

DAVIS HIGHWAY & DR. MARTIN LUTHER KING JR. DRIVE / ALCANIZ STREET

Two-Way Conversion Traffic Feasibility Study

Florida - Alabama Transportation Planning Organization (FL-AL TPO)
Emerald Coast Regional Council (ECRC)

June 2020

Final





Contents

Executive Summary.....	1
Project Purpose	1
Project Need	1
Crash Analysis	2
Traffic Operations.....	2
Recommendations and Conclusion.....	3
1.0 Introduction.....	1
1.1 Project Overview.....	1
1.2 Purpose and Need.....	1
2.0 Existing Conditions.....	3
2.1 Roadway and Intersection Characteristics	3
2.2 Study Area.....	6
2.3 Traffic Data Collection.....	6
2.4 Pedestrian Activity	6
2.5 Traffic Parameters.....	9
2.6 Development of Existing Year (2019) Traffic Volumes.....	9
2.7 Crash Analysis.....	14
2.8 Existing Year (2019) Traffic Operational Analysis	19
Existing Intersection Delay Analysis.....	19
Existing Intersection Queue Analysis.....	21
3.0 Future Travel Demand.....	24
3.1 Growth Rate Determination.....	24
Historical Traffic Growth.....	24
NWFRPM Growth Rate.....	24
Escambia County Population Projections.....	28
Growth Rate Recommendation	28
4.0 Future Alternatives.....	33
4.1 No Build Condition.....	33
4.2 Build Condition (Two-Way Traffic)	33
5.0 Future Conditions.....	38
5.1 Future No Build Year (2045) Traffic Operational Analysis.....	38
No Build Intersection Delay Analysis.....	38
No Build Intersection Queue Analysis.....	40
5.2 Future Build Year (2045) Traffic Operational Analysis	43
Build Intersection Delay Analysis	43
Build Intersection Queue Analysis.....	45
6.0 Generalized Planning Analysis.....	48
7.0 Magee Field.....	50
8.0 Recommendations.....	52
9.0 Conclusion	66
10.0 Appendices.....	67

List of Figures

Figure 1.1: Study Area, County Commission and City Council.....2

Figure 2.1: City of Pensacola CRA Urban Design Overlay District Boundaries.....4

Figure 2.2: Existing AADT5

Figure 2.3: Study Intersections.....7

Figure 2.4: Pedestrian Count Locations8

Figure 2.5: Existing Year AM (2019) Turning Movement Volumes 10

Figure 2.6: Existing Year AM (2019) Turning Movement Volumes 11

Figure 2.7: Existing Year PM (2019) Turning Movement Volumes..... 12

Figure 2.8: Existing Year PM (2019) Turning Movement Volumes..... 13

Figure 2.9: Davis/MLK Crash Density (2014-2018) 17

Figure 3.1: Future No Build Design Year AM (2045) Turning Movement Volumes 29

Figure 3.2: Future No Build Design Year AM (2045) Turning Movement Volumes 30

Figure 3.3: Future No Build Design Year PM (2045) Turning Movement Volumes..... 31

Figure 3.4: Future No Build Design Year PM (2045) Turning Movement Volumes..... 32

Figure 4.1: Future Build Design Year AM (2045) Turning Movement Volumes..... 34

Figure 4.2: Future Build Design Year AM (2045) Turning Movement Volumes..... 35

Figure 4.3: Future Build Design Year PM (2045) Turning Movement Volumes 36

Figure 4.4: Future Build Design Year PM (2045) Turning Movement Volumes 37

Figure 7.1: Magee Field..... 51

Figure 8.1: Design Concept Roundabout..... 53

Figure 8.2: Design Concept Alcaniz Street / Wright Street..... 55

Figure 8.3: Design Concept Cervantes Street..... 57

Figure 8.4: Design Concept Texar Drive 58

Figure 8.5: Magee Field Improvements..... 59

Figure 8.6: Sidewalk Gap on Davis Highway South of Anderson Street..... 60

Figure 8.7: Alcaniz Street at Wright Street – North Approach Facing South 61

Figure 8.8: Typical section of MLK Drive (North of Cervantes Street)..... 62

Figure 8.9: Typical section of MLK Drive (South of Cervantes Street)..... 63

Figure 8.10: Rendering MLK Drive (North of Cervantes) 64

Figure 8.11: Rendering MLK Drive (South of Cervantes) 65



List of Tables

Table 2.1: Crashes by Severity	14
Table 2.2: Crash Injuries by Severity.....	14
Table 2.3: Crashes by Type	15
Table 2.4: Dr. Martin Luther King Jr. Drive / Alcaniz Street Crash Rate Comparison.....	18
Table 2.5: Davis Highway Crash Rate Comparison.....	18
Table 2.6: Existing Year (2019) Overall Intersection Delay (s/veh)	20
Table 2.7: Existing Turn Lane Storage Length (ft) Inventory.....	21
Table 2.8: Dr. Martin Luther King Jr. Drive / Alcaniz Street and Davis Highway Existing Year AM (2019) Intersection Queue Length (ft).....	22
Table 2.9: Dr. Martin Luther King Jr. Drive / Alcaniz Street and Davis Highway Existing Year PM (2019) Intersection Queue Length (ft).....	23
Table 3.1: Historical Growth Trends	25
Table 3.2: NWFRPM Growth Rates	26
Table 3.3: Escambia County Population Projections	28
Table 5.1: Design Year (2045) No Build Intersection Delay (s/veh)	39
Table 5.2: Design Year AM (2045) No Build Intersection Queue Length (ft)	41
Table 5.3: Design Year PM (2045) No Build Intersection Queue Length (ft).....	42
Table 5.4: Design Year (2045) Build Intersection Delay (s/veh).....	44
Table 5.5: Build Turn Lane Storage Length (ft) Inventory (2045).....	45
Table 5.6: Design Year AM (2045) Build Condition Queue Length (ft).....	46
Table 5.7: Design Year PM (2045) Build Condition Intersection Queue Length (ft).....	47
Table 6.1: Dr. Martin Luther King Jr. Drive/Alcaniz Street Capacity Check	48
Table 6.2: Davis Highway Capacity Check	49

List of Appendices

- Appendix A: Approved Methodology
- Appendix B: Traffic Count Data
- Appendix C: Historic Traffic Data
- Appendix D: Signal Timing Plans
- Appendix E: Synchro/SimTraffic and SIDRA Output Reports
- Appendix F: Cost Estimates

Executive Summary

Project Purpose

At the request of Councilwoman Hill (City of Pensacola Council District 6), the Florida Department of Transportation (FDOT) District 3, has identified the need to develop a Two-Way Conversion Traffic Feasibility Study for Davis Highway and Dr. Martin Luther King, Jr. Drive (MLK Drive)/Alcaniz Street (SR 291). Currently, SR 291 is configured as two one-way pairs along Davis Highway (northbound), and MLK Drive (southbound) between SR 295 (Fairfield Drive) and E. Wright Street, a distance of approximately 2.2 miles. The purpose of the study is to determine the potential traffic impacts of converting Davis Highway and Dr. Martin Luther King Jr (MLK) Drive to two-way travel, as well as develop preliminary conceptual designs of the recommended improvements.

Project Need

FDOT, the Emerald Coast Regional Council (ECRC), and HDR met with the City of Pensacola on June 28, 2019 to develop an understanding of the requested study. The study is needed for general safety improvements and to restore the neighborhood roadway network grid in the City of Pensacola Eastside Community Redevelopment Area.

The City of Pensacola Eastside Neighborhood Plan (January 2004) contains an Action Plan with the following goal, strategy, and action:

Section 5.2 Neighborhood Infrastructure

- (a) **Goal:** Improve public infrastructure to encourage the continued revitalization of the Eastside Neighborhood.
- (b) **Strategy:** Enhance the function and appearance of major transportation corridors in the Neighborhood.
- (2) **Action:** Explore the possibility of returning Dr. Martin Luther King Jr. Drive and Davis Highway to two-way collector level streets.

The City of Pensacola Eastside Redevelopment Board met on Tuesday, July 9, 2019 to discuss the project with the Helen Gibson (CRA Administrator), and Councilwoman Hill (Council District 6) as Chair of the Eastside Redevelopment Board. The Board passed a motion of support for the need for the study.

Crash Analysis

There were 639 reported crashes along both corridors from 2014 to 2018. These crashes resulted in zero (0) fatalities within five years, 12 incapacitating injuries, 79 non-incapacitating injuries, and 153 possible injuries. There were eight (8) collisions involving pedestrians and four (4) involving bicyclists. The most common crash type reported was angle collisions with 156 crashes and approximately 24% of the total crashes. There were 134 (21%) rear-end crashes, 68 (11%) sideswipe crashes, and 54 (9%) off-road crashes.

There were seven (7) wrong-way crashes reported in the study area for the five-year history; however, several wrong-way vehicles were observed in the field (January 2020) with 13 wrong-way vehicles counted on MLK Drive and 15 on Davis Highway during the four-hour count period (November 2019). The crash reports show that there were many the sideswipe, other, and unknown crashes due to a vehicle in the right through lane attempting to turn left onto a cross street or driveway and colliding with a vehicle in the left through lane. At signalized intersections along both corridors, several of the crash reports indicate red light running, the driver did not notice the traffic signal, or both drivers thought the traffic signal was green; as such increased signal visibility and warning signage may be needed. Several angle crashes were noted along the corridor at unsignalized intersections that may need increased stop sign conspicuity and awareness. Finally, several angle crashes were noted along the corridor with possible sight distance issues due to trees, landscaping, or buildings including at the intersections; notably at the intersection of Alcaniz Street and Wright Street.

Traffic Operations

Davis Highway and MLK Drive were assessed for potential traffic impacts from converting the corridors from their existing two, one-way pair configuration to two-way travel. The traffic operations of the No Build Condition (one-way pair) were compared to the Build Condition (two-way traffic). Under the Build Condition, all of the intersections are expected to operate at LOS D or better for both the AM and PM peak hours in the future year (2045). The Build Condition analysis results indicate that the overall facility is expected to operate at LOS D or better. The model results indicate no significant queuing in the AM or PM peak hour for Build conditions compared to the No Build condition.

Generalized Service Volume Tables (GSVT), found in the *FDOT Quality/LOS Handbook 2013*, were used to perform corridor capacity checks for MLK Drive and Davis Highway. The existing year (2019) and future year (2045) No Build and Build volumes were compared to the LOS D service volumes found in the GSVTs to assess the corridors' capacities. Analysis results show that both the MLK Drive and Davis Highway corridors are expected to operate well below the service volume for both the Build and No Build conditions.

Recommendations and Conclusion

This Traffic Feasibility Study was conducted based on the need as identified by FDOT District 3 at the request of Councilwoman Hill (City of Pensacola Council District 6). Davis Highway and MLK Drive were assessed for potential traffic impacts of converting the corridors to two-way travel. In addition, this study provides preliminary conceptual designs of the recommended improvements.

The results from the model indicate that the Build Condition with the two-way conversion in place operates at acceptable LOS. Based on the analysis results, the following improvement recommendations are discussed below.

Northern Tie-in at I-110

With the two-way conversion in place on MLK Drive and Davis Highway, a roundabout is recommended on the northern end to combine the two roadways into Davis Highway to the north. The following improvements are recommended:

- Construct a four-leg, single-lane roundabout to tie in MLK Drive, Davis Highway from the south, to Davis Highway to the north, and Hart Drive.
- Provide raised crosswalks on each approach leg at the roundabout.
- Provide pedestrian and/or green space in the remaining right of way.
- Relocate the driveway for the industrial use west of the roundabout further south on MLK Drive.
- Modify the driveway for the shopping center east of the I-110 intersection at Davis Highway (the eastern leg of the intersection) to allow left in, right in, through in, but right out only (prohibit left out and throughout). Due to the current split phasing at the signal, this will improve operations and queuing on the I-110 off-ramp approach, as well as on Davis Highway.
- Drop the inside southbound through lane on Davis Highway at the intersection with I-110 as a southbound left turn lane into the shopping center.

A conceptual design of these improvements is provided in **Figure A**.

Figure A: Design Concept Roundabout





Southern Tie-in at Wright Street

Similar to the northern tie-in, improvement recommendations are provided for the southern end of the one-way pair at Wright Street with the proposed two-way conversion of MLK Drive and Davis Highway in place. The following improvements are recommended:

- To better align the northbound approach of Alcaniz Street at Wright Street for traffic continuing northbound on Alcaniz Street, reduce the footprint of the northbound approach to two southbound exiting through lanes, one northbound left turn lane, one northbound through lane, and one northbound right turn lane.
- Perform a full signal warrant analysis at the intersection of Alcaniz Street and Wright Street and signalize if warranted. Signalization may be warranted based on the review of the crash data at this intersection. Signalization can help to relieve the existing safety concerns due to the sight distance issue with the building located in the northeast corner of the intersection. Furthermore, if this intersection is signalized, coordination with the signal to the south at Gregory Street and possibly a shared controller should be considered given the close spacing.
- Provide a pedestrian refuge area in the northbound approach of Alcaniz Street at Wright Street in the channelized right turn median.
- To better accommodate pedestrians along Alcaniz Street, which experiences high volumes of pedestrians during special events at the Pensacola Bay Center and the Grand Hotel, provide pedestrian and/or green space in remaining right of way.
- If it is desired to extend the proposed pedestrian enhancements along Alcaniz Street to the south, it is recommended to conduct additional analysis of Alcaniz Street. The analysis can extend along Alcaniz Street by the Pensacola Bay Center and to the south to determine if the existing six-lane section is necessary, or if a road diet can be implemented with the conversion of the extra right of way to pedestrian and/or green space. Similar to the previous recommendation, this could better serve the high volumes of pedestrian traffic experienced during special events.

A conceptual design of these improvements is provided in **Figure B**.

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Figure B: Design Concept Alcaniz Street/Wright Street



Cervantes Street at MLK Drive and Davis Highway

With the two-way conversion in place on MLK Drive and Davis Highway, the following improvements are recommended:

- Provide an eastbound left turn lane on Cervantes Street at the intersection of Cervantes Street and MLK Drive/Alcaniz Street.
- Provide a westbound left turn lane on Cervantes Street at the intersection of Cervantes Street and Davis Highway.

A conceptual design of these improvements is provided in **Figure C**.

Texar Drive at MLK Drive and Davis Highway

The following improvements are recommended with MLK Drive and Davis Highway converted to two-way travel:

- Provide an eastbound left turn lane on Texar Drive at the intersection of Texar Drive and MLK Drive.
- Provide a westbound left turn lane on Texar Drive at the intersection of Texar Drive and Davis Highway.
- The model results indicate queuing on the southbound approach of Davis Highway at Texar Drive. The addition of a southbound turn lane on Davis Highway could be considered at this intersection; however, this may involve right of way and driveway impacts.

A conceptual design of these improvements is provided in **Figure D**.

Figure C: Design Concept Cervantes Street



Figure D: Design Concept Texar Drive



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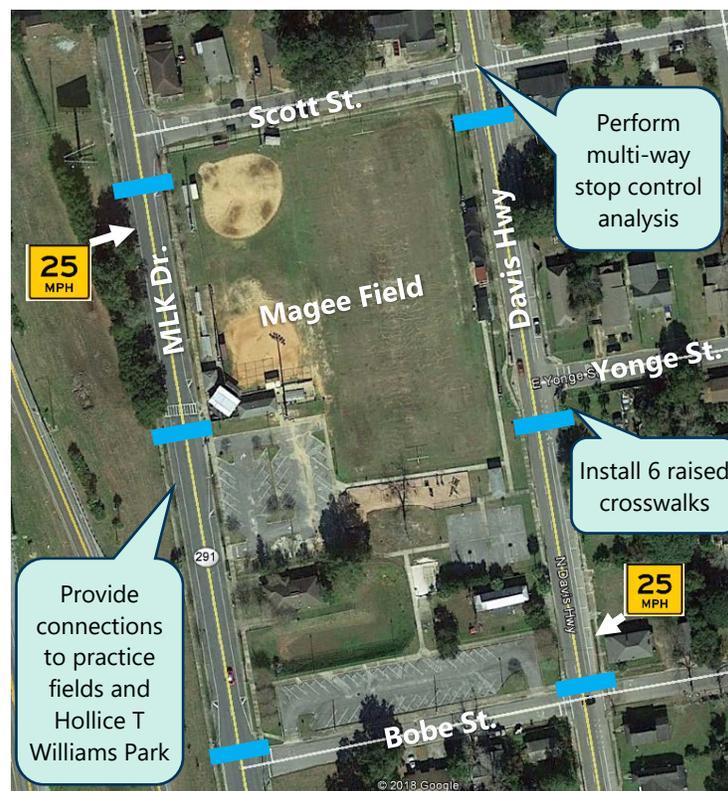
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Magee Field

Based on field coordination with the President of the East Pensacola Student Athlete Program, and the City of Pensacola (January 2020), there are safety concerns for pedestrians crossing MLK Drive and Davis Highway at Magee Field. The following improvements are recommended to enhance the safety of pedestrians and bicyclists and are depicted in **Figure E**:

- Install Advisory Speed Plaques (MUTCD W13-1P) for 25 mph on both Davis Highway and MLK Drive approaching Magee Field: at Bobe Street for northbound traffic and at Scott Street for southbound traffic.
- Provide six (6) raised crosswalks at the following locations:
 - MLK Drive at Scott Street (south side)
 - MLK Drive at existing midblock crossing
 - MLK Drive at Bobe Street (north side)
 - Davis Highway at Scott Street (south side)
 - Davis Highway at Young Street (south side)
 - Davis Highway at Bobe Street (north side)
- Perform all-way stop control analysis at Davis Highway and E Scott Street.
- Further study for pedestrian and bicycle connections and improvements to/from Magee Field to the existing practice fields under I-110, and to Hollice T Williams Park under I-110, which is planned for upgrades, including a proposed urban greenway.

Figure E: Magee Field Improvements



Corridor-Wide

- With the two-way conversion in place and to enhance the safety along both corridors, it is recommended to post the speed limit of both corridors at 30 mph within the study area. Currently, the posted speed limit on Alcaniz Street (Wright Street to Cervantes Street) is 30 mph, and 35 mph on MLK Drive (Cervantes Street to the I-110 ramps) and Davis Highway. The posted speed limit and other design elements will be determined during the design phase.
- Provide signal modification at signalized intersections to accommodate two-way conversion.
- Enhanced lighting, such as LED, should be added throughout the corridor, especially at the crosswalks. Crash history indicated that 20% of crashes occurred in dark conditions.
- Sidewalks should be provided on both sides of the road and existing sidewalk gaps should be completed from E Leonard Street to Texar Drive on Davis Highway (shown in **Figure F**).

Figure F: Sidewalk Gap on Davis Highway South of Anderson Street



- Bicycle lanes are not proposed at the recommendation of the City of Pensacola to emphasize the prioritized need for on-street parking, and to not acquire additional right-of-way.
- The southbound right turn lane at MLK Drive/Alcaniz Street at Cervantes Street and at MLK Drive at Maxwell Street could be considered for removal in place for additional green space or pedestrian space.
- Countermeasures (such as signal backplates and advanced signal warning signage) should be considered at the following intersections to increase the signal visibility and awareness:
 - MLK Drive at Maxwell Street
 - Davis Highway at Blount Street
 - MLK Drive and Texar Drive
 - Davis Highway and Texar Drive
 - Fairfield Drive/Davis Highway

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- Review and improve possible sight distance issues due to trees, landscaping, or buildings at the intersections, including:
 - Davis Highway and Cross Street
 - Davis Highway and Jordan Street
 - Davis Highway and De Soto Street
 - Alcaniz Street and Wright Street (shown in **Figure G**)

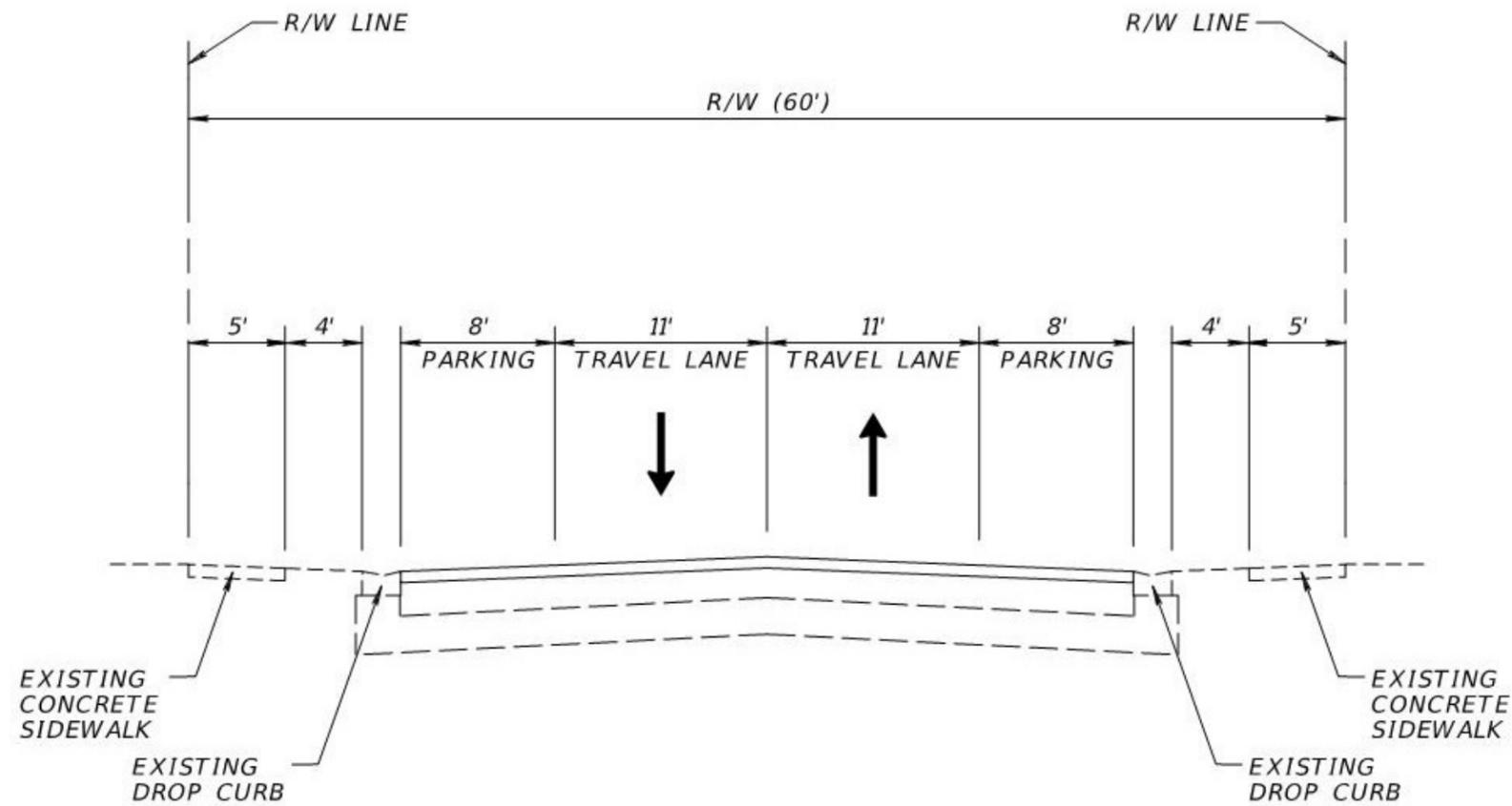
Figure G: Alcaniz Street at Wright Street – North Approach Facing South



- Provide improved stop sign conspicuity and awareness at unsignalized intersections along the corridor, including Davis Highway and Maxwell Street.
- If the two-way conversion is not implemented along Davis Highway and MLK Drive, it is recommended to provide additional signage to indicate the one-way flow and discourage wrong-way travel. The safety improvements previously discussed should also be implemented.
- Improvements should be consistent with the Urban Core Community Redevelopment Area Plan, as appropriate.

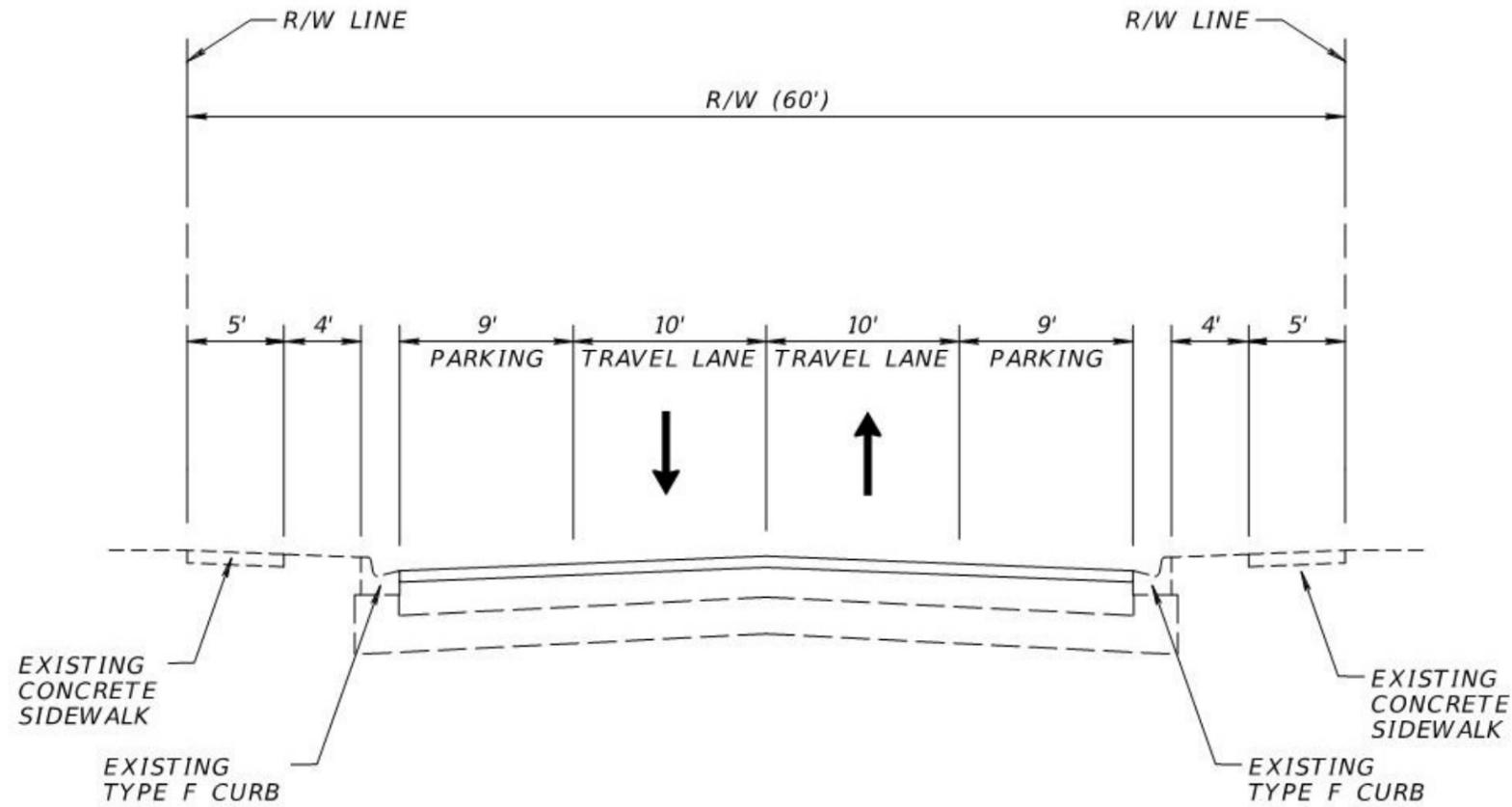
The estimated cost for this project is \$7.9 million utilizing the FDOT LRE system and standards. Detailed cost estimate information can be found in **Appendix F**. Typical sections are provided in **Figure H** and **Figure I**. Renderings for these two typical sections are illustrated in **Figure J** and **Figure K** respectively.

Figure H: Typical Section of MLK Drive (North of Cervantes Street)



TYPICAL SECTION
DR. MARTIN LUTHER KING JR. DRIVE
NORTH OF CERVANTES ROAD

Figure I: Typical Section of MLK Drive (South of Cervantes Street)



TYPICAL SECTION
DR. MARTIN LUTHER KING JR. DRIVE
SOUTH OF CERVANTES ROAD

Figure J: Rendering MLK Drive (North of Cervantes Street)

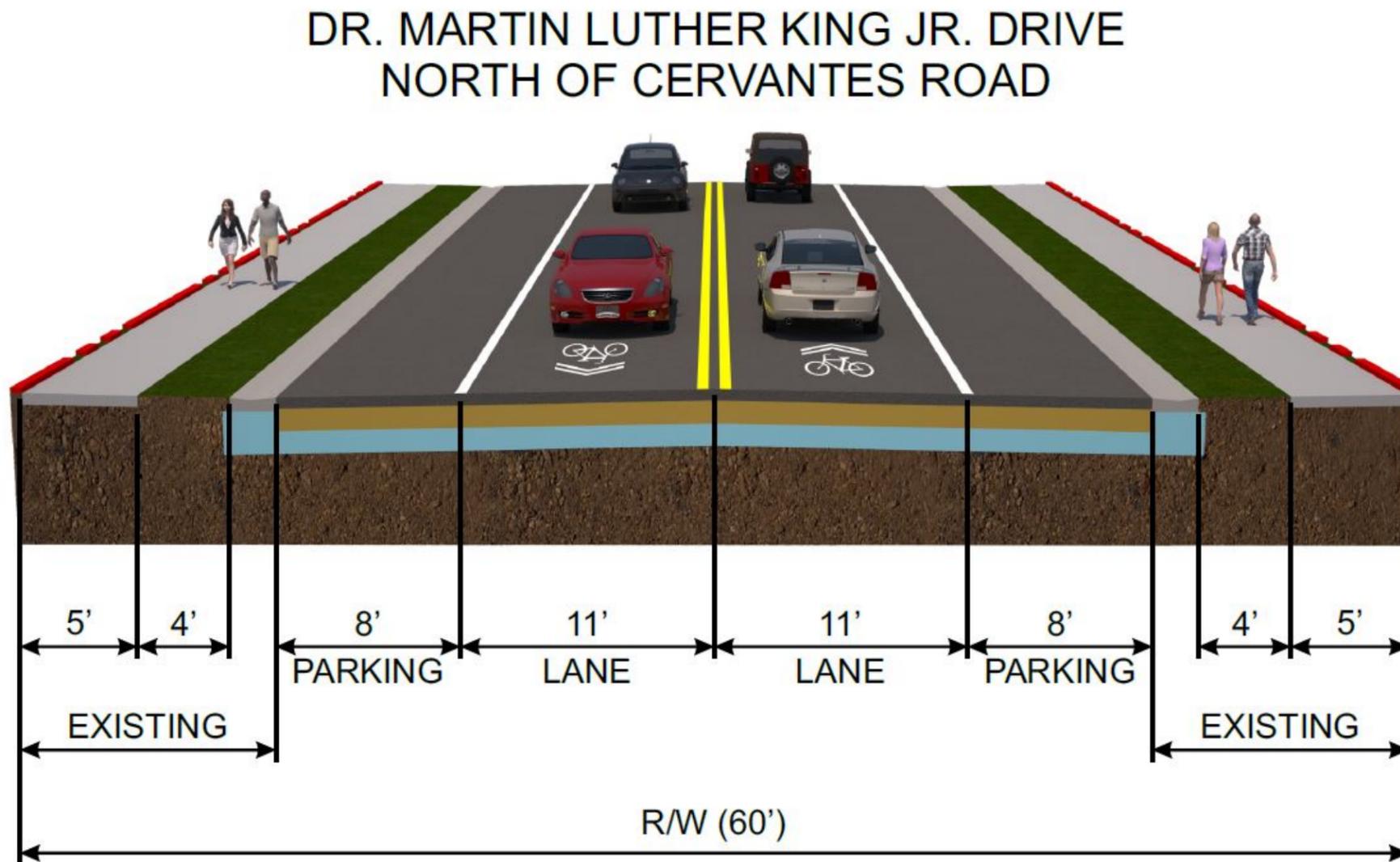
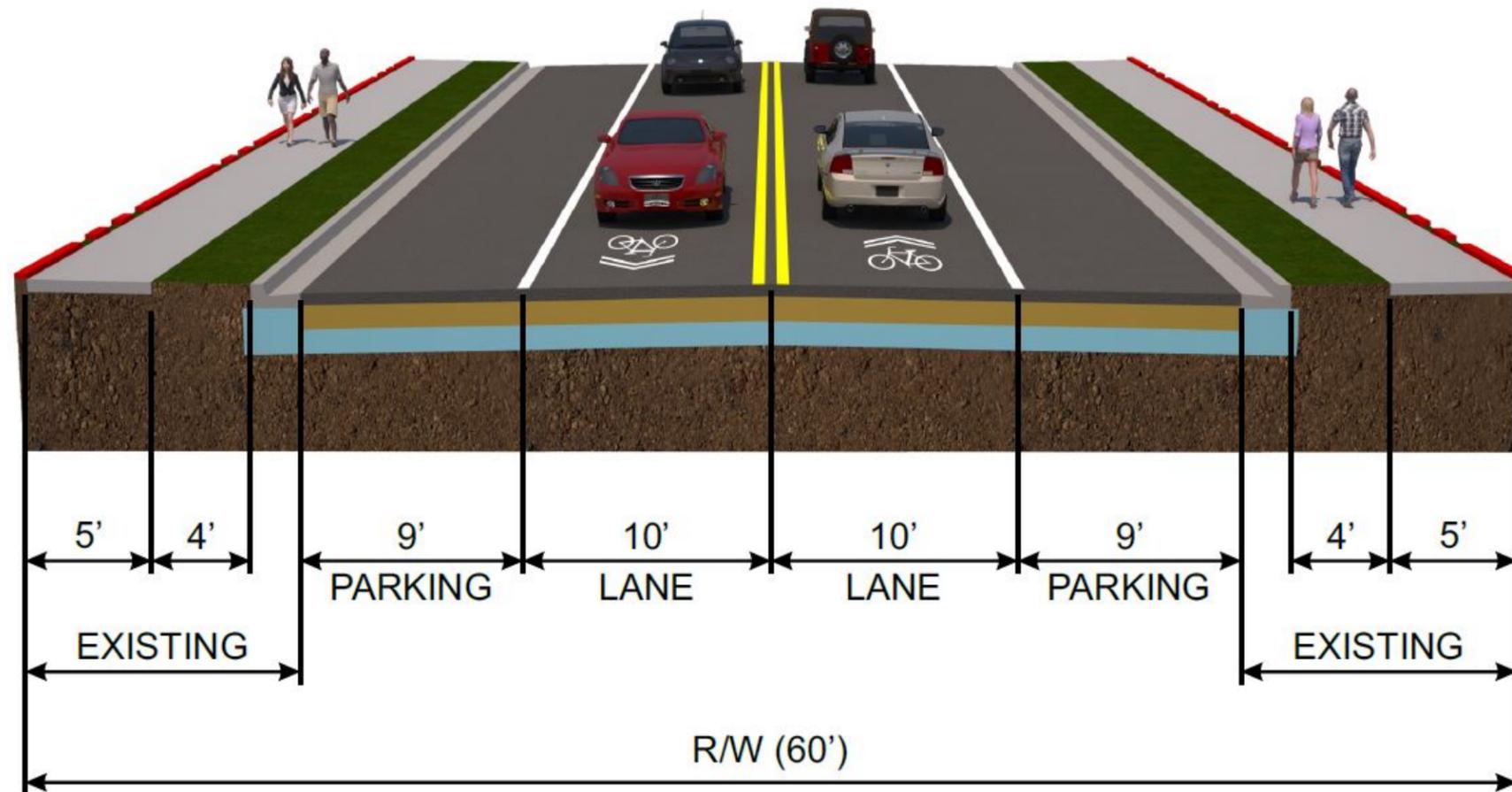


Figure K: Rendering MLK Drive (North of Cervantes Street)

DR. MARTIN LUTHER KING JR. DRIVE SOUTH OF CERVANTES ROAD



Conclusion

This Traffic Feasibility Study was conducted based on the need as identified by FDOT District 3 at the request of Councilwoman Hill (City of Pensacola Council District 6). Davis Highway and MLK Drive were assessed for potential traffic impacts of converting the corridors to two-way travel. Preliminary conceptual designs of the recommended improvements were also developed as a part of this study.

There were 639 reported crashes along both corridors from 2014 to 2018. These crashes resulted in zero (0) fatalities within five years, 12 incapacitating injuries, 79 non-incapacitating injuries, and 153 possible injuries. There were eight (8) collisions involving pedestrians and four (4) involving bicyclists. The most common crash type reported was angle collisions with 156 crashes and approximately 24% of the total crashes. There was also 134 (21%) rear-end crashes, 68 (11%) sideswipe crashes, 54 (9%) off road crashes.

The traffic operations of the No Build Condition (two one-way pair) were compared to the Build Condition (two-way traffic). **Under the Build Condition, all of the intersections are expected to operate at LOS D or better for both the AM and PM peak hours in the future year (2045). The Build Condition analysis results indicate that the overall facility is expected to operate at LOS D or better. The model results indicate no significant queuing in the AM or PM peak hour for Build conditions compared to the No Build condition.**

Generalized Service Volume Tables (GSVT), found in the *FDOT Quality/LOS Handbook 2013*, were used to perform corridor capacity checks for MLK Drive and Davis Highway. The existing year (2019) and future year (2045) No Build and Build volumes were compared to the LOS D service volumes found in the GSVTs to assess the corridors' capacities. **Analysis results show that both the MLK Drive and Davis Highway corridors are expected to operate well below the service volume for both the Build and No Build conditions.**

Several improvements along both corridors were identified. These include a roundabout at the northern end at Hart Drive to combine the two roadways into Davis Highway to the north, signalization and reduced footprint of Alcaniz Street at Wright Street at the southern end to improve alignment and safety, turn lanes on Cervantes Street and Texar Drive, pedestrian safety improvements at Magee Field, improved lighting and sidewalks corridor-wide, and a reduced speed limit of 30 mph.

The estimated cost for this project is \$7.9 million utilizing the FDOT LRE system and standards.

The final recommendation/s will be provided following review by the FL-AL TPO.

1.0 Introduction

1.1 Project Overview

At the request of Councilwoman Hill (City of Pensacola Council District 6), the Florida Department of Transportation (FDOT) District 3, has identified the need to develop a Traffic Feasibility Study for Davis Highway and Dr. Martin Luther King, Jr. Drive (MLK Drive)/Alcaniz Street (SR 291) to analyze the potential conversion to two-way flow. Presently, SR 291 is configured as two one-way pairs along Davis Highway (northbound), and MLK Drive (southbound) between Fairfield Drive (SR 295) and East Wright Street, a distance of approximately 2.2 miles. South of Cervantes Street (US 90), MLK Drive becomes Alcaniz Street. The limits of the study are from Wright Street on the south, to Fairfield Drive (SR 295) on the north and includes the I-110 ramp south of Fairfield Drive. **Figure 1.1** depicts the project location.

1.2 Purpose and Need

FDOT, ECRC, and HDR met with the City of Pensacola on June 28, 2019 to develop an understanding of the requested study. The study is needed for general safety improvements, and to restore the neighborhood roadway network grid in the Eastside Community Redevelopment Area.

The City of Pensacola Eastside Neighborhood Plan (January 2004) contains an Action Plan with the following goal, strategy, and action:

Section 5.2 Neighborhood Infrastructure

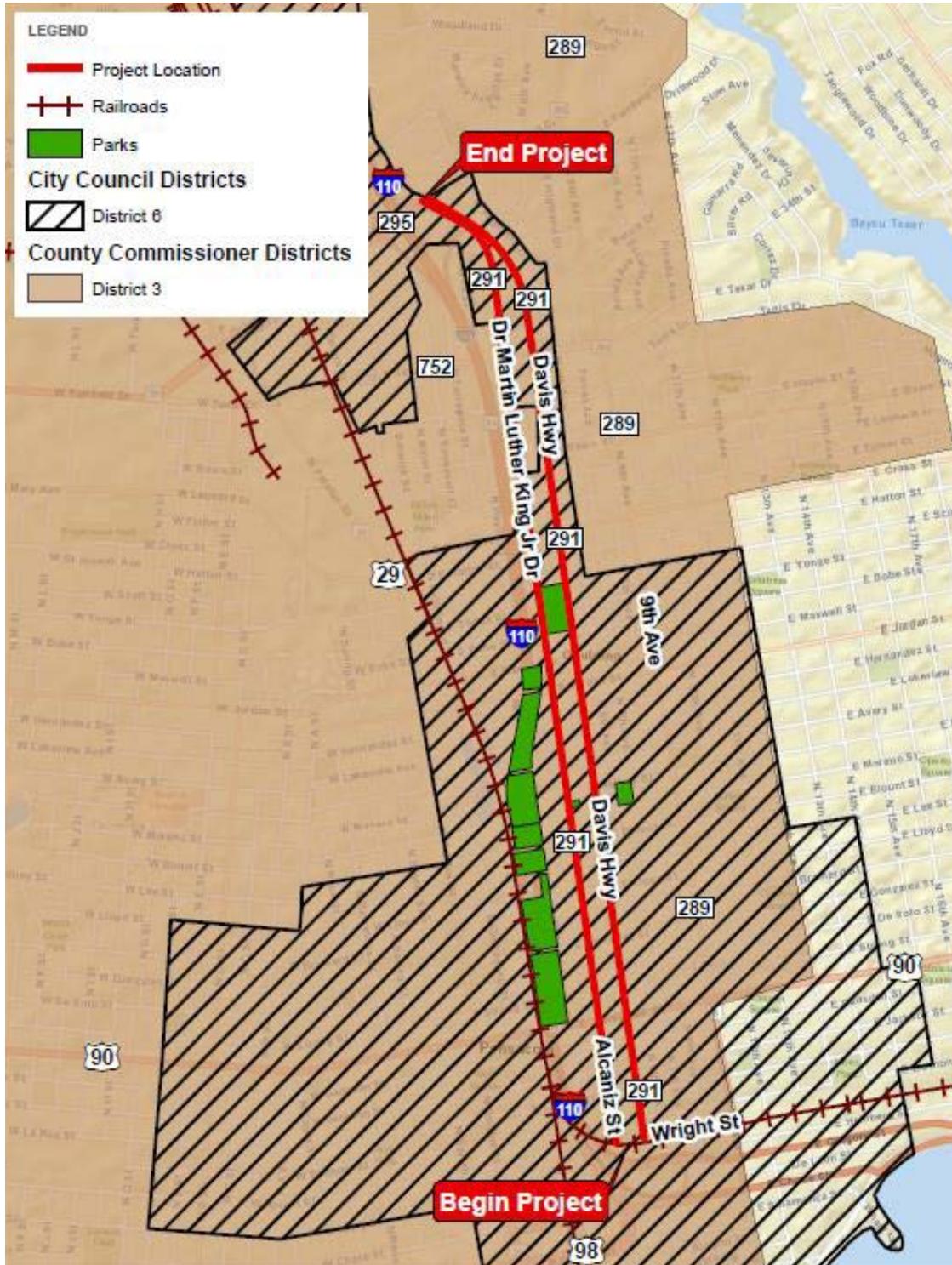
- (a) **Goal:** Improve public infrastructure to encourage the continued revitalization of the Eastside Neighborhood.
- (b) **Strategy:** Enhance the function and appearance of major transportation corridors in the Neighborhood.
- (2) **Action:** Explore the possibility of returning Dr. Martin Luther King Jr. Drive and Davis Highway to two-way collector level streets.

The City of Pensacola Eastside Redevelopment Board met on Tuesday, July 9, 2019 to discuss the project with the Helen Gibson (CRA Administrator), and Councilwoman Hill (Council District 6) as Chair of the Eastside Redevelopment Board. The Board passed a motion of support for the need for the study.

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Figure 1.1: Study Area, County Commission and City Council



2.0 Existing Conditions

2.1 Roadway and Intersection Characteristics

Currently, SR 291 is configured as two one-way pairs along Davis Highway (northbound) and MLK Drive (southbound) between Fairfield Drive (SR 295) and Wright Street. Davis Highway and MLK Drive are both have two travel lanes with areas of on-street parking. There is a local bus route, Route 45, which runs along Davis Highway and MLK Drive/Alcaniz Street. The posted speed limit on Alcaniz Street (Wright Street to Cervantes Street) is 30 miles per hour (mph), and 35 mph on MLK Drive (Cervantes Street to the I-110 ramps) and Davis Highway throughout the study area.

The lane widths on Davis Highway are approximately 11-feet. A five-foot (approximately) sidewalk is available on both sides of Davis Highway from Wright Street to Fisher Street. From Fisher Street to Baars Street, as the sidewalk is available on the west side of Davis Highway. There is a gap in sidewalks on both sides of the street from Baars Street to south of Barcia Drive. From south of Barcia Drive to the I-110 ramps, a sidewalk is provided on the east side of the Davis Highway. A sidewalk is provided on both sides of Davis Highway from the I-110 ramps to Fairfield Drive. A marked bike lane is provided on Davis Highway for the entire study area.

MLK Drive becomes Alcaniz Street south of Cervantes Street. The lane widths on MLK Drive/Alcaniz Street vary with approximately 11-foot lanes provided north of Cervantes Street, and 10-foot lanes between Wright Street and Cervantes Street. South of Wright Street, three 11-foot lanes are provided. A five-foot (approximately) sidewalk is available on both sides of MLK Drive/Alcaniz Street from Gregory Street to Texar Drive. A sidewalk is not currently available on either side of the road from Texar Drive to Hart Drive.

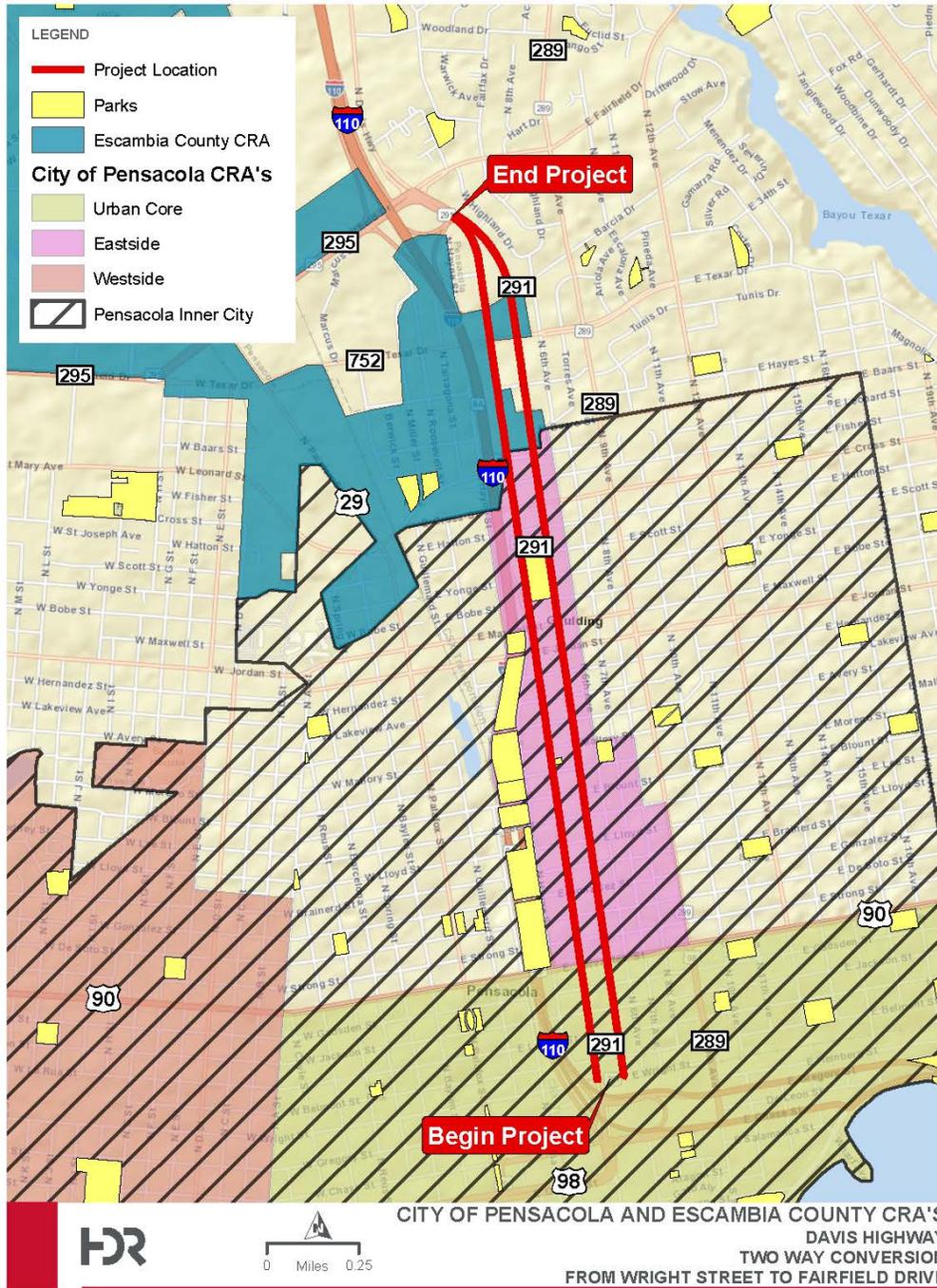
This section of Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street falls within both the City of Pensacola and Escambia County jurisdictions, including parts of the City of Pensacola CRA (Community Redevelopment Area) Urban Design Overlay District Boundaries as shown in **Figure 2.1**. It is a Minor Arterial Urban with a LOS target of LOS D. The context classification for these segments are C4 Urban General. These two corridors are primarily residential in character with scattered commercial clusters along the corridors.

The annual average daily traffic (AADT) from the year 2018 for this section of Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street are as per FDOT Florida Traffic Online is shown in **Figure 2.2**.

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Figure 2.1: City of Pensacola CRA Urban Design Overlay District Boundaries



2.2 Study Area

The following study intersections are included in this analysis (depicted in **Figure 2.3**):

1. Alcaniz Street and Gregory Street
2. Alcaniz Street and Wright Street
3. MLK Drive/Alcaniz Street and Cervantes Street
4. Cervantes Street and Haynes Street
5. MLK Drive and Blount Street
6. MLK Drive and Jordan Street
7. Jordan Street and Hayne Street
8. MLK Drive and Maxwell Street
9. Maxwell Street and Hayne Street
10. MLK Drive and Cross St
11. MLK Drive and Texar Drive
12. MLK Drive and Hart Drive
13. Davis Highway and Wright Street
14. Davis Highway and Cervantes Street
15. Davis Highway and Blount Street
16. Davis Highway and Jordan Street
17. Davis Highway and Maxwell Street
18. Davis Highway and Cross Street
19. Davis Highway and Texar Drive
20. Davis Highway and Hart Drive
21. Davis Highway and I-110 On/Off Ramp
22. Davis Highway and Fairfield Drive
23. Northbound to Southbound U-turn location south of Hart Drive

2.3 Traffic Data Collection

Consistent with the approved Methodology Memorandum (provided in **Appendix A**), turning movement counts were collected along the corridor within the study area on November 12, 2019 and November 14, 2019 at the study intersections from 7:00 AM to 9:00 AM and 4:00 PM and 6:00 PM. In addition, pedestrian counts were collected on 11/09/2019 a Magee Field game day Saturday for a 12-hour period 7:00 AM – 7:00 PM. **Appendix B** provides the traffic count data.

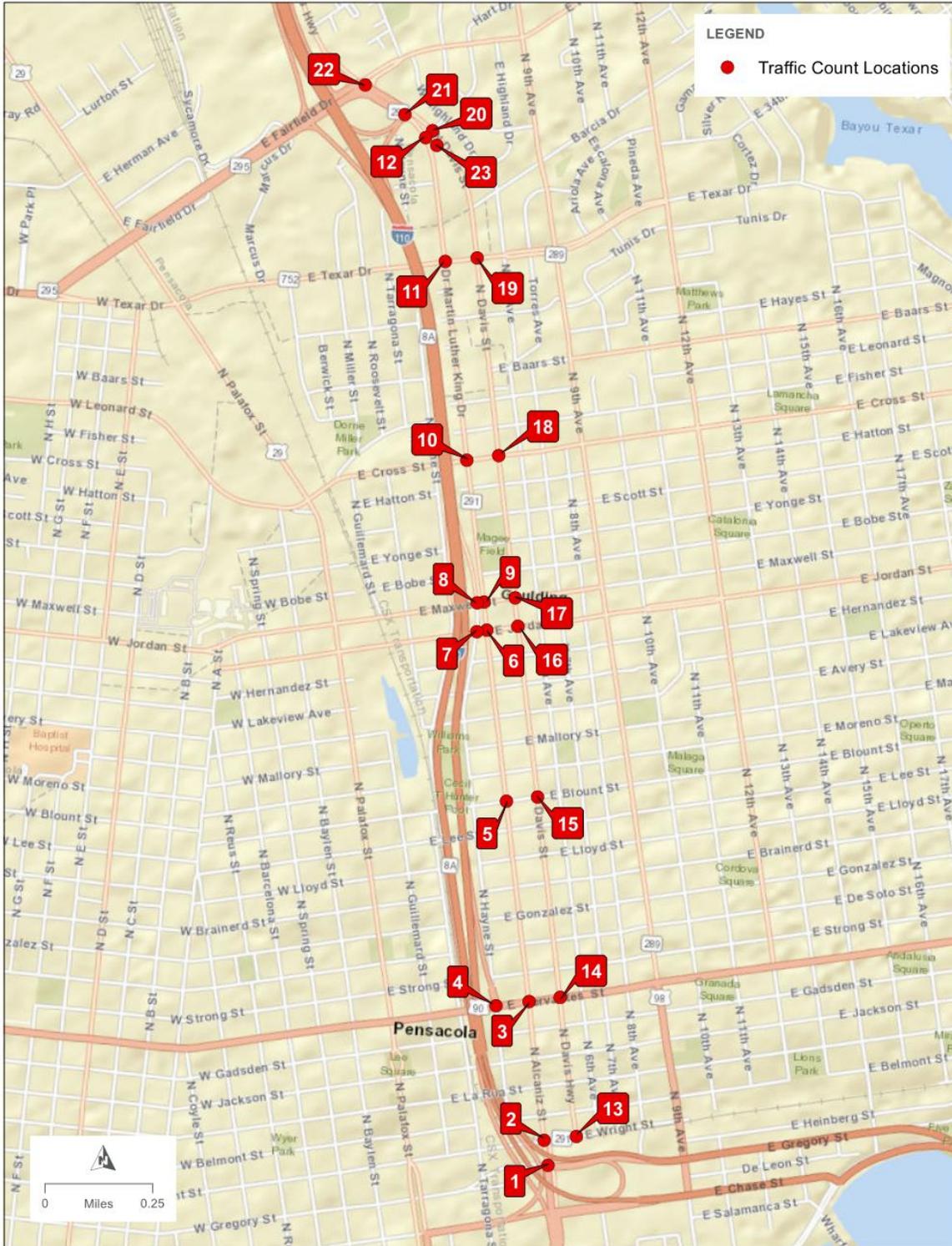
2.4 Pedestrian Activity

Pedestrian counts were collected near Magee Field along Davis Highway and southbound MLK Drive/Alcaniz Street. The counts were collected in four zones, as depicted in **Figure 2.4**. Zone A is the existing crosswalk on MLK Drive at Magee Field, Zone B is along Davis Highway from Scott Street to approximately 150 feet south, Zone C is along Davis Highway from approximately 150 feet north and south of Yonge Street, and Zone D is along Davis Highway from Bobe Street to approximately 150 feet north. The counts show that Zone B was the busiest zone with 282 pedestrians and 27 bicyclists during the 12-hour traffic count period. A maximum peak hour volume of 62 pedestrians was observed from 2:00-3:00 PM. **Appendix B** provides the traffic count data.

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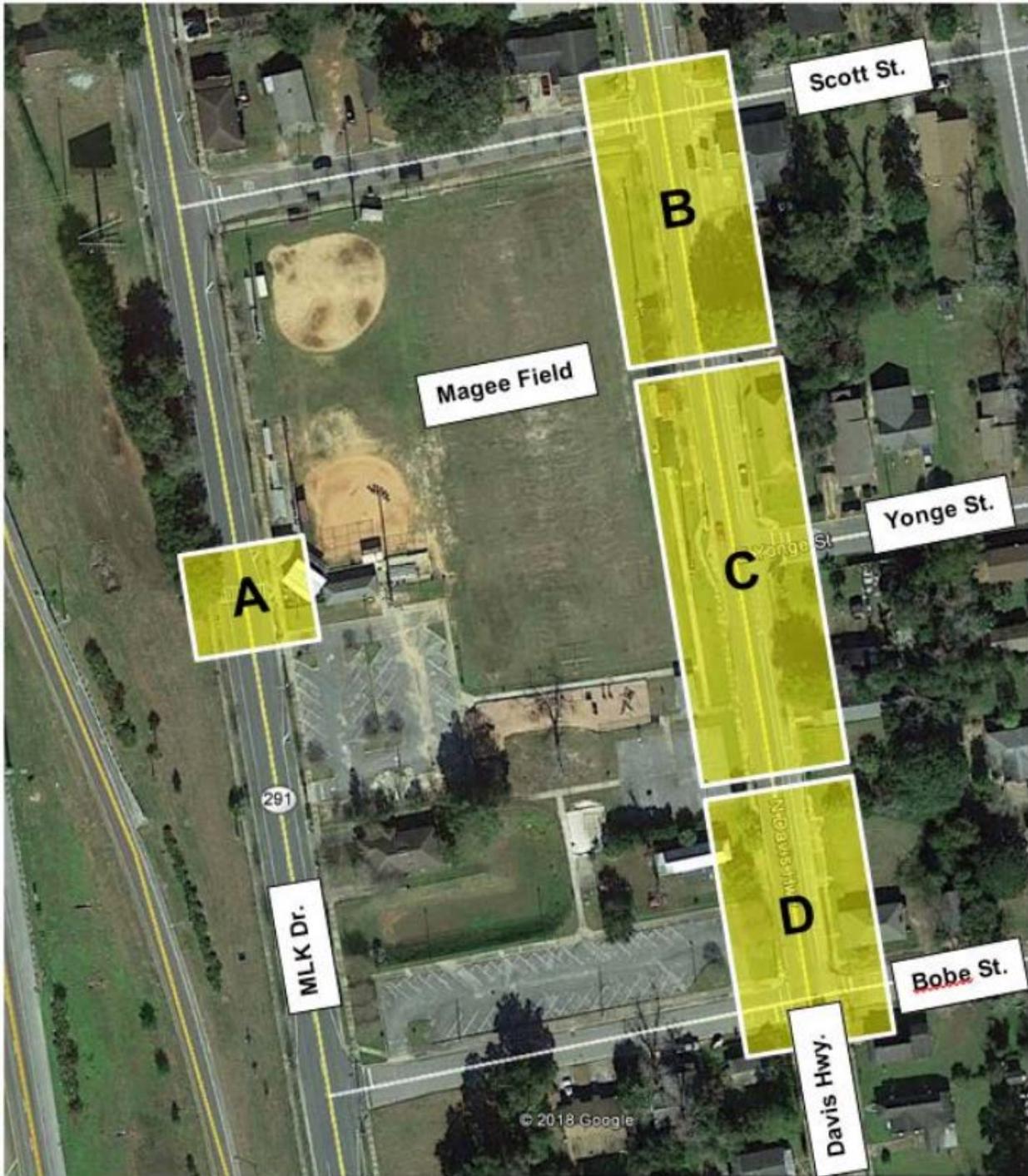
Figure 2.3: Study Intersections



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Figure 2.4: Pedestrian Count Locations



2.5 Traffic Parameters

A global AM and PM peak hour and peak hour factor (PHF) was determined for the entire study area based on the aggregation of peak-hour traffic counts at each intersection. The global AM peak hour begins at 7:15 AM and has a PHF of 0.91, and the global PM peak hour begins at 4:30 PM and has a PHF of 0.95. The PHF accounts for fluctuations in traffic flow within the 15-minute increments of the peak hour and indicates how consistent traffic volume is during the peak hour. In the AM peak hour, there is not a distinct peak direction of travel between northbound Davis Highway and southbound MLK Drive/Alcaniz Street and the peak direction alternates between the corridors. However, the southbound direction of MLK Drive/Alcaniz Street experiences slightly higher volumes overall along both corridors during the AM peak hour. In the PM peak hour, the northbound direction on Davis Highway is the peak direction of travel along most sections of the corridors. Truck percentages from turning movement counts were used in the existing year (2019) analysis. The FDOT Florida Traffic Online was used to determine the design hour truck percentage (DHT) for future year analyses, which is generally taken as half of the existing 24-hour percentage of trucks (T24) based on the *FDOT Project Traffic Forecasting Handbook, 2014* methodology. The DHT for this study area was determined to be 2.0 percent. The historical data is shown in **Appendix C**.

2.6 Development of Existing Year (2019) Traffic Volumes

The intersection volumes for the existing year (2019) were developed from traffic count data using the following methodology, consistent with the approved Methodology Memorandum (provided in **Appendix A**). Each peak hour intersection traffic count was seasonally adjusted for day of week and month of the year using the seasonal factors from the FDOT Florida Traffic Online. Traffic volumes were balanced along the corridors as necessary; however, the intersections are distance from one another and existing driveways, major generators, and attractions were assumed to contribute to some imbalances along the corridor. Furthermore, several wrong way traffic movements were observed in the traffic data collection along both MLK Drive/Alcaniz Street and Davis Highway. There were 13 wrong-way vehicles counted on MLK Drive for the four-hour count period, and 15 on Davis Highway. These wrong-way movements were removed for analysis purposes. **Figure 2.5** through **Figure 2.8** show the existing year (2019) AM and PM peak-hour turning movement volumes. Existing year (2019) volume development calculations can be found in **Appendix B**.

Figure 2.6: Existing Year AM (2019) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes

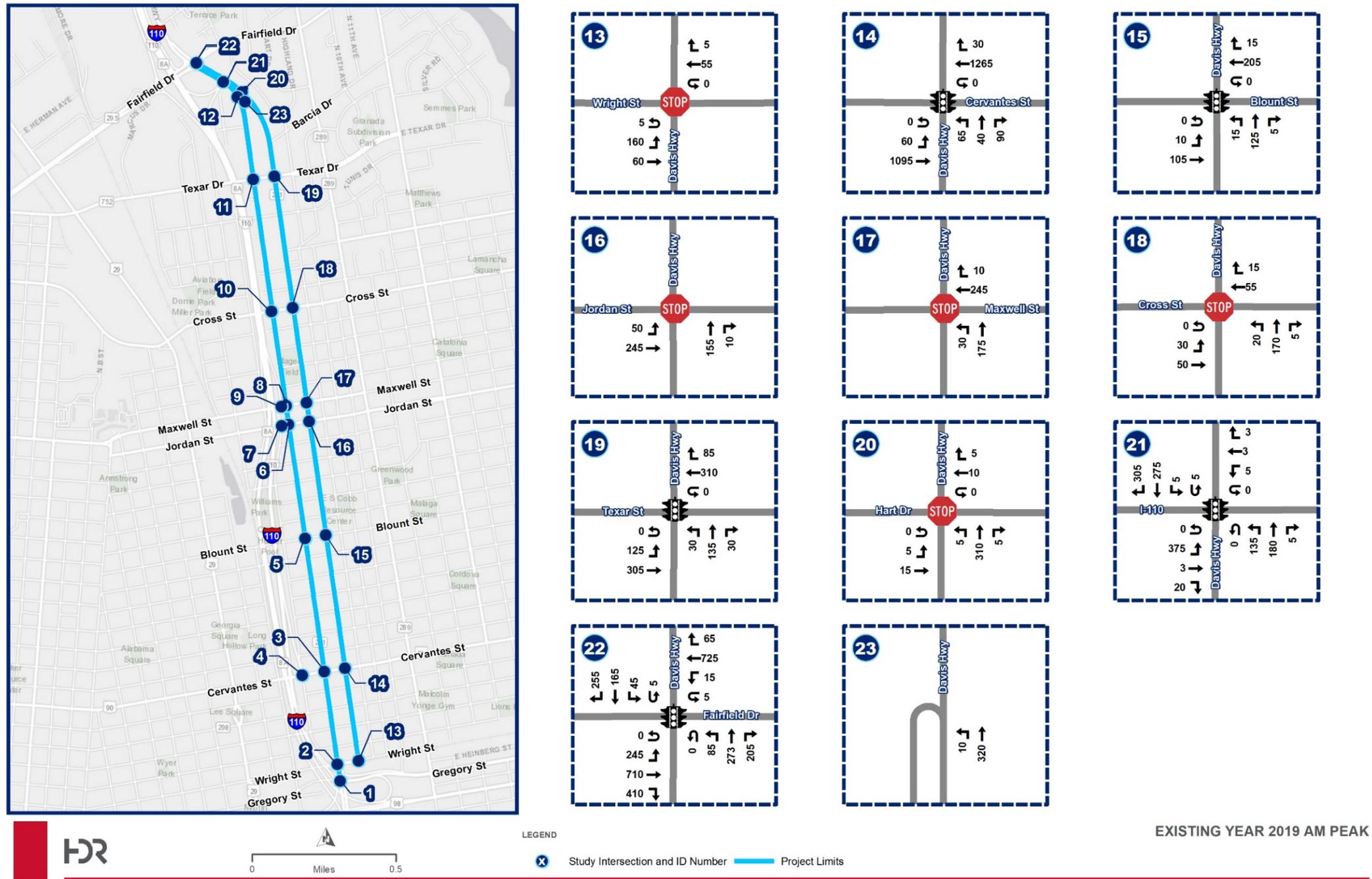
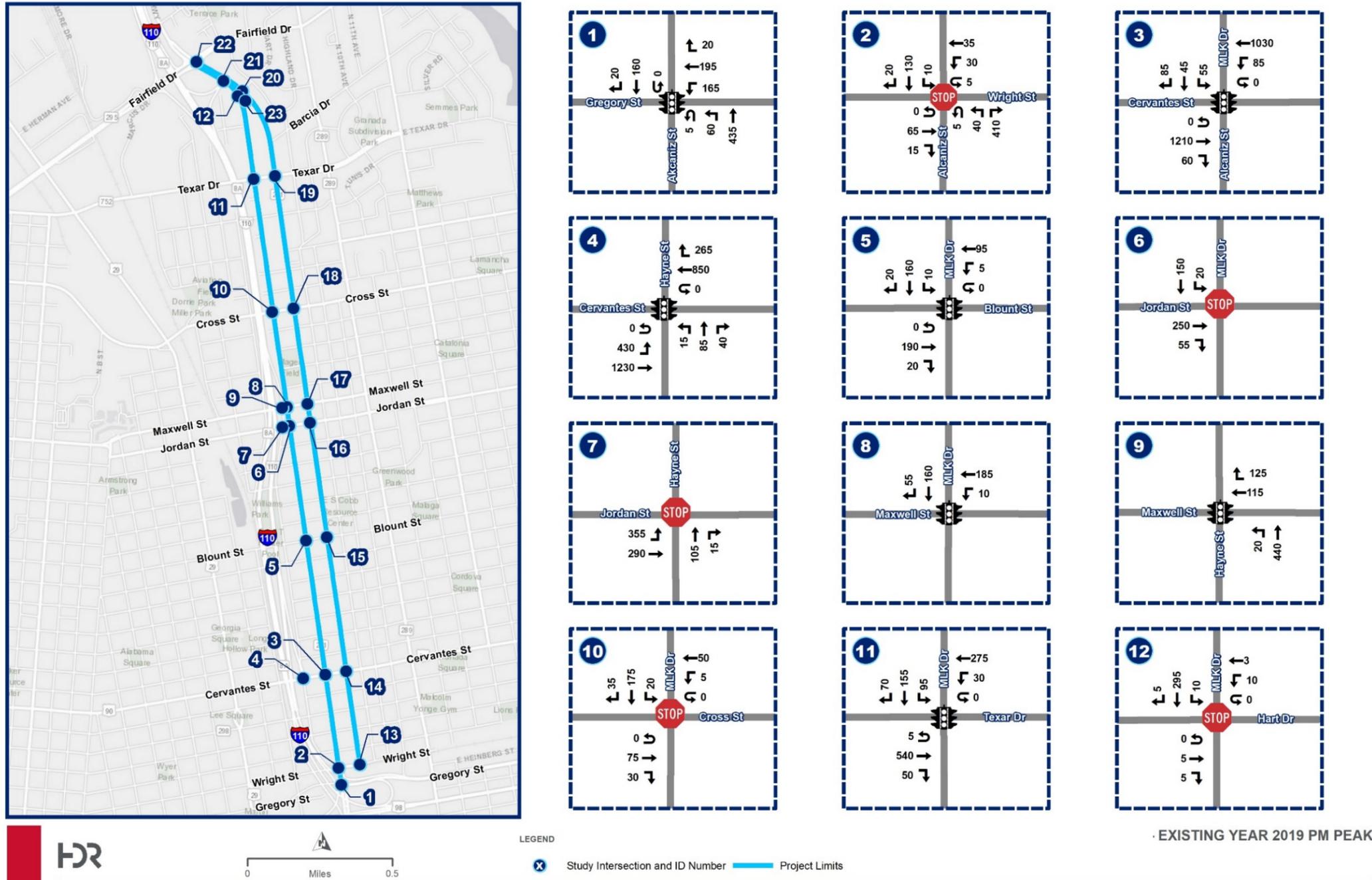


Figure 2.7: Existing Year PM (2019) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes



2.7 Crash Analysis

Crash data were obtained from FDOT Crash Analysis Reporting System (CARS) for the years 2014 to 2016 and Signal Four Analytics (SFA) for the years 2017 to 2018. A total of 639 crashes occurred within the study area during these five years. There were zero (0) fatalities within these five years, 12 incapacitating injuries, 79 non-incapacitating injuries, and 153 possible injuries. There were eight (8) collisions involving pedestrians and four (4) collisions involving bicyclists.

The most common crash type reported was angle collisions with 156 crashes and approximately 24% of the total crashes. There was also 134 (21%) rear end crashes, 68 (11%) sideswipe crashes, 54 (9%) off road crashes. **Table 2.1**, **Table 2.2**, and

Table 2.3 show the crashes by severity, total injuries, and type, respectively.

The crash data indicate that 16% of crashes were distraction related crashes, 4% were alcohol related and 1% were drug related crashes. Only one (1) crash involved an animal in the roadway for the five-year period. With regards to weather conditions, 12% of crashes occurred with wet pavement conditions. With regards to lighting conditions, 20% of crashes occurred in dark conditions. There were seven (7) wrong-way crashes reported in the study area for the five year history.

Table 2.1: Crashes by Severity

Year	Fatal	Injury	Property Damage Only	Total
2014	0	33	61	94
2015	0	30	59	89
2016	0	32	63	95
2017	0	29	162	191
2018	0	33	137	170
Total	0	157	482	639

Table 2.2: Crash Injuries by Severity

Year	Fatalities	Total Injuries	Incapacitating Injuries	Non Incapacitating Injuries	Possible Injuries
2014	0	43	2	13	28
2015	0	50	0	14	36
2016	0	45	6	12	27
2017	0	49	1	21	27
2018	0	57	3	19	35
Total	0	244	12	79	153

Table 2.3: Crashes by Type

Type	2014	2015	2016	2017	2018	Total	Percentage
Angle	27	29	30	49	21	156	24%
Bicycle	0	1	2	0	1	4	1%
Head On	1	1	3	1	2	8	1%
Left Turn	4	7	5	10	6	32	5%
Off Road	9	9	7	12	17	54	8%
Other	18	11	20	43	26	118	18%
Pedestrian	3	0	1	0	4	8	1%
Rear End	23	17	12	49	33	134	21%
Right Turn	0	0	1	2	1	4	1%
Rollover	0	1	0	1	0	2	0%
Sideswipe	7	10	13	19	19	68	11%
Unknown	2	3	1	5	40	51	8%
Total	94	89	95	191	170	639	100%

The following patterns were observed upon review of the crash reports:

- Overall, the crash reports show that many of the sideswipe, other, and unknown crashes are due to a vehicle in the right through lane attempting to turn left onto a cross street or driveway and colliding with a vehicle in the left through lane.
- At signalized intersections along both corridors, several of the crash reports indicate red light running, the driver did not notice the traffic signal, or both drivers thought the traffic signal was green. Countermeasures should be considered at these intersections to increase the signal visibility and awareness. These intersections include:
 - MLK Drive at Maxwell Street
 - Davis Highway at Blount Street
 - MLK Drive and Texar Drive
 - Davis Highway and Texar Drive
- Several angle crashes were noted along the corridor with possible sight distance issues due to trees, landscaping, or buildings including at the intersections of:
 - Davis Highway and Cross Street
 - Davis Highway and Jordan Street
 - Davis Highway and De Soto Street
- Several angle crashes were noted along the corridor at unsignalized intersections that may need increased stop sign conspicuity and awareness including Davis Highway and Maxwell Street.

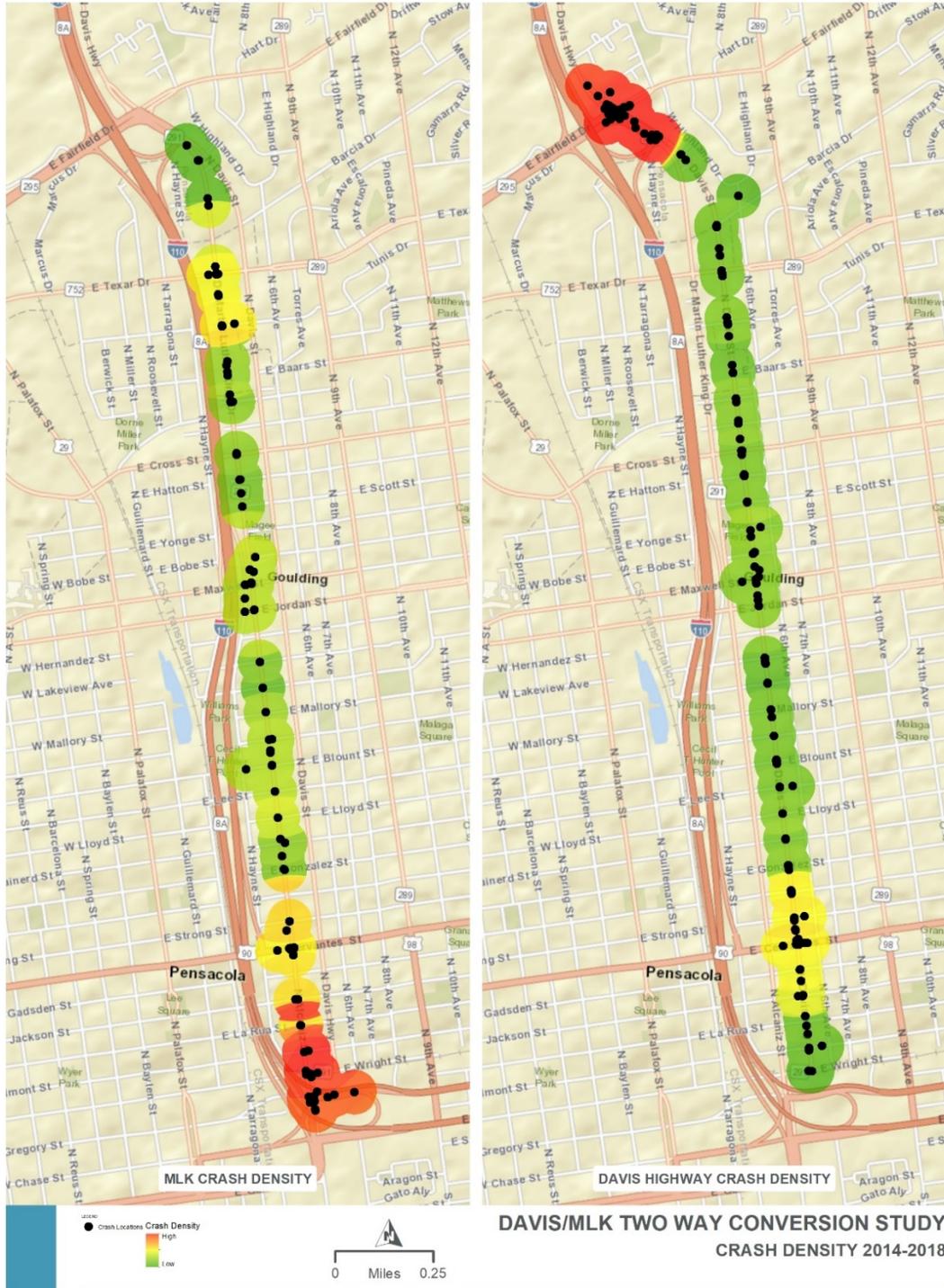
Figure 2.9 shows the crash density along MLK Drive and Davis Highway between 2014 and 2018. Discussion is provided below for intersections with a high volume of crashes.

- The Fairfield Drive/Davis Highway intersection has the maximum number of crashes among other intersections within the study area, with 148 crashes. The most common crash type was rear-end crashes with 82 (55%) reported. Most of the crashes were property damage only and there were 25 (17%) non-incapacitating injuries. One crash involved a pedestrian which was a non-incapacitating injury crash, and one crash involved a bicyclist which also involved a non-incapacitating injury. About 30 (20%) of the crashes occurred in dark conditions, and 21 (14%) occurred with wet pavement conditions. Rear-end collisions can be attributed to poor traffic control visibility, inadequate signal timing, inadequate roadway lighting, congestion, and driver inattentiveness. As such, potential countermeasures include providing advance signal warning signage and installing signal backplates.
- MLK Drive and Cervantes Street had 35 crashes reported for the five-year history. The most predominant crash type was rear-end with 14 (40%) rear-end crashes, followed by angle crashes with 11 (31%) reported. The majority of crashes were property damage only, and there were six (6) injury crashes with one (1) incapacitating injury reported. There were 10 (29%) crashes that occurred in dark conditions. The majority of crashes occurred with dry pavement conditions. There was one reported pedestrian crash with a non-incapacitating injury.
- The intersection of Davis Highway and Cervantes Street has 46 crashes reported. The most common crash type of rear-end with 11 (23%) reported. The next most common crash type was angle crashes with nine (20%) reported. The majority of crashes were property damage only with nine (9) injury crashes reported with one (1) incapacitating injury. The majority of crashes occurred in daylight conditions with dry pavement. There was one (1) bicycle crash reported that resulted in property damage only.
- There were 33 reported crashes at the intersection of Alcaniz Street and Wright Street. The most common crash type was angle with 22 (67%) reported. The majority of crashes were property damage only with eight (8) injury crashes reported and no incapacitating injuries. The majority of crashes occurred in daylight conditions with dry pavement. Notably, 19 of the 22 angle crashes occurred between southbound and westbound traffic. There is limited sight distance on the northern leg due to a building located in the northeast corner. This limited sight distance is likely contributing to these angle crashes due to limited visibility of conflicting traffic entering the intersection between the northern and eastern legs.
- The intersection of Alcaniz Street and Gregory Street had 22 reported crashes during the five-year history. The most common crash type was angle with eight (8) crashes reported. There were seven (7) injury crashes with four (4) incapacitating injuries reported. There was one pedestrian injury resulting in an injury. About 27% of the crashes occurred in dark conditions or with wet pavement conditions.

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Figure 2.9: Davis/MLK Crash Density (2014-2018)



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Table 2.4 and **Table 2.5** shows the comparison of the average crash rate experienced for the same facility type over the last five (5) years throughout District Three. The crash rate is calculated by the total number of crashes on all segments of the same facility type within the District divided by the total millions of vehicle miles (MVM) traveled. The MVM is determined by multiplying the AADT by the length of the segment and by the number of days in the study, then dividing by one million. As shown, the average crash rate experienced in District Three over the last five (5) years for the same facility type is 8.72 crashes per MVM. This segment of Dr. Martin Luther King Jr. Drive / Alcaniz Street and Davis Highway experience a crash rate that is more than double the average crash rate at 21.67 crashes per MVM and 21.22 crashes per MVM, respectively.

Table 2.4: Dr. Martin Luther King Jr. Drive / Alcaniz Street Crash Rate Comparison

Dr. Martin Luther King Jr. Drive / Alcaniz Street	
AADT	3200
Segment Length (miles)	2.55
Number of Study Days	1,825
Millions of Vehicle Miles (MVM)	14.892
Number of Crashes	323
Segment Crash Rate	21.69
District Three Average Crash Rate*	8.72

*Note: The Average Crash Rate for the Urban One Way Roadway Segment is shown

Table 2.5: Davis Highway Crash Rate Comparison

Davis Highway	
AADT	3200
Segment Length (miles)	2.25
Number of Study Days	1,825
Millions of Vehicle Miles (MVM)	14.892
Number of Crashes	316
Segment Crash Rate	21.22
District Three Average Crash Rate*	8.72

*Note: The Average Crash Rate for the Urban One Way Roadway Segment is shown

2.8 Existing Year (2019) Traffic Operational Analysis

Consistent with the approved Methodology Memorandum (provided in **Appendix A**), the intersection analyses were conducted using Synchro/SimTraffic software. The signal timing plans for the signalized intersections along the study corridor were obtained from the City of Pensacola. The signal timing plans can be found in **Appendix D**. Existing truck percentages for each approach and the measured global PHFs were used in the analysis. The Measures of Effectiveness (MOEs) analyzed include level of service (LOS), delay, and queuing. These MOEs for existing conditions are further discussed in the following subsections to establish a baseline for comparison with the future traffic analysis years. The Synchro reports can be found in **Appendix E**.

Existing Intersection Delay Analysis

Table 2.6 shows the existing year (2019) overall intersection control delay and LOS results for the existing conditions of the 22 intersections. The Synchro reports can be found in **Appendix E**.

The Davis Highway/ I-110 On/Off Ramp intersection currently experiences overall delays over 45 seconds/vehicle (s/veh) during the AM peak hour, resulting in LOS D. While Davis Highway/ Fairfield Drive experiences overall delays of 40 s/veh and over during both the AM and PM peak hours, resulting in LOS D.

For the Alcaniz Street/Gregory Street intersection, the overall intersection delay is over 25 s/veh during PM peak hour. Davis Highway/Cervantes Street shows LOS F during PM peak hour and Davis Highway/Texar Drive the overall intersection delay is over 140 s/veh during the PM peak hour, resulting in LOS F and is the highest delay among all the intersections

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Two-Way Conversion Traffic Feasibility Study

Table 2.6: Existing Year (2019) Overall Intersection Delay (s/veh)

	Intersections	Overall Intersection			
		Delay	LOS	Delay	LOS
		AM		PM	
1	 Alcaniz Street/Gregory Street	18.9**	B	27.4**	C
2	 Alcaniz Street/Wright Street	8.8*	A	9.5*	A
3	 MLK Drive / Alcaniz Street/Cervantes Street	10.9*	B	11.5*	B
4	 Cervantes Street/Hayne Street	3.7*	A	6.1*	A
5	 MLK Drive/Blount Street	7**	A	13**	B
6	 MLK Drive/Jordan Street	8.9*	A	8.9*	A
7	 Jordan Street/Hayne Street	0*	A	0*	A
8	 Maxwell Street/Hayne Street	10.6**	B	19.8**	B
9	 MLK Drive/Maxwell Street	19.2**	B	18**	B
10	 MLK Drive/Cross St	5*	A	4.5*	A
11	 MLK Drive/Texar Drive	18.1**	B	18.6**	B
12	 MLK Drive/Hart Drive	0.8*	A	0.7*	A
13	 Davis Highway/Wright Street	1.8*	A	1.1*	A
14	 Davis Highway/Cervantes Street	12*	B	82.3*	F
15	 Davis Highway/Blount Street	9.3**	A	9.2**	A
16	 Davis Highway/Jordan Street	9.2*	A	9.1*	A
17	 Davis Highway/Maxwell Street	0*	A	0*	A
18	 Davis Highway/Cross Street	4.9*	A	4*	A
19	 Davis Highway/Texar Drive	45.9*	D	147.5*	F
20	 Davis Highway/Hart Drive	1.1*	A	0.6*	A
21	 Davis Highway/I-110 On/Off Ramp	47.2**	D	32.6**	C
22	 Davis Highway/Fairfield Drive	40**	D	41**	D

* denotes values from HCM 6th

** denotes values from HCM 2000

Existing Intersection Queue Analysis

Table 2.7 shows the existing turn lane storage length inventory rounded to the nearest 25 feet (ft), and **Table 2.8** and **Table 2.9** shows the queue length results of the study intersections with turn lanes for the existing year (2019) AM and PM peak hour. The 95th percentile queue length rounded up to the nearest 25 ft is provided. SimTraffic queue reports for all the intersections within the study area can be found in **Appendix E**.

Table 2.7: Existing Turn Lane Storage Length (ft) Inventory

Intersections	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Existing								
Alcaniz Street/Gregory Street	-	-	-	-	125	-	-	-
MLK Drive/Cervantes Street	-	-	100	-	-	-	-	-
Cervantes Street/Haynes Street	175	-	-	-	-	-	-	-
MLK Drive/Blount Street	-	-	125	-	-	-	-	-
MLK Drive/Maxwell Street	-	-	-	-	-	-	-	350
MLK Drive/Texar Drive	-	-	125	-	-	-	-	-
Davis Highway/Cervantes Street	125	-	-	-	-	200	-	-
Davis Highway/Blount Street	75	-	-	-	-	-	-	-
Davis Highway/Texar Drive	150	-	-	-	-	-	-	-
Davis Highway/I-110 On/Off Ramp	250	-	-	-	225	-	150	-
Davis Highway/Fairfield Drive	250	-	200	-	275	-	300	550

The results for the existing year (2019) queue length analysis indicate that the existing storage lengths are sufficient for the majority of the study intersections.

For the MLK Drive/Cervantes Street intersection, the queue length for the westbound left turn and Cervantes Street/Hayne Street, the queue for the eastbound left turn exceeds the available turn bay storage for both AM and PM peak hour and spill into the through lane. This queuing contributes to the delays associated with these approaches.

For the Davis Highway/I-110 On/Off Ramp intersection, the queue lengths for the eastbound left movements exceed the available turn bay storage for both AM and PM peak hour and spill into the through lane. This contributes to the higher delays associated with these approaches.

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Two-Way Conversion Traffic Feasibility Study

Table 2.8: Dr. Martin Luther King Jr. Drive / Alcaniz Street and Davis Highway Existing Year AM (2019) Intersection Queue Length (ft)

Intersections		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
		AM											
1	 Alcaniz Street/Gregory Street	-	-	-	250	250	50	75	100	-	-	100	100
3	 MLK Drive / Alcaniz Street/Cervantes Street	-	425	400	200*	300	-	-	-	-	100	100	100
4	 Cervantes Street/Haynes Street	225*	475	-	-	225	200	75	75	75	-	-	-
5	 MLK Drive/Blount Street	-	75	75	50	100	-	-	-	-	50	75	75
9	 MLK Drive/Maxwell Street	-	-	-	100	100	-	-	-	-	-	75	75
11	 MLK Drive/Texar Drive	125	125	75	50	125	-	-	-	-	200	225	225
14	 Davis Highway/Cervantes Street	75	175	-	-	175	150	175	175	100	-	-	-
15	 Davis Highway/Blount Street	25	75	-	-	125	125	75	75	75	-	-	-
19	 Davis Highway/Texar Drive	75	75	-	-	125	75	150	150	150	-	-	-
21	 Davis Highway/I-110 On/Off Ramp	350*	350	125	50	50	50	175	100	100	50	125	-
22	 Davis Highway/Fairfield Drive	200	175	-	25	250	125	100	200	-	100	175	-

* Indicates the queue length exceeds the turn lane length

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Two-Way Conversion Traffic Feasibility Study

Table 2.9: Dr. Martin Luther King Jr. Drive / Alcaniz Street and Davis Highway Existing Year PM (2019) Intersection Queue Length (ft)

Intersections		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM													
1	 Alcaniz Street/Gregory Street	-	-	-	175	175	25	125	225	-	-	100	100
3	 MLK Drive / Alcaniz Street/Cervantes Street	-	375	375	150*	275	-	-	-	-	125	125	100
4	 Cervantes Street/Haynes Street	250*	375	-	-	300	300	50	175	125	-	-	-
5	 MLK Drive/Blount Street	-	125	125	25	100	-	-	-	-	75	75	75
9	 MLK Drive/Maxwell Street	-	-	-	75	75	-	-	-	-	-	100	75
11	 MLK Drive/Texar Drive	175	175	100	75	100	-	-	-	-	200	200	200
14	 Davis Highway/Cervantes Street	100	125	-	-	175	125	175	175	175	-	-	-
15	 Davis Highway/Blount Street	50	100	-	-	75	75	75	75	75	-	-	-
19	 Davis Highway/Texar Drive	150	125	-	-	150	75	250	250	200	-	-	-
21	 Davis Highway/I-110 On/Off Ramp	300*	300	150	25	50	50	200	175	175	25	250	-
22	 Davis Highway/Fairfield Drive	225	200	-	150	400	225	100	175	-	125	200	-

* Indicates the queue length exceeds the turn lane length

3.0 Future Travel Demand

3.1 Growth Rate Determination

Consistent with the approved Methodology Memorandum (provided in **Appendix A**), various sources were reviewed to determine an appropriate growth rate for the study area. These include historical traffic data, the Bureau of Economic and Business Research (BEBR) population estimates, and Northwest Florida Regional Planning Model (NWFRPM) volumes.

Historical Traffic Growth

Historical AADT volumes obtained from the *FDOT Florida Traffic Online (FTO) 2018* were analyzed for compounded growth trends, as shown in **Table 3.1**. As shown, no stations were showing a positive growth trend with an average growth rate of -2.20%.

NWFRPM Growth Rate

The NWFRPM (version 2.1) is the adopted model for the ECRC. The NWFRPM includes areas within the ECRC jurisdiction, as well as Jackson, Calhoun, Gulf, Franklin, and Wakulla Counties. The adopted NWFRPM was validated for Base Year (2010) and Horizon Year (2040). The Base Year (2010) model and Horizon Year (2040) Cost Feasible model were used to estimate compounded model growth rates in the study area. **Table 3.2** shows the results with an average model growth rate of -1.74%.

Table 3.1: Historical Growth Trends

Road	Count Location	Station ID	Trend Analysis Growth Rate (2018 to 2045)
Davis Highway	South of Fairfield Dr	485323	3.63%
	North of Texar Dr	484010	-1.73%
	North of Maxwell St	485047	-3.70%
	Between Maxwell and Jordan St	485234	-2.66%
	South of Cervantes St	485161	-4.00%
	North of Wright St	485292	-0.55%
	North of Lloyd St	485248	-4.53%
Martin Luther King Jr. Drive	North of Texar Dr	485308	-4.68%
	South of Texar Dr	484007	-5.24%
	Between Maxwell and Jordan St	485235	-5.82%
	North of Lloyd St	485247	-5.85%
Alcaniz St	South of Cervantes St	485028	-4.59%
	North of Wright St	485293	-3.90%
	South of Wright St	485030	-0.19%
Fairfield Drive	S of W D Childer's Plz	485177	-0.47%
	East of Palafox St	484019	0.17%
Texar Drive	West of I-110	485206	-2.38%
	East of I-110	485284	-2.38%
Cross Street	East of Palafox Street	485191	-2.81%
Maxwell Street	East of Davis Hwy	485137	1.31%
	West of Hayne St	485238	-2.01%
Jordan Street	West of I-110	485240	-0.67%
Blount Street	West of Tarragona St	485246	-2.58%
	West of MLK Dr	485245	-3.57%
Cervantes	West of Davis St	485006	-0.51%
Gregory Street	West of 9 th Ave	485031	0.04%
Average			-2.20%

Table 3.2: NWFRPM Growth Rates

Road	Count Location	NWFRPM AADT		
		Base Year (2010) Model	Cost Feasible (2040) Model	2010/2040 Growth
Davis Highway	North of Fairfield Dr	13528	6692	-2.32%
	North of I-110 Ramps	7283	3354	-2.55%
	North of Hart Dr	3340	1543	-2.54%
	North of Texar Dr	3622	1737	-2.42%
	North of Cross St	2770	685	-4.55%
	South of Cross St	3117	868	-4.17%
	North of Maxwell St	3066	757	-4.56%
	North of Jordan St	5091	2594	-2.22%
	South of Jordan St	3152	2187	-1.21%
	North of Blount	2925	2074	-1.14%
	South of Blount	3533	2922	-0.63%
	North of De Soto St	3526	2953	-0.59%
	North of Cervantes	3863	3215	-0.61%
	South of Cervantes	2124	1239	-1.78%
Martin Luther King Jr Drive	North of Wright St	1550	782	-2.25%
	North of Hart Dr	3943	1811	-2.56%
	North of Texar Dr	4146	1950	-2.48%
	North of Cross St	2733	685	-4.51%
	South of Cross St	2909	767	-4.35%
	North of Maxwell St	2960	759	-4.44%
	North of Jordan St	1550	760	-2.35%
	South of Jordan St	5009	4285	-0.52%
	North of Blount	4732	4055	-0.51%
	South of Blount	4649	4506	-0.10%
Alcaniz Street	North of De Soto St	4562	4455	-0.08%
	North of Cervantes	4893	4713	-0.12%
	North of Wright St	1760	1085	-1.60%
Fairfield Drive	North of Gregory St	2921	2246	-0.87%
	South of Gregory St	7952	7316	-0.28%
	West of Davis Hwy	34860	30318	-0.46%
Texar Drive	East of Davis Hwy	25801	24507	-0.17%
	West of MLK Dr	16395	11045	-1.31%
	West of Davis Hwy	19517	12021	-1.60%
	East of Davis Hwy	21956	12756	-1.79%

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JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

	West of I-110	1599	732	-2.57%
Cross Street	West of Davis Hwy	1416	514	-3.32%
	East of Davis Hwy	1450	444	-3.87%
Maxwell Street	West of MLK Dr	7888	4505	-1.85%
	West of Davis Hwy	6479	4507	-1.20%
	East of Davis Hwy	4454	2670	-1.69%
Jordan Street	West of MLK Dr	9195	6600	-1.10%
	West of Davis Hwy	5737	3075	-2.06%
	East of Davis Hwy	3795	2669	-1.17%
Blount Street	West of MLK Dr	2869	1449	-2.25%
	West of Davis Hwy	3380	1536	-2.59%
	East of Davis Hwy	3605	2148	-1.71%
Cervantes Street	West of MLK Dr	27296	29064	0.21%
	West of Davis Hwy	27183	29248	0.24%
	East of Davis Hwy	28681	30076	0.16%
Wright Street	West of MLK Dr	450	235	-2.14%
	West of Davis Hwy	2679	1655	-1.59%
	East of Davis Hwy	1128	873	-0.85%
Gregory Street	West of Alcaniz St	4624	3544	-0.88%
	East of Alcaniz St	8618	8660	-0.02%
Average				-1.74%

Escambia County Population Projections

The BEBR population projections were reviewed for Escambia County. Population growth projections are provided through the design year (2045) for three scenarios: low, medium, and high. As shown in **Table 3.3**, the low linear growth rate is 0.04% and the high linear growth rate is 1.23%.

Table 3.3: Escambia County Population Projections

Projection Range	2017 Estimate	2045 Projection	Annual Growth Rate, Persons / Year (%)	
			Linear Average Growth Rate	Exponential Average Growth Rate
Low	318,560	322,200	0.04%	0.04%
Medium	318,560	367,700	0.57%	0.53%
High	318,560	424,600	1.23%	1.07%

Growth Rate Recommendation

Historical traffic growth rates in the study area show a negative growth in traffic. The adopted NWFRPM shows that a negative growth rate is also anticipated from the Base Year 2010 to Horizon Year 2040. The BEBR population projections for Escambia County as a whole is 0.04% per year as a low estimation, and 1.23% as a high estimation.

Consistent with the approved Methodology Memorandum (provided in **Appendix A**), an annual compounded growth rate of 0.5% was used to represent conservative growth in the area.

Future traffic volumes were estimated using the compounded annual growth rate of 0.5% applied to existing traffic volumes. **Figure 3.1**, **Figure 3.2**, **Figure 3.3**, and **Figure 3.4** show the future No Build design year (2045) AM and PM peak-hour volumes.

Figure 3.1: Future No Build Design Year AM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes

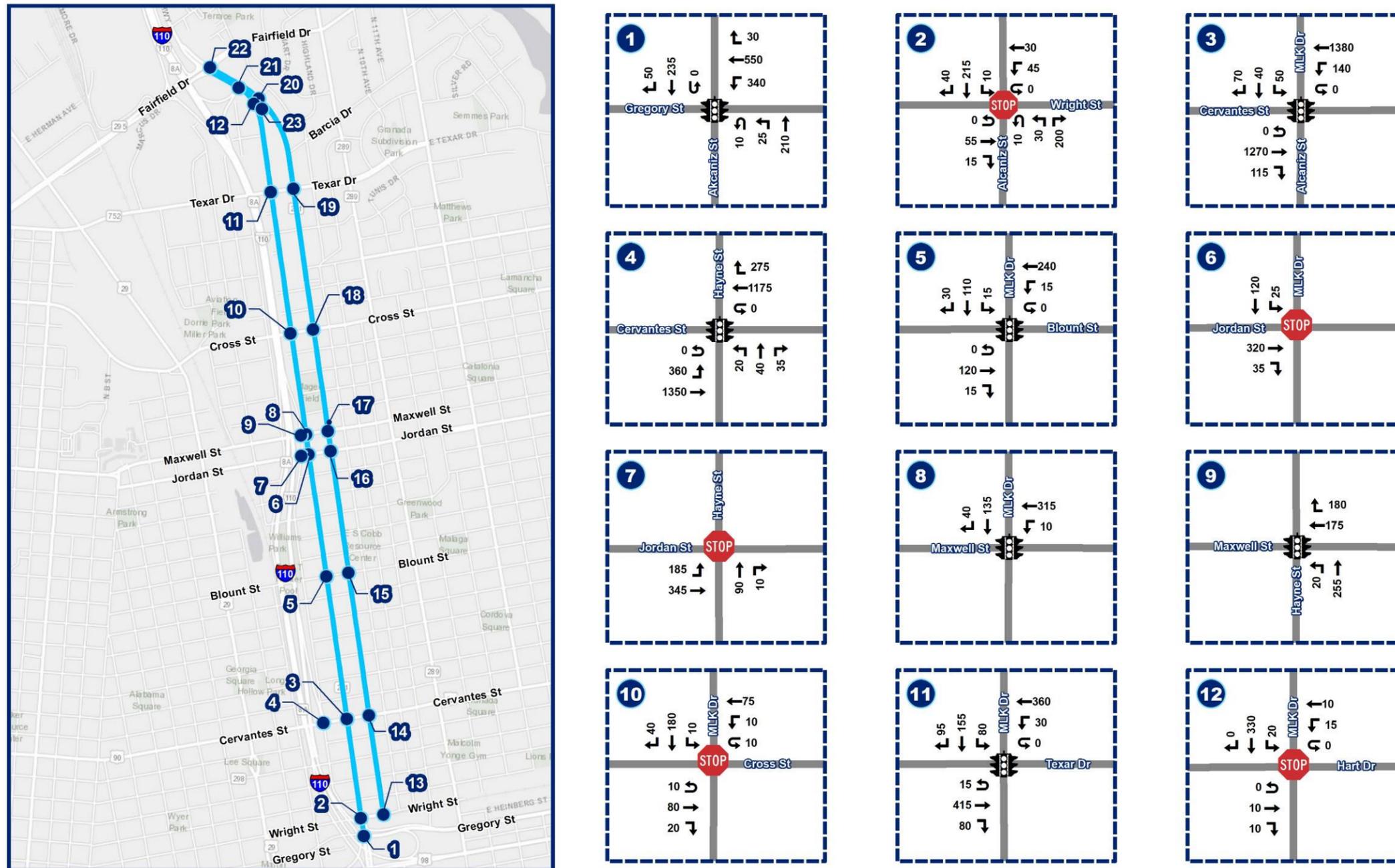


FIGURE 4 - FUTURE NO BUILD YEAR 2045 AM PEAK

HR

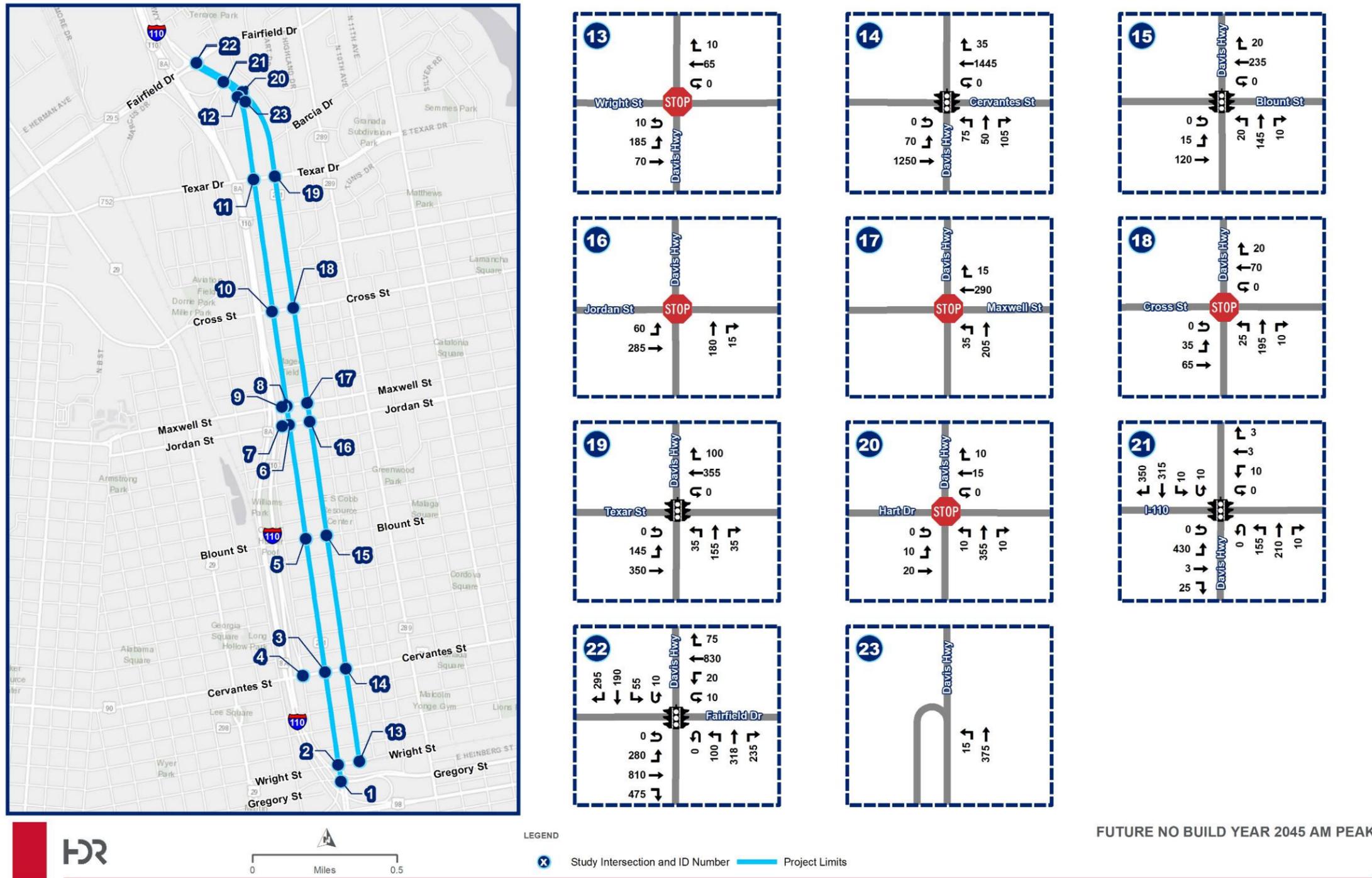
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LEGEND

- Study Intersection and ID Number
- Project Limits

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Figure 3.2: Future No Build Design Year AM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes



FUTURE NO BUILD YEAR 2045 AM PEAK

Figure 3.3: Future No Build Design Year PM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes

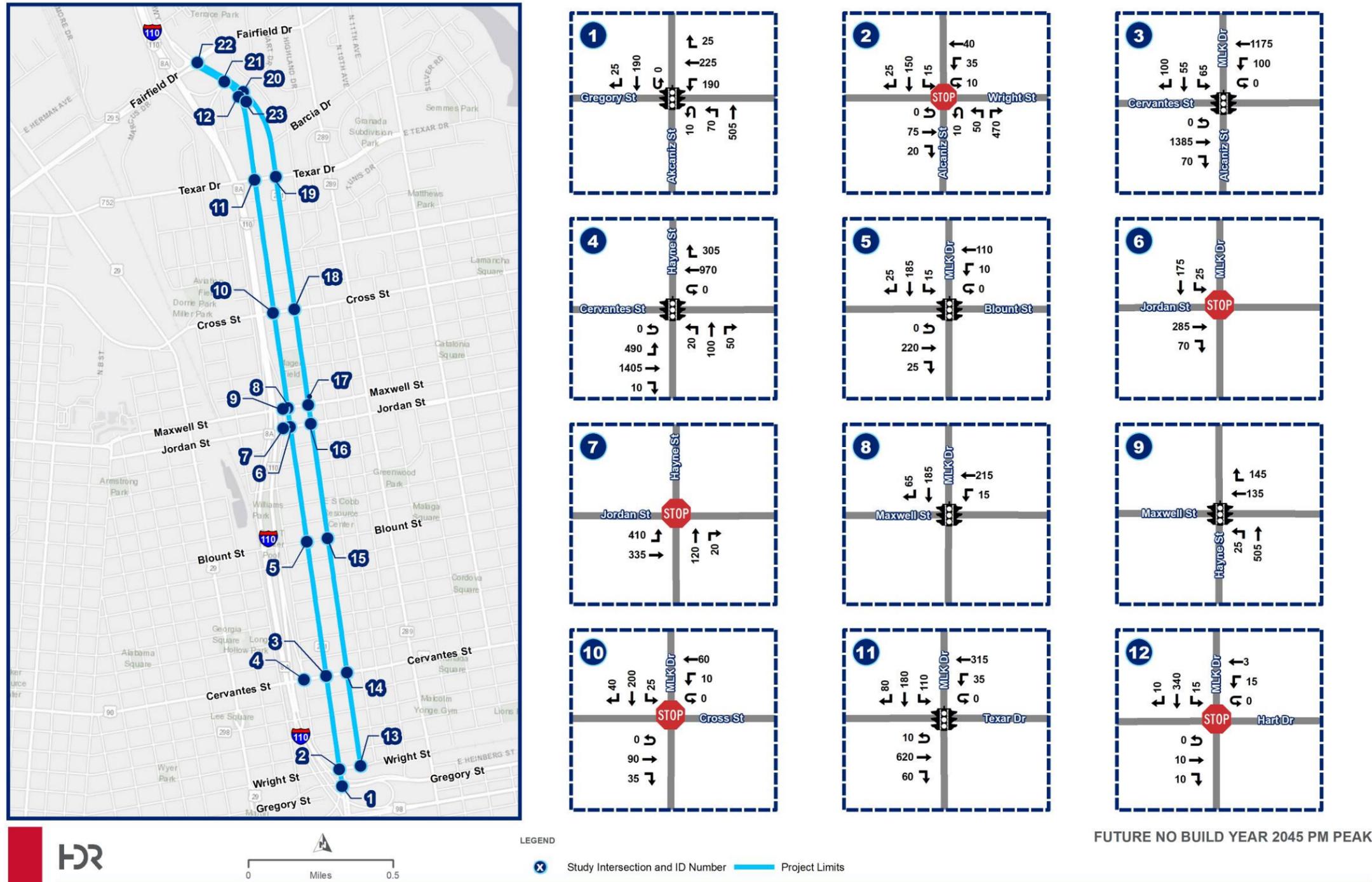
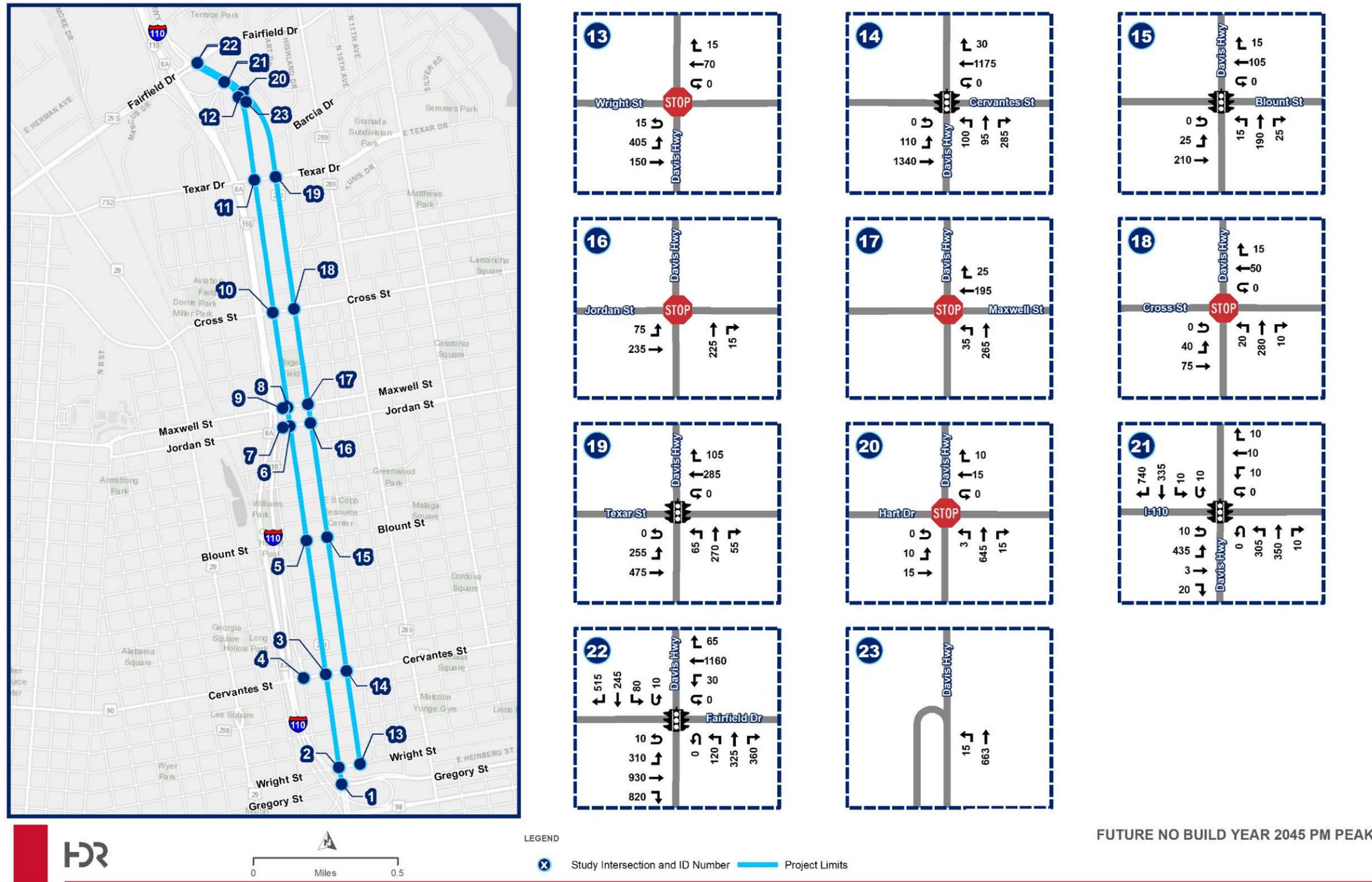


Figure 3.4: Future No Build Design Year PM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes



4.0 Future Alternatives

In addition to the Build Condition, a No Build Condition was considered along the Davis Highway & Dr. Martin Luther King Jr. Drive/Alcaniz Street study corridor. The Build Condition incorporates design and operational features for two-way traffic movements along both the corridors. The two conditions are discussed in detail in this section.

4.1 No Build Condition

The No Build Condition has no changes to the existing year (2019) lane geometry or traffic control features within the project area. The No Build Condition is considered to compare the operational conditions to the Build Condition (with two-way traffic). The No Build Condition has no capital cost associated with it as the existing facility will not be modified. Signal retiming is considered along both the corridors, the No Build Condition assumes all signalized intersections within the study area will be retimed by 2045 and the signal timing was optimized using the existing signal phasing.

4.2 Build Condition (Two-Way Traffic)

Under the Build Condition, Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street is converted to a two-way traffic flow throughout the corridor. A 50/50 split of traffic volume was considered between both the corridors for the development of traffic volumes for this condition. The Build Conditions also includes the following improvements:

- Due to this two-way conversion, a roundabout has been introduced at the point where MLK Drive merges into Davis Highway in order to negotiate the two-way traffic flow. The design concept for this merge area and roundabout is discussed further in the Recommendations section. Raised crosswalks at the roundabout are recommended as well as extra green and pedestrian space.
- The center turn lane at MLK Drive/Cervantes Street, Davis Highway/Cervantes Street, MLK Drive/Texar Drive and Davis Highway/Texar Drive intersections were converted to left-turn turn bays, as further discussed in the recommendations section.
- Alcaniz Street/Wright Street intersection is signalized in the build condition due to two-way traffic operations and existing safety issues. Green space and a pedestrian refuge area has been designed to accommodate pedestrians along Alcaniz Street which experiences high volumes of pedestrians during special events at the Pensacola Civic Center and the Pensacola Grand Hotel. Further discussion is provided in the recommendations section.

Additional discussion of the recommendations is provided in Section 8.0

Figure 4.1: Future Build Design Year AM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes

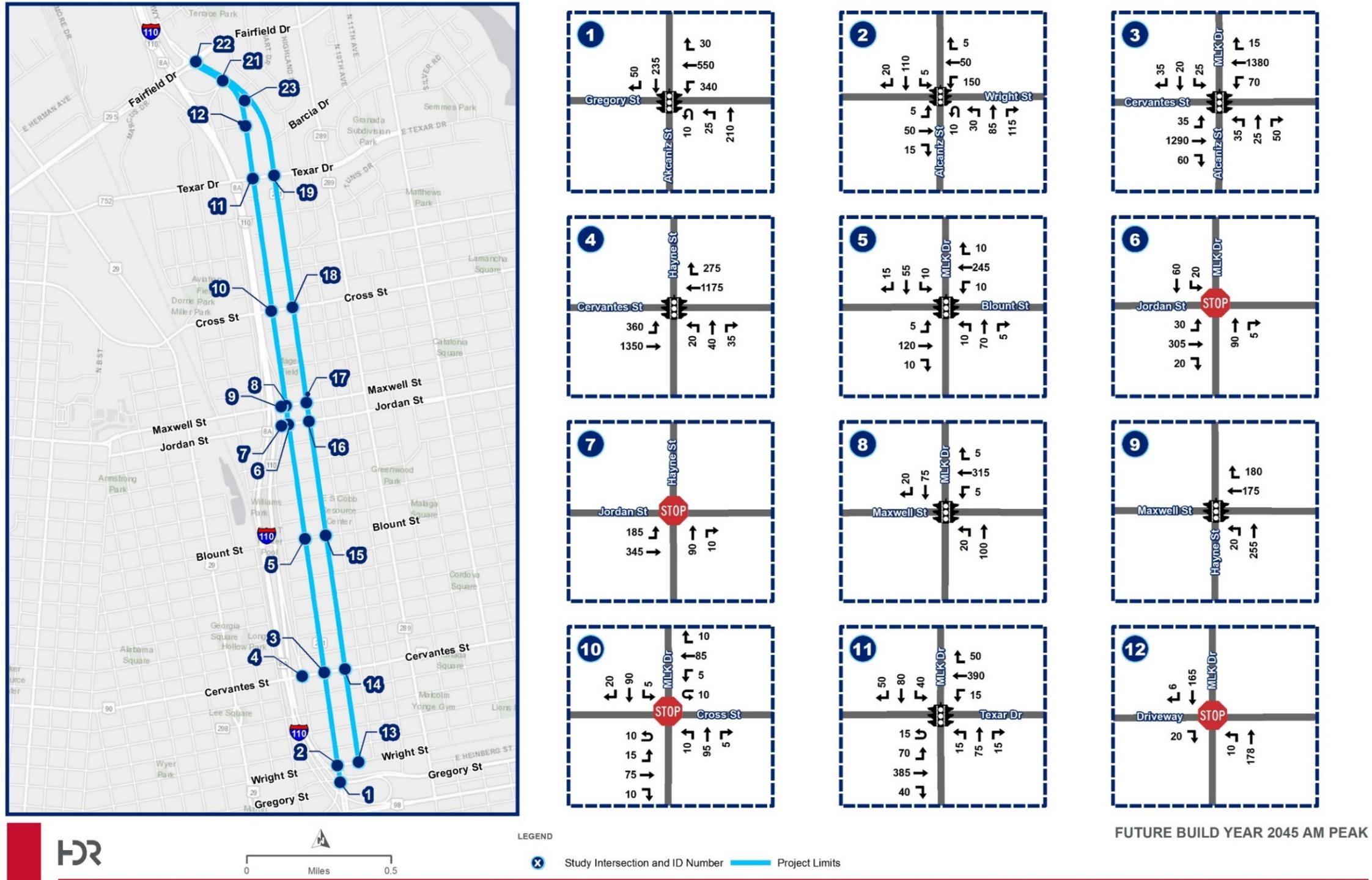
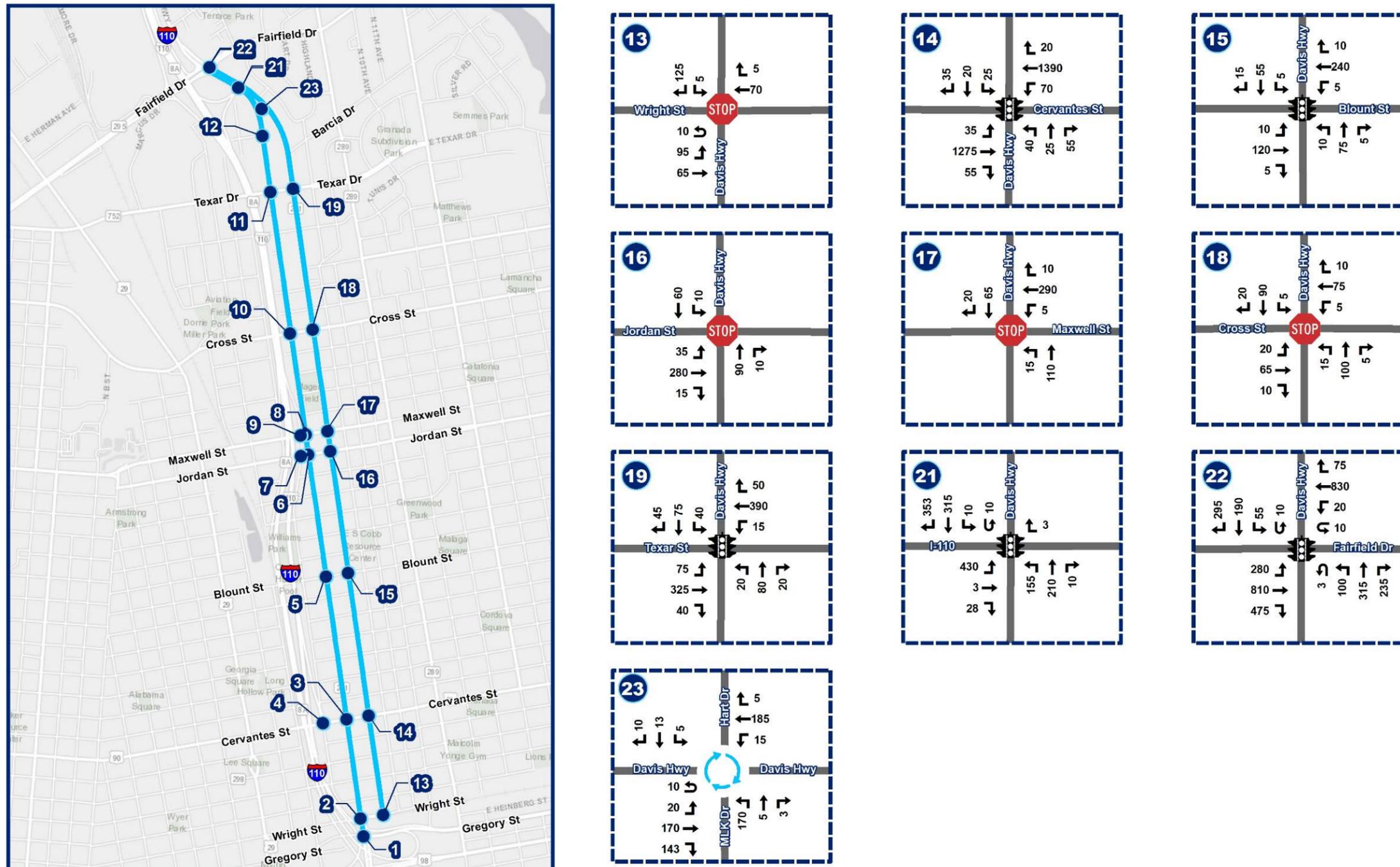


Figure 4.2: Future Build Design Year AM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes



FUTURE BUILD YEAR 2045 AM PEAK



LEGEND
 X Study Intersection and ID Number
 Project Limits

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Figure 4.3: Future Build Design Year PM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes

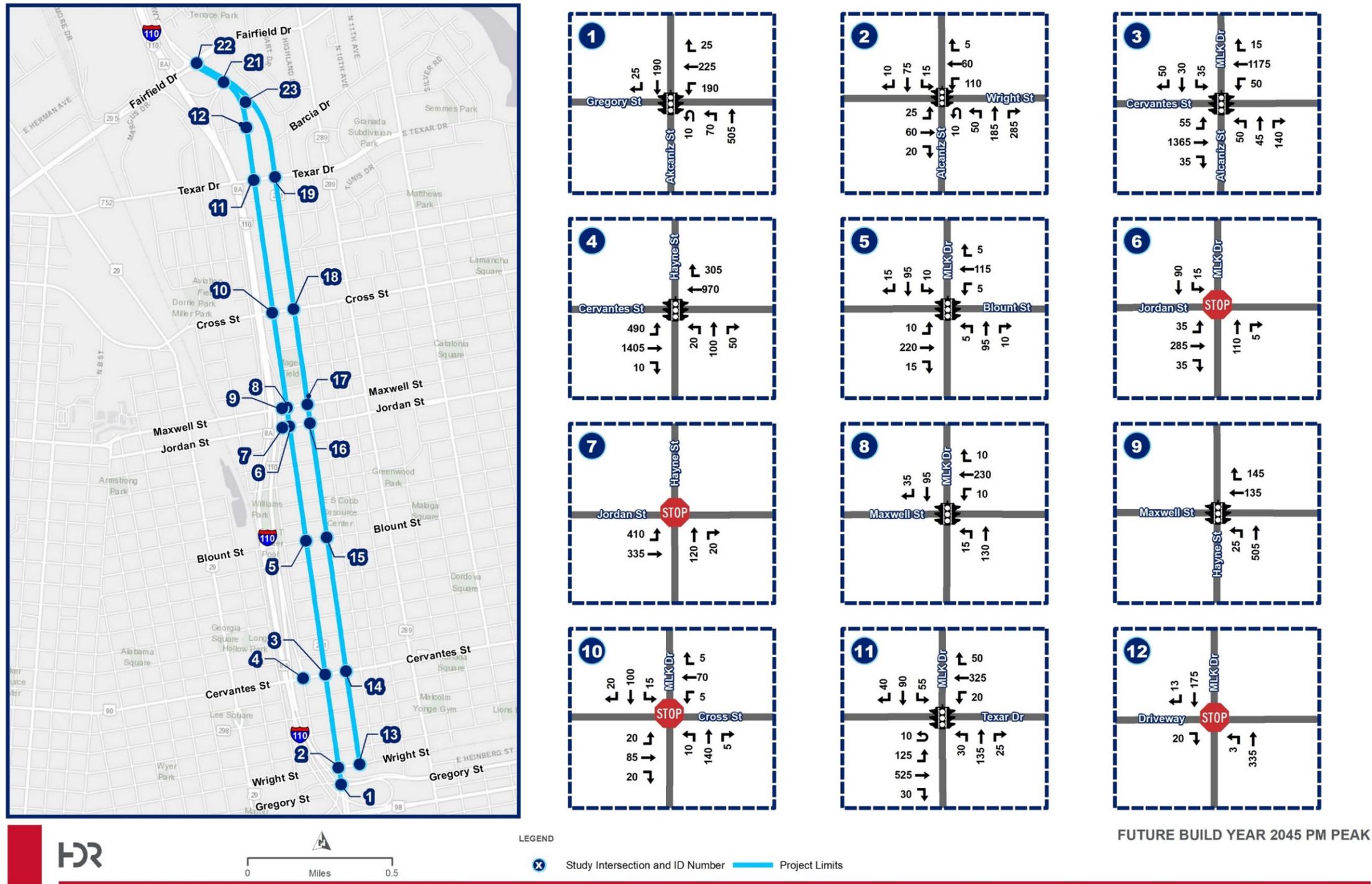
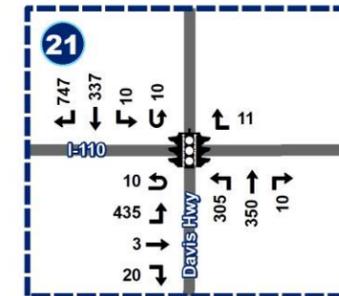
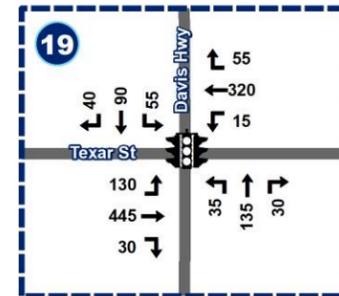
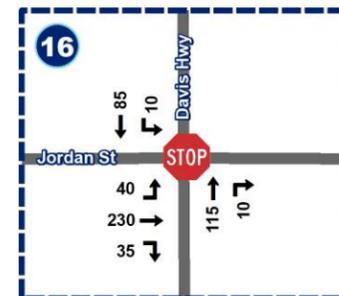
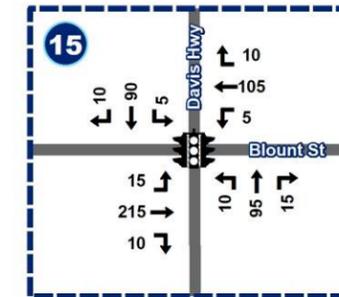
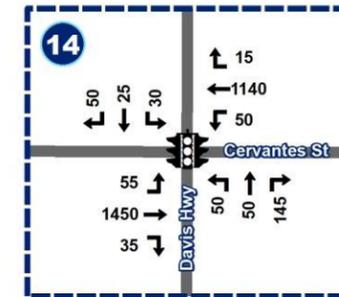
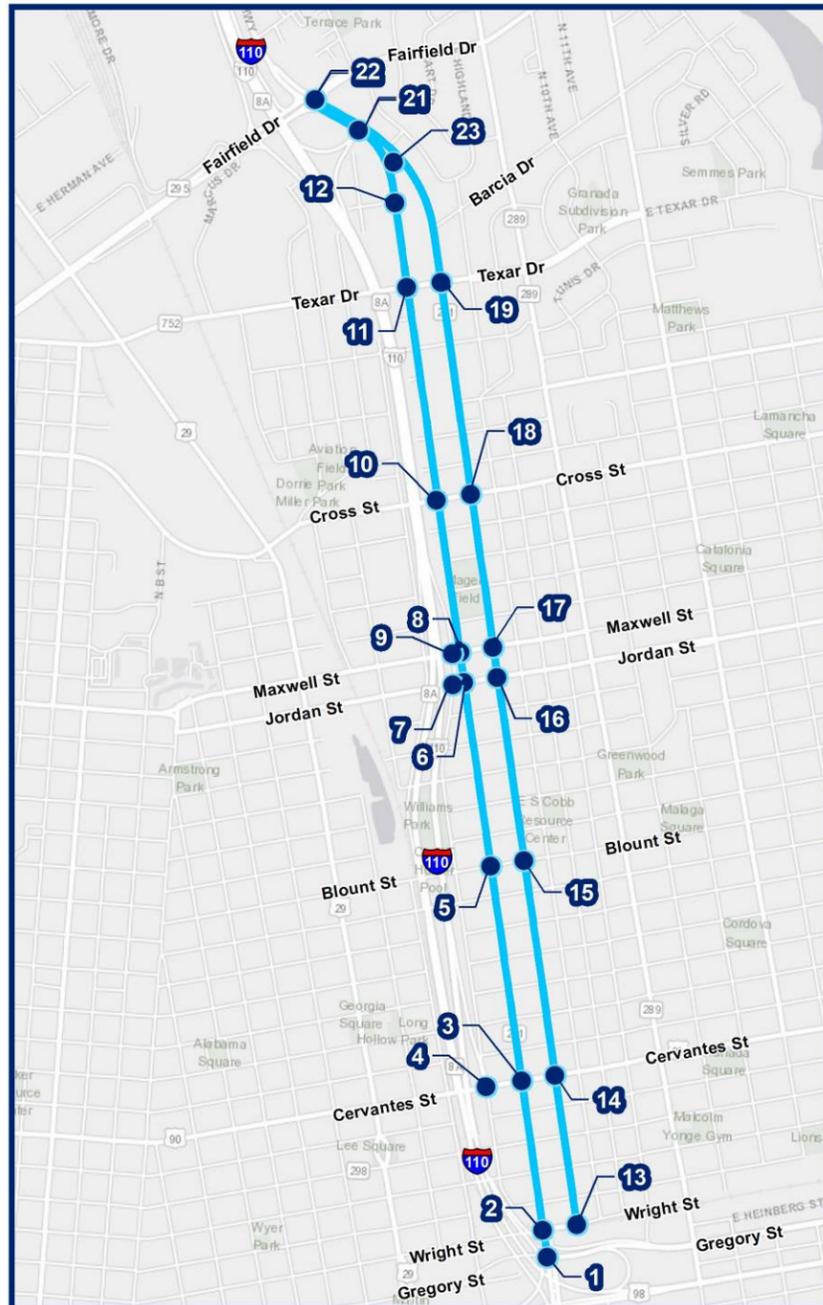


Figure 4.4: Future Build Design Year PM (2045) Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Turning Movement Volumes



FUTURE BUILD YEAR 2045 PM PEAK

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5.0 Future Conditions

5.1 Future No Build Year (2045) Traffic Operational Analysis

The existing year (2019) Synchro models were used as the basis for the future year (2045) models. Signal timing, cycle lengths, offsets and splits were optimized and coordinated for the No Build Alternative in Synchro.

No Build Intersection Delay Analysis

Table 5.1 shows the future year (2045) overall intersection control delay and LOS results for the No Build. The HCM 6th and HCM 2000 Signalized and Unsignalized Intersection Summary results can be found in **Appendix E**.

The results of the No Build Future year analysis indicate that all the intersections are expected to operate acceptably in the AM peak hour and PM peak hour. Based on the analysis results, the Future No Build Condition is performing better than the existing year (2019) analysis results for many of the intersections; this is likely due to the signal timings optimization.

DAVIS HIGHWAY & DR. MARTIN LUTHER KING JR. DRIVE / ALCANIZ STREET

Two-Way Conversion Traffic Feasibility Study

Table 5.1: Design Year (2045) No Build Intersection Delay (s/veh)

	Intersections	Overall Intersection			
		Delay	LOS	Delay	LOS
		AM		PM	
1	 Alcaniz Street/Gregory Street	13.7**	B	11.7**	B
2	 Alcaniz Street/Wright Street	9.4*	A	10.3*	B
3	 MLK Drive / Alcaniz Street/Cervantes Street	12.2*	B	13.5*	B
4	 Cervantes Street/Hayne Street	13.2*	B	23.7*	C
5	 MLK Drive/Blount Street	11.1**	B	15.4**	B
6	 MLK Drive/Jordan Street	9.4*	A	9.4*	A
7	 Jordan Street/Hayne Street	0.0*	A	0.0*	A
8	 Maxwell Street/Hayne Street	13.0**	B	13.2**	B
9	 MLK Drive/Maxwell Street	31.0**	C	31.8**	C
10	 MLK Drive/Cross St	5.3*	A	4.9*	A
11	 MLK Drive/Texar Drive	9.5**	A	11.9**	B
12	 MLK Drive/Hart Drive	1.2*	A	1.0*	A
13	 Davis Highway/Wright Street	1.9*	A	1.1*	A
14	 Davis Highway/Cervantes Street	21.1*	C	13.7**	B
15	 Davis Highway/Blount Street	16.6**	B	11.2**	B
16	 Davis Highway/Jordan Street	9.7*	A	9.6*	A
17	 Davis Highway/Maxwell Street	0.0*	A	0.0*	A
18	 Davis Highway/Cross Street	5.2*	A	4.5*	A
19	 Davis Highway/Texar Drive	17.4*	B	49.5*	C
20	 Davis Highway/Hart Drive	1.5*	A	1.0*	A
21	 Davis Highway/I-110 On/Off Ramp	27.0**	C	36.1**	D
22	 Davis Highway/Fairfield Drive	31.3**	C	41.4**	D

* denotes values from HCM 6th

** denotes values from HCM 2000

No Build Intersection Queue Analysis

The turn lane lengths for the No Build Condition remain unchanged from existing conditions. **Table 5.2** and **Table 5.3** show the queue length results of the study intersections with turn lanes for the AM and PM peak hour. The 95th percentile queue length rounded up to the nearest 25 ft is provided. SimTraffic queue reports for all the intersections within the study area can be found in **Appendix E**.

The results of the No Build condition analysis indicates that queue length results in the existing year are under 500 feet except for one movement, which is the eastbound through movement for the Cervantes Street/Haynes Street intersection. This movement is expected to experience queue length of 525 feet in the PM peak hour.

For the Davis Highway/I-110 On/Off Ramp intersection, the queue lengths for the eastbound left movements exceed the available turn bay storage for both AM and PM peak hour and spill into the through lane. This contributes to the high delays associated with these approaches.

For the MLK Drive/Cervantes Street intersection, the queue length for the westbound left turn for AM peak hour and Cervantes Street/Hayne Street, the queue for the eastbound left turn is expected to exceed the available turn bay storage for both AM and PM peak hour and spill into the through lane. This queuing could contribute to delays associated with these approaches.

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Two-Way Conversion Traffic Feasibility Study

Table 5.2: Design Year AM (2045) No Build Intersection Queue Length (ft)

Intersections		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
		AM											
1	 Alcaniz Street/Gregory Street	-	-	-	300	300	100	75	100	-	-	75	100
3	 MLK Drive / Alcaniz Street/Cervantes Street	-	400	400	175*	225	-	-	-	-	100	100	75
4	 Cervantes Street/Haynes Street	250*	525	-	-	250	250	75	125	100	-	-	-
5	 MLK Drive/Blount Street	-	125	125	50	225	-	-	-	-	50	75	75
9	 MLK Drive/Maxwell Street	-	-	-	125	175	-	-	-	-	-	75	75
11	 MLK Drive/Texar Drive	150	150	100	50	100	-	-	-	-	125	125	125
14	 Davis Highway/Cervantes Street	100	50	-	-	225	175	150	150	100	-	-	-
15	 Davis Highway/Blount Street	50	125	-	-	175	175	75	75	75	-	-	-
19	 Davis Highway/Texar Drive	100	75	-	-	125	100	100	100	100	-	-	-
21	 Davis Highway/I-110 On/Off Ramp	350*	350	125	25	50	50	150	100	100	50	100	-
22	 Davis Highway/Fairfield Drive	200	200	-	100	325	175	100	150	-	100	150	-

* Indicates the queue length exceeds the turn lane length

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Two-Way Conversion Traffic Feasibility Study

Table 5.3: Design Year PM (2045) No Build Intersection Queue Length (ft)

Intersections		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
		PM											
1	 Alcaniz Street/Gregory Street	-	-	-	200	200	50	100	125	-	-	75	75
3	 MLK Drive / Alcaniz Street/Cervantes Street	-	325	325	125*	175	-	-	-	-	125	125	100
4	 Cervantes Street/Haynes Street	250*	525	500	-	300	300	75	200	125	-	-	-
5	 MLK Drive/Blount Street	-	175	175	50	125	-	-	-	-	50	100	100
9	 MLK Drive/Maxwell Street	-	-	-	100	175	-	-	-	-	-	75	150
11	 MLK Drive/Texar Drive	175	175	100	50	75	-	-	-	-	125	125	125
14	 Davis Highway/Cervantes Street	125	100	-	-	250	200	175	175	175	-	-	-
15	 Davis Highway/Blount Street	75	150	-	-	125	125	75	75	75	-	-	-
19	 Davis Highway/Texar Drive	150	75	-	-	125	75	150	150	125	-	-	-
21	 Davis Highway/I-110 On/Off Ramp	325*	325	150	25	50	50	200	150	150	50	150	-
22	 Davis Highway/Fairfield Drive	225	325	-	150	475	275	100	150	-	150	225	150

* Indicates the queue length exceeds the turn lane length

5.2 Future Build Year (2045) Traffic Operational Analysis

The existing year (2019) Synchro models were used as the basis for the future year (2045) models. Signal timing, cycle lengths, offsets and splits were also optimized for the Build Alternative in Synchro. The Alcaniz Street/Wright Street intersection has been signalized in this build condition for two-way traffic operations. The proposed roundabout at Davis Highway/MLK Drive/Hart Drive was analyzed with SIDRA Intersection software.

Build Intersection Delay Analysis

Table 5.4 show the future year (2045) overall intersection control delay and LOS results for the Build condition. The HCM 6th and HCM 2000 Signalized and Unsignalized Intersection Summary results and the SIDRA Intersection results can be found in **Appendix E**.

The results of the Build Future year analysis indicate that all the intersections are expected to meet acceptable FDOT LOS targets in the AM peak hour and PM peak hour. Based on the analysis results, **the Future No Build Condition is performing better than the existing year (2019) analysis results;** this is likely due to the signal timings optimization.

The model results indicate that Davis Highway/Fairfield Drive intersection and MLK Drive/Maxwell Street experiences overall delays over 30 seconds/vehicle (s/veh) during both the AM and PM peak hours, resulting in LOS C.

Alcaniz Street / Wright Street intersection, signalized in build condition, experiences 6.3 s/veh during AM and 5.9 s/veh during PM peak hour resulting in LOS A.

The proposed roundabout at Davis Highway/MLK Drive/Hart Drive is anticipated to operate at LOS A in both the AM and PM peak hours.

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Two-Way Conversion Traffic Feasibility Study

Table 5.4: Design Year (2045) Build Intersection Delay (s/veh)

	Intersections	Overall Intersection			
		Delay	LOS	Delay	LOS
		AM		PM	
1	 Alcaniz Street/Gregory Street	14.0**	B	11.9**	B
2	 Alcaniz Street/Wright Street	6.3**	A	5.9**	A
3	 MLK Drive / Alcaniz Street/Cervantes Street	17.7*	B	19.0*	B
4	 Cervantes Street/Hayne Street	5.1*	A	14.6*	B
5	 MLK Drive/Blount Street	11.0*	B	13.4*	B
6	 MLK Drive/Jordan Street	9.2*	A	9.4*	A
7	 Jordan Street/Hayne Street	0.0*	A	0.0*	A
8	 Maxwell Street/Hayne Street	13.4**	B	13.6**	B
9	 MLK Drive/Maxwell Street	30.5**	C	30.7**	C
10	 MLK Drive/Cross St	8.4*	A	8.7*	A
11	 MLK Drive/Texar Drive	10.8**	B	12.3**	B
12	 MLK Drive/Driveway	0.7**	A	0.4**	A
13	 Davis Highway/Wright Street	8.3*	A	9.3*	A
14	 Davis Highway/Cervantes Street	11.4*	B	13.4*	B
15	 Davis Highway/Blount Street	10.4*	B	11.9*	B
16	 Davis Highway/Jordan Street	9.0*	A	9.1*	A
17	 Davis Highway/Maxwell Street	9.4*	A	9.2*	A
18	 Davis Highway/Cross Street	8.3*	A	8.5*	A
19	 Davis Highway/Texar Drive	11.0*	B	11.4*	B
21	 Davis Highway/I-110 On/Off Ramp	25.4**	C	34.0**	C
22	 Davis Highway/Fairfield Drive	33.2**	C	47.0**	D
23	 Davis Highway/MLK Drive/Hart Drive	3.7***	A	6.4***	A

* denotes values from HCM 6th

** denotes values from HCM 2000

*** denotes SIDRA Intersection analysis



Build Intersection Queue Analysis

Table 5.5 shows the turn lane length inventory for the Future Build Condition rounded to the nearest 25 ft. **Table 5.6** and **Table 5.7** show the queue length results of the study intersections with turn lanes for the AM and PM peak hour. The 95th percentile queue length rounded up to the nearest 25 ft is provided. SimTraffic queue reports for all the intersections within the study area can be found in **Appendix E**.

Table 5.5: Build Turn Lane Storage Length (ft) Inventory (2045)

Intersections	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Existing								
Alcaniz Street/Gregory Street	-	-	-	-	200	-	-	-
MLK Drive/Cervantes Street	150	-	150	-	-	-	-	-
Cervantes Street/Haynes Street	175	-	-	-	-	-	-	-
MLK Drive/Blount Street	-	-	125	-	-	-	-	-
MLK Drive/Maxwell Street	-	-	-	-	-	-	-	350
MLK Drive/Texar Drive	225	-	125	-	-	-	-	-
Davis Highway/Cervantes Street	150	-	150	-	-	150	-	-
Davis Highway/Blount Street	75	-	-	-	-	-	-	-
Davis Highway/Texar Drive	150	-	100	-	-	-	-	-
Davis Highway/I-110 On/Off Ramp	250	-	-	-	275	-	-	-
Davis Highway/Fairfield Drive	250	-	200	-	275	-	300	550

The results of the Build condition analysis indicates that queue lengths results in Build Conditions are 500 feet or less. For the Davis Highway/Fairfield Drive intersection, the queue lengths for the westbound left movement exceed the available turn bay storage for the PM peak hour. However, based on observation of the SimTraffic model, these results appear to be due to the westbound through traffic queuing and blocking the westbound left turn lane. This condition is present in Existing and No Build conditions.

For the Cervantes Street/Haynes Street intersection and Davis Highway/I110 On/Off Ramp intersection, the queue length for the eastbound left turn for both AM and PM peak hours is expected to exceed the available turn bay storage and spill into the through lane. This queuing could contribute to delays associated with these approaches. This queuing is also present in Existing and No Build conditions and not a direct result of the proposed two-way conversion.

The model results also indicate queuing on the southbound approach of Davis Highway at Texar Drive. The addition of a southbound turn lane on Davis Highway could be considered at this intersection; however, this may involve right of way and driveway impacts.

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Two-Way Conversion Traffic Feasibility Study

Table 5.6: Design Year AM (2045) Build Condition Queue Length (ft)

Intersections		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM													
1	 Alcaniz Street/Gregory Street	-	-	-	250	250	50	75	100	-	-	125	125
3	 MLK Drive / Alcaniz Street/Cervantes Street	150	400	400	125	325	325	125	125	125	100	100	75
4	 Cervantes Street/Haynes Street	250*	400	-	-	275	275	75	100	75	-	-	-
5	 MLK Drive/Blount Street	75	75	75	25	100	100	125	125	125	75	75	75
9	 MLK Drive/Maxwell Street	-	-	-	125	125	175	125	125	-	-	75	50
11	 MLK Drive/Texar Drive	75	100	100	50	75	75	150	150	150	125	125	125
14	 Davis Highway/Cervantes Street	125	375	375	150	350	350	125	125	75	150	150	150
15	 Davis Highway/Blount Street	75	75	75	125	125	125	100	100	100	100	100	100
19	 Davis Highway/Texar Drive	75	75	75	50	100	100	125	125	125	200	200	200
23	 Davis Highway/MLK Drive/Hart Drive (Roundabout)	-	39.0	-	-	23.9	-	-	20.3	-	-	3.3	-
21	 Davis Highway/I-110 On/Off Ramp	375*	375	175	-	-	-	125	75	75	25	225	-
22	 Davis Highway/Fairfield Drive	200	225	-	50	350	175	100	150	-	125	175	75

* Indicates the queue length exceeds the turn lane length

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Two-Way Conversion Traffic Feasibility Study

Table 5.7: Design Year PM (2045) Build Condition Intersection Queue Length (ft)

Intersections		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
PM													
1	 Alcaniz Street/Gregory Street	-	-	-	175	175	50	100	125	-	-	100	100
3	 MLK Drive / Alcaniz Street/Cervantes Street	150	400	400	75	175	175	200	200	200	100	100	75
4	 Cervantes Street/Haynes Street	275*	500	425	-	300	300	50	125	100	-	-	-
5	 MLK Drive/Blount Street	100	100	100	25	75	75	150	150	150	100	100	100
9	 MLK Drive/Maxwell Street	-	-	-	75	175	175	125	125	-	-	75	75
11	 MLK Drive/Texar Drive	100	125	100	50	100	100	200	200	200	175	175	175
14	 Davis Highway/Cervantes Street	75	125	125	100	225	225	125	125	125	150	150	150
15	 Davis Highway/Blount Street	50	100	100	75	75	75	100	100	100	125	125	125
19	 Davis Highway/Texar Drive	75	100	100	50	125	125	175	175	175	450	450	450
23	 Davis Highway/MLK Drive/Hart Drive (Roundabout)	-	68.6	-	-	129.2	-	-	0.62	-	-	7.8	-
21	 Davis Highway/I-110 On/Off Ramp	350*	350	175	-	-	25	200	150	150	50	275	-
22	 Davis Highway/Fairfield Drive	250	275	-	225*	475	275	100	200	-	150	300	200

* Indicates the queue length exceeds the turn lane length

6.0 Generalized Planning Analysis

Generalized Service Volume Tables (GSVT), found in the *FDOT Quality/LOS Handbook 2013*, were used to perform corridor capacity checks for MLK Drive and Davis Highway. The existing year (2019) and future year (2045) No Build and Build volumes were compared to the LOS D service volumes found in the GSVTs to assess the corridors' capacities. **Table 6.1** and **Table 6.2** provide the capacity checks along Davis Highway and MLK Drive based on peak hour directional service volumes. **Both MLK Drive and Davis Highway corridors are expected to operate well below the maximum service volume for both the Build and No Build conditions.**

Table 6.1: Dr. Martin Luther King Jr. Drive/Alcaniz Street Capacity Check

MLK Drive Corridor	Peak Hour Peak Direction Service Volume*	AM Volumes	PM Volumes
Existing Year (2019) Volumes		One-Way (SB)	
Between E Wright St and E Cervantes St	1,956*	225	160
Between E Cervantes St and E Blount St	1,956*	135	185
Between E Blount St and E Jordan St	1,956*	130	190
Between E Jordan St and E Maxwell St	1,956*	120	170
Between E Maxwell St and E Cross St	1,956*	150	215
Between E Cross St and E Texar Drive	1,956*	195	230
Between Texar Drive and I-110 Ramp	1,956*	285	320
No Build Future Year (2045) Volumes		One-Way (SB)	
Between E Wright St and E Cervantes St	1,956*	265	190
Between E Cervantes St and E Blount St	1,956*	160	220
Between E Blount St and E Jordan St	1,956*	155	225
Between E Jordan St and E Maxwell St	1,956*	145	200
Between E Maxwell Street and E Cross St	1,956*	175	250
Between E Cross St and E Texar Drive	1,956*	230	265
Between Texar Drive and I-110 Ramp	1,956*	330	370
Build Future Year (2045) Volumes		Two-Way	
Between E Wright St and E Cervantes St	750	135	235
Between E Cervantes St and E Blount St	750	85	115
Between E Blount St and E Jordan St	750	95	120
Between E Jordan St and E Maxwell St	750	120	145
Between E Maxwell Street and E Cross St	750	110	155
Between E Cross St and E Texar Drive	750	115	190
Between Texar Drive and I-110 Ramp	750	188	338

*LOS D Capacity adjusted to One-Way Travel

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Two-Way Conversion Traffic Feasibility Study

Table 6.2: Davis Highway Capacity Check

Davis Highway Corridor	Peak Hour Peak Direction Service Volume*	AM Volumes	PM Volumes
Existing Year (2019) Volumes		One-Way (NB)	
Between E Wright St and E Cervantes St	1,956*	195	415
Between E Cervantes St and E Blount St	1,956*	145	195
Between E Blount St and E Jordan St	1,956*	165	205
Between E Jordan St and E Maxwell St	1,956*	205	260
Between E Maxwell St and E Cross St	1,956*	195	265
Between E Cross St and E Texar Drive	1,956*	195	335
Between Texar Drive and I-110 Ramp	1,956*	320	578
No Build Future Year (2045) Volumes		One-Way (NB)	
Between E Wright St and E Cervantes St	1,956*	230	480
Between E Cervantes St and E Blount St	1,956*	175	230
Between E Blount St and E Jordan St	1,956*	195	240
Between E Jordan St and E Maxwell St	1,956*	240	300
Between E Maxwell Street and E Cross St	1,956*	230	310
Between E Cross St and E Texar Drive	1,956*	225	390
Between Texar Drive and I-110 Ramp	1,956*	375	663
Build Future Year (2045) Volumes		Two-Way	
Between E Wright St and E Cervantes St	750	130	245
Between E Cervantes St and E Blount St	750	90	120
Between E Blount St and E Jordan St	750	100	125
Between E Jordan St and E Maxwell St	750	125	155
Between E Maxwell Street and E Cross St	750	120	155
Between E Cross St and E Texar Drive	750	120	200
Between Texar Drive and Roundabout	750	205	343

*LOS D Capacity adjusted to One-Way Travel

7.0 Magee Field

Based on existing safety concerns expressed by stakeholders, MLK Drive and Davis Highway were reviewed for potential pedestrian enhancements at Magee Field. Magee Field is a park maintained by the City of Pensacola and is bordered by MLK Drive, Scott Street, Davis Highway, and Bobe Street. The park has sports fields, basketball courts, a playground, onsite parking, and a covered shelter and tables. Youth football attracts a large volume of traffic during the season, including pedestrians.

Pedestrian Counts were collected on a game day Saturday on November 9, 2019 for a 12-hour period, 7:00am-7:00pm, at the following locations (depicted in **Figure 7.1**):

- A. Existing crosswalk on MLK Drive at Magee Field (pedestrians/bicycles crossing MLK Drive)
- B. Zone along Davis Highway from Scott Street to approximately 150 feet south (pedestrians/bicycles crossing Davis Highway)
- C. Zone along Davis Highway from approximately 150 feet north and south of Yonge Street (pedestrians/bicycles crossing Davis Highway)
- D. Zone along Davis Highway from Bobe Street to approximately 150 feet north (pedestrians/bicycles crossing Davis Highway)

In addition, ECRC staff and consultants met with the City of Pensacola and the East Pensacola Student Athlete Program at Magee Field on January 15, 2020 to discuss existing operations and safety concerns. During this meeting, it was noted that vehicles tend to drive above the speed limit and do not stop or slow for many pedestrians. This is particularly a safety concern due to the volume of pedestrians experienced at Magee Field, particularly on a game day, and due to the fact that many younger pedestrians are crossing to reach the basketball courts and playgrounds

Based on the results of the traffic data collection, Zone B experienced the highest volume of pedestrians with 69 observed crossing Davis Highway in a single hour between 2:30pm to 3:30pm. There was a total of 27 bicyclists observed in Zone B during the 12-hour count period.

In Zone D, a maximum of 33 pedestrians was observed to cross Davis Highway in an hour from 1:00pm to 2:00pm and 19 bicyclists were observed during the entire 12-hour count period.

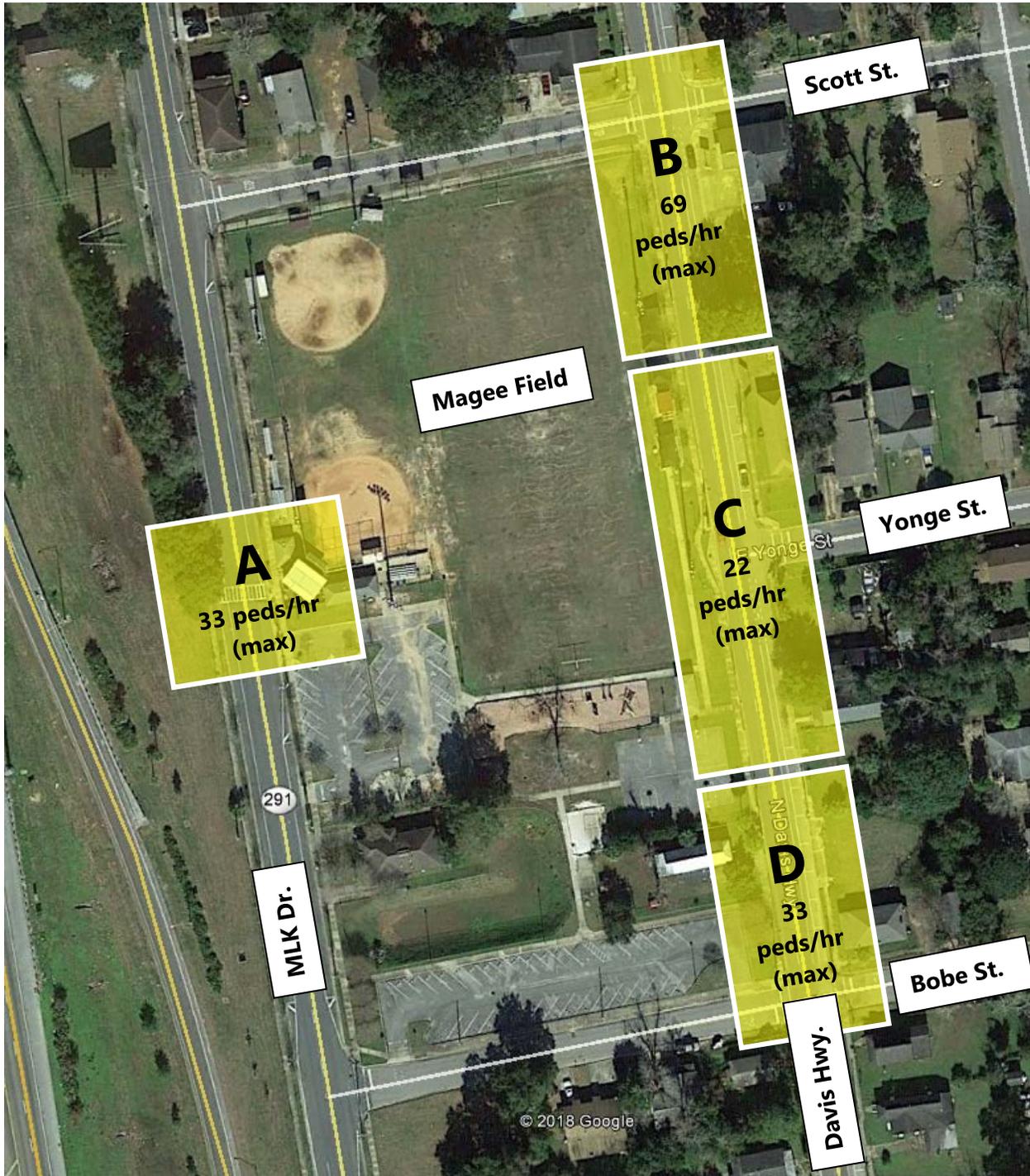
Zone A experienced a maximum of 33 pedestrians per hour crossing MLK Drive from 10:00am to 11:00am and there were no recorded bicyclists.

Zone C was the least busy among the four zones with the highest pedestrian volume of 22 per hour during 1:00pm to 2:00pm and a total of 12 bicyclists throughout the count period.

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Two-Way Conversion Traffic Feasibility Study

Figure 7.1: Magee Field



8.0 Recommendations

This feasibility study provides an analysis of the potential two-way conversion of Davis Highway and MLK Drive. In addition, a safety analysis was conducted to review existing safety concerns along both corridors including pedestrian safety concerns at Magee Field. Based on the analysis results, the following improvements recommendations are discussed below.

Northern Tie-in at I-110

With the two-way conversion in place on MLK Drive and Davis Highway, a roundabout is recommended on the northern end at Hart Drive to combine the two roadways into Davis Highway to the north. The following improvements are recommended:

- Construct a four-leg, single-lane roundabout to tie in MLK Drive, Davis Highway from the south, to Davis Highway to the north, and Hart Drive.
- Provide raised crosswalks on each approach leg at the roundabout.
- Provide pedestrian and/or green space in the remaining right of way.
- Relocate the driveway for the industrial use west of the roundabout further south on MLK Drive.
- Modify the driveway for the shopping center east of the I-110 intersection at Davis Highway (the eastern leg of the intersection) to allow left in, right in, through in, but right out only (prohibit left out and throughout). Due to the current split phasing at the signal, this will improve operations and queuing on the I-110 off-ramp approach, as well as on Davis Highway.
- Drop the inside southbound through lane on Davis Highway at the intersection with I-110 as a southbound left turn lane into the shopping center.

A conceptual design of these improvements is provided in **Figure 8.1**

Figure 8.1: Design Concept Roundabout



Southern Tie-in at Wright Street

Similar to the northern tie-in, improvement recommendations are provided for the southern end of the one-way pair at Wright Street with the proposed two-way conversion of MLK Drive and Davis Highway in place. The following improvements are recommended:

- To better align the northbound approach of Alcaniz Street at Wright Street for traffic continuing northbound on Alcaniz Street, reduce the footprint of the northbound approach to two southbound exiting through lanes, one northbound left turn lane, one northbound through lane, and one northbound right turn lane.
- Perform a full signal warrant analysis at the intersection of Alcaniz Street and Wright Street and signalize if warranted. Signalization may be warranted based on the review of the crash data at this intersection. Signalization can help to relieve the existing safety concerns due to the sight distance issue with the building located in the northeast corner of the intersection. Furthermore, if this intersection is signalized, coordination with the signal to the south at Gregory Street and possibly a shared controller should be considered given the close spacing.
- Provide a pedestrian refuge area in the northbound approach of Alcaniz Street at Wright Street in the channelized right turn median.
- To better accommodate pedestrians along Alcaniz Street, which experiences high volumes of pedestrians during special events at the Pensacola Civic Center and the Pensacola Grand Hotel, provide pedestrian and/or green space in remaining right of way.
- If it is desired to extend the proposed pedestrian enhancements along Alcaniz Street to the south, it is recommended to conduct additional analysis of Alcaniz Street. The analysis can extend along Alcaniz Street by the Pensacola Bay Center and to the south to determine if the existing six-lane section is necessary, or if a road diet can be implemented with the conversion of the extra right of way to pedestrian and/or green space. Similar to the previous recommendation, this could better serve the high volumes of pedestrian traffic experienced during special events.

A conceptual design of these improvements is provided in **Figure 8.2**

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Two-Way Conversion Traffic Feasibility Study

Figure 8.2: Design Concept Alcaniz Street / Wright Street





Cervantes Street at MLK Drive and Davis Highway

With the two-way conversion in place on MLK Drive and Davis Highway, the following improvements are recommended:

- Provide an eastbound left turn lane on Cervantes Street at the intersection of Cervantes Street and MLK Drive/Alcaniz Street.
- Provide a westbound left turn lane on Cervantes Street at the intersection of Cervantes Street and Davis Highway.

A conceptual design of these improvements is provided in **Figure 8.3**

Texar Drive at MLK Drive and Davis Highway

The following improvements are recommended with MLK Drive and Davis Highway converted to two-way travel:

- Provide an eastbound left turn lane on Texar Drive at the intersection of Texar Drive and MLK Drive.
- Provide a westbound left turn lane on Texar Drive at the intersection of Texar Drive and Davis Highway.
- The model results indicate queuing on the southbound approach of Davis Highway at Texar Drive. The addition of a southbound turn lane on Davis Highway could be considered at this intersection; however, this may involve right of way and driveway impacts.

A conceptual design of these improvements is provided in **Figure 8.4**

Figure 8.3: Design Concept Cervantes Street



Figure 8.4: Design Concept Texar Drive



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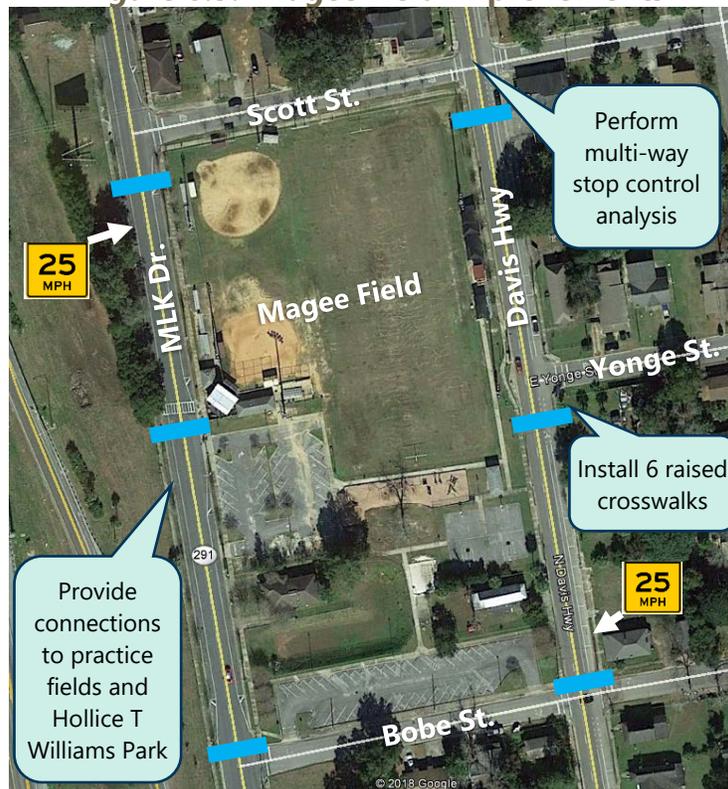
Two-Way Conversion Traffic Feasibility Study

Magee Field

Based on field coordination with the President of the East Pensacola Student Athlete Program, and the City of Pensacola (January 2020), there are safety concerns for pedestrians crossing MLK Drive and Davis Highway at Magee Field. The following improvements are recommended to enhance the safety of pedestrians and bicyclists and are depicted in **Figure 8.5**:

- Install Advisory Speed Plaques (MUTCD W13-1P) for 25 mph on both Davis Highway and MLK Drive approaching Magee Field: at Bobe Street for northbound traffic and at Scott Street for southbound traffic.
- Provide six (6) raised crosswalks at the following locations:
 - MLK Drive at Scott Street (south side)
 - MLK Drive at existing midblock crossing
 - MLK Drive at Bobe Street (north side)
 - Davis Highway at Scott Street (south side)
 - Davis Highway at Young Street (south side)
 - Davis Highway at Bobe Street (north side)
- Perform all-way stop control analysis at Davis Highway and E Scott Street.
- Further study for pedestrian and bicycle connections and improvements to/from Magee Field to the existing practice fields under I-110, and to Hollice T Williams Park under I-110, which is planned for upgrades, including a proposed urban greenway.

Figure 8.5: Magee Field Improvements



Corridor-Wide

- With the two-way conversion in place and to enhance the safety along both corridors, it is recommended to post the speed limit of both corridors at 30 mph within the study area. Currently, the posted speed limit on Alcaniz Street (Wright Street to Cervantes Street) is 30 mph, and 35 mph on MLK Drive (Cervantes Street to the I-110 ramps) and Davis Highway. The posted speed limit and other design elements will be determined during the design phase.
- Provide signal modification at signalized intersections to accommodate two-way conversion.
- Enhanced lighting, such as LED, should be added throughout the corridor, especially at the crosswalks. Crash history indicated that 20% of crashes occurred in dark conditions.
- Sidewalks should be provided on both sides of the road and existing sidewalk gaps should be completed from E Leonard Street to Texar Drive on Davis Highway (shown in **Figure 8.6**).

Figure 8.6: Sidewalk Gap on Davis Highway South of Anderson Street



- Bicycle lanes are not proposed at the recommendation of the City of Pensacola to emphasize the prioritized need for on-street parking, and to not acquire additional right-of-way.
- The southbound right turn lane at MLK Drive/Alcaniz Street at Cervantes Street and at MLK Drive at Maxwell Street could be considered for removal in place for additional green space or pedestrian space.
- Countermeasures (such as signal backplates and advanced signal warning signage) should be considered at the following intersections to increase the signal visibility and awareness:
 - MLK Drive at Maxwell Street
 - Davis Highway at Blount Street
 - MLK Drive and Texar Drive

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Two-Way Conversion Traffic Feasibility Study

- Davis Highway and Texar Drive
- Fairfield Drive/Davis Highway
- Review and improve possible sight distance issues due to trees, landscaping, or buildings at the intersections, including:
 - Davis Highway and Cross Street
 - Davis Highway and Jordan Street
 - Davis Highway and De Soto Street
 - Alcaniz Street and Wright Street (shown in **Figure 8.7**)

Figure 8.7: Alcaniz Street at Wright Street – North Approach Facing South

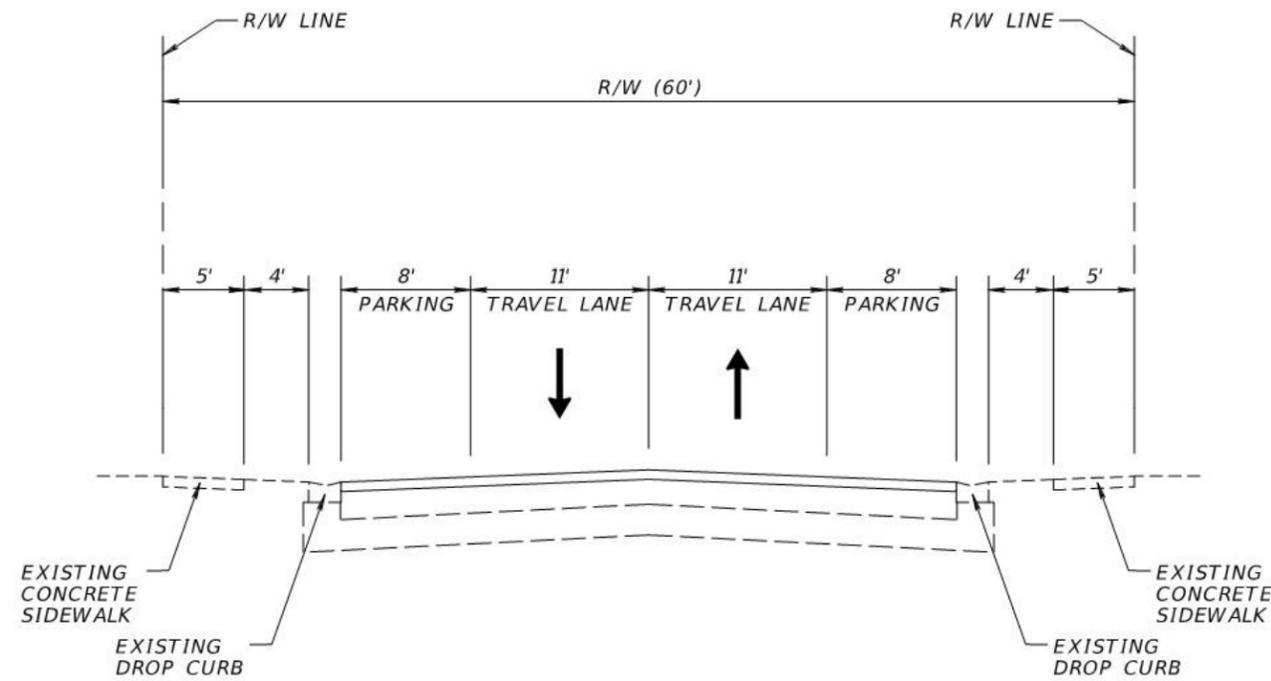


- Provide improved stop sign conspicuity and awareness at unsignalized intersections along the corridor, including Davis Highway and Maxwell Street.
- If the two-way conversion is not implemented along Davis Highway and MLK Drive, it is recommended to provide additional signage to indicate the one-way flow and discourage wrong-way travel. The safety improvements previously discussed should also be implemented.
- Improvements should be consistent with the Urban Core Community Redevelopment Area Plan, as appropriate.

The estimated cost for this project is \$7.9 million utilizing the FDOT LRE system and standards. Detailed cost estimate information can be found in **Appendix F**. Typical sections are provided in **Figure 8.8** and **Figure 8.9**. Renderings for these two typical sections are illustrated in **Figure 8.10** and **Figure 8.11** respectively.

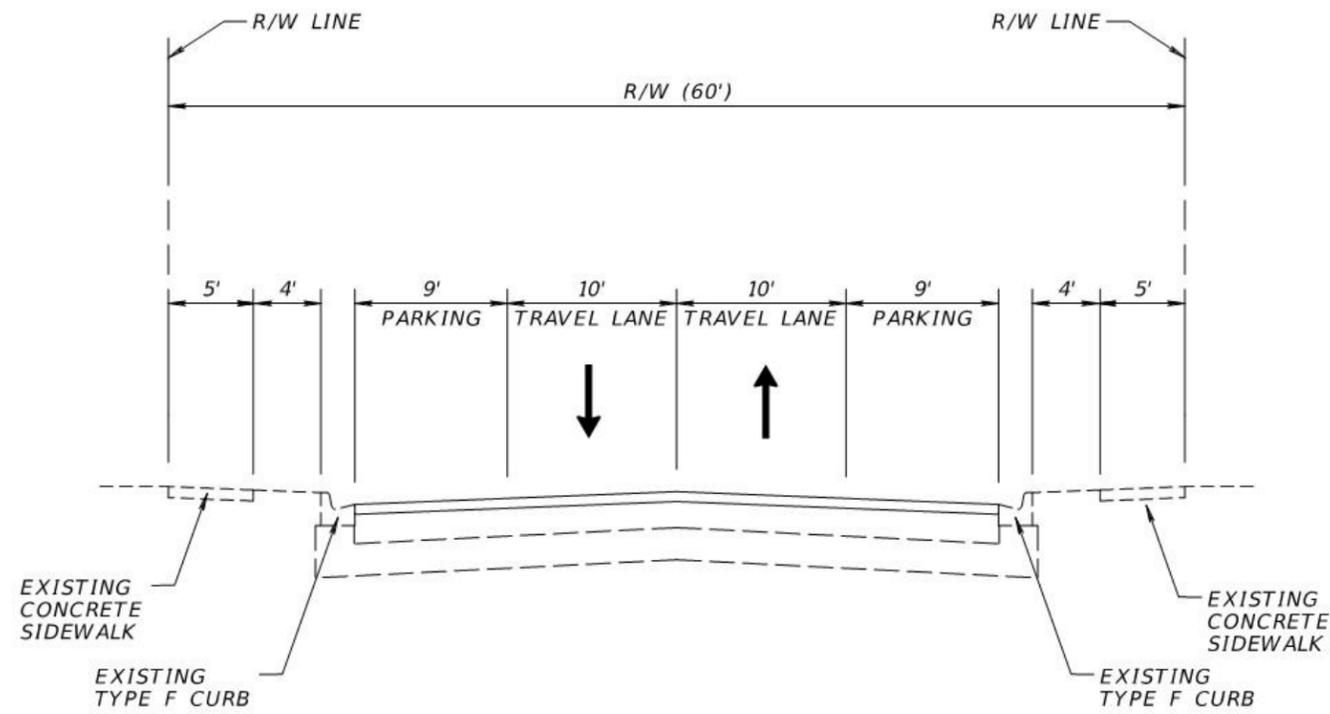


Figure 8.8: Typical section of MLK Drive (North of Cervantes Street)



TYPICAL SECTION
DR. MARTIN LUTHER KING JR. DRIVE
NORTH OF CERVANTES ROAD

Figure 8.9: Typical section of MLK Drive (South of Cervantes Street)



TYPICAL SECTION
DR. MARTIN LUTHER KING JR. DRIVE
SOUTH OF CERVANTES ROAD

Figure 8.10: Rendering MLK Drive (North of Cervantes)

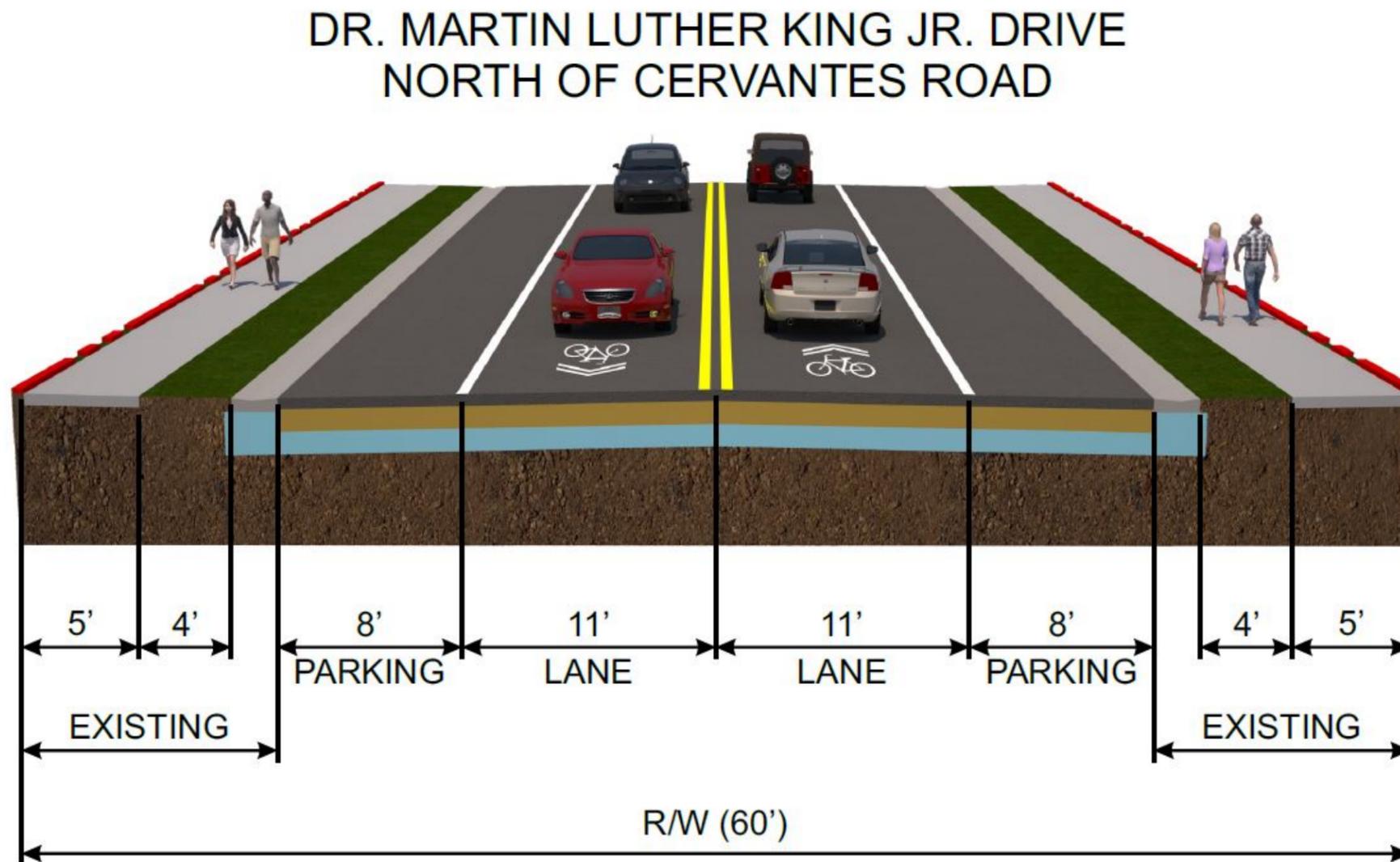
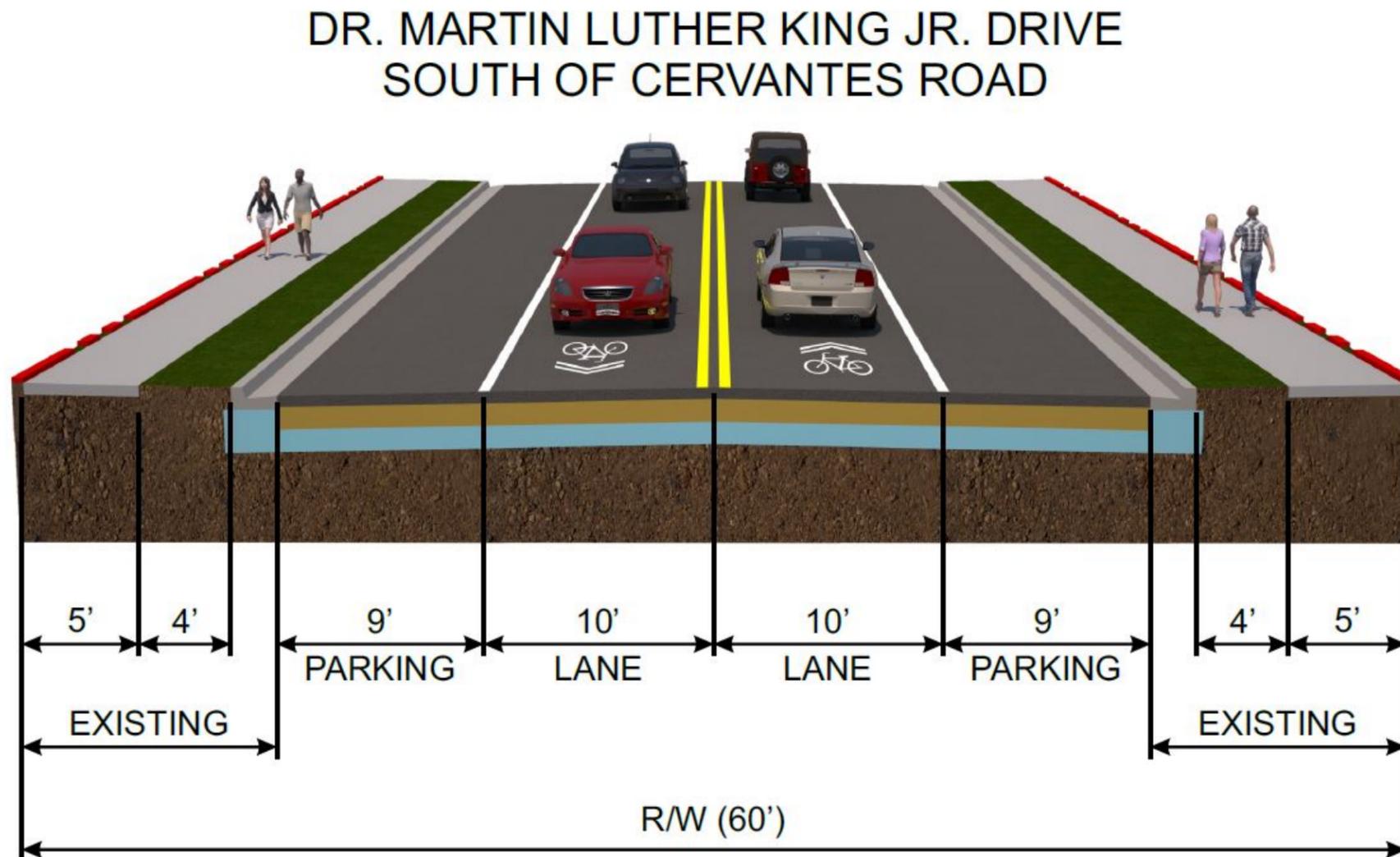


Figure 8.11: Rendering MLK Drive (South of Cervantes)



9.0 Conclusion

This Traffic Feasibility Study was conducted based on the need as identified by FDOT District 3 at the request of Councilwoman Hill (City of Pensacola Council District 6). Davis Highway and MLK Drive were assessed for potential traffic impacts of converting the corridors to two-way travel. Preliminary conceptual designs of the recommended improvements were also developed as a part of this study.

There were 639 reported crashes along both corridors from 2014 to 2018. These crashes resulted in zero (0) fatalities within five years, 12 incapacitating injuries, 79 non-incapacitating injuries, and 153 possible injuries. There were eight (8) collisions involving pedestrians and four (4) involving bicyclists. The most common crash type reported was angle collisions with 156 crashes and approximately 24% of the total crashes. There was also 134 (21%) rear-end crashes, 68 (11%) sideswipe crashes, 54 (9%) off road crashes.

The traffic operations of the No Build Condition (two one-way pair) were compared to the Build Condition (two-way traffic). Under the Build Condition, all of the intersections are expected to operate at LOS D or better for both the AM and PM peak hours in the future year (2045). The Build Condition analysis results indicate that the overall facility is expected to operate at LOS D or better. The model results indicate no significant queuing in the AM or PM peak hour for Build conditions compared to the No Build condition.

Generalized Service Volume Tables (GSVT), found in the *FDOT Quality/LOS Handbook 2013*, were used to perform corridor capacity checks for MLK Drive and Davis Highway. The existing year (2019) and future year (2045) No Build and Build volumes were compared to the LOS D service volumes found in the GSVTs to assess the corridors' capacities. Analysis results show that both the MLK Drive and Davis Highway corridors are expected to operate well below the service volume for both the Build and No Build conditions.

Several improvements along both corridors were identified. These include a roundabout at the northern end at Hart Drive to combine the two roadways into Davis Highway to the north, signalization and reduced footprint of Alcaniz Street at Wright Street at the southern end to improve alignment and safety, turn lanes on Cervantes Street and Texar Drive, pedestrian safety improvements at Magee Field, improved lighting and sidewalks corridor-wide, and a reduced speed limit of 30 mph.

The estimated cost for this project is \$7.9 million utilizing the FDOT LRE system and standards.

The final recommendation/s will be provided by the FL-AL TPO.



10.0 Appendices



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Appendix A:
Approved Methodology



Methodology Memorandum

Davis Highway and Dr. Martin Luther King Jr. Drive/Alcaniz Street Two-Way Conversion Traffic Feasibility Study

City of Pensacola & Escambia County

Draft - November 2019



1. Introduction

At the request of Councilwoman Hill (City of Pensacola Council District 6), the Florida Department of Transportation (FDOT) District 3, has initiated a traffic feasibility study to determine if it is possible to return Davis Highway and Dr. Martin Luther King Jr. Drive (MLK Drive) / Alcaniz Street (SR 291) to two-way flow. Currently, SR 291 is configured as two one-way pairs along Davis Highway (northbound), and MLK Drive (southbound) between SR 295 (Fairfield Drive) and E. Wright Street, a distance of approximately 2.2 miles. South of US 90 (Cervantes Street), MLK Drive becomes Alcaniz Street. The limits of the study are from Wright Street to the south, to SR 295 (Fairfield Drive) to the north and includes the I-110 ramp south of Fairfield Drive. **Figure 1** depicts the project location.

FDOT proposes to complete the feasibility study through the Emerald Coast Regional Council (ECRC) as staff to the Florida-Alabama Transportation Planning Organization (FL-AL TPO) utilizing HDR Engineering, Inc. as the General Planning Consultant.

FDOT, ECRC, and HDR met with the City of Pensacola on June 28, 2019 to develop an understanding of the requested study. The study is needed for general safety improvements, and to restore the neighborhood roadway network grid in the Eastside Community Redevelopment Area (see **Figure 2**).

The City of Pensacola Eastside Neighborhood Plan (January 2004) contains an Action Plan with the following goal, strategy, and action:

Section 5.2 Neighborhood Infrastructure

Goal: Improve public infrastructure to encourage continued revitalization of the Eastside Neighborhood.

Strategy: Enhance the function and appearance of major transportation corridors in the Neighborhood.

Action: Explore possibility of returning Dr. Martin Luther King Jr. Drive and Davis Highway to two-way collector level streets.

The City of Pensacola Eastside Redevelopment Board met on Tuesday, July 9, 2019 to discuss the project with the Helen Gibson (CRA Administrator), and Councilwoman Hill (Council District 6) as Chair of the Eastside Redevelopment Board. The Board passed a motion of support for the need for the study.

Figure 1: Study Area, County Commission and City Council

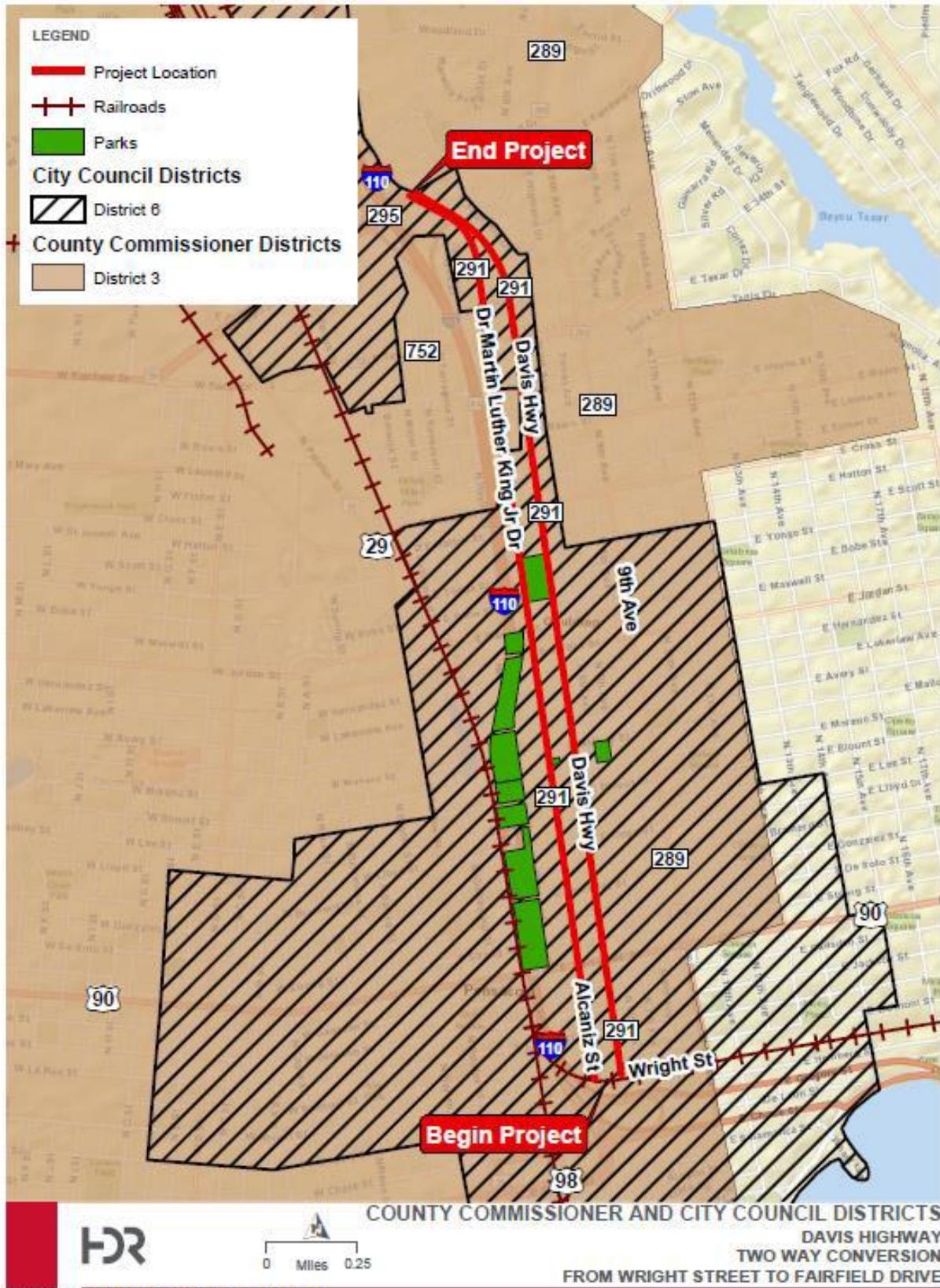
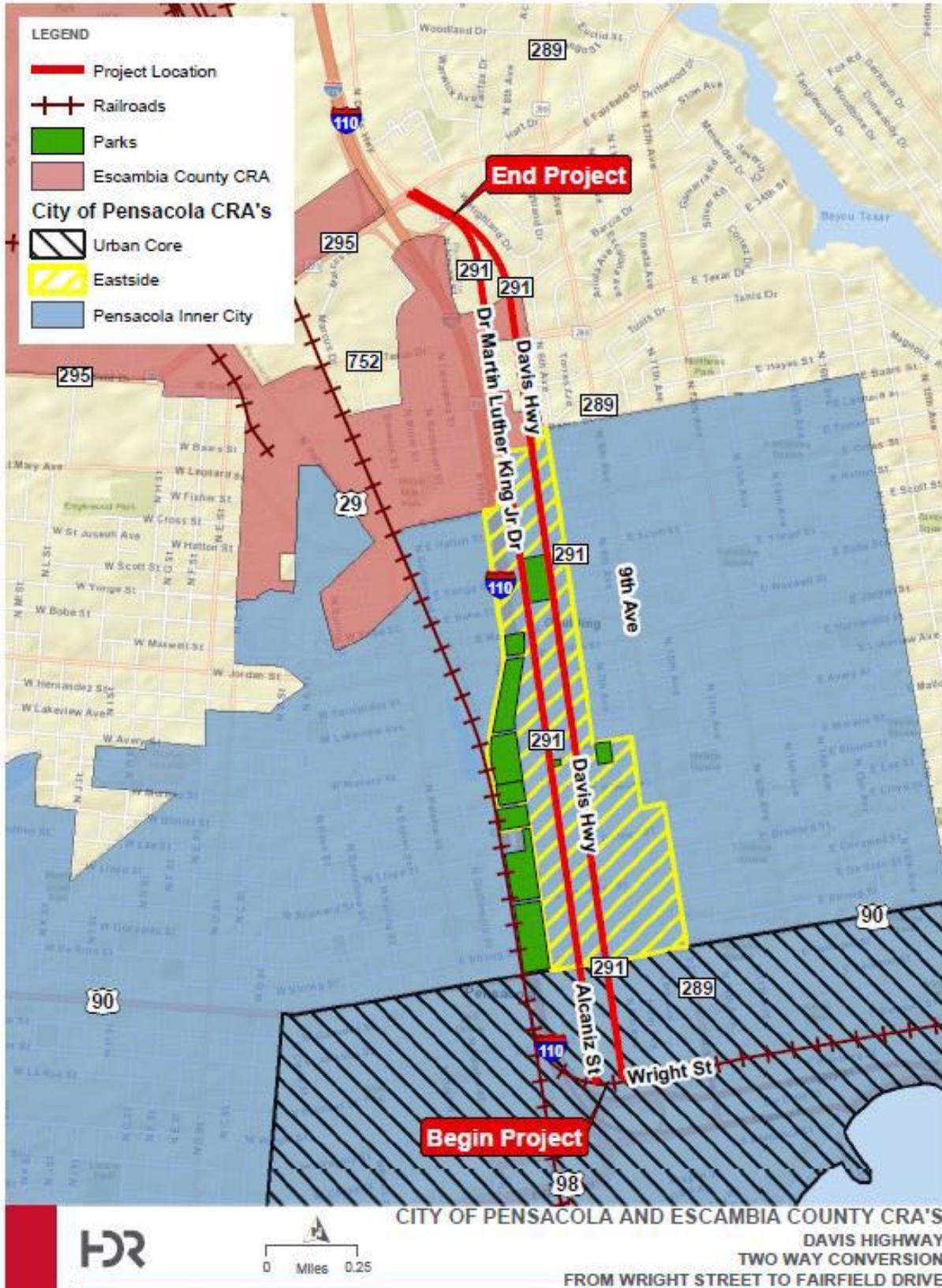


Figure 2: Study Area, Community Redevelopment Agency Areas



2. Study Area

The Two-Way Conversion Traffic Feasibility Study on Davis Highway and Dr. Martin Luther King, Jr. Drive/Alcaniz Street extends from Gregory Street to Fairfield Drive. The following study intersections are included in this analysis (depicted in **Figure 3**):

1. Alcaniz Street and Gregory Street
2. Alcaniz Street and Wright Street
3. MLK Drive/Alcaniz Street and Cervantes Street
4. Cervantes Street and Haynes Street
5. MLK Drive and Blount Street
6. MLK Drive and Jordan Street
7. Jordan Street and Hayne Street
8. MLK Drive and Maxwell Street
9. Maxwell Street and Hayne Street
10. MLK Drive and Cross St
11. MLK Drive and Texar Drive
12. MLK Drive and Hart Drive
13. Davis Highway and Wright Street
14. Davis Highway and Cervantes Street
15. Davis Highway and Blount Street
16. Davis Highway and Jordan Street
17. Davis Highway and Maxwell Street
18. Davis Highway and Cross Street
19. Davis Highway and Texar Drive
20. Davis Highway and Hart Drive
21. Davis Highway and I-110 On/Off Ramp
22. Davis Highway and Fairfield Drive
23. NB to SB U-turn location south of Hart Drive

3. Data Collection

Data will be collected from various sources such as FDOT and field-collected data, as discussed further below.

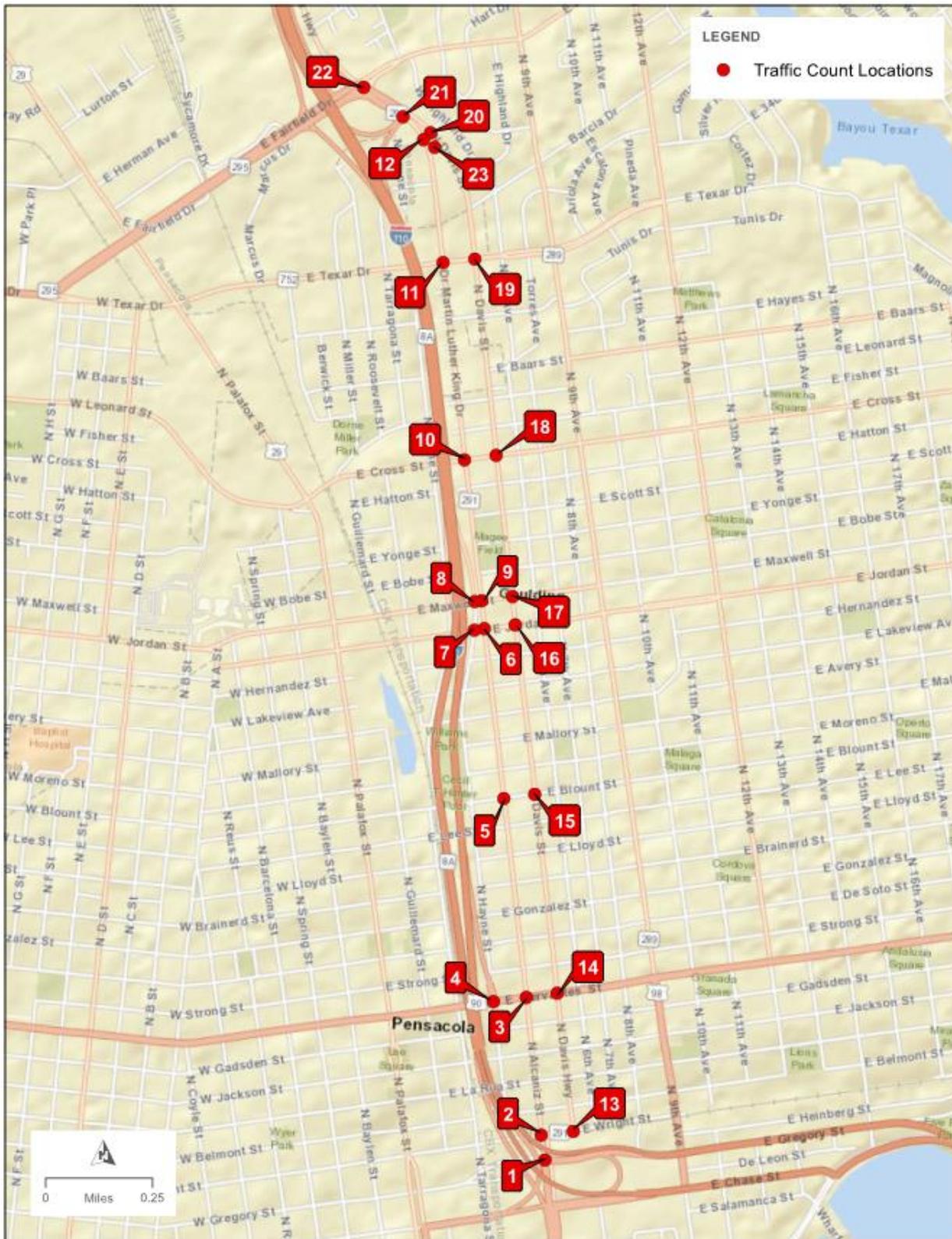
3.1. Traffic Volumes

Traffic and turning movement counts will be collected along the corridor for the AM (7:00-9:00am) and PM (4:00-6:00 pm) peak hours at the following study intersections:

1. Alcaniz Street and Gregory Street
2. Alcaniz Street and Wright Street
3. MLK Drive/Alcaniz Street and Cervantes Street
4. Cervantes Street and Haynes Street
5. MLK Drive and Blount Street
6. MLK Drive and Jordan Street
7. Jordan Street and Hayne Street
8. MLK Drive and Maxwell Street
9. Maxwell Street and Hayne Street
10. MLK Drive and Cross St
11. MLK Drive and Texar Drive
12. MLK Drive and Hart Drive
13. Davis Highway and Wright Street
14. Davis Highway and Cervantes Street
15. Davis Highway and Blount Street
16. Davis Highway and Jordan Street
17. Davis Highway and Maxwell Street
18. Davis Highway and Cross Street
19. Davis Highway and Texar Drive
20. Davis Highway and Hart Drive
21. Davis Highway and I-110 On/Off Ramp
22. Davis Highway and Fairfield Drive
23. 24-hour pneumatic tube count NB to SB U-turn location south of Hart Drive

Figure 3 shows the traffic count locations. Counts will include heavy vehicles, pedestrian and bicyclists categories.

Figure 3: Study Intersections / Traffic Count Locations

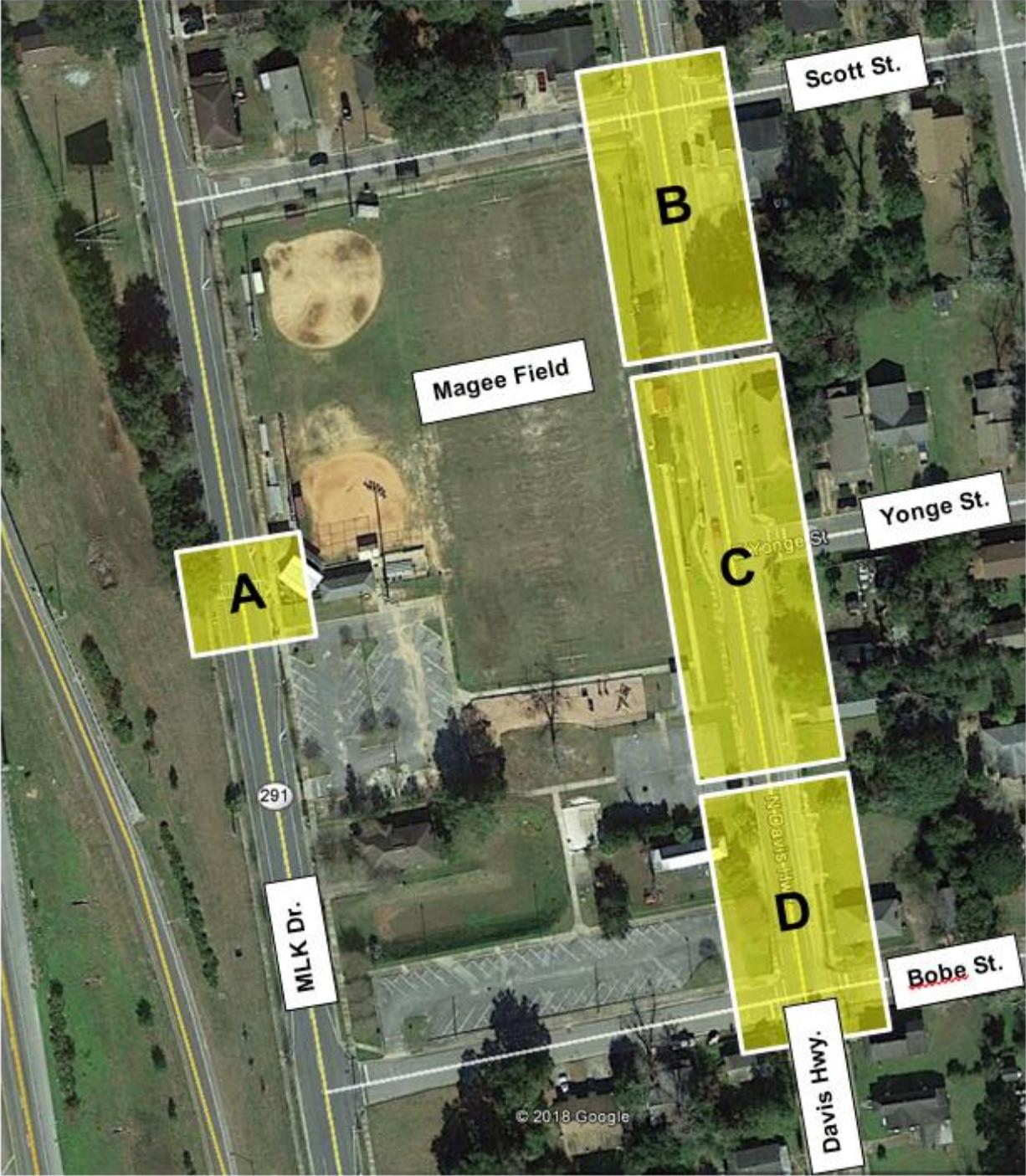


Pedestrian Counts will be collected on a game day Saturday for a 12-hour period 7:00am-7:00pm, at the following locations (depicted in **Figure 4**):

- A. Existing crosswalk on MLK Drive at Magee Field (pedestrians/bicycles crossing MLK Drive)
- B. Zone along Davis Highway from Scott Street to approximately 150 feet south (pedestrians/bicycles crossing Davis Highway)
- C. Zone along Davis Highway from approximately 150 feet north and south of Yonge Street (pedestrians/bicycles crossing Davis Highway)
- D. Zone along Davis Highway from Bobe Street to approximately 150 feet north (pedestrians/bicycles crossing Davis Highway)

Additional count data will be obtained from available sources such as FDOT Florida Traffic Online (FTO).

Figure 4: Pedestrian Count Locations



3.2. Signal Timing

Signal timing plans will be obtained from the City of Pensacola for existing conditions. All signals will be optimized and coordinated for future conditions while maintaining the existing signal systems.

3.3. Safety Data

Crash data will be obtained from FDOT Crash Analysis Reporting System (CARS) for the years 2014 to 2016 and Signal Four Analytics (SFA) for the years 2017 to 2018.

4. Analysis Years & Periods

The corridors will be analyzed for the following scenarios:

- Existing Year 2019
- Future Year 2045 No Build (One-way pair)
- Future Year 2045 Build (Two-way conversion)

Additional needed improvements will be identified in the Future Year 2045 Build condition scenario.

Analysis will be performed for the AM and PM peak hours, to be determined by the traffic counts.

5. Analysis Tools & Measures of Effectiveness

Synchro/SimTraffic software will be utilized for the analysis of the study intersections. Analysis results will include LOS, delay, and queuing.

In addition to intersection analysis, the FDOT generalized service volume tables (GSVT) will be utilized to assess the capacity for existing year and future year corridor analysis for both Davis Highway and MLK Drive. Traffic count data will be obtained from available sources such as FTO.

6. Existing Conditions

6.1. Existing Intersection Peak Hour Volume

The intersection volumes will be developed from traffic count data. The methodology for developing balanced existing peak hour traffic numbers is provided below.

- At each intersection, the AM and PM peak hour periods will be calculated.
- Each peak hour intersection traffic count will be seasonally adjusted for day of week and month of year using the seasonal factors from FDOT Florida Traffic Online.
- A global AM and PM peak hour will be determined for the entire study corridors based on the aggregation of peak hour traffic counts at each intersection within the study area.
- The Peak Hour Factor (PHF) is defined as the hourly volume during the analysis hour divided by the peak 15-min flow rate within the analysis hour. A global PHF for both the AM and PM peak periods will be calculated for the study area.

- Truck factors will be based on traffic data collection and other available data.
- Existing traffic counts will be balanced by adding and/or subtracting traffic numbers along the corridor if no other driveways or intersections are present between two adjacent study intersections. Balancing will avoid any unreasonable additions and subtractions by looking at existing driveways, major generators and attractions along the corridor.

6.2. Crash Analysis

HDR will review the five-year crash history for the corridor and summarize crash data by location, type, and severity. Crash “hot spots” and patterns will be identified.

7. Future Conditions

7.1. Growth Rate

Historical data, BEBR, NWFRPM data were reviewed to determine an appropriate growth rate for the study area.

Historical Traffic Growth

A compounded annual growth was calculated from historic AADTs obtained from the 2018 FTO Web Application. As shown in **Table 1**, an average annual growth rate of -2.20% was observed for the study area. Additional information is attached.

Table 1: Historical Traffic Growth

Road	Count Location	Station ID	Trend Analysis Growth Rate (2018 to Design Year 2045)
Davis Highway	South of Fairfield Dr	485323	3.63%
	North of Texar Dr	484010	-1.73%
	North of Maxwell St	485047	-3.70%
	Between Maxwell and Jordan St	485234	-2.66%
	South of Cervantes St	485161	-4.00%
	North of Wright St	485292	-0.55%
	North of Lloyd St	485248	-4.53%
Martin Luther King JR Drive	North of Texar Dr	485308	-4.68%
	South of Texar Dr	484007	-5.24%
	Between Maxwell and Jordan St	485235	-5.82%
	North of Lloyd St	485247	-5.85%
Alcaniz St	South of Cervantes St	485028	-4.59%
	North of Wright St	485293	-3.90%
	South of Wright St	485030	-0.19%
	S of W D Childer's Plz	485177	-0.47%
Fairfield Drive	East of Palafox St	484019	0.15%
	West of I-110	485206	0.17%
Texar Drive	West of I-110	485284	-2.38%
Cross Street	East of Palafox St	485191	-2.81%
Maxwell Street	East of Davis Hwy	485137	1.13%
	West of Hayne St	485238	-2.01%
Jordan Street	West of I-110	485240	-0.67%
Blount Street	West of Tarragona St	485246	-2.58%
	West of MLK Dr	485245	-3.57%
Cervantes	West of Davis St	485006	-0.51%
Gregory Street	West of 9th Ave	485031	0.04%
Average			-2.20%



Escambia County Population Projections

The Bureau of Economic and Business Research (BEBR) population projections were reviewed for Escambia County. Population growth projections are provided through year 2045 for three scenarios: low, medium, and high. As shown in **Table 2**, the low linear growth rate is 0.04% and the high linear growth rate is 1.23%.

Table 2: BEBR - Escambia County Population Projections

Estimation	2018 Estimate	2045 Projection	Annual Growth Rate, Persons / Year (%)	
			Linear average Growth Rate	Exponential average Growth Rate
Low	318,560	322,200	0.04%	0.04%
Medium		367,700	0.57%	0.53%
High		424,600	1.23%	1.07%

NWFRPM Growth Rate

The Northwest Florida Regional Planning Model (NWFRPM) version 2.1 is the adopted model for the Emerald Coast Regional Council (ECRC). The NWFRPM regional model includes areas within the ECRC jurisdiction as well as Jackson, Calhoun, Gulf, Franklin, and Wakulla Counties. The adopted NWFRPM was validated for Base Year (2010) and Horizon Year (2040).

The Base Year 2010 model and Horizon Year 2040 Cost Feasible model were used to estimate model growth rates in the study area. **Table 3** below shows the results with an average model growth rate of -1.74%.



Table 3: NWFRPM Growth Rates

Road	Count Location	NWFRPM AADT		
		2010 Base Year Model	2040 Cost Feasible Model	2010/2040 Growth
Davis Highway	North of Farifields Dr	13528	6692	-2.32%
	North of I-110 Ramps	7283	3354	-2.55%
	North of Hart Dr	3340	1543	-2.54%
	North of Texar Dr	3622	1737	-2.42%
	North of Cross St	2770	685	-4.55%
	South of Cross St	3117	868	-4.17%
	North of Maxwell St	3066	757	-4.56%
	North of Jordan St	5091	2594	-2.22%
	South of Jordan St	3152	2187	-1.21%
	North of Blount	2925	2074	-1.14%
	South of Blount	3533	2922	-0.63%
	North of De Soto St	3526	2953	-0.59%
	North of Cervantes	3863	3215	-0.61%
	South of Cervantes	2124	1239	-1.78%
	North of Wright St	1550	782	-2.25%
Martin Luther King JR Drive	North of Hart Dr	3943	1811	-2.56%
	North of Texar Dr	4146	1950	-2.48%
	North of Cross St	2733	685	-4.51%
	South of Cross St	2909	767	-4.35%
	North of Maxwell St	2960	759	-4.44%
	North of Jordan St	1550	760	-2.35%
	South of Jordan St	5009	4285	-0.52%
	North of Blount	4732	4055	-0.51%
	South of Blount	4649	4506	-0.10%
	North of De Soto St	4562	4455	-0.08%
	North of Cervantes	4893	4713	-0.12%
Alcaniz Street	North of Wright St	1760	1085	-1.60%
	North of Gregory St	2921	2246	-0.87%
	South of Gregory St	7952	7316	-0.28%
Fairfield Drive	West of Davis Hwy	34860	30318	-0.46%
	East of Davis Hwy	25801	24507	-0.17%
Texar Drive	West of MLK Dr	16395	11045	-1.31%
	West of Davis Hwy	19517	12021	-1.60%
	East of Davis Hwy	21956	12756	-1.79%



Table 3 (continued): NWFRPM Growth Rates

Road	Count Location	NWFRPM AADT		
		2010 Base Year Model	2040 Cost Feasible Model	2010/2040 Growth
Cross Street	West of I-110	1599	732	-2.57%
	West of Davis Hwy	1416	514	-3.32%
	East of Davis Hwy	1450	444	-3.87%
Maxwell Street	West of MLK Dr	7888	4505	-1.85%
	West of Davis Hwy	6479	4507	-1.20%
	East of Davis Hwy	4454	2670	-1.69%
Jordan Street	West of MLK Dr	9195	6600	-1.10%
	West of Davis Hwy	5737	3075	-2.06%
	East of Davis Hwy	3795	2669	-1.17%
Blount Street	West of MLK Dr	2869	1449	-2.25%
	West of Davis Hwy	3380	1536	-2.59%
	East of Davis Hwy	3605	2148	-1.71%
Cervantes Street	West of MLK Dr	27296	29064	0.21%
	West of Davis Hwy	27183	29248	0.24%
	East of Davis Hwy	28681	30076	0.16%
Wright Street	West of MLK Dr	450	235	-2.14%
	West of Davis Hwy	2679	1655	-1.59%
	East of Davis Hwy	1128	873	-0.85%
Gregory Street	West of Alcaniz St	4624	3544	-0.88%
	East of Alcaniz St	8618	8660	0.02%
Average				-1.74%

Growth Rate Recommendation

Historical traffic growth rates in the study area show a negative growth in traffic. The adopted NWFRPM shows that a negative growth rate is also anticipated from the Base Year 2010 to Horizon Year 2040. The BEBR population projections for Escambia County as a whole is 0.04% per year as a low estimation, and 1.23% as a high estimation.

Given the low to negative growth historically seen in the study area, and the low to negative growth projected for the future, an annual compounded growth rate of 0.5% is recommended to represent conservative growth in the area.

7.2. Future Intersection Peak Hour Volume

Future traffic volumes will be estimated using the compounded annual growth rate of 0.5% applied to existing traffic volumes. Traffic volumes will be balanced, as necessary, using the same approach previously discussed for existing conditions.

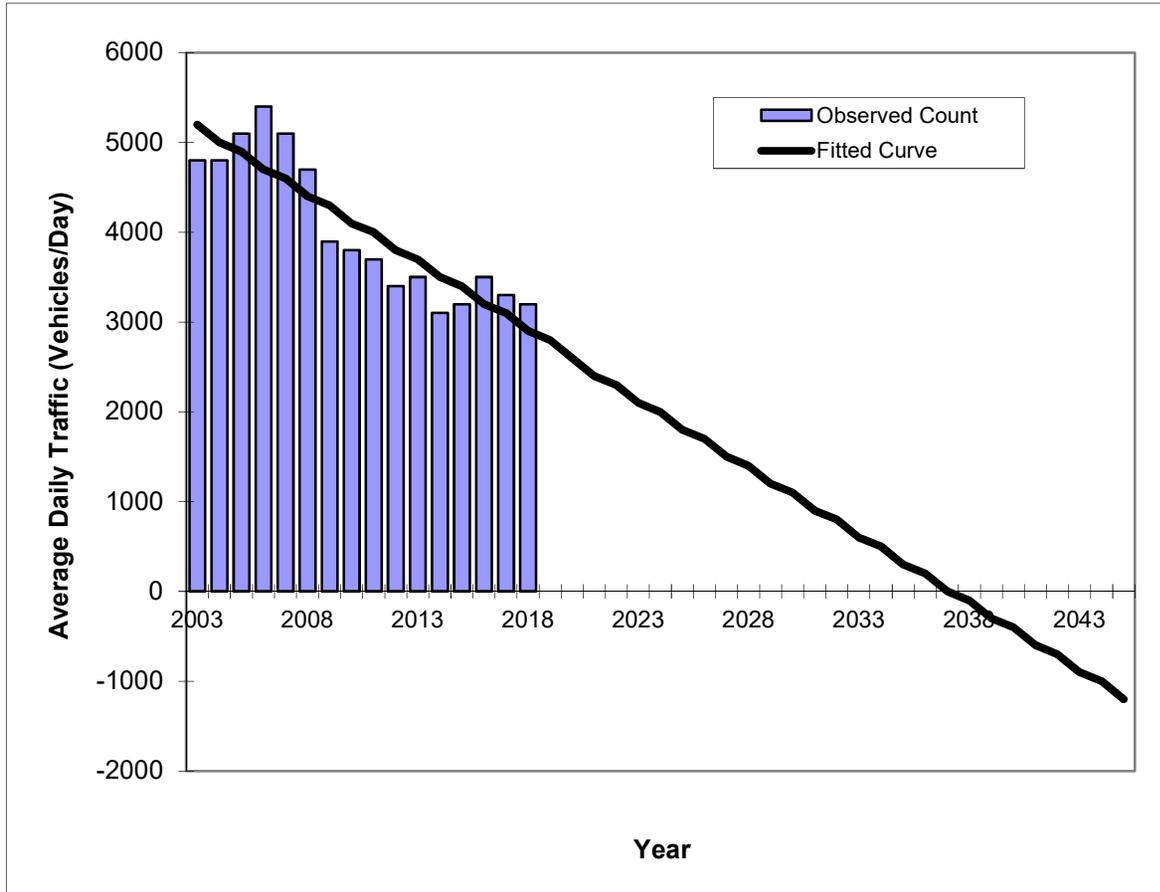
For future Build conditions with the two-way conversion in place, traffic volumes will be split between MLK Drive and Davis Highway, as appropriate. Future traffic volumes will be balanced and checked for reasonableness based on factors such as the recommended Build conceptual improvements.

Attachments

Traffic Trends - V03.a TEXAR DRIVE --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	484007
Highway:	TEXAR DRIVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	4800	5200
2004	4800	5000
2005	5100	4900
2006	5400	4700
2007	5100	4600
2008	4700	4400
2009	3900	4300
2010	3800	4100
2011	3700	4000
2012	3400	3800
2013	3500	3700
2014	3100	3500
2015	3200	3400
2016	3500	3200
2017	3300	3100
2018	3200	2900
2025 Opening Year Trend		
2025	N/A	1800
2035 Mid-Year Trend		
2035	N/A	300
2045 Design Year Trend		
2045	N/A	-1200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-151
Trend R-squared:	79.52%
Trend Annual Historic Growth Rate:	-2.95%
Trend Growth Rate (2018 to Design Year):	-5.24%
Printed:	29-Oct-19

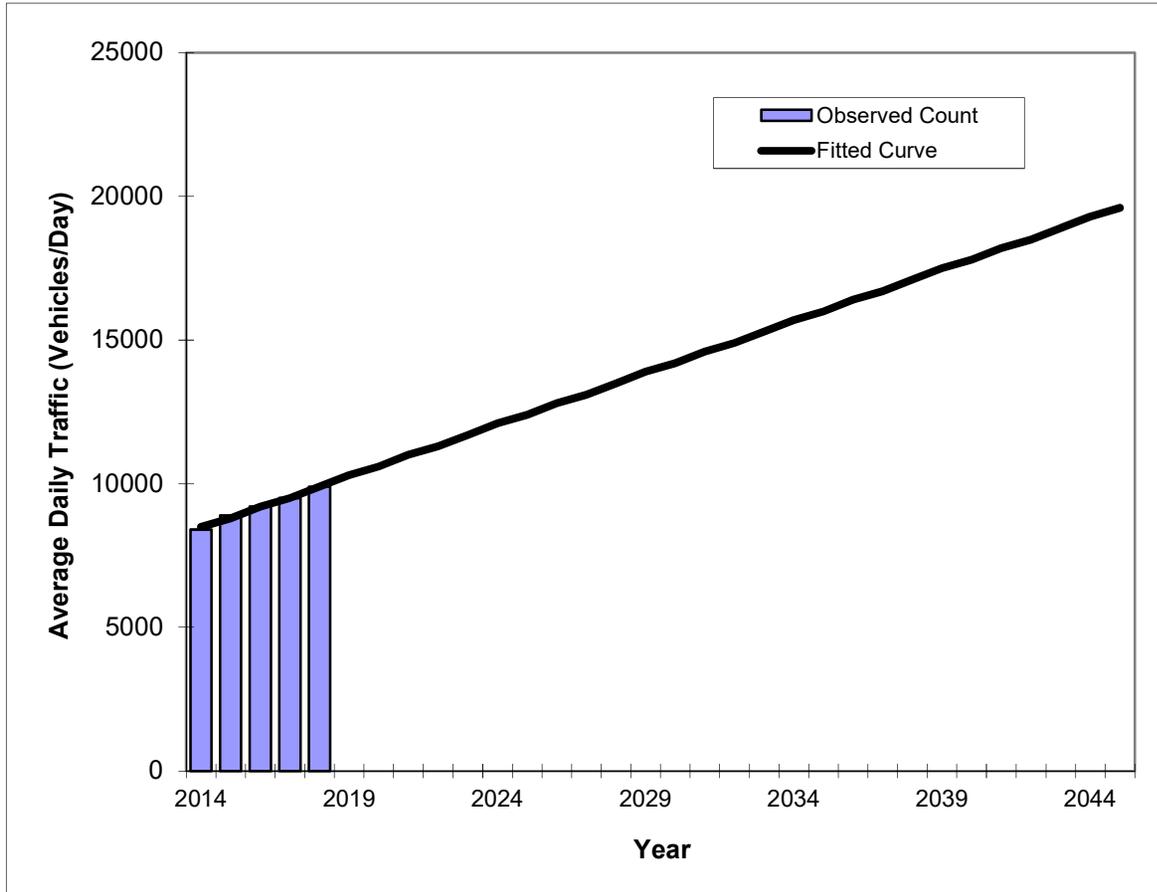
Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V03.a FAIRFIELD DR --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485323
Highway:	FAIRFIELD DR



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2014	8400	8500
2015	8900	8800
2016	9200	9200
2017	9500	9500
2018	9900	9900
2025 Opening Year Trend		
2025	N/A	12400
2035 Mid-Year Trend		
2035	N/A	16000
2045 Design Year Trend		
2045	N/A	19600
TRANPLAN Forecasts/Trends		

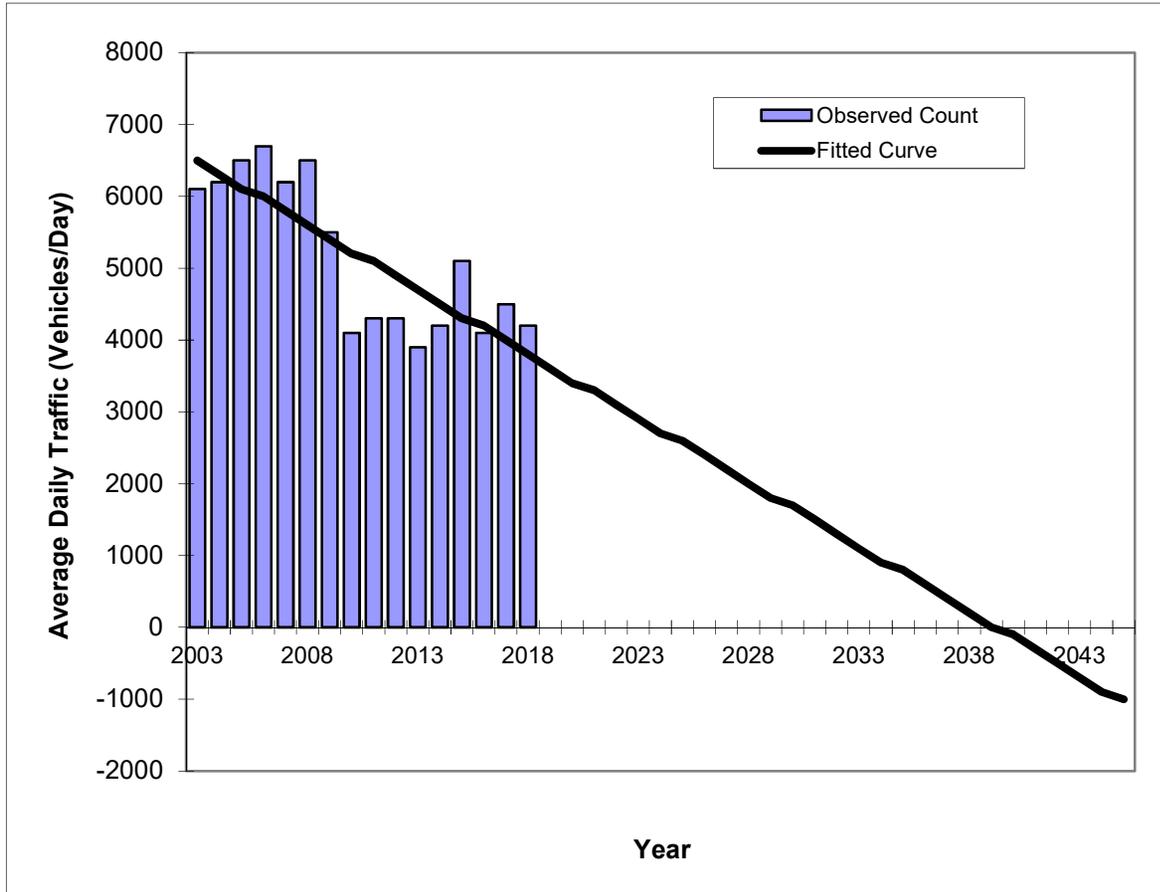
** Annual Trend Increase:	360
Trend R-squared:	99.08%
Trend Annual Historic Growth Rate:	4.12%
Trend Growth Rate (2018 to Design Year):	3.63%
Printed:	28-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a TEXAR DRIVE --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485308
Highway:	TEXAR DRIVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	6100	6500
2004	6200	6300
2005	6500	6100
2006	6700	6000
2007	6200	5800
2008	6500	5600
2009	5500	5400
2010	4100	5200
2011	4300	5100
2012	4300	4900
2013	3900	4700
2014	4200	4500
2015	5100	4300
2016	4100	4200
2017	4500	4000
2018	4200	3800
2025 Opening Year Trend		
2025	N/A	2600
2035 Mid-Year Trend		
2035	N/A	800
2045 Design Year Trend		
2045	N/A	-1000
TRANPLAN Forecasts/Trends		

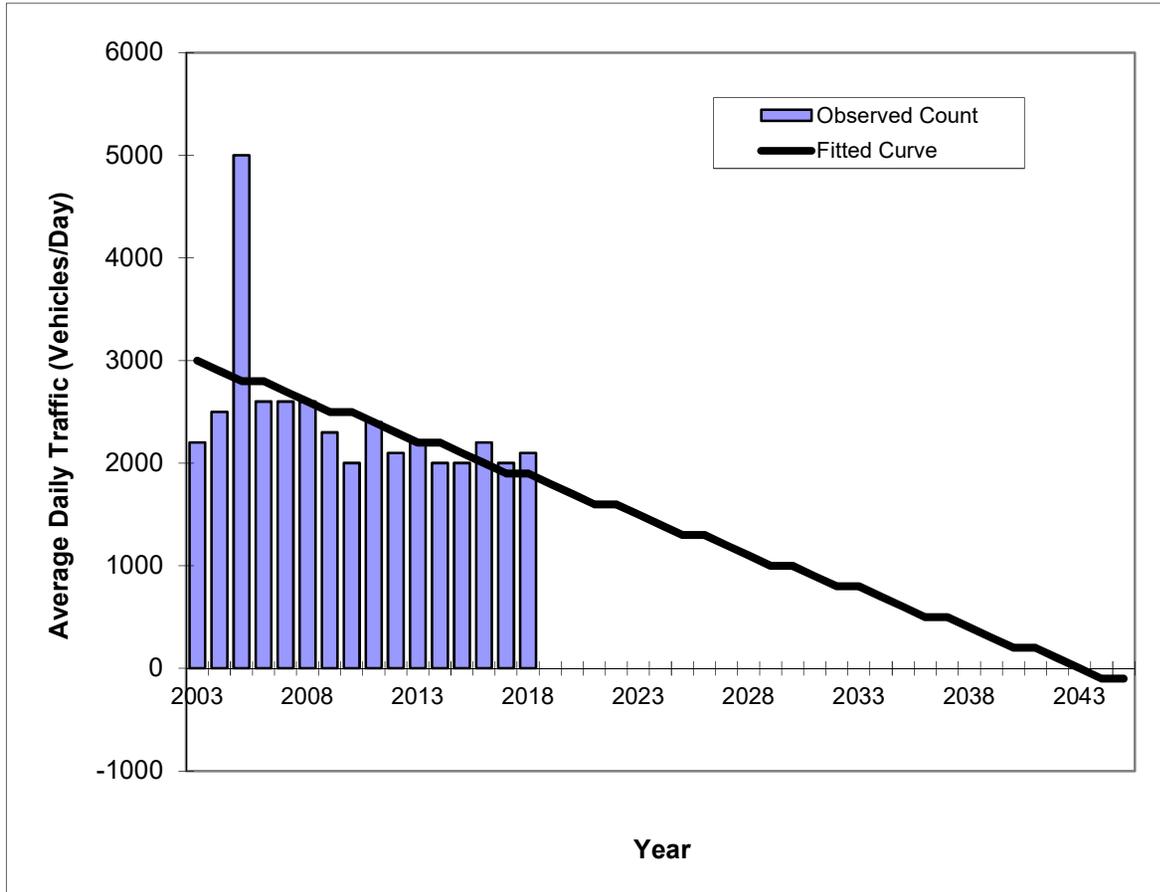
** Annual Trend Increase:	-179
Trend R-squared:	65.24%
Trend Annual Historic Growth Rate:	-2.77%
Trend Growth Rate (2018 to Design Year):	-4.68%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a WRIGHT ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485293
Highway:	WRIGHT ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	2200	3000
2004	2500	2900
2005	5000	2800
2006	2600	2800
2007	2600	2700
2008	2600	2600
2009	2300	2500
2010	2000	2500
2011	2400	2400
2012	2100	2300
2013	2200	2200
2014	2000	2200
2015	2000	2100
2016	2200	2000
2017	2000	1900
2018	2100	1900
2025 Opening Year Trend		
2025	N/A	1300
2035 Mid-Year Trend		
2035	N/A	600
2045 Design Year Trend		
2045	N/A	-100
TRANPLAN Forecasts/Trends		

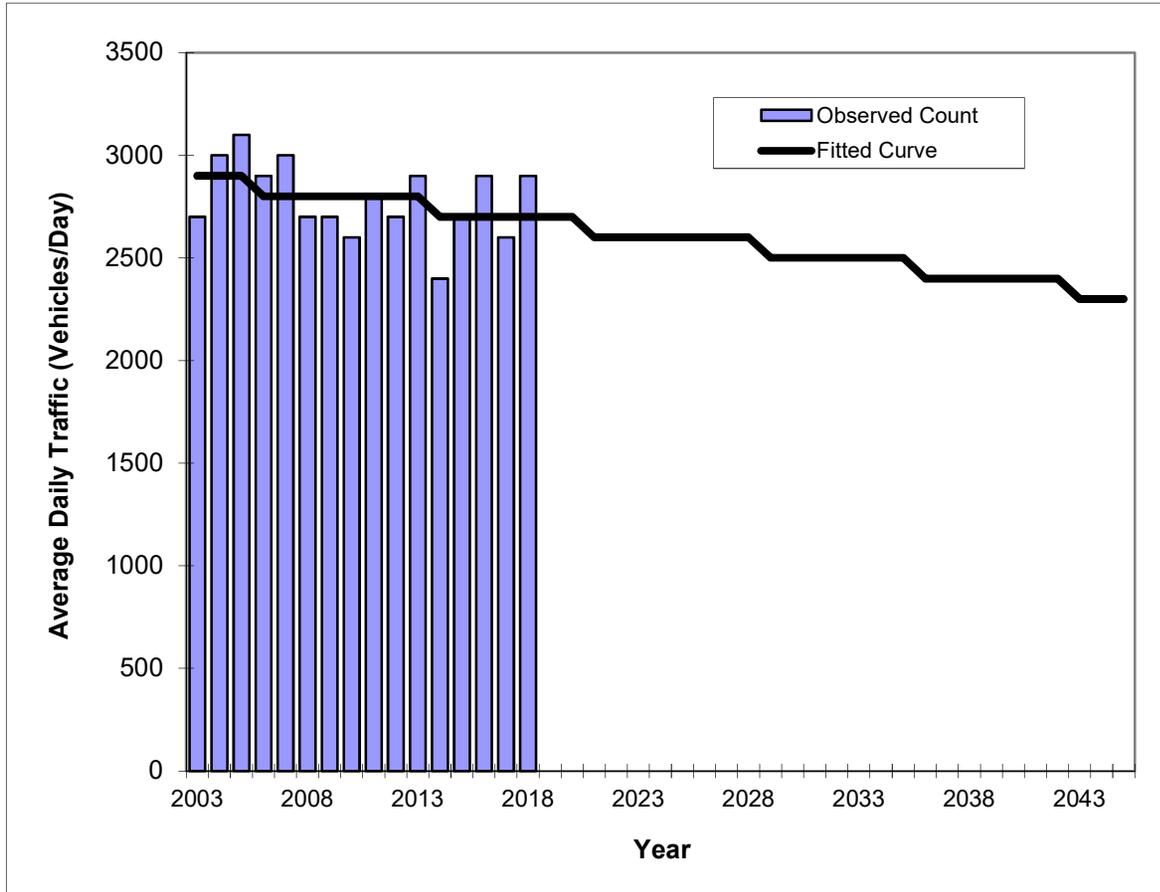
** Annual Trend Increase:	-74
Trend R-squared:	24.04%
Trend Annual Historic Growth Rate:	-2.44%
Trend Growth Rate (2018 to Design Year):	-3.90%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a DAVIS HWY --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485292
Highway:	DAVIS HWY



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	2700	2900
2004	3000	2900
2005	3100	2900
2006	2900	2800
2007	3000	2800
2008	2700	2800
2009	2700	2800
2010	2600	2800
2011	2800	2800
2012	2700	2800
2013	2900	2800
2014	2400	2700
2015	2700	2700
2016	2900	2700
2017	2600	2700
2018	2900	2700
2025 Opening Year Trend		
2025	N/A	2600
2035 Mid-Year Trend		
2035	N/A	2500
2045 Design Year Trend		
2045	N/A	2300
TRANPLAN Forecasts/Trends		

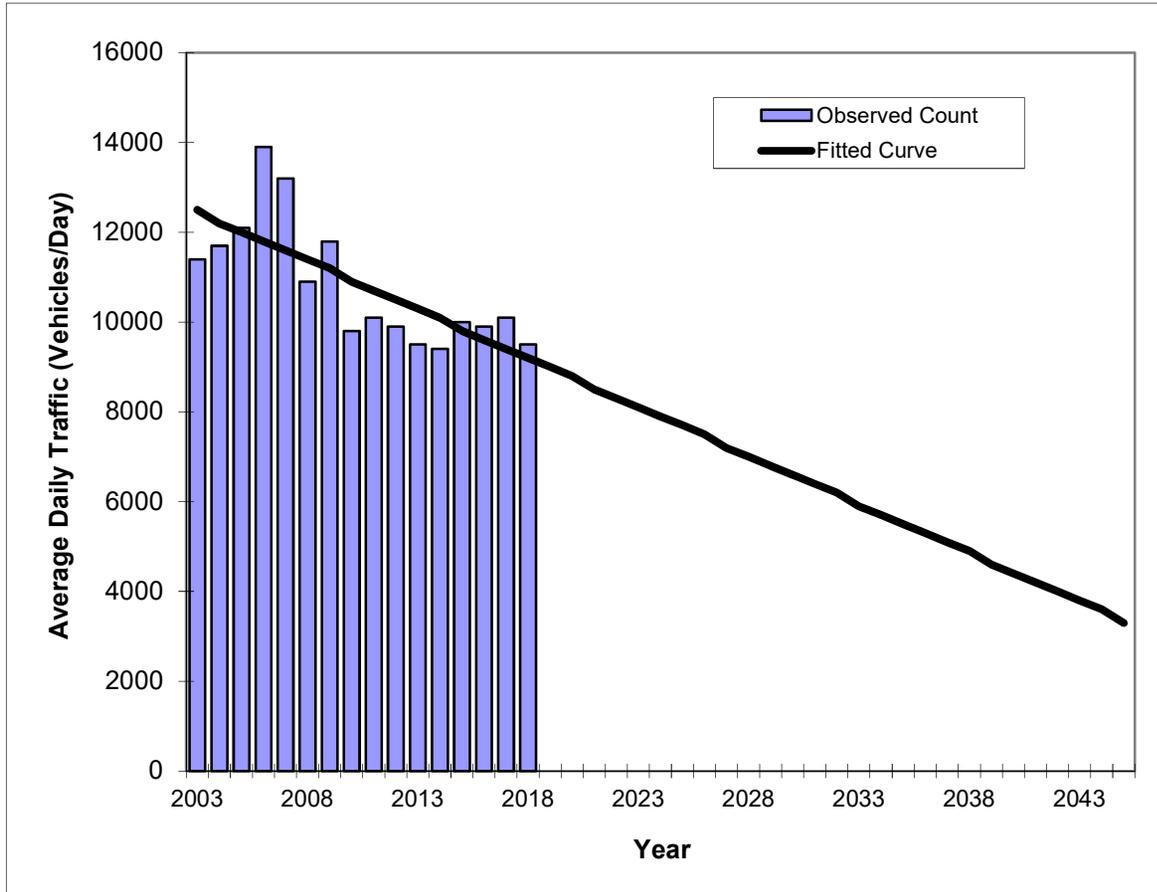
** Annual Trend Increase:	-14
Trend R-squared:	12.51%
Trend Annual Historic Growth Rate:	-0.46%
Trend Growth Rate (2018 to Design Year):	-0.55%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a TEXAR DRIVE --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485284
Highway:	TEXAR DRIVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	11400	12500
2004	11700	12200
2005	12100	12000
2006	13900	11800
2007	13200	11600
2008	10900	11400
2009	11800	11200
2010	9800	10900
2011	10100	10700
2012	9900	10500
2013	9500	10300
2014	9400	10100
2015	10000	9800
2016	9900	9600
2017	10100	9400
2018	9500	9200
2025 Opening Year Trend		
2025	N/A	7700
2035 Mid-Year Trend		
2035	N/A	5500
2045 Design Year Trend		
2045	N/A	3300
TRANPLAN Forecasts/Trends		

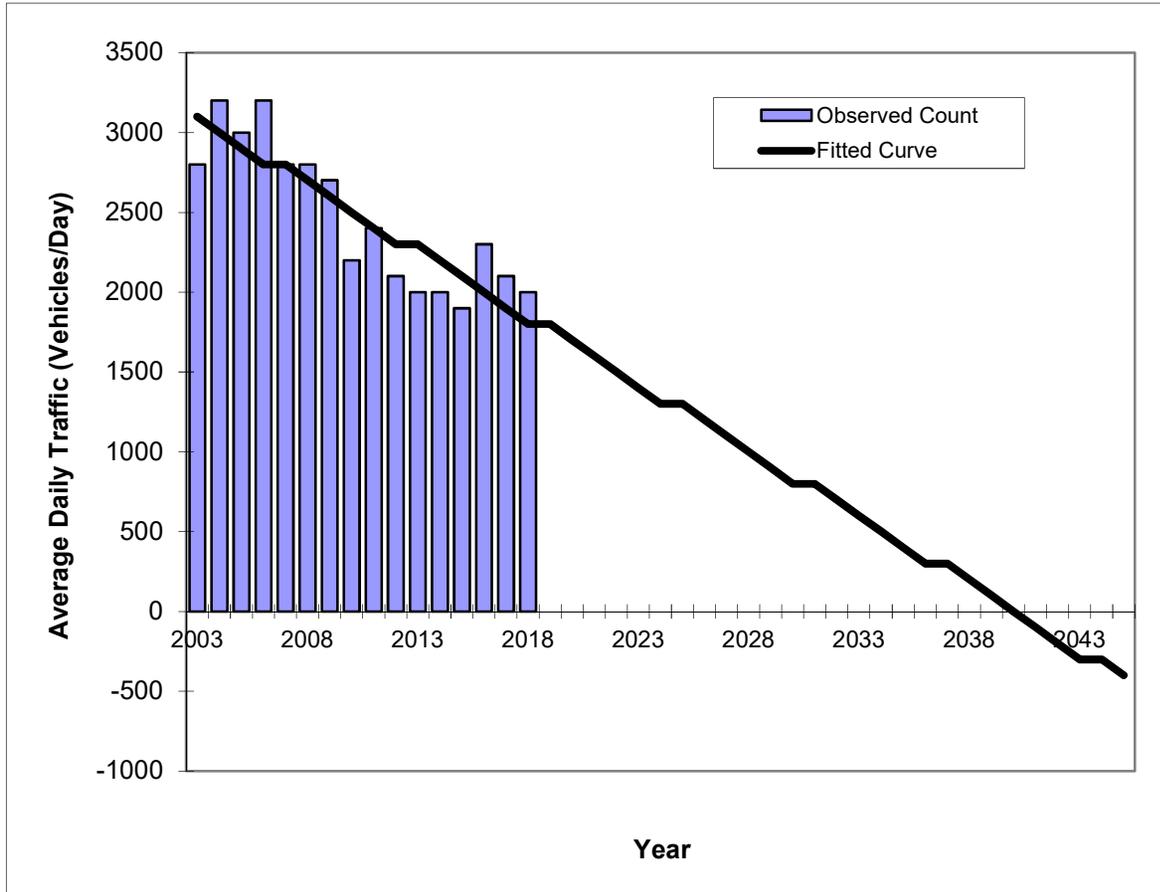
** Annual Trend Increase:	-217
Trend R-squared:	55.60%
Trend Annual Historic Growth Rate:	-1.76%
Trend Growth Rate (2018 to Design Year):	-2.38%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a DAVIS HWY --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485248
Highway:	DAVIS HWY



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	2800	3100
2004	3200	3000
2005	3000	2900
2006	3200	2800
2007	2800	2800
2008	2800	2700
2009	2700	2600
2010	2200	2500
2011	2400	2400
2012	2100	2300
2013	2000	2300
2014	2000	2200
2015	1900	2100
2016	2300	2000
2017	2100	1900
2018	2000	1800
2025 Opening Year Trend		
2025	N/A	1300
2035 Mid-Year Trend		
2035	N/A	400
2045 Design Year Trend		
2045	N/A	-400
TRANPLAN Forecasts/Trends		

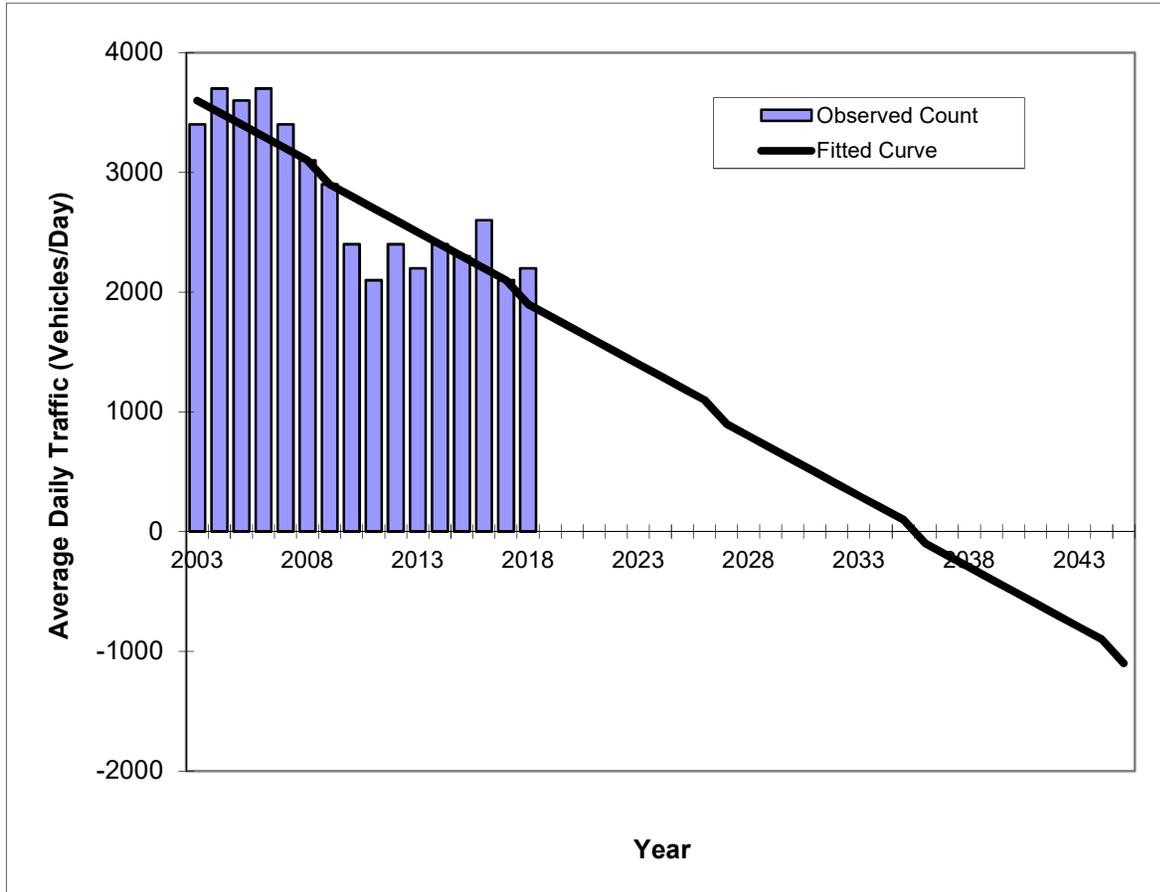
** Annual Trend Increase:	-84
Trend R-squared:	76.93%
Trend Annual Historic Growth Rate:	-2.80%
Trend Growth Rate (2018 to Design Year):	-4.53%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a MLK JR DR --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485247
Highway:	MLK JR DR



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3400	3600
2004	3700	3500
2005	3600	3400
2006	3700	3300
2007	3400	3200
2008	3100	3100
2009	2900	2900
2010	2400	2800
2011	2100	2700
2012	2400	2600
2013	2200	2500
2014	2400	2400
2015	2300	2300
2016	2600	2200
2017	2100	2100
2018	2200	1900
2025 Opening Year Trend		
2025	N/A	1200
2035 Mid-Year Trend		
2035	N/A	100
2045 Design Year Trend		
2045	N/A	-1100
TRANPLAN Forecasts/Trends		

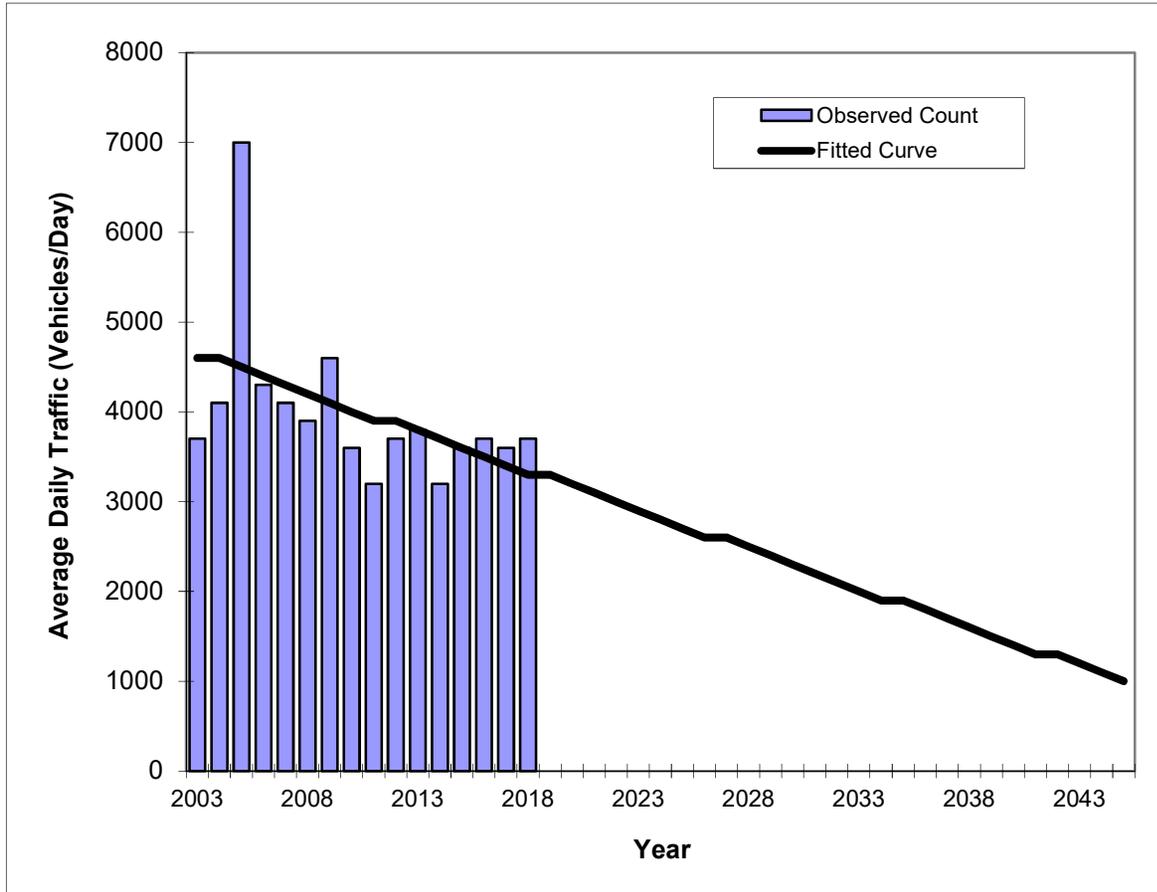
** Annual Trend Increase:	-111
Trend R-squared:	76.00%
Trend Annual Historic Growth Rate:	-3.15%
Trend Growth Rate (2018 to Design Year):	-5.85%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a BLOUNT ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485246
Highway:	BLOUNT ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3700	4600
2004	4100	4600
2005	7000	4500
2006	4300	4400
2007	4100	4300
2008	3900	4200
2009	4600	4100
2010	3600	4000
2011	3200	3900
2012	3700	3900
2013	3800	3800
2014	3200	3700
2015	3600	3600
2016	3700	3500
2017	3600	3400
2018	3700	3300
2025 Opening Year Trend		
2025	N/A	2700
2035 Mid-Year Trend		
2035	N/A	1900
2045 Design Year Trend		
2045	N/A	1000
TRANPLAN Forecasts/Trends		

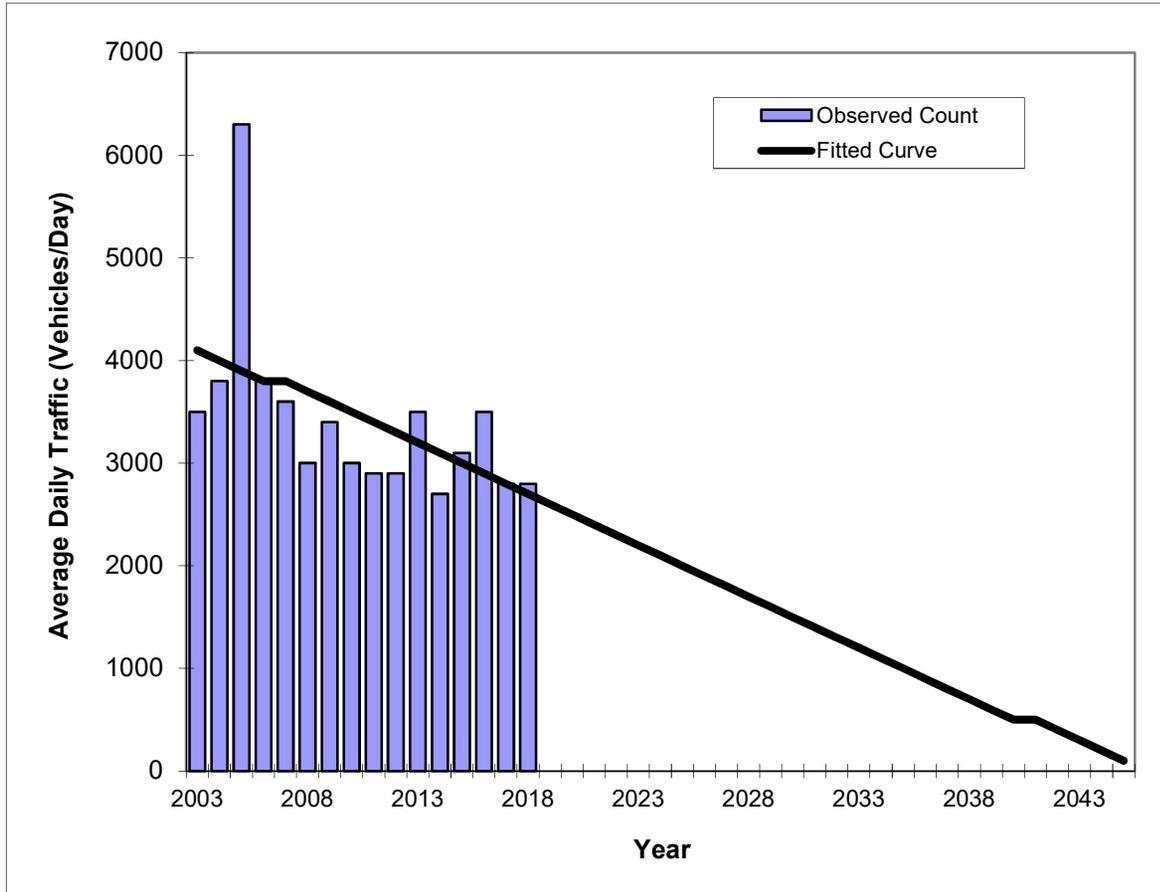
** Annual Trend Increase:	-87
Trend R-squared:	21.99%
Trend Annual Historic Growth Rate:	-1.88%
Trend Growth Rate (2018 to Design Year):	-2.58%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a BLOUNT ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485245
Highway:	BLOUNT ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3500	4100
2004	3800	4000
2005	6300	3900
2006	3800	3800
2007	3600	3800
2008	3000	3700
2009	3400	3600
2010	3000	3500
2011	2900	3400
2012	2900	3300
2013	3500	3200
2014	2700	3100
2015	3100	3000
2016	3500	2900
2017	2800	2800
2018	2800	2700
2025 Opening Year Trend		
2025	N/A	2000
2035 Mid-Year Trend		
2035	N/A	1000
2045 Design Year Trend		
2045	N/A	100
TRANPLAN Forecasts/Trends		

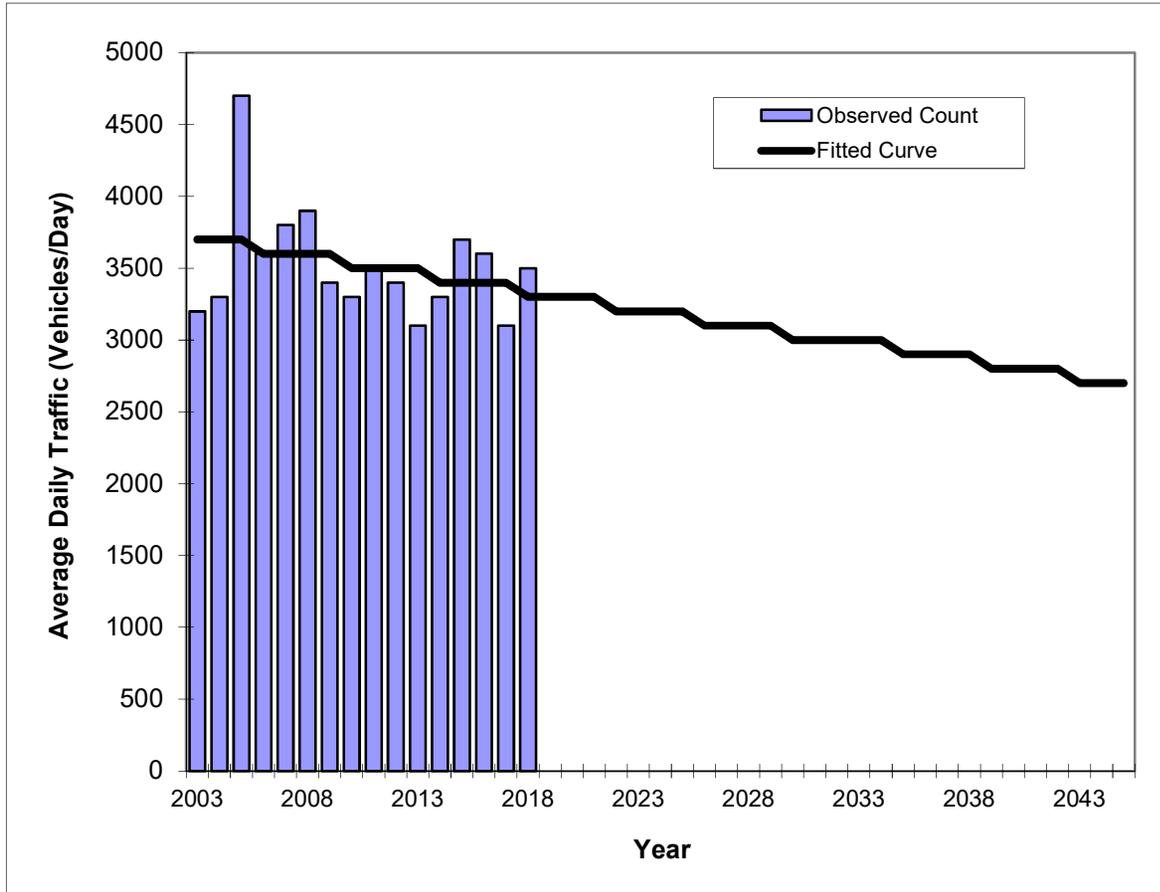
** Annual Trend Increase:	-97
Trend R-squared:	29.34%
Trend Annual Historic Growth Rate:	-2.28%
Trend Growth Rate (2018 to Design Year):	-3.57%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a JORDAN ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485240
Highway:	JORDAN ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3200	3700
2004	3300	3700
2005	4700	3700
2006	3600	3600
2007	3800	3600
2008	3900	3600
2009	3400	3600
2010	3300	3500
2011	3500	3500
2012	3400	3500
2013	3100	3500
2014	3300	3400
2015	3700	3400
2016	3600	3400
2017	3100	3400
2018	3500	3300
2025 Opening Year Trend		
2025	N/A	3200
2035 Mid-Year Trend		
2035	N/A	2900
2045 Design Year Trend		
2045	N/A	2700
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-24
Trend R-squared:	8.85%
Trend Annual Historic Growth Rate:	-0.72%
Trend Growth Rate (2018 to Design Year):	-0.67%
Printed:	29-Oct-19

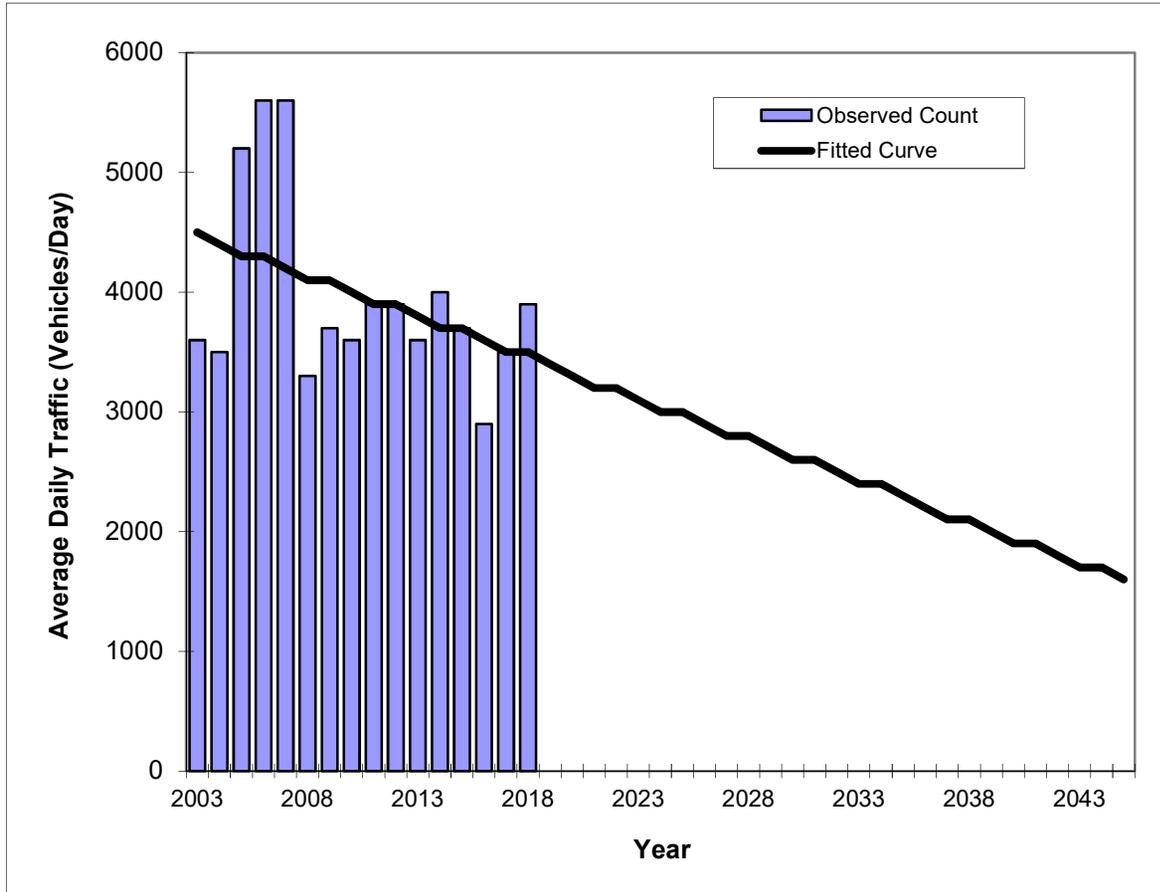
Straight Line Growth Option

*Axle-Adjusted

Traffic Trends - V03.a MAXWELL ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485238
Highway:	MAXWELL ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3600	4500
2004	3500	4400
2005	5200	4300
2006	5600	4300
2007	5600	4200
2008	3300	4100
2009	3700	4100
2010	3600	4000
2011	3900	3900
2012	3900	3900
2013	3600	3800
2014	4000	3700
2015	3700	3700
2016	2900	3600
2017	3500	3500
2018	3900	3500
2025 Opening Year Trend		
2025	N/A	3000
2035 Mid-Year Trend		
2035	N/A	2300
2045 Design Year Trend		
2045	N/A	1600
TRANPLAN Forecasts/Trends		

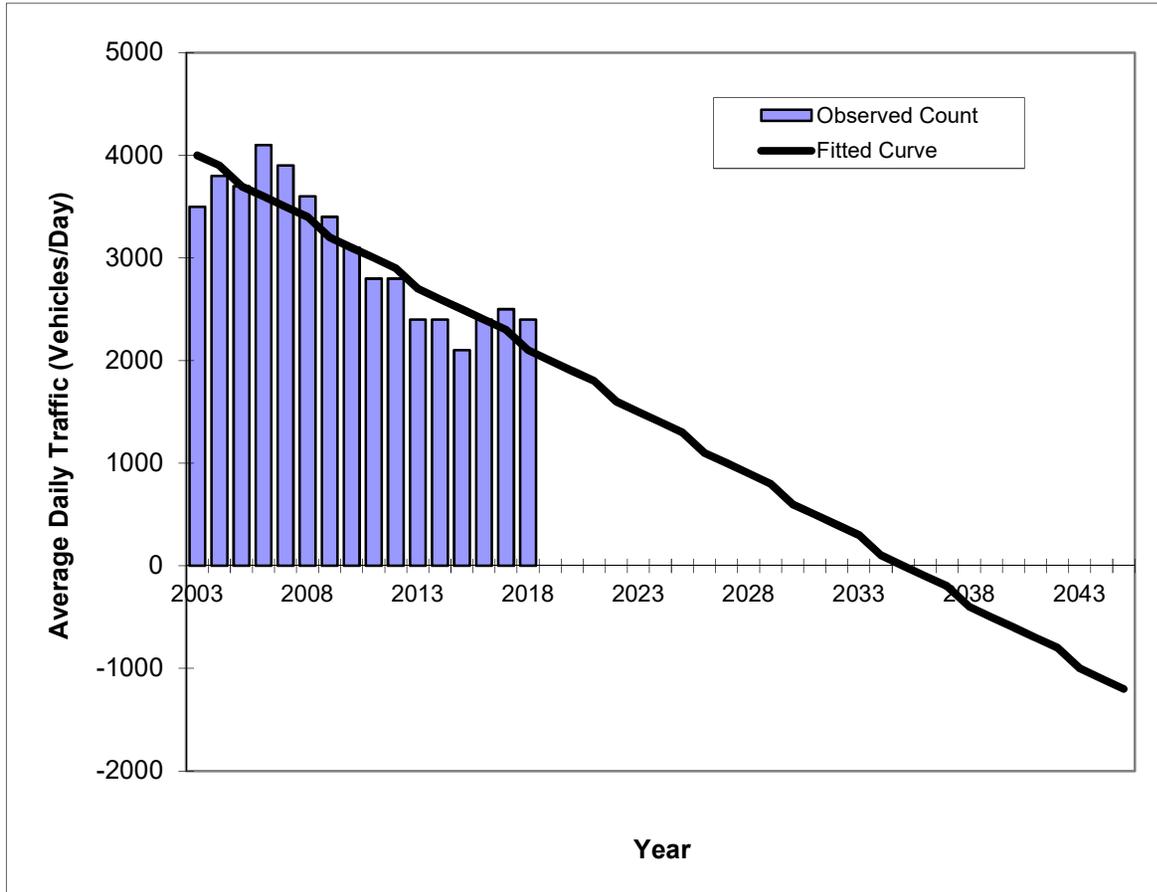
** Annual Trend Increase:	-69
Trend R-squared:	17.00%
Trend Annual Historic Growth Rate:	-1.48%
Trend Growth Rate (2018 to Design Year):	-2.01%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a MLK JR DR --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485235
Highway:	MLK JR DR



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3500	4000
2004	3800	3900
2005	3700	3700
2006	4100	3600
2007	3900	3500
2008	3600	3400
2009	3400	3200
2010	3100	3100
2011	2800	3000
2012	2800	2900
2013	2400	2700
2014	2400	2600
2015	2100	2500
2016	2400	2400
2017	2500	2300
2018	2400	2100
2025 Opening Year Trend		
2025	N/A	1300
2035 Mid-Year Trend		
2035	N/A	0
2045 Design Year Trend		
2045	N/A	-1200
TRANPLAN Forecasts/Trends		

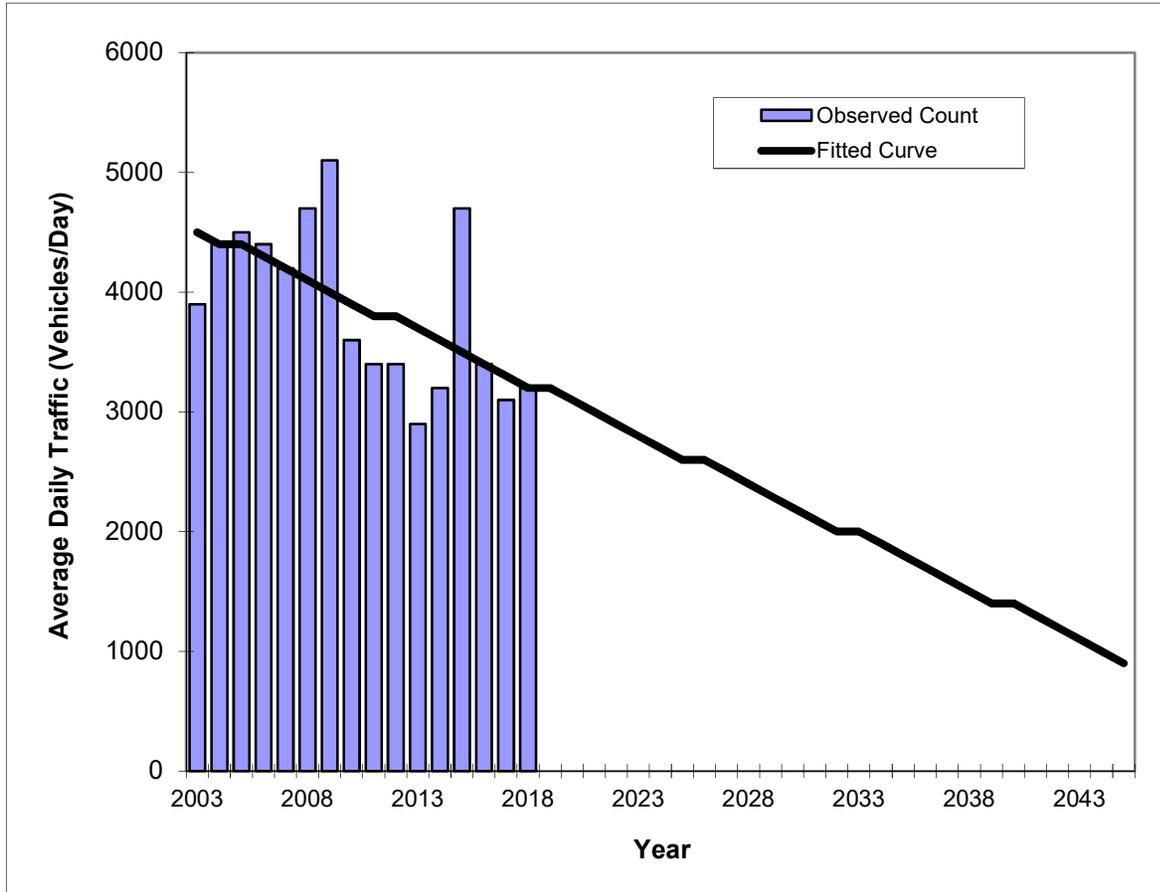
** Annual Trend Increase:	-124
Trend R-squared:	80.90%
Trend Annual Historic Growth Rate:	-3.17%
Trend Growth Rate (2018 to Design Year):	-5.82%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a DAVIS HWY --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485234
Highway:	DAVIS HWY



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3900	4500
2004	4400	4400
2005	4500	4400
2006	4400	4300
2007	4200	4200
2008	4700	4100
2009	5100	4000
2010	3600	3900
2011	3400	3800
2012	3400	3800
2013	2900	3700
2014	3200	3600
2015	4700	3500
2016	3400	3400
2017	3100	3300
2018	3200	3200
2025 Opening Year Trend		
2025	N/A	2600
2035 Mid-Year Trend		
2035	N/A	1800
2045 Design Year Trend		
2045	N/A	900
TRANPLAN Forecasts/Trends		

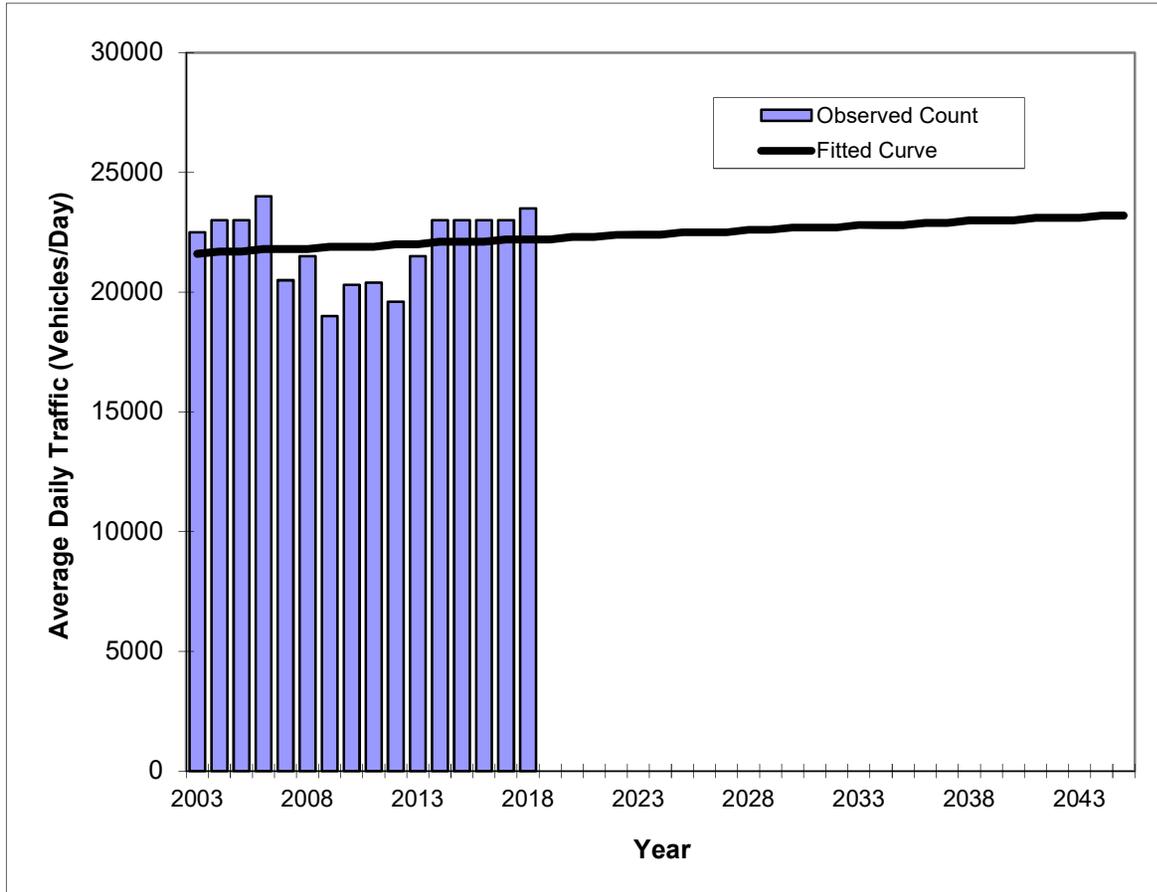
** Annual Trend Increase:	-85
Trend R-squared:	34.84%
Trend Annual Historic Growth Rate:	-1.93%
Trend Growth Rate (2018 to Design Year):	-2.66%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a FAIRFIELD DR --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485206
Highway:	FAIRFIELD DR



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	22500	21600
2004	23000	21700
2005	23000	21700
2006	24000	21800
2007	20500	21800
2008	21500	21800
2009	19000	21900
2010	20300	21900
2011	20400	21900
2012	19600	22000
2013	21500	22000
2014	23000	22100
2015	23000	22100
2016	23000	22100
2017	23000	22200
2018	23500	22200
2025 Opening Year Trend		
2025	N/A	22500
2035 Mid-Year Trend		
2035	N/A	22800
2045 Design Year Trend		
2045	N/A	23200
TRANPLAN Forecasts/Trends		

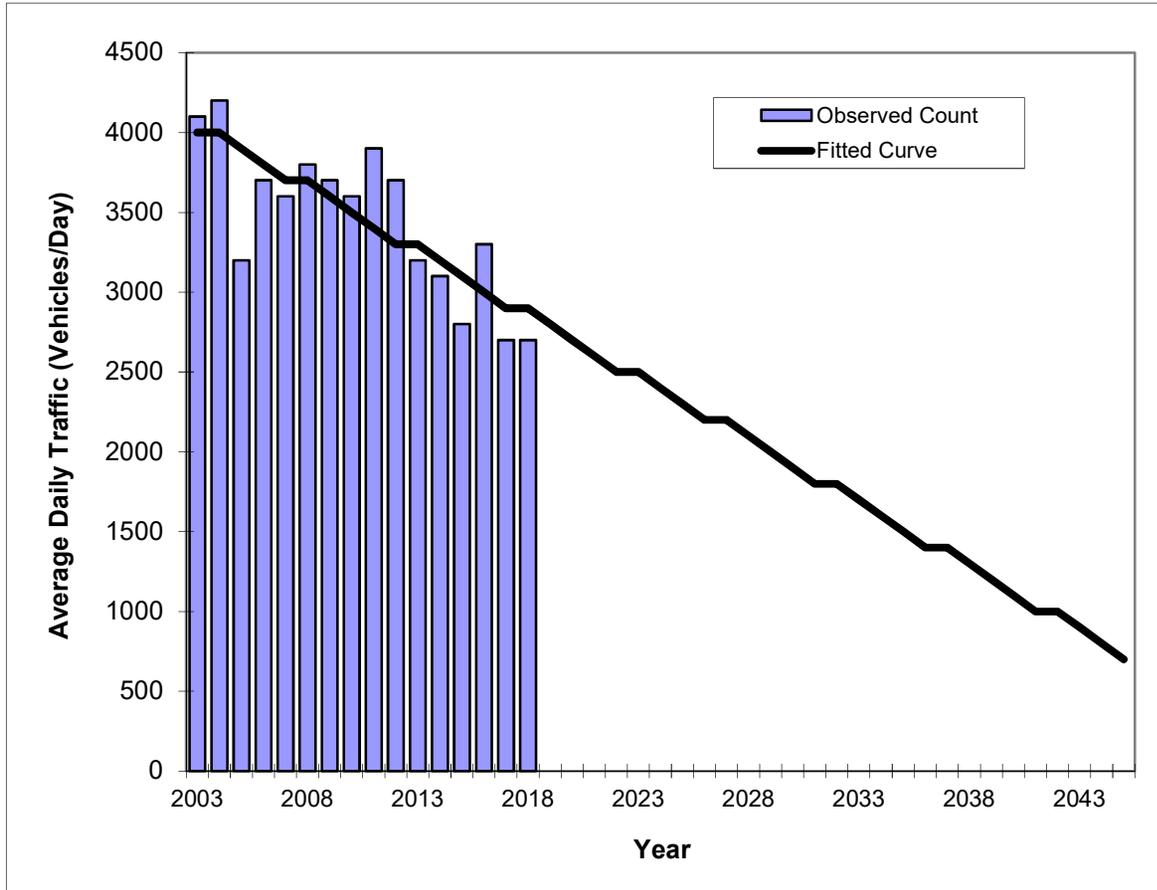
** Annual Trend Increase:	37
Trend R-squared:	1.34%
Trend Annual Historic Growth Rate:	0.19%
Trend Growth Rate (2018 to Design Year):	0.17%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a CROSS ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485191
Highway:	CROSS ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	4100	4000
2004	4200	4000
2005	3200	3900
2006	3700	3800
2007	3600	3700
2008	3800	3700
2009	3700	3600
2010	3600	3500
2011	3900	3400
2012	3700	3300
2013	3200	3300
2014	3100	3200
2015	2800	3100
2016	3300	3000
2017	2700	2900
2018	2700	2900
2025 Opening Year Trend		
2025	N/A	2300
2035 Mid-Year Trend		
2035	N/A	1500
2045 Design Year Trend		
2045	N/A	700
TRANPLAN Forecasts/Trends		

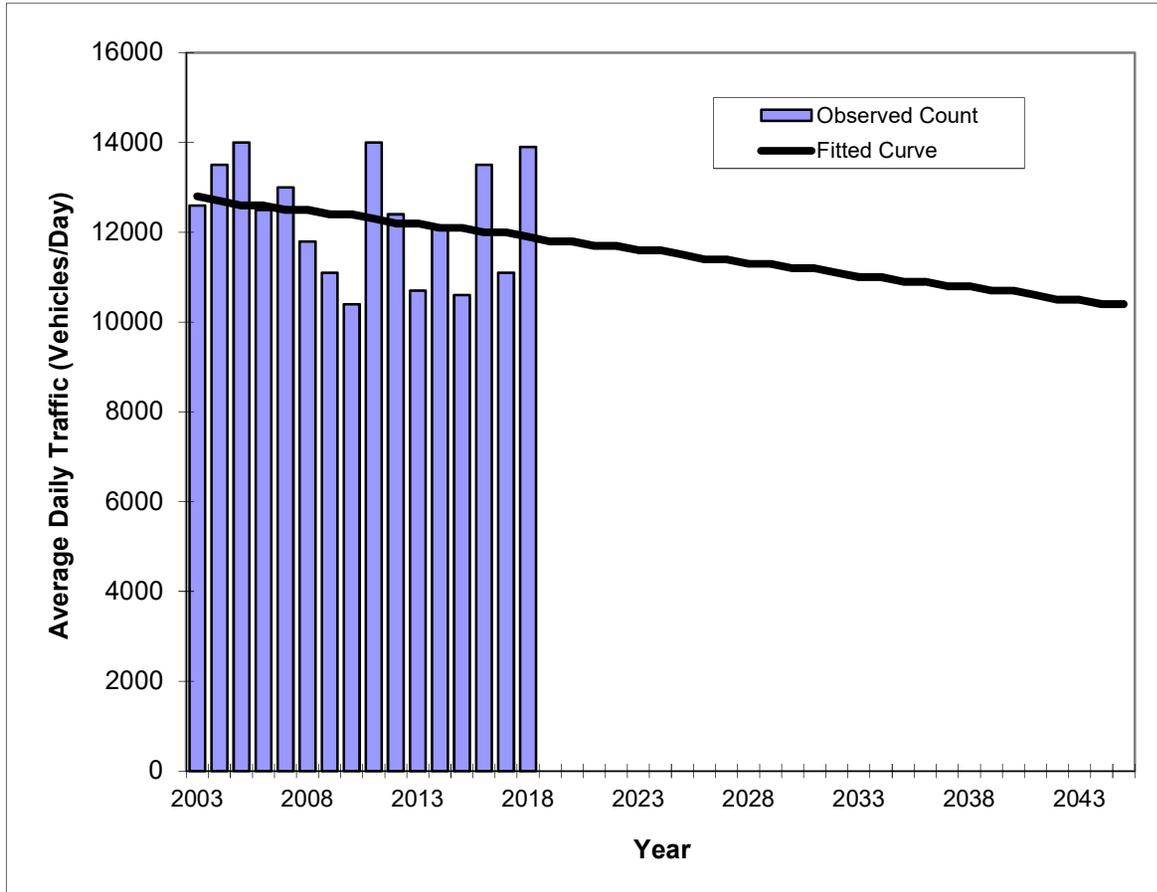
** Annual Trend Increase:	-79
Trend R-squared:	63.12%
Trend Annual Historic Growth Rate:	-1.83%
Trend Growth Rate (2018 to Design Year):	-2.81%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a ALCANIZ ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485177
Highway:	ALCANIZ ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	12600	12800
2004	13500	12700
2005	14000	12600
2006	12500	12600
2007	13000	12500
2008	11800	12500
2009	11100	12400
2010	10400	12400
2011	14000	12300
2012	12400	12200
2013	10700	12200
2014	12100	12100
2015	10600	12100
2016	13500	12000
2017	11100	12000
2018	13900	11900
2025 Opening Year Trend		
2025	N/A	11500
2035 Mid-Year Trend		
2035	N/A	10900
2045 Design Year Trend		
2045	N/A	10400
TRANPLAN Forecasts/Trends		

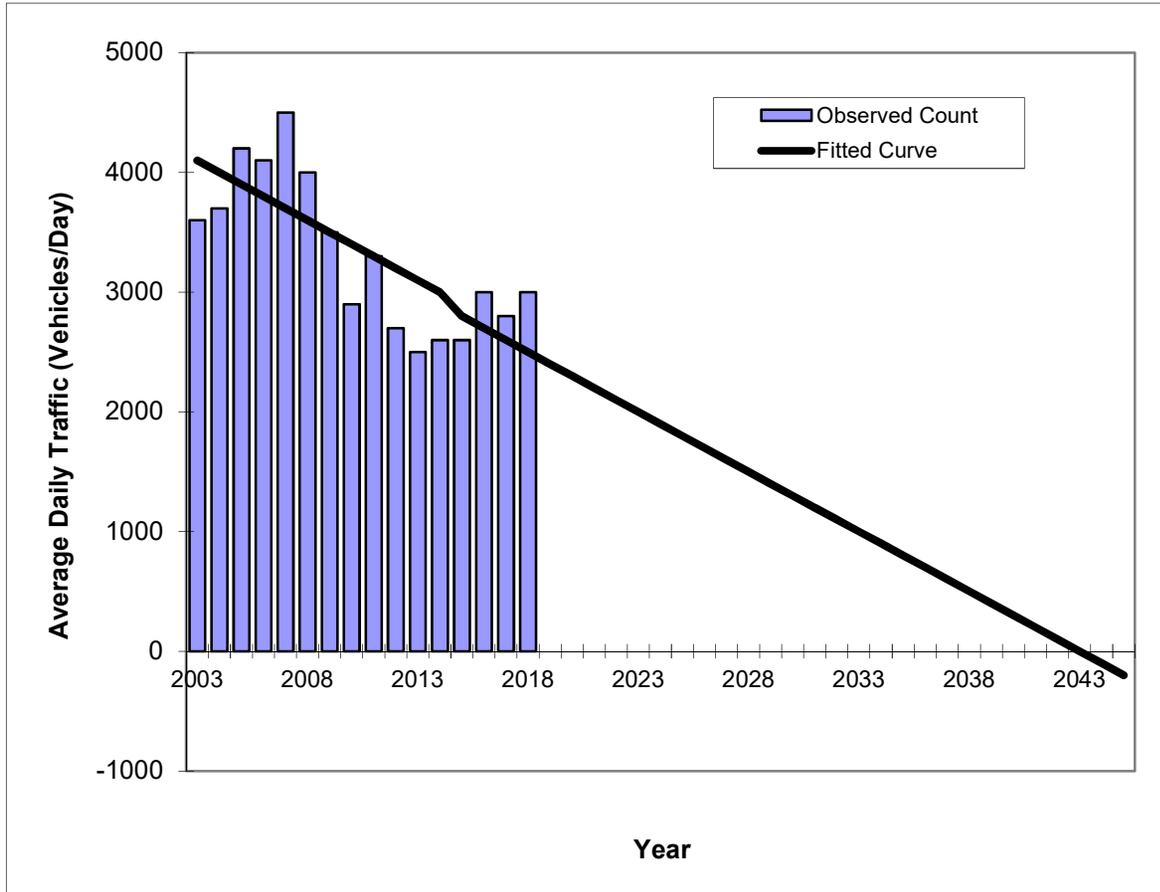
** Annual Trend Increase:	-57
Trend R-squared:	4.55%
Trend Annual Historic Growth Rate:	-0.47%
Trend Growth Rate (2018 to Design Year):	-0.47%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a DAVIS HWY --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485161
Highway:	DAVIS HWY



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3600	4100
2004	3700	4000
2005	4200	3900
2006	4100	3800
2007	4500	3700
2008	4000	3600
2009	3500	3500
2010	2900	3400
2011	3300	3300
2012	2700	3200
2013	2500	3100
2014	2600	3000
2015	2600	2800
2016	3000	2700
2017	2800	2600
2018	3000	2500
2025 Opening Year Trend		
2025	N/A	1800
2035 Mid-Year Trend		
2035	N/A	800
2045 Design Year Trend		
2045	N/A	-200
TRANPLAN Forecasts/Trends		

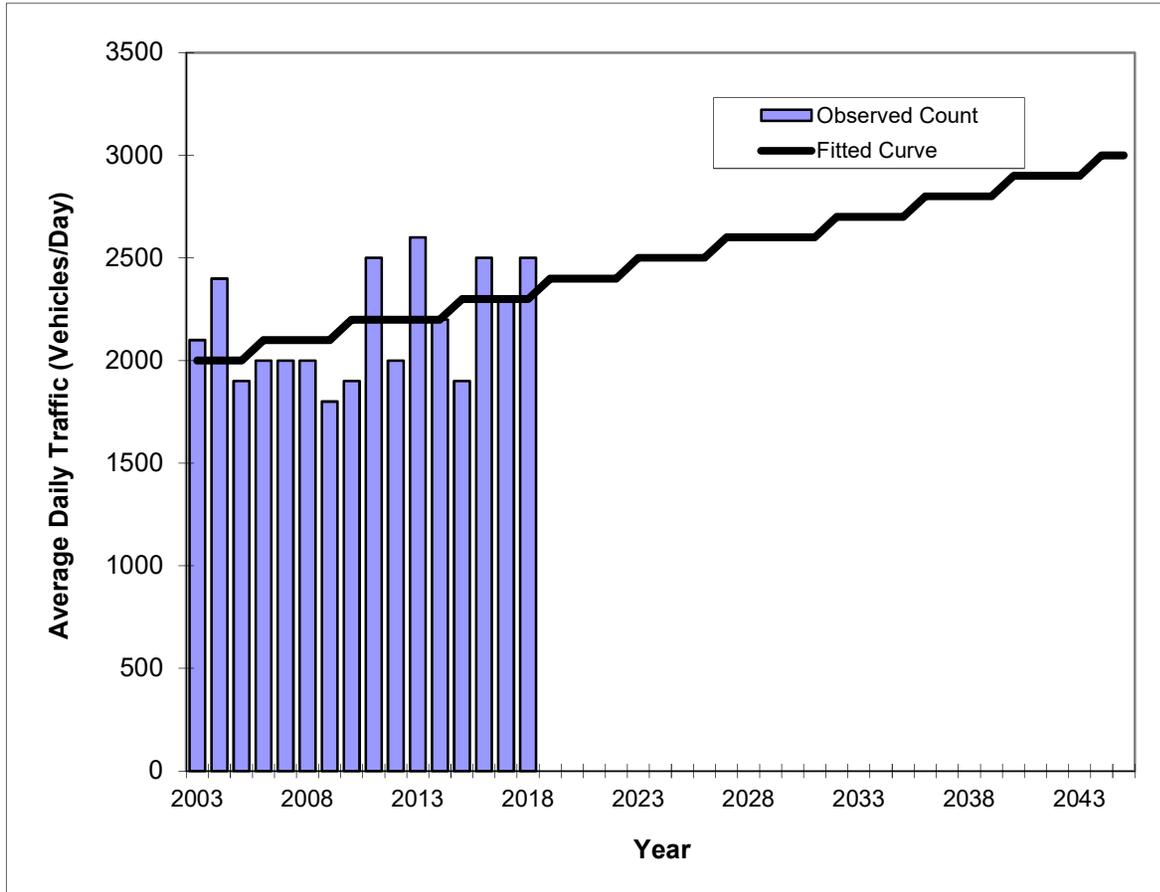
** Annual Trend Increase:	-103
Trend R-squared:	58.09%
Trend Annual Historic Growth Rate:	-2.60%
Trend Growth Rate (2018 to Design Year):	-4.00%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a MAXWELL ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485137
Highway:	MAXWELL ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	2100	2000
2004	2400	2000
2005	1900	2000
2006	2000	2100
2007	2000	2100
2008	2000	2100
2009	1800	2100
2010	1900	2200
2011	2500	2200
2012	2000	2200
2013	2600	2200
2014	2200	2200
2015	1900	2300
2016	2500	2300
2017	2300	2300
2018	2500	2300
2025 Opening Year Trend		
2025	N/A	2500
2035 Mid-Year Trend		
2035	N/A	2700
2045 Design Year Trend		
2045	N/A	3000
TRANPLAN Forecasts/Trends		

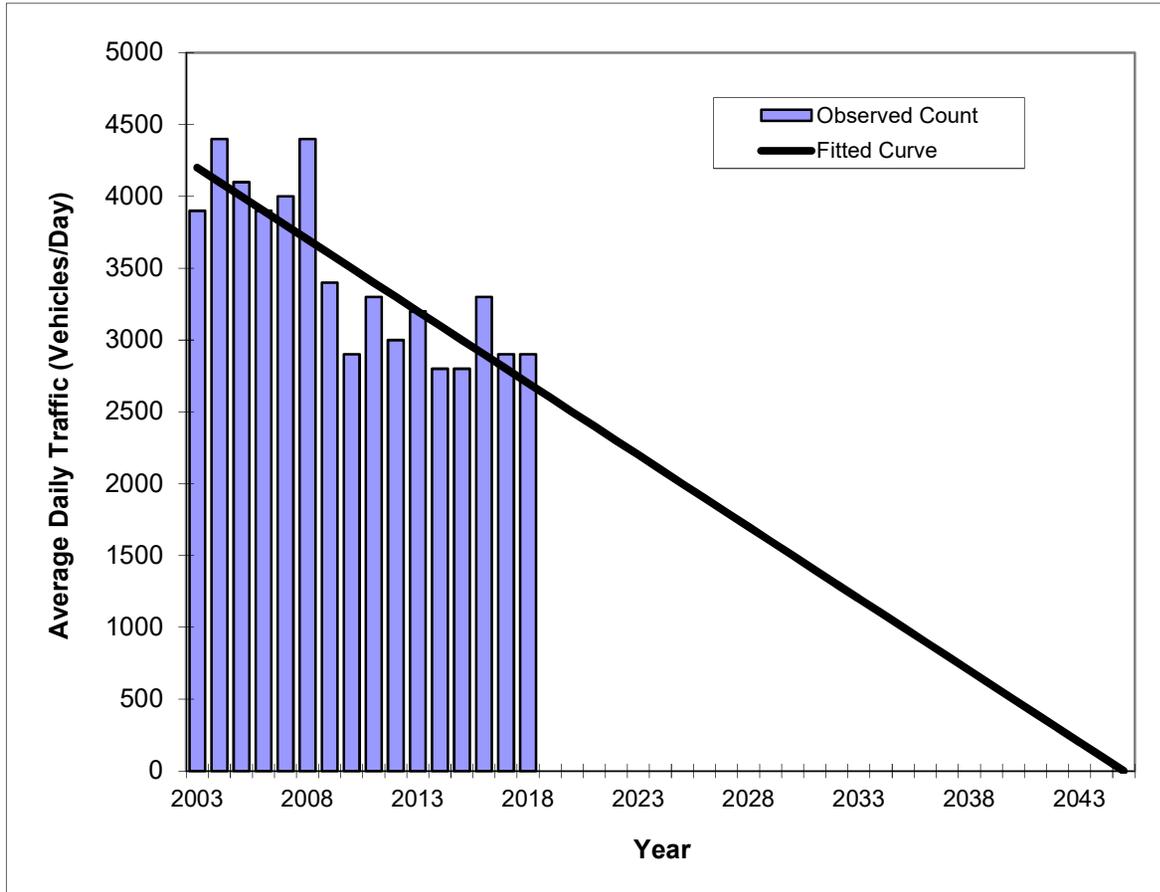
** Annual Trend Increase:	24
Trend R-squared:	17.80%
Trend Annual Historic Growth Rate:	1.00%
Trend Growth Rate (2018 to Design Year):	1.13%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a DAVIS HWY --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485047
Highway:	DAVIS HWY



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3900	4200
2004	4400	4100
2005	4100	4000
2006	3900	3900
2007	4000	3800
2008	4400	3700
2009	3400	3600
2010	2900	3500
2011	3300	3400
2012	3000	3300
2013	3200	3200
2014	2800	3100
2015	2800	3000
2016	3300	2900
2017	2900	2800
2018	2900	2700
2025 Opening Year Trend		
2025	N/A	2000
2035 Mid-Year Trend		
2035	N/A	1000
2045 Design Year Trend		
2045	N/A	0
TRANPLAN Forecasts/Trends		

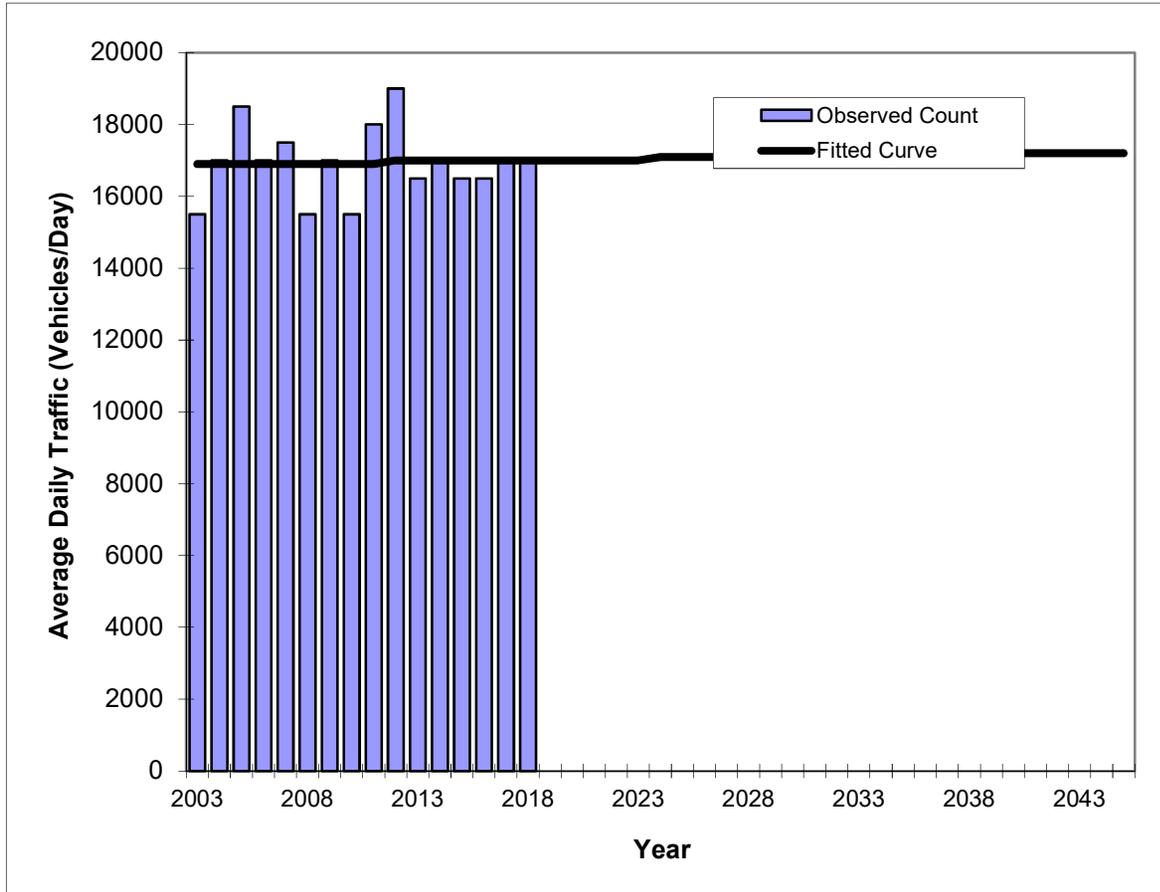
** Annual Trend Increase:	-101
Trend R-squared:	68.80%
Trend Annual Historic Growth Rate:	-2.38%
Trend Growth Rate (2018 to Design Year):	-3.70%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a GREGORY ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485031
Highway:	GREGORY ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	15500	16900
2004	17000	16900
2005	18500	16900
2006	17000	16900
2007	17500	16900
2008	15500	16900
2009	17000	16900
2010	15500	16900
2011	18000	16900
2012	19000	17000
2013	16500	17000
2014	17000	17000
2015	16500	17000
2016	16500	17000
2017	17000	17000
2018	17000	17000
2025 Opening Year Trend		
2025	N/A	17100
2035 Mid-Year Trend		
2035	N/A	17200
2045 Design Year Trend		
2045	N/A	17200
TRANPLAN Forecasts/Trends		

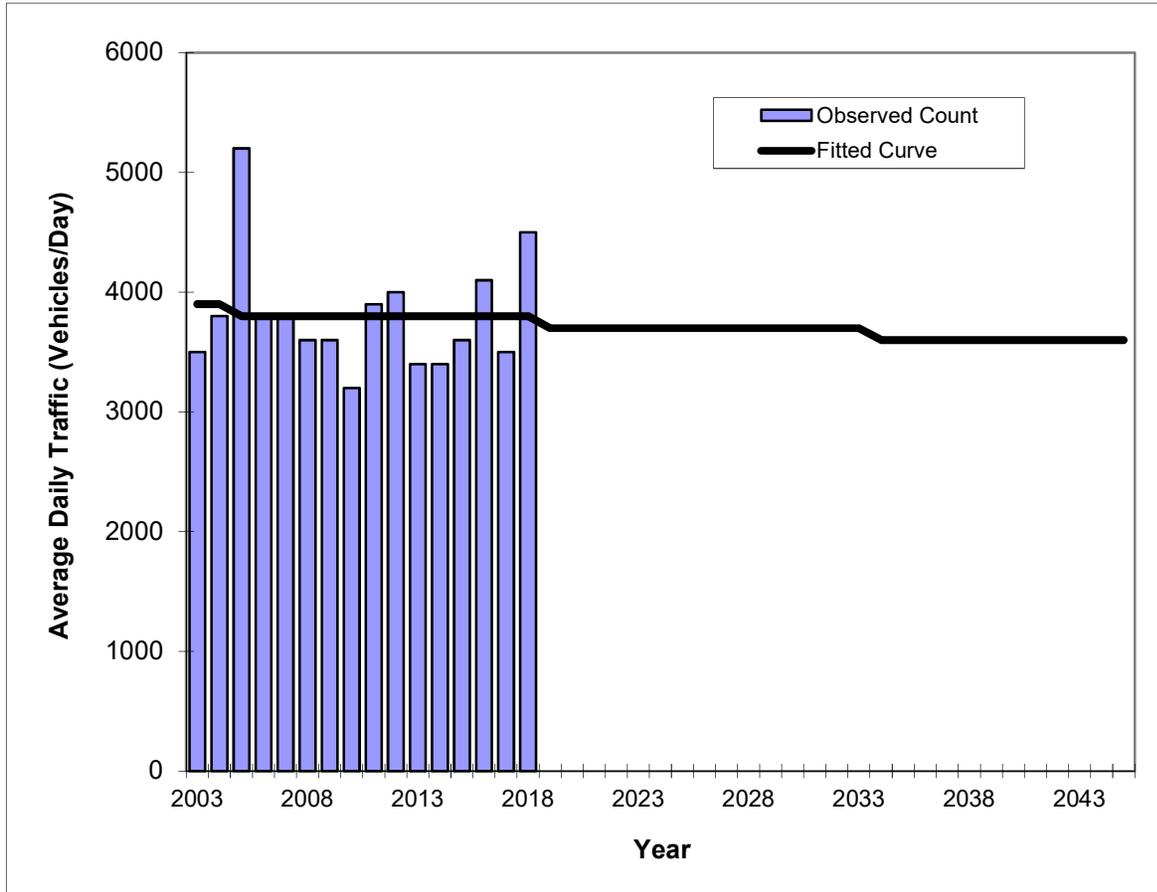
** Annual Trend Increase:	9
Trend R-squared:	0.18%
Trend Annual Historic Growth Rate:	0.04%
Trend Growth Rate (2018 to Design Year):	0.04%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a ALCANIZ ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485030
Highway:	ALCANIZ ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	3500	3900
2004	3800	3900
2005	5200	3800
2006	3800	3800
2007	3800	3800
2008	3600	3800
2009	3600	3800
2010	3200	3800
2011	3900	3800
2012	4000	3800
2013	3400	3800
2014	3400	3800
2015	3600	3800
2016	4100	3800
2017	3500	3800
2018	4500	3800
2025 Opening Year Trend		
2025	N/A	3700
2035 Mid-Year Trend		
2035	N/A	3600
2045 Design Year Trend		
2045	N/A	3600
TRANPLAN Forecasts/Trends		

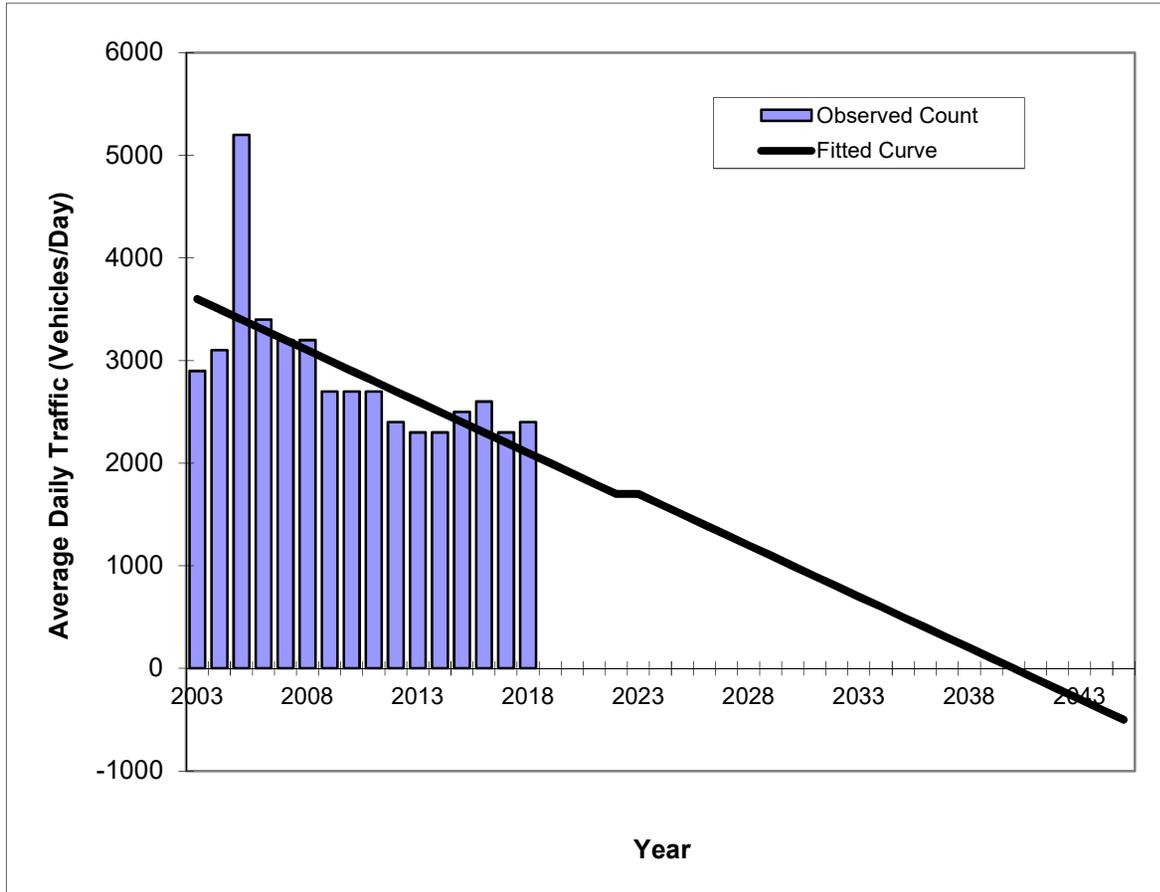
** Annual Trend Increase:	-7
Trend R-squared:	0.46%
Trend Annual Historic Growth Rate:	-0.17%
Trend Growth Rate (2018 to Design Year):	-0.19%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a ALCANIZ ST --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485028
Highway:	ALCANIZ ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	2900	3600
2004	3100	3500
2005	5200	3400
2006	3400	3300
2007	3200	3200
2008	3200	3100
2009	2700	3000
2010	2700	2900
2011	2700	2800
2012	2400	2700
2013	2300	2600
2014	2300	2500
2015	2500	2400
2016	2600	2300
2017	2300	2200
2018	2400	2100
2025 Opening Year Trend		
2025	N/A	1500
2035 Mid-Year Trend		
2035	N/A	500
2045 Design Year Trend		
2045	N/A	-500
TRANPLAN Forecasts/Trends		

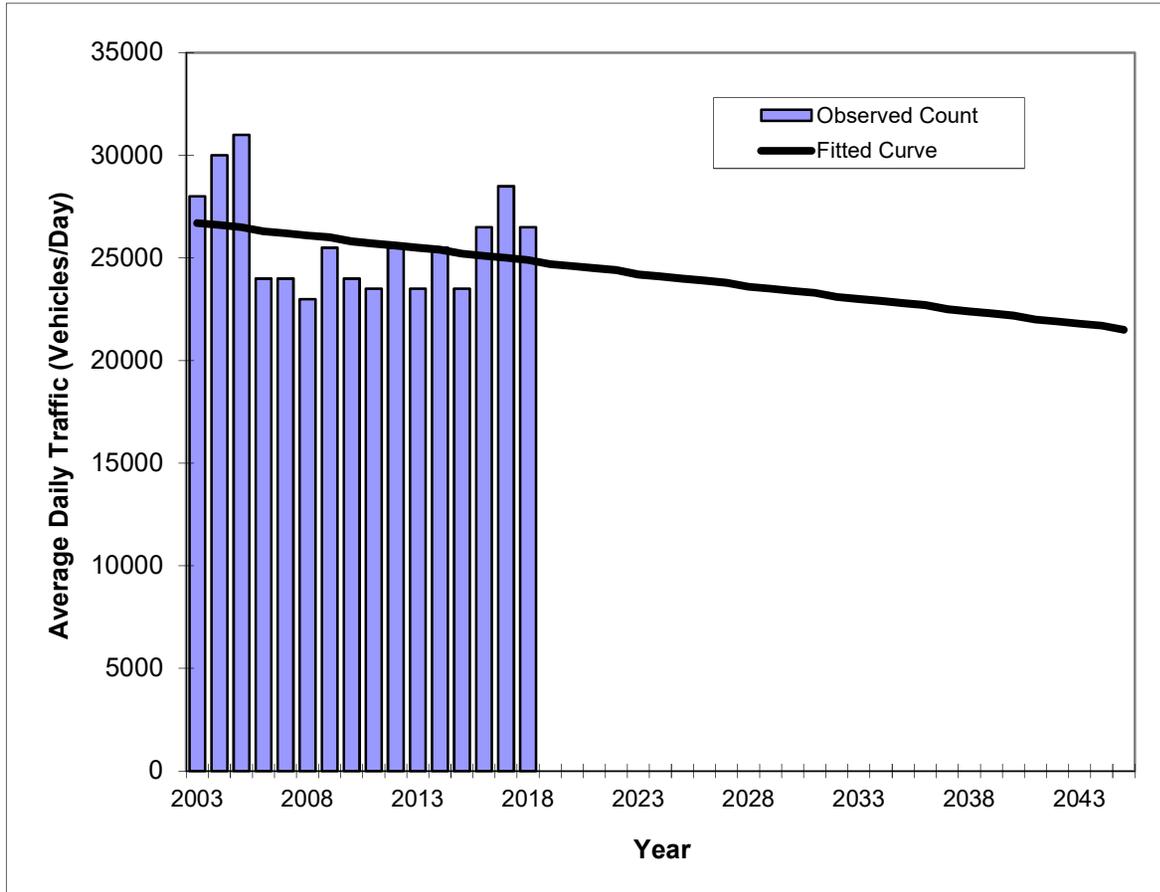
** Annual Trend Increase:	-98
Trend R-squared:	42.01%
Trend Annual Historic Growth Rate:	-2.78%
Trend Growth Rate (2018 to Design Year):	-4.59%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a SR10A (US90) --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	485006
Highway:	SR10A (US90)



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	28000	26700
2004	30000	26600
2005	31000	26500
2006	24000	26300
2007	24000	26200
2008	23000	26100
2009	25500	26000
2010	24000	25800
2011	23500	25700
2012	25500	25600
2013	23500	25500
2014	25500	25400
2015	23500	25200
2016	26500	25100
2017	28500	25000
2018	26500	24900
2025 Opening Year Trend		
2025	N/A	24000
2035 Mid-Year Trend		
2035	N/A	22800
2045 Design Year Trend		
2045	N/A	21500
TRANPLAN Forecasts/Trends		

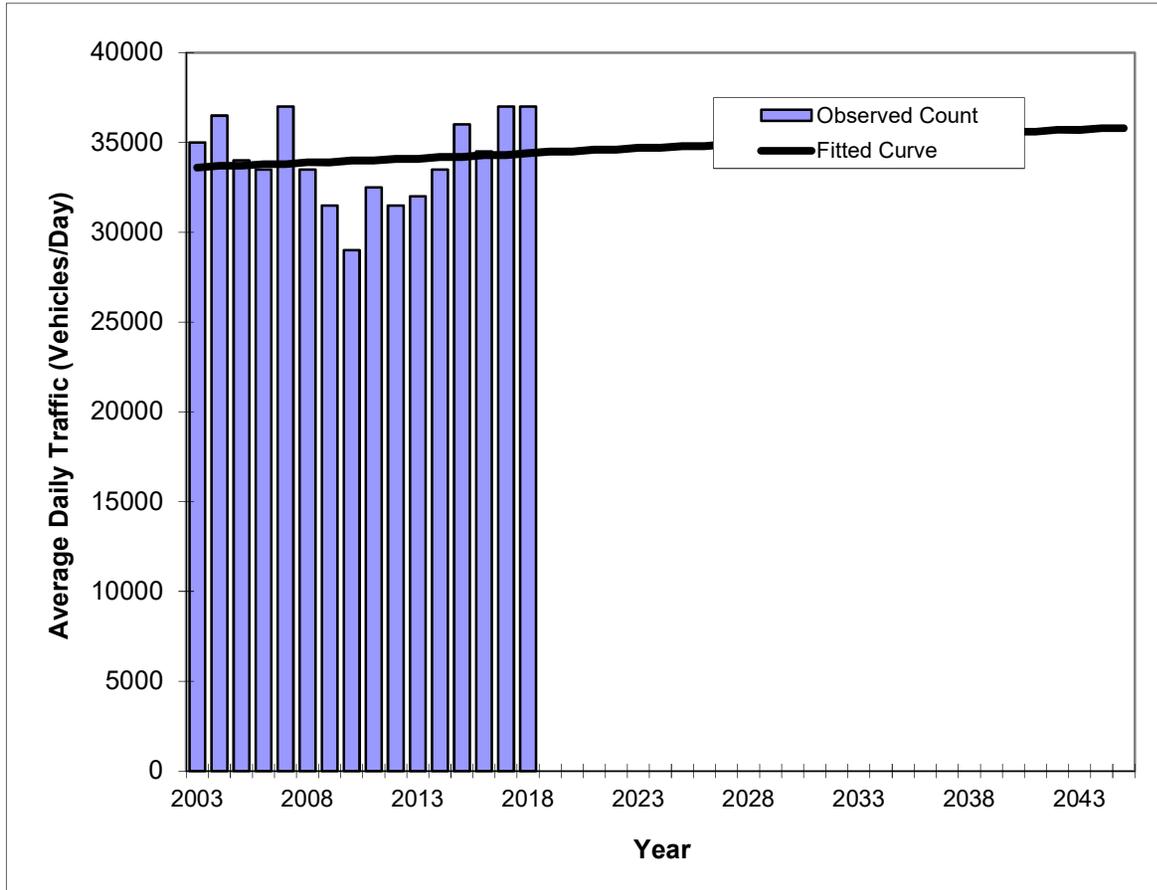
** Annual Trend Increase:	-123
Trend R-squared:	5.60%
Trend Annual Historic Growth Rate:	-0.45%
Trend Growth Rate (2018 to Design Year):	-0.51%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a FAIRFIELD DR --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	484019
Highway:	FAIRFIELD DR



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	35000	33600
2004	36500	33700
2005	34000	33700
2006	33500	33800
2007	37000	33800
2008	33500	33900
2009	31500	33900
2010	29000	34000
2011	32500	34000
2012	31500	34100
2013	32000	34100
2014	33500	34200
2015	36000	34200
2016	34500	34300
2017	37000	34300
2018	37000	34400
2025 Opening Year Trend		
2025	N/A	34800
2035 Mid-Year Trend		
2035	N/A	35300
2045 Design Year Trend		
2045	N/A	35800
TRANPLAN Forecasts/Trends		

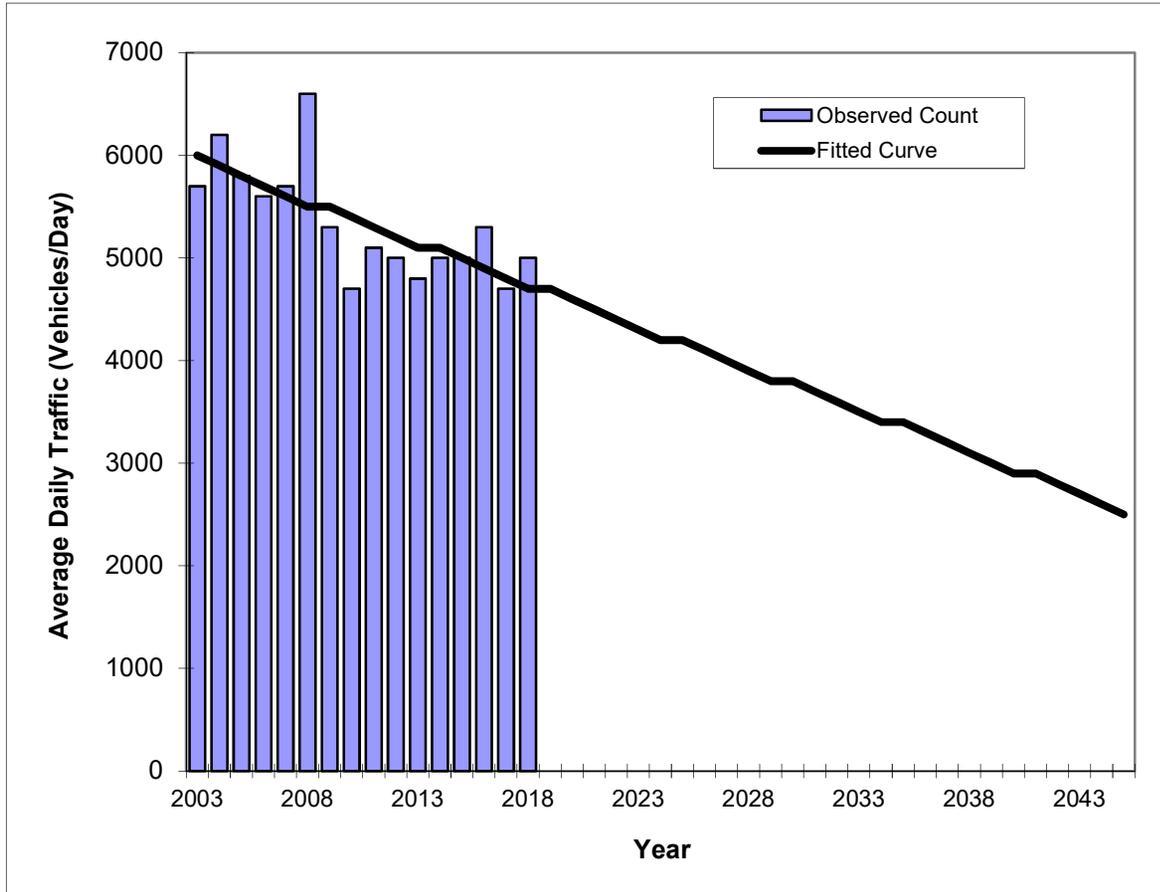
** Annual Trend Increase:	53
Trend R-squared:	1.15%
Trend Annual Historic Growth Rate:	0.16%
Trend Growth Rate (2018 to Design Year):	0.15%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a DAVIS HWY --

FIN#	1234
Location	1

County:	Escambia (48)
Station #:	484010
Highway:	DAVIS HWY



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2003	5700	6000
2004	6200	5900
2005	5800	5800
2006	5600	5700
2007	5700	5600
2008	6600	5500
2009	5300	5500
2010	4700	5400
2011	5100	5300
2012	5000	5200
2013	4800	5100
2014	5000	5100
2015	5000	5000
2016	5300	4900
2017	4700	4800
2018	5000	4700
2025 Opening Year Trend		
2025	N/A	4200
2035 Mid-Year Trend		
2035	N/A	3400
2045 Design Year Trend		
2045	N/A	2500
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-81
Trend R-squared:	49.98%
Trend Annual Historic Growth Rate:	-1.44%
Trend Growth Rate (2018 to Design Year):	-1.73%
Printed:	29-Oct-19
Straight Line Growth Option	

*Axle-Adjusted



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Appendix B:
Traffic Count Data

Study Name 1_Alcaniz St at Gregory St

Start Date 11-12-2019

Start Time 7:00

Site Code 1

Project

Alcaniz St at Gregory St

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Gregory St Eastbound				Gregory St Westbound				Alcaniz St Northbound				Alcaniz St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		47	85	3	0	5	15	0	0	0	14	5
7:15		0	0	0		66	93	1	0	5	30	0	0	0	24	13
7:30		0	0	0		81	123	8	1	5	38	0	0	0	43	14
7:45		0	0	0		78	124	5	2	1	41	0	0	0	61	5
8:00		0	0	0		68	133	4	0	6	23	0	0	0	52	8
8:15		0	0	0		83	88	2	0	1	25	0	0	0	30	6
8:30		0	0	0		70	86	3	0	3	29	0	0	0	27	2
8:45		0	0	0		61	59	3	1	5	29	0	0	0	40	3
16:00		0	0	0		51	43	8	1	11	68	0	0	0	36	1
16:15		0	0	0		29	48	0	0	12	82	0	0	0	32	4
16:30		0	0	0		34	42	3	0	16	85	0	0	0	37	6
16:45		0	0	0		44	59	5	0	10	108	0	0	0	38	10
17:00		0	0	0		40	49	7	3	22	128	0	0	0	33	3
17:15		0	0	0		46	40	3	1	11	100	0	0	0	44	1
17:30		0	0	0		52	31	8	1	6	75	0	0	0	21	4
17:45		0	0	0		31	25	7	1	7	52	0	0	0	18	1

Study Name 1_Alcaniz St at Gregory St

Start Date 11-12-2019

Start Time 7:00

Site Code 1

Project

Alcaniz St at Gregory St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Gregory St Eastbound	Gregory St Westbound	Alcaniz St Northbound	Alcaniz St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	1	1	0
16:45	0	0	0	0
17:00	0	0	1	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	1	0	0	0

Study Name 1_Alcaniz St at Gregory St

Start Date 11-12-2019

Start Time 7:00

Site Code 1

Project

Alcaniz St at Gregory St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Gregory St Eastbound	Gregory St Westbound	Alcaniz St Northbound	Alcaniz St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	1	0	0
8:45	0	1	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	1	0
16:45	0	1	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	1	0	0
17:45	0	0	0	0

Study Name 1_Alcaniz St at Gregory St

Start Date 11-12-2019

Start Time 7:00

Site Code 1

Project

Alcaniz St at Gregory St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Gregory St Eastbound				Gregory St Westbound				Alcaniz St Northbound				Alcaniz St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		47	85	3	0	5	16	0	0	0	15	5
7:15		0	0	0		66	94	1	0	5	31	0	0	0	25	13
7:30		0	0	0		81	123	8	1	5	38	0	0	0	43	14
7:45		0	0	0		78	125	5	2	1	43	0	0	0	63	5
8:00		0	0	0		68	134	4	0	7	23	0	0	0	53	8
8:15		0	0	0		84	88	2	0	1	27	0	0	0	32	6
8:30		0	0	0		72	86	3	0	3	29	0	0	0	27	2
8:45		0	0	0		62	59	3	1	5	29	0	0	0	42	3
16:00		0	0	0		51	43	8	1	11	70	0	0	0	36	1
16:15		0	0	0		30	49	0	0	12	83	0	0	0	33	4
16:30		0	0	0		34	44	3	0	16	86	0	0	0	37	6
16:45		0	0	0		44	60	5	0	10	108	0	0	0	39	10
17:00		0	0	0		41	51	7	3	22	129	0	0	0	34	3
17:15		0	0	0		46	40	3	1	11	100	0	0	0	45	1
17:30		0	0	0		52	32	8	1	6	76	0	0	0	21	4
17:45		0	0	0		31	25	7	1	7	52	0	0	0	19	1

Study Name 2_Alcaniz St at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 2

Project

Alcaniz St at Wright St

Thursday TMC

**Type Road
Classification Light Vehicles**

Start Time	Wright St Eastbound				Wright St Westbound				Alcaniz St Northbound				Alcaniz St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	0	3	0	3	5	0	0	6	0	18		1	15	2
7:15	0	0	3	1	0	3	3	0	0	6	0	30		0	20	5
7:30	0	0	8	2	0	5	7	0	0	7	0	32		3	39	9
7:45	0	0	17	2	0	10	10	0	1	8	0	38		0	37	9
8:00	0	0	4	2	0	8	2	0	0	2	0	26		0	48	8
8:15	0	0	8	1	0	4	5	0	0	5	0	36		2	40	12
8:30	0	0	8	3	0	3	2	0	0	6	1	40		2	27	4
8:45	0	0	4	2	0	3	5	0	0	2	0	21		1	48	6
16:00	0	0	12	1	0	7	3	0	1	5	0	74		1	28	5
16:15	0	0	10	4	0	7	6	0	1	4	0	73		3	25	3
16:30	0	0	13	3	1	4	5	0	1	11	0	98		3	19	4
16:45	0	0	14	3	3	10	5	0	0	7	0	92		1	42	2
17:00	0	0	19	5	0	7	14	0	0	10	2	124		1	31	6
17:15	0	0	13	2	0	7	7	0	3	6	0	82		4	34	6
17:30	0	0	15	0	0	5	6	0	1	3	0	69		1	43	3
17:45	0	0	8	2	0	0	8	0	0	10	1	60		1	32	2

Study Name 2_Alcaniz St at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 2

Project

Alcaniz St at Wright St

Thursday TMC

**Type Road
Classification Heavy Vehicles**

Start Time	Wright St Eastbound				Wright St Westbound				Alcaniz St Northbound				Alcaniz St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	0	0	0	0	0	0	0	0	0	1		0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0		0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	1		0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	2		0	1	0
8:00	0	0	0	0	0	0	0	0	0	0	0	1		1	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	1		1	0	0
8:30	0	0	0	0	0	1	0	0	0	0	0	1		0	2	0
8:45	0	0	0	0	0	1	0	0	0	0	0	1		0	1	0
16:00	0	0	0	0	0	0	0	0	0	0	0	1		0	1	0
16:15	0	0	0	0	0	0	0	0	0	0	0	2		0	0	0
16:30	0	0	1	0	0	0	0	0	0	1	0	1		0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0		0	1	0
17:00	0	0	0	0	0	0	0	0	0	1	0	1		0	1	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0		0	1	0
17:30	0	0	0	0	0	0	0	0	0	0	0	2		0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0		0	3	0

Study Name 2_Alcaniz St at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 2

Project

Alcaniz St at Wright St

Thursday TMC

Type Crosswalk

Classification Pedestrians

	Wright St Eastbound	Wright St Westbound	Alcaniz St Northbound	Alcaniz St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	1	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	1	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 2_Alcaniz St at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 2

Project

Alcaniz St at Wright St

Thursday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Wright St Eastbound	Wright St Westbound	Alcaniz St Northbound	Alcaniz St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	1	0	0
8:45	0	0	0	0
16:00	0	1	0	0
16:15	0	0	1	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 2_Alcaniz St at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 2

Project

Alcaniz St at Wright St

Thursday TMC

**Type Road
Classification Totals**

Start Time	Wright St Eastbound				Wright St Westbound				Alcaniz St Northbound				Alcaniz St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	0	3	0	3	5	0	0	6	0	19		1	15	2
7:15	0	0	4	1	0	3	3	0	0	6	0	30		0	22	5
7:30	0	0	8	2	0	5	7	0	0	7	0	33		3	39	9
7:45	0	0	17	2	0	10	10	0	1	8	0	40		0	38	10
8:00	0	0	4	2	0	8	2	0	0	2	0	27		1	49	8
8:15	0	0	8	1	0	4	5	0	0	5	0	38		3	40	12
8:30	0	0	8	3	0	4	2	0	0	6	1	42		2	29	4
8:45	0	0	5	2	0	4	5	0	0	2	0	22		1	49	6
16:00	0	0	12	1	0	7	3	0	1	5	0	75		1	29	6
16:15	0	0	10	4	0	7	6	0	1	4	0	75		3	25	3
16:30	0	0	14	3	1	4	5	0	1	12	0	99		3	19	4
16:45	0	0	14	3	3	10	5	0	0	7	0	92		1	43	2
17:00	0	0	19	5	0	7	14	0	0	11	2	125		1	32	6
17:15	0	0	13	2	0	7	7	0	3	6	0	82		4	35	6
17:30	0	0	15	0	0	5	6	0	1	3	0	71		1	43	3
17:45	0	0	8	2	0	0	8	0	0	10	1	60		1	35	2

Study Name 3_MLK/Alcaniz St at Cervantes St

Start Date 11-12-2019

Start Time 7:00

Site Code 3

Project

MLK/Alcaniz St at Cervantes St

Tuesday TMC

Type Road

Classification Light Vehicles

Start Time	Cervantes St Eastbound				Cervantes St Westbound				Alcaniz St Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	175	14	0	9	197	0	0	0	0	0	0	4	3	6
7:15	0	0	269	17	0	23	204	0	0	0	0	0	0	9	8	19
7:30	0	0	309	27	0	37	359	0	0	0	0	0	0	6	7	9
7:45	0	1	256	29	0	30	372	0	0	0	0	0	0	10	6	19
8:00	0	0	231	22	0	29	259	0	0	0	0	0	0	11	7	12
8:15	0	0	173	11	0	25	209	0	0	0	0	0	0	6	5	19
8:30	0	0	169	13	0	23	184	0	0	0	0	0	0	10	12	12
8:45	0	0	200	17	0	45	187	0	0	0	0	0	0	4	11	8
16:00	0	0	272	16	0	12	246	0	0	0	0	0	0	10	9	17
16:15	0	1	267	12	0	21	235	0	0	0	0	0	0	10	10	22
16:30	0	0	279	23	0	14	223	0	0	0	0	0	0	13	11	26
16:45	0	0	292	12	0	23	260	0	0	0	1	0	0	11	9	19
17:00	0	0	298	6	0	15	262	1	0	0	0	0	0	12	9	14
17:15	0	0	319	18	0	24	222	0	0	0	0	0	0	15	12	22
17:30	0	0	243	7	0	17	223	1	0	0	1	0	0	9	4	18
17:45	0	0	167	8	0	16	192	0	0	0	0	0	0	9	7	12

Study Name 3_MLK/Alcaniz St at Cervantes St

Start Date 11-12-2019

Start Time 7:00

Site Code 3

Project

MLK/Alcaniz St at Cervantes St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Cervantes St Eastbound	Cervantes St Westbound	Alcaniz St Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	1
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	1
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	2	0	0

Study Name 3_MLK/Alcaniz St at Cervantes St

Start Date 11-12-2019

Start Time 7:00

Site Code 3

Project

MLK/Alcaniz St at Cervantes St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Cervantes St Eastbound	Cervantes St Westbound	Alcaniz St Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 3_MLK/Alcaniz St at Cervantes St

Start Date 11-12-2019

Start Time 7:00

Site Code 3

Project

MLK/Alcaniz St at Cervantes St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Cervantes St Eastbound				Cervantes St Westbound				Alcaniz St Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	177	14	0	9	198	0	0	0	0	0	5	4	6	
7:15	0	0	270	18	0	23	208	0	0	0	0	0	9	9	19	
7:30	0	0	311	27	0	37	361	0	0	0	0	0	6	8	9	
7:45	0	1	264	30	0	30	373	0	0	0	0	0	10	6	20	
8:00	0	0	235	22	0	29	263	0	0	0	0	0	13	8	12	
8:15	0	0	184	13	0	25	215	0	0	0	0	0	6	6	20	
8:30	0	0	173	13	0	24	190	0	0	0	0	0	10	12	12	
8:45	0	0	208	18	0	45	187	0	0	0	0	0	4	12	8	
16:00	0	0	272	16	0	12	247	0	0	0	0	0	10	10	17	
16:15	0	1	270	12	0	21	239	0	0	0	0	0	10	10	22	
16:30	0	0	283	23	0	14	224	0	0	0	0	0	14	12	27	
16:45	0	0	294	12	0	23	263	0	0	0	1	0	11	10	19	
17:00	0	0	300	6	0	16	264	1	0	0	0	0	12	9	14	
17:15	0	0	321	18	0	24	227	0	0	0	0	0	15	13	22	
17:30	0	0	244	8	0	17	224	1	0	0	1	0	9	4	18	
17:45	0	0	168	8	0	16	193	0	0	0	0	0	9	8	12	

Study Name 4_Cervantes St at Haynes St

Start Date 11-12-2019

Start Time 7:00

Site Code 4

Project

Cervantes St at Haynes St

Tuesday TMC

Type Road

Classification Light Vehicles

Start Time	Cervantes St Eastbound				Cervantes St Westbound				Haynes St Northbound				Haynes St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	70	189	0	0	0	186	23	2	3	1		0	0	0	
7:15	0	70	283	0	0	0	193	36	1	5	4		0	0	0	
7:30	0	81	339	0	0	0	287	83	5	7	4		0	0	0	
7:45	0	71	272	0	0	0	319	75	5	16	11		0	0	0	
8:00	0	86	242	0	0	0	216	43	1	5	8		0	0	0	
8:15	0	61	179	0	0	0	190	38	1	4	1		0	0	0	
8:30	0	60	176	0	0	0	145	48	2	4	5		0	0	0	
8:45	0	68	210	0	0	0	170	28	3	7	4		0	0	0	
16:00	0	109	268	0	0	0	198	60	2	17	9		0	0	0	
16:15	0	92	272	0	0	0	197	60	3	17	9		0	0	0	
16:30	0	108	298	1	0	0	185	57	3	22	8		0	0	0	
16:45	0	106	302	0	0	0	228	57	1	12	6		0	0	0	
17:00	0	102	289	0	0	0	203	68	5	29	13		0	0	0	
17:15	0	101	331	0	0	0	187	66	2	16	13		0	0	0	
17:30	0	101	239	0	0	0	199	46	1	10	6		0	0	0	
17:45	0	70	177	0	0	0	179	26	2	8	4		0	0	0	

Study Name 4_Cervantes St at Haynes St

Start Date 11-12-2019

Start Time 7:00

Site Code 4

Project

Cervantes St at Haynes St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Cervantes St Eastbound	Cervantes St Westbound	Haynes St Northbound	Haynes St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	2	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	1	1	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 4_Cervantes St at Haynes St

Start Date 11-12-2019

Start Time 7:00

Site Code 4

Project

Cervantes St at Haynes St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Cervantes St Eastbound	Cervantes St Westbound	Haynes St Northbound	Haynes St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	1	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	1	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 4_Cervantes St at Haynes St

Start Date 11-12-2019

Start Time 7:00

Site Code 4

Project

Cervantes St at Haynes St

Tuesday TMC

Type Road

Classification Bicycles on Road

Start Time	Cervantes St Eastbound				Cervantes St Westbound				Haynes St Northbound				Haynes St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0

Study Name 4_Cervantes St at Haynes St

Start Date 11-12-2019

Start Time 7:00

Site Code 4

Project

Cervantes St at Haynes St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Cervantes St Eastbound				Cervantes St Westbound				Haynes St Northbound				Haynes St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	71	191	0	0	0	187	23	2	3	1		0	0	0	
7:15	0	71	285	0	0	0	197	36	1	5	4		0	0	0	
7:30	0	85	341	0	0	0	289	83	5	7	4		0	0	0	
7:45	0	73	280	0	0	0	320	75	5	16	11		0	0	0	
8:00	0	86	246	0	0	0	219	45	1	5	8		0	0	0	
8:15	0	61	191	0	0	0	196	39	1	4	1		0	0	0	
8:30	0	65	180	0	0	0	147	50	2	4	5		0	0	0	
8:45	0	69	218	0	0	0	170	28	3	7	4		0	0	0	
16:00	0	109	268	0	0	0	199	60	2	17	9		0	0	0	
16:15	0	95	275	0	0	0	201	61	3	17	9		0	0	0	
16:30	0	111	302	1	0	0	186	58	3	22	8		0	0	0	
16:45	0	108	303	0	0	0	230	58	1	13	6		0	0	0	
17:00	0	106	291	0	0	0	204	68	5	29	13		0	0	0	
17:15	0	102	333	0	0	0	192	66	2	17	13		0	0	0	
17:30	0	103	240	0	0	0	200	46	1	10	6		0	0	0	
17:45	0	70	178	0	0	0	180	27	2	8	5		0	0	0	

Study Name 5_MLK at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 5

Project

MLK at Blount St

Tuesday TMC

Type Road
Classification Light Vehicles

Start Time	Blount St Eastbound				Blount St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	13	1	0	0	14	0	0	0	0	0	0	8	3	
7:15	0	0	25	4	0	1	36	0	0	0	0	0	23	3		
7:30	0	0	32	1	0	2	61	0	0	0	0	3	19	4		
7:45	0	0	29	1	0	2	72	0	0	0	0	2	26	5		
8:00	0	0	15	3	0	4	34	0	0	0	0	2	18	7		
8:15	0	0	24	3	0	4	21	0	0	0	0	2	25	8		
8:30	0	0	11	2	0	0	18	0	0	0	0	0	23	4		
8:45	0	0	9	2	0	2	26	0	0	0	0	1	22	7		
16:00	0	0	42	4	0	2	28	0	0	0	0	3	32	6		
16:15	0	0	34	0	0	6	23	0	0	0	0	2	29	3		
16:30	0	0	40	5	0	0	22	0	0	0	0	3	47	3		
16:45	0	0	50	3	0	1	18	0	0	0	0	2	36	6		
17:00	0	0	55	3	0	0	34	0	0	0	0	1	32	4		
17:15	0	0	40	6	0	1	18	0	0	0	0	3	36	6		
17:30	0	0	30	4	0	0	17	0	0	0	0	3	35	1		
17:45	0	0	22	0	0	1	17	0	0	0	0	1	29	6		

Study Name 5_MLK at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 5

Project

MLK at Blount St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Blount St Eastbound	Blount St Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	1	0	0
8:00	1	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	2	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	1

Study Name 5_MLK at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 5

Project

MLK at Blount St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Blount St Eastbound	Blount St Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	1	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 5_MLK at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 5

Project

MLK at Blount St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Blount St Eastbound				Blount St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	13	1	0	0	15	0	0	0	0	0	0	11	3	
7:15	0	0	25	4	0	1	36	0	0	0	0	0	24	4		
7:30	0	0	32	1	0	2	61	0	0	0	0	3	20	5		
7:45	0	0	29	1	0	2	73	0	0	0	0	2	30	5		
8:00	0	0	15	3	0	4	34	0	0	0	0	2	20	7		
8:15	0	0	24	3	0	4	21	0	0	0	0	2	27	8		
8:30	0	0	11	2	0	0	18	0	0	0	0	0	24	4		
8:45	0	0	9	2	0	2	26	0	0	0	0	1	23	7		
16:00	0	0	42	4	0	2	28	0	0	0	0	3	33	6		
16:15	0	0	34	0	0	6	23	1	0	0	0	2	29	3		
16:30	0	0	40	5	0	0	22	0	0	0	0	3	51	3		
16:45	0	0	50	3	0	1	18	0	0	0	0	3	36	6		
17:00	0	0	56	3	0	0	34	0	0	0	0	1	33	4		
17:15	0	0	40	6	0	1	18	0	0	0	0	3	36	6		
17:30	0	0	31	4	0	0	17	0	0	0	0	3	35	1		
17:45	0	0	22	0	0	1	17	0	0	0	0	1	30	6		

Study Name 6_MLK at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 6

Project

MLK at Jordan St

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Jordan St Eastbound				Jordan St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	59	3		0	0	0		0	0	0		5	17	0
7:15		0	82	3		0	0	0		0	0	0		4	23	0
7:30		0	88	8		0	0	0		0	0	0		3	19	0
7:45		0	52	8		0	0	0		0	0	0		4	25	0
8:00		0	46	9		0	0	0		0	0	0		5	23	0
8:15		0	43	8		0	0	0		0	0	0		5	24	0
8:30		0	38	4		0	0	0		0	0	0		5	31	0
8:45		0	43	6		0	0	0		0	0	0		6	25	0
16:00		0	52	7		0	0	0		0	0	0		4	37	0
16:15		0	57	16		0	0	0		0	0	0		8	26	0
16:30		0	58	10		0	0	0		0	0	0		3	44	0
16:45		0	80	10		0	0	0		0	0	0		2	34	0
17:00		0	57	17		0	0	0		0	0	0		5	23	0
17:15		0	48	18		0	0	0		0	0	0		7	39	0
17:30		0	34	24		0	0	0		0	0	0		2	29	0
17:45		0	41	12		0	0	0		0	0	0		2	24	0

Study Name 6_MLK at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 6

Project

MLK at Jordan St

Tuesday TMC

Type Road

Classification Heavy Vehicles

Start Time	Jordan St Eastbound				Jordan St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		0	0	0		0	2	0
7:15		0	0	0		0	0	0		0	0	0		1	2	0
7:30		0	0	0		0	0	0		0	0	0		0	2	0
7:45		0	0	1		0	0	0		0	0	0		0	1	0
8:00		0	0	0		0	0	0		0	0	0		0	2	0
8:15		0	2	1		0	0	0		0	0	0		1	1	0
8:30		0	0	1		0	0	0		0	0	0		0	2	0
8:45		0	1	0		0	0	0		0	0	0		0	1	0
16:00		0	2	0		0	0	0		0	0	0		0	1	0
16:15		0	2	0		0	0	0		0	0	0		0	2	0
16:30		0	0	0		0	0	0		0	0	0		0	4	0
16:45		0	0	0		0	0	0		0	0	0		0	1	0
17:00		0	1	0		0	0	0		0	0	0		0	1	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	1		0	0	0		0	0	0		0	0	0
17:45		0	1	0		0	0	0		0	0	0		0	1	0

Study Name 6_MLK at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 6

Project

MLK at Jordan St

Tuesday TMC

Type Road

Classification Bicycles on Road

Start Time	Jordan St Eastbound				Jordan St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		0	0	0		0	0	0
7:15		0	0	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	0	0		0	1	0
7:45		1	0	0		0	0	0		0	0	0		0	0	0
8:00		0	0	0		0	0	0		0	0	0		0	0	0
8:15		0	0	0		0	0	0		0	0	0		0	0	0
8:30		0	1	0		0	0	0		0	0	0		0	0	0
8:45		0	0	0		0	0	0		0	0	0		0	0	0
16:00		0	0	0		0	0	0		0	0	0		0	0	0
16:15		0	2	0		0	1	0		0	0	0		0	0	0
16:30		0	0	0		0	0	0		0	0	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		0	0	0		0	0	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	0	0		0	0	0		0	0	0
17:45		0	0	0		0	0	0		0	0	0		0	0	0

Study Name 6_MLK at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 6

Project

MLK at Jordan St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Jordan St Eastbound				Jordan St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	59	3		0	0	0		0	0	0		5	19	0
7:15		0	82	3		0	0	0		0	0	0		5	25	0
7:30		0	88	8		0	0	0		0	0	0		3	22	0
7:45		1	52	9		0	0	0		0	0	0		4	26	0
8:00		0	46	9		0	0	0		0	0	0		5	25	0
8:15		0	45	9		0	0	0		0	0	0		6	25	0
8:30		0	39	5		0	0	0		0	0	0		5	33	0
8:45		0	44	6		0	0	0		0	0	0		6	26	0
16:00		0	54	7		0	0	0		0	0	0		4	38	0
16:15		0	61	16		0	1	0		0	0	0		8	28	0
16:30		0	58	10		0	0	0		0	0	0		3	48	0
16:45		0	80	10		0	0	0		0	0	0		2	35	0
17:00		0	58	17		0	0	0		0	0	0		5	24	0
17:15		0	48	18		0	0	0		0	0	0		7	39	0
17:30		0	34	25		0	0	0		0	0	0		2	29	0
17:45		0	42	12		0	0	0		0	0	0		2	25	0

Study Name 7_Jordan St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 7

Project

Jordan St at Hayne St

Tuesday TMC

Type Road
Classification Light Vehicles

Start Time	Jordan St Eastbound				Jordan St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right												
7:00		25	61	0		0	0	0		0	12	2		0	0	0
7:15		36	85	0		0	0	0		0	15	0		0	0	0
7:30		43	95	0		0	0	0		0	29	1		0	0	0
7:45		38	61	0		0	0	0		0	23	2		0	0	0
8:00		33	51	0		0	0	0		0	7	2		0	0	0
8:15		41	51	0		0	0	0		0	10	2		0	0	0
8:30		34	42	0		0	0	0		0	15	1		0	0	0
8:45		27	49	0		0	0	0		0	10	1		0	0	0
16:00		70	55	0		0	0	0		0	26	3		0	0	0
16:15		57	73	0		0	0	0		0	18	0		0	0	0
16:30		96	66	0		0	0	0		0	21	3		0	0	0
16:45		86	82	0		0	0	0		0	14	7		0	0	0
17:00		102	73	0		0	0	0		0	30	2		0	0	0
17:15		68	63	0		0	0	0		0	36	3		0	0	0
17:30		53	55	0		0	0	0		0	26	3		0	0	0
17:45		38	53	0		0	0	0		0	10	0		0	0	0

Study Name 7_Jordan St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 7

Project

Jordan St at Hayne St

Tuesday TMC

Type Road
Classification Heavy Vehicles

Start Time	Jordan St Eastbound				Jordan St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right												
7:00		1	0	0		0	0	0		0	2	0		0	0	0
7:15		2	0	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	1	0		0	0	0
7:45		0	1	0		0	0	0		0	0	0		0	0	0
8:00		1	0	0		0	0	0		0	0	0		0	0	0
8:15		1	3	0		0	0	0		0	0	0		0	0	0
8:30		0	0	0		0	0	0		0	0	0		0	0	0
8:45		0	1	0		0	0	0		0	0	0		0	0	0
16:00		1	2	0		0	0	0		0	0	0		0	0	0
16:15		1	1	0		0	0	0		0	0	1		0	0	0
16:30		2	0	0		0	0	0		0	0	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		0	1	0		0	0	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	1	0		0	0	0
17:30		0	1	0		0	0	0		0	1	0		0	0	0
17:45		0	1	0		0	0	0		0	1	0		0	0	0

Study Name 7_Jordan St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 7

Project

Jordan St at Hayne St

Tuesday TMC

Type Road

Classification Bicycles on Road

Start Time	Jordan St Eastbound				Jordan St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right												
7:00		1	0	0		0	0	0		0	0	0		0	0	0
7:15		0	0	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	0	0		0	0	0
7:45		0	0	0		0	0	0		0	0	0		0	0	0
8:00		0	0	0		0	0	0		0	0	0		0	0	0
8:15		0	0	0		0	0	0		0	0	0		0	0	0
8:30		0	1	0		0	0	0		0	0	0		0	0	0
8:45		0	0	1		0	0	0		0	0	0		0	0	0
16:00		0	0	0		0	0	0		0	0	0		0	0	0
16:15		0	1	0		0	0	0		0	0	0		0	0	0
16:30		0	0	0		0	0	0		0	0	0		0	1	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		0	0	0		0	0	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	0	0		0	0	0		0	0	0
17:45		0	0	0		0	0	0		1	0	0		0	0	0

Study Name 7_Jordan St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 7

Project

Jordan St at Hayne St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Jordan St Eastbound				Jordan St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right												
7:00		27	61	0		0	0	0		0	14	2		0	0	0
7:15		38	85	0		0	0	0		0	15	0		0	0	0
7:30		43	95	0		0	0	0		0	30	1		0	0	0
7:45		38	62	0		0	0	0		0	23	2		0	0	0
8:00		34	51	0		0	0	0		0	7	2		0	0	0
8:15		42	54	0		0	0	0		0	10	2		0	0	0
8:30		34	43	0		0	0	0		0	15	1		0	0	0
8:45		27	50	1		0	0	0		0	10	1		0	0	0
16:00		71	57	0		0	0	0		0	26	3		0	0	0
16:15		58	75	0		0	0	0		0	18	1		0	0	0
16:30		98	66	0		0	0	0		0	21	3		0	1	0
16:45		86	82	0		0	0	0		0	14	7		0	0	0
17:00		102	74	0		0	0	0		0	30	2		0	0	0
17:15		68	63	0		0	0	0		0	37	3		0	0	0
17:30		53	56	0		0	0	0		0	27	3		0	0	0
17:45		38	54	0		0	0	0		1	11	0		0	0	0

Study Name 8_MLK at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 8

Project

MLK at Maxwell St

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		2	45	0		0	0	0		0	20	8
7:15		0	0	0		1	65	0		0	0	0		0	24	11
7:30		0	0	0		1	77	0		0	0	0		0	21	4
7:45		0	0	0		1	60	0		0	0	0		0	27	6
8:00		0	0	0		0	57	0		0	0	0		0	29	10
8:15		0	0	0		3	49	0		0	0	0		0	30	11
8:30		0	0	0		5	47	0		0	0	0		0	32	12
8:45		0	0	0		3	35	0		0	0	0		0	31	6
16:00		0	0	0		2	42	0		0	0	0		0	40	6
16:15		0	0	0		5	48	0		0	0	0		0	27	11
16:30		0	0	0		2	52	0		0	0	0		0	48	14
16:45		0	0	0		1	40	0		0	0	0		0	33	11
17:00		0	0	0		1	47	0		0	0	0		0	30	15
17:15		0	0	0		3	34	0		0	0	0		0	43	9
17:30		0	0	0		3	40	0		0	0	0		0	28	12
17:45		0	0	0		0	19	0		0	0	0		0	25	5

Study Name 8_MLK at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 8

Project

MLK at Maxwell St

Tuesday TMC

**Type Road
Classification Heavy Vehicles**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		0	0	0		0	2	0
7:15		0	0	0		1	0	0		0	0	0		0	2	0
7:30		0	0	0		0	0	0		0	0	0		0	2	0
7:45		0	0	0		0	1	0		0	0	0		0	1	1
8:00		0	0	0		0	0	0		0	0	0		0	2	0
8:15		0	0	0		0	0	0		0	0	0		0	2	0
8:30		0	0	0		1	0	0		0	0	0		0	1	0
8:45		0	0	0		0	0	0		0	0	0		0	1	0
16:00		0	0	0		0	0	0		0	0	0		0	1	0
16:15		0	0	0		0	0	0		0	0	0		0	1	0
16:30		0	0	0		0	0	0		0	0	0		0	4	1
16:45		0	0	0		0	0	0		0	0	0		0	1	1
17:00		0	0	0		0	0	0		0	0	0		0	1	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	0	0		0	0	0		0	1	0
17:45		0	0	0		0	0	0		0	0	0		0	0	0

Study Name 8_MLK at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 8

Project

MLK at Maxwell St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Maxwell St Eastbound	Maxwell St Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	1	0	0	0
7:30	0	1	1	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	2	0
16:15	0	0	2	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	1	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 8_MLK at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 8

Project

MLK at Maxwell St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Maxwell St Eastbound	Maxwell St Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	1	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	1	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	1	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 8_MLK at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 8

Project

MLK at Maxwell St

Tuesday TMC

**Type Road
Classification Bicycles on Road**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		0	0	0		0	0	0
7:15		0	0	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	0	0		0	1	0
7:45		0	0	0		0	0	0		0	0	0		0	0	0
8:00		0	0	0		0	0	0		0	0	0		0	0	0
8:15		0	0	0		0	0	0		0	0	0		0	0	0
8:30		0	0	0		0	0	0		0	0	0		0	0	0
8:45		0	0	0		0	0	0		0	0	0		0	0	0
16:00		0	1	0		0	0	0		0	0	0		0	0	0
16:15		0	0	0		0	0	0		0	0	0		0	0	0
16:30		0	0	0		0	1	0		0	0	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		0	0	0		0	1	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	1	0		0	0	0		0	0	0
17:45		0	0	0		0	0	0		0	0	0		0	0	0

Study Name 8_MLK at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 8

Project

MLK at Maxwell St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		2	45	0		0	0	0		0	22	8
7:15		0	0	0		2	65	0		0	0	0		0	26	11
7:30		0	0	0		1	77	0		0	0	0		0	24	4
7:45		0	0	0		1	61	0		0	0	0		0	28	7
8:00		0	0	0		0	57	0		0	0	0		0	31	10
8:15		0	0	0		3	49	0		0	0	0		0	32	11
8:30		0	0	0		6	47	0		0	0	0		0	33	12
8:45		0	0	0		3	35	0		0	0	0		0	32	6
16:00		0	1	0		2	42	0		0	0	0		0	41	6
16:15		0	0	0		5	48	0		0	0	0		0	28	11
16:30		0	0	0		2	53	0		0	0	0		0	52	15
16:45		0	0	0		1	40	0		0	0	0		0	34	12
17:00		0	0	0		1	48	0		0	0	0		0	31	15
17:15		0	0	0		3	34	0		0	0	0		0	43	9
17:30		0	0	0		3	41	0		0	0	0		0	29	12
17:45		0	0	0		0	19	0		0	0	0		0	25	5

Study Name 9_Maxwell St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 9

Project

Maxwell St at Hayne St

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	20	32		3	33	0		0	0	0
7:15		0	0	0		0	41	36		1	50	0		0	0	0
7:30		0	0	0		0	34	48		6	68	0		0	0	0
7:45		0	0	0		0	34	37		2	59	0		0	0	0
8:00		0	0	0		0	36	31		2	37	0		0	0	0
8:15		0	0	0		0	28	33		1	50	0		0	0	0
8:30		0	0	0		0	25	31		1	48	0		0	0	0
8:45		0	0	0		0	20	25		1	36	0		0	0	0
16:00		0	0	0		0	22	24		4	93	0		0	0	0
16:15		0	0	0		0	30	30		2	70	0		0	0	0
16:30		0	0	0		0	37	35		4	116	0		0	0	0
16:45		0	0	0		0	33	27		2	94	0		0	0	0
17:00		0	0	0		0	26	32		4	126	0		0	0	0
17:15		0	0	0		0	16	28		8	94	0		0	0	0
17:30		0	0	0		0	27	22		4	77	0		0	0	0
17:45		0	0	0		0	14	14		5	53	0		0	0	0

Study Name 9_Maxwell St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 9

Project

Maxwell St at Hayne St

Tuesday TMC

Type Road

Classification Heavy Vehicles

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		2	1	0		0	0	0
7:15		0	0	0		0	0	0		0	2	0		0	0	0
7:30		0	0	0		0	0	0		1	0	0		0	0	0
7:45		0	0	0		0	1	1		0	0	0		0	0	0
8:00		0	0	0		0	0	0		0	1	0		0	0	0
8:15		0	0	0		0	0	0		0	1	0		0	0	0
8:30		0	0	0		0	0	0		0	0	0		0	0	0
8:45		0	0	0		0	0	0		0	0	0		0	0	0
16:00		0	0	0		0	0	0		0	2	0		0	0	0
16:15		0	0	0		0	0	0		0	2	0		0	0	0
16:30		0	0	0		0	1	0		0	1	0		0	0	0
16:45		0	0	0		0	0	1		0	0	0		0	0	0
17:00		0	0	0		0	0	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	1	0		0	0	0
17:30		0	0	0		0	0	0		0	1	0		0	0	0
17:45		0	0	0		0	0	0		0	2	0		0	0	0

Study Name 9_Maxwell St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 9

Project

Maxwell St at Hayne St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Maxwell St Eastbound	Maxwell St Westbound	Hayne St Northbound	Hayne St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	1
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 9_Maxwell St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 9

Project

Maxwell St at Hayne St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Maxwell St Eastbound	Maxwell St Westbound	Hayne St Northbound	Hayne St Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	1	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	1
17:45	0	0	0	0

Study Name 9_Maxwell St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 9

Project

Maxwell St at Hayne St

Tuesday TMC

Type Road

Classification Bicycles on Road

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		0	0	1		0	0	0
7:15		0	0	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		1	0	0		0	0	0		0	0	0
7:45		0	0	0		0	0	0		0	0	0		0	0	0
8:00		0	0	0		0	0	0		0	0	0		0	0	0
8:15		0	0	0		0	0	0		0	0	0		0	0	0
8:30		0	0	0		0	0	0		0	0	0		0	0	0
8:45		0	0	0		0	0	0		0	0	0		0	0	0
16:00		0	0	0		0	0	0		0	0	0		0	0	0
16:15		0	0	0		0	0	0		0	0	0		0	0	0
16:30		0	0	0		1	0	0		0	0	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		0	0	0		0	1	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	0	0		0	0	0		0	0	0
17:45		0	0	0		0	0	0		0	0	0		0	0	0

Study Name 9_Maxwell St at Hayne St

Start Date 11-12-2019

Start Time 7:00

Site Code 9

Project

Maxwell St at Hayne St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Hayne St Northbound				Hayne St Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	20	32		5	34	1		0	0	0
7:15		0	0	0		0	41	36		1	52	0		0	0	0
7:30		0	0	0		1	34	48		7	68	0		0	0	0
7:45		0	0	0		0	35	38		2	59	0		0	0	0
8:00		0	0	0		0	36	31		2	38	0		0	0	0
8:15		0	0	0		0	28	33		1	51	0		0	0	0
8:30		0	0	0		0	25	31		1	48	0		0	0	0
8:45		0	0	0		0	20	25		1	36	0		0	0	0
16:00		0	0	0		0	22	24		4	95	0		0	0	0
16:15		0	0	0		0	30	30		2	72	0		0	0	0
16:30		0	0	0		1	38	35		4	117	0		0	0	0
16:45		0	0	0		0	33	28		2	94	0		0	0	0
17:00		0	0	0		0	27	32		4	126	0		0	0	0
17:15		0	0	0		0	16	28		8	95	0		0	0	0
17:30		0	0	0		0	27	22		4	78	0		0	0	0
17:45		0	0	0		0	14	14		5	55	0		0	0	0

Study Name 10_MLK at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 10

Project

MLK at Cross St

Tuesday TMC

Type Road
Classification Light Vehicles

Start Time	Cross St Eastbound				Cross St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	7	2	0	0	6	0	0	0	0	0	0	26	2	
7:15	0	0	15	1	0	1	8	0	0	0	0	0	0	30	4	
7:30	0	0	14	2	0	0	18	0	0	0	0	0	0	26	7	
7:45	1	0	17	4	0	1	17	0	0	0	0	0	3	27	9	
8:00	0	0	15	2	0	2	12	0	0	0	0	0	1	32	6	
8:15	0	0	15	3	0	0	10	0	0	0	0	0	1	38	5	
8:30	0	0	13	5	0	0	5	0	0	0	0	0	0	32	8	
8:45	0	0	4	4	0	1	2	0	0	0	0	0	2	41	3	
16:00	0	0	14	3	0	1	15	0	0	0	0	0	1	47	8	
16:15	0	0	14	4	0	1	14	0	0	0	0	0	0	29	6	
16:30	0	0	16	9	0	1	19	0	0	0	0	0	3	49	7	
16:45	0	0	13	5	0	0	18	0	0	0	0	0	2	36	10	
17:00	0	0	19	7	0	0	1	0	0	0	0	0	6	43	7	
17:15	0	0	21	4	0	1	12	0	0	0	0	0	3	39	8	
17:30	0	0	9	6	0	0	7	0	0	0	0	0	2	34	5	
17:45	0	0	14	3	0	1	3	0	0	0	0	0	1	31	4	

Study Name 10_MLK at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 10

Project

MLK at Cross St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Cross St Eastbound	Cross St Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	1	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	1	0	0
8:15	0	1	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	1	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	1
17:45	0	0	0	0

Study Name 10_MLK at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 10

Project

MLK at Cross St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Cross St Eastbound	Cross St Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	1	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	2
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 10_MLK at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 10

Project

MLK at Cross St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Cross St Eastbound				Cross St Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	9	2	0	0	6	0	0	0	0	0	0	27	2	
7:15	0	0	17	1	0	1	8	0	0	0	0	0	0	32	4	
7:30	0	0	15	3	0	0	18	0	0	0	0	0	0	28	7	
7:45	1	0	22	5	1	1	21	0	0	0	0	0	3	29	9	
8:00	0	0	16	2	0	2	15	0	0	0	0	0	1	35	6	
8:15	0	0	15	3	0	1	10	0	0	0	0	0	1	41	5	
8:30	0	0	14	6	0	0	6	0	0	0	0	0	0	32	9	
8:45	0	0	4	4	0	1	2	0	1	0	0	0	2	42	3	
16:00	0	0	15	3	0	1	15	0	0	0	0	0	1	48	8	
16:15	0	0	14	4	0	1	14	0	0	0	0	0	0	31	7	
16:30	0	0	16	9	0	1	19	0	0	0	0	0	3	53	7	
16:45	0	0	13	6	0	0	18	0	0	0	0	0	2	37	11	
17:00	0	0	21	7	0	0	2	0	0	0	0	0	6	44	7	
17:15	0	0	21	4	0	1	13	0	0	0	0	0	3	39	8	
17:30	0	0	9	6	0	0	7	0	0	0	0	0	2	35	5	
17:45	0	0	14	3	0	1	4	0	0	0	0	0	1	31	4	

Study Name 11_MLK at Texar Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 11

Project

MLK at Texar Drive

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Texar Drive Eastbound				Texar Drive Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	61	10	0	4	49	0	0	0	0	0	0	13	29	6
7:15	0	0	78	16	0	5	75	0	0	0	0	0	0	14	23	16
7:30	0	0	91	10	0	7	80	0	0	0	0	0	0	14	29	14
7:45	0	0	77	17	0	5	83	0	0	0	0	0	0	10	42	21
8:00	0	0	89	10	0	5	66	0	0	0	0	0	0	21	37	22
8:15	0	0	55	10	0	5	54	0	0	0	0	0	0	15	44	13
8:30	0	0	67	6	0	9	46	0	0	0	0	0	0	14	31	17
8:45	0	0	60	12	0	4	43	0	0	0	0	0	0	11	41	10
16:00	0	0	122	13	0	10	36	0	0	0	0	0	0	22	53	16
16:15	1	0	97	11	0	11	67	0	0	0	0	0	0	15	25	10
16:30	0	0	156	10	0	5	70	0	0	0	0	0	0	20	44	13
16:45	0	0	132	10	0	9	48	0	0	0	0	0	0	21	29	17
17:00	0	0	141	9	0	8	69	0	0	0	0	0	0	27	42	16
17:15	0	0	108	17	0	5	48	0	0	0	0	0	0	23	34	10
17:30	0	0	76	17	0	4	52	0	0	0	0	0	0	14	19	8
17:45	0	0	49	9	0	4	39	0	0	0	0	0	0	11	25	9

Study Name 11_MLK at Texar Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 11

Project

MLK at Texar Drive

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Texar Drive Eastbound	Texar Drive Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	1	0	0	1
7:15	0	0	0	1
7:30	0	0	0	0
7:45	2	0	0	0
8:00	0	0	0	0
8:15	0	0	1	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	1	0	0	0
17:15	0	1	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 11_MLK at Texar Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 11

Project

MLK at Texar Drive

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Texar Drive Eastbound	Texar Drive Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	1
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 11_MLK at Texar Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 11

Project

MLK at Texar Drive

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Texar Drive Eastbound				Texar Drive Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	65	12	0	4	49	0	0	0	0	0	0	13	29	8
7:15	0	0	80	17	0	5	77	0	0	0	0	0	0	15	24	17
7:30	0	0	94	12	0	7	82	0	0	0	0	0	0	15	29	14
7:45	0	0	81	19	0	5	85	0	0	0	0	0	0	11	43	24
8:00	0	0	94	11	0	5	70	0	0	0	0	0	0	21	39	25
8:15	0	0	62	10	0	5	56	0	0	0	0	0	0	17	47	15
8:30	0	0	71	6	0	9	47	0	0	0	0	0	0	14	31	21
8:45	0	0	65	13	0	4	45	0	0	0	0	0	0	11	41	12
16:00	0	0	123	15	0	10	37	0	0	0	0	0	0	22	54	17
16:15	1	0	99	11	0	12	74	0	0	0	0	0	0	15	25	13
16:30	0	0	157	12	0	5	74	0	0	0	0	0	0	20	45	15
16:45	0	0	133	11	0	9	56	0	0	0	0	0	0	21	30	24
17:00	0	0	142	10	0	8	71	0	0	0	0	0	0	27	42	17
17:15	0	0	108	17	0	5	48	0	0	0	0	0	0	23	34	13
17:30	0	0	76	18	0	4	54	0	0	0	0	0	0	14	19	8
17:45	0	0	51	9	0	4	41	0	0	0	0	0	0	11	25	11

Study Name 12_MLK at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 12

Project

MLK at Hart Drive

Tuesday TMC

Type Road
Classification Light Vehicles

Start Time	Driveway Eastbound				Hart Drive Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	49	0
7:15	0	0	0	0	0	2	0	0	0	0	0	0	0	8	52	0
7:30	0	0	0	0	0	2	0	0	0	0	0	0	0	2	57	0
7:45	0	0	0	1	0	3	2	0	0	0	0	0	0	2	78	0
8:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	71	0
8:15	0	0	0	0	0	2	0	0	0	0	0	0	0	0	74	0
8:30	0	0	0	0	0	2	0	0	0	0	0	0	0	1	62	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	60	0
16:00	0	0	0	0	0	2	0	0	0	0	0	0	0	1	75	0
16:15	0	0	0	0	0	2	0	0	0	0	0	0	0	3	58	0
16:30	0	0	0	0	0	1	0	0	0	0	0	0	0	2	57	1
16:45	0	0	0	0	0	4	0	0	0	0	0	0	0	1	69	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	75	0
17:15	0	0	1	0	0	1	0	0	0	0	0	0	0	4	65	0
17:30	0	0	0	0	0	1	0	0	0	0	0	0	0	3	36	0
17:45	0	0	0	0	0	1	0	0	0	0	0	0	0	3	48	0

Study Name 12_MLK at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 12

Project

MLK at Hart Drive

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Driveway Eastbound	Hart Drive Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	1	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	1	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 12_MLK at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 12

Project

MLK at Hart Drive

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Driveway Eastbound	Hart Drive Westbound	MLK Northbound	MLK Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 12_MLK at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 12

Project

MLK at Hart Drive

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Driveway Eastbound				Hart Drive Westbound				MLK Northbound				MLK Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	52	0
7:15	0	0	0	0	0	2	0	0	0	0	0	0	0	8	53	0
7:30	0	0	0	0	0	2	0	0	0	0	0	0	0	2	58	0
7:45	0	0	0	1	0	4	2	0	0	0	0	0	0	2	80	0
8:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	76	0
8:15	0	0	0	0	0	2	0	0	0	0	0	0	0	0	78	0
8:30	0	0	0	0	0	2	0	0	0	0	0	0	0	1	66	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	63	0
16:00	0	0	0	0	0	2	0	0	0	0	0	0	0	1	77	0
16:15	0	0	0	0	0	2	0	0	0	0	0	0	0	3	63	0
16:30	0	0	0	0	0	1	0	0	0	0	0	0	0	2	58	1
16:45	0	0	0	0	0	4	0	0	0	0	0	0	0	1	77	0
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	76	0
17:15	0	0	1	0	0	1	0	0	0	0	0	0	0	4	67	0
17:30	0	0	0	0	0	1	0	0	0	0	0	0	0	3	36	0
17:45	0	0	0	0	0	1	0	0	0	0	0	0	0	3	48	0

Study Name 13_Davis Hwy at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 13

Project

Davis Hwy at Wright St

Thursday TMC

Type Road

Classification Light Vehicles

Start Time	Wright St Eastbound				Wright St Westbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	17	3		0		8	1		0		0
7:15	0	20	12		0		6	0		0		0
7:30	0	27	17		0		13	1		0		0
7:45	0	37	17		0		20	1		0		0
8:00	1	21	10		0		10	1		0		0
8:15	0	28	18		0		9	1		0		0
8:30	0	34	17		0		6	0		0		0
8:45	0	10	14		0		7	1		0		0
16:00	0	69	20		0		10	1		0		0
16:15	1	71	20		1		12	5		0		0
16:30	1	85	30		0		9	3		0		0
16:45	2	69	39		0		14	0		0		0
17:00	1	120	27		0		17	5		0		0
17:15	3	70	33		0		10	2		0		0
17:30	0	63	22		0		9	1		0		0
17:45	0	55	20		0		7	1		0		0

Study Name 13_Davis Hwy at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 13

Project

Davis Hwy at Wright St

Thursday TMC

Type Road

Classification Heavy Vehicles

Start Time	Wright St Eastbound				Wright St Westbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	1	0		0		0	0		0		0
7:15	0	1	0		0		0	0		0		0
7:30	0	1	0		0		0	0		0		0
7:45	0	1	0		0		0	0		0		0
8:00	0	2	0		0		0	0		0		0
8:15	0	1	1		0		0	0		0		0
8:30	0	1	0		0		1	0		0		0
8:45	0	2	1		0		1	0		0		0
16:00	0	1	0		0		0	1		0		0
16:15	0	1	1		0		0	0		0		0
16:30	0	2	0		0		0	0		0		0
16:45	0	0	0		0		0	0		0		0
17:00	0	1	0		0		0	0		0		0
17:15	0	0	0		0		0	0		0		0
17:30	0	2	0		0		0	0		0		0
17:45	0	0	0		0		0	0		0		0

Study Name 13_Davis Hwy at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 13

Project

Davis Hwy at Wright St

Thursday TMC

Type Crosswalk

Classification Pedestrians

	Wright St Eastbound	Wright St Westbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds
7:00	0	0	1
7:15	0	0	1
7:30	0	0	1
7:45	0	0	0
8:00	0	0	1
8:15	0	0	0
8:30	0	0	0
8:45	0	0	1
16:00	0	0	0
16:15	0	0	0
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0

Study Name 13_Davis Hwy at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 13

Project

Davis Hwy at Wright St

Thursday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Wright St Eastbound	Wright St Westbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds
7:00	0	0	0
7:15	0	0	0
7:30	0	0	0
7:45	0	0	0
8:00	0	0	0
8:15	0	0	0
8:30	0	0	0
8:45	0	0	0
16:00	0	0	0
16:15	0	0	0
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0

Study Name 13_Davis Hwy at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 13

Project

Davis Hwy at Wright St

Thursday TMC

Type Road

Classification Bicycles on Road

Start Time	Wright St Eastbound				Wright St Westbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	0	0		0		0	0		0		0
7:15	0	0	1		0		0	0		0		0
7:30	0	0	0		0		0	0		0		0
7:45	0	0	0		0		0	0		0		0
8:00	0	0	0		0		0	0		0		0
8:15	0	1	0		0		0	0		0		0
8:30	0	1	0		0		1	0		0		0
8:45	0	0	1		0		0	0		0		0
16:00	0	0	0		0		0	0		0		1
16:15	0	0	0		0		0	0		0		0
16:30	0	0	0		0		0	0		0		0
16:45	0	1	1		0		0	1		0		0
17:00	0	0	0		0		0	0		0		0
17:15	0	0	0		0		0	0		0		0
17:30	0	0	0		0		0	0		0		0
17:45	0	0	0		0		0	0		0		0

Study Name 13_Davis Hwy at Wright St

Start Date 11-14-2019

Start Time 7:00

Site Code 13

Project

Davis Hwy at Wright St

Thursday TMC

Type Road

Classification Totals

Start Time	Wright St Eastbound				Wright St Westbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	18	3		0		8	1		0		0
7:15	0	21	13		0		6	0		0		0
7:30	0	28	17		0		13	1		0		0
7:45	0	38	17		0		20	1		0		0
8:00	1	23	10		0		10	1		0		0
8:15	0	30	19		0		9	1		0		0
8:30	0	36	17		0		8	0		0		0
8:45	0	12	16		0		8	1		0		0
16:00	0	70	20		0		10	2		0		1
16:15	1	72	21		1		12	5		0		0
16:30	1	87	30		0		9	3		0		0
16:45	2	70	40		0		14	1		0		0
17:00	1	121	27		0		17	5		0		0
17:15	3	70	33		0		10	2		0		0
17:30	0	65	22		0		9	1		0		0
17:45	0	55	20		0		7	1		0		0

Study Name 14_Davis Hwy at Cervantes St

Start Date 11-14-2019

Start Time 7:00

Site Code 14

Project

Davis Hwy at Cervantes St

Thursday TMC

**Type Road
Classification Light Vehicles**

Start Time	Cervantes St Eastbound				Cervantes St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	6	206	0	0	0	180	10	10	9	10		0	0	0	
7:15	0	12	315	0	0	0	247	12	9	6	21		0	0	0	
7:30	0	15	294	1	0	0	363	5	11	11	19		0	0	0	
7:45	0	22	274	0	0	0	354	5	23	6	38		0	0	0	
8:00	0	9	191	1	0	0	273	7	16	11	12		0	0	0	
8:15	0	9	200	0	0	0	190	5	15	13	16		0	0	1	
8:30	0	8	174	0	0	0	195	5	11	6	18		0	0	0	
8:45	0	11	170	0	0	0	232	5	10	4	15		0	0	0	
16:00	0	25	236	0	0	0	250	3	20	22	45		0	0	0	
16:15	0	21	271	0	0	0	230	11	11	18	43		0	0	0	
16:30	0	27	269	0	0	0	228	8	25	18	62		0	0	0	
16:45	0	22	264	0	0	0	267	9	14	13	54		0	0	0	
17:00	0	23	300	1	0	0	284	2	25	24	60		0	0	0	
17:15	0	16	259	0	0	0	235	4	19	23	72		0	0	0	
17:30	0	17	230	0	0	0	234	10	14	11	51		0	0	0	
17:45	0	11	196	0	0	0	213	6	7	11	51		0	0	0	

Study Name 14_Davis Hwy at Cervantes St

Start Date 11-14-2019

Start Time 7:00

Site Code 14

Project

Davis Hwy at Cervantes St

Thursday TMC

Type Crosswalk

Classification Pedestrians

	Cervantes St Eastbound	Cervantes St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	2	2	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	2	1
8:30	0	0	0	0
8:45	0	0	1	0
16:00	0	1	0	0
16:15	0	0	0	0
16:30	0	0	0	1
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 14_Davis Hwy at Cervantes St

Start Date 11-14-2019

Start Time 7:00

Site Code 14

Project

Davis Hwy at Cervantes St

Thursday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Cervantes St Eastbound	Cervantes St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	1	0
7:15	0	0	0	0
7:30	1	0	0	0
7:45	0	1	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 14_Davis Hwy at Cervantes St

Start Date 11-14-2019

Start Time 7:00

Site Code 14

Project

Davis Hwy at Cervantes St

Thursday TMC

**Type Road
Classification Totals**

Start Time	Cervantes St Eastbound				Cervantes St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	7	207	0	0	0	185	10	10	10	10	0	0	0	0	0
7:15	0	12	317	0	0	0	251	12	10	7	21	0	0	0	0	0
7:30	0	15	304	1	0	0	364	5	11	12	19	0	0	0	0	0
7:45	0	23	275	0	0	0	357	5	23	7	38	0	0	0	0	0
8:00	0	9	198	1	0	0	274	7	17	12	12	0	0	0	0	0
8:15	0	9	205	0	0	0	195	5	17	14	16	0	0	0	1	0
8:30	0	8	175	0	0	0	199	5	11	7	19	0	0	0	0	0
8:45	0	13	175	0	0	0	238	5	11	5	15	0	0	0	0	0
16:00	0	25	239	0	0	0	251	3	20	24	45	0	0	0	0	0
16:15	0	21	273	0	0	0	240	11	11	20	44	0	0	0	0	0
16:30	0	27	272	0	0	0	229	8	25	19	64	0	0	0	0	0
16:45	0	22	264	0	0	0	273	9	14	15	54	0	0	0	0	0
17:00	0	23	301	1	0	0	287	2	25	25	60	0	0	0	0	0
17:15	0	16	260	0	0	0	236	4	19	23	72	0	0	0	0	0
17:30	0	17	235	0	0	0	236	10	14	12	51	0	0	0	0	0
17:45	0	11	196	0	0	0	217	6	7	11	51	0	0	0	0	0

Study Name 15_Davis Hwy at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 15

Project

Davis Hwy at Blount St

Tuesday TMC

Type Road

Classification Light Vehicles

Start Time	Blount St Eastbound				Blount St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	3	10	0	0	0	15	1	0	16	1	0	0	0	0	
7:15	0	0	25	0	0	0	35	4	2	23	1	0	0	0	0	
7:30	0	3	33	0	0	0	66	7	2	29	2	0	0	0	0	
7:45	0	5	26	0	0	0	66	0	5	39	2	0	0	0	0	
8:00	0	2	17	0	0	0	37	1	2	26	0	0	0	0	0	
8:15	0	3	20	0	0	0	25	4	1	16	0	0	0	0	0	
8:30	0	2	10	0	0	0	18	5	1	20	1	0	0	0	0	
8:45	0	1	8	0	0	0	24	1	3	21	2	0	0	0	0	
16:00	0	3	43	0	0	0	27	2	3	43	3	0	0	0	0	
16:15	0	3	36	0	0	0	27	6	2	45	4	0	0	0	0	
16:30	0	4	42	0	0	0	19	1	3	38	3	0	0	0	0	
16:45	0	6	44	0	0	0	18	1	2	52	3	0	0	0	0	
17:00	0	4	53	0	0	0	31	1	2	40	9	0	0	0	0	
17:15	0	5	34	0	0	0	16	2	2	31	2	0	0	0	0	
17:30	0	4	29	0	0	0	14	2	4	27	4	0	0	0	0	
17:45	0	0	22	0	0	0	19	3	0	27	1	0	0	0	0	

Study Name 15_Davis Hwy at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 15

Project

Davis Hwy at Blount St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Blount St Eastbound	Blount St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	1	0	0	0
17:30	0	1	0	0
17:45	0	0	0	1

Study Name 15_Davis Hwy at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 15

Project

Davis Hwy at Blount St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Blount St Eastbound	Blount St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	1	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 15_Davis Hwy at Blount St

Start Date 11-12-2019

Start Time 7:00

Site Code 15

Project

Davis Hwy at Blount St

Tuesday TMC

Type Road

Classification Totals

Start Time	Blount St Eastbound				Blount St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	3	10	0	0	0	15	1	1	17	2		0	0	0	
7:15	0	0	25	0	0	0	35	4	2	23	1		0	0	0	
7:30	0	3	33	0	0	0	66	7	2	30	2		0	0	0	
7:45	0	5	26	0	0	0	67	0	5	42	2		0	0	0	
8:00	0	2	17	0	0	0	37	1	2	28	0		0	0	0	
8:15	0	3	20	0	0	0	26	4	1	16	0		0	0	0	
8:30	0	2	10	0	0	0	18	5	1	25	1		0	0	0	
8:45	0	1	8	0	0	0	24	1	3	22	2		0	0	0	
16:00	0	3	43	0	0	0	27	2	3	45	3		0	0	0	
16:15	0	3	36	0	0	0	27	6	2	46	4		0	0	0	
16:30	0	4	42	0	0	0	19	1	3	40	3		0	0	0	
16:45	0	6	45	0	0	0	18	1	2	52	3		0	0	0	
17:00	0	4	54	0	0	0	31	1	2	41	9		0	0	0	
17:15	0	5	34	0	0	0	16	3	2	31	2		0	0	0	
17:30	0	5	29	0	0	0	14	2	4	28	4		0	0	0	
17:45	0	0	22	0	0	0	19	3	0	27	1		0	0	0	

Study Name 16_Davis Hwy at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 16

Project

Davis Hwy at Jordan St

Tuesday TMC

Type Road

Classification Light Vehicles

Start Time	Jordan St Eastbound				Jordan St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		14	49	0		0	0	0		0	16	0		0	0	0
7:15		11	73	0		0	0	0		0	30	1		0	0	0
7:30		11	77	0		0	0	0		0	40	2		0	0	0
7:45		11	48	0		0	0	0		0	44	3		0	0	0
8:00		12	41	0		0	0	0		0	30	0		0	0	0
8:15		9	42	0		0	0	0		0	30	1		0	0	0
8:30		15	37	0		0	0	0		0	37	2		0	0	0
8:45		14	34	0		0	0	0		0	24	1		0	0	0
16:00		12	43	0		0	0	0		0	43	1		0	0	0
16:15		15	47	0		0	0	0		0	50	1		0	0	0
16:30		15	50	0		0	0	0		0	55	3		0	0	0
16:45		20	61	0		0	0	0		0	58	1		0	0	0
17:00		14	52	0		0	0	0		0	42	4		0	0	0
17:15		14	39	0		0	0	0		0	31	2		0	0	0
17:30		10	28	0		0	0	0		0	36	5		0	0	0
17:45		7	36	0		0	0	0		0	26	1		0	0	0

Study Name 16_Davis Hwy at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 16

Project

Davis Hwy at Jordan St

Tuesday TMC

Type Road

Classification Heavy Vehicles

Start Time	Jordan St Eastbound				Jordan St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		0	1	0		0	0	0
7:15		0	1	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	1	0		0	0	0
7:45		0	0	0		0	0	0		0	4	0		0	0	0
8:00		0	0	0		0	0	0		0	2	0		0	0	0
8:15		0	3	0		0	0	0		0	0	0		0	0	0
8:30		0	0	0		0	0	0		0	4	1		0	0	0
8:45		0	1	0		0	0	0		0	0	1		0	0	0
16:00		1	1	0		0	0	0		0	3	0		0	0	0
16:15		1	1	0		0	0	0		0	1	0		0	0	0
16:30		0	0	0		0	0	0		0	2	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		1	0	0		0	0	0		0	3	0		0	0	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	0	0		0	3	0		0	0	0
17:45		0	1	0		0	0	0		0	2	0		0	0	0

Study Name 16_Davis Hwy at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 16

Project

Davis Hwy at Jordan St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Jorden St Eastbound	Jorden St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	1
7:30	0	0	0	1
7:45	0	0	0	2
8:00	1	0	0	2
8:15	0	0	0	0
8:30	0	0	0	2
8:45	0	0	0	2
16:00	0	0	0	2
16:15	0	0	0	6
16:30	1	0	0	1
16:45	0	0	0	0
17:00	0	0	0	1
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 16_Davis Hwy at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 16

Project

Davis Hwy at Jordan St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Jordan St Eastbound	Jordan St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	1	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	1	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 16_Davis Hwy at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 16

Project

Davis Hwy at Jordan St

Tuesday TMC

Type Road

Classification Bicycles on Road

Start Time	Jordan St Eastbound				Jordan St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		0	0	0		0	0	0		0	0	0		0	0	0
7:15		0	0	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	0	0		0	0	0
7:45		0	0	0		0	0	0		0	0	0		0	0	0
8:00		0	0	0		0	0	0		0	0	0		0	0	0
8:15		0	0	0		0	0	0		0	0	0		0	0	0
8:30		0	1	0		0	0	0		0	0	0		0	0	0
8:45		0	0	0		0	0	0		0	0	0		0	0	0
16:00		0	0	0		0	0	0		0	0	0		0	0	0
16:15		0	1	0		0	0	0		0	0	0		0	0	0
16:30		0	0	0		0	0	0		0	0	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		0	0	0		0	0	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	0	0		0	0	0		0	0	0
17:45		0	0	0		0	0	0		0	0	0		0	0	0

Study Name 16_Davis Hwy at Jordan St

Start Date 11-12-2019

Start Time 7:00

Site Code 16

Project

Davis Hwy at Jordan St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Jordan St Eastbound				Jordan St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00		14	49	0		0	0	0		0	17	0		0	0	0
7:15		11	74	0		0	0	0		0	30	1		0	0	0
7:30		11	77	0		0	0	0		0	41	2		0	0	0
7:45		11	48	0		0	0	0		0	48	3		0	0	0
8:00		12	41	0		0	0	0		0	32	0		0	0	0
8:15		9	45	0		0	0	0		0	30	1		0	0	0
8:30		15	38	0		0	0	0		0	41	3		0	0	0
8:45		14	35	0		0	0	0		0	24	2		0	0	0
16:00		13	44	0		0	0	0		0	46	1		0	0	0
16:15		16	49	0		0	0	0		0	51	1		0	0	0
16:30		15	50	0		0	0	0		0	57	3		0	0	0
16:45		20	61	0		0	0	0		0	58	1		0	0	0
17:00		15	52	0		0	0	0		0	45	4		0	0	0
17:15		14	39	0		0	0	0		0	31	2		0	0	0
17:30		10	28	0		0	0	0		0	39	5		0	0	0
17:45		7	37	0		0	0	0		0	28	1		0	0	0

Study Name 17_Davis Hwy at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 17

Project

Davis Hwy at Maxwell St

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right												
7:00		0	0	0		0	47	1		1	29	0		0	0	0
7:15		0	0	0		0	62	0		6	37	0		0	0	0
7:30		0	0	0		0	70	1		9	44	0		0	0	0
7:45		0	0	0		0	53	5		6	48	0		0	0	0
8:00		0	0	0		0	50	1		8	34	0		0	0	1
8:15		0	0	0		0	48	0		9	30	0		0	0	0
8:30		0	0	0		0	39	5		8	36	0		0	0	0
8:45		0	0	0		0	34	3		4	35	0		0	0	1
16:00		0	0	0		0	43	3		7	47	0		0	0	0
16:15		0	0	0		0	44	4		17	52	0		0	0	0
16:30		0	0	0		0	46	5		11	55	0		0	0	0
16:45		0	0	0		0	32	4		8	69	0		0	0	0
17:00		0	0	0		0	41	3		5	43	0		0	0	0
17:15		0	0	0		0	30	3		3	36	0		0	0	0
17:30		0	0	0		0	35	5		7	40	0		0	0	0
17:45		0	0	0		0	14	2		3	33	0		0	0	0

Study Name 17_Davis Hwy at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 17

Project

Davis Hwy at Maxwell St

Tuesday TMC

**Type Road
Classification Heavy Vehicles**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right												
7:00		0	0	0		0	0	0		0	1	0		0	0	0
7:15		0	0	0		0	1	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	1	0		0	0	0
7:45		0	0	0		0	1	0		0	4	0		0	0	0
8:00		0	0	0		0	0	0		0	2	0		0	0	0
8:15		0	0	0		0	0	0		0	0	0		0	0	0
8:30		0	0	0		0	1	0		0	3	0		0	0	0
8:45		0	0	0		0	0	0		0	0	0		0	0	0
16:00		0	0	0		0	0	0		0	4	0		0	0	0
16:15		0	0	0		0	0	0		0	2	0		0	0	0
16:30		0	0	0		0	0	1		0	2	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	0	0
17:00		0	0	0		0	0	0		0	3	0		0	0	0
17:15		0	0	0		0	0	0		0	1	0		0	0	0
17:30		0	0	0		0	0	1		0	3	0		0	0	0
17:45		0	0	0		0	0	0		0	2	0		0	0	0

Study Name 17_Davis Hwy at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 17

Project

Davis Hwy at Maxwell St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Maxwell St Eastbound	Maxwell St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	1
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	2	0	0
16:15	0	0	0	2
16:30	0	1	0	0
16:45	0	0	0	0
17:00	1	1	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 17_Davis Hwy at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 17

Project

Davis Hwy at Maxwell St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Maxwell St Eastbound	Maxwell St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	1	0	0
7:45	0	0	0	1
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	1
16:15	0	1	0	0
16:30	0	0	0	0
16:45	0	2	0	2
17:00	0	0	0	0
17:15	0	1	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 17_Davis Hwy at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 17

Project

Davis Hwy at Maxwell St

Tuesday TMC

**Type Road
Classification Bicycles on Road**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right												
7:00		0	0	0		0	0	0		0	0	0		0	0	0
7:15		0	0	0		0	0	0		0	0	0		0	0	0
7:30		0	0	0		0	0	0		0	0	0		0	0	0
7:45		0	0	0		0	0	0		0	0	0		0	0	0
8:00		0	0	0		0	0	0		0	0	0		0	0	0
8:15		0	0	0		0	0	0		0	0	0		0	0	0
8:30		0	0	0		0	0	0		0	1	0		0	0	0
8:45		0	0	0		0	0	0		0	0	0		0	1	0
16:00		0	0	0		0	0	0		0	0	0		0	0	0
16:15		0	0	0		0	0	0		0	0	0		0	1	0
16:30		0	0	0		0	0	0		0	1	0		0	0	0
16:45		0	0	0		0	0	0		0	0	0		0	1	0
17:00		0	0	0		0	0	0		0	0	0		0	0	0
17:15		0	0	0		0	0	0		0	0	0		0	0	0
17:30		0	0	0		0	0	0		1	0	0		0	0	0
17:45		0	0	0		0	0	0		0	0	0		0	0	0

Study Name 17_Davis Hwy at Maxwell St

Start Date 11-12-2019

Start Time 7:00

Site Code 17

Project

Davis Hwy at Maxwell St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Maxwell St Eastbound				Maxwell St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right												
7:00		0	0	0		0	47	1		1	30	0		0	0	0
7:15		0	0	0		0	63	0		6	37	0		0	0	0
7:30		0	0	0		0	70	1		9	45	0		0	0	0
7:45		0	0	0		0	54	5		6	52	0		0	0	0
8:00		0	0	0		0	50	1		8	36	0		0	0	1
8:15		0	0	0		0	48	0		9	30	0		0	0	0
8:30		0	0	0		0	40	5		8	40	0		0	0	0
8:45		0	0	0		0	34	3		4	35	0		0	1	1
16:00		0	0	0		0	43	3		7	51	0		0	0	0
16:15		0	0	0		0	44	4		17	54	0		0	1	0
16:30		0	0	0		0	46	6		11	58	0		0	0	0
16:45		0	0	0		0	32	4		8	69	0		0	1	0
17:00		0	0	0		0	41	3		5	46	0		0	0	0
17:15		0	0	0		0	30	3		3	37	0		0	0	0
17:30		0	0	0		0	35	6		8	43	0		0	0	0
17:45		0	0	0		0	14	2		3	35	0		0	0	0

Study Name 18_Davis Hwy at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 18

Project

Davis Hwy at Cross St

Tuesday TMC

Type Road

Classification Light Vehicles

Start Time	Cross St Eastbound				Cross St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	3	5	0	0	0	6	4	0	29	0	0	0	0	0	0
7:15	0	5	9	0	0	0	5	1	4	31	0	0	0	0	0	0
7:30	0	6	9	0	0	0	14	4	5	41	1	0	0	0	0	0
7:45	0	8	11	0	0	0	15	3	3	55	0	0	0	0	0	0
8:00	0	7	9	0	0	0	11	4	3	36	1	0	0	0	0	0
8:15	0	7	9	0	0	0	7	2	3	31	0	0	0	0	0	0
8:30	0	6	6	0	0	0	2	2	4	34	0	0	0	0	0	0
8:45	0	1	6	0	0	0	2	3	1	34	1	0	0	0	0	0
16:00	0	7	10	0	0	0	16	2	2	44	1	0	0	0	0	0
16:15	0	4	9	0	0	0	5	10	8	49	0	0	0	0	0	0
16:30	0	4	14	0	0	0	16	3	4	53	1	0	0	0	0	0
16:45	0	5	12	0	0	0	11	2	6	63	1	0	0	0	0	0
17:00	0	12	13	0	0	0	1	0	1	50	1	0	0	0	0	0
17:15	0	10	17	0	0	0	8	2	4	45	0	0	0	0	0	0
17:30	0	3	7	0	0	0	3	3	4	41	0	0	0	0	0	0
17:45	0	4	11	0	0	0	5	1	1	34	0	0	0	0	0	0

Study Name 18_Davis Hwy at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 18

Project

Davis Hwy at Cross St

Tuesday TMC

Type Road
Classification Heavy Vehicles

Start Time	Cross St Eastbound				Cross St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0
7:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
7:45	0	0	7	1	0	0	3	0	1	1	1	0	0	0	0	0
8:00	0	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0
8:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
8:30	0	0	1	0	0	0	0	0	1	2	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Study Name 18_Davis Hwy at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 18

Project

Davis Hwy at Cross St

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Cross St Eastbound	Cross St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 18_Davis Hwy at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 18

Project

Davis Hwy at Cross St

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Cross St Eastbound	Cross St Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 18_Davis Hwy at Cross St

Start Date 11-12-2019

Start Time 7:00

Site Code 18

Project

Davis Hwy at Cross St

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Cross St Eastbound				Cross St Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	5	5	0	0	0	6	4	0	30	0	0	0	0	0	0
7:15	0	6	10	0	0	0	5	1	4	31	0	0	0	0	0	0
7:30	0	6	10	0	0	0	14	4	5	43	1	0	0	0	0	0
7:45	0	8	18	1	0	0	19	4	4	56	2	0	0	0	0	0
8:00	0	7	10	0	0	0	13	5	4	37	1	0	1	0	0	0
8:15	0	7	9	0	0	0	8	2	3	31	0	0	0	0	0	0
8:30	0	6	7	0	0	0	2	2	5	36	0	0	0	0	0	0
8:45	0	1	6	0	0	0	2	3	1	34	1	0	0	0	0	0
16:00	0	7	10	0	0	0	16	3	2	47	1	0	0	0	0	0
16:15	0	4	9	0	0	0	5	10	8	50	0	0	0	0	0	0
16:30	0	4	14	0	0	0	16	3	4	54	1	0	0	0	0	0
16:45	0	5	12	0	0	0	11	2	6	64	1	0	0	0	0	0
17:00	0	12	14	1	0	0	1	0	2	52	1	0	0	0	0	0
17:15	0	10	17	0	0	0	8	2	4	45	0	0	0	0	0	0
17:30	0	3	7	0	0	0	3	3	4	45	0	0	0	0	0	0
17:45	0	4	11	0	0	0	5	1	1	35	0	0	0	0	0	1

Study Name Pedestrians Crossing SR 291 (MLK Blvd)

Start Date 11/9/2019

Start Time 7:00

Site Code ZONE A

Pedestrians Crossing SR 291 (MLK Blvd)

SATURDAY

Type Road

Classification Pedestrians & Bicycles

Start Time	SR 291 (MLK Blvd)	
	Peds	Bicycles
7:00	0	0
7:15	0	0
7:30	0	0
7:45	0	0
8:00	2	0
8:15	5	0
8:30	7	0
8:45	5	0
9:00	1	0
9:15	1	0
9:30	3	0
9:45	0	0
10:00	2	0
10:15	8	0
10:30	16	0
10:45	2	0
11:00	7	0
11:15	2	0
11:30	1	0
11:45	7	0
12:00	10	0
12:15	8	0
12:30	1	0
12:45	6	0
13:00	6	0
13:15	4	0
13:30	8	0
13:45	2	0
14:00	0	0
14:15	5	0
14:30	5	0
14:45	2	0
15:00	0	0
15:15	17	0
15:30	0	0
15:45	0	0
16:00	0	0
16:15	0	0
16:30	0	0
16:45	0	0
17:00	0	0
17:15	0	0
17:30	0	0
17:45	0	0
18:00	0	0
18:15	0	0
18:30	0	0
18:45	0	0

Study Name Pedestrians Crossing SR 291 (Davis Highway)

Start Date 11/9/2019

Start Time 7:00

Site Code ZONE B

Pedestrians Crossing SR 291 (Davis Highway)

SATURDAY

Type Road

Classification Pedestrians & Bicycles

Start Time	SR 291 (Davis Highway)	
	Peds	Bicycles
7:00	0	0
7:15	0	0
7:30	0	0
7:45	0	0
8:00	2	0
8:15	4	0
8:30	0	0
8:45	0	1
9:00	3	1
9:15	0	0
9:30	0	1
9:45	3	2
10:00	3	0
10:15	6	3
10:30	0	2
10:45	6	0
11:00	2	0
11:15	10	1
11:30	6	0
11:45	14	0
12:00	14	1
12:15	10	0
12:30	15	2
12:45	4	1
13:00	10	1
13:15	11	3
13:30	25	0
13:45	11	0
14:00	18	1
14:15	10	0
14:30	19	0
14:45	13	1
15:00	17	0
15:15	20	2
15:30	3	0
15:45	6	0
16:00	2	0
16:15	0	0
16:30	1	2
16:45	5	1
17:00	5	0
17:15	0	0
17:30	0	0
17:45	2	0
18:00	0	0
18:15	0	0
18:30	2	1
18:45	0	0

Study Name Pedestrians Crossing SR 291 (Davis Highway)

Start Date 11/9/2019

Start Time 7:00

Site Code ZONE C

Pedestrians Crossing SR 291 (Davis Highway)

SATURDAY

Type Road

Classification Pedestrians & Bicycles

Start Time	SR 291 (Davis Highway)	
	Peds	Bicycles
7:00	1	0
7:15	0	0
7:30	0	0
7:45	0	0
8:00	0	0
8:15	0	0
8:30	1	0
8:45	0	1
9:00	0	0
9:15	0	0
9:30	7	1
9:45	1	0
10:00	2	0
10:15	10	0
10:30	1	2
10:45	2	1
11:00	1	0
11:15	3	1
11:30	0	0
11:45	7	0
12:00	1	0
12:15	0	0
12:30	3	1
12:45	2	1
13:00	5	1
13:15	7	3
13:30	6	0
13:45	4	0
14:00	2	0
14:15	3	0
14:30	2	0
14:45	0	0
15:00	2	0
15:15	9	0
15:30	0	0
15:45	0	0
16:00	0	0
16:15	0	0
16:30	1	0
16:45	0	0
17:00	0	0
17:15	0	0
17:30	0	0
17:45	0	0
18:00	0	0
18:15	0	0
18:30	0	0
18:45	0	0

Study Name Pedestrians Crossing SR 291 (Davis Highway)

Start Date 11/9/2019

Start Time 7:00

Site Code ZONE D

Pedestrians Crossing SR 291 (Davis Highway)

SATURDAY

Type Road

Classification Pedestrians & Bicycles

Start Time	SR 291 (Davis Highway)	
	Peds	Bicycles
7:00	0	0
7:15	0	0
7:30	0	0
7:45	0	0
8:00	0	0
8:15	1	0
8:30	0	0
8:45	1	0
9:00	0	0
9:15	0	0
9:30	0	0
9:45	0	1
10:00	0	0
10:15	4	0
10:30	11	0
10:45	0	0
11:00	4	2
11:15	9	0
11:30	1	1
11:45	5	1
12:00	10	0
12:15	4	2
12:30	2	1
12:45	6	1
13:00	14	0
13:15	8	0
13:30	1	1
13:45	10	0
14:00	8	0
14:15	8	0
14:30	3	0
14:45	0	1
15:00	1	0
15:15	6	0
15:30	4	1
15:45	1	1
16:00	2	0
16:15	8	0
16:30	10	1
16:45	2	0
17:00	0	0
17:15	3	0
17:30	2	2
17:45	4	0
18:00	0	0
18:15	1	1
18:30	0	2
18:45	0	0

Study Name 19_Davis Hwy at Texar Drive

Start Date 11-14-2019

Start Time 7:00

Site Code 19

Project

Davis Hwy at Texar Drive

Thursday TMC

**Type Road
Classification Light Vehicles**

Start Time	Texar Drive Eastbound				Texar Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	21	45	0	0	0	35	16	8	13	4		0	0	0	
7:15	0	30	79	0	0	0	75	26	7	20	4		0	0	0	
7:30	0	29	81	0	0	0	88	23	7	36	10		0	0	0	
7:45	0	31	64	0	0	0	79	20	7	35	3		0	0	0	
8:00	0	23	64	0	0	0	49	15	8	37	8		0	0	0	
8:15	0	19	46	0	0	0	39	20	15	29	7		0	0	0	
8:30	0	17	56	0	0	0	41	18	3	25	8		0	0	0	
8:45	0	18	58	0	0	0	37	16	7	25	7		0	0	0	
16:00	0	47	93	1	0	0	64	24	13	58	19		0	0	0	
16:15	0	41	75	0	0	0	51	19	22	71	13		0	0	0	
16:30	0	58	102	0	0	0	52	29	16	66	12		0	0	0	
16:45	0	46	90	0	0	0	59	14	10	62	11		0	0	0	
17:00	0	61	104	0	0	0	75	24	11	55	10		0	0	0	
17:15	0	42	99	0	0	0	53	18	16	44	9		0	0	0	
17:30	0	28	68	0	0	0	42	12	13	30	14		0	0	0	
17:45	0	21	56	0	0	0	44	6	8	38	13		0	0	0	

Study Name 19_Davis Hwy at Texar Drive

Start Date 11-14-2019

Start Time 7:00

Site Code 19

Project

Davis Hwy at Texar Drive

Thursday TMC

Type Crosswalk

Classification Pedestrians

	Texar Drive Eastbound	Texar Drive Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	1	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	1	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 19_Davis Hwy at Texar Drive

Start Date 11-14-2019

Start Time 7:00

Site Code 19

Project

Davis Hwy at Texar Drive

Thursday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Texar Drive Eastbound	Texar Drive Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	1	0	0
8:45	0	0	0	0
16:00	0	1	0	0
16:15	0	0	1	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	1	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 19_Davis Hwy at Texar Drive

Start Date 11-14-2019

Start Time 7:00

Site Code 19

Project

Davis Hwy at Texar Drive

Thursday TMC

**Type Road
Classification Totals**

Start Time	Texar Drive Eastbound				Texar Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	23	47	0	0	0	36	16	8	15	5		0	0	0	
7:15	0	33	82	0	0	0	76	26	7	20	5		0	0	0	
7:30	0	32	82	0	0	0	93	23	8	39	13		0	0	0	
7:45	0	34	67	0	0	0	80	20	7	35	3		0	0	0	
8:00	0	26	69	0	0	0	52	16	8	41	8		0	0	0	
8:15	0	21	48	0	0	0	41	20	19	30	8		0	0	0	
8:30	0	23	57	0	0	0	41	18	4	27	8		0	0	0	
8:45	0	21	63	0	0	0	41	16	7	27	7		0	0	0	
16:00	0	48	95	1	0	0	67	25	13	59	19		0	0	0	
16:15	0	41	75	0	0	0	53	21	23	71	14		0	0	0	
16:30	0	59	103	0	0	0	54	29	16	68	12		0	0	0	
16:45	0	46	92	0	0	0	63	14	10	64	11		0	0	0	
17:00	0	62	105	0	0	0	77	25	12	56	10		0	0	0	
17:15	0	43	99	0	0	0	53	19	16	44	10		0	0	0	
17:30	0	28	68	0	0	0	42	13	13	31	14		0	0	0	
17:45	0	22	56	0	0	0	46	8	8	38	13		0	0	0	

Study Name 20_Davis Hwy at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 20

Project

Davis Hwy at Hart Drive

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Hart Drive Eastbound				Hart Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right												
7:00	0	0	1	0	0	0	1	3	0	59	2	0	0	0	0	0
7:15	0	1	6	0	0	0	2	1	0	58	0	0	0	0	0	0
7:30	0	0	2	0	0	0	2	2	0	84	0	0	0	0	0	0
7:45	0	1	1	0	0	0	3	2	2	82	0	0	0	0	0	0
8:00	0	1	0	0	0	0	1	0	0	70	1	0	0	0	0	0
8:15	0	0	0	0	0	0	2	1	0	77	0	0	0	0	0	0
8:30	0	1	0	0	0	0	2	2	0	73	1	0	0	0	0	0
8:45	0	0	2	0	0	0	0	0	0	62	0	0	0	0	0	0
16:00	0	0	1	0	0	0	2	1	0	131	3	0	0	0	0	0
16:15	0	0	3	0	0	0	2	1	0	97	2	0	0	0	0	0
16:30	0	0	2	0	0	0	1	2	0	145	0	0	0	0	0	0
16:45	0	0	1	0	0	0	4	2	0	138	3	0	0	0	0	0
17:00	0	1	0	0	0	0	0	0	0	135	2	0	0	0	0	0
17:15	0	1	4	0	0	0	1	1	0	133	4	0	0	0	0	0
17:30	0	0	3	0	0	0	1	3	0	84	1	0	0	0	0	0
17:45	0	0	3	0	0	0	1	1	0	60	0	0	0	0	0	0

Study Name 20_Davis Hwy at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 20

Project

Davis Hwy at Hart Drive

Tuesday TMC

**Type Road
Classification Heavy Vehicles**

Start Time	Hart Drive Eastbound				Hart Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right												
7:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
7:45	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Study Name 20_Davis Hwy at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 20

Project

Davis Hwy at Hart Drive

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Hart Drive Eastbound	Hart Drive Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	1	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 20_Davis Hwy at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 20

Project

Davis Hwy at Hart Drive

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Hart Drive Eastbound	Hart Drive Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	1	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 20_Davis Hwy at Hart Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 20

Project

Davis Hwy at Hart Drive

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Hart Drive Eastbound				Hart Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right												
7:00	0	0	1	0	0	0	1	3	0	62	2	0	0	0	0	
7:15	0	1	6	0	0	0	2	1	0	60	0	0	0	0	0	
7:30	0	0	2	0	0	0	2	2	0	88	0	0	0	0	0	
7:45	0	1	1	0	0	0	4	2	2	85	0	0	0	0	0	
8:00	0	1	0	0	0	0	1	0	0	73	1	0	0	0	0	
8:15	0	0	0	0	0	0	2	1	0	86	0	0	0	0	0	
8:30	0	1	0	0	0	0	2	2	0	78	1	0	0	0	0	
8:45	0	0	2	0	0	0	0	0	0	66	0	0	0	0	0	
16:00	0	0	1	0	0	0	2	1	0	134	3	0	0	0	0	
16:15	0	0	3	0	0	0	2	1	0	100	3	0	0	0	0	
16:30	0	0	2	0	0	0	1	2	0	146	0	0	0	0	0	
16:45	0	0	1	0	0	0	4	2	0	140	3	0	0	0	0	
17:00	0	1	0	0	0	0	0	0	0	137	2	0	0	0	0	
17:15	0	1	4	0	0	0	1	1	0	136	4	0	0	0	0	
17:30	0	0	3	0	0	0	1	3	0	86	1	0	0	0	0	
17:45	0	0	3	0	0	0	1	1	0	61	0	0	0	0	0	

Study Name 21_Davis Hwy at I-110 Ramp

Start Date 11-12-2019

Start Time 7:00

Site Code 21

Project

Davis Hwy at I-110 Ramp

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	I-110 Ramp Eastbound				Driveway Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	49	0	3	0	0	0	0	0	44	22	0	2	1	43	76
7:15	0	78	0	4	0	0	0	0	0	27	32	0	0	0	54	88
7:30	0	91	0	2	0	0	0	0	0	37	50	0	0	0	59	60
7:45	0	102	0	7	0	0	0	0	0	39	43	1	0	1	65	61
8:00	0	98	0	5	0	2	0	0	0	24	45	1	1	1	84	75
8:15	0	59	2	4	0	0	0	1	0	20	60	0	1	0	52	58
8:30	0	68	0	2	0	1	0	0	0	32	43	0	0	0	60	72
8:45	0	53	0	3	0	1	1	2	0	18	43	1	0	1	59	48
16:00	0	71	1	5	0	3	2	1	0	69	67	0	0	0	57	185
16:15	0	74	0	1	0	0	0	0	0	46	55	0	0	0	59	118
16:30	0	87	0	5	0	1	0	0	0	64	77	0	1	0	60	160
16:45	1	90	0	3	0	0	1	1	0	66	77	2	1	0	62	166
17:00	0	92	0	3	0	0	0	4	0	73	63	0	1	0	101	187
17:15	0	104	0	3	0	0	1	0	0	58	82	0	0	0	54	128
17:30	0	93	0	3	0	0	0	0	0	44	46	0	0	1	47	99
17:45	0	61	1	6	0	0	0	0	0	32	39	1	0	1	35	59

Study Name 21_Davis Hwy at I-110 Ramp

Start Date 11-12-2019

Start Time 7:00

Site Code 21

Project

Davis Hwy at I-110 Ramp

Tuesday TMC

**Type Road
Classification Heavy Vehicles**

Start Time	I-110 Ramp Eastbound				Driveway Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	2	0	0	0	0	0	0	0	2	1	0	0	0	3	6
7:15	0	1	0	0	0	0	0	0	0	2	0	0	0	0	2	5
7:30	0	0	0	1	0	0	0	0	0	0	3	0	0	0	1	8
7:45	0	0	0	0	0	0	0	0	0	3	1	0	0	0	2	4
8:00	0	2	0	0	0	0	0	0	0	0	3	0	0	0	4	4
8:15	0	0	0	0	0	0	0	0	0	5	3	0	0	0	3	6
8:30	0	3	0	1	0	0	0	0	0	2	3	0	0	0	3	0
8:45	0	4	0	0	0	0	0	0	0	2	2	0	0	0	2	3
16:00	0	3	0	0	0	0	0	0	0	0	1	0	0	0	1	1
16:15	0	1	0	1	0	0	0	0	0	1	1	0	0	0	5	4
16:30	0	2	0	0	0	0	0	0	0	0	1	0	0	1	1	3
16:45	0	1	0	1	0	0	0	0	0	2	0	0	0	0	6	2
17:00	0	2	0	0	0	0	0	0	0	0	1	0	0	0	2	1
17:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
17:30	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
17:45	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1

Study Name 21_Davis Hwy at I-110 Ramp

Start Date 11-12-2019

Start Time 7:00

Site Code 21

Project

Davis Hwy at I-110 Ramp

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	I-110 Ramp Eastbound	Driveway Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	1	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	1	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 21_Davis Hwy at I-110 Ramp

Start Date 11-12-2019

Start Time 7:00

Site Code 21

Project

Davis Hwy at I-110 Ramp

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	I-110 Ramp Eastbound	Driveway Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	1	0
17:45	0	0	0	0

Study Name 21_Davis Hwy at I-110 Ramp

Start Date 11-12-2019

Start Time 7:00

Site Code 21

Project

Davis Hwy at I-110 Ramp

Tuesday TMC

**Type Road
Classification Totals**

Start Time	I-110 Ramp Eastbound				Driveway Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	51	0	3	0	0	0	0	0	46	23	0	2	1	46	82
7:15	0	79	0	4	0	0	0	0	0	29	32	0	0	0	56	93
7:30	0	91	0	3	0	0	0	0	0	37	53	0	0	0	60	68
7:45	0	102	0	7	0	0	0	0	0	42	44	1	0	1	67	65
8:00	0	100	0	5	0	2	0	0	0	24	48	1	1	1	88	79
8:15	0	59	2	4	0	0	0	1	0	25	63	0	1	0	55	64
8:30	0	71	0	3	0	1	0	0	0	34	46	0	0	0	63	72
8:45	0	57	0	3	0	1	1	2	0	20	45	1	0	1	61	51
16:00	0	74	1	5	0	3	2	1	0	69	68	0	0	0	58	186
16:15	0	75	0	2	0	0	0	0	0	47	56	0	0	0	64	122
16:30	0	89	0	5	0	1	0	0	0	64	78	0	1	1	61	163
16:45	1	91	0	4	0	0	1	1	0	68	77	2	1	0	68	168
17:00	0	94	0	3	0	0	0	4	0	73	64	0	1	0	103	188
17:15	0	104	0	3	0	0	1	0	0	60	83	0	0	0	56	130
17:30	0	93	0	3	0	0	0	0	0	45	47	0	0	1	48	100
17:45	0	63	1	6	0	0	0	0	0	32	40	1	0	1	35	60

Study Name 22_Davis Hwy at Fairfield Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 22

Project

Davis Hwy at Fairfield Drive

Tuesday TMC

**Type Road
Classification Light Vehicles**

Start Time	Fairfield Drive Eastbound				Fairfield Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	52	134	101	0	1	172	12	0	10	33	24	0	7	22	54
7:15	0	51	171	110	0	0	196	12	0	17	44	46	0	9	23	38
7:30	0	57	165	82	1	2	220	19	0	18	67	46	0	12	32	64
7:45	0	72	205	78	0	6	175	22	0	16	72	56	1	9	49	69
8:00	0	62	160	100	0	4	121	11	0	28	68	44	0	12	47	69
8:15	0	61	169	77	1	4	148	18	0	18	57	36	2	17	37	69
8:30	1	50	155	84	0	7	136	18	0	27	58	39	0	12	37	89
8:45	1	48	142	63	1	9	139	13	0	13	50	26	2	16	31	49
16:00	1	86	186	186	0	2	221	13	0	18	51	57	0	19	49	108
16:15	0	71	193	129	0	6	261	16	0	25	55	56	5	18	46	102
16:30	0	70	189	159	0	6	294	18	0	20	65	71	0	16	48	100
16:45	1	67	195	171	0	3	216	13	0	29	64	71	2	16	54	110
17:00	0	64	202	198	0	6	248	11	0	20	70	78	1	22	63	125
17:15	0	63	222	141	0	8	247	13	0	26	61	70	1	13	39	112
17:30	1	61	192	111	0	3	191	12	0	17	60	76	1	22	34	96
17:45	0	35	137	65	1	2	170	11	0	10	35	50	1	11	25	51

Study Name 22_Davis Hwy at Fairfield Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 22

Project

Davis Hwy at Fairfield Drive

Tuesday TMC

**Type Road
Classification Heavy Vehicles**

Start Time	Fairfield Drive Eastbound				Fairfield Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	1	3	7	0	0	1	0	0	0	3	0	0	1	2	5
7:15	0	3	1	6	0	1	4	0	0	1	0	0	0	0	1	4
7:30	0	0	2	9	0	0	2	0	0	1	3	0	0	0	0	4
7:45	0	0	0	5	0	0	1	0	0	0	0	0	0	0	3	2
8:00	0	0	2	4	0	1	3	0	0	1	3	1	0	0	3	4
8:15	0	0	1	9	0	0	8	0	0	0	2	1	0	0	2	2
8:30	0	1	2	2	0	0	3	0	0	0	7	1	0	0	2	3
8:45	0	0	2	4	0	0	2	0	0	3	0	1	0	0	3	4
16:00	0	0	2	2	0	0	1	0	0	2	1	0	0	0	0	0
16:15	0	1	0	3	0	2	4	0	0	1	2	0	0	0	2	1
16:30	0	2	1	6	0	0	1	0	0	1	3	0	0	0	1	0
16:45	0	1	0	8	0	0	5	0	0	0	1	0	0	0	1	1
17:00	0	1	1	0	0	0	1	0	0	1	1	0	0	0	1	0
17:15	0	1	1	3	0	1	3	0	0	1	0	0	0	0	1	0
17:30	0	0	1	1	0	0	0	0	0	0	1	0	0	0	1	1
17:45	0	0	0	1	0	0	1	0	0	2	1	0	0	0	0	0

Study Name 22_Davis Hwy at Fairfield Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 22

Project

Davis Hwy at Fairfield Drive

Tuesday TMC

Type Crosswalk

Classification Pedestrians

	Fairfield Drive Eastbound	Fairfield Drive Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 22_Davis Hwy at Fairfield Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 22

Project

Davis Hwy at Fairfield Drive

Tuesday TMC

Type Crosswalk

Classification Bicycles on Crosswalk

	Fairfield Drive Eastbound	Fairfield Drive Westbound	Davis Hwy Northbound	Davis Hwy Southbound
Start Time	Peds	Peds	Peds	Peds
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0

Study Name 22_Davis Hwy at Fairfield Drive

Start Date 11-12-2019

Start Time 7:00

Site Code 22

Project

Davis Hwy at Fairfield Drive

Tuesday TMC

**Type Road
Classification Totals**

Start Time	Fairfield Drive Eastbound				Fairfield Drive Westbound				Davis Hwy Northbound				Davis Hwy Southbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00	0	53	137	108	0	1	173	12	0	10	36	24	0	8	24	59
7:15	0	54	172	116	0	1	200	12	0	18	44	46	0	9	24	42
7:30	0	57	167	91	1	2	222	19	0	19	70	46	0	12	32	68
7:45	0	72	205	83	0	6	176	22	0	16	72	56	1	9	52	71
8:00	0	62	162	104	0	5	124	11	0	29	71	45	0	12	50	73
8:15	0	61	170	86	1	4	156	18	0	18	59	37	2	17	39	71
8:30	1	51	157	86	0	7	139	18	0	27	65	40	0	12	39	92
8:45	1	48	144	67	1	9	141	13	0	16	50	27	2	16	34	53
16:00	1	86	188	188	0	2	222	13	0	20	52	57	0	19	49	108
16:15	0	72	193	132	0	8	265	16	0	26	57	56	5	18	48	103
16:30	0	72	190	165	0	6	295	18	0	21	68	71	0	16	49	100
16:45	1	68	195	179	0	3	221	13	0	29	65	71	2	16	55	111
17:00	0	65	203	198	0	6	249	11	0	21	71	78	1	22	64	125
17:15	0	64	223	144	0	9	250	13	0	27	61	70	1	13	40	112
17:30	1	61	193	112	0	3	191	12	0	17	62	76	1	22	35	97
17:45	0	35	137	66	1	2	171	11	0	12	36	50	1	11	25	51



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Appendix C:
Historic Traffic Data

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5030 - SR291 (ALCANIZ ST) - 200' S OF WRIGHT ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	7200 C	N 4500	S 2700	9.00	52.20	3.90
2017	5600 C	N 3500	S 2100	9.00	58.60	4.50
2016	6500 C	N 4100	S 2400	9.00	56.30	3.20
2015	5700 C	N 3600	S 2100	9.00	55.50	3.50
2014	5500 C	N 3400	S 2100	9.00	55.80	3.40
2013	5700 C	N 3400	S 2300	9.00	56.30	3.20
2012	6700 C	N 4000	S 2700	9.00	56.10	3.00
2011	6600 C	N 3900	S 2700	9.00	56.10	3.40
2010	5400 C	N 3200	S 2200	9.39	55.60	3.60
2009	8000 C	N 3600	S 4400	9.51	57.14	3.60
2008	6800 C	N 3600	S 3200	9.42	56.46	3.80
2007	7800 F	N 3800	S 4000	9.42	56.49	6.30
2006	7800 C	N 3800	S 4000	9.16	52.46	3.40
2005	10100 C	N 5200	4900	10.00	55.30	4.70
2004	3800 C	N 3800		9.80	99.90	3.60
2003	3500 C	N 3500		9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5293 - SR 291(ALCANIZ ST) - 150' N OF WRIGHT ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	2100 C	S 2100	0	9.00	99.90	5.00
2017	2000 C	S 2000	0	9.00	99.90	3.80
2016	2200 C	S 2200	0	9.00	99.90	3.00
2015	2000 C	S 2000	0	9.00	99.90	3.90
2014	2000 C	S 2000	0	9.00	99.90	3.80
2013	2200 C	S 2200	0	9.00	99.90	3.30
2012	2100 C	S 2100	0	9.00	99.90	3.00
2011	2400 C	S 2400	0	9.00	99.90	3.40
2010	2000 C	S 2000	0	9.39	99.99	3.60
2009	2300 C	S 2300	B 0	9.51	99.99	3.60
2008	2600 C	S 2600	B 0	9.42	99.99	3.80
2007	2600 F	0	0	9.42	99.99	6.30
2006	2600 C	S 2600	B 0	9.16	99.99	3.40
2005	5000 C	S 5000	B	10.00	99.90	4.70
2004	2500 C	S 2500	B 0	9.80	99.90	3.60
2003	2200 C	S 2200	B 0	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5028 - SR 291(ALCANIZ ST) - 225' S OF SR 10A(US90) CERVANTES ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	2400 C	S 2400	0	9.00	99.90	3.90
2017	2300 C	S 2300	0	9.00	99.90	4.50
2016	2600 C	S 2600	0	9.00	99.90	3.20
2015	2500 C	S 2500	0	9.00	99.90	3.50
2014	2300 C	S 2300	0	9.00	99.90	3.40
2013	2300 C	S 2300	0	9.00	99.90	3.20
2012	2400 C	S 2400	0	9.00	99.90	3.00
2011	2700 C	S 2700	0	9.00	99.90	3.40
2010	2700 C	S 2700	0	9.39	99.99	3.60
2009	2700 C	S 2700	B 0	9.51	99.99	3.60
2008	3200 C	S 3200	B 0	9.42	99.99	3.80
2007	3200 C	S 3200	B 0	9.42	99.99	6.30
2006	3400 C	S 3400	B 0	9.16	99.99	3.40
2005	5200 C	S 5200	B	10.00	99.90	4.70
2004	3100 C	S 3100	B 0	9.80	99.90	3.60
2003	2900 C	S 2900	B 0	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5247 - SR 291 (MARTIN LUTHER KING DR) - 200' N OF LLOYD ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	2200 C	S 2200	0	9.00	99.90	5.70
2017	2100 C	S 2100	0	9.00	99.90	4.40
2016	2600 C	S 2600	0	9.00	99.90	4.30
2015	2300 C	S 2300	0	9.00	99.90	3.50
2014	2400 C	S 2400	0	9.00	99.90	3.40
2013	2200 C	S 2200	0	9.00	99.90	3.20
2012	2400 C	S 2400	0	9.00	99.90	3.00
2011	2100 C	S 2100	0	9.00	99.90	3.40
2010	2400 C	S 2400	0	9.39	99.99	3.60
2009	2900 C	S 2900	B 0	9.51	99.99	3.60
2008	3100 C	S 3100	B 0	9.42	99.99	3.80
2007	3400 C	S 3400	B 0	9.42	99.99	6.30
2006	3700 C	S 3700	B 0	9.16	99.99	3.40
2005	3600 C	S 3600	B 0	10.00	99.90	4.70
2004	3700 C	S 3700	B 0	9.80	99.90	3.60
2003	3400 C	S 3400	B 0	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5235 - SR 291(MLK JR DR) - BTW MAXWELL & JORDAN (ONEWAY SB)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	2400 C	S 2400	0	9.00	99.90	3.90
2017	2500 C	S 2500	0	9.00	99.90	4.50
2016	2400 C	S 2400	0	9.00	99.90	3.20
2015	2100 C	S 2100	0	9.00	99.90	3.50
2014	2400 C	S 2400	0	9.00	99.90	3.40
2013	2400 C	S 2400	0	9.00	99.90	3.20
2012	2800 C	S 2800	0	9.00	99.90	3.00
2011	2800 C	S 2800	0	9.00	99.90	3.40
2010	3100 C	S 3100	0	9.39	99.99	3.60
2009	3400 C	S 3400	0	9.51	99.99	3.60
2008	3600 C	S 3600	0	9.42	99.99	3.80
2007	3900 C	S 3900	0	9.42	99.99	6.30
2006	4100 C	S 4100	0	9.16	99.99	3.40
2005	3700 C	S 3700	0	10.00	99.90	4.70
2004	3800 C	S 3800	0	9.80	99.90	3.60
2003	3500 C	S 3500	0	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 4007 - SR 291 (MLK JR DR) - 325' S OF TEXAR DR

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	3200 C	S 3200	0	9.00	99.90	4.90
2017	3300 C	S 3300	0	9.00	99.90	4.90
2016	3500 C	S 3500	0	9.00	99.90	3.50
2015	3200 C	S 3200	0	9.00	99.90	4.80
2014	3100 C	S 3100	0	9.00	99.90	4.10
2013	3500 C	S 3500	0	9.00	99.90	4.40
2012	3400 C	S 3400	0	9.00	99.90	4.20
2011	3700 C	S 3700	0	9.00	99.90	3.90
2010	3800 C	S 3800	0	9.39	99.99	4.20
2009	3900 C	S 3900	B 0	9.51	99.99	4.70
2008	4700 C	S 4700	B 0	9.42	99.99	4.30
2007	5100 C	S 5100	B 0	9.42	99.99	3.00
2006	5400 C	S 5400	B 0	9.16	99.99	3.60
2005	5100 C	S 5100	B 0	10.00	99.90	4.40
2004	4800 C	S 4800	B 0	9.80	99.90	4.40
2003	4800 C	S 4800	B 0	9.60	99.90	3.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5308 - SR 291(MARTIN LUTHER KING JR DR) - 250' N OF TEXAR DR

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	4200 C	S 4200	0	9.00	99.90	3.90
2017	4500 C	S 4500	0	9.00	99.90	4.50
2016	4100 C	S 4100	0	9.00	99.90	3.20
2015	5100 C	S 5100	0	9.00	99.90	3.50
2014	4200 C	S 4200	0	9.00	99.90	3.40
2013	3900 C	S 3900	0	9.00	99.90	3.20
2012	4300 C	S 4300	0	9.00	99.90	3.00
2011	4300 C	S 4300	0	9.00	99.90	3.40
2010	4100 C	S 4100	0	9.39	99.99	3.60
2009	5500 C	S 5500	B 0	9.51	99.99	3.60
2008	6500 C	S 6500	B 0	9.42	99.99	3.80
2007	6200 C	S 6200	B 0	9.42	99.99	6.30
2006	6700 C	S 6700	B 0	9.16	99.99	3.40
2005	6500 C	S 6500	B 0	10.00	99.90	4.70
2004	6200 C	S 6200	B 0	9.80	99.90	3.60
2003	6100 C	S 6100	B 0	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5292 - SR 291(DAVIS HWY) - 200' N OF WRIGHT ST

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	2900	C	N	2900	0	9.00	99.90	3.00
2017	2600	C	N	2600	0	9.00	99.90	3.20
2016	2900	C	N	2900	0	9.00	99.90	2.80
2015	2700	C	N	2700	0	9.00	99.90	3.10
2014	2400	C	N	2400		9.00	99.90	2.70
2013	2900	C	N	2900	0	9.00	99.90	1.90
2012	2700	C	N	2700	0	9.00	99.90	1.70
2011	2800	C	N	2800	0	9.00	99.90	3.10
2010	2600	C	N	2600	0	9.39	99.99	3.50
2009	2700	C	N	2700	0	9.51	99.99	2.40
2008	2700	C	N	2700	0	9.42	99.99	3.50
2007	3000	C	N	3000	0	9.42	99.99	5.50
2006	2900	C	N	2900	0	9.16	99.99	2.10
2005	3100	F	N	3100	B 0	10.00	99.90	2.80
2004	3000	C	N	3000	B	9.80	99.90	2.80
2003	2700	C	N	2700	B	9.60	99.90	3.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5161 - SR 291(DAVIS HWY) - 450' S OF US90 (CERVANTES ST)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	3000 C	N 3000	0	9.00	99.90	3.90
2017	2800 C	N 2800	0	9.00	99.90	4.50
2016	3000 C	N 3000	0	9.00	99.90	3.20
2015	2600 C	N 2600	0	9.00	99.90	3.50
2014	2600 C	N 2600	0	9.00	99.90	3.40
2013	2500 C	N 2500	0	9.00	99.90	3.20
2012	2700 C	N 2700	0	9.00	99.90	3.00
2011	3300 C	N 3300	0	9.00	99.90	3.40
2010	2900 C	N 2900	0	9.39	99.99	3.60
2009	3500 C	N 3500	0	9.51	99.99	3.60
2008	4000 C	N 0	S 0	9.42	56.46	3.80
2007	4500 C	N 4500	0	9.42	99.99	6.30
2006	4100 C	N 4100	0	9.16	99.99	3.40
2005	4200 C	N 4200	B	10.00	99.90	4.70
2004	3700 C	N 3700	B	9.80	99.90	3.60
2003	3600 C	N 3600	B	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5248 - SR 291(DAVIS HWY) - 125' N OF LLOYD ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	2000 C	N 2000	0	9.00	99.90	3.70
2017	2100 C	N 2100	0	9.00	99.90	5.10
2016	2300 C	N 2300	0	9.00	99.90	4.40
2015	1900 C	N 1900	0	9.00	99.90	3.50
2014	2000 C	N 2000	0	9.00	99.90	3.70
2013	2000 C	N 2000	0	9.00	99.90	4.00
2012	2100 C	N 2100	0	9.00	99.90	3.00
2011	2400 C	N 2400	0	9.00	99.90	3.40
2010	2200 C	N 2200	0	9.39	99.99	3.60
2009	2700 C	N 2700	0	9.51	99.99	3.60
2008	2800 C	N 2800	0	9.42	99.99	3.80
2007	2800 C	N 2800	0	9.42	99.99	6.30
2006	3200 C	N 3200	0	9.16	99.99	3.40
2005	3000 C	N 3000	B	10.00	99.90	4.70
2004	3200 C	N 3200	B	9.80	99.90	3.60
2003	2800 C	N 2800	B	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5234 - SR 291(DAVIS HWY) - BTW MAXWELL & JORDAN (ONEWAY NB)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	3200 C	N 3200	0	9.00	99.90	3.90
2017	3100 C	N 3100	0	9.00	99.90	4.50
2016	3400 C	N 3400	0	9.00	99.90	3.20
2015	4700 C	N 4700	0	9.00	99.90	3.50
2014	3200 C	N 3200	0	9.00	99.90	3.40
2013	2900 C	N 2900	0	9.00	99.90	3.20
2012	3400 C	N 3400	0	9.00	99.90	3.00
2011	3400 C	N 3400	0	9.00	99.90	3.40
2010	3600 C	N 3600	0	9.39	99.99	3.60
2009	5100 C	N 5100	0	9.51	99.99	3.60
2008	4700 C	N 4700	0	9.42	99.99	3.80
2007	4200 C	N 4200	0	9.42	99.99	6.30
2006	4400 C	N 4400	0	9.16	99.99	3.40
2005	4500 C	N 4500		10.00	99.90	4.70
2004	4400 C	N 4400		9.80	99.90	3.60
2003	3900 C	N 3900		9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5047 - SR 291(DAVIS ST) - 200' N OF MAXWELL ST (ONEWAY NB)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	2900 C	N 2900	0	9.00	99.90	4.70
2017	2900 C	N 2900	0	9.00	99.90	5.30
2016	3300 C	N 3300	0	9.00	99.90	3.30
2015	2800 C	N 2800	0	9.00	99.90	4.00
2014	2800 C	N 2800	0	9.00	99.90	4.30
2013	3200 C	N 3200	0	9.00	99.90	3.80
2012	3000 C	N 3000	0	9.00	99.90	4.40
2011	3300 C	N 3300	0	9.00	99.90	3.70
2010	2900 C	N 2900	0	9.39	99.99	4.40
2009	3400 C	N 3400	0	9.51	99.99	3.60
2008	4400 C	N 4400	0	9.42	99.99	3.80
2007	4000 C	N 4000	0	9.42	99.99	7.20
2006	3900 C	N 3900	0	9.16	99.99	4.00
2005	4100 C	N 4100		10.00	99.90	4.30
2004	4400 C	N 4400		9.80	99.90	4.30
2003	3900 C	N 3900		9.60	99.90	6.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 4010 - SR 291 (DAVIS HWY) - 575' N OF TEXAR DR

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	5000 C	N 5000	0	9.00	99.90	3.90
2017	4700 C	N 4700	0	9.00	99.90	4.50
2016	5300 C	N 5300	0	9.00	99.90	3.20
2015	5000 C	N 5000	0	9.00	99.90	3.50
2014	4800 C	N 4800	0	9.00	99.90	3.40
2013	4800 C	N 4800	0	9.00	99.90	3.20
2012	5000 C	N 5000	0	9.00	99.90	3.00
2011	5100 C	N 5100	0	9.00	99.90	3.40
2010	4700 C	N 4700	0	9.39	99.99	3.60
2009	5300 C	N 5300	0	9.51	99.99	3.60
2008	6600 C	N 6600	0	9.42	99.99	3.80
2007	5700 C	N 5700	0	9.42	99.99	6.30
2006	5600 C	N 5600	0	9.16	99.99	3.40
2005	5800 C	N 5800	B	10.00	99.90	4.70
2004	6200 C	N 6200	B	9.80	99.90	3.60
2003	5700 C	N 5700	B	9.60	99.90	4.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2018 HISTORICAL AADT REPORT

COUNTY: 48 - ESCAMBIA

SITE: 5323 - SR 291 (DAVIS HWY) - 400' S OF FAIRFIELD DR

YEAR	AADT	DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
2018	9900 C	N	6100	S	3800	9.00	52.20	3.90
2017	9500 C	N	6000	S	3500	9.00	58.60	4.50
2016	9200 C	N	5500	S	3700	9.00	56.30	3.20
2015	8900 C	N	5100	S	3800	9.00	55.50	3.50
2014	8400 C	N	4600	S	3800	9.00	55.80	3.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Appendix D:
Signal Timing Plans

①

COORDINATED SYSTEM

ID#:
Date: 11/18/19

Intersection Location: Alcaniz and Gregory

Coordination Timing

Weekday Plan

Day	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Plan	1	1	1	1	1	1	1

Cycle	1	2	3	4	5	6
Length						
Min Length						

Offsets (%)	1	2	3	4	5	6
Cycle						
Offset 1						
Offset 2						
Offset 3						
Offset 4						
Offset 5						

Phase Allocation (%)

Phase	1	2	3	4	5	6	7	8
Split 1								
Split 2								
Split 3								
Split 4								
Split 5								
Split 6								

Time Of Day Plans

Plan	Time	C/O/S	CKT
1	0:00		Free
1	6:45		Max2 on
1	8:30		Max2off
1			
1			
1			
2			
2			
2			
2			
2			
2			
2			
2			
2			
3			
3			
3			
3			
3			
3			

Basic Timings

	1	2	3	4	5	6	7	8
Approach	x		x		x	x		
Movement		WB		NB			NBLT	SB
Initial		8		5			5	6
Passage		5.0		4.0			3.0	4.0
Yellow		4.0		4.0			4.0	4.0
All Red		2.0		2.0			2.0	2.0
Walk		7		7				9
Don't Walk		24		14				14
Max 1		40		25			15	25
Max11		65		25			15	25

2

Intersection: Cervantes & Alcaniz/MLK

Programmed Basic Timings								
Phase	1	2	3	4	5	6	7	8
Movement	WBL	EB		SB		WB		
Turn Type	Prot/Perm							
Initial	4	15	4	5	4	15	4	4
Passage	2.5	5	4	2.5	4	5	4	4
Yellow	4	4	4	4	4	4	4	4
Red	2	2	2	2	2	2	2	2
Walk		7		7		7		7
Ped Clr		15		22		12		
Max 1	25	45	5	30	5	45	5	5
Max 2	30	140	30	50	30	140	30	30

TOD	Plan 1 Weekday	TOD	Plan 2 Saturday	TOD	Plan 3 Sunday
0000	Free	0000	Free	0000	Free
0530	4/4/4	0630	4/4/4	0730	4/4/4
0630	1/1/1	0800	5/5/1	0830	5/5/1
1030	2/2/2	2200	4/4/4	2000	4/4/4
1530	3/3/3			2200	Free
1800	2/2/2				
2030	4/4/4				
2330	Free				

Cycle	1	2	3	4	5
	140	140	160	100	120
Offset 1	61				
Offset 2		61			
Offset 3			53		
Offset 4				7	
Offset 5					4

Allocation Phase	1	2	3	4	5	6	7	8
S1	16	59		25		75		25
S2	14	61		25		75		25
S3	13	65		22		78		22
S4	16	49		35		65		35
S5	13	58		29		71		29

Notes:

4

Intersection: Cervantes & Hayne St

Programmed Basic Timings								
Phase	1	2	3	4	5	6	7	8
Movement	EBL	WB		NB		EB		
Turn Type	Prot/Perm							
Initial	4	15	1	4	1	15	1	1
Passage	2.5	5	0	2.5	0	5	0	0
Yellow	4	4	4	4	4	4	4	4
Red	2	2	0	2	0	2	0	0
Walk		7		7		7		7
Ped Clr		12		20		12		23
Max 1	15	35	30	15	30	35	30	30
Max 2	60	100	30	40	30	140	30	30

TOD	Plan 1 Weekday	TOD	Plan 2 Saturday	TOD	Plan 3 Sunday
0000	Free	0000	Free	0000	Free
0530	4/4/4	0630	4/4/4	0730	4/4/4
0630	1/1/1	0800	5/5/1	0830	5/5/1
1030	2/2/2	2200	4/4/4	2000	4/4/4
1530	3/3/3			2200	Free
1800	2/2/2				
2030	4/4/4				
2330	Free				

Cycle	1	2	3	4	5
	140	140	160	100	120
Offset 1	58				
Offset 2		58			
Offset 3			49		
Offset 4				6	
Offset 5					11

Allocation Phase	1	2	3	4	5	6	7	8
S1	25	51		24		76		
S2	29	47		24		76		
S3	31	48		21		79		
S4	22	45		33		67		
S5	29	43		28		72		

Notes:

5

PENSACOLA

THE UPSIDE of FLORIDA

COORDINATED SYSTEM : FREE

ID#:
 Date: 11/18/19

Intersection Location: MLK and Blunt

Coordination Timing

Weekday Plan

Day	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Plan							

Cycle	1	2	3	4	5	6
Length						
Min Length						

Offsets (%)	1	2	3	4	5	6
Cycle						
Offset 1						
Offset 2						
Offset 3						
Offset 4						
Offset 5						

Phase Allocation (%)

Phase	1	2	3	4	5	6	7	8
Split 1								
Split 2								
Split 3								
Split 4								
Split 5								
Split 6								

Time Of Day Plans : FREE

Plan	Time	C/O/S	CKT
1			Free
1			
1			
1			
1			
1			
2			
2			
2			
2			
2			
2			
2			
2			
3			
3			
3			
3			
3			
3			

Basic Timings

	1	2	3	4	5	6	7	8
Approach	x		x		x	x	x	x
Movement		SB		EB/WB				
Initial		5		5				
Passage		4.0		4.0				
Yellow		4.0		4.0				
All Red		2.0		2.0				
Walk		7		7				
Don't Walk		10		10				
Max 1		25		20				
Max11		30		30				



COORDINATED SYSTEM

ID#: _____
Date: 11/18/19

Intersection Location: MLK and Maxwell

Coordination Timing : FREE

Weekday Plan

Day	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Plan							

Cycle	1	2	3	4	5	6
Length						
Min Length						

Offsets (%)	1	2	3	4	5	6
Cycle						
Offset 1						
Offset 2						
Offset 3						
Offset 4						
Offset 5						

Phase Allocation (%)

Phase	1	2	3	4	5	6	7	8
Split 1								
Split 2								
Split 3								
Split 4								
Split 5								
Split 6								

Time Of Day Plans

Plan	Time	C/O/S	CKT
1			FREE
1			
1			
1			
1			
1			
2			
2			
2			
2			
2			
2			
2			
2			
3			
3			
3			
3			
3			
3			

Basic Timings

	1	2	3	4	5	6	7	8
Approach			x		x		x	x
Movement	SBRT	NB		WB		SB		
Initial	4	5		6		5		
Passage	2.0	4.0		5.0		4.0		
Yellow	4.0	4.0		4.0		4.0		
All Red	2.0	2.0		2.0		2.0		
Walk		5		7		5		
Don't Walk		11		11		11		
Max 1	15	30		30		30		
Max11	30	30		30		30		

COORDINATED SYSTEM

ID#:
Date: 11/18/19

Intersection Location: Maxwell and Hayne

Coordination Timing : FREE

Weekday Plan

Day Plan	Sun	Mon	Tues	Wed	Thurs	Fri	Sat

Cycle

	1	2	3	4	5	6
Length						
Min Length						

Offsets (%)

Cycle	1	2	3	4	5	6
Offset 1						
Offset 2						
Offset 3						
Offset 4						
Offset 5						

Phase Allocation (%)

Phase	1	2	3	4	5	6	7	8
Split 1								
Split 2								
Split 3								
Split 4								
Split 5								
Split 6								

Time Of Day Plans

Plan	Time	C/O/S	CKT
1			FREE
1			
1			
1			
1			
1			
2			
2			
2			
2			
2			
2			
2			
2			
3			
3			
3			
3			
3			
3			

Basic Timings

	1	2	3	4	5	6	7	8
Approach			x		x		x	x
Movement	SBRT	NB		WB		SB		
Initial	4	5		6		5		
Passage	2.0	4.0		5.0		4.0		
Yellow	4.0	4.0		4.0		4.0		
All Red	2.0	2.0		2.0		2.0		
Walk		5		7		5		
Don't Walk		11		11		11		
Max 1	15	30		30		30		
Max11	30	30		30		30		

SR 291 (MLK DR) @ SR 752 (TEXAR DR)

Yellow Change Interval								
Phase	1	2	3	4	5	6	7	8
Movement	N/A	WBT	N/A	N/A	WBL	EB	N/A	SB
Speed (mph)	N/A	35	N/A	N/A	35	35	N/A	35
Grade (%/100)	N/A	-0.001	N/A	N/A	-0.001	-0.003	N/A	-0.016
Yellow Change Interval (sec)	N/A	4.0	N/A	N/A	4.0	4.0	N/A	4.1

Minimum Value (V)

APPROACH SPEED (MPH)	YELLOW INTERVAL (SECONDS)
25	3.4
30	3.7
35	4.0
40	4.4
45	4.8
50	5.1
55	5.5
60	5.9
65	6.0

- For approach grades other than 0%, use ITE Formula

Minimum Value (R) = 2.0 Seconds

Red Clearance Interval								
Phase	1	2	3	4	5	6	7	8
Movement	N/A	WBT	N/A	N/A	WBL	EB	N/A	SB
Speed (mph)	N/A	35	N/A	N/A	35	35	N/A	35
Inter. Width	N/A	80	N/A	N/A	70	80	N/A	90
Red Clearance Interval (sec)	N/A	1.9	N/A	N/A	1.7	1.9	N/A	2.1



Programmed Basic Timings

Phase	1	2	3	4	5	6	7	8
Initial	6.0	10.0	6.0	6.0	6.0	10.0	8.0	6.0
Passage	3.0	4.0	0.0	0.0	3.0	4.0	0.0	4.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.1
Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
Walk	0.0	7.0	0.0	7.0	0.0	7.0	0.0	7.0
Ped Clr	0.0	9.0	0.0	17.0	0.0	9.0	0.0	17.0
Max 1	0.0	60.0	0.0	0.0	20.0	60.0	0.0	40.0
Max 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Yellow Change and Red Clearance Intervals are set in accordance with Section 3.6 of the *FDOT Traffic Engineering Manual Revised September 2013*. All Signal Timing Alterations, along with any Controller Replacements, must be approved by Escambia County and the Signalization Project Manager within 72 hours of Alteration or Replacement. Contact signals@myescambia.com

Note: All Programmed Basic Timings, with the exception of the Yellow Change and Red Clearance Intervals, are existing timings which are the responsibility of the signal owner.

Intersection: Cervantes & Davis

Programmed Basic Timings								
Phase	1	2	3	4	5	6	7	8
Movement	EBL	WB		NB		EB		
Turn Type	Prot/Perm							
Initial	4	15	1	5	1	15	1	1
Passage	2.5	5	1	3	1	5	1	1
Yellow	4	4	4	4	4	4	4	4
Red	2	2.5	0	2	0	2.5	0	0
Walk		7		7		7		
Ped Clr		9		18		10		
Max 1	20	45	0	25	0	45	0	0
Max 2	30	140	0	40	0	140	0	0

TOD	Plan 1 Weekday	TOD	Plan 2 Saturday	TOD	Plan 3 Sunday
0000	Free	0000	Free	0000	Free
0530	4/4/4	0630	4/4/4	0730	4/4/4
0630	1/1/1	0800	5/5/1	0830	5/5/1
1030	2/2/2	2200	4/4/4	2000	4/4/4
1530	3/3/3			2200	Free
1800	2/2/2				
2030	4/4/4				
2330	Free				

Cycle	1	2	3	4	5
	140	140	160	100	120
Offset 1	54				
Offset 2		55			
Offset 3			53		
Offset 4				2	
Offset 5					8

Allocation Phase	1	2	3	4	5	6	7	8
S1	11	67		22		78		22
S2	11	67		22		78		22
S3	13	68		19		81		19
S4	16	53		31		69		31
S5	13	61		26		74		26

Notes:

15

PENSACOLA

THE UPSIDE of FLORIDA

COORDINATED SYSTEM : FREE

ID#: _____
Date: 11/18/19

Intersection Location: Davis and Blunt

Coordination Timing

Weekday Plan							
Day	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Plan							

Cycle	1	2	3	4	5	6
Length						
Min Length						

Offsets (%)						
Cycle	1	2	3	4	5	6
Offset 1						
Offset 2						
Offset 3						
Offset 4						
Offset 5						

Phase Allocation (%)								
Phase	1	2	3	4	5	6	7	8
Split 1								
Split 2								
Split 3								
Split 4								
Split 5								
Split 6								

Time Of Day Plans : FREE

Plan	Time	C/O/S	CKT
1			
1			
1			
1			
1			
1			
2			
2			
2			
2			
2			
2			
2			
2			
3			
3			
3			
3			
3			
3			

Basic Timings

	1	2	3	4	5	6	7	8
Approach	x	SB	x	EB/WB	x	x	x	x
Movement								
Initial		8		10				
Passage		4		4				
Yellow		5.0		5.0				
All Red		2.5		2.5				
Walk		7		7				
Don't Walk		11		11				
Max 1		30		30				
Max11		20		20				

19

SR 291 (DAVIS HWY) @ SR 752 (TEXAR DR)

Yellow Change Interval								
Phase	1	2	3	4	5	6	7	8
Movement	EBL	WB	N/A	NB	N/A	EBT	N/A	N/A
Speed (mph)	35	35	N/A	35	N/A	35	N/A	N/A
Grade (%/100)	0.002	0.008	N/A	-0.002	N/A	0.002	N/A	N/A
Yellow Change Interval (sec)	4.0	3.9	N/A	4.0	N/A	4.0	N/A	N/A

Minimum Value (Y)	
APPROACH SPEED (MPH)	YELLOW INTERVAL (SECONDS)
25	3.4
30	3.7
35	4.0
40	4.4
45	4.8
50	5.1
55	5.5
60	5.9
65	6.0

* For approach grades other than 0%, use ITE Formula.

Minimum Value (R) = 2.0 Seconds

Red Clearance Interval								
Phase	1	2	3	4	5	6	7	8
Movement	EBL	WB	N/A	NB	N/A	EBT	N/A	N/A
Speed (mph)	35	35	N/A	35	N/A	35	N/A	N/A
Inter. Width	60	70	N/A	105	N/A	65	N/A	N/A
Red Clearance Interval (sec)	1.6	1.7	N/A	2.4	N/A	1.7	N/A	N/A



Programmed Basic Timings								
Phase	1	2	3	4	5	6	7	8
Initial	6.0	10.0	6.0	6.0	6.0	10.0	6.0	6.0
Passage	3.0	4.0	0.0	3.0	0.0	4.0	0.0	0.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Red	2.0	2.0	2.0	2.4	2.0	2.0	2.0	2.0
Walk	0.0	7.0	0.0	7.0	0.0	7.0	0.0	7.0
Ped Clr	0.0	9.0	0.0	17.0	0.0	9.0	0.0	19.0
Max 1	30.0	60.0	0.0	40.0	0.0	60.0	0.0	0.0
Max 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Yellow Change and Red Clearance Intervals are set in accordance with Section 3.6 of the FDOT Traffic Engineering Manual Revised September 2013. All Signal Timing Alterations, along with any Controller Replacements, must be approved by Escambia County and the Signalization Project Manager within 72 hours of Alteration or Replacement. Contact signals@myescambia.com

Note: All Programmed Basic Timings, with the exception of the Yellow Change and Red Clearance Intervals, are existing timings which are the responsibility of the signal owner.

21

B.3 System Information

System Id	17
Name	DAVIS & 110>
Location	

1.2 Unit Setup

Auto Ped Clear	Disabled
Red Revert	2
Min Yellow Time	3
Texas Dmd Mode	Disabled
Texas Dmd Type	4-Phase

1.3 Startup

Flash	0
All Red	0
Start Veh Call	2,6
Start Ped Call	

1.4 Channel Setup (1-16)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Type	V	V	0	0	V	V	V	V	0	0	0	0	P	0	0	P
Source	1	2			5	6	7	8					2			8
Alt 1/2 Hz																
Flash Red																
Flash Yel		X				X										

1.4 Channel Setup (17-32)

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Type	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Source																
Alt 1/2 Hz																
Flsh Red																
Flsh Yel																
Start Next Phases																

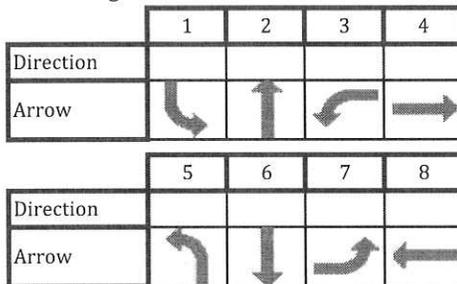
2.5 Phase Concurrency

	1	2	3	4	5	6	7	8
Phase 1					X	X		
Phase 2				X	X			
Phase 3							X	X
Phase 4							X	X
Phase 5	X	X						
Phase 6	X	X						
Phase 7			X	X				
Phase 8			X	X				
Phase 9								
Phase 10								
Phase 11								
Phase 12								
Phase 13								
Phase 14								
Phase 15								
Phase 16								

2.4 Phase Enable and Rings

	1	2	3	4	5	6	7	8
Startup	2	4	2	2	2	4	2	2
Enabled	X	X	X	X	X	X	X	X
Ring1	X	X	X	X				
Ring2					X	X	X	X
Ring3								
Ring4								

Phase Diagram



Program Type McCain Omni eX
Firmware 1.8
Street 1 Davis Hwy
Street 2 NB I110 Ramp
Last Modified 11/6/2017 7:55 AM

5.1 Coordination Constants

Correction Mode	Shortway
Max Cycles Trans	3
Coord Max Mode	Max Inhibit
Coord Force Mode	Fixed
Perm Strategy	Maximum
Omit Strategy	Minimum
Sync Point	End Green
No Early Return	Disable
Sync Ref Time	0
Operational Mode	254

Pensacola
Davis Hwy & I-110 NB Ramp > Phases > Phase Timing

2.1 Phase Parameters Set 1	1	2	3	4	5	6	7	8
Min. Green	5	15	0	0	5	15	5	10
Pass/10	3	6	0	0	3	6	3	3
Max. 1	20	40	0	0	20	40	20	45
Max. 2	30	30	0	0	30	30	30	30
Yel/10	4	4	0	0	4	4	4	4
Red/10	2	2.5	2	2	2	2	2	2
Walk	0	7	0	0	0	0	0	5
Pedestrian Clear	0	25	0	0	0	0	0	25
Add In/10	0	0	0	0	0	0	0	0
Max. Initial	0	0	0	0	0	0	0	0
TBR	0	0	0	0	0	0	0	0
CBR	0	0	0	0	0	0	0	0
TTR	0	0	0	0	0	0	0	0
Reduce/10	0	0	0	0	0	0	0	0
Min Gp/10	0	0	0	0	0	0	0	0
DM Limit	0	0	0	0	0	0	0	0
DM Stp/10	0	0	0	0	0	0	0	0
Red Rv/10	2	2	2	2	2	2	2	2
Cond Svc Min	0	0	0	0	0	0	0	0
Alt Min Green	0	0	0	0	0	0	0	0
Alt Ps/10	0	0	0	0	0	0	0	0
Alternate Walk	0	0	0	0	0	0	0	0
Alt Ped Clear	0	0	0	0	0	0	0	0
Advanced Walk	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
St Dly/10	0	0	0	0	0	0	0	0
Green Clear	0	0	0	0	0	0	0	0

2.2 Phase Options Set 1	1	2	3	4	5	6	7	8
Phase Omit			X	X				
Ped Omit	X		X	X	X	X	X	
Min Recall		X				X		
Max Recall								
Soft Recall								
Ped Recall								
Pedestrian Recycle								
Cond Srv								
Detector Lock		X				X		
Dual Entry		X				X		
Simul Gap	X	X			X	X	X	X
Guar Pass								
Add Init Calc								
Walk Rest								
Red Rest								
Flash Entry								X
Flash Exit		X				X		
CNA-1								
CNA-2								
No Backup								
Max Walk								
Max Extension								
Sequential Timing								
No Min Yellow								
FDW Ped Recycle								

Pensacola
Davis Hwy & I-110 NB Ramp > Coordination > Coordination Patterns



5.2 Patterns	1	2	3	4	5	6
Cycle Time	150	150	160	150	0	0
Offset Time	0	0	0	0	0	0
Split	1	2	3	4	1	1
Sequence	1	1	1	1	1	1
Correction Mode						
Maximum Mode						
Force Mode						
Perm Strategy						
Omit Strategy						
Early Return	Default	Default	Default	Default	Default	Default
Texas Diamond						
Max2 Phases						
Phase Timing Set	1	1	1	1	1	1
Phase Option Set	1	1	1	1	1	1
Overlap Set	1	1	1	1	1	1
Veh. Det. Set	1	1	1	1	1	1
Ped. Det. Set	1	1	1	1	1	1
Veh. Det. Diag Set	1	1	1	1	1	1
Ped. Det. Diag Set	1	1	1	1	1	1
Priority Set	1	1	1	1	1	1
Ped Ovlp Set	1	1	1	1	1	1
Det. Reset						

5.2 Patterns	9	10	11	12	13	14
Cycle Time	0	0	0	0	0	0
Offset Time	0	0	0	0	0	0
Split	1	1	1	1	1	1
Sequence	1	1	1	1	1	1
Correction Mode						
Maximum Mode						
Force Mode						
Perm Strategy						
Omit Strategy						
Early Return	Default	Default	Default	Default	Default	Default
Texas Diamond						
Max2 Phases						
Phase Timing Set	1	1	1	1	1	1
Phase Option Set	1	1	1	1	1	1
Overlap Set	1	1	1	1	1	1
Veh. Det. Set	1	1	1	1	1	1
Ped. Det. Set	1	1	1	1	1	1
Veh. Det. Diag Set	1	1	1	1	1	1
Ped. Det. Diag Set	1	1	1	1	1	1
Priority Set	1	1	1	1	1	1
Ped Ovlp Set	1	1	1	1	1	1
Det. Reset						

7	8
0	0
0	0
1	1
1	1

Default

Default

1	1
1	1
1	1
1	1
1	1
1	1
1	1
1	1
1	1

15	16
0	0
0	0
1	1
1	1

Default

Default

1	1
1	1
1	1
1	1
1	1
1	1
1	1
1	1
1	1

Pensacola
Davis Hwy & I-110 NB Ramp > Coordination > Coordination

5.2 Patterns	1	2	3	4	5	6	7	8
Cycle Time	150	150	160	150	0	0	0	0
Offset Time	0	0	0	0	0	0	0	0
Split	1	2	3	4	1	1	1	1
Sequence	1	1	1	1	1	1	1	1
Correction Mode								
Maximum Mode								
Force Mode								
Perm Strategy								
Omit Strategy								
Early Return	Default							
Texas Diamond								
Max2 Phases								
Phase Timing Set	1	1	1	1	1	1	1	1
Phase Option Set	1	1	1	1	1	1	1	1
Overlap Set	1	1	1	1	1	1	1	1
Veh. Det. Set	1	1	1	1	1	1	1	1
Ped. Det. Set	1	1	1	1	1	1	1	1
Veh. Det. Diag Set	1	1	1	1	1	1	1	1
Ped. Det. Diag Set	1	1	1	1	1	1	1	1
Priority Set	1	1	1	1	1	1	1	1
Ped Ovlp Set	1	1	1	1	1	1	1	1
Det. Reset								

5.2 Patterns	9	10	11	12	13	14	15	16
Cycle Time	0	0	0	0	0	0	0	0
Offset Time	0	0	0	0	0	0	0	0
Split	1	1	1	1	1	1	1	1
Sequence	1	1	1	1	1	1	1	1
Correction Mode								
Maximum Mode								
Force Mode								
Perm Strategy								
Omit Strategy								
Early Return	Default							
Texas Diamond								
Max2 Phases								
Phase Timing Set	1	1	1	1	1	1	1	1
Phase Option Set	1	1	1	1	1	1	1	1
Overlap Set	1	1	1	1	1	1	1	1
Veh. Det. Set	1	1	1	1	1	1	1	1
Ped. Det. Set	1	1	1	1	1	1	1	1
Veh. Det. Diag Set	1	1	1	1	1	1	1	1
Ped. Det. Diag Set	1	1	1	1	1	1	1	1
Priority Set	1	1	1	1	1	1	1	1
Ped Ovlp Set	1	1	1	1	1	1	1	1
Det. Reset								

Pensacola
Davis Hwy & I-110 NB Ramp > Coordination > Split Tables

5.3 Split Table 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	20	72	0	0	16	76	16	42	0	0	0	0	0	0	0	0
Mode	NONE	NACT	OMIT	OMIT	NONE	NACT	NONE									
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Split Table 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	22	72	0	0	16	78	16	40	0	0	0	0	0	0	0	0
Mode	NONE	NACT	OMIT	OMIT	NONE	NACT	NONE									
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Split Table 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	25	80	0	0	16	89	16	39	0	0	0	0	0	0	0	0
Mode	NONE	NACT	OMIT	OMIT	NONE	NACT	NONE									
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Split Table 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	18	78	0	0	16	80	16	38	0	0	0	0	0	0	0	0
Mode	NONE	NACT	OMIT	OMIT	NONE	NACT	NONE									
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

22

B.3 System Information

System Id	16
Name	
Location	

1.2 Unit Setup

Auto Ped Clear	Disabled
Red Revert	2
Min Yellow Time	3
Texas Dmd Mode	Disabled
Texas Dmd Type	4-Phase

1.3 Startup

Flash	0
All Red	0
Start Veh Call	1,2,3,4,5,6,7,8
Start Ped Call	

1.4 Channel Setup (1-16)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Type	V	V	V	V	V	V	V	V	O	O	O	O	P	P	P	P
Source	1	2	3	4	5	6	7	8					2	4	6	
Alt 1/2 Hz																
Flash Red	X	X	X	X	X	X	X	X	X	X	X	X				
Flash Yel																

1.4 Channel Setup (17-32)

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Type	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Source																
Alt 1/2 Hz																
Flash Red																
Flash Yel																
Start Next Phases																

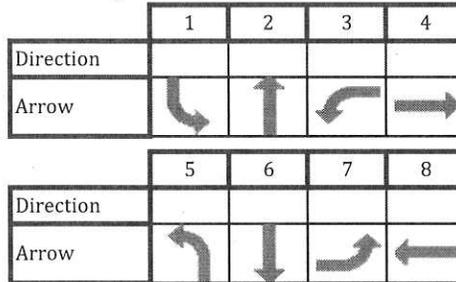
2.5 Phase Concurrency

	1	2	3	4	5	6	7	8
Phase 1					X	X		
Phase 2				X	X			
Phase 3							X	X
Phase 4						X	X	
Phase 5	X	X						
Phase 6	X	X						
Phase 7			X	X				
Phase 8			X	X				
Phase 9								
Phase 10								
Phase 11								
Phase 12								
Phase 13								
Phase 14								
Phase 15								
Phase 16								

2.4 Phase Enable and Rings

	1	2	3	4	5	6	7	8
Startup	2	4	2	2	2	4	2	2
Enabled	X	X	X	X	X	X	X	X
Ring1	X	X	X	X				
Ring2					X	X	X	X
Ring3								
Ring4								

Phase Diagram





Pensacola
Davis Hwy & Fairfield Drive > Phases > Phase Timing

2.1 Phase Parameters Set 1	1	2	3	4	5	6	7	8
Min. Green	4	10	4	4	4	10	4	4
Pass/10	4.5	4	4	3	3	4	4	3
Max. 1	35	65	30	50	30	80	30	55
Max. 2	15	45	15	45	15	45	15	45
Yel/10	4.4	4.4	4	4	4.4	4.4	4	4
Red/10	2	2	2	2	2	2	2	2
Walk	0	7	0	5	0	7	0	0
Pedestrian Clear	0	28	0	35	0	28	0	0
Add In/10	0	0	0	0	0	0	0	0
Max. Initial	0	0	0	0	0	0	0	0
TBR	0	0	0	0	0	0	0	0
CBR	0	0	0	0	0	0	0	0
TTR	0	0	0	0	0	0	0	0
Reduce/10	0	0	0	0	0	0	0	0
Min Gp/10	0	0	0	0	0	0	0	0
DM Limit	0	0	0	0	0	0	0	0
DM Stp/10	0	0	0	0	0	0	0	0
Red Rv/10	2	2	2	2	2	2	2	2
Cond Svc Min	0	0	0	0	0	0	0	0
Alt Min Green	0	0	0	0	0	0	0	0
Alt Ps/10	0	0	0	0	0	0	0	0
Alternate Walk	0	0	0	0	0	0	0	0
Alt Ped Clear	0	0	0	0	0	0	0	0
Advanced Walk	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
St Dly/10	0	0	0	0	0	0	0	0
Green Clear	0	0	0	0	0	0	0	0

2.2 Phase Options Set 1	1	2	3	4	5	6	7	8
Phase Omit								
Ped Omit	X		X		X		X	X
Min Recall		X				X		
Max Recall								
Soft Recall								
Ped Recall								
Pedestrian Recycle								
Cond Srv								
Detector Lock		X				X		
Dual Entry				X				X
Simul Gap	X	X	X	X	X	X	X	X
Guar Pass								
Add Init Calc								
Walk Rest								
Red Rest								
Flash Entry				X				X
Flash Exit		X				X		
CNA-1								
CNA-2								
No Backup	X	X	X	X	X	X	X	X
Max Walk								
Max Extension								
Sequential Timing								
No Min Yellow								
FDW Ped Recycle								

Program Type McCain Omni eX
Firmware 1.8
Street 1 Davis Hwy
Street 2 Fairfield Drive
Last Modified 11/6/2017 7:55 AM

5.1 Coordination Constants

Correction Mode	Add Only
Max Cycles Trans	2
Coord Max Mode	Max Inhibit
Coord Force Mode	Fixed
Perm Strategy	Maximum
Omit Strategy	Minimum
Sync Point	Begin Green
No Early Return	Disable
Sync Ref Time	0
Operational Mode	0

Pensacola
Davis Hwy & Fairfield Drive > Phases > Phase Timing

2.1 Phase Parameters Set 1	1	2	3	4	5	6	7	8
Min. Green	4	10	4	4	4	10	4	4
Pass/10	4.5	4	4	3	3	4	4	3
Max. 1	35	65	30	50	30	80	30	55
Max. 2	15	45	15	45	15	45	15	45
Yel/10	4.4	4.4	4	4	4.4	4.4	4	4
Red/10	2	2	2	2	2	2	2	2
Walk	0	7	0	5	0	7	0	0
Pedestrian Clear	0	28	0	35	0	28	0	0
Add In/10	0	0	0	0	0	0	0	0
Max. Initial	0	0	0	0	0	0	0	0
TBR	0	0	0	0	0	0	0	0
CBR	0	0	0	0	0	0	0	0
TTR	0	0	0	0	0	0	0	0
Reduce/10	0	0	0	0	0	0	0	0
Min Gp/10	0	0	0	0	0	0	0	0
DM Limit	0	0	0	0	0	0	0	0
DM Stp/10	0	0	0	0	0	0	0	0
Red Rv/10	2	2	2	2	2	2	2	2
Cond Svc Min	0	0	0	0	0	0	0	0
Alt Min Green	0	0	0	0	0	0	0	0
Alt Ps/10	0	0	0	0	0	0	0	0
Alternate Walk	0	0	0	0	0	0	0	0
Alt Ped Clear	0	0	0	0	0	0	0	0
Advanced Walk	0	0	0	0	0	0	0	0
Delay Walk	0	0	0	0	0	0	0	0
St Dly/10	0	0	0	0	0	0	0	0
Green Clear	0	0	0	0	0	0	0	0

2.2 Phase Options Set 1	1	2	3	4	5	6	7	8
Phase Omit								
Ped Omit	X		X		X		X	X
Min Recall		X				X		
Max Recall								
Soft Recall								
Ped Recall								
Pedestrian Recycle								
Cond Srv								
Detector Lock		X				X		
Dual Entry				X				X
Simul Gap	X	X	X	X	X	X	X	X
Guar Pass								
Add Init Calc								
Walk Rest								
Red Rest								
Flash Entry				X				X
Flash Exit		X				X		
CNA-1								
CNA-2								
No Backup	X	X	X	X	X	X	X	X
Max Walk								
Max Extension								
Sequential Timing								
No Min Yellow								
FDW Ped Recycle								

Pensacola
Davis Hwy & Fairfield Drive > Coordination >

5.2 Patterns	1	2	3	4	5	6	7	8
Cycle Time	150	150	160	150	0	0	0	0
Offset Time	60	60	60	60	0	0	0	0
Split	1	2	3	4	1	1	1	1
Sequence	3	3	3	3	1	1	1	1
Correction Mode								
Maximum Mode								
Force Mode								
Perm Strategy								
Omit Strategy								
Early Return	Default							
Texas Diamond								
Max2 Phases								
Phase Timing Set	1	1	1	1	1	1	1	1
Phase Option Set	1	1	1	1	1	1	1	1
Overlap Set	1	1	1	1	1	1	1	1
Veh. Det. Set	1	1	1	1	1	1	1	1
Ped. Det. Set	1	1	1	1	1	1	1	1
Veh. Det. Diag Set	1	1	1	1	1	1	1	1
Ped. Det. Diag Set	1	1	1	1	1	1	1	1
Priority Set	1	1	1	1	1	1	1	1
Ped Ovlp Set	1	1	1	1	1	1	1	1
Det. Reset								

5.2 Patterns	9	10	11	12	13	14	15	16
Cycle Time	0	0	0	0	0	0	0	0
Offset Time	0	0	0	0	0	0	0	0
Split	1	1	1	1	1	1	1	1
Sequence	1	1	1	1	1	1	1	1
Correction Mode								
Maximum Mode								
Force Mode								
Perm Strategy								
Omit Strategy								
Early Return	Default							
Texas Diamond								
Max2 Phases								
Phase Timing Set	1	1	1	1	1	1	1	1
Phase Option Set	1	1	1	1	1	1	1	1
Overlap Set	1	1	1	1	1	1	1	1
Veh. Det. Set	1	1	1	1	1	1	1	1
Ped. Det. Set	1	1	1	1	1	1	1	1
Veh. Det. Diag Set	1	1	1	1	1	1	1	1
Ped. Det. Diag Set	1	1	1	1	1	1	1	1
Priority Set	1	1	1	1	1	1	1	1
Ped Ovlp Set	1	1	1	1	1	1	1	1
Det. Reset								

**Pensacola
Davis Hwy & Fairfield Drive > Coordination > Split Tables**

5.3 Split Table 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	31	64	20	35	18	77	20	35	0	0	0	0	0	0	0	0
Mode	NONE	PED	NONE	NONE	NONE	PED	NONE									
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Split Table 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	28	62	24	36	16	74	24	36	0	0	0	0	0	0	0	0
Mode	NONE	PED	NONE	NONE	NONE	PED	NONE									
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Split Table 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	27	63	22	48	16	74	22	48	0	0	0	0	0	0	0	0
Mode	NONE	PED	NONE	NONE	NONE	PED	NONE									
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Split Table 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time (sec)	30	58	20	42	16	72	20	42	0	0	0	0	0	0	0	0
Mode	NONE	PED	NONE	NONE	NONE	PED	PED	NONE								
Coord. Phase		X				X										
Manual Permit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manual Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Split Table 5

Pensacola
Davis Hwy & Fairfield Drive > Time Base > Day Plans

6.5 Day Plan 1

Event#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour	0	6	10	14	18	19	0	0	0	0	0	0	0	0	0	0
Minute	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Action	6	1	2	3	2	6	0	0	0	0	0	0	0	0	0	0

**Pensacola
Davis Hwy & Fairfield Drive > Time Base > Actions**

6.6 Action Parameters	1	2	3	4	5	6	7	8
Pattern	1	2	3	4	5	6	7	8
Auxiliary Function	1	2	3	4	5	254	0	0
Special Functions 1-8								
Special Functions 9-16								
Detector Reset	No Action							
Detector VOS Log	No Action							
Speed Trap Log	No Action							
Cycle MOE Log	No Action							
High Res Log	No Action							



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Appendix E:
Synchro/SimTraffic and SIDRA Output



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Existing Year (2019) Analysis

Intersection: 1: Alcaniz St & E Gregory Street

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LT	T	TR	UL	T	T	T	T	T	TR
Maximum Queue (ft)	284	211	67	68	48	118	115	155	107	94
Average Queue (ft)	161	69	11	21	17	45	55	48	45	56
95th Queue (ft)	236	158	38	54	42	88	99	100	86	90
Link Distance (ft)	584	584	584		543	543	543	219	219	219
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				120						
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 2: Alcaniz St & E Wright Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	T	TR	LT	T	UL	R	R	LT	TR
Maximum Queue (ft)	49	55	11	2	50	98	79	79	56
Average Queue (ft)	11	23	8	0	20	41	49	35	38
95th Queue (ft)	35	48	15	1	47	71	81	56	57
Link Distance (ft)	739	739	295	295	219	219	219	1624	1624
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	LT	T	R
Maximum Queue (ft)	379	368	194	334	284	116	73	94
Average Queue (ft)	239	236	84	199	178	41	25	40
95th Queue (ft)	415	399	183	276	246	84	59	76
Link Distance (ft)	339	339		323	323	2392	2392	
Upstream Blk Time (%)	5	5		0				
Queuing Penalty (veh)	31	31		2				
Storage Bay Dist (ft)			95					315
Storage Blk Time (%)			4	16				
Queuing Penalty (veh)			21	19				

Intersection: 4: Haynes St/I-110 NB On Ramp & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	L	T	R
Maximum Queue (ft)	215	435	435	225	184	71	71	91
Average Queue (ft)	133	202	185	120	115	17	32	25
95th Queue (ft)	225	466	445	211	199	53	59	59
Link Distance (ft)		401	401	339	339	359	359	
Upstream Blk Time (%)		11	9					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)	155							125
Storage Blk Time (%)	6	13						
Queuing Penalty (veh)	38	42						

Intersection: 5: Martin Luther King Jr Dr & E Blount St

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	TR
Maximum Queue (ft)	70	31	116	50	75
Average Queue (ft)	26	8	38	18	29
95th Queue (ft)	62	31	86	46	68
Link Distance (ft)	376		331	2046	2046
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		120			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 6: Martin Luther King Jr Dr & E Jordan St

Movement	EB	EB	SB	SB
Directions Served	T	TR	LT	T
Maximum Queue (ft)	31	31	56	56
Average Queue (ft)	31	27	29	30
95th Queue (ft)	31	44	59	58
Link Distance (ft)	31	31	278	278
Upstream Blk Time (%)	17	5		
Queuing Penalty (veh)	26	7		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Haynes St & E Jordan St

Movement	EB	EB	NB	NB
Directions Served	T	T	T	TR
Maximum Queue (ft)	72	30	29	74
Average Queue (ft)	32	2	1	33
95th Queue (ft)	59	14	10	61
Link Distance (ft)	265	265	406	406
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Haynes St/I-110 NB & E Maxwell Street

Movement	WB	NB	NB
Directions Served	T	L	T
Maximum Queue (ft)	77	30	144
Average Queue (ft)	3	6	73
95th Queue (ft)	25	25	123
Link Distance (ft)	40	279	279
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Martin Luther King Jr Dr & E Maxwell Street

Movement	WB	WB	WB	SB	SB	SB
Directions Served	LT	T	T	T	T	R
Maximum Queue (ft)	94	55	118	70	93	73
Average Queue (ft)	44	17	56	15	21	27
95th Queue (ft)	79	49	96	50	62	55
Link Distance (ft)	334	334	334	1700	1700	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						330
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Martin Luther King Jr Dr & E Cross St

Movement	EB	WB
Directions Served	UTR	ULT
Maximum Queue (ft)	98	55
Average Queue (ft)	36	36
95th Queue (ft)	62	56
Link Distance (ft)	209	329
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Martin Luther King Jr Dr & E Texar Dr

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	UT	TR	L	T	T	LT	TR
Maximum Queue (ft)	173	92	32	127	96	249	254
Average Queue (ft)	59	25	15	52	20	104	120
95th Queue (ft)	122	64	39	109	61	192	216
Link Distance (ft)	701	701		320	320	1273	1273
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			115				
Storage Blk Time (%)				0			
Queuing Penalty (veh)				0			

Intersection: 12: Martin Luther King Jr Dr & Hart Dr

Movement	EB	WB	SB
Directions Served	TR	LT	TR
Maximum Queue (ft)	30	45	11
Average Queue (ft)	6	11	0
95th Queue (ft)	26	33	4
Link Distance (ft)	83	53	29
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: E Wright Street & N Davis Hwy

Movement	WB
Directions Served	TR
Maximum Queue (ft)	32
Average Queue (ft)	26
95th Queue (ft)	43
Link Distance (ft)	772
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 14: N Davis Hwy & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	LT	T	R
Maximum Queue (ft)	75	171	202	244	154	181	145	121
Average Queue (ft)	25	54	56	82	55	81	26	42
95th Queue (ft)	58	151	164	159	134	157	76	76
Link Distance (ft)		323	323	473	473	1619	1619	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	130							140
Storage Blk Time (%)		1					0	0
Queuing Penalty (veh)		1					0	0

Intersection: 15: N Davis Hwy & E Blount St

Movement	EB	EB	WB	NB	NB
Directions Served	L	T	TR	LT	TR
Maximum Queue (ft)	31	74	142	79	74
Average Queue (ft)	3	24	60	32	20
95th Queue (ft)	18	56	111	67	55
Link Distance (ft)		331	493	2388	2388
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 16: N Davis Hwy & E Jordan St

Movement	EB	EB	NB	NB
Directions Served	LT	T	T	TR
Maximum Queue (ft)	56	53	98	56
Average Queue (ft)	31	29	36	32
95th Queue (ft)	39	44	66	51
Link Distance (ft)	354	354	2061	2061
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: N Davis Hwy & E Maxwell Street

Movement	WB	WB	WB	NB
Directions Served	T	T	R	LT
Maximum Queue (ft)	79	56	31	31
Average Queue (ft)	37	39	8	3
95th Queue (ft)	59	62	30	17
Link Distance (ft)	521	521	521	282
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: N Davis Hwy & E Cross St

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	79	74
Average Queue (ft)	36	36
95th Queue (ft)	58	61
Link Distance (ft)	329	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 19: N Davis Hwy & E Texar Dr

Movement	EB	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	T	TR	LT	TR
Maximum Queue (ft)	91	95	70	135	113	210	147
Average Queue (ft)	32	32	13	52	21	81	81
95th Queue (ft)	71	74	46	114	58	140	135
Link Distance (ft)		320	320	592	592	2355	2355
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	130						
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 20: N Davis Hwy & Hart Dr

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	21	48
Average Queue (ft)	8	10
95th Queue (ft)	24	35
Link Distance (ft)	53	194
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: N Davis Hwy & I-110 Ramp/Driveway

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	TR	UL	T	T
Maximum Queue (ft)	271	401	214	44	30	185	201	113	48	119	143
Average Queue (ft)	127	217	21	7	7	115	34	36	13	35	62
95th Queue (ft)	254	338	123	26	27	173	100	93	37	82	115
Link Distance (ft)		415		307	307		251	251		525	525
Upstream Blk Time (%)		0									
Queuing Penalty (veh)		0									
Storage Bay Dist (ft)	250		190			225			150		
Storage Blk Time (%)		15	0								
Queuing Penalty (veh)		30	0								

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	T	UL	T	T	TR	L	L	T
Maximum Queue (ft)	192	212	181	135	98	32	288	274	177	75	98	202
Average Queue (ft)	96	143	94	58	8	6	166	117	30	14	40	93
95th Queue (ft)	187	198	158	117	48	22	246	210	113	49	83	166
Link Distance (ft)			890	890	890		469	469	469			525
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250				190				270	270	
Storage Blk Time (%)							4					
Queuing Penalty (veh)							1					

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	NB	SB	SB	SB
Directions Served	T	UL	T	T
Maximum Queue (ft)	219	107	108	170
Average Queue (ft)	116	52	47	87
95th Queue (ft)	192	95	88	157
Link Distance (ft)	525		748	748
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		285		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: N Davis Hwy

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 35: N Davis Hwy & Martin Luther King Jr Dr

Movement

Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 1000: Martin Luther King Jr Dr

Movement **WB**

Directions Served L
Maximum Queue (ft) 30
Average Queue (ft) 3
95th Queue (ft) 17
Link Distance (ft) 144
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 252

Existing Year 2019 PM
 Queuing and Blocking Report

03/25/2020

Intersection: 1: Alcaniz St & E Gregory Street

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LT	T	TR	UL	T	T	T	T	T	TR
Maximum Queue (ft)	183	125	24	120	139	196	257	66	67	92
Average Queue (ft)	99	16	4	54	33	96	131	23	35	39
95th Queue (ft)	166	59	19	110	83	164	209	48	57	80
Link Distance (ft)	584	584	584		543	543	543	219	219	219
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				120						
Storage Blk Time (%)				2	1					
Queuing Penalty (veh)				3	0					

Intersection: 2: Alcaniz St & E Wright Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	T	TR	ULT	T	UL	R	R	LT	TR
Maximum Queue (ft)	27	30	11	2	53	131	235	55	55
Average Queue (ft)	12	26	8	0	24	67	109	28	38
95th Queue (ft)	35	42	15	1	48	112	171	46	56
Link Distance (ft)	739	739	295	295	219	219	219	1633	1633
Upstream Blk Time (%)							0		
Queuing Penalty (veh)							0		
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	LT	T	R
Maximum Queue (ft)	370	349	194	261	284	120	73	90
Average Queue (ft)	228	229	58	175	169	63	27	43
95th Queue (ft)	366	362	141	253	251	111	62	79
Link Distance (ft)	340	340		326	326	2383	2383	
Upstream Blk Time (%)	2	2						
Queuing Penalty (veh)	12	10						
Storage Bay Dist (ft)			95					315
Storage Blk Time (%)			0	12				
Queuing Penalty (veh)			2	11				

Intersection: 4: Haynes St/I-110 NB On Ramp & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	L	T	R
Maximum Queue (ft)	214	416	419	326	340	53	199	150
Average Queue (ft)	156	143	105	162	168	15	84	37
95th Queue (ft)	227	373	289	269	290	41	151	106
Link Distance (ft)		401	401	340	340	359	359	
Upstream Blk Time (%)		5	4	0	0			
Queuing Penalty (veh)		0	0	0	2			
Storage Bay Dist (ft)	155							125
Storage Blk Time (%)	12	4					3	0
Queuing Penalty (veh)	71	17					1	0

Intersection: 5: Martin Luther King Jr Dr & E Blount St

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	TR
Maximum Queue (ft)	119	31	96	79	98
Average Queue (ft)	77	4	48	18	36
95th Queue (ft)	120	21	87	57	71
Link Distance (ft)	376		331	2046	2046
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		120			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Martin Luther King Jr Dr & E Jordan St

Movement	EB	EB	SB	SB
Directions Served	T	TR	LT	T
Maximum Queue (ft)	31	52	103	103
Average Queue (ft)	31	31	35	39
95th Queue (ft)	31	48	70	70
Link Distance (ft)	31	31	278	278
Upstream Blk Time (%)	15	6		
Queuing Penalty (veh)	22	10		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Existing Year 2019 PM
 Queuing and Blocking Report

03/25/2020

Intersection: 7: Haynes St & E Jordan St

Movement	EB	EB	EB	NB	NB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	21	70	30	30	72
Average Queue (ft)	1	26	2	3	37
95th Queue (ft)	9	54	14	17	61
Link Distance (ft)	265	265	265	406	406
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Haynes St/I-110 NB & E Maxwell Street

Movement	WB	NB	NB
Directions Served	T	L	T
Maximum Queue (ft)	29	30	288
Average Queue (ft)	1	10	157
95th Queue (ft)	10	33	264
Link Distance (ft)	40	279	279
Upstream Blk Time (%)	0		1
Queuing Penalty (veh)	0		1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Martin Luther King Jr Dr & E Maxwell Street

Movement	WB	WB	WB	SB	SB	SB
Directions Served	LT	T	T	T	T	R
Maximum Queue (ft)	70	51	94	136	120	75
Average Queue (ft)	32	14	41	25	36	31
95th Queue (ft)	62	41	70	80	83	63
Link Distance (ft)	334	334	334	1700	1700	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						330
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Martin Luther King Jr Dr & E Cross St

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	56	54
Average Queue (ft)	37	25
95th Queue (ft)	54	48
Link Distance (ft)	209	329
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Martin Luther King Jr Dr & E Texar Dr

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	UT	TR	L	T	T	LT	TR
Maximum Queue (ft)	162	152	72	129	99	191	186
Average Queue (ft)	85	36	20	38	16	119	114
95th Queue (ft)	159	100	51	88	56	186	182
Link Distance (ft)	701	701		324	324	1274	1274
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			115				
Storage Blk Time (%)				0			
Queuing Penalty (veh)				0			

Intersection: 12: Martin Luther King Jr Dr & Hart Dr

Movement	EB	WB	SB	SB
Directions Served	TR	LT	LT	TR
Maximum Queue (ft)	94	27	48	12
Average Queue (ft)	14	7	2	1
95th Queue (ft)	55	26	16	5
Link Distance (ft)	83	53	29	29
Upstream Blk Time (%)	0		0	0
Queuing Penalty (veh)	0		0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 13: E Wright Street & N Davis Hwy

Movement	WB
Directions Served	TR
Maximum Queue (ft)	52
Average Queue (ft)	29
95th Queue (ft)	50
Link Distance (ft)	772
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 14: N Davis Hwy & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	LT	T	R
Maximum Queue (ft)	136	137	141	238	134	180	220	175
Average Queue (ft)	46	51	55	87	63	101	62	97
95th Queue (ft)	90	111	120	171	124	159	146	168
Link Distance (ft)		326	326	473	473	1626	1626	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	130							140
Storage Blk Time (%)	0	0					1	4
Queuing Penalty (veh)	2	0					3	2

Intersection: 15: N Davis Hwy & E Blount St

Movement	EB	EB	WB	NB	NB
Directions Served	L	T	TR	LT	TR
Maximum Queue (ft)	53	118	100	92	72
Average Queue (ft)	10	43	28	37	33
95th Queue (ft)	36	100	71	66	66
Link Distance (ft)		331	493	2383	2383
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)	0	3			
Queuing Penalty (veh)	0	1			

Intersection: 16: N Davis Hwy & E Jordan St

Movement	EB	EB	NB	NB
Directions Served	LT	T	T	TR
Maximum Queue (ft)	54	51	74	57
Average Queue (ft)	31	26	33	34
95th Queue (ft)	38	46	56	54
Link Distance (ft)	354	354	2061	2061
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: N Davis Hwy & E Maxwell Street

Movement	WB	WB	WB
Directions Served	T	T	R
Maximum Queue (ft)	91	55	31
Average Queue (ft)	32	30	16
95th Queue (ft)	61	53	41
Link Distance (ft)	521	521	521
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: N Davis Hwy & E Cross St

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	55	31
Average Queue (ft)	33	24
95th Queue (ft)	44	44
Link Distance (ft)	329	222
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Existing Year 2019 PM
 Queuing and Blocking Report

03/25/2020

Intersection: 19: N Davis Hwy & E Texar Dr

Movement	EB	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	T	TR	LT	TR
Maximum Queue (ft)	204	207	75	181	135	301	185
Average Queue (ft)	68	48	37	63	25	141	113
95th Queue (ft)	137	112	78	126	71	232	185
Link Distance (ft)		324	324	592	592	2365	2365
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	130						
Storage Blk Time (%)	1						
Queuing Penalty (veh)	3						

Intersection: 20: N Davis Hwy & Hart Dr

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	53	55
Average Queue (ft)	9	9
95th Queue (ft)	32	33
Link Distance (ft)	53	194
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: N Davis Hwy & I-110 Ramp/Driveway

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	LT	R	L	TR	L	T	TR	UL	T	T
Maximum Queue (ft)	274	300	215	26	30	241	168	184	30	114	525
Average Queue (ft)	126	199	21	5	10	103	48	91	2	52	81
95th Queue (ft)	239	291	126	21	32	193	104	162	14	100	227
Link Distance (ft)		415		307	307		251	251		525	525
Upstream Blk Time (%)						0					0
Queuing Penalty (veh)						0					0
Storage Bay Dist (ft)	250		190			225			150		
Storage Blk Time (%)		16	0			1					
Queuing Penalty (veh)		34	0			1					

Existing Year 2019 PM
 Queuing and Blocking Report

03/25/2020

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	T	L	T	T	TR	L	L	T
Maximum Queue (ft)	181	248	224	210	163	239	445	383	282	112	123	173
Average Queue (ft)	105	150	104	95	25	35	251	206	83	25	51	88
95th Queue (ft)	187	217	192	178	99	150	378	350	206	68	89	162
Link Distance (ft)			890	890	890		469	469	469			525
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250				190				270	270	
Storage Blk Time (%)		0					16					
Queuing Penalty (veh)		0					4					

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	NB	SB	SB	SB
Directions Served	T	UL	T	T
Maximum Queue (ft)	180	131	111	203
Average Queue (ft)	98	61	45	108
95th Queue (ft)	167	116	91	179
Link Distance (ft)	525		748	748
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		285		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: N Davis Hwy

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 35: N Davis Hwy & Martin Luther King Jr Dr

Movement	SB
Directions Served	R
Maximum Queue (ft)	79
Average Queue (ft)	3
95th Queue (ft)	26
Link Distance (ft)	251
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1000: Martin Luther King Jr Dr

Movement	WB
Directions Served	L
Maximum Queue (ft)	31
Average Queue (ft)	2
95th Queue (ft)	15
Link Distance (ft)	144
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 212

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
2: Alcaniz St & E Wright Street

03/25/2020

Intersection

Intersection Delay, s/veh 8.8
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↔↑			↔		↔↔		↔↑	
Traffic Vol, veh/h	0	45	10	35	25	0	5	25	0	175	5	185	35
Future Vol, veh/h	0	45	10	35	25	0	5	25	0	175	5	185	35
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	3	3	3	3
Mvmt Flow	0	49	11	38	27	0	5	27	0	192	5	203	38
Number of Lanes	0	2	0	0	2	0	0	1	0	2	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	8.8	9.4	8.3	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	81%	0%	5%	0%
Vol Thru, %	0%	0%	0%	100%	60%	19%	100%	95%	73%
Vol Right, %	0%	100%	100%	0%	40%	0%	0%	0%	27%
Sign Control	Stop								
Traffic Vol by Lane	30	88	88	30	25	43	17	98	128
LT Vol	30	0	0	0	0	35	0	5	0
Through Vol	0	0	0	30	15	8	17	93	93
RT Vol	0	88	88	0	10	0	0	0	35
Lane Flow Rate	33	96	96	33	27	48	18	107	140
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.055	0.127	0.127	0.054	0.042	0.082	0.03	0.16	0.201
Departure Headway (Hd)	5.955	4.749	4.749	5.849	5.568	6.23	5.824	5.392	5.174
Convergence, Y/N	Yes								
Cap	599	750	750	607	637	571	610	661	689
Service Time	3.715	2.508	2.508	3.632	3.351	4.013	3.607	3.156	2.937
HCM Lane V/C Ratio	0.055	0.128	0.128	0.054	0.042	0.084	0.03	0.162	0.203
HCM Control Delay	9.1	8.2	8.2	9	8.6	9.6	8.8	9.2	9.2
HCM Lane LOS	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.4	0.2	0.1	0.3	0.1	0.6	0.7

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↔	↑↑						↑↑	↔
Traffic Volume (veh/h)	0	1115	100	120	1210	0	0	0	0	40	35	60
Future Volume (veh/h)	0	1115	100	120	1210	0	0	0	0	40	35	60
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No		No						No		
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1826	1826	1826
Adj Flow Rate, veh/h	0	1225	110	132	1330	0				44	38	66
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	1	1	1	1	0				5	5	5
Cap, veh/h	0	2070	185	292	2533	0				360	359	321
Arrive On Green	0.00	0.62	0.62	0.08	1.00	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	3419	298	1795	3676	0				1739	1735	1547
Grp Volume(v), veh/h	0	659	676	132	1330	0				44	38	66
Grp Sat Flow(s),veh/h/ln	0	1791	1832	1795	1791	0				1739	1735	1547
Q Serve(g_s), s	0.0	30.7	30.9	3.7	0.0	0.0				2.9	2.5	4.9
Cycle Q Clear(g_c), s	0.0	30.7	30.9	3.7	0.0	0.0				2.9	2.5	4.9
Prop In Lane	0.00		0.16	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1115	1140	292	2533	0				360	359	321
V/C Ratio(X)	0.00	0.59	0.59	0.45	0.53	0.00				0.12	0.11	0.21
Avail Cap(c_a), veh/h	0	1115	1140	423	2533	0				360	359	321
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.92	0.92	0.85	0.85	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.8	15.8	12.8	0.0	0.0				45.1	45.0	46.0
Incr Delay (d2), s/veh	0.0	1.2	1.2	0.7	0.7	0.0				0.7	0.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.4	12.8	1.3	0.2	0.0				1.3	1.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.0	17.0	13.5	0.7	0.0				45.8	45.6	47.4
LnGrp LOS	A	B	B	B	A	A				D	D	D
Approach Vol, veh/h		1335			1462						148	
Approach Delay, s/veh		17.0			1.8						46.5	
Approach LOS		B			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	1.8	93.2		35.0		105.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	6.0	77.0		29.0		99.0						
Max Q Clear Time (g_c+1/2), s	6.0	32.9		6.9		2.0						
Green Ext Time (p_c), s	0.2	24.9		0.4		35.8						
Intersection Summary												
HCM 6th Ctrl Delay				10.9								
HCM 6th LOS				B								

Davis Highway/MLK Drive Two-Way Conversion Study
4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑			↑↑		↖	↑	↗			
Traffic Volume (veh/h)	315	1185	0	0	1030	240	15	35	30	0	0	0
Future Volume (veh/h)	315	1185	0	0	1030	240	15	35	30	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1885	1885	1900	1900	1900			
Adj Flow Rate, veh/h	346	1302	0	0	1132	264	16	38	33			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	1	1	0	0	0			
Cap, veh/h	452	3125	0	0	2256	522	63	66	56			
Arrive On Green	0.06	0.88	0.00	0.00	1.00	1.00	0.03	0.03	0.03			
Sat Flow, veh/h	1781	3647	0	0	2982	668	1810	1900	1610			
Grp Volume(v), veh/h	346	1302	0	0	699	697	16	38	33			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1791	1765	1810	1900	1610			
Q Serve(g_s), s	5.0	9.8	0.0	0.0	0.0	0.0	1.2	2.8	2.8			
Cycle Q Clear(g_c), s	5.0	9.8	0.0	0.0	0.0	0.0	1.2	2.8	2.8			
Prop In Lane	1.00		0.00	0.00		0.38	1.00		1.00			
Lane Grp Cap(c), veh/h	452	3125	0	0	1399	1379	63	66	56			
V/C Ratio(X)	0.77	0.42	0.00	0.00	0.50	0.51	0.25	0.57	0.59			
Avail Cap(c_a), veh/h	722	3125	0	0	1399	1379	362	380	322			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	0.85	0.85	1.00	1.00	1.00			
Uniform Delay (d), s/veh	2.1	1.6	0.0	0.0	0.0	0.0	65.8	66.5	66.6			
Incr Delay (d2), s/veh	2.0	0.2	0.0	0.0	1.1	1.1	1.6	5.7	7.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.4	1.7	0.0	0.0	0.4	0.4	0.6	1.4	1.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.1	1.8	0.0	0.0	1.1	1.1	67.3	72.3	73.7			
LnGrp LOS	A	A	A	A	A	A	E	E	E			
Approach Vol, veh/h		1648			1396			87				
Approach Delay, s/veh		2.3			1.1			71.9				
Approach LOS		A			A			E				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	3.8	115.4		10.9		129.1						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	29.0	65.0		28.0		100.0						
Max Q Clear Time (g_c+11), s	2.0	2.0		4.8		11.8						
Green Ext Time (p_c), s	0.7	32.5		0.2		33.5						
Intersection Summary												
HCM 6th Ctrl Delay				3.7								
HCM 6th LOS				A								

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
7: Haynes St & E Jordan St

03/25/2020

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑						↑↑				
Traffic Vol, veh/h	160	300	0	0	0	0	0	75	5	0	0	0
Future Vol, veh/h	160	300	0	0	0	0	0	75	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	0	0	0
Mvmt Flow	176	330	0	0	0	0	0	82	5	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	0	0	-	-	682	165
Stage 1	-	-	-	-	682	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.21	-	-	-	4.01	3.31
Pot Cap-1 Maneuver	-	-	0	0	373	854
Stage 1	-	-	0	0	450	-
Stage 2	-	-	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	0	854
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT
Capacity (veh/h)	-	854	-	-
HCM Lane V/C Ratio	-	0.055	-	-
HCM Control Delay (s)	-	9.5	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

HCM 6th Edition methodology does not support clustered intersections.

HCM 6th Edition methodology does not support clustered intersections.

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

03/25/2020

Intersection															
Int Delay, s/veh	5														
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations			↔				↔						↔↔		
Traffic Vol, veh/h	5	0	70	15	5	5	65	0	0	0	0	5	155	35	
Future Vol, veh/h	5	0	70	15	5	5	65	0	0	0	0	5	155	35	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Free	Free	Free	Free	Free	Free								
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	16983	-	-	0	-	
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91	91	91	
Heavy Vehicles, %	12	12	12	12	11	11	11	11	0	0	0	5	5	5	
Mvmt Flow	5	0	77	16	5	5	71	0	0	0	0	5	170	38	

Major/Minor	Minor2			Minor1				Major2			
Conflicting Flow All	0	-	199	104	0	134	218	-	0	0	0
Stage 1	0	-	199	-	0	0	0	-	-	-	-
Stage 2	0	-	0	-	0	134	218	-	-	-	-
Critical Hdwy	-	-	6.74	7.14	-	7.72	6.72	-	4.2	-	-
Critical Hdwy Stg 1	-	-	5.74	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	6.72	5.72	-	-	-	-
Follow-up Hdwy	-	-	4.12	3.42	-	3.61	4.11	-	2.25	-	-
Pot Cap-1 Maneuver	0	0	673	899	0	800	659	0	-	-	-
Stage 1	0	0	711	-	0	-	-	0	-	-	-
Stage 2	0	0	-	-	0	830	700	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	0	-	673	899	0	717	659	-	-	-	-
Mov Cap-2 Maneuver	0	-	673	-	0	717	659	-	-	-	-
Stage 1	0	-	711	-	0	-	-	-	-	-	-
Stage 2	0	-	-	-	0	727	700	-	-	-	-

Approach	EB			WB			SB		
HCM Control Delay, s	10.9			11.1					
HCM LOS	B			B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	704	663	-	-	-
HCM Lane V/C Ratio	0.133	0.116	-	-	-
HCM Control Delay (s)	10.9	11.1	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.5	0.4	-	-	-

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	5	5	10	5	0	0	0	0	15	285	0
Future Vol, veh/h	0	5	5	10	5	0	0	0	0	15	285	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	9	9	9	0	0	0	3	3	3
Mvmt Flow	0	5	5	11	5	0	0	0	0	16	313	0

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	345	157	191	345	-	-	0	0	0
Stage 1	-	345	-	0	0	-	-	-	-	-
Stage 2	-	0	-	191	345	-	-	-	-	-
Critical Hdwy	-	6.5	6.9	7.68	6.68	-	-	4.16	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.68	5.68	-	-	-	-	-
Follow-up Hdwy	-	4	3.3	3.59	4.09	-	-	2.23	-	-
Pot Cap-1 Maneuver	0	581	867	733	561	0	-	-	-	-
Stage 1	0	640	-	-	-	0	-	-	-	-
Stage 2	0	-	-	773	617	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	581	867	723	561	-	-	-	-	-
Mov Cap-2 Maneuver	-	581	-	723	561	-	-	-	-	-
Stage 1	-	640	-	-	-	-	-	-	-	-
Stage 2	-	-	-	762	617	-	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	10.3		10.6			
HCM LOS	B		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	696	660	-	-	-
HCM Lane V/C Ratio	0.016	0.025	-	-	-
HCM Control Delay (s)	10.3	10.6	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0	0.1	-	-	-

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

03/25/2020

Intersection

Int Delay, s/veh 1.8

Movement EBU EBL EBT WBT WBR SBL SBR

Lane Configurations		↖	↗	↘			
Traffic Vol, veh/h	5	160	60	55	5	0	0
Future Vol, veh/h	5	160	60	55	5	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-	-
Veh in Median Storage, #	-	-	0	0	-	16965	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	0	0	0	0
Mvmt Flow	5	176	66	60	5	0	0

Major/Minor Major1 Minor2

Conflicting Flow All	-	0	0	428	5
Stage 1	-	-	-	0	-
Stage 2	-	-	-	428	-
Critical Hdwy	-	4.13	-	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.5	-
Follow-up Hdwy	-	2.227	-	4	3.3
Pot Cap-1 Maneuver	-	-	-	522	1084
Stage 1	-	-	-	-	-
Stage 2	-	-	-	588	-
Platoon blocked, %			-		
Mov Cap-1 Maneuver	-	-	-	0	1084
Mov Cap-2 Maneuver	-	-	-	0	-
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-

Approach EB WB

HCM Control Delay, s		8.5
HCM LOS		A

Minor Lane/Major Mvmt EBL EBTWBLn1

Capacity (veh/h)	-	-	1084
HCM Lane V/C Ratio	-	-	0.061
HCM Control Delay (s)	-	-	8.5
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.2

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑			↑↑			↖↖	↗			
Traffic Volume (veh/h)	60	1095	0	0	1265	0	65	40	90	0	0	0
Future Volume (veh/h)	60	1095	0	0	1265	0	65	40	90	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1885	1885	1856	1856	1856			
Adj Flow Rate, veh/h	66	1203	0	0	1390	0	71	44	99			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	1	1	3	3	3			
Cap, veh/h	351	3039	0	0	2815	0	98	98	87			
Arrive On Green	0.03	0.86	0.00	0.00	0.79	0.00	0.06	0.06	0.06			
Sat Flow, veh/h	1781	3647	0	0	3770	0	1767	1763	1572			
Grp Volume(v), veh/h	66	1203	0	0	1390	0	71	44	99			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1791	0	1767	1763	1572			
Q Serve(g_s), s	0.9	10.4	0.0	0.0	19.0	0.0	5.5	3.4	7.8			
Cycle Q Clear(g_c), s	0.9	10.4	0.0	0.0	19.0	0.0	5.5	3.4	7.8			
Prop In Lane	1.00		0.00	0.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	351	3039	0	0	2815	0	98	98	87			
V/C Ratio(X)	0.19	0.40	0.00	0.00	0.49	0.00	0.72	0.45	1.13			
Avail Cap(c_a), veh/h	419	3039	0	0	2815	0	316	315	281			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.74	0.74	0.00	0.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	4.1	2.2	0.0	0.0	5.2	0.0	65.0	64.0	66.1			
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	0.6	0.0	9.6	3.2	85.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	2.3	0.0	0.0	6.2	0.0	2.7	1.6	5.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.2	2.4	0.0	0.0	5.9	0.0	74.6	67.2	151.9			
LnGrp LOS	A	A	A	A	A	A	E	E	F			
Approach Vol, veh/h		1269			1390			214				
Approach Delay, s/veh		2.5			5.9			108.9				
Approach LOS		A			A			F				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.7	116.5		13.8		126.2						
Change Period (Y+Rc), s	6.0	6.5		6.0		6.5						
Max Green Setting (Gmax), s	9.0	87.5		25.0		102.5						
Max Q Clear Time (g_c+I1), s	2.9	21.0		7.5		12.4						
Green Ext Time (p_c), s	0.0	33.7		0.3		29.1						
Intersection Summary												
HCM 6th Ctrl Delay				12.0								
HCM 6th LOS				B								

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020

Intersection

Intersection Delay, s/veh 9.2
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑				
Traffic Vol, veh/h	50	245	0	0	0	0	0	155	10	0	0	0
Future Vol, veh/h	50	245	0	0	0	0	0	155	10	0	0	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	4	4	4	0	0	0
Mvmt Flow	55	269	0	0	0	0	0	170	11	0	0	0
Number of Lanes	0	2	0	0	0	0	0	2	0	0	0	0

Approach	EB	NB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left		EB
Conflicting Lanes Left	0	2
Conflicting Approach Right	NB	
Conflicting Lanes Right	2	0
HCM Control Delay	9.3	9
HCM LOS	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2
Vol Left, %	0%	0%	38%	0%
Vol Thru, %	100%	84%	62%	100%
Vol Right, %	0%	16%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	103	62	132	163
LT Vol	0	0	50	0
Through Vol	103	52	82	163
RT Vol	0	10	0	0
Lane Flow Rate	114	68	145	179
Geometry Grp	7	7	7	7
Degree of Util (X)	0.169	0.099	0.208	0.248
Departure Headway (Hd)	5.372	5.258	5.17	4.979
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	669	682	696	722
Service Time	3.097	2.983	2.893	2.703
HCM Lane V/C Ratio	0.17	0.1	0.208	0.248
HCM Control Delay	9.2	8.6	9.3	9.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.3	0.8	1

Davis Highway/MLK Drive Two-Way Conversion Study
 17: N Davis Hwy & E Maxwell Street

03/25/2020

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑↑				
Traffic Vol, veh/h	0	0	0	0	245	10	30	175	0	0	0	0
Future Vol, veh/h	0	0	0	0	245	10	30	175	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	1	1	1	4	4	4	0	0	0
Mvmt Flow	0	0	0	0	269	11	33	192	0	0	0	0

Major/Minor	Minor1	Major1			
Conflicting Flow All	-	258	96	0	0
Stage 1	-	258	-	-	-
Stage 2	-	0	-	-	-
Critical Hdwy	-	6.52	6.92	4.18	-
Critical Hdwy Stg 1	-	5.52	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	2.24	-
Pot Cap-1 Maneuver	0	647	945	-	0
Stage 1	0	695	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %					-
Mov Cap-1 Maneuver	-	0	945	-	-
Mov Cap-2 Maneuver	-	0	-	-	-
Stage 1	-	0	-	-	-
Stage 2	-	0	-	-	-

Approach	WB	NB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBL	NBTWBLn1	WBLn2	WBLn3
Capacity (veh/h)	-	-	-	945
HCM Lane V/C Ratio	-	-	-	0.012
HCM Control Delay (s)	-	-	-	8.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

03/25/2020

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	30	50	0	0	55	15	20	170	5	0	0	0
Future Vol, veh/h	30	50	0	0	55	15	20	170	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	15	15	15	10	10	10	3	3	3	0	0	0
Mvmt Flow	33	55	0	0	60	16	22	187	5	0	0	0

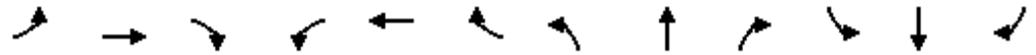
Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	168	236	-	-	234	96	0	0	0		
Stage 1	0	0	-	-	234	-	-	-	-		
Stage 2	168	236	-	-	0	-	-	-	-		
Critical Hdwy	7.8	6.8	-	-	6.7	7.1	4.16	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.7	-	-	-	-		
Critical Hdwy Stg 2	6.8	5.8	-	-	-	-	-	-	-		
Follow-up Hdwy	3.65	4.15	-	-	4.1	3.4	2.23	-	-		
Pot Cap-1 Maneuver	745	634	0	0	647	917	-	-	-		
Stage 1	-	-	0	0	691	-	-	-	-		
Stage 2	781	677	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	679	634	-	-	647	917	-	-	-		
Mov Cap-2 Maneuver	679	634	-	-	647	-	-	-	-		
Stage 1	-	-	-	-	691	-	-	-	-		
Stage 2	700	677	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	11.4		10.9				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	650	691
HCM Lane V/C Ratio	-	-	-	0.135	0.111
HCM Control Delay (s)	-	-	-	11.4	10.9
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.5	0.4

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑			↑↑			↑↑				
Traffic Volume (veh/h)	125	305	0	0	310	85	30	135	30	0	0	0
Future Volume (veh/h)	125	305	0	0	310	85	30	135	30	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1826	1826	0	0	1856	1856	1900	1811	1900			
Adj Flow Rate, veh/h	137	335	0	0	341	93	33	148	33			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	5	5	0	0	3	3	0	6	0			
Cap, veh/h	818	2978	0	0	2105	566	24	111	26			
Arrive On Green	0.05	0.86	0.00	0.00	0.77	0.77	0.05	0.05	0.05			
Sat Flow, veh/h	1739	3561	0	0	2840	739	522	2415	559			
Grp Volume(v), veh/h	137	335	0	0	217	217	113	0	101			
Grp Sat Flow(s),veh/h/ln	1739	1735	0	0	1763	1723	1785	0	1711			
Q Serve(g_s), s	1.9	2.0	0.0	0.0	4.3	4.4	6.0	0.0	6.0			
Cycle Q Clear(g_c), s	1.9	2.0	0.0	0.0	4.3	4.4	6.0	0.0	6.0			
Prop In Lane	1.00		0.00	0.00		0.43	0.29		0.33			
Lane Grp Cap(c), veh/h	818	2978	0	0	1351	1320	82	0	79			
V/C Ratio(X)	0.17	0.11	0.00	0.00	0.16	0.16	1.37	0.00	1.28			
Avail Cap(c_a), veh/h	1059	2978	0	0	1351	1320	461	0	442			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.98	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	2.3	1.4	0.0	0.0	4.0	4.1	62.0	0.0	62.0			
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.3	0.3	183.1	0.0	145.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.0	0.0	1.3	1.4	6.9	0.0	5.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.4	1.5	0.0	0.0	4.3	4.3	245.1	0.0	207.7			
LnGrp LOS	A	A	A	A	A	A	F	A	F			
Approach Vol, veh/h		472			434			214				
Approach Delay, s/veh		1.7			4.3			227.5				
Approach LOS		A			A			F				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	105.6		12.4		117.6						
Change Period (Y+Rc), s	6.0	6.0		6.4		6.0						
Max Green Setting (Gmax), s	24.0	54.0		33.6		54.0						
Max Q Clear Time (g_c+I1), s	3.9	6.4		2.0		4.0						
Green Ext Time (p_c), s	0.3	4.0		1.2		3.3						
Intersection Summary												
HCM 6th Ctrl Delay				45.9								
HCM 6th LOS				D								

Davis Highway/MLK Drive Two-Way Conversion Study
20: N Davis Hwy & Hart Dr

03/25/2020

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	5	15	0	0	10	5	5	310	5	0	0	0
Future Vol, veh/h	5	15	0	0	10	5	5	310	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	7	7	7	4	4	4	0	0	0
Mvmt Flow	5	16	0	0	11	5	5	341	5	0	0	0

Major/Minor

	Minor2	Minor1	Major1
Conflicting Flow All	186 356	- -	354 173 0 0 0
Stage 1	0 0	- -	354 - - - -
Stage 2	186 356	- -	0 - - - -
Critical Hdwy	7.5 6.5	- -	6.64 7.04 4.18 - -
Critical Hdwy Stg 1	- -	- -	5.64 - - - -
Critical Hdwy Stg 2	6.5 5.5	- -	- - - - -
Follow-up Hdwy	3.5 4	- -	4.07 3.37 2.24 - -
Pot Cap-1 Maneuver	763 573	0 0	559 825 - - -
Stage 1	- -	0 0	616 - - - -
Stage 2	804 633	0 0	- - - - -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	746 573	- -	559 825 - - -
Mov Cap-2 Maneuver	746 573	- -	559 - - - -
Stage 1	- -	- -	616 - - - -
Stage 2	784 633	- -	- - - - -

Approach

	EB	WB	NB
HCM Control Delay, s	11.1	10.9	
HCM LOS	B	B	

Minor Lane/Major Mvmt

	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	608	626
HCM Lane V/C Ratio	-	-	-	0.036	0.026
HCM Control Delay (s)	-	-	-	11.1	10.9
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

HCM 6th Edition methodology expects strict NEMA phasing.

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 1: Alcaniz St & E Gregory Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations					←↑↑↑			↓	↑↑↑			↑↑↑
Traffic Volume (vph)	0	0	0	295	480	25	5	20	180	0	0	195
Future Volume (vph)	0	0	0	295	480	25	5	20	180	0	0	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0			6.0	6.0			6.0
Lane Util. Factor					0.91			1.00	0.91			0.91
Frt					1.00			1.00	1.00			0.97
Flt Protected					0.98			0.95	1.00			1.00
Satd. Flow (prot)					5070			1752	5036			4955
Flt Permitted					0.98			0.95	1.00			1.00
Satd. Flow (perm)					5070			1752	5036			4955
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	324	527	27	5	22	198	0	0	214
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	32
Lane Group Flow (vph)	0	0	0	0	876	0	0	27	198	0	0	226
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	3%	3%	3%	2%	2%
Turn Type				Perm	NA		Prot	Prot	NA			NA
Protected Phases					2		7	7	4			8
Permitted Phases				2								
Actuated Green, G (s)					71.2			4.8	21.8			11.0
Effective Green, g (s)					71.2			4.8	21.8			11.0
Actuated g/C Ratio					0.68			0.05	0.21			0.10
Clearance Time (s)					6.0			6.0	6.0			6.0
Vehicle Extension (s)					5.0			3.0	4.0			4.0
Lane Grp Cap (vph)					3437			80	1045			519
v/s Ratio Prot								c0.02	0.04			c0.05
v/s Ratio Perm					0.17							
v/c Ratio					0.25			0.34	0.19			0.44
Uniform Delay, d1					6.6			48.6	34.3			44.1
Progression Factor					1.00			1.00	1.00			1.00
Incremental Delay, d2					0.2			2.5	0.1			0.8
Delay (s)					6.8			51.1	34.4			44.9
Level of Service					A			D	C			D
Approach Delay (s)		0.0			6.8				36.4			44.9
Approach LOS		A			A				D			D

Intersection Summary			
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	40.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	44
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	2%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑						↙↑	↗
Traffic Volume (vph)	0	1115	100	120	1210	0	0	0	0	40	35	60
Future Volume (vph)	0	1115	100	120	1210	0	0	0	0	40	35	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	6.0
Lane Util. Factor		0.95		1.00	0.95						0.95	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3530		1787	3574						3348	1538
Flt Permitted		1.00		0.12	1.00						0.97	1.00
Satd. Flow (perm)		3530		235	3574						3348	1538
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1225	110	132	1330	0	0	0	0	44	38	66
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	1331	0	132	1330	0	0	0	0	0	82	14
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	5%	5%	5%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		84.6		99.0	99.0						29.0	29.0
Effective Green, g (s)		84.6		99.0	99.0						29.0	29.0
Actuated g/C Ratio		0.60		0.71	0.71						0.21	0.21
Clearance Time (s)		6.0		6.0	6.0						6.0	6.0
Vehicle Extension (s)		5.0		2.5	5.0						2.5	2.5
Lane Grp Cap (vph)		2133		259	2527						693	318
v/s Ratio Prot		c0.38		0.03	c0.37							
v/s Ratio Perm				0.33							0.02	0.01
v/c Ratio		0.62		0.51	0.53						0.12	0.04
Uniform Delay, d1		17.6		13.3	9.6						45.1	44.4
Progression Factor		1.25		0.61	0.90						1.00	1.00
Incremental Delay, d2		0.8		1.0	0.7						0.3	0.3
Delay (s)		22.8		9.1	9.3						45.5	44.7
Level of Service		C		A	A						D	D
Approach Delay (s)		22.8			9.3			0.0			45.1	
Approach LOS		C			A			A			D	

Intersection Summary

HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑		↘	↑	↘			
Traffic Volume (vph)	315	1185	0	0	1030	240	15	35	30	0	0	0
Future Volume (vph)	315	1185	0	0	1030	240	15	35	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	3539			3473		1805	1900	1615			
Flt Permitted	0.12	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	223	3539			3473		1805	1900	1615			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	346	1302	0	0	1132	264	16	38	33	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	31	0	0	0
Lane Group Flow (vph)	346	1302	0	0	1386	0	16	38	2	0	0	0
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	121.3	121.3			88.2		6.7	6.7	6.7			
Effective Green, g (s)	121.3	121.3			88.2		6.7	6.7	6.7			
Actuated g/C Ratio	0.87	0.87			0.63		0.05	0.05	0.05			
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0		2.5	2.5	2.5			
Lane Grp Cap (vph)	492	3066			2187		86	90	77			
v/s Ratio Prot	c0.14	0.37			0.40			c0.02				
v/s Ratio Perm	c0.47						0.01		0.00			
v/c Ratio	0.70	0.42			0.63		0.19	0.42	0.02			
Uniform Delay, d1	27.1	2.0			16.0		64.0	64.8	63.5			
Progression Factor	1.00	1.00			0.63		1.00	1.00	1.00			
Incremental Delay, d2	4.2	0.2			1.2		0.8	2.3	0.1			
Delay (s)	31.3	2.2			11.3		64.8	67.1	63.6			
Level of Service	C	A			B		E	E	E			
Approach Delay (s)		8.3			11.3			65.3			0.0	
Approach LOS		A			B			E			A	

Intersection Summary

HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

03/25/2020



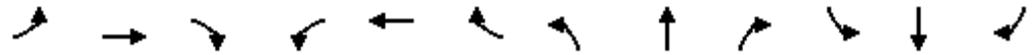
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↑						↔	
Traffic Volume (vph)	0	105	10	10	210	0	0	0	0	10	95	25
Future Volume (vph)	0	105	10	10	210	0	0	0	0	10	95	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.99		1.00	1.00						0.97	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1878		1805	1900						3265	
Flt Permitted		1.00		0.68	1.00						1.00	
Satd. Flow (perm)		1878		1285	1900						3265	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	115	11	11	231	0	0	0	0	11	104	27
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	0	0	23	0
Lane Group Flow (vph)	0	120	0	11	231	0	0	0	0	0	119	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	7%	7%
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		8.8		8.8	8.8						3.9	
Effective Green, g (s)		8.8		8.8	8.8						3.9	
Actuated g/C Ratio		0.36		0.36	0.36						0.16	
Clearance Time (s)		6.0		6.0	6.0						6.0	
Vehicle Extension (s)		4.0		4.0	4.0						4.0	
Lane Grp Cap (vph)		669		457	676						515	
v/s Ratio Prot		0.06			0.12							
v/s Ratio Perm				0.01							0.04	
v/c Ratio		0.18		0.02	0.34						0.23	
Uniform Delay, d1		5.5		5.2	5.8						9.1	
Progression Factor		1.00		1.00	1.00						1.00	
Incremental Delay, d2		0.2		0.0	0.4						0.3	
Delay (s)		5.6		5.2	6.2						9.4	
Level of Service		A		A	A						A	
Approach Delay (s)		5.6			6.2			0.0			9.4	
Approach LOS		A			A			A			A	

Intersection Summary

HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	24.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 6: Martin Luther King Jr Dr & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑									↑↑	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	275	30	0	0	0	0	0	0	20	100	0
Future Volume (vph)	0	275	30	0	0	0	0	0	0	20	100	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	302	33	0	0	0	0	0	0	22	110	0

Direction, Lane #	EB 1	EB 2	SB 1	SB 2
Volume Total (vph)	201	134	59	73
Volume Left (vph)	0	0	22	0
Volume Right (vph)	0	33	0	0
Hadj (s)	0.00	-0.17	0.31	0.12
Departure Headway (s)	4.9	4.7	5.6	5.4
Degree Utilization, x	0.27	0.17	0.09	0.11
Capacity (veh/h)	725	745	611	631
Control Delay (s)	8.5	7.5	8.0	7.9
Approach Delay (s)	8.1		7.9	
Approach LOS	A		A	

Intersection Summary			
Delay		8.0	
Level of Service		A	
Intersection Capacity Utilization	18.6%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 8: Haynes St/I-110 NB & E Maxwell Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑	↑	↑				
Traffic Volume (vph)	0	0	0	0	150	155	15	220	0	0	0	0
Future Volume (vph)	0	0	0	0	150	155	15	220	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0	12.0	6.0	6.0				
Lane Util. Factor					0.95	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					3574	1599	1770	1863				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					3574	1599	1770	1863				
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	0	165	170	16	242	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	87	10	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	165	83	6	242	0	0	0	0
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Turn Type					NA	Perm	Perm	NA				
Protected Phases					4	1		2				
Permitted Phases						4	1	2				
Actuated Green, G (s)					33.2	33.2	24.2	24.2				
Effective Green, g (s)					33.2	33.2	24.2	24.2				
Actuated g/C Ratio					0.49	0.49	0.36	0.36				
Clearance Time (s)							6.0	6.0				
Vehicle Extension (s)							4.0	4.0				
Lane Grp Cap (vph)					1747	781	630	663				
v/s Ratio Prot					0.05			c0.13				
v/s Ratio Perm						c0.05	0.00					
v/c Ratio					0.09	0.11	0.01	0.37				
Uniform Delay, d1					9.3	9.4	14.1	16.2				
Progression Factor					0.62	0.51	1.00	1.00				
Incremental Delay, d2					0.0	0.1	0.0	1.6				
Delay (s)					5.8	4.9	14.1	17.7				
Level of Service					A	A	B	B				
Approach Delay (s)		0.0			5.3			17.5			0.0	
Approach LOS		A			A			B			A	

Intersection Summary

HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	67.9	Sum of lost time (s)	22.5
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 9: Martin Luther King Jr Dr & E Maxwell Street

03/25/2020

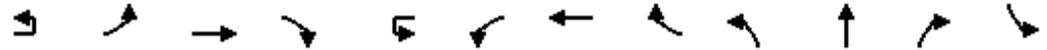


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔↔↔						↔↔	↔
Traffic Volume (vph)	0	0	0	5	270	0	0	0	0	0	115	35
Future Volume (vph)	0	0	0	5	270	0	0	0	0	0	115	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0						6.0	4.5
Lane Util. Factor					0.91						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					1.00						1.00	1.00
Satd. Flow (prot)					5131						3406	1524
Flt Permitted					1.00						1.00	1.00
Satd. Flow (perm)					5131						3406	1524
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	5	297	0	0	0	0	0	126	38
RTOR Reduction (vph)	0	0	0	0	87	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	215	0	0	0	0	0	126	38
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	0%	0%	6%	6%	6%
Turn Type				Perm	NA						NA	custom
Protected Phases					4						6	
Permitted Phases				4								1
Actuated Green, G (s)					13.6						36.3	7.6
Effective Green, g (s)					13.6						36.3	7.6
Actuated g/C Ratio					0.20						0.53	0.11
Clearance Time (s)					12.0						6.0	4.5
Vehicle Extension (s)					5.0						4.0	3.0
Lane Grp Cap (vph)					1027						1820	170
v/s Ratio Prot											c0.04	
v/s Ratio Perm					0.04							c0.02
v/c Ratio					0.21						0.07	0.22
Uniform Delay, d1					22.7						7.6	27.5
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					0.2						0.0	0.7
Delay (s)					22.9						7.7	28.1
Level of Service					C						A	C
Approach Delay (s)		0.0			22.9			0.0			12.4	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.14		
Actuated Cycle Length (s)	67.9	Sum of lost time (s)	22.5
Intersection Capacity Utilization	24.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations			↔				↔					
Traffic Volume (veh/h)	5	0	70	15	5	5	65	0	0	0	0	5
Future Volume (Veh/h)	5	0	70	15	5	5	65	0	0	0	0	5
Sign Control			Stop				Stop			Free		
Grade			0%				0%			0%		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	0	77	16	0	5	71	0	0	0	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type											None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.00				0.00							
vC, conflicting volume	0	234	199	104	0	150	218	0	208			0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	234	199	104	0	150	218	0	208			0
tC, single (s)	0.0	7.7	6.7	7.1	0.0	7.7	6.7	7.1	4.1			4.2
tC, 2 stage (s)												
tF (s)	0.0	3.6	4.1	3.4	0.0	3.6	4.1	3.4	2.2			2.2
p0 queue free %	0	100	89	98	0	99	89	100	100			100
cM capacity (veh/h)	0	617	671	899	0	697	657	1056	1375			1600

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	93	76	90	123
Volume Left	0	5	5	0
Volume Right	16	0	0	38
cSH	702	659	1600	1700
Volume to Capacity	0.13	0.12	0.00	0.07
Queue Length 95th (ft)	11	10	0	0
Control Delay (s)	10.9	11.2	0.4	0.0
Lane LOS	B	B	A	
Approach Delay (s)	10.9	11.2	0.2	
Approach LOS	B	B		

Intersection Summary			
Average Delay		5.0	
Intersection Capacity Utilization	19.1%	ICU Level of Service	A
Analysis Period (min)	15		

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

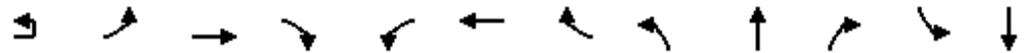
03/25/2020



Movement	SBT	SBR
Lane Configurations	↔	
Traffic Volume (veh/h)	155	35
Future Volume (Veh/h)	155	35
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.91	0.91
Hourly flow rate (vph)	170	38
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

Davis Highway/MLK Drive Two-Way Conversion Study
 11: Martin Luther King Jr Dr & E Texar Dr

03/25/2020



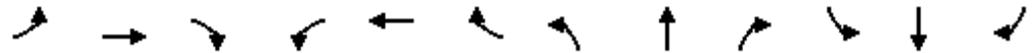
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	
Lane Configurations			↑↑		↖	↑↑						↑↑	
Traffic Volume (vph)	10	0	360	70	25	315	0	0	0	0	70	135	
Future Volume (vph)	10	0	360	70	25	315	0	0	0	0	70	135	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)			6.0		6.0	6.0						6.2	
Lane Util. Factor			0.95		1.00	0.95						0.95	
Frt			0.98		1.00	1.00						0.96	
Flt Protected			1.00		0.95	1.00						0.99	
Satd. Flow (prot)			3352		1752	3505						3253	
Flt Permitted			0.94		0.44	1.00						0.99	
Satd. Flow (perm)			3171		815	3505						3253	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	
Adj. Flow (vph)	11	0	396	77	27	346	0	0	0	0	77	148	
RTOR Reduction (vph)	0	0	8	0	0	0	0	0	0	0	0	41	
Lane Group Flow (vph)	0	0	476	0	27	346	0	0	0	0	0	272	
Heavy Vehicles (%)	5%	5%	5%	5%	3%	3%	3%	0%	0%	0%	5%	5%	
Turn Type	Perm		NA		pm+pt	NA					Perm	NA	
Protected Phases			6		5	2						8	
Permitted Phases	6				2						8		
Actuated Green, G (s)			81.6		91.4	91.4						16.4	
Effective Green, g (s)			81.6		91.4	91.4						16.4	
Actuated g/C Ratio			0.68		0.76	0.76						0.14	
Clearance Time (s)			6.0		6.0	6.0						6.2	
Vehicle Extension (s)			4.0		3.0	3.0						4.0	
Lane Grp Cap (vph)			2156		650	2669						444	
v/s Ratio Prot					0.00	c0.10							
v/s Ratio Perm			c0.15		0.03							0.08	
v/c Ratio			0.22		0.04	0.13						0.61	
Uniform Delay, d1			7.2		3.6	3.8						48.8	
Progression Factor			1.00		1.00	1.00						1.00	
Incremental Delay, d2			0.2		0.0	0.0						2.9	
Delay (s)			7.5		3.7	3.8						51.7	
Level of Service			A		A	A						D	
Approach Delay (s)			7.5			3.8		0.0				51.7	
Approach LOS			A			A		A				D	
Intersection Summary													
HCM 2000 Control Delay			18.1		HCM 2000 Level of Service							B	
HCM 2000 Volume to Capacity ratio			0.28										
Actuated Cycle Length (s)			120.0		Sum of lost time (s)						18.2		
Intersection Capacity Utilization			41.0%		ICU Level of Service						A		
Analysis Period (min)			15										
c Critical Lane Group													



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	80
Future Volume (vph)	80
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	88
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020

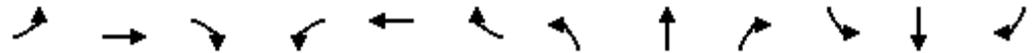


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖			↗						↖↗	
Traffic Volume (veh/h)	0	5	5	10	5	0	0	0	0	15	285	0
Future Volume (Veh/h)	0	5	5	10	5	0	0	0	0	15	285	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	5	5	11	5	0	0	0	0	16	313	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	348	345	156	196	345	0	313			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	348	345	156	196	345	0	313			0		
tC, single (s)	7.5	6.5	6.9	7.7	6.7	7.1	4.1			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.6	4.1	3.4	2.2			2.2		
p0 queue free %	100	99	99	98	99	100	100			99		
cM capacity (veh/h)	579	575	868	712	555	1062	1259			1614		
Direction, Lane #	EB 1	WB 1	SB 1	SB 2								
Volume Total	10	16	172	156								
Volume Left	0	11	16	0								
Volume Right	5	0	0	0								
cSH	692	655	1614	1700								
Volume to Capacity	0.01	0.02	0.01	0.09								
Queue Length 95th (ft)	1	2	1	0								
Control Delay (s)	10.3	10.6	0.7	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	10.3	10.6	0.4									
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization			22.5%	ICU Level of Service						A		
Analysis Period (min)			15									

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1095	0	0	1265	0	65	40	90	0	0	0
Future Volume (vph)	60	1095	0	0	1265	0	65	40	90	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.5			6.5			6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95			0.95	1.00			
Frt	1.00	1.00			1.00			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.97	1.00			
Satd. Flow (prot)	1770	3539			3574			3400	1568			
Flt Permitted	0.16	1.00			1.00			0.97	1.00			
Satd. Flow (perm)	289	3539			3574			3400	1568			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	66	1203	0	0	1390	0	71	44	99	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	92	0	0	0
Lane Group Flow (vph)	66	1203	0	0	1390	0	0	115	7	0	0	0
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	117.4	117.4			106.6			10.1	10.1			
Effective Green, g (s)	117.4	117.4			106.6			10.1	10.1			
Actuated g/C Ratio	0.84	0.84			0.76			0.07	0.07			
Clearance Time (s)	6.0	6.5			6.5			6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0			3.0	3.0			
Lane Grp Cap (vph)	293	2967			2721			245	113			
v/s Ratio Prot	0.01	c0.34			c0.39							
v/s Ratio Perm	0.18							0.03	0.00			
v/c Ratio	0.23	0.41			0.51			0.47	0.06			
Uniform Delay, d1	4.1	2.8			6.5			62.4	60.5			
Progression Factor	0.21	0.34			1.00			1.00	1.00			
Incremental Delay, d2	0.2	0.2			0.7			1.4	0.2			
Delay (s)	1.1	1.1			7.2			63.8	60.8			
Level of Service	A	A			A			E	E			
Approach Delay (s)		1.1			7.2			62.4			0.0	
Approach LOS		A			A			E			A	

Intersection Summary

HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

03/25/2020



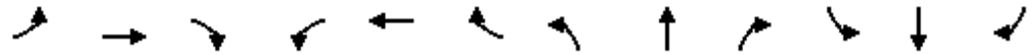
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖			↕				
Traffic Volume (vph)	10	105	0	0	205	15	15	125	5	0	0	0
Future Volume (vph)	10	105	0	0	205	15	15	125	5	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5			7.5				
Lane Util. Factor	1.00	1.00			1.00			0.95				
Frt	1.00	1.00			0.99			1.00				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1805	1900			1883			3437				
Flt Permitted	0.61	1.00			1.00			0.99				
Satd. Flow (perm)	1157	1900			1883			3437				
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	115	0	0	225	16	16	137	5	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	4	0	0	0	0
Lane Group Flow (vph)	11	115	0	0	236	0	0	154	0	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%	4%	4%	0%	0%	0%
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			4			2				
Permitted Phases	4						2					
Actuated Green, G (s)	8.7	8.7			8.7			6.2				
Effective Green, g (s)	8.7	8.7			8.7			6.2				
Actuated g/C Ratio	0.29	0.29			0.29			0.21				
Clearance Time (s)	7.5	7.5			7.5			7.5				
Vehicle Extension (s)	4.0	4.0			4.0			4.0				
Lane Grp Cap (vph)	336	552			547			712				
v/s Ratio Prot		0.06			0.13							
v/s Ratio Perm	0.01							0.04				
v/c Ratio	0.03	0.21			0.43			0.22				
Uniform Delay, d1	7.6	8.0			8.6			9.8				
Progression Factor	1.00	1.00			1.00			1.00				
Incremental Delay, d2	0.1	0.3			0.7			0.2				
Delay (s)	7.6	8.3			9.3			10.0				
Level of Service	A	A			A			B				
Approach Delay (s)		8.2			9.3			10.0			0.0	
Approach LOS		A			A			B			A	

Intersection Summary

HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	29.9	Sum of lost time (s)	15.0
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↑						↑↔				
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	50	245	0	0	0	0	0	155	10	0	0	0
Future Volume (vph)	50	245	0	0	0	0	0	155	10	0	0	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	55	269	0	0	0	0	0	170	11	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2
Volume Total (vph)	145	179	113	68
Volume Left (vph)	55	0	0	0
Volume Right (vph)	0	0	0	11
Hadj (s)	0.19	0.00	0.07	-0.05
Departure Headway (s)	5.2	5.0	5.4	5.3
Degree Utilization, x	0.21	0.25	0.17	0.10
Capacity (veh/h)	669	700	639	651
Control Delay (s)	8.3	8.4	8.3	7.6
Approach Delay (s)	8.4		8.0	
Approach LOS	A		A	

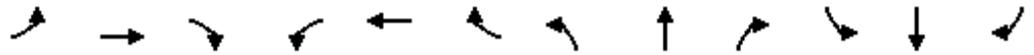
Intersection Summary

Delay	8.3
Level of Service	A
Intersection Capacity Utilization	19.5%
ICU Level of Service	A
Analysis Period (min)	15

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

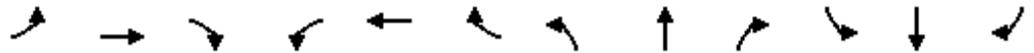
03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Volume (veh/h)	30	50	0	0	55	15	20	170	5	0	0	0
Future Volume (Veh/h)	30	50	0	0	55	15	20	170	5	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	33	55	0	0	60	16	22	187	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	184	236	0	261	234	96	0			192		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	184	236	0	261	234	96	0			192		
tC, single (s)	7.8	6.8	7.2	7.7	6.7	7.1	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.2	3.4	3.6	4.1	3.4	2.2			2.2		
p0 queue free %	95	91	100	100	91	98	99			100		
cM capacity (veh/h)	656	626	1043	600	639	917	1614			1394		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2								
Volume Total	88	76	116	98								
Volume Left	33	0	22	0								
Volume Right	0	16	0	5								
cSH	637	682	1614	1700								
Volume to Capacity	0.14	0.11	0.01	0.06								
Queue Length 95th (ft)	12	9	1	0								
Control Delay (s)	11.6	10.9	1.5	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	11.6	10.9	0.8									
Approach LOS	B	B										
Intersection Summary												
Average Delay			5.3									
Intersection Capacity Utilization			23.1%		ICU Level of Service					A		
Analysis Period (min)			15									

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



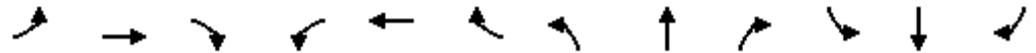
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↑↑				
Traffic Volume (vph)	125	305	0	0	310	85	30	135	30	0	0	0
Future Volume (vph)	125	305	0	0	310	85	30	135	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.4				
Lane Util. Factor	1.00	0.95			0.95			0.95				
Frt	1.00	1.00			0.97			0.98				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1719	3438			3392			3301				
Flt Permitted	0.47	1.00			1.00			0.99				
Satd. Flow (perm)	848	3438			3392			3301				
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	137	335	0	0	341	93	33	148	33	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	13	0	0	0	0
Lane Group Flow (vph)	137	335	0	0	424	0	0	201	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	6%	6%	6%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	1	6			2			4				
Permitted Phases	6						4					
Actuated Green, G (s)	104.4	104.4			90.6			13.2				
Effective Green, g (s)	104.4	104.4			90.6			13.2				
Actuated g/C Ratio	0.80	0.80			0.70			0.10				
Clearance Time (s)	6.0	6.0			6.0			6.4				
Vehicle Extension (s)	3.0	4.0			4.0			3.0				
Lane Grp Cap (vph)	733	2760			2363			335				
v/s Ratio Prot	c0.01	0.10			0.12							
v/s Ratio Perm	c0.14							0.06				
v/c Ratio	0.19	0.12			0.18			0.60				
Uniform Delay, d1	2.9	2.8			6.8			55.9				
Progression Factor	1.00	1.00			1.00			1.00				
Incremental Delay, d2	0.1	0.0			0.2			2.9				
Delay (s)	3.0	2.8			7.0			58.7				
Level of Service	A	A			A			E				
Approach Delay (s)		2.9			7.0			58.7			0.0	
Approach LOS		A			A			E			A	

Intersection Summary

HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	41.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 20: N Davis Hwy & Hart Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↕				
Traffic Volume (veh/h)	5	15	0	0	10	5	5	310	5	0	0	0
Future Volume (Veh/h)	5	15	0	0	10	5	5	310	5	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	5	16	0	0	11	5	5	341	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)											414	
pX, platoon unblocked												
vC, conflicting volume	191	356	0	362	354	173	0			346		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	191	356	0	362	354	173	0			346		
tC, single (s)	7.5	6.5	6.9	7.6	6.6	7.0	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.6	4.1	3.4	2.2			2.2		
p0 queue free %	99	97	100	100	98	99	100			100		
cM capacity (veh/h)	739	571	1091	544	557	825	1607			1224		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2								
Volume Total	21	16	176	176								
Volume Left	5	0	5	0								
Volume Right	0	5	0	5								
cSH	604	620	1607	1700								
Volume to Capacity	0.03	0.03	0.00	0.10								
Queue Length 95th (ft)	3	2	0	0								
Control Delay (s)	11.2	11.0	0.2	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	11.2	11.0	0.1									
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			20.7%		ICU Level of Service				A			
Analysis Period (min)			15									

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖		↖	↖↗			↖	↖↗
Traffic Volume (vph)	375	3	20	5	3	3	135	180	5	5	5	275
Future Volume (vph)	375	3	20	5	3	3	135	180	5	5	5	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0	6.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00		1.00	0.95			1.00	0.95
Frt	1.00	1.00	0.85	1.00	0.93		1.00	1.00			1.00	1.00
Flt Protected	0.95	0.95	1.00	0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1698	1703	1599	1805	1758		1736	3458			1719	3438
Flt Permitted	0.95	0.95	1.00	0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1698	1703	1599	1805	1758		1736	3458			1719	3438
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	412	3	22	5	3	3	148	198	5	5	5	302
RTOR Reduction (vph)	0	0	15	0	3	0	0	1	0	0	0	0
Lane Group Flow (vph)	206	209	7	5	3	0	148	202	0	0	10	302
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	4%	4%	4%	5%	5%	5%
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	Prot	NA
Protected Phases	8	8		7	7		5	2		1	1	6
Permitted Phases			8									
Actuated Green, G (s)	46.9	46.9	46.9	2.7	2.7		10.0	72.9			3.0	66.4
Effective Green, g (s)	46.9	46.9	46.9	2.7	2.7		10.0	72.9			3.0	66.4
Actuated g/C Ratio	0.31	0.31	0.31	0.02	0.02		0.07	0.49			0.02	0.44
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0	6.0
Vehicle Extension (s)	6.0	6.0	6.0	3.0	3.0		3.0	3.0			3.0	6.0
Lane Grp Cap (vph)	530	532	499	32	31		115	1680			34	1521
v/s Ratio Prot	0.12	c0.12		c0.00	0.00		c0.09	0.06			0.01	0.09
v/s Ratio Perm			0.00									
v/c Ratio	0.39	0.39	0.01	0.16	0.10		1.29	0.12			0.29	0.20
Uniform Delay, d1	40.3	40.4	35.6	72.5	72.5		70.0	21.0			72.5	25.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.22	0.67
Incremental Delay, d2	2.1	2.2	0.1	2.3	1.4		179.6	0.1			4.6	0.3
Delay (s)	42.5	42.6	35.6	74.8	73.8		249.6	21.2			92.9	17.5
Level of Service	D	D	D	E	E		F	C			F	B
Approach Delay (s)		42.2			74.3			117.5				12.0
Approach LOS		D			E			F				B

Intersection Summary

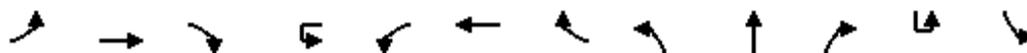
HCM 2000 Control Delay	47.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	7
Traffic Volume (vph)	305
Future Volume (vph)	305
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1538
Flt Permitted	1.00
Satd. Flow (perm)	1538
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	335
RTOR Reduction (vph)	187
Lane Group Flow (vph)	148
Heavy Vehicles (%)	5%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	66.4
Effective Green, g (s)	66.4
Actuated g/C Ratio	0.44
Clearance Time (s)	6.0
Vehicle Extension (s)	6.0
Lane Grp Cap (vph)	680
v/s Ratio Prot	
v/s Ratio Perm	c0.10
v/c Ratio	0.22
Uniform Delay, d1	25.8
Progression Factor	0.15
Incremental Delay, d2	0.7
Delay (s)	4.6
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

03/25/2020



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	245	710	410	5	15	725	65	85	273	205	5	45
Future Volume (vph)	245	710	410	5	15	725	65	85	273	205	5	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4		6.4	6.0	6.0		6.0
Lane Util. Factor	0.97	0.91	1.00		1.00	0.91		0.97	0.95	1.00		1.00
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3433	5085	1583		1787	5073		3433	3539	1583		1719
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3433	5085	1583		1787	5073		3433	3539	1583		1719
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	269	780	451	5	16	797	71	93	300	225	5	49
RTOR Reduction (vph)	0	0	182	0	0	5	0	0	0	194	0	0
Lane Group Flow (vph)	269	780	269	0	21	863	0	93	300	31	0	54
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	1%	2%	2%	2%	5%	5%
Turn Type	Prot	NA	Perm	Prot	Prot	NA		Prot	NA	Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6							4		
Actuated Green, G (s)	17.9	89.5	89.5		5.6	77.2		9.4	20.7	20.7		9.4
Effective Green, g (s)	17.9	89.5	89.5		5.6	77.2		9.4	20.7	20.7		9.4
Actuated g/C Ratio	0.12	0.60	0.60		0.04	0.51		0.06	0.14	0.14		0.06
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4		6.4	6.0	6.0		6.0
Vehicle Extension (s)	4.0	3.0	3.0		4.0	3.0		3.0	3.0	3.0		4.0
Lane Grp Cap (vph)	409	3034	944		66	2610		215	488	218		107
v/s Ratio Prot	c0.08	0.15			0.01	c0.17		0.03	c0.08			c0.03
v/s Ratio Perm			0.17							0.02		
v/c Ratio	0.66	0.26	0.29		0.32	0.33		0.43	0.61	0.14		0.50
Uniform Delay, d1	63.1	14.4	14.7		70.3	21.3		67.7	60.9	56.8		68.0
Progression Factor	1.00	1.00	1.00		1.00	1.00		0.75	0.71	2.69		1.00
Incremental Delay, d2	4.2	0.2	0.8		3.8	0.3		1.4	2.2	0.3		5.0
Delay (s)	67.3	14.6	15.5		74.1	21.6		52.0	45.5	153.2		73.1
Level of Service	E	B	B		E	C		D	D	F		E
Approach Delay (s)		24.3			22.9			85.7				
Approach LOS		C			C			F				

Intersection Summary

HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	165	255
Future Volume (vph)	165	255
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3438	1538
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3438	1538
Peak-hour factor, PHF	0.91	0.91
Adj. Flow (vph)	181	280
RTOR Reduction (vph)	0	242
Lane Group Flow (vph)	181	38
Heavy Vehicles (%)	5%	5%
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Actuated Green, G (s)	20.3	20.3
Effective Green, g (s)	20.3	20.3
Actuated g/C Ratio	0.14	0.14
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	465	208
v/s Ratio Prot	0.05	
v/s Ratio Perm		0.02
v/c Ratio	0.39	0.18
Uniform Delay, d1	59.2	57.5
Progression Factor	1.00	1.00
Incremental Delay, d2	0.5	0.4
Delay (s)	59.7	57.9
Level of Service	E	E
Approach Delay (s)	60.1	
Approach LOS	E	

Intersection Summary

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 1000: Martin Luther King Jr Dr

03/25/2020



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↶					↷↷
Traffic Volume (veh/h)	10	0	0	0	0	300
Future Volume (Veh/h)	10	0	0	0	0	300
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	11	0	0	0	0	330
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	165	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	165	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	815	1091			1622	

Direction, Lane #	WB 1	SB 1	SB 2
Volume Total	11	165	165
Volume Left	11	0	0
Volume Right	0	0	0
cSH	815	1700	1700
Volume to Capacity	0.01	0.10	0.10
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.5	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.5	0.0	
Approach LOS	A		

Intersection Summary			
Average Delay		0.3	
Intersection Capacity Utilization		24.1%	ICU Level of Service
Analysis Period (min)		15	A

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
2: Alcaniz St & E Wright Street

03/25/2020

Intersection

Intersection Delay, s/veh 9.5

Intersection LOS A

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑				↔↑			↔		↔↔		↔↔	
Traffic Vol, veh/h	0	65	15	5	30	35	0	5	40	0	410	10	130	20
Future Vol, veh/h	0	65	15	5	30	35	0	5	40	0	410	10	130	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	1	1	1	0	0	0	0	1	1	1	1	2	2	2
Mvmt Flow	0	68	16	5	32	37	0	5	42	0	432	11	137	21
Number of Lanes	0	2	0	0	0	2	0	0	1	0	2	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	9.4	9.9	9.4	9.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	72%	0%	13%	0%
Vol Thru, %	0%	0%	0%	100%	59%	28%	100%	87%	76%
Vol Right, %	0%	100%	100%	0%	41%	0%	0%	0%	24%
Sign Control	Stop								
Traffic Vol by Lane	45	205	205	43	37	47	23	75	85
LT Vol	45	0	0	0	0	34	0	10	0
Through Vol	0	0	0	43	22	13	23	65	65
RT Vol	0	205	205	0	15	0	0	0	20
Lane Flow Rate	47	216	216	46	39	49	25	79	89
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.078	0.282	0.282	0.081	0.065	0.092	0.043	0.133	0.145
Departure Headway (Hd)	5.914	4.708	4.708	6.367	6.078	6.727	6.365	6.053	5.82
Convergence, Y/N	Yes								
Cap	600	753	753	565	592	535	565	594	619
Service Time	3.71	2.503	2.503	4.08	3.792	4.442	4.08	3.764	3.531
HCM Lane V/C Ratio	0.078	0.287	0.287	0.081	0.066	0.092	0.044	0.133	0.144
HCM Control Delay	9.2	9.4	9.4	9.6	9.2	10.1	9.4	9.7	9.5
HCM Lane LOS	A	A	A	A	A	B	A	A	A
HCM 95th-tile Q	0.3	1.2	1.2	0.3	0.2	0.3	0.1	0.5	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑						↑↑	↗
Traffic Volume (veh/h)	0	1210	60	85	1030	0	0	0	0	55	45	85
Future Volume (veh/h)	0	1210	60	85	1030	0	0	0	0	55	45	85
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No		No						No		
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1856	1856	1856
Adj Flow Rate, veh/h	0	1274	63	89	1084	0				58	47	89
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1	1	1	0				3	3	3
Cap, veh/h	0	2357	116	297	2664	0				320	320	285
Arrive On Green	0.00	0.68	0.68	0.06	1.00	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	3568	172	1795	3676	0				1767	1763	1572
Grp Volume(v), veh/h	0	656	681	89	1084	0				58	47	89
Grp Sat Flow(s),veh/h/ln	0	1791	1854	1795	1791	0				1767	1763	1572
Q Serve(g_s), s	0.0	29.7	29.8	2.4	0.0	0.0				4.4	3.6	7.9
Cycle Q Clear(g_c), s	0.0	29.7	29.8	2.4	0.0	0.0				4.4	3.6	7.9
Prop In Lane	0.00		0.09	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1215	1258	297	2664	0				320	320	285
V/C Ratio(X)	0.00	0.54	0.54	0.30	0.41	0.00				0.18	0.15	0.31
Avail Cap(c_a), veh/h	0	1215	1258	416	2664	0				320	320	285
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	0.91	0.91	0.90	0.90	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	13.0	13.1	10.4	0.0	0.0				55.4	55.1	56.8
Incr Delay (d2), s/veh	0.0	0.8	0.8	0.4	0.4	0.0				1.2	1.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.9	12.3	0.9	0.2	0.0				2.1	1.7	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.8	13.8	10.7	0.4	0.0				56.7	56.1	59.7
LnGrp LOS	A	B	B	B	A	A				E	E	E
Approach Vol, veh/h		1337			1173						194	
Approach Delay, s/veh		13.8			1.2						57.9	
Approach LOS		B			A						E	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	114.6			35.0		125.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	98.0			29.0		119.0						
Max Q Clear Time (g_c+14.4), s	31.8			9.9		2.0						
Green Ext Time (p_c), s	0.1	30.4		0.6		24.7						

Intersection Summary

HCM 6th Ctrl Delay		11.5										
HCM 6th LOS			B									

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖	↗	↖	↗	↖			
Traffic Volume (veh/h)	430	1230	0	0	850	265	15	85	40	0	0	0
Future Volume (veh/h)	430	1230	0	0	850	265	15	85	40	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1885	1885	1870	1870	1870			
Adj Flow Rate, veh/h	453	1295	0	0	895	279	16	89	42			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	1	1	0	0	1	1	2	2	2			
Cap, veh/h	539	3091	0	0	2022	629	110	116	98			
Arrive On Green	0.07	0.86	0.00	0.00	1.00	1.00	0.06	0.06	0.06			
Sat Flow, veh/h	1795	3676	0	0	2783	836	1781	1870	1585			
Grp Volume(v), veh/h	453	1295	0	0	595	579	16	89	42			
Grp Sat Flow(s),veh/h/ln	1795	1791	0	0	1791	1735	1781	1870	1585			
Q Serve(g_s), s	8.7	12.4	0.0	0.0	0.0	0.0	1.4	7.5	4.1			
Cycle Q Clear(g_c), s	8.7	12.4	0.0	0.0	0.0	0.0	1.4	7.5	4.1			
Prop In Lane	1.00		0.00	0.00		0.48	1.00		1.00			
Lane Grp Cap(c), veh/h	539	3091	0	0	1347	1304	110	116	98			
V/C Ratio(X)	0.84	0.42	0.00	0.00	0.44	0.44	0.14	0.77	0.43			
Avail Cap(c_a), veh/h	901	3091	0	0	1347	1304	312	327	277			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	0.92	0.92	1.00	1.00	1.00			
Uniform Delay (d), s/veh	3.0	2.4	0.0	0.0	0.0	0.0	71.0	73.9	72.3			
Incr Delay (d2), s/veh	2.8	0.2	0.0	0.0	1.0	1.0	0.4	7.7	2.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.9	3.1	0.0	0.0	0.4	0.4	0.6	3.9	1.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	2.5	0.0	0.0	1.0	1.0	71.5	81.6	74.5			
LnGrp LOS	A	A	A	A	A	A	E	F	E			
Approach Vol, veh/h		1748			1174			147				
Approach Delay, s/veh		3.4			1.0			78.5				
Approach LOS		A			A			E				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	7.8	126.3		15.9		144.1						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	41.0	70.0		28.0		120.0						
Max Q Clear Time (g_c+110), s	11.0	2.0		9.5		14.4						
Green Ext Time (p_c), s	1.0	24.9		0.4		34.7						
Intersection Summary												
HCM 6th Ctrl Delay				6.1								
HCM 6th LOS				A								

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
6: Martin Luther King Jr Dr & E Jordan St

03/25/2020

Intersection

Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑									↑↑	
Traffic Vol, veh/h	0	250	55	0	0	0	0	0	0	20	150	0
Future Vol, veh/h	0	250	55	0	0	0	0	0	0	20	150	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	4	4	4
Mvmt Flow	0	263	58	0	0	0	0	0	0	21	158	0
Number of Lanes	0	2	0	0	0	0	0	0	0	0	2	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	2
HCM Control Delay	8.9	9
HCM LOS	A	A

Lane	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	29%	0%
Vol Thru, %	100%	60%	71%	100%
Vol Right, %	0%	40%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	167	138	70	100
LT Vol	0	0	20	0
Through Vol	167	83	50	100
RT Vol	0	55	0	0
Lane Flow Rate	175	146	74	105
Geometry Grp	7	7	7	7
Degree of Util (X)	0.243	0.19	0.112	0.156
Departure Headway (Hd)	4.98	4.701	5.475	5.331
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	723	764	655	674
Service Time	2.702	2.423	3.202	3.059
HCM Lane V/C Ratio	0.242	0.191	0.113	0.156
HCM Control Delay	9.3	8.5	8.9	9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.7	0.4	0.6

Davis Highway/MLK Drive Two-Way Conversion Study
7: Haynes St & E Jordan St

03/25/2020

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑						↑↑				
Traffic Vol, veh/h	355	290	0	0	0	0	0	105	15	0	0	0
Future Vol, veh/h	355	290	0	0	0	0	0	105	15	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	0	0	0
Mvmt Flow	374	305	0	0	0	0	0	111	16	0	0	0

Major/Minor

	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	4.1	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	2.2	-
Pot Cap-1 Maneuver	-	0
Stage 1	-	0
Stage 2	-	0
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	0
Mov Cap-2 Maneuver	-	0
Stage 1	-	0
Stage 2	-	0

Approach

EB NB
HCM Control Delay, s
HCM LOS

Minor Lane/Major Mvmt

	NBLn1	NBLn2	EBL	EBT
Capacity (veh/h)	-	869	-	-
HCM Lane V/C Ratio	-	0.082	-	-
HCM Control Delay (s)	-	9.5	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

HCM 6th Edition methodology does not support clustered intersections.

HCM 6th Edition methodology does not support clustered intersections.

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

03/25/2020

Intersection

Int Delay, s/veh 4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	75	30	5	50	0	0	0	0	20	175	35
Future Vol, veh/h	0	75	30	5	50	0	0	0	0	20	175	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	3	3	3
Mvmt Flow	0	79	32	5	53	0	0	0	0	21	184	37

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	245	111	174	263	-	-	0	0	0
Stage 1	-	245	-	0	0	-	-	-	-	-
Stage 2	-	0	-	174	263	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.5	6.5	-	-	4.16	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.5	5.5	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.5	4	-	-	2.23	-	-
Pot Cap-1 Maneuver	0	658	924	778	646	0	-	-	-	-
Stage 1	0	705	-	-	-	0	-	-	-	-
Stage 2	0	-	-	817	694	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	658	924	682	646	-	-	-	-	-
Mov Cap-2 Maneuver	-	658	-	682	646	-	-	-	-	-
Stage 1	-	705	-	-	-	-	-	-	-	-
Stage 2	-	-	-	701	694	-	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	10.9		11.1			
HCM LOS	B		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	717	649	-	-	-
HCM Lane V/C Ratio	0.154	0.089	-	-	-
HCM Control Delay (s)	10.9	11.1	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.5	0.3	-	-	-

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Vol, veh/h	0	5	5	10	3	0	0	0	0	10	295	5
Future Vol, veh/h	0	5	5	10	3	0	0	0	0	10	295	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	50	50	0	0	0	0	0	0	4	4	4
Mvmt Flow	0	5	5	11	3	0	0	0	0	11	311	5

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	336	158	180	338	-	-	0	0	0
Stage 1	-	336	-	0	0	-	-	-	-	-
Stage 2	-	0	-	180	338	-	-	-	-	-
Critical Hdwy	-	7.5	7.9	7.5	6.5	-	-	4.18	-	-
Critical Hdwy Stg 1	-	6.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.5	5.5	-	-	-	-	-
Follow-up Hdwy	-	4.5	3.8	3.5	4	-	-	2.24	-	-
Pot Cap-1 Maneuver	0	487	727	771	586	0	-	-	-	-
Stage 1	0	534	-	-	-	0	-	-	-	-
Stage 2	0	-	-	810	644	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	487	727	759	586	-	-	-	-	-
Mov Cap-2 Maneuver	-	487	-	759	586	-	-	-	-	-
Stage 1	-	534	-	-	-	-	-	-	-	-
Stage 2	-	-	-	796	644	-	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	11.3		10.2			
HCM LOS	B		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	583	711	-	-	-
HCM Lane V/C Ratio	0.018	0.019	-	-	-
HCM Control Delay (s)	11.3	10.2	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

03/25/2020

Intersection

Int Delay, s/veh 1.1

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗	↘			
Traffic Vol, veh/h	10	350	130	60	10	0	0
Future Vol, veh/h	10	350	130	60	10	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-	-
Veh in Median Storage, #	-	-	0	0	-	16965	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	0	0	0	0
Mvmt Flow	11	368	137	63	11	0	0

Major/Minor

	Major1	Minor2
Conflicting Flow All	- 0	0 895 11
Stage 1	- -	- 0 -
Stage 2	- -	- 895 -
Critical Hdwy	- 4.11	- 6.5 6.2
Critical Hdwy Stg 1	- -	- -
Critical Hdwy Stg 2	- -	- 5.5 -
Follow-up Hdwy	- 2.209	- 4 3.3
Pot Cap-1 Maneuver	- -	- 282 1076
Stage 1	- -	- -
Stage 2	- -	- 362 -
Platoon blocked, %		-
Mov Cap-1 Maneuver	- -	- 0 1076
Mov Cap-2 Maneuver	- -	- 0 -
Stage 1	- -	- 0 -
Stage 2	- -	- 0 -

Approach

	EB	WB
HCM Control Delay, s		8.6
HCM LOS		A

Minor Lane/Major Mvmt

	EBL	EBTWBLn1
Capacity (veh/h)	-	- 1076
HCM Lane V/C Ratio	-	- 0.068
HCM Control Delay (s)	-	- 8.6
HCM Lane LOS	-	- A
HCM 95th %tile Q(veh)	-	- 0.2

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗			↖↖			↖↖	↖			
Traffic Volume (veh/h)	95	1170	0	0	1030	25	85	80	250	0	0	0
Future Volume (veh/h)	95	1170	0	0	1030	25	85	80	250	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	100	1232	0	0	1084	26	89	84	263			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	0	0	0	1	1	1	1	1			
Cap, veh/h	454	3097	0	0	2844	68	112	118	102			
Arrive On Green	0.02	0.86	0.00	0.00	0.80	0.80	0.06	0.06	0.06			
Sat Flow, veh/h	1810	3705	0	0	3669	86	1751	1837	1598			
Grp Volume(v), veh/h	100	1232	0	0	543	567	91	82	263			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1791	1870	1798	1791	1598			
Q Serve(g_s), s	1.6	11.8	0.0	0.0	14.2	14.2	8.0	7.2	10.3			
Cycle Q Clear(g_c), s	1.6	11.8	0.0	0.0	14.2	14.2	8.0	7.2	10.3			
Prop In Lane	1.00		0.00	0.00		0.05	0.97		1.00			
Lane Grp Cap(c), veh/h	454	3097	0	0	1425	1488	115	115	102			
V/C Ratio(X)	0.22	0.40	0.00	0.00	0.38	0.38	0.79	0.71	2.57			
Avail Cap(c_a), veh/h	579	3097	0	0	1425	1488	281	280	250			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.80	0.80	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	3.4	2.5	0.0	0.0	4.8	4.8	73.8	73.4	74.9			
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	0.8	0.7	11.5	7.9	733.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	3.1	0.0	0.0	5.0	5.2	4.1	3.5	25.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.5	2.6	0.0	0.0	5.6	5.5	85.3	81.3	808.4			
LnGrp LOS	A	A	A	A	A	A	F	F	F			
Approach Vol, veh/h		1332			1110			436				
Approach Delay, s/veh		2.7			5.6			520.8				
Approach LOS		A			A			F				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	10.0	133.8		16.3		143.7						
Change Period (Y+Rc), s	6.0	6.5		6.0		6.5						
Max Green Setting (Gmax), s	15.0	101.5		25.0		122.5						
Max Q Clear Time (g_c+I1), s	3.6	16.2		10.0		13.8						
Green Ext Time (p_c), s	0.1	23.1		0.2		31.5						

Intersection Summary

HCM 6th Ctrl Delay			82.3									
HCM 6th LOS			F									

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020

Intersection

Intersection Delay, s/veh 9.1
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕						↕↕				
Traffic Vol, veh/h	65	205	0	0	0	0	0	195	10	0	0	0
Future Vol, veh/h	65	205	0	0	0	0	0	195	10	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	68	216	0	0	0	0	0	205	11	0	0	0
Number of Lanes	0	2	0	0	0	0	0	2	0	0	0	0

Approach	EB	NB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left		EB
Conflicting Lanes Left	0	2
Conflicting Approach Right	NB	
Conflicting Lanes Right	2	0
HCM Control Delay	9.2	8.9
HCM LOS	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2
Vol Left, %	0%	0%	49%	0%
Vol Thru, %	100%	87%	51%	100%
Vol Right, %	0%	13%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	75	133	137
LT Vol	0	0	65	0
Through Vol	130	65	68	137
RT Vol	0	10	0	0
Lane Flow Rate	137	79	140	144
Geometry Grp	7	7	7	7
Degree of Util (X)	0.198	0.112	0.207	0.202
Departure Headway (Hd)	5.221	5.127	5.298	5.053
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	688	699	678	711
Service Time	2.948	2.855	3.023	2.778
HCM Lane V/C Ratio	0.199	0.113	0.206	0.203
HCM Control Delay	9.2	8.5	9.4	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.4	0.8	0.8

Davis Highway/MLK Drive Two-Way Conversion Study
 17: N Davis Hwy & E Maxwell Street

03/25/2020

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑↑				
Traffic Vol, veh/h	0	0	0	0	165	20	30	230	0	0	0	0
Future Vol, veh/h	0	0	0	0	165	20	30	230	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	1	1	1	3	3	3	0	0	0
Mvmt Flow	0	0	0	0	174	21	32	242	0	0	0	0

Major/Minor	Minor1		Major1			
Conflicting Flow All	-	306	121	0	0	-
Stage 1	-	306	-	-	-	-
Stage 2	-	0	-	-	-	-
Critical Hdwy	-	6.52	6.92	4.16	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	2.23	-	-
Pot Cap-1 Maneuver	0	609	911	-	-	0
Stage 1	0	663	-	-	-	0
Stage 2	0	-	-	-	-	0
Platoon blocked, %						-
Mov Cap-1 Maneuver	-	0	911	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	WB	NB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBL	NBTWBLn1	WBLn2	WBLn3
Capacity (veh/h)	-	-	-	911
HCM Lane V/C Ratio	-	-	-	0.023
HCM Control Delay (s)	-	-	-	9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

03/25/2020

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	35	60	0	0	40	10	15	245	5	0	0	0
Future Vol, veh/h	35	60	0	0	40	10	15	245	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	0	0	0
Mvmt Flow	37	63	0	0	42	11	16	258	5	0	0	0

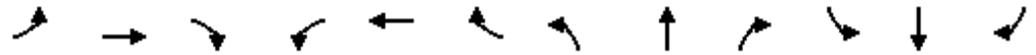
Major/Minor	Minor2	Minor1	Major1
Conflicting Flow All	182 295	- -	293 132 0 0 0
Stage 1	0 0	- -	293 - - - -
Stage 2	182 295	- -	0 - - - -
Critical Hdwy	7.5 6.5	- -	6.5 6.9 4.14 - -
Critical Hdwy Stg 1	- -	- -	5.5 - - - -
Critical Hdwy Stg 2	6.5 5.5	- -	- - - - -
Follow-up Hdwy	3.5 4	- -	4 3.3 2.22 - -
Pot Cap-1 Maneuver	768 620	0 0	621 899 - - -
Stage 1	- -	0 0	674 - - - -
Stage 2	808 673	0 0	- - - - -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	720 620	- -	621 899 - - -
Mov Cap-2 Maneuver	720 620	- -	621 - - - -
Stage 1	- -	- -	674 - - - -
Stage 2	749 673	- -	- - - - -

Approach	EB	WB	NB
HCM Control Delay, s	11.5	10.9	
HCM LOS	B	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	653	662
HCM Lane V/C Ratio	-	-	-	0.153	0.08
HCM Control Delay (s)	-	-	-	11.5	10.9
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.5	0.3

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗			↖↖			↗↗				
Traffic Volume (veh/h)	220	415	0	0	250	90	55	235	45	0	0	0
Future Volume (veh/h)	220	415	0	0	250	90	55	235	45	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1856	1856	1900	1870	1900			
Adj Flow Rate, veh/h	232	437	0	0	263	95	58	247	47			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	1	1	0	0	3	3	0	2	0			
Cap, veh/h	900	3075	0	0	1958	690	26	117	23			
Arrive On Green	0.05	0.86	0.00	0.00	0.77	0.77	0.05	0.05	0.05			
Sat Flow, veh/h	1795	3676	0	0	2648	901	574	2543	504			
Grp Volume(v), veh/h	232	437	0	0	179	179	186	0	166			
Grp Sat Flow(s),veh/h/ln	1795	1791	0	0	1763	1693	1842	0	1780			
Q Serve(g_s), s	3.3	2.6	0.0	0.0	3.4	3.6	6.0	0.0	6.0			
Cycle Q Clear(g_c), s	3.3	2.6	0.0	0.0	3.4	3.6	6.0	0.0	6.0			
Prop In Lane	1.00		0.00	0.00		0.53	0.31		0.28			
Lane Grp Cap(c), veh/h	900	3075	0	0	1351	1297	85	0	82			
V/C Ratio(X)	0.26	0.14	0.00	0.00	0.13	0.14	2.19	0.00	2.02			
Avail Cap(c_a), veh/h	1149	3075	0	0	1351	1297	476	0	460			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	2.4	1.5	0.0	0.0	4.0	4.0	62.0	0.0	62.0			
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.2	0.2	543.5	0.0	468.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	0.4	0.0	0.0	1.1	1.1	15.6	0.0	13.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.5	1.5	0.0	0.0	4.2	4.2	605.5	0.0	530.1			
LnGrp LOS	A	A	A	A	A	A	F	A	F			
Approach Vol, veh/h		669			358			352				
Approach Delay, s/veh		1.9			4.2			570.0				
Approach LOS		A			A			F				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	105.6		12.4		117.6						
Change Period (Y+Rc), s	6.0	6.0		6.4		6.0						
Max Green Setting (Gmax), s	24.0	54.0		33.6		84.0						
Max Q Clear Time (g_c+I1), s	5.3	5.6		2.0		4.6						
Green Ext Time (p_c), s	0.6	3.2		2.1		4.4						
Intersection Summary												
HCM 6th Ctrl Delay				147.5								
HCM 6th LOS				F								

Davis Highway/MLK Drive Two-Way Conversion Study
20: N Davis Hwy & Hart Dr

03/25/2020

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	5	10	0	0	10	5	3	565	10	0	0	0
Future Vol, veh/h	5	10	0	0	10	5	3	565	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	0	0	0
Mvmt Flow	5	11	0	0	11	5	3	595	11	0	0	0

Major/Minor	Minor2	Minor1	Major1
Conflicting Flow All	309 612	- -	607 303 0 0 0
Stage 1	0 0	- -	607 - - - -
Stage 2	309 612	- -	0 - - - -
Critical Hdwy	7.5 6.5	- -	6.5 6.9 4.12 - -
Critical Hdwy Stg 1	- -	- -	5.5 - - - -
Critical Hdwy Stg 2	6.5 5.5	- -	- - - - -
Follow-up Hdwy	3.5 4	- -	4 3.3 2.21 - -
Pot Cap-1 Maneuver	626 411	0 0	414 699 - - -
Stage 1	- -	0 0	489 - - - -
Stage 2	682 487	0 0	- - - - -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	609 411	- -	414 699 - - -
Mov Cap-2 Maneuver	609 411	- -	414 - - - -
Stage 1	- -	- -	489 - - - -
Stage 2	662 487	- -	- - - - -

Approach	EB	WB	NB
HCM Control Delay, s	13.1	12.8	
HCM LOS	B	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	461	479
HCM Lane V/C Ratio	-	-	-	0.034	0.033
HCM Control Delay (s)	-	-	-	13.1	12.8
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

HCM 6th Edition methodology expects strict NEMA phasing.

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 1: Alcaniz St & E Gregory Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations					←↑↑↑			↓	↑↑↑			↑↑↑
Traffic Volume (vph)	0	0	0	165	195	20	5	60	435	0	0	160
Future Volume (vph)	0	0	0	165	195	20	5	60	435	0	0	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0			6.0	6.0			6.0
Lane Util. Factor					0.91			1.00	0.91			0.91
Frt					0.99			1.00	1.00			0.98
Flt Protected					0.98			0.95	1.00			1.00
Satd. Flow (prot)					4938			1805	5187			5001
Flt Permitted					0.98			0.95	1.00			1.00
Satd. Flow (perm)					4938			1805	5187			5001
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	174	205	21	5	63	458	0	0	168
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	16
Lane Group Flow (vph)	0	0	0	0	396	0	0	68	458	0	0	173
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	0%	0%	0%	0%	2%	2%
Turn Type				Perm	NA		Prot	Prot	NA			NA
Protected Phases					2		7	7	4			8
Permitted Phases				2								
Actuated Green, G (s)					69.2			7.0	23.8			10.8
Effective Green, g (s)					69.2			7.0	23.8			10.8
Actuated g/C Ratio					0.66			0.07	0.23			0.10
Clearance Time (s)					6.0			6.0	6.0			6.0
Vehicle Extension (s)					5.0			3.0	4.0			4.0
Lane Grp Cap (vph)					3254			120	1175			514
v/s Ratio Prot								0.04	c0.09			0.03
v/s Ratio Perm					0.08							
v/c Ratio					0.12			0.57	0.39			0.34
Uniform Delay, d1					6.6			47.5	34.4			43.8
Progression Factor					1.00			1.00	1.00			1.00
Incremental Delay, d2					0.1			6.0	0.3			0.5
Delay (s)					6.7			53.5	34.7			44.3
Level of Service					A			D	C			D
Approach Delay (s)		0.0			6.7				37.2			44.3
Approach LOS		A			A				D			D

Intersection Summary

HCM 2000 Control Delay	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Intersection Summary	
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	21
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	2%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

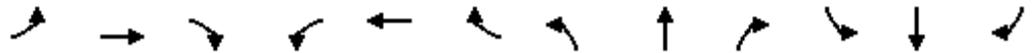
Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑						↙↑	↗
Traffic Volume (vph)	0	1210	60	85	1030	0	0	0	0	55	45	85
Future Volume (vph)	0	1210	60	85	1030	0	0	0	0	55	45	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	6.0
Lane Util. Factor		0.95		1.00	0.95						0.95	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3549		1787	3574						3411	1568
Flt Permitted		1.00		0.14	1.00						0.97	1.00
Satd. Flow (perm)		3549		265	3574						3411	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1274	63	89	1084	0	0	0	0	58	47	89
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	1335	0	89	1084	0	0	0	0	0	105	16
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	3%	3%	3%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		105.9		119.0	119.0						29.0	29.0
Effective Green, g (s)		105.9		119.0	119.0						29.0	29.0
Actuated g/C Ratio		0.66		0.74	0.74						0.18	0.18
Clearance Time (s)		6.0		6.0	6.0						6.0	6.0
Vehicle Extension (s)		5.0		2.5	5.0						2.5	2.5
Lane Grp Cap (vph)		2348		264	2658						618	284
v/s Ratio Prot		c0.38		0.01	c0.30							
v/s Ratio Perm				0.23							0.03	0.01
v/c Ratio		0.57		0.34	0.41						0.17	0.06
Uniform Delay, d1		14.7		10.4	7.5						55.3	54.2
Progression Factor		1.10		0.39	0.67						1.00	1.00
Incremental Delay, d2		0.5		0.5	0.4						0.6	0.4
Delay (s)		16.7		4.5	5.5						55.9	54.6
Level of Service		B		A	A						E	D
Approach Delay (s)		16.7			5.4			0.0			55.3	
Approach LOS		B			A			A			E	

Intersection Summary

HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑		↘	↑	↘			
Traffic Volume (vph)	430	1230	0	0	850	265	15	85	40	0	0	0
Future Volume (vph)	430	1230	0	0	850	265	15	85	40	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1787	3574			3447		1770	1863	1583			
Flt Permitted	0.16	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	298	3574			3447		1770	1863	1583			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	453	1295	0	0	895	279	16	89	42	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	0	39	0	0	0
Lane Group Flow (vph)	453	1295	0	0	1160	0	16	89	3	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	135.5	135.5			94.2		12.5	12.5	12.5			
Effective Green, g (s)	135.5	135.5			94.2		12.5	12.5	12.5			
Actuated g/C Ratio	0.85	0.85			0.59		0.08	0.08	0.08			
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0		2.5	2.5	2.5			
Lane Grp Cap (vph)	580	3026			2029		138	145	123			
v/s Ratio Prot	c0.17	0.36			0.34			c0.05				
v/s Ratio Perm	c0.49						0.01		0.00			
v/c Ratio	0.78	0.43			0.57		0.12	0.61	0.03			
Uniform Delay, d1	28.7	2.9			20.4		68.6	71.4	68.1			
Progression Factor	1.00	1.00			0.71		1.00	1.00	1.00			
Incremental Delay, d2	6.5	0.2			1.1		0.3	6.4	0.1			
Delay (s)	35.2	3.1			15.7		68.9	77.8	68.2			
Level of Service	D	A			B		E	E	E			
Approach Delay (s)		11.4			15.7			74.1			0.0	
Approach LOS		B			B			E			A	

Intersection Summary

HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

03/25/2020



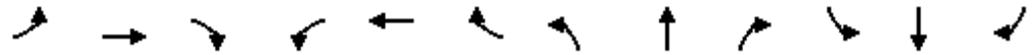
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↑						↔	
Traffic Volume (vph)	0	190	20	5	95	0	0	0	0	10	160	20
Future Volume (vph)	0	190	20	5	95	0	0	0	0	10	160	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.99		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1876		1805	1900						3440	
Flt Permitted		1.00		0.62	1.00						1.00	
Satd. Flow (perm)		1876		1178	1900						3440	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	200	21	5	100	0	0	0	0	11	168	21
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	213	0	5	100	0	0	0	0	0	190	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	3%
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		12.3		12.3	12.3						26.8	
Effective Green, g (s)		12.3		12.3	12.3						26.8	
Actuated g/C Ratio		0.24		0.24	0.24						0.52	
Clearance Time (s)		6.0		6.0	6.0						6.0	
Vehicle Extension (s)		4.0		4.0	4.0						4.0	
Lane Grp Cap (vph)		451		283	457						1804	
v/s Ratio Prot		0.11			0.05							
v/s Ratio Perm				0.00							0.06	
v/c Ratio		0.47		0.02	0.22						0.11	
Uniform Delay, d1		16.6		14.8	15.5						6.1	
Progression Factor		1.00		1.00	1.00						1.00	
Incremental Delay, d2		1.1		0.0	0.3						0.1	
Delay (s)		17.7		14.8	15.9						6.2	
Level of Service		B		B	B						A	
Approach Delay (s)		17.7			15.8			0.0			6.2	
Approach LOS		B			B			A			A	

Intersection Summary

HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	51.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 6: Martin Luther King Jr Dr & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑									↑↑	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	250	55	0	0	0	0	0	0	20	150	0
Future Volume (vph)	0	250	55	0	0	0	0	0	0	20	150	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	263	58	0	0	0	0	0	0	21	158	0

Direction, Lane #	EB 1	EB 2	SB 1	SB 2
Volume Total (vph)	175	146	74	105
Volume Left (vph)	0	0	21	0
Volume Right (vph)	0	58	0	0
Hadj (s)	0.00	-0.28	0.21	0.07
Departure Headway (s)	5.0	4.7	5.5	5.3
Degree Utilization, x	0.24	0.19	0.11	0.16
Capacity (veh/h)	694	740	627	643
Control Delay (s)	8.4	7.6	8.0	8.1
Approach Delay (s)	8.0		8.1	
Approach LOS	A		A	

Intersection Summary			
Delay		8.0	
Level of Service		A	
Intersection Capacity Utilization	20.1%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 8: Haynes St/I-110 NB & E Maxwell Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations					↑↑	↑	↑	↑					
Traffic Volume (vph)	0	0	0	0	115	125	20	440	0	0	0	0	
Future Volume (vph)	0	0	0	0	115	125	20	440	0	0	0	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)					12.0	12.0	6.0	6.0					
Lane Util. Factor					0.95	1.00	1.00	1.00					
Frt					1.00	0.85	1.00	1.00					
Flt Protected					1.00	1.00	0.95	1.00					
Satd. Flow (prot)					3574	1599	1805	1900					
Flt Permitted					1.00	1.00	0.95	1.00					
Satd. Flow (perm)					3574	1599	1805	1900					
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	0	0	0	0	121	132	21	463	0	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	67	14	0	0	0	0	0	
Lane Group Flow (vph)	0	0	0	0	121	65	7	463	0	0	0	0	
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	
Turn Type					NA	Perm	Perm	NA					
Protected Phases					4	1		2					
Permitted Phases						4	1	2					
Actuated Green, G (s)					33.8	33.8	24.1	24.1					
Effective Green, g (s)					33.8	33.8	24.1	24.1					
Actuated g/C Ratio					0.49	0.49	0.35	0.35					
Clearance Time (s)							6.0	6.0					
Vehicle Extension (s)							4.0	4.0					
Lane Grp Cap (vph)					1766	790	635	669					
v/s Ratio Prot					0.03			c0.24					
v/s Ratio Perm						c0.04	0.00						
v/c Ratio					0.07	0.08	0.01	0.69					
Uniform Delay, d1					9.1	9.1	14.4	19.0					
Progression Factor					1.05	1.36	1.00	1.00					
Incremental Delay, d2					0.0	0.1	0.0	5.8					
Delay (s)					9.5	12.5	14.4	24.8					
Level of Service					A	B	B	C					
Approach Delay (s)		0.0			11.1			24.3			0.0		
Approach LOS		A			B			C			A		
Intersection Summary													
HCM 2000 Control Delay			19.8		HCM 2000 Level of Service				B				
HCM 2000 Volume to Capacity ratio			0.42										
Actuated Cycle Length (s)			68.4		Sum of lost time (s)				22.5				
Intersection Capacity Utilization			45.9%		ICU Level of Service				A				
Analysis Period (min)			15										
c Critical Lane Group													

Davis Highway/MLK Drive Two-Way Conversion Study
 9: Martin Luther King Jr Dr & E Maxwell Street

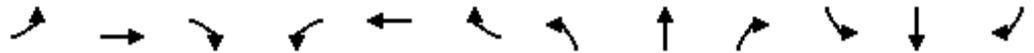
03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔↔↔						↑↑	↗
Traffic Volume (vph)	0	0	0	10	185	0	0	0	0	0	160	55
Future Volume (vph)	0	0	0	10	185	0	0	0	0	0	160	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0						6.0	4.5
Lane Util. Factor					0.91						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					1.00						1.00	1.00
Satd. Flow (prot)					5173						3471	1553
Flt Permitted					1.00						1.00	1.00
Satd. Flow (perm)					5173						3471	1553
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	11	195	0	0	0	0	0	168	58
RTOR Reduction (vph)	0	0	0	0	91	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	115	0	0	0	0	0	168	58
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	4%
Turn Type				Perm	NA						NA	custom
Protected Phases					4						6	1
Permitted Phases				4								
Actuated Green, G (s)					11.3						39.1	10.5
Effective Green, g (s)					11.3						39.1	10.5
Actuated g/C Ratio					0.17						0.57	0.15
Clearance Time (s)					12.0						6.0	4.5
Vehicle Extension (s)					5.0						4.0	8.0
Lane Grp Cap (vph)					854						1984	238
v/s Ratio Prot											c0.05	c0.04
v/s Ratio Perm					0.02							
v/c Ratio					0.13						0.08	0.24
Uniform Delay, d1					24.4						6.6	25.5
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					0.2						0.0	2.3
Delay (s)					24.5						6.6	27.7
Level of Service					C						A	C
Approach Delay (s)		0.0			24.5			0.0			12.0	
Approach LOS		A			C			A			B	
Intersection Summary												
HCM 2000 Control Delay			18.0		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.14									
Actuated Cycle Length (s)			68.4		Sum of lost time (s)				22.5			
Intersection Capacity Utilization			24.4%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

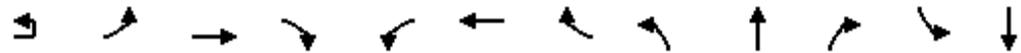
03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Volume (veh/h)	0	75	30	5	50	0	0	0	0	20	175	35
Future Volume (Veh/h)	0	75	30	5	50	0	0	0	0	20	175	35
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	79	32	5	53	0	0	0	0	21	184	37
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	271	244	110	206	263	0	221			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	271	244	110	206	263	0	221			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	88	97	99	92	100	100			99		
cM capacity (veh/h)	614	650	925	641	637	1091	1360			1614		
Direction, Lane #	EB 1	WB 1	SB 1	SB 2								
Volume Total	111	58	113	129								
Volume Left	0	5	21	0								
Volume Right	32	0	0	37								
cSH	711	637	1614	1700								
Volume to Capacity	0.16	0.09	0.01	0.08								
Queue Length 95th (ft)	14	7	1	0								
Control Delay (s)	11.0	11.2	1.4	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	11.0	11.2	0.7									
Approach LOS	B	B										
Intersection Summary												
Average Delay			4.9									
Intersection Capacity Utilization			20.0%	ICU Level of Service							A	
Analysis Period (min)			15									

Davis Highway/MLK Drive Two-Way Conversion Study
 11: Martin Luther King Jr Dr & E Texar Dr

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations			↑↑		↖	↑↑						↑↑
Traffic Volume (vph)	5	0	540	50	30	275	0	0	0	0	95	155
Future Volume (vph)	5	0	540	50	30	275	0	0	0	0	95	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0		6.0	6.0						6.2
Lane Util. Factor			0.95		1.00	0.95						0.95
Frt			0.99		1.00	1.00						0.97
Flt Protected			1.00		0.95	1.00						0.99
Satd. Flow (prot)			3527		1719	3438						3276
Flt Permitted			0.95		0.37	1.00						0.99
Satd. Flow (perm)			3363		672	3438						3276
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	0	568	53	32	289	0	0	0	0	100	163
RTOR Reduction (vph)	0	0	3	0	0	0	0	0	0	0	0	26
Lane Group Flow (vph)	0	0	623	0	32	289	0	0	0	0	0	311
Heavy Vehicles (%)	1%	1%	1%	1%	5%	5%	5%	0%	0%	0%	5%	5%
Turn Type	Perm		NA		pm+pt	NA					Perm	NA
Protected Phases			6		5	2						8
Permitted Phases	6				2						8	
Actuated Green, G (s)			80.1		90.0	90.0						17.8
Effective Green, g (s)			80.1		90.0	90.0						17.8
Actuated g/C Ratio			0.67		0.75	0.75						0.15
Clearance Time (s)			6.0		6.0	6.0						6.2
Vehicle Extension (s)			4.0		3.0	3.0						4.0
Lane Grp Cap (vph)			2244		538	2578						485
v/s Ratio Prot					0.00	c0.08						
v/s Ratio Perm			c0.19		0.04							0.10
v/c Ratio			0.28		0.06	0.11						0.64
Uniform Delay, d1			8.1		4.2	4.1						48.1
Progression Factor			1.00		1.00	1.00						1.00
Incremental Delay, d2			0.3		0.0	0.0						3.2
Delay (s)			8.4		4.2	4.1						51.3
Level of Service			A		A	A						D
Approach Delay (s)			8.4		4.1			0.0				51.3
Approach LOS			A		A			A				D

Intersection Summary

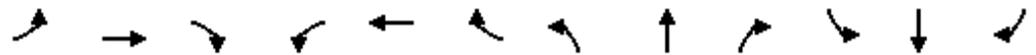
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Intersection Summary	
Lane Configurations	
Traffic Volume (vph)	70
Future Volume (vph)	70
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	74
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	5%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020

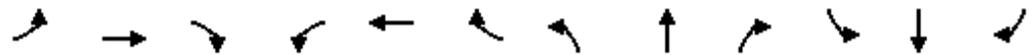


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Volume (veh/h)	0	5	5	10	3	0	0	0	0	10	295	5
Future Volume (Veh/h)	0	5	5	10	3	0	0	0	0	10	295	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	5	5	11	3	0	0	0	0	11	311	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	337	336	158	185	338	0	316			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	337	336	158	185	338	0	316			0		
tC, single (s)	7.5	7.5	7.9	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.5	3.8	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	99	99	99	100	100			99		
cM capacity (veh/h)	592	484	727	749	582	1091	1256			1607		
Direction, Lane #	EB 1	WB 1	SB 1	SB 2								
Volume Total	10	14	166	160								
Volume Left	0	11	11	0								
Volume Right	5	0	0	5								
cSH	581	706	1607	1700								
Volume to Capacity	0.02	0.02	0.01	0.09								
Queue Length 95th (ft)	1	2	1	0								
Control Delay (s)	11.3	10.2	0.5	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	11.3	10.2	0.3									
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			22.6%		ICU Level of Service					A		
Analysis Period (min)			15									

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

03/25/2020



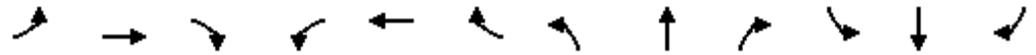
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↔↑	↘			
Traffic Volume (vph)	95	1170	0	0	1030	25	85	80	250	0	0	0
Future Volume (vph)	95	1170	0	0	1030	25	85	80	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.5			6.5			6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95			0.95	1.00			
Frt	1.00	1.00			1.00			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.97	1.00			
Satd. Flow (prot)	1805	3610			3562			3485	1599			
Flt Permitted	0.21	1.00			1.00			0.97	1.00			
Satd. Flow (perm)	404	3610			3562			3485	1599			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	1232	0	0	1084	26	89	84	263	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	115	0	0	0
Lane Group Flow (vph)	100	1232	0	0	1109	0	0	173	148	0	0	0
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	128.5	128.5			115.6			19.0	19.0			
Effective Green, g (s)	128.5	128.5			115.6			19.0	19.0			
Actuated g/C Ratio	0.80	0.80			0.72			0.12	0.12			
Clearance Time (s)	6.0	6.5			6.5			6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0			3.0	3.0			
Lane Grp Cap (vph)	384	2899			2573			413	189			
v/s Ratio Prot	0.01	c0.34			0.31							
v/s Ratio Perm	0.20							0.05	c0.09			
v/c Ratio	0.26	0.42			0.43			0.42	0.79			
Uniform Delay, d1	5.0	4.7			8.9			65.4	68.5			
Progression Factor	0.83	0.89			1.00			1.00	1.00			
Incremental Delay, d2	0.2	0.2			0.5			0.7	19.0			
Delay (s)	4.4	4.3			9.5			66.1	87.5			
Level of Service	A	A			A			E	F			
Approach Delay (s)		4.4			9.5			79.0			0.0	
Approach LOS		A			A			E			A	

Intersection Summary

HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

03/25/2020

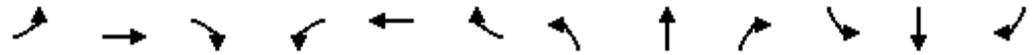


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑			↗			↕				
Traffic Volume (vph)	20	180	0	0	90	10	10	165	20	0	0	0
Future Volume (vph)	20	180	0	0	90	10	10	165	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5			7.5				
Lane Util. Factor	1.00	1.00			1.00			0.95				
Frt	1.00	1.00			0.99			0.98				
Flt Protected	0.95	1.00			1.00			1.00				
Satd. Flow (prot)	1787	1881			1855			3476				
Flt Permitted	0.69	1.00			1.00			1.00				
Satd. Flow (perm)	1295	1881			1855			3476				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	189	0	0	95	11	11	174	21	0	0	0
RTOR Reduction (vph)	0	0	0	0	8	0	0	17	0	0	0	0
Lane Group Flow (vph)	21	189	0	0	98	0	0	189	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			4			2				
Permitted Phases	4						2					
Actuated Green, G (s)	8.2	8.2			8.2			6.3				
Effective Green, g (s)	8.2	8.2			8.2			6.3				
Actuated g/C Ratio	0.28	0.28			0.28			0.21				
Clearance Time (s)	7.5	7.5			7.5			7.5				
Vehicle Extension (s)	4.0	4.0			4.0			4.0				
Lane Grp Cap (vph)	359	522			515			742				
v/s Ratio Prot		c0.10			0.05							
v/s Ratio Perm	0.02							0.05				
v/c Ratio	0.06	0.36			0.19			0.26				
Uniform Delay, d1	7.8	8.6			8.1			9.6				
Progression Factor	1.00	1.00			1.00			1.00				
Incremental Delay, d2	0.1	0.6			0.2			0.2				
Delay (s)	7.9	9.1			8.4			9.9				
Level of Service	A	A			A			A				
Approach Delay (s)		9.0			8.4			9.9			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	29.5	Sum of lost time (s)	15.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↑						↑↔				
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	65	205	0	0	0	0	0	195	10	0	0	0
Future Volume (vph)	65	205	0	0	0	0	0	195	10	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	68	216	0	0	0	0	0	205	11	0	0	0

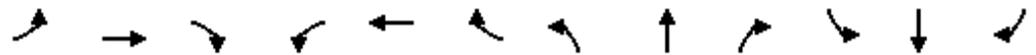
Direction, Lane #	EB 1	EB 2	NB 1	NB 2
Volume Total (vph)	140	144	137	79
Volume Left (vph)	68	0	0	0
Volume Right (vph)	0	0	0	11
Hadj (s)	0.24	0.00	0.00	-0.10
Departure Headway (s)	5.3	5.1	5.2	5.1
Degree Utilization, x	0.21	0.20	0.20	0.11
Capacity (veh/h)	651	687	661	670
Control Delay (s)	8.5	8.1	8.3	7.6
Approach Delay (s)	8.3		8.0	
Approach LOS	A		A	

Intersection Summary			
Delay		8.2	
Level of Service		A	
Intersection Capacity Utilization	19.9%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

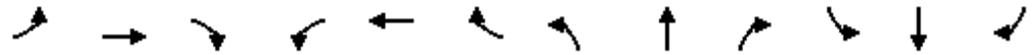
03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖			↗			↖↗				
Traffic Volume (veh/h)	35	60	0	0	40	10	15	245	5	0	0	0
Future Volume (Veh/h)	35	60	0	0	40	10	15	245	5	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	37	63	0	0	42	11	16	258	5	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	193	295	0	324	292	132	0			263		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	193	295	0	324	292	132	0			263		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	90	100	100	93	99	99			100		
cM capacity (veh/h)	701	614	1091	558	616	900	1622			1313		
Direction, Lane #												
	EB 1	WB 1	NB 1	NB 2								
Volume Total	100	53	145	134								
Volume Left	37	0	16	0								
Volume Right	0	11	0	5								
cSH	643	659	1622	1700								
Volume to Capacity	0.16	0.08	0.01	0.08								
Queue Length 95th (ft)	14	7	1	0								
Control Delay (s)	11.6	10.9	0.9	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	11.6	10.9	0.5									
Approach LOS	B	B										
Intersection Summary												
Average Delay			4.3									
Intersection Capacity Utilization			25.8%		ICU Level of Service					A		
Analysis Period (min)			15									

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↑↑				
Traffic Volume (vph)	220	415	0	0	250	90	55	235	45	0	0	0
Future Volume (vph)	220	415	0	0	250	90	55	235	45	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.4				
Lane Util. Factor	1.00	0.95			0.95			0.95				
Frt	1.00	1.00			0.96			0.98				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1787	3574			3365			3440				
Flt Permitted	0.50	1.00			1.00			0.99				
Satd. Flow (perm)	944	3574			3365			3440				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	437	0	0	263	95	58	247	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	17	0	0	11	0	0	0	0
Lane Group Flow (vph)	232	437	0	0	341	0	0	341	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	2%	2%	2%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	1	6			2			4				
Permitted Phases	6						4					
Actuated Green, G (s)	99.4	99.4			83.1			18.2				
Effective Green, g (s)	99.4	99.4			83.1			18.2				
Actuated g/C Ratio	0.76	0.76			0.64			0.14				
Clearance Time (s)	6.0	6.0			6.0			6.4				
Vehicle Extension (s)	3.0	4.0			4.0			3.0				
Lane Grp Cap (vph)	788	2732			2151			481				
v/s Ratio Prot	c0.02	0.12			0.10							
v/s Ratio Perm	c0.20							0.10				
v/c Ratio	0.29	0.16			0.16			0.71				
Uniform Delay, d1	4.3	4.1			9.4			53.4				
Progression Factor	1.00	1.00			1.00			1.00				
Incremental Delay, d2	0.2	0.0			0.2			4.7				
Delay (s)	4.5	4.1			9.6			58.1				
Level of Service	A	A			A			E				
Approach Delay (s)		4.3			9.6			58.1			0.0	
Approach LOS		A			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 20: N Davis Hwy & Hart Dr

03/25/2020



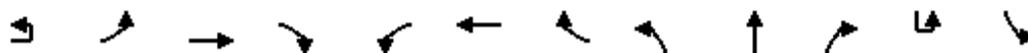
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖			↗			↖↗				
Traffic Volume (veh/h)	5	10	0	0	10	5	3	565	10	0	0	0
Future Volume (Veh/h)	5	10	0	0	10	5	3	565	10	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	11	0	0	11	5	3	595	11	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)											414	
pX, platoon unblocked												
vC, conflicting volume	314	612	0	612	606	303	0			606		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	314	612	0	612	606	303	0			606		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	97	100	100	97	99	100			100		
cM capacity (veh/h)	603	410	1091	373	413	699	1629			982		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	16	16	300	308
Volume Left	5	0	3	0
Volume Right	0	5	0	11
cSH	456	474	1629	1700
Volume to Capacity	0.04	0.03	0.00	0.18
Queue Length 95th (ft)	3	3	0	0
Control Delay (s)	13.2	12.9	0.1	0.0
Lane LOS	B	B	A	
Approach Delay (s)	13.2	12.9	0.0	
Approach LOS	B	B		

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization	27.6%		ICU Level of Service
Analysis Period (min)	15		A

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations		↖	↗	↖	↖	↗		↖	↖↗			↖
Traffic Volume (vph)	5	380	3	15	5	5	5	265	305	5	5	5
Future Volume (vph)	5	380	3	15	5	5	5	265	305	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0
Lane Util. Factor		0.95	0.95	1.00	1.00	1.00		1.00	0.95			1.00
Frt		1.00	1.00	0.85	1.00	0.93		1.00	1.00			1.00
Flt Protected		0.95	0.95	1.00	0.95	1.00		0.95	1.00			0.95
Satd. Flow (prot)		1681	1687	1583	1805	1758		1787	3566			1770
Flt Permitted		0.95	0.95	1.00	0.95	1.00		0.57	1.00			0.49
Satd. Flow (perm)		1681	1687	1583	1805	1758		1065	3566			912
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	400	3	16	5	5	5	279	321	5	5	5
RTOR Reduction (vph)	0	0	0	14	0	5	0	0	1	0	0	0
Lane Group Flow (vph)	0	205	203	2	5	5	0	279	325	0	0	10
Heavy Vehicles (%)	2%	2%	2%	2%	0%	0%	0%	1%	1%	1%	2%	2%
Turn Type	Split	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	pm+pt
Protected Phases	8	8	8		7	7		5	2		1	1
Permitted Phases				8				2			6	6
Actuated Green, G (s)		24.9	24.9	24.9	4.0	4.0		81.3	69.9			113.1
Effective Green, g (s)		24.9	24.9	24.9	4.0	4.0		81.3	69.9			113.1
Actuated g/C Ratio		0.16	0.16	0.16	0.02	0.02		0.51	0.44			0.71
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	3.0			6.0
Lane Grp Cap (vph)		261	262	246	45	43		592	1557			841
v/s Ratio Prot		c0.12	0.12		0.00	c0.00		c0.03	0.09			0.00
v/s Ratio Perm				0.00				c0.21				0.01
v/c Ratio		0.79	0.77	0.01	0.11	0.12		0.47	0.21			0.01
Uniform Delay, d1		65.0	64.9	57.1	76.3	76.3		23.1	27.9			7.2
Progression Factor		1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00
Incremental Delay, d2		14.3	13.3	0.0	1.1	1.2		0.6	0.3			0.0
Delay (s)		79.3	78.2	57.1	77.4	77.5		23.7	28.2			7.2
Level of Service		E	E	E	E	E		C	C			A
Approach Delay (s)			77.9			77.5			26.1			
Approach LOS			E			E			C			

Intersection Summary

HCM 2000 Control Delay	32.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

03/25/2020

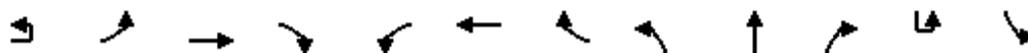


Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	290	650
Future Volume (vph)	290	650
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	305	684
RTOR Reduction (vph)	0	275
Lane Group Flow (vph)	305	409
Heavy Vehicles (%)	2%	2%
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	95.7	95.7
Effective Green, g (s)	95.7	95.7
Actuated g/C Ratio	0.60	0.60
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2116	946
v/s Ratio Prot	0.09	
v/s Ratio Perm		c0.26
v/c Ratio	0.14	0.43
Uniform Delay, d1	14.1	17.4
Progression Factor	1.00	1.00
Incremental Delay, d2	0.0	0.3
Delay (s)	14.2	17.7
Level of Service	B	B
Approach Delay (s)	16.5	
Approach LOS	B	

Intersection Summary

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations		↔↔	↔↔↔	↔	↔	↔↔↔		↔↔	↔↔	↔		↔
Traffic Volume (vph)	5	270	815	710	25	1015	55	105	280	310	5	70
Future Volume (vph)	5	270	815	710	25	1015	55	105	280	310	5	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4	6.4	6.4		6.0	6.0	6.0		6.0
Lane Util. Factor		0.97	0.91	1.00	1.00	0.91		0.97	0.95	1.00		1.00
Frt		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		3467	5136	1599	1787	5096		3467	3574	1599		1787
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)		3467	5136	1599	1787	5096		3467	3574	1599		1787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	284	858	747	26	1068	58	111	295	326	5	74
RTOR Reduction (vph)	0	0	0	260	0	3	0	0	0	204	0	0
Lane Group Flow (vph)	0	289	858	487	26	1123	0	111	295	122	0	79
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	Prot
Protected Phases	1	1	6		5	2		7	4		3	3
Permitted Phases				6						4		
Actuated Green, G (s)		19.1	79.8	79.8	5.2	65.9		10.2	27.6	27.6		12.6
Effective Green, g (s)		19.1	79.8	79.8	5.2	65.9		10.2	27.6	27.6		12.6
Actuated g/C Ratio		0.13	0.53	0.53	0.03	0.44		0.07	0.18	0.18		0.08
Clearance Time (s)		6.4	6.4	6.4	6.4	6.4		6.0	6.0	6.0		6.0
Vehicle Extension (s)		4.5	4.0	4.0	3.0	4.0		3.0	4.0	4.0		4.5
Lane Grp Cap (vph)		441	2732	850	61	2238		235	657	294		150
v/s Ratio Prot		c0.08	0.17		0.01	0.22		0.03	0.08			c0.04
v/s Ratio Perm				c0.30						0.08		
v/c Ratio		0.66	0.31	0.57	0.43	0.50		0.47	0.45	0.41		0.53
Uniform Delay, d1		62.3	19.7	23.6	70.9	30.2		67.3	54.4	54.1		65.8
Progression Factor		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2		4.2	0.3	2.8	4.7	0.8		1.5	0.7	1.3		5.3
Delay (s)		66.5	20.0	26.4	75.7	31.0		68.8	55.1	55.4		71.1
Level of Service		E	C	C	E	C		E	E	E		E
Approach Delay (s)			29.7		32.1			57.3				
Approach LOS			C		C			E				

Intersection Summary

HCM 2000 Control Delay	41.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.8
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

03/25/2020



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	215	450
Future Volume (vph)	215	450
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3574	1599
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3574	1599
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	226	474
RTOR Reduction (vph)	0	213
Lane Group Flow (vph)	226	261
Heavy Vehicles (%)	1%	1%
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Actuated Green, G (s)	30.0	30.0
Effective Green, g (s)	30.0	30.0
Actuated g/C Ratio	0.20	0.20
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	4.0	4.0
Lane Grp Cap (vph)	714	319
v/s Ratio Prot	0.06	
v/s Ratio Perm		c0.16
v/c Ratio	0.32	0.82
Uniform Delay, d1	51.2	57.4
Progression Factor	1.00	1.00
Incremental Delay, d2	0.3	15.7
Delay (s)	51.6	73.1
Level of Service	D	E
Approach Delay (s)	66.7	
Approach LOS	E	

Intersection Summary

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
1000: Martin Luther King Jr Dr

03/25/2020



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰					↱↱
Traffic Volume (veh/h)	10	0	0	0	0	310
Future Volume (Veh/h)	10	0	0	0	0	310
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	0	0	0	0	326
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	163	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	163	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	817	1091			1622	
Direction, Lane #	WB 1	SB 1	SB 2			
Volume Total	11	163	163			
Volume Left	11	0	0			
Volume Right	0	0	0			
cSH	817	1700	1700			
Volume to Capacity	0.01	0.10	0.10			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.5	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	9.5	0.0				
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			31.5%	ICU Level of Service		A
Analysis Period (min)			15			



DAVIS HIGHWAY & DR. MARTIN LUTHER KING JR. DRIVE / ALCANIZ STREET

Two-Way Conversion Traffic Feasibility Study

Design Year (2045) No Build Condition Analysis

Intersection: 1: Alcaniz St & E Gregory Street

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LT	T	TR	UL	T	T	T	T	T	TR
Maximum Queue (ft)	385	246	114	49	53	68	94	90	104	94
Average Queue (ft)	165	87	28	28	17	31	41	31	38	49
95th Queue (ft)	288	196	80	54	45	60	79	62	69	81
Link Distance (ft)	584	584	584		543	543	543	219	219	219
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				120						
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 2: Alcaniz St & E Wright Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	T	TR	LT	T	UL	R	R	LT	TR
Maximum Queue (ft)	27	30	29	2	52	77	92	56	75
Average Queue (ft)	16	23	11	0	19	37	49	36	43
95th Queue (ft)	37	43	22	2	43	58	76	52	71
Link Distance (ft)	739	739	295	295	219	219	219	1614	1614
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	LT	T	R
Maximum Queue (ft)	352	352	194	327	302	114	74	52
Average Queue (ft)	241	254	93	144	146	50	27	32
95th Queue (ft)	396	397	162	225	223	97	67	59
Link Distance (ft)	339	339		319	319	2403	2403	
Upstream Blk Time (%)	5	6		0	0			
Queuing Penalty (veh)	32	41		2	0			
Storage Bay Dist (ft)			95					615
Storage Blk Time (%)			19	15				
Queuing Penalty (veh)			129	20				

Intersection: 4: Haynes St/I-110 NB On Ramp & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	L	T	R
Maximum Queue (ft)	215	416	440	286	314	74	115	100
Average Queue (ft)	173	228	206	108	120	16	52	34
95th Queue (ft)	242	512	475	216	231	55	103	81
Link Distance (ft)		401	401	339	339	359	359	
Upstream Blk Time (%)		22	7					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)	155							125
Storage Blk Time (%)	26	11					0	
Queuing Penalty (veh)	173	38					0	

Intersection: 5: Martin Luther King Jr Dr & E Blount St

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	TR
Maximum Queue (ft)	141	55	207	54	73
Average Queue (ft)	66	5	106	18	31
95th Queue (ft)	112	26	210	50	64
Link Distance (ft)	376		331	2046	2046
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		120			
Storage Blk Time (%)			15		
Queuing Penalty (veh)			2		

Intersection: 6: Martin Luther King Jr Dr & E Jordan St

Movement	EB	EB	SB	SB
Directions Served	T	TR	LT	T
Maximum Queue (ft)	78	31	57	83
Average Queue (ft)	37	28	33	32
95th Queue (ft)	57	43	44	61
Link Distance (ft)	31	31	278	278
Upstream Blk Time (%)	18	5		
Queuing Penalty (veh)	33	9		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Haynes St & E Jordan St

Movement	EB	EB	EB	NB	NB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	23	171	30	48	71
Average Queue (ft)	1	44	6	7	37
95th Queue (ft)	8	94	25	30	60
Link Distance (ft)	265	265	265	406	406
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Haynes St/I-110 NB & E Maxwell Street

Movement	WB	NB	NB
Directions Served	T	L	T
Maximum Queue (ft)	30	51	290
Average Queue (ft)	2	7	121
95th Queue (ft)	14	31	226
Link Distance (ft)	40	279	279
Upstream Blk Time (%)	0		1
Queuing Penalty (veh)	0		1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Martin Luther King Jr Dr & E Maxwell Street

Movement	WB	WB	WB	SB	SB	SB
Directions Served	LT	T	T	T	T	R
Maximum Queue (ft)	176	134	203	72	74	91
Average Queue (ft)	66	38	100	19	26	29
95th Queue (ft)	125	89	164	50	62	74
Link Distance (ft)	334	334	334	1700	1700	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						330
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Martin Luther King Jr Dr & E Cross St

Movement	EB	WB
Directions Served	UTR	ULT
Maximum Queue (ft)	96	72
Average Queue (ft)	40	35
95th Queue (ft)	69	54
Link Distance (ft)	209	329
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Martin Luther King Jr Dr & E Texar Dr

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	UT	TR	L	T	T	LT	TR
Maximum Queue (ft)	160	120	31	94	72	134	121
Average Queue (ft)	79	38	16	40	21	60	63
95th Queue (ft)	139	80	40	84	60	110	110
Link Distance (ft)	701	701		322	322	1272	1272
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			115				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 12: Martin Luther King Jr Dr & Hart Dr

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	56	27
Average Queue (ft)	13	13
95th Queue (ft)	42	34
Link Distance (ft)	83	53
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: E Wright Street & N Davis Hwy

Movement	WB
Directions Served	TR
Maximum Queue (ft)	69
Average Queue (ft)	33
95th Queue (ft)	51
Link Distance (ft)	772
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 14: N Davis Hwy & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	LT	T	R
Maximum Queue (ft)	108	110	73	283	208	175	83	111
Average Queue (ft)	37	12	9	117	60	89	33	51
95th Queue (ft)	80	50	36	220	152	142	72	89
Link Distance (ft)		319	319	473	473	1617	1617	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	120							140
Storage Blk Time (%)	0	0						
Queuing Penalty (veh)	0	0						

Intersection: 15: N Davis Hwy & E Blount St

Movement	EB	EB	WB	NB	NB
Directions Served	L	T	TR	LT	TR
Maximum Queue (ft)	31	134	207	54	90
Average Queue (ft)	11	56	99	28	27
95th Queue (ft)	35	107	163	53	60
Link Distance (ft)		331	493	2390	2390
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)		13			
Queuing Penalty (veh)		2			

Intersection: 16: N Davis Hwy & E Jordan St

Movement	EB	EB	NB	NB
Directions Served	LT	T	T	TR
Maximum Queue (ft)	77	55	67	56
Average Queue (ft)	37	30	36	34
95th Queue (ft)	57	50	57	52
Link Distance (ft)	354	354	2061	2061
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: N Davis Hwy & E Maxwell Street

Movement	WB	WB	WB
Directions Served	T	T	R
Maximum Queue (ft)	55	92	54
Average Queue (ft)	37	44	19
95th Queue (ft)	53	69	45
Link Distance (ft)	521	521	521
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: N Davis Hwy & E Cross St

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	70	56
Average Queue (ft)	35	33
95th Queue (ft)	55	54
Link Distance (ft)	329	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 19: N Davis Hwy & E Texar Dr

Movement	EB	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	T	TR	LT	TR
Maximum Queue (ft)	113	75	51	138	120	111	96
Average Queue (ft)	46	32	14	56	34	54	53
95th Queue (ft)	88	69	40	104	83	95	88
Link Distance (ft)		322	322	592	592	2354	2354
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	130						
Storage Blk Time (%)	0						
Queuing Penalty (veh)	0						

Intersection: 20: N Davis Hwy & Hart Dr

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	45	53
Average Queue (ft)	11	21
95th Queue (ft)	31	47
Link Distance (ft)	53	194
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: N Davis Hwy & I-110 Ramp/Driveway

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	TR	UL	T	T
Maximum Queue (ft)	275	416	215	27	70	176	53	94	30	74	74
Average Queue (ft)	166	230	14	6	11	69	26	46	9	30	39
95th Queue (ft)	270	337	103	22	40	135	59	99	31	70	80
Link Distance (ft)		415		307	307		251	251		525	525
Upstream Blk Time (%)		0									
Queuing Penalty (veh)		0									
Storage Bay Dist (ft)	250		190			225			150		
Storage Blk Time (%)	0	22	0								
Queuing Penalty (veh)	0	52	0								

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	T	UL	T	T	TR	L	L	T
Maximum Queue (ft)	170	186	205	192	163	239	359	306	155	73	99	151
Average Queue (ft)	77	125	119	84	24	24	220	162	68	13	45	77
95th Queue (ft)	165	190	188	168	93	99	316	267	159	45	78	136
Link Distance (ft)			890	890	890		469	469	469			525
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250				190				270	270	
Storage Blk Time (%)							12					
Queuing Penalty (veh)							3					

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	NB	SB	SB	SB
Directions Served	T	UL	T	T
Maximum Queue (ft)	150	88	152	159
Average Queue (ft)	89	43	68	81
95th Queue (ft)	146	80	124	142
Link Distance (ft)	525		748	748
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		285		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: N Davis Hwy

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 35: N Davis Hwy & Martin Luther King Jr Dr

Movement

Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 1000: Martin Luther King Jr Dr

Movement **WB**

Directions Served L
Maximum Queue (ft) 31
Average Queue (ft) 2
95th Queue (ft) 14
Link Distance (ft) 144
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 538

Intersection: 1: Alcaniz St & E Gregory Street

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LT	T	TR	UL	T	T	T	T	T	TR
Maximum Queue (ft)	202	164	83	123	73	135	141	60	68	72
Average Queue (ft)	109	20	18	50	25	57	68	21	27	33
95th Queue (ft)	182	71	48	98	56	103	125	48	47	65
Link Distance (ft)	584	584	584		543	543	543	219	219	219
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				120						
Storage Blk Time (%)				0						
Queuing Penalty (veh)				1						

Intersection: 2: Alcaniz St & E Wright Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	T	TR	ULT	T	UL	R	R	LT	TR
Maximum Queue (ft)	27	53	11	26	66	131	148	54	75
Average Queue (ft)	12	24	9	1	30	59	72	31	38
95th Queue (ft)	34	46	14	9	52	95	121	52	59
Link Distance (ft)	739	739	295	295	219	219	219	1626	1626
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

Movement	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	TR	L	T	T	LT	T	R
Maximum Queue (ft)	320	330	133	161	181	140	74	115
Average Queue (ft)	187	206	53	93	104	59	31	43
95th Queue (ft)	301	308	105	137	166	104	68	85
Link Distance (ft)	341	341		326	326	2391	2391	
Upstream Blk Time (%)		0						
Queuing Penalty (veh)		0						
Storage Bay Dist (ft)			95				315	
Storage Blk Time (%)			4	8				
Queuing Penalty (veh)			26	8				

Intersection: 4: Haynes St/I-110 NB On Ramp & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	TR	T	TR	L	T	R
Maximum Queue (ft)	215	451	403	341	355	74	238	150
Average Queue (ft)	211	375	314	147	161	28	94	46
95th Queue (ft)	226	522	494	277	284	65	178	114
Link Distance (ft)		388	388	341	341	359	359	
Upstream Blk Time (%)		38	3	0	0			
Queuing Penalty (veh)		0	0	1	2			
Storage Bay Dist (ft)	155							125
Storage Blk Time (%)	51	3					7	0
Queuing Penalty (veh)	357	15					4	0

Intersection: 5: Martin Luther King Jr Dr & E Blount St

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	TR
Maximum Queue (ft)	162	54	136	53	115
Average Queue (ft)	104	12	53	16	40
95th Queue (ft)	156	40	110	46	79
Link Distance (ft)	376		331	2046	2046
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		120			
Storage Blk Time (%)			2		
Queuing Penalty (veh)			0		

Intersection: 6: Martin Luther King Jr Dr & E Jordan St

Movement	EB	EB	SB	SB
Directions Served	T	TR	LT	T
Maximum Queue (ft)	54	50	78	56
Average Queue (ft)	33	28	39	37
95th Queue (ft)	44	45	67	54
Link Distance (ft)	31	31	278	278
Upstream Blk Time (%)	15	6		
Queuing Penalty (veh)	27	11		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Haynes St & E Jordan St

Movement	EB	EB	EB	NB	NB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	110	89	30	30	150
Average Queue (ft)	6	28	5	12	46
95th Queue (ft)	40	63	23	35	89
Link Distance (ft)	265	265	265	406	406
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Haynes St/I-110 NB & E Maxwell Street

Movement	WB	NB	NB
Directions Served	T	L	T
Maximum Queue (ft)	30	30	290
Average Queue (ft)	2	15	202
95th Queue (ft)	15	39	290
Link Distance (ft)	40	279	279
Upstream Blk Time (%)	0		2
Queuing Penalty (veh)	0		5
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Martin Luther King Jr Dr & E Maxwell Street

Movement	WB	WB	WB	SB	SB	SB
Directions Served	LT	T	T	T	T	R
Maximum Queue (ft)	134	79	243	94	53	138
Average Queue (ft)	55	21	89	20	20	62
95th Queue (ft)	99	63	160	55	49	127
Link Distance (ft)	334	334	334	1700	1700	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						330
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Martin Luther King Jr Dr & E Cross St

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	55	71
Average Queue (ft)	37	30
95th Queue (ft)	54	54
Link Distance (ft)	209	329
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Martin Luther King Jr Dr & E Texar Dr

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	UT	TR	L	T	T	LT	TR
Maximum Queue (ft)	237	121	44	74	72	124	117
Average Queue (ft)	103	44	19	38	14	56	64
95th Queue (ft)	174	94	43	71	47	105	107
Link Distance (ft)	701	701		326	326	1277	1277
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			115				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 12: Martin Luther King Jr Dr & Hart Dr

Movement	EB	WB	SB	SB
Directions Served	TR	LT	LT	TR
Maximum Queue (ft)	56	27	24	15
Average Queue (ft)	17	10	1	0
95th Queue (ft)	46	30	8	5
Link Distance (ft)	83	53	29	29
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 13: E Wright Street & N Davis Hwy

Movement	WB
Directions Served	TR
Maximum Queue (ft)	74
Average Queue (ft)	34
95th Queue (ft)	54
Link Distance (ft)	772
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 14: N Davis Hwy & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	LT	TR	R
Maximum Queue (ft)	160	74	101	304	176	162	176	158
Average Queue (ft)	60	21	40	119	88	105	98	82
95th Queue (ft)	121	53	83	227	182	153	154	141
Link Distance (ft)		326	326	473	473	1622	1622	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	120							140
Storage Blk Time (%)	2						1	0
Queuing Penalty (veh)	15						2	1

Intersection: 15: N Davis Hwy & E Blount St

Movement	EB	EB	WB	NB	NB
Directions Served	L	T	TR	LT	TR
Maximum Queue (ft)	99	202	114	72	76
Average Queue (ft)	21	60	60	27	33
95th Queue (ft)	63	142	101	64	71
Link Distance (ft)		331	493	2386	2386
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)	2	10			
Queuing Penalty (veh)	3	3			

Intersection: 16: N Davis Hwy & E Jordan St

Movement	EB	EB	NB	NB
Directions Served	LT	T	T	TR
Maximum Queue (ft)	54	55	78	76
Average Queue (ft)	32	27	35	39
95th Queue (ft)	42	50	64	63
Link Distance (ft)	354	354	2061	2061
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: N Davis Hwy & E Maxwell Street

Movement	WB	WB	WB
Directions Served	T	T	R
Maximum Queue (ft)	55	71	55
Average Queue (ft)	37	37	15
95th Queue (ft)	53	55	42
Link Distance (ft)	521	521	521
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: N Davis Hwy & E Cross St

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	76	56
Average Queue (ft)	36	29
95th Queue (ft)	53	48
Link Distance (ft)	329	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 19: N Davis Hwy & E Texar Dr

Movement	EB	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	T	TR	LT	TR
Maximum Queue (ft)	155	88	75	115	68	184	136
Average Queue (ft)	75	34	27	54	33	89	63
95th Queue (ft)	138	65	64	101	58	147	109
Link Distance (ft)		326	326	592	592	2358	2358
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	130						
Storage Blk Time (%)	1						
Queuing Penalty (veh)	3						

Intersection: 20: N Davis Hwy & Hart Dr

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	43	30
Average Queue (ft)	14	18
95th Queue (ft)	34	41
Link Distance (ft)	53	194
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: N Davis Hwy & I-110 Ramp/Driveway

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	UL	LT	R	L	TR	L	T	TR	UL	T	T
Maximum Queue (ft)	243	336	215	49	71	238	188	162	30	170	184
Average Queue (ft)	114	222	28	6	16	126	51	88	14	78	83
95th Queue (ft)	215	316	148	25	45	200	124	150	37	133	149
Link Distance (ft)		415		307	307		251	251		525	525
Upstream Blk Time (%)						0					
Queuing Penalty (veh)						0					
Storage Bay Dist (ft)	250		190			225			150		
Storage Blk Time (%)	0	16	0			0				0	
Queuing Penalty (veh)	0	40	0			0				0	

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	T	L	T	T	TR	L	L	T
Maximum Queue (ft)	190	222	305	253	218	239	484	429	288	133	141	151
Average Queue (ft)	95	146	181	151	88	37	310	241	139	22	39	72
95th Queue (ft)	193	213	301	250	209	150	468	392	262	73	88	130
Link Distance (ft)			890	890	890		469	469	469			525
Upstream Blk Time (%)							1					
Queuing Penalty (veh)							0					
Storage Bay Dist (ft)	250	250				190				270	270	
Storage Blk Time (%)			4				26					
Queuing Penalty (veh)			11				8					

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	UL	T	T	R
Maximum Queue (ft)	157	275	191	126	227	270
Average Queue (ft)	88	24	77	49	127	22
95th Queue (ft)	140	145	147	102	217	131
Link Distance (ft)	525	525		748	748	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			285		550	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 23: N Davis Hwy

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 35: N Davis Hwy & Martin Luther King Jr Dr

Movement	SB	SB
Directions Served	R	R
Maximum Queue (ft)	31	57
Average Queue (ft)	1	2
95th Queue (ft)	10	19
Link Distance (ft)	251	251
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 1000: Martin Luther King Jr Dr

Movement	WB
Directions Served	L
Maximum Queue (ft)	31
Average Queue (ft)	2
95th Queue (ft)	15
Link Distance (ft)	144
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 542

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
2: Alcaniz St & E Wright Street

03/25/2020

Intersection

Intersection Delay, s/veh 9.4
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↔↑			↔		↔↔		↔↑	
Traffic Vol, veh/h	0	55	15	45	30	0	10	30	0	200	10	215	40
Future Vol, veh/h	0	55	15	45	30	0	10	30	0	200	10	215	40
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	60	16	49	33	0	11	33	0	220	11	236	44
Number of Lanes	0	2	0	0	2	0	0	1	0	2	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	9.3	9.9	8.8	9.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	82%	0%	9%	0%
Vol Thru, %	0%	0%	0%	100%	55%	18%	100%	91%	73%
Vol Right, %	0%	100%	100%	0%	45%	0%	0%	0%	27%
Sign Control	Stop								
Traffic Vol by Lane	40	100	100	37	33	55	20	118	148
LT Vol	40	0	0	0	0	45	0	10	0
Through Vol	0	0	0	37	18	10	20	108	108
RT Vol	0	100	100	0	15	0	0	0	40
Lane Flow Rate	44	110	110	40	37	60	22	129	162
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.076	0.151	0.151	0.07	0.061	0.112	0.038	0.204	0.246
Departure Headway (Hd)	6.259	5.061	5.061	6.271	5.954	6.652	6.24	5.697	5.463
Convergence, Y/N	Yes								
Cap	575	713	713	573	603	540	575	634	661
Service Time	3.97	2.761	2.761	3.991	3.673	4.371	3.96	3.398	3.164
HCM Lane V/C Ratio	0.077	0.154	0.154	0.07	0.061	0.111	0.038	0.203	0.245
HCM Control Delay	9.5	8.7	8.7	9.5	9.1	10.2	9.2	9.9	9.9
HCM Lane LOS	A	A	A	A	A	B	A	A	A
HCM 95th-tile Q	0.2	0.5	0.5	0.2	0.2	0.4	0.1	0.8	1

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↔	↑↑						↑↑	↔
Traffic Volume (veh/h)	0	1270	115	140	1380	0	0	0	0	50	40	70
Future Volume (veh/h)	0	1270	115	140	1380	0	0	0	0	50	40	70
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1396	126	154	1516	0				55	44	77
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2118	190	256	2582	0				344	344	306
Arrive On Green	0.00	0.64	0.64	0.09	1.00	0.00				0.19	0.19	0.19
Sat Flow, veh/h	0	3391	296	1781	3647	0				1781	1777	1585
Grp Volume(v), veh/h	0	749	773	154	1516	0				55	44	77
Grp Sat Flow(s),veh/h/ln	0	1777	1817	1781	1777	0				1781	1777	1585
Q Serve(g_s), s	0.0	39.1	39.7	4.5	0.0	0.0				3.9	3.1	6.2
Cycle Q Clear(g_c), s	0.0	39.1	39.7	4.5	0.0	0.0				3.9	3.1	6.2
Prop In Lane	0.00		0.16	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1141	1167	256	2582	0				344	344	306
V/C Ratio(X)	0.00	0.66	0.66	0.60	0.59	0.00				0.16	0.13	0.25
Avail Cap(c_a), veh/h	0	1141	1167	367	2582	0				344	344	306
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.88	0.77	0.77	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.6	16.7	16.8	0.0	0.0				50.4	50.0	51.3
Incr Delay (d2), s/veh	0.0	1.7	1.7	1.3	0.8	0.0				1.0	0.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.8	16.4	2.3	0.3	0.0				1.8	1.4	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.2	18.4	18.1	0.8	0.0				51.3	50.8	53.3
LnGrp LOS	A	B	B	B	A	A				D	D	D
Approach Vol, veh/h		1522			1670						176	
Approach Delay, s/veh		18.3			2.4						52.0	
Approach LOS		B			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	102.3			35.0		115.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	60.0	87.0		29.0		109.0						
Max Q Clear Time (g_c+1/5), s	10.5	41.7		8.2		2.0						
Green Ext Time (p_c), s	0.2	30.2		0.5		48.1						
Intersection Summary												
HCM 6th Ctrl Delay				12.2								
HCM 6th LOS				B								

Davis Highway/MLK Drive Two-Way Conversion Study
4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖	↗	↖	↗	↖			
Traffic Volume (veh/h)	360	1350	0	0	1175	275	20	40	35	0	0	0
Future Volume (veh/h)	360	1350	0	0	1175	275	20	40	35	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	396	1484	0	0	1291	302	22	44	38			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	786	3134	0	0	1396	321	68	71	61			
Arrive On Green	0.36	0.88	0.00	0.00	0.97	0.97	0.04	0.04	0.04			
Sat Flow, veh/h	1781	3647	0	0	2962	660	1781	1870	1585			
Grp Volume(v), veh/h	396	1484	0	0	792	801	22	44	38			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1752	1781	1870	1585			
Q Serve(g_s), s	11.0	12.7	0.0	0.0	16.4	21.5	1.8	3.5	3.5			
Cycle Q Clear(g_c), s	11.0	12.7	0.0	0.0	16.4	21.5	1.8	3.5	3.5			
Prop In Lane	1.00		0.00	0.00		0.38	1.00		1.00			
Lane Grp Cap(c), veh/h	786	3134	0	0	865	852	68	71	61			
V/C Ratio(X)	0.50	0.47	0.00	0.00	0.92	0.94	0.32	0.62	0.63			
Avail Cap(c_a), veh/h	786	3134	0	0	865	852	321	337	285			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.80	0.80	1.00	1.00	1.00			
Uniform Delay (d), s/veh	26.0	1.8	0.0	0.0	1.2	1.3	70.2	71.1	71.1			
Incr Delay (d2), s/veh	0.4	0.2	0.0	0.0	13.4	16.4	2.0	6.3	7.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.4	2.4	0.0	0.0	4.0	4.7	0.9	1.8	1.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	2.0	0.0	0.0	14.6	17.7	72.3	77.3	78.8			
LnGrp LOS	C	A	A	A	B	B	E	E	E			
Approach Vol, veh/h		1880			1593			104				
Approach Delay, s/veh		7.2			16.2			76.8				
Approach LOS		A			B			E				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	59.3	79.0		11.7		138.3						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	32.0	73.0		27.0		111.0						
Max Q Clear Time (g_c+11.0), s	13.0	23.5		5.5		14.7						
Green Ext Time (p_c), s	0.8	34.2		0.3		44.3						
Intersection Summary												
HCM 6th Ctrl Delay				13.2								
HCM 6th LOS				B								

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
6: Martin Luther King Jr Dr & E Jordan St

03/25/2020

Intersection

Intersection Delay, s/veh 9.4
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑									↑↑	
Traffic Vol, veh/h	0	320	35	0	0	0	0	0	0	25	120	0
Future Vol, veh/h	0	320	35	0	0	0	0	0	0	25	120	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	352	38	0	0	0	0	0	0	27	132	0
Number of Lanes	0	2	0	0	0	0	0	0	0	0	2	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	2
HCM Control Delay	9.6	9
HCM LOS	A	A

Lane	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	38%	0%
Vol Thru, %	100%	75%	62%	100%
Vol Right, %	0%	25%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	213	142	65	80
LT Vol	0	0	25	0
Through Vol	213	107	40	80
RT Vol	0	35	0	0
Lane Flow Rate	234	156	71	88
Geometry Grp	7	7	7	7
Degree of Util (X)	0.324	0.208	0.112	0.133
Departure Headway (Hd)	4.972	4.799	5.655	5.461
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	724	749	634	657
Service Time	2.694	2.521	3.386	3.193
HCM Lane V/C Ratio	0.323	0.208	0.112	0.134
HCM Control Delay	10.1	8.8	9.1	9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.4	0.8	0.4	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
7: Haynes St & E Jordan St

03/25/2020

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑						↑↑				
Traffic Vol, veh/h	185	345	0	0	0	0	0	90	10	0	0	0
Future Vol, veh/h	185	345	0	0	0	0	0	90	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	203	379	0	0	0	0	0	99	11	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	0	0	-	-	785	190
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	4.02	3.32
Pot Cap-1 Maneuver	-	-	0	0	323	820
Stage 1	-	-	0	0	402	-
Stage 2	-	-	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	0	820
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT
Capacity (veh/h)	-	820	-	-
HCM Lane V/C Ratio	-	0.074	-	-
HCM Control Delay (s)	-	9.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

HCM 6th Edition methodology does not support clustered intersections.

HCM 6th Edition methodology does not support clustered intersections.

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

03/25/2020

Intersection														
Int Delay, s/veh	5.3													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↔				↔						↔↔	
Traffic Vol, veh/h	10	0	80	20	10	10	75	0	0	0	0	10	180	40
Future Vol, veh/h	10	0	80	20	10	10	75	0	0	0	0	10	180	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free									
RT Channelized	-	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	16983	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	88	22	11	11	82	0	0	0	0	11	198	44

Major/Minor	Minor2			Minor1			Major2					
Conflicting Flow All	0	-	242	121	0	165	264	-	-	0	0	0
Stage 1	0	-	242	-	0	0	0	-	-	-	-	-
Stage 2	0	-	0	-	0	165	264	-	-	-	-	-
Critical Hdwy	-	-	6.54	6.94	-	7.54	6.54	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	5.54	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	6.54	5.54	-	-	-	-	-
Follow-up Hdwy	-	-	4.02	3.32	-	3.52	4.02	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	658	908	0	784	640	0	-	-	-	-
Stage 1	0	0	704	-	0	-	-	0	-	-	-	-
Stage 2	0	0	-	-	0	821	689	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	0	-	658	908	0	687	640	-	-	-	-	-
Mov Cap-2 Maneuver	0	-	658	-	0	687	640	-	-	-	-	-
Stage 1	0	-	704	-	0	-	-	-	-	-	-	-
Stage 2	0	-	-	-	0	701	689	-	-	-	-	-

Approach	EB			WB			SB		
HCM Control Delay, s	11.1			11.5					
HCM LOS	B			B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	696	645	-	-	-
HCM Lane V/C Ratio	0.158	0.145	-	-	-
HCM Control Delay (s)	11.1	11.5	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.6	0.5	-	-	-

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	15	10	0	0	0	0	20	330	0
Future Vol, veh/h	0	10	10	15	10	0	0	0	0	20	330	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	11	16	11	0	0	0	0	22	363	0

Major/Minor	Minor2		Minor1			Major2			
Conflicting Flow All	-	407	182	231	407	-	0	0	0
Stage 1	-	407	-	0	0	-	-	-	-
Stage 2	-	0	-	231	407	-	-	-	-
Critical Hdwy	-	6.54	6.94	7.54	6.54	-	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	3.52	4.02	-	2.22	-	-
Pot Cap-1 Maneuver	0	532	829	704	532	0	-	-	-
Stage 1	0	596	-	-	-	0	-	-	-
Stage 2	0	-	-	751	596	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	532	829	684	532	-	-	-	-
Mov Cap-2 Maneuver	-	532	-	684	532	-	-	-	-
Stage 1	-	596	-	-	-	-	-	-	-
Stage 2	-	-	-	727	596	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	10.8		11.1			
HCM LOS	B		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	648	614	-	-	-
HCM Lane V/C Ratio	0.034	0.045	-	-	-
HCM Control Delay (s)	10.8	11.1	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

03/25/2020

Intersection

Int Delay, s/veh 1.9

Movement EBU EBL EBT WBT WBR SBL SBR

Lane Configurations		↖	↗	↘			
Traffic Vol, veh/h	10	185	70	65	10	0	0
Future Vol, veh/h	10	185	70	65	10	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-	-
Veh in Median Storage, #	-	-	0	0	-	16965	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	11	203	77	71	11	0	0

Major/Minor Major1 Minor2

Conflicting Flow All	-	0	0	505	11
Stage 1	-	-	-	0	-
Stage 2	-	-	-	505	-
Critical Hdwy	-	4.12	-	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.52	-
Follow-up Hdwy	-	2.218	-	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	470	1070
Stage 1	-	-	-	-	-
Stage 2	-	-	-	540	-
Platoon blocked, %			-		
Mov Cap-1 Maneuver	-	-	-	0	1070
Mov Cap-2 Maneuver	-	-	-	0	-
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-

Approach EB WB

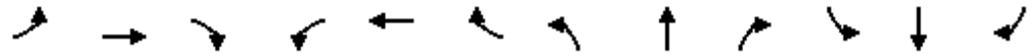
HCM Control Delay, s		8.6
HCM LOS		A

Minor Lane/Major Mvmt EBL EBTWBLn1

Capacity (veh/h)	-	-	1070
HCM Lane V/C Ratio	-	-	0.077
HCM Control Delay (s)	-	-	8.6
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.2

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑			↑↑			↖↖	↗			
Traffic Volume (veh/h)	70	1250	0	0	1445	35	75	50	105	0	0	0
Future Volume (veh/h)	70	1250	0	0	1445	35	75	50	105	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	77	1374	0	0	1588	38	82	55	115			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	455	3042	0	0	2282	55	108	108	96			
Arrive On Green	0.17	0.86	0.00	0.00	0.64	0.64	0.06	0.06	0.06			
Sat Flow, veh/h	1781	3647	0	0	3641	85	1781	1777	1585			
Grp Volume(v), veh/h	77	1374	0	0	794	832	82	55	115			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1855	1781	1777	1585			
Q Serve(g_s), s	0.0	13.6	0.0	0.0	43.2	43.5	6.8	4.5	9.1			
Cycle Q Clear(g_c), s	0.0	13.6	0.0	0.0	43.2	43.5	6.8	4.5	9.1			
Prop In Lane	1.00		0.00	0.00		0.05	1.00		1.00			
Lane Grp Cap(c), veh/h	455	3042	0	0	1143	1193	108	108	96			
V/C Ratio(X)	0.17	0.45	0.00	0.00	0.69	0.70	0.76	0.51	1.19			
Avail Cap(c_a), veh/h	455	3042	0	0	1143	1193	321	320	285			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.64	0.64	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	24.0	2.5	0.0	0.0	17.2	17.3	69.4	68.3	70.4			
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	3.5	3.4	10.3	3.7	107.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.8	3.3	0.0	0.0	18.0	18.8	3.4	2.2	6.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	2.7	0.0	0.0	20.7	20.7	79.6	72.0	177.9			
LnGrp LOS	C	A	A	A	C	C	E	E	F			
Approach Vol, veh/h		1451			1626			252				
Approach Delay, s/veh		3.8			20.7			122.8				
Approach LOS		A			C			F				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	31.9	103.0		15.1		134.9						
Change Period (Y+Rc), s	6.5	* 6.5		6.0		6.5						
Max Green Setting (Gmax), s	8.0	* 97		27.0		110.5						
Max Q Clear Time (g_c+I1), s	2.0	45.5		8.8		15.6						
Green Ext Time (p_c), s	0.0	35.4		0.3		38.0						

Intersection Summary

HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020

Intersection

Intersection Delay, s/veh 9.7
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑				
Traffic Vol, veh/h	60	285	0	0	0	0	0	180	15	0	0	0
Future Vol, veh/h	60	285	0	0	0	0	0	180	15	0	0	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	66	313	0	0	0	0	0	198	16	0	0	0
Number of Lanes	0	2	0	0	0	0	0	2	0	0	0	0

Approach	EB	NB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left		EB
Conflicting Lanes Left	0	2
Conflicting Approach Right	NB	
Conflicting Lanes Right	2	0
HCM Control Delay	9.9	9.3
HCM LOS	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2
Vol Left, %	0%	0%	39%	0%
Vol Thru, %	100%	80%	61%	100%
Vol Right, %	0%	20%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	75	155	190
LT Vol	0	0	60	0
Through Vol	120	60	95	190
RT Vol	0	15	0	0
Lane Flow Rate	132	82	170	209
Geometry Grp	7	7	7	7
Degree of Util (X)	0.201	0.122	0.251	0.296
Departure Headway (Hd)	5.478	5.337	5.295	5.101
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	655	671	678	704
Service Time	3.214	3.073	3.029	2.835
HCM Lane V/C Ratio	0.202	0.122	0.251	0.297
HCM Control Delay	9.6	8.8	9.8	10
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.4	1	1.2

Davis Highway/MLK Drive Two-Way Conversion Study
 17: N Davis Hwy & E Maxwell Street

03/25/2020

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑↑				
Traffic Vol, veh/h	0	0	0	0	290	15	35	205	0	0	0	0
Future Vol, veh/h	0	0	0	0	290	15	35	205	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	319	16	38	225	0	0	0	0

Major/Minor	Minor1	Major1			
Conflicting Flow All	-	301	113	0	0
Stage 1	-	301	-	-	-
Stage 2	-	0	-	-	-
Critical Hdwy	-	6.54	6.94	4.14	-
Critical Hdwy Stg 1	-	5.54	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	2.22	-
Pot Cap-1 Maneuver	0	610	918	-	0
Stage 1	0	664	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %					-
Mov Cap-1 Maneuver	-	0	918	-	-
Mov Cap-2 Maneuver	-	0	-	-	-
Stage 1	-	0	-	-	-
Stage 2	-	0	-	-	-

Approach	WB	NB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBL	NBTWBLn1	WBLn2	WBLn3
Capacity (veh/h)	-	-	-	918
HCM Lane V/C Ratio	-	-	-	0.018
HCM Control Delay (s)	-	-	-	9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

03/25/2020

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	35	65	0	0	70	20	25	195	10	0	0	0
Future Vol, veh/h	35	65	0	0	70	20	25	195	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	71	0	0	77	22	27	214	11	0	0	0

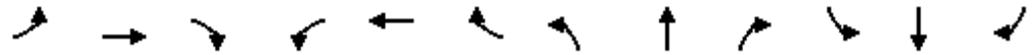
Major/Minor	Minor2		Minor1		Major1				
Conflicting Flow All	200	279	-	-	274	113	0	0	0
Stage 1	0	0	-	-	274	-	-	-	-
Stage 2	200	279	-	-	0	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	6.54	6.94	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	4.02	3.32	2.22	-	-
Pot Cap-1 Maneuver	741	628	0	0	632	918	-	-	-
Stage 1	-	-	0	0	682	-	-	-	-
Stage 2	783	678	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	656	628	-	-	632	918	-	-	-
Mov Cap-2 Maneuver	656	628	-	-	632	-	-	-	-
Stage 1	-	-	-	-	682	-	-	-	-
Stage 2	678	678	-	-	-	-	-	-	-

Approach	EB		WB		NB	
HCM Control Delay, s	11.8		11.2			
HCM LOS	B		B			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	638	679
HCM Lane V/C Ratio	-	-	-	0.172	0.146
HCM Control Delay (s)	-	-	-	11.8	11.2
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.6	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↑↑				
Traffic Volume (veh/h)	145	350	0	0	355	100	35	155	35	0	0	0
Future Volume (veh/h)	145	350	0	0	355	100	35	155	35	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	159	385	0	0	390	110	38	170	38			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	860	2552	0	0	701	195	49	227	53			
Arrive On Green	0.74	1.00	0.00	0.00	0.26	0.26	0.09	0.09	0.09			
Sat Flow, veh/h	1781	3647	0	0	2838	765	539	2492	578			
Grp Volume(v), veh/h	159	385	0	0	251	249	130	0	116			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1733	1843	0	1766			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	8.0	8.1	4.5	0.0	4.2			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	8.0	8.1	4.5	0.0	4.2			
Prop In Lane	1.00		0.00	0.00		0.44	0.29		0.33			
Lane Grp Cap(c), veh/h	860	2552	0	0	454	442	168	0	161			
V/C Ratio(X)	0.18	0.15	0.00	0.00	0.55	0.56	0.77	0.00	0.72			
Avail Cap(c_a), veh/h	860	2552	0	0	454	442	681	0	652			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	4.1	0.0	0.0	0.0	21.0	21.0	28.9	0.0	28.7			
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	4.8	5.1	7.3	0.0	5.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.0	3.6	3.6	2.2	0.0	1.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.2	0.0	0.0	0.0	25.8	26.1	36.2	0.0	34.7			
LnGrp LOS	A	A	A	A	C	C	D	A	C			
Approach Vol, veh/h		544			500			246				
Approach Delay, s/veh		1.2			26.0			35.5				
Approach LOS		A			C			D				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.1	22.6		12.3		52.7						
Change Period (Y+Rc), s	6.0	6.0		6.4		6.0						
Max Green Setting (Gmax), s	6.0	16.6		24.0		28.6						
Max Q Clear Time (g_c+I1), s	2.0	10.1		2.0		2.0						
Green Ext Time (p_c), s	0.1	2.0		1.3		3.4						
Intersection Summary												
HCM 6th Ctrl Delay				17.4								
HCM 6th LOS				B								

Davis Highway/MLK Drive Two-Way Conversion Study
20: N Davis Hwy & Hart Dr

03/25/2020

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	20	0	0	15	10	10	355	10	0	0	0
Future Vol, veh/h	10	20	0	0	15	10	10	355	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	22	0	0	16	11	11	390	11	0	0	0

Major/Minor	Minor2		Minor1		Major1				
Conflicting Flow All	225	423	-	-	418	201	0	0	0
Stage 1	0	0	-	-	418	-	-	-	-
Stage 2	225	423	-	-	0	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	6.54	6.94	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	4.02	3.32	2.22	-	-
Pot Cap-1 Maneuver	711	521	0	0	524	806	-	-	-
Stage 1	-	-	0	0	589	-	-	-	-
Stage 2	757	586	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	685	521	-	-	524	806	-	-	-
Mov Cap-2 Maneuver	685	521	-	-	524	-	-	-	-
Stage 1	-	-	-	-	589	-	-	-	-
Stage 2	726	586	-	-	-	-	-	-	-

Approach	EB		WB		NB	
HCM Control Delay, s	11.8		11.2			
HCM LOS	B		B			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	566	609
HCM Lane V/C Ratio	-	-	-	0.058	0.045
HCM Control Delay (s)	-	-	-	11.8	11.2
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.1

HCM 6th Edition methodology expects strict NEMA phasing.

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 1: Alcaniz St & E Gregory Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations					←↑↑↑			↓	↑↑↑			↑↑↑
Traffic Volume (vph)	0	0	0	340	550	30	10	25	210	0	0	235
Future Volume (vph)	0	0	0	340	550	30	10	25	210	0	0	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0			6.0	6.0			6.0
Lane Util. Factor					0.91			1.00	0.91			0.91
Frt					1.00			1.00	1.00			0.97
Flt Protected					0.98			0.95	1.00			1.00
Satd. Flow (prot)					4968			1770	5085			4951
Flt Permitted					0.98			0.95	1.00			1.00
Satd. Flow (perm)					4968			1770	5085			4951
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	374	604	33	11	27	231	0	0	258
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	45
Lane Group Flow (vph)	0	0	0	0	1007	0	0	38	231	0	0	268
Turn Type				Perm	NA		Prot	Prot	NA			NA
Protected Phases					2		7	7	4			8
Permitted Phases				2								
Actuated Green, G (s)					25.8			1.8	17.7			9.9
Effective Green, g (s)					25.8			1.8	17.7			9.9
Actuated g/C Ratio					0.46			0.03	0.32			0.18
Clearance Time (s)					6.0			6.0	6.0			6.0
Vehicle Extension (s)					5.0			3.0	4.0			4.0
Lane Grp Cap (vph)					2309			57	1621			883
v/s Ratio Prot								c0.02	0.05			c0.05
v/s Ratio Perm					0.20							
v/c Ratio					0.44			0.67	0.14			0.30
Uniform Delay, d1					10.0			26.6	13.5			19.8
Progression Factor					1.00			1.00	1.00			1.00
Incremental Delay, d2					0.3			25.7	0.1			0.3
Delay (s)					10.2			52.2	13.5			20.1
Level of Service					B			D	B			C
Approach Delay (s)		0.0			10.2				19.0			20.1
Approach LOS		A			B				B			C

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	55.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	50
Future Volume (vph)	50
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Fr	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	55
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑						↙↑	↗
Traffic Volume (vph)	0	1270	115	140	1380	0	0	0	0	50	40	70
Future Volume (vph)	0	1270	115	140	1380	0	0	0	0	50	40	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	6.0
Lane Util. Factor		0.95		1.00	0.95						0.95	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3495		1770	3539						3444	1583
Flt Permitted		1.00		0.09	1.00						0.97	1.00
Satd. Flow (perm)		3495		168	3539						3444	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1396	126	154	1516	0	0	0	0	55	44	77
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	1518	0	154	1516	0	0	0	0	0	99	23
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		92.4		109.0	109.0						29.0	29.0
Effective Green, g (s)		92.4		109.0	109.0						29.0	29.0
Actuated g/C Ratio		0.62		0.73	0.73						0.19	0.19
Clearance Time (s)		6.0		6.0	6.0						6.0	6.0
Vehicle Extension (s)		5.0		2.5	5.0						2.5	2.5
Lane Grp Cap (vph)		2152		235	2571						665	306
v/s Ratio Prot		c0.43		0.05	c0.43							
v/s Ratio Perm				0.43							0.03	0.01
v/c Ratio		0.71		0.66	0.59						0.15	0.08
Uniform Delay, d1		19.6		20.0	9.8						50.2	49.5
Progression Factor		0.89		2.27	0.56						1.00	1.00
Incremental Delay, d2		1.2		4.7	0.8						0.5	0.5
Delay (s)		18.6		50.1	6.3						50.7	50.0
Level of Service		B		D	A						D	D
Approach Delay (s)		18.6			10.4			0.0			50.4	
Approach LOS		B			B			A			D	

Intersection Summary

HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑		↘	↑	↗			
Traffic Volume (vph)	360	1350	0	0	1175	275	20	40	35	0	0	0
Future Volume (vph)	360	1350	0	0	1175	275	20	40	35	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	3539			3439		1770	1863	1583			
Flt Permitted	0.09	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	169	3539			3439		1770	1863	1583			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	396	1484	0	0	1291	302	22	44	38	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	36	0	0	0
Lane Group Flow (vph)	396	1484	0	0	1583	0	22	44	2	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	130.6	130.6			94.2		7.4	7.4	7.4			
Effective Green, g (s)	130.6	130.6			94.2		7.4	7.4	7.4			
Actuated g/C Ratio	0.87	0.87			0.63		0.05	0.05	0.05			
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0		2.5	2.5	2.5			
Lane Grp Cap (vph)	471	3081			2159		87	91	78			
v/s Ratio Prot	c0.17	0.42			0.46			c0.02				
v/s Ratio Perm	c0.56						0.01		0.00			
v/c Ratio	0.84	0.48			0.73		0.25	0.48	0.02			
Uniform Delay, d1	30.6	2.2			19.2		68.6	69.4	67.9			
Progression Factor	1.00	1.00			0.47		1.00	1.00	1.00			
Incremental Delay, d2	12.6	0.2			1.9		1.1	2.9	0.1			
Delay (s)	43.2	2.4			10.9		69.8	72.4	68.0			
Level of Service	D	A			B		E	E	E			
Approach Delay (s)		11.0			10.9			70.2			0.0	
Approach LOS		B			B			E			A	

Intersection Summary

HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔						↔↔	
Traffic Volume (vph)	0	120	15	15	240	0	0	0	0	15	110	30
Future Volume (vph)	0	120	15	15	240	0	0	0	0	15	110	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.99		1.00	1.00						0.97	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1836		1770	1863						3420	
Flt Permitted		1.00		0.66	1.00						1.00	
Satd. Flow (perm)		1836		1235	1863						3420	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	132	16	16	264	0	0	0	0	16	121	33
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	0	0	15	0
Lane Group Flow (vph)	0	139	0	16	264	0	0	0	0	0	155	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		16.6		16.6	16.6						36.4	
Effective Green, g (s)		16.6		16.6	16.6						36.4	
Actuated g/C Ratio		0.26		0.26	0.26						0.56	
Clearance Time (s)		6.0		6.0	6.0						6.0	
Vehicle Extension (s)		4.0		4.0	4.0						4.0	
Lane Grp Cap (vph)		468		315	475						1915	
v/s Ratio Prot		0.08			c0.14							
v/s Ratio Perm				0.01							0.05	
v/c Ratio		0.30		0.05	0.56						0.08	
Uniform Delay, d1		19.5		18.3	21.0						6.6	
Progression Factor		1.00		0.40	0.36						1.00	
Incremental Delay, d2		0.5		0.1	1.7						0.1	
Delay (s)		20.0		7.4	9.2						6.7	
Level of Service		B		A	A						A	
Approach Delay (s)		20.0			9.1			0.0			6.7	
Approach LOS		B			A			A			A	

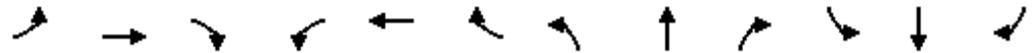
Intersection Summary

HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 6: Martin Luther King Jr Dr & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑									↑↑	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	320	35	0	0	0	0	0	0	25	120	0
Future Volume (vph)	0	320	35	0	0	0	0	0	0	25	120	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	352	38	0	0	0	0	0	0	27	132	0

Direction, Lane #	EB 1	EB 2	SB 1	SB 2
Volume Total (vph)	235	155	71	88
Volume Left (vph)	0	0	27	0
Volume Right (vph)	0	38	0	0
Hadj (s)	0.03	-0.14	0.22	0.03
Departure Headway (s)	5.0	4.8	5.7	5.5
Degree Utilization, x	0.32	0.21	0.11	0.13
Capacity (veh/h)	699	727	604	623
Control Delay (s)	9.2	7.9	8.2	8.1
Approach Delay (s)	8.6		8.1	
Approach LOS	A		A	

Intersection Summary			
Delay		8.5	
Level of Service		A	
Intersection Capacity Utilization	20.7%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 8: Haynes St/I-110 NB & E Maxwell Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑	↑	↑				
Traffic Volume (vph)	0	0	0	0	175	180	20	255	0	0	0	0
Future Volume (vph)	0	0	0	0	175	180	20	255	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0	12.0	6.0	6.0				
Lane Util. Factor					0.95	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					3539	1583	1770	1863				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					3539	1583	1770	1863				
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	0	192	198	22	280	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	141	11	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	192	57	11	280	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					4	1		2				
Permitted Phases						4	1	2				
Actuated Green, G (s)					37.2	37.2	53.3	53.3				
Effective Green, g (s)					31.2	31.2	53.3	53.3				
Actuated g/C Ratio					0.29	0.29	0.49	0.49				
Clearance Time (s)							6.0	6.0				
Vehicle Extension (s)							4.0	4.0				
Lane Grp Cap (vph)					1017	455	869	915				
v/s Ratio Prot					c0.05			c0.15				
v/s Ratio Perm						0.04	0.01					
v/c Ratio					0.19	0.13	0.01	0.31				
Uniform Delay, d1					29.1	28.6	14.1	16.5				
Progression Factor					0.26	0.40	1.00	1.00				
Incremental Delay, d2					0.2	0.3	0.0	0.9				
Delay (s)					7.7	11.7	14.2	17.4				
Level of Service					A	B	B	B				
Approach Delay (s)		0.0			9.7			17.2			0.0	
Approach LOS		A			A			B			A	

Intersection Summary

HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	108.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 9: Martin Luther King Jr Dr & E Maxwell Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑						↑↑	↑
Traffic Volume (vph)	0	0	0	10	315	0	0	0	0	0	135	40
Future Volume (vph)	0	0	0	10	315	0	0	0	0	0	135	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0						6.0	6.0
Lane Util. Factor					0.91						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					1.00						1.00	1.00
Satd. Flow (prot)					5077						3539	1583
Flt Permitted					1.00						1.00	1.00
Satd. Flow (perm)					5077						3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	11	346	0	0	0	0	0	148	44
RTOR Reduction (vph)	0	0	0	0	62	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	295	0	0	0	0	0	148	44
Turn Type				Perm	NA						NA	custom
Protected Phases					4						6	
Permitted Phases				4								1
Actuated Green, G (s)					19.4						71.1	11.8
Effective Green, g (s)					19.4						71.1	11.8
Actuated g/C Ratio					0.18						0.66	0.11
Clearance Time (s)					12.0						6.0	6.0
Vehicle Extension (s)					5.0						4.0	4.0
Lane Grp Cap (vph)					907						2319	172
v/s Ratio Prot											c0.04	
v/s Ratio Perm					0.06							c0.03
v/c Ratio					0.32						0.06	0.26
Uniform Delay, d1					38.8						6.7	44.3
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					0.4						0.0	1.1
Delay (s)					39.3						6.7	45.4
Level of Service					D						A	D
Approach Delay (s)		0.0			39.3			0.0			15.6	
Approach LOS		A			D			A			B	

Intersection Summary

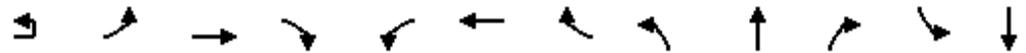
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.15		
Actuated Cycle Length (s)	108.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	25.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 11: Martin Luther King Jr Dr & E Texar Dr

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations			↑↑		↖	↑↑						↑↑
Traffic Volume (vph)	15	0	415	80	30	360	0	0	0	0	80	155
Future Volume (vph)	15	0	415	80	30	360	0	0	0	0	80	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0		6.0	6.0						6.2
Lane Util. Factor			0.95		1.00	0.95						0.95
Frt			0.98		1.00	1.00						0.96
Flt Protected			1.00		0.95	1.00						0.99
Satd. Flow (prot)			3451		1770	3539						3346
Flt Permitted			0.94		0.44	1.00						0.99
Satd. Flow (perm)			3246		816	3539						3346
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	16	0	456	88	33	396	0	0	0	0	88	170
RTOR Reduction (vph)	0	0	16	0	0	0	0	0	0	0	0	85
Lane Group Flow (vph)	0	0	544	0	33	396	0	0	0	0	0	277
Turn Type	Perm		NA		pm+pt	NA					Perm	NA
Protected Phases			6		5	2						8
Permitted Phases	6				2						8	
Actuated Green, G (s)			32.6		41.0	41.0						11.8
Effective Green, g (s)			32.6		41.0	41.0						11.8
Actuated g/C Ratio			0.50		0.63	0.63						0.18
Clearance Time (s)			6.0		6.0	6.0						6.2
Vehicle Extension (s)			4.0		3.0	3.0						4.0
Lane Grp Cap (vph)			1627		549	2232						607
v/s Ratio Prot					0.00	c0.11						
v/s Ratio Perm			c0.17		0.04							0.08
v/c Ratio			0.33		0.06	0.18						0.46
Uniform Delay, d1			9.7		4.7	5.0						23.7
Progression Factor			1.00		0.33	0.36						0.71
Incremental Delay, d2			0.6		0.0	0.0						0.7
Delay (s)			10.3		1.6	1.8						17.6
Level of Service			B		A	A						B
Approach Delay (s)			10.3			1.8			0.0			17.6
Approach LOS			B			A			A			B

Intersection Summary

HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

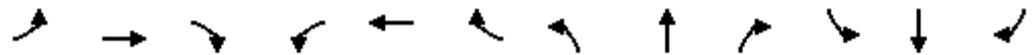
c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	95
Future Volume (vph)	95
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	104
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Volume (veh/h)	0	10	10	15	10	0	0	0	0	20	330	0
Future Volume (Veh/h)	0	10	10	15	10	0	0	0	0	20	330	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	11	11	16	11	0	0	0	0	22	363	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	412	407	182	242	407	0	363			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	412	407	182	242	407	0	363			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	98	98	100	100			99		
cM capacity (veh/h)	510	525	830	665	525	1084	1192			1622		
Direction, Lane #	EB 1	WB 1	SB 1	SB 2								
Volume Total	22	27	204	182								
Volume Left	0	16	22	0								
Volume Right	11	0	0	0								
cSH	643	600	1622	1700								
Volume to Capacity	0.03	0.05	0.01	0.11								
Queue Length 95th (ft)	3	4	1	0								
Control Delay (s)	10.8	11.3	0.9	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	10.8	11.3	0.5									
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.7									
Intersection Capacity Utilization			24.4%		ICU Level of Service					A		
Analysis Period (min)			15									

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1250	0	0	1445	35	75	50	105	0	0	0
Future Volume (vph)	70	1250	0	0	1445	35	75	50	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.5			6.5			6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95			0.95	1.00			
Frt	1.00	1.00			1.00			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.97	1.00			
Satd. Flow (prot)	1770	3539			3527			3436	1583			
Flt Permitted	0.12	1.00			1.00			0.97	1.00			
Satd. Flow (perm)	226	3539			3527			3436	1583			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	77	1374	0	0	1588	38	82	55	115	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	85	0	0	0
Lane Group Flow (vph)	77	1374	0	0	1625	0	0	137	30	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	126.7	126.2			115.2			11.3	11.3			
Effective Green, g (s)	126.7	126.2			115.2			11.3	11.3			
Actuated g/C Ratio	0.84	0.84			0.77			0.08	0.08			
Clearance Time (s)	6.0	6.5			6.5			6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0			3.0	3.0			
Lane Grp Cap (vph)	242	2977			2708			258	119			
v/s Ratio Prot	0.01	c0.39			c0.46							
v/s Ratio Perm	0.26							0.04	0.02			
v/c Ratio	0.32	0.46			0.60			0.53	0.25			
Uniform Delay, d1	10.7	3.1			7.5			66.8	65.4			
Progression Factor	0.33	0.02			1.00			1.00	1.00			
Incremental Delay, d2	0.4	0.2			1.0			2.1	1.1			
Delay (s)	3.9	0.2			8.5			68.9	66.5			
Level of Service	A	A			A			E	E			
Approach Delay (s)		0.4			8.5			67.8			0.0	
Approach LOS		A			A			E			A	

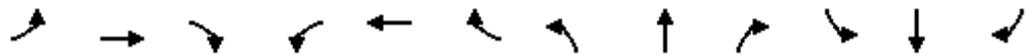
Intersection Summary

HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑			↗			↖	↗			
Traffic Volume (vph)	15	120	0	0	235	20	20	145	10	0	0	0
Future Volume (vph)	15	120	0	0	235	20	20	145	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5			7.5				
Lane Util. Factor	1.00	1.00			1.00			0.95				
Frt	1.00	1.00			0.99			0.99				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1770	1863			1843			3489				
Flt Permitted	0.54	1.00			1.00			0.99				
Satd. Flow (perm)	1005	1863			1843			3489				
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	16	132	0	0	258	22	22	159	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	5	0	0	0	0
Lane Group Flow (vph)	16	132	0	0	274	0	0	187	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			4			2				
Permitted Phases	4						2					
Actuated Green, G (s)	16.8	16.8			16.8			33.2				
Effective Green, g (s)	16.8	16.8			16.8			33.2				
Actuated g/C Ratio	0.26	0.26			0.26			0.51				
Clearance Time (s)	7.5	7.5			7.5			7.5				
Vehicle Extension (s)	4.0	4.0			4.0			4.0				
Lane Grp Cap (vph)	259	481			476			1782				
v/s Ratio Prot		0.07			c0.15							
v/s Ratio Perm	0.02							0.05				
v/c Ratio	0.06	0.27			0.58			0.10				
Uniform Delay, d1	18.2	19.2			21.0			8.2				
Progression Factor	0.59	0.79			1.00			1.00				
Incremental Delay, d2	0.1	0.4			2.0			0.1				
Delay (s)	10.9	15.7			23.0			8.3				
Level of Service	B	B			C			A				
Approach Delay (s)		15.2			23.0			8.3			0.0	
Approach LOS		B			C			A			A	

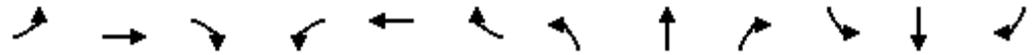
Intersection Summary

HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↑						↑↔				
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	60	285	0	0	0	0	0	180	15	0	0	0
Future Volume (vph)	60	285	0	0	0	0	0	180	15	0	0	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	66	313	0	0	0	0	0	198	16	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2
Volume Total (vph)	170	209	132	82
Volume Left (vph)	66	0	0	0
Volume Right (vph)	0	0	0	16
Hadj (s)	0.23	0.03	0.03	-0.10
Departure Headway (s)	5.3	5.1	5.5	5.3
Degree Utilization, x	0.25	0.30	0.20	0.12
Capacity (veh/h)	653	683	625	638
Control Delay (s)	8.9	9.1	8.7	7.9
Approach Delay (s)	9.0		8.4	
Approach LOS	A		A	

Intersection Summary			
Delay		8.8	
Level of Service		A	
Intersection Capacity Utilization	21.7%		ICU Level of Service
Analysis Period (min)		15	A

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↑↑				
Traffic Volume (vph)	145	350	0	0	355	100	35	155	35	0	0	0
Future Volume (vph)	145	350	0	0	355	100	35	155	35	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.4				
Lane Util. Factor	1.00	0.95			0.95			0.95				
Frt	1.00	1.00			0.97			0.98				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1770	3539			3422			3431				
Flt Permitted	0.47	1.00			1.00			0.99				
Satd. Flow (perm)	873	3539			3422			3431				
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	159	385	0	0	390	110	38	170	38	0	0	0
RTOR Reduction (vph)	0	0	0	0	27	0	0	32	0	0	0	0
Lane Group Flow (vph)	159	385	0	0	474	0	0	214	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	1	6			2			4				
Permitted Phases	6						4					
Actuated Green, G (s)	43.3	43.3			32.5			9.3				
Effective Green, g (s)	43.3	43.3			32.5			9.3				
Actuated g/C Ratio	0.67	0.67			0.50			0.14				
Clearance Time (s)	6.0	6.0			6.0			6.4				
Vehicle Extension (s)	3.0	4.0			4.0			3.0				
Lane Grp Cap (vph)	647	2357			1711			490				
v/s Ratio Prot	c0.02	0.11			c0.14							
v/s Ratio Perm	0.15							0.06				
v/c Ratio	0.25	0.16			0.28			0.44				
Uniform Delay, d1	4.4	4.1			9.4			25.5				
Progression Factor	0.29	0.34			1.00			1.00				
Incremental Delay, d2	0.2	0.0			0.4			0.6				
Delay (s)	1.5	1.4			9.8			26.1				
Level of Service	A	A			A			C				
Approach Delay (s)		1.4			9.8			26.1			0.0	
Approach LOS		A			A			C			A	

Intersection Summary

HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 20: N Davis Hwy & Hart Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖			↗			↖↗				
Traffic Volume (veh/h)	10	20	0	0	15	10	10	355	10	0	0	0
Future Volume (Veh/h)	10	20	0	0	15	10	10	355	10	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	11	22	0	0	16	11	11	390	11	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)											414	
pX, platoon unblocked												
vC, conflicting volume	236	423	0	428	418	200	0			401		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	236	423	0	428	418	200	0			401		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	96	100	100	97	99	99			100		
cM capacity (veh/h)	669	518	1084	491	521	807	1622			1154		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	33	27	206	206
Volume Left	11	0	11	0
Volume Right	0	11	0	11
cSH	560	609	1622	1700
Volume to Capacity	0.06	0.04	0.01	0.12
Queue Length 95th (ft)	5	3	1	0
Control Delay (s)	11.8	11.2	0.4	0.0
Lane LOS	B	B	A	
Approach Delay (s)	11.8	11.2	0.2	
Approach LOS	B	B		

Intersection Summary			
Average Delay		1.7	
Intersection Capacity Utilization	25.4%		ICU Level of Service
Analysis Period (min)	15		A

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	↶	↷	↷	↶	↷		↶	↷			↶	↷
Traffic Volume (vph)	430	3	25	10	3	3	155	210	10	10	10	315
Future Volume (vph)	430	3	25	10	3	3	155	210	10	10	10	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0	6.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00		1.00	0.95			1.00	0.95
Frt	1.00	1.00	0.85	1.00	0.93		1.00	0.99			1.00	1.00
Flt Protected	0.95	0.95	1.00	0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1681	1686	1583	1770	1723		1770	3515			1770	3539
Flt Permitted	0.95	0.95	1.00	0.95	1.00		0.54	1.00			0.60	1.00
Satd. Flow (perm)	1681	1686	1583	1770	1723		1000	3515			1120	3539
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	473	3	27	11	3	3	170	231	11	11	11	346
RTOR Reduction (vph)	0	0	22	0	3	0	0	2	0	0	0	0
Lane Group Flow (vph)	236	240	5	11	3	0	170	240	0	0	22	346
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	pm+pt	NA
Protected Phases	8	8		7	7		5	2		1	1	6
Permitted Phases			8				2			6	6	
Actuated Green, G (s)	24.3	24.3	24.3	4.0	4.0		83.7	74.2			70.7	67.7
Effective Green, g (s)	24.3	24.3	24.3	4.0	4.0		83.7	74.2			70.7	67.7
Actuated g/C Ratio	0.19	0.19	0.19	0.03	0.03		0.64	0.57			0.54	0.52
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	6.0			3.0	6.0
Lane Grp Cap (vph)	314	315	295	54	53		703	2006			624	1843
v/s Ratio Prot	0.14	c0.14		c0.01	0.00		c0.02	0.07			0.00	0.10
v/s Ratio Perm			0.00				c0.14				0.02	
v/c Ratio	0.75	0.76	0.02	0.20	0.06		0.24	0.12			0.04	0.19
Uniform Delay, d1	50.0	50.1	43.1	61.4	61.2		10.3	12.9			13.8	16.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.93			0.84	0.79
Incremental Delay, d2	9.7	10.4	0.0	1.9	0.5		0.2	0.1			0.0	0.2
Delay (s)	59.7	60.5	43.1	63.3	61.6		10.6	12.1			11.6	13.4
Level of Service	E	E	D	E	E		B	B			B	B
Approach Delay (s)		59.2			62.7			11.5				13.3
Approach LOS		E			E			B				B

Intersection Summary

HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

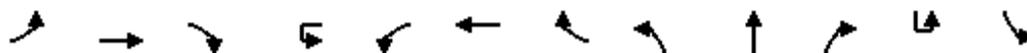
c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	350
Future Volume (vph)	350
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	385
RTOR Reduction (vph)	185
Lane Group Flow (vph)	200
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	67.7
Effective Green, g (s)	67.7
Actuated g/C Ratio	0.52
Clearance Time (s)	6.0
Vehicle Extension (s)	6.0
Lane Grp Cap (vph)	824
v/s Ratio Prot	
v/s Ratio Perm	0.13
v/c Ratio	0.24
Uniform Delay, d1	17.1
Progression Factor	0.74
Incremental Delay, d2	0.7
Delay (s)	13.3
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

03/25/2020



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	280	810	475	10	20	830	75	100	318	235	10	55
Future Volume (vph)	280	810	475	10	20	830	75	100	318	235	10	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4		6.4	6.4	6.4		6.4
Lane Util. Factor	0.97	0.91	1.00		1.00	0.91		0.97	0.95	1.00		1.00
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3433	5085	1583		1770	5022		3433	3539	1583		1770
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3433	5085	1583		1770	5022		3433	3539	1583		1770
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	308	890	522	11	22	912	82	110	349	258	11	60
RTOR Reduction (vph)	0	0	258	0	0	7	0	0	0	175	0	0
Lane Group Flow (vph)	308	890	264	0	33	987	0	110	349	83	0	71
Turn Type	Prot	NA	Perm	Prot	Prot	NA		Prot	NA	Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6							4		
Actuated Green, G (s)	20.0	65.8	65.8		5.5	51.3		8.8	22.7	22.7		10.4
Effective Green, g (s)	20.0	65.8	65.8		5.5	51.3		8.8	22.7	22.7		10.4
Actuated g/C Ratio	0.15	0.51	0.51		0.04	0.39		0.07	0.17	0.17		0.08
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4		6.4	6.4	6.4		6.4
Vehicle Extension (s)	4.5	4.0	4.0		3.0	4.0		3.0	4.0	4.0		4.5
Lane Grp Cap (vph)	528	2573	801		74	1981		232	617	276		141
v/s Ratio Prot	c0.09	0.18			0.02	c0.20		0.03	c0.10			c0.04
v/s Ratio Perm			0.17							0.05		
v/c Ratio	0.58	0.35	0.33		0.45	0.50		0.47	0.57	0.30		0.50
Uniform Delay, d1	51.1	19.2	19.0		60.8	29.7		58.4	49.1	46.7		57.3
Progression Factor	1.00	1.00	1.00		1.00	1.00		0.84	0.52	0.54		1.00
Incremental Delay, d2	2.2	0.4	1.1		4.2	0.9		1.4	1.3	0.8		4.8
Delay (s)	53.4	19.6	20.1		65.0	30.6		50.4	26.8	25.9		62.1
Level of Service	D	B	C		E	C		D	C	C		E
Approach Delay (s)		25.8			31.7			30.1				
Approach LOS		C			C			C				

Intersection Summary

HCM 2000 Control Delay	31.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	190	295
Future Volume (vph)	190	295
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.4	6.4
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.91	0.91
Adj. Flow (vph)	209	324
RTOR Reduction (vph)	0	263
Lane Group Flow (vph)	209	61
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Actuated Green, G (s)	24.3	24.3
Effective Green, g (s)	24.3	24.3
Actuated g/C Ratio	0.19	0.19
Clearance Time (s)	6.4	6.4
Vehicle Extension (s)	4.0	4.0
Lane Grp Cap (vph)	661	295
v/s Ratio Prot	0.06	
v/s Ratio Perm		0.04
v/c Ratio	0.32	0.21
Uniform Delay, d1	45.7	44.7
Progression Factor	1.00	1.00
Incremental Delay, d2	0.4	0.5
Delay (s)	46.0	45.2
Level of Service	D	D
Approach Delay (s)	47.5	
Approach LOS	D	
Intersection Summary		

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 1000: Martin Luther King Jr Dr

03/25/2020



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵					↕↕
Traffic Volume (veh/h)	15	0	0	0	0	355
Future Volume (Veh/h)	15	0	0	0	0	355
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	16	0	0	0	0	390
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	195	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	195	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	100			100	
cM capacity (veh/h)	776	1084			1622	

Direction, Lane #	WB 1	SB 1	SB 2
Volume Total	16	195	195
Volume Left	16	0	0
Volume Right	0	0	0
cSH	776	1700	1700
Volume to Capacity	0.02	0.11	0.11
Queue Length 95th (ft)	2	0	0
Control Delay (s)	9.7	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.7	0.0	
Approach LOS	A		

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		27.3%	ICU Level of Service
Analysis Period (min)		15	A

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
2: Alcaniz St & E Wright Street

03/25/2020

Intersection

Intersection Delay, s/veh 10.3

Intersection LOS B

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑				↔↑			↔		↔↔		↔↔	
Traffic Vol, veh/h	0	75	20	10	35	40	0	10	50	0	470	15	150	25
Future Vol, veh/h	0	75	20	10	35	40	0	10	50	0	470	15	150	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	79	21	11	37	42	0	11	53	0	495	16	158	26
Number of Lanes	0	2	0	0	0	2	0	0	1	0	2	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay	10.1	10.6	10.3	10.3
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	72%	0%	17%	0%
Vol Thru, %	0%	0%	0%	100%	56%	28%	100%	83%	75%
Vol Right, %	0%	100%	100%	0%	44%	0%	0%	0%	25%
Sign Control	Stop								
Traffic Vol by Lane	60	235	235	50	45	58	27	90	100
LT Vol	60	0	0	0	0	42	0	15	0
Through Vol	0	0	0	50	25	16	27	75	75
RT Vol	0	235	235	0	20	0	0	0	25
Lane Flow Rate	63	247	247	53	47	61	28	95	105
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.11	0.346	0.346	0.099	0.085	0.122	0.053	0.168	0.179
Departure Headway (Hd)	6.247	5.039	5.039	6.759	6.445	7.136	6.771	6.388	6.127
Convergence, Y/N	Yes								
Cap	574	712	712	529	555	502	528	561	585
Service Time	3.981	2.771	2.771	4.506	4.192	4.885	4.519	4.131	3.87
HCM Lane V/C Ratio	0.11	0.347	0.347	0.1	0.085	0.122	0.053	0.169	0.179
HCM Control Delay	9.8	10.4	10.4	10.3	9.8	10.9	9.9	10.4	10.2
HCM Lane LOS	A	B	B	B	A	B	A	B	B
HCM 95th-tile Q	0.4	1.5	1.5	0.3	0.3	0.4	0.2	0.6	0.6

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↔	↑↑						↑↑	↔
Traffic Volume (veh/h)	0	1385	70	100	1175	0	0	0	0	65	55	100
Future Volume (veh/h)	0	1385	70	100	1175	0	0	0	0	65	55	100
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1458	74	105	1237	0				68	58	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2166	110	234	2513	0				369	368	328
Arrive On Green	0.00	0.63	0.63	0.07	1.00	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	3535	174	1781	3647	0				1781	1777	1585
Grp Volume(v), veh/h	0	751	781	105	1237	0				68	58	105
Grp Sat Flow(s),veh/h/ln	0	1777	1839	1781	1777	0				1781	1777	1585
Q Serve(g_s), s	0.0	38.0	38.3	2.9	0.0	0.0				4.4	3.7	7.9
Cycle Q Clear(g_c), s	0.0	38.0	38.3	2.9	0.0	0.0				4.4	3.7	7.9
Prop In Lane	0.00		0.09	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1118	1157	234	2513	0				369	368	328
V/C Ratio(X)	0.00	0.67	0.68	0.45	0.49	0.00				0.18	0.16	0.32
Avail Cap(c_a), veh/h	0	1118	1157	312	2513	0				369	368	328
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	0.86	0.86	0.85	0.85	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	16.7	15.4	0.0	0.0				45.8	45.5	47.1
Incr Delay (d2), s/veh	0.0	1.8	1.8	0.8	0.6	0.0				1.1	0.9	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.2	15.9	1.2	0.2	0.0				2.1	1.8	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.5	18.5	16.2	0.6	0.0				46.8	46.4	49.7
LnGrp LOS	A	B	B	B	A	A				D	D	D
Approach Vol, veh/h		1532			1342						231	
Approach Delay, s/veh		18.5			1.8						48.0	
Approach LOS		B			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	0.9	94.1		35.0		105.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	1.0	82.0		29.0		99.0						
Max Q Clear Time (g_c+14), s	40.3			9.9		2.0						
Green Ext Time (p_c), s	0.1	28.6		0.7		31.1						

Intersection Summary

HCM 6th Ctrl Delay		13.5										
HCM 6th LOS			B									

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑			↑↑		↙	↑	↗			
Traffic Volume (veh/h)	490	1405	10	0	970	305	20	100	50	0	0	0
Future Volume (veh/h)	490	1405	10	0	970	305	20	100	50	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	516	1479	11	0	1021	321	21	105	53			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2			
Cap, veh/h	780	3041	23	0	1066	333	130	137	116			
Arrive On Green	0.40	0.84	0.84	0.00	0.80	0.80	0.07	0.07	0.07			
Sat Flow, veh/h	1781	3615	27	0	2759	832	1781	1870	1585			
Grp Volume(v), veh/h	516	727	763	0	678	664	21	105	53			
Grp Sat Flow(s),veh/h/ln	1781	1777	1866	0	1777	1721	1781	1870	1585			
Q Serve(g_s), s	26.5	15.4	15.4	0.0	45.1	47.4	1.5	7.7	4.5			
Cycle Q Clear(g_c), s	26.5	15.4	15.4	0.0	45.1	47.4	1.5	7.7	4.5			
Prop In Lane	1.00		0.01	0.00		0.48	1.00		1.00			
Lane Grp Cap(c), veh/h	780	1495	1569	0	711	688	130	137	116			
V/C Ratio(X)	0.66	0.49	0.49	0.00	0.95	0.96	0.16	0.77	0.46			
Avail Cap(c_a), veh/h	780	1495	1569	0	711	688	344	361	306			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.88	0.88	1.00	1.00	1.00			
Uniform Delay (d), s/veh	31.4	3.0	3.0	0.0	12.9	13.1	60.9	63.7	62.2			
Incr Delay (d2), s/veh	1.9	0.5	0.5	0.0	22.2	24.7	0.4	6.6	2.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.0	4.0	4.2	0.0	9.6	9.9	0.7	3.9	1.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	3.5	3.5	0.0	35.1	37.8	61.3	70.3	64.3			
LnGrp LOS	C	A	A	A	D	D	E	E	E			
Approach Vol, veh/h		2006			1342			179				
Approach Delay, s/veh		11.2			36.5			67.5				
Approach LOS		B			D			E				
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	61.8	62.0	16.2	123.8								
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0								
Max Green Setting (Gmax), s	39.0	56.0	27.0	101.0								
Max Q Clear Time (g_c+Q), s	29.5	49.4	9.7	17.4								
Green Ext Time (p_c), s	1.0	5.6	0.5	40.9								
Intersection Summary												
HCM 6th Ctrl Delay			23.7									
HCM 6th LOS			C									

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
6: Martin Luther King Jr Dr & E Jordan St

03/25/2020

Intersection

Intersection Delay, s/veh 9.4
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑									↑↑	
Traffic Vol, veh/h	0	285	70	0	0	0	0	0	0	25	175	0
Future Vol, veh/h	0	285	70	0	0	0	0	0	0	25	175	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	300	74	0	0	0	0	0	0	26	184	0
Number of Lanes	0	2	0	0	0	0	0	0	0	0	2	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	2
HCM Control Delay	9.4	9.3
HCM LOS	A	A

Lane	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	30%	0%
Vol Thru, %	100%	58%	70%	100%
Vol Right, %	0%	42%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	190	165	83	117
LT Vol	0	0	25	0
Through Vol	190	95	58	117
RT Vol	0	70	0	0
Lane Flow Rate	200	174	88	123
Geometry Grp	7	7	7	7
Degree of Util (X)	0.283	0.232	0.136	0.185
Departure Headway (Hd)	5.102	4.804	5.576	5.425
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	704	747	643	661
Service Time	2.83	2.532	3.313	3.162
HCM Lane V/C Ratio	0.284	0.233	0.137	0.186
HCM Control Delay	9.8	9	9.2	9.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.2	0.9	0.5	0.7

Davis Highway/MLK Drive Two-Way Conversion Study
7: Haynes St & E Jordan St

03/25/2020

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑						↑↑				
Traffic Vol, veh/h	410	335	0	0	0	0	0	120	20	0	0	0
Future Vol, veh/h	410	335	0	0	0	0	0	120	20	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	432	353	0	0	0	0	0	126	21	0	0	0

Major/Minor

	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	4.14	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	2.22	-
Pot Cap-1 Maneuver	-	0
Stage 1	-	0
Stage 2	-	0
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	0
Mov Cap-2 Maneuver	-	0
Stage 1	-	0
Stage 2	-	0

Approach

EB NB
HCM Control Delay, s
HCM LOS

Minor Lane/Major Mvmt

	NBLn1	NBLn2	EBL	EBT
Capacity (veh/h)	-	835	-	-
HCM Lane V/C Ratio	-	0.101	-	-
HCM Control Delay (s)	-	9.8	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

HCM 6th Edition methodology does not support clustered intersections.

HCM 6th Edition methodology does not support clustered intersections.

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

03/25/2020

Intersection

Int Delay, s/veh 4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	90	35	10	60	0	0	0	0	25	200	40
Future Vol, veh/h	0	90	35	10	60	0	0	0	0	25	200	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free							
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	95	37	11	63	0	0	0	0	26	211	42

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	284	127	205	305	-	-	0	0	0
Stage 1	-	284	-	0	0	-	-	-	-	-
Stage 2	-	0	-	205	305	-	-	-	-	-
Critical Hdwy	-	6.54	6.94	7.54	6.54	-	-	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	3.52	4.02	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	624	900	735	607	0	-	-	-	-
Stage 1	0	675	-	-	-	0	-	-	-	-
Stage 2	0	-	-	778	661	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	624	900	623	607	-	-	-	-	-
Mov Cap-2 Maneuver	-	624	-	623	607	-	-	-	-	-
Stage 1	-	675	-	-	-	-	-	-	-	-
Stage 2	-	-	-	641	661	-	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	11.5		11.7			
HCM LOS	B		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	683	609	-	-	-
HCM Lane V/C Ratio	0.193	0.121	-	-	-
HCM Control Delay (s)	11.5	11.7	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.7	0.4	-	-	-

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Vol, veh/h	0	10	10	15	3	0	0	0	0	15	340	10
Future Vol, veh/h	0	10	10	15	3	0	0	0	0	15	340	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	11	16	3	0	0	0	0	16	358	11

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	396	185	217	401	-	-	0	0	0
Stage 1	-	396	-	0	0	-	-	-	-	-
Stage 2	-	0	-	217	401	-	-	-	-	-
Critical Hdwy	-	6.54	6.94	7.54	6.54	-	-	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	3.52	4.02	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	540	826	721	536	0	-	-	-	-
Stage 1	0	602	-	-	-	0	-	-	-	-
Stage 2	0	-	-	765	599	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	540	826	702	536	-	-	-	-	-
Mov Cap-2 Maneuver	-	540	-	702	536	-	-	-	-	-
Stage 1	-	602	-	-	-	-	-	-	-	-
Stage 2	-	-	-	742	599	-	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	10.7		10.5			
HCM LOS	B		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	653	668	-	-	-
HCM Lane V/C Ratio	0.032	0.028	-	-	-
HCM Control Delay (s)	10.7	10.5	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

03/25/2020

Intersection

Int Delay, s/veh 1.1

Movement EBU EBL EBT WBT WBR SBL SBR

Lane Configurations							
Traffic Vol, veh/h	15	405	150	70	15	0	0
Future Vol, veh/h	15	405	150	70	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-	-
Veh in Median Storage, #	-	-	0	0	-	16965	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	16	426	158	74	16	0	0

Major/Minor Major1 Minor2

Conflicting Flow All	-	0	0	1042	16
Stage 1	-	-	-	0	-
Stage 2	-	-	-	1042	-
Critical Hdwy	-	4.12	-	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.52	-
Follow-up Hdwy	-	2.218	-	4.018	3.318
Pot Cap-1 Maneuver	-	-	-	230	1063
Stage 1	-	-	-	-	-
Stage 2	-	-	-	307	-
Platoon blocked, %			-		
Mov Cap-1 Maneuver	-	-	-	0	1063
Mov Cap-2 Maneuver	-	-	-	0	-
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-

Approach EB WB

HCM Control Delay, s		8.7
HCM LOS		A

Minor Lane/Major Mvmt EBL EBTWBLn1

Capacity (veh/h)	-	-	1063
HCM Lane V/C Ratio	-	-	0.084
HCM Control Delay (s)	-	-	8.7
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.3

HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

HCM 6th Edition methodology does not support Non-NEMA phasing.

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020

Intersection

Intersection Delay, s/veh 9.6
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕						↕↕				
Traffic Vol, veh/h	75	235	0	0	0	0	0	225	15	0	0	0
Future Vol, veh/h	75	235	0	0	0	0	0	225	15	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	247	0	0	0	0	0	237	16	0	0	0
Number of Lanes	0	2	0	0	0	0	0	2	0	0	0	0

Approach	EB	NB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left		EB
Conflicting Lanes Left	0	2
Conflicting Approach Right	NB	
Conflicting Lanes Right	2	0
HCM Control Delay	9.7	9.4
HCM LOS	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2
Vol Left, %	0%	0%	49%	0%
Vol Thru, %	100%	83%	51%	100%
Vol Right, %	0%	17%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	150	90	153	157
LT Vol	0	0	75	0
Through Vol	150	75	78	157
RT Vol	0	15	0	0
Lane Flow Rate	158	95	161	165
Geometry Grp	7	7	7	7
Degree of Util (X)	0.235	0.138	0.244	0.238
Departure Headway (Hd)	5.369	5.252	5.434	5.188
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	668	682	660	691
Service Time	3.106	2.989	3.169	2.923
HCM Lane V/C Ratio	0.237	0.139	0.244	0.239
HCM Control Delay	9.8	8.8	9.9	9.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.5	1	0.9

Davis Highway/MLK Drive Two-Way Conversion Study
 17: N Davis Hwy & E Maxwell Street

03/25/2020

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑		↑↑				
Traffic Vol, veh/h	0	0	0	0	195	25	35	265	0	0	0	0
Future Vol, veh/h	0	0	0	0	195	25	35	265	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	205	26	37	279	0	0	0	0

Major/Minor

	Minor1	Major1		
Conflicting Flow All	-	353	140	0
Stage 1	-	353	-	-
Stage 2	-	0	-	-
Critical Hdwy	-	6.54	6.94	4.14
Critical Hdwy Stg 1	-	5.54	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	2.22
Pot Cap-1 Maneuver	0	571	882	-
Stage 1	0	629	-	-
Stage 2	0	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	-	0	882	-
Mov Cap-2 Maneuver	-	0	-	-
Stage 1	-	0	-	-
Stage 2	-	0	-	-

Approach

HCM Control Delay, s
 HCM LOS

Minor Lane/Major Mvmt

	NBL	NBTWBLn1	WBLn2	WBLn3
Capacity (veh/h)	-	-	-	882
HCM Lane V/C Ratio	-	-	-	0.03
HCM Control Delay (s)	-	-	-	9.2
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

03/25/2020

Intersection

Int Delay, s/veh 4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	40	75	0	0	50	15	20	280	10	0	0	0
Future Vol, veh/h	40	75	0	0	50	15	20	280	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	79	0	0	53	16	21	295	11	0	0	0

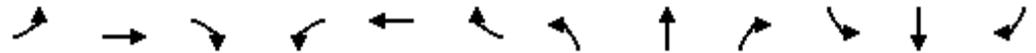
Major/Minor	Minor2		Minor1		Major1					
Conflicting Flow All	216	348	-	-	343	153	0	0	0	
Stage 1	0	0	-	-	343	-	-	-	-	
Stage 2	216	348	-	-	0	-	-	-	-	
Critical Hdwy	7.54	6.54	-	-	6.54	6.94	4.14	-	-	
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-	
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-	
Follow-up Hdwy	3.52	4.02	-	-	4.02	3.32	2.22	-	-	
Pot Cap-1 Maneuver	722	574	0	0	578	866	-	-	-	
Stage 1	-	-	0	0	636	-	-	-	-	
Stage 2	766	633	0	0	-	-	-	-	-	
Platoon blocked, %								-	-	
Mov Cap-1 Maneuver	659	574	-	-	578	866	-	-	-	
Mov Cap-2 Maneuver	659	574	-	-	578	-	-	-	-	
Stage 1	-	-	-	-	636	-	-	-	-	
Stage 2	690	633	-	-	-	-	-	-	-	

Approach	EB	WB	NB
HCM Control Delay, s	12.5	11.5	
HCM LOS	B	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	601	626
HCM Lane V/C Ratio	-	-	-	0.201	0.109
HCM Control Delay (s)	-	-	-	12.5	11.5
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.7	0.4

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗			↖↖			↗↗				
Traffic Volume (veh/h)	255	475	0	0	285	105	65	270	55	0	0	0
Future Volume (veh/h)	255	475	0	0	285	105	65	270	55	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	268	500	0	0	300	111	68	284	58			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	889	2548	0	0	652	236	53	231	49			
Arrive On Green	0.12	0.24	0.00	0.00	0.26	0.26	0.09	0.09	0.09			
Sat Flow, veh/h	1781	3647	0	0	2648	926	576	2506	534			
Grp Volume(v), veh/h	268	500	0	0	207	204	217	0	193			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1704	1842	0	1774			
Q Serve(g_s), s	0.2	7.3	0.0	0.0	6.4	6.6	6.0	0.0	6.0			
Cycle Q Clear(g_c), s	0.2	7.3	0.0	0.0	6.4	6.6	6.0	0.0	6.0			
Prop In Lane	1.00		0.00	0.00		0.54	0.31		0.30			
Lane Grp Cap(c), veh/h	889	2548	0	0	454	435	170	0	164			
V/C Ratio(X)	0.30	0.20	0.00	0.00	0.46	0.47	1.28	0.00	1.18			
Avail Cap(c_a), veh/h	889	2548	0	0	454	435	680	0	655			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.2	9.8	0.0	0.0	20.4	20.5	29.5	0.0	29.5			
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	3.3	3.6	135.1	0.0	93.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.0	1.9	0.0	0.0	2.8	2.8	8.9	0.0	6.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	9.9	0.0	0.0	23.7	24.1	164.6	0.0	123.0			
LnGrp LOS	B	A	A	A	C	C	F	A	F			
Approach Vol, veh/h		768			411			410				
Approach Delay, s/veh		12.1			23.9			145.0				
Approach LOS		B			C			F				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	30.0	22.6		12.4		52.6						
Change Period (Y+Rc), s	6.0	6.0		6.4		6.0						
Max Green Setting (Gmax), s	6.0	16.6		24.0		28.6						
Max Q Clear Time (g_c+I1), s	2.2	8.6		2.0		9.3						
Green Ext Time (p_c), s	0.3	1.9		2.3		4.1						
Intersection Summary												
HCM 6th Ctrl Delay				49.5								
HCM 6th LOS				D								

Davis Highway/MLK Drive Two-Way Conversion Study
 20: N Davis Hwy & Hart Dr

03/25/2020

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	15	0	0	15	10	3	645	15	0	0	0
Future Vol, veh/h	10	15	0	0	15	10	3	645	15	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	16	0	0	16	11	3	679	16	0	0	0

Major/Minor

	Minor2	Minor1	Major1	
Conflicting Flow All	354 701	- -	693 348	0 0
Stage 1	0 0	- -	693 -	- -
Stage 2	354 701	- -	0 -	- -
Critical Hdwy	7.54 6.54	- -	6.54 6.94	4.14 -
Critical Hdwy Stg 1	- -	- -	5.54 -	- -
Critical Hdwy Stg 2	6.54 5.54	- -	- -	- -
Follow-up Hdwy	3.52 4.02	- -	4.02 3.32	2.22 -
Pot Cap-1 Maneuver	576 361	0 0	365 648	- -
Stage 1	- -	0 0	443 -	- -
Stage 2	636 439	0 0	- -	- -
Platoon blocked, %				- -
Mov Cap-1 Maneuver	548 361	- -	365 648	- -
Mov Cap-2 Maneuver	548 361	- -	365 -	- -
Stage 1	- -	- -	443 -	- -
Stage 2	603 439	- -	- -	- -

Approach

	EB	WB	NB
HCM Control Delay, s	14.2	13.7	
HCM LOS	B	B	

Minor Lane/Major Mvmt

	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	418	442
HCM Lane V/C Ratio	-	-	-	0.063	0.06
HCM Control Delay (s)	-	-	-	14.2	13.7
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.2

HCM 6th Edition methodology expects strict NEMA phasing.

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 1: Alcaniz St & E Gregory Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations					←↑↑↑			↓	↑↑↑			↑↑↑
Traffic Volume (vph)	0	0	0	190	225	25	10	70	505	0	0	190
Future Volume (vph)	0	0	0	190	225	25	10	70	505	0	0	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0			6.0	6.0			6.0
Lane Util. Factor					0.91			1.00	0.91			0.91
Frt					0.99			1.00	1.00			0.98
Flt Protected					0.98			0.95	1.00			1.00
Satd. Flow (prot)					4936			1770	5085			4998
Flt Permitted					0.98			0.95	1.00			1.00
Satd. Flow (perm)					4936			1770	5085			4998
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	200	237	26	11	74	532	0	0	200
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	0	454	0	0	85	532	0	0	206
Turn Type				Perm	NA		Prot	Prot	NA			NA
Protected Phases					2		7	7	4			8
Permitted Phases				2								
Actuated Green, G (s)					13.0			4.0	19.5			9.5
Effective Green, g (s)					13.0			4.0	19.5			9.5
Actuated g/C Ratio					0.29			0.09	0.44			0.21
Clearance Time (s)					6.0			6.0	6.0			6.0
Vehicle Extension (s)					5.0			3.0	4.0			4.0
Lane Grp Cap (vph)					1441			159	2228			1066
v/s Ratio Prot								c0.05	c0.10			0.04
v/s Ratio Perm					0.09							
v/c Ratio					0.31			0.53	0.24			0.19
Uniform Delay, d1					12.3			19.4	7.8			14.4
Progression Factor					1.00			1.00	1.00			1.00
Incremental Delay, d2					0.3			3.4	0.1			0.1
Delay (s)					12.5			22.8	7.9			14.5
Level of Service					B			C	A			B
Approach Delay (s)		0.0			12.5				10.0			14.5
Approach LOS		A			B				A			B

Intersection Summary

HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	44.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	35.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	25
Future Volume (vph)	25
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	26
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

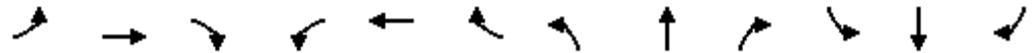
Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑						↙↑	↗
Traffic Volume (vph)	0	1385	70	100	1175	0	0	0	0	65	55	100
Future Volume (vph)	0	1385	70	100	1175	0	0	0	0	65	55	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	6.0
Lane Util. Factor		0.95		1.00	0.95						0.95	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3514		1770	3539						3446	1583
Flt Permitted		1.00		0.09	1.00						0.97	1.00
Satd. Flow (perm)		3514		160	3539						3446	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1458	74	105	1237	0	0	0	0	68	58	105
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	83
Lane Group Flow (vph)	0	1530	0	105	1237	0	0	0	0	0	126	22
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		85.1		99.0	99.0						29.0	29.0
Effective Green, g (s)		85.1		99.0	99.0						29.0	29.0
Actuated g/C Ratio		0.61		0.71	0.71						0.21	0.21
Clearance Time (s)		6.0		6.0	6.0						6.0	6.0
Vehicle Extension (s)		5.0		2.5	5.0						2.5	2.5
Lane Grp Cap (vph)		2136		203	2502						713	327
v/s Ratio Prot		c0.44		0.03	c0.35							
v/s Ratio Perm				0.34							0.04	0.01
v/c Ratio		0.72		0.52	0.49						0.18	0.07
Uniform Delay, d1		19.1		17.1	9.2						45.7	44.6
Progression Factor		0.80		2.70	0.44						1.00	1.00
Incremental Delay, d2		1.3		1.5	0.6						0.5	0.4
Delay (s)		16.5		47.4	4.7						46.2	45.0
Level of Service		B		D	A						D	D
Approach Delay (s)		16.5			8.0			0.0			45.7	
Approach LOS		B			A			A			D	

Intersection Summary

HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑		↘	↑	↗			
Traffic Volume (vph)	490	1405	10	0	970	305	20	100	50	0	0	0
Future Volume (vph)	490	1405	10	0	970	305	20	100	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	3535			3412		1770	1863	1583			
Flt Permitted	0.10	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	193	3535			3412		1770	1863	1583			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	516	1479	11	0	1021	321	21	105	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	48	0	0	0
Lane Group Flow (vph)	516	1490	0	0	1324	0	21	105	5	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	115.2	115.2			71.6		12.8	12.8	12.8			
Effective Green, g (s)	115.2	115.2			71.6		12.8	12.8	12.8			
Actuated g/C Ratio	0.82	0.82			0.51		0.09	0.09	0.09			
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0		2.5	2.5	2.5			
Lane Grp Cap (vph)	582	2908			1744		161	170	144			
v/s Ratio Prot	c0.24	0.42			0.39			c0.06				
v/s Ratio Perm	c0.49						0.01		0.00			
v/c Ratio	0.89	0.51			0.76		0.13	0.62	0.03			
Uniform Delay, d1	31.1	3.8			27.3		58.5	61.2	58.0			
Progression Factor	1.00	1.00			0.57		1.00	1.00	1.00			
Incremental Delay, d2	15.0	0.3			2.8		0.3	5.6	0.1			
Delay (s)	46.1	4.1			18.4		58.8	66.8	58.0			
Level of Service	D	A			B		E	E	E			
Approach Delay (s)		14.9			18.4			63.3			0.0	
Approach LOS		B			B			E			A	

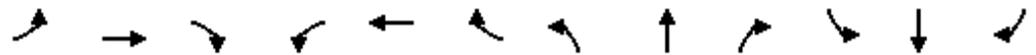
Intersection Summary

HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔						↔↔	
Traffic Volume (vph)	0	220	25	10	110	0	0	0	0	15	185	25
Future Volume (vph)	0	220	25	10	110	0	0	0	0	15	185	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0						6.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.99		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1837		1770	1863						3469	
Flt Permitted		1.00		0.52	1.00						1.00	
Satd. Flow (perm)		1837		963	1863						3469	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	232	26	11	116	0	0	0	0	16	195	26
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	250	0	11	116	0	0	0	0	0	227	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		16.0		16.0	16.0						37.0	
Effective Green, g (s)		16.0		16.0	16.0						37.0	
Actuated g/C Ratio		0.25		0.25	0.25						0.57	
Clearance Time (s)		6.0		6.0	6.0						6.0	
Vehicle Extension (s)		4.0		4.0	4.0						4.0	
Lane Grp Cap (vph)		452		237	458						1974	
v/s Ratio Prot		c0.14			0.06							
v/s Ratio Perm				0.01							0.07	
v/c Ratio		0.55		0.05	0.25						0.12	
Uniform Delay, d1		21.4		18.7	19.7						6.5	
Progression Factor		1.00		0.59	0.81						1.00	
Incremental Delay, d2		1.8		0.1	0.4						0.1	
Delay (s)		23.2		11.2	16.4						6.6	
Level of Service		C		B	B						A	
Approach Delay (s)		23.2			15.9			0.0			6.6	
Approach LOS		C			B			A			A	

Intersection Summary

HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 6: Martin Luther King Jr Dr & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↓									↑↓	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	285	70	0	0	0	0	0	0	25	175	0
Future Volume (vph)	0	285	70	0	0	0	0	0	0	25	175	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	300	74	0	0	0	0	0	0	26	184	0

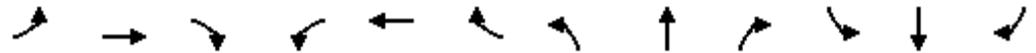
Direction, Lane #	EB 1	EB 2	SB 1	SB 2
Volume Total (vph)	200	174	87	123
Volume Left (vph)	0	0	26	0
Volume Right (vph)	0	74	0	0
Hadj (s)	0.03	-0.26	0.18	0.03
Departure Headway (s)	5.1	4.8	5.6	5.4
Degree Utilization, x	0.28	0.23	0.14	0.19
Capacity (veh/h)	678	723	613	630
Control Delay (s)	8.9	8.1	8.3	8.5
Approach Delay (s)	8.5		8.4	
Approach LOS	A		A	

Intersection Summary			
Delay		8.5	
Level of Service		A	
Intersection Capacity Utilization	22.3%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 8: Haynes St/I-110 NB & E Maxwell Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑	↑	↑				
Traffic Volume (vph)	0	0	0	0	135	145	25	505	0	0	0	0
Future Volume (vph)	0	0	0	0	135	145	25	505	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0	12.0	6.0	6.0				
Lane Util. Factor					0.95	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					3539	1583	1770	1863				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					3539	1583	1770	1863				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	142	153	26	532	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	120	11	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	142	33	15	532	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					4	1		2				
Permitted Phases						4	1	2				
Actuated Green, G (s)					31.5	31.5	68.2	68.2				
Effective Green, g (s)					25.5	25.5	68.2	68.2				
Actuated g/C Ratio					0.22	0.22	0.58	0.58				
Clearance Time (s)							6.0	6.0				
Vehicle Extension (s)							4.0	4.0				
Lane Grp Cap (vph)					766	342	1025	1079				
v/s Ratio Prot					c0.04			c0.29				
v/s Ratio Perm						0.02	0.01					
v/c Ratio					0.19	0.10	0.01	0.49				
Uniform Delay, d1					37.6	36.9	10.5	14.6				
Progression Factor					0.28	0.15	1.00	1.00				
Incremental Delay, d2					0.2	0.3	0.0	1.6				
Delay (s)					10.7	5.7	10.5	16.2				
Level of Service					B	A	B	B				
Approach Delay (s)		0.0			8.1			15.9			0.0	
Approach LOS		A			A			B			A	

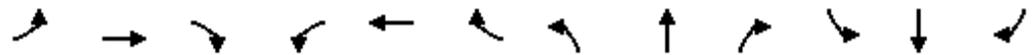
Intersection Summary

HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	117.7	Sum of lost time (s)	24.0
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 9: Martin Luther King Jr Dr & E Maxwell Street

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔↔↔						↕↕	↗
Traffic Volume (vph)	0	0	0	15	215	0	0	0	0	0	185	65
Future Volume (vph)	0	0	0	15	215	0	0	0	0	0	185	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0						6.0	6.0
Lane Util. Factor					0.91						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					1.00						1.00	1.00
Satd. Flow (prot)					5069						3539	1583
Flt Permitted					1.00						1.00	1.00
Satd. Flow (perm)					5069						3539	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	16	226	0	0	0	0	0	195	68
RTOR Reduction (vph)	0	0	0	0	67	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	175	0	0	0	0	0	195	68
Turn Type				Perm	NA						NA	custom
Protected Phases					4						6	
Permitted Phases				4								1
Actuated Green, G (s)					14.0						85.7	11.5
Effective Green, g (s)					14.0						85.7	11.5
Actuated g/C Ratio					0.12						0.73	0.10
Clearance Time (s)					12.0						6.0	6.0
Vehicle Extension (s)					5.0						4.0	4.0
Lane Grp Cap (vph)					602						2576	154
v/s Ratio Prot											c0.06	
v/s Ratio Perm					0.03							c0.04
v/c Ratio					0.29						0.08	0.44
Uniform Delay, d1					47.3						4.6	50.1
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					0.6						0.0	2.7
Delay (s)					47.9						4.6	52.8
Level of Service					D						A	D
Approach Delay (s)		0.0			47.9			0.0			17.1	
Approach LOS		A			D			A			B	

Intersection Summary

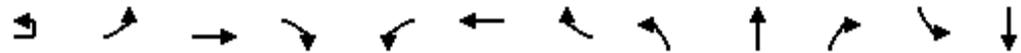
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	117.7	Sum of lost time (s)	24.0
Intersection Capacity Utilization	25.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 11: Martin Luther King Jr Dr & E Texar Dr

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations			↑↑		↖	↑↑						↑↑
Traffic Volume (vph)	10	0	620	60	35	315	0	0	0	0	110	180
Future Volume (vph)	10	0	620	60	35	315	0	0	0	0	110	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0		6.0	6.0						6.2
Lane Util. Factor			0.95		1.00	0.95						0.95
Frt			0.99		1.00	1.00						0.97
Flt Protected			1.00		0.95	1.00						0.99
Satd. Flow (prot)			3491		1770	3539						3374
Flt Permitted			0.95		0.28	1.00						0.99
Satd. Flow (perm)			3313		525	3539						3374
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	0	653	63	37	332	0	0	0	0	116	189
RTOR Reduction (vph)	0	0	8	0	0	0	0	0	0	0	0	49
Lane Group Flow (vph)	0	0	719	0	37	332	0	0	0	0	0	340
Turn Type	Perm		NA		pm+pt	NA					Perm	NA
Protected Phases			6		5	2						8
Permitted Phases	6				2						8	
Actuated Green, G (s)			30.9		39.6	39.6						13.2
Effective Green, g (s)			30.9		39.6	39.6						13.2
Actuated g/C Ratio			0.48		0.61	0.61						0.20
Clearance Time (s)			6.0		6.0	6.0						6.2
Vehicle Extension (s)			4.0		3.0	3.0						4.0
Lane Grp Cap (vph)			1574		371	2156						685
v/s Ratio Prot					0.00	c0.09						
v/s Ratio Perm			c0.22		0.06							0.10
v/c Ratio			0.46		0.10	0.15						0.50
Uniform Delay, d1			11.4		5.8	5.5						23.0
Progression Factor			1.00		0.59	0.57						0.80
Incremental Delay, d2			1.0		0.1	0.0						0.8
Delay (s)			12.4		3.5	3.2						19.2
Level of Service			B		A	A						B
Approach Delay (s)			12.4			3.2			0.0			19.2
Approach LOS			B			A			A			B

Intersection Summary

HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

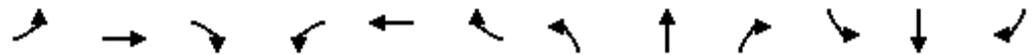
c Critical Lane Group



Movement	SBR
Intersection Summary	
Lane Configurations	
Traffic Volume (vph)	80
Future Volume (vph)	80
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	84
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 12: Martin Luther King Jr Dr & Hart Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Volume (veh/h)	0	10	10	15	3	0	0	0	0	15	340	10
Future Volume (Veh/h)	0	10	10	15	3	0	0	0	0	15	340	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	11	11	16	3	0	0	0	0	16	358	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	397	396	184	228	401	0	369			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	397	396	184	228	401	0	369			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	98	99	100	100			99		
cM capacity (veh/h)	531	535	826	683	531	1084	1186			1622		
Direction, Lane #	EB 1	WB 1	SB 1	SB 2								
Volume Total	22	19	195	190								
Volume Left	0	16	16	0								
Volume Right	11	0	0	11								
cSH	649	653	1622	1700								
Volume to Capacity	0.03	0.03	0.01	0.11								
Queue Length 95th (ft)	3	2	1	0								
Control Delay (s)	10.7	10.7	0.7	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	10.7	10.7	0.3									
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization			24.5%		ICU Level of Service					A		
Analysis Period (min)			15									

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↔	↗			
Traffic Volume (vph)	110	1340	0	0	1175	30	100	95	285	0	0	0
Future Volume (vph)	110	1340	0	0	1175	30	100	95	285	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.5			6.5			6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95			0.91	0.91			
Frt	1.00	1.00			1.00			0.94	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	1770	3539			3526			3135	1441			
Flt Permitted	0.18	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	336	3539			3526			3135	1441			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	1411	0	0	1237	32	105	100	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	56	68	0	0	0
Lane Group Flow (vph)	116	1411	0	0	1268	0	0	290	91	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	109.3	108.8			97.8			18.7	18.7			
Effective Green, g (s)	109.3	108.8			97.8			18.7	18.7			
Actuated g/C Ratio	0.78	0.78			0.70			0.13	0.13			
Clearance Time (s)	6.0	6.5			6.5			6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0			3.0	3.0			
Lane Grp Cap (vph)	313	2750			2463			418	192			
v/s Ratio Prot	0.01	c0.40			0.36							
v/s Ratio Perm	0.28							0.09	0.06			
v/c Ratio	0.37	0.51			0.51			0.69	0.48			
Uniform Delay, d1	12.0	5.8			9.9			57.9	56.1			
Progression Factor	0.08	0.03			1.00			1.00	1.00			
Incremental Delay, d2	0.4	0.2			0.8			4.9	1.9			
Delay (s)	1.3	0.4			10.7			62.8	58.0			
Level of Service	A	A			B			E	E			
Approach Delay (s)		0.5			10.7			61.3			0.0	
Approach LOS		A			B			E			A	

Intersection Summary

HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖			↕				
Traffic Volume (vph)	25	210	0	0	105	15	15	190	25	0	0	0
Future Volume (vph)	25	210	0	0	105	15	15	190	25	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5			7.5				
Lane Util. Factor	1.00	1.00			1.00			0.95				
Frt	1.00	1.00			0.98			0.98				
Flt Protected	0.95	1.00			1.00			1.00				
Satd. Flow (prot)	1770	1863			1831			3471				
Flt Permitted	0.68	1.00			1.00			1.00				
Satd. Flow (perm)	1258	1863			1831			3471				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	221	0	0	111	16	16	200	26	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	10	0	0	0	0
Lane Group Flow (vph)	26	221	0	0	117	0	0	232	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			4			2				
Permitted Phases	4						2					
Actuated Green, G (s)	15.1	15.1			15.1			34.9				
Effective Green, g (s)	15.1	15.1			15.1			34.9				
Actuated g/C Ratio	0.23	0.23			0.23			0.54				
Clearance Time (s)	7.5	7.5			7.5			7.5				
Vehicle Extension (s)	4.0	4.0			4.0			4.0				
Lane Grp Cap (vph)	292	432			425			1863				
v/s Ratio Prot		c0.12			0.06							
v/s Ratio Perm	0.02							0.07				
v/c Ratio	0.09	0.51			0.28			0.12				
Uniform Delay, d1	19.6	21.7			20.5			7.5				
Progression Factor	0.41	0.39			1.00			1.00				
Incremental Delay, d2	0.2	1.3			0.5			0.1				
Delay (s)	8.2	9.8			20.9			7.6				
Level of Service	A	A			C			A				
Approach Delay (s)		9.7			20.9			7.6			0.0	
Approach LOS		A			C			A			A	

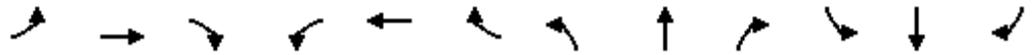
Intersection Summary

HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↑						↑↔				
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	75	235	0	0	0	0	0	225	15	0	0	0
Future Volume (vph)	75	235	0	0	0	0	0	225	15	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	79	247	0	0	0	0	0	237	16	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1	NB 2
Volume Total (vph)	161	165	158	95
Volume Left (vph)	79	0	0	0
Volume Right (vph)	0	0	0	16
Hadj (s)	0.28	0.03	0.03	-0.08
Departure Headway (s)	5.4	5.2	5.4	5.3
Degree Utilization, x	0.24	0.24	0.24	0.14
Capacity (veh/h)	634	667	641	652
Control Delay (s)	9.0	8.6	8.8	7.9
Approach Delay (s)	8.8		8.5	
Approach LOS	A		A	

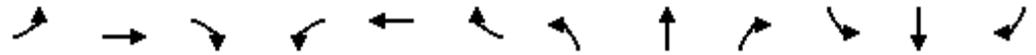
Intersection Summary			
Delay		8.7	
Level of Service		A	
Intersection Capacity Utilization	22.0%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

03/25/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗			↖↖			↗↗				
Traffic Volume (vph)	255	475	0	0	285	105	65	270	55	0	0	0
Future Volume (vph)	255	475	0	0	285	105	65	270	55	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.4				
Lane Util. Factor	1.00	0.95			0.95			0.95				
Frt	1.00	1.00			0.96			0.98				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1770	3539			3396			3436				
Flt Permitted	0.51	1.00			1.00			0.99				
Satd. Flow (perm)	952	3539			3396			3436				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	268	500	0	0	300	111	68	284	58	0	0	0
RTOR Reduction (vph)	0	0	0	0	45	0	0	26	0	0	0	0
Lane Group Flow (vph)	268	500	0	0	366	0	0	384	0	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA				
Protected Phases	1	6			2			4				
Permitted Phases	6						4					
Actuated Green, G (s)	39.9	39.9			27.9			12.7				
Effective Green, g (s)	39.9	39.9			27.9			12.7				
Actuated g/C Ratio	0.61	0.61			0.43			0.20				
Clearance Time (s)	6.0	6.0			6.0			6.4				
Vehicle Extension (s)	3.0	4.0			4.0			3.0				
Lane Grp Cap (vph)	659	2172			1457			671				
v/s Ratio Prot	c0.04	0.14			0.11							
v/s Ratio Perm	c0.21							0.11				
v/c Ratio	0.41	0.23			0.25			0.57				
Uniform Delay, d1	6.7	5.6			11.9			23.7				
Progression Factor	0.59	0.56			1.00			1.00				
Incremental Delay, d2	0.4	0.1			0.4			1.2				
Delay (s)	4.3	3.2			12.3			24.9				
Level of Service	A	A			B			C				
Approach Delay (s)		3.6			12.3			24.9			0.0	
Approach LOS		A			B			C			A	

Intersection Summary

HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 20: N Davis Hwy & Hart Dr

03/25/2020



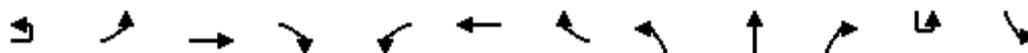
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Volume (veh/h)	10	15	0	0	15	10	3	645	15	0	0	0
Future Volume (Veh/h)	10	15	0	0	15	10	3	645	15	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	16	0	0	16	11	3	679	16	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)											414	
pX, platoon unblocked												
vC, conflicting volume	364	701	0	701	693	348	0			695		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	364	701	0	701	693	348	0			695		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	96	100	100	96	98	100			100		
cM capacity (veh/h)	538	361	1084	314	365	649	1622			897		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	27	27	342	356
Volume Left	11	0	3	0
Volume Right	0	11	0	16
cSH	417	444	1622	1700
Volume to Capacity	0.06	0.06	0.00	0.21
Queue Length 95th (ft)	5	5	0	0
Control Delay (s)	14.2	13.6	0.1	0.0
Lane LOS	B	B	A	
Approach Delay (s)	14.2	13.6	0.0	
Approach LOS	B	B		

Intersection Summary			
Average Delay		1.0	
Intersection Capacity Utilization	33.1%	ICU Level of Service	A
Analysis Period (min)	15		

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations		↘	↙	↗	↘	↗		↘	↕			↘
Traffic Volume (vph)	10	435	3	20	10	10	10	305	350	10	10	10
Future Volume (vph)	10	435	3	20	10	10	10	305	350	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0
Lane Util. Factor		0.95	0.95	1.00	1.00	1.00		1.00	0.95			1.00
Frt		1.00	1.00	0.85	1.00	0.93		1.00	1.00			1.00
Flt Protected		0.95	0.95	1.00	0.95	1.00		0.95	1.00			0.95
Satd. Flow (prot)		1681	1686	1583	1770	1723		1770	3524			1770
Flt Permitted		0.95	0.95	1.00	0.95	1.00		0.53	1.00			0.52
Satd. Flow (perm)		1681	1686	1583	1770	1723		985	3524			972
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	458	3	21	11	11	11	321	368	11	11	11
RTOR Reduction (vph)	0	0	0	17	0	10	0	0	1	0	0	0
Lane Group Flow (vph)	0	235	237	4	11	12	0	321	378	0	0	22
Turn Type	Split	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	pm+pt
Protected Phases	8	8	8		7	7		5	2		1	1
Permitted Phases				8				2			6	6
Actuated Green, G (s)		23.5	23.5	23.5	6.0	6.0		82.5	73.0			67.6
Effective Green, g (s)		23.5	23.5	23.5	6.0	6.0		82.5	73.0			67.6
Actuated g/C Ratio		0.18	0.18	0.18	0.05	0.05		0.63	0.56			0.52
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0		6.0	6.5			6.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0		3.0	6.0			3.0
Lane Grp Cap (vph)		303	304	286	81	79		696	1978			523
v/s Ratio Prot		0.14	c0.14		0.01	c0.01		c0.04	0.11			0.00
v/s Ratio Perm				0.00				0.25				0.02
v/c Ratio		0.78	0.78	0.01	0.14	0.15		0.46	0.19			0.04
Uniform Delay, d1		50.7	50.8	43.7	59.5	59.5		13.6	14.0			15.6
Progression Factor		1.00	1.00	1.00	1.00	1.00		0.87	0.88			1.12
Incremental Delay, d2		11.7	11.9	0.0	0.8	0.9		0.5	0.2			0.0
Delay (s)		62.5	62.7	43.7	60.3	60.4		12.2	12.5			17.6
Level of Service		E	E	D	E	E		B	B			B
Approach Delay (s)			61.8			60.4			12.4			
Approach LOS			E			E			B			

Intersection Summary

HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

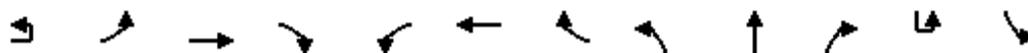
03/25/2020



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	335	740
Future Volume (vph)	335	740
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	353	779
RTOR Reduction (vph)	0	392
Lane Group Flow (vph)	353	387
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	64.6	64.6
Effective Green, g (s)	64.6	64.6
Actuated g/C Ratio	0.50	0.50
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	6.0	6.0
Lane Grp Cap (vph)	1758	786
v/s Ratio Prot	0.10	
v/s Ratio Perm		c0.24
v/c Ratio	0.20	0.49
Uniform Delay, d1	18.3	21.8
Progression Factor	1.04	2.16
Incremental Delay, d2	0.2	1.5
Delay (s)	19.1	48.5
Level of Service	B	D
Approach Delay (s)	38.9	
Approach LOS	D	
Intersection Summary		

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

03/25/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations		↔↔	↔↔↔	↔	↔	↔↔↔		↔↔	↔↔	↔		↔
Traffic Volume (vph)	10	310	930	820	30	1160	65	120	325	360	10	80
Future Volume (vph)	10	310	930	820	30	1160	65	120	325	360	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4		6.4
Lane Util. Factor		0.97	0.91	1.00	1.00	0.91		0.97	0.95	1.00		1.00
Frt		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		3433	5085	1583	1770	5045		3433	3539	1583		1770
Flt Permitted		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)		3433	5085	1583	1770	5045		3433	3539	1583		1770
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	326	979	863	32	1221	68	126	342	379	11	84
RTOR Reduction (vph)	0	0	0	236	0	4	0	0	0	146	0	0
Lane Group Flow (vph)	0	337	979	627	32	1285	0	126	342	233	0	95
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	Prot
Protected Phases	1	1	6		5	2		7	4		3	3
Permitted Phases				6						4		
Actuated Green, G (s)		16.3	62.2	62.2	2.5	48.4		7.3	29.9	29.9		9.8
Effective Green, g (s)		16.3	62.2	62.2	2.5	48.4		7.3	29.9	29.9		9.8
Actuated g/C Ratio		0.13	0.48	0.48	0.02	0.37		0.06	0.23	0.23		0.08
Clearance Time (s)		6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4		6.4
Vehicle Extension (s)		4.5	4.0	4.0	3.0	4.0		3.0	4.0	4.0		4.5
Lane Grp Cap (vph)		430	2432	757	34	1878		192	813	364		133
v/s Ratio Prot		0.10	0.19		0.02	c0.25		0.04	0.10			0.05
v/s Ratio Perm				c0.40						c0.15		
v/c Ratio		0.78	0.40	0.83	0.94	0.68		0.66	0.42	0.64		0.71
Uniform Delay, d1		55.1	21.9	29.3	63.7	34.4		60.1	42.7	45.2		58.7
Progression Factor		1.00	1.00	1.00	1.00	1.00		0.79	0.80	0.76		1.00
Incremental Delay, d2		10.1	0.5	10.1	129.7	2.0		7.3	0.4	3.8		18.7
Delay (s)		65.2	22.4	39.4	193.4	36.4		55.0	34.4	38.2		77.5
Level of Service		E	C	D	F	D		D	C	D		E
Approach Delay (s)			35.7			40.2			39.2			
Approach LOS			D			D			D			

Intersection Summary

HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

03/25/2020



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	245	515
Future Volume (vph)	245	515
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.4	6.4
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	258	542
RTOR Reduction (vph)	0	201
Lane Group Flow (vph)	258	341
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Actuated Green, G (s)	32.4	32.4
Effective Green, g (s)	32.4	32.4
Actuated g/C Ratio	0.25	0.25
Clearance Time (s)	6.4	6.4
Vehicle Extension (s)	4.0	4.0
Lane Grp Cap (vph)	882	394
v/s Ratio Prot	0.07	
v/s Ratio Perm		c0.22
v/c Ratio	0.29	0.86
Uniform Delay, d1	39.5	46.7
Progression Factor	1.00	1.00
Incremental Delay, d2	0.3	18.1
Delay (s)	39.8	64.8
Level of Service	D	E
Approach Delay (s)	58.9	
Approach LOS	E	
Intersection Summary		

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 1000: Martin Luther King Jr Dr

03/25/2020



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰					↱↱
Traffic Volume (veh/h)	15	0	0	0	0	365
Future Volume (Veh/h)	15	0	0	0	0	365
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	16	0	0	0	0	384
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	192	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	192	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	100			100	
cM capacity (veh/h)	779	1084			1622	

Direction, Lane #	WB 1	SB 1	SB 2
Volume Total	16	192	192
Volume Left	16	0	0
Volume Right	0	0	0
cSH	779	1700	1700
Volume to Capacity	0.02	0.11	0.11
Queue Length 95th (ft)	2	0	0
Control Delay (s)	9.7	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.7	0.0	
Approach LOS	A		

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		35.5%	ICU Level of Service
Analysis Period (min)		15	A



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Design Year (2045) Build Condition Analysis

Intersection: 1: Alcaniz St & E Gregory Street

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	LT	T	TR	UL	T	T	T	T	TR
Maximum Queue (ft)	287	280	50	72	49	74	115	107	117
Average Queue (ft)	167	81	15	30	19	33	48	53	68
95th Queue (ft)	244	193	36	61	42	64	97	88	104
Link Distance (ft)	574	574	574		547	547	547	225	225
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)				200					
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Alcaniz St & E Wright Street

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	UL	T	LTR
Maximum Queue (ft)	72	77	79	54	52	72	136
Average Queue (ft)	17	12	46	19	21	26	33
95th Queue (ft)	47	42	75	46	48	57	77
Link Distance (ft)	751	751	307	307	225	225	1611
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	200	347	345	190	335	334	136	91	91
Average Queue (ft)	39	255	260	50	185	187	72	34	25
95th Queue (ft)	129	385	381	122	317	315	116	80	64
Link Distance (ft)		339	339		331	331	1611	2407	
Upstream Blk Time (%)		2	2		0	1			
Queuing Penalty (veh)		11	15		3	4			
Storage Bay Dist (ft)	150			140					315
Storage Blk Time (%)	0	15			13				
Queuing Penalty (veh)	0	5			9				

Intersection: 4: Haynes St/I-110 NB On Ramp & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	T	T	TR	L	T	R
Maximum Queue (ft)	215	453	416	270	269	74	96	69
Average Queue (ft)	155	163	128	163	172	28	39	24
95th Queue (ft)	229	380	333	247	262	59	78	55
Link Distance (ft)		401	401	339	339	359	359	
Upstream Blk Time (%)		5	2					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)	155							125
Storage Blk Time (%)	10	4						
Queuing Penalty (veh)	71	16						

Intersection: 5: Martin Luther King Jr Dr & E Blount St

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	LTR	LTR
Maximum Queue (ft)	74	31	94	140	74
Average Queue (ft)	21	5	34	54	43
95th Queue (ft)	58	24	77	108	75
Link Distance (ft)	388		307	2407	2047
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		120			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Martin Luther King Jr Dr & E Jordan St

Movement	EB	EB	NB	SB
Directions Served	LT	TR	TR	LT
Maximum Queue (ft)	55	54	78	53
Average Queue (ft)	40	34	40	34
95th Queue (ft)	59	47	70	56
Link Distance (ft)	43	43	2047	277
Upstream Blk Time (%)	7	2		
Queuing Penalty (veh)	12	4		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Haynes St & E Jordan St

Movement	EB	NB	NB
Directions Served	T	T	TR
Maximum Queue (ft)	46	49	71
Average Queue (ft)	6	6	35
95th Queue (ft)	26	27	55
Link Distance (ft)	265	406	406
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Haynes St/I-110 NB & E Maxwell Street

Movement	WB	WB	NB	NB
Directions Served	T	T	L	T
Maximum Queue (ft)	30	29	30	183
Average Queue (ft)	7	3	9	97
95th Queue (ft)	26	18	31	173
Link Distance (ft)	53	53	279	279
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Martin Luther King Jr Dr & E Maxwell Street

Movement	WB	WB	WB	NB	SB	SB
Directions Served	LT	T	TR	LT	T	R
Maximum Queue (ft)	115	106	221	158	71	53
Average Queue (ft)	67	46	94	50	21	19
95th Queue (ft)	105	91	164	117	55	48
Link Distance (ft)	310	310	310	277	1701	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					330	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Martin Luther King Jr Dr & E Cross St

Movement	EB	WB	NB	SB
Directions Served	ULTR	ULTR	LTR	LTR
Maximum Queue (ft)	74	55	118	55
Average Queue (ft)	37	34	46	39
95th Queue (ft)	56	46	83	58
Link Distance (ft)	222	304	1701	2369
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Martin Luther King Jr Dr & E Texar Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	UL	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	107	118	126	31	119	77	180	138
Average Queue (ft)	33	50	40	7	43	30	72	73
95th Queue (ft)	74	98	92	26	93	66	139	128
Link Distance (ft)		712	712		322	322	2369	1184
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	225			115				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 13: E Wright Street & N Davis Hwy

Movement	EB	EB	WB	SB
Directions Served	UL	T	TR	LR
Maximum Queue (ft)	74	78	79	74
Average Queue (ft)	39	26	31	43
95th Queue (ft)	64	60	52	69
Link Distance (ft)	307	307	778	1610
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: N Davis Hwy & E Cervantes St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	TR	L	T	TR	LT	R	LTR
Maximum Queue (ft)	189	350	341	198	500	500	157	73	200
Average Queue (ft)	37	131	142	49	149	143	51	31	71
95th Queue (ft)	124	353	358	133	309	331	116	69	148
Link Distance (ft)		331	331		485	485	1610		2396
Upstream Blk Time (%)		1	1		0	0			
Queuing Penalty (veh)		6	9		0	0			
Storage Bay Dist (ft)	140			150				150	
Storage Blk Time (%)		6			5		0		
Queuing Penalty (veh)		2			3		0		

Intersection: 15: N Davis Hwy & E Blount St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	73	161	96	98
Average Queue (ft)	19	50	55	46
95th Queue (ft)	55	119	89	86
Link Distance (ft)	307	505	2396	2061
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Intersection: 16: N Davis Hwy & E Jordan St

Movement	EB	EB	NB	SB
Directions Served	LT	TR	TR	LT
Maximum Queue (ft)	54	52	71	55
Average Queue (ft)	32	32	38	30
95th Queue (ft)	42	42	64	44
Link Distance (ft)	330	330	2061	282
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: N Davis Hwy & E Maxwell Street

Movement	WB	WB	WB	NB	SB
Directions Served	LT	T	R	LT	TR
Maximum Queue (ft)	55	75	31	53	55
Average Queue (ft)	38	41	13	32	32
95th Queue (ft)	55	62	37	47	51
Link Distance (ft)	533	533	533	282	1698
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 18: N Davis Hwy & E Cross St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	51	56	55	79
Average Queue (ft)	33	40	37	43
95th Queue (ft)	43	59	58	70
Link Distance (ft)	304	234	1698	2357
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 19: N Davis Hwy & E Texar Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	53	72	73	31	95	118	138	230
Average Queue (ft)	30	29	21	7	46	35	63	99
95th Queue (ft)	52	59	55	26	81	83	116	186
Link Distance (ft)		322	322		604	604	2357	1462
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	130			100				
Storage Blk Time (%)							0	
Queuing Penalty (veh)							0	

Intersection: 21: N Davis Hwy & I-110 Ramp/Driveway

Movement	EB	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	L	T	TR	UL	T
Maximum Queue (ft)	274	427	215	138	70	72	30	247
Average Queue (ft)	159	227	36	54	24	30	6	111
95th Queue (ft)	258	357	168	106	59	71	24	215
Link Distance (ft)		412			330		538	538
Upstream Blk Time (%)		1						
Queuing Penalty (veh)		0						
Storage Bay Dist (ft)	250		190	270		220		
Storage Blk Time (%)	0	16	0					
Queuing Penalty (veh)	0	39	0					

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	T	UL	T	T	TR	UL	L	T
Maximum Queue (ft)	194	235	256	224	210	32	356	304	188	72	95	151
Average Queue (ft)	78	123	125	101	38	9	242	187	72	17	51	70
95th Queue (ft)	177	189	217	192	133	27	342	292	167	49	84	131
Link Distance (ft)			890	890	890		468	468	468			538
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250				190				270	270	
Storage Blk Time (%)		0	0				15					
Queuing Penalty (veh)		0	0				4					

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	NB	SB	SB	SB	SB
Directions Served	T	UL	T	T	R
Maximum Queue (ft)	158	128	151	182	157
Average Queue (ft)	77	46	11	110	5
95th Queue (ft)	146	103	58	172	52
Link Distance (ft)	538		748	748	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		285		550	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 1000: Martin Luther King Jr Dr & N Davis Hwy

Movement	EB	WB	NB	SB
Directions Served	ULTR	LTR	LTR	LTR
Maximum Queue (ft)	171	93	74	31
Average Queue (ft)	18	23	23	9
95th Queue (ft)	84	62	59	31
Link Distance (ft)	330	1462	126	236
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1001: Martin Luther King Jr Dr

Movement	EB	NB
Directions Served	R	LT
Maximum Queue (ft)	31	51
Average Queue (ft)	13	3
95th Queue (ft)	37	20
Link Distance (ft)	306	1184
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 214

Intersection: 1: Alcaniz St & E Gregory Street

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	LT	T	TR	UL	T	T	T	T	TR
Maximum Queue (ft)	186	171	60	134	50	134	138	88	94
Average Queue (ft)	107	26	14	47	16	57	78	36	47
95th Queue (ft)	164	85	39	99	42	101	119	66	83
Link Distance (ft)	577	577	577		629	629	629	225	225
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)				200					
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Alcaniz St & E Wright Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB
Directions Served	LT	TR	LT	TR	UL	T	R	LTR
Maximum Queue (ft)	75	49	74	52	110	142	82	55
Average Queue (ft)	27	18	43	14	24	55	10	22
95th Queue (ft)	58	42	69	42	63	114	48	49
Link Distance (ft)	751	751	307	307	225	225	225	1611
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	199	369	342	93	184	198	226	117	96
Average Queue (ft)	55	231	244	37	88	98	117	44	28
95th Queue (ft)	143	394	379	73	157	162	189	89	63
Link Distance (ft)		339	339		331	331	1611	2407	
Upstream Blk Time (%)		2	1						
Queuing Penalty (veh)		12	8						
Storage Bay Dist (ft)	150			140					315
Storage Blk Time (%)		14			1				
Queuing Penalty (veh)		8			1				

Intersection: 4: Haynes St/I-110 NB On Ramp & E Cervantes St

Movement	EB	EB	EB	WB	WB	NB	NB	NB
Directions Served	L	T	TR	T	TR	L	T	R
Maximum Queue (ft)	215	422	403	306	355	52	156	138
Average Queue (ft)	170	240	190	172	188	17	69	37
95th Queue (ft)	251	485	416	270	290	47	118	76
Link Distance (ft)		388	388	339	339	359	359	
Upstream Blk Time (%)		13	5		0			
Queuing Penalty (veh)		0	0		1			
Storage Bay Dist (ft)	155							125
Storage Blk Time (%)	21	7					2	0
Queuing Penalty (veh)	148	36					1	0

Intersection: 5: Martin Luther King Jr Dr & E Blount St

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	LTR	LTR
Maximum Queue (ft)	77	32	74	159	118
Average Queue (ft)	44	3	21	71	54
95th Queue (ft)	85	18	56	130	99
Link Distance (ft)	388		307	2407	2047
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		120			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Martin Luther King Jr Dr & E Jordan St

Movement	EB	EB	NB	SB
Directions Served	LT	TR	TR	LT
Maximum Queue (ft)	66	65	99	77
Average Queue (ft)	43	34	48	41
95th Queue (ft)	62	56	82	65
Link Distance (ft)	43	43	2047	277
Upstream Blk Time (%)	6	3		
Queuing Penalty (veh)	11	5		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Haynes St & E Jordan St

Movement	EB	EB	EB	NB	NB
Directions Served	L	T	T	T	TR
Maximum Queue (ft)	105	84	28	29	155
Average Queue (ft)	10	10	1	2	55
95th Queue (ft)	53	41	9	14	104
Link Distance (ft)	265	265	265	406	406
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Haynes St/I-110 NB & E Maxwell Street

Movement	WB	WB	NB	NB
Directions Served	T	T	L	T
Maximum Queue (ft)	30	29	48	293
Average Queue (ft)	9	5	12	195
95th Queue (ft)	31	21	37	305
Link Distance (ft)	53	53	279	279
Upstream Blk Time (%)				3
Queuing Penalty (veh)				7
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Martin Luther King Jr Dr & E Maxwell Street

Movement	WB	WB	WB	NB	SB	SB
Directions Served	LT	T	TR	LT	T	R
Maximum Queue (ft)	72	94	177	118	74	74
Average Queue (ft)	50	30	91	40	20	35
95th Queue (ft)	74	74	151	101	57	69
Link Distance (ft)	310	310	310	277	1701	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						330
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Martin Luther King Jr Dr & E Cross St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	79	31	101	75
Average Queue (ft)	40	28	53	47
95th Queue (ft)	66	41	83	68
Link Distance (ft)	222	304	1701	2369
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Martin Luther King Jr Dr & E Texar Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	UL	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	92	157	91	52	96	95	226	184
Average Queue (ft)	51	69	39	11	40	36	105	96
95th Queue (ft)	83	125	83	39	79	76	197	167
Link Distance (ft)		712	712		323	323	2369	1205
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	225			115				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 13: E Wright Street & N Davis Hwy

Movement	EB	EB	WB	SB
Directions Served	UL	T	TR	LR
Maximum Queue (ft)	79	55	56	54
Average Queue (ft)	51	34	36	32
95th Queue (ft)	74	58	54	54
Link Distance (ft)	307	307	778	1610
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: N Davis Hwy & E Cervantes St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	TR	L	T	TR	LT	R	LTR
Maximum Queue (ft)	67	186	200	169	315	306	118	139	201
Average Queue (ft)	30	31	42	31	110	97	72	57	69
95th Queue (ft)	59	96	105	84	206	208	119	103	130
Link Distance (ft)		331	331		485	485	1610		2396
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	140			120				150	
Storage Blk Time (%)		1			4			0	
Queuing Penalty (veh)		0			2			0	

Intersection: 15: N Davis Hwy & E Blount St

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	52	116	94	97	120
Average Queue (ft)	11	44	27	55	58
95th Queue (ft)	37	96	63	94	101
Link Distance (ft)		307	505	2396	2061
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)	0	2			
Queuing Penalty (veh)	0	0			

Intersection: 16: N Davis Hwy & E Jordan St

Movement	EB	EB	NB	SB
Directions Served	LT	TR	TR	LT
Maximum Queue (ft)	72	67	94	53
Average Queue (ft)	36	34	48	32
95th Queue (ft)	55	54	76	46
Link Distance (ft)	330	330	2061	282
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: N Davis Hwy & E Maxwell Street

Movement	WB	WB	WB	NB	SB
Directions Served	LT	T	R	LT	TR
Maximum Queue (ft)	55	68	31	88	55
Average Queue (ft)	33	34	11	36	38
95th Queue (ft)	49	52	35	58	56
Link Distance (ft)	533	533	533	282	1698
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 18: N Davis Hwy & E Cross St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	51	56	89	99
Average Queue (ft)	31	29	42	45
95th Queue (ft)	48	54	69	70
Link Distance (ft)	304	234	1698	2357
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 19: N Davis Hwy & E Texar Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	89	130	116	49	158	146	238	544
Average Queue (ft)	38	40	31	13	58	48	88	182
95th Queue (ft)	69	87	86	38	114	106	161	431
Link Distance (ft)		323	323		602	602	2357	1463
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	130			100				
Storage Blk Time (%)		0			2			
Queuing Penalty (veh)		0			0			

Intersection: 21: N Davis Hwy & I-110 Ramp/Driveway

Movement	EB	EB	EB	WB	NB	NB	NB	SB	SB
Directions Served	UL	LT	R	R	L	T	TR	UL	T
Maximum Queue (ft)	275	435	215	51	237	90	152	30	295
Average Queue (ft)	145	230	36	4	106	37	67	14	173
95th Queue (ft)	264	340	168	24	193	74	126	37	263
Link Distance (ft)		420		301		348		524	524
Upstream Blk Time (%)		0							
Queuing Penalty (veh)		0							
Storage Bay Dist (ft)	250		190		270		220		
Storage Blk Time (%)	0	17							
Queuing Penalty (veh)	0	43							

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	UL	L	T	T	T	L	T	T	TR	UL	L	T
Maximum Queue (ft)	220	249	265	242	180	240	483	403	289	87	101	239
Average Queue (ft)	134	164	168	135	68	60	341	271	164	26	47	103
95th Queue (ft)	200	238	256	222	155	209	471	396	270	65	82	180
Link Distance (ft)			890	890	890		468	468	468			524
Upstream Blk Time (%)							1					
Queuing Penalty (veh)							0					
Storage Bay Dist (ft)	250	250				190				270	270	
Storage Blk Time (%)		0	1				34					
Queuing Penalty (veh)		0	2				10					

Intersection: 22: N Davis Hwy & E Fairfield Dr

Movement	NB	SB	SB	SB	SB
Directions Served	T	UL	T	T	R
Maximum Queue (ft)	215	130	252	288	374
Average Queue (ft)	110	72	28	180	42
95th Queue (ft)	186	130	133	284	191
Link Distance (ft)	524		748	748	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		285		550	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 1000: Martin Luther King Jr Dr & N Davis Hwy

Movement	EB	WB	NB	SB
Directions Served	ULTR	LTR	LTR	LTR
Maximum Queue (ft)	130	116	99	31
Average Queue (ft)	14	32	47	10
95th Queue (ft)	63	76	91	33
Link Distance (ft)	348	1463	99	241
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			1	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1001: Martin Luther King Jr Dr

Movement	EB	NB
Directions Served	R	LT
Maximum Queue (ft)	31	32
Average Queue (ft)	12	2
95th Queue (ft)	35	14
Link Distance (ft)	266	1205
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 297

HCM 6th Edition cannot analyze u-turn movements.

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1290	60	70	1380	15	35	25	50	25	20	35
Future Volume (veh/h)	35	1290	60	70	1380	15	35	25	50	25	20	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	1358	63	74	1453	16	37	26	53	26	21	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1743	81	358	2465	27	131	97	161	219	165	354
Arrive On Green	0.50	0.50	0.50	0.27	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	361	3458	160	1781	3600	40	422	434	720	789	741	1585
Grp Volume(v), veh/h	37	697	724	74	717	752	116	0	0	47	0	37
Grp Sat Flow(s),veh/h/ln	361	1777	1842	1781	1777	1863	1576	0	0	1530	0	1585
Q Serve(g_s), s	7.4	41.6	41.8	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	2.4
Cycle Q Clear(g_c), s	7.4	41.6	41.8	0.0	0.0	0.0	7.6	0.0	0.0	2.9	0.0	2.4
Prop In Lane	1.00		0.09	1.00		0.02	0.32		0.46	0.55		1.00
Lane Grp Cap(c), veh/h	237	895	928	358	1216	1276	388	0	0	384	0	354
V/C Ratio(X)	0.16	0.78	0.78	0.21	0.59	0.59	0.30	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	266	1039	1077	358	1216	1276	406	0	0	384	0	354
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.89	0.89	0.89	0.78	0.78	0.78	1.00	0.00	0.00	0.97	0.00	0.97
Uniform Delay (d), s/veh	17.8	26.3	26.4	32.1	0.0	0.0	42.1	0.0	0.0	40.3	0.0	40.2
Incr Delay (d2), s/veh	0.6	3.9	3.8	0.2	1.6	1.6	0.4	0.0	0.0	0.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	17.9	18.7	1.7	0.6	0.6	3.2	0.0	0.0	1.3	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	30.2	30.2	32.3	1.6	1.6	42.5	0.0	0.0	40.9	0.0	40.7
LnGrp LOS	B	C	C	C	A	A	D	A	A	D	A	D
Approach Vol, veh/h		1458			1543			116				84
Approach Delay, s/veh		29.9			3.1			42.5				40.8
Approach LOS		C			A			D				D
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	33.5	71.5		35.0		95.0		35.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		* 6				
Max Green Setting (Gmax), s	76.0	76.0		29.0		89.0		* 31				
Max Q Clear Time (g_c+1/2g), s	43.8	43.8		4.9		2.0		0.0				
Green Ext Time (p_c), s	0.0	21.7		0.2		40.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Davis Highway/MLK Drive Two-Way Conversion Study
4: Haynes St/I-110 NB On Ramp & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖	↗	↖	↗	↖			
Traffic Volume (veh/h)	360	1350	0	0	1175	275	20	40	35	0	0	0
Future Volume (veh/h)	360	1350	0	0	1175	275	20	40	35	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	379	1421	0	0	1237	289	21	42	37			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	430	3086	0	0	2171	501	70	73	62			
Arrive On Green	0.07	0.87	0.00	0.00	1.00	1.00	0.04	0.04	0.04			
Sat Flow, veh/h	1781	3647	0	0	2960	661	1781	1870	1585			
Grp Volume(v), veh/h	379	1421	0	0	761	765	21	42	37			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1751	1781	1870	1585			
Q Serve(g_s), s	5.7	11.4	0.0	0.0	0.0	0.0	1.5	2.9	3.0			
Cycle Q Clear(g_c), s	5.7	11.4	0.0	0.0	0.0	0.0	1.5	2.9	3.0			
Prop In Lane	1.00		0.00	0.00		0.38	1.00		1.00			
Lane Grp Cap(c), veh/h	430	3086	0	0	1345	1326	70	73	62			
V/C Ratio(X)	0.88	0.46	0.00	0.00	0.57	0.58	0.30	0.57	0.60			
Avail Cap(c_a), veh/h	670	3086	0	0	1345	1326	370	388	329			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.77	0.77	1.00	1.00	1.00			
Uniform Delay (d), s/veh	7.4	1.9	0.0	0.0	0.0	0.0	60.7	61.4	61.4			
Incr Delay (d2), s/veh	7.4	0.2	0.0	0.0	1.3	1.4	1.8	5.1	6.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.2	2.0	0.0	0.0	0.5	0.5	0.7	1.5	1.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	2.1	0.0	0.0	1.3	1.4	62.5	66.5	68.0			
LnGrp LOS	B	A	A	A	A	A	E	E	E			
Approach Vol, veh/h		1800			1526			100				
Approach Delay, s/veh		4.8			1.4			66.2				
Approach LOS		A			A			E				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	4.5	104.4		11.1		118.9						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	6.0	59.0		27.0		91.0						
Max Q Clear Time (g_c+11), s	6.0	2.0		5.0		13.4						
Green Ext Time (p_c), s	0.8	35.4		0.2		37.5						
Intersection Summary												
HCM 6th Ctrl Delay				5.1								
HCM 6th LOS				A								

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Volume (veh/h)	5	120	10	10	245	10	10	70	5	10	55	15
Future Volume (veh/h)	5	120	10	10	245	10	10	70	5	10	55	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	126	11	11	258	11	11	74	5	11	58	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	1227	104	1044	1311	56	74	125	8	74	103	27
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	22	1667	142	1252	1781	76	144	1571	101	150	1299	336
Grp Volume(v), veh/h	142	0	0	11	0	269	90	0	0	85	0	0
Grp Sat Flow(s),veh/h/ln	1830	0	0	1252	0	1857	1815	0	0	1785	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	2.9	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	0.1	0.0	2.9	3.1	0.0	0.0	2.9	0.0	0.0
Prop In Lane	0.04		0.08	1.00		0.04	0.12		0.06	0.13		0.19
Lane Grp Cap(c), veh/h	1404	0	0	1044	0	1367	206	0	0	204	0	0
V/C Ratio(X)	0.10	0.00	0.00	0.01	0.00	0.20	0.44	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	1404	0	0	1044	0	1367	690	0	0	676	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.99	0.00	0.99	0.97	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.5	0.0	0.0	2.3	0.0	2.6	29.0	0.0	0.0	28.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.0	0.0	0.7	1.4	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.6	0.0	0.0	2.3	0.0	2.7	31.0	0.0	0.0	30.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		142			280			90			85	
Approach Delay, s/veh		2.6			2.7			31.0			30.8	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		53.8		11.2		53.8		11.2				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		30.0		23.0		30.0		23.0				
Max Q Clear Time (g_c+I1), s		3.4		4.9		4.9		0.0				
Green Ext Time (p_c), s		1.1		0.5		2.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				11.0								
HCM 6th LOS				B								

Davis Highway/MLK Drive Two-Way Conversion Study
6: Martin Luther King Jr Dr & E Jordan St

04/01/2020

Intersection

Intersection Delay, s/veh 9.2
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Traffic Vol, veh/h	30	305	20	0	0	0	0	90	5	20	60	0
Future Vol, veh/h	30	305	20	0	0	0	0	90	5	20	60	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	321	21	0	0	0	0	95	5	21	63	0
Number of Lanes	0	2	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	9.5	8.7	8.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	0%	16%	0%	25%
Vol Thru, %	95%	84%	88%	75%
Vol Right, %	5%	0%	12%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	183	173	80
LT Vol	0	30	0	20
Through Vol	90	153	153	60
RT Vol	5	0	20	0
Lane Flow Rate	100	192	182	84
Geometry Grp	2	7	7	2
Degree of Util (X)	0.135	0.271	0.247	0.116
Departure Headway (Hd)	4.873	5.07	4.906	4.974
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	736	709	732	721
Service Time	2.901	2.799	2.635	3.003
HCM Lane V/C Ratio	0.136	0.271	0.249	0.117
HCM Control Delay	8.7	9.7	9.2	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	1.1	1	0.4

Davis Highway/MLK Drive Two-Way Conversion Study
7: Haynes St & E Jordan St

04/01/2020

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑						↑↑				
Traffic Vol, veh/h	185	345	0	0	0	0	0	90	10	0	0	0
Future Vol, veh/h	185	345	0	0	0	0	0	90	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	195	363	0	0	0	0	0	95	11	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	0	0	-	-	753	182
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	4.02	3.32
Pot Cap-1 Maneuver	-	-	0	0	337	829
Stage 1	-	-	0	0	416	-
Stage 2	-	-	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	0	829
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT
Capacity (veh/h)	-	829	-	-
HCM Lane V/C Ratio	-	0.07	-	-
HCM Control Delay (s)	-	9.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

HCM 6th Edition methodology does not support clustered intersections.

HCM 6th Edition methodology does not support clustered intersections.

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

04/01/2020

Intersection

Intersection Delay, s/veh 8.4
 Intersection LOS A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↕				↕			↕			↕	
Traffic Vol, veh/h	10	15	75	10	10	5	85	10	10	95	5	5	90	20
Future Vol, veh/h	10	15	75	10	10	5	85	10	10	95	5	5	90	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	16	79	11	11	5	89	11	11	100	5	5	95	21
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	8.4	8.4	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	15%	5%	4%
Vol Thru, %	86%	75%	85%	78%
Vol Right, %	5%	10%	10%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	110	110	115
LT Vol	10	16	6	5
Through Vol	95	82	93	90
RT Vol	5	11	11	20
Lane Flow Rate	116	116	116	121
Geometry Grp	1	1	1	1
Degree of Util (X)	0.148	0.148	0.147	0.152
Departure Headway (Hd)	4.608	4.592	4.573	4.517
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	778	780	784	794
Service Time	2.638	2.621	2.602	2.546
HCM Lane V/C Ratio	0.149	0.149	0.148	0.152
HCM Control Delay	8.4	8.4	8.4	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.5	0.5	0.5

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

04/01/2020

Intersection

Intersection Delay, s/veh 8.3
 Intersection LOS A

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗	↖		↖	↗
Traffic Vol, veh/h	10	95	65	70	5	5	125
Future Vol, veh/h	10	95	65	70	5	5	125
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	11	100	68	74	5	5	132
Number of Lanes	0	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.8	8	7.7
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	4%
Vol Thru, %	0%	100%	93%	0%
Vol Right, %	0%	0%	7%	96%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	65	75	130
LT Vol	105	0	0	5
Through Vol	0	65	70	0
RT Vol	0	0	5	125
Lane Flow Rate	111	68	79	137
Geometry Grp	7	7	5	2
Degree of Util (X)	0.163	0.092	0.099	0.152
Departure Headway (Hd)	5.321	4.82	4.492	3.996
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	668	736	800	902
Service Time	3.102	2.6	2.509	2.001
HCM Lane V/C Ratio	0.166	0.092	0.099	0.152
HCM Control Delay	9.2	8.1	8	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.3	0.3	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1275	55	70	1390	20	40	25	55	25	20	35
Future Volume (veh/h)	35	1275	55	70	1390	20	40	25	55	25	20	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	1342	58	74	1463	21	42	26	58	26	21	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	2723	118	307	2547	37	141	77	183	72	60	75
Arrive On Green	0.03	0.78	0.78	0.00	0.71	0.71	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1781	3470	150	1781	3586	51	835	671	1585	308	519	651
Grp Volume(v), veh/h	37	686	714	74	724	760	68	0	58	84	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1843	1781	1777	1861	1506	0	1585	1478	0	0
Q Serve(g_s), s	0.7	17.6	17.7	0.1	25.9	26.0	0.0	0.0	4.4	2.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	17.6	17.7	0.1	25.9	26.0	5.3	0.0	4.4	7.3	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.03	0.62		1.00	0.31		0.44
Lane Grp Cap(c), veh/h	287	1394	1446	307	1262	1322	218	0	183	207	0	0
V/C Ratio(X)	0.13	0.49	0.49	0.24	0.57	0.57	0.31	0.00	0.32	0.41	0.00	0.00
Avail Cap(c_a), veh/h	305	1394	1446	518	1262	1322	334	0	305	320	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	1.00	1.00	1.00	1.00	0.00	1.00	0.98	0.00	0.00
Uniform Delay (d), s/veh	7.4	4.9	4.9	9.6	9.2	9.2	53.1	0.0	52.8	53.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.4	1.9	1.8	0.8	0.0	1.0	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.4	5.6	0.9	9.7	10.1	2.1	0.0	1.8	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	5.3	5.3	10.0	11.1	11.0	53.9	0.0	53.8	56.5	0.0	0.0
LnGrp LOS	A	A	A	A	B	B	D	A	D	E	A	A
Approach Vol, veh/h		1437			1558			126			84	
Approach Delay, s/veh		5.4			11.0			53.9			56.5	
Approach LOS		A			B			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	98.8		21.5	0.0	108.5		21.5				
Change Period (Y+Rc), s	6.0	6.5		* 6.5	4.5	6.5		6.5				
Max Green Setting (Gmax), s	5.0	81.5		* 25	15.5	72.5		24.5				
Max Q Clear Time (g_c+1/2), s	12.5	28.0		7.3	0.0	19.7		0.0				
Green Ext Time (p_c), s	0.0	32.2		0.1	0.0	29.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	120	5	5	240	10	10	75	5	5	55	15
Future Volume (veh/h)	10	120	5	5	240	10	10	75	5	5	55	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	126	5	5	253	11	11	79	5	5	58	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	875	1164	46	61	1153	49	75	189	11	65	162	43
Arrive On Green	1.00	1.00	1.00	0.65	0.65	0.65	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1115	1787	71	8	1770	76	108	1605	95	48	1375	361
Grp Volume(v), veh/h	11	0	131	269	0	0	95	0	0	79	0	0
Grp Sat Flow(s),veh/h/ln	1115	0	1858	1853	0	0	1809	0	0	1785	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.8	0.0	0.0	3.1	0.0	0.0	2.6	0.0	0.0
Prop In Lane	1.00		0.04	0.02		0.04	0.12		0.05	0.06		0.20
Lane Grp Cap(c), veh/h	875	0	1210	1264	0	0	275	0	0	269	0	0
V/C Ratio(X)	0.01	0.00	0.11	0.21	0.00	0.00	0.35	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	875	0	1210	1264	0	0	733	0	0	806	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.96	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	4.6	0.0	0.0	26.7	0.0	0.0	26.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.1	0.0	0.0	1.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.2	0.0	0.0	1.4	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.2	4.7	0.0	0.0	27.7	0.0	0.0	27.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		142			269			95			79	
Approach Delay, s/veh		0.2			4.7			27.7			27.1	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.8		15.2		49.8		15.2				
Change Period (Y+Rc), s		7.5		* 7.5		* 7.5		7.5				
Max Green Setting (Gmax), s		25.5		* 28		* 29		24.5				
Max Q Clear Time (g_c+I1), s		2.0		0.0		5.8		5.1				
Green Ext Time (p_c), s		1.0		0.0		1.6		0.6				

Intersection Summary

HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

04/01/2020

Intersection

Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Traffic Vol, veh/h	35	280	15	0	0	0	0	90	10	10	60	0
Future Vol, veh/h	35	280	15	0	0	0	0	90	10	10	60	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	295	16	0	0	0	0	95	11	11	63	0
Number of Lanes	0	2	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB		
Conflicting Lanes Left	1	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	9.3	8.6	8.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	0%	20%	0%	14%
Vol Thru, %	90%	80%	90%	86%
Vol Right, %	10%	0%	10%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	175	155	70
LT Vol	0	35	0	10
Through Vol	90	140	140	60
RT Vol	10	0	15	0
Lane Flow Rate	105	184	163	74
Geometry Grp	2	7	7	2
Degree of Util (X)	0.14	0.259	0.222	0.1
Departure Headway (Hd)	4.777	5.068	4.899	4.904
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	752	709	733	731
Service Time	2.801	2.796	2.628	2.931
HCM Lane V/C Ratio	0.14	0.26	0.222	0.101
HCM Control Delay	8.6	9.6	9	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	1	0.8	0.3

Davis Highway/MLK Drive Two-Way Conversion Study
 17: N Davis Hwy & E Maxwell Street

04/01/2020

Intersection

Intersection Delay, s/veh 9.4
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕↕	↕		↕			↕	
Traffic Vol, veh/h	0	0	0	5	290	10	15	110	0	0	65	20
Future Vol, veh/h	0	0	0	5	290	10	15	110	0	0	65	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	305	11	16	116	0	0	68	21
Number of Lanes	0	0	0	0	2	1	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	3	0
HCM Control Delay	9.5	9.6	8.9
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	12%	5%	0%	0%	0%
Vol Thru, %	88%	95%	100%	0%	76%
Vol Right, %	0%	0%	0%	100%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	102	193	10	85
LT Vol	15	5	0	0	0
Through Vol	110	97	193	0	65
RT Vol	0	0	0	10	20
Lane Flow Rate	132	107	204	11	89
Geometry Grp	7	7	7	7	7
Degree of Util (X)	0.2	0.153	0.29	0.013	0.132
Departure Headway (Hd)	5.476	5.157	5.132	4.429	5.304
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	655	695	700	807	675
Service Time	3.215	2.892	2.868	2.164	3.047
HCM Lane V/C Ratio	0.202	0.154	0.291	0.014	0.132
HCM Control Delay	9.6	8.8	10	7.2	8.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.7	0.5	1.2	0	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

04/01/2020

Intersection

Intersection Delay, s/veh 8.3
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	65	10	5	75	10	15	100	5	5	90	20
Future Vol, veh/h	20	65	10	5	75	10	15	100	5	5	90	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	68	11	5	79	11	16	105	5	5	95	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	8.2	8.4	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	21%	6%	4%
Vol Thru, %	83%	68%	83%	78%
Vol Right, %	4%	11%	11%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	95	90	115
LT Vol	15	20	5	5
Through Vol	100	65	75	90
RT Vol	5	10	10	20
Lane Flow Rate	126	100	95	121
Geometry Grp	1	1	1	1
Degree of Util (X)	0.159	0.128	0.12	0.149
Departure Headway (Hd)	4.528	4.593	4.566	4.44
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	793	781	785	809
Service Time	2.552	2.619	2.592	2.465
HCM Lane V/C Ratio	0.159	0.128	0.121	0.15
HCM Control Delay	8.4	8.3	8.2	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.4	0.4	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	325	40	15	390	50	20	80	20	40	75	45
Future Volume (veh/h)	75	325	40	15	390	50	20	80	20	40	75	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	342	42	16	411	53	21	84	21	42	79	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	675	2246	274	652	1717	220	86	138	32	106	95	51
Arrive On Green	0.14	1.00	1.00	0.54	0.54	0.54	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1781	3189	389	999	3168	406	203	1316	304	351	907	488
Grp Volume(v), veh/h	79	189	195	16	229	235	126	0	0	168	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1800	999	1777	1797	1823	0	0	1746	0	0
Q Serve(g_s), s	1.0	0.0	0.0	0.5	4.4	4.5	0.0	0.0	0.0	1.8	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.5	4.4	4.5	4.3	0.0	0.0	6.1	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.23	0.17		0.17	0.25		0.28
Lane Grp Cap(c), veh/h	675	1251	1268	652	963	974	256	0	0	252	0	0
V/C Ratio(X)	0.12	0.15	0.15	0.02	0.24	0.24	0.49	0.00	0.00	0.67	0.00	0.00
Avail Cap(c_a), veh/h	714	1251	1268	652	963	974	701	0	0	687	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	6.9	7.8	7.8	28.0	0.0	0.0	28.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.1	0.6	0.6	1.5	0.0	0.0	4.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.1	1.4	1.5	1.9	0.0	0.0	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.4	0.1	0.1	7.0	8.4	8.4	29.4	0.0	0.0	33.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		463			480			126			168	
Approach Delay, s/veh		0.8			8.4			29.4			33.0	
Approach LOS		A			A			C			C	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	0.6	41.2		13.2		51.8		13.2				
Change Period (Y+Rc), s	6.0	6.0		6.4		6.0		* 6.4				
Max Green Setting (Gmax), s	6.0	16.6		24.0		28.6		* 24				
Max Q Clear Time (g_c+1), s	6.5	6.5		6.3		2.0		0.0				
Green Ext Time (p_c), s	0.0	2.4		0.6		3.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM 6th Edition cannot analyze u-turn movements.

Intersection				
Intersection Delay, s/veh	5.1			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	362	216	187	30
Demand Flow Rate, veh/h	369	220	191	30
Vehicles Circulating, veh/h	35	220	220	409
Vehicles Exiting, veh/h	404	191	184	31
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.2	5.1	4.9	4.3
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	369	220	191	30
Cap Entry Lane, veh/h	1331	1103	1103	909
Entry HV Adj Factor	0.982	0.982	0.979	0.991
Flow Entry, veh/h	362	216	187	30
Cap Entry, veh/h	1307	1083	1079	901
V/C Ratio	0.277	0.200	0.173	0.033
Control Delay, s/veh	5.2	5.1	4.9	4.3
LOS	A	A	A	A
95th %tile Queue, veh	1	1	1	0

Davis Highway/MLK Drive Two-Way Conversion Study
1001: Martin Luther King Jr Dr

04/01/2020

Intersection

Int Delay, s/veh 0.7

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations		↗		↖	↘	
Traffic Vol, veh/h	0	20	10	178	165	6
Future Vol, veh/h	0	20	10	178	165	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	21	11	187	174	6

Major/Minor Minor2 Major1 Major2

Conflicting Flow All	-	177	180	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	866	1396	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	866	1396	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach EB NB SB

HCM Control Delay, s	9.3	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h)	1396	-	866	-	-
HCM Lane V/C Ratio	0.008	-	0.024	-	-
HCM Control Delay (s)	7.6	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Davis Highway/MLK Drive Two-Way Conversion Study
 1: Alcaniz St & E Gregory Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations					←↑↑↑			↓	↑↑↑			↑↑
Traffic Volume (vph)	0	0	0	340	550	30	10	25	210	0	0	235
Future Volume (vph)	0	0	0	340	550	30	10	25	210	0	0	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0			6.0	6.0			6.0
Lane Util. Factor					0.91			1.00	0.91			0.95
Frt					1.00			1.00	1.00			0.97
Flt Protected					0.98			0.95	1.00			1.00
Satd. Flow (prot)					4968			1770	5085			3445
Flt Permitted					0.98			0.95	1.00			1.00
Satd. Flow (perm)					4968			1770	5085			3445
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	358	579	32	11	26	221	0	0	247
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	25
Lane Group Flow (vph)	0	0	0	0	965	0	0	37	221	0	0	275
Turn Type				Perm	NA		Prot	Prot	NA			NA
Protected Phases					2		7	7	4			8
Permitted Phases				2								
Actuated Green, G (s)					24.8			1.8	19.2			11.4
Effective Green, g (s)					24.8			1.8	19.2			11.4
Actuated g/C Ratio					0.44			0.03	0.34			0.20
Clearance Time (s)					6.0			6.0	6.0			6.0
Vehicle Extension (s)					5.0			3.0	4.0			4.0
Lane Grp Cap (vph)					2200			56	1743			701
v/s Ratio Prot								c0.02	0.04			c0.08
v/s Ratio Perm					0.19							
v/c Ratio					0.44			0.66	0.13			0.39
Uniform Delay, d1					10.8			26.8	12.6			19.3
Progression Factor					1.00			1.00	1.00			1.00
Incremental Delay, d2					0.3			25.5	0.0			0.5
Delay (s)					11.1			52.3	12.7			19.8
Level of Service					B			D	B			B
Approach Delay (s)		0.0			11.1				18.4			19.8
Approach LOS		A			B				B			B

Intersection Summary

HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	56.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	50
Future Volume (vph)	50
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	53
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
2: Alcaniz St & E Wright Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↑			↔↑			↔	↑	↔		↔
Traffic Volume (vph)	5	50	15	150	50	5	10	30	85	115	5	110
Future Volume (vph)	5	50	15	150	50	5	10	30	85	115	5	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5	4.5	4.5		4.5
Lane Util. Factor		0.95			0.95			1.00	1.00	1.00		1.00
Frt		0.97			1.00			1.00	1.00	0.85		0.98
Flt Protected		1.00			0.96			0.95	1.00	1.00		1.00
Satd. Flow (prot)		3413			3402			1770	1863	1583		1822
Flt Permitted		0.93			0.76			0.67	1.00	1.00		0.99
Satd. Flow (perm)		3177			2673			1241	1863	1583		1806
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	53	16	158	53	5	11	32	89	121	5	116
RTOR Reduction (vph)	0	11	0	0	1	0	0	0	0	80	0	6
Lane Group Flow (vph)	0	63	0	0	215	0	0	43	89	41	0	136
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2		2		6
Actuated Green, G (s)		7.7			7.7			8.7	8.7	8.7		8.7
Effective Green, g (s)		7.7			7.7			8.7	8.7	8.7		8.7
Actuated g/C Ratio		0.30			0.30			0.34	0.34	0.34		0.34
Clearance Time (s)		4.5			4.5			4.5	4.5	4.5		4.5
Vehicle Extension (s)		3.0			3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		963			810			425	638	542		618
v/s Ratio Prot									0.05			
v/s Ratio Perm		0.02			c0.08			0.03		0.03		c0.08
v/c Ratio		0.07			0.26			0.10	0.14	0.08		0.22
Uniform Delay, d1		6.3			6.7			5.7	5.8	5.6		5.9
Progression Factor		1.00			1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.0			0.2			0.1	0.1	0.1		0.2
Delay (s)		6.3			6.9			5.8	5.9	5.7		6.1
Level of Service		A			A			A	A	A		A
Approach Delay (s)		6.3			6.9				5.8			6.1
Approach LOS		A			A				A			A

Intersection Summary

HCM 2000 Control Delay	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	25.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	21
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1290	60	70	1380	15	35	25	50	25	20	35
Future Volume (vph)	35	1290	60	70	1380	15	35	25	50	25	20	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			4.5			6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	1.00
Satd. Flow (prot)	1770	3516		1770	3533			1720			1813	1583
Flt Permitted	0.12	1.00		0.11	1.00			0.90			0.82	1.00
Satd. Flow (perm)	224	3516		210	3533			1576			1526	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	37	1358	63	74	1453	16	37	26	53	26	21	37
RTOR Reduction (vph)	0	3	0	0	1	0	0	23	0	0	0	29
Lane Group Flow (vph)	37	1418	0	74	1468	0	0	93	0	0	47	8
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	75.7	75.7		89.0	89.0			30.5			29.0	29.0
Effective Green, g (s)	75.7	75.7		89.0	89.0			30.5			29.0	29.0
Actuated g/C Ratio	0.58	0.58		0.68	0.68			0.23			0.22	0.22
Clearance Time (s)	6.0	6.0		6.0	6.0			4.5			6.0	6.0
Vehicle Extension (s)	5.0	5.0		2.5	5.0			3.0			2.5	2.5
Lane Grp Cap (vph)	130	2047		231	2418			369			340	353
v/s Ratio Prot		c0.40		0.02	c0.42							
v/s Ratio Perm	0.17			0.20				c0.06			0.03	0.01
v/c Ratio	0.28	0.69		0.32	0.61			0.25			0.14	0.02
Uniform Delay, d1	13.6	19.0		26.4	11.1			40.5			40.5	39.4
Progression Factor	0.81	0.87		0.48	0.45			1.00			0.80	13.71
Incremental Delay, d2	2.3	1.2		0.5	0.9			0.4			0.8	0.1
Delay (s)	13.3	17.8		13.2	6.0			40.8			33.3	540.9
Level of Service	B	B		B	A			D			C	F
Approach Delay (s)		17.7			6.3			40.8			256.9	
Approach LOS		B			A			D			F	

Intersection Summary

HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗↗			↗↗		↘	↗	↗			
Traffic Volume (vph)	360	1350	0	0	1175	275	20	40	35	0	0	0
Future Volume (vph)	360	1350	0	0	1175	275	20	40	35	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	3539			3439		1770	1863	1583			
Flt Permitted	0.08	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	149	3539			3439		1770	1863	1583			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	379	1421	0	0	1237	289	21	42	37	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	35	0	0	0
Lane Group Flow (vph)	379	1421	0	0	1514	0	21	42	2	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	111.1	111.1			76.2		6.9	6.9	6.9			
Effective Green, g (s)	111.1	111.1			76.2		6.9	6.9	6.9			
Actuated g/C Ratio	0.85	0.85			0.59		0.05	0.05	0.05			
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0		2.5	2.5	2.5			
Lane Grp Cap (vph)	487	3024			2015		93	98	84			
v/s Ratio Prot	c0.17	0.40			0.44			c0.02				
v/s Ratio Perm	c0.49						0.01		0.00			
v/c Ratio	0.78	0.47			0.75		0.23	0.43	0.02			
Uniform Delay, d1	34.8	2.3			19.9		59.0	59.6	58.4			
Progression Factor	1.00	1.00			0.51		1.00	1.00	1.00			
Incremental Delay, d2	7.4	0.2			2.2		0.9	2.2	0.1			
Delay (s)	42.2	2.5			12.2		59.9	61.8	58.4			
Level of Service	D	A			B		E	E	E			
Approach Delay (s)		10.9			12.2			60.2			0.0	
Approach LOS		B			B			E			A	

Intersection Summary

HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗			↕			↕	
Traffic Volume (vph)	5	120	10	10	245	10	10	70	5	10	55	15
Future Volume (vph)	5	120	10	10	245	10	10	70	5	10	55	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.99		1.00	0.99			0.99			0.97	
Flt Protected		1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)		1840		1770	1851			1838			1804	
Flt Permitted		0.99		0.67	1.00			0.94			0.94	
Satd. Flow (perm)		1827		1241	1851			1741			1711	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	126	11	11	258	11	11	74	5	11	58	16
RTOR Reduction (vph)	0	3	0	0	1	0	0	4	0	0	14	0
Lane Group Flow (vph)	0	139	0	11	268	0	0	86	0	0	71	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		44.8		44.8	44.8			8.2			8.2	
Effective Green, g (s)		44.8		44.8	44.8			8.2			8.2	
Actuated g/C Ratio		0.69		0.69	0.69			0.13			0.13	
Clearance Time (s)		6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)		4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)		1259		855	1275			219			215	
v/s Ratio Prot					c0.14							
v/s Ratio Perm		0.08		0.01				c0.05			0.04	
v/c Ratio		0.11		0.01	0.21			0.39			0.33	
Uniform Delay, d1		3.4		3.2	3.7			26.1			25.9	
Progression Factor		1.00		0.37	0.33			0.98			1.00	
Incremental Delay, d2		0.2		0.0	0.1			1.5			1.2	
Delay (s)		3.6		1.2	1.3			27.1			27.1	
Level of Service		A		A	A			C			C	
Approach Delay (s)		3.6			1.3			27.1			27.1	
Approach LOS		A			A			C			C	

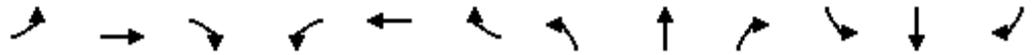
Intersection Summary

HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	29.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 6: Martin Luther King Jr Dr & E Jordan St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	305	20	0	0	0	0	90	5	20	60	0
Future Volume (vph)	30	305	20	0	0	0	0	90	5	20	60	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	32	321	21	0	0	0	0	95	5	21	63	0

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total (vph)	193	182	100	84
Volume Left (vph)	32	0	0	21
Volume Right (vph)	0	21	5	0
Hadj (s)	0.12	-0.05	0.00	0.08
Departure Headway (s)	5.1	4.9	4.9	5.0
Degree Utilization, x	0.27	0.25	0.14	0.12
Capacity (veh/h)	681	709	694	675
Control Delay (s)	8.8	8.3	8.7	8.6
Approach Delay (s)	8.6		8.7	8.6
Approach LOS	A		A	A

Intersection Summary			
Delay		8.6	
Level of Service		A	
Intersection Capacity Utilization	27.5%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 8: Haynes St/I-110 NB & E Maxwell Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑	↑	↑				
Traffic Volume (vph)	0	0	0	0	175	180	20	255	0	0	0	0
Future Volume (vph)	0	0	0	0	175	180	20	255	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0	12.0	6.0	6.0				
Lane Util. Factor					0.95	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					3539	1583	1770	1863				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					3539	1583	1770	1863				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	184	189	21	268	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	136	10	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	184	53	11	268	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					4	1		2				
Permitted Phases						4	1	2				
Actuated Green, G (s)					36.9	36.9	56.3	56.3				
Effective Green, g (s)					30.9	30.9	56.3	56.3				
Actuated g/C Ratio					0.28	0.28	0.51	0.51				
Clearance Time (s)							6.0	6.0				
Vehicle Extension (s)							4.0	4.0				
Lane Grp Cap (vph)					983	439	896	943				
v/s Ratio Prot					c0.05			c0.14				
v/s Ratio Perm						0.03	0.01					
v/c Ratio					0.19	0.12	0.01	0.28				
Uniform Delay, d1					30.6	30.0	13.6	15.8				
Progression Factor					0.19	0.53	1.00	1.00				
Incremental Delay, d2					0.2	0.3	0.0	0.8				
Delay (s)					5.9	16.3	13.7	16.6				
Level of Service					A	B	B	B				
Approach Delay (s)		0.0			11.1			16.4			0.0	
Approach LOS		A			B			B			A	

Intersection Summary

HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	24.0
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 9: Martin Luther King Jr Dr & E Maxwell Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔↔↔			↕			↕	↗
Traffic Volume (vph)	0	0	0	5	315	5	20	100	0	0	75	20
Future Volume (vph)	0	0	0	5	315	5	20	100	0	0	75	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0			6.0			6.0	6.0
Lane Util. Factor					0.91			1.00			1.00	1.00
Frt					1.00			1.00			1.00	0.85
Flt Protected					1.00			0.99			1.00	1.00
Satd. Flow (prot)					5070			1847			1863	1583
Flt Permitted					1.00			0.96			1.00	1.00
Satd. Flow (perm)					5070			1779			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	5	332	5	21	105	0	0	79	21
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	340	0	0	126	0	0	79	21
Turn Type				Perm	NA		Perm	NA			NA	custom
Protected Phases					4			2			6	
Permitted Phases				4			2					1
Actuated Green, G (s)					19.8			56.3			73.4	11.1
Effective Green, g (s)					19.8			56.3			73.4	11.1
Actuated g/C Ratio					0.18			0.51			0.66	0.10
Clearance Time (s)					12.0			6.0			6.0	6.0
Vehicle Extension (s)					5.0			4.0			4.0	4.0
Lane Grp Cap (vph)					902			900			1229	158
v/s Ratio Prot											0.04	
v/s Ratio Perm					0.07			c0.07				c0.01
v/c Ratio					0.38			0.14			0.06	0.13
Uniform Delay, d1					40.3			14.6			6.7	45.7
Progression Factor					1.00			1.00			1.00	1.00
Incremental Delay, d2					0.6			0.3			0.0	0.5
Delay (s)					40.8			14.9			6.7	46.2
Level of Service					D			B			A	D
Approach Delay (s)		0.0			40.8			14.9			15.0	
Approach LOS		A			D			B			B	

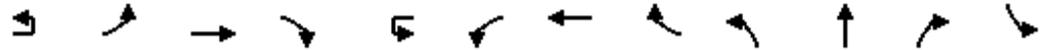
Intersection Summary

HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	24.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

04/01/2020



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations			↕				↕			↕		
Sign Control			Stop					Stop			Stop	
Traffic Volume (vph)	10	15	75	10	10	5	85	10	10	95	5	5
Future Volume (vph)	10	15	75	10	10	5	85	10	10	95	5	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	16	79	11	0	5	89	11	11	100	5	5

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	106	105	116	121
Volume Left (vph)	16	5	11	5
Volume Right (vph)	11	11	5	21
Hadj (s)	0.00	-0.02	0.03	-0.06
Departure Headway (s)	4.6	4.6	4.6	4.5
Degree Utilization, x	0.14	0.13	0.15	0.15
Capacity (veh/h)	731	736	743	753
Control Delay (s)	8.3	8.3	8.4	8.3
Approach Delay (s)	8.3	8.3	8.4	8.3
Approach LOS	A	A	A	A

Intersection Summary

Delay	8.3
Level of Service	A
Intersection Capacity Utilization	25.5%
ICU Level of Service	A
Analysis Period (min)	15

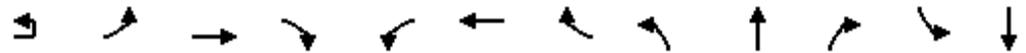


Movement	SBT	SBR
Lane Configurations	↕	
Sign Control	Stop	
Traffic Volume (vph)	90	20
Future Volume (vph)	90	20
Peak Hour Factor	0.95	0.95
Hourly flow rate (vph)	95	21

Direction, Lane #

Davis Highway/MLK Drive Two-Way Conversion Study
 11: Martin Luther King Jr Dr & E Texar Dr

04/01/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	15	70	385	40	15	390	50	15	75	15	40	80
Future Volume (vph)	15	70	385	40	15	390	50	15	75	15	40	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	6.0		6.0	6.0			6.0			6.2
Lane Util. Factor		1.00	0.95		1.00	0.95			1.00			1.00
Frt		1.00	0.99		1.00	0.98			0.98			0.96
Flt Protected		0.95	1.00		0.95	1.00			0.99			0.99
Satd. Flow (prot)		1770	3489		1770	3479			1813			1768
Flt Permitted		0.44	1.00		0.49	1.00			0.94			0.90
Satd. Flow (perm)		822	3489		919	3479			1720			1612
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	16	74	405	42	16	411	53	16	79	16	42	84
RTOR Reduction (vph)	0	0	8	0	0	11	0	0	12	0	0	30
Lane Group Flow (vph)	0	90	439	0	16	453	0	0	99	0	0	149
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA
Protected Phases	1	1	6		5	2			4			8
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		38.7	32.9		31.2	29.9			12.8			12.6
Effective Green, g (s)		38.7	32.9		31.2	29.9			12.8			12.6
Actuated g/C Ratio		0.60	0.51		0.48	0.46			0.20			0.19
Clearance Time (s)		4.5	6.0		6.0	6.0			6.0			6.2
Vehicle Extension (s)		3.0	4.0		3.0	3.0			3.0			4.0
Lane Grp Cap (vph)		573	1765		458	1600			338			312
v/s Ratio Prot		c0.01	0.13		0.00	c0.13						
v/s Ratio Perm		0.08			0.02				0.06			c0.09
v/c Ratio		0.16	0.25		0.03	0.28			0.29			0.48
Uniform Delay, d1		5.7	9.1		8.9	10.9			22.2			23.3
Progression Factor		1.00	1.00		0.55	0.45			1.00			1.00
Incremental Delay, d2		0.1	0.3		0.0	0.1			0.5			1.6
Delay (s)		5.8	9.4		4.9	5.0			22.7			24.9
Level of Service		A	A		A	A			C			C
Approach Delay (s)			8.8			5.0			22.7			24.9
Approach LOS			A			A			C			C

Intersection Summary		
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.33	B
Actuated Cycle Length (s)	65.0	Sum of lost time (s)
Intersection Capacity Utilization	47.5%	18.2
Analysis Period (min)	15	ICU Level of Service
		A

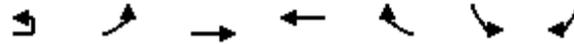
c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	50
Future Volume (vph)	50
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	53
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

04/01/2020



Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↑	↗		↘	
Sign Control			Stop	Stop		Stop	
Traffic Volume (vph)	10	95	65	70	5	5	125
Future Volume (vph)	10	95	65	70	5	5	125
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	100	68	74	5	5	132

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total (vph)	100	68	79	137
Volume Left (vph)	100	0	0	5
Volume Right (vph)	0	0	5	132
Hadj (s)	0.53	0.03	0.00	-0.54
Departure Headway (s)	5.4	4.9	4.5	4.0
Degree Utilization, x	0.15	0.09	0.10	0.15
Capacity (veh/h)	650	710	764	859
Control Delay (s)	8.1	7.2	8.0	7.7
Approach Delay (s)	7.8		8.0	7.7
Approach LOS	A		A	A

Intersection Summary			
Delay		7.8	
Level of Service		A	
Intersection Capacity Utilization	27.2%		ICU Level of Service A
Analysis Period (min)		15	

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1275	55	70	1390	20	40	25	55	25	20	35
Future Volume (vph)	35	1275	55	70	1390	20	40	25	55	25	20	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.5		4.5	6.5			6.0	6.0		6.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.97	1.00		0.98	
Satd. Flow (prot)	1770	3517		1770	3532			1807	1583		1725	
Flt Permitted	0.14	1.00		0.13	1.00			0.76	1.00		0.87	
Satd. Flow (perm)	261	3517		241	3532			1412	1583		1529	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	37	1342	58	74	1463	21	42	26	58	26	21	37
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	51	0	24	0
Lane Group Flow (vph)	37	1398	0	74	1483	0	0	68	7	0	60	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4		4	8		
Actuated Green, G (s)	89.7	85.1		101.6	91.0			15.9	15.9		15.4	
Effective Green, g (s)	89.7	85.1		101.6	91.0			15.9	15.9		15.4	
Actuated g/C Ratio	0.69	0.65		0.78	0.70			0.12	0.12		0.12	
Clearance Time (s)	6.0	6.5		4.5	6.5			6.0	6.0		6.5	
Vehicle Extension (s)	2.5	5.0		3.0	5.0			3.0	3.0		5.0	
Lane Grp Cap (vph)	233	2302		329	2472			172	193		181	
v/s Ratio Prot	0.01	0.40		c0.02	c0.42							
v/s Ratio Perm	0.10			0.15				c0.05	0.00		0.04	
v/c Ratio	0.16	0.61		0.22	0.60			0.40	0.04		0.33	
Uniform Delay, d1	7.7	12.9		7.4	10.1			52.6	50.3		52.6	
Progression Factor	0.35	0.45		1.00	1.00			1.00	1.00		0.75	
Incremental Delay, d2	0.2	0.5		0.3	1.1			1.5	0.1		2.3	
Delay (s)	2.9	6.3		7.7	11.2			54.1	50.4		41.6	
Level of Service	A	A		A	B			D	D		D	
Approach Delay (s)		6.2			11.0			52.4			41.6	
Approach LOS		A			B			D			D	

Intersection Summary

HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	120	5	5	240	10	10	75	5	5	55	15
Future Volume (vph)	10	120	5	5	240	10	10	75	5	5	55	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			4.5			7.5			4.5	
Lane Util. Factor	0.95	0.95			1.00			1.00			1.00	
Frt	1.00	0.99			0.99			0.99			0.97	
Flt Protected	0.95	1.00			1.00			0.99			1.00	
Satd. Flow (prot)	1681	1759			1851			1839			1806	
Flt Permitted	0.64	1.00			1.00			0.96			0.98	
Satd. Flow (perm)	1127	1757			1847			1772			1779	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	126	5	5	253	11	11	79	5	5	58	16
RTOR Reduction (vph)	0	1	0	0	1	0	0	4	0	0	13	0
Lane Group Flow (vph)	10	131	0	0	268	0	0	91	0	0	66	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	41.7	41.7			44.7			8.3			11.3	
Effective Green, g (s)	41.7	41.7			44.7			8.3			11.3	
Actuated g/C Ratio	0.64	0.64			0.69			0.13			0.17	
Clearance Time (s)	7.5	7.5			4.5			7.5			4.5	
Vehicle Extension (s)	4.0	4.0			3.0			4.0			3.0	
Lane Grp Cap (vph)	723	1127			1270			226			309	
v/s Ratio Prot												
v/s Ratio Perm	0.01	0.07			c0.14			c0.05			0.04	
v/c Ratio	0.01	0.12			0.21			0.40			0.21	
Uniform Delay, d1	4.2	4.5			3.7			26.1			23.0	
Progression Factor	0.92	0.86			1.00			1.01			1.00	
Incremental Delay, d2	0.0	0.2			0.1			1.6			0.3	
Delay (s)	3.9	4.1			3.8			27.8			23.4	
Level of Service	A	A			A			C			C	
Approach Delay (s)		4.1			3.8			27.8			23.4	
Approach LOS		A			A			C			C	

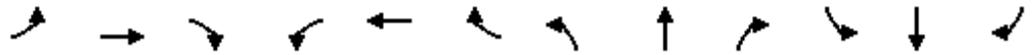
Intersection Summary

HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	35	280	15	0	0	0	0	90	10	10	60	0
Future Volume (vph)	35	280	15	0	0	0	0	90	10	10	60	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	37	295	16	0	0	0	0	95	11	11	63	0

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total (vph)	185	164	106	74
Volume Left (vph)	37	0	0	11
Volume Right (vph)	0	16	11	0
Hadj (s)	0.13	-0.03	-0.03	0.06
Departure Headway (s)	5.1	4.9	4.8	4.9
Degree Utilization, x	0.26	0.22	0.14	0.10
Capacity (veh/h)	691	710	710	684
Control Delay (s)	8.7	8.1	8.6	8.5
Approach Delay (s)	8.4		8.6	8.5
Approach LOS	A		A	A

Intersection Summary

Delay	8.5
Level of Service	A
Intersection Capacity Utilization	26.3%
ICU Level of Service	A
Analysis Period (min)	15

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	65	10	5	75	10	15	100	5	5	90	20
Future Volume (vph)	20	65	10	5	75	10	15	100	5	5	90	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	21	68	11	5	79	11	16	105	5	5	95	21

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	100	95	126	121
Volume Left (vph)	21	5	16	5
Volume Right (vph)	11	11	5	21
Hadj (s)	0.01	-0.02	0.04	-0.06
Departure Headway (s)	4.6	4.6	4.5	4.5
Degree Utilization, x	0.13	0.12	0.16	0.15
Capacity (veh/h)	727	733	751	760
Control Delay (s)	8.3	8.2	8.4	8.2
Approach Delay (s)	8.3	8.2	8.4	8.2
Approach LOS	A	A	A	A

Intersection Summary

Delay	8.3
Level of Service	A
Intersection Capacity Utilization	29.6%
ICU Level of Service	A
Analysis Period (min)	15

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	325	40	15	390	50	20	80	20	40	75	45
Future Volume (vph)	75	325	40	15	390	50	20	80	20	40	75	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.4			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.98		1.00	0.98			0.98			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	3481		1770	3479			1806			1770	
Flt Permitted	0.41	1.00		0.52	1.00			0.91			0.90	
Satd. Flow (perm)	757	3481		977	3479			1648			1616	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	342	42	16	411	53	21	84	21	42	79	47
RTOR Reduction (vph)	0	9	0	0	11	0	0	15	0	0	29	0
Lane Group Flow (vph)	79	375	0	16	453	0	0	111	0	0	139	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	42.5	42.5		30.9	30.9			10.1			10.5	
Effective Green, g (s)	42.5	42.5		30.9	30.9			10.1			10.5	
Actuated g/C Ratio	0.65	0.65		0.48	0.48			0.16			0.16	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.4			6.0	
Vehicle Extension (s)	3.0	4.0		4.0	4.0			3.0			4.0	
Lane Grp Cap (vph)	582	2276		464	1653			256			261	
v/s Ratio Prot	0.01	c0.11			c0.13							
v/s Ratio Perm	0.08			0.02				0.07			c0.09	
v/c Ratio	0.14	0.16		0.03	0.27			0.43			0.53	
Uniform Delay, d1	4.4	4.4		9.1	10.3			24.9			25.0	
Progression Factor	0.62	0.57		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.0		0.1	0.4			1.2			2.7	
Delay (s)	2.8	2.5		9.2	10.7			26.0			27.7	
Level of Service	A	A		A	B			C			C	
Approach Delay (s)		2.6			10.6			26.0			27.7	
Approach LOS		A			B			C			C	

Intersection Summary

HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	430	3	28	0	0	3	155	210	10	10	10	315
Future Volume (vph)	430	3	28	0	0	3	155	210	10	10	10	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0			6.0	6.0	6.5			6.0	6.0
Lane Util. Factor	0.95	0.95	1.00			1.00	1.00	0.95			1.00	1.00
Frt	1.00	1.00	0.85			0.86	1.00	0.99			1.00	1.00
Flt Protected	0.95	0.95	1.00			1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	1681	1686	1583			1611	1770	3514			1770	1863
Flt Permitted	0.95	0.95	1.00			1.00	0.49	1.00			0.61	1.00
Satd. Flow (perm)	1681	1686	1583			1611	904	3514			1131	1863
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	453	3	29	0	0	3	163	221	11	11	11	332
RTOR Reduction (vph)	0	0	24	0	0	1	0	2	0	0	0	0
Lane Group Flow (vph)	226	230	5	0	0	2	163	230	0	0	22	332
Turn Type	Split	NA	Perm			Perm	pm+pt	NA		pm+pt	pm+pt	NA
Protected Phases	8	8					5	2		1	1	6
Permitted Phases			8			1 2 5 6	2			6	6	
Actuated Green, G (s)	23.9	23.9	23.9			93.7	93.2	83.8			82.5	78.7
Effective Green, g (s)	23.9	23.9	23.9			93.7	93.2	83.8			82.5	78.7
Actuated g/C Ratio	0.18	0.18	0.18			0.72	0.72	0.64			0.63	0.61
Clearance Time (s)	6.0	6.0	6.0				6.0	6.5			6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0				3.0	6.0			3.0	6.0
Lane Grp Cap (vph)	309	309	291			1161	710	2265			736	1127
v/s Ratio Prot	0.13	c0.14					c0.02	0.07			0.00	c0.18
v/s Ratio Perm			0.00			0.00	0.15				0.02	
v/c Ratio	0.73	0.74	0.02			0.00	0.23	0.10			0.03	0.29
Uniform Delay, d1	50.0	50.2	43.4			5.1	6.3	8.8			8.8	12.3
Progression Factor	1.00	1.00	1.00			1.00	1.00	1.00			0.84	0.89
Incremental Delay, d2	8.6	9.3	0.0			0.0	0.2	0.1			0.0	0.6
Delay (s)	58.6	59.5	43.5			5.1	6.5	8.9			7.4	11.6
Level of Service	E	E	D			A	A	A			A	B
Approach Delay (s)		58.1			5.1			7.9				13.2
Approach LOS		E			A			A				B

Intersection Summary

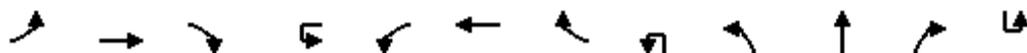
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	353
Future Volume (vph)	353
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	372
RTOR Reduction (vph)	147
Lane Group Flow (vph)	225
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	78.7
Effective Green, g (s)	78.7
Actuated g/C Ratio	0.61
Clearance Time (s)	6.0
Vehicle Extension (s)	6.0
Lane Grp Cap (vph)	958
v/s Ratio Prot	
v/s Ratio Perm	0.14
v/c Ratio	0.24
Uniform Delay, d1	11.8
Progression Factor	1.23
Incremental Delay, d2	0.5
Delay (s)	15.0
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

04/01/2020



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	280	810	475	10	20	830	75	3	100	315	235	10
Future Volume (vph)	280	810	475	10	20	830	75	3	100	315	235	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4		6.4	6.4			6.4	6.4	6.4	
Lane Util. Factor	0.97	0.91	1.00		1.00	0.91			0.97	0.95	1.00	
Frt	1.00	1.00	0.85		1.00	0.99			1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00		0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)	3433	5085	1583		1770	5022			3433	3539	1583	
Flt Permitted	0.95	1.00	1.00		0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)	3433	5085	1583		1770	5022			3433	3539	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	295	853	500	11	21	874	79	3	105	332	247	11
RTOR Reduction (vph)	0	0	241	0	0	6	0	0	0	0	182	0
Lane Group Flow (vph)	295	853	259	0	32	947	0	0	108	332	65	0
Turn Type	Prot	NA	Perm	Prot	Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	1	6		5	5	2		7	7	4		3
Permitted Phases			6									4
Actuated Green, G (s)	18.2	67.3	67.3		5.4	54.5			9.5	22.2	22.2	
Effective Green, g (s)	18.2	67.3	67.3		5.4	54.5			9.5	22.2	22.2	
Actuated g/C Ratio	0.14	0.52	0.52		0.04	0.42			0.07	0.17	0.17	
Clearance Time (s)	6.4	6.4	6.4		6.4	6.4			6.4	6.4	6.4	
Vehicle Extension (s)	4.5	4.0	4.0		3.0	4.0			3.0	4.0	4.0	
Lane Grp Cap (vph)	480	2632	819		73	2105			250	604	270	
v/s Ratio Prot	c0.09	0.17			0.02	c0.19			0.03	c0.09		
v/s Ratio Perm			0.16									0.04
v/c Ratio	0.61	0.32	0.32		0.44	0.45			0.43	0.55	0.24	
Uniform Delay, d1	52.6	18.2	18.1		60.8	27.0			57.7	49.3	46.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00			1.32	0.70	0.84	
Incremental Delay, d2	3.0	0.3	1.0		4.2	0.7			1.2	1.2	0.6	
Delay (s)	55.6	18.5	19.1		65.0	27.7			77.4	35.9	39.7	
Level of Service	E	B	B		E	C			E	D	D	
Approach Delay (s)		25.3				28.9				43.8		
Approach LOS		C				C				D		

Intersection Summary

HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

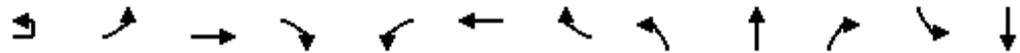


Movement	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗
Traffic Volume (vph)	55	190	295
Future Volume (vph)	55	190	295
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	58	200	311
RTOR Reduction (vph)	0	0	209
Lane Group Flow (vph)	69	200	102
Turn Type	Prot	NA	Perm
Protected Phases	3	8	
Permitted Phases			8
Actuated Green, G (s)	9.5	22.2	22.2
Effective Green, g (s)	9.5	22.2	22.2
Actuated g/C Ratio	0.07	0.17	0.17
Clearance Time (s)	6.4	6.4	6.4
Vehicle Extension (s)	4.5	4.0	4.0
Lane Grp Cap (vph)	129	604	270
v/s Ratio Prot	c0.04	0.06	
v/s Ratio Perm			0.06
v/c Ratio	0.53	0.33	0.38
Uniform Delay, d1	58.1	47.4	47.8
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.4	1.2
Delay (s)	64.6	47.8	49.0
Level of Service	E	D	D
Approach Delay (s)		50.4	
Approach LOS		D	

Intersection Summary

Davis Highway/MLK Drive Two-Way Conversion Study
 1000: Martin Luther King Jr Dr & N Davis Hwy

04/01/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Right Turn Channelized												
Traffic Volume (veh/h)	10	20	170	143	15	185	5	170	5	3	5	13
Future Volume (veh/h)	10	20	170	143	15	185	5	170	5	3	5	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	21	179	151	16	195	5	179	5	3	5	14
Approach Volume (veh/h)			362			216			187			30
Crossing Volume (veh/h)			35			216			216			401
High Capacity (veh/h)			1347			1169			1169			1010
High v/c (veh/h)			0.27			0.18			0.16			0.03
Low Capacity (veh/h)			1127			966			966			823
Low v/c (veh/h)			0.32			0.22			0.19			0.04

Intersection Summary

Maximum v/c High	0.27
Maximum v/c Low	0.32
Intersection Capacity Utilization	49.6%
ICU Level of Service	A



Movement SBR

Right Turn Channelized	
Traffic Volume (veh/h)	10
Future Volume (veh/h)	10
Peak Hour Factor	0.95
Hourly flow rate (vph)	11
Approach Volume (veh/h)	
Crossing Volume (veh/h)	
High Capacity (veh/h)	
High v/c (veh/h)	
Low Capacity (veh/h)	
Low v/c (veh/h)	

Intersection Summary

Davis Highway/MLK Drive Two-Way Conversion Study
 1001: Martin Luther King Jr Dr

04/01/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	20	10	178	165	6
Future Volume (Veh/h)	0	20	10	178	165	6
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	21	11	187	174	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)	1259					
pX, platoon unblocked						
vC, conflicting volume	386	177	180			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	386	177	180			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	612	866	1396			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	21	198	180			
Volume Left	0	11	0			
Volume Right	21	0	6			
cSH	866	1396	1700			
Volume to Capacity	0.02	0.01	0.11			
Queue Length 95th (ft)	2	1	0			
Control Delay (s)	9.3	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			20.9%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM 6th Edition cannot analyze u-turn movements.

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↖	↗
Traffic Volume (veh/h)	55	1365	35	50	1175	15	50	45	140	35	30	50
Future Volume (veh/h)	55	1365	35	50	1175	15	50	45	140	35	30	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	1437	37	53	1237	16	53	47	147	37	32	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	1747	45	253	2253	29	107	103	250	212	170	418
Arrive On Green	0.49	0.49	0.49	0.16	1.00	1.00	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	443	3540	91	1781	3592	46	254	391	948	615	644	1585
Grp Volume(v), veh/h	58	720	754	53	612	641	247	0	0	69	0	53
Grp Sat Flow(s),veh/h/ln	443	1777	1854	1781	1777	1862	1592	0	0	1259	0	1585
Q Serve(g_s), s	8.4	38.0	38.2	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	2.8
Cycle Q Clear(g_c), s	8.4	38.0	38.2	0.0	0.0	0.0	14.5	0.0	0.0	4.4	0.0	2.8
Prop In Lane	1.00		0.05	1.00		0.02	0.21		0.60	0.54		1.00
Lane Grp Cap(c), veh/h	284	877	915	253	1115	1168	459	0	0	382	0	418
V/C Ratio(X)	0.20	0.82	0.82	0.21	0.55	0.55	0.54	0.00	0.00	0.18	0.00	0.13
Avail Cap(c_a), veh/h	299	937	978	253	1115	1168	481	0	0	382	0	418
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	0.84	0.84	0.84	0.98	0.00	0.00	0.91	0.00	0.91
Uniform Delay (d), s/veh	16.2	23.7	23.8	36.5	0.0	0.0	35.1	0.0	0.0	31.2	0.0	30.9
Incr Delay (d2), s/veh	0.6	5.6	5.4	0.3	1.6	1.6	1.1	0.0	0.0	0.9	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	16.4	17.1	1.2	0.5	0.5	5.8	0.0	0.0	1.5	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	29.3	29.2	36.7	1.6	1.6	36.1	0.0	0.0	32.1	0.0	31.4
LnGrp LOS	B	C	C	D	A	A	D	A	A	C	A	C
Approach Vol, veh/h		1532			1306			247			122	
Approach Delay, s/veh		28.8			3.0			36.1			31.8	
Approach LOS		C			A			D			C	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	4.7	60.3		35.0		75.0		35.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		* 6				
Max Green Setting (Gmax), s	5.0	58.0		29.0		69.0		* 31				
Max Q Clear Time (g_c+1/2g), s	40.2			6.4		2.0		0.0				
Green Ext Time (p_c), s	0.0	14.1		0.4		27.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Davis Highway/MLK Drive Two-Way Conversion Study
4: Haynes St/I-110 NB On Ramp & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖	↗	↖	↗	↖			
Traffic Volume (veh/h)	490	1405	10	0	970	305	20	100	50	0	0	0
Future Volume (veh/h)	490	1405	10	0	970	305	20	100	50	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	516	1479	11	0	1021	321	21	105	53			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2			
Cap, veh/h	547	2940	22	0	1543	481	138	145	123			
Arrive On Green	0.18	0.81	0.81	0.00	0.77	0.77	0.08	0.08	0.08			
Sat Flow, veh/h	1781	3615	27	0	2759	832	1781	1870	1585			
Grp Volume(v), veh/h	516	727	763	0	678	664	21	105	53			
Grp Sat Flow(s),veh/h/ln	1781	1777	1866	0	1777	1721	1781	1870	1585			
Q Serve(g_s), s	17.1	14.2	14.2	0.0	19.6	20.1	1.2	6.0	3.5			
Cycle Q Clear(g_c), s	17.1	14.2	14.2	0.0	19.6	20.1	1.2	6.0	3.5			
Prop In Lane	1.00		0.01	0.00		0.48	1.00		1.00			
Lane Grp Cap(c), veh/h	547	1445	1517	0	1028	996	138	145	123			
V/C Ratio(X)	0.94	0.50	0.50	0.00	0.66	0.67	0.15	0.72	0.43			
Avail Cap(c_a), veh/h	631	1445	1517	0	1028	996	437	459	389			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	1.00	0.00	0.82	0.82	1.00	1.00	1.00			
Uniform Delay (d), s/veh	22.6	3.2	3.2	0.0	7.6	7.7	47.3	49.6	48.4			
Incr Delay (d2), s/veh	20.8	0.6	0.6	0.0	2.7	2.9	0.4	5.0	1.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.3	3.4	3.6	0.0	5.4	5.3	0.6	3.0	1.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	3.8	3.8	0.0	10.3	10.6	47.7	54.6	50.2			
LnGrp LOS	D	A	A	A	B	B	D	D	D			
Approach Vol, veh/h		2006			1342			179				
Approach Delay, s/veh		14.0			10.4			52.5				
Approach LOS		B			B			D				
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	25.8	69.7	14.5	95.5								
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0								
Max Green Setting (Gmax), s	25.0	40.0	27.0	71.0								
Max Q Clear Time (g_c+119, s)	19.6	22.1	8.0	16.2								
Green Ext Time (p_c), s	0.7	13.4	0.5	32.9								

Intersection Summary

HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗			↕			↕	
Traffic Volume (veh/h)	10	220	15	5	115	5	5	95	10	10	95	15
Future Volume (veh/h)	10	220	15	5	115	5	5	95	10	10	95	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	232	16	5	121	5	5	100	11	11	100	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	1198	80	943	1262	52	62	174	19	69	160	24
Arrive On Green	0.71	0.71	0.71	0.71	0.71	0.71	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	29	1693	113	1132	1783	74	36	1618	173	85	1490	227
Grp Volume(v), veh/h	259	0	0	5	0	126	116	0	0	127	0	0
Grp Sat Flow(s),veh/h/ln	1836	0	0	1132	0	1857	1828	0	0	1802	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.1	0.0	1.4	3.9	0.0	0.0	4.3	0.0	0.0
Prop In Lane	0.04		0.06	1.00		0.04	0.04		0.09	0.09		0.13
Lane Grp Cap(c), veh/h	1357	0	0	943	0	1314	254	0	0	254	0	0
V/C Ratio(X)	0.19	0.00	0.00	0.01	0.00	0.10	0.46	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1357	0	0	943	0	1314	698	0	0	688	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.87	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	0.0	0.0	2.8	0.0	3.0	27.6	0.0	0.0	27.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.0	0.0	0.4	1.8	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.5	0.0	0.0	2.8	0.0	3.0	29.2	0.0	0.0	30.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		259			131			116			127	
Approach Delay, s/veh		3.5			3.0			29.2			30.0	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.0		13.0		52.0		13.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		30.0		23.0		30.0		23.0				
Max Q Clear Time (g_c+I1), s		5.1		6.3		3.4		0.0				
Green Ext Time (p_c), s		2.3		0.8		1.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Davis Highway/MLK Drive Two-Way Conversion Study
6: Martin Luther King Jr Dr & E Jordan St

04/01/2020

Intersection

Intersection Delay, s/veh 9.4
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Traffic Vol, veh/h	35	285	35	0	0	0	0	110	5	15	90	0
Future Vol, veh/h	35	285	35	0	0	0	0	110	5	15	90	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	300	37	0	0	0	0	116	5	16	95	0
Number of Lanes	0	2	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	9.7	8.9	8.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	0%	20%	0%	14%
Vol Thru, %	96%	80%	80%	86%
Vol Right, %	4%	0%	20%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	178	178	105
LT Vol	0	35	0	15
Through Vol	110	143	143	90
RT Vol	5	0	35	0
Lane Flow Rate	121	187	187	111
Geometry Grp	2	7	7	2
Degree of Util (X)	0.166	0.27	0.258	0.153
Departure Headway (Hd)	4.923	5.203	4.965	4.99
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	728	689	723	717
Service Time	2.96	2.942	2.704	3.028
HCM Lane V/C Ratio	0.166	0.271	0.259	0.155
HCM Control Delay	8.9	9.9	9.4	8.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	1.1	1	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
7: Haynes St & E Jordan St

04/01/2020

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑						↑↑				
Traffic Vol, veh/h	410	335	0	0	0	0	0	120	20	0	0	0
Future Vol, veh/h	410	335	0	0	0	0	0	120	20	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	432	353	0	0	0	0	0	126	21	0	0	0

Major/Minor

	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	4.14	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	2.22	-
Pot Cap-1 Maneuver	-	0
Stage 1	-	0
Stage 2	-	0
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	0
Mov Cap-2 Maneuver	-	0
Stage 1	-	0
Stage 2	-	0

Approach

EB NB
HCM Control Delay, s
HCM LOS

Minor Lane/Major Mvmt

	NBLn1	NBLn2	EBL	EBT
Capacity (veh/h)	-	835	-	-
HCM Lane V/C Ratio	-	0.101	-	-
HCM Control Delay (s)	-	9.8	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

HCM 6th Edition methodology does not support clustered intersections.

HCM 6th Edition methodology does not support clustered intersections.

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

04/01/2020

Intersection

Intersection Delay, s/veh 8.7
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	85	20	5	70	5	10	140	5	15	100	20
Future Vol, veh/h	20	85	20	5	70	5	10	140	5	15	100	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	89	21	5	74	5	11	147	5	16	105	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	8.4	8.9	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	16%	6%	11%
Vol Thru, %	90%	68%	88%	74%
Vol Right, %	3%	16%	6%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	125	80	135
LT Vol	10	20	5	15
Through Vol	140	85	70	100
RT Vol	5	20	5	20
Lane Flow Rate	163	132	84	142
Geometry Grp	1	1	1	1
Degree of Util (X)	0.209	0.171	0.112	0.181
Departure Headway (Hd)	4.61	4.686	4.784	4.576
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	777	764	748	783
Service Time	2.646	2.724	2.825	2.612
HCM Lane V/C Ratio	0.21	0.173	0.112	0.181
HCM Control Delay	8.9	8.7	8.4	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.4	0.7

HCM 6th Edition cannot analyze u-turn movements.

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

04/01/2020

Intersection

Intersection Delay, s/veh 9.3
 Intersection LOS A

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗	↖		↖	
Traffic Vol, veh/h	15	195	150	75	10	5	85
Future Vol, veh/h	15	195	150	75	10	5	85
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	16	205	158	79	11	5	89
Number of Lanes	0	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	9.9	8.2	8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	6%
Vol Thru, %	0%	100%	88%	0%
Vol Right, %	0%	0%	12%	94%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	210	150	85	90
LT Vol	210	0	0	5
Through Vol	0	150	75	0
RT Vol	0	0	10	85
Lane Flow Rate	221	158	89	95
Geometry Grp	7	7	5	2
Degree of Util (X)	0.322	0.208	0.114	0.117
Departure Headway (Hd)	5.25	4.749	4.58	4.446
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	679	747	784	810
Service Time	3.039	2.537	2.6	2.454
HCM Lane V/C Ratio	0.325	0.212	0.114	0.117
HCM Control Delay	10.6	8.8	8.2	8
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.4	0.8	0.4	0.4

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	1450	35	50	1140	15	50	50	145	30	25	50
Future Volume (veh/h)	55	1450	35	50	1140	15	50	50	145	30	25	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	1526	37	53	1200	16	53	53	153	32	26	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	2643	64	249	2345	31	132	116	216	72	60	82
Arrive On Green	0.04	0.75	0.75	0.00	0.65	0.65	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1781	3546	86	1781	3591	48	604	852	1585	216	441	600
Grp Volume(v), veh/h	58	764	799	53	594	622	106	0	153	111	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1855	1781	1777	1862	1457	0	1585	1256	0	0
Q Serve(g_s), s	1.1	21.1	21.2	0.1	19.1	19.2	0.0	0.0	10.1	2.7	0.0	0.0
Cycle Q Clear(g_c), s	1.1	21.1	21.2	0.1	19.1	19.2	7.5	0.0	10.1	10.2	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03	0.50		1.00	0.29		0.48
Lane Grp Cap(c), veh/h	353	1325	1383	249	1161	1216	248	0	216	213	0	0
V/C Ratio(X)	0.16	0.58	0.58	0.21	0.51	0.51	0.43	0.00	0.71	0.52	0.00	0.00
Avail Cap(c_a), veh/h	366	1325	1383	492	1161	1216	388	0	360	342	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.00
Uniform Delay (d), s/veh	7.1	6.2	6.3	12.5	9.9	9.9	44.0	0.0	45.4	44.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.6	0.5	0.4	1.6	1.5	1.2	0.0	4.2	4.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.4	6.8	0.6	7.2	7.5	2.8	0.0	4.2	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.2	6.8	6.8	12.9	11.5	11.5	45.2	0.0	49.6	48.8	0.0	0.0
LnGrp LOS	A	A	A	B	B	B	D	A	D	D	A	A
Approach Vol, veh/h		1621			1269			259			111	
Approach Delay, s/veh		6.8			11.6			47.8			48.8	
Approach LOS		A			B			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.2	78.3		21.5	0.0	88.5		21.5				
Change Period (Y+Rc), s	6.0	6.5		* 6.5	4.5	6.5		6.5				
Max Green Setting (Gmax), s	5.0	61.5		* 25	15.1	52.9		24.5				
Max Q Clear Time (g_c+1/3), s	13.5	21.2		9.5	0.0	23.2		0.0				
Green Ext Time (p_c), s	0.0	20.8		0.2	0.0	22.7		0.0				

Intersection Summary

HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	215	10	5	105	10	10	95	15	5	90	10
Future Volume (veh/h)	15	215	10	5	105	10	10	95	15	5	90	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	226	11	5	111	11	11	100	16	5	95	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	946	1146	56	73	1065	102	70	181	27	62	195	22
Arrive On Green	1.00	1.00	1.00	0.65	0.65	0.65	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1269	1769	86	24	1644	158	79	1488	226	35	1607	181
Grp Volume(v), veh/h	16	0	237	127	0	0	127	0	0	111	0	0
Grp Sat Flow(s),veh/h/ln	1269	0	1855	1827	0	0	1794	0	0	1822	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.7	0.0	0.0	4.3	0.0	0.0	3.7	0.0	0.0
Prop In Lane	1.00		0.05	0.04		0.09	0.09		0.13	0.05		0.10
Lane Grp Cap(c), veh/h	946	0	1202	1241	0	0	278	0	0	279	0	0
V/C Ratio(X)	0.02	0.00	0.20	0.10	0.00	0.00	0.46	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	946	0	1202	1241	0	0	701	0	0	795	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.99	0.00	0.99	1.00	0.00	0.00	0.93	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	4.3	0.0	0.0	27.0	0.0	0.0	26.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.0	0.0	1.6	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.5	0.0	0.0	1.9	0.0	0.0	1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.4	4.4	0.0	0.0	28.5	0.0	0.0	27.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		253			127			127			111	
Approach Delay, s/veh		0.3			4.4			28.5			27.6	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.6		15.4		49.6		15.4				
Change Period (Y+Rc), s		7.5		* 7.5		* 7.5		7.5				
Max Green Setting (Gmax), s		26.5		* 27		* 30		23.5				
Max Q Clear Time (g_c+I1), s		2.0		0.0		3.7		6.3				
Green Ext Time (p_c), s		2.1		0.0		0.7		0.8				

Intersection Summary

HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

04/01/2020

Intersection

Intersection Delay, s/veh 9.1
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Traffic Vol, veh/h	40	230	35	0	0	0	0	115	10	10	85	0
Future Vol, veh/h	40	230	35	0	0	0	0	115	10	10	85	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	242	37	0	0	0	0	121	11	11	89	0
Number of Lanes	0	2	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right		NB	EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	9.3	8.8	8.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	0%	26%	0%	11%
Vol Thru, %	92%	74%	77%	89%
Vol Right, %	8%	0%	23%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	155	150	95
LT Vol	0	40	0	10
Through Vol	115	115	115	85
RT Vol	10	0	35	0
Lane Flow Rate	132	163	158	100
Geometry Grp	2	7	7	2
Degree of Util (X)	0.174	0.237	0.216	0.136
Departure Headway (Hd)	4.774	5.221	4.927	4.881
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	751	687	728	734
Service Time	2.806	2.956	2.662	2.915
HCM Lane V/C Ratio	0.176	0.237	0.217	0.136
HCM Control Delay	8.8	9.6	9	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.9	0.8	0.5

Davis Highway/MLK Drive Two-Way Conversion Study
 17: N Davis Hwy & E Maxwell Street

04/01/2020

Intersection

Intersection Delay, s/veh 9.2
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔		↔			↔	
Traffic Vol, veh/h	0	0	0	5	200	15	20	135	0	0	90	30
Future Vol, veh/h	0	0	0	5	200	15	20	135	0	0	90	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	211	16	21	142	0	0	95	32
Number of Lanes	0	0	0	0	2	1	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	3	0
HCM Control Delay	9	9.7	9
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	13%	7%	0%	0%	0%
Vol Thru, %	87%	93%	100%	0%	75%
Vol Right, %	0%	0%	0%	100%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	72	133	15	120
LT Vol	20	5	0	0	0
Through Vol	135	67	133	0	90
RT Vol	0	0	0	15	30
Lane Flow Rate	163	75	140	16	126
Geometry Grp	7	7	7	7	7
Degree of Util (X)	0.241	0.112	0.206	0.02	0.179
Departure Headway (Hd)	5.309	5.326	5.291	4.586	5.113
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	675	672	678	779	700
Service Time	3.046	3.064	3.029	2.324	2.854
HCM Lane V/C Ratio	0.241	0.112	0.206	0.021	0.18
HCM Control Delay	9.7	8.7	9.4	7.4	9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.9	0.4	0.8	0.1	0.6

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

04/01/2020

Intersection

Intersection Delay, s/veh 8.5
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	70	15	5	50	10	10	140	5	10	100	20
Future Vol, veh/h	20	70	15	5	50	10	10	140	5	10	100	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	74	16	5	53	11	11	147	5	11	105	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.2	8.7	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	19%	8%	8%
Vol Thru, %	90%	67%	77%	77%
Vol Right, %	3%	14%	15%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	105	65	130
LT Vol	10	20	5	10
Through Vol	140	70	50	100
RT Vol	5	15	10	20
Lane Flow Rate	163	111	68	137
Geometry Grp	1	1	1	1
Degree of Util (X)	0.204	0.143	0.089	0.17
Departure Headway (Hd)	4.508	4.656	4.68	4.469
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	796	769	765	803
Service Time	2.534	2.687	2.713	2.496
HCM Lane V/C Ratio	0.205	0.144	0.089	0.171
HCM Control Delay	8.7	8.5	8.2	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.5	0.3	0.6

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	445	30	15	320	55	35	135	30	55	90	40
Future Volume (veh/h)	130	445	30	15	320	55	35	135	30	55	90	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	468	32	16	337	58	37	142	32	58	95	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	668	2206	150	539	1448	247	98	203	42	132	145	56
Arrive On Green	0.17	1.00	1.00	0.48	0.48	0.48	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3376	230	898	3037	517	213	1305	271	385	934	362
Grp Volume(v), veh/h	137	246	254	16	196	199	211	0	0	195	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	898	1777	1777	1789	0	0	1681	0	0
Q Serve(g_s), s	2.2	0.0	0.0	0.6	4.2	4.3	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.6	4.2	4.3	7.1	0.0	0.0	7.0	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.29	0.18		0.15	0.30		0.22
Lane Grp Cap(c), veh/h	668	1161	1195	539	847	847	344	0	0	334	0	0
V/C Ratio(X)	0.21	0.21	0.21	0.03	0.23	0.24	0.61	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	681	1161	1195	539	847	847	702	0	0	676	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	0.0	9.1	10.0	10.0	26.2	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.1	0.6	0.7	1.8	0.0	0.0	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.1	1.5	1.5	3.1	0.0	0.0	2.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	0.1	0.1	9.2	10.6	10.7	28.0	0.0	0.0	28.4	0.0	0.0
LnGrp LOS	A	A	A	A	B	B	C	A	A	C	A	A
Approach Vol, veh/h		637			411			211			195	
Approach Delay, s/veh		1.3			10.6			28.0			28.4	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	15.0	37.0		16.5		48.5		16.5				
Change Period (Y+Rc), s	6.0	6.0		6.4		6.0		* 6.4				
Max Green Setting (Gmax), s	6.0	16.6		24.0		28.6		* 24				
Max Q Clear Time (g_c+14), s	6.3	6.3		9.1		2.0		0.0				
Green Ext Time (p_c), s	0.1	2.0		1.0		4.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM 6th Edition cannot analyze u-turn movements.

Intersection				
Intersection Delay, s/veh	6.7			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	376	362	352	30
Demand Flow Rate, veh/h	383	369	359	30
Vehicles Circulating, veh/h	35	383	217	720
Vehicles Exiting, veh/h	715	193	201	32
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.3	8.4	6.5	6.0
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	383	369	359	30
Cap Entry Lane, veh/h	1331	934	1106	662
Entry HV Adj Factor	0.982	0.982	0.980	0.991
Flow Entry, veh/h	376	362	352	30
Cap Entry, veh/h	1308	917	1084	656
V/C Ratio	0.288	0.395	0.325	0.045
Control Delay, s/veh	5.3	8.4	6.5	6.0
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	0

Davis Highway/MLK Drive Two-Way Conversion Study
1001: Martin Luther King Jr Dr

04/01/2020

Intersection

Int Delay, s/veh 0.4

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations		↗		↖	↗	↖
Traffic Vol, veh/h	0	20	3	335	175	13
Future Vol, veh/h	0	20	3	335	175	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	21	3	353	184	14

Major/Minor Minor2 Major1 Major2

Conflicting Flow All	-	191	198	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	851	1375	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	851	1375	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach EB NB SB

HCM Control Delay, s	9.3	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h)	1375	-	851	-	-
HCM Lane V/C Ratio	0.002	-	0.025	-	-
HCM Control Delay (s)	7.6	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Davis Highway/MLK Drive Two-Way Conversion Study
 1: Alcaniz St & E Gregory Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations					←↑↑↑			↓	↑↑↑			↑↑
Traffic Volume (vph)	0	0	0	190	225	25	10	70	505	0	0	190
Future Volume (vph)	0	0	0	190	225	25	10	70	505	0	0	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0			6.0	6.0			6.0
Lane Util. Factor					0.91			1.00	0.91			0.95
Frt					0.99			1.00	1.00			0.98
Flt Protected					0.98			0.95	1.00			1.00
Satd. Flow (prot)					4936			1770	5085			3478
Flt Permitted					0.98			0.95	1.00			1.00
Satd. Flow (perm)					4936			1770	5085			3478
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	200	237	26	11	74	532	0	0	200
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	0	0	454	0	0	85	532	0	0	212
Turn Type				Perm	NA		Prot	Prot	NA			NA
Protected Phases					2		7	7	4			8
Permitted Phases				2								
Actuated Green, G (s)					13.2			4.0	20.2			10.2
Effective Green, g (s)					13.2			4.0	20.2			10.2
Actuated g/C Ratio					0.29			0.09	0.44			0.22
Clearance Time (s)					6.0			6.0	6.0			6.0
Vehicle Extension (s)					5.0			3.0	4.0			4.0
Lane Grp Cap (vph)					1435			155	2262			781
v/s Ratio Prot								c0.05	c0.10			0.06
v/s Ratio Perm					0.09							
v/c Ratio					0.32			0.55	0.24			0.27
Uniform Delay, d1					12.6			19.8	7.8			14.5
Progression Factor					1.00			1.00	1.00			1.00
Incremental Delay, d2					0.3			3.9	0.1			0.3
Delay (s)					12.8			23.8	7.9			14.8
Level of Service					B			C	A			B
Approach Delay (s)		0.0			12.8				10.1			14.8
Approach LOS		A			B				B			B

Intersection Summary

HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	45.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	25
Future Volume (vph)	25
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	26
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
2: Alcaniz St & E Wright Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↔			↔↔			↔	↑	↗		↔↔
Traffic Volume (vph)	25	60	20	110	60	5	10	50	185	285	15	75
Future Volume (vph)	25	60	20	110	60	5	10	50	185	285	15	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5	4.5	4.5		4.5
Lane Util. Factor		0.95			0.95			1.00	1.00	1.00		1.00
Frt		0.97			1.00			1.00	1.00	0.85		0.99
Flt Protected		0.99			0.97			0.95	1.00	1.00		0.99
Satd. Flow (prot)		3398			3417			1770	1863	1583		1823
Flt Permitted		0.84			0.81			0.69	1.00	1.00		0.94
Satd. Flow (perm)		2902			2854			1283	1863	1583		1732
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	63	21	116	63	5	11	53	195	300	16	79
RTOR Reduction (vph)	0	16	0	0	2	0	0	0	0	172	0	5
Lane Group Flow (vph)	0	94	0	0	182	0	0	64	195	128	0	101
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA	Perm	Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2		2		6
Actuated Green, G (s)		5.9			5.9			11.1	11.1	11.1		11.1
Effective Green, g (s)		5.9			5.9			11.1	11.1	11.1		11.1
Actuated g/C Ratio		0.23			0.23			0.43	0.43	0.43		0.43
Clearance Time (s)		4.5			4.5			4.5	4.5	4.5		4.5
Vehicle Extension (s)		3.0			3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		658			647			547	795	675		739
v/s Ratio Prot								c0.10				
v/s Ratio Perm		0.03			c0.06			0.05		0.08		0.06
v/c Ratio		0.14			0.28			0.12	0.25	0.19		0.14
Uniform Delay, d1		8.0			8.3			4.5	4.8	4.6		4.5
Progression Factor		1.00			1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.1			0.2			0.1	0.2	0.1		0.1
Delay (s)		8.1			8.5			4.6	4.9	4.8		4.6
Level of Service		A			A			A	A	A		A
Approach Delay (s)		8.1			8.5			4.8				4.6
Approach LOS		A			A			A				A

Intersection Summary

HCM 2000 Control Delay	5.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	26.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	38.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	11
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 3: Alcaniz St/Martin Luther King Jr Dr & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1365	35	50	1175	15	50	45	140	35	30	50
Future Volume (vph)	55	1365	35	50	1175	15	50	45	140	35	30	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			4.5			6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.92			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1770	3526		1770	3532			1695			1814	1583
Flt Permitted	0.16	1.00		0.09	1.00			0.92			0.73	1.00
Satd. Flow (perm)	290	3526		165	3532			1579			1354	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	1437	37	53	1237	16	53	47	147	37	32	53
RTOR Reduction (vph)	0	1	0	0	1	0	0	48	0	0	0	39
Lane Group Flow (vph)	58	1473	0	53	1252	0	0	199	0	0	69	14
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	59.0	59.0		69.0	69.0			30.5			29.0	29.0
Effective Green, g (s)	59.0	59.0		69.0	69.0			30.5			29.0	29.0
Actuated g/C Ratio	0.54	0.54		0.63	0.63			0.28			0.26	0.26
Clearance Time (s)	6.0	6.0		6.0	6.0			4.5			6.0	6.0
Vehicle Extension (s)	5.0	5.0		2.5	5.0			3.0			2.5	2.5
Lane Grp Cap (vph)	155	1891		161	2215			437			356	417
v/s Ratio Prot		c0.42		0.01	c0.35							
v/s Ratio Perm	0.20			0.19				c0.13			0.05	0.01
v/c Ratio	0.37	0.78		0.33	0.57			0.45			0.19	0.03
Uniform Delay, d1	14.8	20.3		29.3	11.8			32.9			31.4	30.1
Progression Factor	0.71	0.84		0.43	0.37			1.00			1.00	1.00
Incremental Delay, d2	2.7	2.1		0.8	0.9			0.8			1.2	0.1
Delay (s)	13.3	19.1		13.4	5.4			33.6			32.6	30.2
Level of Service	B	B		B	A			C			C	C
Approach Delay (s)		18.9			5.7			33.6			31.6	
Approach LOS		B			A			C			C	

Intersection Summary

HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 4: Haynes St/I-110 NB On Ramp & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑		↘	↑	↘			
Traffic Volume (vph)	490	1405	10	0	970	305	20	100	50	0	0	0
Future Volume (vph)	490	1405	10	0	970	305	20	100	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	3535			3412		1770	1863	1583			
Flt Permitted	0.08	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	155	3535			3412		1770	1863	1583			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	516	1479	11	0	1021	321	21	105	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	27	0	0	0	48	0	0	0
Lane Group Flow (vph)	516	1490	0	0	1315	0	21	105	5	0	0	0
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6						4		4			
Actuated Green, G (s)	86.9	86.9			42.0		11.1	11.1	11.1			
Effective Green, g (s)	86.9	86.9			42.0		11.1	11.1	11.1			
Actuated g/C Ratio	0.79	0.79			0.38		0.10	0.10	0.10			
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0	6.0			
Vehicle Extension (s)	2.5	5.0			5.0		2.5	2.5	2.5			
Lane Grp Cap (vph)	693	2792			1302		178	187	159			
v/s Ratio Prot	c0.26	0.42			c0.39			c0.06				
v/s Ratio Perm	0.32						0.01		0.00			
v/c Ratio	0.74	0.53			1.01		0.12	0.56	0.03			
Uniform Delay, d1	25.7	4.2			34.0		45.0	47.1	44.6			
Progression Factor	1.00	1.00			0.61		1.00	1.00	1.00			
Incremental Delay, d2	4.1	0.4			25.5		0.2	3.1	0.1			
Delay (s)	29.8	4.6			46.3		45.2	50.2	44.7			
Level of Service	C	A			D		D	D	D			
Approach Delay (s)		11.0			46.3			48.0			0.0	
Approach LOS		B			D			D			A	

Intersection Summary

HCM 2000 Control Delay	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
5: Martin Luther King Jr Dr & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗			↕			↕	
Traffic Volume (vph)	10	220	15	5	115	5	5	95	10	10	95	15
Future Volume (vph)	10	220	15	5	115	5	5	95	10	10	95	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.99		1.00	0.99			0.99			0.98	
Flt Protected		1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)		1843		1770	1852			1835			1823	
Flt Permitted		0.99		0.60	1.00			0.98			0.97	
Satd. Flow (perm)		1830		1116	1852			1807			1768	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	232	16	5	121	5	5	100	11	11	100	16
RTOR Reduction (vph)	0	2	0	0	1	0	0	8	0	0	10	0
Lane Group Flow (vph)	0	257	0	5	125	0	0	108	0	0	117	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		43.9		43.9	43.9			9.1			9.1	
Effective Green, g (s)		43.9		43.9	43.9			9.1			9.1	
Actuated g/C Ratio		0.68		0.68	0.68			0.14			0.14	
Clearance Time (s)		6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)		4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)		1235		753	1250			252			247	
v/s Ratio Prot					0.07							
v/s Ratio Perm		c0.14		0.00				0.06			c0.07	
v/c Ratio		0.21		0.01	0.10			0.43			0.47	
Uniform Delay, d1		4.0		3.4	3.7			25.6			25.7	
Progression Factor		1.00		0.84	0.80			1.00			1.00	
Incremental Delay, d2		0.4		0.0	0.0			1.6			1.9	
Delay (s)		4.4		2.9	3.0			27.2			27.7	
Level of Service		A		A	A			C			C	
Approach Delay (s)		4.4			3.0			27.2			27.7	
Approach LOS		A			A			C			C	

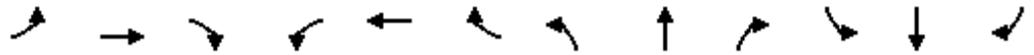
Intersection Summary

HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 6: Martin Luther King Jr Dr & E Jordan St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	35	285	35	0	0	0	0	110	5	15	90	0
Future Volume (vph)	35	285	35	0	0	0	0	110	5	15	90	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	37	300	37	0	0	0	0	116	5	16	95	0

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total (vph)	187	187	121	111
Volume Left (vph)	37	0	0	16
Volume Right (vph)	0	37	5	0
Hadj (s)	0.13	-0.10	0.01	0.06
Departure Headway (s)	5.2	5.0	4.9	5.0
Degree Utilization, x	0.27	0.26	0.17	0.15
Capacity (veh/h)	661	697	687	673
Control Delay (s)	9.0	8.5	8.9	8.9
Approach Delay (s)	8.8		8.9	8.9
Approach LOS	A		A	A

Intersection Summary			
Delay		8.8	
Level of Service		A	
Intersection Capacity Utilization	28.9%		ICU Level of Service A
Analysis Period (min)		15	

Intersection Sign configuration not allowed in HCM analysis.

Davis Highway/MLK Drive Two-Way Conversion Study
 8: Haynes St/I-110 NB & E Maxwell Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑	↑	↑				
Traffic Volume (vph)	0	0	0	0	135	145	25	505	0	0	0	0
Future Volume (vph)	0	0	0	0	135	145	25	505	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0	12.0	6.0	6.0				
Lane Util. Factor					0.95	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					3539	1583	1770	1863				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					3539	1583	1770	1863				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	142	153	26	532	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	119	11	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	142	34	15	532	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					4	1		2				
Permitted Phases						4	1	2				
Actuated Green, G (s)					32.4	32.4	70.1	70.1				
Effective Green, g (s)					26.4	26.4	70.1	70.1				
Actuated g/C Ratio					0.22	0.22	0.58	0.58				
Clearance Time (s)							6.0	6.0				
Vehicle Extension (s)							4.0	4.0				
Lane Grp Cap (vph)					775	346	1029	1083				
v/s Ratio Prot					c0.04			c0.29				
v/s Ratio Perm						0.02	0.01					
v/c Ratio					0.18	0.10	0.01	0.49				
Uniform Delay, d1					38.3	37.5	10.6	14.8				
Progression Factor					0.17	0.28	1.00	1.00				
Incremental Delay, d2					0.2	0.3	0.0	1.6				
Delay (s)					6.7	10.6	10.7	16.4				
Level of Service					A	B	B	B				
Approach Delay (s)		0.0			8.8			16.1			0.0	
Approach LOS		A			A			B			A	

Intersection Summary

HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 9: Martin Luther King Jr Dr & E Maxwell Street

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔↔↔			↕			↕	↕
Traffic Volume (vph)	0	0	0	10	230	10	15	130	0	0	95	35
Future Volume (vph)	0	0	0	10	230	10	15	130	0	0	95	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					12.0			6.0			6.0	6.0
Lane Util. Factor					0.91			1.00			1.00	1.00
Frt					0.99			1.00			1.00	0.85
Flt Protected					1.00			0.99			1.00	1.00
Satd. Flow (prot)					5043			1853			1863	1583
Flt Permitted					1.00			0.97			1.00	1.00
Satd. Flow (perm)					5043			1811			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	11	242	11	16	137	0	0	100	37
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	261	0	0	153	0	0	100	37
Turn Type				Perm	NA		Perm	NA			NA	custom
Protected Phases					4			2			6	
Permitted Phases				4			2					1
Actuated Green, G (s)					16.5			70.1			86.0	9.9
Effective Green, g (s)					16.5			70.1			86.0	9.9
Actuated g/C Ratio					0.14			0.58			0.71	0.08
Clearance Time (s)					12.0			6.0			6.0	6.0
Vehicle Extension (s)					5.0			4.0			4.0	4.0
Lane Grp Cap (vph)					690			1053			1329	130
v/s Ratio Prot											0.05	
v/s Ratio Perm					0.05			c0.08				c0.02
v/c Ratio					0.38			0.15			0.08	0.28
Uniform Delay, d1					47.3			11.5			5.2	52.0
Progression Factor					1.00			1.00			1.00	1.00
Incremental Delay, d2					0.7			0.3			0.0	1.6
Delay (s)					48.1			11.8			5.3	53.6
Level of Service					D			B			A	D
Approach Delay (s)		0.0			48.1			11.8			18.3	
Approach LOS		A			D			B			B	

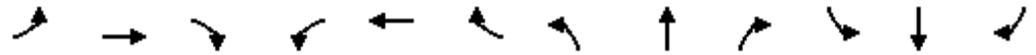
Intersection Summary

HCM 2000 Control Delay	30.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	120.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 10: Martin Luther King Jr Dr & E Cross St

04/01/2020



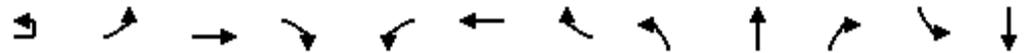
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	85	20	5	70	5	10	140	5	15	100	20
Future Volume (vph)	20	85	20	5	70	5	10	140	5	15	100	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	21	89	21	5	74	5	11	147	5	16	105	21

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	131	84	163	142
Volume Left (vph)	21	5	11	16
Volume Right (vph)	21	5	5	21
Hadj (s)	-0.03	0.01	0.03	-0.03
Departure Headway (s)	4.7	4.8	4.6	4.6
Degree Utilization, x	0.17	0.11	0.21	0.18
Capacity (veh/h)	708	689	735	734
Control Delay (s)	8.7	8.4	8.9	8.6
Approach Delay (s)	8.7	8.4	8.9	8.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.7	
Level of Service		A	
Intersection Capacity Utilization	30.2%		ICU Level of Service A
Analysis Period (min)		15	

Davis Highway/MLK Drive Two-Way Conversion Study
 11: Martin Luther King Jr Dr & E Texar Dr

04/01/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	125	525	30	20	325	50	30	135	25	55	90
Future Volume (vph)	10	125	525	30	20	325	50	30	135	25	55	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	6.0		6.0	6.0			6.0			6.2
Lane Util. Factor		1.00	0.95		1.00	0.95			1.00			1.00
Frt		1.00	0.99		1.00	0.98			0.98			0.97
Flt Protected		0.95	1.00		0.95	1.00			0.99			0.99
Satd. Flow (prot)		1770	3510		1770	3468			1816			1782
Flt Permitted		0.45	1.00		0.43	1.00			0.93			0.82
Satd. Flow (perm)		847	3510		804	3468			1695			1477
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	132	553	32	21	342	53	32	142	26	58	95
RTOR Reduction (vph)	0	0	5	0	0	15	0	0	10	0	0	19
Lane Group Flow (vph)	0	143	580	0	21	380	0	0	190	0	0	176
Turn Type	pm+pt	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA
Protected Phases	1	1	6		5	2			4			8
Permitted Phases	6	6			2			4			8	
Actuated Green, G (s)		38.3	31.6		29.0	27.7			14.1			13.9
Effective Green, g (s)		38.3	31.6		29.0	27.7			14.1			13.9
Actuated g/C Ratio		0.59	0.49		0.45	0.43			0.22			0.21
Clearance Time (s)		4.5	6.0		6.0	6.0			6.0			6.2
Vehicle Extension (s)		3.0	4.0		3.0	3.0			3.0			4.0
Lane Grp Cap (vph)		594	1706		378	1477			367			315
v/s Ratio Prot		c0.02	c0.17		0.00	0.11						
v/s Ratio Perm		0.12			0.02				0.11			c0.12
v/c Ratio		0.24	0.34		0.06	0.26			0.52			0.56
Uniform Delay, d1		6.1	10.3		10.1	12.0			22.4			22.8
Progression Factor		1.00	1.00		0.64	0.56			1.00			1.00
Incremental Delay, d2		0.2	0.5		0.1	0.1			1.2			2.6
Delay (s)		6.3	10.8		6.5	6.8			23.7			25.5
Level of Service		A	B		A	A			C			C
Approach Delay (s)			9.9			6.8			23.7			25.5
Approach LOS			A			A			C			C

Intersection Summary

HCM 2000 Control Delay	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

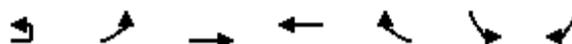
c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	40
Future Volume (vph)	40
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	42
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Davis Highway/MLK Drive Two-Way Conversion Study
 13: E Wright Street & N Davis Hwy

04/01/2020



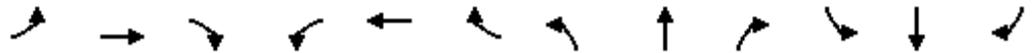
Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↑	↗		↘	
Sign Control			Stop	Stop		Stop	
Traffic Volume (vph)	15	195	150	75	10	5	85
Future Volume (vph)	15	195	150	75	10	5	85
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	205	158	79	11	5	89

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total (vph)	205	158	90	94
Volume Left (vph)	205	0	0	5
Volume Right (vph)	0	0	11	89
Hadj (s)	0.53	0.03	-0.04	-0.52
Departure Headway (s)	5.3	4.8	4.6	4.4
Degree Utilization, x	0.30	0.21	0.11	0.11
Capacity (veh/h)	664	728	755	759
Control Delay (s)	9.4	7.9	8.2	8.0
Approach Delay (s)	8.8		8.2	8.0
Approach LOS	A		A	A

Intersection Summary			
Delay		8.5	
Level of Service		A	
Intersection Capacity Utilization	30.5%		ICU Level of Service A
Analysis Period (min)		15	

Davis Highway/MLK Drive Two-Way Conversion Study
 14: N Davis Hwy & E Cervantes St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1450	35	50	1140	15	50	50	145	30	25	50
Future Volume (vph)	55	1450	35	50	1140	15	50	50	145	30	25	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.5		4.5	6.5			6.0	6.0		6.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00		1.00	1.00			1.00	0.85		0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		0.99	
Satd. Flow (prot)	1770	3527		1770	3532			1817	1583		1718	
Flt Permitted	0.20	1.00		0.08	1.00			0.77	1.00		0.87	
Satd. Flow (perm)	366	3527		146	3532			1433	1583		1511	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	1526	37	53	1200	16	53	53	153	32	26	53
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	131	0	33	0
Lane Group Flow (vph)	58	1562	0	53	1215	0	0	106	22	0	78	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4		4	8		
Actuated Green, G (s)	69.8	64.9		81.4	70.5			16.1	16.1		15.6	
Effective Green, g (s)	69.8	64.9		81.4	70.5			16.1	16.1		15.6	
Actuated g/C Ratio	0.63	0.59		0.74	0.64			0.15	0.15		0.14	
Clearance Time (s)	6.0	6.5		4.5	6.5			6.0	6.0		6.5	
Vehicle Extension (s)	2.5	5.0		3.0	5.0			3.0	3.0		5.0	
Lane Grp Cap (vph)	294	2080		285	2263			209	231		214	
v/s Ratio Prot	0.01	c0.44		c0.02	c0.34							
v/s Ratio Perm	0.12			0.12				c0.07	0.01		0.05	
v/c Ratio	0.20	0.75		0.19	0.54			0.51	0.10		0.37	
Uniform Delay, d1	8.1	16.6		11.0	10.8			43.3	40.7		42.7	
Progression Factor	0.16	0.23		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.2	1.3		0.3	0.9			1.9	0.2		2.2	
Delay (s)	1.5	5.1		11.3	11.7			45.2	40.8		44.9	
Level of Service	A	A		B	B			D	D		D	
Approach Delay (s)		5.0			11.7			42.6			44.9	
Approach LOS		A			B			D			D	

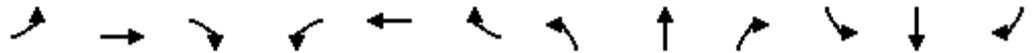
Intersection Summary

HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 15: N Davis Hwy & E Blount St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	215	10	5	105	10	10	95	15	5	90	10
Future Volume (vph)	15	215	10	5	105	10	10	95	15	5	90	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			4.5			7.5			4.5	
Lane Util. Factor	1.00	1.00			1.00			1.00			1.00	
Frt	1.00	0.99			0.99			0.98			0.99	
Flt Protected	0.95	1.00			1.00			1.00			1.00	
Satd. Flow (prot)	1770	1850			1837			1823			1834	
Flt Permitted	0.68	1.00			0.99			0.96			0.99	
Satd. Flow (perm)	1258	1850			1826			1764			1813	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	16	226	11	5	111	11	11	100	16	5	95	11
RTOR Reduction (vph)	0	2	0	0	3	0	0	11	0	0	8	0
Lane Group Flow (vph)	16	235	0	0	124	0	0	116	0	0	103	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	40.9	40.9			43.9			9.1			12.1	
Effective Green, g (s)	40.9	40.9			43.9			9.1			12.1	
Actuated g/C Ratio	0.63	0.63			0.68			0.14			0.19	
Clearance Time (s)	7.5	7.5			4.5			7.5			4.5	
Vehicle Extension (s)	4.0	4.0			3.0			4.0			3.0	
Lane Grp Cap (vph)	791	1164			1233			246			337	
v/s Ratio Prot		c0.13										
v/s Ratio Perm	0.01				0.07			c0.07			0.06	
v/c Ratio	0.02	0.20			0.10			0.47			0.31	
Uniform Delay, d1	4.5	5.1			3.7			25.7			22.8	
Progression Factor	0.42	0.41			1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.4			0.0			1.9			0.5	
Delay (s)	2.0	2.5			3.7			27.7			23.3	
Level of Service	A	A			A			C			C	
Approach Delay (s)		2.5			3.7			27.7			23.3	
Approach LOS		A			A			C			C	

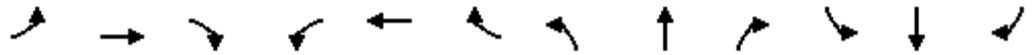
Intersection Summary

HCM 2000 Control Delay	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	34.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 16: N Davis Hwy & E Jordan St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	230	35	0	0	0	0	115	10	10	85	0
Future Volume (vph)	40	230	35	0	0	0	0	115	10	10	85	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	42	242	37	0	0	0	0	121	11	11	89	0

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total (vph)	163	158	132	100
Volume Left (vph)	42	0	0	11
Volume Right (vph)	0	37	11	0
Hadj (s)	0.16	-0.13	-0.02	0.06
Departure Headway (s)	5.2	5.0	4.8	4.9
Degree Utilization, x	0.24	0.22	0.18	0.14
Capacity (veh/h)	657	700	712	689
Control Delay (s)	8.7	8.1	8.8	8.7
Approach Delay (s)	8.4		8.8	8.7
Approach LOS	A		A	A

Intersection Summary			
Delay		8.5	
Level of Service		A	
Intersection Capacity Utilization	28.1%		ICU Level of Service A
Analysis Period (min)		15	

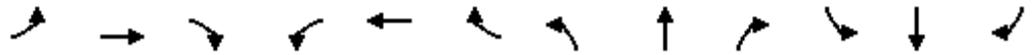
Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Davis Highway/MLK Drive Two-Way Conversion Study
 18: N Davis Hwy & E Cross St

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	70	15	5	50	10	10	140	5	10	100	20
Future Volume (vph)	20	70	15	5	50	10	10	140	5	10	100	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	21	74	16	5	53	11	11	147	5	11	105	21

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	111	69	163	137
Volume Left (vph)	21	5	11	11
Volume Right (vph)	16	11	5	21
Hadj (s)	-0.01	-0.05	0.03	-0.04
Departure Headway (s)	4.7	4.7	4.5	4.5
Degree Utilization, x	0.14	0.09	0.21	0.17
Capacity (veh/h)	713	705	757	756
Control Delay (s)	8.5	8.2	8.7	8.4
Approach Delay (s)	8.5	8.2	8.7	8.4
Approach LOS	A	A	A	A

Intersection Summary

Delay	8.5
Level of Service	A
Intersection Capacity Utilization	27.5%
ICU Level of Service	A
Analysis Period (min)	15

Davis Highway/MLK Drive Two-Way Conversion Study
 19: N Davis Hwy & E Texar Dr

04/01/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	445	30	15	320	55	35	135	30	55	90	40
Future Volume (vph)	130	445	30	15	320	55	35	135	30	55	90	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.4			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	3505		1770	3461			1809			1782	
Flt Permitted	0.42	1.00		0.47	1.00			0.90			0.81	
Satd. Flow (perm)	788	3505		873	3461			1646			1467	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	137	468	32	16	337	58	37	142	32	58	95	42
RTOR Reduction (vph)	0	6	0	0	17	0	0	13	0	0	19	0
Lane Group Flow (vph)	137	494	0	16	378	0	0	198	0	0	176	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	39.1	39.1		26.4	26.4			13.5			13.9	
Effective Green, g (s)	39.1	39.1		26.4	26.4			13.5			13.9	
Actuated g/C Ratio	0.60	0.60		0.41	0.41			0.21			0.21	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.4			6.0	
Vehicle Extension (s)	3.0	4.0		4.0	4.0			3.0			4.0	
Lane Grp Cap (vph)	575	2108		354	1405			341			313	
v/s Ratio Prot	0.02	c0.14			c0.11							
v/s Ratio Perm	0.12			0.02				c0.12			0.12	
v/c Ratio	0.24	0.23		0.05	0.27			0.58			0.56	
Uniform Delay, d1	5.9	6.0		11.7	12.9			23.2			22.8	
Progression Factor	0.54	0.46		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.1		0.2	0.5			2.5			2.8	
Delay (s)	3.4	2.9		11.9	13.3			25.7			25.6	
Level of Service	A	A		B	B			C			C	
Approach Delay (s)		3.0			13.3			25.7			25.6	
Approach LOS		A			B			C			C	

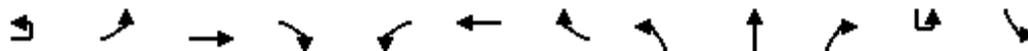
Intersection Summary

HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

04/01/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations		↖	↗	↖			↖	↖	↕			↖
Traffic Volume (vph)	10	435	3	20	0	0	11	305	350	10	10	10
Future Volume (vph)	10	435	3	20	0	0	11	305	350	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0			6.0	6.0	6.5			6.0
Lane Util. Factor		0.95	0.95	1.00			1.00	1.00	0.95			1.00
Frt		1.00	1.00	0.85			0.86	1.00	1.00			1.00
Flt Protected		0.95	0.95	1.00			1.00	0.95	1.00			0.95
Satd. Flow (prot)		1681	1686	1583			1611	1770	3524			1770
Flt Permitted		0.95	0.95	1.00			1.00	0.45	1.00			0.53
Satd. Flow (perm)		1681	1686	1583			1611	847	3524			982
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	458	3	21	0	0	12	321	368	11	11	11
RTOR Reduction (vph)	0	0	0	17	0	0	3	0	1	0	0	0
Lane Group Flow (vph)	0	235	237	4	0	0	9	321	378	0	0	22
Turn Type	Split	Split	NA	Perm			Perm	pm+pt	NA		pm+pt	pm+pt
Protected Phases	8	8	8					5	2		1	1
Permitted Phases				8			1 2 5 6	2			6	6
Actuated Green, G (s)		24.0	24.0	24.0			94.0	93.5	84.1			77.7
Effective Green, g (s)		24.0	24.0	24.0			94.0	93.5	84.1			77.7
Actuated g/C Ratio		0.18	0.18	0.18			0.72	0.72	0.65			0.60
Clearance Time (s)		6.0	6.0	6.0				6.0	6.5			6.0
Vehicle Extension (s)		3.0	3.0	3.0				3.0	6.0			3.0
Lane Grp Cap (vph)		310	311	292			1164	706	2279			607
v/s Ratio Prot		0.14	c0.14					c0.05	0.11			0.00
v/s Ratio Perm				0.00			0.01	0.28				0.02
v/c Ratio		0.76	0.76	0.01			0.01	0.45	0.17			0.04
Uniform Delay, d1		50.2	50.3	43.3			5.0	7.3	9.1			10.7
Progression Factor		1.00	1.00	1.00			1.00	1.00	1.00			1.00
Incremental Delay, d2		10.2	10.5	0.0			0.0	0.5	0.2			0.0
Delay (s)		60.4	60.8	43.3			5.0	7.8	9.2			10.6
Level of Service		E	E	D			A	A	A			B
Approach Delay (s)			59.9			5.0			8.6			
Approach LOS			E			A			A			

Intersection Summary

HCM 2000 Control Delay	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 21: N Davis Hwy & I-110 Ramp/Driveway

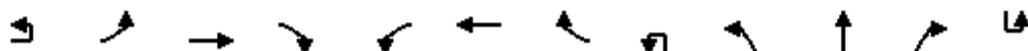
04/01/2020



Movement	SBT	SBR
Lane Configurations	↑	↑
Traffic Volume (vph)	337	747
Future Volume (vph)	337	747
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	6.0	6.0
Lane Util. Factor	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1863	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1863	1583
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	355	786
RTOR Reduction (vph)	0	337
Lane Group Flow (vph)	355	449
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	74.3	74.3
Effective Green, g (s)	74.3	74.3
Actuated g/C Ratio	0.57	0.57
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	6.0	6.0
Lane Grp Cap (vph)	1064	904
v/s Ratio Prot	0.19	
v/s Ratio Perm		c0.28
v/c Ratio	0.33	0.50
Uniform Delay, d1	14.7	16.7
Progression Factor	1.01	2.92
Incremental Delay, d2	0.5	1.2
Delay (s)	15.4	49.9
Level of Service	B	D
Approach Delay (s)	38.6	
Approach LOS	D	
Intersection Summary		

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

04/01/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations		↔↔	↑↑↑	↔	↔	↑↑↑			↔↔	↑↑	↔	
Traffic Volume (vph)	10	310	930	820	30	1160	65	9	120	325	352	10
Future Volume (vph)	10	310	930	820	30	1160	65	9	120	325	352	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	6.4	6.4	6.4			6.4	6.4	6.4	
Lane Util. Factor		0.97	0.91	1.00	1.00	0.91			0.97	0.95	1.00	
Frt		1.00	1.00	0.85	1.00	0.99			1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		3433	5085	1583	1770	5045			3433	3539	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		3433	5085	1583	1770	5045			3433	3539	1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	326	979	863	32	1221	68	9	126	342	371	11
RTOR Reduction (vph)	0	0	0	303	0	5	0	0	0	0	133	0
Lane Group Flow (vph)	0	337	979	560	32	1284	0	0	135	342	238	0
Turn Type	Prot	Prot	NA	Perm	Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	1	1	6		5	2		7	7	4		3
Permitted Phases				6								4
Actuated Green, G (s)		14.9	49.7	49.7	3.8	38.6			10.5	38.7	38.7	
Effective Green, g (s)		14.9	49.7	49.7	3.8	38.6			10.5	38.7	38.7	
Actuated g/C Ratio		0.11	0.38	0.38	0.03	0.30			0.08	0.30	0.30	
Clearance Time (s)		6.4	6.4	6.4	6.4	6.4			6.4	6.4	6.4	
Vehicle Extension (s)		4.5	4.0	4.0	3.0	4.0			3.0	4.0	4.0	
Lane Grp Cap (vph)		393	1944	605	51	1497			277	1053	471	
v/s Ratio Prot		c0.10	0.19		0.02	0.25			0.04	0.10		
v/s Ratio Perm				c0.35								0.15
v/c Ratio		0.86	0.50	0.93	0.63	0.86			0.49	0.32	0.50	
Uniform Delay, d1		56.5	30.7	38.4	62.4	43.1			57.2	35.5	37.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.17	0.75	0.64	
Incremental Delay, d2		17.7	0.9	22.3	21.7	6.6			1.3	0.2	1.1	
Delay (s)		74.2	31.6	60.7	84.1	49.7			68.1	27.0	25.2	
Level of Service		E	C	E	F	D			E	C	C	
Approach Delay (s)			49.7			50.5				32.7		
Approach LOS			D			D				C		

Intersection Summary

HCM 2000 Control Delay	47.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Davis Highway/MLK Drive Two-Way Conversion Study
 22: N Davis Hwy & E Fairfield Dr

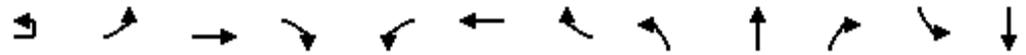
04/01/2020



Movement	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗
Traffic Volume (vph)	80	245	515
Future Volume (vph)	80	245	515
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	84	258	542
RTOR Reduction (vph)	0	0	132
Lane Group Flow (vph)	95	258	410
Turn Type	Prot	NA	Perm
Protected Phases	3	8	
Permitted Phases			8
Actuated Green, G (s)	12.2	40.4	40.4
Effective Green, g (s)	12.2	40.4	40.4
Actuated g/C Ratio	0.09	0.31	0.31
Clearance Time (s)	6.4	6.4	6.4
Vehicle Extension (s)	4.5	4.0	4.0
Lane Grp Cap (vph)	166	1099	491
v/s Ratio Prot	c0.05	0.07	
v/s Ratio Perm			c0.26
v/c Ratio	0.57	0.23	0.83
Uniform Delay, d1	56.4	33.3	41.7
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.2	12.1
Delay (s)	62.9	33.5	53.8
Level of Service	E	C	D
Approach Delay (s)		48.9	
Approach LOS		D	
Intersection Summary			

Davis Highway/MLK Drive Two-Way Conversion Study
 1000: Martin Luther King Jr Dr & N Davis Hwy

04/01/2020



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Right Turn Channelized												
Traffic Volume (veh/h)	10	15	172	160	15	318	10	327	5	3	5	13
Future Volume (veh/h)	10	15	172	160	15	318	10	327	5	3	5	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	16	181	168	16	335	11	344	5	3	5	14
Approach Volume (veh/h)			376			362			352			30
Crossing Volume (veh/h)			35			376			213			706
High Capacity (veh/h)			1347			1030			1172			791
High v/c (veh/h)			0.28			0.35			0.30			0.04
Low Capacity (veh/h)			1127			841			968			629
Low v/c (veh/h)			0.33			0.43			0.36			0.05

Intersection Summary

Maximum v/c High	0.35
Maximum v/c Low	0.43
Intersection Capacity Utilization	60.6%
ICU Level of Service	B



Movement SBR

Right Turn Channelized	
Traffic Volume (veh/h)	10
Future Volume (veh/h)	10
Peak Hour Factor	0.95
Hourly flow rate (vph)	11
Approach Volume (veh/h)	
Crossing Volume (veh/h)	
High Capacity (veh/h)	
High v/c (veh/h)	
Low Capacity (veh/h)	
Low v/c (veh/h)	

Intersection Summary

Davis Highway/MLK Drive Two-Way Conversion Study
1001: Martin Luther King Jr Dr

04/01/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	20	3	335	175	13
Future Volume (Veh/h)	0	20	3	335	175	13
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	21	3	353	184	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)	1281					
pX, platoon unblocked						
vC, conflicting volume	550	191	198			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	550	191	198			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	495	851	1375			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	21	356	198			
Volume Left	0	3	0			
Volume Right	21	0	14			
cSH	851	1375	1700			
Volume to Capacity	0.02	0.00	0.12			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.3	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			23.4%	ICU Level of Service	A	
Analysis Period (min)			15			

MOVEMENT SUMMARY

 Site: 101 [Davis_Highway_MLK_Drive_Build_Roundabout_2045_AM]

Davis_Highway_MLK_Drive
 Site Category: (None)
 Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: N Davis Hwy												
3x	L2	16	2.0	0.200	8.2	LOS A	0.9	23.9	0.40	0.31	0.40	30.4
8x	T1	195	2.0	0.200	2.1	LOS A	0.9	23.9	0.40	0.31	0.40	29.7
18x	R2	5	2.0	0.200	2.9	LOS A	0.9	23.9	0.40	0.31	0.40	28.1
Approach		216	2.0	0.200	2.5	LOS A	0.9	23.9	0.40	0.31	0.40	29.7
NorthEast: Hart Dr												
1x	L2	5	2.0	0.033	8.8	LOS A	0.1	3.3	0.47	0.47	0.47	30.2
6x	T1	14	2.0	0.033	2.7	LOS A	0.1	3.3	0.47	0.47	0.47	29.2
16x	R2	11	2.0	0.033	3.5	LOS A	0.1	3.3	0.47	0.47	0.47	24.6
Approach		29	2.0	0.033	4.1	LOS A	0.1	3.3	0.47	0.47	0.47	28.4
NorthWest: N Davis Hwy												
7ux	U	11	2.0	0.277	9.3	LOS A	1.5	39.0	0.16	0.26	0.16	11.8
7x	L2	21	2.0	0.277	7.3	LOS A	1.5	39.0	0.16	0.26	0.16	9.9
4x	T1	179	2.0	0.277	1.2	LOS A	1.5	39.0	0.16	0.26	0.16	30.4
14x	R2	151	2.0	0.277	2.0	LOS A	1.5	39.0	0.16	0.26	0.16	28.9
Approach		361	2.0	0.277	2.1	LOS A	1.5	39.0	0.16	0.26	0.16	28.0
SouthWest: MLK Dr												
5x	L2	179	2.0	0.173	8.2	LOS A	0.8	20.3	0.39	0.61	0.39	17.3
2x	T1	5	2.0	0.173	2.0	LOS A	0.8	20.3	0.39	0.61	0.39	16.7
12x	R2	3	2.0	0.173	2.9	LOS A	0.8	20.3	0.39	0.61	0.39	27.3
Approach		187	2.0	0.173	7.9	LOS A	0.8	20.3	0.39	0.61	0.39	17.4
All Vehicles		794	2.0	0.277	3.7	LOS A	1.5	39.0	0.29	0.36	0.29	24.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: 101 [Davis_Highway_MLK_Drive_Build_Roundabout_2045_PM]

Davis_Highway_MLK_Drive

Site Category: (None)

Roundabout

Design Life Analysis (Capacity): Results for 20 years

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: N Davis Highway												
3x	L2	22	2.0	0.646	13.6	LOS B	5.1	129.2	0.81	0.97	1.10	28.9
8x	T1	469	2.0	0.646	7.5	LOS A	5.1	129.2	0.81	0.97	1.10	27.6
18x	R2	15	2.0	0.646	8.3	LOS A	5.1	129.2	0.81	0.97	1.10	26.0
Approach		505	2.0	0.646	7.8	LOS A	5.1	129.2	0.81	0.97	1.10	27.6
NorthEast: Hart Dr												
1x	L2	7	2.0	0.085	13.0	LOS B	0.3	7.8	0.66	0.76	0.66	27.9
6x	T1	19	2.0	0.085	6.9	LOS A	0.3	7.8	0.66	0.76	0.66	27.0
16x	R2	15	2.0	0.085	7.7	LOS A	0.3	7.8	0.66	0.76	0.66	20.9
Approach		41	2.0	0.085	8.3	LOS A	0.3	7.8	0.66	0.76	0.66	25.9
NorthWest: N Davis Hwy												
7ux	U	15	2.0	0.409	9.4	LOS A	2.7	68.6	0.24	0.27	0.24	11.6
7x	L2	22	2.0	0.409	7.4	LOS A	2.7	68.6	0.24	0.27	0.24	9.8
4x	T1	253	2.0	0.409	1.3	LOS A	2.7	68.6	0.24	0.27	0.24	30.2
14x	R2	236	2.0	0.409	2.1	LOS A	2.7	68.6	0.24	0.27	0.24	28.7
Approach		526	2.0	0.409	2.2	LOS A	2.7	68.6	0.24	0.27	0.24	28.1
SouthWest: MLK Dr												
5x	L2	482	2.0	0.497	9.4	LOS A	3.1	79.4	0.62	0.75	0.63	17.1
2x	T1	7	2.0	0.497	3.2	LOS A	3.1	79.4	0.62	0.75	0.63	16.5
12x	R2	4	2.0	0.497	4.1	LOS A	3.1	79.4	0.62	0.75	0.63	26.9
Approach		494	2.0	0.497	9.2	LOS A	3.1	79.4	0.62	0.75	0.63	17.1
All Vehicles		1567	2.0	0.646	6.4	LOS A	5.1	129.2	0.55	0.66	0.65	23.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



DAVIS HIGHWAY & DR. MARTIN LUTHER
KING JR. DRIVE / ALCANIZ STREET
Two-Way Conversion Traffic Feasibility Study

Appendix F:
Cost Estimates

Date: 4/6/2020 2:31:04 PM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 555555-1-55-11

Letting Date: 01/2099

Description: MLK and Davis Hwy one-way pair to two-way pair conversion

District: 03 County: 48 ESCAMBIA Market Area: 01 Units: English

Contract Class: Lump Sum Project: N Design/Build: N Project Length: 2.330 MI

Project Manager:

Version 1-P Project Grand Total

\$6,911,919.02

Description: MLK and Davis Hwy one-way pair to two-way pair conversion

Sequence: 1 WUU - Widen/Resurface, Undivided, Urban

Net Length: 2.330 MI
12,302 LF

Description: Milling/Resurfacing and Signalization Work (MLK Only)

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Existing Roadway Pavement Width L/R	19.00 / 19.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	51,943.47	SY	\$2.53	\$131,416.98
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	4,285.34	TN	\$158.86	\$680,769.11

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	315.00	EA	\$5.75	\$1,811.25
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	4.66	GM	\$948.27	\$4,418.94
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.33	GM	\$628.79	\$1,465.08

711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	4.66 GM	\$4,192.80	\$19,538.45
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.33 GM	\$2,063.12	\$4,807.07
Roadway Component Total				\$844,226.88

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,700.00	SY	\$60.76	\$103,292.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,500.00	LF	\$3.40	\$8,500.00
104-15	SOIL TRACKING PREVENTION DEVICE	3.00	EA	\$4,047.39	\$12,142.17
104-18	INLET PROTECTION SYSTEM	119.00	EA	\$294.56	\$35,052.64
107-1	LITTER REMOVAL	10.72	AC	\$99.19	\$1,063.32
107-2	MOWING	10.72	AC	\$104.36	\$1,118.74
Shoulder Component Total					\$161,168.87

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	20.00	AS	\$314.35	\$6,287.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	\$1,200.96	\$6,004.80
700-1-50	SINGLE POST SIGN, RELOCATE	5.00	AS	\$127.00	\$635.00
700-1-60	SINGLE POST SIGN, REMOVE	20.00	AS	\$45.74	\$914.80
Signing Component Total					\$13,841.60

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	4
Description	4 Existing Signal location along MLK

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,000.00	LF	\$6.66	\$19,980.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,000.00	LF	\$18.37	\$18,370.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	4.00	PI	\$3,272.59	\$13,090.36
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	64.00	EA	\$605.24	\$38,735.36
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	4.00	AS	\$1,326.00	\$5,304.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	240.00	LF	\$2.83	\$679.20
649-21-6	STEEL MAST ARM ASSEMBLY, F&I, 50'	4.00	EA	\$37,449.29	\$149,797.16
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00	AS	\$851.46	\$10,217.52
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	48.00	EA	\$321.17	\$15,416.16
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	48.00	AS	\$948.63	\$45,534.24
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	\$121.42	\$485.68

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	New Signal at MLK and Wright

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	\$6.66	\$4,662.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	\$18.37	\$5,511.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$3,272.59	\$3,272.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	\$605.24	\$13,315.28
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,326.00	\$1,326.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$2.83	\$169.80
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	\$884.00	\$884.00
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	\$51,974.05	\$311,844.30
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	\$851.46	\$17,029.20
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	\$690.01	\$5,520.08
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	\$321.17	\$6,423.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	\$948.63	\$18,972.60
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$236.44	\$1,891.52
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$22,099.91	\$22,099.91
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	\$121.42	\$485.68
Signalizations Component Total					\$731,017.04

LIGHTING COMPONENT
Conventional Lighting Subcomponent**Description**

Spacing

Value

MAX

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	12,302.40	LF	\$6.66	\$81,933.98
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,605.37	LF	\$18.37	\$29,490.65
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	49.00	EA	\$605.24	\$29,656.76
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	41,723.31	LF	\$2.20	\$91,791.28
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	49.00	EA	\$6,237.78	\$305,651.22
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	49.00	EA	\$449.16	\$22,008.84
	Subcomponent Total				\$560,532.73
	Lighting Component Total				\$560,532.73
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	Sequence 1 Total				\$2,310,787.12
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Sequence: 2 WUU - Widen/Resurface, Undivided, Urban**Net Length:** 2.330 MI
12,302 LF**Description:** Milling/Resurfacing and Signalization Work (Davis Hwy Only)**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	2
Existing Roadway Pavement Width L/R	19.00 / 19.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	275
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	51,943.47	SY	\$2.53	\$131,416.98
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	4,285.34	TN	\$158.86	\$680,769.11

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	315.00	EA	\$5.75	\$1,811.25
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	4.66	GM	\$948.27	\$4,418.94
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.33	GM	\$628.79	\$1,465.08
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	4.66	GM	\$4,192.80	\$19,538.45
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.33	GM	\$2,063.12	\$4,807.07

Roadway Component Total

\$844,226.88

SHOULDER COMPONENT**User Input Data**

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	4,000.00 SY	\$60.76	\$243,040.00

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,500.00 LF	\$3.40	\$8,500.00
104-15	SOIL TRACKING PREVENTION DEVICE	3.00 EA	\$4,047.39	\$12,142.17
104-18	INLET PROTECTION SYSTEM	119.00 EA	\$294.56	\$35,052.64
107-1	LITTER REMOVAL	10.72 AC	\$99.19	\$1,063.32
107-2	MOWING	10.72 AC	\$104.36	\$1,118.74

Shoulder Component Total

\$300,916.87

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	20.00 AS	\$314.35	\$6,287.00
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00 AS	\$1,200.96	\$6,004.80
700-1-50	SINGLE POST SIGN, RELOCATE	5.00 AS	\$127.00	\$635.00
700-1-60	SINGLE POST SIGN, REMOVE	20.00 AS	\$45.74	\$914.80

Signing Component Total

\$13,841.60

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	4 Lane Mast Arm
Multiplier	3
Description	3 Signal location along Davis Hwy

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,250.00 LF	\$6.66	\$14,985.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	750.00 LF	\$18.37	\$13,777.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	3.00 PI	\$3,272.59	\$9,817.77
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	48.00 EA	\$605.24	\$29,051.52
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	3.00 AS	\$1,326.00	\$3,978.00
639-2-1	ELECTRICAL SERVICE WIRE, F&I	180.00 LF	\$2.83	\$509.40
649-21-6	STEEL MAST ARM ASSEMBLY, F&I, 50'	3.00 EA	\$37,449.29	\$112,347.87
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	9.00 AS	\$851.46	\$7,663.14
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	36.00 EA	\$321.17	\$11,562.12

660-2-106	LOOP ASSEMBLY, F&I, TYPE F	36.00 AS	\$948.63	\$34,150.68
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	3.00 EA	\$121.42	\$364.26
Signalizations Component Total				\$238,207.26

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description				Value	
Spacing				MAX	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	12,302.40	LF	\$6.66	\$81,933.98
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,605.37	LF	\$18.37	\$29,490.65
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	49.00	EA	\$605.24	\$29,656.76
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	41,723.31	LF	\$2.20	\$91,791.28
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	49.00	EA	\$6,237.78	\$305,651.22
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	49.00	EA	\$449.16	\$22,008.84
Subcomponent Total					\$560,532.73
Lighting Component Total					\$560,532.73
Sequence 2 Total					\$1,957,725.34

Sequence: 3 NDR - New Construction, Divided, Rural**Net Length:** 0.054 MI
285 LF**Description:** Roundabout 2-Lane Approach (Davis Hwy South)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	\$21,815.23	\$10,907.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY	350.00	CY	\$14.24	\$4,984.00
120-6	EMBANKMENT Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY	350.00	CY	\$19.62	\$6,867.00
Earthwork Component Total					\$22,758.62

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	15.00 / 15.00
Structural Spread Rate	220
Friction Course Spread Rate	80

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: 2-Lane Leg: 11264 SF/9 = 1252 SY use 1250 SY	1,250.00	SY	\$5.39	\$6,737.50
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: 2-Lane Leg: Measure approx. 1000 SY	1,000.00	SY	\$31.09	\$31,090.00

334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: 2" Superpave Traffic C (1000 X 110 X 2)/2000 = 110 TN	110.00 TN	\$204.28	\$22,470.80
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22 Comment: 1" FC-9.5 Traffic C PG 76-22 (1000 X 110)/2000=55 TN	55.00 TN	\$115.58	\$6,356.90
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15 GM	\$948.27	\$142.24
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00 LF	\$1.47	\$88.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00 LF	\$3.09	\$278.10
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02 GM	\$1,020.50	\$20.41
710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01 GM	\$1,033.28	\$10.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00 EA	\$54.92	\$54.92
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15 GM	\$938.45	\$140.77
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00 LF	\$2.13	\$106.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Roadway Component Total

\$67,496.67

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	570.00	LF	\$35.36	\$20,155.20
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	440.00	SY	\$60.76	\$26,734.40
527-2	DETECTABLE WARNINGS	104.00	SF	\$23.59	\$2,453.36

570-1-2	PERFORMANCE TURF, SOD	450.00 SY	\$3.45	\$1,552.50
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Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00 LF	\$3.40	\$2,040.00
107-1	LITTER REMOVAL	0.25 AC	\$99.19	\$24.80
107-2	MOWING	0.25 AC	\$104.36	\$26.09
Shoulder Component Total				\$52,986.35

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	240.00 LF	\$36.03	\$8,647.20
527-2	DETECTABLE WARNINGS	40.00 SF	\$23.59	\$943.60
570-1-2	PERFORMANCE TURF, SOD	100.00 SY	\$3.45	\$345.00
Median Component Total				\$9,935.80

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00 LF	\$100.69	\$20,138.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00 EA	\$9,688.23	\$19,376.46
Drainage Component Total				\$39,514.46

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
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700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00 AS	\$314.35	\$2,514.80
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$5,315.68	\$5,315.68
Signing Component Total				\$7,830.48
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Sequence 3 Total				\$200,522.38
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Sequence: 4 NDR - New Construction, Divided, Rural**Net Length:** 0.057 MI
301 LF**Description:** Roundabout Central Island**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	\$21,815.23	\$10,907.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION Comment: 22000 ft x 0.5 ft deep / 27 = 407 CY use 400 CY	400.00	CY	\$14.24	\$5,696.00
120-6	EMBANKMENT Comment: 22000 ft x 0.5 ft deep / 27 = 407 CY use 400 CY	400.00	CY	\$19.62	\$7,848.00
Earthwork Component Total					\$24,451.62

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: measure (15405-4799)SF /9 = 1178 SY use 1200 SY	1,200.00	SY	\$5.39	\$6,468.00
285-709	OPTIONAL BASE,BASE GROUP 09	850.00	SY	\$31.09	\$26,426.50

	Comment: measure (15405-7779)SF /9 = 848 SY use 850 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	94.00 TN	\$204.28	\$19,202.32
	Comment: 2" Superpave Traffic C (850 X 110 X 2)/2000			
337-7-82	ASPH CONC FC, TRAFFIC C, FC-9.5, PG 76-22	47.00 TN	\$115.58	\$5,432.26
	Comment: 1" FC-9.5 Traffic C PG 76-22 (850 X 110)/2000			
710-11-201	PAINTED PAVT MARK, STD, YELLOW, SOLID, 6"	0.07 GM	\$938.45	\$65.69

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total \$57,594.77

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$4,047.39	\$4,047.39
107-1	LITTER REMOVAL	0.25	AC	\$99.19	\$24.80
107-2	MOWING	0.25	AC	\$104.36	\$26.09

Shoulder Component Total \$4,098.28

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T

Rumble Strips $\frac{1}{2}$ No. of Sides 0**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
350-30-13	CONC PAVEMENT FOR ROUNDABOUT APRON, 12" Comment: measure (7776-4799)/9=331 use 330 SY	330.00	SY	\$158.86	\$52,423.80
520-2-4	CONCRETE CURB, TYPE D	250.00	LF	\$44.65	\$11,162.50
520-2-8	CONCRETE CURB, TYPE RA	320.00	LF	\$31.17	\$9,974.40
570-1-2	PERFORMANCE TURF, SOD	530.00	SY	\$3.45	\$1,828.50
Median Component Total					\$75,389.20

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	\$314.35	\$1,257.40
Signing Component Total					\$1,257.40

Sequence 4 Total**\$162,791.27**

Sequence: 5 NDR - New Construction, Divided, Rural**Net Length:** 0.054 MI
285 LF**Description:** Roundabout 2-Lane Approach (MLK South)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	\$21,815.23	\$10,907.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY	350.00	CY	\$14.24	\$4,984.00
120-6	EMBANKMENT Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY	350.00	CY	\$19.62	\$6,867.00
Earthwork Component Total					\$22,758.62

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: 2-Lane Leg: 11264 SF/9 = 1252 SY use 1250 SY	1,250.00	SY	\$5.39	\$6,737.50
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: 2-Lane Leg: Measure approx. 1000 SY	1,000.00	SY	\$31.09	\$31,090.00

334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: 2" Superpave Traffic C (1000 X 110 X 2)/2000 = 110 TN	110.00 TN	\$204.28	\$22,470.80
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22 Comment: 1" FC-9.5 Traffic C PG 76-22 (1000 X 110)/2000=55 TN	55.00 TN	\$115.58	\$6,356.90
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15 GM	\$948.27	\$142.24
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00 LF	\$1.47	\$88.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00 LF	\$3.09	\$278.10
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02 GM	\$1,020.50	\$20.41
710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01 GM	\$1,033.28	\$10.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00 EA	\$54.92	\$54.92
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15 GM	\$938.45	\$140.77
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00 LF	\$2.13	\$106.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total

\$67,496.67

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	570.00	LF	\$35.36	\$20,155.20
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	440.00	SY	\$60.76	\$26,734.40
527-2	DETECTABLE WARNINGS	104.00	SF	\$23.59	\$2,453.36

570-1-2	PERFORMANCE TURF, SOD	450.00 SY	\$3.45	\$1,552.50
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Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00 LF	\$3.40	\$2,040.00
107-1	LITTER REMOVAL	0.25 AC	\$99.19	\$24.80
107-2	MOWING	0.25 AC	\$104.36	\$26.09
Shoulder Component Total				\$52,986.35

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	240.00 LF	\$36.03	\$8,647.20
527-2	DETECTABLE WARNINGS	40.00 SF	\$23.59	\$943.60
570-1-2	PERFORMANCE TURF, SOD	100.00 SY	\$3.45	\$345.00
Median Component Total				\$9,935.80

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00 LF	\$100.69	\$20,138.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00 EA	\$9,688.23	\$19,376.46
Drainage Component Total				\$39,514.46

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
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700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00 AS	\$314.35	\$2,514.80
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$5,315.68	\$5,315.68
Signing Component Total				\$7,830.48
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Sequence 5 Total				\$200,522.38
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Sequence: 6 NDR - New Construction, Divided, Rural**Net Length:** 0.054 MI
285 LF**Description:** Roundabout 2-Lane Approach (Hart Dr.)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	\$21,815.23	\$10,907.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY	350.00	CY	\$14.24	\$4,984.00
120-6	EMBANKMENT Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY	350.00	CY	\$19.62	\$6,867.00
Earthwork Component Total					\$22,758.62

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: 2-Lane Leg: 11264 SF/9 = 1252 SY use 1250 SY	1,250.00	SY	\$5.39	\$6,737.50
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: 2-Lane Leg: Measure approx. 1000 SY	1,000.00	SY	\$31.09	\$31,090.00

334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C Comment: 2" Superpave Traffic C (1000 X 110 X 2)/2000 = 110 TN	110.00 TN	\$204.28	\$22,470.80
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22 Comment: 1" FC-9.5 Traffic C PG 76-22 (1000 X 110)/2000=55 TN	55.00 TN	\$115.58	\$6,356.90
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15 GM	\$948.27	\$142.24
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00 LF	\$1.47	\$88.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00 LF	\$3.09	\$278.10
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02 GM	\$1,020.50	\$20.41
710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01 GM	\$1,033.28	\$10.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00 EA	\$54.92	\$54.92
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15 GM	\$938.45	\$140.77
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00 LF	\$2.13	\$106.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total

\$67,496.67

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	570.00	LF	\$35.36	\$20,155.20
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	440.00	SY	\$60.76	\$26,734.40
527-2	DETECTABLE WARNINGS	104.00	SF	\$23.59	\$2,453.36

570-1-2	PERFORMANCE TURF, SOD	450.00 SY	\$3.45	\$1,552.50
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Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00 LF	\$3.40	\$2,040.00
107-1	LITTER REMOVAL	0.25 AC	\$99.19	\$24.80
107-2	MOWING	0.25 AC	\$104.36	\$26.09
Shoulder Component Total				\$52,986.35

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	240.00 LF	\$36.03	\$8,647.20
527-2	DETECTABLE WARNINGS	40.00 SF	\$23.59	\$943.60
570-1-2	PERFORMANCE TURF, SOD	100.00 SY	\$3.45	\$345.00
Median Component Total				\$9,935.80

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00 LF	\$100.69	\$20,138.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00 EA	\$9,688.23	\$19,376.46
Drainage Component Total				\$39,514.46

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
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700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00 AS	\$314.35	\$2,514.80
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$5,315.68	\$5,315.68
Signing Component Total				\$7,830.48
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Sequence 6 Total				\$200,522.38
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Sequence: 7 NDR - New Construction, Divided, Rural**Net Length:** 0.054 MI
285 LF**Description:** Roundabout 2-Lane Approach (MLK/Davis North)**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	\$21,815.23	\$10,907.62

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION Comment: 2-Lane Leg: 22490 ft X 0.5 ft / 27=833	833.00	CY	\$14.24	\$11,861.92
120-6	EMBANKMENT Comment: 2-Lane Leg: 22490 ft X 0.5 ft / 27=833	833.00	CY	\$19.62	\$16,343.46
Earthwork Component Total					\$39,113.00

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION Comment: 2-Lane Leg: 22490 SF/9 = 2489 SY use 2500 SY	2,500.00	SY	\$5.39	\$13,475.00
285-709	OPTIONAL BASE,BASE GROUP 09 Comment: 2-Lane Leg: Measure approx. 2500 SY	2,500.00	SY	\$31.09	\$77,725.00
334-1-13		275.00	TN	\$204.28	\$56,177.00

	SUPERPAVE ASPHALTIC CONC, TRAFFIC C			
	Comment: 2" Superpave Traffic C (2500 X 110 X 2)/2000 = 275 TN			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	138.00 TN	\$115.58	\$15,950.04
	Comment: 1" FC-9.5 Traffic C PG 76-22 (2500 X 110)/2000=138 TN			
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15 GM	\$948.27	\$142.24
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00 LF	\$1.47	\$88.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00 LF	\$3.09	\$278.10
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02 GM	\$1,020.50	\$20.41
710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01 GM	\$1,033.28	\$10.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00 EA	\$54.92	\$54.92
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15 GM	\$938.45	\$140.77
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00 LF	\$2.13	\$106.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total

\$164,168.51

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01	454.00	SY	\$18.03	\$8,185.62
	Comment: 2 Lane Leg: (340 ft X 6 ft wide x 2 sides)/9 = 454 SY				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	25.00	TN	\$115.58	\$2,889.50

	Comment:			
	1" thick FC: (454 SY X 110)/2000=24.97 use 25 TN			
520-1-10	CONCRETE CURB & GUTTER, TYPE F	686.00 LF	\$35.36	\$24,256.96
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	692.00 SY	\$60.76	\$42,045.92
527-2	DETECTABLE WARNINGS	104.00 SF	\$23.59	\$2,453.36
570-1-2	PERFORMANCE TURF, SOD	450.00 SY	\$3.45	\$1,552.50

Erosion Control**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00 LF	\$3.40	\$2,040.00
107-1	LITTER REMOVAL	0.25 AC	\$99.19	\$24.80
107-2	MOWING	0.25 AC	\$104.36	\$26.09
Shoulder Component Total				\$83,474.75

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	712.00 LF	\$36.03	\$25,653.36
527-2	DETECTABLE WARNINGS	40.00 SF	\$23.59	\$943.60
570-1-2	PERFORMANCE TURF, SOD	100.00 SY	\$3.45	\$345.00
Median Component Total				\$26,941.96

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00 LF	\$100.69	\$20,138.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00 EA	\$9,688.23	\$19,376.46

Drainage Component Total

\$39,514.46

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00	AS	\$314.35	\$2,514.80
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$5,315.68	\$5,315.68
Signing Component Total					\$7,830.48

Sequence 7 Total

\$361,043.16

Sequence: 8 WDU - Widen/Resurface, Divided, Urban**Net Length:** 0.057 MI
300 LF**Description:** Alcaniz Street realignment at Wright Street**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 90.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.62	AC	\$21,815.23	\$13,525.44
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	583.86	CY	\$20.71	\$12,091.74
Earthwork Component Total					\$25,617.18

ROADWAY COMPONENT**User Input Data**

Description	Value
Number of Lanes	5
Existing Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	110
Widened Outside Pavement Width L/R	12.00 / 36.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	220
Widened Friction Course Spread Rate	110

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,771.43	SY	\$5.39	\$9,548.01
285-706	OPTIONAL BASE,BASE GROUP 06	1,621.48	SY	\$24.79	\$40,196.49
327-70-5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	399.87	SY	\$1.97	\$787.74
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	32.99	TN	\$158.86	\$5,240.79
334-1-12		175.94	TN	\$158.86	\$27,949.83

	SUPERPAVE ASPHALTIC CONC, TRAFFIC B			
337-7-80	ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22	21.99 TN	\$130.90	\$2,878.49
337-7-80	ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22	87.97 TN	\$130.90	\$11,515.27

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-1	RAISED PAVMT MARK, TYPE B W/O FINAL SURF	31.00	EA	\$5.75	\$178.25
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.23	GM	\$948.27	\$218.10
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.17	GM	\$628.79	\$106.89
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.23	GM	\$4,192.80	\$964.34
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.17	GM	\$2,063.12	\$350.73
Roadway Component Total					\$99,934.94

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	12.25 / 12.25
New Total Outside Shoulder Width L/R	13.25 / 19.25
Total Outside Shoulder Perf. Turf Width L/R	5.00 / 5.00
Sidewalk Width L/R	6.00 / 12.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	299.90	LF	\$35.36	\$10,604.46
520-1-10	CONCRETE CURB & GUTTER, TYPE F	299.90	LF	\$35.36	\$10,604.46
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	599.81	SY	\$60.76	\$36,444.46
570-1-3	PERFORMANCE TURF, SOD AND SOIL	333.23	SY	\$4.53	\$1,509.53

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price
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				Extended Amount
104-10-3	SEDIMENT BARRIER	599.81 LF	\$3.40	\$2,039.35
104-11	FLOATING TURBIDITY BARRIER	5.68 LF	\$16.38	\$93.04
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	5.68 LF	\$10.21	\$57.99
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$4,047.39	\$4,047.39
104-18	INLET PROTECTION SYSTEM	3.00 EA	\$294.56	\$883.68
107-1	LITTER REMOVAL	0.50 AC	\$99.19	\$49.60
107-2	MOWING	0.50 AC	\$104.36	\$52.18
Shoulder Component Total				\$66,386.14

MEDIAN COMPONENT**User Input Data**

Description	Value
Total Median Width	22.00
Performance Turf Width	6.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	599.81 LF	\$36.03	\$21,611.15
570-1-3	PERFORMANCE TURF, SOD AND SOIL	199.94 SY	\$4.53	\$905.73
Median Component Total				\$22,516.88

DRAINAGE COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.02 CY	\$1,446.68	\$1,475.61
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00 EA	\$7,874.43	\$23,623.29
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00 EA	\$8,674.60	\$8,674.60
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00 LF	\$100.69	\$3,222.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00 LF	\$171.82	\$2,749.12
570-1-1	PERFORMANCE TURF	17.27 SY	\$0.87	\$15.02
Drainage Component Total				\$39,759.72

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	\$314.35	\$628.70
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00 AS	\$1,200.96	\$1,200.96

700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	\$127.00	\$127.00
700-1-60	SINGLE POST SIGN, REMOVE	2.00 AS	\$45.74	\$91.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$5,315.68	\$5,315.68
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	\$279.34	\$279.34
Signing Component Total				\$7,643.16
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Sequence 8 Total				\$261,858.02
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FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 555555-1-55-11

Letting Date: 01/2099

Description: MLK and Davis Hwy one-way pair to two-way pair conversion

District: 03

County: 48 ESCAMBIA

Market Area: 01

Units: English

Contract Class: Lump Sum Project: N

Design/Build: N

Project Length: 2.330 MI

Project Manager:

Version 1-P Project Grand Total

\$6,911,919.02

Description: MLK and Davis Hwy one-way pair to two-way pair conversion

Project Sequences Subtotal**\$5,655,772.05**

102-1	Maintenance of Traffic	10.00 %	\$565,577.20
101-1	Mobilization	10.00 %	\$622,134.93

Project Sequences Total**\$6,843,484.18**

Project Unknowns	0.00 %	\$0.00
Design/Build	0.00 %	\$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$68,434.84	\$68,434.84

Project Non-Bid Subtotal**\$68,434.84**

Version 1-P Project Grand Total

\$6,911,919.02

