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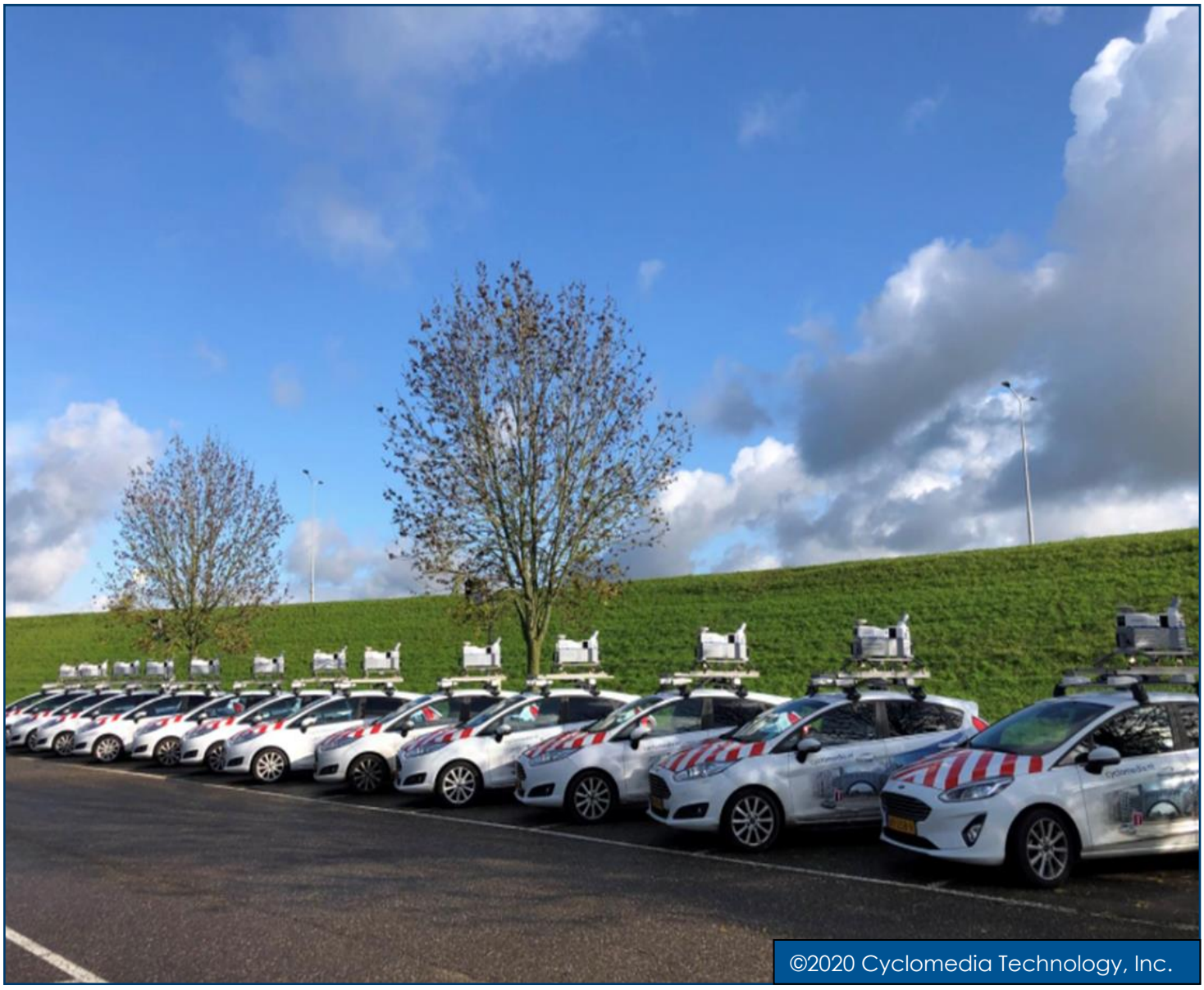
City of Pensacola, FL
Street Level Data Collection
ASTM Pavement Analysis and
MUTCD Sign Inventory



Cyclomedia Technology Inc. Corporate Office: Madison, WI

Document prepared by: Danny Hendren, Director, Local Government Sales
502-609-5175 dhendren@cyclomedia.com

Price Proposal for the Area of Proposed Data Analytics:

Professional Services: 360° GeoCycloramas™ and mobile LiDAR will be captured for approximately **360 total miles** (which will include imagery capture and processing), that will be generated from the shapefiles provided by the city.

- Prices include cloud-based storage and access for the duration of the one year license term.
- All standard license terms and agreements apply. License agreement provided in link below
- The Client's access to and use of the Professional Services is subject to the City accepting and agreeing to the Cyclomedia End User Terms and Service Schedule (to be provided with License Agreement).
- Elevation Visualization Tool – tool generated from the LiDAR point cloud that allows users to rapidly visualize change in elevations and make measurements within the solution (i.e. water issues, slopes, crowns, potholes, etc.)
- ESRI integrations and add-ins for ArcGIS Pro and ArcGIS Online
- Privacy blurring of faces and license plates
- ASTM PCI pavement analysis – condition of roadways, segmented by the City's street centerline shapefile
- MUTCD traffic sign inventory and additional street name sign inventory
    - **This estimate is based on the following assumptions:**
    - Assets to be extracted
        - ASTM PCI road surface analysis (product spec included)
        - Sign inventory with MUTCD code (product spec included)
        - Street name sign inventory with MUTCD code (not street name)
    - Quantity - 360 miles of city maintained roadways

Software: One year license with unlimited logins for City staff to access GeoCycloramas using the Street Smart web application and API for the duration of the license term. Cyclomedia Street Smart API to be included with project to allow City to publish services using Cyclomedia 360° imagery in public web mapping applications.

Fee Schedule: Prices valid for 60 days from 11/04/2022

GeoCycloramas™ Imagery with LiDAR for 360 miles @ $135.00 per mile = $48,600.00
Privacy Filter Blurring for 360 miles = included with GeoCycloramas imagery
ASTM PCI pavement analysis for 360 miles @ $170.00 per mile = $61,200.00
MUTCD Sign inventory for 360 miles @ $110.00 per mile = $39,600.00
Street name addition for 360 miles @ $54.00 per mile = $19,440.00
Technical Support and Training for two years @ $4,100.00 = $8,200.00

Project Total: $177,040.00

A mobilization fee of 30% of the imagery collection fee ($16,200.00) will be invoiced on signing of the license agreement. The remaining 70% of the imagery collection fee ($37,800.00) will be invoiced when imagery and LiDAR datasets are published and accessible to the city. The ASTM pavement evaluation, MUTCD / street name sign inventory and ESRI tools ($123,040.00) will be invoiced when pavement analysis is delivered to the city.

This Budgetary Quote is an expression of intent only and is meant solely to be used as a negotiation aid by the parties. The parties acknowledge that they must complete negotiations, including negotiations on points beyond the scope hereof, which negotiations may also cause the terms set forth in this Budgetary Quote to be changed. Accordingly, the parties do not intend to be bound until they enter into definitive agreements regarding the subject matter of this Budgetary Quote. Cyclomedia's standard license agreement and terms and conditions of Cyclomedia services found at:

LA SAAS USA Cyclomedia Technology 2020_200722.pdf

DATA EXTRACTION SPECIFICATIONS

Detection distance of objects:

- Objects > 25cm x 25 cm: up to 10 meters from the car
- Objects > 50cm x 50 cm: up to 30 meters from the car
- Both only when the object is visible in at least 1 image.
- Objects beyond 30 meters do not have a quality specification.

Positional accuracy (absolute):

- The average standard deviation of all the measured points is 10 cm or 4” inches (1-σ) in all directions, except in long tunnels, woody areas, occluded areas and urban canyons where the positional accuracy is not specified.

Standard completeness/correctness of delivery:

- Goal is 95% of all the specified objects that are visible on the GeoCyclorama, and within distance spec. from the Cyclorama recording locations, are inventoried. Of the objects detected, 95% are expected to be accurately extracted and attributed.
- In tunnels, the objects are only inventoried if there is enough light to take photographs. Also, the positional accuracy will decrease inside tunnels.
- Quality control is done via a statistical process where the number of checks depends on the size of the dataset, based on the AQL method. 100% QA is not performed.

CONFIRMING DATA QUALITY

Cyclomedia will evaluate a random sample of data and if the quality is within the specifications, the data set is deemed accepted. Any correction of detected errors is at the sole option of Cyclomedia and does not change the acceptance of the entire data set. If the client does not provide written documentation of quality outside of specification within 15 days of delivery to the client, that data is deemed acceptance. Cyclomedia has 15 days from the receipt of any such documentation to respond, including if considered necessary by Cyclomedia, a plan to address the issues documented.

OTHER

Unless specified elsewhere, hosting of delivered data in a GIS environment is not included or is provided at additional cost.
If tax cutouts are included in the scope, there are additional requirements from the client to provide acceptable data to Cyclomedia to perform the project.

Data Dictionary / Geodatabase schema for City of Pensacola, FL

*Please refer to the two product specification manuals provided with this budgetary estimate

City of Pensacola, FL Imagery and LiDAR Collection / AOI Map