RESOLUTION NO. 2025-

A RESOLUTION OF THE VILLAGE OF PINECREST, FLORIDA, AUTHORIZING THE VILLAGE MANAGER TO ENTER INTO AN AGREEMENT WITH URBAN SDK FOR A SPEED REDUCTION PILOT STUDY; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Village's 2025–2030 Strategic Plan establishes, under the "Secure & Safe Community" Strategic Priority Area, Objective 2.4, which directs the Village to evaluate the feasibility and impacts of reducing residential speed limits to 20 miles per hour; and

WHERAS, the Village adopted a Vision Zero Policy in 2024 with the goal of eliminating severe and fatal traffic crashes by 2035; and

WHEREAS, the Village desires to implement a data-driven pilot program to assess the effectiveness of a 20 MPH speed limit in improving local safety and traffic operations; AND

WHEREAS, the Village Manager wishes to enter into an agreement with Urban SDK for a speed reduction traffic study;

BE IT RESOLVED BY THE VILLAGE COUNCIL OF PINECREST, FLORIDA, AS FOLLOWS:

Section 1. That the Village Council hereby authorizes the Village Manager to enter into the attached agreement with Urban SDK for a speed reduction traffic study.

Section 2. This resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED this 9th day of December, 2025.

_____
Joseph M. Corradino, Mayor

Attest:

_____
Priscilla Torres, MMC
Village Clerk

Approved as to Form and Legal Sufficiency:

_____
Mitchell Bierman
Village Attorney

Consent Agenda

Yocelyn Galiano, ICMA-CM
Village Manager
manager@pinecrest-fl.gov

VILLAGE OF PINECREST
Office of the Village Manager

DATE: December 3, 2025

TO: The Honorable Mayor and Members of the Village Council

FROM: Yocelyn Galiano, ICMA CM, Village Manager

RE: Pilot Program – Reduction of Residential Speed Limits to 20 MPH
Vision Zero Implementation Initiative

BACKGROUND

The Village's 2025–2030 Strategic Plan establishes, under the "Secure & Safe Community" Strategic Priority Area, Objective 2.4, which directs the Village to evaluate the feasibility and impacts of reducing residential speed limits to 20 miles per hour. This objective specifically calls for an analysis of how a 20-mph standard on local residential streets would influence safety, neighborhood traffic flow, and overall community well-being. It was developed in response to extensive resident input via citizen surveys and written communications with elected officials expressing concerns about speeding, cut-through traffic, and recurring pedestrian–vehicle conflicts. Since tracking began in January 2025, the Police Department has documented 11 pedestrian or cyclist crashes involving a motor vehicle within the Village. Lower speed limits are widely recognized as supporting walkability, bicycling, safe school travel, and improved neighborhood quality of life. The proposed pilot program outlined in this memorandum directly advances this Strategic Plan objective by offering a data-driven, operationally controlled approach to evaluate the practical benefits and considerations associated with adopting a lower residential speed limit throughout the residential roads in Pinecrest.

VISION ZERO COMMITMENT

In addition to the Strategic Plan mandate, the Village adopted a Vision Zero Policy in 2024, establishing a goal of eliminating severe and fatal traffic crashes by 2035. Vision Zero frameworks emphasize that speed is the single most influential factor affecting crash severity, especially for pedestrians and cyclists.

National and federal research strongly supports this premise. The AAA Foundation for Traffic Safety, in *Impact Speed and a Pedestrian's Risk of Severe Injury or Death* (2011), found that a pedestrian struck at 20 MPH has roughly a 10% risk of severe injury, while the risk increases to nearly 40% at 30 MPH. Similarly, the Federal Highway Administration's (FHWA) *Speed Management for Safety: A Toolkit for Practitioners* (2020) identifies residential speed reduction

as a “high impact, systemwide safety strategy,” noting that even small reductions in speed meaningfully improve reaction time, reduce braking distance, and lower crash forces.

These findings have a direct bearing on Pinecrest’s residential environment, where tree-lined streets, limited sidewalk coverage, and regular cut-through activity amplify the risks associated with higher-speed traffic and underscore the need for proactive speed management.

DRIVER RESPONSIBILITY AND VEHICLE PHYSICS

To further emphasize the safety rationale, it is important to recognize that drivers directly control their vehicle’s speed. A typical passenger vehicle weighs between 2,000 and 4,000 pounds, and even small increases in speed substantially increase the amount of kinetic energy a driver is directing through the roadway environment. For example, a vehicle traveling at 25 MPH carries 56% more kinetic energy than one traveling at 20 MPH, resulting in dramatically more severe outcomes if a collision occurs. Lower residential speed limits reduce this destructive potential, lengthen reaction time, shorten stopping distance, and create a greater margin for drivers to avoid conflicts—particularly in neighborhoods where families walk, bike, play, and enter the roadway unpredictably. These factors reinforce the importance of targeting lower operating speeds, rather than relying on prevailing speeds, in residential areas where vulnerable road users are present.

FLORIDA CONTEXT AND PEER EXAMPLES

Florida communities are increasingly adopting or evaluating 20 mph residential speed limits based on similar safety concerns.

One of the most comprehensive Florida analyses was conducted by the City of Jacksonville through its “Residential Speed Limit Reduction Study – 20 is Plenty” (2024). Jacksonville reviewed 2,969 miles of neighborhood streets and performed a five-year crash analysis (2018–2022) that found speeding-related and aggressive-driving crashes widely dispersed across its residential network. The study recommended adopting a citywide 20 mph speed limit on all local residential roads. Public input was substantial: 2,619 survey responses were received, with 80% supporting the 20-mph limit. This study demonstrates Florida’s growing recognition that residential street design, crash data, and community safety expectations increasingly support 20 mph zones.

Additionally, Flagler Beach adopted Ordinance 2024-13, which established a 20-mph speed limit on all city streets (excluding state roads). The Commission’s decision cited the city’s constrained beachside roadway grid and the need to improve pedestrian safety where sidewalks are limited. This ordinance reflects a full municipal adoption of 20 mph limits in Florida.

Regionally, the Hillsborough County (Plan Hillsborough) Speed Management Action Plan (2023) explicitly recommends 20 mph for all residential streets, identifying it as the appropriate maximum speed in neighborhoods with high pedestrian and bicycle activity. The plan ties 20 mph limits to Vision Zero principles and emphasizes that lower speeds are a necessary component of a safe system.

At the state level, the FDOT *Speed Zoning Manual* (2017), implementing Section 316.189, Florida Statutes, confirms that municipalities may establish 20 mph residential speed limits particularly in areas with high pedestrian activity, limited sidewalks, driveway density, and school routes. These are all characteristics found within Pinecrest's proposed pilot zone.

Finally, the Miami-Dade County Vision Zero Plan (2018) reinforces that Florida communities are permitted to implement 20 mph limits in residential areas and identifies lower speed limits as a key strategy for reducing pedestrian fatalities. Thus, Pinecrest's proposal therefore aligns directly with countywide safety goals.

Together, these Florida case studies and regional frameworks demonstrate that Pinecrest's proposed 20 mph pilot is consistent with the direction taken by several Florida jurisdictions and is grounded in current state-authorized engineering practice.

NATIONAL BEST PRACTICES AND DEMONSTRATED OUTCOMES

Several peer cities across the country have demonstrated the effectiveness of lowering residential speed limits based on real-world data:

- Seattle Department of Transportation, in its *Speed Limit Evaluation Report* (2020), documented a 22% reduction in serious injuries after reducing residential speed limits to 20 MPH.

- The Portland Bureau of Transportation, in its *Neighborhood Greenway Assessment Report* (2018), observed a 34% decrease in drivers traveling more than 10 MPH over the speed limit following implementation of 20 MPH zones.

- The City of Boston, in its *Vision Zero Boston: Impact of Lowering Speed Limits* (2018), identified a 29% reduction in drivers exceeding 35 MPH after lowering the default citywide speed limit from 30 to 25 MPH.

- The City of Hoboken, in its *Vision Zero Annual Report* (2023), reports seven consecutive years with zero traffic fatalities, achieved in part through the adoption of 20 MPH zones, aggressive speed management, and pedestrian-focused design.

Public opinion research further supports the viability of lowered residential speed limits. As mentioned previously, in Jacksonville's Residential Speed Limit Reduction – 20 is Plenty study (2024), an online survey of 2,619 residents found that 80% supported a 20-mph speed limit on all local residential streets. Similarly, as part of the Town of Vail's Go Vail 2045 transportation master plan process, 80% of survey respondents supported establishing 20 mph as the residential speed standard, and in Bellevue, Washington, neighborhood pilots with lowered local speed limits and enhanced pavement markings have been well received. A 2023 resident survey found that 85% of respondents liked having speed-limit legends on the pavement, reinforcing the 20-mph message on local streets. Although most of the formal post-implementation satisfaction studies come from international jurisdictions, those evaluations

consistently show that public support for 20 mph limits increases after implementation as residents experience calmer, safer streets in practice.

These examples demonstrate that reducing residential speed limits—particularly to the 20–25 MPH range—produces measurable safety benefits, reduces severe crashes, slows overall operating speeds, and does so with minimal disruption to travel times. Although 50th/85th/95th percentile speeds will continue to be measured as important descriptive indicators of current driving behavior, it is important to note that percentile metrics were developed for higher-speed, vehicle-oriented contexts where maintaining homogenous flow was the primary goal. In residential areas with vulnerable users, the overriding objective is lower, safer operating speeds, not alignment with prevailing speeds. Together with Florida-specific research and statutory authority, these national outcomes provide strong justification for Pinecrest's proposed 20 MPH pilot.

PILOT AREA

The proposed pilot zone, bordered on the west by Pinecrest Parkway, on the north by SW 112 Street, on the east by SW 67 Avenue and on the south by SW 136 Street, is a cohesive area lacking sidewalks on the residentially designated roads that contain numerous driveways, school-related pedestrian activity, and cut-through traffic generated by regional congestion. These characteristics match conditions identified by FHWA, AAA Foundation, Plan Hillsborough, and FDOT as appropriate for lower speed limits.

Additionally, a comprehensive analysis of speed data across the Village, performed using the Village's Urban SDK traffic analytics system, identified this specific area as exhibiting the greatest prevalence of vehicles exceeding the posted speed limit of 35 mph by more than the 6-mph enforcement grace relative to other neighborhoods in Pinecrest. This pattern reflects a consistent speeding hotspot and underscores the need for targeted speed management measures in this neighborhood.

PILOT PROGRAM COMPONENTS

To effectively implement and evaluate the pilot, staff recommend engaging Urban SDK to provide comprehensive mobility data and analytical support. This will allow the Village to quantify and measure the effectiveness of the reduced speed limit using consistent, high-quality traffic metrics collected before, during, and after the pilot period. If approved by Council, Urban SDK will provide the following:

1. **Speed and Congestion Metrics:** Hourly speed data for all public streets within the pilot area for the full duration of the study, allowing the Village to determine whether the pilot's desired reductions in operating speeds have been achieved. Metrics will include average speeds, 50th/85th/95th percentile speeds, and congestion indicators such as the travel time index, planning time index, and buffer time index.
2. **Roadway Characteristics (RCI Data):** A complete inventory of roadway characteristics for all public streets in the study area, including roadway width, number of lanes,

crosswalk locations and dimensions, and the presence and configuration of sidewalks and sidewalk separation distances.

3. **Active Transportation Assessment:** An evaluation of pedestrian and bicycle conditions using FDOT's Level of Traffic Stress methodology, supported by the roadway inventory data. This assessment will quantify the improvements to walkability and cycling conditions resulting from the pilot.
4. **Traffic Volumes and Historical Counts:** Up to seven (7) new traffic volume counts will be conducted to assess the pilot's impact on traffic volumes and vehicle miles traveled (VMT) throughout the study area. All data will be tagged to the Village's standardized linear referencing system and provided in geospatial formats to support mapping, analysis, and future planning.

Once Urban SDK has collected baseline conditions prior to implementation, the Village will proceed with the following steps:

5. **Public Education Campaign:** Launch a coordinated outreach effort to inform residents, neighborhood associations, and schools about the pilot program, its objectives, and its expected benefits.
6. **Signage Installation:** Install 20 MPH signage throughout the designated pilot zone.
7. **Deployment of Radar Feedback Signs:** Install portable radar feedback devices at strategic locations to reinforce awareness of the new speed limit and support voluntary compliance.
8. **Targeted Police Enforcement:** Initiate focused enforcement efforts, with particular emphasis during the first 60–90 days of the pilot, to support the transition to the new speed limit and reinforce compliance.
9. **Ongoing Data Collection and Monitoring:** Conduct continuous before-and-after monitoring, including:
   • 50th/85th/95th percentile operating speeds
   • Traffic volumes
   • Peak school-hour speed profiles
   • Number of warnings and citations issued
   • Resident feedback and complaints
   • Assessment of diversion effects onto collector or arterial roads

Collectively, these measures will ensure that the Village has robust, comparable before-and-after metrics to accurately evaluate the pilot's effectiveness.

ANTICIPATED BENEFITS AND POTENTIAL DRAWBACKS

The proposed 20-mph pilot is expected to yield several meaningful benefits for the community. Lower operating speeds significantly reduce crash severity and improve pedestrian survival rates, directly enhancing safety for children, families, and recreational walkers, particularly in neighborhoods without sidewalks. A reduction in speeds may also discourage cut-through traffic, helping to calm neighborhood streets and reduce overall noise levels while enhancing the day-to-day livability of adjacent homes. Importantly, the pilot advances the Village's Vision

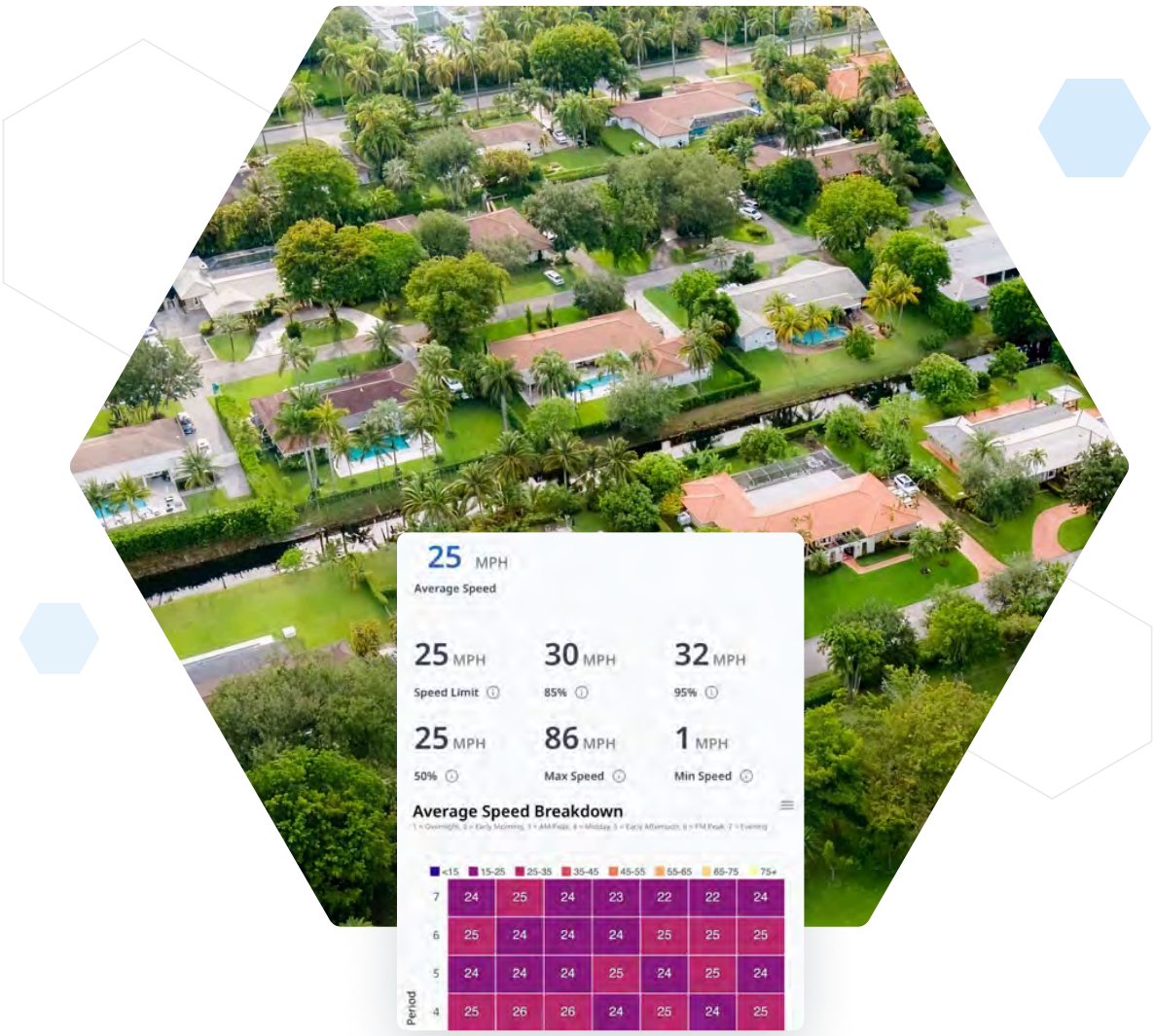
Zero 2035 goal of eliminating severe and fatal traffic injuries, while simultaneously fulfilling Objective 2.4 of the 2025–2030 Strategic Plan, which calls for evaluating the impacts of a lower residential speed limit in Pinecrest.

While the pilot is expected to deliver substantial safety and quality-of-life benefits, several potential challenges must be acknowledged. Initial compliance may be uneven as drivers adapt to the new speed limit; however, this is expected during early implementation and will be mitigated through targeted enforcement, strategically deployed radar feedback signs, and sustained community education. Diversion to nearby collector roads is also possible, and staff will monitor traffic volumes closely to identify and address any unintended shifts in travel patterns. Finally, although some residents may perceive an increase in travel time, national research shows that reducing speeds from 35 mph to 20 mph adds approximately 1.25 minutes per mile. Given that the longest continuous trip across Pinecrest is roughly 3.5 miles, even a full-length journey through the Village would experience a maximum added travel time of less than 4.5 minutes—a modest impact when weighed against the significant safety gains.

RECOMMENDATION

The proposed 20 MPH Residential Speed Limit Pilot Program is strongly supported by the Village's 2025–2030 Strategic Plan, Vision Zero 2035 policy, national and federal safety research, and Florida-specific case studies and statutory authority. Implementing this pilot will allow the Village to gather meaningful data, measure impacts, and determine whether a broader 20 mph policy is warranted.

I hereby respectfully recommend that the Village Council authorize the implementation of a 20 MPH Residential Speed Limit Pilot Program within the area bounded by SW 112 Street (North), SW 67 Avenue (East), SW 136 Street (South), and U.S. 1 (West). This pilot aligns with the Village's 2025–2030 Strategic Plan, Vision Zero 2035 commitment, and emerging Florida best practices. Based on the evidence summarized above, staff believes the proposed 20 MPH pilot is both warranted and consistent with national, state, and county best practices.



Geospatial AI Platform

Identify, analyze and maintain regulated infrastructure planning, maintenance and development.

Statement of Work (SOW)

1. Purpose

The purpose of this Statement of Work (SOW) is to define the scope, deliverables, and responsibilities associated with Urban SDK's provision of traffic speed and volume data for the Village of Pinecrest, Florida. This engagement will deliver comprehensive speed and volume data that supports the city's safety, planning, and operational analysis initiatives.

2. Scope of Services

2.1 Roadway Characteristics Data

Urban SDK will provide the city with roadway characteristics data for all jurisdictional roadways. Deliverables include:

- **Roadway length and width**
- **Number of roadway lanes**
- **Sidewalk inventory and connectivity information**
- **Width of crosswalks on roadways**
- **Crosswalk presence on all roadways**

2.2 Traffic Count Pilot

Urban SDK will conduct up to 7 (seven) traffic volume counts to assess impacts on traffic volumes. Deliverables include:

- **Traffic count pilot assessing volumes**
- **Vehicle Miles Traveled (VMT) per location**
- **Geospatial data tagged to LRS for Village**
- **Functional Road Classes 1–5 data**

2.3 Workflows

Urban SDK will provide the city automated workflows that users schedule to run weekly, monthly, quarterly, or annually. Users will automatically receive reports on their data without the need for recurring manual input. Deliverables include:

- **Automated Workflows**
- **Email and in-app notifications**
- **Setup and support from dedicated Urban SDK representatives**

2.4 Data Analysis Hours

Active Transportation Assessment

Created using Urban SDK Roadway Characteristic Data

Bicycle and Pedestrian Conditions

In accordance with FDOT Level of Stress methodologies

Pre/Post Implementation

Full written analysis to show impact of speed limit reduction pilot.

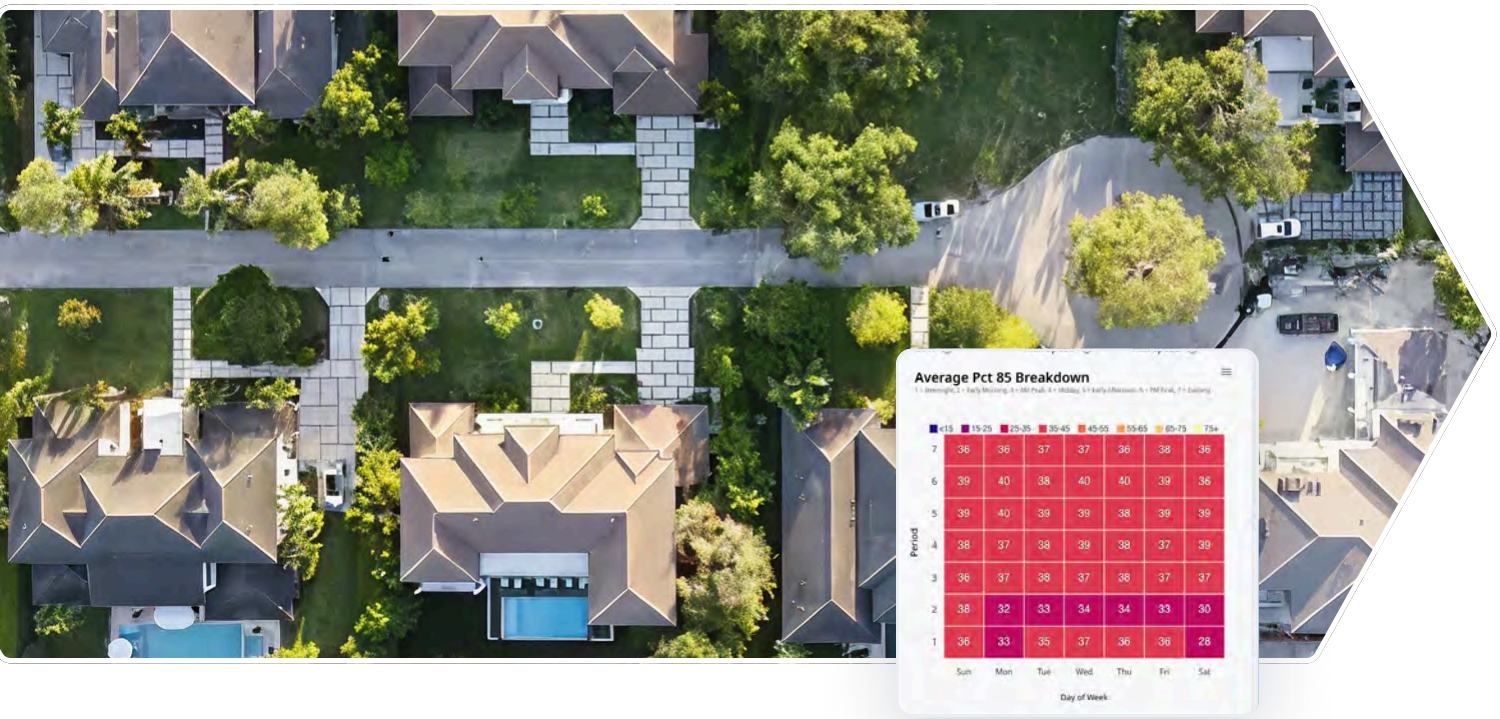
2.5 Customer Support

- **Channels:** Live chat and email support.
- **Coverage:** Standard business hours with SLA defined under Urban SDK's Terms of Service.
- **Included Services:** No additional cost for support during contract term.

3. Deliverables

Deliverable	Description	Frequency	Delivery Method
Roadway Characteristics Dataset	Roadway Length and Width, Number of Lanes, Sidewalk Width, Sidewalk Connectivity, Crosswalk Width and Presence	Annual	Web app + file delivery
7-Day Traffic Counts	Up to 7 traffic volume counts to assess impact and VMT in study area	Annual	Web app + file delivery
Workflows	Rules-based workflows and automatic reporting	Daily	Web app + email
Data Analysis Hours	Written analysis to show pre/post implementation of speed limit reduction pilot	Annual	File delivery
User Access	3 Urban SDK annual seats	Ongoing	Web application
Training & Onboarding	Onboarding sessions and webinars for staff	Initial + ongoing	Virtual
Support Services	Dedicated, Live chat, email support, and knowledge base	Ongoing	Digital support portal

4. Pricing & Fees



4.1 Annual Total

Roadway Characteristic Data
$4,500 / year (after 100% discount)

Workflows
$0.00 / year (after 100% discount)

Data Analysis Hours
$3,600

7 Day Traffic Counts
$7,000

Total Contract Value: $15,100.00

5. Responsibilities

5.1 Urban SDK

- Provide data access and updates as defined in this SOW.
- Conduct onboarding and training sessions for staff.
- Conduct a full Q&A of all data to ensure locations and results meet the city's needs.
- Maintain application uptime and ensure timely delivery of data.
- Provide customer support throughout the engagement.

5.2 Pinecrest

Provide designated points of contact for project oversight and user access assignments.

Ensure timely attendance at training and onboarding sessions.

Village of Pinecrest - RCI / LOS

Village of Pinecrest, Florida

12645 Pinecrest Pkwy, Pinecrest, FL 33156, USA
Pinecrest, FL 33156
United States

Reference: 20251113-063644666

Quote created: November 13, 2025
Quote expires: December 13, 2025
Quote created by: Micah Dickman

VP of Revenue
micah.dickman@urbansdk.com
+16787931627

Yocelyn Galiano

ygaliano@pinecrest-fl.gov
305-234-2121

Comments from Micah Dickman

Urban SDK is proposing to provide mobility data to support the **Village of Pinecrest's Speed Reduction Pilot study**, which aims to support the Village's commitments to Vision Zero 2035 and the Walk/Bike Initiative by reducing the speed limit on internal residential streets in the southwest quadrant of the Village and measuring the effects of this measure on traffic metrics prior to, during, and after the Pilot.

The Pilot is oriented around the reality that lower traffic speeds dramatically reduce the risk of fatality in collisions between vehicles and vulnerable road users. Accordingly, the Village will reduce speed limits on all internal residential streets in the southwest quadrant of the village (bounded by SW 112th St, SW 67th Ave, SW 136th St, and US 1) from 30mph to 20mph.

Urban SDK will provide mobility data support to allow the Village to quantify and measure the effectiveness of these speed limit reductions prior to, during, and after the Pilot period.

Specifically, Urban SDK will:

01 Speed and Congestion Metrics

Provide Traffic Speed and Traffic Delay metrics, disaggregated to the hourly level, for all public streets in the study area for the desired timeframe of the Pilot study to measure whether the Pilot's desired reduction in speeds has been achieved. These metrics include Average Speed, 50th/85th/95th Percentile Speeds, and Travel Time Index/Planning Time Index/Buffer Time Index.

02 Roadway Characteristics (RCI Data)

Provide Roadway Characteristics (RCI) data for all public streets in the study area, including road width, number of lanes, crosswalk locations and widths, and sidewalk/sidewalk separation locations and widths.

03 Active Transportation Assessment

Conduct an Active Transportation assessment using the above RCI data in accordance with FDOT Level of Traffic Stress methodologies to quantify the improvements to pedestrian and cycling conditions on public streets in the study area as a result of the Pilot.

04 Traffic Volumes and Historical Counts

Conduct up to 7 (seven) traffic volume counts to assess the impacts of the Pilot on traffic volumes and vehicle miles traveled (VMT) throughout the study area. All data provided by Urban SDK will be tagged to our standard Linear Referencing System (LRS) road network in the Village of Pinecrest and will be provided in geospatial formats.

Products & Services

Item & Description	Quantity	Unit Price	Total
Roadway Characteristics Data Urban SDK RCI Data includes: - Roadway Length - Roadway Width - Number of Lanes - Sidewalk Width - Sidewalk Connectivity - Crosswalk width - Crosswalk presence	1	**$4,500.00 / year**	**$4,500.00 / year** for 1 years
Workflows Workflows enable Urban SDK customers to automate Insights re ports, scheduling them to run weekly, monthly, quarterly, or an nually. Receive Urban SDK data on an automated and scheduled basis, without the need for recurring manual input	1	**$3,500.00 / year**	**$0.00 / year** after 100% discount
Data Analysis Hours Conduct an Active Transportation assessment using the above RCI data in accordance with FDOT Level of Traffic Stress method ologies to quantify the improvements to pedestrian and cycling conditions on public streets in the study area as a result of the Pilot. Additionally Urban SDK will do a conduct a full written analysis to show the pre and post implementation of speed limit reduction pilot	16	**$225.00**	**$3,600.00**

Item & Description	Quantity	Unit Price	Total
7 Day Traffic Counts Conduct up to 7 (seven) traffic volume counts to assess the im pacts of the Pilot on traffic volumes and vehicle miles traveled (VMT) throughout the study area	**14**	**$500.00**	**$7,000.00**

Annual subtotal	**$4,500.00** after $3,500.00 discount
One-time subtotal	**$10,600.00**
Total	**$15,100.00**

Terms and Conditions

Our agreement is effective as of the Effective Date set forth below, is entered into by and between the Buyer identified as Customer below (“Customer”) and Urban SDK, Inc., a Delaware corporation, with its principal place of business located at 10151 Deerwood Park Boulevard, Building 100 Ste 100 Jacksonville, Florida 32256 (“Urban SDK”). The parties acknowledge and agree that they have read and understand this Agreement and, upon execution, are legally bound by it.

This Agreement includes this “Signature” or any other ordering document referencing this Agreement, the Terms and Conditions available at Terms and Conditions, all statements of work entered into in connection with this Agreement (“Statement(s) of Work”)

Signature

Signature

Date

Printed name

Countersignature

Countersignature

Date

Printed name

This page in website

Questions? Contact me

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Urban SDK

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