



APPROVED AS AMENDED

SUMMARIZED MEETING MINUTES

**CITY OF SCOTTSDALE
TRANSPORTATION COMMISSION
REGULAR MEETING**

**Thursday, March 16, 2023
Kiva-City Hall
3939 N. Drinkwater Boulevard
Scottsdale, Arizona 85251**

CALL TO ORDER

Chair Iacovo called the regular meeting of the Scottsdale Transportation Commission to order at 5:15 p.m.

ROLL CALL

PRESENT: Pamela Iacovo, Chair
Don Anderson, Vice Chair
Emmie Cardella
Karen Kowal
Mary Ann Miller
Kerry Wilcoxon

ABSENT: B. Kent Lall

STAFF: Mark Melnychenko, Transportation & Streets Director
Susan Conklu, Senior Transportation Planner
Nathan Domme, Transportation Planning Manager
Kiran Guntupalli, Principal Traffic Engineer
Kyle Lofgren, Office Manager

PUBLIC COMMENT

There were no members of the public who wished to speak. Written comments were included in the commission packet.

1. APPROVAL OF MINUTES

VICE-CHAIR ANDERSON MOVED TO APPROVE THE REGULAR MEETING MINUTES OF THE TRANSPORTATION COMMISSION ON FEBRUARY 16, 2023, AS PRESENTED. COMMISSIONER WILCOXON SECONDED THE MOTION, WHICH CARRIED 6-0 WITH CHAIR IACOVO, VICE CHAIR ANDERSON COMMISSIONERS CARDELLA, KOWAL, MILLER, AND WILCOXON VOTING IN THE AFFIRMATIVE WITH NO DISSENTING VOTES.

2. SENSAGRATE PILOT PROJECT: MONITORING PEDESTRIAN CONFLICTS AT THE SCOTTSDALE AND CAMELBACK INTERSECTION.

Kiran Guntupalli, Principal Traffic Engineer, stated six months ago an agreement was made with Sensagrate to study the intersection of Scottsdale Road and Camelback Road and gain an understanding of pedestrian movement on the road, sidewalk, and curb and to include how near misses are occurring. This is a pilot project with no cost to the City.

Darryl Keaton, President and Founder of Sensagrate, provided some background on creating Sensagrate and its purpose. Mr. Keaton presented the details of the study, data collected, and next steps.

The Governor's Highway of Safety Association study on pedestrian safety from January to June 2022 revealed pedestrian fatalities has increased by 18% since 2019.

SensaVision captures real time data using a LiDAR camera, which include night vision, radar and video sensors were installed to track pedestrian, vehicles, cyclists, and other mobility users. Such data collected is useful in supporting pedestrian safety, capital projects, and design planning. This product uses AI and IoT software platform, use of their own internet capability, and IoT Edge Device that processes the data and sends it to the cloud for storage. The object is the detection, classification, and tracking of the movements and behaviors of the engagement between vehicles and pedestrians. Data outputs and visualizations are provided in JSON format.

Data was collected from September 2022 to February 2023 using a camera facing southbound and one facing westbound. Data collected includes pedestrian counts and movements at the crosswalk waiting area, time in the crosswalk, lane counts and assessing safety using near miss collision analysis. The data revealed 29,000 pedestrians southbound and 38,000 westbound. The high-volume days were Friday, Saturday, and Wednesday. The average time a pedestrian is in the crosswalk is between 14.5 and 18.9 seconds. There were large number of vehicles making right hand turns while pedestrians were in the crosswalk, which is classified as a near-miss.

Near miss analysis uses two algorithms; Post-Encroachment Time (PET), which is based on a predictive path and speed to obtain the measurement of risk. Time to Collision (TTC) is used to predict the path and speed of an object and time for direct impact or ability to brake. This data is used to assess roadway conditions and identify data to predict potential spots where the next injury or death is most likely to occur.

The data collected over a period consisted of 2,664 PET near misses with 252 involving pedestrians and of those 33 were severe near misses. Nine of these incidents involved vehicles going above 30 mph, which is high enough to lead to a fatality. Using the TTC algorithm, there were 3,719 near misses. Of those 58 were severe, with vehicles going over 30 mph. Near miss

rate is highest in the evening between the hours of 10:00 p.m. and 12:00 a.m. When there are fewer cars on the road, pedestrian behavior changes and they are not following the path and using crosswalks. The second highest time is between the hours of 8:30 a.m. and 3:30 p.m. Pedestrian trajectory is used to assess the common and unique behaviors of pedestrians.

This information is beneficial when trying to understand the risk and safety as well as how people about for purposes of future zoning and redesign. This data can be integrated into the traffic control signal with on demand signal control and improve pedestrian safety. The signal should be delayed promoting safety when someone takes longer to cross the road.

Next steps are to begin Phase 2 by expanding to Saddleback, which is the entertainment district, to capture events beyond the intersection and mid-block. Roadside and curbside drop offs have been prohibited in this area. Monitoring compliance will help understand pedestrian behavior, present more consistent data and demonstrate a full solution by understanding and providing enhanced detailed and predictive analytics on pedestrian safety in the corridor. Another area of focus is understanding the velocity and path of the object as they go into the intersection. This data is being processed to help predict when specific outcomes occur, to implement recommendations and solutions to prevent any potential incident from happening.

Commissioner Wilcoxon inquired if there was any correlation with the observed behavior with near misses and actual crashes. Mr. Keaton stated that is part of the next phase, which is to understand the commonality between them and the behavior of the car and person.

Commissioner Wilcoxon inquired if there is anything in this system that compensates for parallax. Mr. Keaton explained within the first phase it was just to cover the intersection, as all expenses were out of pocket. However, additional funding has been received for phase 2 and will be able to capture a full view of the intersection. The detection models are being improved to see pedestrians farther than 100 meters.

Commissioner Wilcoxon inquired if the software allows for compensation of intentionality. Mr. Keaton stated that will be part of the predictive analysis behavior which comes with an understanding of more data to build models of predictive movement.

Commissioner Wilcoxon inquired if this software is compatible with the technology used by the City if a signal had to be sent. Mr. Keaton stated they have found expert partners that have established technology to streamline the data into their software to provide those solutions.

Commissioner Kowal inquired if the data provided something unexpected. Mr. Keaton stated he was not expecting the volume of near misses during midday versus nighttime. Commissioner Kowal asked if the City took the data and looked to see if there was any correlation with what is occurring with the signals during that time. Mr. Keaton advised this is the first time he has been able to look at the data and assures there will be deeper look into the details and report back to the Commission.

Chair Iacovo inquired what is done with the data and if cities have any liability issues pertaining to safety. Mr. Guntupalli stated they are doing their job putting every effort into making intersections safer and does not think there is any additional liability on them. This project was launched from a traffic engineering standpoint to see if anything can be done to make it safer for pedestrians and vehicles.

Chair Iacovo inquired if the 14-18 seconds to cross the street is the time it takes or the allowable time. Mr. Keaton clarified it is the time it takes to cross and stated the signal and crosswalk time data is being looked at to see how they correlate.

Chair Iacovo inquired if this data shows vehicles that are looking right then left and start to turn right only to find a pedestrian in the crosswalk. Mr. Keaton stated within phase 2 they will be looking to understand that path, the level of risk, and when it is happening.

Commissioner Cardella inquired if the city owned more plug and play devices could they be moved around and if so, what is the ideal time to be gathering useful information? Mr. Keaton explained the technology would need to remain in place to collect transportation data 24/7.

Vice-Chair Anderson inquired of the parameters used to determine the interaction between vehicles and pedestrians in near miss incidents. Mr. Keaton explained their algorithms have been enhanced and continue to be improved for better accuracy. He went on to explain the process they use, which includes GPS coordinates. Vice-Chair Anderson clarified vehicle speed and pedestrian location measurements are gathered. Based on the results the model is refined. Mr. Keaton said exactly, the closer one approaches zero risk rate the more risk there is. He wants to compare and understand what other companies are doing and review publicly available data. Vice-Chair Anderson inquired about privacy issues and what happens to the data. Mr. Keaton stated the data is not reshared or repurposed without approval from the City and legal department.

Commissioner Wilcoxon inquired if any of the test intersections are equipped with leading pedestrian intervals (LPI). Mr. Keaton stated they are not. Commissioner Wilcoxon inquired if any of the intersections in Scottsdale have LPI. Mr. Guntupalli stated this intersection does have LPI; more will be installed, as they want to address pedestrian safety concerns.

3. INTRODUCTION OF THE NEW TRANSPORTATION PLANNING MANAGER

Chair Iacovo reminded the Commission that Dave Meinhart held this position prior to his retirement in December.

Mark Melnychenko, Transportation and Streets Director, stated Nathan Domme was selected for the Transportation Planning Manager position. Mr. Domme will be a great fit as he is a multifaceted planner, worked closely with Mr. Meinhart, has experience as a transportation planner in the public and private sectors, and work on CIP projects. Chair Iacovo welcomed Mr. Domme.

Mr. Melnychenko stated Shane Lopez, Paving Manager moved on to Salt River Pima-Maricopa Indian Community and Ed Padron, Paving Supervisor, was selected to be his successor. Mr. Padron has 25 years of experience in the asphalt industry and has been employed with the city for about five years. Chair Iacovo stated Mr. Padron's background in paving is critical, as half of the CIP projects relate to preservation, paving, and pothole repair.

4. UPDATE ON GRANT APPLICATIONS, STATUS, AND AWARDS

Nathan Domme, Transportation Planning Manager, provided an overview of grant applications, results, and awards.

Grants provide additional funding on all exclusive projects; allows development of projects not likely to be done with regular funding and allows the City to leverage funds; permits faster implementation of projects and generates more innovative projects. Grant titles help to define what they will cover.

He presented an overview of available federal grants, the meaning of “call for projects”, design assistance grants, Federal grants applied for and received. In 2022, applications were submitted to seven grants; three were awarded and one is still in process. Mr. Domme provided an overview of current projects going forward because of grant funds received.

Chair Iacovo inquired how much has been requested from the RAISE grant. Mr. Domme stated \$14.5 million was requested with a \$4.8 million local match.

The process for selecting projects and grants begins with staff identifying grant opportunities and their timeline, grant criteria that can change each year, and review of future projects. Projects are selected based on the need and ability to score high on the grant. Transportation staff will also assist other departments with grant applications they are requesting which are related to transportation.

Mr. Domme provided an overview of recently completed and active grant-funded projects. The City has received \$22 million in grant funding for current CIPs, which are at various stages of completion.

Vice-Chair Anderson inquired how the grant opportunities are found. Mr. Domme stated the usual way to find grants is through the Federal Highways Website and Maricopa Association of Governments (MAG) website. Ms. Conklu stated a ‘call for project’ is sent out to member agencies, which provides parameters, funding, and deadline. Mr. Melnychenko stated they also have a liaison in D.C. who corresponds with the City regarding federal initiatives.

The RAISE grant’s criteria is specific to the safety, environment, sustainability, quality of life, mobility and community connectivity, economic competitiveness and opportunity.

Chair Iacovo stated the grants are so competitive and commended City staff on their hard work. She noted Mr. Melnychenko has previously presented all the current projects so the Commission is familiar with them.

Mr. Melnychenko stated he and Ms. Conklu had an opportunity to sit down with DOT after their submittal was denied and gained insight on how to improve the grant applications to make stronger connections with economic need and transit.

Mr. Domme provided information on the HonorHealth Blue Zones Project that helps communities to live better and longer by improving their environment through economic vibrancy, environmental quality, and public health. The goal is to make communities more livable, walkable, and bikeable. Scottsdale has been chosen this year as the first city in Arizona. This is an exclusive partnership and the City intends to actively participate in this process. Mr. Melnychenko stated HonorHealth felt strong about the adoption of TAP, work on a sustainability and safety action plans were strong elements in being selected.

Commissioner Wilcoxon complimented Mr. Domme on the job he and his staff are doing looking for these opportunities to advance safety and equity for all. Mr. Domme stated he finds value in

matching the criteria based on directives from MAG, State, and Federal government, as it helps to plan initiatives that help in leading and directing good projects.

5. BICYCLE FRIENDLY COMMUNITIES' APPLICATION PROCESS

Susan Conklu, Senior Transportation Planner, provided an update on the League of American Bicyclist (LAB) Bicycle Friendly Community Program that actively supports and encourages people to ride bikes for transportation and recreation.

- LAB looks comprehensively at a city's achievement in the "5 Es"
 - Engineering
 - Education
 - Encouragement / Events
 - Equity
 - Evaluation and Planning
- Provides measurable goals for continuous improvement
- Provides best practices and resources
- Clear comparisons to peer cities
- Helps compete for grant funding
- Acts as a tool for economic development

The LAB provides awards that range from Honorable Mention up to Diamond status. In 2005 and 2007 Scottsdale was the first community to be awarded the silver level without a university or college. In 2011, 2015, and 2019 Scottsdale advanced to and maintained the gold level. There are almost 500 communities in the LAB program with 5 platinum communities and 34 gold communities. Approximately 80% of the gold and platinum communities have a major college campus. Part of the application process is for LAB to acquire public input, utilize local reviewers to evaluate the application, and provide a report card with feedback, which includes building blocks, categories, and key outcomes. The report card provides information on the average platinum community that offers ideas for improvement.

The 2022 TAP, bikeway element includes an important goal to achieve the platinum level status, policies, and performance measures, such as wayfinding, bike counts, and mileage of bike lanes completed.

Key steps to reaching the platinum level include improve low stress on street bike network, increase separation and protection based on the adjacent motor vehicle to make bicycling more appealing to all ages and abilities. Things that are already being done and relate to this are the improvements to 68th and 70th Street bikeways and adding buffered bike lane to Jackrabbit Road. Another component is education such as safe routes to school program that they are improving on since the pandemic. As part of the Bicycle Friendly Business program that engages businesses to promote biking to their employees and customers, Scottsdale initiated a Bike to Work day with sponsored stops. This engages small businesses and help the City become more bike-friendly.

Scottsdale is already working on comprehensive street safety action plan, right-sizing the road, and keeping it appropriate for the capacity, which address safety. As well as the work being done with bicycle and pedestrian collision study. Bike counts are being collected in certain locations, with more being added.

Goals that were incorporated in the 2020-2023 application include:

- Improving biking within Old Town as part of the Old Town Bicycle Master Plan
- Increase overall bikeway mileage
- Complete bike lanes on Dynamite Blvd, which has been completed
- Implement path wayfinding signage, which will be implemented over the summer
- Increase education for kids and adults
- Hold signature events, such as an open street event and expand Bike Month
- Pedestrian and bicycle safety outreach
- Messaging for sharing the road and path, which is in the discussion phase
- Scottsdale has installed 24-hour continuous counters to obtain bike counts
- Analyze bikeway gaps
- Update Old Town Bicycle Master Plan and TAP

The next steps are to prepare to complete the application which is due by August 30, 2023. Last spring staff attended webinars by the LAB related to new questions such as accessibility and equity. Meetings with colleagues at the platinum level were held to gain important knowledge on their programs and gain ideas to grown Scottsdale's events. Staff has gathered input from the public, the Paths & Trails Subcommittee, and the Transportation Commission.

Mr. Melnychenko stated this shows the City where they want to be headed. The active transportation system makes Scottsdale special; it is important to solidify that with this designation. The designation helps with grant processes, and has a strong economic impact with development opportunities.

Commissioner Kowal provided an overview of Scottsdale Life and suggested they promote education and physical activity utilizing this program.

Commissioner Wilcoxon inquired if practical growth is seen in bicycling as an alternative means of transportation. Ms. Conklu stated there have not been a lot of businesses wanting to put more bike parking than required under ordinance. Every now and then staff is asked what the City can do to help provide more bike parking. They would like to see what patterns the comprehensive data reveals prior to taking on new projects.

Vice-Chair Anderson inquired if there are certain goals that must be met to reach platinum and do they raise the bar once a city has reached that level. Ms. Conklu explained LAB provides feedback on things they would like to see when scoring. It is important to demonstrate the City is doing the things they said they would, and new goals were developed. LAB does not raise the bar, but the city must continue demonstrating it is doing more all the time. Vice-Chair Anderson stated they expect progress, and asked if the awards are strictly subject to judgment by LAB or do they have guidelines they abide by. Ms. Conklu stated they have guidelines to make it as consistent as possible and have local reviewers assist them.

Chair Iacovo inquired if the TAP and Bicycle Master Plan is pointed to in the application as there is a large section of the TAP that focuses on bicycles, bike-friendly community, and buffered lanes. Ms. Conklu state the application allows them to link the TAP and Bicycle Master Plan and during scoring they can see the actual documents.

6. PROJECTS AND PROGRAMS UPDATE

Mr. Melnychenko provided an update on projects and programs.

- Coordination with Scottsdale Ranch and Salt River Pima-Maricopa Indian Community to clean out four washes that drain into contributories in the Indian Community. Staff will assist in trimming and removing vegetation and grading. This project is awaiting approval from the landowners and hopes to begin within the next month and a half.
- Updating the ADA ramps within Scottsdale Ranch HOA and installing colored concrete in two areas near the lake.
- Exploring changing the code to prohibit the homeless from using the transit shelters from 10:00 p.m. to 7:00 a.m. and reduce the homeless issue within the transit system. Another way is to add standard shelters within the city. A further update will be brought before the Commission.
- The Street Maintenance Crew has been providing interdepartmental assistance.
- The Spring Training Trolley Route will be providing free transportation to home games, which will start one and a half hours before the first pitch and end one and a half hours after the last inning. This ridership data will also be used in discussing bringing back the Downtown Circulator in Old Town.
- Staff attended the Senior Expo at the Scottsdale Center for the Arts to promote the trolley service, cab connection, transit, bike path and trail system. Feedback was obtained by those who attended, noting senior residents are interested in transit services. This feedback will be used to make the system more effective and to grow ridership.
- Upcoming Transportation events for Bike Month include:
 - Bike to Read on April 1st
 - Cycle of the Arts on April 16th
 - Bike to Work on April 27th
 - Earth Day at North Corp yard

Commissioner Miller inquired if any work has been done with the City to deal with the homeless people and provide resources instead of just chasing them off. Mr. Melnychenko stated the Human Services department has primary contact with the homeless residents. They also work with the Police Department and transit providers, as the purpose is to make sure the riders have a safe place to sit daily, but need more tools in the toolbox to address this concern within the system. Vice-Chair Anderson inquired if Scottsdale has a program to create a homeless shelter. Mr. Melnychenko advised the only discussion he is aware of is in Tempe, where a shelter would be constructed on the border and used by both cities. Chair Iacovo asked how many shelters were affected by this issue. Mr. Melnychenko stated he does not have the exact information with him but noted Mustang Library, Scottsdale Road, Thomas Road, and Earl Road are those of highest concern at this time.

7. COMMISSION IDENTIFICATION OF FUTURE AGENDA ITEMS

- Sensagrate Phase 2
- HonorHealth Blue Zone
- Follow up Bicycle Friendly Community Application
- Construction Mitigation Plan

8. ADJOURNMENT

With no further business to discuss, being duly moved by Commissioner Wilcoxon and seconded by Commissioner Kowal, the meeting adjourned at 7:21 p.m.

AYES: Chair Iacovo, Vice Chair Anderson, Commissioners Cardella, Kowal, Miller,
and Wilcoxon NAYS: None

SUBMITTED BY:
eScribers, LLC

***Note: These are summary action meeting minutes only. A complete copy of the
audio/video recording is available at <http://www.scottsdaleaz.gov/boards/transp.as>**