



APPROVED

SUMMARIZED MINUTES

**CITY OF SCOTTSDALE
TRANSPORTATION COMMISSION
REGULAR MEETING**

**Thursday, September 21, 2023
Kiva-City Hall
3939 N. Drinkwater Boulevard
Scottsdale, Arizona 85251**

CALL TO ORDER

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

ROLL CALL

PRESENT: Don Anderson, Chair
B. Kent Lall, Vice Chair
Emmie Cardella
Mary Ann Miller
Lee Kauftheil (telephonic)

ABSENT: Karen Kowal
Kerry Wilcoxon

STAFF: Mark Melnychenko, Transportation & Streets Director
Susan Conklu, Senior Transportation Planner
Nathan Domme, Senior Transportation Planner
Phil Kercher, Traffic Engineering Manager
Greg Davies, Senior Transportation Planner
John Savage, Traffic Engineer
Kyle Lofgren, Office Manager

GUESTS Berwyn Wilbrink, Arizona Department of Transportation
Greg Fly, Arizona Department of Transportation, Design Project Manager
Derek Boland, Senior ADOT Project Manager

WELCOME

Chair Anderson welcomed new Commissioner Lee Kauftheil.

PUBLIC COMMENT

There were no public comments. Written comments were included in the Commission packet.

1. APPROVAL OF MINUTES

Chair called for approval of the minutes. One correction was made.

COMMISSIONER MILLER MOVED TO APPROVE THE REGULAR MEETING MINUTES OF THE TRANSPORTATION COMMISSION ON AUGUST 17, 2023 AS AMENDED. VICE CHAIR LALL SECONDED THE MOTION, WHICH CARRIED 5-0 WITH CHAIR ANDERSON, VICE CHAIR LALL AND COMMISSIONERS CARDELLA, MILLER AND KAUFTHEIL VOTING IN THE AFFIRMATIVE WITH NO DISSENTING VOTES.

2. ADOT LOOP 101 UPDATE

Berwyn Wilbrink, Arizona Department of Transportation and Greg Fly, WSP, Design Project Manager, provided an update on improvements for the 101 from Shea to Princess Drive.

Project background:

- Design concept report development in 2010
- Public survey conducted in 2020
- Design concept reported updated in 2021

Project purpose and need:

- Improve traffic flow on Loop 101 and cross streets
- Increase capacity to accommodate existing and future traffic levels through 2040
- Congestion will worsen if improvements are not made

Project timeline:

- Design completed: Summer 2023
- Construction begins: Early 2024
- Project completion: Two-year timeline

Improvements include:

- Add one general-purpose lane in each direction
- Add third southbound left turn lane at Pima/Princess Interchange
- Convert Frank Lloyd Wright Blvd interchange to diamond configuration

- Add right turn lanes at Raintree Drive and Shea Boulevard
- Resurface pavement
- Update sidewalks to make them ADA compliant
- Upgrade freeway and ramp lighting to LED and adding safety features for wrong-way drivers

Crossroad improvements (including ADA, median and turn lane additions and improvements):

- Princess Drive
- Bell Road
- Frank Lloyd Wright Boulevard
- Raintree Drive
- Thunderbird Road
- Cactus Road
- Shea Boulevard

Mr. Fly addressed the area between Princess and Frank Lloyd Wright, with regard to potential backups associated with the Princess exit. The improvements include an additional general purpose lane and increasing the existing three lanes to four lanes. In terms of traffic volumes, the design team looked at alternatives to be able to utilize the pavement to add an additional, or fifth, general purpose lane. This will allow the Raintree entrance ramp and the Frank Lloyd Wright entrance ramp to come into their own lanes, rather than weaving into the new fourth general purpose lane. To drop the lanes moving north, there will be installation of a two-lane exit ramp at Princess. Aesthetics and landscaping were reviewed.

A review of noise abatement and analysis was provided:

- Noise analysis based on current ADOT/Federal regulations
 - Performed noise measurements within project limits
 - Predicted noise levels based on future (2040) traffic volumes
 - Determined noise mitigation requirements and locations of new walls and modifications to existing walls
- Results - The existing sound walls will continue to reduce noise below the ADOT threshold
- No need for new or modified sound walls

Construction expectations were discussed:

- All existing freeway lanes will be maintained during weekday peak travel times
- Periodic weekend and nighttime restrictions and closures will be allowed
- 60-day ramp closures will be allowed similar to previous Loop 101
- Widening between I-17 and Pima/Princess
- Closures/restrictions will be minimized during special events and holiday periods.
- Subscribe to updates at: azdot.gov/Loop101PrincesstoShea

Commissioner asked for greater elaboration on the wrong-way signals. Mr. Fly stated that the wrong-way detection system includes thermal camera placement on exit ramps, which detect vehicles potentially traveling in the wrong direction. The detection system alerts the traffic operation center, which immediately dispatches DPS law enforcement. The system is also installed at the section from the I-17 to Princess portion of the project installed a few years ago. It has been installed throughout the Valley on many fairly recent projects in the last few years.

Commissioner asked question on pavement. Mr. Wilbrink stated that ADOT, Maricopa Association of Governments (MAG) and Valley cities are still in discussions regarding what the final finish on this particular segment will be. In some areas, there is an asphalt overlay on both sides of the freeway. In other places, there has been utilization of a diamond grind of Portland cement concrete. Final decisions have not yet been made. Mr. Fly stated that original asphalt was installed in the early 2000s, at the time of original construction.

Commissioner asked whether the noise studies predicting 2040 volumes took into consideration the rise in electric vehicle usage impacts. Mr. Wilbrink stated that most freeway noise is not associated with the engines as much as it is the tires. The two solutions have been modeled and provide similar performance.

Vice Chair inquired about processes for keeping the public informed on lane and ramp closures. Mr. Wilbrink stated that in addition to the website, ADOT works with the City to produce flyers. These are associated with press releases and media bursts. The City will participate in the construction meetings to be kept apprised.

Chair asked about the general consensus on use of the diamond cut versus asphalt. Derek Boland, Senior ADOT Project Manager, said that currently, there is a preference for diamond grind; however, evaluation and discussion is ongoing from a regional planning perspective. From a specific project perspective, direction has not yet been determined. Maintenance and noise factors weigh heavily on considerations.

Chair asked about program budget. Mr. Boland estimated the programmed budget at approximately \$150 million.

Commissioner asked how the decision was made. Mr. Wilbrink stated that the study and Design Concept Report (DCR) initially focused on widening the freeway. The latter DCR in 2010 focused on widening of cross streets. Traffic studies were performed to determine turning movements and through movements. The SPI (single-point urban interchange) alternative favors a heavy left-turn movement. At Frank Lloyd Wright, there is a considerable through movement, necessitating an opportunity for this traffic to travel under the freeway. These factors form the basis for the reconfiguration.

Commissioner referenced the proposed four lanes with an additional general purpose lane and inquired as to cost considerations and other potential options, such as sidewalks and pedestrian needs. Mr. Wilbrink stated that as freeways do not feature sidewalks, pedestrian facilities will be limited. In regards to the configuration, the right-of-way and corridor were cleared for improvements via the design concept report and the environmental clearance documents. This included close work with partners, including federal highways, in order to fit an extra lane. Traffic modeling was used to evaluate various scenarios.

Commissioner asked about timelines and lane closures, Mr. Wilbrink stated the due to the event schedule and holiday moratorium, closures are really restricted to summer. If closures were more flexible and included winter, the construction could be sped up quite a bit. Mr. Fly clarified that they were not currently planning anything in the winter when they are not allowed to.

Chair asked question about contractor consequences and incentives, Mr. Fly stated that there were consequences for the contractors for doing items they are not supposed to, but there are no incentives to finish the project sooner.

3. ARTERIAL LIFE CYCLE PROGRAM (ALCP) FISCAL YEAR 2023/24 UPDATE

Greg Davies, Senior Transportation Planner, provided an overview of the ALCP Program:

- Funded through Fiscal Year 2025-26 (0.5 percent regional sales tax and federal funds)
- Maricopa Association of Governments (MAG) oversees ALCP
- Cities manage their own projects
- Cities program total project cost and get reimbursed 70 percent
- Projects require a minimum 30 percent local match
- Focus on adding roadway capacity through additional lanes and/or intersection widening
- Projects can include bike lanes, sidewalks, and paths/trails that provide pedestrian access

Key considerations:

- Span of ALCP is 20 Years
- Several Factors Impact Costs Over a 20 Year Period
 - Great Recession 2007-2009 Economic Impacts
 - COVID-19 Pandemic 2019-2021 Economic Impacts
 - Right of way acquisition Challenges
 - Utility Relocations
 - Project Feasibility
- ALCP Funded By Four Main Funding Sources
 - Scottsdale 0.1% Transportation Sales Tax (tax sunsets 1/31/29)
 - Scottsdale 0.2% Transportation Sales Tax (no sunset)
 - Maricopa County Half-Cent Sales Tax (tax sunsets 12/31/25)
 - Federal Surface Transportation Block Grant Program Funds

In July 2023, staff conducted a proforma audit. To date, \$138 million has been invested into the roadway system, with the City match at \$42 million and the Region's match at \$96 million. There have been 37 projects identified with 17 completed; 6 in design; 7 in construction; 5 pending, and 2 cancelled.

A review of the existing strategy for addressing projected ALCP cost increases was provided:

- Identified \$130 million cost increase to program
- Address cost increase using three options (A-C)
- Reallocate funds programmed for Loop 101/Hayden Road Interchange (Option A)
- Require vacant land parcels to build roadway along their frontage consistent with zoning requirements (Options B and C)
- Option A: Infeasible Project: Loop 101/Hayden Road Interchange
- Option B: Undeveloped land on both sides of project corridors: Scottsdale Road, Pima Road, Hualapai Drive
- Option C: Undeveloped land on one side of project corridors: Scottsdale Road and Pima Road

The ALCP proforma audit included a review of the 13 projects in the 2018 ballot. Of these, 5 have been designed, 3 are in design, 1 is in construction, 2 are pending initiation. The audit also

included a review of the remaining ALCP costs over the next two years, totaling \$282 million and \$84 million City match.

The analysis included four revenue forecast scenarios:

- Negative (10 percent) forecast
- Negative (2.4 percent) forecast
- 0 percent growth forecast
- 3.5 percent growth forecast

If revenues are insufficient to complete the identified projects, it may be necessary to ask voters to approve extension of the 0.1 percent sales tax.

Next steps include:

- Continue to monitor status of Arizona State land parcels
- Reassess project funding distribution for FY 2025 ALCP update
- Collaborate with MAG to shift additional funds into critical corridors
- Anticipate a voter-approved Prop 400E in November 2024

Commissioner question regarding the parcels identified in Options B and C. Mr. Davies stated the City does not have development impact fees. However, there are stipulations for the developers to make half-street improvements, including lanes, sidewalks, trails or paths.

Commissioner asked about the audit forecast. Mr. Davies went over the forecast scenarios highlighting that two of the options were very pessimistic approaches.

Mark Melnychenko, Transportation and Streets Director stated that the City had a positive meeting with MAG approximately two months ago and they were amenable to an approach of realigning projects in accordance with the needs of the City.

Vice Chair inquired as to project funding. Mr. Davies stated that the City's 30 percent budget portion may increase at the City's discretion according to identified priorities as well as cost increases.

In reply to a follow-up question from Chair, Mr. Davies explained that projects are identified and vetted out, then are presented to MAG which automatically reimburses 70 percent of the costs once construction begins. Mr. Melnychenko added that based on estimates from all projects, MAG has a lump sum available to draw from. Projects are reviewed with MAG monthly to reallocate funds across projects as needed.

4. ROUNDABOUT EDUCATION

Phillip Kercher, Traffic Engineering and Operations Manager, and John Savage, Traffic Engineer, gave the presentation. In 2011, there were three roundabouts in the City and today there are a total of 27. The 2020 Transportation Action Plan includes a roundabouts first policy, meaning that roundabouts are considered as a first choice for any new traffic control.

Mr. Kercher reviewed the details of the program.

Roundabout characteristics:

- Generally circular in shape
- Yield signs at entries
- Counterclockwise direction
- Geometric and physical features that force slow travel speeds

National safety information:

- One of 28 Proven Safety Countermeasures (PSCs) that reduce roadway fatalities and serious injuries
- FHWA cites an 82 percent reduction in fatal and injury collisions compared to AWS
- 78 percent reduction in fatal and injury collisions compared to signalized intersections
- Reduces conflict points compared to conventional intersection from 32 to 8
- Removes all crossing conflicts which are often tied to red light running, left turns, and head-on collisions
- Remaining conflicts occur at low speed resulting in less severe collisions
- Reduces pedestrian-vehicle conflict points by 50 percent
- Setback crossings reduce crossing distances and allow for staged crossings across one direction at a time
- Separates driver decision making in the roundabout and at pedestrian crossing locations

Cost considerations:

- Total cost varies based on site conditions and project goals
- Signals and roundabouts have different ROW needs that can affect project cost
- Construction costs for roundabouts generally range between \$3.5 and \$4 million and signals around \$600,000 and \$1 million

Roundabouts in Scottsdale:

- 27 intersections with right of way control via roundabout
- Oldest roundabout in operation since 1986
- Newest roundabout at Miller and Osborn opened in 2023
- More roundabouts are in the planning or construction process

Mr. Savage provided a review of the City's roundabout evaluation:

- Roundabout performance characterized by both Level of Service (LOS) and collision experience
- LOS analysis requires detailed microsimulation or extensive data collection and was not evaluated as part of this process
- LOS analysis is performed with new roundabout intersections, historical analysis shows roundabouts can reduce delay

LOS and other traffic condition details were discussed for City locations:

- Hayden Road and Northsight Boulevard
 - 64 percent reduction in average collision severity post roundabout construction

- Annual number of collisions increased from 8.4 to 14.8, but recent years may indicate an improvement
- 62 percent decrease in percentage of collisions involving injury
- Overall injuries at intersection reduced by 34 percent after roundabout construction
- Volumes have remained stagnant since construction of roundabout
- 90th Street at the Mustang Library
 - 60 percent reduction in average collision severity post roundabout construction
 - 34 percent decrease in percentage of collisions involving injury
 - Overall injuries at intersection remained similar
 - Volumes have remained consistent since construction of roundabout in 2017
 - 2018 volumes excluded from average value
- Miller Road and Osborn Road
 - An average annual severity of 1.24 would mean a 60 percent reduction in a severity
 - Based on multi-lane roundabout data, the number of collisions may increase
 - Average percentage of collisions with injury is close to Hayden Road and Northsight Boulevard pre-roundabout
 - Traffic volumes have declined over the evaluation period

Chair requested clarification. Mr. Savage confirmed that while the number of traffic accidents may increase at the roundabouts, the severity of such accidents has been reduced substantially. Vice Chair further commented that incidents appeared to decrease overall over time.

Commissioner asked regarding accidents. Mr. Savage confirmed that the accident counts include in-car travelers as well as pedestrians.

5. PROJECTS AND PROGRAMS UPDATE

Mark Melnychenko, Transportation & Streets Director, provided updates on the following programs and projects:

- Department policies and plans
- Bicycle Friendly Community update
- Scottsdale rated the sixth best city for recreation in the United States by WalletHub
- Scottsdale selected as one of 62 cities worldwide under the “What Works Cities Certification,” for use of data to inform by Bloomberg Philanthropies
- Scottsdale selected by Blue Zones to undergo a health and livability assessment
- 68th Street improvements from Thomas Road to Indian School
- Roundabout First progress
- Paiute Center paving
- Information cards in trolleys
- Future traffic signals
 - 64th Street/Osborn Road
 - Scottsdale Road/1st Avenue
 - Scottsdale Road/Dove Valley Road
- Shea Boulevard Paving Project
- Emergency response: Storm cleanup
- Streetlight knockdown
- Other damaged infrastructure
- ITS Section: Signal repairs

Commissioner suggested that damage to infrastructure and light poles be tracked to identify problem areas. Mr. Melnychenko confirmed that the Department works very close with the Police Department and Risk Management in this regard.

6. COMMISSION IDENTIFICATION OF FUTURE AGENDA ITEMS

Chair noted the fullness of October's agenda.

The following agenda items were identified:

- Process for measuring pavement value index
- Update on the 124th Street project
- Presentation the Public Outreach Officer
- Pavement/cool pavement

7. ADJOURNMENT

With no further business to discuss, being duly moved by Commissioner Miller and seconded by Commissioner Cardella, the meeting adjourned at 7:10 p.m.

AYES: Chair Anderson, Vice Chair Vice Chair Lall, Commissioners Cardella, Miller and Kauftheil

NAYS: None

SUBMITTED BY:

eScribers, LLC