



LEGAL ACTION REPORT

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Mayor and Council Tucson Transit Advisory Committee and to the general public that the Committee will hold the following meeting which will be open to the public on:

Monday, January 6th, 2025 at 3:00 PM
Park Tucson Conference Room, 110 E. Pennington St., Ste. 150

1. Call to Order/Roll Call – 5 minutes 3:00 pm

Those present were:

Members

-Suzanne Schafer, Ward 3
-Margot Garcia, Ward 6
-Mike Sanchez, Ward 4
-Nicole Feldt, City Manager
-Gene Caywood, City Manager
-Mike Milczarek, City Manager

Others

Marcia Spark, Public
Ron Spark, Public
Matthew Boepple, Public
Allen Benz, Public
Richard Mayer, Public
Kimberly Sargent-Mason, Public
Preston McLaughlin, PAG/RTA
Thomas Robertson, PAG/RTA
Blake Olofson, City of Tucson
Ian Sansom, City of Tucson
Rhett Crowninshield, City of Tucson
Mikel Oglesby, Sun Tran
Davita Mueller, Sun Tran
Monica Landgrave-Serrano, City of Tucson

Those absent were:

Members

-Angie Quiroz, Ward 5
-Riley Merline, Ward 1
-Lisa Shipek, Ward 2

2. Approval of Minutes – (Vote) – 5 minutes
Chair Suzanne Schafer

The approval of minutes was moved, duly seconded, and, hearing no objections, Chair Suzanne approved the motion, pending the correction to item 7 of the December minutes.

3. Call to the Audience (First) – 5 minutes

NO ACTION TAKEN

Ron Spark said the RTA transit funding is unsatisfactory and he thinks the City of Tucson should go on its own. He hopes this will make it to a future TTAC agenda for discussion.

Allen Benz mentioned that in Mayor Romero's December newsletter, transit will be fare-free until June 2026. In Valley Metro, a day pass is \$4 dollars, and \$104 for a monthly pass. He says kudos to all those working in favor of fare-free transit in this area. He says City of South Tucson new leadership is in favor of transit.

Richard Mayer says the NW corner of University and Stone has a bus stop and it gets five buses. The 4,10,19, and the 16 usually arrive at the same time. For the third time he has been left behind by a bus. It's not the driver's fault, it is the stop with no queueing space. He wishes there was a better way to organize this bus stop.

Preston McLaughlin made an announcement letting people know about the in-person meeting taking place tomorrow, Tuesday, January 7th starting at 6:00 pm at the Tucson Association of Realtors. There is also a virtual meeting taking place today, Monday January 6th at 6:00 pm, here is the registration link: https://us06web.zoom.us/webinar/register/WN_tzUMIURORVGz-9b_bIQQaQ#/registration.

4. Update and Announcements from Committee Members and Staff (Informational Only) – 5 minutes NO ACTION TAKEN

Monica mentioned the Sun Tran App Survey is now live in their website at the following link: <https://www.surveymonkey.com/r/SunTranAPP>. The survey will close on January 15, 2025. Likewise,

Margot says she has had to use the Sun Van app instead of the customer service phone number for canceling reservations.

5. Complete Streets Coordinating Council Update – 5 minutes NO ACTION TAKEN

N/A

6. Transit Center Facilities - 15 minutes NO ACTION TAKEN

Mikel Oglesby mentioned that the issue at the transit centers is the same happening at the bus stops: a cleaning crew shows up and 15 minutes later it is dirty again, unfortunately. He says the turnover and the traffic is a concern, to the point where bathrooms have had to be closed down for safety and/or maintenance reasons. He says Sun Tran is spending 1.6 million dollars a year in terms of cleanliness, with about 90 thousand dollars used for power washing, for instance. People turnover is very high, with 25, 15, and 8 routes at Ronstadt, Laos, and Tohono, respectively. For example, tamper-proof water fountains were recently installed, but he hears conflicting complaints and concerns, with some happy with the new water fountains and others upset because people cannot use them to clean themselves anymore. He says they are doing everything they can in relation to the people using the transit system based on boarding data, but that it is tricky because there are people who at the transit centers not boarding buses. Mikel mentioned it's been 6 months since he started and that on-time performance has been a priority, as well as the state of the bus shelters, with cleanliness and loitering being an important concern. Mikel thinks he knows what people want to see, to see the transit centers and say this is nice, this represents Tucson in terms of function, beauty, security, etc. However, unintended consequences need to be addressed, or we will be going in circles with graffiti, vandalism, etc.

7. Transit Budget Update – 15 minutes NO ACTION TAKEN
Isaac Marcor

N/A

8. Technical Update: Priority Signal Technology Presentation - 20 minutes NO ACTION TAKEN
Blake Olofson

Transit Signal Priority

Tucson Transit Advisory Committee
Department of Transportation and Mobility
Traffic Engineering Division
Blake Olofson, PE, PTOE

Udaya Adhikari
Mingfeng Shang, Ph.D.
Yao-Jan Wu, Ph.D., P.E.

Emergency Vehicle Preemption (EVP)

- Will interrupt normal signal operations to prioritize emergency vehicles
- Ensure quick and safe intersection navigation for critical vehicles (e.g., fire engines, ambulances)
- Improve emergency response times
- Enhance safety and reliability for preempted vehicles
- Clarify right-of-way for other road users



Transit Signal Priority (TSP)

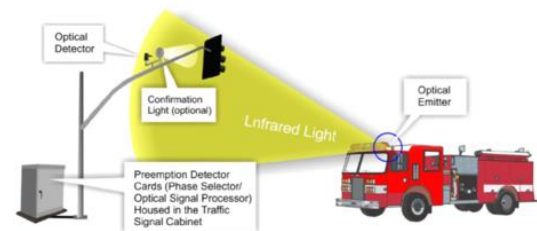
- Extend green or shorten conflicting phases
- Ability to request phase before arrival
- Can prioritize transit vehicles at signalized intersections
- Enhance public transportation reliability
- Improve street network efficiency by increasing traveler throughput
- Maintain overall traffic network performance
- Can improve mobility and reduce environmental impacts

TSP vs EVP

Aspect	Emergency Vehicle Preemption (EVP)	Transit Signal Priority (TSP)
Objectives	Prioritize safety and response time for emergency vehicles	Enhance transit efficiency and reliability
Impacts on signal operations	Interrupt signal cycles to prioritize emergency vehicles	Make minimal adjustments to maintain coordination
Applications	Address safety needs and reduces response time for emergency services	Improve mobility and reliability for public transit

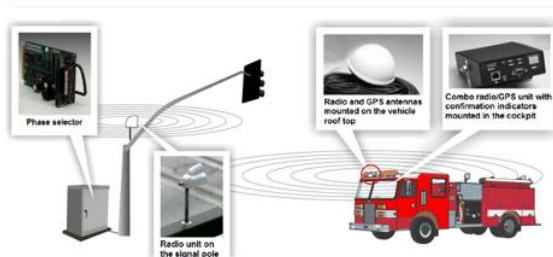


Optical Based System

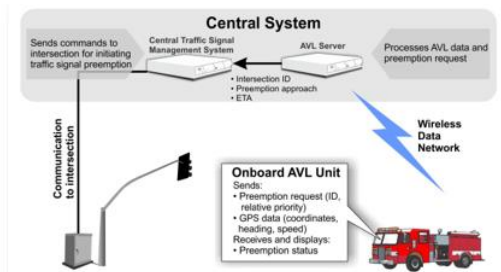


Approximately 60% of city - 252 of 420 intersections

GPS or Radio Based System



Central System



System Comparisons

Aspect	Optical-based Systems	GPS/Radio-based Systems	Central/AVL based Systems
Request Media	Infrared light	Radio wave	Wireless data communication
Line of Sight	Require absolute line of sight	No absolute line of sight required	No absolute line of sight required
Status	Confirmation lights at the signal	OBUs displays the status	OBUs displays the status
Field installation	• Detectors are needed for all approaches • Phase selectors are installed in the signal cabinet	• One radio unit is needed for each intersection • Traffic signal cabinet houses a phase selector	No field installation needed

Optical System Costs (Planning Level Only)

Optical	Per Intersection	Per Vehicle
Optical Detector	\$1,000	\$0
Confirmation Light	\$500	\$0
Phase Selector (in cabinet)	\$2,000	\$0
Optical Emitter (on vehicle)	\$0	\$200
Installation	\$3,000	\$800
Total (Rounded)	\$6,500	\$1,000

GPS & Radio System Costs (Planning Level Only)

GPS & Radio	Per Intersection	Per Vehicle
Antenna (on vehicle)	\$0	\$200
Display (on vehicle)	\$0	\$1,000
Radio (in cabinet)	\$500	\$0
Phase Selector (in cabinet)	\$2,000	\$0
Installation	\$2,000	\$800
Total (Rounded)	\$4,500	\$2,000

Central System Costs (Planning Level Only)

Central	Per Intersection	Per Vehicle
Antenna (on vehicle)	\$0	\$200
Display (on vehicle)	\$0	\$1,000
Vendor Setup per Intersection	\$1,000	\$0
Installation	\$0	\$800
Total (Rounded)	\$1,000	\$2,000

System Cost Summary (Planning Level Only)***

System	Installation - All Signals 185 Transit Vehicles	Operation and Maintenance (Per Year)
Optical *	\$1,277,000	\$160,000
GPS & Radio **	\$2,170,000	\$160,000
Central	\$770,000	\$300,000

*Assuming existing phase selector cards compatible with TSP operations. Cost to equip at remaining intersections.

**System software may be additional cost

***Based on 420 intersections and 185 Transit Vehicles (scalable)



Notes and Conclusions

- Traffic Engineering Division supports TSP
- Optical System is outdated technology - may be challenging to integrate with system monitoring
- GPS & Radio systems proven technology but most costly
- Central Systems emerging technology
- City applied for SMART grant 2022 and 2024 but not selected
- All systems are scalable, except all vehicles need on board equipment
- Intent is to include TSP in Bus Rapid Transit (BRT) project



9. Call to the Audience (Second) – 5 minutes

NO ACTION TAKEN

Allen Benz asked what the time frame is to repair and/or replace roof tiles on various bus stops, especially on Broadway, like Broadway and Alvernon. They have been out for months, he reported them, and they told him they are waiting for the tiles to arrive and then they have to install them, but there is no time frame given. He also noticed two bus stops where loitering is taking place, and he reported them. Allen also repeated his comment from last month: a parking charge component could help fund transit charged per space use, per month, and added to the cost of business licenses, or to increase the parking meter costs.

Richard wanted to know if the bus tracking system could be improved with the Transit Signal Priority options. He also said that the Sun Tran App Survey doesn't allow for nuanced feedback until the end.

10. Items and Date for Next Meeting(s) – 5 minutes

NO ACTION TAKEN

The following items were mentioned for consideration:

- Letter to the Mayor item
- Transit Budget w/Isaac Marcor

11. Adjournment 4:57 pm

For further information, contact: Monica Landgrave-Serrano, (520)-780-0635, monica.landgrave@tucsonaz.gov. Persons with a disability may request reasonable accommodation, such as a sign language interpreter, by contacting Transit Services at 520 791-5409. Requests should be made as early as possible to allow time to arrange the accommodation.