



PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE

Tuesday, August 8, 2017
7:30 a.m.

MEETING LOCATION

Tempe Transportation Center, Don Cassano Room
200 E. 5th Street, 2nd floor
Tempe, Arizona

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
1. Public Appearances The Transportation Commission welcomes public comment for items listed on this agenda. There is a three-minute time limit per citizen.	Ryan Guzy, Commission Vice Chair	Information
2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the June 13, 2017 meeting.	Ryan Guzy, Commission Vice Chair	Action
3. Procedure for Naming of City Facilities Staff will present procedure/guideline revisions regarding the City's naming policy.	Steven Methvin, Deputy City Manager	Information and Possible Action
4. Transportation Marketing Plan Staff will present the 2018-2020 Transportation Marketing Plan.	Sue Taaffe and Amanda Nelson, Public Works	Information and Possible Action
5. Leading and Lagging Left Hand Turn Traffic Signals Staff will present information on Tempe's rationale for when leading left turn arrows and lagging left hand turn arrows are used.	John Hoang, Public Works	Information
6. Tempe Transit Security Update Staff will present statistics regarding bus service, stop and facility security.	Jon King, Tempe Police Department	Information
7. Department & Regional Transportation Updates Staff will provide updates and current issues being discussed at regional transit agencies.	Public Works Staff	Information
8. Future Agenda Items Commission may request future agenda items.	Ryan Guzy, Commission Vice Chair	Information and Possible Action

According to the Arizona Open Meeting Law, the Transportation Commission may only discuss matters listed on the agenda. The city of Tempe endeavors to make all public meetings accessible to persons with disabilities. With 48 hours advance notice, special assistance is available at public meetings for sight and/or hearing-impaired persons. Please call 350-4311 (voice) or for Relay Users: 711 to request an accommodation to participate in a public meeting.



Minutes City of Tempe Transportation Commission June 13, 2017

Minutes of the Tempe Transportation Commission held on Tuesday, June 13, 2017, 7:30 a.m., at the Tempe Transportation Center, Don Cassano Community Room, 200 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Don Cassano (Chair)	Lloyd Thomas
Ryan Guzy	Susan Conklu
Brian Fellows	Kevin Olson
Charles Redman	Cyndi Streid (via phone)
Jeremy Browning	Shana Ellis
Nigel A.L. Brooks	Paul Hubbell

(MEMBERS) Absent:

Charles Huellmantel	Shereen Lerner
Bonnie Gerepka	

City Staff Present:

Shelly Seyler, Deputy Public Works Director	Laura Kajfez, Neighborhoods Services Specialist
Sue Taaffe, Public Works Supervisor	Sam Stevenson, Senior Planner
Shauna Warner, Neighborhoods Program Manager	Mackenzie Keller, Public Information Officer
Eric Iwersen, Principal Planner	Julian Dresang, City Traffic Engineer
Braden Kay, Sustainability Program Manager	

Guests Present:

Laura Ashbrook, Griffin and Associates	Lauren Kuby, Councilmember
Zina Alam, resident	Cliff Anderson, resident
John Federico, resident	Kim Gresham, resident
James Winfrey, Arizona State University	Jennifer Rode, resident
David Rice, resident	Robert Herz, resident
William Terrance, resident	Kristian Dook, resident

Commission Chair Cassano called the meeting to order at 7:30 a.m.

Agenda Item 1 – Public Appearances

See Attachment 1 for comments about agenda item #3.

William Terrance spoke about the Road Construction Traffic Mitigation agenda item. He informed the Commission that in Washington DC it is required for construction areas to maintain the bike lane even if it means closing a traffic lane. He also pointed out that the plates that cover construction areas can have sharp edges and be slippery when wet, which is a hazard to bicyclists and pedestrians.

Agenda Item 2 – Minutes

Chair Cassano introduced the minutes of the May 9, 2017 meeting and asked for a motion. A motion was made to approve the minutes.

Motion: Commissioner Kevin Olson

Second: Commissioner Lloyd Thomas

Decision: Approved

Agenda Item 3 – McClintock Drive Street Configuration

Julian Dresang made a presentation about the McClintock Drive street configuration. Topics of the presentation included:

- Traffic Counts
- Bicycle Counts
- Travel Times
- Crashes
- Stakeholder Feedback
- Segment Scenarios
- Public Input
- Options which include:
 - Maintain current configuration
 - Restripe to original configuration
 - Implement the collaboration scenario
 - Select a different combination of alternatives

The Commissioners asked the following questions and made the following statements.

- What is the level of service for McClintock Drive? Staff did not perform an analysis; however, experience would lead staff to believe that it performs at a level B or C during non-peak and a D or F during peak, which is consistent with other arterials in Tempe.
- How was the crash data presented to the public? Staff responded that the March public meetings focused on the corridor alternatives only. Crash data had been presented at previous Council meetings and was available online. Staff prefers to have three years of crash data before drawing any conclusions even though the trend of crashes going down.
- Letting the public know that this project could reduce crashes might be helpful.
- Will adding a third southbound lane near the US 60 encourage more people to use McClintock Drive instead of the freeway? Staff stated that it is unknown how adding the third lane southbound near the US 60 will affect traffic.
- Did we receive much feedback from the retailers along McClintock Drive? Staff responded that businesses were notified of the public meetings and Steve's Espresso commented on a preference for returning the street to its original configuration.
- Bicyclists riding on the sidewalk should be counted because one goal of the project is to get people off the sidewalk and into the bike lanes.
- How were the bike counts collected? Staff said that video counters were used as well as a third party vendor to collect the data. The presentation numbers include only those bicyclists using the bike lane.
- Do we know what the shared path at the railroad underpass width will be under the collaborative scenario? Staff said that removing the planters will likely add four or five feet.
- Part of the problem is the Council summary. The Mayor states the consensus after each meeting about this project, but when the Council discusses it again, the direction and previous consensus changes.

- If the City removes the bike lanes, we will at some point in the future have to consider adding the bike lanes back to McClintock Drive because of growth.
- The bike lanes are part of a larger transportation network.
- When heading southbound toward Broadway Road, how would the bicyclist merge from the shared area with the barrier wall to the bike lane? Staff said that at this point the designs are at 15% and that would be something for the engineers to determine.
- It is stated in the memo that bicycle traffic is low when compared to vehicular traffic. What is the comparison of bicycle traffic on McClintock to other arterials with bicycle lanes? Staff responded that excluding the downtown area, there aren't any other north/south arterial corridors that have bicycle lanes to compare.
- The sharrows under the railroad are not a good idea.
- Bicycle and pedestrian crashes were not included in the presentation. That information would have been good to know in order to see if bike and ped crashes have decreased since the bike lanes were added.
- There were traffic delays on McClintock Drive prior to the reconfiguration and there will continue to be delays.
- None of the scenarios take into consideration that widening the road will increase pedestrian crossing time.
- This is a safety project.
- The collaborative scenario would cost \$5 million dollars and that may not be the best use of funds.
- Because the area under the railroad seems less controversial, maybe that should be considered a separate motion.
- Having lived off of McClintock Drive, traffic begins to back up southbound at Don Carlos.
- Adding a third southbound travel lane will reduce travel times.
- The reduction of accidents is good for everyone.
- If the data supports adding back in a third southbound travel lane then Option C (collaborative scenario) may be the best option.
- The collaborative scenario may need to be phased.
- The delays southbound actually start at Rio Salado Parkway.
- Anything less than a buffered bike lane is unsafe and an unreasonable compromise.
- Parks and homelessness are safety issues for the Council and the McClintock bike lanes should also be about safety.
- Widening the street will only add traffic and increase the heat island.
- Taking out the buffer and adding shade would be a preference.
- The economic impact of spending \$5 million dollars should be considered. If there is an addition \$5 million in the fund, then this probably isn't the best project to use the money for.

A motion was made to support keeping the street configuration the way it currently is today. (Option A)

Motion: Commissioner Brian Fellows

Second: Commissioner Kevin Olson

Decision: Approved

Agenda Item 4 – Road Construction Traffic Mitigation

Julian Dresang made a presentation about road construction traffic mitigation. Topics of the presentation included:

- Tempe Barricading Manual
- Telephone Survey Results
- Peer Analysis
- Night Project pros and Cons
- Barricading with No Visible Construction

The Commissioners asked the following questions and made the following statements.

- During rush hour, why would there be barricades in the roadway? Staff stated that the main reason for barricades to be in the street during rush hour is poor communication between the contractor and barricade company or due to logistics. In addition, staff will allow more barricading to occur in the peak hours in the summer when traffic volumes are much lower.
- It is great that another technician has been hired.
- What is the process for those contractors who don't remove the barricades when they should? Do they get fined? Currently there are no fines. Staff has discovered that once the contractor has been notified that they are noncompliant the behavior changes.
- Who should people call during off hours if they see an issue with barricades? Staff stated that residents may call the non-emergency number or the hotline number located on the project construction sign.

Agenda Item 5 – Department & Regional Transportation Updates

None

Agenda Item 6 - Future Agenda Items

Commissioner Brian Fellows requested that "Crash Data and Enforcement" be added as a future agenda item. Chair Cassano requested that discussing bike lanes on McClintock Drive between Broadway Road and Apache Boulevard be added to the current future agenda item for November titled Plan for Expansion of Bicycle/Pedestrian Paths. The following future agenda items have been previously identified by the Commission or staff:

- July 11
- August 8
 - Leading vs. Lagging Left Turn Signals
 - Bus Security Program
 - Streetcar
 - Small Area Transportation Plan
 - 1st Street/Ash Avenue/Rio Salado Pkwy Intersection
- September 12
 - Highline Canal MUP Final Design
 - Country Club Way Streetscape Design
 - Annual Report
 - Commuter Rail Study
- October 10
 - Fifth Street Streetscape Design
 - Western Canal Expansion MUP Final Design
 - Annual Report
 - Alameda Drive Streetscape
 - 8th Street Streetscape
 - Autonomous Vehicles
- November 12
 - Plan for Expansion of Bicycle/Pedestrian Paths
 - North/South Railroad Spur MUP
 - Bike Share
 - Streetcar
 - Maintenance Procedures for Sidewalk Shade Trees near Overhead Power Lines
- December 12
- January 9

- Speed Limits
 - February 13
 - March 13
 - April 10
 - TBD: Bicycle/Pedestrian Signal Activate Operations Update
 - TBD: Prop 500

The July 11, 2017 meeting has been cancelled. The next meeting is scheduled for August 8, 2017.

The meeting was adjourned at 9:00 a.m.

Prepared by: Sue Taaffe

Reviewed by: Eric Iwersen and Shelly Seyler

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 3

DATE

July 10, 2017

SUBJECT

Procedure for Naming of City Facilities

PURPOSE

The purpose of this memo is for the Commission to discuss and possibly make a recommendation regarding the procedure/guideline revisions regarding the naming of City facilities.

BACKGROUND

In August, the Mayor and Council will be considering procedure and guideline revisions to the City's 2012 naming policy. A staff working group (Ken Jones, Shelley Hearn, Don Bessler, Elizabeth Higgins and Steven Methvin) developed several edits to the current policy for Council review, including:

- More clarity in defining the contributions of the beneficiary;
- Adding a minimum length of time before naming requests may be submitted for a deceased person, employee or elected officials;
- Adding language for the development or construction of improvements to facilities;
- Adding submittal due dates;
- Revising a new process for reviewing naming requests;
- Establishing a Naming Committee; and
- Adding a minimum time frame for resubmittal of naming requests.

In the attached draft of the revised policy, it is recommended that the "Naming Committee" include the chairs of the Art and Culture Commission; Neighborhood Advisory Commission; **Transportation Commission**; Parks, Recreation, Golf and Double Butte Cemetery Advisory Board; Human Relations Commission and the Mayor's Youth Advisory Commission.

FISCAL IMPACT

N/a

RECOMMENDATION

None

CONTACT

Steven Methvin
Deputy City Manager
480-350-8810

steven_methvin@tempe.gov

ATTACHMENTS

Draft Procedure for Naming of City Facilities

EXHIBIT A

Procedure for Naming of City Facilities

Purpose:

This document establishes a process for naming a City facility in recognition of an individual, and includes procedures to follow when completing a naming request.

Definitions:

“City facility,” any building, structure or property owned by the City of Tempe and any City right-of-way excluding ~~the naming of~~ City streets and alleys (the naming of which is governed by Chapter 25, Article III of the Tempe City Code);

“Individual,” a natural person whose name is submitted as part of, or in whole, as a proposed facility name;

“Felony,” an offense for which a sentence to a term of imprisonment in the custody of any state within the United States or the Federal Bureau of Prisons is authorized by a law of any state, or the United States;

“Naming guidelines,” suggested information to include in any City facility naming request;

“Naming request,” the City facility naming request and all supporting documentation;

“Proposed facility name,” the City facility name that the requesting entity proposes be adopted by the City Council;

“Requesting entity,” the individual, entity, or group that is initiating the naming request;

“Supporting documentation,” any documents used to support the naming guidelines.

The following information must be included in any City facility naming request:

- 1) Current City facility name and street address;
- 2) Requesting entity and contact information;
- 3) Proposed facility name;
- 4) A written summary that includes information about the individual in the proposed facility name. The summary should explain how the individual’s contribution relates to any one or more of the guidelines listed in the following section;

- 5) Proof of consent to the proposed facility name by the individual for whom the City facility is to be named or, in the case of a deceased individual, proof of consent of a family or legal representative.

The following guidelines apply to any naming request:

- 1) The requesting entity should not be the same as the proposed facility name;
- 2) The proposed facility name should not be similar to any existing City facility name;
- 3) The connection between the contribution of the individual and the City facility should be **compelling and** thoroughly explained;
- 4) The naming request should contain information supporting the affiliation between the individual and the City;
- 5) The naming request should summarize the individual's contributions through **outstanding** community service, involvement, or dedication beyond an ordinary interest level that clearly resulted in tangible benefits to the City. Examples of tangible benefits to the City may include:
 - a. An enhanced well-being and quality of life for City residents;
 - b. Preservation of the City's history;
 - c. Contributions toward the acquisition, development, or conveyance of land, buildings, structures or other amenities to the City or community;
 - d. Local, state or national recognition for work in public service that directly impacted the City;
 - e. An act of heroism;
 - f. Any other contribution that resulted in tangible benefits to the City or City residents.
- 6) The naming request shall not include a proposed facility name for an individual who has been convicted of a felony.
- 7) **When submitting a naming request for a deceased individual, the person must have been deceased at least 5 (five) years.**
- 8) **When submitting a naming request for a City of Tempe elected official or employee, it shall be after five years of the end of service or employment.**
- 9) **Development or construction of improvements such as public art, living infrastructure, interpretive displays, monuments, etc shall be considered separately from the naming request**

and must undergo the appropriate department evaluation to ensure the suitable commit of resources. Examples of evaluations include consideration in the annual budget, commission review, public outreach, ongoing maintenance costs, required permits, etc. Proposers must include enough detail in their submittal for thorough consideration, including detailed funding plans.

Re-Naming:

The City Council reserves the right to re-name any City facility previously named, if it is determined that it is in the best interest of the community that the facility should no longer bear its current name. The City Manager shall remove the name from any City facility if the person for whom the facility was named has been subsequently convicted of a felony. If a name is removed from a facility, it shall immediately revert to its previous name, until the City Council approves a new name.

Procedure:

The requesting entity shall deliver the naming request to the City Clerk's Office. Naming requests are reviewed twice per calendar year with due dates of January 1 and July 1. The City Clerk shall determine if the naming request is complete and, if so, shall submit the naming request to the Mayor. The Mayor shall convene an ad hoc Naming Committee to review the naming request per the guidelines and report its recommended action to the City Council. The Naming Committee shall be made up of seven (7) members, including the current chair of the Tempe Arts and Culture Commission; Neighborhood Advisory Commission; Transportation Commission; Parks, Recreation, Golf, and Double Butte Cemetery Advisory Board; Tempe Human Relations Commission; Mayor's Youth Advisory Commission and a member at large, selected by the Mayor and not currently serving on a city board or commission. The Naming Committee shall be staffed by the Chief of Staff to the Mayor and Council.

Naming requests recommended by the Naming Committee shall be forwarded to the City Council for consideration. Naming requests not recommended by the Naming Committee will be forwarded to the City Clerk's Office for notification of the applicant. Naming requests not recommended for approval by the Naming Committee or City Council shall not be resubmitted for a minimum of twenty-four (24) months.

~~The requesting entity shall deliver the naming request to the City Clerk. The City Clerk shall determine if the naming request is complete and, if so, shall submit the naming request to the Mayor for assignment to the appropriate Board, Commission or Committee. The Board, Commission, or Committee so assigned shall review the naming request and report its recommendation action to the City Council.~~

Approval by City Council Resolution shall accomplish the naming of the City facility.

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 4

DATE

July 27, 2017

SUBJECT

Transportation Marketing Plan

PURPOSE

The purpose of the memo is for the Commission to review and approve the 2018-2020 Transportation Marketing Plan.

BACKGROUND

The city of Tempe Transportation Program, Tempe in Motion - TIM, encourages using alternative modes of transportation including riding the bus, biking, walking, taking light rail and – soon – Tempe Streetcar. The goal of the program is to encourage Tempe residents and visitors to incorporate alternative modes of transportation in their everyday lives. We provide connectivity between home, work, school and recreation. We have a balanced transportation system that is environmentally sustainable, accessible, preserves neighborhoods, promotes transit-oriented development and involves people in the process. This plan integrates with the city's comprehensive strategic communication plan adopted in 2010.

The plan includes the following elements:

- Current Situation
- Current Travel Patterns
- Strengths, Opportunities, Weaknesses, Threats
- Audiences
- Goals
- Objectives
- Measurements
- Messaging
- Communication tool box
- Research Findings

FISCAL IMPACT

The costs to implement the plan fall into a variety of cost centers within the Transit Fund.

RECOMMENDATION

This item is for approval.

CONTACT

Sue Taaffe
Public Works Supervisor
480-350-8663
sue.taaffe@tempe.gov

ATTACHMENTS

PowerPoint
Marketing Plan

Transportation Marketing Plan

Transportation Commission
August 8, 2017



Transportation – Tempe in Motion Overview



- Half-cent sales tax for transit passed in 1996
- Marketing, public relations and community outreach identified as key elements of program
- Program evolved from introduction of new services to promotion of a wide range of events, services, programs

Strengths



- Bus routes on almost every major street; Orbit in dozens of neighborhoods
- Regional BikeShare system
- Bus and light rail service seven days a week, 365 days a year with 15-minute rush hour service
- More than 175 miles of multi-use paths and bike lanes

Weaknesses



- Perception that transit is not convenient/reliable
- Confusion about how to use the system
- Limited connections to neighboring cities
- Capacity issues on Orbit

Opportunities



- Conduct outreach through community events
- Communicate real-life success stories
- Capitalize on Tempe's constantly improving/expanding transportation options, specifically the coming Tempe Streetcar

Threats



- Cars
- Inexpensive fuel / alt fuel vehicles
- Fluctuating economy

Audiences



- Retention
- Occasional Alternative Mode Users
- Acquisition



Inspire people to use Tempe's transportation system and participate in programs, services and events:

- Youth Transit Pass Program
- Bike Month
- Dump the Pump Day
- Bike Hero Program
- BikeShare
- Adopt-A Street, Path and Alley
- Try Transit Week
- Bike Registry
- Bike and Pedestrian Safety
- Street Closure Notifications
- Service Changes

Objectives



- Increase use of alternative modes.
 - Transit ridership by 3% annually
 - Bicycle use by 2% by 2020
 - BikeShare by 10% annually
- Maintain a positive perception of Tempe in Motion.
- Increase participation in public processes and events.
- Increase awareness of TIM by 5% by 2020.



- Tempe has many different transportation options (BikeShare, light rail).
- People of all ages and economic backgrounds can use system (Youth Pass).
- Tempe offers a number of transportation-related programs to engage people with the community (Adopt a Street, Path, Alley programs).
- Using an alternative mode saves money, improves your health and is environmentally-friendly (Try Transit Week, Dump the Pump Day).
- Having a transportation program, even if you don't use it, is good for the community (Bike Hero).

Reaching Our Audience



- Monitor and participate in social media to engage and measure online discussions related to the impact these sites have on traffic to TIM's webpage.
- Create “how to” videos for potential transit users.
- Pitch story opportunities to the media promoting the positive reasons to use alternative modes.
- Conduct outreach through community events.
- Place paid advertising.
- Produce collateral materials.



Communication Tool Box

- Media Relations
- Electronic Communication
- Collateral
- Paid Advertising
- Community Outreach

Transportation Program – Tempe in Motion

Marketing and Communication Plan

2018-2020



Table of Contents

Introduction	3
Current Situation	3
Strengths, Opportunities, Weaknesses, Threats	4
Audiences	5
Goals	6
Objectives	6
Measurements	6
Messaging	7
Appendix A	8
Appendix B	9

Introduction

The city of Tempe Transportation Program, Tempe in Motion - TIM, encourages using alternative modes of transportation including riding the bus, biking, walking, taking light rail and – soon – Tempe Streetcar. The goal of the program is to encourage Tempe residents and visitors to incorporate alternative modes of transportation in their everyday lives. We provide connectivity between home, work, school and recreation. We have a balanced transportation system that is environmentally sustainable, accessible, preserves neighborhoods, promotes transit-oriented development and involves people in the process. This plan integrates with the city's comprehensive strategic communication plan adopted in 2010.

Current Situation/Research

In September 2016, Tempe commissioned WestGroup Research to complete a telephone survey of Tempe residents in an effort to gain insights into perceptions about transit among both riders and non-riders. The survey was completed with 401 Tempe residents. Major conclusions included:

1. Transit usage among Tempe residents remains consistent over the past four years. Additionally it appears that those who used public transit in the past are continuing to use it with a notable increase in those who have used transit six or more years and a decrease in the percentage who are newer riders. However, in 2016, there was an increase in using transit only in special circumstances versus a more consistent basis.
2. Satisfaction with various bus system attributes among bus riders generally follows a similar hierarchy compared to the previous two waves of the study. Measures pertaining to *comfort on the bus*, *cleanliness of the bus*, and *driver courtesy and professionalism* have the highest levels of satisfaction, while measures pertaining to *bus service during major events*, *amenities* and *security at bus stops* tend to be near the bottom. This indicates the overarching perception surrounding the bus system among current riders has not changed much since 2012. It should be noted, however, that satisfaction with "ease of use" continues to decline from 2012 (and all previous years); a conversation about what could be causing this continued drop off is likely warranted.
3. Overall satisfaction with the transit system in Tempe declined slightly this year compared to 2014, but is in-line with satisfaction reported in 2012. Interestingly, on-time performance was most often selected as the highest priority for transit system improvements; in other markets it is more common to see requests for more service, longer hours, or more frequent service at the top of the list. Also, there was a decline in satisfaction among riders for reliability and on-time performance compared to 2014. Again, a conversation about what could be causing this continued concern about reliability is likely warranted.
4. The effectiveness of specific messages promoting public transit usage measured in this survey has been in decline for more than 10 years. In particular, the message *saves money on gas/auto insurance/maintenance* saw a steep decline compared to 2012. Normalized or decreasing gas prices in addition to increasingly improved fuel efficiencies in vehicles likely play a role in residents' perceived benefit of public transit versus individual vehicular transport. Only the messaging

pertaining to *improves air quality/good for environment* was considered to be an effective measure by more than half of the population. It appears that it may be necessary to look into other messaging that resonates more strongly with non-transit users.

If consumers are going to use public transportation, they need it to be reliable. Once a consumer has been inconvenienced because of a missed transit trip or no bikes at a BikeShare station, it is exceedingly difficult to convince them to try transit again. Behavior can be changed by promoting positive messages through advertising and public relations that feature factual, believable transit successes. Also, some residents may be persuaded to change their behavior if they could see they are making a difference in their community. Self-interest (speed, reliability and cost of the services) are also motivating factors.

Based on the 2014 US Census data, the mean travel time to work for Tempe residents was 20.6 minutes. The following provides transportation information for residents who are 16 years old and older who commute to work:

- Drive alone: 71.1%
- Carpool: 8.7%
- Use public transportation: 5%
- Walk to work: 3.8%
- Bike to work: 3.9%
- Work at home: 5.5%

Strengths, Weaknesses, Opportunities, Threats

- Total awareness of Tempe in Motion remained statistically comparable to recent years (44%), as did the proportion of TIM-aware residents who knew the correct meaning of the TIM acronym (65%).
- Residents aware of TIM recalled hearing about it through street banners (24%) and signs on buses (11%).
- Among those aware of TIM advertising:
 - Over half (54%) indicated it had a positive impact on their impression of transportation options in Tempe.
 - One in four (25%) indicated “yes” when asked whether the advertising message persuaded them to try public transit in Tempe.

Strengths

- Bus routes on almost every major street; Orbit in dozens of neighborhoods
- Regional BikeShare system
- Bus and light rail service seven days a week, 365 days a year with 15-minute rush hour service
- More than 175 miles of multi-use paths and bike lanes

Weaknesses

- Perception that transit is not convenient/reliable
- Confusion about how to use the system
- Limited connections to neighboring cities
- Capacity issues on Orbit

Opportunities

- Conduct outreach through community events
- Communicate real-life success stories
- Capitalize on Tempe's constantly improving/expanding transportation options, specifically the coming Tempe Streetcar

Threats

- Cars
- Fluctuating economy

Audiences

Retention Audiences are those people who are loyal alternative mode users. We will continue to communicate with this group with general awareness messages about the various alternative modes of transportation and programs available. These consumers typically include high school and ASU students and low income people. The primary motivating factor for this group is reliability. For this audience to use an alternative mode there needs to be a consistent on-time transit departure or consistent areas throughout the community designated for secure bike storage. This group needs to be able to depend on the transit system and bicycle network and experience the benefits of their amenities.

Occasional Alternative Mode Users are people who would consider using alternative modes of transportation only if necessary or only when more convenient than driving. This group may also be thought of as emergency users. They normally drive a car, but due to an unforeseen circumstance, such as car being repaired or inability to drive for medical reasons, they may be forced to use bike, walk, ride the bus or take light rail. Or, due to a community event or other situation that impacts traffic/parking (e.g., Tempe Festival of the Arts or ASU football game), they find it easier to reach their destination by biking, walking or using transit than driving a vehicle. Since this group doesn't typically use alternative modes, it is necessary for this audience to know how to access bicycle, bus or light rail information.

Acquisition Audiences are those people who are not consistent alternative mode users or not riders at all. These consumers could use alternative modes of transportation, but need to be reminded of the benefits. Personal benefits include convenience, saving money, helping the environment, reducing traffic and having more free time. They need to understand how to use the transportation system and which modes are available. By communicating the availability of various transportation options and programs, trial use of alternative modes may translate into new travel habits.

Goals

Inspire people to use Tempe's balanced transportation system and participate in Transportation's many programs, services and events, including:

- Youth Transit Pass Program
- Bike Month
- Dump the Pump Day
- Bike Hero Program
- BikeShare
- Adopt-A Street, Path and Alley
- Try Transit Week
- Bike Registry
- Bike and Pedestrian Safety
- Street Closure Notifications
- Service Changes

Objectives

- 1.) Increase use of alternative modes of transportation in Tempe.
 - A.) Transit ridership by 3% annually.
 - B.) Bicycle use by 2% by 2020.
 - C.) BikeShare by 10% annually.
- 2.) Maintain a positive perception of Tempe in Motion.
- 3.) Increase participation in public processes and events.
- 4.) Increase awareness of TIM by 5% by 2020.

* It should be noted that there is no definitive way to attribute marketing to increased ridership.

Measurements

- 1.) Results of biennial telephone survey.
- 2.) Ridership statistics (bus, light rail and BikeShare).
- 3.) Monitor press coverage and social media mentions of specific issues to determine effectiveness of proactive pitching efforts for key programs, services and events.
- 4.) Identify specific programs, services and events to be monitored.

Messaging

The messages crafted focus primarily on specific transportation programs, events and services while encouraging alternative mode use. Messages focus on:

- Tempe has many different transportation options (BikeShare, light rail).
- People of all ages and economic backgrounds can use the transportation system. (Youth Pass).
- Tempe offers a number of transportation-related programs to engage people with the community (Adopt a Street, Path, Alley programs).
- Using an alternative mode saves money, improves your health and is environmentally-friendly (Try Transit Week, Dump the Pump Day).
- Having a transportation program, even if you don't use it, is good for the community (Bike Hero).

Our target audiences are unique. In order for us to reach them, our messages have to be communicated in a way that is both relevant and compelling. We will be using several different mediums from our "toolbox" to deliver our key messages. See Appendix A for a complete list of our communication tools. Over the next 24 months, we will accomplish the following in order to reach our audiences:

- Monitor and participate in social media to engage and measure online discussions as related to the impact these sites have on traffic to TIM's webpage (www.tempe.gov/tim).
- Create "how to" videos for potential transit users.
- Pitch story opportunities to the media promoting the positive reasons to use alternative modes.
- Conduct outreach through community events.
- Place paid advertising.
- Produce collateral materials.

Appendix A

Communication Tool Box

The following is a compilation of the specific tactics that will be utilized to achieve our goals. As new mediums are introduced, they will be added to our communication toolbox.

Media Relations – 10%

- Press releases
- Proactive pitching

Electronic Communication – 30%

- Tempe web site
- E-mail and E-Newsletters
- Social media
- Tempe 11

Collateral – 15%

- Banner program
- Brochures, fliers and posters
- Newsletters
- Direct mail and door hangers
- Tempe Opportunities quarterly brochure
- Water bill inserts and Tempe Today (water bill newsletter)

Paid Advertising – 20%

- Print
- Online
- Out of home
- Radio
- TV

Community Outreach – 25%

- Public meetings
- Special events
- Health fairs, school fairs, etc.

Appendix B

Research Findings

Rider Characteristics and Opinions

- More than three in five (62%) Tempe residents indicated they used Tempe's transit service in the past year, including light rail, Orbit, Flash, and local bus/express.
- Among residents who indicated use of Tempe's transit service in the past year, 16% reported at least riding on a monthly basis. This is down significantly from 2014 when one quarter (25%) indicating riding on a monthly basis, while "special circumstances" usage is up slightly (31% to 37%).
- In general there are fewer new transit users, but users are continuing to use public transit as the years go by. The proportion of surveyed transit riders who report having used the transit service for less than a year was 5%; however, nearly half (47%) have been riding transit in the city for more than six years (up from 31% in 2014).
- Convenience and getting to and from recreation were again the most popular reasons for riding public transit (mentioned by 27% and 18%, respectively).
- Recreational activities and Phoenix/Downtown Phoenix were the top destinations for transit riders (35% and 20%, respectively). ASU, work and Downtown Tempe were each mentioned by 14% of riders.
- A lower proportion of riders in 2016 indicated they use public transit to go shopping (4% vs. 15%); however, the destination of Phoenix/Downtown Phoenix increased significantly to 20% up from 13% in 2014.
- Riders were most satisfied with the cleanliness of the bus stops and their comfort on the bus (91% and 90% very + somewhat satisfied, respectively). Despite their high satisfaction with bus stops for cleanliness, riders expressed the lowest level of satisfaction with security and amenities at bus stops (72% and 74%).

Overall Satisfaction and Improvements of Tempe's Transit System

- More than two-thirds (69%) of residents with an opinion indicated they were highly satisfied with the Tempe transit system.
 - Residents satisfied with the transit system (rating it a "4" or "5") mention good service (32%) and frequent and reliable service (18%).
 - Residents who provided "1," "2," or "3" ratings mentioned more/better routes (14%) and more frequent buses with extended hours (8%) as needed improvements.
- On-time performance of buses continued to top the list with the highest percentage of "high priority" ratings as it did in 2014 (79% of residents provided a top-two rating).

Potential Use of Tempe's Transit System

- When non-riders were asked why they do not use public transit, well over half (59%) indicated they prefer using a car.
- Perceived effectiveness of each argument presented to residents regarding motivation to use public transit has been declining since prior to 2006.

- The argument *improves air quality/good for environment* was perceived as either “somewhat effective” or “very effective” by 51% of residents, compared to a range of 60% to 75% between 2006 and 2012.
- *Reduces congestion* was seen as effective by 44%, compared to a range of 49% to 69% between 2006 and 2012.
- *Saves money on gas, auto insurance/maintenance* was perceived as effective by 45% (the same as last year) compared to a range of 57% to 72% between 2006 and 2012.

Tempe Bicycling and Walking

- Approximately three in five residents (62%) report having access to a bicycle.
- Among those who reported having access to a bike, 71% reported they ride their bike at least once a month, which is virtually the same as in 2014.
- Approximately three in seven (44%) of those who indicated riding their bikes at least once a month report they ride for exercise, while 13% report riding a bike to the store and 12% ride a bike to work/school.
- As was the case in 2014, two thirds (65%) of residents reported being satisfied with the quality of walking and biking paths in Tempe.
- Among those with an opinion, the most common positive reasons for ratings included *they are fine the way they are/no problems* (18%) and *they are everywhere, there are plenty of paths* (12%). Top negative reasons included *don't seem safe enough/make them safer* (9%) and *need more of them* (7%) or *need more bike lanes* (4%).
- Protected bike lanes, safer paths and adding more bike and pedestrian paths received the highest percentage of priority ratings (63% to 66%).

Tempe Youth Free Transit Pass Program

- Nearly two in five (38%) residents surveyed in 2016 reported having heard of the Tempe Youth Free Transit Pass. This is consistent with 2014 awareness.
- Among those aware of the program, one quarter (24%) indicated they heard about it through school followed by 16% citing word-of-mouth.

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 5

DATE

August 1, 2017

SUBJECT

Leading and Lagging Left-Turn Traffic Signals

PURPOSE

The purpose of the presentation is to present the Commission information about leading and lagging left-turn traffic signals.

BACKGROUND

The presentation will cover the following topics and provide rational for why leading and lagging left-turn traffic signals are used throughout Tempe.

- Signal Basics
- Study History and Study Summaries
- Tempe Signal Statistics
- Yellow Left-Turn Trap
- Lessons Learned
- Tempe's Future Plan

FISCAL IMPACT

n/a

RECOMMENDATION

This is for information only.

CONTACT

John Hoang
Senior Civil Engineer
480-350-8629
john_hoang@tempe.gov

ATTACHMENT

PowerPoint

Leading and Lagging Left-Turn Traffic Signals

**Transportation Commission
August 8, 2017**



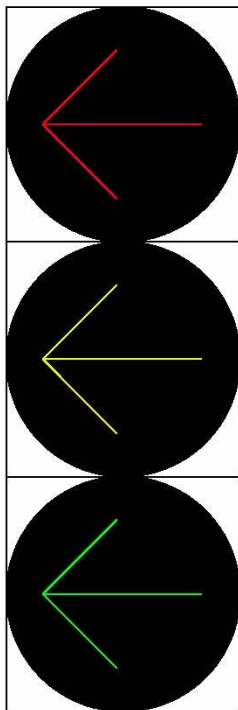


- Signal Basics
- Study History and Study Summaries
- Tempe Signal Statistics
- Yellow Left-Turn Trap
- Lessons Learned
- Tempe's Future Plan

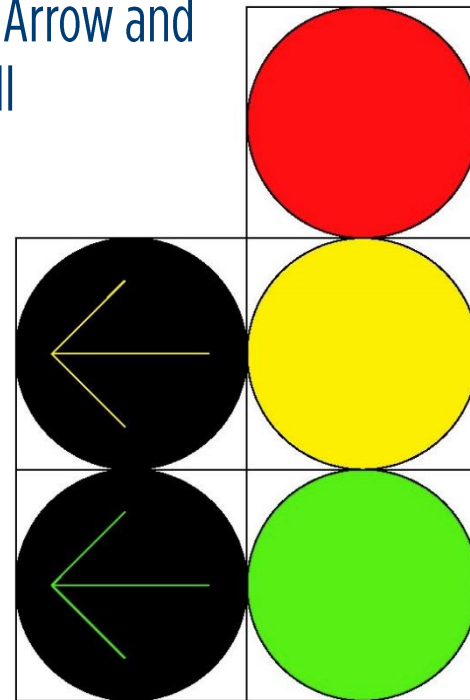
Left-Turn Arrows



- Protected: Left -Turn Arrow Only



- Protected/Permissive: Left-Turn Arrow and Green Ball





- Permissive Only may reduce intersection delay but may adversely affect intersection safety.
- Protected Only may reduce delay for turning vehicles but likely to increase overall intersection delay.
- Protected-Permissive offers a good compromise between safety and efficiency.

Left-Turn Phasing Options

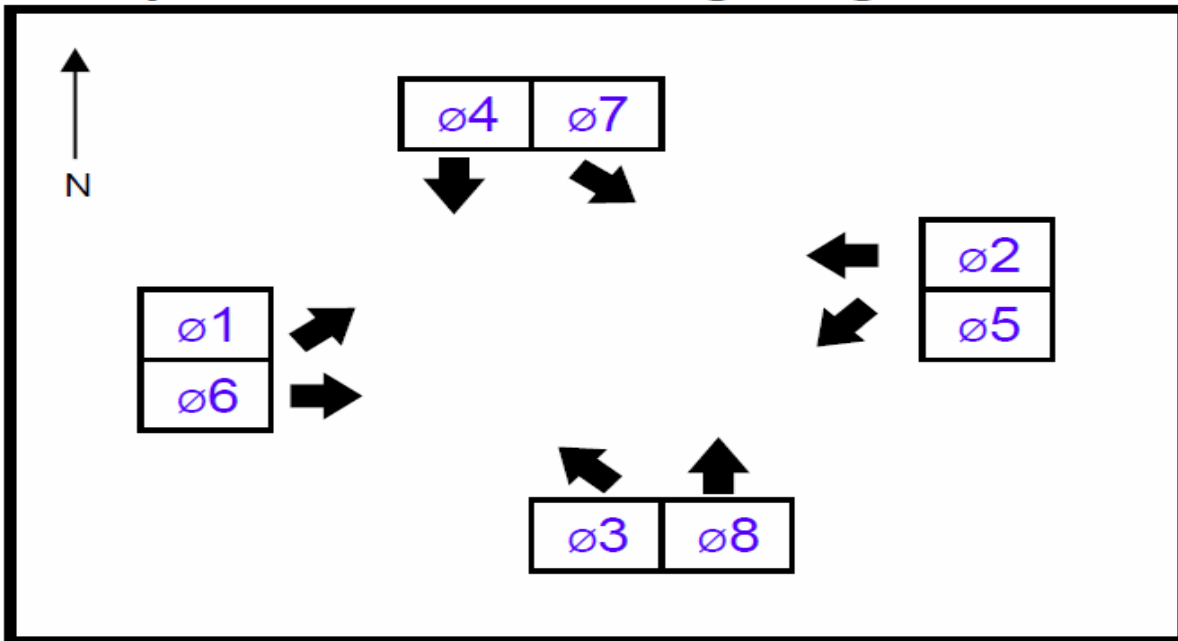


Exhibit 5-4 Left-Turn Phasing Options

Left-Turn Phasing Option	Description	Advantages	Challenges
Permitted Left-Turn Phase	Served with the adjacent through movement, requiring left-turning vehicles to yield to conflicting vehicle and pedestrian movements	<ul style="list-style-type: none"> □ Reduced intersection delay □ Efficient green allocation 	<ul style="list-style-type: none"> □ Requires users to choose acceptable gaps in traffic □ Yellow trap can occur if opposing movement is a lagging left turn
Protected Left-Turn Phase	Left-turning vehicles are given the right-of-way without any conflicting movements	<ul style="list-style-type: none"> □ Reduced delay for left-turning vehicles □ Users always receive exclusive right-of-way; gaps in traffic do not need to be identified 	<ul style="list-style-type: none"> □ Increased intersection delay
Protected-Permitted Left-Turn Phase	Combination of permitted and protected left-turn phasing; users receive a protected interval, but can also make permitted movements as the conflicting through phase receives a green indication	<ul style="list-style-type: none"> □ Compromise between safety of protected left-turn phase and efficiency of permitted left-turn phase □ No significant increase in delay for other movements 	<ul style="list-style-type: none"> □ Fewer options for maximizing progression of through vehicles during coordination (unless flashing yellow arrow displays are used) □ Yellow trap can occur if opposing movement is a lagging left turn



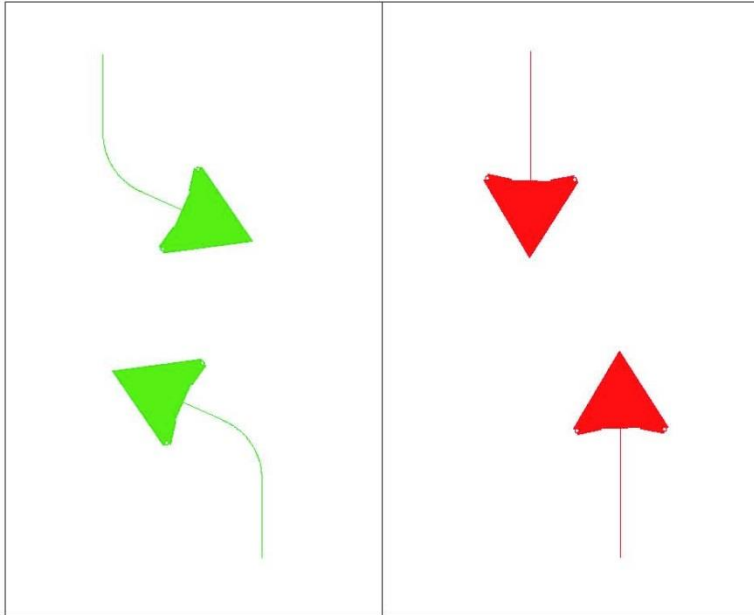
Tempe Standard Phasing Diagram



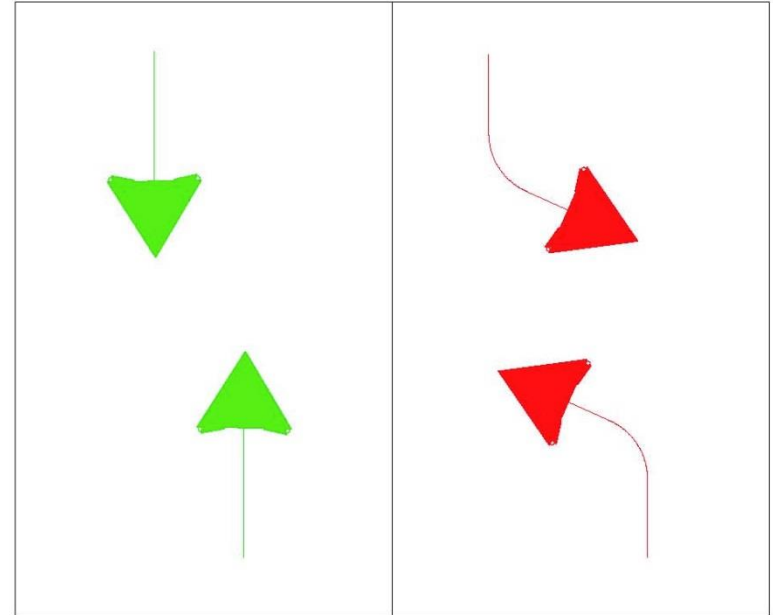
Lead vs. Lag Arrow



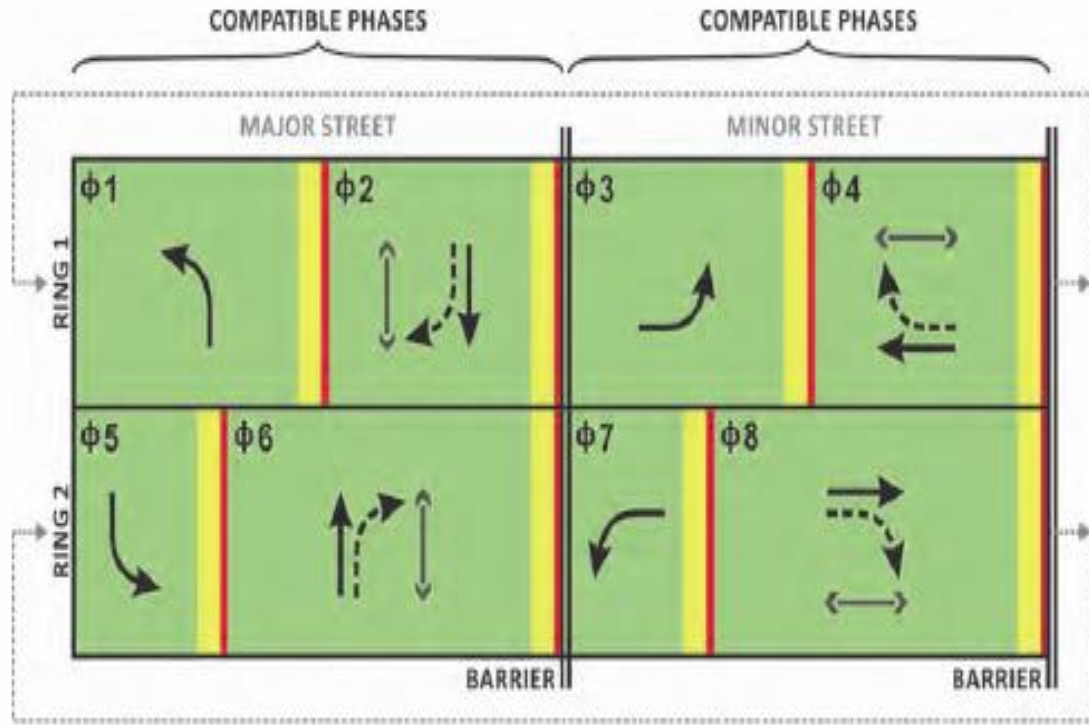
● Leading: Left-Turn Arrow First



● Lagging: Through Traffic First



Ring & Barrier



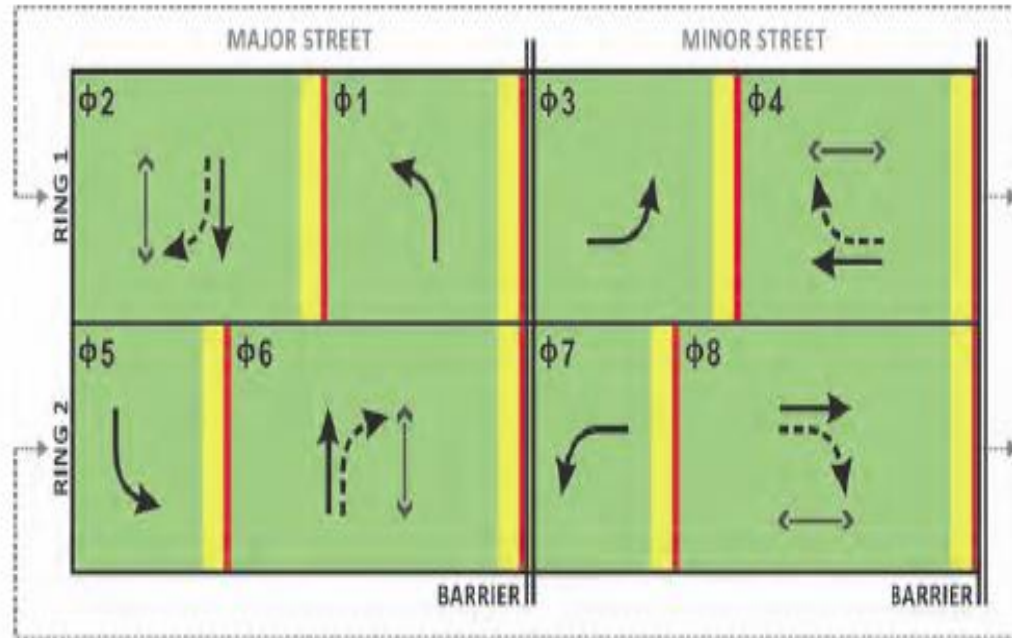
ϕ = Phase Number \dashrightarrow = Permitted Movement
 \rightarrow = Protected Movement \longleftrightarrow = Pedestrian Movement

Exhibit 5-3 Basic Ring-and-Barrier Diagram

Protected Lead-Lag



Exhibit 5-10 Ring-and-Barrier Diagram Showing Protected Lead-Lag Left-Turn Phasing



ϕ	= Phase Number	\dashrightarrow	= Permitted Movement
\rightarrow	= Protected Movement	\leftrightarrow	= Pedestrian Movement

Protected Permitted

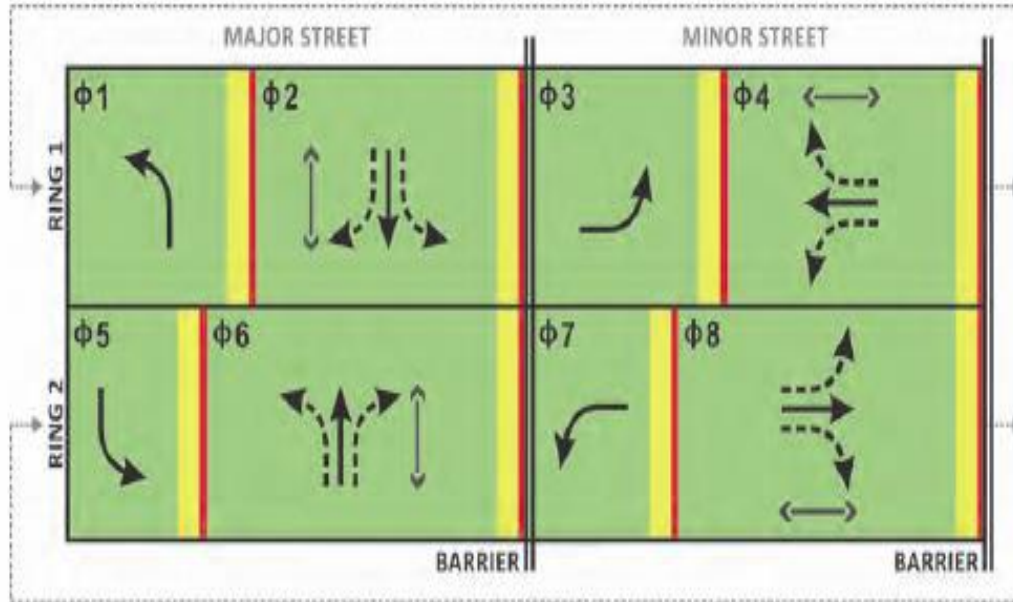


Exhibit 5-7 Ring-and-Barrier Diagram Showing Protected-Permitted Left-Turn Phasing

Study History



- Comparative Analysis of Leading and Lagging Left-Turns Report (Lee Study, August 1991)
- Box Study (November 1999)
- Valley Traffic Engineers (VATEC) meeting (November 2000)
- Chandler-Gilbert Study (2007)

Summary - Safety



- Similar crash rates for leading and lagging
- No statistical evidence of difference
- Consideration should be based on multiple factors such as safety, efficiency, consistency and resources

Summary - Capacity



- Leading provides additional capacity in most cases
- Affected by any interrelated factors (geometrics, traffic volumes, cycle length, phase overlaps, driver habits, speeds, etc.)
- Optimizing signals provides maximum use of available roadway capacity



Tempe Traffic Signals

- 227 signals city-wide
- 118 signals (52%) have left-turn arrows
- 44 signals (19%) have lagging lefts - 6 by TOD, 15 All Day, 23 LRT (as needed)
- 42% of left-turns are protected/permissive lefts

Peer Comparison

























	Tempe	Chandler	Gilbert	Mesa	Phoenix	Scottsdale
Total Signals	227	208	196	400+	1,150	300+
Lead/Lead	97	112	15	150+	300+	65
Lag/Lag	21	18	100	50	20	80

Why Use Lagging?



- More effective in appropriate situations:
 - Freeway intersections
 - Unusual signal spacing
 - Geometric constraints (short left-turn storage)
- In combination with leading left-turns, creates opportunities for light rail vehicles

Yellow Trap

OPPOSING THROUGH	LEFT-TURN THROUGH SIGNAL		THROUGH SIGNAL	NOTE: Opposing Left-Turn Signal Not Shown
				
1				ALL RED
2				PROTECTED LEFT TURN
3				CLEARANCE INTERVAL End of Protected Left Turn
4				PERMITTED PHASE
5				CHANGE INTERVAL Yellow Trap
6				OPPOSING THROUGH PHASE INDICATION STILL GREEN

Source: Adapted from *Signalized Intersections: An Informational Guide* (16)

Exhibit 4-19
Illustration of the
Yellow Trap

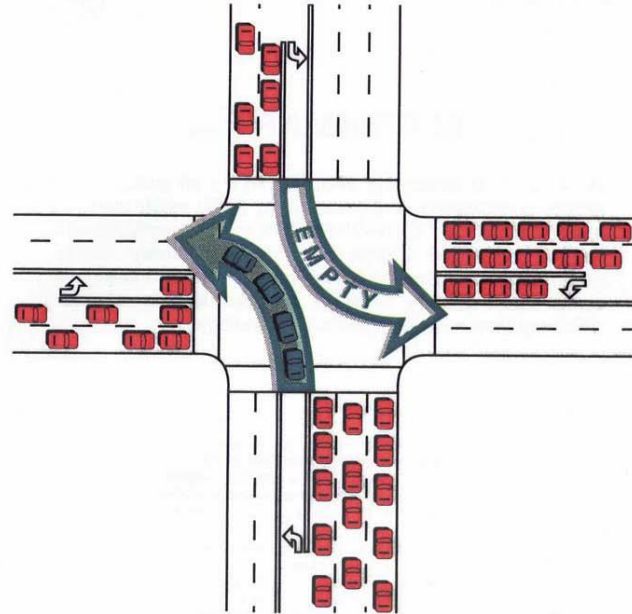


Yellow Trap

- With lagging, possible trap hazard for protected/ permissive Lefts
- Eliminating left-turn trap results in operational inefficiency

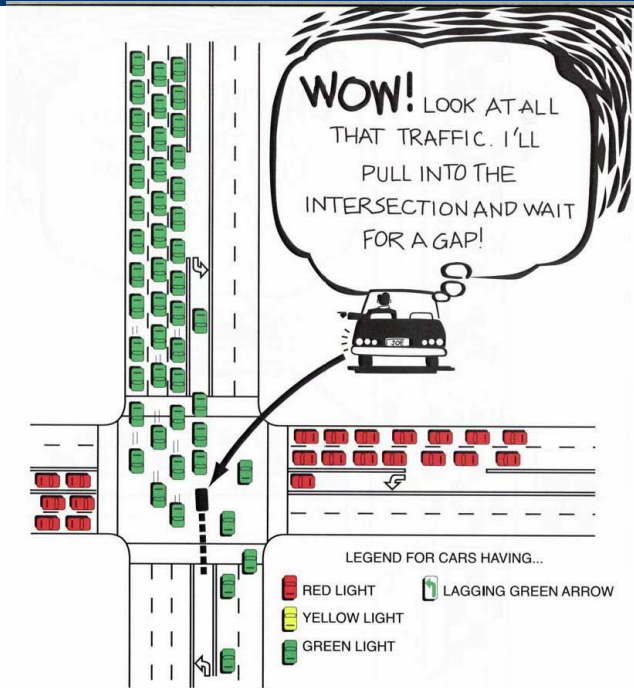


THE **SAFE** WAY TO USE LAGGING ARROWS



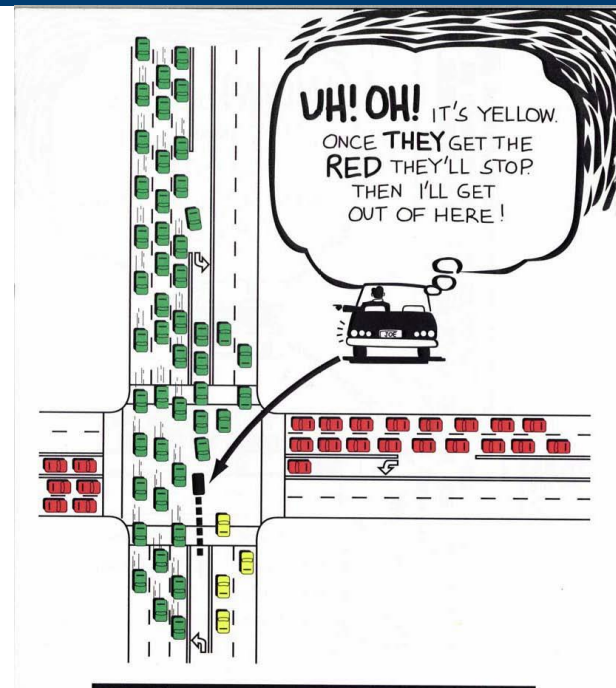
SAFE - BUT LESS EFFICIENT

The safe way to use LAGGING arrows involves stopping ALL through traffic even when there are NO left-turning vehicles. Given the busy, unbalanced rush-hour traffic that exists in Phoenix, the result would be major delays and increased driver frustration.



SITUATION - RUSH HOUR

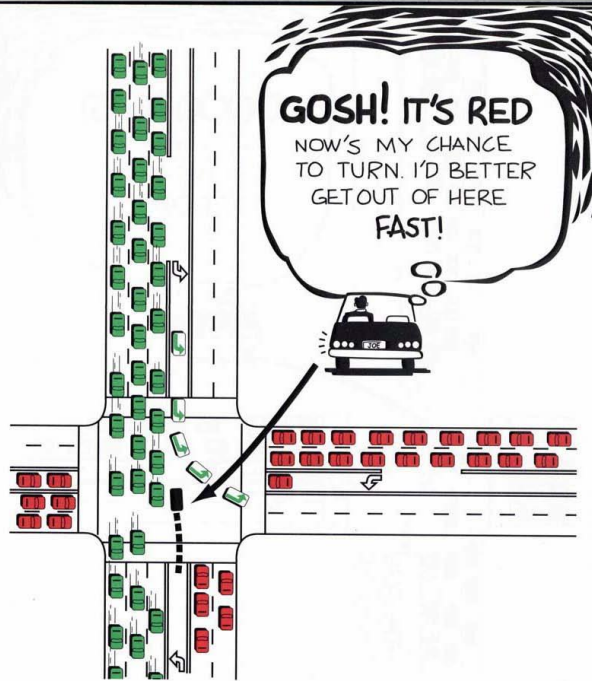
Heavy traffic in the peak direction with moderate opposing traffic. Lonely Joe is waiting to turn left across heavy rush-hour traffic.



PROBLEM CREATED

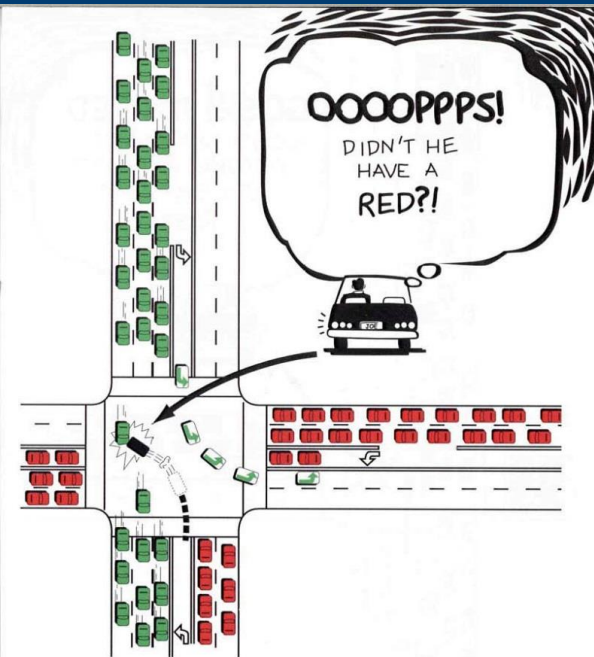
Because no other vehicles are behind our left turner, the lagging left-turn arrow was not activated. However, the arrow **was** triggered in the opposing direction, causing Joe to get a yellow light, and he wrongly assumes the opposing driver does too. What he doesn't know is that opposing drivers continue to get a green light.

Yellow Trap



TENSION BUILDS

Under increasing stress, Joe gets a red light and feels "trapped". He wrongly assumes cross-street traffic now has a green light and will start coming at him. Feeling pressured, he makes a hasty (and bad) decision to force his turn into heavy and fast-moving traffic.



RESULT

CRASH!

Flashing Yellow Arrow



Exhibit 4-20
Illustration of the
Flashing Yellow Arrow

	OPPOSING THROUGH	LEFT-TURN SIGNAL	THROUGH SIGNAL	
				NOTE: Opposing Left-Turn Signal Not Shown
1				ALL RED
2				PROTECTED LEFT TURN
3				CLEARANCE INTERVAL End of Protected Left Turn
4				PERMITTED PHASE
5				ADJACENT THROUGH PHASE CHANGE INTERVAL Flashing Yellow Arrow Continues to Flash
6				OPPOSING THROUGH PHASE INDICATION STILL GREEN Flashing Yellow Arrow Continues to Flash

Why Not Use all Leading or Lagging?

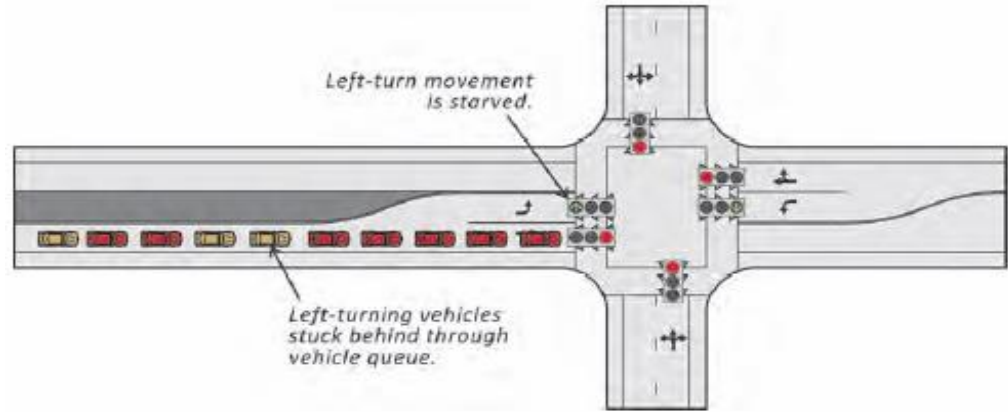


Exhibit 3-21 Storage Bay Blocking

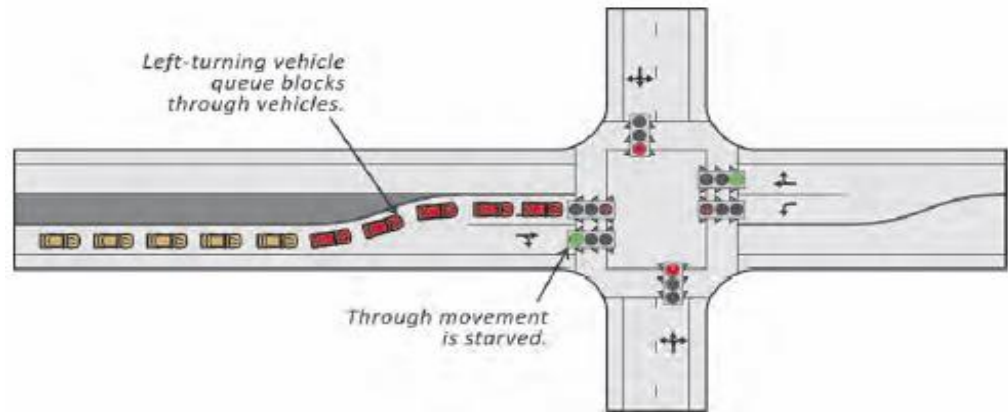


Exhibit 3-22 Storage Bay Spillback

Conditions for Leading or Lagging

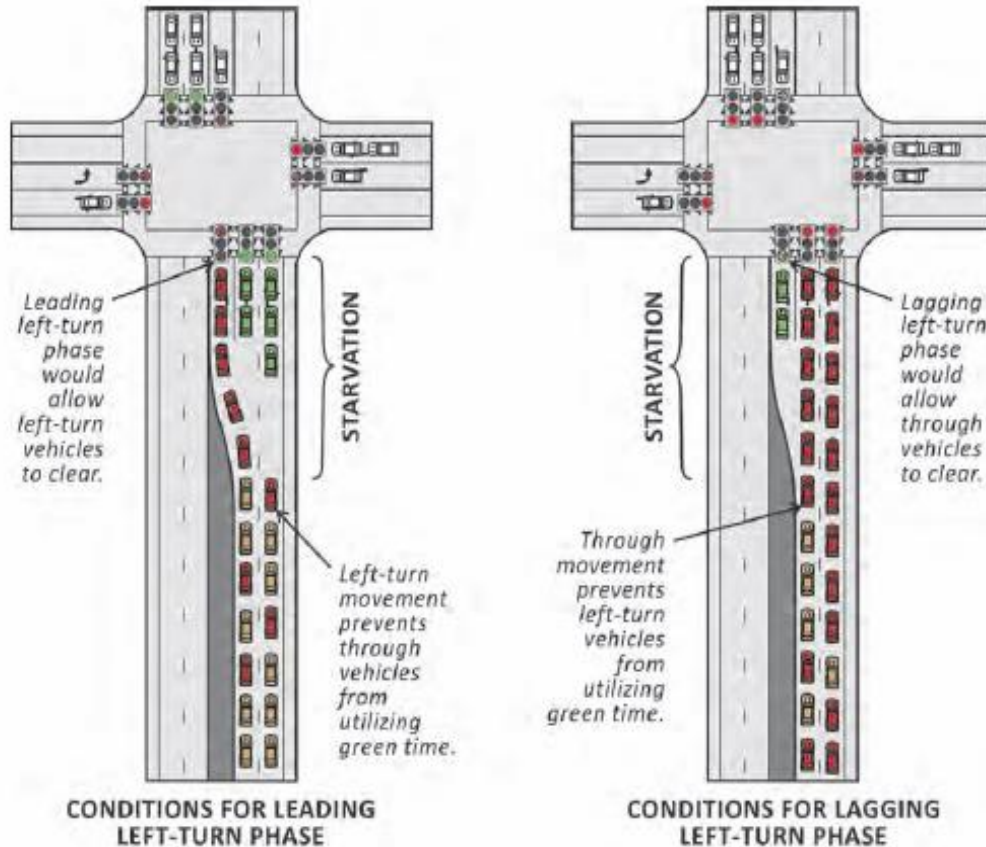


Exhibit 12-15
Conditions for Leading and Lagging Left-Turn Phases



- No significant difference in crash rates
- Motorists are best served when traffic flow is optimized
- Optimization requires the flexibility provided by both leading and lagging lefts
- Lagging to be used when appropriate – not a universal remedy
- Traffic analysis should be used to decide what operation is best for given circumstances

Tempe's Ongoing and Future Plans



- City-wide timing assessment ongoing
- 1-3 Traffic Signal Optimization Program (TSOP) annually
- Utilize mix of lead/lag operations
- Tempe Street Car designing for lead/lag
- Use Intelligent Transportation Systems (ITS) technology to minimize delays, reduce travel time, increase safety

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 6

DATE

August 8, 2017

SUBJECT

Tempe Transit System Security update

PURPOSE

The Purpose of this memo is to provide the Commission with an update on Tempe's Transit Security program.

BACKGROUND

Since the inception of the Light Rail System, Staff has recognized the need for dedicated transit system and facility security in Tempe. Passenger safety, employee safety and the public's perception of the transit system are vital to the success of the system.

The Transportation Division – Transit provides funding for one full-time police sergeant position. This position is a liaison between Tempe Transit, Tempe PD, Valley Metro Security and Phoenix, Mesa and ASU police departments for transit-related police and security issues. Sergeant King (Tempe PD) works closely with Tempe Transit Facilities and Operations staff to address any security concerns brought forward by passengers or bus operators along with Valley Metro Safety and Security staff to address concerns related to light rail. As part of the Regional Security Team, Sergeant King also collaborates with Valley Metro to address local and regional transit issues.

Sergeant King's position oversees Tempe transit facility security, contract security staff and card access for the East Valley Bus Operations and Maintenance Facility (EVBOM) and the Tempe Transportation Center.

The Transportation Division – Transit provides funding for a police transit explosives ordinance detection dog named Eko. K9 Handler Officer Frank Razo and K9 Eko are deployed for all major special events. They also conduct regular patrols at the Transportation Center, EVBOM, light rail platforms and park-and-ride lots.

Tempe does not have a dedicated transit enforcement unit, but uses off-duty Tempe Police officers to patrol and provide a uniformed presence for the light rail and bus systems.

Light Rail

- Tempe off-duty officers work alongside contract light rail security to provide a uniform police presence and patrol platforms and trains. The deployment schedule is late night weekends based on the ASU student population and Mill Avenue bar district.
- Off-duty officers are also used for certain special events when ridership numbers significantly increase.
- The off-duty light rail program is expanding system-wide to address fare evasion, rule violations and improve the perception and overall experience for passengers. Tempe will add 60 hours per week of off-duty officers with an increased focus on platform presence and enforcement.

Bus/Orbit

- Officers patrol bus stops, transit centers and ride bus routes within the Tempe city limits. Officers primarily work in uniform although plain clothes deployments in certain focused areas have proven to be successful. Officers are asked to engage with passengers and bus operators to solicit comments or feedback that can assist us with any areas of concern.
- To improve passenger satisfaction, bus shelters and bus stops have been a focus for officers. Officers have been directed to enforce state/city code violations such as public consumption and any other violations to decrease loitering and to keep our bus stops safe, clean and secure for the legitimate users.
- The Tempe high schools and some middle schools have high ridership numbers during peak hours so officers have been directed to patrol these bus stops and ride certain routes when school lets out.

RESULTS

Fiscal year July 01, 2016 – June 30, 2017

Total activity

Adult Arrests	82
Juvenile Arrests	2
Warrant Arrests	18
Liquor Violations	59
Field Interviews	47
Criminal Reports	11
Traffic Citations	10
Medical Calls	11
# of Buses Boarded	731
# of Bus Stop Checks	1952

Arrest Types

Public Consumption of Alcohol	61
Warrant Arrests	15
Drug Charges	0
Aggravated Assault	2
Assault	1
Public Urination	1
Criminal Damage	0
Disorderly Conduct	1
Trespassing	0
Shoplifting	1
Other	0

FISCAL IMPACT

N/a

RECOMMENDATION

For information.

CONTACT

Jon King
Sergeant - PD Security Transportation
480-350-8633
jon_king@tempe.gov

Sam Stevenson
Senior Planner
480-858-7765
sam_stevenson@tempe.gov

ATTACHMENT

PowerPoint

Tempe Transit System Security Update

Transportation Commission

August 8, 2017



Background



- Inception of light rail system: December 2008
- Recognized need for dedicated transit system (bus and rail) and facility security
- Passenger safety
- Employee safety
- Public perception



Transit Sergeant

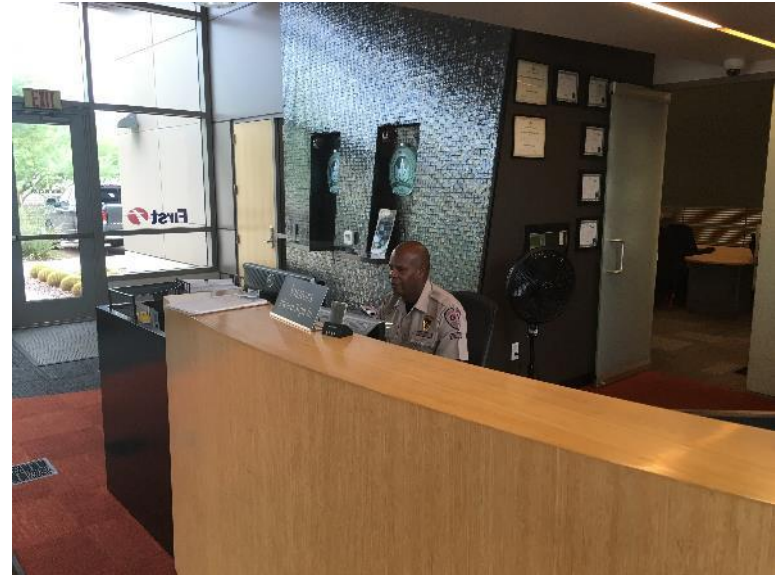


- One full-time Police Sergeant position
- Part of the regional security team
- Liaison between Tempe Transit, Tempe PD, Valley Metro Security, regional police departments for transit-related issues
- Addresses concerns brought forward by passengers and bus operators
- Collaborates with Valley Metro Safety and Security on rail concerns
- Special event staffing and off-duty supervision

Transit Sergeant



- Transit facility security
- East Valley Bus Operations and Maintenance Facility (EVBOM)
- Tempe Transportation Center (TTC)
- Contract oversight of security staff
- Card access system





- Police transit explosives ordinance detection dog
- Deployed for all special major events
- Regular patrols at TTC, EVBOM, on light rail platforms and buses



Off-Duty Transit Security



- Provides uniformed presence on light rail and bus systems within Tempe
- Deployed on late nights and weekends
- Support high-ridership special events



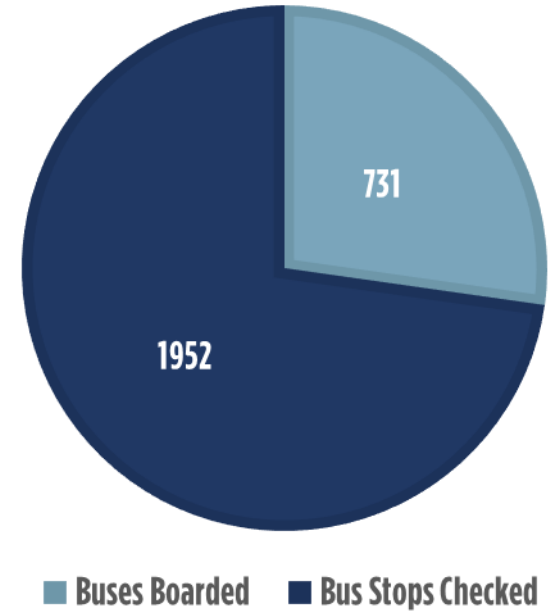
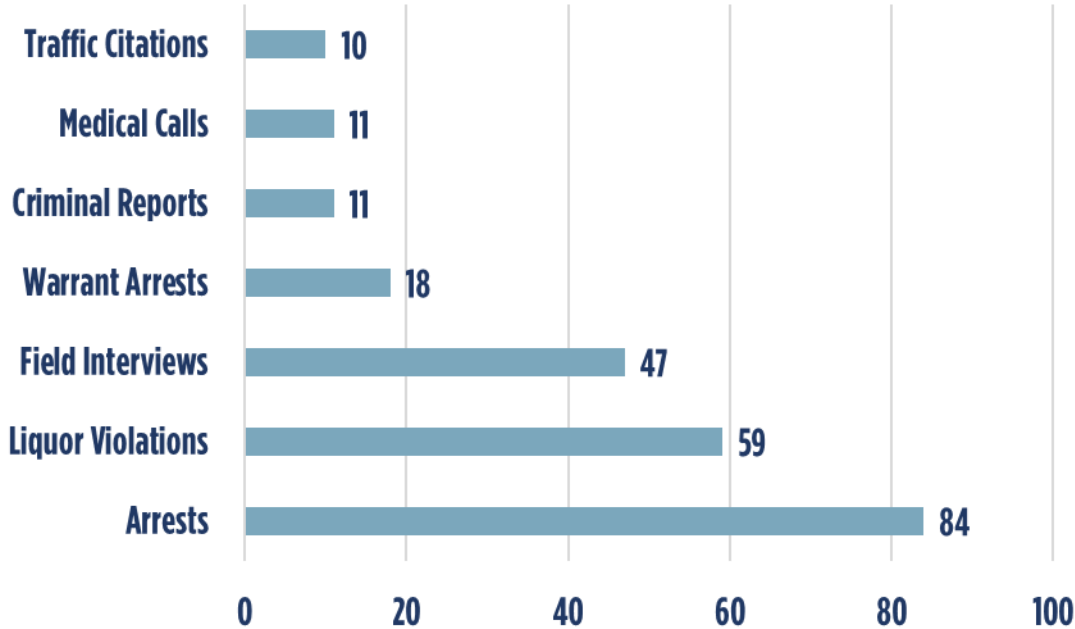
Off-Duty Transit Security



- Address fare evasion issues, rule violations and improve the public experience
- Presence at bus stops, transit centers, and on-board buses within Tempe
- Available at schools during high-ridership times



Statistics: July 1, 2016 – June 30, 2017



STAFF REPORT

AGENDA ITEM 8

DATE

August 1, 2017

SUBJECT

Future Agenda Items

PURPOSE

The Chair will request future agenda items from the Commission members.

BACKGROUND

The following future agenda items have been previously identified by the Commission or staff:

- September 12
 - Highline Canal MUP Final Design
 - Country Club Way Streetscape Design
 - Annual Report
 - 1st/Ash/Rio Intersection Alignment
 - Small Area/Downtown Transportation and Development Fee Impacts
 - Streetcar
- October 10
 - Fifth Street Streetscape Design
 - Annual Report
 - Alameda Drive Streetscape
 - Autonomous Vehicles
- November 12
 - Plan for Expansion of Bicycle/Pedestrian Paths
 - Bike Share
 - Streetcar
 - Maintenance Procedures for Sidewalk Shade Trees near Overhead Power Lines
- December 12
- January 9
 - Speed Limits
 - North/South Railroad Spur MUP
 - Crash Data and Enforcement
 - Western Canal Expansion MUP Final Design
- February 13
 - FY 18/19 Paid Media Plan
- March 13
- April 10
- TBD: Bicycle/Pedestrian Signal Activate Operations Update

- TBD: Prop 500

RECOMMENDATION

This item is for information only.

CONTACT

Shelly Seyler

480-350-8854

shelly_seyler@tempe.gov