



PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE

Tuesday, February 14, 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.	Don Cassano, Commission Chair	Information
2. Approval of Meeting Minutes The Commission will be asked to review and approve meeting minutes from the January 10, 2017 meeting.	Don Cassano, Commission Chair	ACTION
3. Commission Business The Commission will be asked if they would like to continue to receive in the mail paper copy meeting materials or only the memos. Electronic packets with all attachments would continue.	Don Cassano, Commission Chair	ACTION
4. FY 2017/18 Media Plan Staff and the consultant from Lavidge will present fiscal year 2017/18 Tempe in Motion paid media plan.	Mackenzie Keller, Community Relations and Betsey Griffin, Lavidge	Information and Possible Action
5. Bus Pullout Decision Matrix Staff will present a decision matrix strategy for arterial-arterial and arterial-collector intersection bus pullout locations.	Mike Nevarez, Public Works	Information and Possible Action
6. Fifth Street Streetscape Project Staff will present an update on the Fifth Street Streetscape Project	Eric Iwersen, Public Works	Information and Possible Action
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.	Don Cassano, Commission 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 January 10, 2017

Minutes of the Tempe Transportation Commission held on Tuesday, January 10, 2017, 7:30 a.m., at the Tempe Transportation Center, Don Cassano Community Room, 200 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Ryan Guzy	Lloyd Thomas
Don Cassano (Chair)	Susan Conklu
Brian Fellows	Shereen Lerner
Charles Redman	Bonnie Gerepka
Jeremy Browning	Kevin Olson
Charles Huellmantel	Cyndi Streid
Nigel A.L. Brooks	Shana Ellis

(MEMBERS) Absent:

None

City Staff Present:

Shelly Seyler, Deputy Public Works Director	Joe Clements, Transportation Financial Analyst
Sue Taaffe, Public Works Supervisor	Laura Kajfez, Neighborhoods Services Specialist
Tony Belleau, Transportation Planner	Mike Nevarez, Transit Manager
Julian Dresang, City Traffic Engineer	Mackenzie Keller, Public Information Officer
Chase Walman, Transportation Planner	Robert Yabes, Principal Planner
Eric Iwersen, Principal Planner	

Guests Present:

Kathy DeBoer, WestGroup Research	Bruce Hernandez, Behavior Research Center
JC Porter, Arizona State University	Eric Anderson, Maricopa Association of Governments

Commission Chair Cassano called the meeting to order at 7:33 a.m.

Agenda Item 1 – Public Appearances

None.

Agenda Item 2 – Minutes

Chair Cassano introduced the minutes of the November 8, 2016 meeting and asked for a motion. A motion was made to approve the minutes.

Motion: Commissioner Kevin Olson

Second: Commissioner Lloyd Thomas

Abstained: Charles Huellmantel

Decision: Approved

Agenda Item 3 – Commission Business

Chair Cassano introduced newly inducted Commissioners Shana Ellis and Nigel A.L. Brooks and provided an overview of the annual election of the Chair and Vice-Chair for the Commission for the upcoming year per the Tempe City Code. Chair Cassano asked for a motion for the Transportation Commission to select the position of Chair and Vice-Chair for 2017. A motion was made to select Don Cassano as Chair and Ryan Guzy as Vice-Chair.

Motion: Commissioner Kevin Olsen

Second: Commissioner Charles Huellmantel

Decision: Approved.

Chair Cassano also received consensus to keep the meeting on the second Tuesday of the month at 7:30 a.m.

Agenda Item 4 – Transportation Market Research Survey

Kathy DeBoer with WestGroup Research presented the key findings from the October 2016 Tempe Transit telephone survey. The most recent data collection was completed with 401 Tempe residents in September 2016. The survey results will be used to formulate the paid media campaign for fiscal year 2017-18 and to evaluate ways to improve transit and bicycle/pedestrian facilities. The margin of error for this sample size is approximately +4.9% at a 95% level of confidence. The overview included:

- Rider characteristics and opinions
- Overall satisfaction and improvements of Tempe's transit system
- Potential use of Tempe's transit system
- Awareness of Tempe in Motion
- Overall satisfaction and improvements Tempe bicycling and walking facilities
- Awareness of Tempe Youth Free Transit Pass program

The Commission asked the following questions, and staff responded as follows:

- What is the plan to make the bus shelters more secure? Staff explained that there is a bus security program led by the Tempe Police Department that includes having officers ride the buses and patrol bus shelters.
- Why is it that the percentage of those who ride transit at least monthly is down significantly from 2014? Staff said that one reason may be the popularity of Uber and Lyft or the lower gas prices.

Agenda Item 5 – Interstate 10/Interstate 17 Corridor Master Plan

Eric Anderson provided an update on the Maricopa Association of Government's progress on the Interstate 10/Interstate 17 Corridor Master Plan. The overview included:

- Project history
- Project timeline
- Needs assessment report
- Issues/obstacles
- Potential options
- Recommendation
- Public meeting dates

The Commission asked the following questions, and staff responded as follows:

- How will technology be incorporated into improvements including autonomous vehicles? Staff responded that emerging technologies will be evaluated.

Agenda Item 6 – Traffic Congestion Research Survey

Bruce Hernandez with Behavior Research Center provided an overview of the key findings from the October 2016 traffic congestion telephone survey including:

- Methodology
- Perception of traffic congestion in Tempe
- Congested times of day, day of week and intersections
- Affects that buses have on travel time
- Bus pullouts
- Night time construction
- Bike lanes

The Commission made the following statements and asked the following questions:

- The question about removing a lane of traffic to add bikes lanes did not include enough information or should have been asked differently.
- While there is a slight majority of residents who oppose removing a lane of traffic to add bikes lanes, there is a margin of error.
- There will be public meetings that cover this topic.
- Has staff compared the traffic data at the seven intersections identified in the survey highly congested? Staff said that no, but based on staff's professional experience these are the most congested intersections.
- The streets surrounding Arizona State University are very congested. Perhaps many people who responded to the survey were focused solely on McClintock Drive. The consultant added that the results are broken down by four quadrants within the city. Staff also stated that the biggest complaint along McClintock Drive is neighbors more difficulty getting out of the neighborhood.
- What type of construction was occurring when the survey was administered? Staff said that it was typical construction with no major daytime street restrictions.
- The responses to the bus pullout question were subjective and data should be used to formulate recommendations. It was also stated that this question could have been worded differently as it gives the impression that bus pullouts reduce congestion.
- When the 1996 transit tax was being drafted, the most popular improvement among residents was adding more bus pullouts.
- The survey should not be the only tool used for formulating recommendations. Data and other matrixes should be considered.
- Is there additional collision data? Staff responded no, but staff is evaluating 130 collector to arterial and arterial to arterial intersections as part of the bus pullout decision matrix project.

Agenda Item 7 – Bike Hero

The Commission discussed the 2017 Bike Hero Award nominations. Chair Cassano asked for a motion for the 2017 Bike Hero. A motion was made to nominate the Broadmor PTA Bike Cats.

Motion: Commissioner Kevin Olson

Second: Commissioner Brian Fellows

Abstained: Lloyd Thomas

Decision: Approved.

Agenda Item 8 – McClintock Drive Update

Shelly Seyler provided the Commission with the process for moving forward to explore and develop concepts to achieve the Council's goal of keeping the bike lanes, improving traffic flow and decreasing congestion on McClintock Drive. The presentation included:

- Data collection
- Timeline
- Deliverables
- Next Steps

The Commission made the following statements and asked the following questions:

- Will staff collect bike counts on other major arterials? Staff stated that the focus is on McClintock Drive and the method used to collect this data, which is to count bikes manually by staff watching video, is very time consuming.
- Collecting crash data on other major streets would be good to know. Staff responded crash data is received from the Arizona Department of Transportation and lags by about six months. In addition staff prefers to have three years of before and after crash data before making any assumptions about the lane configuration change.
- Is staff going to collect data for bicycles on the sidewalk, wrong way riding and at mid-block locations? Yes, staff did collect this data before the November presentation, but did not include it in the materials. Staff will explore collecting bike count data at midblock crossings.
- Are tubes going to be used to collect data? No because the tubes can't differentiate between cars that turn through the bike lane and bikes.
- Will the bike counts be for a 24 hour time period in an effort to show a more accurate number of users? Staff will do its best to collect as much data as possible.
- Will streets like Alameda Drive be included in the bike counts? Staff said that Alameda Drive is considered a collector street, but the cameras can pan to see other streets depending on the location. Staff will do its best to collect as much data as possible.

Agenda Item 9 – Department & Regional Transportation Updates

Staff informed the Commission that Mackenzie Keller has joined the Transportation Division as its Public Information Officer.

Agenda Item 8- Future Agenda Items

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

- Speed Limits (February)
- Bus Pullout Decision Matrix (February)
- Road Construction Traffic Mitigation (February)
- Streetcar (February)
- FY 2017-18 Media Plan (February)
- Rio Salado @ McClintock Drive MUP Underpass (March)
- Long-Range Forecast Presentation (March)
- 5th Street Streetscape Project (March)
- Country Club Way Bike/Ped Project (March)
- Leading vs. Lagging Left Turn Signals (March)
- ASU Bike Registry Outreach Efforts (April)
- McClintock Drive Update (April)

- Streetcar (April)
- Maintenance of MUPs (April)
- North/South Railroad Spur MUP (May)
- Tempe Involving the Public Plan (May)
- DTA Update (May)
- Streetcar (June)
- Annual Report (September)
- Annual Report (October)
- Alameda Streetscape Project (October)
- Bicycle/Pedestrian Signal Activate Operations Update (TBD)
- Small Area Transportation Study (TBD)
- Prop 500 (TBD)
- MAG Grant Applications (TBD)

Commissioner requested that the following items be added to future agenda items:

- Autonomous Vehicles
- Plan for Expansion of Bicycle/Pedestrian Paths
- Bus Security Program

The next meeting is scheduled for February 14, 2017.

The meeting was adjourned at 8:49 a.m.

Prepared by: Sue Taaffe

Reviewed by: Shelly Seyler and Eric Iwersen

**CITY OF TEMPE
TRANSPORTATION COMMISSION**



STAFF REPORT

AGENDA ITEM 3

DATE

January 20, 2017

SUBJECT

Commission Business

PURPOSE

At the request of a Commissioner, the Commission will be asked if they would like to continue to receive in the mail paper copies of all meeting materials or only the memos. Electronic packets with all attachments would continue.

BACKGROUND

Currently, staff emails to the Commission an electronic copy of the packet and mails a hard copy of the packet.

FISCAL IMPACT

None

RECOMMENDATION

None

CONTACT

Shelly Seyler
Deputy Public Works Director
480-350-8854
shelly_seyler@tempe.gov

ATTACHMENTS

None

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 4

DATE

February 14, 2017

SUBJECT

FY 2017/18 Transportation Media Plan

PURPOSE

At the February 14, 2017, Transportation Commission meeting, Mackenzie Keller, City of Tempe Public Information Officer and Betsey Griffin, Managing Director for Media with Lavidge advertising agency, will present the recommended Transportation media plan for FY 2017/18.

BACKGROUND

Key messages, as outlined in the marketing plan, include promoting:

- walking, biking, riding the bus (Orbit, Express and fixed route) and taking light rail
- bike events, bike registration, promotions and public meetings
- youth transit pass and ASU U-Pass programs
- Adopt-A-Path, Alley and Street programs
- bike safety education
- street restrictions and bus detours
- biking, walking and taking transit as part of Tempe's upbeat, forward-thinking culture
- GRID (bike share)
- Bike Hero
- Orbit Saturn

Key audiences include:

- ASU & high school students
- Tempe residents and professionals

Proposed paid mediums are based on target ability, efficiency, cost and relevance to the audience. They include:

- Tempe Opportunities Parks and Recreation publication
- ASU Off Campus Housing Guide
- GO Digital/Tegna – Programmatic Digital Buying
- Light pole and Mill Avenue banners
- High school online ads (McClintock, Corona del Sol, Marcos de Niza and Tempe high schools)
- Mall kiosks at Tempe Marketplace
- Gas pump tops – gas stations
- Facebook ads
- Pandora – Music Streaming Service

- Spotify - Music Streaming Service
- East Valley Cox Cable TV
- MNI Digital – Programmatic Digital Video Advertising (“Pre-Roll”)
- ASU newsrack ads
- Theater ads (Harkins and AMC)

FISCAL IMPACT

The budget for FY 2017/18 to promote all elements of the Tempe in Motion program is \$153,348. Adequate funds for the Transportation Media Plan are budgeted in Cost Center 3916-6751 for FY 2017/18.

RECOMMENDATION

This item is for information only.

CONTACT

Mackenzie Keller
Public Information Officer
480-898-7989
Mackenzie_Keller@tempe.gov

ATTACHMENTS

PowerPoint

Tempe In Motion

2017-2018 Media Plan



Media Objectives

- Increase awareness of public transit within Tempe
- Encourage use of public transportation
- Promote continuous messages which may include:
 - Walking, biking and riding the bus (Orbit, Express, fixed route) and light rail
 - Bike events, bike registration, promotions and public meetings
 - Bike safety education
 - Youth Transit Pass/ASU U-Pass programs
 - Street Restrictions and Bus Detours
 - Biking, walking, and taking transit as part of Tempe's upbeat, forward thinking culture

TIM Target Demos

- Adults 25-49, residing or working in Tempe
 - Based on media audit, Tempe's composition of adults 25-49 is 51%
 - Heavy users of internet and radio
 - Heavy targeting toward millennial demographic within this subset
- ASU Students and young adults 18-24
 - 60,168 students attend the Tempe campus
 - Based on media audit, Tempe composition of adults 18-24 is 17.9%
 - Heavy users of internet
- Teens 13-17
 - Heavy users of internet

Media Strategies

- Use a variety of mediums to reach all pertinent demos in the City of Tempe
- Maintain presence on digital all year for top-of-mind awareness

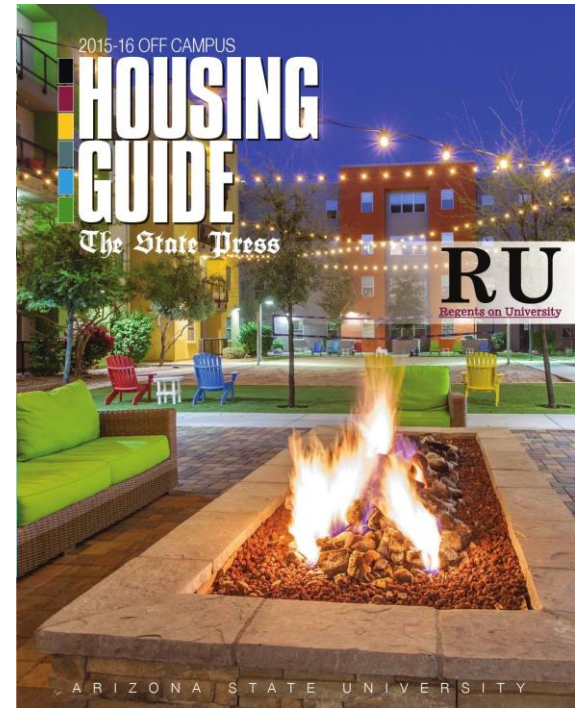
2017-2018 Media Plan

- Budget: approximately \$153,348
- Media Vehicles
 - Print
 - Digital
 - Outdoor
 - Cinema
 - Streaming Radio
 - TV and Video Pre-Roll



Print

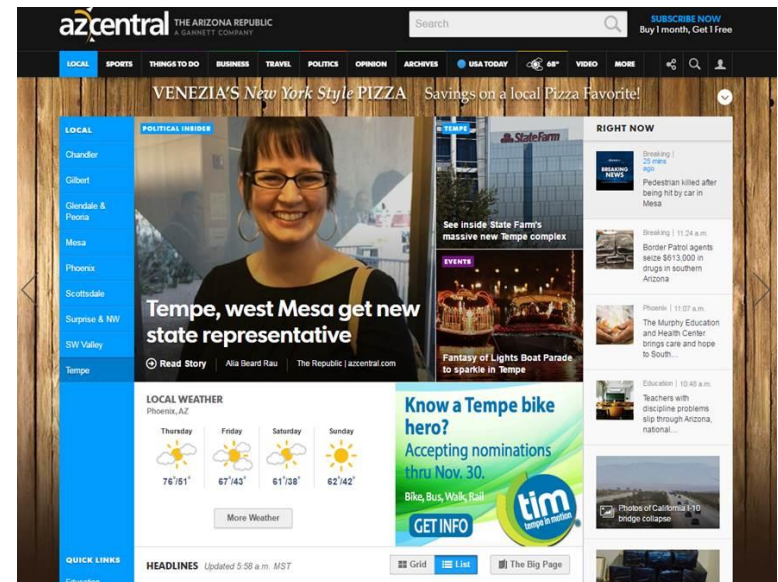
- \$3,600 (2% of budget)
 - ASU Off Campus Housing Guide
 - Reaches off campus commuters
 - Circulation: 10,000



LAVIDGE

DIGITAL

- \$30,832 (20% of budget)
 - All target Tempe Zips only
 - Mix of local and national sites
 - 75% mobile ads (phones, tablets)
 - 25% desktop
 - 780,000 on Facebook
 - 6.8 million impressions



LAVIDGE

OUTDOOR

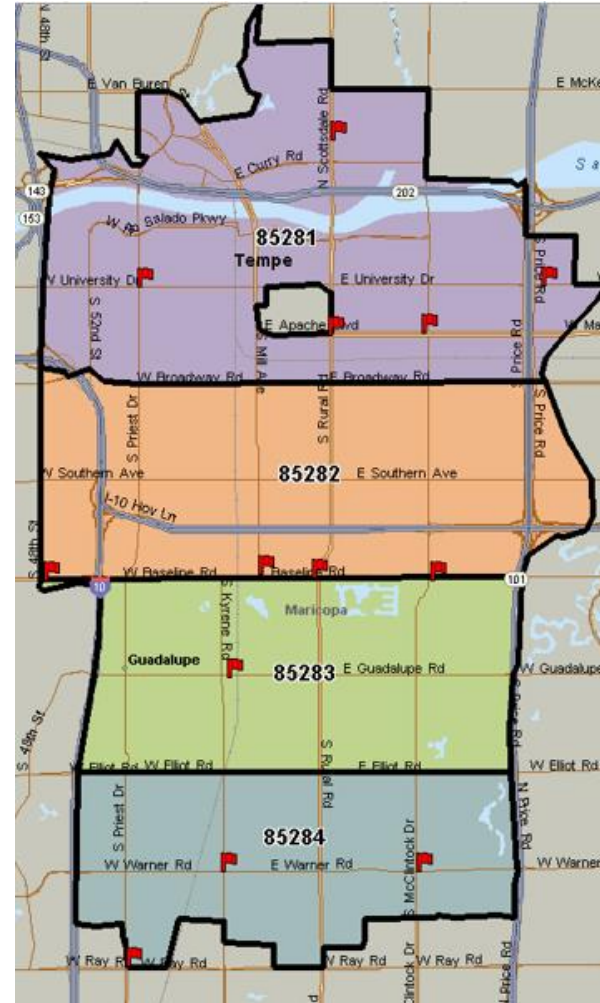
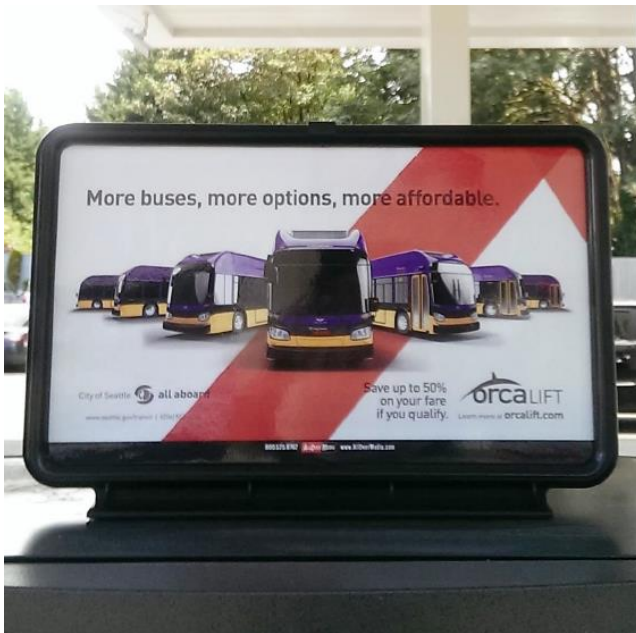
- \$17,000 (11% of budget)
- CBS Outdoor – Tempe Marketplace
 - 5 units, 24 weeks
 - Mid-July through mid-January, covering back-to-school and holiday shopping
 - Estimated 5 millions impressions



LAVIDGE

OUTDOOR

- ***NEW*** Gas Pump Toppers
 - 10 Tempe gas stations, 40 signs
 - August 2017 campaign
 - 953,400 impressions



CINEMA

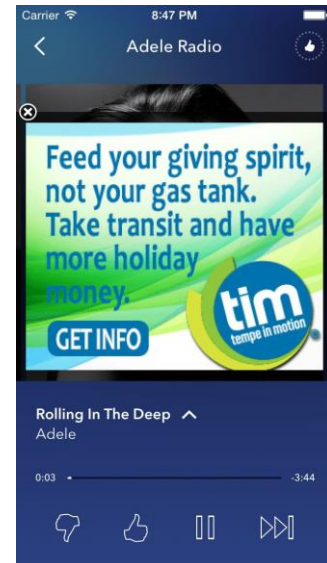
- \$18,276 (12% of budget)
- Three Tempe movie theaters, TV commercial before movie
 - Harkins Valley Art, Mill Ave, 1 screen
 - Harkins, Tempe Marketplace, 16 screens
 - AMC, Centerpoint on Mill Ave, 11 screens
- Peak movie season
 - Thanksgiving – Early January
 - May – June summer blockbusters
- Estimated 514,000 impressions



LAVIDGE

STREAMING RADIO

- \$45,430 (30% of budget)
- Pandora Radio, target Tempe Zips
 - :30 Audio with Banner Ad
 - 2,376,000 impressions
- ***NEW*** Spotify, target Tempe Zips
 - :30 Audio with Banner Ad
 - 404,800 impressions



LAVIDGE

TV and Video Pre-Roll

- \$38,210 (25% of budget)
- Cox Southeast Phoenix ZONE includes Tempe
 - 80,535 subscribers
 - 11 weeks of advertising, 6.3 Million Impressions
- ***NEW*** Programmatic Pre-Roll Video
 - 6 months of advertising, 1,020,000 million impressions
 - Will appear on various local and national sites as video is viewed

2017-2018 Media Plan

- Budget: \$153,348
- Over 27.8 million impressions (up 30% from previous year)
- Media Vehicles
 - 2% Print \$ 3,600
 - 20% Digital \$ 30,832
 - 11% Outdoor \$ 17,000
 - 12% Cinema \$ 18,276
 - 30% Streaming Radio \$ 45,430
 - 25% TV/Video \$ 38,210

STAFF REPORT

AGENDA ITEM 5

DATE

January 23, 2017

SUBJECT

Bus Pullout Decision Matrix Update

PURPOSE

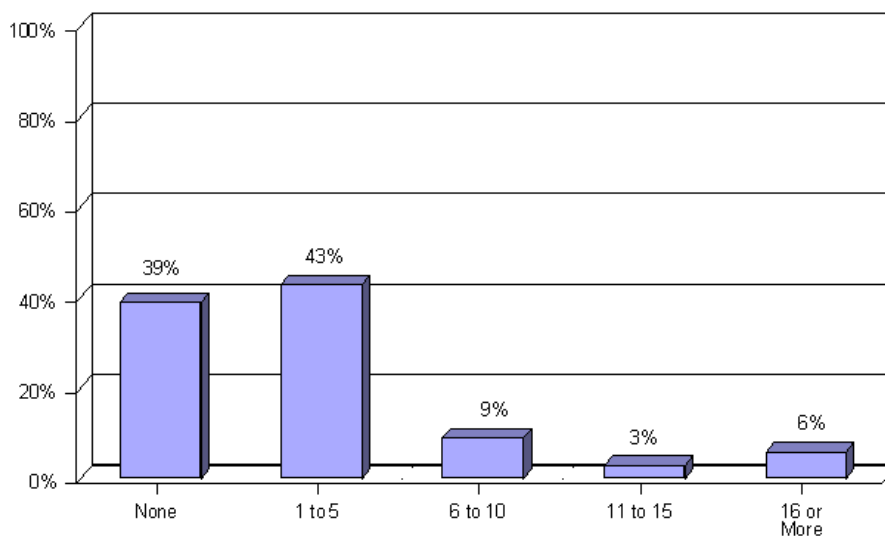
The purpose of this memo is to present the Commission with the update to the decision matrix strategy following the August 11, 2016 Issue Review Session where Council requested that staff include factors related to previous projects where volumetric changes to the configuration of the roadway were made and input from the public.

BACKGROUND

As requested by the Council, staff included projects which were recently completed that included a volumetric change to the configuration of the roadway. In September and October 2016, a telephone survey of 425 Tempe residents was conducted by Behavior Research Center. This telephone is statistically significant with a margin of error is +4.8% at a 95% level of confidence, which means that the probability is 95% that the estimates are within 4.8 percentage points of the numbers that would have obtained had every qualified resident in Tempe been interviewed. The survey results related to the bus pullouts are provided below:

Sixty-one percent of residents indicate that in the past month they have been delayed at an intersection in Tempe because of a stopped bus, with a median reading of 2.0 times over the period.

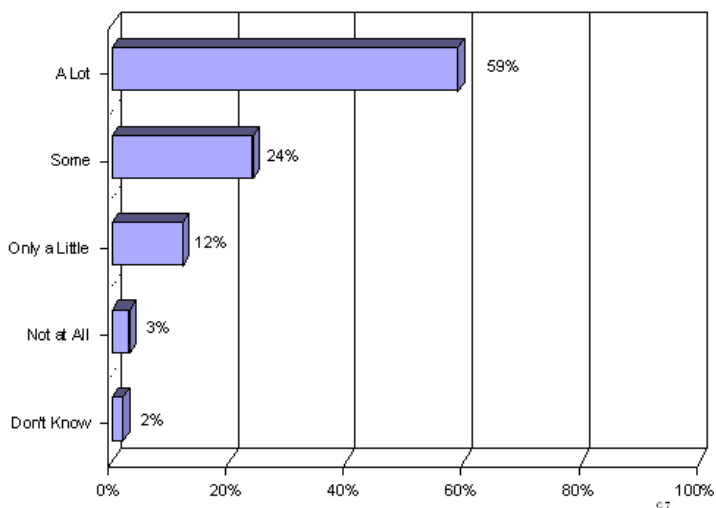
**EXPERIENCE WITH BUS-CAUSED
TRAFFIC DELAYS**



Fifty-nine percent of residents who had experienced a bus-caused delay in the past month believe that the installation of bus pullouts would help “a lot” to improve Tempe traffic congestion.

PERCEIVED IMPACT OF BUS PULLOUTS ON TRAFFIC CONGESTION

(Among Those Who Have Experienced Bus Delays in the Past Month)



Residents were also asked at which intersection have you experienced delays. The following were identified as the cross streets that form each intersection.

	Total	Region			
		North-west	North-east	South-west	South-east
Broadway & Rural	19%	37%	19%	5%	10%
Southern & Rural	17	19	25	8	10
Southern & Mill	17	28	14	9	16
Baseline & Rural	15	27	8	15	8
University & Rural	14	25	10	10	6
Southern & McClintock	13	24	11	4	10
University & Mill	11	18	9	12	1
Broadway & McClintock	10	16	3	7	17
Apache & Rural	9	15	7	9	1
Baseline & Mill	9	16	1	13	2
Baseline & McClintock	9	17	4	9	7
Baseline & Priest	9	15	1	17	1
Broadway & Priest	9	23	6	1	1
Guadalupe & Rural	9	14	1	12	12
University & McClintock	8	15	6	4	2
University & Priest	8	15	11	1	0
Broadway & Mill	7	15	9	0	0
Apache & McClintock	7	15	2	6	2
Guadalupe & McClintock	6	14	2	0	10
Southern & Priest	5	15	0	1	6
McClintock & Elliot	2	0	0	8	1
McClintock & Warner	1	0	0	0	8
All others	10	11	3	13	16

Based on the information, staff updated the decision matrix to include the additional factors. As a reminder, the table below provides all of the scoring criteria used in creating the bus pullout decision matrix. Each factor was given a score and the total score was used to rank the locations as identified Table 2.

TABLE 1 – Scoring Criteria

Factor	Range	Assigned Score	Why This Matters
Street Configuration	1 – 2 lanes	5	Streets with one or two lanes provide minimal opportunity for vehicles and cyclists to safely pass a stopped bus.
	3 + lanes	0	
Traffic Volume –Vehicles per day by direction (VPD)	0 – 3500 VPD	1	On streets with high traffic volume, a stopped bus is more likely to impede the flow of vehicle traffic and the potential for a collision is increased.
	3501 – 7000 VPD	3	
	7001+ VPD	5	
Count of Pass-through Bus Trips – Trips per day (TPD)	0 – 4 TPD	0	Bus stops with a greater number of trips will have a bus blocking traffic more often than those with a small number of trips. The higher quantity of disruptions increases the potential for traffic delays and collisions.
	5 – 100 TPD	1	
	101 – 200 TPD	2	
	201+ TPD	3	
Count of Timepoint Bus Trips – Time points per day	0 – 4 Timepoints	0	Bus stops that serve as timepoints may be especially impactful as buses sometimes must remain at the stop for several minutes.
	5 – 50 Timepoints	2	
	51 – 100 Timepoints	3	
	101+ Timepoints	4	
Transfers Routes Available	Yes	1	If there are transfer routes available, the volume of passengers using the stop would increase, as would the dwell time for stopped buses.
	No	0	
High Crash Location	Yes	5	Implementation of bus pullouts may help improve safety at intersections that appear on the city's high crash list.
	No	0	
Left Turn Traffic Impeded by Bus	Yes	5	A significant safety issue occurs when turning traffic (typically left turns) is impeded by a stopped bus. This may result in intersection delays and unexpected lane changes, increasing the potential for a collision.
	No	0	
Federal Grants	Yes	20	The City of Tempe has dedicated grant funds for construction. Only bus routes that are expanding

	No	0	have the option to apply for grant funds related to bus pullouts.
Bike Lanes	Yes	2	When a bike lane is present, a stopped bus will impede the bike lane. This may result in lane changes by cyclists, increasing the potential for a collision.
	No	0	
Project Integration	Yes	2	When an adjacent project is scheduled, it might be advantageous to coordinate the projects allowing for integration and decreased impacts of construction on the traveling public. In addition, when construction of bus pullouts might enhance the success of an adjacent project.
	No	0	
Roadway Capacity/volumetric change from project	Yes	2	A project that has changed the lane configuration and capacity of a roadway may increase congestion. This could be further increased by buses stopping in the travel lanes/bike lanes if they are not able to fully get out of the lanes of travel.
	No	0	
Resident Feedback from Survey	Yes	2	Locations identified were based on a survey regarding resident perceptions of the impacts of buses stopping in the lanes of traffic.
	No	0	

Table 2 below includes the top 40 locations according to the ranking system established above. Those in blue are the bus pullouts recommended for design in FY 16-17 with up to three pullouts constructed in FY 17-18. Some of the locations included will be implemented through striping modifications only. In addition, the location in green has an existing design completed.

TABLE 2 – Top 40 Recommended Bus Pullout Locations

	Location			Overall		Property Owner	Comments
	Direction	On Street	At Street	Score	Rank		
1	NB	Priest	Ray	30	1	Archland Property LLC	
2	EB	University	McClintock	29	2	Theolline Investments	
3	EB	University	Priest	29	2	Raffter M Enterprises Inc	Existing Design
4	NB	Priest	Baseline	27	4	Eck Baseline 33 LLC	
5	EB	University	Mill Avenue	27	4	Arizona State University	
6	SB	McClintock	Apache	27	4		Striping Modifications Only
7	SB	McClintock	Broadway	25	7	Business Properties Partnership No. 41	
8	NB	McClintock	Apache	23	8	Kozinets Irving O/Esther S TR	
9	WB	Broadway	Hardy	22	9	Circle K Stores Inc	
10	EB	Guadalupe	Kyrene	20	10	Supr Petro LLC	
11	SB	McClintock	Southern	20	10	Walgreen Arizona Drug Co	
12	SB	Kyrene	Guadalupe	19	12	R1 CS1 LLC	
13	NB	Kyrene	Guadalupe	19	12	The Elmukhtar Group	
14	EB	Southern	48th	19	12		Striping Modifications Only
15	EB	Southern	Priest	19	12	Circle K Stores Inc	
16	SB	Mill	Southern	19	12	DBNCH Circle LLC	
17	WB	Guadalupe	Kyrene	18	17	Tempe Union High School District	

18	SB	52nd	University	18	17	University 52nd St LLC	
19	NB	52nd	University	18	17	MSC Tempe LLC	
20	SB	Hardy	Baseline	18	17		Striping Modifications Only
21	NB	McClintock	Baseline	18	17	Rosebud Tempe One	
22	WB	Rio Salado	McClintock	17	22	City of Phoenix	
23	EB	Rio Salado	Rural Road	17	22	Arizona Board of Regents	
24	SB	Hardy	Broadway	17	22		Striping Modifications Only
25	NB	Hardy	Broadway	17	22		Striping Modifications Only
26	EB	Warner	McClintock	17	22	Simco Sales Company Inc	
27	SB	Rural	Apache	17	22	Supr Group LLC	
28	NB	McClintock	Warner	17	22	Bank of America Arizona	
29	EB	Broadway	Rural	17	22	909 East Broadway Road LLC	
30	EB	Curry	Mill	16	30		Striping Modifications Only
31	NB	Hardy	Warner	16	30		Striping Modifications Only
32	SB	Mill	Washington	16	30	City of Tempe	
33	NB	Hardy	Baseline	16	30		Striping Modifications Only
34	WB	Guadalupe	Rural	16	30	NIR Enterprises LLC	
35	EB	Guadalupe	Rural	16	30	Circle K Stores Inc	
36	SB	Rural	Guadalupe	16	30	Laird Financial Corp	
37	NB	Rural	Baseline	16	30	Bank of America N A	
38	NB	Rural	Broadway	16	30	Safeway Inc, CFT Developments LLC	
39	SB	McClintock	Warner	16	30	World Savings and Loan Association	
40	SB	McClintock	Baseline	16	30	Chapman Chevrolet LLC	

TABLE 3 – Comparison of Top 14 Recommended Bus Pullout Locations from August 2016 to January 2017

	Location			New Overall		Aug. 2016 Overall		Rank Change
	Direction	On Street	At Street	Score	Rank	Score	Rank	
1	NB	Priest	Ray	30	1	30	1	None
2	EB	University	McClintock	29	2	27	2	None
3	EB	University	Priest	29	2	27	2	None
4	NB	Priest	Baseline	27	4	25	4	None
5	EB	University	Mill Avenue	27	4	25	4	None
6	SB	McClintock	Apache	27	4	23	6	Up 2
7	SB	McClintock	Broadway	25	7	21	8	Up 1
8	NB	McClintock	Apache	23	8	21	8	None
9	WB	Broadway	Hardy	22	9	22	7	Down 2
10	EB	Guadalupe	Kyrene	20	10	20	10	None
11	SB	McClintock	Southern	20	10	16	24	Up 14
12	SB	Kyrene	Guadalupe	19	12	19	11	Down 1
13	NB	Kyrene	Guadalupe	19	12	19	11	Down 1
14	EB	Southern	48th	19	12	19	11	Down 1
17	WB	Guadalupe	Kyrene	18	17	18	14	Down 3*

*No longer in top 14

FISCAL IMPACT

None

RECOMMENDATION

None

CONTACT

Shelly Seyler

Deputy Public Works Director

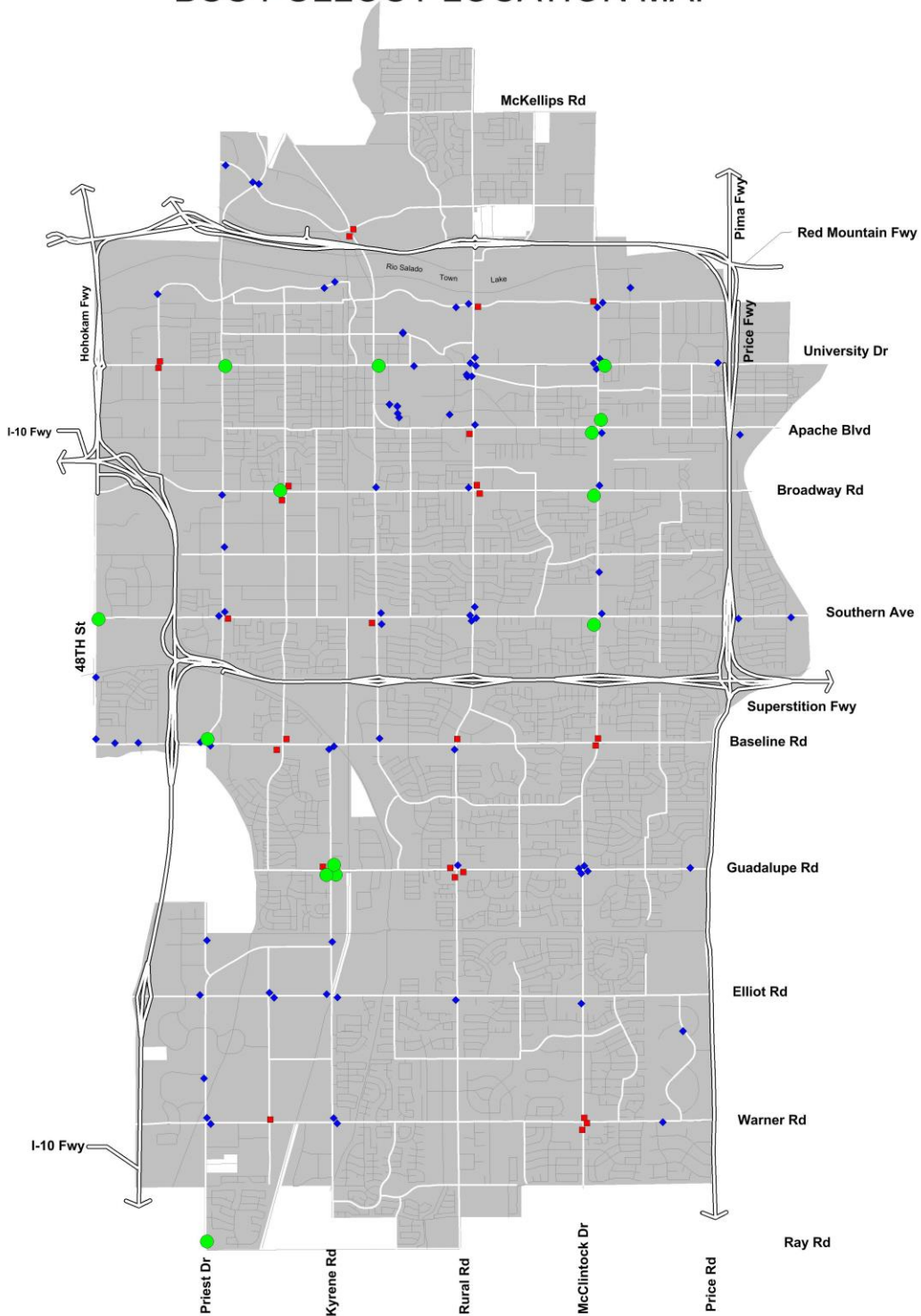
480-350-8854

shelly_seyler@tempe.gov

ATTACHMENTS

- PowerPoint
- Traffic Congestion Telephone Survey
- Traffic Congestion Online Survey

MAP 1 BUS PULLOUT LOCATION MAP



Legend

- Reccomended 14 Bus Pullout Locations for Design FY16-17
- Reccomended 26 Bus Pullout Locations for Design After FY16-17
- ◆ Existing Bus Pullouts

Bus Pullout Decision Matrix Follow-up Presentation

**Transportation Commission
February 14, 2017**



Factors Considered in Creating Decision Matrix



- Street configuration
- Traffic volume
- Pass-through bus trips
- Time points
- Transfers
- High crash locations
- Left turn impedance
- Federal grants
- Bike lanes
- Project Integration
- Volumetric change to configuration of roadway
- Input from public



Telephone Survey Findings

- Conducted by Behavior Research Center with 425 residents.
- Margin of error is $\pm 4.8\%$ at a 95% level of confidence.
- 61% indicated that in the past month they have been delayed at an intersection because of a stopped bus.
- 59% who had experienced a bus-caused delay in the past month believed that adding a bus pullout would help a lot to improve traffic congestion.

Other Considerations

- Locations with Layovers
- Development Opportunities
- City Owned Property
- Orbit Saturn Implementation
- Safety and Accessibility Concerns
- ROW/Property Acquisition

Top 14 Ranked Locations Recommended For Design

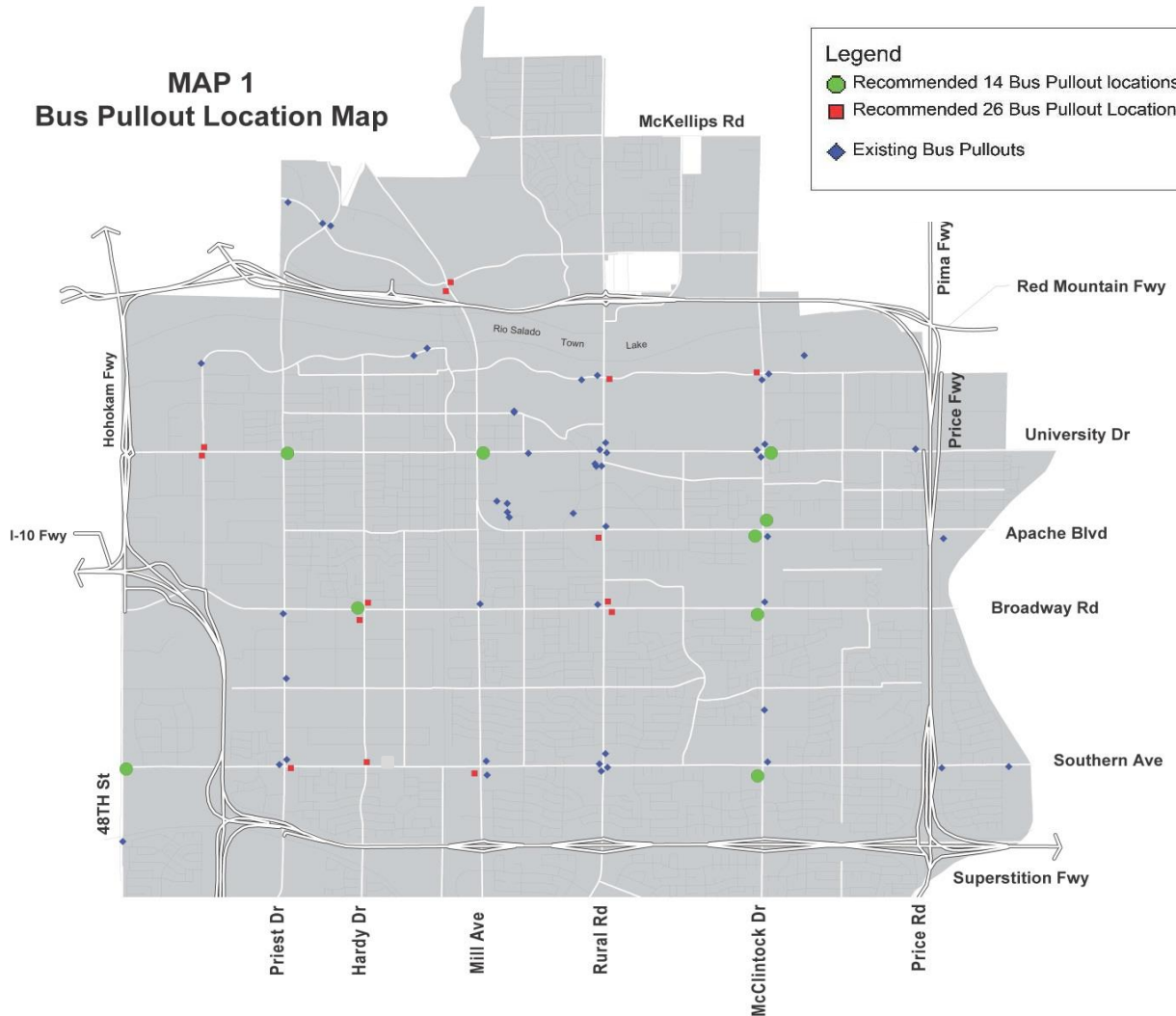
	Location			New Overall		Aug. 2016 Overall		Rank Change
	Direction	On Street	At Street	Score	Rank	Score	Rank	
1	NB	Priest	Ray	30	1	30	1	None
2	EB	University	McClintock	29	2	27	2	None
3	EB	University	Priest	29	2	27	2	None
4	NB	Priest	Baseline	27	4	25	4	None
5	EB	University	Mill Avenue	27	4	25	4	None
6	SB	McClintock	Apache	27	4	23	6	Up 2
7	SB	McClintock	Broadway	25	7	21	8	Up 1
8	NB	McClintock	Apache	23	8	21	8	None
9	WB	Broadway	Hardy	22	9	22	7	Down 2
10	EB	Guadalupe	Kyrene	20	10	20	10	None
11	SB	McClintock	Southern	20	10	16	24	Up 14
12	SB	Kyrene	Guadalupe	19	12	19	11	Down 1
13	NB	Kyrene	Guadalupe	19	12	19	11	Down 1
14	EB	Southern	48th	19	12	19	11	Down 1
17	WB	Guadalupe	Kyrene	18	17	18	14	Down 3*

*No longer
in top 14

MAP 1 Bus Pullout Location Map

Legend

- Recommended 14 Bus Pullout locations for Design FY16-17
- Recommended 26 Bus Pullout Locations for Design After FY16-17
- ◆ Existing Bus Pullouts



Legend

- Recommended 14 Bus Pullout locations for Design FY16-17
- Recommended 26 Bus Pullout Locations for Design After FY16-17
- ◆ Existing Bus Pullouts



Council Direction Requested

- Feedback on methodology used to create bus pullout decision matrix.

CITY OF TEMPE TRAFFIC CONGESTION SURVEY

October 2016

Prepared for
City of Tempe
Transportation Division

Prepared by
Behavior Research Center, Inc.
45 East Monterey Way
Phoenix, Arizona 85012
(602) 258-4554



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INTRODUCTION

This study was commissioned by the City of Tempe Transportation Division to determine residents' attitudes about traffic congestion within the City. More specifically, this study addresses the following issues:

- Residents' attitudes about how big of a problem traffic congestion is in Tempe in general and on major roads adjacent to their neighborhood.
- Residents' experiences with traffic delays at Tempe intersections due to stopped buses.
- Residents' experiences with traffic delays on major Tempe roads due to construction.
- Residents' attitudes about adding bicycle lanes to major roads in Tempe.

The information contained in this report is based on 425 telephone interviews conducted with a representative cross-section of Tempe residents 18 years of age or older. For the purpose of this research, a minimum of 100 interviews were conducted in each of four geographic analyses zones:

Northwest – north of US 60, west of Rural Road
Northeast – north of US 60, east of Rural Road
Southwest – south of US 60, west of Rural Road
Southeast – south of US 60, east of Rural Road

Respondent selection for this project was accomplished via a computer-generated pure unweighted (EPSEM) random digit dial (RDD) telephone sample which selects households on the basis of telephone prefix. This method was used because it ensures a randomly-selected sample of area households proportionately allocated throughout the sample universe. This method also ensures that all unlisted and newly listed telephone households are included in the sample. A pre-identification screening process was also utilized on this project. This computer procedure screens the sample to remove known business and commercial phone prefixes in addition to disconnects, faxes and computers. Both landlines and cell telephones were included in this research.

All of the interviewing on this project was conducted between September 28 and October 9, 2016, at the Center's central location telephone facility where each interviewer worked under the direct supervision of BRC supervisory personnel. All of the interviewers who worked on this project were professional interviewers of the Center. Each received a thorough briefing on the particulars of this study. During the briefing, the interviewers were trained on (a) the purpose of the study, (b) sampling procedures, (c) administration of the questionnaire and (d) other project-related factors. In addition, each interviewer completed a set of practice interviews to ensure that all procedures were understood and followed.

Interviewing on this study was conducted during a cross-section of late afternoon, evening, weekday and weekend hours. During the interviewing segment of this study, up to five separate attempts, on different days and during different times of day, were made to contact each selected household. Only after five unsuccessful attempts was a household substituted in

the sample. Using this methodology, the full sample was completed and partially completed interviews were not accepted nor counted toward fulfillment of the total quotas.

As the data collection segment of this study was being undertaken, completed and validated interviews were turned over to BRC's Coding Department. The Coding Department edited, validated and coded the interviews. Upon completion of coding, a series of validity and logic checks were run to ensure the data were "clean." Following this procedure, the study data were "weighted" by the actual volume of residents in each geographic zone to make the final study sample representative of the study universe.

All surveys are subject to sampling error. Sampling error, stated simply, is the difference between the results obtained from a sample and those which would be obtained by surveying the entire population under consideration. The size of sampling error varies, to some extent, with the number of interviews completed and with the division of opinion on a particular question. An estimate of the sampling error range for this study is provided in the following table. The sampling error presented in the table has been calculated at the confidence level most frequently used by social scientists, the 95 percent level. The sampling error figures shown in the table are average figures that represent the maximum error for the sample bases shown (i.e., for the survey findings where the division of opinion is approximately 50%/50%). Survey findings that show a more one-sided distribution of opinion, such as 70%/30% or 90%/10%, are usually subject to slightly lower sampling tolerances than those shown in the table.

As may be seen in the table, the oversampling error for this study is +/-4.8 percent when the sample is studied in total. However, when subsets of the total sample are studied, the amount of sampling error increases based on the sample size within the subset.

SAMPLING SIZE	APPROXIMATE SAMPLING ERROR AT A 95% CONFIDENCE LEVEL (PLUS/MINUS PERCENTAGE OF SAMPLING TOLERANCE)
425	4.8%
300	5.8
200	7.1
100	10.0

SAMPLE PROFILE

<u>AGE</u>		<u>TYPICAL MODE OF TRANSPORTATION</u>	
Under 25	9%	Car/Truck	84%
25 to 34	38	Bike	10
35 to 44	11	Bus	2
45 to 54	17	Ride Share/Taxi	2
55 to 64	8	Walk	1
65 or over	<u>17</u>	Light rail	1
	100%	Motorcycle	<u>1</u>
			101%

*Does not equal 100% due to rounding

SUMMARY OF THE FINDINGS

KEY STUDY FINDINGS

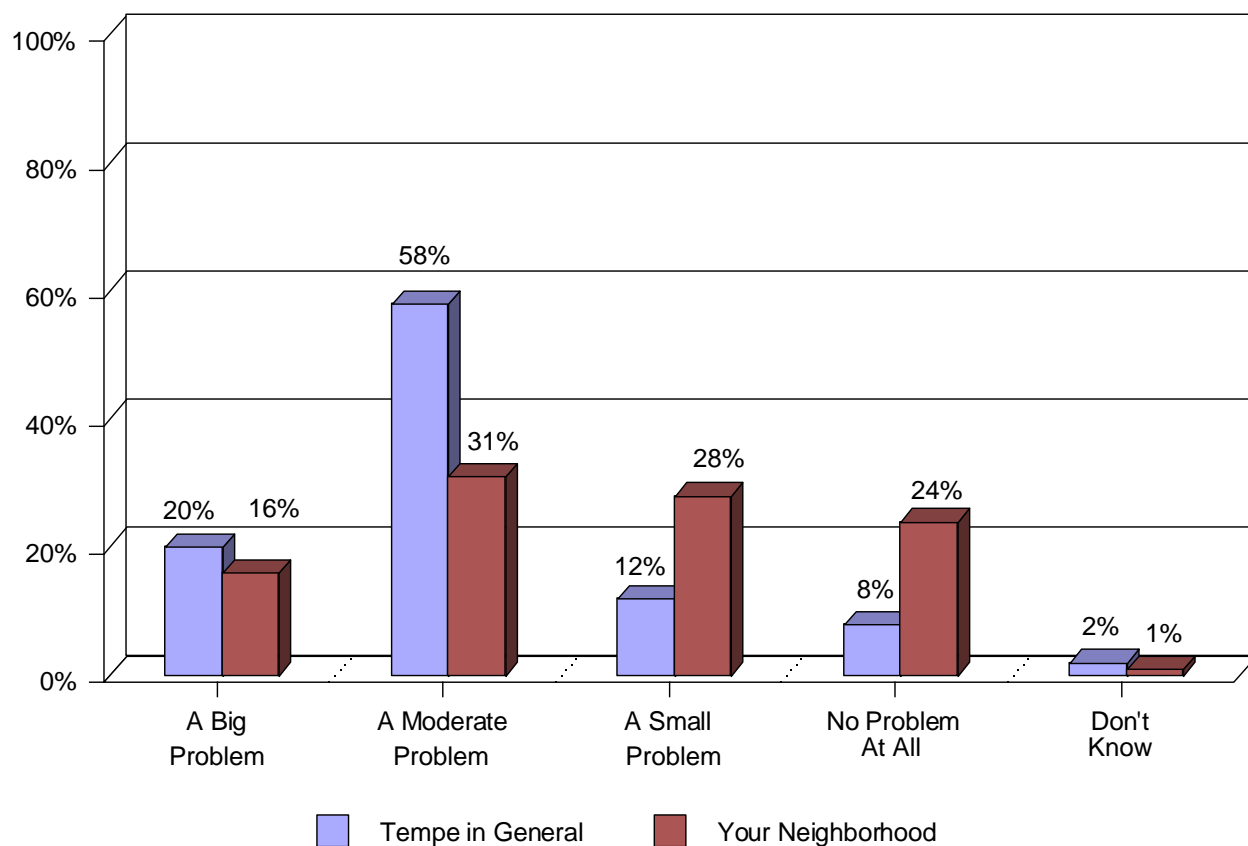
- Seventy-eight percent of Tempe residents believe that traffic congestion in Tempe in general is either a big problem (20%) or a moderate problem (58%), while less than a majority of residents (47%) believe that traffic congestion on the major roads adjacent to their neighborhood is a big (16%) or moderate (31%) problem.
- Residents believe that afternoon drive time is by far the worst time for congestion with a reading of 84 percent. Morning drive time is mentioned by 35 percent of residents as the worst time.
- With a reading of 61 percent, Friday is viewed as the worst day for congestion in Tempe. Receiving slightly lower readings of approximately 50 percent are the remaining four weekdays.
- Seven Tempe intersections receive readings over ten percent when residents are asked to indicate those intersections with the worst congestion problems: University & Rural (18%); Broadway & Rural (16%); University & Mill (16%); Southern & Rural (15%); Southern & Mill (13%); Broadway & Mill (12%); Apache & Rural (12%).
- Sixty-one percent of residents indicate that in the past month they have been delayed at an intersection in Tempe because of a stopped bus, with a median reading of 2.0 times over the period.
- Fifty-nine percent of residents who had experienced a bus-caused delay in the past month believe that the installation of bus pullouts would help “a lot” to improve Tempe traffic congestion.
- Seventy-eight percent of residents indicate that in the past three months they have been delayed in traffic while traveling on a major road in Tempe because of a lane restriction related to construction, with a median reading of 4.0 times over the period.
- Sixty-six percent of residents who experienced construction delays in the past three months would prefer that lane restrictions or closures related to construction occur overnight, even if it might produce noise on a major road adjacent to their neighborhood.
- A slight majority of Tempe residents (52%) oppose adding bike lanes to major roads in Tempe if it means removing a lane of traffic.

TRAFFIC CONGESTION IN TEMPE

Nearly eight out of ten residents (78%) believe that traffic congestion in Tempe in general is either a big problem (20%) or a moderate problem (58%), with northern Tempe residents offering somewhat higher problem readings than southern Tempe residents.

In comparison, less than a majority of residents (47%) believe that traffic congestion on the major roads adjacent to their neighborhood is a big (16%) or moderate (31%) problem. Only among northwestern Tempe residents does the problem reading reach majority status (55%).

TEMPE TRAFFIC CONGESTION



c1

TABLE 1: EVALUATION OF
TEMPE TRAFFIC CONGESTION

“How big of a problem would you say the amount of traffic congestion in **Tempe is in general?**”

	REGION				
	TOTAL	North- west	North- east	South- west	South- east
A big problem	20%	18%	23%	17%	20%
A moderate problem	58	64	58	57	53
A small problem	12	10	10	14	15
No problem at all	8	7	6	10	12
Don't know	<u>2</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>0</u>
	100%	100%	100%	100%	100%
BIG/MODERATE SUMMARY	78%	82%	81%	74%	73%

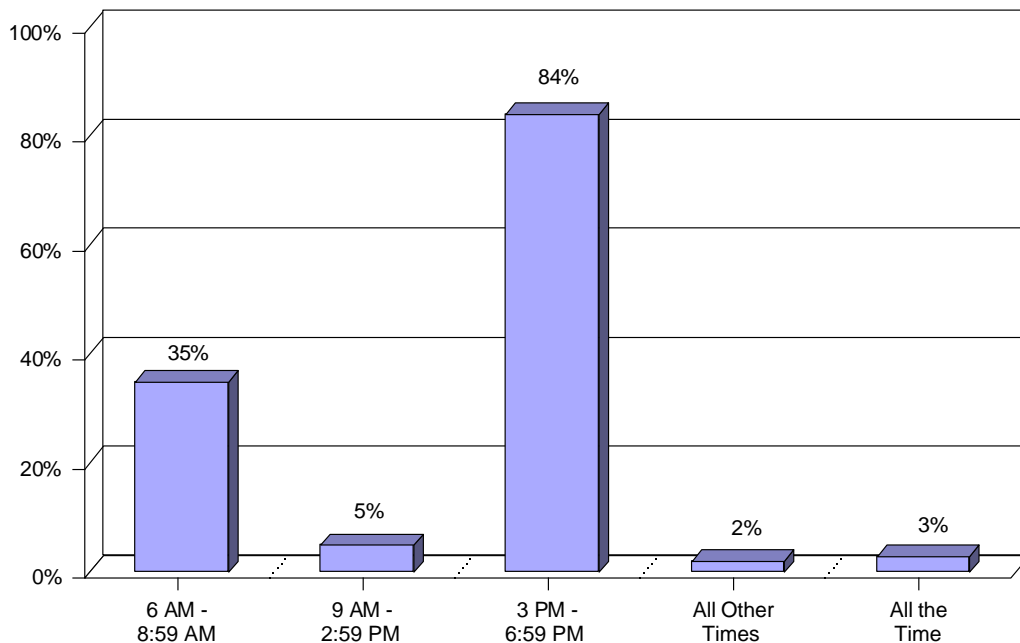
“How big of a problem would you say traffic congestion is on the major streets adjacent to **your neighborhood?**”

A big problem	16%	20%	16%	11%	17%
A moderate problem	31	35	24	36	29
A small problem	28	13	38	29	28
No problem at all	24	31	19	22	25
Don't know	<u>1</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>1</u>
	100%	100%	100%	100%	100%
BIG/MODERATE SUMMARY	47%	55%	40%	47%	46%

When residents who believe congestion is a big or moderate problem in Tempe are asked to reveal the worst times for congestion, the afternoon drive time receives by far the highest reading of 84 percent. This high reading is consistent across all regions. Morning drive time is mentioned by 35 percent of residents, with residents in southern Tempe offering particularly high readings.

WORST TIMES FOR TRAFFIC CONGESTION IN TEMPE

(Among Those Who Feel Congestion is a Big or Moderate Problem in Tempe)



C2

TABLE 2: WORST TIMES FOR TRAFFIC CONGESTION IN TEMPE

(AMONG THOSE WHO FEEL A CONGESTION IS A BIG OR MODERATE PROBLEM IN TEMPE)

“Is there a certain time of day that you feel congestion is worse in Tempe?”

	TOTAL	REGION			
		North-west	North-east	South-west	South-east
6 a.m. to 8:59 a.m.	35%	25%	31%	50%	41%
9 a.m. to 2:59 p.m.	5	16	1	2	2
3 p.m. to 6:59 p.m.	84	76	90	86	80
All other times	2	2	1	2	5
All the time	3	1	6	1	2

Totals do not equal 100% due to multiple responses

Continuing with this line of questioning, we find that Friday, with a reading of 61 percent, is viewed as the worst day for congestion in Tempe. Receiving slightly lower readings of approximately 50 percent are the remaining four weekdays. The data also reveals that northeast residents offer particularly high weekday readings, while southwest residents offer particularly low weekday readings.

WORST DAYS FOR TRAFFIC CONGESTION IN TEMPE

(Among Those Who Feel Congestion is a Big or Moderate Problem in Tempe)

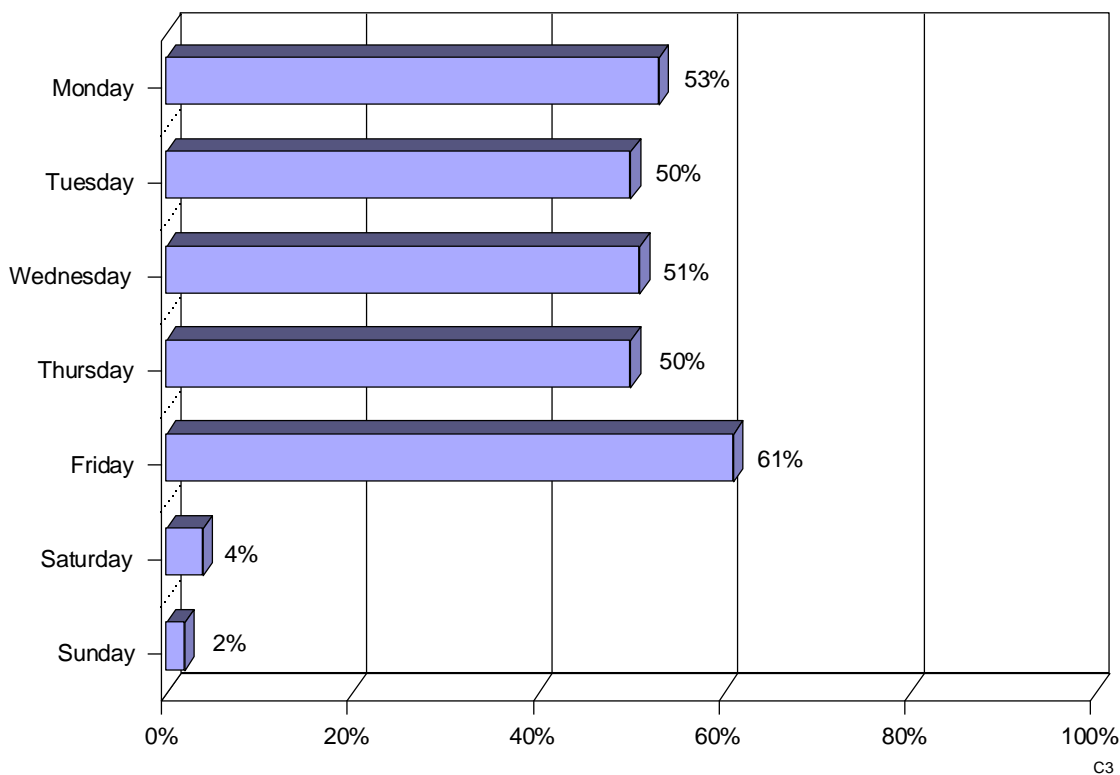


TABLE 3: WORST DAYS FOR TRAFFIC
CONGESTION IN TEMPE

(AMONG THOSE WHO FEEL CONGESTION IS A
BIG OR MODERATE PROBLEM IN TEMPE)

“Is there a certain day of the week that you feel congestion is
worse in Tempe?”

	REGION				
	TOTAL	North- west	North- east	South- west	South- east
Monday	53%	49%	67%	39%	51%
Tuesday	50	48	61	39	49
Wednesday	51	53	63	39	43
Thursday	50	48	60	40	49
Friday	61	56	78	51	52
Saturday	4	2	7	2	2
Sunday	2	2	2	2	1
Every day	15	21	5	20	14

Totals exceed 100% due to multiple responses

Finally, in this section we find that seven Tempe intersections receive readings over ten percent when residents are asked to indicate those intersections with the worst congestion problems. As might be expected, response to this question varies sharply by city region.

WORST INTERSECTION FOR TRAFFIC CONGESTION IN TEMPE

(Among Those Who Feel Congestion is a Big or Moderate Problem in Tempe)

TOP 7 MENTIONS

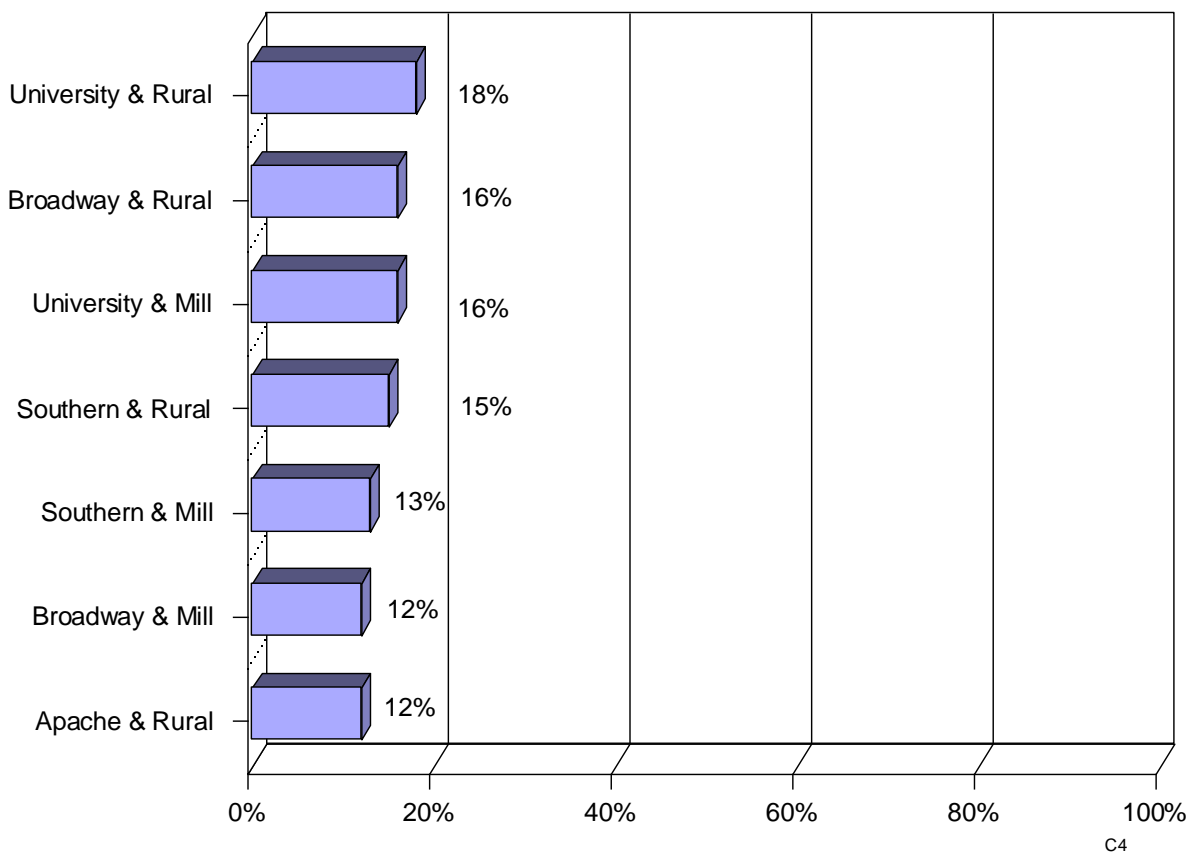


TABLE 4: WORST INTERSECTIONS FOR
TRAFFIC CONGESTION IN TEMPE

(AMONG THOSE WHO FEEL CONGESTION IS A
BIG OR MODERATE PROBLEM IN TEMPE)

“Which intersections in Tempe do you feel have the worst congestion problems?”

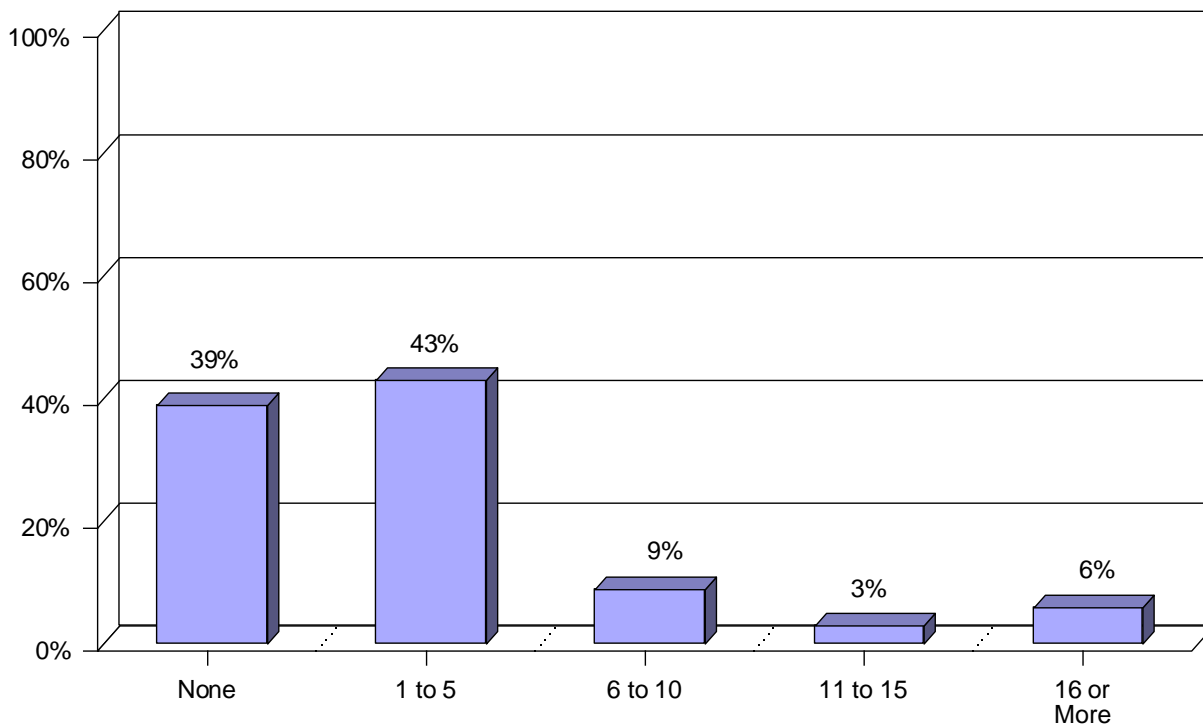
	REGION				
	TOTAL	North- west	North- east	South- west	South- east
University & Rural	18%	11%	19%	30%	13%
Broadway & Rural	16	15	27	8	9
University & Mill	16	25	17	10	7
Southern & Rural	15	19	16	14	10
Southern & Mill	13	19	12	9	11
Broadway & Mill	12	5	26	6	5
Apache & Rural	12	9	13	8	19
Southern & McClintock	9	3	8	9	21
Baseline & Mill	9	7	5	23	2
University & McClintock	9	14	6	8	9
Baseline & McClintock	9	2	5	16	16
Baseline & Rural	8	4	4	13	16
Apache & McClintock	7	4	8	3	13
Broadway & McClintock	6	3	2	6	15
Baseline & Priest	5	2	2	16	4
Guadalupe & McClintock	5	1	1	6	20
Southern & Priest	5	7	6	4	1
Broadway & Priest	4	8	3	4	1
Guadalupe & Rural	3	2	*	5	7
All others	17	10	19	26	12

* Indicates % less than .5

EXPERIENCE WITH BUS DELAYS

Sixty-one percent of residents indicate that in the past month they have been delayed at an intersection in Tempe because of a stopped bus, with a median reading of 2.0 times over the period. Southeast residents report the lowest bus-caused delay reading.

EXPERIENCE WITH BUS-CAUSED TRAFFIC DELAYS



C5

TABLE 5: EXPERIENCE WITH BUS - CAUSED TRAFFIC DELAYS

“Next, in the past month, how many times, if any, have you been delayed at an intersection in Tempe because of a stopped bus?”

	REGION				
	TOTAL	North-west	North-east	South-west	South-east
None	39%	33%	39%	33%	56%
1 to 5	43	50	39	45	36
6 to 10	9	4	16	10	1
11 to 15	3	1	2	7	*
16 or more	6	12	4	5	7
	100%	100%	100%	100%	100%
MEDIAN TIMES	2.0	2.4	2.1	2.5	<1.0

*Indicates % less than .5

Eight Tempe intersections record readings of ten percent or over when residents are asked to reveal those intersections where they have experienced bus-caused delays.

INTERSECTIONS WHERE BUS DELAYS EXPERIENCED

(Among Those Who Have Experienced Bus Delays in the Past Month)

TOP 8 MENTIONS

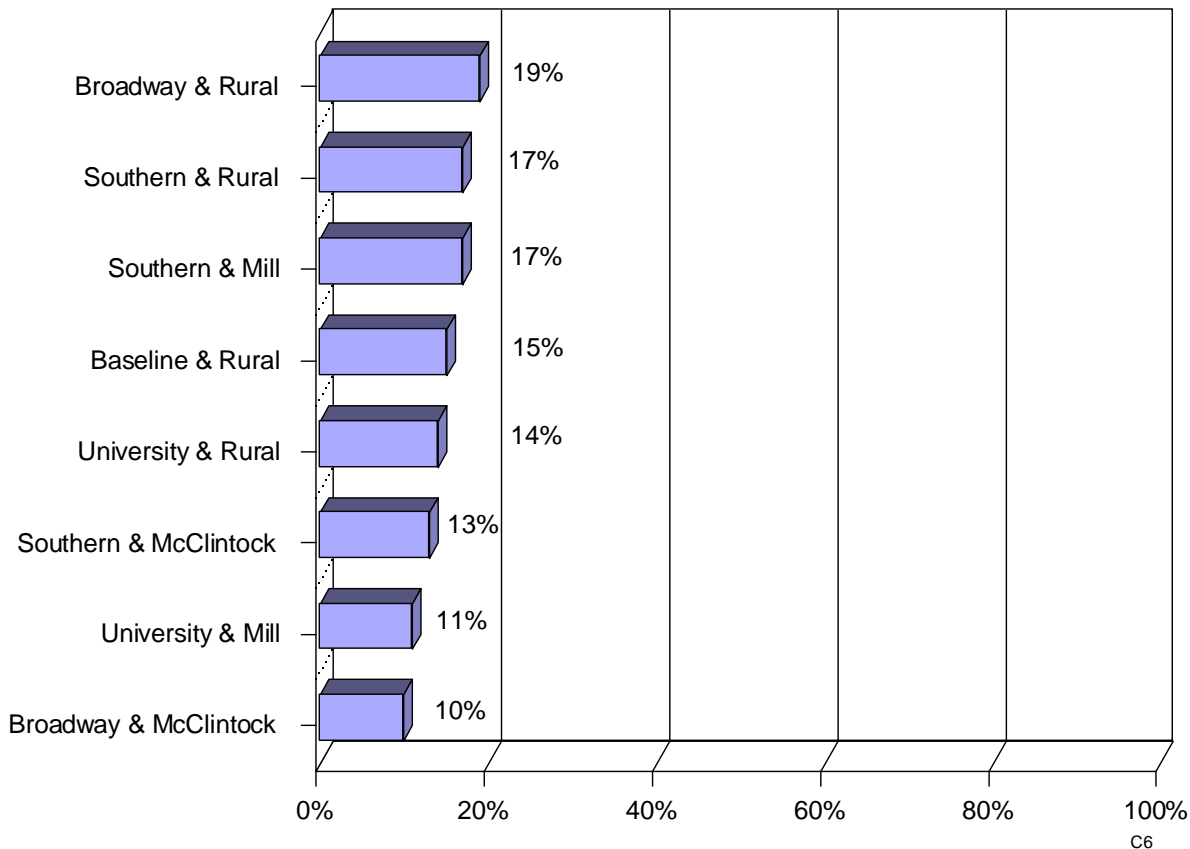


TABLE 6: INTERSECTIONS WHERE
BUS DELAYS EXPERIENCED

(AMONG THOSE WHO HAVE EXPERIENCED
BUS DELAYS IN THE PAST MONTH)

“At which intersection have you experienced delays? Please give me the cross streets that form each intersection.”

	REGION				
	TOTAL	North- west	North- east	South- west	South- east
Broadway & Rural	19%	37%	19%	5%	10%
Southern & Rural	17	19	25	8	10
Southern & Mill	17	28	14	9	16
Baseline & Rural	15	27	8	15	8
University & Rural	14	25	10	10	6
Southern & McClintock	13	24	11	4	10
University & Mill	11	18	9	12	1
Broadway & McClintock	10	16	3	7	17
Apache & Rural	9	15	7	9	1
Baseline & Mill	9	16	1	13	2
Baseline & McClintock	9	17	4	9	7
Baseline & Priest	9	15	1	17	1
Broadway & Priest	9	23	6	1	1
Guadalupe & Rural	9	14	1	12	12
University & McClintock	8	15	6	4	2
University & Priest	8	15	11	1	0
Broadway & Mill	7	15	9	0	0
Apache & McClintock	7	15	2	6	2
Guadalupe & McClintock	6	14	2	0	10
Southern & Priest	5	15	0	1	6
McClintock & Elliot	2	0	0	8	1
McClintock & Warner	1	0	0	0	8
All others	10	11	3	13	16

In a related question, 59 percent of residents who had experienced a bus-caused delay in the past month believe that the installation of bus pullouts would help “a lot” to improve Tempe traffic congestion. Only among southeast residents does the “a lot” reading dip below 50 percent.

PERCEIVED IMPACT OF BUS PULLOUTS ON TRAFFIC CONGESTION

(Among Those Who Have Experienced Bus Delays in the Past Month)

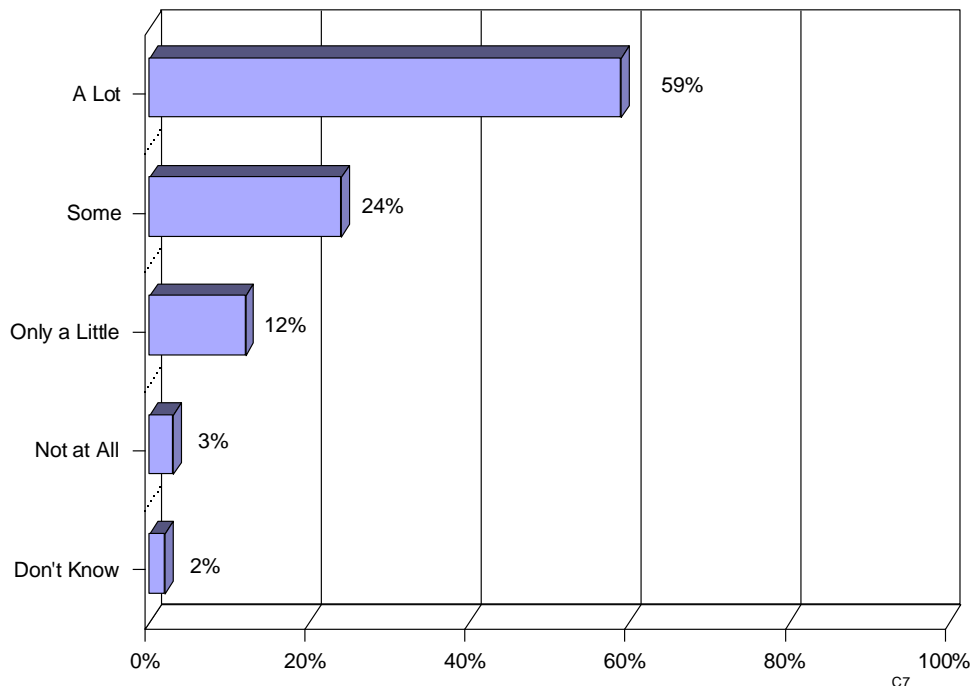


TABLE 7: PERCEIVED IMPACT OF BUS PULLOUTS ON TRAFFIC CONGESTION

(AMONG THOSE WHO HAVE EXPERIENCED BUS DELAYS IN THE PAST MONTH)

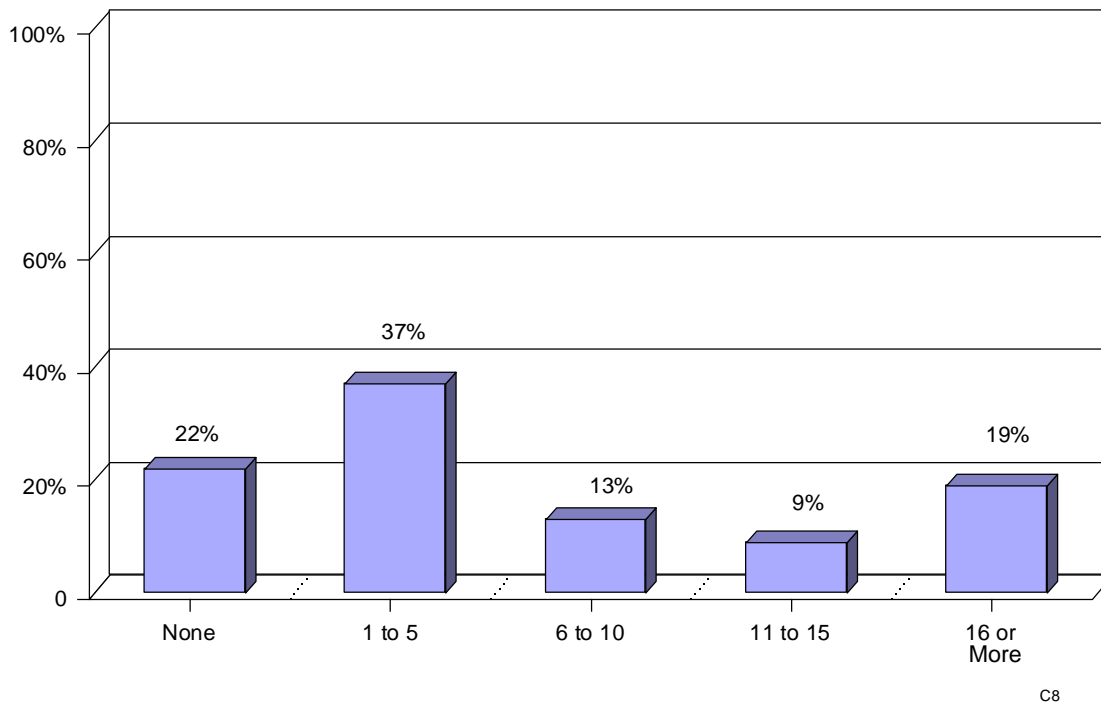
“Do you feel that installing bus pullouts, which is when a bus pulls out of the traffic lane to pick up passengers, would help a lot, some, only a little or not at all to improve traffic congestion in Tempe?”

	TOTAL	REGION			
		North-west	North-east	South-west	South-east
A lot	59%	51%	67%	66%	46%
Some	24	30	18	20	29
Only a little	12	16	11	5	17
Not at all	3	2	3	4	4
Don't know	2	1	1	5	4
	100%	100%	100%	100%	100%

EXPERIENCE WITH CONSTRUCTION-CAUSED DELAYS

Seventy-eight percent of residents indicate that in the past three months they have been delayed in traffic while traveling on a major road in Tempe because of a lane restriction related to construction with a median reading of 4.0 times over the period. Once again, southeast residents report the lowest construction caused delay reading.

**EXPERIENCE WITH CONSTRUCTION -
CAUSED TRAFFIC DELAYS**



**TABLE 8: EXPERIENCE WITH CONSTRUCTION-
CAUSED TRAFFIC DELAYS**

“In the past three months, how many times, if any, have you been delayed in traffic while traveling on a major road in Tempe because of a lane restriction or closure related to construction?”

	REGION				
	TOTAL	North-west	North-east	South-west	South-east
None	22%	19%	19%	24%	25%
1 to 5	37	35	34	36	49
6 to 10	13	17	15	7	13
11 to 15	9	10	6	16	5
16 or more	<u>19</u>	<u>19</u>	<u>26</u>	<u>17</u>	<u>8</u>
	100%	100%	100%	100%	100%
MEDIAN TIMES	4.0	4.5	4.7	3.8	3.1

When residents who have experienced construction delays in the past three months are asked if they would prefer that lane restrictions or closures related to construction occur overnight, 66 percent say yes, even if it might produce noise on a major road adjacent to their neighborhood. This attitude is universal across each City region.

PREFERENCE FOR OVERNIGHT CONSTRUCTION CLOSURES

(Among Those Who Have Experienced
Construction Delays in the Past 3 Months)

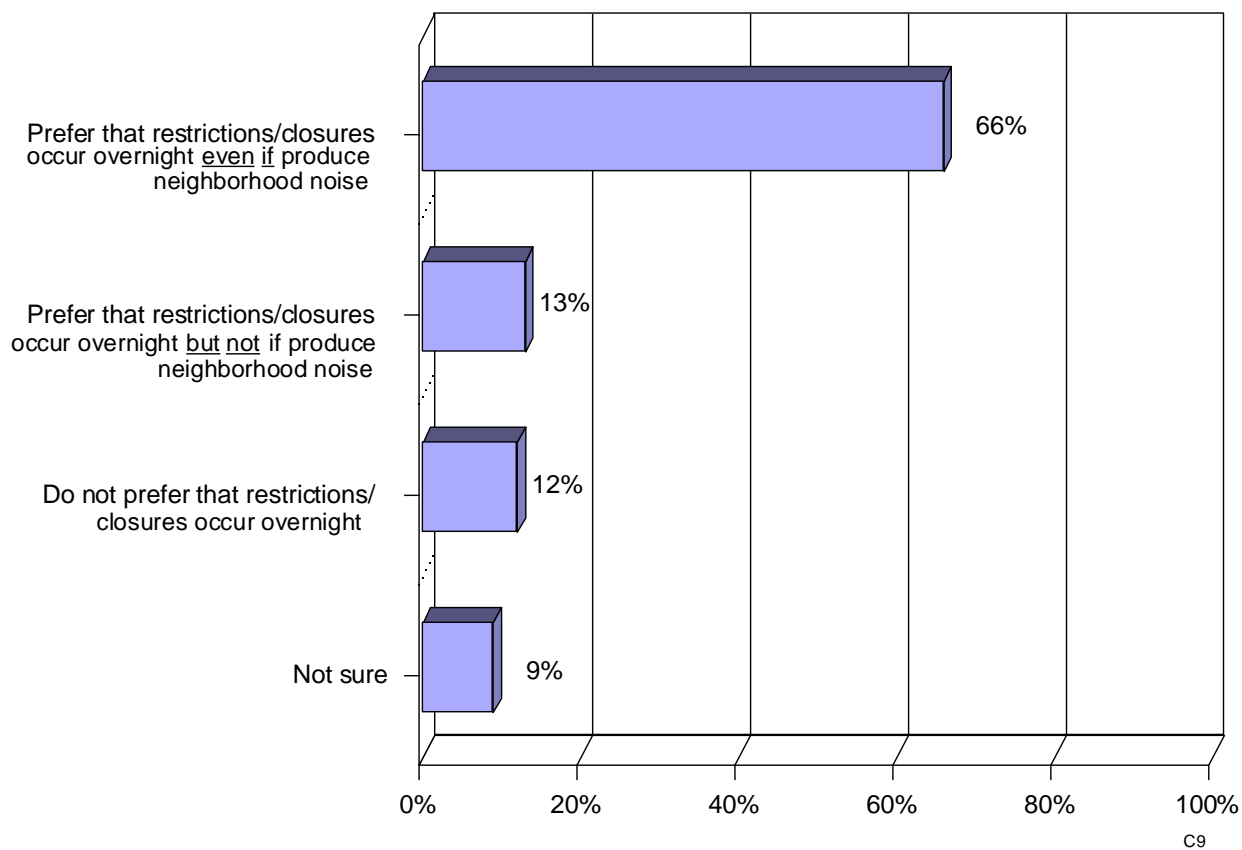


TABLE 9: PREFERENCE FOR OVERNIGHT
CONSTRUCTION CLOSURES

(AMONG THOSE WHO HAVE EXPERIENCED
CONSTRUCTION DELAYS IN THE PAST 3 MONTHS)

“Would you prefer that lane restrictions or closures related to
construction occurred overnight in Tempe?”

	REGION				
	TOTAL	North- west	North- east	South- west	South- east
Yes	83%	87%	86%	81%	75%
No	12	13	12	11	13
Don't know	<u>5</u>	<u>*</u>	<u>2</u>	<u>8</u>	<u>12</u>
	100%	100%	100%	100%	100%

(AMONG THOSE PREFERRING OVERNIGHT CLOSURES)

“And would you still prefer that lane restrictions and closures
related to construction occurred overnight in Tempe even if it was
on a major road adjacent to your neighborhood which may
produce noise?”

Yes	80%	88%	71%	84%	77%
No	15	9	22	13	14
Don't know	<u>5</u>	<u>3</u>	<u>7</u>	<u>3</u>	<u>9</u>
	100%	100%	100%	100%	100%

*Indicates % less than .5

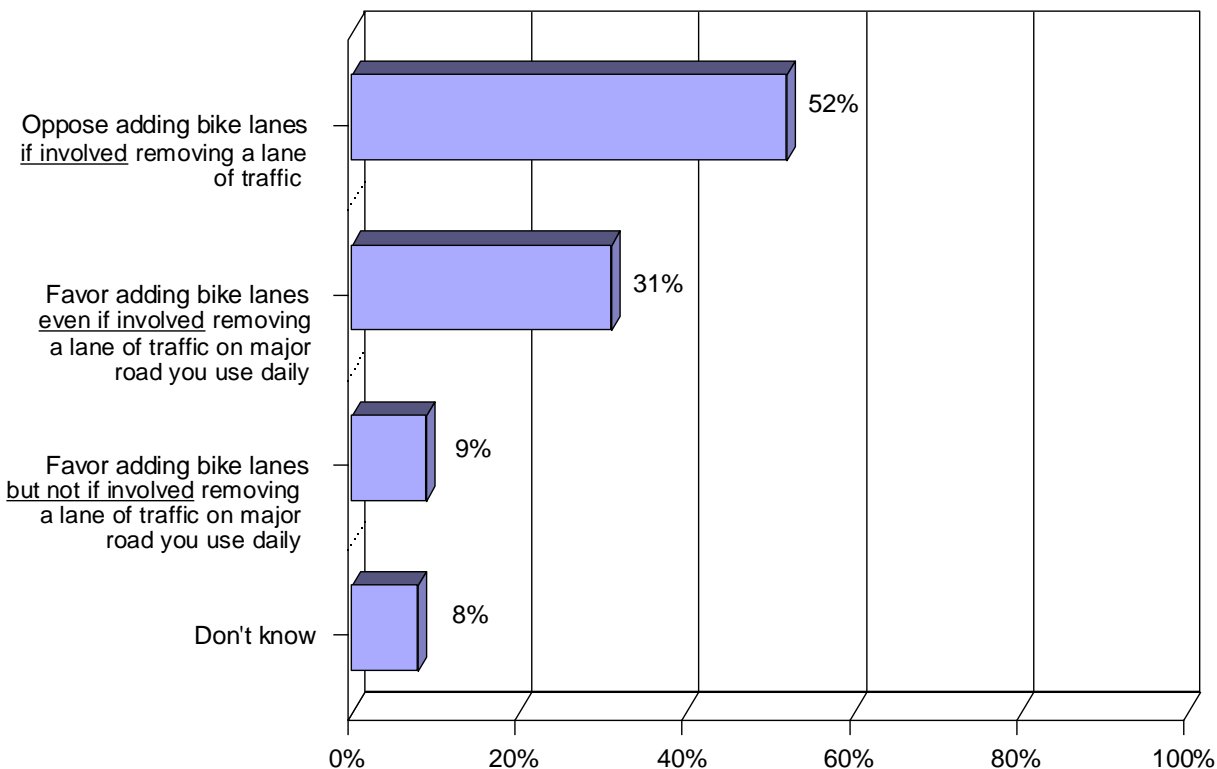
SUMMARY

Prefer restrictions/closures occur overnight <u>even if</u> produce neighborhood noise	66%	77%	61%	69%	58%
Prefer restrictions/closures occur overnight <u>but not if</u> produce neighborhood noise	13	8	19	10	11
Do not prefer restrictions/ closures occur overnight	12	13	12	12	12
Don't know	<u>9</u>	<u>2</u>	<u>8</u>	<u>9</u>	<u>19</u>
	100%	100%	100%	100%	100%

ATTITUDE ABOUT ADDING BIKE LANES ON MAJOR ROADS

A majority of Tempe residents (52%) oppose adding bike lanes to major roads in Tempe if it means removing a lane of traffic. Only in the northwest region of the City does opposition drop below majority with a reading of only 34 percent. In this region, 50 percent of residents favor adding bike lanes even if it involves removing a lane of traffic on a major road they use daily.

ATTITUDE ABOUT ADDING BIKE LANES TO MAJOR TEMPE ROADS



C10

TABLE 10: ATTITUDE ABOUT ADDING
BIKE LANES TO MAJOR TEMPE ROADS

“Do you favor or oppose adding bicycle lanes to major roads in Tempe if it means removing a lane of traffic?”

	REGION				
	TOTAL	North-west	North-east	South-west	South-east
Favor	43%	54%	41%	38%	36%
Oppose	51	34	56	61	56
Don't know	<u>6</u>	<u>12</u>	<u>3</u>	<u>1</u>	<u>8</u>
	100%	100%	100%	100%	100%

(AMONG THOSE FAVORING BIKE LANES)

“And would you still favor adding bicycle lanes to major roads in Tempe if it involved removing a lane of traffic along a major road that you use daily?”

Favor	74%	92%	79%	38%	74%
Oppose	21	7	20	42	26
Don't know	<u>5</u>	<u>1</u>	<u>1</u>	<u>20</u>	<u>*</u>
	100%	100%	100%	100%	100%

*Indicates % less than .5

SUMMARY

Oppose adding bike lanes <u>if involved</u> removing a lane of traffic	52%	34%	56%	61%	56%
Favor adding bike lanes <u>even if involved</u> removing a lane of traffic on major road you use daily	31	50	32	15	26
Favor adding bike lanes <u>but not if involved</u> removing a lane of traffic on major road you use daily	9	4	8	15	9
Don't know	<u>8</u>	<u>12</u>	<u>4</u>	<u>9</u>	<u>9</u>
	100%	100%	100%	100%	100%

MAJOR TEMPE ROADS TRAVELED MOST OFTEN

The three most travelled major streets in Tempe are Rural (45%), McClintock (43%) and Southern (38%).

TABLE 11: MAJOR TEMPE ROADS
TRAVELED MOST OFTEN

“What major street in Tempe do you travel the most?”

	TOTAL	REGION			
		North-west	North-east	South-west	South-east
Rural	45%	48%	40%	51%	44%
McClintock	43	17	64	28	62
Southern	38	57	46	24	16
Broadway	23	26	37	13	6
Baseline	19	6	13	37	26
Mill	17	30	16	10	8
University	17	19	26	9	6
Priest	11	19	6	15	3
Apache	10	2	21	5	6
Elliot	9	1	1	19	23
Guadalupe	7	1	1	13	20
Warner	3	0	*	8	7
All others	8	5	4	11	11

*Indicates % less than .5

APPENDIX

Survey Questionnaire

Hello, my name is _____ and I'm with the Behavior Research Center of Arizona. We're conducting a survey for the City of Tempe Transportation Division on important transportation issues affecting the City and I'd like to speak with you for a few minutes.

A. Before we get started however, are you 18 years of age or older and a resident of Tempe?

IF YES: CONTINUE

IF NO: ASK TO SPEAK WITH OTHER HOUSEHOLD MEMBER 18+ AND RESIDENT. REINTRODUCE YOURSELF AND CONTINUE. IF NONE AVAILABLE, ARRANGE CALLBACK. IF NONE, TERMINATE.

(CELLPHONE SAMPLE ONLY)

B. Are you currently driving a vehicle or doing any activity that requires your full attention?

(ARRANGE CALLBACK) Yes...1
(CONTINUE) No...2

1. To begin, do you live north or south of US 60?

North...1
South...2

2. And do you live east or west of Rural Road?

East...1
West...2

3. How big of a problem would you say the amount of traffic congestion is in Tempe in general?
(READ EACH EXCEPT DK)

A big problem...1
A moderate problem...2
A small problem...3
Or no problem at all...4
Don't know/NA...5

4. And how big of a problem would you say traffic congestion is on the major streets adjacent to your neighborhood? (READ EACH EXCEPT DK)

A big problem...1
A moderate problem...2
A small problem...3
Or no problem at all...4
Don't know/NA...5

(IF Q3 OR Q4 = 1 OR 2, GO TO Q5; OTHERWISE GO TO Q8)

5. Is there a certain time of day that you feel traffic congestion is worse in Tempe? (DO NOT READ)

6 a.m. to 9 a.m....1
9 a.m. to 3 p.m....2
3 p.m. to 7 p.m....3
All the time...4
Don't know/NA...5

6. Is there a certain day of the week that you feel traffic congestion is worse in Tempe? (DO NOT READ – MARK ALL MENTIONED).

- Sunday...1
- Monday...2
- Tuesday...3
- Wednesday...4
- Thursday...5
- Friday...6
- Saturday...7
- Every day...8
- Don't know/NA...9

7. Which intersections in Tempe do you feel have the worst congestion problem? Please give me the two cross streets that form each intersection. (MARK ALL MENTIONED).

- Apache and Rural...1
- Apache and McClintock...2
- Baseline and Priest...3
- Baseline and McClintock...4
- Baseline and Mill...5
- Baseline and Rural...6
- Broadway and Rural...7
- Broadway and McClintock...8
- Broadway at Mill...9
- Broadway at Priest...10
- Guadalupe and Rural...11
- Guadalupe and McClintock...12
- Southern and McClintock...13
- Southern and Priest...14
- Southern and Mill...15
- Southern and Rural...16
- University and McClintock...17
- University and Priest...18
- University and Mill...19
- University and Rural...20
- _____ Other (SPECIFY)

8. What are the major roads in Tempe that you travel the most? (MARK ALL MENTIONED)

- Apache...1
- Baseline...2
- Broadway...3
- Elliot...4
- Guadalupe...5
- McClintock...6
- Mill...7
- Priest...8
- Rio Salado...9
- Rural...10
- Southern...11
- University...12
- _____ Other (SPECIFY)

9. Next, in the past month, how many times, if any, have you been delayed at an intersection in Tempe because of a stopped bus?

- (GO TO Q11) None...1
- 1 to 5...2
- (GO TO Q10) 6 to 10...3
- 11 to 15...4
- 16 or more...5

10. At which intersections have you experienced delays? Please give me the two cross streets that form each intersection. (MARK ALL MENTIONED).

- Apache and Rural...1
- Apache and McClintock...2
- Baseline and Priest...3
- Baseline and McClintock...4
- Baseline and Mill...5
- Baseline and Rural...6
- Broadway and Rural...7
- Broadway and McClintock...8
- Broadway at Mill...9
- Broadway at Priest...10
- Guadalupe and Rural...11
- Guadalupe and McClintock...12
- Southern and McClintock...13
- Southern and Priest...14
- Southern and Mill...15
- Southern and Rural...16
- University and McClintock...17
- University and Priest...18
- University and Mill...19
- University and Rural...20
- _____ Other (SPECIFY)

11. Do you feel that installing bus pullouts, which is when a bus pulls out of the traffic lane to pick up passengers, would help a lot, some, only a little or not at all to improve traffic congestion in Tempe?

- A lot...1
- Some...2
- Only a little...3
- Not at all...4
- Don't know...5

12. In the past three months, how many times if any, have you been delayed in traffic while traveling on a major road in Tempe because of a lane restriction or closure related to construction?

- (GO TO Q15) None...1
- 1 to 5...2
- (GO TO Q13) 6 to 10...3
- 11 to 15...4
- 16 or more...5

13. Would you prefer that lane restrictions or closures related to construction occurred overnight in Tempe?

- (GO TO Q14) Yes...1
- No...2
- (GO TO Q15) Don't know...3

14. And would you still prefer that lane restrictions and closures related to construction occurred overnight in Tempe even if it was on a major road adjacent to your neighborhood which may produce noise?
- Yes...1
No...2
Don't know...3
15. Do you favor or oppose adding bicycle lanes to major roads in Tempe if it means removing a lane of traffic?
- (GO TO Q16) Favor...1
Oppose...2
(GO TO Q17) Don't know...3
16. And would you favor or oppose adding bicycle lanes to major roads in Tempe if it involved removing a lane of traffic along a major road that you use daily?
- Favor...1
Oppose...2
Don't know...3
17. Now, before I finish, I need two pieces of information about yourself for classification purposes only. First, which one of the following categories best describes your age? (READ EACH EXCEPT REFUSED)
- Under 25...1
25 to 34...2
35 to 44...3
45 to 54...4
55 to 64...5
65 or over...6
Refused...7
18. And finally, what mode of transportation do you use most often to travel in Tempe? (DO NOT READ)
- Car/truck...1
Bus...2
Bike...3
Walk...4
_____ Other (SPECIFY)

Thank you very much, that completes this interview. We very much appreciate your help on this project. My supervisor may want to call you to verify that I conducted this interview so may I have your first name so that they may do so?
(VERIFY PHONE NUMBER)

NAME: _____

PHONE #: _____

**CITY OF TEMPE
TRAFFIC CONGESTION SURVEY**

ONLINE SUPPLEMENT

October 2016

Prepared for
City of Tempe
Transportation Division

Prepared by
Behavior Research Center, Inc.
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Phoenix, Arizona 85012
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SURVEY BACKGROUND

This summary report presents the findings of an Online Supplement Survey to a City of Tempe Traffic Congestion Survey conducted for the City of Tempe Transportation Division.

The base Tempe Traffic Congestion Survey was based on 425 telephone interviews conducted with a representative cross-section of Tempe residents 18 years of age or older. Respondent selection for the project was accomplished via a computer-generated pure unweighted (EPSEM) random digit dial (RDD) telephone sample which selects households on the basis of telephone prefix. This method was used because it ensured a randomly-selected sample of area households proportionately allocated throughout the sample universe. This method also ensured that all unlisted and newly listed telephone households were included in the sample. A pre-identification screening process was also utilized on this project. This computer procedure screened the sample to remove known business and commercial phone prefixes in addition to disconnects, faxes and computers. Both landlines and cell telephones were included in this research.

All of the interviewing on the base survey was conducted between September 28 and October 9, 2016, at the Center’s central location telephone facility where each interviewer worked under the direct supervision of BRC supervisory personnel. Interviewing was conducted during a cross-section of late afternoon, evening, weekday and weekend hours. During the interviewing segment of this study, up to five separate attempts, on different days and during different times of day, were made to contact each selected household. Only after five unsuccessful attempts was a household substituted in the sample.

All random sample surveys are subject to sampling error. Sampling error, stated simply, is the difference between the results obtained from a sample and those which would be obtained by surveying the entire population under consideration. The size of sampling error varies, to some extent, with the number of interviews completed and with the division of opinion on a particular question. The estimated sampling error for the base survey is +/-4.8 percent at a 95 percent confidence level. This sampling error figure represents the maximum error for survey findings where the division of opinion is approximately 50%/50%. Survey findings that show a more one-sided distribution of opinion, such as 70%/30% or 90%/10%, are usually subject to slightly lower sampling tolerances than those shown in the table.

The results of the Online Supplement Survey presented in this summary report are based on a non-scientific opt in survey of 332 individuals who filled out the survey online between September 30 and October 23, 2016. Respondents were invited to participate in the survey either via an online invitation sent by the Transportation Division to neighborhood, homeowner and affiliated association contacts or via invitations posted on the city’s Facebook and Twitter accounts. Non-scientific online surveys conducted using an opt in methodology do not lend themselves to the calculation of sampling error estimates as are traditionally reported for random sample telephone surveys.

SAMPLE PROFILE

<u>AGE</u>		<u>TYPICAL MODE OF TRANSPORTATION</u>	
Under 25	2%	Car/Truck	88%
25 to 34	20	Bike	10
35 to 44	21	Bus	1
45 to 54	23	Ride Share/Taxi	<u>1</u>
55 to 64	20		100%
65 or over	<u>14</u>		
	100%		

TABLE 1: EVALUATION OF
TEMPE TRAFFIC CONGESTION

“How big of a problem would you say the amount of traffic congestion in Tempe is in general?”

	RESIDENT TELEPHONE SURVEY	ONLINE OPT IN SURVEY
A big problem	20%	34%
A moderate problem	58	44
A small problem	12	16
No problem at all	8	6
Don't know	<u>2</u>	<u>0</u>
	100%	100%
BIG/MODERATE SUMMARY	78%	78%

“How big of a problem would you say traffic congestion is on the major streets adjacent to your neighborhood?”

A big problem	16%	34%
A moderate problem	31	37
A small problem	28	18
No problem at all	24	11
Don't know	<u>1</u>	<u>0</u>
	100%	100%
BIG/MODERATE SUMMARY	47%	71%

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TABLE 2: WORST TIMES FOR TRAFFIC  
CONGESTION IN TEMPE

(AMONG THOSE WHO FEEL CONGESTION IS A  
BIG OR MODERATE PROBLEM IN TEMPE)

“Is there a certain time of day that you feel congestion is worse in Tempe?”

|                     | <u>RESIDENT<br/>TELEPHONE<br/>SURVEY</u> | <u>ONLINE<br/>OPT IN<br/>SURVEY</u> |
|---------------------|------------------------------------------|-------------------------------------|
| 6 a.m. to 8:59 a.m. | 35%                                      | 57%                                 |
| 9 a.m. to 2:59 p.m. | 5                                        | 3                                   |
| 3 p.m. to 6:59 p.m. | 84                                       | 86                                  |
| All other times     | 2                                        | 1                                   |
| All the time        | 3                                        | 6                                   |

Totals do not equal 100% due to multiple responses  
~~~~~

TABLE 3: WORST DAYS FOR TRAFFIC
CONGESTION IN TEMPE

(AMONG THOSE WHO FEEL CONGESTION IS A
BIG OR MODERATE PROBLEM IN TEMPE)

“Is there a certain day of the week that you feel congestion is worse in Tempe?”

	<u>RESIDENT TELEPHONE SURVEY</u>	<u>ONLINE OPT IN SURVEY</u>
Monday	53%	78%
Tuesday	50	77
Wednesday	51	76
Thursday	50	78
Friday	61	69
Saturday	4	8
Sunday	2	1
Every day	15	15

Totals exceed 100% due to multiple responses
~~~~~

TABLE 4: WORST INTERSECTIONS FOR  
TRAFFIC CONGESTION IN TEMPE

(AMONG THOSE WHO FEEL CONGESTION IS A  
BIG OR MODERATE PROBLEM IN TEMPE)

“Which intersections in Tempe do you feel have the worst congestion problems?”

|                         | <u>RESIDENT<br/>TELEPHONE<br/>SURVEY</u> | <u>ONLINE<br/>OPT IN<br/>SURVEY</u> |
|-------------------------|------------------------------------------|-------------------------------------|
| University & Rural      | 18%                                      | 40%                                 |
| Broadway & Rural        | 16                                       | 33                                  |
| University & Mill       | 16                                       | 31                                  |
| Southern & Rural        | 15                                       | 43                                  |
| Southern & Mill         | 13                                       | 29                                  |
| Broadway & Mill         | 12                                       | 28                                  |
| Apache & Rural          | 12                                       | 30                                  |
| Southern & McClintock   | 9                                        | 41                                  |
| Baseline & Mill         | 9                                        | 10                                  |
| University & McClintock | 9                                        | 26                                  |
| Baseline & McClintock   | 9                                        | 30                                  |
| Baseline & Rural        | 8                                        | 18                                  |
| Apache & McClintock     | 7                                        | 32                                  |
| Broadway & McClintock   | 6                                        | 34                                  |
| Baseline & Priest       | 5                                        | 17                                  |
| Guadalupe & McClintock  | 5                                        | 16                                  |
| Southern & Priest       | 5                                        | 18                                  |
| Broadway & Priest       | 4                                        | 15                                  |
| Guadalupe & Rural       | 3                                        | 8                                   |
| All others              | 17                                       | 26                                  |

Note: online respondents reacted to a list of defined Intersections.

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TABLE 5: EXPERIENCE WITH BUS -
CAUSED TRAFFIC DELAYS

“Next, in the past month, how many times, if any, have you been delayed at an intersection in Tempe because of a stopped bus?”

	RESIDENT TELEPHONE SURVEY	ONLINE OPT IN SURVEY
None	39%	30%
1 to 5	43	44
6 to 10	9	17
11 to 15	3	4
16 or more	<u>6</u>	<u>5</u>
	100%	100%
 MEDIAN TIMES	 2.0	 2.8
 ~~~~~		

TABLE 6: INTERSECTIONS WHERE  
BUS DELAYS EXPERIENCED

(AMONG THOSE WHO HAVE EXPERIENCED  
BUS DELAYS IN THE PAST MONTH)

“At which intersection have you experienced delays? Please give me the cross streets.”

	RESIDENT TELEPHONE SURVEY	ONLINE OPT IN SURVEY
Broadway & Rural	19%	25%
Southern & Rural	17	36
Southern & Mill	17	27
Baseline & Rural	15	16
University & Rural	14	22
Southern & McClintock	13	41
University & Mill	11	24
Broadway & McClintock	10	28
Apache & Rural	9	17
Baseline & Mill	9	12
Baseline & McClintock	9	26
Baseline & Priest	9	9
Broadway & Priest	9	11
Guadalupe & Rural	9	7
University & McClintock	8	18
University & Priest	8	7
Broadway & Mill	7	21
Apache & McClintock	7	27
Guadalupe & McClintock	6	12
Southern & Priest	5	15
McClintock & Elliot	2	1
McClintock & Warner	1	0
All others	10	15

Note: online respondents reacted to a list of defined intersections.

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TABLE 7: PERCEIVED IMPACT OF BUS
PULLOUTS ON TRAFFIC CONGESTION

“Do you feel that installing bus pullouts, which is when a bus pulls out of the traffic lane to pick up passengers, would help a lot, some, only a little or not at all to improve traffic congestion in Tempe?”

| | RESIDENT
TELEPHONE
SURVEY | ONLINE
OPT IN
SURVEY |
|---------------|---------------------------------|----------------------------|
| A lot | 59% | 47% |
| Some | 24 | 32 |
| Only a little | 12 | 16 |
| Not at all | 3 | 3 |
| Don't know | <u>2</u> | <u>2</u> |
| | 100% | 100% |

~~~~~

TABLE 8: EXPERIENCE WITH CONSTRUCTION-  
CAUSED TRAFFIC DELAYS

“In the past three months, how many times, if any, have you been delayed in traffic while traveling on a major road in Tempe because of a lane restriction or closure related to construction?”

	RESIDENT TELEPHONE SURVEY	ONLINE OPT IN SURVEY
None	22%	11%
1 to 5	37	51
6 to 10	13	22
11 to 15	9	6
16 or more	<u>19</u>	<u>10</u>
	100%	100%
 MEDIAN TIMES	 4.0	 4.1

~~~~~


TABLE 9: PREFERENCE FOR OVERNIGHT
CONSTRUCTION CLOSURES

(AMONG THOSE WHO HAVE EXPERIENCED
CONSTRUCTION DELAYS IN THE PAST 3 MONTHS)

“Would you prefer that lane restrictions or closures related to construction occurred overnight in Tempe?”

| | RESIDENT
TELEPHONE
SURVEY | ONLINE
OPT IN
SURVEY |
|------------|---------------------------------|----------------------------|
| Yes | 83% | 92% |
| No | 12 | 7 |
| Don't know | <u>5</u> | <u>11</u> |
| | 100% | 100% |

(AMONG THOSE PREFERRING OVERNIGHT CLOSURES)

“And would you still prefer that lane restrictions and closures related to construction occurred overnight in Tempe even if it was on a major road adjacent to your neighborhood which may produce noise?”

| | | |
|------------|----------|-----------|
| Yes | 80% | 77% |
| No | 15 | 9 |
| Don't know | <u>5</u> | <u>14</u> |
| | 100% | 100% |

SUMMARY

| | | |
|---|----------|-----------|
| Prefer restrictions/closures occur overnight <u>even if</u> produce neighborhood noise | 66% | 63% |
| Prefer restrictions/closures occur overnight <u>but not</u> if produce neighborhood noise | 13 | 7 |
| Do not prefer restrictions/closures occur overnight | 12 | 7 |
| Don't know | <u>9</u> | <u>23</u> |
| | 100% | 100% |

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TABLE 10: ATTITUDE ABOUT ADDING  
BIKE LANES TO MAJOR TEMPE ROADS

“Do you favor or oppose adding bicycle lanes to major roads in Tempe if it means removing a lane of traffic?”

	RESIDENT TELEPHONE SURVEY	ONLINE OPT IN SURVEY
Favor	43%	36%
Oppose	51	55
Don't know	<u>6</u>	<u>9</u>
	100%	100%

(AMONG THOSE FAVORING BIKE LANES)

“And would you still favor adding bicycle lanes to major roads in Tempe if it involved removing a lane of traffic along a major road that you use daily?”

Favor	74%	93%
Oppose	21	3
Don't know	<u>5</u>	<u>4</u>
	100%	100%

SUMMARY

Oppose adding bike lanes <u>if involved</u> removing a lane of traffic	52%	55%
Favor adding bike lanes <u>even if involved</u> removing a lane of traffic on major road you use daily	31	34
Favor adding bike lanes <u>but not if involved</u> removing a lane of traffic on major road you use daily	9	1
Don't know	<u>8</u>	<u>10</u>
	100%	100%

~~~~~

TABLE 11: MAJOR TEMPE ROADS
TRAVELED MOST OFTEN

“What major street in Tempe do you travel the most?”

| | RESIDENT
TELEPHONE
SURVEY | ONLINE
OPT IN
SURVEY |
|------------|---------------------------------|----------------------------|
| Rural | 45% | 63% |
| McClintock | 43 | 72 |
| Southern | 38 | 68 |
| Broadway | 23 | 49 |
| Baseline | 19 | 45 |
| Mill | 17 | 39 |
| University | 17 | 29 |
| Priest | 11 | 26 |
| Apache | 10 | 16 |
| Elliot | 9 | 13 |
| Guadalupe | 7 | 20 |
| Warner | 3 | 1 |
| All others | 8 | 15 |

Note: online respondents reacted to a list of defined intersections

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# CITY OF TEMPE TRANSPORTATION COMMISSION



## STAFF REPORT

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### AGENDA ITEM 6

#### DATE

February 6, 2017

#### SUBJECT

Fifth Street Streetscape Project (Farmer to College)

#### PURPOSE

The purpose of this memo is to provide the Commission with an overview and update of the Fifth Street Streetscape Project. A visual presentation will be provided at the Commission meeting.

#### BACKGROUND

This streetscape project includes a half-mile stretch between Farmer and College avenues along Fifth Street, a collector street that connects important civic, neighborhood, education and business entities in downtown Tempe.

The project was first identified as a need through the 2014-2015 Kimley Horn Downtown Parking Study, which encouraged the City to look at maximizing the on-street parking availability and to reconfigure the street to be more multi-modal; alleviating strain on parking demand and providing comfortable alternatives to driving.

The technical scope of the project includes the development of design and construction documents that may include short-term and long-term improvements/phasing options for the street. The final documents will be for a buildable project that will strive to enhance landscaping, increase and improve bicycle, pedestrian and transit access, improve parking availability, preserve vehicular access and ensure optimal ADA design. The project will consider the overall landscape architecture and traffic, civil and structural engineering while exploring specific features like shade coverage, parklets, gateway treatments, enhanced bicycle lanes, parking configuration, improved pedestrian areas and opportunities for public engagement. The project aims to create an iconic downtown street with a focus on sustainability and providing mobility for all.

#### PUBLIC INPUT & COMMUNITY OUTREACH

The first public meeting for the project was held in October 2016 to introduce the inception and scope of the project to residents, business owners, students and workers in the area to understand the process and provide feedback on its direction. Since that meeting, staff and the design team have met individually with stakeholders to identify opportunities and critical issues along the corridor. This list includes a diverse array of those associated with the project area, from city departments (Police, Fire, Utility, Waste & Refuse, Community Development) to commissions (Historic Preservation, Mayor's Commission on Disability Concerns, Sustainability, Municipal Arts, Parks) and community partners (ASU, SRP, Mission Palms, DTA, Farmer Arts District, Studio 5c, and more). Additionally, a Staff Advisory Committee was assembled to review design progress and provide concentrated feedback on an ongoing basis. A second public meeting will be held in spring 2017.

## **DESIGN CONCEPT & PROCESS**

Early concepts for the project were formed by the project charter, first public meeting, stakeholder discussions, and guided by staff direction. The design team is working on illustrations for a design that emphasizes the majority-supported direction received in 2016. The concept for the street is generally moving toward a proposal that includes the following priorities:

- Narrower street, less pavement
- Gain of on-street parking (typical reverse angle back-in)
- Retention of most existing vehicle capacity, however some intersections tightened up and center left turn lane eliminated
- Landscaped medians and overall higher canopy coverage than exists today
- Enhanced bike lanes and transit amenities
- Enhanced pedestrian experience and raised pedestrian plaza in front of city hall
- Water harvesting into landscape areas
- Gateway treatments at College and at Farmer avenues
- Accommodations for flexible street functioning like arts festivals and ASU football games
- Accommodations for utility access and clearances
- Landscaping and pavement that is sustainable and contributing to creation of an iconic, comfortable, accessible street
- A project that meets all traffic, structural, civil and ADA requirements

## **NEXT STEPS**

An overview of the preferred concept will be presented to stakeholders, boards and commissions and the general public for additional feedback and direction. Ultimately the project will be presented to the City Council for direction and project funding recommendations.

## **FISCAL IMPACT**

Design and construction document creation is funded through the Downtown Parking fund. There is no construction cost estimate at this time. A variety of potential sources for construction funding will be reviewed, including Highway User Revenue Funds, parking revenues, private development partnerships and transit tax funds.

## **RECOMMENDATION**

Staff would like to receive feedback on design elements for the project and is seeking a motion of support for the project concept to advance to the construction document stage.

## **CONTACT**

Eric Iwersen  
Principal Planner  
480-350-8810  
[eric_iwersen@tempe.gov](mailto:eric_iwersen@tempe.gov)

## **ATTACHMENTS**

None

**STAFF REPORT**

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**AGENDA ITEM 8**

**DATE**

February 2, 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:

- March 14
  - Streetcar
  - Speed Limits
  - City CIP Update
  - Highline Canal MUP
- April 11
  - Country Club Way Bike/Ped Project
  - Road Construction Traffic Mitigation
  - ASU Bike Registry Outreach Efforts
  - Maintenance of MUPs
  - McClintock @ Rio Salado MUP Underpass
- May 9
  - Streetcar
  - DTA Update
  - Tempe Involving the Public Plan
  - MAG Design Grant Applications
  - Plan for Expansion of Bicycle/Pedestrian Paths
- June 13
  - Leading vs. Lagging Left Turn Signals
  - Highline Canal MUP Final Design
  - Bus Security Program
  - Western Canal Expansion MUP Final Design
  - Autonomous Vehicles
- July 11
- August 8
- September 12
  - Annual Report
  - North/South Railroad Spur MUP

- October 10
  - Annual Report
  - Alameda Drive
- November 12
- December 12
- TBD: Bicycle/Pedestrian Signal Activate Operations Update
- TBD: Small Area Transportation Study
- TBD: Prop 500

**RECOMMENDATION**

This item is for information only.

**CONTACT**

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480-350-8854

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