



PUBLIC MEETING AGENDA

Transportation Commission

MEETING DATE

Tuesday, February 9, 2016
7:30 a.m.

MEETING LOCATION

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

MEETING AGENDA

AGENDA ITEM	PRESENTER	ACTION or INFORMATION
1. Public Appearances The Transportation Commission welcomes public comment for items listed on this agenda. There is a <i>three-minute time limit</i> 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 12, 2016 meeting.	Don Cassano, Commission Chair	ACTION
3. FY 2016/17 Media Plan Staff will present the proposed fiscal year 2016/17 Tempe in Motion paid media plan.	Amanda Nelson, Community Relations	Information and Possible Action
4. Streetcar Staff will present the Alternative Propulsion Study conducted by Center for Transportation and the Environment (CTE).	Eric Iwersen, Public Works	Information and Possible Action
5. Bike Share Staff will provide an update on the status of Tempe's Bike Share program.	Eric Iwersen, Public Works	Information and Possible Action
6. Department and Regional Transportation Updates Staff will provide updates and current issues being discussed at the Maricopa Association of Governments and regional transit agencies.	Public Works Staff	Information

7. Future Agenda Items Commission may request future agenda items.	Don Cassano, Commission Chair	Information
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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 350-2775 (voice) or 350-8400 (TDD) to request an accommodation to participate in a public meeting.

Minutes City of Tempe Transportation Commission January 12, 2016

Minutes of the Tempe Transportation Commission held on Tuesday, Jan. 12, 2016, 7:30 a.m., at the Tempe Transportation Center, Don Cassano Community Room, 200 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Pam Goronkin (Chair)
Ryan Guzy
Bonnie Gerepka
Don Cassano
Philip Luna
Jeremy Browning
Brian Fellows

Kevin Olson
Cyndi Streid
Lloyd Thomas
Susan Conklu – via phone
Charles Huellmantel
Shereen Lerner – via phone

(MEMBERS) Absent:

Charles Redman

Peter Schelstraete

City Staff Present:

Shelly Seyler, Deputy Public Works Director
Eric Iwersen, Principal Planner
Sue Taaffe, Public Works Supervisor
Laura Kajfez, Neighborhoods Services Specialist
Bonnie Richardson, Principal Planner

Mike Nevarez, Transit Manager
Julian Dresang, City Traffic Engineer
Joe Clements, Transportation Financial Analyst
Amanda Nelson, Public Information Officer

Guests Present:

Ron Brooks, Valley Metro
Carol Ketcherside, Valley Metro
JC Porter, Arizona State University

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

Agenda Item 1 – Public Appearances

None

Agenda Item 2 – Minutes

Chair Goronkin introduced the minutes of the Nov. 12, 2015 meeting and asked for a motion. A motion was made to approve the minutes.

Motion: Commissioner Charles Huellmantel
Second: Commissioner Lloyd Thomas
Decision: Approved

Agenda Item 3 – Commission Business

Chair Goronkin introduced newly inducted Commissioner Brian Fellows 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 Goronkin asked for a motion for the Transportation Commission to select the position of Chair for 2016. A motion was made to select Don Cassano as Chair.

Motion: Commissioner Lloyd Thomas
Second: Commissioner Charles Huellmantel
Decision: Approved.

Chair Goronkin asked for a motion for the Transportation Commission to select the position of Vice-Chair for 2016. A motion was made to select Ryan Guzy as Vice-Chair.

Motion: Commissioner Cyndi Streid
Second: Commissioner Lloyd Thomas
Decision: Approved.

Agenda Item 4 – Dial-a-Ride Update

Carol Ketcherside and Ron Brooks with Valley Metro presented information about the Regional ADA Paratransit and Dial-a-Ride (DAR) Study conducted by Valley Metro. Valley Metro is preparing a Regional Paratransit Plan that will assess recommendations from the 2008 Regional Paratransit Study and consider opportunities for greater consistency of service policies. As part of this effort, Valley Metro is reviewing current Dial-a-Ride services in the East Valley, Northwest Valley, Phoenix, Glendale, Southwest Valley, Paradise Valley and Peoria. Valley Metro will also look at procedures for providing transfers between DAR regions. A public meeting will be held on Jan. 27 and an online comment form is also available on the Valley Metro web site.

The Commission discussed future savings and funding allocations. Carol Ketcherside explained that most cities pay for their own portion of DAR and will continue to do so through Prop 400 funding or local money. Valley Metro anticipates a rise in demand for DAR with more service, and thereby utilizing the current budgeted amount. She also stated that both of these issues will be revisited in two to three years to ensure equity.

Agenda Item 5 – Bike Hero

Sue Taaffe presented the 15 bike hero nominations to the Commission. The Commission discussed all of the nominations and decided to have both an individual and organization recognized as bike heroes. Chair Cassano asked for a motion for an individual to be named the 2016 Tempe Bike Hero. A motion was made to nominate Catherine Brubaker.

Motion: Commissioner Lloyd Thomas
Second: Commissioner Bonnie Gerepka
Decision: Approved.

A motion was also made to nominate David Waechter

Motion: Commissioner Cyndi Streid

Second: Commissioner Brian Fellows

Decision: Not approved.

Chair Cassano asked for a motion for an organization to be named the 2016 Tempe Bike Hero. A motion was made to nominate Bike Saviours.

Motion: Commissioner Lloyd Thomas

Second: Commissioner Susan Conklu

Decision: Approved.

A motion was also made to nominate Tempe Leadership Class XXX

Motion: Commissioner Bonnie Gerepka

Second: Commissioner Philip Luna

Decision: Not approved.

Commissioners Guzy, Lerner abstained from the organization nominations.

Agenda Item 6 – Urban Forest

Bonnie Richardson provided background information and current status of the City's Urban Forest Masterplan.

Topics of the presentation:

- Phase 2A efforts included:
 - a staff kickoff meeting to understand the existing roles and responsibilities in the multiple departments that are involved with urban forestry
 - meetings with staff subcommittees to understand the nuances and complexities of integrating a cohesive urban forestry program across all city divisions and departments
- Phase 2B efforts include:
 - completion of tree inventory data will provide a more accurate measure of the costs and benefits of the urban forest, including the cost of planting and maintenance and current condition of our city properties.
 - working draft will reflect the principles of a sustainable Tempe urban forestry program, with strategies identifying challenges, opportunities and potential solutions to accomplish the identified goals and measures of the plan.
 - ongoing reviews with staff committees, stakeholders and the general public will inform and refine goals and interim steps to increasing the urban forest asset value.
 - developing the Urban Forestry Action Plan directives will ensure sustainable asset management in support of the City's General Plan 2040 and the 20-minute walkable city.
- Communication tools. A workshop will be held Feb. 27 at the Tempe History Museum. An online survey will be posted on the website (tempe.gov/urbanforest), as well as announcements for tree events. Information will be available to assist residents and businesses in selecting appropriate tree species, proper pruning, minimizing water use and planting to take advantage of storm water and non-potable water. Other events scheduled include educational seminars, workshops, tree giveaways, stewardship opportunities, 'Tempe Tree Talks,' and conversations with service groups and volunteers in the city.

The City received a grant from the American Forests for approximately \$100,000. Receiving a grant from American Forests is an opportunity to gain additional expertise in looking at the challenges specific to maintaining trees and shade in the urban desert. American Forests is dedicated to the assessment, restoration and monitoring of urban forests. Their process evaluates loss of trees due to storms, flash floods, etc., provides funding for

replanting trees, and addresses proper irrigation and storm water management. American Forests also assists with community tree events and works with local partners and the city to address long-term management of the urban forest. The grant provides Tempe with a local partner, Bank of America, and assists in helping us strategize funding for long term tree care. The focus of the ReLeaf grant and replanting is in the Rio Salado Park area, specifically starting with the many trees lost at the TCA.

The Commission discussed adding trees along Orbit routes and at bus stops, the advantages of shade vs. the increase in allergies and humidity that come with adding trees, the cost of planting and maintaining trees, requirements for private development to plant trees including the need to provide planting standards, the idea of having the City help with irrigation and electricity costs associated with trees and a preference to discontinue to the use of the Heritage Oak in Tempe.

Agenda Item 7 – Department and Regional Transportation Updates

Shelly Seyler updated the Commission on the bus strike that has been in effect since Jan. 8 in Phoenix. Staff is updating the City Council and residents daily.

Agenda Item 8 – Future Agenda Items

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

- Streetcar (February)
- Bike Share (February)
- McClintock @ Rio Salado MUP underpass (February)
- FY 2016/17 Media Plan (February)
- Fifth Street Streetscape Project (March)
- Seat Bikelt Route (March)
- Highline Canal Multi-use Path (March)
- Long-Range Forecast Update (Operating) & CIP follow-up (March)
- Urban Forest (April)
- CIP Discussion (April)
- Bus Unification Update (May)
- North/South Railroad Spur Multi-Use Path (May)
- Bicycle/Pedestrian Signal Activate Operations Update (June)
- MAG Congestion and Mitigation and Air Quality Program (CMAQ, ITS) and Pedestrian Design Assistance Grants (June)
- Western Canal Multi-use Path Extension (August)

The Commission requested that an update about the McClintock Drive bike lanes be added to the agenda.

The Commission's next meeting is scheduled for February 9, 2016.

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

Prepared by: Sue Taaffe
Reviewed by: Eric Iwersen

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 3

DATE

Feb. 9, 2016

SUBJECT

FY 2016/17 Transportation Media Plan

PURPOSE

At the Feb. 9, 2016, Transportation Commission meeting, Amanda Nelson, 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 2016/17.

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

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:

- Light pole and Mill Avenue banners
- AzCentral.com
- statepress.com
- azfamily.com
- brandexchange.net
- High school online ads (McClintock, Corona del Sol, Marcos de Niza and Tempe high schools)
- State Press Off Campus Housing Guide
- Tempe Opportunities
- Facebook ads
- Pandora
- Mall kiosks at Tempe Marketplace
- East Valley Cox Cable TV

- ASU newsrack ads
- Theater ads
- BikeLife East Valley Magazine

Both the ASU newsrack ads and Theater ads were added last year, FY 2015/16, and deemed to be effective media in reaching our target audiences.

New to this year's media plan is BikeLife East Valley Magazine. Although it wasn't included in last year's media plan, Tempe worked with Catalyst Communications to publish BikeLife Tempe in fall 2015. The publication was well received by the community, and we are planning to team with Scottsdale and Mesa to produce an East Valley issue for fall 2016.

FISCAL IMPACT

The budget for FY 2016/17 to promote all elements of the Tempe in Motion program is \$150,000. Adequate funds for the Transportation Media Plan are budgeted in Cost Center 3916-6751 for FY 2016/17.

RECOMMENDATION

This item is for information only.

CONTACT

Amanda Nelson
Public Information Officer
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amanda_nelson@tempe.gov

ATTACHMENTS

PowerPoint

Tempe In Motion

2016-2017 Media Plan

The logo for LAVIDGE is a white, horizontally-oriented arrow shape with a slightly curved top and bottom. The word "LAVIDGE" is written in a bold, orange, sans-serif font inside the arrow.

LAVIDGE

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
 - Adopt-A-Path, Alley and Street 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
- ASU Students 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



2016-2017 Media Plan

- Budget: \$150,000
- Media Vehicles
 - Print
 - Digital
 - Outdoor
 - Cinema
 - Streaming Radio
 - TV/Video



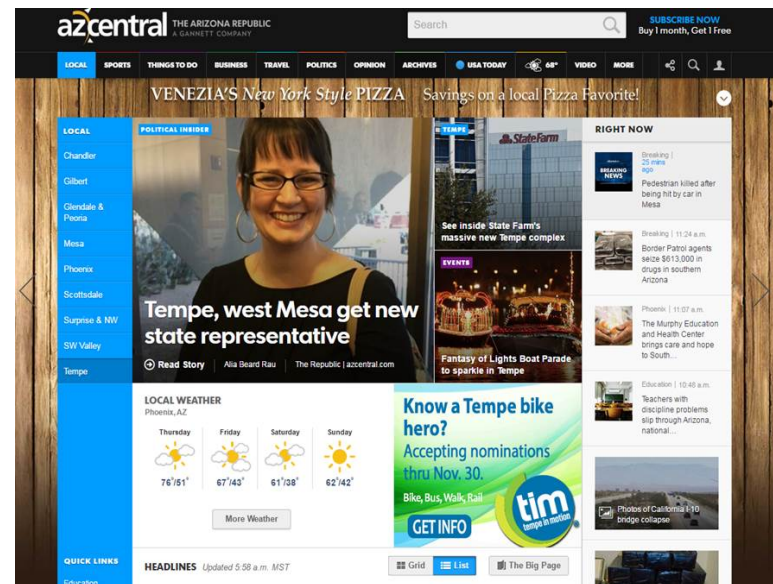
Print

- \$16,600 Print Expenditures
 - ASU Off Campus Housing Guide
 - Reaches off campus commuters
 - NEW: BIKE LIFE East Valley Magazine
 - Fall 2016
 - 10 page section on Tempe
 - 60,000 circulation



DIGITAL

- \$28,476 Digital (Desktop, mobile, tablet)
 - All target Tempe Zips only
 - Over 4.9 Million impressions
 - Websites/Networks include
 - Arizona State Press
 - Azcentral.com
 - Azfamily.com
 - Facebook paid posts
 - Ad Networks



OUTDOOR

- \$6,750 Outdoor Expenditure
- CBS Outdoor – Tempe Marketplace
 - 5 units, 12 weeks
 - Late October through Early January to reach holiday shoppers
 - Estimated 5 Millions impressions



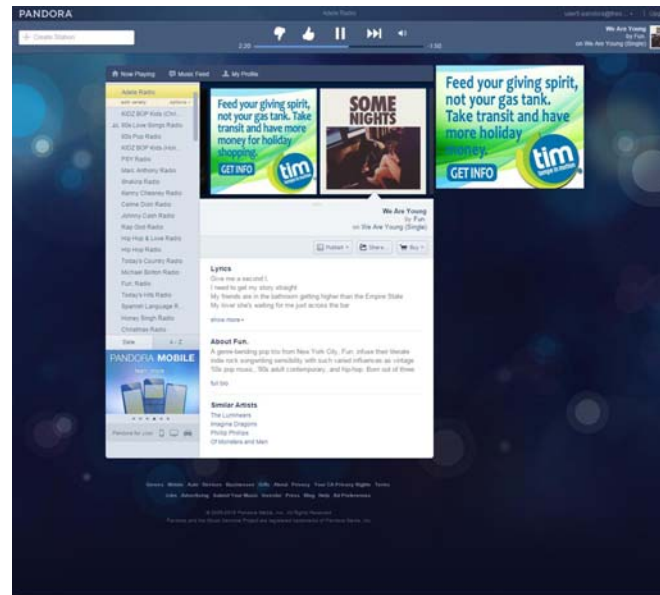
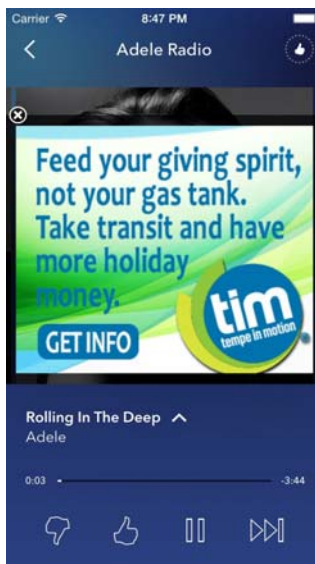
CINEMA

- \$8,938 Expenditure
- 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 advertising Thanksgiving – Early January
- Estimated 307,000 impressions



STREAMING RADIO

- \$47,036 Streaming Radio Expenditure
- Pandora Radio targeting only Tempe Zips
 - :30 Audio with Banner Ad
 - Mobile and Desktop
- Over 3 Million impressions



TV and Video PreRoll

- \$42,200 Expenditure
- Cox Southeast Phoenix ZONE includes Tempe, 80,535 subscribers
 - 12 weeks of advertising, 6.9 Million Impressions
- Cox In Banner and Pre Roll Video, 1.2 Million impressions



2016-2017 Media Plan

- Budget: \$150,000
- Over 21.3 Million Impressions
- Media Vehicles
 - 11% Print \$ 16,600
 - 19% Digital \$ 28,476
 - 5% Outdoor \$ 6,750
 - 6% Cinema \$ 8,938
 - 31% Streaming Radio \$ 47,036
 - 28% TV/Video \$ 43,200



Discussion

LAVIDGE

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 4

DATE

February 9, 2016

SUBJECT

Tempe Streetcar Update

PURPOSE

The purpose of this memo is to inform the Transportation Commission of activities related to the Tempe Streetcar Project. Valley Metro, Tempe staff and representatives from the Center for Transportation and the Environment (CTE) presented the following items to the City Council on January 21, 2016.

BACKGROUND

Streetcar Environmental Clearance – Finding Of No Significant Impact (FONSI)

In October 2015, the Federal Transit Administration (FTA) issued a Finding of No Significant Impact for the Streetcar Project, approving and completing the environmental review phase of the project. This is an important step in the Small Starts grant application process, and enables the project to advance into the engineering and design phase.

Letter of No Prejudice (LONP)

Following the FONSI, a Letter of No Prejudice request has been approved by FTA. Approval of the LONP allows Valley Metro and Tempe to advance the vehicle procurement efforts without the full funding grant agreement in place.

Request for Expression of Interest (RFEI) and Streetcar Vehicle Procurement

Valley Metro, working with Tempe staff, has released a Request for Expression of Interest to generate an understanding of rail vehicle manufacturers tracking the Streetcar project. This is a preliminary step in the long process of vehicle procurement. This step helps to begin to understand the state of the vehicle industry and determine which manufacturers are showing interest in the project. Language in the RFEI does include the City Council's interest in wireless options as is shown in the following:

Valley Metro and our partner, the city of Tempe, are interested in minimizing the impacts of overhead wires and associated facilities, while advancing proven technology. With that in mind, the feasibility of off-wire propulsion is being explored for the Tempe Streetcar project. This could eliminate the need for the Overhead Contact System and Traction Power Sub-Stations entirely or for portions of the streetcar route. If off-wire is selected, the minimum route segment without overhead wires would include approximately 3/4-mile on Mill Avenue through downtown Tempe.

After the RFEI process Valley Metro would move into the more formal RFQ and RFP processes to eventually determine a vehicle manufacturer.

Project Manager Oversight Consultant (PMOC) Visits

On Dec. 10 and 11, 2015, Valley Metro and Tempe Staff met with Louis Berger International, the Project Manager Oversight Consultant for the Tempe Streetcar project. FTA hires PMOC's to provide project oversight and facilitate direct contact between Tempe, Valley Metro and the FTA. Two staff from the firm, Connie Crawford and Kirit Mevawala, toured the Streetcar route and discussed the roles of Tempe and Valley Metro. The PMOC will visit regularly as the project moves forward.

Federal Transit Administration Staff Visit and Streetcar Project Kick-off

On Jan. 6 and 7, the PMOC returned and was joined by the FTA's Region 9 representatives to formally kick-off the Streetcar project. This important step for the project included a route tour and a meeting to discuss the project elements.

Alternative Propulsion Study with Center for Transportation and the Environment

In August 2015, CTE was hired to conduct an independent audit of global rail vehicle energy systems in order to have the most current understanding of the industry and possibilities for off-wire, on-wire and as close to zero-emission power systems for the Tempe Streetcar. The findings of this effort were presented to the City Council by CTE on Jan. 21. The direction from City Council was to advance traditional wire technologies and battery options to enable a portion of the streetcar route to be wireless. Valley Metro and staff will ensure that manufacturers interested in off-wire solutions are invited to respond to the RFP. CTE will also be involved in the RFP process.

RECOMMENDATION

This item is for information only.

CONTACT

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Principal Planner
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ATTACHMENT

PowerPoint

City of Tempe Wireless Streetcar Project

Technology Technical Analysis



Tempe City Council
January 21, 2016



Streetcar Route



Project Objectives

Goals

- Determine feasibility of operating a wireless streetcar on the Tempe Streetcar Alignment.
- Provide performance, operations, and cost data for technologies that support wireless streetcar service.

Methodology

- Perform market summary and examine current state of technology.
- Model potential technologies and simulate revenue service.
- Lean on CTE experience with advanced transit vehicle technologies and information from rail industry experts for cost data.



Industry Resources

Industry experts were contacted throughout analysis. Information used to:

- summarize available streetcar technology
- correlate and validate simulation results

Streetcar Original Equipment Manufacturers (OEM):

- Siemens
- Kinkisharyo
- Brookville Equipment
- Inekon
- United Streetcar
- Bombardier
- TIG/m
- Oregon Iron Works
- Alstom

Streetcar Operators:

- Atlanta Streetcar
- Dallas Area Rapid Transit (DART)
- Seattle DOT

Published Resources:

- ASHRAE, Marek, Thermo King
- APTA Procurement Guidelines
- Valley Metro Streetcar Technical Specification (draft)
- D.C. Streetcar feasibility studies
- Seattle FHSC feasibility studies
- National Transit Database
- WMG rail research

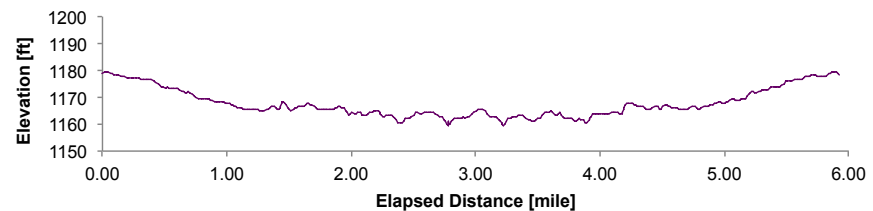
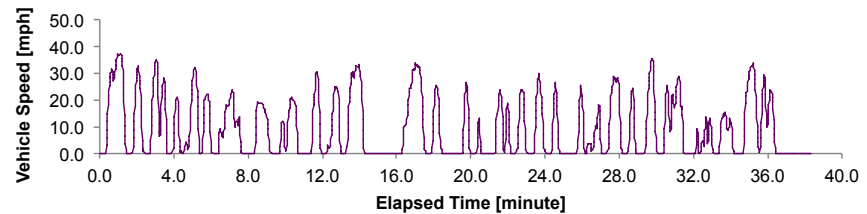
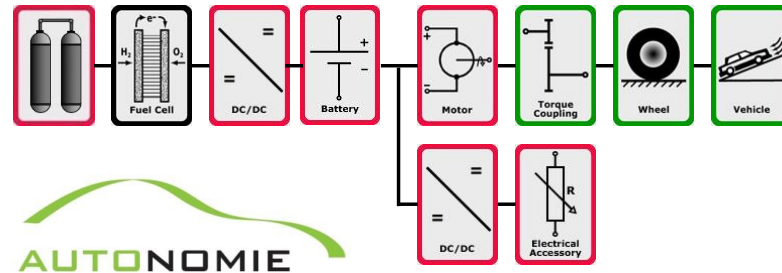
Additional Resources:

- LTK
- AECOM
- BAE Systems
- APTA/TRB 2015 LRV & Streetcar Conference
- Dr. Andreas Hoffrichter (Hydrail, WMG)



Modeling and Simulation

- Autonomie™ vehicle modeling software
 - DOE
 - Argonne National Lab
- Variable parameter simulations
 - vehicle weight
 - passenger loads
 - hotel loads (i.e., heating/cooling)
- Duty Cycle based on real-world GPS drive cycle data
- Tempe Streetcar specific study



Tempe Simulation Results Summary

	Off Wire for Entire Route	Off Wire for Route Segment
Battery Only (depot charge)	■	■
Battery Only (charge at stops)	◆	■
OCS with Battery	■	○
Hydrogen Fuel Cell (FC dominant)	◆	■
Hydrogen Fuel Cell (battery depleting)	■	■
OCS with Hydrogen Fuel Cell	■	■

Baseline Technology – Traditional Overhead Catenary System (OCS)

- - feasible
- ◆ - feasible, with additional considerations
- - not appropriate / non-applicable



OCS with Battery – Route Segment

Description:

- on-board battery allows off-wire operation for a segment of route
- good candidate for wireless section begins at Mill & 9th, continues northbound to Rio Salado & Hayden Ferry or Marina Heights

Pros:

- no overhead wires in the downtown district
- proven propulsion system... deployed by Dallas Streetcar
- batteries increasingly more common transit applications
- batteries can be stored without impacting passenger capacity
- provides more flexibility for route expansion

Cons:

- limited history in rail applications
- OEM may limit vehicle acceleration when off wire to protect the batteries

Battery Only (Charge at Stops) – Entire Route

Description:

- on-board batteries power streetcar along entire route
- streetcar may stop at on-route charging stations to replenish battery energy

Pros:

- no overhead wires along route
- batteries and on-route charge strategy increasingly more common transit applications
- provides more flexibility for route expansion

Cons:

- no streetcars with this charge strategy currently deployed in North America
- headways will be affected by charging time, or more streetcars may have to be deployed to maintain frequency
- high charge rate may be detrimental to battery life
- real estate for large battery packs on low-floor streetcar may be limited
- OEM may limit vehicle acceleration when off wire to protect the batteries

Hydrogen FC (FC dominant) – Entire Route

Description:

- fuel cell is used as primary power source for motor
- a small battery is used as a peaking power source and energy bank for regenerative braking

Pros:

- 100% wireless route
- quick re-fueling
- proven propulsion system – deployed in heavy-duty on-road vehicles
- provides more flexibility for route expansion
- leading edge technology

Cons:

- no hydrogen-powered modern streetcars delivered in North America to date
- leading edge technology
- real estate for fuel cell and hydrogen tanks on low-floor streetcar may be limited
- acceleration at high speeds may be limited by FC size

Traditional OCS – Entire Route

Description:

- overhead contact system along entire route

Pros:

- long history of successful deployments
- vehicle acceleration not limited by power supply
- predictable cost

Cons:

- overhead wires along entire route, including Mill Ave downtown district
- construction and wayside infrastructure required along route
- reduced flexibility for route expansion

Attribute Summary

	Technical	Headway Impact	Project Timeline	Aesthetic	Costs (capital*)	Costs (fuel)	Costs (total*)	Overall Risk
OCS with Battery Route Segment	Green	Green	Green	Yellow	- 3%	+/- 0%	Green	low
Battery Only (charge stop) Entire Route	Yellow	Red	Red	Green	- 16%	+/- 0%	Green	high
Hydrogen FC (FC dominant) Entire Route	Yellow	Yellow	Red	Green	- 8%	+ 174%	Yellow	high
Traditional OCS Entire Route	Green	Green	Green	Red	+/- 0%	+/- 0%	Yellow	low

* Cost forecasts are preliminary estimates. Forecast does not include FTA SCC 60: right-of-way, land and existing improvement

Recommendations

An OCS with an on-board battery system is the most suitable wireless option for the Tempe Streetcar project. This limits deployment risk, ensures reliable revenue service, and can eliminate overhead wires in the downtown district.

Recommended additional analysis

- total cost of ownership analysis for feasible technologies (in comparison to OCS)
- additional specification input for RFP
- support technical evaluation of RFP responses (modeling and simulation of proposed vehicles)

CITY OF TEMPE TRANSPORTATION COMMISSION



STAFF REPORT

AGENDA ITEM 5

DATE

February 9, 2016

SUBJECT

Tempe Bike Share Update

PURPOSE

The purpose of this memo is to inform the Transportation Commission of activities related to the implementation and efforts regarding the regional bike share program, GR:D. The Tempe City Council was also presented this information on January 21, 2016.

BACKGROUND

Bicycle sharing is a for-rent public bike program in progressive, urban environments where land use is higher density, bicycle trips are common and transit connections are strong. Bike share programs are meant to support greater access to more sustainable transportation and further reduce dependency on automobiles. Bike share station locations are placed in high activity centers and streets to provide convenient customer use. Bike share trips are ideal to supplement transit or walking trips for the first and last mile to/from travel destinations. Rental use is by the hour, month or year.

Advertising opportunities in Phoenix and Mesa include ads on the bike frame, basket, racks and kiosks. Due to the regional nature of the system, advertising on Phoenix and Mesa bike baskets may be seen in Tempe as bicycles may cross city borders. However, CycleHop's responsibility will be to maintain jurisdictional placement of individual city bicycles; to balance the system on a frequent basis. In addition, ASU and the city of Tempe are likely to seek branding opportunities at the stations located on the campus and in Tempe.

GR:D Membership Fees/Rates:

- Hourly: \$5
- Monthly Basic: \$15 (60 minutes per day; \$5 each additional hour)
- Monthly extended: \$20 (90 minutes per day; \$5 each additional hour)
- Student Annually: \$59 (60 minutes per day; \$5 each additional hour)
- Annually: \$79 (60 minutes per day; \$5 each additional hour)



Kiosks



Racks



Baskets



Stations

In June 2013, the Phoenix City Council approved CycleHop as its bike share vendor. Between December 2014 and 2015, Phoenix launched and expanded its bike share program, GR:D, with 367 bicycles and 43 stations; and is expected to have 567 bicycles and 63 stations by the end of 2016. Total funding for the Phoenix bike share system is provided by \$800,000 through a Congestion Mitigation and Air Quality (CMAQ) grant and \$50,000 from the city of Phoenix, however the initial launch of the Phoenix system was without cost (for 300 bicycles). Annual operations are funded by advertising and corporate sponsorship.

Mesa also signed a contract with CycleHop with 100 bicycles and 12 stations, and will launch its bike share program in spring 2016. Capital funding (\$500,000) for the Mesa bike share system will be provided by the city of Mesa. Annual operations will be funded by advertising and corporate sponsorship.

Tempe staff conducted a process to identify station locations, provide bike rack and site specifications and complete the required clearances for the federal funding. Station locations for the Tempe system were reviewed by the Transportation Commission and were online for public comment. The 300 bicycles and 26 stations proposed for Tempe extend from Baseline to Washington from McClintock to Priest (see map attached). The locations are targeted to reach the highest bike ridership parts of the community, major destinations (Town Lake, Mill Avenue, Tempe Public Library, etc.), other bikeways, ASU campus as well as link to the regional light rail system and the planned streetcar route. Tempe will continue to work with the public, major stakeholders, the Downtown Tempe Authority and ASU to finalize the station locations.

Tempe secured \$1.18 million in CMAQ grant money for the purchase of equipment. There is an additional \$373,000 allocated from the Tempe Transit Tax for installation of the system. Staff received approval from the City Council for \$50,000 in ongoing annual operating funds with Arizona State University (ASU) contributing an additional \$50,000 for a total of \$100,000 annual operating funds. CycleHop has confirmed that \$100,000 is sufficient to operate the system in Tempe.

	Phoenix	Mesa	Tempe
Contract	June 2013	December 2015	Spring 2016
Launch	Winter 2014	Spring 2015	Fall 2016
Capital	\$800,000 in CMAQ grant \$50,000 from Phoenix	\$500,000 from Mesa	\$1.18 million in CMAQ grant \$373,000 from Transit Tax
System Revenue	Advertising, membership fees, sponsorships	Advertising, membership fees, sponsorships	Membership fees
Annual Operations	\$0 (offset by advertising and sponsorships)	\$0 (offset by advertising and sponsorships)	\$100,000 (ASU & Tempe 50/50 split)
Stations	63	12	26
Bicycles	576 (of which 267 are owned by Phoenix)	100	300
Cost Per Bike Capital	\$3,185	\$5,000	\$5,176
Cost Per Bike Operating	\$0	\$0	\$333

NEXT STEPS

- Spring 2016:
 - Operator contract to City Council for approval
 - Host open house to gather feedback from community on station locations
 - Review advertising revenues in Phoenix and determine fiscal merits and code change requirements for possible Tempe advertising

- Regional MOU and system integration
- IGA with ASU
- Fall 2016: System launch

FISCAL IMPACT

- Capital: \$1.18 million in CMAQ grant & \$373,000 from Transit Tax
- Operating: \$100,000 (ASU & Tempe 50/50 split)

RECOMMENDATION

This item is for information only.

CONTACT

Eric Iwersen

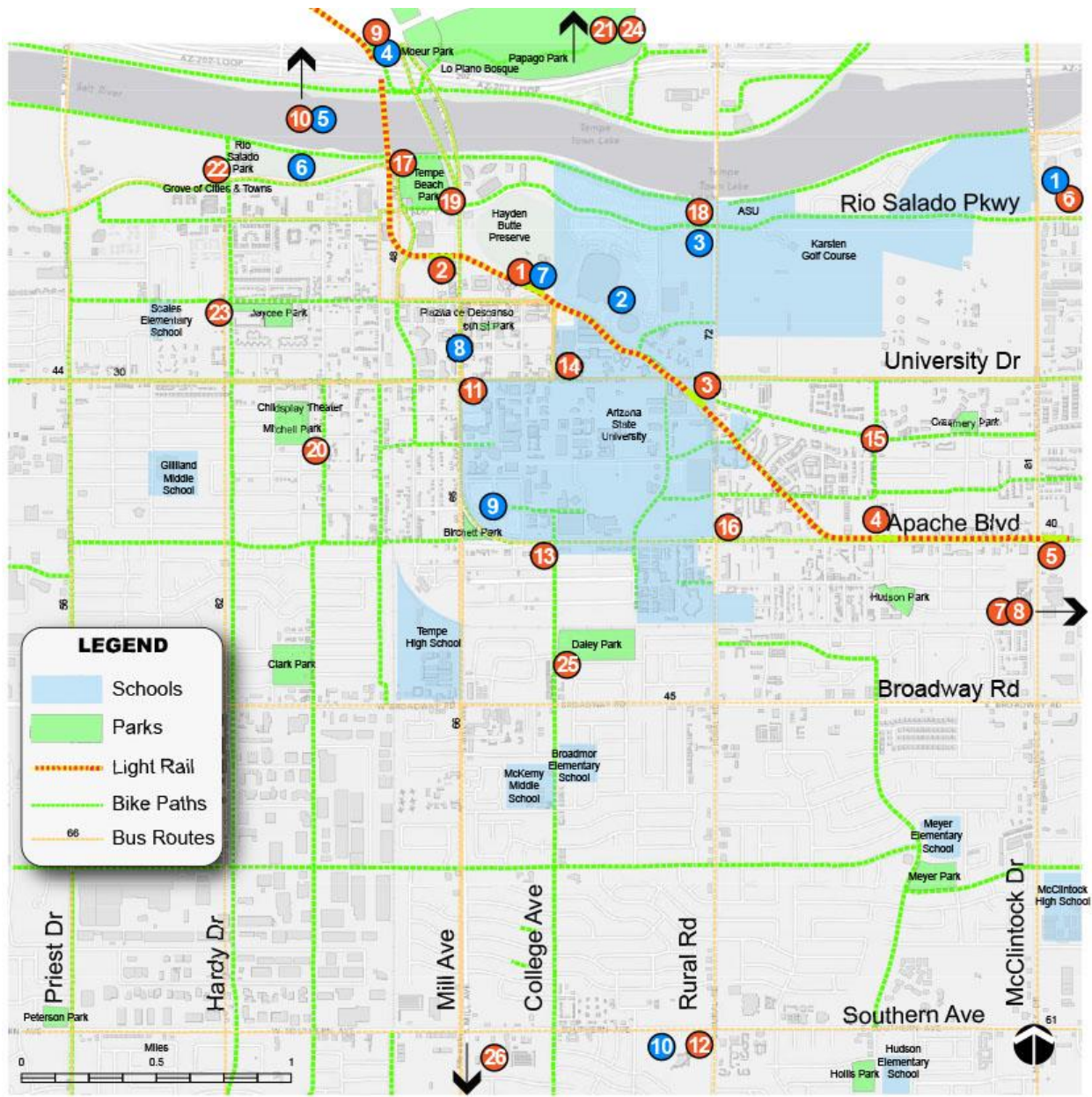
Principal Planner

480-350-8810

eric_iwersen@tempe.gov

ATTACHMENTS

- PowerPoint
- Map of Station Locations



LEGEND

- Schools
- Parks
- Light Rail
- Bike Paths
- Bus Routes

Tempe Bike Sharing Locations

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> 1 Tempe Transportation Center 2 3rd & Mill, LRT Station 3 University & Rural, LRT Station 4 Dorsey & Apache, LRT Station 5 McClintock & Apache, LRT Station 6 Tempe Marketplace 7 Smith Martin & Apache, LRT Station 8 Price 101 & Apache, LRT Station 9 Mill & Washington, Moer Park | <ul style="list-style-type: none"> 10 Priest Dr & Washington, LRT Station 11 Mill Ave & University 12 Southern & Rural, Tempe Library 13 College & Apache 14 College & University 15 8th St & Dorsey 16 Apache & Rural 17 Rio Salado Park, Tempe Beach Park 18 Rural & Rio Salado Pkwy | <ul style="list-style-type: none"> 19 Rio Salado & Mill, Beach Park (E) 20 9th St & Mitchell, Mitchell Park 21 College & Curry 22 Rio Salado & Hardy, Tempe Center 23 5th St & Hardy, Jaycee Park 24 College & McKellips, Hallman Park 25 College & Encanto, Daley Park 26 Mill & Cornell, Kiwanis Park |
|---|---|---|

Activity Centers + Destinations

- 1 Tempe Marketplace
- 2 Sun Devil Stadium, Wells Fargo Arena
- 3 Paackard Stadium
- 4 First Solar
- 5 Papago Park Center, Circle K HQ, SRP
- 6 Tempe Center for the Arts
- 7 Tempe Trans Center (9 bus rts, 5 orbits, 1 light rail)
- 8 Downtown Tempe, Mill Ave
- 9 ASU Gammage Auditorium
- 10 Tempe Public Library, History Museum, Senior Center

Bike Share Transportation Commission

February 9, 2016



What is a Bike Share?

- A for-rent program in cities with high density land use, high demand bicycle trips and strong transit connectivity.
- Support greater access to sustainable transportation and reduce dependency on cars.
- Station locations placed near activity centers/bikeways to provide convenient customer use.
- Use by hour; memberships are monthly & annually.
- 1st and last mile trips.

GR:D (System Brand)



kiosks



baskets



racks



stations

Advertising (Phoenix & Mesa)

- Advertising opportunities in Phoenix and Mesa:
 - Bike frame/basket
 - Racks
 - Kiosks
- Advertising on Phoenix &
- Mesa bikes may be seen in Tempe
- ASU branding opportunities



Membership Fees/Rates

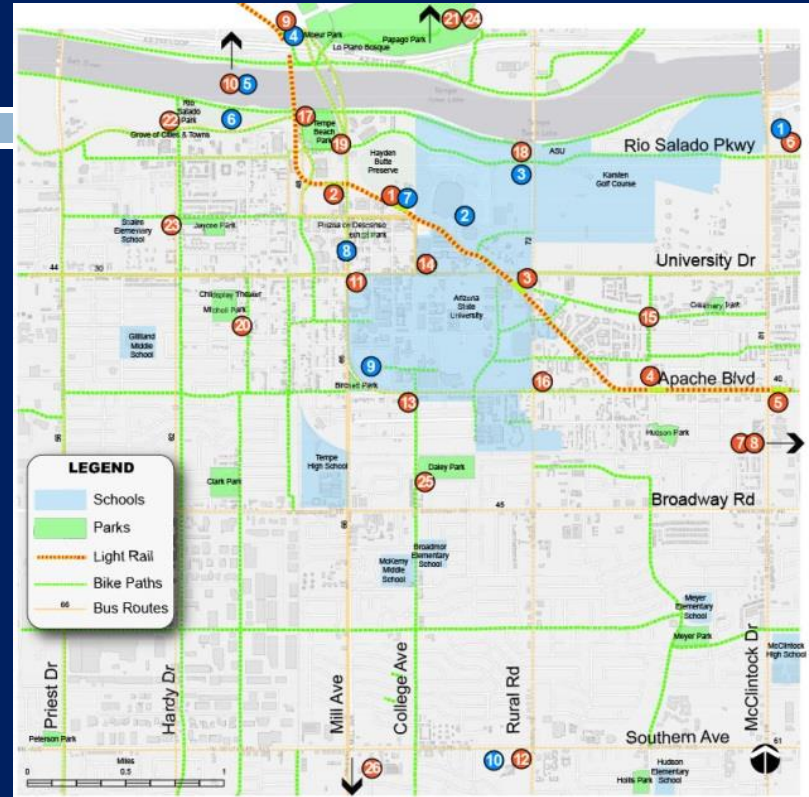
- Hourly: \$5
- Monthly Basic: \$15 (60 minutes per day; \$5 each additional hour)
- Monthly Extended: \$20 (90 minutes per day; \$5 each additional hour)
- Student Annually: \$59 (60 minutes per day; \$5 each additional hour)
- Annually: \$79 (60 minutes per day; \$5 each additional hour)

Regional Program Comparisons

	PHOENIX	MESA	TEMPE
Contract	June 2013	December 2015	Spring 2016
Launch	Winter 2014	Spring 2016	Fall 2016
Capital	<ul style="list-style-type: none"> \$800,000 in CMAQ grant \$50,000 from Phoenix 	<ul style="list-style-type: none"> \$500,000 from Mesa 	<ul style="list-style-type: none"> \$1.18 million in CMAQ grant \$373,000 from Transit Tax
System Revenue	Advertising, membership fees, sponsorships	Advertising, membership fees, sponsorships	Membership fees
Annual Operations	\$0 (offset by advertising and sponsorships)	\$0 (offset by advertising and sponsorships)	\$100,000 (ASU & Tempe 50/50 split)
Stations	63	12	26
Bicycles	567 (of which 267 owned by Phoenix)	100	300
Cost Per Bike Capital	\$3,184	\$5,000	\$5,176
Cost Per Bike Operations	\$0	\$0	\$333

Tempe Station Locations

- 300 bicycles, 26 stations
- Baseline to Washington from McClintock to Priest
- Reaches major destinations, ASU campus, parks, multi-gens and link to light rail, other bikeways and the planned streetcar route.
- Spring 2016: Public open house



Next Steps

- Spring 2016:
 - Negotiate operator contract to take to Council for approval
 - Federal direction to sole source regional vendor
 - Regional MOU and system integration
 - IGA with ASU
- Fall 2016: System launch

STAFF REPORT

AGENDA ITEM 6

DATE

February 9, 2016

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:

- McClintock Drive bike lanes (March)
- Seat Bikelt Route (March)
- Bike Share (March)
- Long-Range Forecast Update (Operating) & CIP follow-up (April)
- Urban Forest (April)
- Fifth Street Streetscape Project (April)
- McClintock @ Rio Salado Underpass (May)
- Bus Unification Update (May)
- Highline Canal Multi-use Path (May)
- Bicycle/Pedestrian Signal Activate Operations Update (June)
- MAG Congestion and Mitigation and Air Quality Program (CMAQ, ITS) and Pedestrian Design Assistance Grants (June)
- Western Canal Multi-use Path Extension (August)
- North/South Railroad Spur Multi-Use Path (August)

RECOMMENDATION

This item is for information only.

CONTACT

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