



Memorandum

Public Works

DATE: May 23, 2012

TO: Mayor and Council

FROM: Greg Jordan, Interim Deputy Public Works Director, (858-2094)

THROUGH: Don Bessler, Public Works Director (350-8205)
Ken Jones, Finance and Technology Director (350-8504)

SUBJECT: Issue Review Session 05/31/12: Transit Fund Financial Balancing Plan Update and FY 2012-13 Bus Service Reductions

At the May 31, 2012 Issue Review Session (IRS), staff will provide an update on the Transit Fund Financial Balancing Plan. The attached document entitled, *Transit Fund Financial Balancing Plan: 2nd Update*, provides information on the Transit Fund's proposed FY 2012-13 operating budget and a preliminary five-year forecast. The base forecast estimates that the Transit Fund will have an average five (5) year deficit of \$2.7 million through FY 2016-17.

The attached report identifies several measures at the local and regional level which will have a positive impact on the Transit Fund. To address the remaining deficit and return the Transit Fund to long-term financial sustainability, staff is requesting City Council direction on the following items:

- **Utilization of regional surplus federal 5307 funds (\$43 million) and Congestion Mitigation and Air Quality (CMAQ) funding (\$25 million) for allocation to Preventive Maintenance (PM) over a 3 year period.** The Maricopa Association of Governments (MAG) is recommending this approach as a method to help mitigate short-range deficits in local and regional transit programs. Based on MAG's present recommendation, Tempe's net gain from both these sources would be up to \$4.8 million in FY 2012-13, \$1.2 million in FY 2013-14, and \$1.3 million in FY 2014-15.
- **Convert Orbit buses from unleaded gas fuel type to Compressed Natural Gas (CNG).** The conversion would take place as part of a normal fleet replacement cycle. Proposed funding sources include federal 5307 grant funds (80%) and regional Proposition 400 funds (20%) allocated for regional fleet replacement needs. This action is expected to reduce operating costs by \$500,000.

- **FY 2012-13 Bus Service Changes:**

- Proposed route-segment modifications to Orbit routes Earth, Jupiter, and Mars. Annual cost savings estimated to be \$429,000;
- Proposed modifications to regional Express Bus Routes 520, 521, and 540 which together constitute Option 1A. This report also provides information on changes to the Express Bus Routes 511 and 532, but these have already been approved by the Regional Public Transportation Authority's (RPTA) Board of Directors. Funding for regional express service is provided by regional Proposition 400 funds which are managed by the RPTA. The proposed changes would increase Tempe's allocation of Proposition 400 to Express Bus Service by \$25,000.

On May 22, the Transportation Commission and the Council Transportation Committee reviewed these items and recommended approval.

Approved service reductions will be implemented on July 23, 2012.

Attachment – Transit Fund Financial Balancing Plan, 2nd Update



CITY OF TEMPE

**PUBLIC WORKS DEPARTMENT
TRANSIT PROGRAM**



**TRANSIT FUND FINANCIAL BALANCING PLAN
2nd UPDATE**

FY 2012-13 OPERATING BUDGET

PRELIMINARY FIVE-YEAR FINANCIAL FORECAST

PROPOSED BUS SERVICE MODIFICATIONS

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SEC. 1.0 CITY OF TEMPE TRANSIT PROGRAM

Tempe is dedicated to providing a balanced transportation system that is environmentally sustainable, accessible, preserves neighborhoods, promotes transit-oriented development and involves citizens in the process. Tempe's transportation system continually strives to be:

- **HIGH PERFORMING** – Nearly 12 million annual boardings; highest per capita in region
- **MULTI-MODAL** – Local bus, express, circulator, rail, paratransit, bike-pedestrian facilities
- **SUSTAINABLE** - Alternatively fueled bus fleet, 2 LEED certified green transit facilities
- **ACCESSIBLE** – Fully accessible buses and trains with bike racks; mobility management program
- **FORWARD THINKING** – Free youth pass and marketing builds transit culture with Tempe youth
- **REGIONALLY INTEGRATED** – Tempe is an anchor of the region's **Total Transit Network**

LIGHT RAIL TRANSIT

The 20-mile light rail line connects Phoenix, Tempe and Mesa, including 5.5 miles through the heart of Tempe, serving employment, activity and cultural centers, downtown Tempe, ASU and Apache Boulevard. Weekday hours/frequency: Trains arrive every 12 minutes from 7:30 a.m. to 6:30 p.m. and run every 20 minutes in early morning and evening. Weekend hours/frequency: Trains arrive every 15-20 minutes from 5 a.m. to 7 p.m. and run every 20 minutes at all other times.



BUS SERVICE (LOCAL, EXPRESS, CIRCULATOR)

Bus service in Tempe operates 365 days a year with 15-minute peak-period service on most routes and 30-minute off peak-period service. Most routes run until midnight Monday through Saturday, and 10 p.m. Sunday. Tempe provides bus service on most arterial streets with fourteen local routes, five express routes, two free Flash routes, and five Orbit neighborhood circulator routes. Tempe buses are wheelchair accessible and have bicycle racks accommodating up to three bicycles. Tempe buses, except the Orbit sub-fleet, are alternatively fueled. The replacement Orbit fleet is planned to be liquid or compressed natural gas.

BICYCLE AND PEDESTRIAN FACILITIES

Tempe is a Bicycle Friendly Community with more than 150 miles of bike lanes and 23 miles of multi-use pathways. More than three percent of Tempe residents use a bicycle to get to work, and most major destinations in Tempe have bicycle parking. Over the next two years, Tempe will construct two miles of the Rio Salado Path System, including a connection to Mesa.

SUSTAINABLE FACILITIES

- **East Valley Bus Operations and Maintenance Facility** – The Facility is LEED Gold certified by the U.S. Green Building Council. Located near Priest Drive and Rio Salado Parkway in Tempe, the 250-bus maintenance facility is owned and operated by the cities of Tempe and Scottsdale along with Valley Metro, the regional transit agency. The facility includes 75,600 square feet of maintenance space, 7,100 square feet of fuel and wash space and 19,650 square feet of administration and operations space. Tempe was recently awarded a \$6.5 million ARRA grant for facility improvements that include installing solar panels, diversifying fueling capabilities, and improving security.



- **Tempe Transportation Center** - Located in downtown Tempe, the Transportation Center includes a three-story, 40,000 square foot building, an exterior shaded courtyard and a transit plaza serving the METRO light rail and local and regional bus patrons. The project also includes a 2,000 square foot conference/community room, retail businesses, transit store, security office, and Bike Station (a secure, interior bicycle storage facility with bike repair services, shower facilities and bicycle accessories), as well as city transportation offices, and for-lease office space. The environmentally-friendly facility was submitted for LEED Gold certification to the U.S. Green Building Council.

PUBLIC INVOLVEMENT

Tempe's Transportation Commission, an advisory group of 15 residents appointed by the Mayor and City Council, meets monthly to provide direction in implementing Tempe's transportation programs.

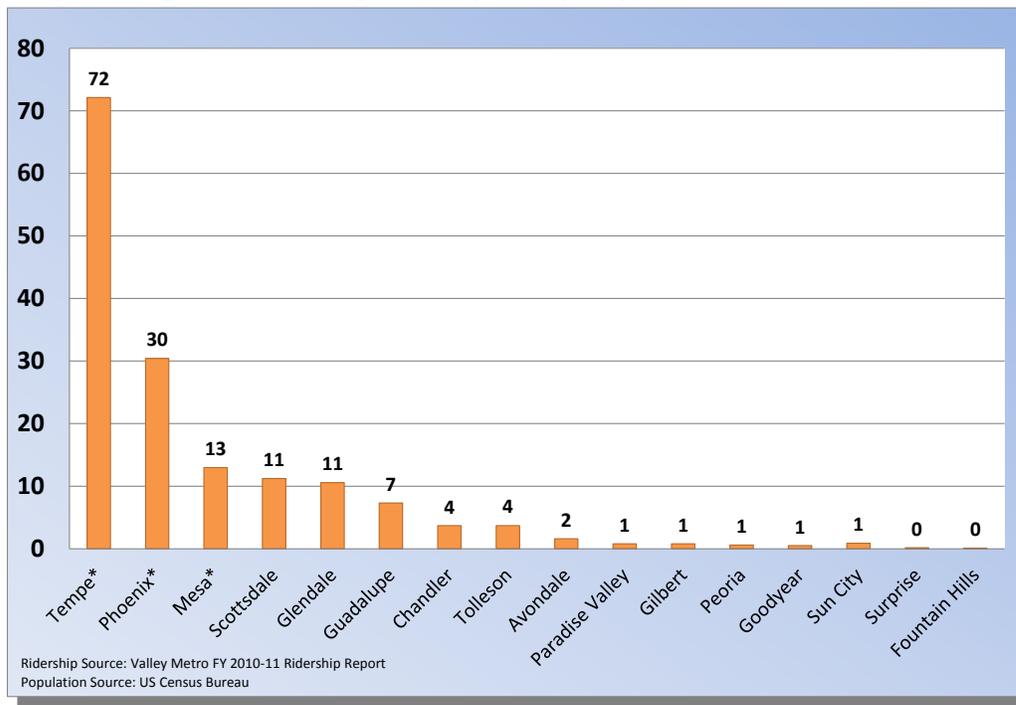
SEC. 2.0

FY 2011-12 ACCOMPLISHMENTS

Transit Utilization

Graph 1 indicates that Tempe continues to be the valley leader in transit utilization in relation to population size. This is the result of Tempe’s significant transit investment, transit supportive land use and development policies, and Tempe’s status as a major destination for employment, education, retail, and recreational activities.

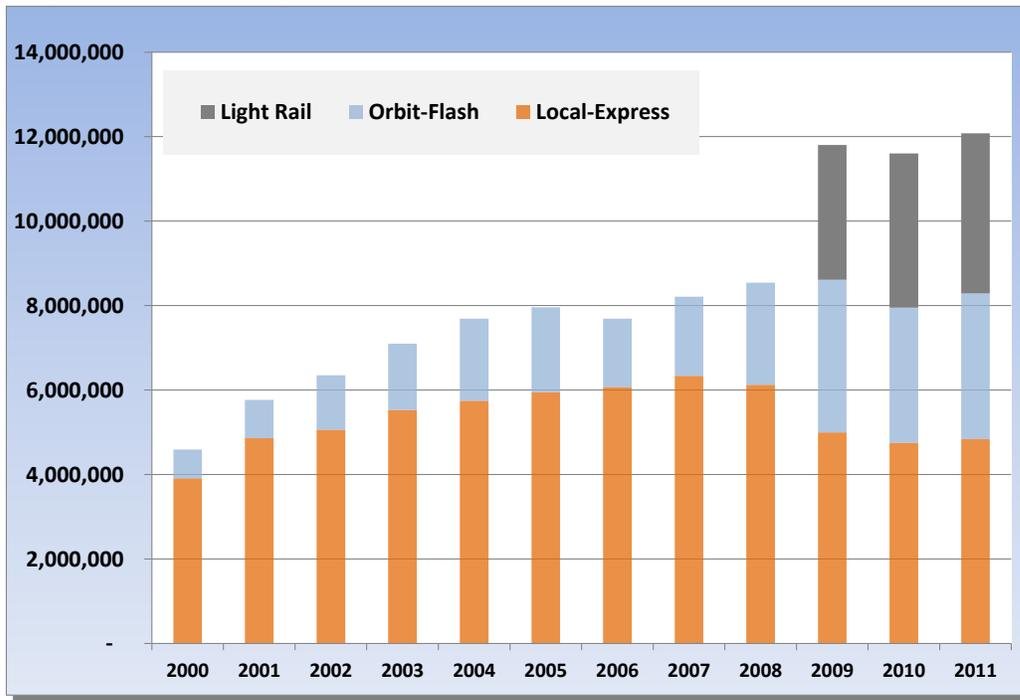
Graph 1: Regional Boardings Per Capita (by City)



Transit System Boardings and Productivity

Despite a 25% decrease in service levels since 2009 to resolve the budget deficit, transit system ridership in Tempe stands at 12.1 million and is increasing. Productivity (“Boardings per revenue mile”) reached 2.2 in FY 2010-11, up from 1.9 in FY 2009-10 and 1.6 in FY 2008-09. The table on the following page presents Tempe’s total boardings for Local-Express Bus, Orbit-Flash Circulators, and Light Rail.

Graph 2: Total Boardings: Calendar Years 2000-2011



Since the beginning of the economic recession, transit service has been reduced by 25-30% while overall boardings has remained stable and is now increasing. Local-Express Bus ridership declines since 2007 are the result of the national recession, the 2009 fare increase, migrations to Orbit and light rail modes, and service reductions.

Community Satisfaction

According to the 2011 Community Attitude Survey overall satisfaction with the quality of local transit service rated 33% above the national average (76% in Tempe vs. 43% U.S.).

Introduction of 60-Foot Electric-Hybrid Buses

Tempe was awarded more than \$3.7 million in federal grants through the Federal Transit Administration’s (FTA) Clean Fuels Grant Program to help purchase hybrid electric propulsion components for seventeen 60-foot diesel buses. The new larger hybrid buses began service in September 2011 and were placed on high demand regional routes. Initial data indicates that these 60-foot hybrid buses are achieving between 4-5 miles per gallon (MPG). These results are benchmarked against 60-foot diesel buses operated by the city of Phoenix which are presently achieving between 2-3 MPG.

Completion of Three (3) Year Transit Fund Financial Balancing Plan

The Transit Fund Financial Balancing Plan approved by the City Council in May 2010 was aimed at resolving a \$15 million structural deficit. Phase 1 reduced the deficit by \$4.5 million in FY 2010-11 and

Phase 2 reduced it by \$7.4 million in FY 2011-12. Phase 3, which is the primary subject of this report, will be implemented in FY 2012-13 and beyond. In addition to all the efforts deployed to return the Transit Fund to long-term financial sustainability, it will be imperative that the transit program continue to strengthen its emerging culture of strategic management and organizational alignment, regional partnerships, critical analysis, and budgetary caution while also reactivating the program's legacy principles of innovation, risk-taking, and progressive approach to transit development.

Progress on Regional Transit Initiatives

- **Single CEO for Regional Transit Agencies** - under Tempe City Council Member Shana Ellis' leadership as Chairperson of the Regional Public Transportation Authority, Tempe was at the forefront of the regional effort to identify and hire a single Chief Executive Officer to lead both the RPTA and Valley Metro Rail (Metro) organizations. The new single CEO assumed his unified duties on March 1, 2012.
- **Tempe-RPTA Bus Operations Unification** – The Tempe City Council and the Valley Metro/RPTA have approved a “scout program” to take the first steps to unify Tempe's bus operations with the Regional Public Transportation Authority. The intent is to operate the regional bus system more efficiently, achieve cost savings, and improve service to customers. The June 2013 expiration of both agencies' individual bus operations contracts creates an opportunity for unification. The estimated savings is in the range of \$800,000 to \$1,000,000 with Tempe's local savings totaling about half of this amount or \$400,000 to \$500,000.
- **Improving Dial-a-Ride** – Tempe staff worked with its partner cities and RPTA on the development, procurement, and implementation of a new East Valley paratransit service delivery model. The new model moves from a single contract operator to a brokerage system. Under this approach, a single lead contractor provides individual and shared ride trips, but also works with area non-profit agencies and private firms. While this approach makes significant use of taxi-based service as a way to provide more flexible and individualized service at a competitive price, the model improves efficiency by using resources across the valley which may be under-utilized. Valley Metro awarded a contract to the lead firm in March 2012. East Valley cities will benefit from a 34% reduction in the cost of dial-a-ride services and dial-a-ride passengers can expect improvements in trip flexibility, wait time, travel time, and customer service.

SEC. 3.0

FY 2012-13 GOALS AND OBJECTIVES

The City Manager in collaboration with city departments articulated the city's organizational purpose and implemented an initiative charging departments and divisions to thoughtfully align division and department level purpose statements, goals, and objectives with the core purpose of the city.

City of Tempe Purpose Statement

Tempe creates outstanding value for those we serve through shared vision, superior service and sustainable practices.

Public Works Purpose Statement and Major Objective

Advancing Tempe's future by providing quality, reliable and sustainable infrastructure systems.

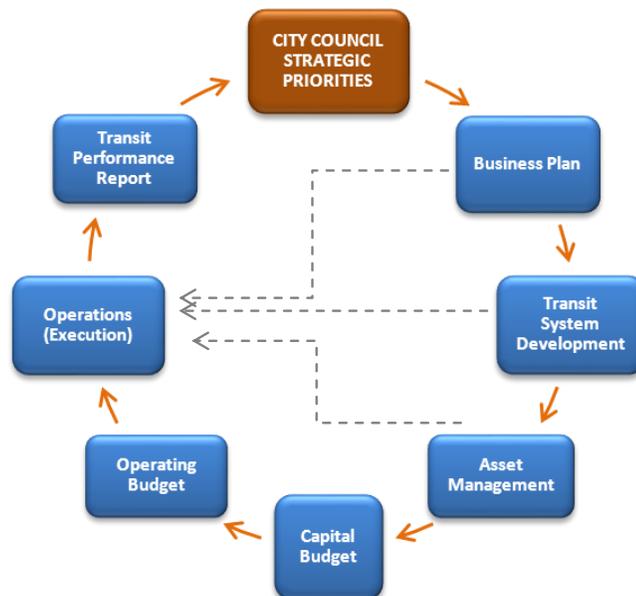
In addition, the Public Works Department has articulated the following major objective: By June 30, 2013 a fully engaged Public Works Department staff will move Tempe Public Works services from a condition of uncertainty and fiscal instability to becoming the Valley leader in providing cost effective Public Works services where revenue supports expenditures, calibrated against the following ranked program priorities: 1) Public Health & Safety, 2) Asset Preservation, 3) Customer Service Enhancements, and 4) System Expansions.

Transit Division Purpose Statement and Major Objectives

Advance a regionally integrated multi-modal transportation program that is performance-driven, safe, accessible, in a state of good repair, and responsive to community needs.

- **Execute Transit Division Strategic Alignment Model** – This approach is designed to enhance action and accountability in support of City Council Strategic Priorities.
- **Complete Major Deliverables** – The business plan, transit system development plan; asset management, operating/capital budget, and transit performance report.

Figure 1: Transit Division Strategic Alignment Model



- **Deliver Reliable and High Quality Transit Services** – The Transit System Development Plan will integrate priorities established by the Transit Tax, the Comprehensive Transportation Plan as well as local, regional and national standards to set benchmarks for Tempe’s transit system service policies, standards and performance targets. The Transit Performance Report will document annual performance and will be submitted for City Council review.
- **Pending Outcome of Joint Procurement, implement Tempe-RPTA Bus Operations Unification** - The Tempe City Council and the Valley Metro/RPTA have approved a "scout program" to take the first steps to unify Tempe's bus operations with the Regional Public Transportation Authority (RPTA). Presuming the savings estimates are confirmed by the procurement and new contract, the first year that any savings may be realized is FY 2013-14.
- **Complete Update of Transportation Master Plan** – In coordination with City Council, city departments, appropriate Boards/Commission, and the general public, complete update of the Transportation Master Plan (formerly named the Comprehensive Transportation Plan).

SEC. 4.0

FY 2012-13 BUS AND RAIL SERVICE PLAN

The FY 2012-13 Bus and Rail Service Plan is tentatively based on City Council approval of the service changes proposed in this report.

Table 1: FY 2012-13 Bus and Rail Service Plan

MODE-ROUTE	Service Area	WEEKDAY			SATURDAY		SUNDAY	
		Span of Service	Freq. (Peak)	Freq. (Off-Peak)	Span of Service	Freq.	Span of Service	Freq.
LOCAL BUS ROUTES								
Route 30	University	5am - 12:30am	30	30	5am - 12:30am	30	5am - 10:00pm	60
Route 40*	Apache	5am - 12:30am	30	30	5am - 12:30am	30	5am - 10:00pm	60
Route 45	Broadway	5am - 12:30am	15	30	5am - 12:30am	30	5am - 10:00pm	30
Route 61	Southern	5am - 12:30am	15	30	5am - 12:30am	30	5am - 10:00pm	30
Route 48	48th-52nd-Rio Salado	5am - 12:30am	30	30	5am - 12:30am	30	5am - 10:00pm	30
Route 56	Priest	5am - 12:30am	15	30	5am - 12:30am	30	5am - 10:00pm	30
Route 62	Guadalupe-Hardy	5am - 12:30am	30	30	5am - 12:30am	30	5am - 10:00pm	30
Route 65	Hardy-Kyrene-Mill	5am - 12:30am	30	30-60	5am - 12:30am	60	5am - 10:00pm	60
Route 66	Kyrene-Mill	5am - 12:30am	30	30-60	5am - 12:30am	60	5am - 10:00pm	60
Route 72	Rural-Scottsdale	5am - 12:30am	20	20-30	5am - 12:30am	30	5am - 10:00pm	30
Route 77	Baseline	5am - 12:30am	30	30	5am - 12:30am	30	5am - 10:00pm	30
Route 81	McClintock	5am - 12:30am	15	30	5am - 12:30am	60	5am - 10:00pm	60
Route 108	Elliot	5am - 12:30am	30	30	5am - 12:30am	60	5am - 10:00pm	60
EXPRESS BUS ROUTES								
Exp 511	Scottsdale-Tempe	4 trips a.m. / 4 trips p.m.		No service	No service		No service	
Exp 520	Tempe-Phoenix	2 trips a.m. / 2 trips p.m.		No service	No service		No service	
Exp 521	Tempe-Phoenix	4 trips a.m. / 4 trips p.m.		No service	No service		No service	
Exp 540	Tempe-Phoenix	4 trips a.m. / 4 trips p.m.		No service	No service		No service	
URBAN CIRCULATORS								
FLASH	Downtown Tempe-ASU	6am - 1am	10	15	No service		No service	
NEIGHBORHOOD CIRCULATORS								
Orbit Earth**	North Tempe	6am - 11pm	15	15-30	8am - 11pm	15	8am - 7pm	30
Orbit Jupiter	Central Tempe	6am - 10pm	15	15	8am - 10pm	15	8am - 7pm	30
Orbit Mars	Central-East Tempe	6am - 10pm	15	15	8am - 10pm	15	8am - 7pm	30
Orbit Mercury	Central-East Tempe	6am - 10pm	10	15	8am - 10pm	15	8am - 7pm	30
Orbit Venus	Central-West Tempe	6am - 10pm	15	15	8am - 10pm	15	8am - 7pm	30
RAIL								
Light Rail	Mesa-Tempe-Phoenix	5am - 12:30am (Fri to 2am)	12	20	5am - 3am	15-20	5am - 11am	20

Notes:

* The Route 40 - Apache was approved for elimination in Tempe effective July 23, 2011; a small segment was kept in place between the Mesa border and the Apache-Price LRT Station as a Title VI mitigation.

** Orbit Earth operates a 30 minute frequency beginning at 9 p.m. (M-Sa) as a method to extend service to 11 p.m. This was done to compensate for the loss of the Route 66 (College/Mill) in north Tempe in 2010.

SEC. 5.0**FY 2012-13 OPERATING BUDGET**

The FY 2012-13 Transit Operating Budget has been prepared with the goals of delivering a fiscally prudent and transparent budget that outlines a clear pathway to financial balance by FY 2012-13 while preserving higher performing transit services.

FY 2012-13 - Sources of Funds

The FY 2012-13 operating budget anticipates base revenue in the amount of \$49.5 million. This amount reflects a 4% increase compared to the original FY 2011-12 budget. Funding sources include local and regional sales tax revenue, revenue from partner cities to provide regional bus service, passenger fares, interest income, advertising revenue, and miscellaneous revenue (grants, transit pass sales, property lease income). Budget analysis notes are provided on page 12.

Table 2: FY 2012-13 Sources of Funds

SOURCES OF FUNDS (\$000)	FY 2012 Budget	FY 2013 Budget	% Change	Budget Note #
Transit Tax	\$ 29,124	\$ 30,751	6%	1
Lottery Transfer In	\$ -	\$ 475	n/a	2
ASU-Flash Transit	\$ 905	\$ 933	3%	3
Interest Income	\$ 120	\$ 120	0%	4
Light Rail Fares	\$ 2,859	\$ 3,292	15%	5
Out of Jurisdiction Revenue	\$ 9,104	\$ 9,097	0%	6
PTF Funding	\$ 2,850	\$ 2,627	-8%	7
Miscellaneous Revenue	\$ 2,795	\$ 2,206	-21%	8
Total Revenues	\$ 47,758	\$ 49,501	4%	

Table 3 provides an analysis of the major revenue changes in the FY 2011-12 transit program operating budget compared to the original FY 2010-11 budget. The number in the “Budget Note” column corresponds to the “Note” column in the “Sources of Funds” table on page 12 and 13.

Table 3: Budget Analysis (Funding Sources)

NOTE	CATEGORY	BUDGET ANALYSIS
1	Transit Tax	Transit sales tax revenue reflects a 6% increase compared to the amount budgeted for FY 2011-12. This forecast is provided by Tempe's Finance & Information Technology Department.
2	Lottery Transfer In	The State of Arizona was compelled by the judicial branch to reinstate the Local Transportation Assistance Fund II (LTAF II). LTAF II provides state funding to cities and towns for transportation and transit operations. This funding source was swept by the Governor's 2011 budget, but legal action compelled the state to reinstate the funding.
3	ASU-Flash Transit	Arizona State University (ASU) provides 100% of the operating cost for the FLASH System and 9% of the operating cost for the Orbit Mars.
4	Interest Income	Interest Income is budgeted to remain static in FY 2012-13 and reflects the Transit Fund's fund balance following the allocation of \$54 million to repay outstanding debt.
5	Light Rail Fares	METRO estimates that light rail fare revenue will increase by 15% from \$2,859,098 to \$3,292,366. This is based on higher than expected boardings (3,919,483) and more effective fare collection and enforcement leading to an average fare of \$0.84 per ride.
6	Out of Jurisdiction Revenue	Tempe is a regional transit provider. 35% of the bus service operated by Tempe is provided in partner cities: Phoenix, Scottsdale, Mesa, Chandler, Gilbert, Guadalupe, Fountain Hills, and the Gila River Indian Community. Tempe receives funding through Valley Metro/RPTA on behalf of these cities for this service. This funding fully offsets the direct costs of providing bus service in those cities (e.g, contract costs, fuel) and partially offsets Tempe's internal overhead costs (e.g., city staff, facilities, security). This funding is remaining static because expected contract, intergovernmental, and personnel related cost increases will be offset by service reductions in neighboring cities, higher fare revenue, and the revenue from MAG's allocation of federal funds for preventative maintenance. Note: this figure will decrease further to the extent that MAG formally approves use of federal CMAQ and 5307 funds for preventative maintenance. These funds will act as a credit to both partner cities.
7	PTF Funding	PTF ("Public Transportation Fund") funding refers to regional Proposition 400 funds that Tempe receives directly to support Local and Express bus service identified in the Regional Transportation Plan. The reduction is related to higher fare revenue which reduces the funding transfer needed from RPTA and the FY 2011-12 elimination of unscheduled booster trips previously provided on route 72 (Rural Rd.), which were approved for removal by the City Council in June 2011. Note: the actual figure will decrease further to the extent that MAG formally approves use of federal CMAQ and 5307 funds for preventative maintenance. These funds will act as a credit to RPTA when it processes the PTF reimbursement.

Table 3 CONTINUED: Budget Analysis (Funding Sources)

NOTE	CATEGORY	BUDGET ANALYSIS
8	Misc Revenue	Several categories comprise Miscellaneous Revenue:
		8a. Transit Property Revenue - \$197,000 is anticipated from the lease of transit property, primarily from Tempe Transportation Center tenants.
		8b. Transit Store (Pass Sales) - Transit passes are purchased at a discount (4%) from the City of Phoenix and sold at full face value by the Tempe Transit Store and Library. Revenue from pass sales and replacement passes is anticipated to be \$452,000.
		8c. Federal PM Funding (Bus-5307) - In 2011, the Maricopa Association of Governments (MAG) approved a five (5) year allocation of Federal 5307 funds for bus-rail fleet preventative maintenance. The new allocation is based on an updated regional distribution methodology also approved by MAG in 2011. The allocation will provide Tempe with \$1.2 million in federal funds to offset the cost of bus fleet preventative maintenance. Tempe received under \$200,000 from this source in FY 2010-11. Note: This is the base amount previously approved by MAG and escalated through FY 2015-16. MAG is in the process of approving additional 5307 and CMAQ funds for preventative maintenance which will increase this amount. These amounts are not reflected in the budget but are noted in the Five (5) year forecast.
		8d. Federal PM Funding (Rail-5307) - In 2011, the Maricopa Association of Governments (MAG) approved a five (5) year allocation of Federal 5307 funds for bus-rail fleet preventative maintenance. The new allocation is based on an updated regional distribution methodology also approved by MAG in 2011. MAG will provide METRO with \$782,992 in federal funds to offset the cost of LRT vehicle preventative maintenance. \$226,772 represents Tempe's proportionate share of this revenue and will be directly credited to the city.
		8e. Alternative Fuel Tax Credit - In December 2010, The U.S. Congress passed and the President signed the Middle Class Tax Relief Act of 2010. The law extended the alternative fuels tax credit for transit properties through December 31, 2011. The alternative fuels tax credit allowed transit agencies that use compressed natural gas (CNG) and liquefied natural gas (LNG) to receive a 50 cent credit per gallon equivalent tax refund. Tempe received approximately \$610,553 in revenue for the period July 1-December 31, 2011. Congress has not passed another extension. The elimination of this revenue is the primary reason for the decrease in the Miscellaneous Revenue category.
		8f. Light Rail Advertising - \$140,150 in revenue is expected from the sale of advertising on light rail vehicles.

FY 2012-13 - Uses of Funds

The FY 2012-13 operating budget anticipates operating and capital expenditures in the amount of approximately \$53 million. This amount reflects a 3% reduction compared to the original FY 2011-12 budget. Uses of funds include bus, rail and paratransit services to the Tempe and East Valley community; personnel expenses related to the planning, operation, and marketing of the transit program; operations and maintenance of transit facilities; debt service on capital construction bonds; internal service charges and allocations; and contingency. Pages 14-16 provide the budget analysis notes for each category listed below.

Table 4: FY 2012-13 Uses of Funds

USE OF FUNDS (\$000)	FY 2012 Budget	FY 2013 Budget	% Change	Budget Note #
Personnel Services	\$ 2,815	\$ 3,041	8%	9
Materials and Supplies	\$ 3,827	\$ 3,965	4%	10
Fees and Services	\$ 41,323	\$ 39,963	-3%	11
Travel and Training	\$ 11	\$ 10	-9%	12
Capital Outlay	\$ 11	\$ 153	1262%	13
CIP Transfer (Transit Tax)	\$ 366	\$ 959	162%	14
Debt Service	\$ 5,070	\$ 3,855	-24%	15
Internal Service Charges	\$ 552	\$ 489	-11%	16
Contingency	\$ 50	\$ -	n/a	17
Total Other Contributions / CBDG +	\$ 100	\$ 50	-50%	18
Indirect Cost Allocations	\$ 325	\$ 403	24%	19
Total Expenditures	\$ 54,451	\$ 52,889	-3%	

Table 5 provides an analysis of the major changes in the uses of funds in the FY 2012-13 transit program operating budget compared to the original FY 2010-11 budget. The number in the “Budget Note” column in Table 4 corresponds to the “Note” column in Table 5 below.

Table 5: Budget Analysis (Uses of Funds)

NOTE	CATEGORY	BUDGET ANALYSIS
9	Personnel Services	Since FY 2009-2010, personnel costs related to the Transit Fund have decreased by 25%. The FY 2012-13 budget amount of \$3,040,868 reflects the cost of 38 Transit funded FTEs across multiple departments. In some cases, the cost of positions are shared between the Transit Fund and other funds. The costs of personnel with a bus operational role are partially offset by funding from regional sources. There are no proposed changes to staffing levels. The increase are related to city-wide personnel policies.
10	Materials and Supplies	The major expenditure in materials and supplies is fuel for bus operations. The 4% increase compared to FY 2011-12 anticipates that the cost of unleaded fuel utilized by the Orbit Neighborhood Circulator fleet will remain at today's higher prices. The amount also assumes reduced consumption of liquid and compressed natural gas due to the introduction of the 60 foot hybrid electric sub-fleet and static L/CNG commodity pricing. The price per gallon is held at the FY 2011-12 level based on the currently low commodity price but in recognition of the ongoing negotiations with L/CNG supplier Clean Energy to settle under-purchased quantities in 2011 and 2012 which were the direct result of bus service reductions and higher fuel efficiency.

Table 5 CONTINUED: Budget Analysis (Uses of Funds)

NOTE	CATEGORY	BUDGET ANALYSIS
11	Fees and Services	The major expenditures in fees and services are for bus, light rail, paratransit, security, and facilities operations.
		<p>11a. Direct bus operations expenditures are estimated to total \$24.9 million which reflects a net decrease of \$43,774 compared to FY 2011-12 - The major factors driving this net reduction are local and regional service reductions approved in FY 2011-12. There were additional service reductions in the city of Scottsdale in January 2012 which impact this number as well as minor operational adjustments planned for FY 2012-13. This figure also reflects the FY 2012-13 contract price escalation of 3% for the Veolia Tempe contract, a rate increase charged by RPTA for bus service to be supplied in Tempe, and a new cost (\$545,000) charged by the City of Phoenix for the regional support services it provides. This includes: regional fare media distribution, service planning and scheduling, vehicle management system maintenance and support, and fare collection system support. RPTA's Transit Lifecycle Program Working Group determined in 2011 that these services were being over-distributed to Phoenix and the cities it provides service to. Cities receiving Tempe and RPTA bus services should be paying a portion of these regional expenses. As with other bus operating expenses, because Tempe is a regional provider, 35% of this new cost will be recovered from partner cities and another 12% recovered from PTF revenue.</p>
		<p>11b. METRO Light Rail gross expenditures are estimated to total \$10.5 million which is a net increase of \$98,349 compared to FY 2011-12 - There are no changes to rail service levels. Metro staff cost will increase due to 1) the proposed increase staffing by 12 from 141 to 153 at a cost of \$1.0 million to support increased design and construction efforts for future extensions and maintain light rail vehicles (Metro estimates that hiring these positions instead of outsourcing will result in an estimated \$275K savings per year), 2) the completion of an FY 2011-12 Board approved plan to reduce cost by transitioning LRV maintenance contractors to in-house employees (the cost of \$1.9 million is offset by greater reductions in contract costs), and 3) wage and fringe benefit increases totaling \$370 which includes up to a 3% merit increase. Additionally, Tempe's security costs will reduce due to Phoenix's participation in the regional security program.</p>
		<p>11c. Tempe's local contribution to Dial-a-Ride is expected to decrease from \$350,000 to \$300,000 - This amount provided by Tempe's local Transit Tax provides dial-a-ride trips for senior citizens and persons with disabilities who are not ADA certified ("Non-ADA"). Tempe's allocation of Proposition 400 funds covers all expenses related to the transportation of ADA certified Tempe residents with disabilities. RPTA anticipates fewer non-ADA dial-a-ride trips as more passengers take advantage of the "RideChoice" program taxi program. In addition, the new brokerage model for providing paratransit service in the east valley will commence in July, 2012 and is expected to reduce dial-a-ride cost by up to 34%.</p>
		<p>11d. Security costs supporting bus operations and transit facilities (Tempe Transportation Center and East Valley Bus Operations and Maintenance Facility) are estimated to total \$321,033 which is a decrease of 1% compared to FY 2011-12 - There are no program level changes.</p>
		<p>11e. Asset and infrastructure operations and maintenance costs are estimated to total \$2.1 million which is an increase of 8% compared to FY 2011-12 - Budget amounts for building operations and maintenance will be decreased from \$1.67 million to 1.54 million. These amounts are being reduced due to historical under-use, but also recognize the need to properly fund a robust asset management program for the Transportation Center and East Valley Bus Operations and Maintenance Facility based on lifecycle costing and preventive maintenance principles. Budget amounts for bus stop and multi-use pathway asset cleaning and maintenance are being increased from \$202k to \$493K as a correction to historical under-funding.</p>
		<p>11f. The cost of the Tempe Free Youth Transit Pass is expected to increase by 10% from \$432,000 to \$475,000. Most of the increase is related to the anticipation of higher pass costs as a result of the expected January 2013 fare increase. While Tempe pays for these passes up front, transit staff estimate that about 70% of the cost of this program is recovered through the regional fare collection and distribution process.</p>

Table 5 CONTINUED: Budget Analysis (Uses of Funds)

NOTE	CATEGORY	BUDGET ANALYSIS
12	Travel and Training	The travel and training budget will be marginally reduced from \$11k to \$10k. Utilization will be restricted to travel and training where there is a clear business imperative.
13	Capital Outlay	The capital outlay increase from \$11k to \$153K reflects a one-time vehicle purchase in support of asset maintenance activities for the city's bus stop and multi-use pathway infrastructure. Coinciding with a regular vehicle replacement cycle, a change in business model requires a different fleet make-up. The new approach dedicates the program's city transportation workers to transit infrastructure maintenance while shifting bus stop cleaning to a private contract. Over the last 5-7 years, increases in transit ridership has outpaced city staff's ability to keep up with the cleaning needs across Tempe's 900 bus stops and 3 major transit centers. At the same time, Tempe's bus stop/pathway infrastructure is aging and the program's asset management program requires dedicated staff to repair and replace shelters, lighting, signs, benches, bike racks, and pathway infrastructure.
14	CIP Transfer (Transit Tax)	The CIP Transfer budget reflects the Transit Tax dollar amount necessary (\$959k) for the proposed FY 2012-13 Transit CIP program.
15	Debt Service	The utilization of fund balance to pay-down debt associated with bonds sold for light rail construction was previously approved by the City Council in June 2011. This strategy has two parts: 1) use a portion of fund balance to pay down debt more quickly to reduce annual debt service, and 2) convert remaining variable rate debt to fixed in order to leverage and lock-in historically low rates. Although fixing the debt will entail a higher interest rate and higher annual payments than can be realized under a variable rate scenario, fixing the debt will protect the Transit Fund from future fluctuations in rates and help stabilize long-range financial forecasting and budgets. The estimated budget savings is approximately \$1.2 million per year and is incorporated into the base budget expenditures noted in Table 4.
16	Internal Service Charges	Internal service charges reflect the Transit Fund's portion of city-wide internal services (e.g., Human Resources, City Attorney's Office).
17	Contingency	The contingency was removed due to modest contingencies applied at the business unit level.
18	Total Other Contributions / CBDG +	The \$50,000 budget amount in this category includes \$50,000 for the Transit Program's grant program supporting Tempe's non-profit agency providers of senior and disabled transportation. The continuation of this program will be reviewed during FY 2012-13. The reduction is related to the removal of \$50,000 for demolition associated with capital projects.
19	Indirect Cost Allocations	Indirect cost allocations represent cost of city services the Transit Program requires as a result of its business (e.g., vehicle maintenance for the vehicles the city operates directly). The increase reflects the higher cost of fuel and aging trucks which support bus stop cleaning and maintenance activities.

SEC. 6.0 PRELIMINARY FIVE (5) YEAR FINANCIAL FORECAST – DEFICIT REDUCTION MEASURES

This document represents the second update to the Transit Fund Financial Balancing Plan (“Balancing Plan”) which was originally approved by the City Council in May 2010. The Balancing Plan initially recommended three (3) major strategies for resolving the forecasted \$15 million structural deficit.

1. Use approximately \$18.5 million in fund balance to help sustain operations and cover annual projected deficits over three fiscal years (FY 2011-2013);
2. Eliminate structural deficit by phasing in recurring cost reductions and/or increased revenues by \$4.5 million in FY 2010-11, \$4.7 million in FY 2011-12, and \$4.9 million in FY 2012-13;
3. Utilize fund balance to retire debt once the budget is balanced.

Phase 1 reduced the deficit by \$4.5 million in FY 2010-11 with a combination of personnel reductions, cost containment, internal program and budget reductions, and service reductions. Phase 2 reduced the deficit by \$7.4 million in FY 2011-12 with a combination of new revenue, service reductions, and additional economies extracted from the budget.

The remaining five (5) year deficit is \$2.7 million. Table 6 presents the preliminary Transit Fund five (5) year financial forecast and incorporates **additional deficit reduction measures**. The forecast was produced in consultation with the Finance and Technology Department (FIT). FIT will formally update the financial forecasts for all funds in mid-2012.

Table 6: Preliminary Transit Fund Five Year Financial Forecast

PRELIMINARY TRANSIT FUND FINANCIAL FORECAST (FY 2013-2017)						
	FY 12/13 Projected	FY 13/14 Projected	FY 14/15 Projected	FY 15/16 Projected	FY 16/17 Projected	Budget Notes
BASE BUDGET						
Revenue	\$ 49,504	\$ 51,393	\$ 53,545	\$ 56,222	\$ 57,407	1
Expenditures	\$ 52,889	\$ 55,275	\$ 56,640	\$ 57,233	\$ 59,585	1
Surplus/(Deficit)	\$ (3,385)	\$ (3,882)	\$ (3,095)	\$ (1,011)	\$ (2,178)	2
POTENTIAL DEFICIT REDUCTION MEASURES						
Supplemental 5307/CMAQ PM Funds TEMPE	\$ 3,883	\$ 922	\$ 1,094	\$ -	\$ -	3
Supplemental 5307/CMAQ PM Funds METRO	\$ 1,002	\$ 240	\$ 234	\$ -	\$ -	3
Bus Service Changes	\$ 429	\$ 442	\$ 455	\$ 469	\$ 483	4
FY 2013 Regional Fare Increase	\$ 365	\$ 739	\$ 761	\$ 424	\$ 437	5
FY 2017 Regional Fare Increase	\$ -	\$ -	\$ -	\$ -	\$ 700	5
Tempe-RPTA Bus Unification	\$ -	\$ 400	\$ 412	\$ 424	\$ 437	6
Orbit Fleet replacement (CNG)	\$ -	\$ 473	\$ 474	\$ 528	\$ 512	7
Orbit Fare	to be determined					8
Revised Surplus/(Deficit)	\$ 2,293	\$ (667)	\$ 335	\$ 834	\$ 390	
Beginning Fund Balance	\$ 80,400	\$ 28,693	\$ 28,026	\$ 28,361	\$ 29,196	
Debt Paydown	\$ 54,000	\$ -	\$ -	\$ -	\$ -	9
Ending Fund Balance	\$ 28,693	\$ 28,026	\$ 28,361	\$ 29,196	\$ 29,586	
Approved Tentative Fund Balance Policy	\$ 19,735	\$ 20,614	\$ 21,633	\$ 22,932	\$ 23,426	10
Excess Fund Balance	\$ 8,958	\$ 7,413	\$ 6,728	\$ 6,264	\$ 6,160	11

Table 7 provides a snapshot of the major items included in the FY 2013-17 Preliminary Transit Fund Financial Forecast. The number in the “Budget Notes” column in Table 6 corresponds to the “Note” column in Table 7 below. The items noted under “Potential Deficit Reduction Measures” are explained in more detail below.

Table 7: Financial Forecast Analysis

NOTE	CATEGORY	BUDGET ANALYSIS
1	Revenue-Expenditures	Revenues include a) increased sales tax, b) higher light rail fare revenue, and c) revenue amounts related to 7 months operation of 2.6 mile streetcar - Expenditures include a) amounts related to 7 months operation of 2.6 mile streetcar, b) revised debt service payments based on fixing remaining variable rate debt, c) program-wide minor adjustments, and d) reduced base light rail costs due to decrease to Tempe's portion of the system once the Mesa and Phoenix Northwest Extensions commence operations in 2015.
2	Surplus/(Deficit)	Revised five (5) year average deficit is \$2.7 million.
3	Supplemental 5307/CMAQ	CMAQ close-out funds allocated to PM have been approved by MAG's Transit Committee, Transportation Review Committee, Management Committee, and Transportation Policy Committee; 5307 surplus allocation to PM has been approved by MAG's Transit Committee.
4	Bus Service Changes	Bus service changes recommended for July 2012; subject to City Council approval.
5	Regional Fare Increases	Financial forecast assumes a regional fare increase is approved by the RPTA Board of Directors for implementation in January 2013. A subsequent fare increase is assumed for FY 2016-17.
6	Tempe-RPTA Bus Operations Unification	The Tempe City Council and the Valley Metro/RPTA have approved a “scout program” to take the first steps to unify Tempe’s bus operations with the Regional Public Transportation Authority (RPTA). The estimated savings is in the range of \$800,000 to \$1,000,000 with Tempe’s local savings totaling about half of this amount or \$400,000 to \$500,000. Presuming the savings estimates are confirmed by the procurement and new contract, the first year that any savings may be realized is FY 2013-14.
7	Orbit Fleet Conversion to CNG	In conjunction with a regular replacement cycle, staff recommend replacing the current buses with the same vehicle type (24 foot Ford Cutaway) powered by CNG instead of the unleaded gas fuel the current fleet uses. The capital cost of these vehicles is eligible for federal funding (80%) with local match (20%) currently included in RPTA’s Transit Lifecycle Model (TLCP) which programs regional Proposition 400 funds. In addition to the environmental benefits of CNG compared to unleaded gas, the average annual cost savings potential associated with converting to CNG is estimated to be approximately \$500,000 per year.
8	Orbit Fare	Staff request that the decision point on this issue be deferred until Autumn 2012 to allow additional analysis of ridership-revenue impacts, operational-administrative issues, social equity concerns, consultation with stakeholders about potentially adverse financial impacts (e.g., Regional Partners, ASU) and follow-up on City Council questions and concerns which may arise at the May 31 budget presentation.
9	Debt Payment	\$54 million in paydown of Bond Debt approved by City Council on 6/16/2011.
10	Tentative Transit Fund Balance Policy	Tentative fund balance policy (6 months of revenue directly supporting Tempe based service) approved by City Council on 6/16/2011.
11	Excess Fund Balance	Estimated fund balance in excess of approved tentative fund balance policy.

REDUCE DEBT SERVICE

The utilization of fund balance to pay-down debt associated with bonds sold for light rail construction was previously approved by the City Council in June 2011. This strategy has two parts, the second of which was not specifically addressed with the City Council in June 2011:

1. Use a portion of fund balance to pay down debt more quickly to reduce annual debt service;
2. Convert remaining variable rate debt to fixed in order to leverage and lock-in historically low rates. Although fixing the debt will entail a higher interest rate and higher annual payments than can be realized under a variable rate scenario, fixing the debt will protect the Transit Fund from future fluctuations in rates and help stabilize long-range financial forecasting and budgets. The estimated budget savings is approximately \$1.2 million per year and is incorporated into the base budget expenditures noted in Table 4.

MAINTAIN TENTATIVE COUNCIL APPROVED TRANSIT FUND BALANCE POLICY

Until a city-wide review of fund balance policies is completed, maintain the policy approved by the City Council on June 16, 2011 which establishes a fund balance based on 6 months of revenues that directly support Tempe transit services.

ADD/DIVERIFY REVENUE BASE

- *Regional Fare Increase* – A regional fare increase was approved by Valley Metro/RPTA’s Transit Management Committee for implementation in January 2013. The Valley Metro/RPTA Board of Directors will consider the fare increase for January 2013 implementation at its September 2012 meeting. There is a good probability that the fare increase will be approved along with a policy to consider fare increases every 3 years. The additional revenue to Tempe (Bus and Rail) will be approximately \$364,000 in FY 2012-13 and \$739,000 in FY 2013-14. A subsequent fare increase may be expected in or before FY 2016-17.
- *Federal Funding For Fleet Maintenance* - In 2011, the Maricopa Association of Governments (MAG) approved the use of federal 5307 funds for allocation to fleet preventative maintenance through FY 2015-16. These funds are distributed to transit operators (e.g., RPTA, METRO, Phoenix, Tempe), then passed through to partner cities relative to their transit service levels. The net gain to Tempe of approximately \$1.1 million per year through FY2015-16 is stable and included in the Transit Fund's financial forecast which has helped reduce the deficit to the current level.

To assist with mitigating short-range deficits in local and regional transit programs, MAG is currently recommending the use of surplus federal 5307 funds (\$43 million) and Congestion Mitigation and Air Quality (CMAQ) funding (\$25 million) for allocation to Preventive Maintenance (PM) over a 3 year period. Tempe's net gain from both these sources will be up to \$4.8 million in FY 2012-13, \$1.2 million in FY 2013-14, and \$1.3 million in FY 2014-15. This measure is viewed as a **non-precedent setting** move to help create a bridge to economic recovery for local and regional transit agencies

experiencing short-range deficits and is subject to approval by the MAG Regional Council in June 2012.

- *Orbit Fare* – **Attachment B** provides current information developed on the issues surrounding an Orbit fare. Staff request that the decision point on this issue be deferred until Autumn 2012 to allow additional analysis of ridership-revenue impacts, operational-administrative issues, social equity concerns, vehicle replacement strategies, consultation with stakeholders about adverse financial impacts (e.g., Regional Partners, ASU) and follow-up on City Council questions and concerns which may arise at the May 31 budget presentation.

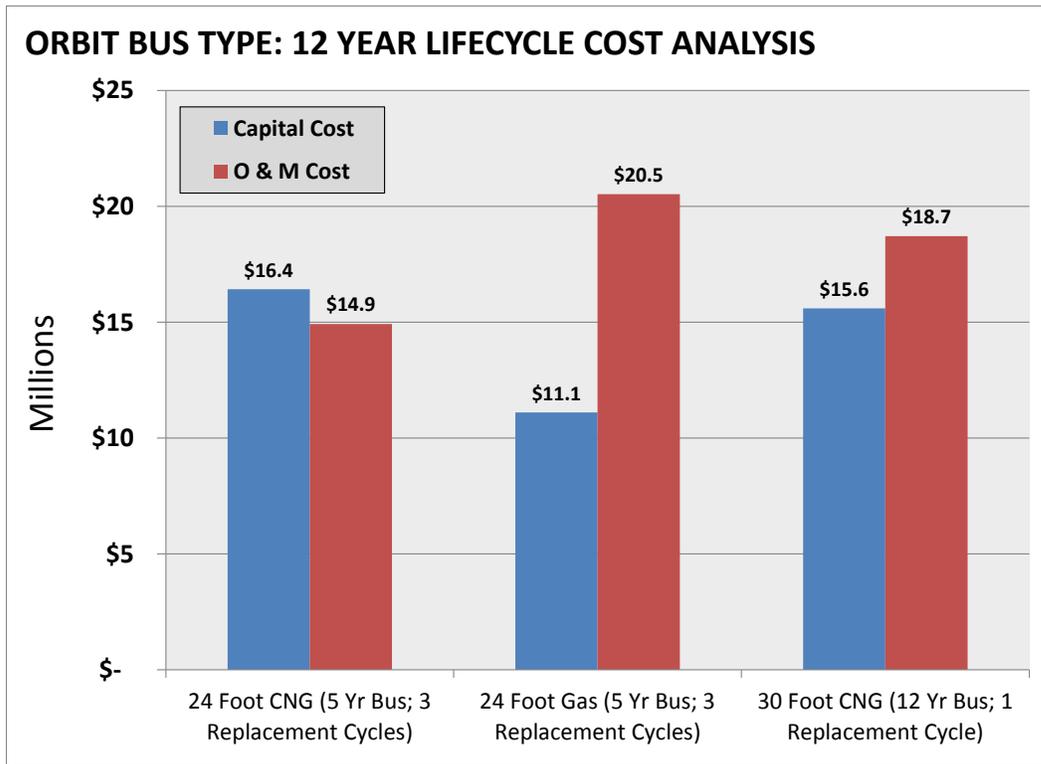
COST CONTAINMENT

- *Orbit Fleet Conversion to Compressed Natural Gas (CNG)* – The majority of the existing Orbit fleet was purchased in 2007 when the system expanded. A small number of buses were retained from the previous Neighborhood Flash system, four (4) of which were replaced in 2009 bringing the current Orbit fleet to a total of thirty-nine (39). The current buses are rated as 7 year/200,000 miles vehicles and operate on unleaded gas. Due to the heavy duty-cycle and high passenger volumes associated with Orbit service, the thirty-five (35) 2007 buses are approaching the 200,000 mile mark this spring at 5 years of service.

As part of a regular fleet replacement cycle, staff recommend replacing the current buses with the same vehicle type (24 foot Ford Cutaway) and paint scheme but powered by CNG instead of the unleaded gas fuel the current fleet uses. The capital cost of these vehicles is eligible for federal funding (80%) with local match (20%) currently included in RPTA's Transit Lifecycle Model (TLCP) which programs regional Proposition 400 funds. In addition to the environmental benefits of CNG compared to unleaded gas, the average annual cost savings potential associated with converting to CNG is estimated to be approximately \$500,000 per year.

Graph 2 on page 7 illustrates a comparison of the lifecycle costs associated with a 24 foot medium-duty cutaway style bus (Unleaded Gas; 5-6 year useful life), a 24 foot medium-duty cutaway style bus (CNG; 5-6 year useful life), and a 30 foot heavy-duty transit style bus (CNG; 12 year useful life). This snapshot examines the capital and operating costs for the entire fleet (39).

Graph 2: Orbit Bus Type: 12 Year Lifecycle Cost Analysis



The graph illustrates that the combined operating and capital cost of the 30 foot heavy-duty bus is nearly \$3 million higher than the other bus types. Although the combined operating and capital costs of the two 24 foot cutaway models are about equal, the 24 foot CNG model offers an operating cost that is \$5.6 million lower over the 12 year period or about \$500,000 per year. These estimates are based on today's difference in the base prices of unleaded gas and CNG but equal growth rates for both commodities. The model does not attempt to predict changes in the structural economic factors (e.g., growth in CNG demand; instability in world oil markets) which may drive differential price fluctuations.

PROGRAM REORGANIZATION

- *Tempe-RPTA Bus Operations Unification* – The Tempe City Council and the Valley Metro/RPTA have approved a “scout program” to take the first steps to unify Tempe’s bus operations with the RPTA. The intent is to operate the regional bus system more efficiently, achieve cost savings, and improve service to customers. The June 2013 expiration of both agencies’ individual bus operations contracts creates an opportunity for unification. The estimated savings is in the range of \$800,000 to \$1,000,000 with Tempe’s local savings totaling about half of this amount or \$400,000 to \$500,000. Presuming the savings estimates are confirmed by the procurement and new contract, the first year that any savings may be realized is FY 2013-14.

SERVICE RESTRUCTURING

- *Performance/Efficiency Adjustments* – based on a review of boardings, performance metrics, and public input, implement route modifications on Orbit routes Earth, Mars and Jupiter. These changes are designed to reduce less productive segments, reduce duplication with parallel bus service, improve efficiency, and speed travel time. These changes would reduce annual operating cost by \$429,000. Maps of the current and recommended route changes are presented below. **Attachment A** provides additional information on the process and analyses which led to these route level recommendations.

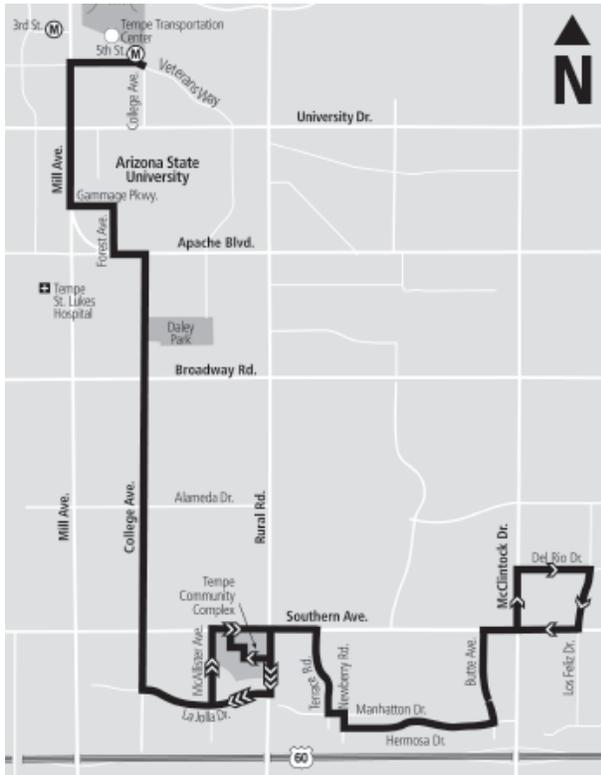
Orbit Earth: Current Route



Orbit Earth: Recommended



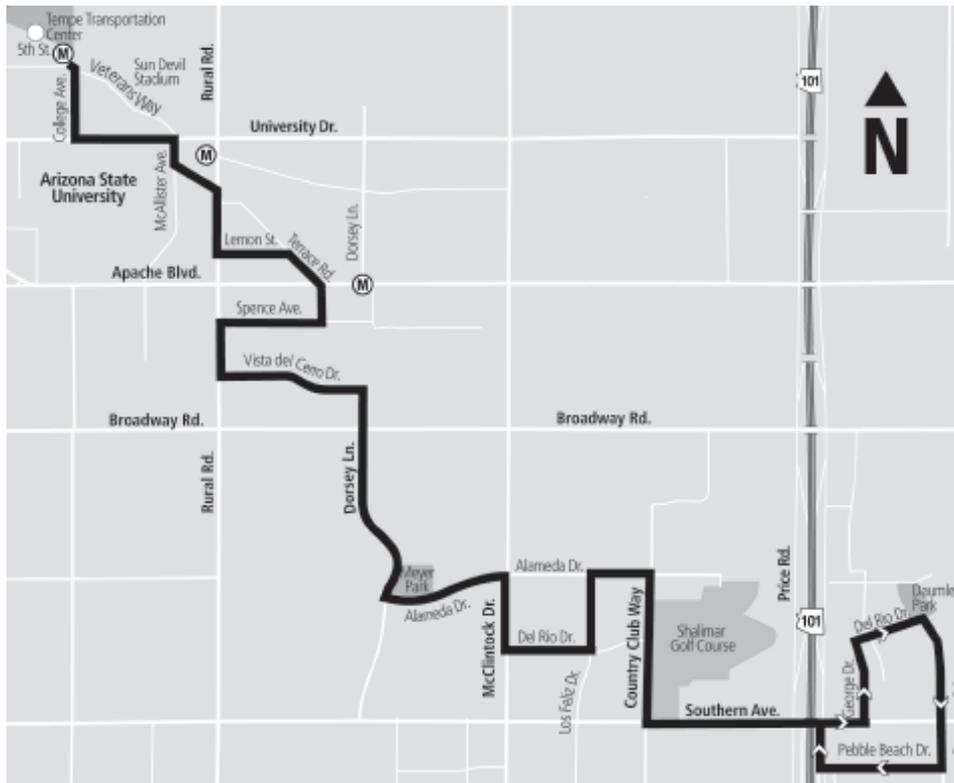
Orbit Jupiter: Current Route



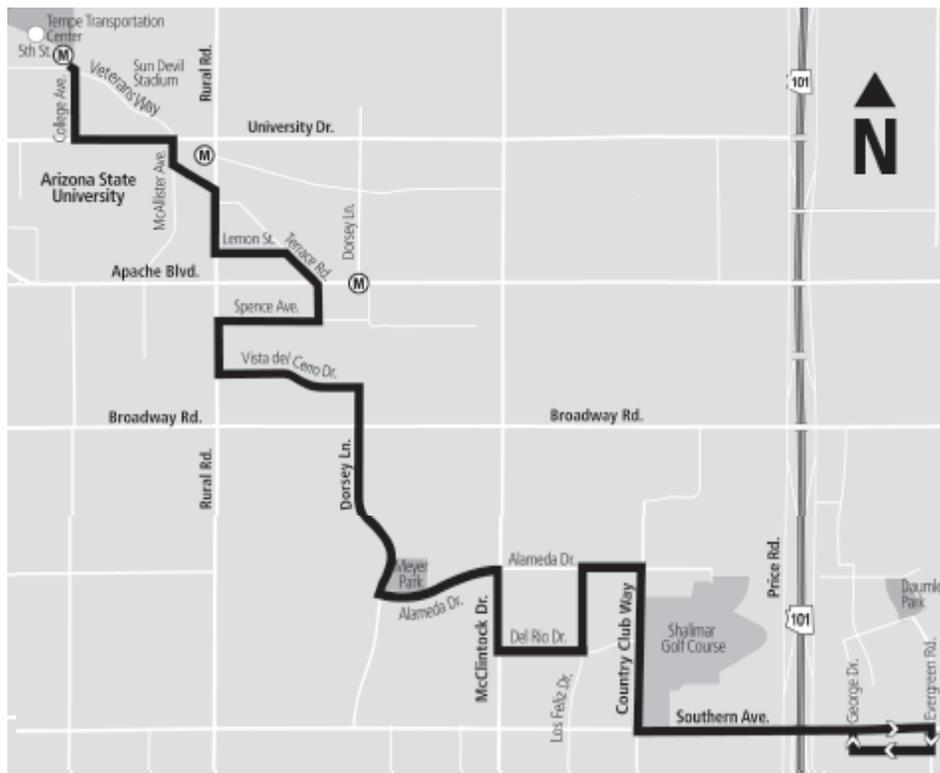
Orbit Jupiter: Recommended



Orbit Mars: Current Route



Orbit Mars: Recommended Route

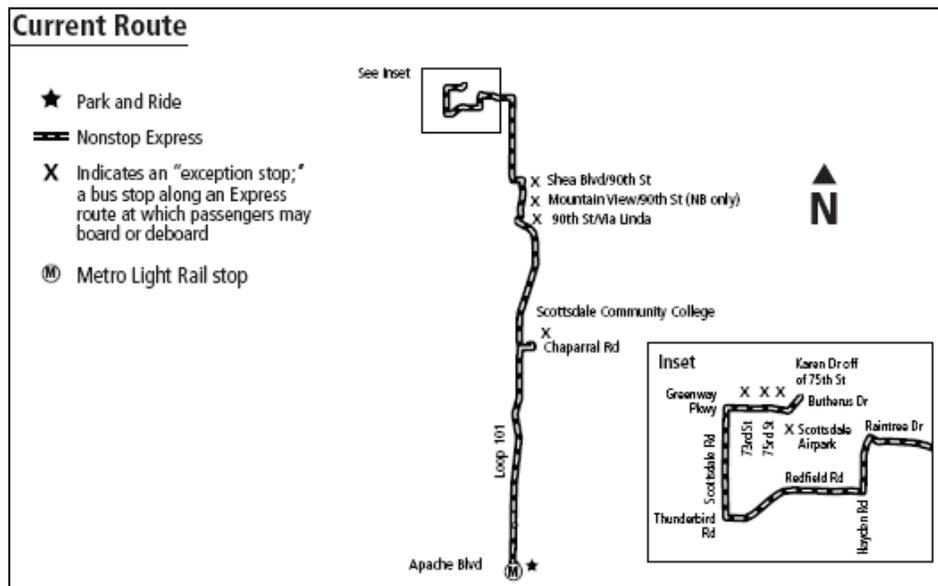


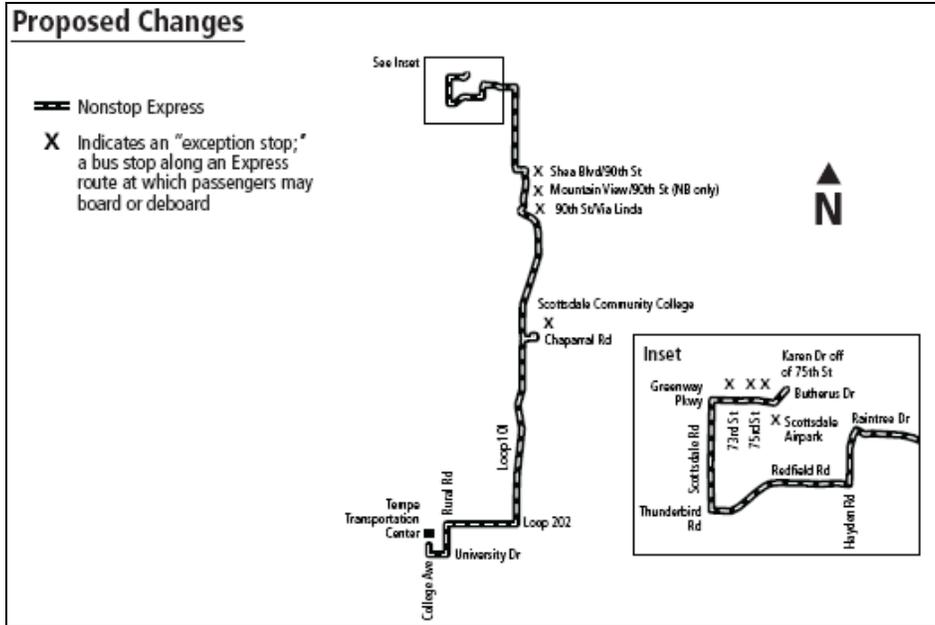
- *Express Bus Route Restructuring* – the current Express Bus Routes are not generating sufficient boardings to warrant the amount of capacity being provided. The recommended changes below reflect a two-pronged approach to 1) better calibrate service supply with actual demand and 2) introduce additional park-and-ride options to grow usage. The following recommended changes are the result of an analysis of boardings and performance metrics as well as an extensive public involvement and Transportation Commission review process.

If approved, these modifications will be the subject of a 12 month post-evaluation by staff and the Transportation Commission. In particular, the performance of the 520 and 521 (walk-access based service) will be compared with the performance of the 540 which will emphasize park and ride use. This evaluation will be useful in determining if the “park and ride” model is appropriate for Tempe.

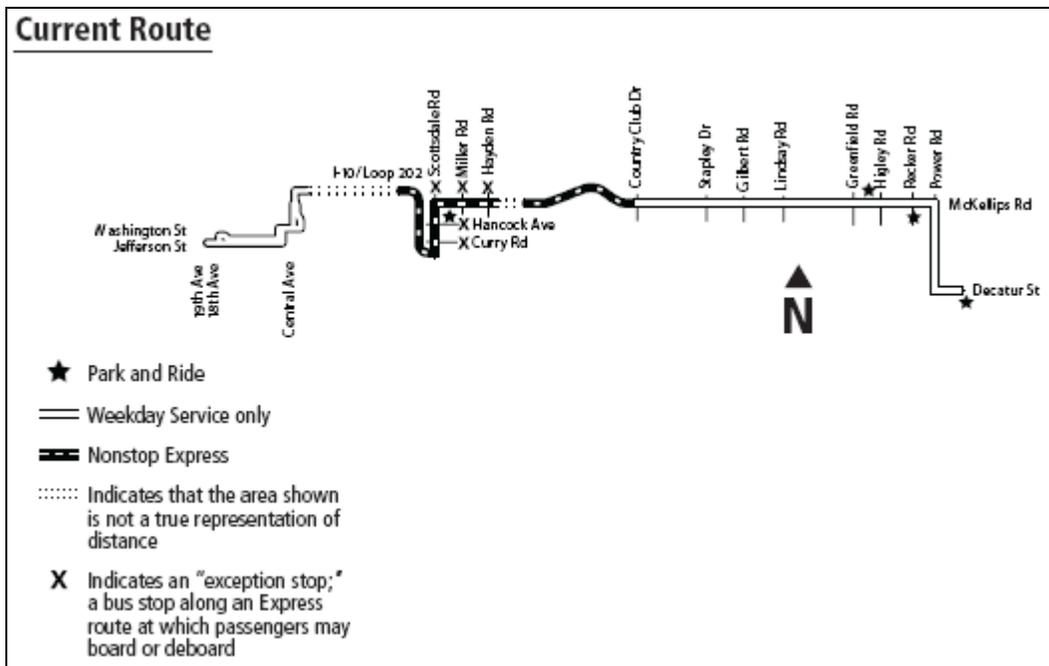
The recommendations for routes 520, 521, and 540 are collectively captured under OPTION 1A in Attachment A

- **Route 511 (Tempe-Scottsdale)** – Modify route to make its southern terminus the Tempe Transportation Center instead of the Apache/Price light rail station and park-and-ride. Maintain bi-directional service; maintain trips at 4 morning/4 afternoon. Subject cancellation in July 2013 if boardings do not improve.

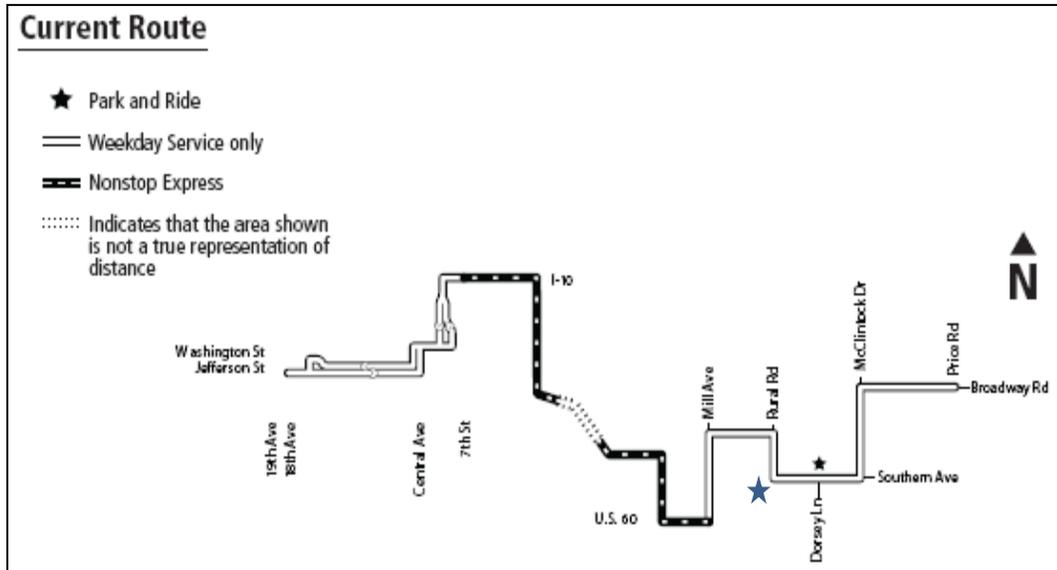




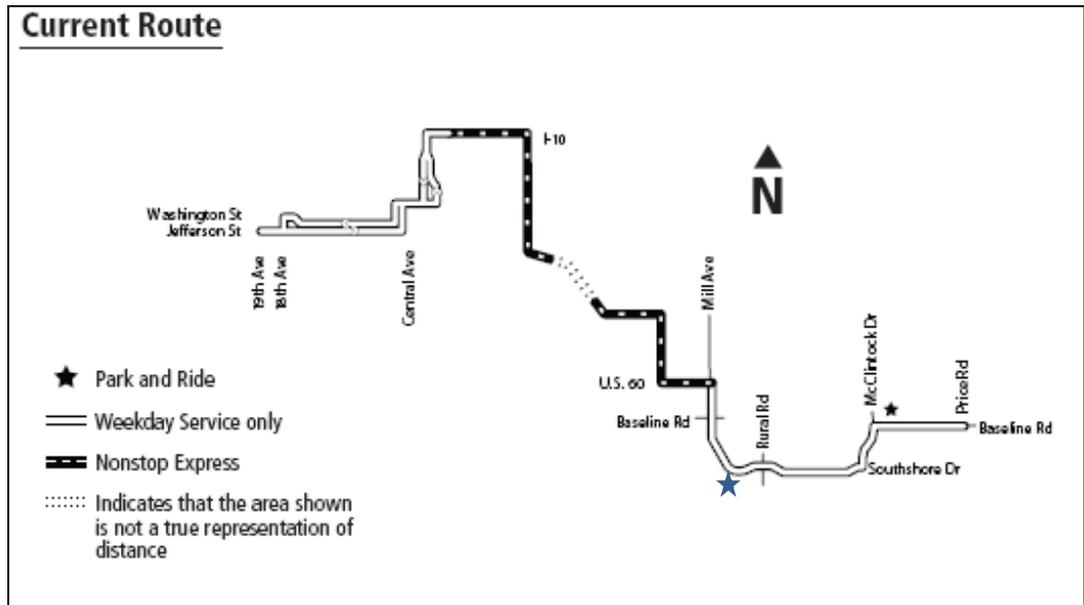
- **Route 532 (Mesa-Scottsdale-Tempe-Phoenix)** - Eliminate route in conjunction with RPTA and partner cities. Existing riders would be encouraged to make use of Route 72 (Scottsdale/Rural Rd.), Route 81 (Hayden/McClintock) and Orbit Earth to connect with light rail.



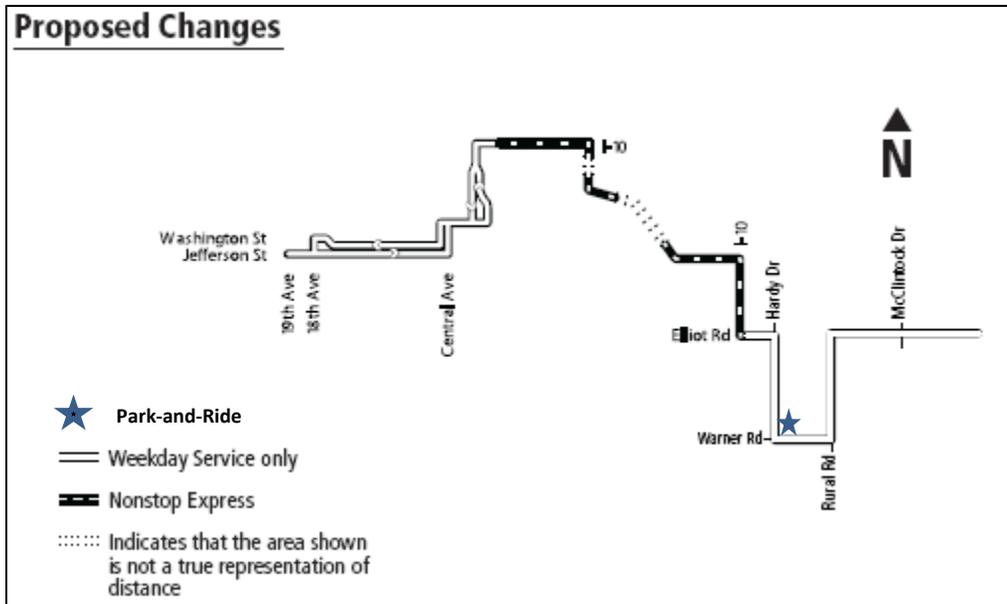
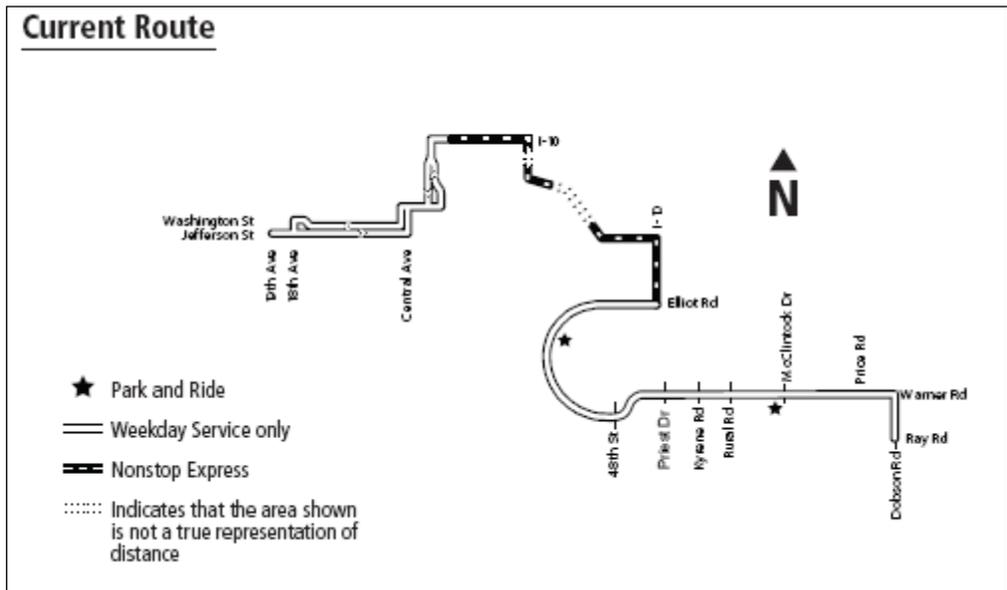
- **Route 520 (Tempe-Phoenix)** – Maintains today’s walk-access based routing but reduces trips from 4 morning inbound and 4 afternoon outbound trips to 2 morning inbound and 2 afternoon outbound trips; adds the Tempe Public Library Complex as a park and ride option.



- **Route 521 (Tempe-Phoenix)** – Maintains today’s walk-access based routing but reduces trips from 7 morning inbound and 6 afternoon outbound trips to 4 morning inbound and 4 afternoon outbound trips; formalizes a park and ride location at the north end of Kiwanis Park.



- **Route 540 (Tempe-Phoenix)** – Modifies today’s routing to provide 2 morning inbound trips from a new park and ride location at the Tempe Sports Complex (Warner and Hardy) and 2 afternoon outbound trips. In addition, 2 morning inbound trips (and 2 afternoon outbound trips) would provide walk-access service on Elliot Rd, Rural Rd., and Warner Rd. before also stopping at the Tempe Sport Complex. The re-routing of the walk-access portion of the route from the present configuration of the 540 is due to the higher residential densities that exist adjacent to Elliot Rd. and Rural Rd. in contrast to Warner Rd in eastern Tempe. Bus stops will be efficiently cited and schedules developed to maximize speeds to Phoenix.



Regional Express service is almost entirely funded by regional Proposition 400 funds which are managed by RPTA. The total regional Proposition 400 bus transit program is valued at \$1.4 billion over 20 years. Tempe's proportional 20 year allocation is \$150 million which is based on a percentage (10.54%) developed as part of the 2004 voter adoption of Proposition 400. **Attachment C** provides an overview of the Proposition 400 allocations per city.

This allocation represents about \$6.8 million per year through FY 2026 and includes allocations for regional bus service, Express service, ADA Dial-a-Ride costs, regional security, fleet replacement, and reimbursements for the construction cost of the East Valley Bus Operations and Maintenance Facility.

Funding for Express Bus Services is about 7% of Tempe's total Proposition 400 program or about \$10.4 million over 20 years. Tempe's portion combines with allocations from other cities as well as fare revenue and various credits (e.g., Alt fuel tax credit, federal funding for preventative maintenance) to make up the gross cost of the service. In the last five (5) years, Tempe's average allocation to Express Bus Service was approximately \$334,326. The allocation in FY 2011-12 is \$325,131. The recommendations provided above would increase the allocation to \$349,835 of Tempe's Proposition 400 funds.

The recommendations above to reduce trips on 520 and 521, restructure routes 511 and 540, and eliminates 532 represent an approximately 30% reduction in service supplied. However, Tempe's allocation of Proposition 400 funds to Express is increasing by \$24,704 due to a Phoenix mandate to cap the amount of Express service coming to downtown Phoenix from the east and west valleys. Phoenix has historically borne a high portion of the regional Express system's cost due to the significant amount of miles in Phoenix. The suburban cities are now being required to absorb either a higher proportion of the cost and/or reduce Express service.

The new method of regionally allocating the cost of Express service may not be consistent with an RPTA Board approved policy for managing Proposition 400 funds by deviating from the policy of cost allocation by distance in each city. Transit Managers from the cities of Mesa and Tempe publically requested (at the May 2, 2012 meeting of RPTA's Transit Management Committee) that the Transit Life Cycle Program (TLCP) Working Group evaluate the equity of the revised method, determine if it is violating Board policy, and recommend potential remedies.

SEC. 7.0 COMMUNICATION PLAN

For July 23 service changes, the following methods will be used to communicate approved service changes:

- Information on buses (posters and hanging flyers)
- Friendship Village and Multi-gen Center notification
- Press releases
- Email blast to all neighborhood Chairs
- ASU and school district notification
- Web sites (TIM, Valley Metro)
- Tempe 11
- Tempe Today Waterbill
- Twitter, Facebook
- Web ads on azcentral.com
- On hold messages at Valley Metro customer service phone line
- Audio announcements on board buses

ATTACHMENT A

OVERVIEW OF PROCESS TO EVALUATE BUS SERVICE CHANGES

Since the beginning of the Transit Fund Financial Balancing Plan in 2010, the goal has been to identify an acceptable package of service adjustments and reductions that combine with internal cost savings/additional revenue in order to balance the Transit Fund goal, achieve long-term fiscal sustainability, and maintain an effective and high performing transit system in a state of good repair. All modes (Local Bus, Express, Orbit, and Light Rail) have been under continuous evaluation for possible adjustment to optimize each element in the Total Transit Network. Major objectives associated with this effort included:

- Maximizing public transit use
- Increasing system efficiency
- Maintaining regional connections
- Upholding system-wide service equity
- Preserve service consistency in terms of span of service and frequencies

The following set of proposed bus service changes was presented for review and input from the Transportation Commission, Council Transportation Committee, and the general public. The process took place from February-May 2012.

Efficiency Improvements

These options intended to balance route efficiency (faster travel times) with residential access (minimizing walk distance).

THESE OPTIONS RECOMMENDED AS INDICATED IN BASE REPORT:

- Restructure Orbit Earth to operate on College Ave. between Weber Dr. and McKellips Rd. Estimated savings: \$136,066
- Restructure Orbit Earth to operate on Miller Rd. between McKellips Rd. and Curry Rd. with a single deviation to serve the North Tempe Multi-Generational Center Estimated savings: \$113,398.
- Restructure Orbit Mars to stop operating on George Dr., Del Rio Dr., and Evergreen Rd. north of Southern Avenue. Estimated savings: \$90,708
- Restructure Orbit Jupiter to operate on Terrace Rd., Malibu Dr., Laguna Dr. and Butte Ave. between Rural Rd. and McClintock Dr. Estimated savings: \$88,937

THESE ITEMS NOT RECOMMENDED

- Restructure Orbit Venus to operate on 13th St. between Beck Ave. and Roosevelt St. Estimated savings: \$223,479

- Revise Orbit Mercury route so that its western end is the University and Rural LRT station (would not go to Tempe Transportation Center.) Estimated savings: \$231,058
- Revise Orbit Mars route so that its northern end is the University and Rural LRT station (would not go to Tempe Transportation Center.) Estimated savings: \$136,06
- **Strategic Expansion** - A strategic expansion of service would include improvements that have great potential to increase long-term ridership, revenue and regional connectivity at an acceptable cost. In most cases such an improvement would entail a relatively small modification or expansion to a Tempe route in order to significantly improve regional connections.

THIS ITEM NOT RECOMMENDED

- Extend Route 62 (Hardy/Guadalupe) on Guadalupe Rd. to Country Club Dr. Implementation date to be determined based on City of Mesa's ability to provide long-term funding. Estimated savings: \$0
- **General Reductions** - General reductions refer to decreases to frequency or hours of operation at the system or route level that are not driven by low performance or opportunities to improve efficiency. These reductions may be viewed as necessary to resolve the deficit only if all other strategies do not yield sufficient savings. The priority order of these options will be based on combining performance data with survey results measuring public impact.

THESE ITEMS NOT RECOMMENDED

- Reduce Sunday LOCAL service to 60 minutes on all bus routes in Tempe. Estimated savings: \$402,883
- Eliminate LOCAL bus service AFTER 10 p.m. in Tempe. Estimated savings: \$848,504
- Reduce Route 108 (Elliot) from 30 to 60 minutes on weekdays (In Tempe). Estimated savings: \$239,372.
- Terminate Route 62 (Hardy/Guadalupe) at the Tempe Transportation Center. Eliminate segment between downtown Tempe and Tempe Marketplace. Estimated savings: \$294,704
- Reduce weekday Orbit Mercury service frequency from 10 to 15 minutes. Add extra trips west of McClintock Dr. during peak travel periods. Estimated savings: \$81,086
- Reduce Saturday ORBIT service from 15 to 20 minutes. Estimated savings: \$192,333
- Reduce weekday ORBIT frequency from 15 to 20 minutes ALL DAY. Estimated savings: \$1,126,132

Express Bus System Restructuring

Valley Metro/RPTA coordinated a regional effort to improve the performance and cost-effectiveness of the regional express bus system while also reducing cost. In Tempe's case, changes to the Express bus service are driven by a need to improve boardings and route performance up to a point where the taxpayer investment in these routes is generating sufficient returns. Although certain trips may have sufficient riders, the overall Express system is operating below capacity.

Regional Express service is almost entirely funded by regional Proposition 400 funds which are managed by RPTA. The total regional Proposition 400 bus transit program is valued at \$1.4 billion over 20 years. Tempe's proportional 20 year allocation is \$150 million which is based on a percentage (10.54%) developed as part of the 2004 voter adoption of Proposition 400. **Attachment C** provides an overview of the Proposition 400 allocations per city.

There are five (5) express bus routes that serve Tempe today. The process for developing final recommendations on changes to the Express Bus System has been iterative and involved the public, an Express Rider Focus Group, partner cities, RPTA, the Transportation Commission, and Council Transportation Committee.

Table A-1 provides FY 2010-11 ridership statistics for all regional express routes that continue to operate today. Tempe's Express routes are highlighted in green. Information on whether the route is primarily park and ride or arterial based is provided on the right as well as estimates of average trip distance from the routes origin point to the end of the line (typically in the Arizona Capitol District).

Table A-1: Regional Express Statistics (FY 2010-11)

Route	Total Passgrs	Revenue Miles	Passgrs Per Mile	Bikes	W/C	FY 2009-2010		Park & Ride (PR) or Arterial (A)**	Estimated Distance**
						Total Passgrs	% Difference		
I-10 West Rapid	151,134	82,660	1.8	607	86	164,764	-8%	PR	13
I-17 Rapid	329,052	211,637	1.6	3,668	499	285,897	15%	PR	21
562	40,492	27,703	1.5	156	6	34,077	19%	PR	28
SR51 Rapid	161,421	117,657	1.4	1,702	77	164,918	-2%	PR	21
I-10 East Rapid	191,288	149,948	1.3	971	36	197,443	-3%	PR	21
575	44,811	39,819	1.1	308	2	38,563	16%	PR	27
533	85,413	80,285	1.1	547	7	87,881	-3%	A+PR	32
571	36,737	35,500	1.0	839	211	36,633	0%	PR	24
542	64,963	69,045	0.9	535	6	53,916	20%	PR	28
510	16,054	18,423	0.9	203	176	18,792	-15%	A+PR	18
535	36,211	41,640	0.9	453	3	28,770	26%	PR	21
581*	14,945	18,387	0.8	667	291	22,725	-34%	A+PR	n/a
541	56,984	70,697	0.8	901	13	56,649	1%	A+PR	31
531	73,808	98,741	0.7	1,406	8	71,505	3%	A+PR	26
540	37,996	51,260	0.7	438	4	43,327	-12%	A+PR	26
560	18,618	25,830	0.7	162	13	14,798	26%	A+PR	26
521	44,639	63,127	0.7	1,383	20	48,676	-8%	A+PR	19
573	44,646	63,440	0.7	448	7	44,636	0%	PR	32
532	32,668	58,061	0.6	899	167	34,307	-5%	A+PR	39
520	20,917	37,650	0.6	320	7	21,690	-4%	A+PR	19
512	17,050	33,634	0.5	290	6	19,322	-12%	A+PR	34
511*	4,479	50,567	0.1	289	4	11,383	-61%	A+PR	n/a
TOTAL EXPRESS	1,556,376	1,511,217	1.0	17,858	1,656	1,594,969	-2%		

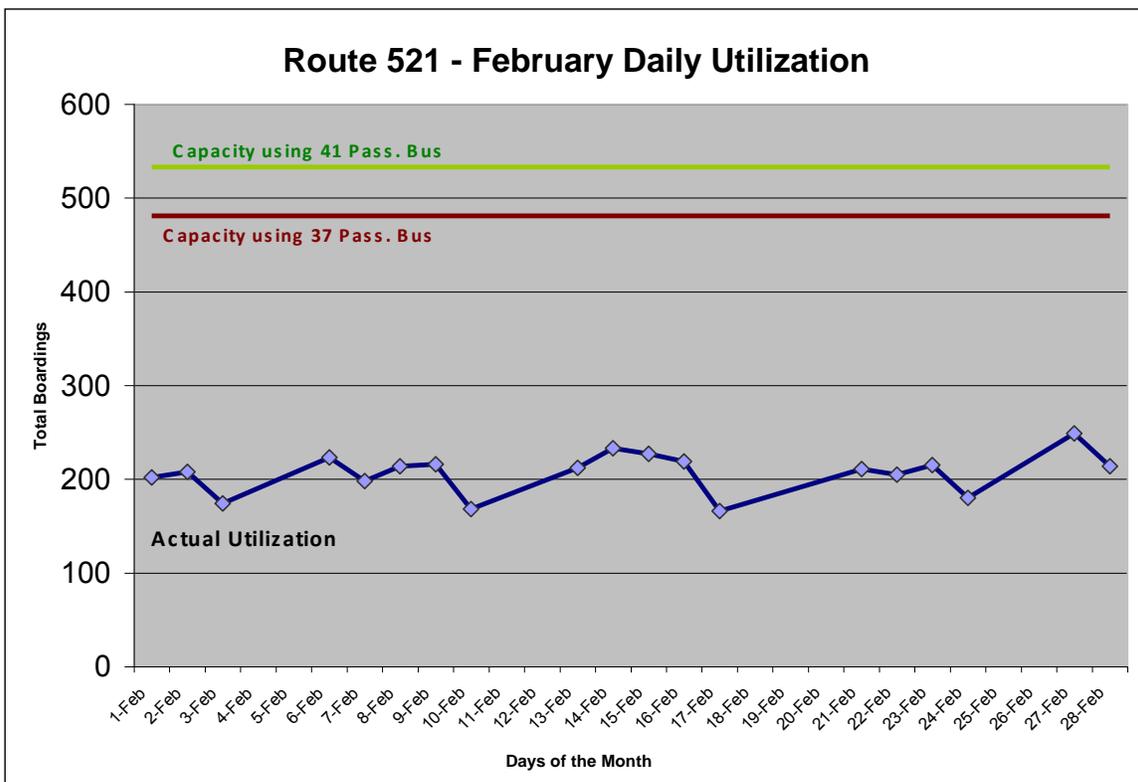
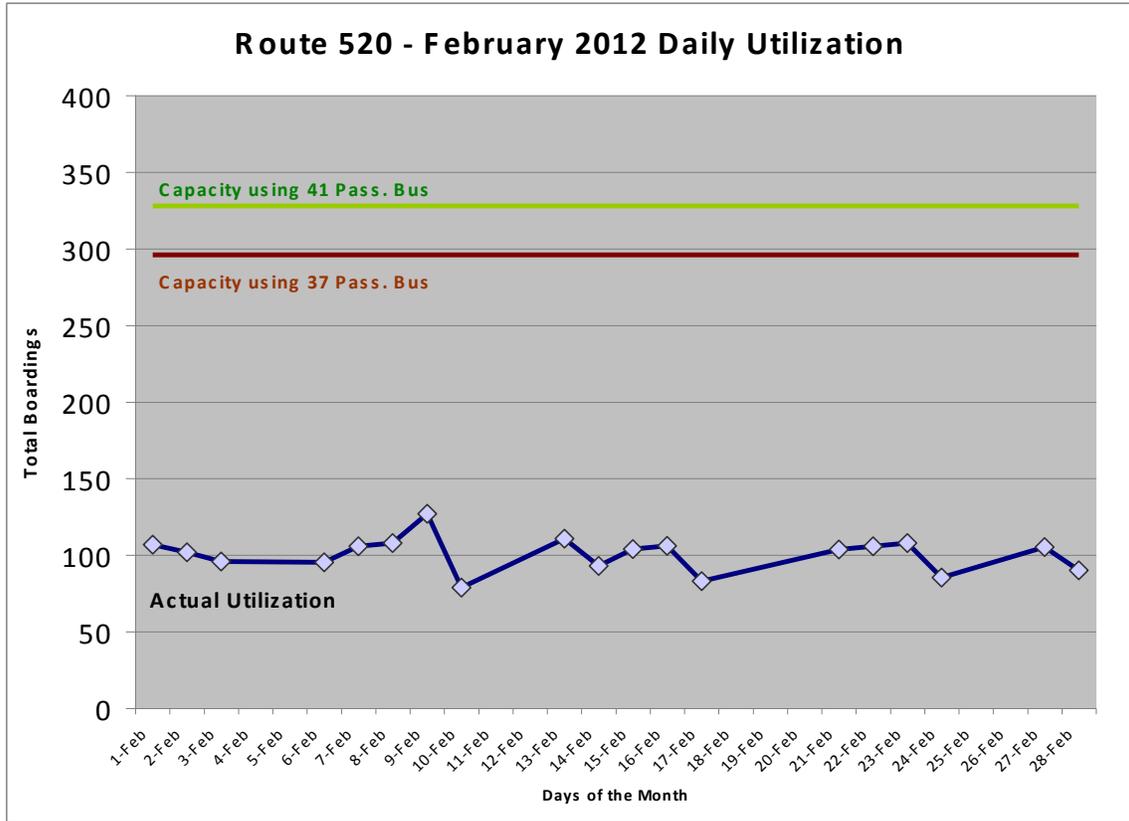
Source: Valley Metro Annual Ridership Report (FY 2010-11)

Data are sorted by Passengers per mile.

* 511 and 581 do not operate to downtown Phoenix.

** The designation as Park and Ride or Arterial and the estimated distance per trip are not data sets included in Valley Metro's Annual Ridership Report

Graphs A-1 and A-2 illustrate total boardings per day in comparison to available seated capacity on Express Routes 520 and 521 (data is from the month of February 2012).

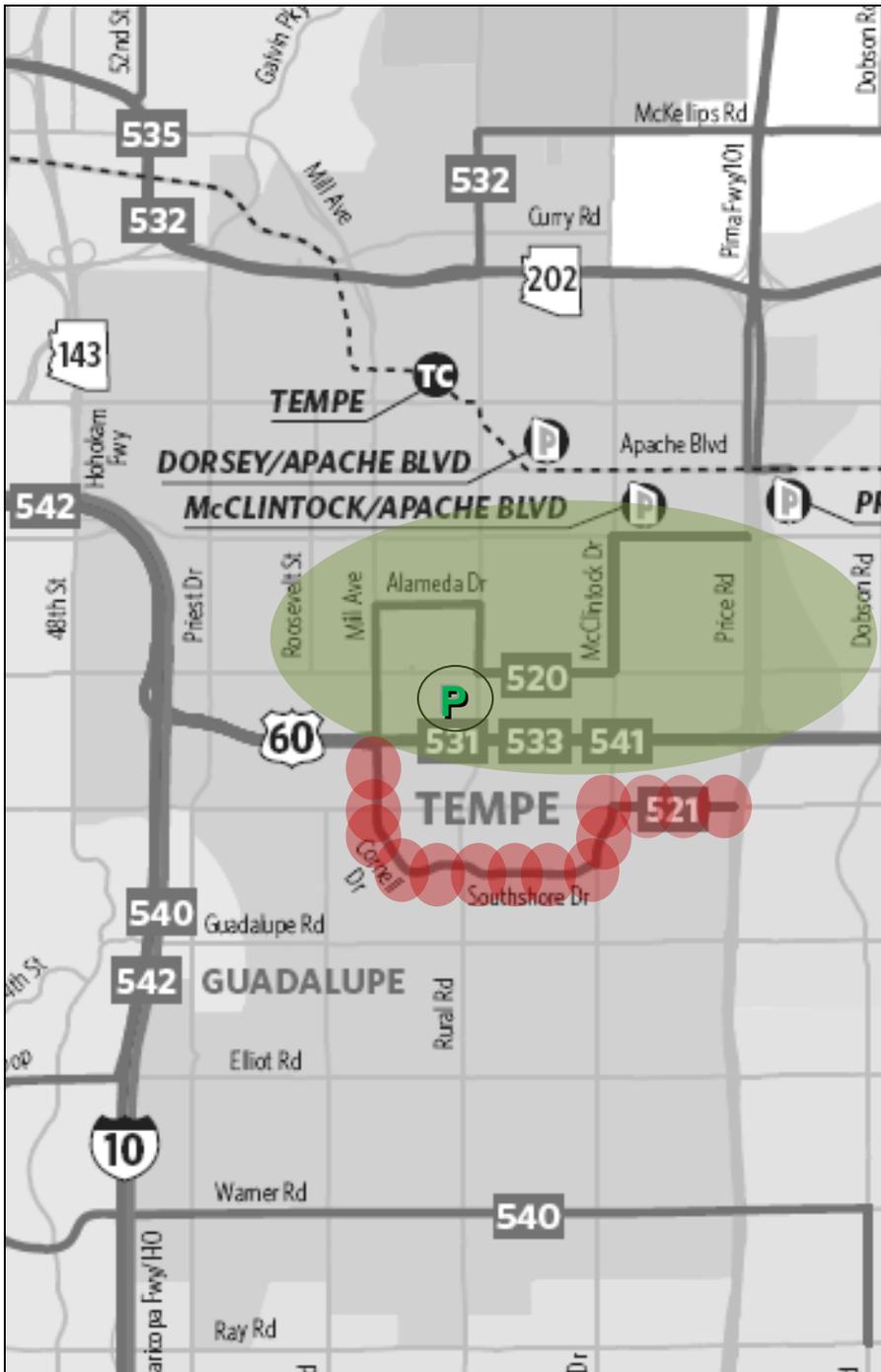


Valley Metro/RPTA is heavily emphasizing park-and-ride based Express Bus service over arterial-neighborhood based service. In general, due to faster travel time and wider passenger capture areas, park-and-ride oriented express bus services have been shown to outperform arterial based service. But there are trade-offs to consider, particularly in Tempe's case:

- **The arterial based approach** allows for convenient walk access within ¼ mile of the route corridor, limits auto use on local streets, and is well suited to areas with high residential density. However, operation in mixed-traffic combined frequent stops increases distance and overall travel time making the system less attractive to those that do not live within ¼ mile of the route. Existing park and ride lots along the current routes are generally small, informal, and/or at the middle or beginning of the route.
- **The park-and-ride approach** offers a wider passenger capture area and reduces overall travel time. Travel time has been shown to be the most important factor in building express bus ridership. Moving to this approach would increase auto use on local streets as a portion of existing access the sites and other choose to drive. This may be offset by the potential of new riders parking and riding instead of driving to Phoenix. However, the incentive to use park and ride based service may be lower the closer the origin points (Central and south Tempe) are to the downtown district (Downtown Phoenix), meaning once a person is in their car, it may be easier to simply drive the rest of the way. The incentive to access park-and-ride based service increases the farther away the origin points are from the downtown destination.

Map A-1 on the following page illustrates the different capture areas of both the arterial model and park-and-ride model.

Map A-1: Illustration of Arterial Based Service (521) and Park and Ride Based Service (520 Area)



PUBLIC INVOLVEMENT AND PERFORMANCE ASSESSMENTS

A public and stakeholder involvement process was implemented during the spring of 2012 to consider bus service and fare policy changes designed to assist with resolving the remaining deficit and improve overall transit system performance.

The Transit Program's public involvement process was designed to be open, equitable, and aimed at generating reliable and actionable information on public/stakeholder opinion. The process provided community members with an opportunity to learn about potential service changes, interact with city staff and neighbors to raise questions and concerns, and provide input on service change options. Additionally, staff communicated opportunities for members of the public to speak to the Transportation Commission, Council Transportation Committee, Valley Metro Board of Directors, and Tempe City Council.

All input received was recorded, analyzed and considered seriously, but also weighed in relation to key performance indicators at the mode and route level.

Public Involvement - Tempe residents and Valley transit users were encouraged to attend Tempe's public meetings to learn about and provide input on potential service adjustments that could occur in July 2012 and/or January 2013.

- Local Public meetings:
 - Feb. 25 at 9 a.m. at the Tempe History Museum, 809 E. Southern Ave.
 - Feb. 28 at 6 p.m. at the Tempe Transportation Center, 200 E. Fifth St.
 - Mar. 1 at 6 p.m. at the Tempe History Museum, 809 E. Southern Ave.
- 520 surveys and public comments received which aided in understanding the public impact of the various proposals. The following methods were used to receive completed survey/comment forms:
 - Distribution at all public meetings
 - Intercept surveys at major transit centers
 - Targeted surveys on Express Bus Trips
 - Distribution at meetings of stakeholder groups and neighborhood associations
 - Website from Feb. 24 through March 29 at www.tempe.gov/tim
- Express Rider Focus Group on March 31

Public Communication - Methods used to communicate public meetings and online comment included:

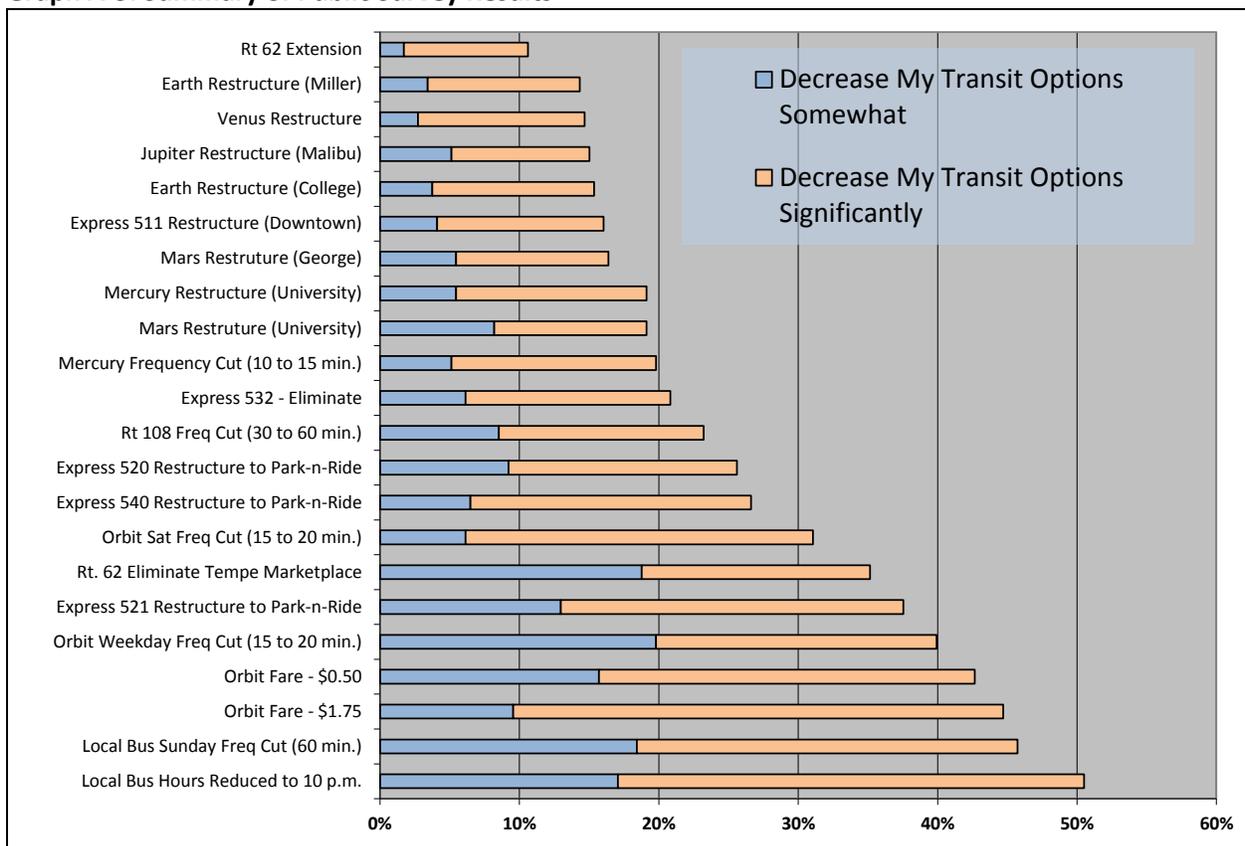
- Press releases
- Facebook, Twitter
- Ads on azcentral.com
- Web site (TIM, Valley Metro)
- Tempe 11
- ASU and School District notification
- Boards and Commission presentations
- Neigh. & Homeowner Assoc. notification
- Posters on local and express buses
- Friendship Village presentation

- Tempe Today Waterbill
- Intercept surveys on buses and transit centers and available at multi-generational centers

Survey Instrument - Transit staff developed a survey to assess the public impact of the proposed service changes. 520 were received and analyzed. A copy of the survey is provided under **Attachment E**. The intent of the survey was to provide those most likely affected by the potential changes the opportunity to have their opinions heard. Although the survey results are not intended to be statistically significant or generalized beyond those who responded, city staff made efforts to ensure a broad-based and equitable rate of response. For example, given the significant proposed changes to the Express Bus System, staff distributed surveys on board most Express Bus trips for a full week.

Graph A-3 presents a stacked bar chart that illustrates the results of the “impact” portion of the survey. Respondents were asked whether the potential service changes would increase, decrease or have no impact on their transit options. The results are ordered from lowest public impact to highest.

Graph A-3: Summary of Public Survey Results



Ranking the Options - A ranking of the alternatives was developed based on a synthesis of system and route level performance and public opinion data. In addition, a “no alternatives” factor was included to raise the importance of alternatives which, if implemented, would mean no transit service would be

available in the affected area. The only option that benefits from this factor is the option to eliminate bus service after 10 p.m. In short, higher performance and greater adverse public impact suggests the option should be avoided.

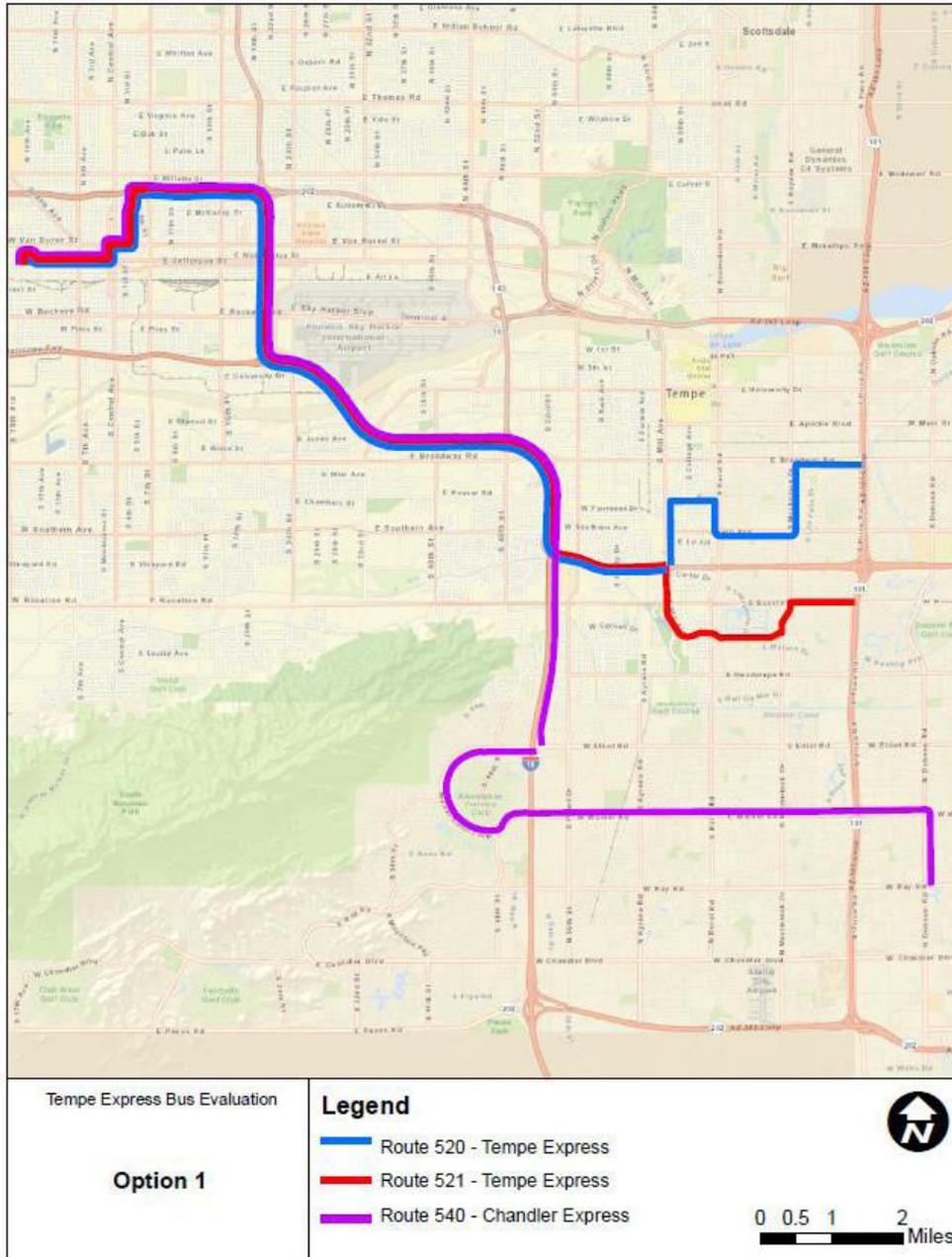
Table A-2 presents the ranking on a scale beginning with Low Performing-Low Impact and increasing to High Performing-High Impact. The table is intended indicate cost savings that directly impact Tempe's local transit tax and budget. Express service is funded entirely by regional Proposition 400 funds, which is managed by the Regional Public Transportation Authority (RPTA). Changes to Express bus routes must take into account the city's 20 year allocation of Proposition 400 funds and RPTA Board approved policies on annual cash flow, cost allocation methods, and jurisdictional equity.

Table A-2: Bus Service Changes Ranking

RANK	MODE	ROUTE	OPTION	ESTIMATED SAVINGS	CUMULATIVE SAVINGS	IMPLEMENTATION	NOTES
1	Express	540	Express 540 Restructure; Add Park-n-Ride	\$ -	\$ -	July 2012	Regional net cost decreases by \$83k (Prop.400)
2	Express	511	Express 511 Restructure (Downtown)	\$ -	\$ -	July 2012	Proposed Express System Restructure Cost Neutral
3	Orbit	Jupiter	Jupiter Restructure (Malibu)	\$ 88,937	\$ 88,937	July 2012	Targeted notification to residents on new segment
4	Local	108	Rt 108 Freq Cut (30 to 60 min.)	\$ 239,372	\$ 328,309	MAINTAIN	Multi-jurisdiction restructure in FY 2013-14
5	Orbit	Earth	Earth Restructure (Miller)	\$ 113,398	\$ 441,707	July 2012	Maintain service to North Tempe Multi-Gen Center
6	Express	532	Express 532 - Eliminate	\$ -	\$ 441,707	July 2012	Proposed Express System Restructure Cost Neutral
7	Express	520	Express 520 - Reduce trips; add Park-n-Ride	\$ -	\$ 441,707	July 2012	Regional net cost decreases by \$120k (Prop. 400)
8	Orbit	Mars	Mars Restructure (Southeast Loop)	\$ 90,708	\$ 532,415	July 2012	Eliminate the loop north of Southern, east of Price
9	Orbit	Earth	Earth Restructure (College)	\$ 136,066	\$ 668,481	July 2012	Eliminate service on Weber, McKellips
10	Orbit	Venus	Venus Restructure	\$ 223,479	\$ 891,960	MAINTAIN	Preserve connection to Broadway; Tempe High School
11	Express	521	Express 521 - Reduce trips; add Park-n-Ride	\$ -	\$ 891,960	July 2012	Regional net cost decreases by \$152k (Prop. 400)
12	Local	Local System	Local Bus Sunday Freq Cut (60 min.)	\$ 402,883	\$ 1,294,843	MAINTAIN	
13	Orbit	Orbit System	Orbit Sat Freq Cut (15 to 20 min.)	\$ 192,333	\$ 1,487,176	MAINTAIN	
14	Local	62	Rt. 62 Eliminate Tempe Marketplace	\$ 294,704	\$ 1,781,880	MAINTAIN	
15	Orbit	Mercury	Mercury Frequency Cut (10 to 15 min.)	\$ 81,086	\$ 1,862,966	MAINTAIN	
16	Orbit	Orbit System	Orbit Fare - \$0.50	\$ 700,000	\$ 2,562,966	Defer Decision	Defer Decision to December 2012
17	Orbit	Orbit System	Orbit Fare - \$1.75	\$ 850,000	\$ 2,712,966	Defer Decision	Defer Decision to December 2012
18	Orbit	Orbit System	Orbit Weekday Freq Cut (15 to 20 min.)	\$ 1,126,132	\$ 3,839,098	MAINTAIN	
19	Local	Local System	Local Bus Hours Reduced to 10 p.m.	\$ 848,504	\$ 4,687,602	MAINTAIN	
BLUE - IMPLEMENT IN FY 2011-12				\$ 429,109	Options 1-3; 5-9; 11		
ORANGE - EVALUATE FOR FY 2013-14				\$ 775,000	Options 16, 17		

Since the beginning of the public process in February 2012, 6 options restructuring options have been evaluated to improve the performance of Express Bus Routes 520, 521, and 540. Each of these varies in their emphasis on park and ride service or arterial based service, but all are intended to improve the performance of the routes. These are summarized on the following pages. Maps for options 1, 2, 3, 3A, and 4 were developed by HDR Engineering.

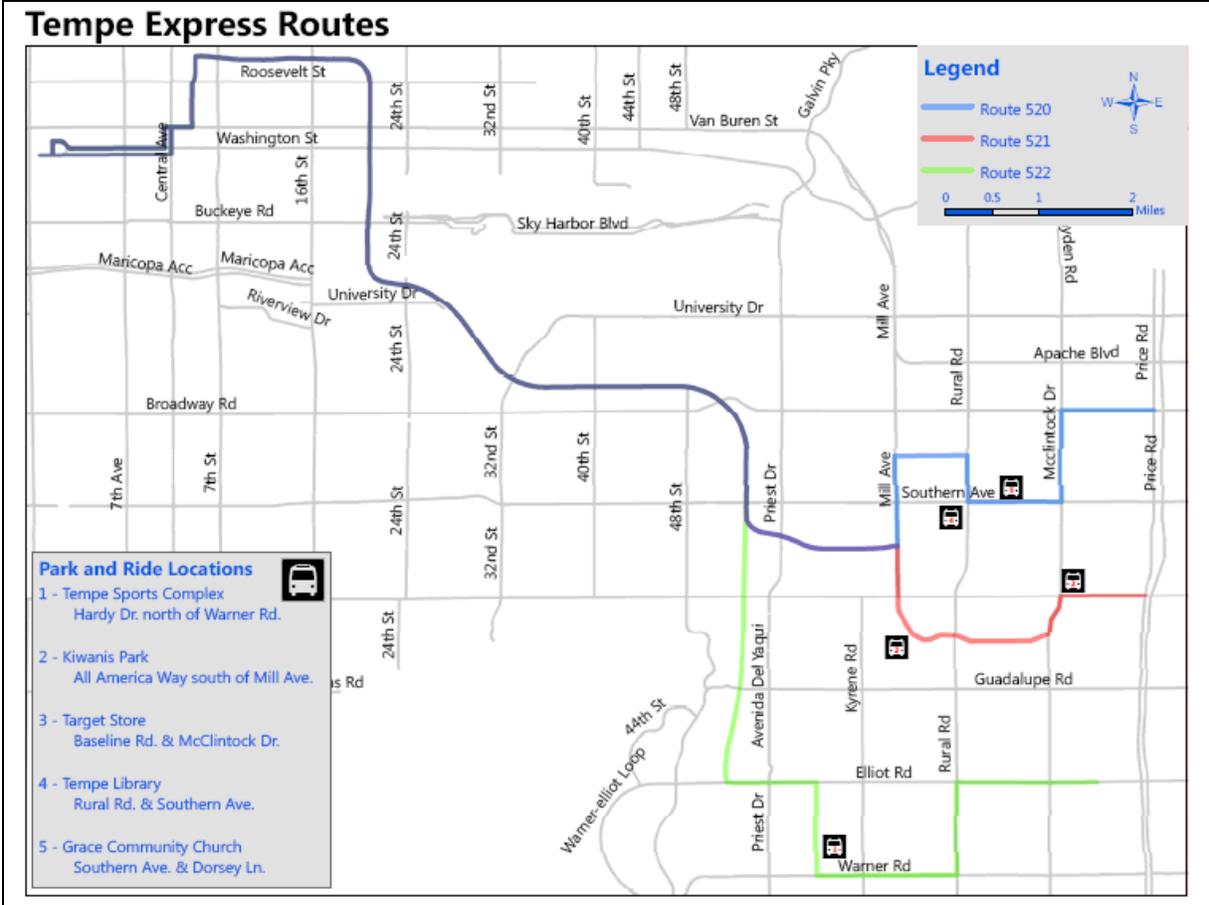
Option 1 – Maintains today’s existing arterial based service but reduces existing service levels for Routes 520, 521, and 540. This option was not presented during formal public meetings, but was a response to concerns raised at the meetings. This option was presented to the Express Rider Focus Group, the Transportation Commission, and Council Transportation Committee.



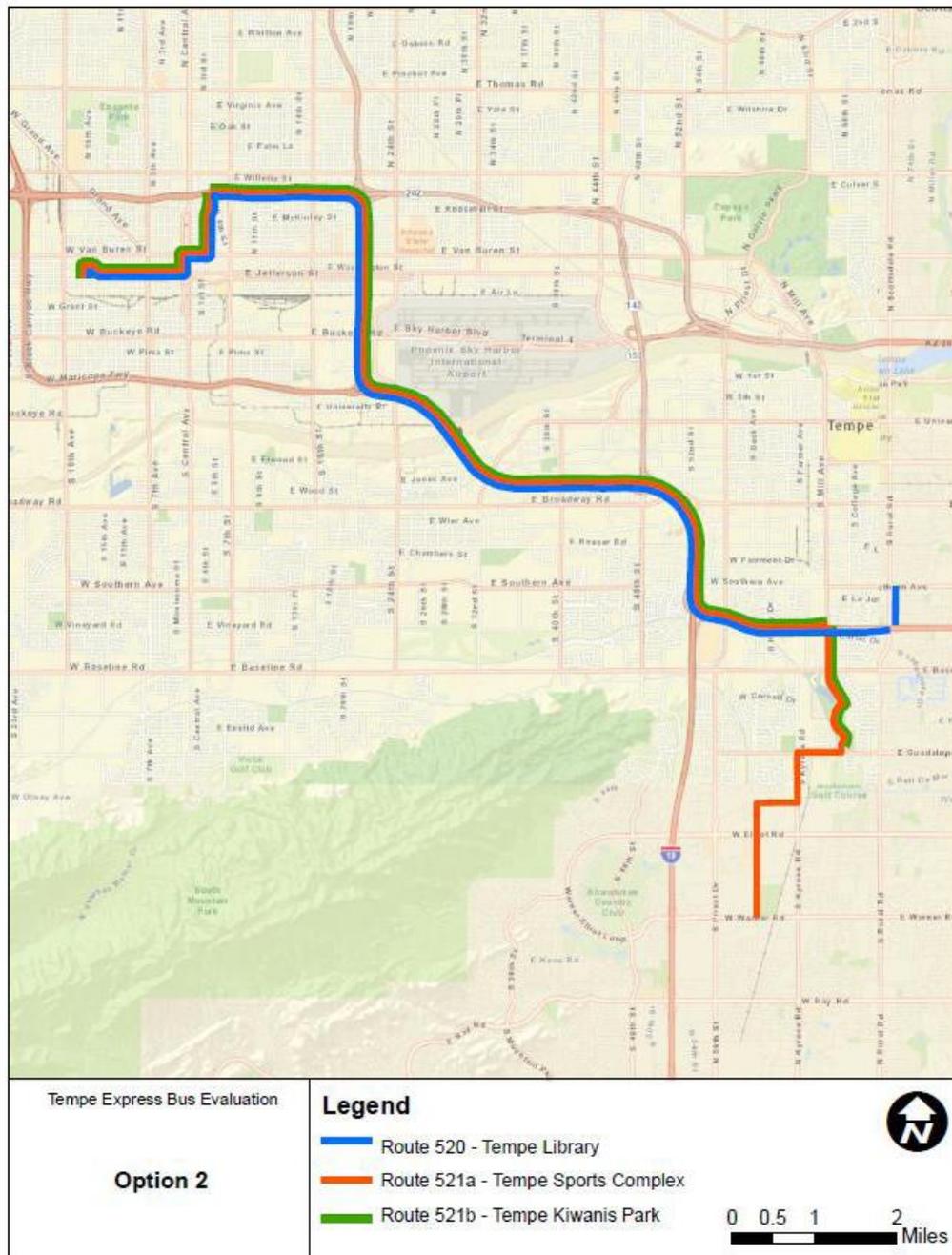
Option 1A: Balanced Approach - **Maintains today's existing arterial based service on Route 520 and 521, but reduces trip levels. Modifies Route 540 to operate a long-short trip pattern with direct service to the Tempe Sports Complex Park and Ride.** This is a new option developed based on a balanced assessment of Tempe's transportation priorities with regional goals for the regional Express Bus System, performance statistics, public comments and discussion at the May 8 meetings of the Transportation Commission and Council Transportation Committee, and public comments and discussion at the May 17 meeting of the RPTA Board of Directors.

This option has the following features (MAP provided on following page):

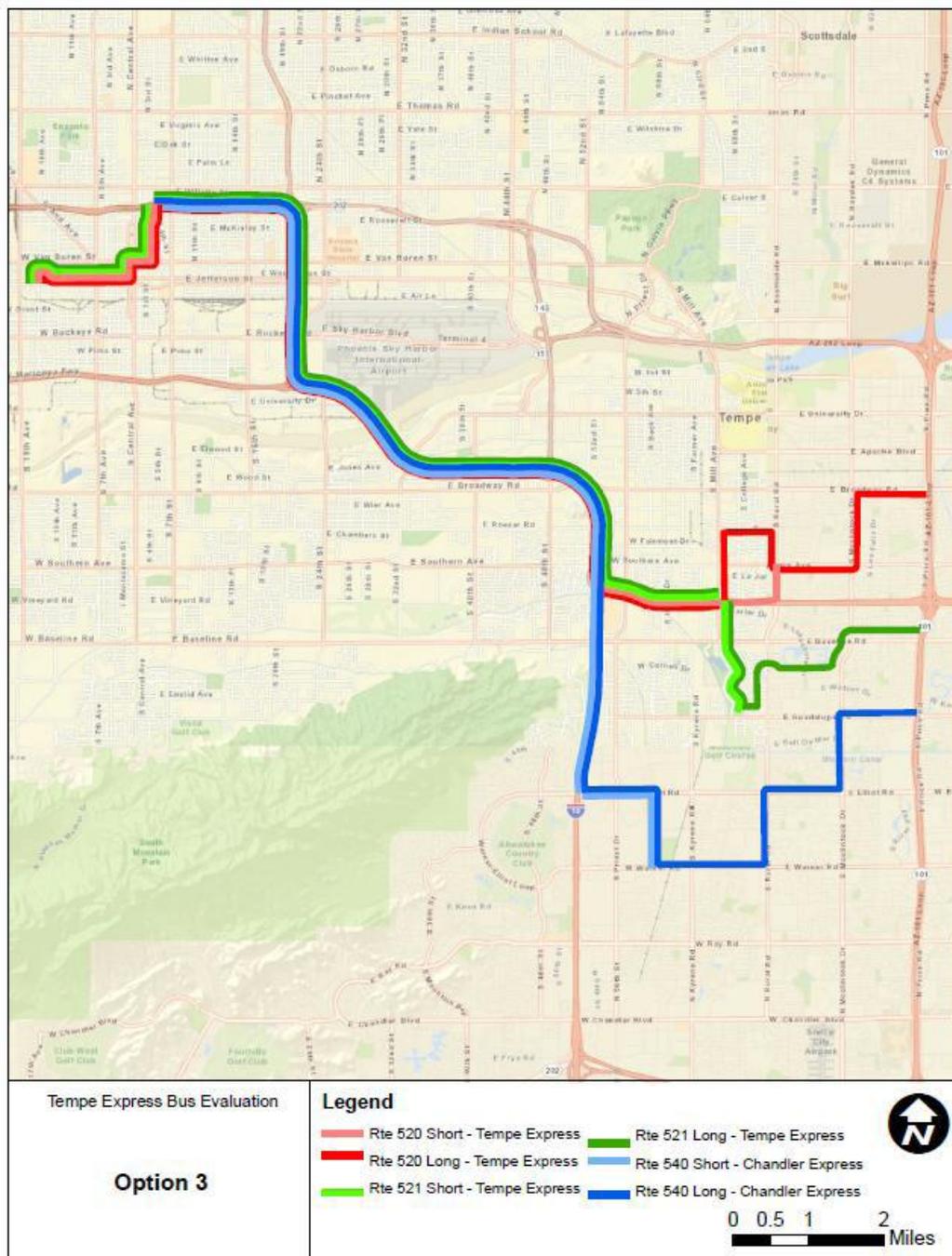
- 520 - Maintains today's walk-access based routing but reduces trips from 4 morning inbound and 4 afternoon outbound trips to 2 morning inbound and 2 afternoon outbound trips; adds the Tempe Public Library Complex as a park-and-ride option.
- 521 - Maintains today's walk-access based routing but reduces trips from 7 morning inbound and 6 afternoon outbound trips to 4 morning inbound and 4 afternoon outbound trips; formalizes a park-and-ride location at the north end of Kiwanis Park.
- 540 (Renamed 522) – Modifies today's routing to provide 2 morning inbound trips from a new park-and-ride location at the Tempe Sports Complex (Warner and Hardy) and 2 afternoon outbound trips. In addition, 2 morning inbound trips (and 2 afternoon outbound trips) would provide walk-access service on Elliot Rd, Rural Rd., and Warner Rd. before stopping at the Tempe Sport Complex also. The re-routing of the walk-access trips from the present configuration of the 540 is due to the higher residential densities that exist adjacent to Elliot Rd. and Rural Rd. in contrast to Warner Rd. in eastern Tempe. Bus stops will be efficiently cited and schedules developed to maximize speeds to Phoenix.



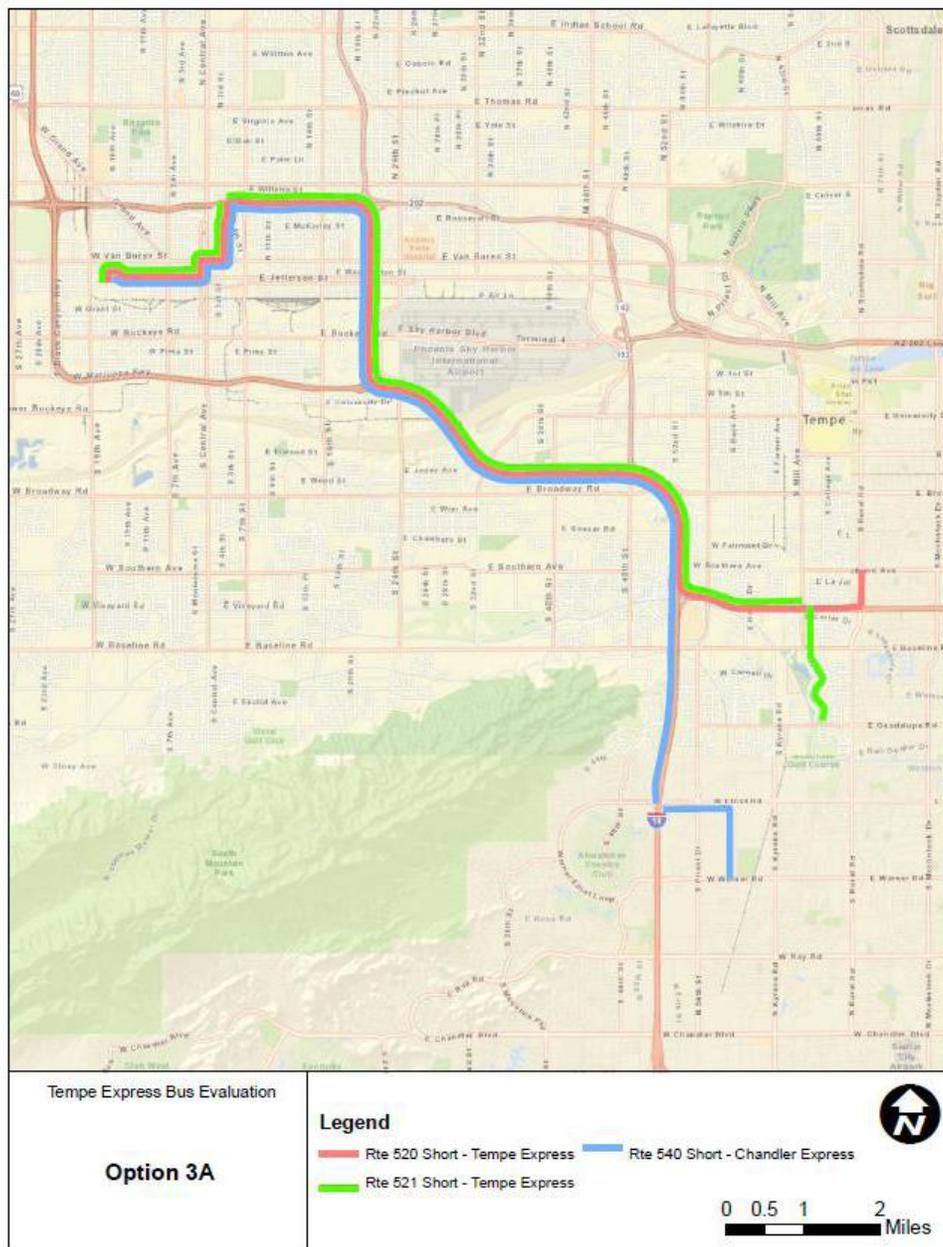
Option 2 – Implements a Park-and-Ride based system with parking located at the Tempe Sports Complex located at Hardy and Warner, Kiwanis Park, and Tempe Library. One route would serve the park-and-rides south of US-60, with fewer trips serving Warner/Kyrene park-and-ride than the Kiwanis park Park-and-Ride. Finally, one route would serve the Park-and-ride north of US-60. This option was the original proposal provided as part of the public involvement process which began in February 2012. It was also discussed with the Express Rider Focus Group on March 31 and in subsequent meetings of the Transportation Commission and Council Transportation Committee.



Option 3 – Implements three (3) sets of Long-Short trip patterns that would provide both walk-access and expanded park-and-ride access at the Tempe Library Complex, Kiwanis Park, and the Tempe Sports Complex. This option was not discussed during the initial public involvement process which began in February 2012, but represents a response to concerns raised at the original public meetings. It was discussed with the Express Rider Focus Group on March 31 and in subsequent meetings of the Transportation Commission and Council Transportation Committee.



Option 3A – Implements three (3) park and rides sites at the Tempe Library Complex, Kiwanis Park, and the Tempe Sports Complex, but in contrast to option 2, the sites would be served by 3 separate routes instead of 2. This option was not discussed during the initial public involvement process which began in February 2012, nor was it discussed at the Express Rider Focus Group on March 31. This option’s development was intended to combine elements of options 2 and 3, meet regional goals to expand park-and-ride facilities and reduce travel time, and improve performance without significantly reducing capacity. This option has been discussed in meetings of the Transportation Commission and Council Transportation Committee, both of which were attended by representatives of the Express Rider Focus Group.



Option 4 – Implements a feeder and trunk system with a centralized park-and-ride at Kiwanis Park. This option maintains walk-access but requires a transfer. It does not actually expand park-and-ride capacity, but seeks to operate more efficiently by increasing utilization of the trunk trips into downtown Phoenix which represents the longest and most expensive portion of the route. This option was not discussed during the initial public involvement process which began in February 2012, but represents a response to concerns raised at the original public meetings. It was discussed with the Express Rider Focus Group on March 31 and in subsequent meetings of the Transportation Commission and Council Transportation Committee.

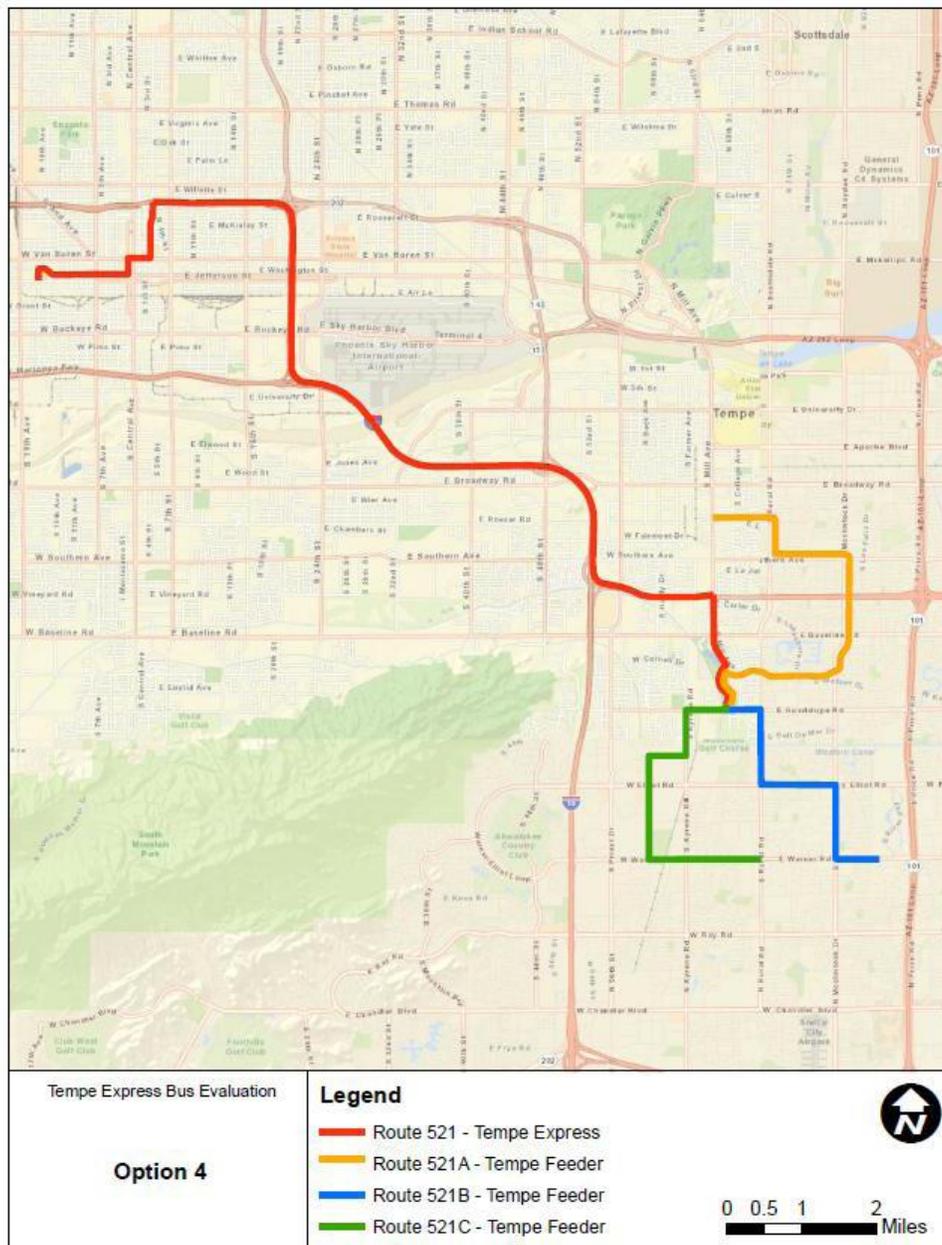


Table A-3 presents cost, boardings, and performance data associated with all the options discussed to date. Option 1A emerges as an approach that reasonably balances walk-access and park-and-ride access while also improving performance and cost-effectiveness, and reducing overall cost.

Table A-3: Express Bus Options (520, 521, 540): Cost, Boardings, and Performance Data

	A.M. Trips	P.M. Trips	Boardings per Trip	Boardings per Mile	Annual Cost	Fare Rec %	Net Cost	Subsidy per Boarding
Status Quo - Today's Routes and Trips								
520	4	4	11	0.56	\$ 245,478	11%	\$ 218,178	\$ 10.39
521	7	6	14	0.71	\$ 411,585	14%	\$ 353,410	\$ 7.90
540	4	4	19	0.74	\$ 334,217	15%	\$ 284,817	\$ 7.50
Total	15	14	14	0.68	\$ 991,279	14%	\$ 856,404	\$ 8.25
Option 1 - Today's Routes; Reduced Trips								
520	3	3	17	0.86	\$ 188,461	17%	\$ 155,961	\$ 6.24
521	5	4	16	0.90	\$ 262,723	18%	\$ 215,598	\$ 5.95
540	3	3	20	0.79	\$ 246,065	16%	\$ 207,065	\$ 6.90
Total	11	10	17	0.85	\$ 697,249	17%	\$ 578,624	\$ 6.34
Option 1A - Balanced Approach: Modified 540; Reduced Trips on 520 and 521								
520	2	2	19	1.00	\$ 122,739	20%	\$ 98,169	\$ 5.19
521	4	4	20	1.04	\$ 253,289	21%	\$ 200,932	\$ 4.99
540	4	4	15	0.81	\$ 241,240	16%	\$ 202,240	\$ 6.74
Total	10	10	18	0.94	\$ 617,268	19%	\$ 501,341	\$ 5.62
Option 2 - Original Park-and-Ride Proposal								
520 - Tempe Library Complex	4	4	14	0.90	\$ 199,007	18%	\$ 163,257	\$ 5.94
521a - Tempe Sports Complex	3	3	15	0.80	\$ 183,228	16%	\$ 153,978	\$ 6.84
521b - Kiwanis Park	4	4	14	0.88	\$ 203,897	18%	\$ 168,147	\$ 6.11
Total	11	11	14	0.86	\$ 586,132	17%	\$ 485,382	\$ 6.26
Option 3 - Long-Short Approach								
520	4	4	13	0.72	\$ 225,103	14%	\$ 192,603	\$ 7.70
521	7	7	15	0.86	\$ 390,760	17%	\$ 324,135	\$ 6.32
540	4	4	15	0.75	\$ 259,496	15%	\$ 220,496	\$ 7.35
Total	15	15	14	0.79	\$ 875,359	16%	\$ 737,234	\$ 6.94
Option 3A - Revised Park-and-Ride Proposal								
520 - Tempe Library Complex	4	4	14	0.90	\$ 199,007	18%	\$ 163,257	\$ 5.94
521 - Kiwanis Park	7	7	14	0.91	\$ 356,416	18%	\$ 291,416	\$ 5.83
540 - Tempe Sports Complex	4	4	15	0.87	\$ 223,636	17%	\$ 184,636	\$ 6.15
Total	15	15	14	0.90	\$ 779,059	18%	\$ 639,309	\$ 5.95
Option 4 - Feeder System								
Combined Feeders + Trunk	12	12	14	0.88	\$ 601,128	18%	\$ 495,503	\$ 6.10
Notes:								
Green shaded cels indicate best performance in that cost, revenue or performance category.								
Boardings statistics for options 1, 2, 3, 3A and 4 developed by HDR, 2012								
Boardings statistics for option 1A based on current performance of 520 and 521; 540 based on HDR, 2012								
An average fare assumption of \$1.30 is used for all options to generate fare revenue								
Cost per revenue mile is assumed to be \$6.52; not revenue credits assumed (i.e., federal PM)								
All data are for the total route, not just Tempe's portion.								

The Express Rider Focus Group reviewed options 1-4 at a March 31, 2012 meeting. Participants favored maintaining the existing walk-access based routes with fewer trips as a way to maintain access for existing users. Options 2, 3 and 4 provide alternatives intended to assess different levels of emphasis on walk-access vs. park-and-ride access based services. Participants generally favored options 1 and 3 over options 2 and 4 as the ranking below indicates.

Table A-4: Express Bus Rider Ranking of Options

	Worst	<i>Weight (1-4)</i>		Best	
	1	2	3	4	
	Raw Votes				
Alt 1 (Existing-Cut)	0	1	2	7	
Alt 2 (Park-n-Ride)	5	5	0	0	
Alt 3 (Long-Short)	0	0	7	3	
Alt 4 (Feeder)	6	1	3	0	
	Weighted				Total
Alt 1 (Existing-Cut)	0	2	6	28	36
Alt 2 (Park-n-Ride)	5	10	0	0	15
Alt 3 (Long-Short)	0	0	21	12	33
Alt 4 (Feeder)	6	2	9	0	17

Option 1A described earlier may be considered a hybrid of options 1 and 3.

ATTACHMENT B

ORBIT FARE ASSESSMENT

This attachment provides information developed on the issues surrounding an Orbit fare. Staff request that the decision point on this issue be deferred until Autumn 2012 to allow additional local and regional discussions and analysis on the following items:

- Ridership-revenue impacts
- Operational-administrative issues at the local and regional levels
- Social equity concerns
- Consultation with stakeholders about adverse financial impacts (e.g., Regional Partners, ASU)
- Follow-up on City Council questions and concerns

Since 2007, the Orbit Neighborhood Circulator program has grown to be very successful with over 3 million boardings expected this year. The circulator system was originally conceived as a method to connect neighborhoods to nearby destinations and feed the larger transit network. When neighborhood circulator systems primarily feed bus and rail services, the system's free status makes sense.

Tempe's Orbit system has grown to function as a stand-alone system. It provides many necessary and discretionary trips that otherwise might have taken place by car or not at all. Without question the Orbit system has improved mobility, community, and limited auto use on Tempe streets. For these reasons, and because the routing and scope of the system in central and north Tempe positions it as a competitor with bus and rail, a user fee would reflect the value of the service and would ask those that benefit the most from the service (i.e., passengers) to contribute at a higher level than the tax payer.

The value of an Orbit trip is significant because many people can use the system for most of their travel needs without needing to connect with local, express or rail services. When one considers the scope and reach of the Orbit system in central and northern Tempe and assess its utility for many home to destination trips, it makes sense to examine whether users should contribute a percentage to cover the cost of the system. Ridership loss will accompany introduction of any fare. The key question is how much, if any, ridership loss is acceptable in order to achieve revenue to support the system.

Two fare scenarios are being presented to the public for input.

- Achieve 20-25% fare recovery by setting the value of an Orbit trip equal to local bus and light rail. Regular one-ride cash fare would be \$1.75 (reduced fare \$0.85) and all passes would be accepted. Estimated savings: \$850,000 to \$1.3 million.
- Achieve 10-15% fare recovery by setting the value of an Orbit trip to \$0.50. All passengers would be required to pay the \$0.50 cash fare including pass holders. Estimated savings: \$700,000 to \$800,000.

A third scenario was developed that would set the base fare to \$0.50 per ride and allow all passes to be used.

ORBIT Fare Policy Study - Policy Objectives for Free vs. Fare

Impact Area	Free	Fare	Note
People's Travel Budget	No Impact 	Fewer trips and/or higher cost to travel 	For people who do not already purchase transit passes (e.g., 31 day pass, Day Pass) or participate in a subsidized pass program (e.g., Platinum, ASU U-Pass, Tempe Free Youth Transit Pass), the introduction of an Orbit fare will impact people's personal budgets and/or their ability to travel.
Ridership	Higher 	Lower 	Introducing fares on the Orbit system will reduce ridership between 15-40%
Public Input	Keep Free 	Charge 	Results of Spring 2012 public process, 40-45% of survey respondents indicated that either fare option would somewhat or significantly decrease their transit options. 50% indicated no impact. 6-10% indicated a positive impact.
Running Time	Faster 	Slower 	Under a fare system, Orbit schedules would be lengthened to accommodate the additional time for fare transactions. Frequency would not be affected, but passenger travel times will be longer.
Reliability	Lower 	Higher 	Under today's free system, frequent overcrowding leads to passenger pass-ups, lower on-time performance, and higher costs to add booster trips.
Security	More incidents 	Fewer incidents 	Due to fewer riders and less overcrowding, incidents would most likely decline while disputes over fare payment would emerge.
Revenue Generation	No 	Yes 	Introducing fares on the Orbit system could raise \$700k - \$1.3 million annually.
Taxpayer Investment	Higher 	Lower 	Implementing a fare would reduce the taxpayer investment (local + federal) from the current 98% to between 70-90%.

Impact Area	Free	Fare	Note
Funding Diversity	More reliant on sales tax 	Greater funding source diversity 	Greater funding diversity means service reductions are less likely during economic downturns. An Orbit fare would reduce funding reliability on local sales tax from 95% to between 69-86%.
Data Reliability	Manual counts less accurate 	Electronic counts more accurate 	Improvements in data collection allow for more reliable and sophisticated analyses of travel patterns with associated improvements to transit planning.
Product Value	May signal low value 	Signals value of service 	A fare denotes the value of the service being purchased and can enhance overall passenger respect for the service.
Role in Transit System	Free services are typically feeders to local, express, and rail transit networks 	Tempe's Orbit system feeds the larger transit system, but is a functional system itself for many point-to-point trips 	<p>The neighborhood circulator concept generally gained nationwide attention in the 1990s as a method to connect neighborhoods to nearby destinations and feed the larger transit network.</p> <p>Implemented in this manner, free systems support the larger transit network because the circulator trip is the first of at least two transit trips before reaching one's destination.</p> <p>Tempe's program evolved into a more comprehensive stand-alone system. With relatively long routes spanning most of central Tempe, each of which anchored to downtown and ASU, the Orbit program provides many people with complete trips from home to destination. For this reason, the Orbit system competes with the local bus-rail network.</p> <p>The utility/value of the Orbit trip is generally equal to the utility/value of a local bus or rail trip.</p>

ATTACHMENT C
REGIONAL PROPOSITION 400 FUNDED TRANSIT PROGRAM

Jurisdiction Equity (JE) Summary						
(millions of dollars)						
May 7, 2012						
<u>Jurisdiction</u>	<u>Total Calculated PTF</u>	<u>Total Policy PTF Allocation</u>	<u>JE Under (JE Over)</u>	<u>JE Calculated Percent</u>	<u>JE Policy Percent</u>	
Avondale	\$19.7	\$22.0	\$2.3	1.37%	1.54%	
Buckeye	\$5.0	\$1.0	(\$3.9)	0.35%	0.07%	
Chandler	\$135.9	\$135.1	(\$0.8)	9.46%	9.46%	
County	\$16.3	\$9.3	(\$7.0)	1.14%	0.65%	
El Mirage	\$1.4	\$3.2	\$1.8	0.10%	0.23%	
Fountain Hills	\$1.2	\$1.2	\$0.0	0.08%	0.09%	
Gila Bend	\$0.0	\$1.9	\$1.9	0.00%	0.14%	
Gilbert	\$86.7	\$87.4	\$0.7	6.03%	6.12%	
Glendale	\$83.1	\$81.1	(\$2.0)	5.78%	5.68%	
Goodyear	\$2.9	\$3.7	\$0.8	0.20%	0.26%	
Guadalupe	\$3.6	\$0.1	(\$3.5)	0.25%	0.01%	
Litchfield Park	\$0.0	\$3.2	\$3.2	0.00%	0.23%	
Mesa	\$283.2	\$277.6	(\$5.5)	19.70%	19.44%	
Paradise Valley	\$6.1	\$7.6	\$1.5	0.43%	0.54%	
Peoria	\$29.0	\$31.7	\$2.7	2.02%	2.22%	
Phoenix	\$452.7	\$453.2	\$0.5	31.50%	31.74%	
Queen Creek	\$0.0	\$0.9	\$0.9	0.00%	0.06%	
Salt River Reser	\$3.9	\$0.0	(\$3.9)	0.27%	0.00%	
Scottsdale	\$146.2	\$148.6	\$2.4	10.17%	10.41%	
Surprise	\$5.6	\$3.3	(\$2.2)	0.39%	0.23%	
Tempe	\$150.0	\$150.9	\$0.9	10.44%	10.56%	
Tolleson	\$4.3	\$4.4	\$0.1	0.30%	0.31%	
Wickenburg	\$0.0	\$0.3	\$0.3	0.00%	0.02%	
Youngtown	\$0.6	\$0.2	(\$0.4)	0.04%	0.02%	
	\$1,437.3	\$1,428.1	(\$9.2)	100.00%	100.00%	

Source: Regional Public Transportation Authority, 2012 TLCP Update.

Notes:

- PTF refers to the "Public Transit Fund" or Proposition 400 funding allocated to transit.
- Total Calculated PTF refers to the currently programmed cost of transit services and projects 2006-2026.
- Total Policy PTF Allocation refers to the percentage of Proposition 400 PTF revenue allocated to cities.
- Tempe's 20 year program costs are currently under the city's 20 year total allocation of revenue by \$900,000. This means Tempe's portion of the program is in balance with a small surplus.
- Surplus funds cannot necessarily be programmed because impacts to other cities, annual cash flow, and the overall regional program need to be considered.

CITY OF TEMPE TRANSIT PROGRAM: TRANSIT PERFORMANCE STATISTICS (Sept.-Nov. 2011)

Explanation of Rank

4.0-5.0	High: Route is very productive and cost effective.
3.0-3.9	Good: Route is generally productive and cost effective; pursue long-term strategic improvements
2.0-2.9	Fair - Evaluate short/long-term options for changes to frequency, hours, routing, marketing, other variables.
1.0-1.9	Low - Changes necessary to frequency, hours, routing, marketing, other variables.

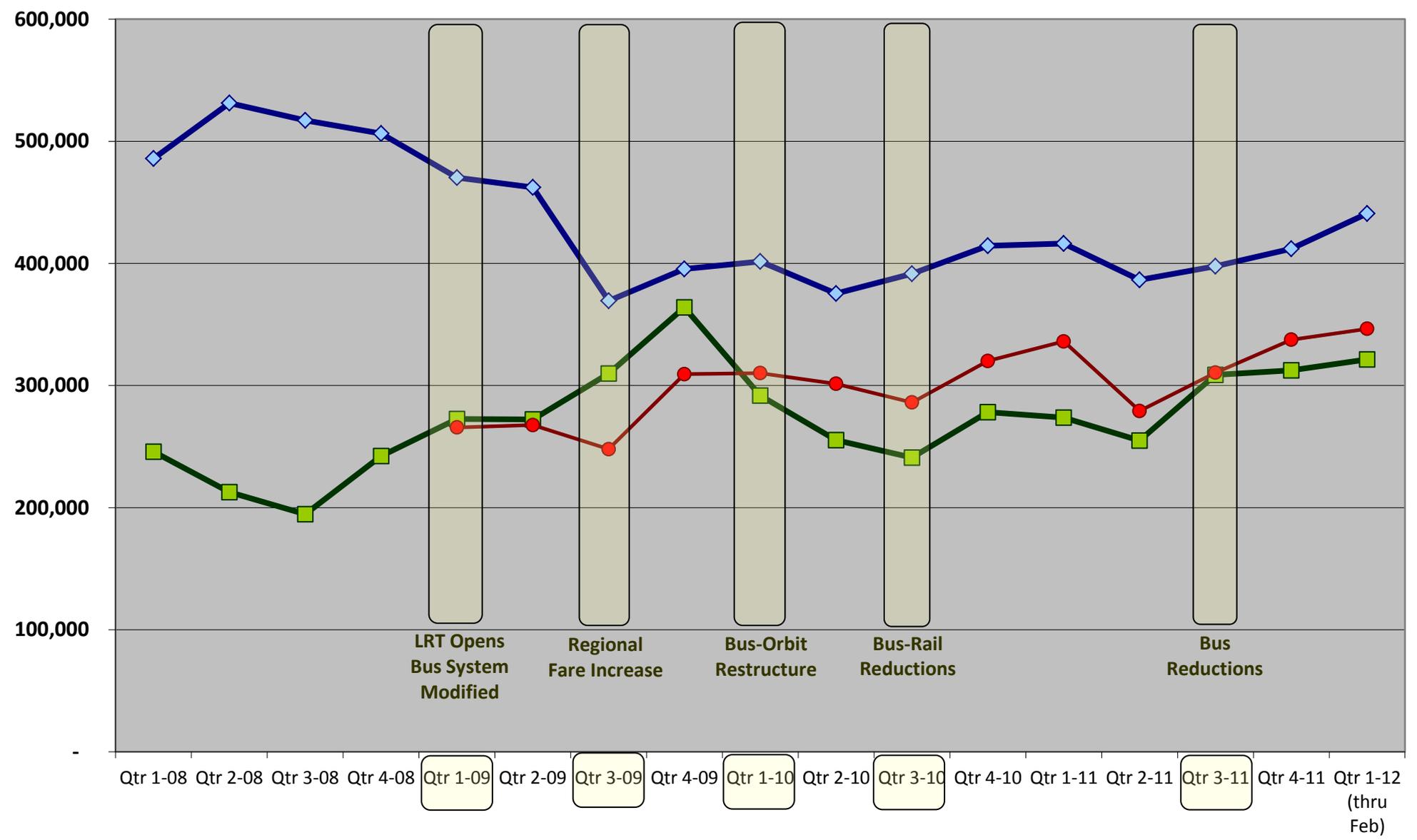
		WEEKDAY				
Mode	Local Bus Service	Average Daily	Boardings per Hour ¹	Subsidy per Boarding ²	Boardings per Mile ³	Rank ⁴
Local Bus	30 - University	1,039	31	\$ 1.85	2.29	2.5
Local Bus	40 - Apache	52	20	\$ 2.95	1.63	1.5
Local Bus	45 - Broadway	1,421	39	\$ 1.41	2.74	3.5
Local Bus	48 - 48th/Rio Salado	990	30	\$ 3.25	1.59	2.0
Local Bus	56 - Priest	1,797	36	\$ 1.63	2.58	3.5
Local Bus	61 - Southern	1,735	45	\$ 1.22	2.99	3.5
Local Bus	62 - Hardy/Guadalupe	1,422	21	\$ 3.36	1.50	2.5
Local Bus	65 - Mill/Kyrene	1,265	31	\$ 2.09	2.16	2.5
Local Bus	66 - Mill/Kyrene	1,034	29	\$ 2.29	2.03	2.5
Local Bus	72 - Rural/Scottsdale	2,756	31	\$ 1.74	2.45	4.5
Local Bus	77 - Baseline	1,386	40	\$ 1.35	2.96	3.5
Local Bus	81 - Hayden/McClintock	1,926	32	\$ 2.20	2.09	3.0
Local Bus	108 - Elliot	290	19	\$ 7.28	0.79	1.0
Express	511 - Scottsdale/Tempe	9	19	\$ 7.49	0.71	1.5
Express	520 - Tempe/Phoenix	48	13	\$ 8.30	0.67	2.0
Express	521 - Tempe/Phoenix	96	17	\$ 5.31	0.98	2.5
Express	532 - Mes/Tem/Sco/Phx	15	12	\$ 13.16	0.43	1.0
Express	540 - Chandler/Tempe/Phx	18	7	\$ 19.80	0.29	1.0
ORBIT	EARTH	1,967	24	\$ 3.64	1.75	2.5
	<i>EARTH ADJUSTED⁵</i>	1,967	24	\$ 3.64	2.50	3.5
ORBIT	JUPITER	2,044	29	\$ 2.48	2.57	4.0
ORBIT	MARS	2,342	30	\$ 2.43	2.62	4.0
ORBIT	MERCURY	3,146	36	\$ 1.67	3.82	5.0
ORBIT	VENUS	2,120	27	\$ 2.20	2.90	4.0
FLASH	Flash	2,639	27	\$ 1.37	4.64	N/A
LRT	Light Rail	12,834	93	\$ 1.71	6.50	N/A

Notes

1. Boardings per hour (productivity) is a reflection of ridership per unit of time or an index of service utilization.
2. Subsidy per boarding refers to the local-regional investment (net of passenger revenue) made in the route.
3. Boardings per mile (productivity) is a reflection of ridership per unit of distance and is an indicator of service utilization;
4. Performance rank reflects a composite assessment of average daily boardings and boardings per mile.
5. Earth Adjusted - Boardings per mile metric adjusted to factor out dead mileage (e.g., Mill Ave. bridge; 202 underpass)

Tempe Transit System: Average Monthly Boardings (January 2008 to February 2012)

◆ Local & Express ■ Flash-Orbit ● Rail





Tempe Transit Service Priority Survey – Spring 2012

Below is a list of possible Tempe transit service adjustments to address an estimated \$3 million deficit. Please indicate how these possible changes would affect your travel. This information will help city staff prioritize and recommend service reductions to the City Council. Approved service changes may be implemented in July 2012 (or possibly in January 2013 depending on any necessary regional coordination). If approved, an Orbit fare program would be implemented no earlier than January 2013. Please mark an "X" in one box per row only. Only complete surveys will be accepted and your name and address must be included.

MODE	SERVICE CHANGE DESCRIPTION	DECREASE my transit options SIGNIFICANTLY	DECREASE my transit options SOMEWHAT	NO IMPACT	INCREASE my transit options SOMEWHAT	INCREASE my transit options SIGNIFICANTLY	Estimated Cost Savings/ (Cost)
EFFICIENCY IMPROVEMENTS (Balancing route efficiency (faster travel times) with residential access (minimizing walk distance))							
1	ORBIT						\$136,066
2	ORBIT						\$226,795
3	ORBIT						\$223,479
4	ORBIT						\$90,708
5	ORBIT						\$88,937
6	ORBIT						\$231,058
7	ORBIT						\$136,066
SYSTEM RESTRUCTURING (Repositioning routes to do more with less, improving regional connections, or changing service delivery model)							
8	EXPRESS BUS						(\$23,476)
9	EXPRESS BUS						\$48,540
10	EXPRESS BUS						\$20,952
11	EXPRESS BUS						\$32,245
12	EXPRESS BUS						\$53,573
STRATEGIC EXPANSION (Cost balanced with potentially strong long-term gains in ridership, revenue and regional connectivity)							
13	LOCAL BUS						\$0
GENERAL REDUCTIONS (System or route level decreases to frequency or hours of operation)							
14	LOCAL BUS						\$402,883
15	LOCAL BUS						\$848,504
16	LOCAL BUS						\$239,372
17	LOCAL BUS						\$294,704
18	ORBIT						\$81,086
19	ORBIT						\$192,333
20	ORBIT						\$1,126,132
ORBIT FARE POLICY (Options for an Orbit Fare Policy)							
21	ORBIT						\$850,000 - \$1,300,000
22	ORBIT						\$700,000 - \$800,000