City of Phoenix Public Transit Department
Title VI Program

November 2015

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Section 1: Introduction

City of Phoenix History

Hundreds of years before any of the cities in the eastern part of our country were so much as clearings in the wilderness, a well-established, civilized community occupied the land we know as Phoenix. The Pueblo Grande ruins, which were occupied between 700 A.D. and 1400 A.D., testify to our city's ancient roots.

The wide Salt River ran through the Valley of the Sun, but there was little rain and no melting snow to moisten the brown earth from river to mountain range on either side.

Those former residents were industrious, enterprising and imaginative. They built an irrigation system, consisting mostly of some 135 miles of canals, and the land became fertile. The ultimate fate of this ancient society, however, is a mystery. The accepted belief is that it was destroyed by a prolonged drought. Roving Indians, observing the Pueblo Grande ruins and the vast canal system these people left behind, gave them the name "Ho Ho Kam" -- the people who have gone.

Phoenix's modern history begins in the second half of the 19th century. In 1867, Jack Swilling of Wickenburg stopped to rest his horse at the foot of the north slopes of the White Tank Mountains. He looked down and across the expansive Salt River Valley and his eyes caught the rich gleam of the brown, dry soil turned up by the horse's hooves. He saw farm land, predominately free of rocks, and in a place beyond the reach of heavy frost or snow. All it needed was water.

Returning to Wickenburg, he organized the Swilling Irrigation Canal Company, and moved into the Valley. The same year, the company began digging a canal to divert some of the water of the Salt River onto the lands of the Valley. By March 1868, water flowed through the canal, and a few members of the company raised meager crops that summer.

Phoenix Is Born

By 1868, a small colony had formed approximately four miles east of the present city. Swilling's Mill became the new name of the area. It was then changed to Helling Mill, after which it became Mill City, and years later, East Phoenix. Swilling, having been a confederate soldier, wanted to name the new settlement Stonewall after Stonewall Jackson. Others suggested the name Salina, but neither name suited the inhabitants. It was Darrell Duppa who suggested the name Phoenix, inasmuch as the new town would spring from the ruins of a former civilization. That is the accepted derivation of our name.

Phoenix officially was recognized on May 4, 1868, when the Yavapai County Board of Supervisors, the county of which we were then a part, formed an election precinct here.

President William Howard Taft approved Arizona's statehood on Feb. 14, 1912. On March 18 of the same year, Gov. George Hunt called the first State Legislature into session. This was an auspicious step in the state's history, and in the following year, the City of Phoenix took an equally important one. At a special election on October 11, 1913, the people of Phoenix, by a vote of nearly two to one,

Horse-drawn streetcars pass by the old City of Phoenix Courthouse in the late 1890's.

More than 100 years before modern light rail, streetcar tracks line the roadway on Washington Street.

ratified a new charter. The charter gave Phoenix the council-manager form of government. Thus, Phoenix became one of the first cities in the nation to adopt this progressive form of government.

Growing into a Metropolis

Like its legendary namesake rising out of the ashes, Phoenix has emerged as one of the bright new cities of the 21st century. Phoenix is the core of Maricopa County and the state's population and economic center.

Home to more than 1.4 million residents, Phoenix spans more than 500 square miles and ranks as the sixth-largest city in the United States. Phoenix is a premier destination, offering the best of both worlds: a growing economy and a great place to live with more than 300 sun-filled days a year and an almost limitless supply of outdoor activities in the beautiful Sonoran Desert.

Phoenix's location, coupled with its regional transportation plan including highways, light rail, buses and railroad networks, plays a principal role in its population and economic growth.

City of Phoenix Public Transit Department

The Phoenix Public Transit Department is a member of the 16 agency regional transit system under the system name of Valley Metro.

In 1993, the Regional Public Transit Authority board adopted the name Valley Metro as the identity for the transit system in the Phoenix metropolitan area. Under the Valley Metro brand, local governments joined to fund the Valley-wide transit system that the public sees on the streets today. Valley Metro Board member agencies include Avondale, Buckeye, Chandler, El Mirage, Gilbert, Glendale, Goodyear, Maricopa County, Mesa, Peoria, Phoenix, Scottsdale, Surprise, Tempe, Tolleson and Wickenburg.

The city of Phoenix is the primary recipient of federal funding for public transit in the region, and therefore is responsible for oversight of all Valley Metro members that receive federal funding for public transit, as well as recipients of federal 5310 grant funding for transportation services to seniors and people with disabilities.

With an annual operating budget of $213 million and with an administrative staff of 105 positions, the Phoenix Public Transit Department oversees and monitors operations of three private companies that provide transit service to the city of Phoe-

The light rail serves the current City of Phoenix Courthouse on Jefferson Street.

City of Phoenix Public Transit Department Mission

To keep Phoenix moving through reliable, innovative transit services for our community.

City of Phoenix Public Transit Department Vision

The recognized leader in multi-modal transit solutions connecting people and destinations.

nix and other Valley Metro member cities, and provides oversight to the rest of the system's service provided by the regional public transit authority under the name Valley Metro.

The city of Phoenix manages transit services to include 44 local bus routes, six RAPID commuter routes, three neighborhood circulators, 1 downtown business circulator and alternative transportation for people with disabilities and senior citizens. With a transportation fleet of 685 buses covering 20 million miles of service within the city of Phoenix, the department provides more than 70 percent of the region's transit. Valley Metro operates the majority of the remaining transit service on behalf of Valley Metro member cities.

The Phoenix Public Transit Department also takes a leading role in the development and oversight of the region's 20-mile light rail line. Working with Valley Metro and other Valley Metro agency partners, Phoenix helps to deliver seamless regional transit services under the name Valley Metro.

The city of Phoenix funds much of its transit service through Transit 2000 - a local sales tax approved by Phoenix voters, a portion of a regional sales tax known as Proposition 400, and other federal, state and local sources.

City of Phoenix Public Transit Department Title VI Program

Title VI activities are mandated by the federal government to ensure that people of all races, income levels, ages, and abilities have an equal voice in the planning and project delivery processes and receive equal benefit from the results of such planning. The City of Phoenix Public Transit Department is actively engaged in Title VI activities as the primary recipient of federal funding.

In partnership with Valley Metro, the City of Phoenix Public Transit Department has developed a robust Title VI program, the goal of which is to ensure all people have a meaningful role in processes associated with the delivery of the region's transit services. This program outlines the roles, method of administration, and analysis that supports equity in the Department's transportation services, planning and programs.

The City of Phoenix Public Transit Department operates under the premise that it is imperative that it develop transit services that are responsive to the needs and priorities of the city's diverse population. In order to execute this mandate, it is essential to have a process in place that effectively engages the public, fully integrates their feedback, analyzes the benefits and burdens of various alternatives, and recommends the most equitable solutions. With an intentional focus, vulnerable populations are assured equal access to the City of Phoenix Public Transit Department's planning process and to the products of such planning.

The City of Phoenix Public Transit Department, working in tandem with Valley Metro, continues to reach out to people in all corners of the city to ensure processes in the department reflect the voices and visions of our diverse population. In order to facilitate a thorough understanding of these activities, the definitions are provided in Attachment A.

The City of Phoenix Public Transit Department's plan will be reviewed annually and updated as needed. The Title VI program will be developed no less than every three years in accordance with federal regulation. Federal guidance directing the content of the City of Phoenix Public Transit Department's Title VI program is described in the following section.

Section 2: Overview of Roles

Guidance for Recipients of Federal Funding

Title VI of the Civil Rights Act of 1964 is the overarching civil rights law that prohibits discrimination based on race, color, or national origin, in any program, service or activity that receives federal assistance. Specifically, Title VI assures that "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefit of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance."

The City of Phoenix Public Transit Department will not restrict an individual in any way from the enjoyment of any advantage or privilege enjoyed by others receiving any service, financial aid, or other benefit under its programs or projects. Individuals may not be subjected to criteria or methods of administration which cause adverse impact because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program because of race, color or national origin. As a recipient of federal financial assistance, the City of Phoenix Public Transit Department must provide access to individuals with limited ability to speak, write, or understand the English language. Therefore, based on federal guidance for large transit providers that operate 50 or more fixed route vehicles in peak service and are located in an urbanized area of 200,000 or more in population, the main components of the City of Phoenix Public Transit Department Title VI Program include:

Title VI Requirements

- A signed Title VI assurance and governing body approval of the overall Title VI Program.
- A copy of the agency's public notice with a list of where the notice is posted.
- Instructions for how to file a complaint with a copy of the complaint form.
- A list of any Title VI investigations, complaints or lawsuits and how such complaints were addressed and resolved by the City of Phoenix Public Transit Department.
- A Public Participation Plan and list of outreach activities conducted since the last submission.
- A Language Assistance Plan for providing language assistance.
- A table depicting the racial composition of transportation-related committees, boards, and advisory councils.
- Title VI analysis conducted for applicable facilities.
- System-wide standards and policies.
- Demographic and service profile maps and charts.
- Fare and Service Equity Policy.
- Origin and Destination data to include customer travel patterns and demographic makeup.
- Service Monitoring Program.
- Description of how the primary recipient of FTA funding monitors for compliance.

The City of Phoenix Public Transit Department shall also ensure that its sub-recipients adhere to state and federal law and include in all written agreements or contracts, assurances that the sub-recipient must comply with Title VI and other related statutes. The City of Phoenix Public Transit Department, as a primary recipient that distributes federal transportation funds, shall monitor its sub-recipients for voluntary compliance with Title VI. In the event that non-compliance is discovered, the City of Phoenix Public Transit Department will make a good faith effort to ensure that the sub-recipient corrects any deficiencies arising out of complaints related to Title VI. The City of Phoenix Public Transit Department will also ensure that sub-recipients will proactively gauge the impacts of any program or activity on the traditionally underserved population that includes minority populations and low-income populations, persons with disabilities, persons with Limited English Proficiency (LEP), all interested persons and affected Title VI populations.

The City of Phoenix Public Transit Department's efforts to prevent such discrimination must address, but not be limited to, a program's impacts, access, benefits, participation, treatment, services, contracting opportunities, training, investigation of complaints, allocation of funds, prioritization of projects, and the overarching functions of planning, project development and delivery, right-of-way, construction, and research.

The City of Phoenix Public Transit Department has developed this Title VI Plan to ensure that services, programs, and activities of the Department are offered, conducted, and administered fairly, without regard to race, color, national origin of the participants or beneficiaries of federally funded programs, services, or activities.

Title VI has been broadened and supplemented by related statutes, regulations and executive orders. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 prohibited unfair and inequitable treatment of persons as a result of projects that are undertaken with Federal financial assistance. The Civil Rights Restoration Act of 1987 clarified the intent of Title VI to include all programs and activities of federal-aid recipients and contractors whether those programs and activities are federally funded or not.

In addition to statutory authorities, Executive Order 12898, signed in February of 1994, requires federal agencies to identify certain disproportionately high and adverse effects of its programs, policies, and activities on minority populations and low-income populations. Such issues are addressed by involving the potentially affected public in the development of transportation projects and transit service that fit within their communities without sacrificing safety or mobility. In 1997, the U.S. Department of Transportation (USDOT) issued a corresponding DOT order to summarize and expand upon the requirements of Executive Order 12898. Also, Executive Order 13166 provides that no person shall be subjected to discrimination on the basis of race, color, or national origin under any program or activity that receives federal financial assistance.

Finally, as the primary recipient of funding from the Federal Transit Administration (FTA), the City of Phoenix Public Transit Department follows the guidance of FTA Circular 4702.1B, which provides the instructions necessary to carry out the USDOT Title VI regulations, and to integrate into our programs and activities considerations expressed in the Department's Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons (70 FR 74087, December 14, 2005).

City of Phoenix
PUBLIC TRANSIT DEPARTMENT

Title VI Policy Statement

The following policy statement supports the implementation of these activities:

The City of Phoenix Public Transit Department is committed to ensuring that no person is discriminated against on the grounds of color, race, or national origin as provided by Title VI of the Civil Rights Act of 1964 and related legislation. Specifically, Title VI asserts that, "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

The City of Phoenix Public Transit Department strives to ensure nondiscrimination in all of its programs and activities, whether those programs and activities are federally funded or not. As a primary recipient of federal funding, the City of Phoenix Public Transit Department is responsible for initiating and monitoring Title VI activities, preparing required reports, and other responsibilities as required by the U.S. Department of Justice under 28 Code of Federal Regulations (CFR) § 42.401 *et seq.* and 28 CFR § 50.3. The U.S. Department of Transportation Title VI implementing regulations can be found at 49 CFR part 21.

_____ _____

Maria Hyatt

Director
City of Phoenix Public Transit Department

Date

Section 3: Method of Administration

Federal agencies have published guidance for their respective recipients in order to assist them with their obligations to limited English proficiency (LEP) persons under Title VI. This order applies to all state and local agencies that receive federal dollars. The explanation of the required Language Assistance Plan outlined below is based on federal guidance provided in Federal Transit Administration (FTA) Circular 4702.1B.

Language Assistance Needs Assessment – Four Factor Analysis

The following outlines how to identify a person who may require language assistance, the ways in which the City of Phoenix Public Transit Department and the regional transit authority, Valley Metro, provides such assistance, any staff training that may be required to provide such services, and the resources available to reach out to the people who may need language assistance service. In order to prepare the Language Assistance Plan (LAP), a needs assessment is conducted utilizing the four factor analysis. The four factors are:

Factor 1: The number or proportion of LEP persons eligible to be served or likely to be encountered by City of Phoenix Public Transit and Valley Metro services and programs.

Factor 2: The frequency with which LEP persons come into contact with City of Phoenix Public Transit and Valley Metro services and programs.

Factor 3: The nature and importance of Valley Metro and City of Phoenix Public Transit services and programs in people's lives.

Factor 4: The resources available to Valley Metro and the City of Phoenix Public Transit Department for LEP outreach, as well as the costs associated with the outreach.

The following is an explanation of what is to be included in the four factor LEP population needs assessment. In addition to the following explanation, Valley Metro has conducted a thorough LEP four factor analysis and resulting Language Access Plan to be utilized by all Valley Metro member agencies. Please refer to *Attachment M: Valley Metro Language Assistance Plan.*

Factor 1: The number or proportion of LEP persons eligible to be served or likely to be encountered by Valley Metro and City of Phoenix Public Transit Department services and programs.

An effective Language Assistance Plan is the preferred way of determining the extent to which the transportation needs of the LEP population mirror those of the community at large and the extent to which LEP persons have different needs that should be addressed through the transit service planning and facilities project development process.

Demographic Profiles for Communities of Concern
Communities of concern describe populations that have been determined by the federal government as benefiting from protections to ensure their meaningful involvement in planning and services. These vulnerable populations have been identified through the Civil Rights Act of 1964, Executive Order 12898, and Executive Order 13166 to end discrimination and ensure equal access to all federally funded services.

To assist with the identification of Title VI neighborhoods, the presence of Title VI populations is compared against the Maricopa County average for each community of concern. Linguistic isolation follows federal guidance at five percent within a census block of 1,000 people or more within a neighborhood. Based on the 2008 to 2012 American Community Survey five-year estimates, the threshold for each mandated community of concern is as follows:

Communities of concern are identified as those census tracts where the identified group represents a percentage of the population equal to or greater than that of the Maricopa County average. Federal guidelines state that minority populations should be identified where either (a) the minority population of the affected area exceeds 50 percent, or (b) the minority population percentage of the affected area is measurably greater than the minority population percentage in the general population or other appropriate unit of geographic analysis—in this case, Maricopa County

Limited English Proficient (LEP) households: A person with limited English proficiency is described as a person who does not speak English as a primary language and has a limited ability to read, write, speak and understand English. An area is identified as LEP when five percent or more of the population, or 1,000 people within a neighborhood, fit this definition. The Census Bureau further defines households as linguistically isolated when there are no members aged 14 years and over who speak only English or who speak a non-English language and speak English "very well." In other words, all members of the household ages 14 years and over have at least some difficulty with English.

Factor 2: The frequency with which LEP persons come into contact with the City of Phoenix Public Transit Department and Valley Metro services and programs.

The Valley Metro Planning and Community Relations divisions have conducted a thorough analysis of the frequency with which LEP persons come into contact with the Valley Metro system through a combination of surveys to community groups serving this population, as well as demographic mapping of service crossing census tracts with greater than average concentration of minority, low income and LEP populations. Please refer to the in-depth LEP analysis conducted by Valley Metro in *Attachment M: Valley Metro Limited English Proficiency Four Factor Analysis and Language Access Plan*.

Factor 3: The nature and importance of the City of Phoenix Public Transit Department services and programs in people's lives.

An analysis of benefits and burdens is a critical component of the City of Phoenix Public Transit Department's Title VI Program. The Valley Metro Community Relations department, in partnership with the City of Phoenix Public Transit Department, analyzes the feedback reported by communities of concern to determine the potential benefits and burdens of a transportation service or fare change on the population. In addition, proposed transportation improvements, such as those in the City of Phoenix Public Transit Department System Plan, are analyzed and documented to determine if the im-

provements impose a disproportionate burden on the communities of concern. This analysis, as well as the input from communities of concern, is incorporated as proposed service and fare changes advance through the Valley Metro and City of Phoenix committee, board and council processes for approval. Feedback from Title VI populations will be used to assess any enhancements to the Title VI Plan on a biennial basis.

The City of Phoenix Public Transit Department Public Involvement Process

Title VI issues are communicated and considered as project and service planning activities move through the City of Phoenix Public Transit Department and Valley Metro board approval process. This generally originates at the planning staff technical level, proceeds through Division and Management level review and recommendation, and is then submitted to the Valley Metro Service Planning Working Group made up of all Valley Metro member cities. After the service changes are refined through the working group, they are presented to the public for input and revision. The Service Planning Working Group meets to discuss public input and to make final changes, then city of Phoenix staff submit the final service change recommendations to the Phoenix City Council for final approval or disapproval. In this way, the concerns and community input that have been addressed throughout the planning of the activity and project development impact decisions in a meaningful way.

Advisory Committees: These groups may include departmental representatives, liaisons from MAG, jurisdictional agencies (cities/towns) and other stakeholders as appropriate to the specific project or planning effort.

General Public: This group includes residents throughout the City of Phoenix. This target group is included through Public Open Houses, social media, and other methods identified by both the City of Phoenix Public Transit Department Public Information Office and Valley Metro Community Relations Department.

Boards and Commissions— Citizen's Transit Commission (CTC):
The Citizen's Transit Commission (CTC) consists of fifteen (15) members. Each member shall be a resident of the City of Phoenix. Commission members shall be appointed from the following: (a) One (1) from each council district; (b) One (1) from the business community; (c) One (1) from the tourism and hospitality industry; (d) One (1) from the community of persons with disabilities; and, (e) Four (4) from the city at large.

Among the CTC's fundamental responsibilities as provided in Proposition 2000 is to assure public input and government accountability on all transit and city traffic improvements that are made with funding provided pursuant to that measure.

Another important function of the CTC is to assist in developing and maintaining public understanding and support of the City of Phoenix Public Transit Department programs through active communication. CTC members bring the constituent voice to the City of Phoenix Public Transit Department transportation decisions, and CTC actions go to the Transportation and Infrastructure Subcommittee of the Phoenix City Council. The board meets every month, and city of Phoenix residents are encouraged to attend.

The City of Phoenix Mayor and City Council: The City is administered by a City Manager who reports to the Mayor and five City Council members elected by the public. The Mayor and City Council receives final drafts of key policies, procedures, plans and programs for adoption.

Factor 4: The resources available to the City of Phoenix Public Transit Department for LEP outreach, as well as the costs associated with the outreach.

Valley Metro conducts public outreach activities on behalf of its members for regional transit service changes. The resources that Valley Metro uses to conduct LEP outreach are highlighted in *Attachment M: Valley Metro Limited English Proficiency Four Factor Analysis and Language Access Plan*.

The City of Phoenix Public Transit Department conducts additional outreach for department-specific transit activities, to include its 35 year comprehensive transit plan.

Resources to translate materials and interpret for individuals are available but finite. The investment is made to translate vital materials, and the City of Phoenix Public Transit Department maintains a standing offer to translate other materials into additional languages and provide alternative formats such as Braille or large print. The City of Phoenix Public Transit Department utilizes the City of Phoenix Library Brailling equipment to aid in the provision of these services and frequently enlists internal resources and staff who are bilingual and available to assist with language interpretation. At a minimum, there is a bilingual staff member who can assist with interpretation at public meetings as needed.

Table Depicting Membership of Transit-Related Committees Broken Down By Race

Body	Caucasian	Latino	African American	Asian American	Native American	Non-Disclosed
Citizen's Transit Committee	7	0	3	0	0	2
Population	58%	0	25%	0	0	17%

Additional materials and interpreters will be made available for areas with high concentrations of linguistically-isolated individuals. The City of Phoenix Public Transit Department public involvement staff has been trained to utilize bilingual staff when needing translation assistance. If fluency in the needed language is not found among the City of Phoenix Public Transit Department staff, assistance may be acquired through contracted services. Currently, the Spanish population has a significant presence in the service area; therefore, a number of materials are created and translated in a format that is easily understood by this Spanish speaking population. The City of Phoenix Public Transit Department also offers language translation services for public meetings at no cost to the public, if the request is made 48 hours prior to the time of the scheduled meetings.

Collateral materials are created and translated for outreach and marketing purposes to include:

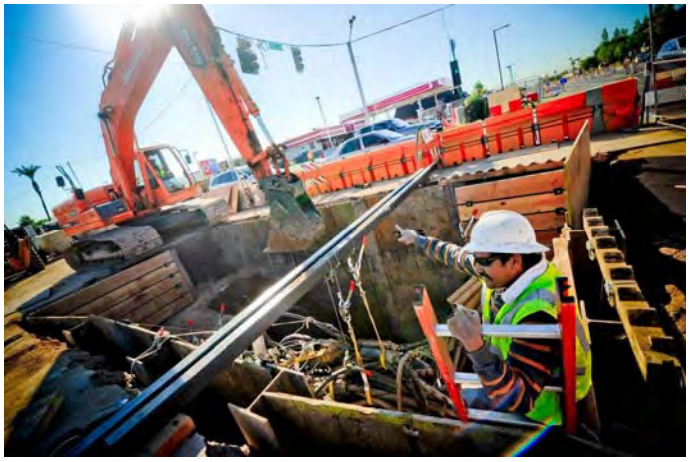
- Printed materials
- News releases to local television, radio and print media
- Public notices, service explanations
- Spanish interpreters at public meetings
- Social media strategies and online technologies to reach affected population

Analysis of Benefits and Burdens - Implementation of the Language Assistance Plan

Information gained from Valley Metro's detailed analysis of affected communities will be considered when conducting planning activities.

Based on the data, staff will determine the presence of Title VI and affected communities as well as the potential to impact them through the planned activity or project. Appropriate outreach and analysis will be incorporated into all relevant activities from the beginning. The Title VI Coordinator may assist staff as needed in determining the potential impact of projects and planning activities on Title VI populations. The Coordinator will also provide training opportunities to ensure staff develops an understanding of Title VI issues and responsibilities.

The City of Phoenix Public Transit Department must analyze any major decision made regarding the



city's transit system, particularly if there is any potential to negatively affect areas of high concentration of LEP population. Some of the on-going LAP implementation strategies include:

- Identifying the LEP individuals who need Language Assistance
- Implementing City of Phoenix and Valley Metro language assistance measures
- Providing staff training

- Ongoing implementation of public involvement program and activities
- Monitoring and updating the LAP

Identifying the LEP Individuals Who Need Language Assistance:
The City of Phoenix Public Transit Department will continue to monitor the language needs of the LEP individuals within its service area and will continue to do the following:

- Continue to monitor the languages and the customers' needs encountered by the front-line staff.
- Continue to monitor the American Community Survey One-Year Estimate published each year by the U.S. Census Bureau for changes in the LEP population.
- Closely monitor the Census data and ensure that the LAP is updated in a timely manner.

Language Assistance Measures:
The City of Phoenix Public Transit Department will continue to implement the current measures to assist the LEP population and will continue to enhance its services to strengthen the LAP to include:

- Continue to provide for interpreters as needed, in Spanish and any other language requested in accordance with Title VI guidelines.
- Maintain regular communication with front line public involvement staff regarding their experience with the LEP clients in order to assess the assistance provided.

- Continue to translate important notices and major transportation planning studies or changes in policies that may directly or indirectly impact the LEP population.
- Continue to work with local social services agencies to disseminate information to the LEP population and to collect information regarding the unmet needs.

Staff Training:
The City of Phoenix Public Transit Title VI Coordinator will ensure that staff is provided appropriate training in order to provide high level of customer service to the general population as well as the LEP population.

All involved staff will be regularly trained for handling potential Title VI and LEP complaints.

Staff with bilingual capabilities will be given special training related to language assistance and how to handle potential Title VI and LEP complaints.

The Public Transit Department Title VI Coordinator will continue to survey staff for their language skills.

Public Involvement:
The City of Phoenix Public Transit Department will continue to participate in Valley Metro's inclusive public outreach process as detailed in the Valley Metro's Title VI Public Participation Plan (*Attachment M: Public Participation Plan*).

The Department's Title VI Coordinator will also continue to monitor the effectiveness of the current process by participating in a sampling of Valley Metro and City of Phoenix Public Transit-sponsored public outreach events.

The City of Phoenix Public Transit Department Title VI Coordinator will also work with Valley Metro to update the Public Participation Plan as needed.

In collaboration with Valley Metro, The City of Phoenix Public Transit Department's Title VI Coordinator will continue to explore new and innovative techniques and strategies to engage the public in transportation projects and planning.

Monitoring and Updating the LAP:
The City of Phoenix Public Transit Department will work with Valley Metro to continue to update the LAP as required by the USDOT and as the characteristics of the population changes. Updates will be made as necessary and may include, but not be limited to:

- Changes in LEP population by number or area as new information is made available.
- Updated analysis of the current LEP service area.
- Requirements for additional language translation services.

Notice to LEP Persons:
Any person requesting language assistance should contact:

Kristy Ruiz
Title VI /ADA Coordinator
City of Phoenix Public Transit Department
302 N. 1st Ave., Ste. 900
Phoenix, AZ 85003
(602) 495-0579 (phone)
(602) 495-2002 (fax)
kristy.ruiz@phoenix.gov
www.phoenix.gov/publictransit/title-vi-notice

Section 4: Conclusion and Definitions

The goal of this plan is to document and enhance opportunities for Title VI populations to have a meaningful voice, to receive equal benefits from the City of Phoenix Public Transit Department activities without shouldering a disproportionate share of burdens. The plan itself is considered a work in progress that will evolve as people's needs and participation in the process change.

For more information, please contact the Title VI Coordinator at (602) 495-0579. Thank you for your support of the City of Phoenix Public Transit Department's efforts throughout the Metropolitan Phoenix area.

Definitions

City of Phoenix Public Transit Department: The City of Phoenix Public Transit Department is one of 16 agencies that are members of the Valley Metro regional transit system. The Department operates 70 percent of transit service in the Metropolitan Phoenix area and is the primary recipient of federal funding for public transit in the region. The City of Phoenix Transit Department is responsible for operating a complex transit system, in addition to building and maintaining transit facilities and bus stops throughout the city. The City of Phoenix is also the designated recipient of federal transit funding for Section 5310 funds for the Phoenix/Mesa Urbanized area, providing oversight to organizations providing transportation services to seniors and people with disabilities.

Valley Metro (Valley Metro Regional Public Transportation Authority): Valley Metro is the regional public transportation agency providing coordinated, multi-modal transit options to residents of greater Phoenix. With a core mission of advancing a total transit network, Valley Metro plans, develops and operates the regional bus and light rail systems and alternative transportation programs for commuters, seniors and people with disabilities.

In 1993, the name Valley Metro was adopted as the identity for the regional transit system in the metropolitan Phoenix region. Under this brand name, local governments set the policy for the regional system that operates throughout the Valley.

Valley Metro is governed by two Boards of Directors. The Regional Public Transportation Authority (RPTA) Board consists of 16 public agencies (15 cities and Maricopa County) that set the policy direction for all modes of transit except light rail. The Valley Metro Rail Board consists of five cities that set the policy direction for light rail high-capacity transit. The Boards and the agency work to improve and regionalize the public transit system.

Maricopa Association of Governments (MAG): MAG serves as the regional planning agency and Council of Governments for the metropolitan Phoenix area. When MAG was formed in 1967, the elected officials recognized the need for long-range planning and policy development on a regional scale. They realized that many issues such as transportation, air quality and human services affected residents beyond the borders of their individual jurisdictions. MAG is the designated metropolitan planning organization (MPO) for transportation planning in the Maricopa metropolitan region, including Maricopa County and portions of Pinal County. MAG has also been designated by the Governor to serve as the principal planning agency for the region in a number of other areas, including air quality, water quality and solid waste management. In addition, through an Executive Order from the Governor, MAG develops population estimates and projections for the region.

Title VI: The Civil Rights Act of 1964 is a comprehensive U.S. law intended to end discrimination based on race, color, religion, or national origin. It guarantees a number of protections, including nondiscrimination in the distribution of funds under federally assisted programs, or Title VI. Specifically, it states, "No person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, denied the benefits of, or subjected to discrimination under any program or activity receiving federal financial assistance." (42 USC 2000d).

Communities of Concern: Federal legislation has identified vulnerable populations that receive protection to end discrimination and ensure equal access to all federally funded services. This includes the Civil Rights Act of 1964, Executive Order 12898,

and Executive Order 13166. These mandated populations include minorities, people with low incomes, people with Limited English Proficiency (LEP), and people with disabilities.

Executive Order 12898: In 1994, President Bill Clinton signed Executive Order 12898, which mandated equitable treatment of minorities and people with low incomes by requiring federal agencies and recipients of federal funding to identify, and address, as appropriate, certain disproportionately high and adverse effects of its programs, policies, and activities on minority populations and low income populations.

Limited English Proficiency: In 2000, President Clinton signed Executive Order 13166, which mandated that people with limited English proficiency (LEP) have meaningful access to services. This requires federal agencies and recipients of federal funding to examine their services and establish guidance on how populations with limited English proficiency can access services, prepare a plan to overcome barriers, and ensure people with limited English proficiency have adequate opportunities for input. A person with limited English proficiency is described as a person who does not speak English as a primary language and has a limited ability to read, write, speak and understand English. A population is defined as LEP when five percent or more of the people living in a geographic area fit this definition.

TITLE VI NOTICE TO THE PUBLIC AND ADA POLICY STATEMENT

The City of Phoenix Public Transit Department hereby gives notice that it is the agency's policy to assure full compliance with Title VI of the Civil Rights Act of 1964, Title II of The Americans with Disabilities Act and related statutes and regulations in all programs and activities. These federal statutes require that no person shall, on the grounds of race, color, national origin or disability be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program, activity or service the City of Phoenix Public Transit Department administers.

For more information regarding The City of Phoenix Public Transit Department's Title VI obligations, please contact:

Kristy Ruiz
Title VI Coordinator
City of Phoenix Public Transit Department
(602) 495-0579
Via e-mail at kristy.ruiz@phoenix.gov

Any person who believes his/her rights have been violated may file a complaint to:

Valley Metro Customer Service
(602) 253-5000
TTY: 602.251.2039
ValleyMetro.org
Via e-mail at csr@valleymetro.org

Or by mailing the complaint to Valley Metro Customer Service, 4600 E. Washington Street, Suite 101, Phoenix, AZ 85034

AVISO AL PÚBLICO DE TÍTULO VI Y DECLARACIÓN DE POLÍTICA ADA`

El Departamento de Transporte Público de la Municipalidad de Phoenix por la presente da aviso al público que es la política de la agencia asegurar el pleno cumplimiento con el Título VI de la Ley de Derechos Civiles de 1964, el Título II de la Ley para Americanos Minusválidos y reglamentos y estatutos relaciones en todos sus programas y actividades. Estos estatutos federales requieren que no se excluya a ninguna persona de participar en, ni que se le nieguen los beneficios de, o que de alguna otra manera sean sujetos a discriminación en cualquier programa, actividad o servicio administrado por el Departamento de Transporte Público de la Municipalidad de Phoenix, con base en su raza, color, origen nacional o discapacidad.

Para más información sobre las obligaciones del Título VI del Departamento de Transporte Público de la Municipalidad de Phoenix, por favor comuníquese con:

Kristy Ruiz
Title VI Coordinator
City of Phoenix Public Transit Department
(602) 495-0579
Por correo electrónico a kristy.ruiz@phoenix.gov

Cualquier persona que considere que se han violado sus derechos puede presentar una queja dirigida a:

Valley Metro Customer Service
(602) 253-5000
TTY: 602.251.2039
ValleyMetro.org
Por correo electrónico a csr@valleymetro.org

O puede enviar la queja por correo postal dirigido a: Valley Metro Customer Service, 4600 E. Washington Street, Suite 101, Phoenix, AZ 85034

The City of Phoenix Public Transit Department Title VI Notice to the Public and ADA Policy Statement. These notices are posted throughout the Department's offices and at all city Transit Centers.

VALLEY METRO

TITLE VI COMPLAINT PROCEDURE

Any person who believes that he or she has been excluded from participation in, been denied the benefits of, or otherwise subjected to unlawful discrimination under any Valley Metro service, program or activity, and believes the discrimination is based upon race, color or national origin may file a formal complaint with Valley Metro Customer Service. This anti-discrimination protection also extends to the activities and programs of Valley Metro's third party contractors. Any such complaint must be filed within 180 days of the alleged discriminatory act (or latest occurrence).

Passengers using federally funded public transportation are entitled to equal access, seating and treatment. Under Title VI of the Civil Rights Act of 1964 (as amended) and related statutes, Valley Metro must ensure that no person shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any federally funded program, activity or service it administers.

Complaints for alleged non-compliance with Title VI and related statutes may be lodged with Valley Metro Customer Service. Any such complaint must be filed within 180 days of the alleged discriminatory act (or latest occurrence).

To submit a complaint online, fill out the online complaint form.

To submit a claim by mail or in person, please fill out the printable complaint form.
and mail/take to:

Regional Public Transportation Authority
4600 E. Washington St., Suite 101
Phoenix, Arizona 85034
Email: csr@valleymetro.org
Phone: (602) 253-5000
TTY: (602) 251-2039

Individuals may also file complaints directly with the Federal Transit Administration (FTA) within the 180-day timeframe.

Federal Transit Administration (FTA)
Attention: Title VI Coordinator
East Building, 5th Floor –TCR
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Complaints received by Customer Service will be assigned to the appropriate staff member(s) for investigation in accordance with federal standards (28 CFR Part 35 and FTA Circular 4702.1B). After the complaint is processed, Customer Service will respond to the complainant and, if warranted by the investigation, take appropriate action. The City of Phoenix, as the designated recipient of federal funds for this region, is responsible for monitoring this process.

Note: To request information about Valley Metro's Title VI Policy, please send an e-mail to TitleVICoordinator@valleymetro.org. To request information in alternative formats, please contact Customer Service at csr@valleymetro.org or phone: (602) 253-5000, TTY: (602) 251-2039.

TITLE VI COMPLAINT PROCEDURE

Title VI Complaint Procedures

Any person who believes she or he have been discriminated against on the basis of race, color, or national origin by Valley Metro or our transit service provider may file a Title VI complaint by completing and submitting the agency's Title VI Complaint Form or by calling Valley Metro's Customer Service. All complaints are logged into Valley Metro's Customer Assistance System (CAS) and will be investigated according to federal standards.

Valley Metro's Title VI Complaint Form (English and Spanish) is located on our website: (http://www.valleymetro.org/about_valleymetro/civil_rights_policy_statement). The form is available in both English and Spanish. Complaints can also be filed by contacting Valley Metro's Customer Service at:

Email: csr@valleymetro.org
Phone: (602) 253-5000
TTY: (602) 251-2039

Valley Metro has 30 days to investigate each complaint. If more information is needed to resolve the case, Valley Metro may contact the complainant. Following the investigation of the complaint, a possibility of two letters will be sent to the complainant: a closure letter or a letter of finding. A closure letter states that there was not a Title VI violation; therefore, the case will be closed. A letter of finding states that there was a Title VI violation and explains what corrective action will be taken to remedy the situation. A complainant can appeal the decision within 60 days of receiving the letter. All appeals must be submitted to Valley Metro Customer Service.

Procedures for Tracking and Investigating Title VI Complaints

TRACKING

Complaint comes in and is logged into the CAS system.

The Customer Service Administrator sends the complaint to the cities/transit provider for investigation and documentation within 24 hours.

Complaint is returned to the Customer Service Administrator to ensure the information is complete and closes the complaint.

Each cities administrator audits the complaints as well to ensure they meet the guidelines for Title VI.

The administrator reviews an outstanding weekly report identifying outstanding complaints. During the review process the administrator will send out notifications to the agency and a copy to the relevant city to remind the entity that the complaint is not yet resolved or closed out. This process is reinitiated each week to ensure timely compliance.

The administrator audits all completed Title VI complaints to check for accuracy and has complaint reopened by Customer Service administrator and sent back if not completed accurately.

VALLEY METRO

TITLE VI COMPLAINT PROCEDURE

INVESTIGATING

STEP ONE: Summary of the complaint, completed by the Regional Services Customer Relations staff.

STEP TWO: Statement of issues.

List every issue derived from the complaint summary. Include questions raised by each issue:

1. Who?
2. What?
3. When?
4. Where?
5. How?

Add new issues that surface during investigation. The final list of issues becomes outline for investigation.

STEP THREE: Respondent's **reply** to each issue.

- Obtain information from each respondent, listen to each tape, review each document.
- All staff will document information collected in the customer contact (respondent area).
- After all respondent information is documented, complete the documentation (remaining steps).
- Determine the action taken.
- Follow up with the customer.

Note: "Respondent" is not confined to the transit vehicle operator. "Respondent" is defined as **any** source of information that can contribute to the investigation, such as:

- Operator (Interview/History)
- Radio/Dispatch/OCC reports
- GPS tracking software and programs
- Maintenance (Staff/Records)
- City Transit staff
- Witnesses
- Complainant (Interview/History)
- Spotter reports
- Video (camera) and/or audio recordings
- Courtesy cards
- Incident reports (supervisor, transit police, fare/security inspectors)

VALLEY METRO

TITLE VI COMPLAINT PROCEDURE

- Other transit employees
- Route history

STEP FOUR: Findings of fact.

Investigate every "issue" (stated in the "statement of issues noted in step two). Separate facts from opinions.

STEP FIVE: Citations of pertinent regulations and rules.

Develop list of all regulations, rules, policies, and procedures that apply to the investigation

- Title VI requirements
- Company rules and procedures
- Valley Metro policies and service standards

STEP SIX: Conclusions of law.

- Compare each fact from "findings of fact" to the list of regulations, rules, etc.
- Make decision on whether violation(s) occurred.
- List of violations becomes "conclusions of law".

STEP SEVEN: Description of remedy for each violation.

- Specific corrective actions for each violation found.
- Include plans for follow-up checks.
- Do not conclude report with "no action taken".
- If no violations found, conclude the report in a positive manner.
- Review policies and procedures.
- Review Title VI provisions.

Response to Customer:

Detailed summary of conversation with customer. Send copy of letter to customer.

Action Taken:

- Must include specific corrective action for each violation found.
- Include a follow-up action plan.
- If no violations found, note policies, procedures, etc. reviewed with operator.
- Never state "no action taken".

TITLE VI COMPLAINT FORM

Any person who believes that he or she has been discriminated against by Valley Metro or any of its service providers, and believes the discrimination was based upon race, color or national origin may file a formal complaint with Valley Metro Customer Service.

Please provide the following information to process your complaint. Alternative formats and languages are available upon request. You can reach Customer Service at (602) 253-5000/TTY: (602) 251-2039, or email at csr@valleymetro.org.

Section I: Customer Information

Name:

Address:

City:	State:	Zip:
Work Phone:	Home Phone:	Cell Phone:

Email Address:

Section II: Incident Information

Date of Incident:	Time of Incident: AM/PM	City:

Incident Location:	Direction of Travel:

Route #:	Bus/Light Rail #:

Service Type: ☐ Local ☐ LINK ☐ Express/RAPID ☐ Light Rail ☐ Circulator/Connector ☐ Dial-a-Ride

Operator Name:

Operator Description:

What was the discrimination based on? (Check all that apply)

☐ Race ☐ Color ☐ National Origin ☐ Limited English Proficiency ☐ Other:

Explain as clearly as possible what happened and why you believe you were discriminated against. Describe all persons who were involved. Include the name and contact information of the person(s) who discriminated against you (if known), as well as names and contact information of any witnesses. If more space is needed, please use the back of this form.

Have you filed this complaint with the Federal Transit Administration? ☐ Yes ☐ No

If yes, please provide information about a contact person at the Federal Transit Administration where the complaint was filed.

Name:	Title:
Address:	Telephone:

Have you previously filed a Title VI complaint with this agency: ☐ Yes ☐ No

You may attach any written materials or other information that you think is relevant to your complaint.

Signature and date required below:

Signature Date

602.253.5000
TTY: 602 251.2039
valleymetro.org

VALLEY METRO

RPT2143

FORMA DE QUEJAS DEL TITULO VI

Cualquier persona que crea que ha sido discriminada basándose en su raza, color u origen nacional por Valley Metro o sus proveedores de servicio puede registrar una queja del Título VI con el Servicio al Cliente de Valley Metro.

Por favor provea la siguiente información necesaria para que se procese su queja. Hay formatos e idiomas alternos disponibles si se solicitan. Llene esta forma y envíela por correo postal a o entréguela en: Regional Public Transportation Authority, 4600 E. Washington St., Suite 101, Phoenix, Arizona 85034. Usted puede comunicarse con el Servicio al Cliente llamando al (602) 253-5000/TTY: (602) 251-2039, ó por correo electrónico en *csr@valleymetro.org*.

Sección I: Información del Cliente		
Nombre:		
Domicilio:		
Ciudad:	Estado:	Código Postal:
Teléfono del Trabajo:	Teléfono del Hogar:	Teléfono Celular:
Domicilio Electrónico:		

Sección II: Información del Incidente		
Fecha del Incidente:	Hora del Incidente: AM/PM	Ciudad:
Ubicación del Incidente:	Dirección de Viaje:	
# de Ruta:	# de Autobús/Tren Ligero:	

Tipo de Servicio: ☐ Local ☐ LINK ☐ Express/RAPID ☐ Tren Ligero ☐ Circulador/Connector ☐ Dial-a-Ride

Nombre del/la Conductor/a:

Descripción del/la Conductor/a:

¿En qué se basó la discriminación? (Marque todo lo que sea aplicable)

☐ Raza ☐ Color ☐ Origen Nacional ☐ Dominio Limitado del Inglés ☐ Otro:

Explique tan claramente como sea posible lo que sucedió y por qué cree usted que se le discriminó. Describa a todas las personas que estuvieron involucradas. Incluya el nombre y la información de contacto de la/s persona/s que le discriminó/aron a usted (si los sabe), así como los nombres y la información de contacto de cualquier testigo. Si necesita más espacio, por favor use el reverso de esta forma.

¿Ha usted registrado esta queja con la Administración Federal de Tránsito? ☐ Sí ☐ No

Si contestó sí, por favor provea información sobre la persona de contacto en la Administración Federal de Tránsito donde se registró la queja:

Nombre:	Título:
Domicilio:	Teléfono:

¿Ha usted registrado previamente una queja del Título VI con esta agencia?: ☐ Sí ☐ No

Usted puede adjuntar cualquier material por escrito o cualquier otra información que crea que sea relevante a su queja.

Se requieren la firma y la fecha abajo:

Firma Fecha

valleymetro.org
602.253.5000
TTY: 602 251.2039

VALLEY METRO

RPT2043

List of Investigations Title VI Investigations, Complaints and Lawsuits — November 2012-June 2015

The City of Phoenix Public Transit Department did not receive any legal claims of Title VI discrimination during the period of November 2012-June 2015.

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
187734	11/2/2012	Discrimination	Attitude (operator)	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
189635	11/30/2012	Discrimination	Hazardous Operation	Video was reviewed and no evidence of hazardous operation or discrimination could be found. No action could be taken.
189694	12/1/2012	Discrimination	Attitude (operator)	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
190467	12/11/2012	Discrimination	Attitude (operator)	Operations manager addressed issue with operator per company policy.
191131	12/20/2012	Discrimination	Pass Up	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
191196	12/21/2012	Discrimination	Policy (oper)	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
191550	12/29/2012	Discrimination	Policy (oper)	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
191863	1/4/2013	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
193538	1/29/2013	Discrimination	Pass Up	Video was reviewed and no evidence of discrimination could be found. No action could be taken.

City of Phoenix Public Transit Department Title VI Complaints — November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
194522	2/7/2013	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
194680	2/9/2013	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
194777	2/11/2013	Discrimination	Fare Policy	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
194975	2/11/2013	Discrimination	Hazardous Operation	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
195056	2/13/2013	Discrimination	Attitude (operator)	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
195555	2/19/2013	Discrimination	Attitude (operator)	Video was reviewed and operator on bus scheduled at time customer provided does not fit customer description. Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
195648	2/20/2013	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Operator followed fare policy. No action was taken.
195985	2/25/2013	Discrimination	Pass Up	No evidence of discrimination could be determined based on investigation. Customer's state they were not at the bus stop. No action was taken.
197017	3/6/2013	Discrimination	Pass Up	Video was reviewed for possible policy violations; with no conclusive evidence of discrimination found. No customers were on the bus or at the stop at the time given by customer. No action could be taken.
198950	3/27/2013	Discrimination	Attitude (operator)	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
200124	4/10/2013	Discrimination	Policy (operator)	Video was reviewed and no evidence of discrimination could be found. No action could be taken.

City of Phoenix Public Transit Department Title VI Complaints—November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
201597	4/29/2013	Discrimination	Policy (operator)	No evidence of discrimination could be determined based on investigation. Issue was addressed with operator per company policy.
202119	5/4/2013	Discrimination	Policy (operator)	No evidence of discrimination could be determined based on investigation. Issue regarding layover policy was addressed with operator per company policy.
202306	5/7/2013	Discrimination	Pass Up	No evidence of discrimination could be determined based on investigation. No action was taken.
203183	5/16/2013	Discrimination	Pass Up	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
203252	5/17/2013	Discrimination	Policy (operator)	No evidence of discrimination could be determined based on investigation. No action was taken.
203283	5/17/2013	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Operator followed fare policy. No action was taken.
203286	5/17/2013	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Operator to be monitored.
203513	5/20/2013	Discrimination	Attitude (operator)	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
203879	5/24/2013	Discrimination	Forced off/Security	Complaint forwarded to supervisor to be addressed with operator per company policy.
204153	5/29/2013	Discrimination	Pass Up	No evidence of discrimination could be determined based on investigation. Operator states that he does not recall anyone running for his bus. Per customer statement they were not at bus stop. No action was taken.
204648	6/4/2013	Discrimination	Pass Up	Complaint forwarded to supervisor to be addressed with operator per company policy.

City of Phoenix Public Transit Department Title VI Complaints — November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
205705	6/15/2013	Discrimination	Attitude (operator)	Complaint forwarded to supervisor to be addressed with operator per company policy.
205780	6/17/2013	Discrimination	Policy (operator)	No evidence of discrimination could be determined based on investigation. Operator followed fare policy. No action was taken.
206286	6/22/2013	Discrimination	Pass Up	Video was reviewed and no evidence of discrimination could be found. Per video, no stops were passed that had customers waiting. No action could be taken.
206682	6/27/2013	Discrimination	Policy (oper)	No evidence of discrimination could be determined based on investigation. Operator states that he asks all customers to dispose of drinks in non-approved containers. No action was taken.
206747	6/28/2013	Discrimination	Pass Up	Operator to be monitored.
207255	7/5/2013	Discrimination	Attitude (operator)	Video was reviewed and no evidence of discrimination could be found. Per video, customer has random verbal outbursts. No action could be taken.
207336	7/8/2013	Discrimination	Attitude (operator)	Issue addressed with operator per company policy.
208405	7/22/2013	Discrimination	Attitude (operator)	Operations manager addressed issue with operator per company policy.
209150	7/29/2013	Discrimination	Forced off/Security	Operator to be monitored.
211188	8/19/2013	Discrimination	Attitude (operator)	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
211469	8/21/2013	Discrimination	Fare Policy	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
211629	8/22/2013	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. No action could be taken.

City of Phoenix Public Transit Department Title VI Complaints—November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
211792	8/24/2013	Discrimination	Policy (oper)	Issue addressed with operator per company policy.
212209	8/28/2013	Discrimination	Fare Policy	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
213047	9/6/2013	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
213682	9/13/2013	Discrimination	Attitude (operator)	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
214428	9/21/2013	Discrimination	Attitude (operator)	Complaint forwarded to supervisor to be addressed with operator per company policy.
215064	9/28/2013	Discrimination	Attitude (operator)	Issue addressed with operator per company policy.
215558	10/4/2013	Discrimination	Hazardous Operation	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
216437	10/15/2013	Discrimination	Attitude (operator)	Issue addressed with operator per company policy.
216553	10/16/2013	Discrimination	Attitude (operator)	Issue addressed with operator per company policy. Operator to be monitored.
216720	10/18/2013	Discrimination	Hazardous Operation	Issue addressed with operator per company policy.
217250	10/23/2013	Discrimination	Attitude (operator)	Issue addressed with operator per company policy.
217374	10/26/2013	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
218337	11/7/2013	Discrimination	Policy (operator)	Issue addressed with operator per company policy.

City of Phoenix Public Transit Department Title VI Complaints — November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
218510	11/9/2013	Discrimination	Attitude (operator)	Issue addressed with operator per company policy. Operator to be monitored.
219108	11/18/2013	Discrimination	Fare Policy	Issue addressed with operator per company policy.
219190	11/19/2013	Discrimination	Pass Up	Issue addressed with operator per company policy.
219668	11/25/2013	Discrimination	Attitude (operator)	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
221607	12/19/2013	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Operator was following fare policy. No action was taken.
222078	12/30/2013	Discrimination	Pass Up	No evidence of discrimination could be determined based on investigation. Customer states they were not at the bus stop. No action was
222538	1/7/2014	Discrimination	Attitude (operator)	Video was reviewed and no evidence of discrimination could be found. No action could
223970	1/24/2014	Discrimination	Pass Up	Issue addressed with operator per company
224344	1/29/2014	Discrimination	Attitude (operator)	Issue addressed with operator per company policy.
225364	2/7/2014	Discrimination	Fare Policy	Video was requested, however there was no recording available for the date and time of the reported incident. Therefore, there was insufficient evidence to determine if discrimination took place. No action could be taken.
225511	2/10/2014	Discrimination	Attitude (operator)	Video was reviewed and no evidence of discrimination could be found. No action could
226595	2/23/2014	Discrimination	Fare Policy	Video was requested, however there was no recording available for the date and time of the reported incident. Therefore, there was insufficient evidence to determine if discrimination took place. No action could be taken.

City of Phoenix Public Transit Department Title VI Complaints — November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
226844	2/26/2014	Discrimination	Attitude (operator)	Video was requested, however there was no recording available for the date and time of the reported incident. Therefore, there was insufficient evidence to determine if discrimination took place. No action could be taken.
228482	4/21/2014	Discrimination	Attitude (operator)	Video was requested, however there was no recording available for the date and time of the reported incident. Therefore, there was insufficient evidence to determine if discrimination took place. No action could be taken.
228336	3/15/2014	Discrimination	Policy (operator)	No evidence of discrimination could be determined based on investigation. Operator was following fare policy. Issue addressed with operator per company policy.
229104	3/25/2014	Discrimination	Attitude (operator)	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company policy.
229149	3/25/2014	Discrimination	Policy (operator)	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
230274	4/8/2014	Discrimination	Policy (operator)	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company policy.
231181	4/19/2014	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. Customer did not have reduced fare ID. No action could be taken.
231433	4/23/2014	Discrimination	Attitude (operator)	Video was reviewed and evidence was found to validate customer's allegations. Issue addressed with operator per company policy.
232522	5/7/2014	Discrimination	Policy (operator)	Video was reviewed and no evidence of discrimination could be found. Customer did not walk to the bus. No action could be taken.
232987	5/13/2014	Discrimination	Policy (operator)	Video was reviewed and no evidence of discrimination could be found. No action could be taken.
233128	5/15/2014	Discrimination	Policy (operator)	Operations manager addressed issue with operator per company policy.

City of Phoenix Public Transit Department Title VI Complaints — November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
235819	6/19/2014	Discrimination	Pass Up	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be taken.
236591	6/30/2014	Discrimination	Pass Up	Operations manager addressed issue with operator per company policy.
236763	7/2/2014	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. No action could be
236910	7/3/2014	Discrimination	Forced off/Security	Video was reviewed and no evidence of discrimination could be found. No action could be
237010	7/6/2014	Discrimination	Policy (operator)	Video was reviewed and no evidence of discrimination could be found. No action could be
238746	7/30/2014	Discrimination	Attitude (operator)	Video was reviewed and no evidence of discrimination could be found. Customer refused to show ID for reduced fare. No action could be
239874	8/12/2014	Discrimination	Policy (operator)	Operations manager addressed issue with operator per company policy.
240861	8/23/2014	Discrimination	Forced off/Security	Video was reviewed and evidence was found to validate customer's allegations. Issue addressed with operator per company policy.
242189	9/8/2014	Discrimination	Attitude (operator)	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company policy.
242799	9/14/2014	Discrimination	Attitude (operator)	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company policy.
245529	10/14/2014	Discrimination	Hazardous Operation	Video was reviewed and evidence was found to validate customer's allegations. Issue addressed with operator per company policy.
246876	10/28/2014	Discrimination	Pass Up	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company policy.
249683	11/25/2014	Discrimination	Attitude (operator)	Complaint forwarded to supervisor to be addressed with operator per company policy.

City of Phoenix Public Transit Department Title VI Complaints — November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
251319	12/15/2014	Discrimination	Forced off/Security	Complaint forwarded to supervisor to be addressed with operator per company
251351	12/15/2014	Discrimination	Pass Up	Per information provided by customer and investigation conducted, correct operator could not be identified. No action could be
252495	1/2/2015	Discrimination	Pass Up	Video was viewed and no evidence of discrimination could be determined based on investigation. No action to be taken.
252535	1/3/2015	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. Customer did not produce reduced fare ID. No action could be
252537	1/3/2015	Discrimination	Fare Policy	Video was reviewed and no evidence of discrimination could be found. Customer did not produce reduced fare ID. Kudos sent in from another customer regarding the incident, stating the operator was following procedure.
252538	1/3/2015	Discrimination	Pass Up	Not investigated. Addressed with provider.
252539	1/3/2015	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company
254151	1/23/2015	Discrimination	Policy (operator)	No evidence of discrimination could be determined based on investigation. Operations manager addressed issue with operator per
256403	2/15/2015	Discrimination	Attitude (operator)	Video was viewed and no evidence of discrimination could be determined based on investigation. Operator to be monitored.
257230	2/24/2015	Discrimination	Attitude (operator)	Video was reviewed and no evidence was found to validate customer's allegations. Complaint forwarded to supervisor to be addressed with operator per company policy.
257757	3/1/2015	Discrimination	Pass Up	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company

City of Phoenix Public Transit Department Title VI Complaints — November 2012-June 2015, Continued

City of Phoenix Public Transit Title VI Complaints— For Routes Operated by the City of Phoenix November 2012-June 2015				
Complaint Number	Incident Date	Subcategory	Customer Complaint	Action Taken
258586	3/10/2015	Discrimination	Fare Policy	Video was viewed and no evidence of discrimination could be determined based on investigation. Operator following company policy. No action to be taken.
261165	4/7/2015	Discrimination	Forced off/Security	Video was viewed and no evidence of discrimination could be determined based on investigation. No action to be taken.
261604	4/13/2015	Discrimination	Fare Policy	Video was viewed and no evidence of discrimination could be determined based on investigation. Operator following company policy. No action to be taken.
261792	4/14/2015	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Issue addressed with operator per company policy.
263514	5/4/2015	Discrimination	Fare Policy	No evidence of discrimination could be determined based on investigation. Operator found to be following company policy. No action to be taken.

Title VI Facilities Equity Analysis

The City of Phoenix Public Transit Department did not construct any facilities that required a Title VI Facilities Equity Analysis, per federal guidance according to FTA Circular 4702.1B, Chapter III, Section 13 — *Determination of Site or Location of Facilities*.

City of Phoenix

Title VI Service Monitoring Report

April 2015

City of Phoenix
PUBLIC TRANSIT DEPARTMENT

Title VI Service Monitoring Report
City of Phoenix Public Transit Department

Introduction

The purpose of this document is to report the results of the City of Phoenix Public Transit Department Title VI Service Monitoring Program. This program was undertaken in April 2015 to identify disparities in the level and quality of City of Phoenix Public Transit Department operated transit service provided to different demographic groups, in particular minority populations. This report also reviews the siting of transit amenities provided to different demographic groups in the City of Phoenix.

Title VI of the Civil Rights Acts of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance. Federal Transit Administration (FTA) Title VI guidelines require the City of Phoenix to conduct service monitoring at least once every three years to compare the level and quality of service provided to predominantly minority areas with service provided in other areas. This purpose of this evaluation is to ensure that service and policy changes result in equitable service.

This report will be used to evaluate bus services and the siting of transit amenities in an objective manner to identify the potential for adverse, disproportionately high, or disparate impacts to minority populations. Per FTA requirements, this report will be utilized to provide suggested corrective actions for consideration, awareness and approval by the City of Phoenix Public Transit Department Director and the City of Phoenix Council.

Guidelines

The City of Phoenix Title VI Service Monitoring Program is guided by FTA Circular 4702.1B, Chapters 4-9, the FTA Triennial Review Workshop Workbook, FY2015, Section 5 - Title VI, the Valley Metro Regional Transit Standards and Performance Measures Phase I Report, the City of Phoenix 2012 Title VI Program, the 2013 Valley Metro Title VI Procedures Manual, and the City of Phoenix Title VI Policy Major Service Change Service Equity Evaluation Procedures Manual.

The following information and documentation is presented as per FTA Triennial Review Workshop Workbook, FY2015, Section 5 - Title VI, Question 22 under the Explanation section:

Prior to October 1, 2012 grantees that provided service to geographic areas with a population of 200,000 or more and received 49 U.S.C. 5307 funding were required to monitor the transit service provided throughout the grantee's service area.

Periodic service monitoring activities were required to compare the level and quality of service provided to predominantly minority areas with service provided in other areas to ensure that the end result of policies and decision-making was equitable service. Grantees needed to implement one of four alternative monitoring procedures.

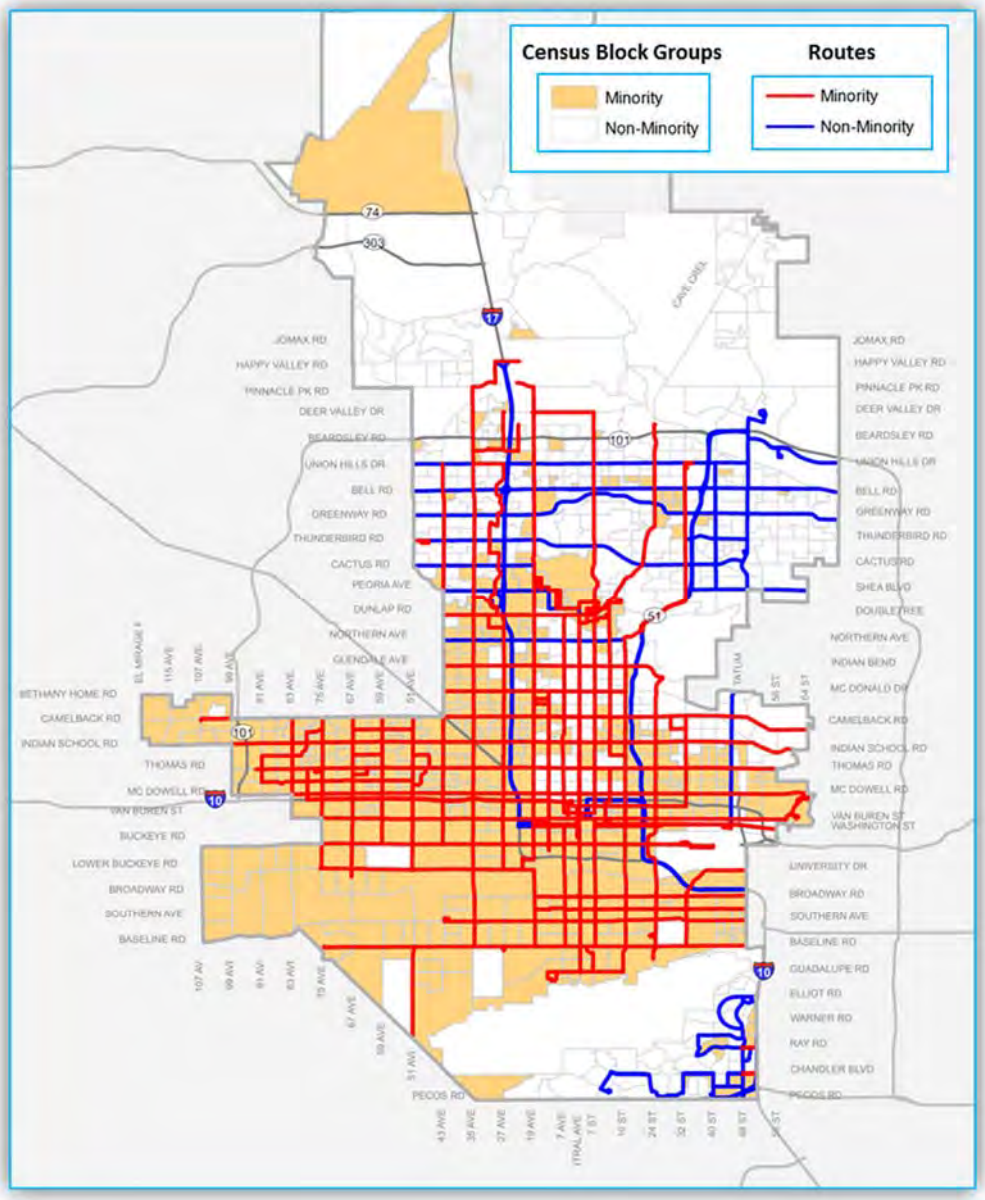
With FTA Circular 4702.1B, the requirements were updated to require grantees that operate 50 or more fixed route vehicles in peak service and are located in a UZA of 200,000 or more in population to monitor services in a specific way. Fixed route transit providers who meet the threshold shall:

- Select a sample of minority and non-minority routes from all modes of service provided. The sample shall include routes that provide service to predominantly minority areas and non-minority areas.
- Assess the performance of each minority and non-minority route in the sample for each of the transit provider's service standards and service policies.
- Compare the transit service observed in the assessment to the transit provider's established service policies and standards.
- Analyze any route that exceeds or fails to meet the standard or policy, depending on the metric measured to determine why the discrepancies exist, and take steps to reduce the potential effects.
- Evaluate their transit amenities policy to ensure amenities are being distributed throughout the transit system in an equitable manner.
- Develop a policy or procedure to determine whether disparate impacts exist on the basis of race, color, or national origin, and apply that policy or procedure to the results of the monitoring activities.
- Brief and obtain approval from the transit providers' policy-making officials regarding the results of the monitoring program.
- Submit the results of the monitoring program as well as documentation to verify the policy board's or governing entity's consideration, awareness, and approval of the monitoring results to FTA every three years as part of the Title VI program.
- Monitoring shall be conducted, at a minimum, once every three years.

City of Phoenix Public Transit Minority Population Overview

The following Title VI service and amenity analysis addresses each of the program monitoring requirements set forth by the FTA by comparing the level and quality of service provided to predominantly minority areas with service provided in other areas to ensure that the end result of policies and decision-making was equitable service.

The following Figure provides an overview of the distribution of predominately minority areas as shown with bus routes in the City of Phoenix, both operated by the City of Phoenix and bus service purchased by the City. The routes are designated as minority or non-minority bus routes.



According to the US Census American Community Survey (ACS) 2013 Five Year Estimate, the City of Phoenix has approximately 1.45 million residents. Of those 1.45 million residents, 1.25 million reside within a half mile of Phoenix local bus service. Approximately 1 million residents reside within a quarter mile of Phoenix local bus service. That equates to 86% of Phoenix residents that have access to bus service within a half mile of bus service and 68% of residents that have access to bus service within a quarter mile.

The estimated minority population in Phoenix is 799,852, or 54.9% of the overall Phoenix population. Of this number, 90.8% of the minority population in Phoenix has access to local bus service within a half mile, and 74.5% has access to local bus service within a quarter mile. See the table below.

	Population	Minority Population
Phoenix	1,457,095	799,852
1/2 Mile from Local Routes	1,253,655	726,224
1/4 Mile from Local Routes	996,373	595,788
	Population	Minority Population
1/2 Mile Percentage	86.0%	90.8%
1/4 Mile Percentage	68.4%	74.5%

Data Source: US Census ACS 2013 Five Year Estimate

In 2011 there were 42 local routes serving the City of Phoenix. Of the 42 local routes, 34 routes had a higher percentage of minority population residing within a half mile of the route than the Maricopa County average. In 2011, 41% of residents in Phoenix were minority.

As of 2014, there are 44 local bus routes servicing the City of Phoenix. Thirty-three routes have a higher percentage of minority population within a half mile of the route segment than the Maricopa County average, meeting the minority route definition.

*Refer to **Appendix A: City of Phoenix Title VI 3 Year Review 2011-2014** for a detailed breakdown to minority routes and non-minority routes.*

In 2011, Phoenix operated 21 local routes outside of the Phoenix city boundary. For the route segments outside Phoenix, 11 routes had a higher percentage of minority population within half mile of the route than the Maricopa County average.

In 2014, Phoenix operated 18 local routes outside of Phoenix boundary. Nine of the 18 route segments outside Phoenix boundary had higher percentage of minority population than the county average.

Notes on major changes between 2011 and 2014:

- Route 17A merged with Route 17 in 2014
- Route 19 is on detour between Montebello and Dunlap due to light rail construction. (Connector route provided in the construction zone)
- Route 39 had major routing change
- Route 60 had major routing change
- Route 80 had major routing change
- Route 106 had major routing change
- Route 108 did not service Phoenix in 2011
- Route 156 did not service Phoenix in 2011
- Route 122 had major routing change
- Route 251 began serving Phoenix in January 2013.
- Route 17A merged with Route 17 in 2014
- Route 80 had major routing change
- Route 106 had major routing change

1. **Select a sample of minority and non-minority routes from all modes of service provided. The sample shall include routes that provide service to predominantly minority areas and non-minority areas.**

To monitor the performance of minority routes versus non-minority routes, a sample was taken of routes by mode and their level of service, average peak load, bus stop shade availability, and on time performance..

Table 2 lists all routes servicing Phoenix by mode. According to census data, 33 of 44 local bus routes serving Phoenix are minority routes, four out of five circulators are minority routes and two of five RAPID commuter service routes are minority routes. A sample of high ridership minority routes and non-minority routes were selected for the comparison in **Table 3.**

Table 2: Bus Service in Phoenix

Local Routes			
County	43.6%	*County*	43.6%
City	54.9%	City	54.9%
Route	% Minority	Route	% Minority
1	79.3%	51	65.0%
3	79.4%	52	89.1%
7	52.4%	56	56.4%
8	59.7%	59	67.0%
10	71.6%	60	65.2%
12	54.8%	61	60.3%
13	89.7%	67	69.4%
15	57.2%	70	63.6%
16	56.3%	72	34.4%
17	71.7%	77	64.1%
19	57.9%	80	36.2%
27	57.7%	90	49.2%
29	69.6%	100	58.5%
30	45.8%	106	42.4%
35	61.3%	108	34.3%
39	25.2%	122	39.1%
41	68.0%	138	27.6%
43	61.7%	154	32.6%
44	33.3%	156	47.6%
45	56.0%	170	32.4%
48	61.3%	186	27.2%
50	58.5%	251	77.5%
	Higher Than County Average		

Circulators	
County	43.6%
City	54.9%
Route	% Minority
19C	59.9%
SMART	56.7%
MARY	87.5%
ALEX	34.8%
DASH	70.8%

RAPID	
County	43.6%
City	54.9%
Route	% Minority
CSM	84.3%
I10E	33.0%
I10W	79.0%
I17	37.2%
SR51	25.5%

Table 3: Sampled Routes

	Minority Routes	Non-Minority Routes
Local	3, 17, 29, 35, 41, 70	106, 170
Circulator	MARY	ALEX
RAPID	I10W	SR51

2. Assess the performance of each minority and non-minority route in the sample for each of the transit provider's service standards and service policies.

The City of Phoenix Public Transit Department uses the Valley Metro Regional Transit Standards and Performance Measures to evaluate its service performance.

Table ES-1 below lists Valley Metro's service standard by transit service type.

ES-1. Recommended Service Standards by Transit Service Type

Service Type	Minimum Headway or Daily Trips	Minimum Span Week / Sat / Sun	Minimum Operating Days
Dial-a-Ride (ADA)	NA	ADA service shall be available throughout the same hours and days as fixed route service	
Rural Connector	4 trips inbound / 4 trips outbound	NA	Mon – Fri
Community/Circulator	30 min	12 hrs / 0 hrs / 0 hrs	Mon – Fri
Local Bus	30 min*	16 hrs / 14 hrs / 12 hrs	Mon – Sun
Key Local Bus	15 min peak / 30 min base*	16 hrs / 14 hrs / 12 hrs	Mon – Sun
Limited Stop Peak	4 trips AM / 4 trips PM	NA	Mon – Fri
Limited Stop All-Day	Headways same as LRT, up to 2X Peak	16 hrs / 14 hrs / 12 hrs (Same as LRT)	Mon – Fri
Commuter Express	4 trips AM / 4 trips PM	NA	Mon – Fri
Light Rail Transit	12 min peak / 20 min base	18 hrs / 14 hrs / 12 hrs	Mon – Sun

**60 min early morning and late night service*

According to the Valley Metro Regional Transit Standards and Performance Measures, local routes are defined as either Local or Key Local routes. The Key Local bus route designation is based on the following metrics:

- Low-income population served
- Zero-auto ownership households served
- Past transit ridership (i.e., highest ridership routes)

The process for determining key local routes includes comparing the percentage of low-income persons and zero-auto households within a quarter-mile of each local route with the average percentage of low-income persons and zero-auto households for all local bus routes in the Valley Metro System. High volume routes are defined as routes with more than 1 million annual weekday boardings.

In addition to the transit standards listed above, the City of Phoenix Public Transit Department also monitors Maximum Load to Capacity Ratio, On Time Performance, and Percentage of Bus Stops in the City of Phoenix with Shade.

- **Maximum Load to Capacity Ratio**: Bus capacity set at 1.25X seating capacity
- **On Time Performance**: 90% on-time percentage
- **Percentage of Bus Stop with Shade**: 100%

Table 4: Sampling Route Performance

Local Route Sample

Minority Routes	Peak Headway	Avg Max Load to Capacity Ratio#	On Time Performance	% Stop with Shade
3	10	65%	91.2%	71%
17	10	75%	93.0%	79%
29	8	67%	92.1%	80%
35	15	63%	91.2%	73%
41	10	76%	91.6%	77%
70	15	61%	90.1%	70%
Non-Minority Routes				
106	30	57%	94.2%	65%
170	30	61%	95.3%	93%

Capacity set at 1.25X seating capacity

Circulator Sample

	Headway	Avg Max Load to Capacity Ratio#	On Time Performance	% Stop with Shade
MARY (Minority)	60	^	94.98%	*
ALEX (Non-Minority)	60	^	93.10%	*

*Many Circulator servicing roads do not have designated bus stops. Passenger flag down the bus to board the vehicle

Capacity set at 1.25X seating capacity

^ Circulator vehicles are not equipped with APC sensor to capture calculate passenger load

RAPID Sample

	Peak Trips	Avg Max Load to Capacity Ratio#	On Time Performance	% Stop with Shade
I10W (Minority)	15	53%	93.03%	**
SR51 (Non Minority)	13	42%	97.84%	**

** All Inbound bus stops for RAPID are Park and Rides and Transit Centers with shade

Capacity set at 1.25X seating capacity

City of Phoenix Bus Stops by Minority Status and Shade Structures

	All	Shaded	Unshaded	%Shaded	%Unshaded	
Minority Stops	2,468	1,557	911	63%	37%	100%
Non-Minority Stops	1,565	1,000	565	64%	36%	100%

3. Compare the transit service observed in the assessment to the transit provider's established service policies and standards.

Peak Headway/Peak Trip

Minority Local Routes
All sampled minority local routes are designated as Key Local Routes. The minimum standard for headway as a Key Local Bus is 15 minutes at peak hours. All six of our sampled routes equal or exceeded that standard ranging from eight to 15 minutes per trip.

Non-Minority Local Routes
All non-minority local routes are designated as Local Route. Minimum headway for Local routes is 30 minutes. Both of our sampled routes meet the headway requirement at 30 minutes.

Circulators
All circulators in the City of Phoenix are a free service. Minimum headway for circulator is 30 minutes. The headway for both Mary (Minority) and ALEX (Non-Minority) is every 60 minutes. The headway for these routes were reduced due to the recession and reduced funding available.

RAPID
Minimum daily trips for RAPID are 4 trips each in the AM and PM peak. I10W has 15 trips in the AM and PM peak. SR51 has 13 trips in the AM and PM peak.

Minimum Span
All routes sampled meet minimum span requirements.

Minimum Operating Days
All routes sampled meet minimum operating days.

Average Maximum Load to Capacity Ratio
All routes sampled are below average maximum load to capacity ratio (100%).

On Time Performance

The On Time Performance goal for the City of Phoenix is 90%. All minority local routes are above the goal of 90%. All sampled Non-Minority Local routes and circulators meet the 90% goal.

Percent Stops with Shade

None of the sampled routes has 100% shaded stop coverage. However, percentage shaded versus unshaded minority stops was 37% unshaded versus 63% shaded. Non-minority bus stops were 36% unshaded versus 64% shaded . Therefore, shaded stops are equitably distributed across both minority and non-minority stops. The City of Phoenix prioritizes the installation of shade at bus stops based on ridership demand. Ninety three percent of all Phoenix riders have shaded bus stops. Additional shaded bus stops are installed each year as funding allows.

4. **Analyze any route that exceeds or fails to meet the standard or policy, depending on the metric measured to determine why the discrepancies exist, and take steps to reduce the potential effects.**

5. **Evaluate their transit amenities policy to ensure amenities are being distributed throughout the transit system in an equitable manner.**

Routes that did not meet the minimum standard are:

Peak Headway/Peak Trip:

Circulators: Two out of 2 circulators do not meet 30 minute frequency standard. Minimum headway for circulators is 30 minutes. The headway for both Mary (Minority) and ALEX (Non-Minority) is every 60 minutes.

Prior to the recession, circulators in Phoenix all ran every 30 minutes. In 2010, circulator services were reduced to every 60 minutes as a result of reduced funding.

All Routes: One non-minority route – Route 122 – does not meet the 30 minute frequency standard.

Percent Stops with Shade: Currently none of the bus routes in Phoenix have 100% shaded bus stop coverage. However, from the analysis it was found that shaded versus non-shaded stops were equitably distributed amongst both minority versus non-minority stops.

On Time Performance: Three fixed routes – Route 50, 60 and 72 – fall below the 90 percent on-time performance standard.

Recommendations

Based upon the performance standards outlined in the Valley Metro Regional Transit Standards and Performance Measures Phase I Report, the City of Phoenix Public Transit Department recommends the following methods to address inequities identified in its service monitoring effort:

Peak Headway/Peak Trip

Funding shortfalls keep frequency at 60 minutes until the economy improves or the City of Phoenix transportation tax initiative passes in the upcoming city election scheduled for August 25, 2015.

On Time Performance

Route 50 – The City of Phoenix Public Transit Department increased frequency on the core segment of the route in January 2014. It is recommended that the transit contractor deploy articulated buses when possible.

Route 60 – This route has been impacted by the construction of the northwest extension of light rail at Bethany Home Road and 19th Avenue. Light rail construction has been ongoing since January 2013 and is scheduled to be completed in the spring of 2016. Once construction concludes, on time performance on this route will improve.

Route 72 – This route is operated by Valley Metro and only three miles on the west side of the road is in Phoenix. The City of Phoenix will work with Valley Metro to address on time performance on this route.

Percent Stops with Shade

To reach a goal of 100% shaded stops, Phoenix Public Transit Department has budgeted $300,000 annually to continue to add shade to all of its bus stops.

Summary

The City of Phoenix Public Transit Title VI Service Monitoring Report is being submitted to the City of Phoenix City Council for consideration, awareness, and approval. The results of this monitoring effort will also be submitted to the FTA per Title VI program guidance in FTA Circular 4702.1B.

City of Phoenix Public Transit Title VI service monitoring shall be conducted once every three years.

Appendix A: Title VI Three Year Review 2011-2014

All Local Routes Serving Phoenix

County	41.8%	43.6%	1.9%	County	41.8%	43.6%	1.9%
Phoenix	53.1%	54.9%	1.8%	Phoenix	53.1%	54.9%	1.8%
Route	**2011 % Minority**	**2014 % Minority**	**Difference**	**Route**	**2011 % Minority**	**2014 % Minority**	**Difference**
1	76.2%	79.3%	3.1%	**51**	63.9%	65.0%	1.1%
3	79.2%	79.4%	0.2%	**52**	86.6%	89.1%	2.4%
7	52.4%	52.4%	0.0%	**56**	50.8%	56.4%	5.6%
8	60.6%	59.7%	-0.9%	**59**	66.0%	67.0%	0.9%
10	69.0%	71.6%	2.6%	**60**	56.3%	65.2%	9.0%
12	53.0%	54.8%	1.8%	**61**	57.4%	60.3%	2.8%
13	87.0%	89.7%	2.6%	**67**	67.5%	69.4%	1.9%
15	55.9%	57.2%	1.3%	**70**	61.5%	63.6%	2.1%
16	53.9%	56.3%	2.4%	**72**	32.2%	34.4%	2.2%
17	73.5%	71.7%	-1.8%	**77**	58.9%	64.1%	5.2%
17A	72.3%	N/A	N/A	**80**	51.8%	36.2%	-15.6%
19	61.1%	57.9%	-3.2%	**90**	46.4%	49.2%	2.7%
27	55.5%	57.7%	2.2%	**100**	57.5%	58.5%	1.0%
29	68.7%	69.6%	0.9%	**108**	N/A	34.3%	N/A
30	44.3%	45.8%	1.5%	**106**	35.9%	42.4%	6.5%
35	59.7%	61.3%	1.6%	**122**	42.5%	39.1%	-3.4%
39	26.2%	25.2%	-0.9%	**138**	25.1%	27.6%	2.5%
41	65.2%	68.0%	2.8%	**154**	29.8%	32.6%	2.8%
43	59.6%	61.7%	2.1%	**156**	N/A	47.6%	N/A
44	31.7%	33.3%	1.6%	**170**	30.5%	32.4%	1.9%
45	56.6%	56.0%	-0.6%	**186**	24.9%	27.2%	2.3%
48	58.5%	61.3%	2.7%	**251**	N/A	77.5%	N/A
50	54.9%	58.5%	3.5%				

Higher Than County Average

Data Source: US Census ACS 2013 Five Year Estimate

Local Route Segments in Phoenix

County	41.8%	43.6%	1.9%	County	41.8%	43.6%	1.9%
Phoenix	53.1%	54.9%	1.8%	Phoenix	53.1%	54.9%	1.8%
Route	**2011 % Minority**	**2014 % Minority**	**Difference**	**Route**	**2011 % Minority**	**2014 % Minority**	**Difference**
1	76.3%	79.3%	3.0%	**51**	71.1%	71.8%	0.6%
3	80.6%	80.6%	0.1%	**52**	89.1%	89.2%	0.0%
7	52.4%	52.4%	0.0%	**56**	37.3%	43.5%	6.2%
8	60.6%	59.7%	-0.9%	**59**	88.3%	88.9%	0.6%
10	69.0%	71.6%	2.6%	**60**	47.1%	57.2%	10.1%
12	53.0%	54.8%	1.8%	**61**	86.1%	87.4%	1.3%
13	87.0%	89.7%	2.7%	**67**	86.5%	88.3%	1.8%
15	55.9%	57.2%	1.3%	**70**	57.4%	59.4%	2.1%
16	53.9%	56.3%	2.4%	**72**	23.8%	14.1%	-9.7%
17	77.4%	76.3%	-1.1%	**77**	79.2%	79.5%	0.3%
17A	82.4%	N/A	N/A	**80**	49.6%	40.4%	-9.2%
19	61.1%	57.9%	-3.2%	**90**	46.4%	49.2%	2.9%
27	55.5%	57.7%	2.2%	**100**	57.5%	58.5%	1.0%
29	74.9%	76.0%	1.1%	**108**	39.3%	43.3%	3.9%
30	78.4%	80.6%	2.3%	**106**	N/A	40.4%	N/A
35	59.7%	61.3%	1.6%	**122**	45.4%	39.1%	-6.3%
39	26.2%	25.2%	-0.9%	**138**	24.9%	27.4%	2.5%
41	70.3%	72.7%	2.4%	**154**	29.8%	32.9%	3.1%
43	59.6%	61.7%	2.1%	**156**	N/A	38.1%	N/A
44	31.9%	33.7%	1.8%	**170**	31.7%	N/A	N/A
45	90.2%	89.7%	-0.5%	**186**	25.1%	27.4%	2.3%
48	67.6%	70.6%	3.1%	**251**	N/A	77.5%	N/A
50	58.9%	58.1%	-0.8%				

Higher Than County Average

Phoenix Operated Routes beyond Phoenix Boundaries

County	41.8%	43.6%	1.9%
Phoenix	53.1%	54.9%	1.8%
Route	**2011 % Minority**	**2014 % Minority**	**Difference**
1	41.8%	N/A	N/A
3	72.8%	73.9%	1.1%
17	33.3%	56.2%	22.9%
17A	67.1%	N/A	N/A
29	32.1%	33.9%	1.8%
41	36.4%	38.2%	1.8%
50	53.9%	61.1%	7.2%
51	54.8%	56.4%	1.7%
59	53.7%	55.0%	1.2%
60	73.4%	75.3%	1.9%
67	56.5%	57.6%	1.1%
70	69.0%	71.4%	2.5%
80	56.4%	31.9%	-24.6%
90	47.3%	49.6%	2.3%
106	33.1%	41.0%	7.9%
122	31.5%	N/A	N/A
138	25.8%	28.1%	2.2%
154	15.3%	14.8%	-0.5%
170	23.1%	26.2%	3.1%
186	24.9%	27.5%	2.5%

Higher Than County Average

Notes on major changes between 2011 and 2014:

- Route 17A merged with Route 17 in 2014
- Route 19 is on detour between Montebello and Dunlap due to light rail construction. (Connector route provided in the construction zone)
- Route 39 had major routing change
- Route 60 had major routing change
- Route 80 had major routing change
- Route 106 had major routing change
- Route 108 did not service Phoenix in 2011

- Route 156 did not service Phoenix in 2011
- Route 122 had major routing change
- Route 251 began serving Phoenix in January 2013.
- Route 17A merged with Route 17 in 2014
- Route 80 had major routing change
  Route 106 had major routing change

Appendix B: City of Phoenix Bus Route by Minority Status and Bus Stop Shade

City of Phoenix Bus Routes by Minority Status and Bus Stop Shade

Route	Minority Route	Total Stops in PHX	Total Minority Stops	Total Non-Minority Stops	Minority Stops with Shade Structure	Non-Minority Stops with Shade Structure	% of Route Minority Stops with Shade Structure	% of Route Non-Minority Stops with Shade Structure	Difference
1	Yes	55	53	2	37	2	70%	100%	30%
3	Yes	139	133	6	94	5	71%	83%	13%
7	Yes	209	105	104	68	60	65%	58%	(7%)
8	Yes	125	73	52	49	34	67%	65%	(2%)
10	Yes	71	49	22	26	16	53%	73%	20%
12	Yes	93	60	33	37	10	62%	30%	(31%)
13	Yes	82	74	8	28	3	38%	38%	(0%)
15	Yes	52	34	18	16	11	47%	61%	14%
16	Yes	167	103	64	63	47	61%	73%	12%
17	Yes	162	130	32	101	27	78%	84%	7%
19	Yes	191	103	88	72	61	70%	69%	(1%)
27	Yes	178	109	69	59	37	54%	54%	(1%)
28	No	32	28	4	9	-	32%	0%	(32%)
29	Yes	145	116	29	90	26	78%	90%	12%
30	Yes	39	27	12	14	9	52%	75%	23%
35	Yes	194	131	63	90	51	69%	81%	12%
39	No	48	3	45	3	31	100%	69%	(31%)
41	Yes	142	110	32	87	22	79%	69%	(10%)
43	Yes	101	64	37	43	24	67%	65%	(2%)
44	No	96	20	76	12	61	60%	80%	20%
45	Yes	60	60	-	39	-	65%	0%	(65%)
48	Yes	8	8	-	7	-	88%	0%	(88%)
50	Yes	133	76	57	50	30	66%	53%	(13%)
51	Yes	54	42	12	25	5	60%	42%	(18%)
52	Yes	65	65	-	28	-	43%	0%	(43%)
56	Yes	7	4	3	2	2	50%	67%	17%
59	Yes	39	38	1	20	1	53%	100%	47%
60	Yes	54	33	21	26	12	79%	57%	(22%)
61	Yes	81	77	4	53	3	69%	75%	6%
67	Yes	43	43	-	28	-	65%	0%	(65%)
70	Yes	145	95	50	59	42	62%	84%	22%
72	No	16	-	16	-	12	0%	75%	75%
75	No	36	36	-	10	-	28%	0%	(28%)
77	Yes	95	86	9	59	8	69%	89%	20%
80	No	80	25	55	21	30	84%	55%	(29%)
83	No	39	39	-	11	-	28%	0%	(28%)
90	Yes	106	53	53	33	29	62%	55%	(8%)
100	Yes	132	73	59	39	18	53%	31%	(23%)
106	No	55	43	12	27	9	63%	75%	12%
108	No	22	6	16	5	10	83%	63%	(21%)
122	No	32	10	22	7	13	70%	59%	(11%)
138	No	93	5	88	5	59	100%	67%	(33%)
154	No	107	16	91	7	34	44%	37%	(6%)
156	Yes	3	2	1	2	1	100%	100%	0%
170	No	107	20	87	19	81	95%	93%	(2%)
186	No	94	8	86	7	72	88%	84%	(4%)
251	Yes	22	22	-	15	-	68%	0%	(68%)

Appendix C: City of Phoenix Bus Route Performance

Local Routes

Routes	Peak Headway	Avg Max Load to Capacity Ratio#	On Time Performance	% Stop with Shade
Minority Local Route				
1	30	27.3%	93.4%	71%
3	10	65.5%	91.2%	71%
7	20	52.7%	92.0%	61%
8	30	60.7%	94.8%	66%
10	30	63.3%	95.6%	59%
12	30	60.6%	95.3%	51%
13	30	37.5%	96.3%	38%
15	30	47.6%	97.1%	52%
16	30	56.7%	95.9%	66%
17	10	75.1%	93.0%	79%
19	12	54.9%	94.8%	70%
27	30	59.1%	92.3%	54%
29	8	67.4%	92.1%	80%
30	30	57.6%	93.4%	59%
35	15	62.9%	91.2%	73%
41	10	75.6%	91.6%	77%
43	30	62.4%	91.5%	66%
45	15	57.6%	92.4%	65%
48	30	32.5%	92.4%	88%
50	10	82.1%	89.9%	60%
51	30	54.6%	96.9%	56%
52	30	66.2%	95.9%	43%
56	15	49.9%	92.2%	57%
59	30	74.2%	93.3%	54%
60	30	69.8%	88.8%	70%
61	15	59.5%	93.9%	69%
67	30	77.9%	93.2%	65%
70	15	60.6%	90.1%	70%
77	30	68.8%	91.3%	71%
90	30	60.6%	96.1%	58%
100	10	91.4%	93.8%	43%
156	30	46.2%	97.0%	100%
251	60	X	91.8%	68%

Routes	Peak Headway	Avg Max Load to Capacity Ratio#	On Time Performance	% Stop with Shade
Non-Minority Local Route				
39	30	21.4%	98.8%	71%
44	30	76.9%	94.3%	76%
72	20	49.0%	89.4%	75%
80	30	67.3%	94.1%	64%
106	30	56.6%	94.2%	65%
108	30	35.0%	93.5%	68%
122	60	11.4%	97.4%	63%
138	30	40.8%	93.8%	69%
154	30	81.1%	92.3%	38%
170	30	61.1%	95.3%	93%
186	30	41.8%	97.8%	84%

 # Capacity set at 1.25X seating capacity

X No Data

Circulators

Route	Headway	Avg Max Load to Capacity Ratio#	On Time Performance	% Stop with Shade
Minority Circulator				
19C	15	^	75.7%	*
SMART	35	^	95.0%	*
MARY	60	^	95.7%	*
DASH	12	^	83.6%	*
Non-Minority Circulator				
ALEX	60	^	93.1%	*

*Many Circulator servicing roads do not have designated bus stops. Passenger flag down the bus to board the vehicle

Capacity set at 1.25X seating capacity

^ Circulator vehicles are not equipped with APC sensor to capture calculate passenger load

RAPID

Route	Peak Trips	Avg Max Load to Capacity Ratio#	On Time Performance	% Stop with Shade
Minority Route				
CSM	5	17.9%	94.9%	**
I10W	15	52.7%	93.0%	**
Non-Minority Route				
I10E	15	46.5%	97.2%	**
I17	25	58.4%	98.3%	**
SR51	13	42.0%	97.8%	**

** All Inbound bus stops for RAPID are Park and Rides and Transit Centers with shade

Capacity set at 1.25X seating capacity

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Title VI Compliance Monitoring Checklist
Federal Transit Administration Review Area

As the primary recipient of Federal Transit Administration (FTA) funding for the Phoenix/Mesa UZA, the City of Phoenix Public Transit Department is required to ensure that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participating in, or denied the benefits of, or be subject to discrimination under any program, or activity receiving federal financial assistance. Per federal requirements, primary recipients and subgrantees must ensure that federally supported transit services and related benefits are distributed in an equitable manner.

Title VI Compliance Monitoring Checklist—To be utilized in the performance of subgrantee oversight reviews

- ☐ System-wide service standards and system-wide service policies, whether existing or new (i.e., adopted by the provider since the last submission), for each specific fixed-route mode provided?
- ☐ A copy of the provider's Title VI notice to the public (and its location) that indicates the recipient complies with Title VI, and informs members of the public of the protections against discrimination afforded by Title VI?
- ☐ A copy of the provider's instructions to the public regarding how to file a Title VI discrimination complaint, including a copy of the complaint form?
- ☐ A list of any public transportation-related Title VI investigations, complaints, or lawsuits filed with the provider since the time of the last submission?
- ☐ A public participation plan that includes an outreach plan to engage minority and limited English proficient populations, as well as a summary of outreach efforts made since the last Title VI Program submission.
- ☐ A copy of the provider's plan for providing language assistance to persons with limited English proficiency, based on the DOT LEP Guidance?
- ☐ For providers that have transit-related, non-elected planning boards, advisory councils or committees, or similar bodies, the membership of which is selected by the provider, a table depicting the racial breakdown of the membership of those committees, and a description of efforts made to encourage the participation of minorities on such committees or councils?
- ☐ If the provider has constructed a facility, such as a vehicle storage facility, maintenance facility, operation center, etc., a copy of the Title VI equity analysis conducted during the planning stage with regard to the location of the facility?
- ☐ Additional information as specified in FTA C 4702.1B, Chapter IV?

[FTA C 4702.1B, Chap. III-2 and 3]

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If the transit provider operates 50 or more fixed route vehicles in peak service, does the provider's Title VI program or program also contain:

- ☐ A demographic analysis of the service area, including demographic maps and charts completed since submission of the last Title VI Program that contains demographic information and service profiles?
- ☐ Data regarding customer demographics and travel patterns, collected from
- ☐ passenger surveys?
- ☐ Results of the monitoring program of service standards and policies and any action taken, including documentation (e.g., a resolution, copy of meeting minutes, or similar documentation) to verify the board's or governing entity or official(s)'s consideration, awareness, and approval of the monitoring results?
- ☐ A description of the public engagement process for setting the "major service change policy" and disparate impact policy?
- ☐ A copy of board meeting minutes or a resolution demonstrating the board's or governing entity or official(s)'s consideration, awareness, and approval of the major service change policy and disparate impact policy?
- ☐ Results of equity analyses for any major service changes and/or fare changes implemented since the last Title VI Program submission?
- ☐ A copy of board meeting minutes or a resolution demonstrating the board's or governing entity or official(s)'s consideration, awareness, and approval of the equity analysis for any service or fare changes required by FTA C 4702.1B?

[FTA C 4702.1B, Chap. IV-3 and 4]

- ☐ Does the provider have a copy of public information on its Title VI obligations, including protections against discrimination? Has staff posted such information on the provider's Web site; on posters, comment cards, or flyers placed at stations, bus shelters, and in transit vehicles; and in public areas of the provider's office(s), including the reception desk, meeting rooms, etc.?

[FTA C 4702.1B, Chap. III-4]

Do the provider's public notices include:

- ☐ A statement that the provider operates programs without regard to race, color, and national origin?
- ☐ A description of the procedures that members of the public should follow to request additional information on the provider's nondiscrimination obligations?
- ☐ A description of the procedures that members of the public should follow to file a discrimination complaint against the provider?

[FTA C 4702.1B, Chap. III-4]

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- ☐ Has the provider integrated the content and considerations of Title VI, the Executive Order on LEP, and the DOT LEP Guidance into the established public participation plan or process (i.e., the document that explicitly describes the proactive strategies, procedures, and desired outcomes that underpin the provider's public participation activities)?

[FTA C 4702.1B, Chap. III-5]

- ☐ Has the provider taken reasonable steps to ensure meaningful access to benefits, services, information, and other important portions of their programs and activities for individuals who are limited-English proficient (LEP)?

[FTA C 4702.1B, Chap. III-6]

- ☐ Does the provider use the information obtained in the Four Factor Analysis to determine the specific language services that are appropriate?

[FTA C 4702.1B, Chap. III-7]

- ☐ The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the provider?
- ☐ The frequency with which LEP persons come in contact with the program?
- ☐ The nature and importance of the program, activity, or service provided by the provider to people's lives?
- ☐ Resources available to the provider and costs?
- ☐ In addition to the number or proportion of LEP persons served, does the provider's analysis identify, at a minimum:
- ☐ How LEP persons interact with the provider?
- ☐ Identification of LEP communities, and assessing the number or proportion of LEP persons from each language group to determine the appropriate language services for each language group?
- ☐ The literacy skills of LEP populations in their native languages, in order to determine whether translation of documents will be an effective practice?
- ☐ Whether LEP persons are underserved by the provider due to language barriers?

Does the provider's LEP Plan, at a minimum:

- ☐ Include the results of the Four Factor Analysis, including a description of the LEP population(s) served?
- ☐ Describe how the provider offers assistance services by language?
- ☐ Describe how the provider offers notices to LEP persons about the availability of language assistance?
- ☐ Describe how the provider monitors, evaluates, and updates the language access plan?
- ☐ Describe how the provider trains employees to provide timely and reasonable language assistance to LEP populations?

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- ☐ Has the transit provider developed quantitative standards for all fixed route modes of operation for the indicators listed below:
- ☐ Vehicle load expressed, for example, as the ratio of passengers to the total number of seats on a vehicle expressed in terms of peak and off-peak times?
- ☐ Vehicle headway expressed, for example, for peak and off-peak service as an increment of time?
- ☐ An on-time performance standard with a defined level of performance, expressed as a percentage?
- ☐ Service availability as a general measure of the distribution of routes within the transit provider's service area?

[FTA C 4702.1B, Chap. IV-6]

- ☐ Has the transit provider developed a policy for each of the following service indicators:
- ☐ How amenities (e.g., benches, seats, shelters, signs) are distributed and sited, and the manner transit users have equal access to those amenities?
- ☐ The process by which transit vehicles are placed into service in depots and on routes throughout the transit provider's system?

[FTA C 4702.1B, Chap. IV-6 and 7]

If the transit provider operates 50 or more fixed route vehicles in peak service, does the provider collect and analyze racial and ethnic data as described below:

- ☐ Demographic and service profile maps and charts after each decennial census and prior to proposed service reductions or eliminations?
- ☐ A demographic profile comparing minority riders and non-minority riders, and trips taken by minority riders and non-minority riders?
- ☐ Fare usage by fare type among minority users and low-income users?
- ☐ Does the provider have a Title VI complaint form? Are the form and procedure for filing a complaint available on the provider's website? [FTA C 4702.1B, Chap. III-5]
- ☐ Does the provider notify the public that they may file discrimination complaints directly with the provider? [FTA C 4702.1B, Chap. III-5]
- ☐ Are the provider's notices detailing a recipient's Title VI obligations and complaint procedures translated into languages other than English, as needed, and consistent with the DOT LEP Guidance and the recipient's language assistance plan? [FTA C 4702.1B, Chap. III-4]
- ☐ Has the provider prepared and maintained a list of alleged discrimination on the basis of race, color, or national origin? [FTA C 4702.1B, Chap. III-5]
- ☐ Does the list include: [FTA C 4702.1B, Chap. III-5]
- ☐ Active investigations conducted by entities other than FTA?
- ☐ Lawsuits and complaints naming the provider?

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- ☐ The date that the investigation, lawsuit, or complaint was filed?
- ☐ A summary of the allegation(s)?
- ☐ The status of the investigation, lawsuit, or complaint?
- ☐ Actions taken by the recipient in response, or final findings related to, the investigation, lawsuit, or complaint?

If the transit provider operates 50 or more fixed route vehicles in peak service, does the provider monitor the performance of their transit system relative to system-wide service standards and service policies (i.e., vehicle load, vehicle assignment, transit amenities, etc.) not less than every three years using the following method:

- ☐ Select a sample of minority and non-minority routes from all modes of service provided, e.g., local bus, bus rapid transit, light rail, etc.?
- ☐ Assess the performance of each minority and non-minority route in the sample for each of the transit provider's service standards and service policies?
- ☐ Compare the transit service observed in the assessment to the transit provider's established service policies and standards?
- ☐ Analyze why any discrepancies exist, and take steps to reduce the potential effects?
- ☐ Evaluate their transit amenities policy to ensure amenities are being distributed throughout the transit system in an equitable manner route in the sample for each of the transit provider's service standards and service policies?
- ☐ Develop a policy or procedure to determine whether disparate impacts exist on the basis of race, color, or national origin, and apply that policy or procedure to the results of the monitoring activities?
- ☐ Brief and obtain approval from the transit providers' policymaking officials, generally the board of directors or appropriate governing entity responsible for policy decisions regarding the results of the monitoring program?
- ☐ Submit the results of the monitoring program as well as documentation (e.g., a resolution, copy of meeting minutes, or similar documentation) to verify the board's or governing entity or official(s)'s consideration, awareness, and approval of the monitoring results to FTA every three years as part of the Title VI Program?

[FTA C 4702.1B, Chap. IV-9 and 10]

If the transit provider operates 50 or more fixed route vehicles in peak service, does the provider:

- ☐ Conduct a service equity analysis for those service changes that meet or exceed the transit provider's "major service change policy"?
- ☐ Define and analyze the change between the existing and proposed service levels that would be deemed significant?

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- ☐ Establish a threshold for determining when statistically significant disparity occurs, (maybe) as a statistical percentage of impacts borne by minority populations compared to impacts borne by non-minority populations?
- ☐ Engage the public in the decision making process to develop the major service change policy and disparate impact policy?
- ☐ Describe the dataset(s) the transit provider will use in the service equity analysis and describe what techniques and/or technologies were used to collect the data?
- ☐ Evaluate the impacts of proposed service changes on minority populations using the framework in FTA C 4702.1B, Chap. IV-14 thru IV-16?
- ☐ Evaluate proposed service and fare changes to determine whether low-income populations will bear a disproportionate burden of the changes?
- ☐ Evaluate the effects of fare changes on low-income populations in addition to Title VI-protected populations?
- ☐ Analyze any available information generated from ridership surveys indicating whether minority and/or low-income riders are disproportionately more likely to use the mode of service, payment type, or payment media that would be subject to the fare change?
- ☐ Evaluate the impacts of their proposed fare changes (either increases or decreases) on minority and low-income populations separately, using the framework in FTA C 4702.1B, Chap. IV-20 and IV-21?

[FTA C 4702.1B, Chap. IV-10 thru IV-21]

If the transit provider operates fewer than 50 fixed route vehicles in peak service, has each analytical assessment been adequate enough to evaluate the possible occurrence of any disproportionately high and adverse effects on minority as well as on low-income riders? [FTA Circular 4702.1B, Chap. IV-11 and IV-21]

If the provider determines that a disparate impact exists for a proposed fare change, does the provider explain how that change meets a substantial need that is in the public interest? Also, does the provider explain how alternative strategies would have more severe adverse effects than the preferred alternative? [Title VI Service and Fare Equity Analysis Questionnaire]

The City of Phoenix Public Transit Department –
https://www.phoenix.gov/publictransit

City of Phoenix History –
https://www.phoenix.gov/pio/city-publications/city-history

Valley Metro Overview –
http://www.valleymetro.org/overview

Valley Metro FY14 Fact Sheet –
http://www.valleymetro.org/images/uploads/Valley_Metro_Agency_Fact_Sheet__Web_May_2015.pdf

Maricopa County Department of Transportation Title VI Plan –
http://www.mcdot.maricopa.gov/technical/TitleVI/Title-VI-Plan.pdf

Arizona Department of Transportation Title VI Assurances –
http://www.azdot.gov/business/civil-rights/title-vi-nondiscrimination-program/title-vi-implementation

Maricopa Association of Governments FY 2015 … Title VI Plan –
http://www.azmag.gov/Projects/Project.asp?CMSID=3881&MID=Human Services

General Reporting Requirements for the RTC Transit Program Update Report and the Southern Nevada Metropolitan Transportation Planning Report under Title VI of the Civil Rights Act of 1964 –
http://www.rtcsnv.com/about-the-rtc/legal-notices-title-vi/

City of South Haven, MI Title VI Nondiscrimination Plan –
www.south-haven.com/pages/…/SH_Title_VI_Plan.pdf

U.S. Department of Transportation Federal Transit Administration Title VI Regulation 49 CFR 21
http://www.gpo.gov/fdsys/pkg/CFR-2009-title49-vol1/content-detail.html

U.S. Department of Transportation Federal Transit Administration Title VI Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients"
http://www.fta.dot.gov/documents/FTA_Title_VI_FINAL.doc

U.S. DOT regulations on implementing Title VI of the Civil Rights Act –
http://www.ecfr.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfr21_main_02.tpl

U.S. Department of Justice guidance on implementation of Title VI –
http://www.justice.gov/crt/about/coord/vimanual.pdf

Executive Order 12898, Environmental Justice Executive Order
http://www.fta.dot.gov/documents/Environmental_Justice_Executive_Order.doc

Executive Order 13166, Limited English Proficiency
http://www.justice.gov/crt/about/cor/Pubs/eolep.php

City of Phoenix

Title VI Policy
Major Service Change Equity Evaluation Procedures Manual

(guided by the 2015 Valley Metro Title VI Major Service Change Policy)

August 2015

City of Phoenix Public Transit Department

Introduction

The purpose of this document is to document guidelines and procedures used by the City of Phoenix Public Transit Department for evaluating potential bus service changes in the City of Phoenix (includes both service operated by the City of Phoenix and service purchased by the City of Phoenix) and bus service operated by the City of Phoenix in other jurisdictions.

Title VI of the Civil Rights Acts of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance. Federal law requires the City of Phoenix to evaluate service changes and proposed improvements at the planning and programming stages to determine whether those changes have a discriminatory impact. This manual will be utilized to evaluate bus services in an objective manner to identify the potential for adverse, disproportionately high, or disparate impacts to minority and/or low income populations.

Guidelines

The City of Phoenix Title VI Policy is guided by two documents: City of Phoenix Title VI Ordinance adopted in 1990 (Attachment 1), (Attachment 2), and Valley Metro Title VI Major Service Change Policy adopted in 2013 and revised in 2015.

City of Phoenix Title VI Ordinance

The Ordinance adopted by the Council of the City of Phoenix in 1990 stated that public comment will be solicited for all fare increases and substantial transit service changes. Substantial service changes are defined as follows:

1. When there is any change in service of:
   a. 25 percent or more of the number of transit route miles of a route; or
   b. 25 percent or more of the number of transit revenue vehicle miles of a route computed on a daily basis for the day of the week for which the change is made.

2. A new transit route is established.

3. Exceptions;
   a. Headway adjustments of up to 5 minute peak hour and 15 minute non-peak hour service.
   b. Standard seasonal variations.
   c. An emergency situation, unless the emergency change will remain in effect for more than 180 days.
   d. Experimental service changes that will be instituted for 180 days or less. If the experimental service is to remain in effect for more than 180 days and meets the requirement for a public hearing, a hearing may be held any time before the end of the 180 day period.

4. Public hearing requirements;
   a. Prior to the institution of a fare increase or substantial service change, two notices of a public hearing shall be published in a newspaper of general circulation in the urbanized area. The notices shall also be published in newspapers oriented to specific groups or neighborhoods that may be affected.
   b. The first notice shall be published at least 30 days prior to the public hearing.
   c. The notices shall contain: (1) a description of the contemplated substantial services change and/or the fare increase as appropriate, and (2) the date, time and place of the hearing.

5. Applicability to Third Party Contract Requirements.
   a. Any agency or firm which operates public transit service within the Phoenix urbanized area utilizing Federal Transit Grant Funds provided by the City of Phoenix, shall follow the above process to solicit and consider public comment prior to any fare increase or substantial service change.

Valley Metro Title VI Procedures Manual – City of Phoenix Exceptions

The City of Phoenix Public Transit Department adheres to the guidelines and procedures provided by the Valley Metro Title VI Procedures Manual with the following exceptions:

1. **Use of the Origin/Destination Survey as an Evaluation Method** - *Step 3: Socioeconomic Data Collection and Summation (Page 9 of Attachment 2).* For the demographic profile of residents near proposed service changes, the Valley Metro Title VI Procedures Manual recommends using U.S. Census Data or the Transit On-Board Origin-Destination Survey (O/D Survey). The City of Phoenix Public Transit Department will only use the U.S. Census Data as the source of demographic information for Title VI analysis. The following is the revised *Table 1. Service Change Equity Analysis Data Sources*.

Category	Action	Sub Action	Evaluation Method
Service Span	Reduction	N/A	~~O/D~~ **Census Data**
	Expansion	N/A	
Service Headway	Reduction	N/A	~~O/D~~ **Census Data**
	Expansion	N/A	
Route Length	Reduction	N/A	~~O/D~~ **Census Data**
	Expansion	N/A	Census Data
Route Alignment	Reduced Alignment	N/A	~~O/D~~ **Census Data**
	Expanded Alignment	N/A	Census Data
	Modified Alignment	Eliminated Segment(s)	~~O/D~~ **Census Data**
		Segment(s) to New Areas	Census Data
New Route	New Route	N/A	Census Data

O/D: Origin/Destination Survey Data

The Census Data accounts for the demographic characteristics of the entire population whereas the O/D survey only considers current transit riders. Utilizing U.S. Census Data for demographic information instead of using O/D survey would allow the City of Phoenix to evaluate the impact of propose changes to the transit riders and the entire population residing within a half mile of the impacted area.

2. **Title VI Analysis by Jurisdiction or Geographic Area**: *Step 5: Determination of Findings, Reporting, and Mitigation (Page 13 of Attachment 2)*
   Under 4.1.1 Special Circumstances, the Valley Metro Title VI Procedures Manual states that "an analysis of equity impacts may be considered to determine whether the proposed service modification adversely affects population residing within a specific jurisdiction or geographic area."

   The City of Phoenix does not view Title VI analysis by jurisdiction or geographic area as optional. Any Title VI equity impacts analysis by the City of Phoenix will evaluate the route as a whole and by jurisdiction. Thus an equity analysis will evaluate potential service changes for a particular route specifically by jurisdiction in addition to the overall route. This will insure maximum protection for low income and/or minority populations.

3. **Low-income Populations & Areas:**
   For clarification and emphasis, the City of Phoenix definition of Low-income Populations & Areas are as follows:
   Low-income populations are persons of whom poverty status is determined with an income of 150 percent or less of the national poverty line. "Low-income Areas" are census block groups where the percentage of population with an income of 150 percent or less of the national poverty line is higher than the percentage of population with an income of 150 percent or less of the national poverty line in the service area (Maricopa County).

4. **Census Tracts vs Census Block Groups:**
   Valley Metro Title VI Procedures Manual states that "The service area percentage is derived by selecting all of the Census tracts (or other Census geographic units) within the service area and determining the minority and low-income populations relative to the entire population of the service area. "Instead of using census tracts as the geographic unit of measurement, City of Phoenix will use census block groups. Census Block Groups are statistical divisions of census tracts. They are generally defined to contain between 600 and 3,000 people. By using the small geographic unit census block groups, the analysis can focus on geographic areas that are closer to the true service area distance of ½ mile from the transit line versus using census tracts.

5. **Service Equity Analysis Exemptions:**
   Valley Metro Title VI Procedures Manual states that major service change thresholds exclude any changes to service that are caused by the discontinuance of a temporary transit service or demonstration service that has been in effect for less than 365 days and an adjustment to service frequencies and/or span of service for new transit routes that have been in revenue service for less than 365 days.

   Based on the City of Phoenix Title VI Ordinance of 1990, exemption for major service change thresholds only exclude experimental service changes that will be instituted for 180 days or less. If the experimental service is to remain in effect for more than 180 days and meets the requirement for a public hearing, a hearing may be held any time before the end of the 180 day period.

10-7 REV. 5-82

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GREEN — CITY CLERK
WHITE — CITY ATTORNEY
BLUE — CITY MANAGER
PINK — ACCOUNTS NOTIFICATION
CANARY — DEPARTMENT NOTIFICATION
BUFF — DEPARTMENT FILE COPY

CITY CLERK DEPT

CITY OF PHOENIX, ARIZONA

REQUEST FOR COUNCIL ACTION

ALL RCA'S MUST BE IN THE CITY MANAGER'S OFFICE BY NOON ON THE TUESDAY, SEVEN DAYS BEFORE THE FORMAL CITY COUNCIL MEETING WITH ALL REQUIRED SIGNATURES. COMPLETE THIS FORM PER M.P. 1.906.

1. To the City Manager:

DATE October 3 19 90

THE FOLLOWING COUNCIL ACTION IS HEREBY REQUESTED: ☐ ORDINANCE ☒ RESOLUTION ☐ FORMAL ACTION.

CITYWIDE

RESOLUTION ESTABLISHING A FORMAL, LOCALLY ADOPTED PROCESS FOR THE SOLICITATION AND CONSIDERATION OF PUBLIC COMMENT PRIOR TO TRANSIT FARE INCREASES AND SUBSTANTIAL SERVICE CHANGES

A Resolution is requested to establish a formal, locally adopted process for the solicitation and consideration of public comment prior to transit fare increases and substantial service changes. The Urban Mass Transportation Act of 1964, as amended, requires that a formal locally adopted process be established by recipients of federal transit grant funds.

Public comment will be solicited for all fare increases and substantial transit service changes. Substantial service changes are defined as follows:

1. When there is any change in service of:

   a) 25 percent or more of the number of transit route miles of a route; or

   b) 25 percent or more of the number of transit revenue vehicle miles of a route computed on a daily basis for the day of the week for which the change is made.

2. A new transit route is established.

3. Exceptions:

   a) Headway adjustments of up to 5 minutes peak hour and 15 minutes non-peak hour service.

   b) Standard seasonal variations.

   c) An emergency situation, unless the emergency change will remain in effect for more than 180 days.

(Continued)

2. Bid Bond (Surety) Required? ☐ Yes ☒ No

3. Bond submitted by low bidder? ☐ YES ☒ NO

4. Performance Bond (Surety) Required? NO $

5. SOURCE OF FUNDS:

INDEX CODE | SUBOBJECT | PROJECT

$

☐ BUDGETED ☐ SUPPLEMENTAL ☐ CONTINGENCY

12. Recommended by:

Department/Function: Public Transit Department

Division Head Signature

Department Head Signature: W E Manske
Acting Public Transit Director

6. Emergency Clause? ☐ YES ☒ NO

IF LESS THAN FIVE COUNCIL MEMBERS ARE PRESENT:
☐ CONTINUE ONE WEEK
☒ ADOPT WITHOUT EMERGENCY CLAUSE

7. Requested by: Al Villaverde Phone #: 27242

8. WP Document #: 0209j

9. Desired Agenda Date: 10-17-90

10. Formal contract required? ☐ Yes ☒ No

Previous contract #

11. Requisition #:

13. Approved as to availability of funds:

MANAGEMENT & BUDGET DIRECTOR

14. Approved: Hallie Wurbs
Assistant to the CITY MANAGER

59

15. Council action taken:

Formal action: RESOLUTION NO. 17773 ORDINANCE NO. DATE 10/17 19 90

CONTRACT NO. 2P22

F-011
CITY CLERK'S FILE NO.

d) Experimental service changes that will be instituted for 180 days or less. If the experimental service is to remain in effect for more than 180 days and meets the requirements for a public hearing, a hearing may be held anytime before the end of the 180 day period.

4. Public hearing requirements:

a) Prior to the institution of a fare increase or substantial service change, two notices of a public hearing shall be published in a newspaper of general circulation in the urbanized area. The notices shall also be published in newspapers oriented to specific groups or neighborhoods that may be affected.

b) The first notice shall be published at least 30 days prior to the public hearing.

c) The notices shall contain: (a) a description of the contemplated substantial service change and/or the fare increase as appropriate, and (b) the time and place of the hearing.

5. Applicability to Third Party Contract Requirements

Any agency or firm which operates public transit service within the Phoenix urbanized area utilizing federal transit grant funds provided by the City of Phoenix, shall follow the above process to solicit and consider public comment prior to any fare increase or substantial service change.

RESOLUTION NO. 17773

A RESOLUTION ESTABLISHING A FORMAL, LOCALLY ADOPTED PROCESS FOR THE SOLICITATION AND CONSIDERATION OF PUBLIC COMMENT PRIOR TO TRANSIT FARE INCREASES AND SUBSTANTIAL SERVICE CHANGES.

WHEREAS, the Urban Mass Transportation Act of 1964, as amended, requires that a formal, locally-adopted process be established by recipients of Federal Transit Grant Funds;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF PHOENIX as follows:

That the following formal, locally-adopted process for the solicitation and consideration of public comment prior to transit fare increases and substantial services changes be, and it is hereby, adopted. The process for the solicitation and consideration of public comment shall be as follows:

Public comment will be solicited for all fare increases and substantial transit service changes. Substantial service changes are defined as follows:

1. When there is any change in service of:

   a. 25 percent or more of the number of transit route miles of a route; or

   b. 25 percent or more of the number of transit revenue vehicle miles of a route computed on a daily basis for the day of the week for which the change is made.

2. A new transit route is established.

0022-0-1236

3. Exceptions:

   a. Headway adjustments of up to 5 minutes peak hour and 15 minutes non-peak hour service.

   b. Standard seasonal variations.

   c. Emergency changes that will remain in effect for 180 days or less. If the emergency change is to remain in effect for more than 180 days and meets the requirements for a public hearing, a hearing shall be held at anytime prior to the end of the 180 day period.

   d. Experimental service changes that will be instituted for 180 days or less. If the experimental service is to remain in effect for more than 180 days and meets the requirements for a public hearing, a hearing shall be held at anytime prior to the end of the 180 day period.

4. Public hearing requirements:

   a. Prior to the institution of a fare increase or substantial service change, two notices of a public hearing shall be published in a newspaper of general circulation in the urbanized area. The notices shall also be published in newspapers oriented to specific groups or neighborhoods that may be affected.

   b. The first notice shall be published at least 30 days prior to the public hearing.

   c. The notices shall contain: (1) a description of the contemplated substantial services change and/or the fare increase as appropriate, and (2) the date, time and place of the hearing.

5. Applicability to Third Party Contract Requirements.

   Any agency or firm which operates public transit service within the Phoenix urbanized area utilizing Federal Transit Grant Funds provided by the City of Phoenix, shall follow the above process to solicit and consider public comment prior to any fare increase or substantial service change.

PASSED by the Council of the City of Phoenix this 17 day of October, 1990.

MAYOR

ATTEST:

Vicky Niel, City Clerk

APPROVED AS TO FORM:

ACTING City Attorney

REVIEWED BY:

Asst. City Manager

1990 OCT 17 PM 12:39
CITY CLERK DEPT.

ASM/aja/#15/10-17-90/2016A

City of Phoenix

Title VI Open House

The city of Phoenix Public Transit Department is hosting an open house to garner comments on its draft Title VI Major Service Change Equity Policy. Feedback on the policy will help to ensure that transit service is provided in an equitable manner citywide and prevents disproportionate or disparate impacts to low income and/or minority populations in the service area. The draft policy will be presented to the Phoenix City Council for consideration in September 2015.

Public Transit Department Title VI Open House
6-7 p.m. Thursday, July 30
Burton Barr Central Library, 1221 N. Central Ave.

Public Transit staff will be on hand at the open house to provide information on the city's service planning process, including required Title VI analyses, the ways that residents can provide input in that process, and how the department is planning for the future growth of transit ridership and services.

Draft City of Phoenix Title VI Major Service Change Equity Evaluation Procedures Manual

COP RCA_Ordinance for Title VI October 1990

2013 Valley Metro Title VI Evaluation Procedures Manual

You may provide comments in person at the open house, or e-mail comments to Kristy Ruiz, Phoenix Public Transit Title VI program coordinator, at kristy.ruiz@phoenix.gov.
Comments on the Title VI policy are due by 5 p.m. Friday, Aug. 7.

Title VI is a law, part of the Civil Rights Act of 1964, and assures that "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefit of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance." For transit agencies, this means people must have opportunities to provide meaningful input on how services are planned and provided, and that they receive equal benefit from the results of such planning.

City of Phoenix Public Transit Service Equity Policy Public Open House

Burton Barr Library, 6-7 p.m., July 30, 2015

Kristy Ruiz – Title VI/ADA Coordinator, City of Phoenix Public Transit

Joe Bowar – Planning Manager, City of Phoenix Public Transit

Name	Organization	Phone	E-mail
Joe BOWAR	Public Transit Dept	602 534 8383	
Leticia Coreas	Public Transit Dept.		
Kristi Grusham	Gompers Habilitation	(602) 336-0061	KGrusham@gompersCenter.org

City of Phoenix Public Transit Title VI Service Change Equity Policy – Open House

July 30, 2015

City of Phoenix

Open House Objectives

- To provide an overview of Title VI of the Civil Rights Act of 1964, and the City's obligation to comply with this legislation.
- Present federal Title VI program requirements.
- Review the City of Phoenix Service Change Equity Analysis Policy and seek public feedback.

The Civil Rights Act of 1964

The Civil Rights Act, signed into law by **President Lyndon Johnson** on July 2, 1964, prohibited discrimination in public places, provided for the integration of schools and other public facilities, and made employment discrimination illegal. This document was the most sweeping civil rights legislation since Reconstruction.

What is Title VI?

Title VI of the Civil Rights Act of 1964 asserts that "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Additional protections under Executive Order 12898 of 1994 are provided to prohibit denial of meaningful access for limited English proficient (LEP) persons.

City of Phoenix Public Transit Title VI Program Highlights

- Title VI Notice to the Public - Signed Title VI Assurance
- Complaint Procedures
- Public Participation Plan - List of public outreach
- Language Assistance Plan
- List of Complaints
- Non-elected transit boards, committees, councils w/racial makeup
- Develop system-wide service standards and policies
- Monitor transit service for equity
- Governing body approval of Plan
- **Evaluate Service and Fare Equity Changes**

City of Phoenix Public Transit Service Change Equity Policy

What is the City of Phoenix Public Transit Service Change Equity Policy?

- The Service Change Equity Policy is a set of guidelines and procedures used by the City of Phoenix Public Transit Department for evaluating potential bus service changes in the City of Phoenix.
- Federal law and City of Phoenix Ordinance requires the City of Phoenix to evaluate service changes and proposed improvements at the planning and programming stages to determine whether those changes have a discriminatory impact.
- This manual will be utilized to evaluate bus services in an objective manner to identify the potential for adverse, disproportionately high, or disparate impacts to minority and/or low income populations.

City of Phoenix Public Transit Service Change Equity Policy

Public hearing requirements

a. Prior to the institution of a fare increase or substantial service change, two notices of a public hearing shall be published in a newspaper of general circulation in the urbanized area. The notices shall also be published in newspapers oriented to specific groups or neighborhoods that may be affected.

b. The first notice shall be published at least 30 days prior to the public hearing.

c. The notices shall contain: (1) a description of the contemplated substantial services change and/or the fare increase as appropriate; and (2) the date, time and place of the hearing.

City of Phoenix Public Transit Service Change Equity Policy

This policy is guided by two documents -

- The City of Phoenix Title VI Ordinance adopted in 1990
- Valley Metro Title VI Procedures Manual adopted in 2013

City of Phoenix Public Transit Service Change Equity Policy

What qualifies as a substantial service change?

1. 25 percent or more of the number of transit route miles of a route; or
2. 25 percent or more of the number of transit revenue vehicle miles of a route computed on a daily basis for the day of the week for which the change is made.
3. A new transit route is established.

City of Phoenix Public Transit Service Change Equity Policy

Service Change Equity Evaluation Procedure

1. Notification to the Public of Proposed Transit Service Changes to Valley Metro
2. Identification of "Major Service Changes"
3. Socioeconomic Data Collection and Summation
4. Analysis Process – Disparate Impact, Disproportionate Burden
5. Determination of Findings, Reporting, and Mitigation

City of Phoenix Public Transit Service Change Equity Policy

Public Comments Due
August 7, 2015

Questions?

Kristy Ruiz

Title VI/ADA Coordinator

City of Phoenix Public Transit

kristy.ruiz@phoenix.gov

602.495.0579

Joe Bowar

Planning Manager

City of Phoenix Public Transit

602.534.8383

joseph.bowar@phoenix.gov

Overview

This section is a demographic analysis of the population within Maricopa County and Valley Metro's Service Area, which is a one-half mile radial buffer around fixed route services. In order to be familiar with the low-income and minority demographics of the area, Valley Metro uses the most current and accurate data available from the US Census Bureau and the Valley Metro Origin and Destination Survey which is conducted every three years.

The following data for minority and low-income populations were gathered from the Census Bureau's 2013 American Community Survey (ACS) 5-year estimates. Low income is defined as the population with incomes at or below 150 percent of the Department of Health and Human Services poverty level.

This section also provides a summary of the results from the 2010-2011 On-Board Survey, which is currently the best available data to observe ridership characteristics and fare usage of minority and low income populations on fixed routes within the Valley Metro network.

Census Data

Table 3 summarizes the minority and low-income populations of all the Census Tracts within the County and Valley Metro's service area, the one-half mile buffer around fixed route transit services, based on data from the 2013 American Community Survey. Map 1 below is a map of the service area, Maricopa County.

Table 3 Minority and Low-Income Population Summary

	Total Population	Minority Population	Percent Minority	Low-Income Population	Percent Low-Income
Maricopa County	3,889,161	1,624,496	41.8%	993,917	25.5%
Service Area (1/2-mile buffer around fixed route service)	3,249,332	1,475,404	45.4%	902,415	27.8%

Table 4 summarizes the racial distribution among the population within the County and service area. The total minority population within the service area is 1,624,496, 42.1% of the total population. The three largest racial groups, other than White, are Asian, Black/African American, and American Indian/Alaskan Native. The category Two or More Races represents people who consider themselves to be any combination of races, and the other categories represent people who consider themselves to be of one race. It should be noted that the category Hispanic/Latino is an ethnicity and not a race.

Table 4 Racial and Hispanic Distribution

Total Population	White	African American	American Indian	Asian	Other Races	Two or More Races	Hispanic/ Latino (Any
Maricopa County							
3,889,161	3,137,012	199,310	72,913	138,405	221,937	111,794	1,155,592
100%	80.6%	5.1%	1.9%	3.6%	5.7%	2.9%	29.7%
Service Area (1/2-mile buffer around fixed route service)							
3,249,332	2,576,408	181,225	65,879	119,649	204,000	95,519	1,060,463
100%	79.3%	5.6%	2.0%	3.7%	6.3%	2.9%	32.6%

Passenger Survey (Origins and Destinations Survey)

Between October 2010 and February 2011, Valley Metro conducted an on-board transit survey. The purpose of the survey was to better understand the travel pattern of transit users in the metropolitan Phoenix area, particularly the impact that light rail has had on regional travel patterns. The results of the survey will be used to update regional travel demand models and improve the overall quality of transit services in the region.

The survey, which included nearly 100 bus routes and all light rail stations, was the largest and most comprehensive origin and destination survey ever conducted by Valley

Metro. The goal was to obtain useable surveys from approximately 13,750 passengers. The actual number of usable surveys was 15,780. Of the useable surveys, 4,732 were completed with light rail passengers and 11,048 were completed with bus passengers. The magnitude of the survey will allow regional planners to better understand the needs and travel patterns of many specialized populations. For example, the final database contains responses from:

- more than 6,600 people who do not have cars
- nearly 1,600 people under age 18
- nearly 1,000 people age 60 or older
- more than 6,000 students, including more than 4,000 college/university students

  nearly 2,000 students in grades K-12
- more than 3,300 people living in households with incomes of less than $10,000
- per year
- more than 9,000 people who were employed full or part time
- nearly 3,000 people who were not employed but were seeking work

Major Findings

Some of the major findings from the survey include the following:

Public Transit Usage in the Metropolitan Phoenix Area Is Significant.

Ridership reports show that there are approximately 250,000 transit boardings per day or 1.25 million boardings during a typical 5-day work week. By providing residents with a reliable mode of transportation, the region's transit system is having a positive impact on traffic flow and air quality by reducing the number of trips that would have otherwise been completed by car.

Transit Users Are Using Public Transit More Often.

Among those who had been using public transit in the metropolitan Phoenix area at least two years, sixty one percent (61%) reported that they were using public transportation more often than they did two years ago. Among light rail users, nearly 80% reported that they were using public transit more often than they were two years ago before light rail began operations. The high percentage of light rail users who reported using public transit more often suggests that light rail has significantly enhanced the effectiveness of public transportation in the region.

Public Transit Is Important to the Region's Economy.

More than one-third (35%) of all transit trips represented in the survey either began or ended at work. When asked to report their employment status, more than three-fourths (78%) of those surveyed indicated that they were currently employed or seeking work. Among those seeking work, more than 30% indicated that they could not have completed their trip if public transportation were not available. Another 10% indicated that they did not know how they would have completed their trip if public transit had not been available.

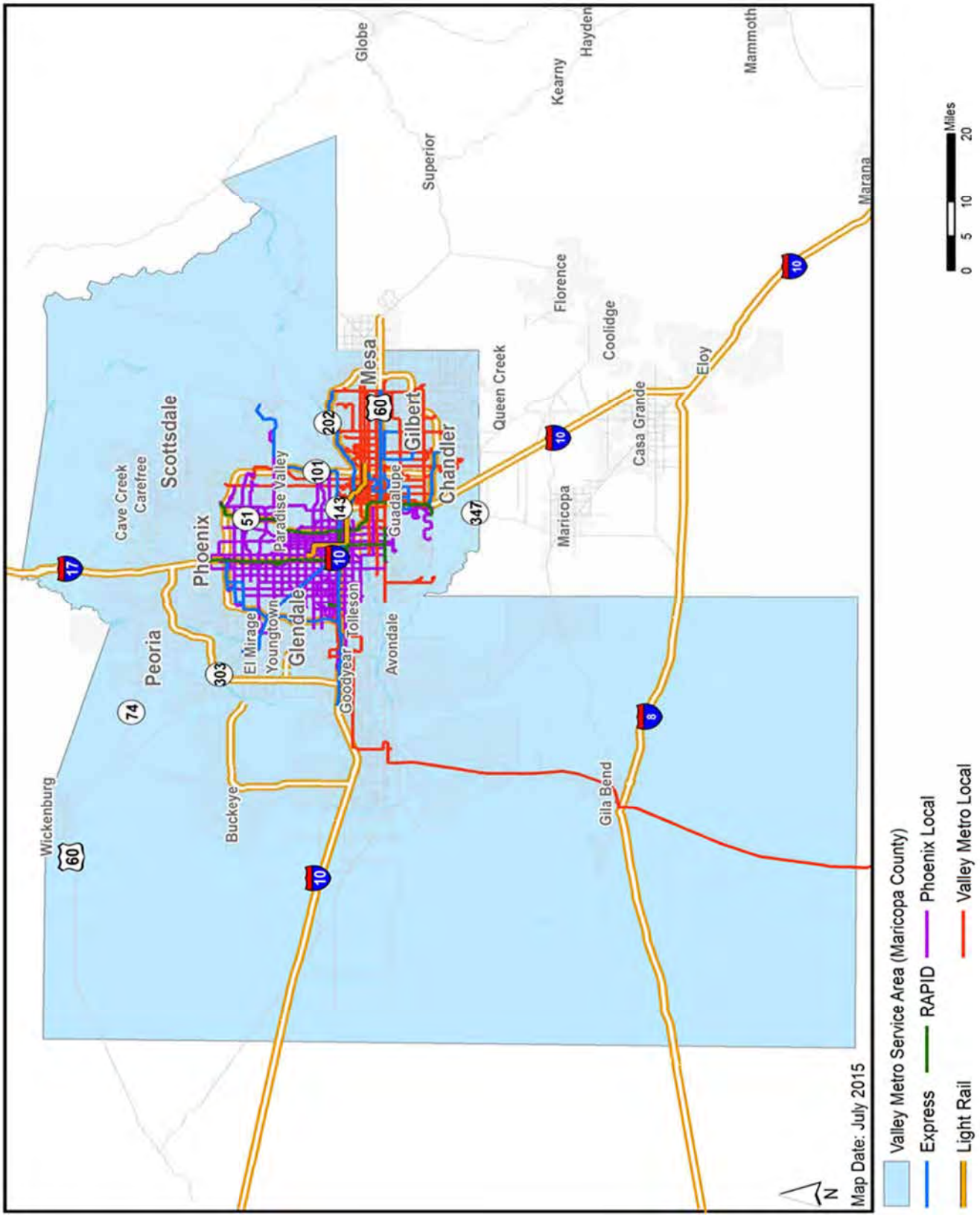
Public Transit Is Important to Education in the Region.

Thirty-nine percent (39%) of those surveyed identified themselves as students, which explains the reason that nearly one-third (31%) of all transit trips represented in the survey either began or ended at a college/university or a K-12 school. On a typical weekday, more than 70,000 school-related trips are completed on public transportation in the metropolitan Phoenix area. If public transportation were not available, 16% of the students surveyed indicated that they would not have been able to get to school. Another 8% did not know how they would have gotten to school if public transit had not been available.

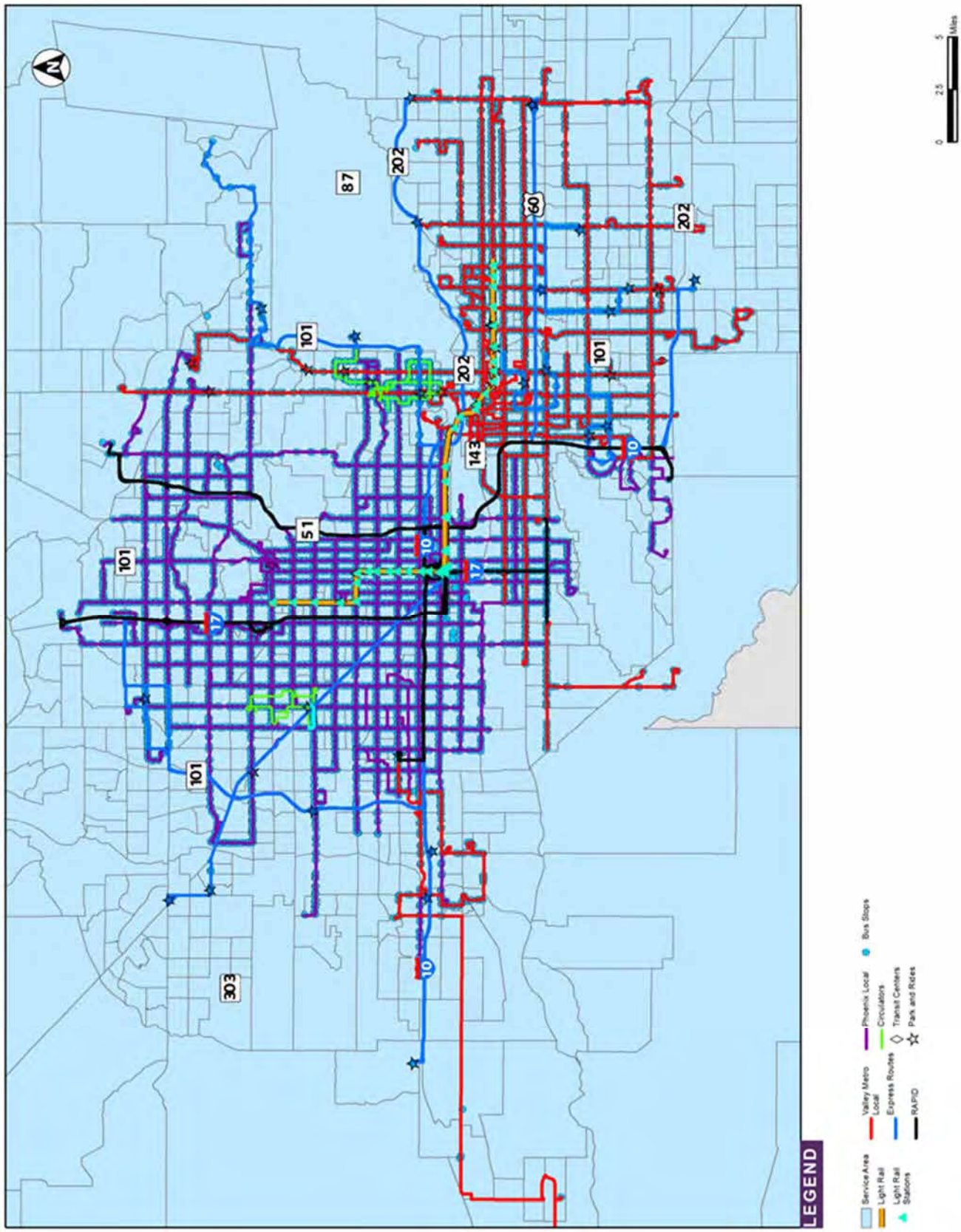
The Demographic Profile of Public Transit Riders Has Changed Since the Introduction of Light Rail.

- Transit riders are more likely to have a driver's license. Among those who began using public transit in the Phoenix area after light rail service began, 57% have a valid driver's license compared to just 43% of those who began using public transit before light rail service was available.
- Transit riders are more likely to have annual household incomes above $50,000. Among those who began using public transit in the Phoenix area after light rail service began, 22% had annual household incomes above $50,000 compared to 18% of those who began using public transit before light rail service was available.

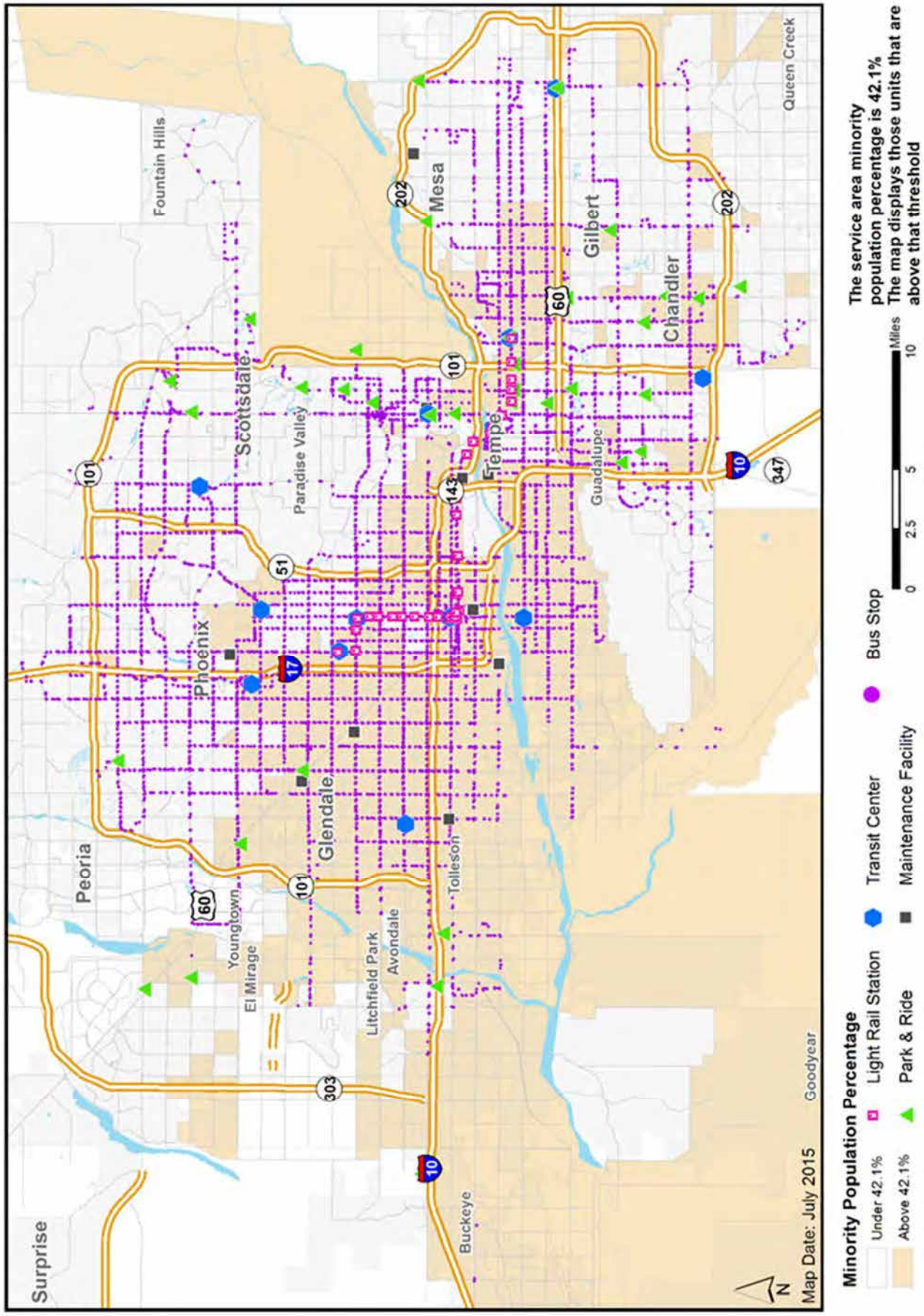
Map 1: Maricopa County and Fixed Route Transit Service



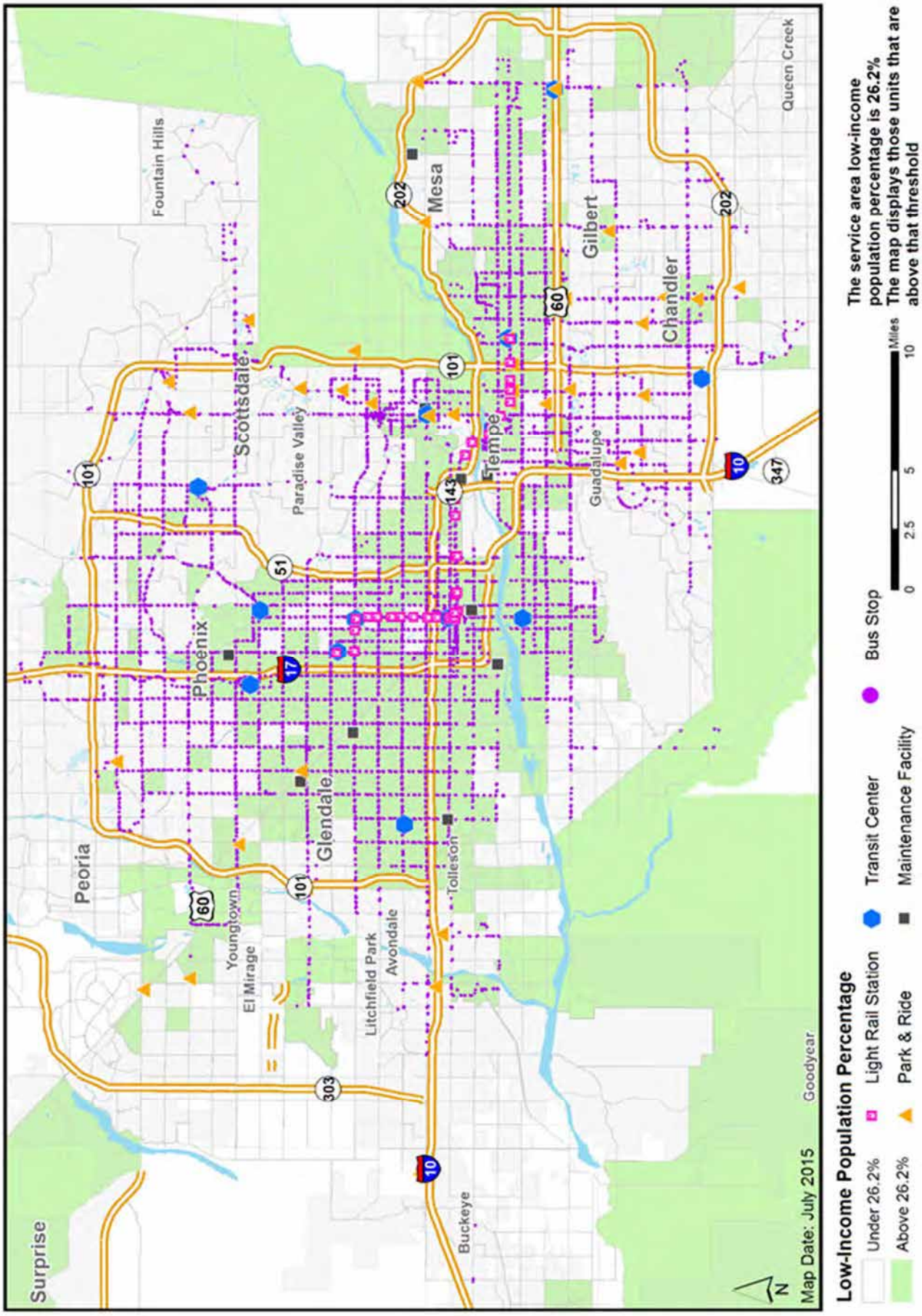
Map 2: Fixed Route Transit Service (Zoomed View)



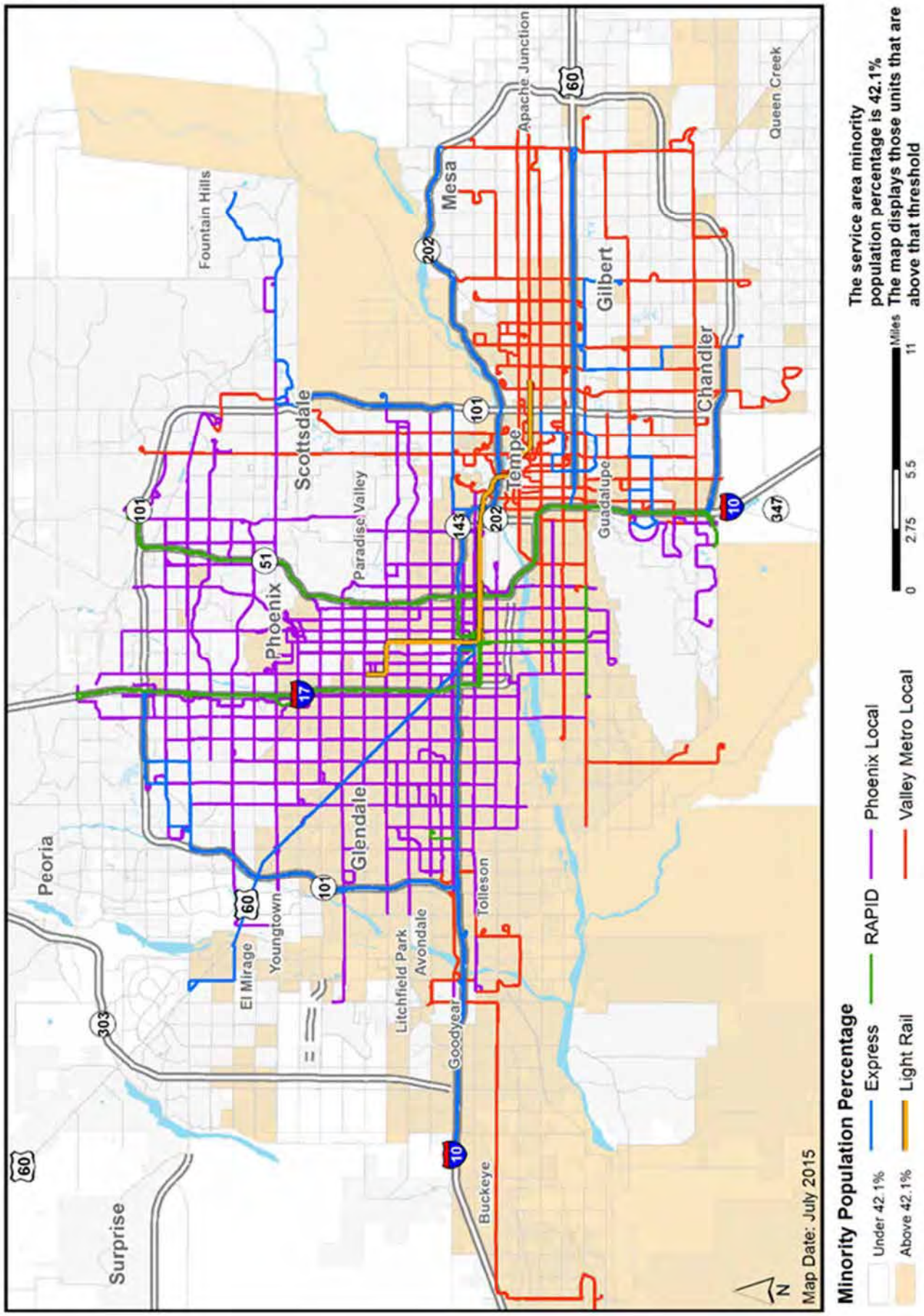
Map 3: Fixed Route Transit System Amenities and Minority Populations



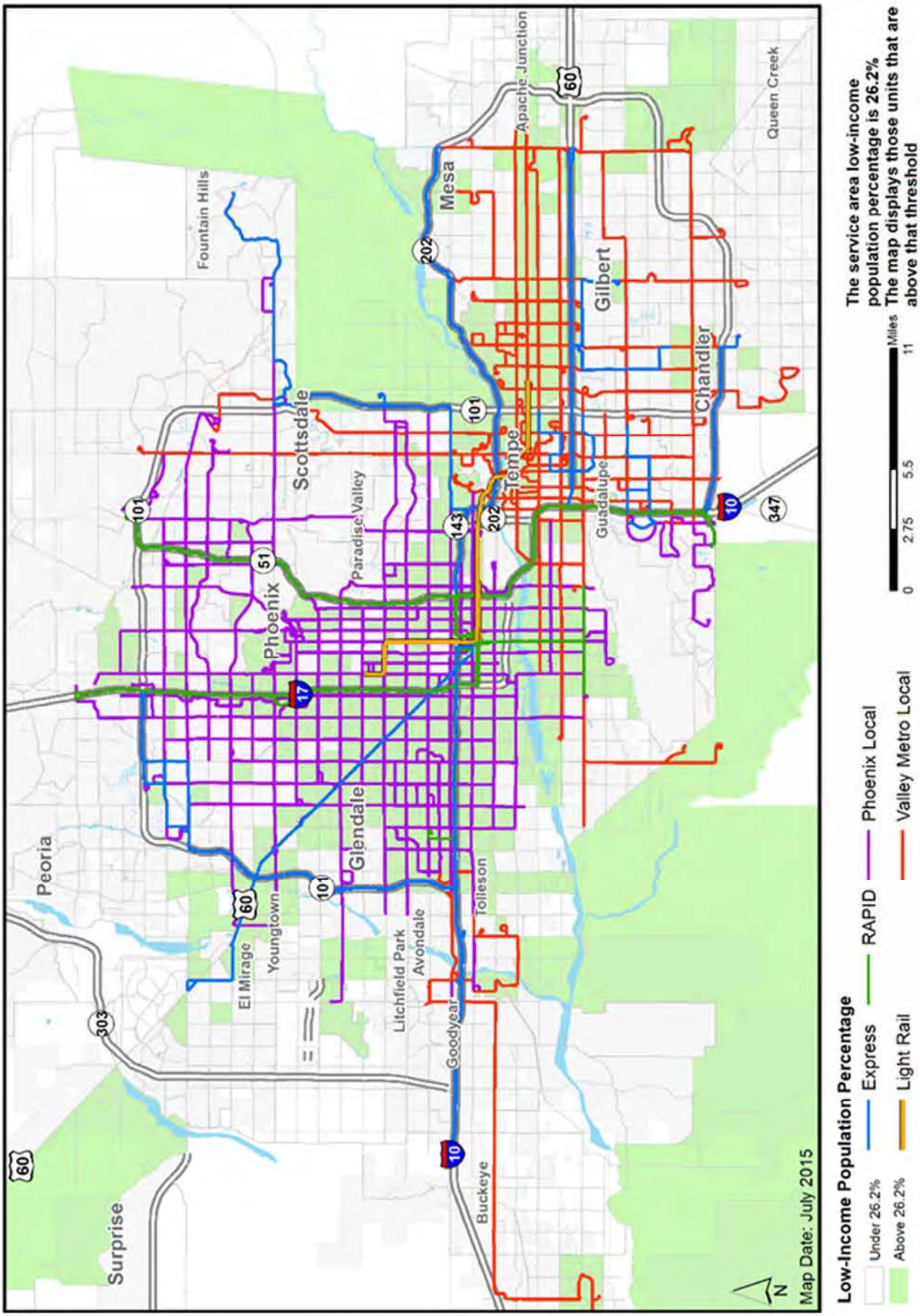
Map 4: Fixed Route Transit System Amenities and Low-Income Populations



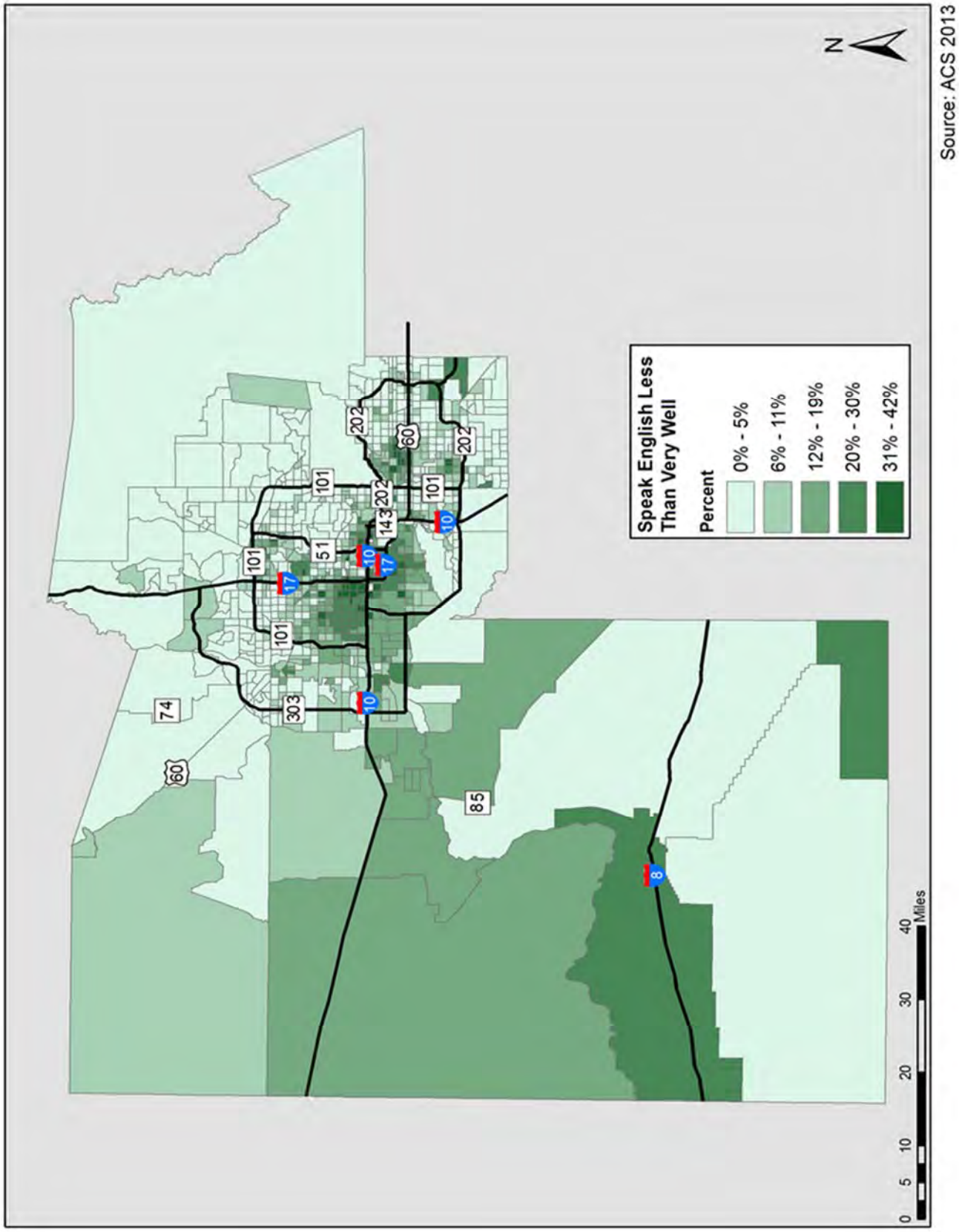
Map 5: Fixed Routes and Census Tracts by Minority Population



Map 6: Fixed Routes and Census Tracts by Low-Income Population



Map 7: Limited English Proficiency Population – Speak English Less Than Very Well



City of Phoenix Public Transit Public Involvement Activities - November 2012-June 2015 *Note: Valley Metro and the City of Phoenix Public Transit Department combined their service change public involvement efforts after July 2013*	
Event	**Date**
Fare Change Open House with Valley Metro RPTA	10/23/12
Fare Change Open House with Valley Metro RPTA	10/24/12
Fare Change Open House with Valley Metro RPTA	10/24/12
Fare Change Open House with Valley Metro RPTA	10/29/12
Fare Change Open House with Valley Metro RPTA	10/30/12
Fare Change Public Hearing with Valley Metro RPTA	11/1/12
July 2013 Service Change Open House	3/12/13
July 2013 Service Change Open House	3/13/13
July 2013 Service Change Open House	3/14/13
July 2013 Service Change Open House	3/19/13
July 2013 Service Change Open House	3/20/13
July 2013 Service Change Public Hearing	4/8/13
Transportation Plan Open House - Ocotillo Library	10/23/14
Transportation Plan Open House - Yucca Library	10/23/14
Transportation Plan Open House - Desert Sage Library	10/28/14
Transportation Plan Open House - Century Library	10/28/14
Transportation Plan Open House - Agave Library	10/29/14
Transportation Plan Open House - Burton Barr Central Library	10/29/14
Service Change Open House with Valley Metro	12/2/14
District 3 Transportation Plan Open House	1/14/15
District 4 Transportation Plan Open House	1/15/15
District 7 Transportation Plan Open House	1/20/15
District 6 Transportation Plan Open House	1/21/15
District 1Transportation Plan Open House	1/22/15
District 2 Transportation Plan Open House	1/26/15
District 5 Transportation Plan Open House	1/27/15
District 6 Transportation Plan Open House	1/28/15
Downtown Transportation Plan Open House	1/29/15
District 8 Transportation Plan Open House	2/5/15

PHOENIX CITY COUNCIL FORMAL AGENDA

Mayor Greg Stanton

Vice Mayor
District 5
Daniel Valenzuela

District 1
Thelda Williams

District 2
Jim Waring

District 3
Bill Gates

District 4
Laura Pastor

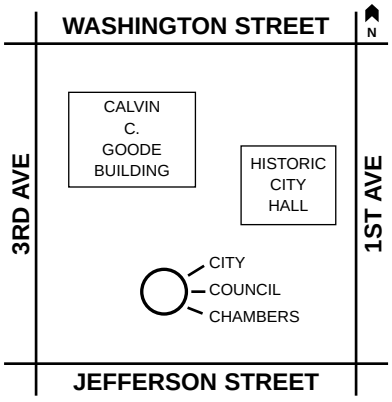
District 6
Sal DiCiccio

District 7
Michael Nowakowski

District 8
Kate Gallego

Online agendas and results available at ***www.phoenix.gov***

City Council Chambers
200 W. Jefferson St.
Phoenix, AZ 85003



WELCOME!

You are now participating in the process of representative local government. We welcome your interest and hope you and your neighbors will often attend Phoenix City Council meetings. Democracy cannot endure without an informed and involved electorate.

Phoenix operates under a Council-Manager form of local government. Policy is set by the Mayor and Council, and the City Manager, who is appointed by the Council, directs staff to carry out the policies. This separation of policy-making and policy administration is considered the most economical and efficient form of city government.

FORMAL CITY COUNCIL MEETINGS

The Council generally holds a “formal” meeting at 3:00 p.m. on Wednesdays to take official action on Ordinances, Resolutions, and other items on the agenda. Although the formal agenda is subject to change, all changes to the printed agenda will be available at least 24 hours prior to the meeting. The City Council does not meet every Wednesday, so visit https://www.phoenix.gov/cityclerk/publicmeetings or call the City Clerk Department at 602-262-6811 to confirm the date of the next formal meeting.

The formal meeting may appear to proceed very quickly, with important decisions reached with little discussion. However, the agenda is available to Council Members the Thursday prior to the meeting, giving them the opportunity to study every item and to ask questions of City staff members. If no additional facts are presented at the meeting, action may be taken without further discussion.

HOW CITIZENS CAN PARTICIPATE

The public may request to address the Council regarding an agenda item by submitting a yellow “Request to Speak” card at the meeting, or may submit a white card to state their support or opposition to an item for the record without speaking. The City Council will take action on most items on the agenda in one motion early in the meeting unless the item involves a public hearing or discussion has been requested. Individuals wishing to speak or submit their position on an item should arrive and submit a card by the beginning of the meeting, before action is taken on the item. After action has been taken on an item, cards will not be accepted.

In addition, Citizen Comments are heard beginning 15 minutes before and, if necessary, immediately after the meeting. Any member of the public will be given three minutes to address the Council on issues of interest or concern to them. Speakers will be called in the order in which requests to speak are received. As mandated by the Arizona Open Meeting Law, officials may not discuss items not on the agenda, but may direct staff to follow-up with the citizen.

If you have an individual concern involving the City, you are encouraged to contact your District Council member at 602-262-7029 or the City Manager’s Office at 602-262-4449. To reach the Mayor’s Office, call 602-262-7111. We will do everything possible to be responsive to your individual requests.

REGISTERED LOBBYISTS

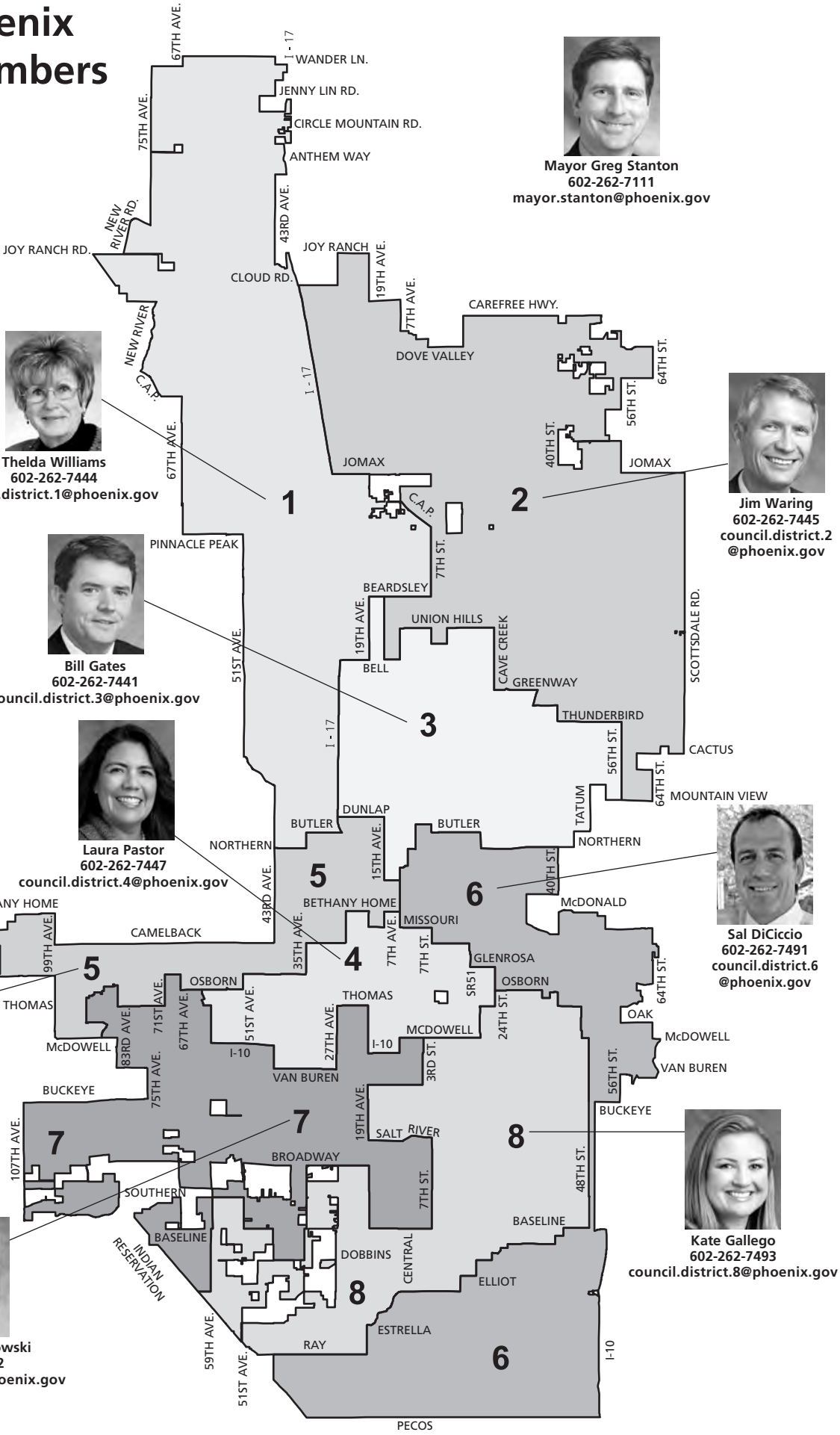
Individuals paid to lobby on behalf of persons or organizations other than themselves must register with the City Clerk prior to lobbying or within five business days thereafter and must re-register annually. If you have any questions about registration or whether or not you must register, please contact the City Clerk’s Office at 602-256-3186.

ACCESSIBILITY

An assistive listening system is available in the Council Chambers for individuals with hearing loss. Headset units are available at the entrance table in the Chambers. In addition, the City Clerk’s Office will provide sign language interpreting services. Please call (voice) 602-256-3186 or Relay 7-1-1 as early as possible to coordinate needed arrangements.

Si necesita asistencia o traducción en español, favor de llamar lo mas pronto posible a la oficina de la Secretaría Municipal de Phoenix al 602-256-3186.

City of Phoenix Council members and district boundaries



January 2014

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WEDNESDAY, SEPTEMBER 9, 2015, 3:00 P.M.
COUNCIL CHAMBERS, 200 WEST JEFFERSON
PHOENIX, ARIZONA 85003

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AGENDA FOR FORMAL MEETING
PHOENIX CITY COUNCIL
WEDNESDAY, SEPTEMBER 9, 2015, 3:00 P.M.
COUNCIL CHAMBERS, 200 WEST JEFFERSON
PHOENIX, ARIZONA 85003

INVOCATION

The invocation to be given by Chaplain Jesse Esquivel, City of Phoenix Employees for Christ.

PLEDGE

The Pledge of Allegiance to the Flag to be led by Councilwoman Thelda Williams.

ROLL CALL

MINUTES OF MEETINGS

For approval or correction, the minutes of the formal meeting of August 26, 2015. (Submitted to Mr. Gates)

For approval or correction, the minutes of the special meeting of August 26, 2015. (Submitted to Vice Mayor Valenzuela)

BOARDS AND COMMISSIONS

Mayor's appointments to Boards and Commissions.

City Council Members' appointments to Boards and Commissions.

The names of persons being recommended for appointment and the Board, Commission, or Committee to which their appointments are being recommended are available in the City Clerk’s Office, 15th Floor, Phoenix City Hall, 200 West Washington Street, not less than 24 hours prior to the meeting.

LIQUOR LICENSE APPLICATIONS

ITEM 1	DISTRICT 8	LIQUOR LICENSE APPLICATION - TORTAS EL REY

Request for a Series 12, Restaurant-All Liquor on Premises, liquor license. Arizona State Application 1207A333.

Applicant
Benito Arteaga, Agent
Tortas El Rey
1811 North 24th Street, Suite C
Zoning Classification: C-2

This request is for a new liquor license for a restaurant. This location was not previously licensed for liquor sales and does not have an interim permit.

The sixty-day limit for processing this application is September 25, 2015.

Pursuant to Arizona Revised Statutes 4-203, consideration may be given to the applicant's personal qualifications and to the location.

Other Active Liquor License Interest in Arizona
This applicant does not hold an interest in any other active liquor license in the State of Arizona.

Public Opinion
No protest or support letters were received within the 20-day public comment period.

Applicant's Statement
The applicant submitted the following statement in support of this application. Spelling, grammar, and punctuation in the statement are shown exactly as written by the applicant on the City Questionnaire:

I have the capability, reliability, and qualifications to hold a liquor license because: "I have managed restaurants with and with out a liquor licenses for over 15 years. During the course of my employment I have been trained and attended classes regaeding the liquor laws of the State of Arizona."

The public convenience requires and the best interest of the community will be substantially served by the issuance of the liquor license because: "A liquor license at our restaurant will allow us to prvide a safe family oriented restaurant where families can eat together in a pleasant enciornment. We wish to provide alcholic beverages to our clients as a compliment to their meal."

Neighborhood Stability

Liquor License Data		1 Mile	1/2 Mile
Description	Series	#	#
Microbrewery	3	1	1
Bar	6	7	1
Beer & Wine Bar	7	3	2
Liquor Store	9	3	2
Beer & Wine Store	10	11	3
Restaurant	12	5	2

Crime Data	Avg.	1 Mile	1/2 Mile
Violent Crimes	5.82	21.72	16.44
Property Crimes	45.04	84.36	78.44

Property Violation Data	Avg.	1/2 Mile
Parcels w/Violations	57	209
Total Violations	105	411

Census 2010 Data 1/2 Mile				
Block Group	2010 Population	Owner Occupied	Residential Vacancy	Persons In Poverty
1115011	2020	44%	16%	43%
1115021	1414	46%	21%	34%
1115024	1708	40%	25%	53%
1116011	1492	55%	13%	39%
1116012	1200	65%	11%	40%
1133001	2490	40%	12%	49%
1135011	2332	25%	12%	55%
1135012	1738	41%	26%	36%
Average		61%	13%	19%

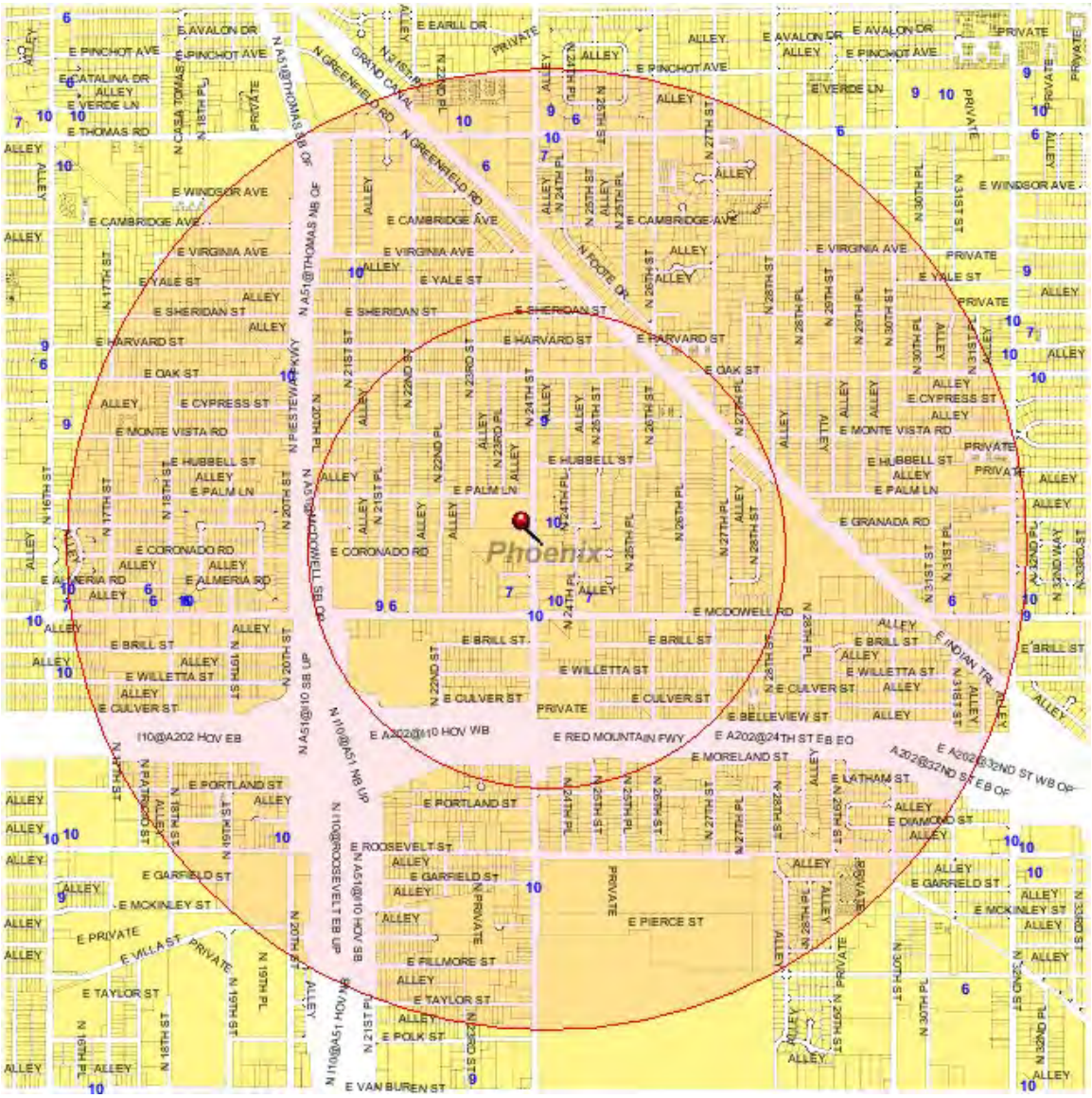
Staff Recommendation

Staff recommends approval of this application, noting the applicant must resolve any pending City of Phoenix building and zoning requirements, and be in compliance with the City of Phoenix Code and Ordinances.

A map indicating liquor licenses within a one-mile radius accompanies this item.

Responsible Department

This item is submitted by Special Assistant to the City Manager Toni Maccarone and the City Clerk Department.


Phoenix
E AVALON DR
E PINCHOT AVE
E CATALINA DR
E VERDE LN
E THOMAS RD
E WINDSOR AVE
E CAMBRIDGE AVE
E VIRGINIA AVE
E YALE ST
E SHERIDAN ST
E HARVARD ST
E OAK ST
E CYPRESS ST
E MONTE VISTA RD
E HUBBELL ST
E PALM LN
E GRANADA RD
E CORONADO RD
E ALMERIA RD
E MCDOWELL RD
E BRILL ST
E WILLETTA ST
E CULVER ST
E BELLEVIEW ST
E MORELAND ST
E LATHAM ST
E DIAMOND ST
E PORTLAND ST
E ROOSEVELT ST
E GARFIELD ST
E MCKINLEY ST
E PIERCE ST
E FILLMORE ST
E TAYLOR ST
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ORDINANCES AND RESOLUTIONS

ADMINISTRATION

ITEM 2 **CITYWIDE** **ORDINANCE S-42019 - PAYMENT ORDINANCE**

Request to authorize the City Controller to disburse funds in an aggregate amount not to exceed $4,041,122 for the purpose of paying vendors, contractors, claimants, and others, and providing additional payment authority under certain existing City contracts.

$	14,000.00	a)	To CoStar Realty Information Group, Inc., for annual payment through June 30, 2016, for subscription renewal to provide comprehensive real estate market data and information on commercial property sales, for the Business and Property Division, for the Aviation Department.
	50,000.00	b)	To Ellen MacArthur Foundation, for annual payment for October 1, 2015 through October 1, 2016, for Circular Economy 100 professional membership for the Public Works Department to access industry best practices on a global scale to implement a plan to attract key industry leaders and capital investment in waste diversion projects at the Phoenix Resource Innovation Campus. This item was unanimously recommended by the Transportation and Infrastructure Subcommittee on Tuesday, June 9, 2015, for the Public Works Department.
	39,073.00	c)	To National League of Cities, for annual payment for September 1, 2015 through August 31, 2016, for annual membership dues, for the City Council Office.
	79,650.00	d)	To Public Safety Personnel Retirement System (PSPRS), to provide employer costs of the Firefighter and Peace Officer Cancer Insurance Policy Program, for fiscal year 2015-2016. Since 1997 PSPRS has administered a Public Safety cancer insurance policy program for active and retired Fire members, for the Phoenix Fire Department.
	40,235.00	e)	To United States Conference of Mayors, for annual payment for July 1, 2015 through June 30, 2016, for annual membership dues, for the Mayor's Office.

12,500.00	f)	To Xerox Business Services, LLC, for payment for September 1, 2015 through June 30, 2016, to modify and improve the accuracy of the vehicle management system, for the Public Transit Department.

This section requests continuing payment authority, up to amounts indicated below, for the following contracts, contract extensions, and/or bids awarded:

$ 3,525,000.00	g)	To Ace Parking Management, Inc., request for additional expenditures for Agreement P-09773-15/129773 awarded by RFP 13-007, through November 30, 2015, to continue to provide parking management oversight and circulator services and management fees at the Phoenix Sky Harbor International Airport, for the Aviation Department.
9,000.00	h)	To American Pumping Service, Inc., to exercise an option to extend Agreement MW15-A0014 awarded by RFQ 15-014, through August 31, 2016, to continue to clean, service, and maintain grease traps in City facilities, for Citywide departments.
112,624.00	i)	To Arizona State Prison, Phoenix West, to exercise an option to extend Agreement 97066, with the State of Arizona Department of Corrections (ADOC) and the Correctional Services Corporation (CSC) pertaining to the Inmate Work Program, to continue to provide inmates from the Correctional Services Corporation for litter control, landscape maintenance, and other duties as assigned by the City's landfills and the 27th Avenue Solid Waste Management Facility, through July 23, 2017, for the Public Works Department.
39,000.00	j)	To Automated Access Systems, request for expenditures for new requirements contract, to provide maintenance of Parking Access Revenue Control Systems, from October 1, 2015 through March 31, 2016, for the Public Works and Phoenix Convention Center Departments.

30,000.00	k)	To Insight Services, Inc., request for additional expenditures for Agreement MW14-00041 awarded by RFQ 14-041, through December 31, 2015, to continue to provide oil and fluid diagnostic maintenance testing on City fleet vehicles, for the Public Works Department.
14,000.00	l)	To Pressure Sensitive, request for additional expenditures for Agreement MW15-00093 awarded by RFQ 15-093, for January 1, 2016 through December 31, 2017, to continue to provide reflective decals for various items, which include safety helmets and equipment, for the Fire Department.
39,000.00	m)	To Southwest LAN Connections, LLC, to exercise an option to extend Agreement MW11-0038B awarded by RFQ 11-038, through June 30, 2016, to continue to provide on-site labor, parts, and services for the Redline systems, which is a system operating with coded signal channels to provide control of remote equipment and to provide Supervisory Control and Data Acquisition (SCADA), software and hardware application system for high security remote locations, for the Water Services Department.

Notice is hereby given of the payment of funds pursuant to Phoenix City Code Section 42-13.

$	37,040.00	n)	To Clerk of The Superior Court, in trust for Mark Forti, to fund the court order of claim CV2013-015105, RE: City of Phoenix versus Mark Forti, court order allowing substitution of cash bond and withdrawal of funds, for the Law Department.
$	4,041,122.00		

Responsible Department
This item is recommended by City Manager Ed Zuercher and the Finance Department.

ITEM 3 **CITYWIDE** **ORDINANCE S-42020 - EXTEND FEDERAL REPRESENTATION CONTRACTS WITH HOLLAND & KNIGHT, LLP AND MURRAY, MONTGOMERY, & O'DONNELL**

Request to authorize the City Manager, or his designee, to extend Contract 134689 with Holland & Knight, LLP and Contract 134579 with HROD, Inc., doing business as Murray, Montgomery, & O'Donnell, for federal representation and consulting services under the guidance of the Office of Government Relations. Further request authorization for the City Controller to disburse all funds related to this item.

Both Holland & Knight and Murray, Montgomery, & O'Donnell play an important role in the City's federal legislative strategy. They help City departments identify grant opportunities and successfully pursue grant funding that supports important City services and projects. They also represent the City face-to-face with elected officials and agencies who make decisions about federal funding that directly affects crucial City programs and services.

Holland & Knight represent the City on water and environment, transportation, and public safety issues. Murray, Montgomery, & O'Donnell represent the City on community development issues. Both firms were selected to represent the City in 2012 after a competitive procurement process.

To help ensure that the City's federal legislative priorities are being advanced in a quantifiable and results-oriented way, specific performance measures will be developed and included in the contract extensions with Holland & Knight and Murray, Montgomery, & O'Donnell. Proposed performance measures will be shared with the Mayor and City Council prior to contract execution as well as made available on the Office of Government Relations website.

Following this, the Office of Government Relations will work with the Mayor and City Council, both lobbying firms, and City staff to develop the City's federal legislative priorities and will bring a proposed 2016 federal legislative agenda to the Mayor and City Council at a later date.

Contract Term

The original term of each contract was one year (October 1, 2012 to September 30, 2013) and included the option of up to four, one-year renewals. The term of the proposed amendment is one year (October 1, 2015 to September 30, 2016). If these contracts are not extended, then they will expire on September 30, 2015. The remaining one-year extension option will require approval of the Mayor and City Council.

Financial Impact
Annual expenditures under the Holland & Knight contract extension will be $240,000 ($20,000 per month), including all expenses, and will be paid by the Aviation, Water Services, and the Public Transit Departments as follows:

Department	Source of Funds	Amount
Aviation	6650111093	$155,600
Water Services	8410600000	$25,740
	8410700000	$17,160
Public Transit	6710100001	$41,500

Annual expenditures under the Murray, Montgomery, & O'Donnell contract extension will be $80,000 (approximately $6,666 per month), including all expenses, and will be paid by the Office of Government Relations.

Location
Citywide

Responsible Department
This item is recommended by Deputy City Managers Karen Peters and Mario Paniagua, Assistant City Manager Milton Dohoney, Jr., the Office of Government Relations, and the Aviation, Water Services, and Public Transit Departments.

ITEM 4 **CITYWIDE** **ORDINANCE S-42021 - ACCESS STATE OF ARIZONA CONTRACT FOR COMPUTER HARDWARE AND SUPPORT**

Request to authorize the City Manager, or his designee, to access State of Arizona Cooperative Contracts with Dell Marketing, Hitachi Data, Lenovo, Transource, NetApp, Hewlett Packard, and IBM. Further request authorization for the City Controller to disburse all funds related to this item in an aggregate amount not to exceed $8,000,000 through March 31, 2017.

These contracts are to purchase a wide variety of technology needs such as desktop computers, laptops, peripherals, accessories, tablets (notebooks, ultrabooks, and netbooks), servers, and network support, parts, and services.

Procurement Results
The State of Arizona awarded these contracts using the master contract established through a competitive bidding process by the National Association of State Procurement Officials (NASPO) consistent with the City's procurement process set forth in Phoenix City Code, Chapter 43. NASPO is made up of multiple states that negotiate volume discounts with manufacturers. The City would not have received these discounts without the combined volume of the other states.

Contract Terms
The contracts were awarded by the State of Arizona on July 1, 2015 and will end on March 31, 2017, with the option for three, one-year extensions. The City would be able to access this contract through March 31, 2020. Staff will come back to City Council to request approval to fund the three option years.

Financial Impact
Expenditures against this contract shall not exceed $8,000,000 (including applicable taxes) with estimated annual expenditures of $4,000,000. Funds are available in City departments' budgets with the most expected usage from the Information Technology Services, Police, Water Services, and Aviation Departments.

Responsible Department
This item is recommended by City Manager Ed Zuercher, Assistant City Manager Milton Dohoney, Jr., and the Finance and Information Technology Services Departments.

ITEM 5	**CITYWIDE**	**ORDINANCE S-42022 - RFP 15-183 - STRATEGIC GOAL SETTING CONSULTANT SERVICES**

Request authorization for the City Manager, or his designee, to enter into a contract with The Mejorando Group to provide strategic planning consultant services for the City. The contract term is one year and two additional option years starting October 1, 2015 and ending September 30, 2016. The contract term may be amended as deemed necessary or appropriate by the City Manager, or his designee. Further request authorization for the City Controller to disburse all funds related to this item.

The consulting services provided by The Mejorando Group will be conducted in two phases. The first phase will include working with the Mayor and City Council to develop organizational priorities and strategic goal setting. The second phase will entail working with executive leadership to facilitate priority implementation planning. Benchmarks and milestones will also be included to measure the City's progress over the course of the next five years.

The Mejorando Group has facilitated strategic plans for large municipal governments including the City of San Antonio, Texas, and the City of Chandler, Arizona in addition to experience providing change and organizational effectiveness services for the City of Austin, Texas, and San Jose, California.

Procurement Results
RFP 15-183 was conducted in accordance with Administrative Regulation 3.10. There were four offers received by the Procurement Division on July 10, 2015.

The proposals were scored by a five-member evaluation committee based on the following criteria: Knowledge/Expertise/Qualifications of Firm/Personnel (300 points); Method of Approach (250 points); Fees and Expenses (200 points); Proposal Response (150 points); and References (100 points). The top three proposers and their scores are as follows:

Company Name	Overall Rating	Annual Expenditures
The Mejorando Group	795 points	$58,250.00
Management Partners	643 points	$134,500.00
Carla Carter and Associates, Inc.	630 points	$45,380.00

The Deputy Finance Director recommends that the offer from The Mejorando Group be accepted as the highest scored, responsive and responsible offeror that was advantageous to the City. Although Carla Carter and Associates, Inc. offered the lowest overall cost, the evaluation committee concluded their proposal did not score high enough in other key criteria to be considered.

Contract Term
The initial one-year contract term shall begin on or about October 1, 2015 and end on September 30, 2016. Provisions of the contract will include an option to extend the term of the contract up to two additional years, in one-year increments, if deemed necessary, which can be exercised by the City Manager, or his designee.

Financial Impact
The anticipated cost for this project is $58,250. If additional projects are deemed necessary, the aggregate contract value, including all option years, will not exceed $174,750. Funds are available in the City Manager's Office budget.

Location
Citywide

Responsible Department
This item is recommended by City Manager Ed Zuercher and the Finance Department.

ITEM 6 **CITYWIDE** **ORDINANCE S-42023 - CONTRACT AWARD FOR REAL PROPERTY ACQUISITION SERVICES**

Request authorization for the City Manager, or his designee, to execute contracts with Acquisition Sciences, Ltd.; Tierra Right of Way Services, Ltd.; and Universal Field Services, Inc. Further request authorization for the City Controller to disburse funds in an amount not to exceed $900,000 over the initial two-year term, with an estimated annual expenditure of $450,000.

This contract will be to provide the Finance Department, Real Estate Division with Real Property Acquisition Services during the contract period beginning October 1, 2015 through September 30, 2017. The Real Estate Division contracts with property acquisition firms for assistance in acquiring real property rights, project management, and property management services as requested by City departments.

Procurement Results

The Finance Department released a Request for Proposals (RFP) for Real Property Acquisition Services on July 2, 2015. The RFP was conducted in accordance with the City's procurement code. Seven proposals were received in response to the RFP, six of which were deemed responsive to the requirements of the RFP.

The Evaluation Panel evaluated submittals according to the following criteria set forth in the RFP: government acquisition experience within Arizona (30 percent), ability to provide services in accordance with project schedules (30 percent), responsiveness to the requirements of the RFP (25 percent), and proposed fees and expenses (15 percent). The evaluation panel determined Acquisition Sciences, Ltd.; Tierra Right of Way Services, Ltd.; and Universal Field Services, Inc. to be the most qualified proposers.

Proposer	Total Points
Acquisition Sciences, Ltd.	994
Tierra Right of Way	979
Universal Field Services	960
Consultant Engineering, Inc.	948
O.R. Colan Associates	829
Overland, Pacific and Cutler	692

Contract Term

The contract term will be two years, with three options to extend of one year each.

Financial Impact

The contract value shall not exceed $900,000 for the initial two-year term. Funds are available in various departments' budgets.

Responsible Department

This item is recommended by City Manager Ed Zuercher and the Finance Department.

COMMUNITY SERVICES

ITEM 7	DISTRICTS 1, 4, 5, 7, AND 8	ORDINANCE S-42024 - APPLY FOR, ACCEPT, AND DISBURSE RESILIENCE AMERICORPS GRANT

Request retroactive authorization for the City Manager, or his designee, to apply for Cities of Service Resilience AmeriCorps grant. Further request authorization for the City Treasurer to accept, and for the City Controller to disburse, all funds related to this item.

During the Council recess, the City of Phoenix was encouraged by Cities of Service to apply for a Resilience AmeriCorps grant, which was created to build the capacity of cities to adapt, survive, and thrive in the face of future shocks and ongoing stresses related to climate change, with a focus on low-income neighborhoods. The application deadline was July 31, 2015.

The grant requires a focus on low-income residents and vulnerable neighborhoods. To meet this requirement, staff selected the West Phoenix Revitalization Area and Council District 8 as the areas of focus based on data related to lack of infrastructure and vulnerabilities to climate change. The results of these focus areas will inform the development of the citywide resiliency plan.

The Rockefeller Foundation, the Corporation for National and Community Service (CNCS), the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the National Oceanic and Atmospheric Administration (NOAA) are partnering with Cities of Service on this initiative.

Financial Impact
This grant includes: financial capital in the amount of $25,000 to support program implementation; human capital from two AmeriCorps VISTA members for two years; and technical assistance and support from Cities of Service, valued at $100,000, over two years. The grant will support development of a comprehensive climate change vulnerability assessment and resiliency plan.

Responsible Department
This item is recommended by Deputy City Managers Deanna Jonovich and Karen Peters, the Sustainability Office, the Volunteer Phoenix Program, and Office of Emergency Management.

PUBLIC SAFETY

ITEM 8 **CITYWIDE** **ORDINANCE S-42025 - AMEND CONTRACT 131679 WITH G FORCE GLOBAL TECHNOLOGIES**

Request authorization for the City Manager, or his designee, to amend Contract 131679 with G Force Global Technologies (G Force). This request increases the contract amount by $184,800 for continued support of the Police Automated Computerized Entry (PACE) system. Authorization is also requested for the City Controller to disburse the funds.

Funding is requested for G Force to continue PACE system support for up to six months, or up to 30 days following deployment of the new Police Records Management System (RMS) that will replace PACE. RMS is expected to be deployed by early October 2015. G Force's PACE system support will be discontinued up to 30 days after the actual RMS deployment date. The total funds expended will be limited to support services received from G Force for an amount not to exceed $184,800.

Operation of PACE, the Police Department's legacy electronic records management system, is necessary until it can be fully replaced by RMS. PACE support is required for the system to continue operating within normal parameters and to ensure uninterrupted service to system users.

Financial Impact
With this amendment, the total expenditures for Contract 131679 will not exceed $1,499,849. Funds are available in the Police Department's Capital Improvement Program budget using Police PACE Upgrade funds.

Responsible Department
This item is recommended by Assistant City Manager Milton Dohoney Jr. and the Information Technology Services and Police Departments.

ITEM 9 **CITYWIDE** **ORDINANCE S-42026 - STRAND ANALYTICAL LABORATORIES, CT133927, FOR DNA OUTSOURCING**

Request authorization for the City Manager, or his designee, to authorize additional expenditures for CT133927 with Strand Analytical Laboratories in the amount of $421,000 for the Police Department. Further request authorization for the City Controller to disburse all funds related to this item.

The Forensic Biology Section of the Police Laboratory Services Bureau received grant funds to facilitate the analysis of backlogged DNA cases through case outsourcing. For this purpose, the 2013 DNA Backlog Reduction, the 2014 DNA

Backlog Reduction, and the 2014 Solving Cold Cases with DNA Grant Funds in the amount of $421,000 are budgeted. The Phoenix Police Department has been partnering with Strand Analytical Laboratories for the purposes of outsourcing DNA backlogged cases since 2000 and this practice has proven to be very successful.

Contract Term
The contract with Strand Analytical Laboratories was approved by City Council on May 6, 2012, with Request for Council Action 68690, Ordinance S-38807. The contract commenced on June 1, 2012, with a term of two years with two options to extend for one year each. The department has exercised the options to extend through May 31, 2016.

Financial Impact
Expenditures will not exceed $421,000 over the remaining life of the contract. Funds are available in the Police Department's operating budget.

Responsible Department
This item is recommended by Assistant City Manager Milton Dohoney, Jr. and the Police Department.

TRANSPORTATION AND INFRASTRUCTURE

ITEM 10 **DISTRICT 2** **ORDINANCE S-42027 - DEDICATION OF RIGHT-OF-WAY OVER A CITY-OWNED PARCEL OF LAND - SONORAN DESERT DRIVE AND NORTH VALLEY PARKWAY**

Request the City Council dedicate to public use for right-of-way purposes a vacant land parcel owned by the City of Phoenix, and order that the ordinance be recorded. The parcel is part of the Sonoran Desert Drive Street improvement project.

The City of Phoenix acquired this land via Warranty Deed on the southeast corner as part of the Sonoran Desert Drive Street improvement project. However, when the land was acquired, it was never dedicated to public use for roadway purpose, making it private property owned by the City as opposed to right-of-way to be used for public use. This authorization will allow the land to be correctly dedicated to public use for right-of-way purposes.

Financial Impact
There is no financial impact to the City as a result of this transaction.

Location
The City-owned parcel is located at the southeast corner of the Sonoran Desert Drive and North Valley Parkway alignment adjacent to the Sonoran Desert Drive right-of-way.

Responsible Department
This item is recommended by City Manager Ed Zuercher, Deputy City Manager Mario Paniagua, and the Finance and Street Transportation Departments.

ITEM 11 **CITYWIDE** **ORDINANCE S-42028 - AMEND CONTRACT 120475 WITH MV TRANSPORTATION FOR OPERATION OF PHOENIX DIAL-A-RIDE AND AHWATUKEE CIRCULATOR SERVICES**

Request an ordinance authorizing the City Manager, or his designee, to enter into a contract change order to Agreement 120475 with MV Transportation, Inc. to increase reservationist hours to meet amended telephone performance standards. The additional two full-time and one part-time reservationists will result in a cost of $83,500 for fiscal year 2016. Additionally, authorizing the City Controller to disburse funds in accordance therewith.

Agreement 120475 with MV Transportation, Inc. was originally approved by City Council on November 1, 2006. MV Transportation, Inc. operates the Public Transit Department's Dial-A-Ride service and Ahwatukee Neighborhood Circulator. A recent Federal Transit Administration triennial review found that the length of time clients waited on hold was too long while seeking to request trip reservations. The request to increase the number of reservationists is in response to these findings to reduce the length of hold times.

Financial Impact
The total amount of the change order will not exceed $83,500. Funds are available in the Public Transit Department's budget.

Responsible Department
This item is recommended by Deputy City Manager Mario Paniagua and the Public Transit Department.

ITEM 12 **CITYWIDE** **ORDINANCE S-42029 - PUBLIC TRANSIT 2015 TITLE VI PROGRAM UPDATE**

Request City Council approval of the Federal Transit Administration (FTA) required 2015 Title VI Program update for the City of Phoenix Public Transit Department (PTD).

As required by Title VI of the Civil Rights Act of 1964, "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Every three years recipients of federal funding must submit an updated Title VI Program that documents compliance with federal Title VI guidance. As the primary (designated) recipient of FTA funding in the Phoenix-Metro region, PTD is required to submit its updated program.

The Title VI Program update is completed in collaboration with Valley Metro and regional transit partners. In addition, PTD's Title VI Coordinator conducted in-depth training with all regional transit subrecipients on new FTA Title VI Program guidance and requirements. The update must then be submitted to the FTA, on behalf of the entire region, no later than September 25, 2015.

Citizen Notification
A community public hearing was held on July 30, 2015, as required by the FTA. The draft PTD Title VI plan is available to the public at phoenix.gov/publictransit and PTD's office at 302 North 1st Avenue, 9th Floor, Phoenix, Arizona 85003.

Responsible Department
This item is recommended by Deputy City Manager Mario Paniagua and the Public Transit Department.

ITEM 13	**DISTRICT 1**	**ORDINANCE S-42030 - AV31000084 FAA - PHOENIX DEER VALLEY AIRPORT NORTH RAMP RECONSTRUCTION - DESIGN-BID-BUILD**

Request to authorize the City Manager, or his designee, to accept J. Banicki Construction, Inc. as the lowest priced, responsive and responsible bidder; and to award, and to enter into, a contract with J. Banicki Construction, Inc. to provide construction services necessary to repave the general aviation aircraft parking and circulation ramp surfaces located on the north side of the Phoenix Deer Valley Airport. Further request authorization for the City Controller to disburse all funds related to this item.

Procurement Results
Four bids were received in compliance with Arizona Revised Statutes, Section 34-201 by the Street Transportation Department on June 30, 2015. The four bids were sent to the Equal Opportunity Department for review to determine subcontractor eligibility and general contractor responsiveness in demonstrating compliance with the project's Disadvantaged Business Enterprise (DBE) program outreach requirements. Three bidders were deemed non-responsive for failing to submit all required paperwork. The second lowest bidder, J. Banicki Construction, Inc. was deemed responsive. The City received a protest from the

preliminary low bidder, Combs Construction Company, Inc., who was deemed non-responsive for a material defect in its bid. The protest was reviewed by the City and after a hearing on the issue, the non-responsive determination was upheld.

Bids ranged from a low of $5,567,950.01 to a high of $6,625,879. The Engineer's Estimate and the lowest priced, responsive and responsible bidder are listed below:

Bidder	Total	DBE Availability - Race-Gender Neutral
Engineer's Estimate	$6,440,603.50	N/A
J. Banicki Construction, Inc.	$6,046,745.15	N/A

Contract Term
Construction on this project is expected to take 120 days to complete. The contract terms and conditions may be amended as deemed necessary or appropriate by the City Manager, or his designee.

Financial Impact
The bid award amount is within the total budget for this project. Funding is available in the Aviation Department's Capital Improvement Program budget. Staff anticipates reimbursement of funds from the Federal Aviation Administration (FAA) Airport Improvement Program (AIP) Grant. This project must be awarded by September 9, 2015, in order for the FAA to complete their awards and administrative process. If award does not occur by September 9, 2015, the Aviation Department could lose federal funding for the project.

Small Business Outreach
This procurement required proposers to engage in small business outreach efforts to encourage small business participation.

Concurrence/Previous City Council Action
City Council awarded Design Phase Contract 140220 on March 14, 2015.

Location
This project is located at Phoenix Deer Valley Airport at 702 West Deer Valley Road, Phoenix.

Responsible Department
This item is recommended by Assistant City Manager Milton Dohoney Jr., the Aviation and Street Transportation Departments, and the City Engineer.

ITEM 14 **DISTRICTS 2, 3, AND 6** **ORDINANCE S-42031 - WS85050023 - STEEL TANK REHAB PROGRAM - CONSTRUCTION ADMINISTRATION AND INSPECTION SERVICES - CONTRACT AMENDMENT 2**

Request to authorize the City Manager, or his designee, to execute Amendment 2 to Contract 136893 with HDR Engineering, Inc. to provide continued construction administration and inspection services for the steel tank rehabilitation program; and increase the contract limit by $388,725. Further, request to authorize the City Controller to disburse all funds related to this item.

HDR Engineering, Inc.'s services to the Water Services Department's Steel Tank Rehabilitation Program include assessment of Group G: 3SE-ES3 (Foothills), 9A-GS1 (Well 280), and 4N-ES1 (Mount Central), as well as representation on behalf of the City, administer the construction schedules, review shop drawings and test results, issue interpretations and clarifications, certify contractor progress payments, and perform a substantial and final completion inspection.

Contract Term
HDR Engineering, Inc. was chosen for this project in 2013 using a qualifications-based selection process in accordance with Section 34-603 of the Arizona Revised Statutes. The contract term is for up to a maximum of five years.

Financial Impact
HDR Engineering, Inc.'s fee for this amendment shall not exceed $388,725, including all subconsultant and reimbursable costs, increasing the total contract amount to $1,051,725.64. Funding for these services is available in the Water Services Department's Capital Improvement Program budget utilizing Water Revenue.

Previous City Council Action
City Council approved Contract 136893 on September 4, 2013, for $293,994, and Amendment 1 on September 17, 2014, which increased the contract by $369,006.64.

Location
Citywide

Responsible Department
This item is recommended by the Deputy City Manager Karen Peters, the Water Services and Street Transportation Departments, and the City Engineer.

ITEM 15 **DISTRICT 8** **ORDINANCE S-42032 - AV08000072 FAA - PHOENIX SKY HARBOR INTERNATIONAL AIRPORT TERMINAL 4 NORTH APRON RECONSTRUCTION - CONSTRUCTION MANAGER AT RISK CONSTRUCTION SERVICES**

Request to authorize the City Manager, or his designee, to award and enter into a contract with J. Banicki Construction, Inc. to provide Construction Manager at Risk (CMAR) construction services for the Phoenix Sky Harbor International Airport Terminal 4 North Apron Reconstruction project. Further request authorization for the City Controller to disburse all funds related to this item.

This project includes the removal and replacement of concrete pavement panels in the Terminal 4 North Apron area that are displaying alkali-silica reaction. The CMAR construction services include, but are not limited to: scheduling and managing site operations, preparing multiple guaranteed maximum price proposals, field verification of site conditions, arranging for procurement of materials and equipment, and providing quality controls.

Procurement Results

J. Banicki Construction, Inc. was chosen for this project using a qualifications-based selection process in accordance with Title 34 of the Arizona Revised Statutes (A.R.S.). Per A.R.S. Title 34, the City is not to release the scoring of proposers until a contract has been awarded. Rankings for top three proposals are shown below:

Bidder	Ranking
J. Banicki Construction, Inc.	1
Kiewit Infrastructure West Co.	2
FNF Construction	3

Contract Term

This is a construction project that is expected to take approximately five years to complete. The work will be issued in phases, with the first construction phase lasting approximately 550 days.

Financial Impact

The estimated total cost of the project is $32,000,000. J. Banicki Construction, Inc.'s construction fee for Phase I shall not exceed $10,000,000, including all subconsultant, subcontractor, and reimbursable costs. Staff anticipates reimbursement of 75 percent of the project cost from a Federal Aviation Administration Airport Improvement Program grant. The remaining

funds are available in the Aviation Department's Capital Improvement Program budget.

Small Business Outreach
This procurement required proposers to engage in small business outreach efforts to encourage small business participation.

Location
Phoenix Sky Harbor International Airport.

Previous City Council Action
On November 5, 2014, the City entered into CMAR Design Phase Services Contract 139591, with J. Banicki Construction, Inc. for initial work on this project.

Responsible Department
This item is recommended by Assistant City Manager Milton Dohoney, Jr., the Aviation and Street Transportation Departments, and the City Engineer.

ITEM 16 **CITYWIDE** **ORDINANCE S-42033 - AMEND ORDINANCE S-41883 TO MODIFY EQUIPMENT OWNERSHIP FOR AGREEMENT WITH COX COMMUNICATIONS**

Request to amend Ordinance S-41883 to include equipment owned by Cox Communications or third parties that will be connected to COX's existing aerial cable system. This is a technical correction to the ordinance approved on June 17, 2015, and was requested by Cox Communications.

Responsible Department
This item is recommended by Deputy City Manager Mario Paniagua and the Street Transportation Department.

ITEM 17 **CITYWIDE** **ORDINANCE S-42034 - PURCHASE OF 250 BIKE RACKS FROM CYCLEHOP, LLC FOR THE CITY'S GR:D BIKE SHARE PROGRAM**

Request to authorize the City Manager, or his designee, to approve the purchase of 250 bike racks from CycleHop, LLC ("CycleHop") at a total cost of $125,615 for expansion of the City's GR:D Bike Share Program. Further request authorization for the City Controller to disburse all funds related to this item.

On July 2, 2014, the City Council adopted an ordinance to establish the City's Complete Streets Guiding Principles and amended City Code to establish a

Complete Streets Advisory Board. On November 18, 2014, the City Council adopted the Comprehensive Bicycle Master Plan. The Complete Streets Guiding Principles and the Bicycle Master Plan make reference to bike sharing and bicycle accessibility as part of a comprehensive multi-modal regional transportation plan. Further, the recommendations of the Citizens Committee on the Future of Phoenix Transportation, approved by the City Council on March 3, 2015, and the funding for which was approved by Phoenix voters on August 25, 2015, address the need for infrastructure improvements such as bicycle lanes for increased connectivity. Also, the voter-approved 2015 General Plan, Plan PHX, recommends implementation of a comprehensive Bike Share Program.

The City's GR:D Bike Share Program furthers these overall multi-modal transportation plans. The City launched GR:D on November 25, 2014. Currently 300 bicycles are deployed at 36 stations, serving approximately 5,000 residents. The GR:D system is a multi-phase project, including up to 500 bicycles in Phase I, up to an additional 375 in Phase II, and another 500 in Phase III.

The purchase of 250 racks will enable the City to deploy 200 GR:D bicycles currently in storage which will complete Phase I of the project. In addition, the racks will provide parking to the public for non-GR:D bicycles with approximately 20 percent of rack parking designated for non-GR:D bicycles.

All equipment purchased with either local or federal dollars will be placed within the public right-of-way or on property purchased with other federal funds, such as public transit centers. Staff will amend the existing contract with CycleHop to require asset identification for City-owned or federally-funded equipment, and the first right to purchase CycleHop's assets in case of bankruptcy.

Procurement Results

During the fiscal year 2013-2014 budget process, City Council approved $1.5 million for citywide bicycling improvements. A portion of these funds was allocated for the development of a bicycle master plan. One-third of those dollars, approximately $500,000, was designated for regional bike share program improvements. The City entered into a contract with CycleHop on September 20, 2013, to install, construct, operate, and manage a bike share system for the City of Phoenix. CycleHop's contract was modified in July 2014 to provide for the capital investment of equipment by the City of Phoenix.

Financial Impact

The total cost to purchase and install the 250 bicycle racks for the City's GR:D Bike Share Program is $125,615. Funds are available in the Street Transportation Department's Capital Improvement Program budget.

Location

The racks will be installed only within public right-of-way at locations where the public has requested bike share installation. Locations currently being vetted include Public Market, Coronado Park, Maricopa County office building, Encanto

Park, and the Arizona Department of Environmental Quality office building located on Central Avenue.

Responsible Department
This item is recommended by Deputy City Manager Mario Paniagua and the Street Transportation Department.

ITEM 18	**OUT OF CITY**	**ORDINANCE S-42035 - PW1681001-3 - LINE EXTENSION AGREEMENT WITH APS FOR THE CONSTRUCTION OF ELECTRIC DISTRIBUTION FACILITIES**

Request to authorize the City Manager, or his designee, to enter into an agreement with Arizona Public Service (APS) for the construction of electric distribution facilities for the construction pond well located at the City of Phoenix State Route (SR) 85 Landfill. Further request authorization for the City Controller to disburse all funds related to this item.

APS work consists of the removal and construction of electrical facilities and providing new 1,000-amp commercial service to the construction pond well. This work is necessary to pump water from the well to provide dust control for future development of the landfill and emergency backup water supply for landfill operations.

Financial Impact
APS service fees will not exceed $25,459. Funds are available in the Public Works Department's Five-Year Capital Improvement Program.

Citizen Notification
Citizen notification was, or will be, done as part of the design and construction process.

Location
Work will occur at the City of Phoenix SR 85 Landfill located at 28361 West Patterson Road in Buckeye, Arizona.

Previous City Council Action
On February 1, 2012, Council adopted Ordinance S-38510, which authorizes the City Manager, or his designee, to take all action deemed necessary or appropriate, and to execute all utilities-related design and construction agreements.

Responsible Department
This item is recommended by Deputy City Managers Mario Paniagua and Karen Peters, the City Engineer, and the Public Works and Street Transportation Departments.

PLANNING AND ZONING MATTERS

ITEM 19 **DISTRICT 4** **FINAL PLAT - JAG - WELDON AVE - 140107 - SOUTHWEST CORNER OF 30TH AVENUE AND WELDON AVENUE**

Plat 140107
Project 03-1707
Name of Plat: Jag – Weldon Ave
Owner(s): JAG Properties III, LLC
Engineer(s): Superior Surveying Services, Inc.
Request: A Two-Lot Commercial Plat

It is recommended that the above plat be approved by the City Council and certified by the City Clerk. Recording of the plat dedicates the streets and easements as shown to the public.

Concurrence
The final plat has been reviewed by the Planning and Development Department in accordance with the provisions of Section 32-21 of the Phoenix City Code, and was approved on August 20, 2015.

Location
Southwest corner of 30th Avenue and Weldon Avenue

Responsible Department
This item is recommended by Deputy City Manager Mario Paniagua and the Planning and Development Department.

ITEM 20 **DISTRICT 6** **FINAL PLAT - ARCADIA FIESTA - 150052 - SOUTHWEST CORNER OF 32ND STREET AND INDIAN SCHOOL**

Plat 150052
Project 14-416
Name of Plat: Arcadia Fiesta
Owner(s): 32nd Indian School Investors, LLC
Engineer(s): Bowman Consulting
Request: A Five-Lot Commercial Plat

It is recommended that the above plat be approved by the City Council and certified by the City Clerk. Recording of the plat dedicates the streets and easements as shown to the public.

Concurrence
The final plat has been reviewed by the Planning and Development Department in accordance with the provisions of Section 32-21 of the Phoenix City Code, and was approved on August 25, 2015.

Location
Southwest corner of 32nd Street and Indian School

Responsible Department
This item is recommended by Deputy City Manager Mario Paniagua and the Planning and Development Department.

ITEM 21 **DISTRICT 4** **RESOLUTION 21355 - ABANDONMENT OF EASEMENT - V-140019A - 1717 NORTH 1ST AVENUE**

Request to abandon the following easements as they are no longer needed.

On April 22, 2014, artHAUS, LLC requested the abandonment of the six-foot Right-of-Way Easement and Public Utility Easement located adjacent to North 1st Avenue on the northwestern side of the parcel addressed 1717 North 1st Avenue, Assessor's Parcel Number 118-56-131, dedicated per Maricopa County Recorder Docket 3998, Pages 88 and 89, on the parcels formerly identified as Lots 53 and 54, now Lot 2.

Financial Impact
Pursuant to Phoenix City Code Article 5, Section 31-64(e), the City acknowledges the public benefit received by the generation of additional revenue from the private tax rolls; by the elimination of third party general liability claims against the City, maintenance expenses, and undesirable traffic patterns; also replatting of the area with new alternate roadways and new development, as sufficient and appropriate consideration in this matter.

Concurrence
This application does not include an Abandonment Hearing Officer's recommendation as the formal application procedure does not apply. (REF: City Code Section 31-68)

Location
Adjacent to North 1st Avenue on the northwestern side of the parcel addressed 1717 North 1st Avenue, Assessor's Parcel Number 118-56-131.

Responsible Department
This item is recommended by Deputy City Manager Mario Paniagua and the Planning and Development Department.

REPORTS FROM CITY MANAGER, COMMITTEES, OR CITY OFFICIALS

Upon request, the City Clerk Department will make this publication available through appropriate auxiliary aids or services to accommodate an individual with a disability by calling the Council Support Section, 602-256-3186; faxing a request to 602-495-5847; or calling TTY number 602-534-2737.

COUNCIL ACTION
ON
AGENDA FOR FORMAL MEETING

WEDNESDAY, SEPTEMBER 9, 2015, 3:00 P.M.
COUNCIL CHAMBERS, 200 WEST JEFFERSON
PHOENIX, ARIZONA 85003

			ACTION
ITEM 1	**DISTRICT 8**	**LIQUOR LICENSE APPLICATION - TORTAS EL REY**	**Recommended for approval**
ITEM 2	**CITYWIDE**	**ORDINANCE S-42019 - PAYMENT ORDINANCE**	**Adopted**
ITEM 3	**CITYWIDE**	**ORDINANCE S-42020 - EXTEND FEDERAL REPRESENTATION CONTRACTS WITH HOLLAND & KNIGHT, LLP AND MURRAY, MONTGOMERY, & O'DONNELL**	**Adopted**
ITEM 4	**CITYWIDE**	**ORDINANCE S-42021 - ACCESS STATE OF ARIZONA CONTRACT FOR COMPUTER HARDWARE AND SUPPORT**	**Adopted**
ITEM 5	**CITYWIDE**	**ORDINANCE S-42022 - RFP 15-183 - STRATEGIC GOAL SETTING CONSULTANT SERVICES**	**Continued until September 30, 2015**
ITEM 6	**CITYWIDE**	**ORDINANCE S-42023 - CONTRACT AWARD FOR REAL PROPERTY ACQUISITION SERVICES**	**Adopted**

			ACTION
ITEM 7	**DISTRICTS 1, 4, 5, 7, AND 8**	**ORDINANCE S-42024 - APPLY FOR, ACCEPT, AND DISBURSE RESILIENCE AMERICORPS GRANT**	**Adopted with modifications**
ITEM 8	**CITYWIDE**	**ORDINANCE S-42025 - AMEND CONTRACT 131679 WITH G FORCE GLOBAL TECHNOLOGIES**	**Adopted**
ITEM 9	**CITYWIDE**	**ORDINANCE S-42026 - STRAND ANALYTICAL LABORATORIES, CT133927, FOR DNA OUTSOURCING**	**Adopted**
ITEM 10	**DISTRICT 2**	**ORDINANCE S-42027 - DEDICATION OF RIGHT-OF-WAY OVER A CITY-OWNED PARCEL OF LAND - SONORAN DESERT DRIVE AND NORTH VALLEY PARKWAY**	**Adopted**
ITEM 11	**CITYWIDE**	**ORDINANCE S-42028 - AMEND CONTRACT 120475 WITH MV TRANSPORTATION FOR OPERATION OF PHOENIX DIAL-A-RIDE AND AHWATUKEE CIRCULATOR SERVICES**	**Adopted**

			ACTION
ITEM 12	CITYWIDE	ORDINANCE S-42029 - PUBLIC TRANSIT 2015 TITLE VI PROGRAM UPDATE	Adopted
ITEM 13	DISTRICT 1	ORDINANCE S-42030 - AV31000084 FAA - PHOENIX DEER VALLEY AIRPORT NORTH RAMP RECONSTRUCTION - DESIGN-BID-BUILD	Adopted
ITEM 14	DISTRICTS 2, 3, AND 6	ORDINANCE S-42031 - WS85050023 - STEEL TANK REHAB PROGRAM - CONSTRUCTION ADMINISTRATION AND INSPECTION SERVICES - CONTRACT AMENDMENT 2	Adopted
ITEM 15	DISTRICT 8	ORDINANCE S-42032 - AV08000072 FAA - PHOENIX SKY HARBOR INTERNATIONAL AIRPORT TERMINAL 4 NORTH APRON RECONSTRUCTION - CONSTRUCTION MANAGER AT RISK CONSTRUCTION SERVICES	Adopted as corrected

			ACTION
ITEM 16	**CITYWIDE**	**ORDINANCE S-42033 - AMEND ORDINANCE S-41883 TO MODIFY EQUIPMENT OWNERSHIP FOR AGREEMENT WITH COX COMMUNICATIONS**	**Adopted**
ITEM 17	**CITYWIDE**	**ORDINANCE S-42034 - PURCHASE OF 250 BIKE RACKS FROM CYCLEHOP, LLC FOR THE CITY'S GR:D BIKE SHARE PROGRAM**	**Adopted**
ITEM 18	**OUT OF CITY**	**ORDINANCE S-42035 - PW1681001-3 - LINE EXTENSION AGREEMENT WITH APS FOR THE CONSTRUCTION OF ELECTRIC DISTRIBUTION FACILITIES**	**Adopted**
ITEM 19	**DISTRICT 4**	**FINAL PLAT - JAG - WELDON AVE - 140107 - SOUTHWEST CORNER OF 30TH AVENUE AND WELDON AVENUE**	**Approved**
ITEM 20	**DISTRICT 6**	**FINAL PLAT - ARCADIA FIESTA - 150042 - SOUTHWEST CORNER OF 32ND STREET AND INDIAN SCHOOL**	**Approved as corrected**

			ACTION
ITEM 21	**DISTRICT 4**	**RESOLUTION 21355 - ABANDONMENT OF EASEMENT - V-140019A - 1717 NORTH 1ST AVENUE**	**Approved**

Title VI System-wide Service Standards and Policies

Overview

Valley Metro as the regional transit authority operates majority of the transit service in Maricopa County with the exception of the City of Phoenix, City of Glendale's local circulator, and City of Scottsdale's downtown trolley. Valley Metro coordination with the City of Phoenix to develop a Regional System-Wide Service Standards and Policies that would apply to all services that both entities provide, but also that can be adopted by the cities of Glendale and Scottsdale. Valley Metro also operates the regions light rail transit system and has developed a separate set of System-Wide Standards and Policies for light rail. Valley Metro in coordination with the cities of Phoenix and Mesa are currently constructing two light rail extensions further into their communities and will adhere to the standards and policies outlined below.

Regional Service Policies for Bus Service

The regional service policies are meant to ensure that transit amenities are distributed fairly throughout the system and vehicles are properly assigned on a route by route basis.

1.0 VEHICLE ASSIGNMENT

1.1 Service Policy

Vehicle assignment refers to the process by which transit vehicles are placed into revenue service throughout the transit system. Vehicles will be assigned to the various depots such that the average age of the fleet serving each depot does not exceed 12 years. Low-floor buses are deployed on frequent service and other high-ridership routes, so these buses carry a higher share of ridership than their numerical proportion of the overall bus fleet. Low-floor buses are also equipped with air conditioning and automated stop announcement system.

Bus assignments take into account the performance characteristics of service types and vehicle assignments are matched to the demand (vehicle with more capacity are assigned to service types with higher ridership). Note that some service types have specific vehicle types. Other bus assignments also take into consideration branded services such as Express/RAPID and LINK routes that have specific sub fleet assignment to it. For example, LINK vehicles count with transit signal priority.

1.2 Service Policy Elements

- Vehicle age
- Vehicle assignment records (Dispatch bus pullout sheets). The contractor dispatch staff assigns buses daily based on historical knowledge of the route.

1.3 Level of Service Assessment

- Calculate the average age of the entire bus fleet.
- Calculate the average age of the buses assigned to serve minority and low-income routes and for non-minority and non-low-income routes.
- Assessment compares minority to non-minority routes and low income to non-low income routes.

2.0 DISTRIBUTION OF TRANSIT AMENITIES

Transit amenities are locally funded and fall under the responsibility of the jurisdictions within which they are sited. The service standard elements and level of service assessments will be the responsibility of the individual municipalities. Valley Metro does however provide support in the planning processes of these facilities. Valley Metro is working with the individual municipalities in developing warrants as part of the Transit Standards and Performance Measures to provide guidance on the transit amenities and is expected to be adopted in 2016.

Regional Service Policies for Light Rail Service

VEHICLE ASSIGNMENT

Service Policy

The Vehicle Assignment service policy generally addresses the equitable assignment of transit vehicles to depots and routes throughout the entire transit system in terms of minority and low-income populations compared to non-minority and non-low-income populations. This policy measures whether transit vehicles are equitably assigned considering the age of the vehicle, type of fuel used, number of seats in the vehicle and whether or not the vehicle is high or low floor. However, Valley Metro has one light rail route with a single type of fleet. Valley Metro's light rail fleet consists of 50 vehicles of the same design, passenger load, amenities, and are the same age. The light rail vehicles are considered low floor at each of the four doors to allow level boarding at each of the 28 light rail stations. Each light rail vehicle is equipped with air conditioning and heating and automated stop announcements. Each vehicle is also equipped with a bike rack that holds four bikes and folding seats to accommodate four wheel chairs.

Service Assessment

All vehicles put into service each day run along the one light rail route and have the same amenities and quality for all passengers riding the system. Until new routes are added to the system that contains different vehicles, no assessment of vehicle assignment is warranted.

2.0 DISTRIBUTION OF TRANSIT AMENITIES

2.1 Service Standard

Transit amenities refer to items of comfort and convenience available to the general riding public. Valley Metro's *Design Criteria Manual* includes a chapter on light rail station design. This chapter provides standards for the design of each station as well as the amenities that will be incorporated into each station. Each of the 28 stations within Valley Metro's current light rail system contains the following amenities:

- shading and climate protection,
- seating,
- lighting,
- drinking fountain,
- trash receptacles,
- platform information maps,
- emergency call boxes,

- closed circuit television cameras,
- public address system/variable message boards,
- ticket vending machines, and
- all light rail station platforms should be double loading, except where adequate pedestrian crossing is not available.

In addition, a securable rack for four bicycles is located at street intersections adjoining the station entrances are provided for each station. Although the *Design Criteria Manual* has been developed as a set of general guidelines for planning and design of the light rail system, deviations from these accepted criteria may be required in specific instances based on community characteristics or other requests. Typically new development is compliant with the *Design Criteria Manual*.

2.2 Service Assessment

Valley Metro will conduct field observations once a year to determine if each station still contains the following amenities in good operational standing:

- Information maps and public announcements at each light rail station are in English and Spanish
- Ticket vending machines at each light rail station entrance
- Seating
- Waste receptacles
- Bike racks
- Lighting

Regional Service Standards for Bus Service

The regional service standards are quantitative performance standards meant to ensure that fixed route services are fairly applied throughout Valley Metro's service area.

1.0 VEHICLE LOAD

1.1 Vehicle Load Standard

Vehicle Load (also known as maximum load) is the ratio of the number of passengers on a vehicle to the number of seats. Valley Metro and the City of Phoenix operates a number of local fixed routes, express routes, and circulator service in the region with a number of different bus configurations containing different number of seats and how many people can stand on the bus. The vehicle load threshold is therefore broken down to the three main types of service and is based on the average number of seats and the number of standing passengers. The load thresholds are identified below:

Local Fixed Route Service (as defined in Transit Standards and Performance Measures (TSPM) are Local Bus, Key Local Bus, Limited Stop All-Day)

Two bus types provide local fixed service in the region, a standard 40-foot bus and a 60 foot articulated bus.

For example, a 40-foot bus contains 36 seats and can hold comfortable 54 passengers. The vehicle load

threshold for peak service is expressed as a ratio of 1.50. This means that all seats are filled and there are 18 standees per bus.

The 60 foot articulated bus contains 55 seats and can hold comfortably 85 passengers. The vehicle load threshold for peak service is expressed as a ratio of 1.50. This means that all seats are filled and there are 30 standees per bus.

Commuter Express / RAPID Service/Limited Stop Peak[4]

Three bus types provide Express service in the region, a standard 40-foot bus, a 45-foot bus and a 60 foot articulated bus.

For example, a 40-foot bus contains 36 seats and can hold comfortable 54 passengers. The vehicle load threshold for peak service is expressed as a ratio of 1.50. This means that all seats are filled and there are 18 standees per bus.

The 60 foot articulated bus contains 55 seats and can hold comfortably 85 passengers. The vehicle load threshold for peak service is expressed as a ratio of 1.50. This means that all seats are filled and there are 30 standees per bus.

Community Circulator Service

The buses used for the circulators on average can seat 17 passengers and hold comfortably 23 passengers. The vehicle load threshold for all day service (such as the BUZZ, ZOOM, MARY, ALEX, SMART, DASH and Orbits) is expressed as a ratio of 1.35. This means that all seats are filled and there are 6 standees per bus. All buses providing this service are ADA accessible.

Rural Connector

The buses used for the rural connector on average can seat 26 passengers and hold comfortably 35 passengers. The vehicle load threshold for all day service is expressed as a ratio of 1.35. This means that all seats are filled and there are 9 standees per bus. All buses providing this service are ADA accessible.

1.2 Vehicle Load Data Collection

To determine the vehicle load the following data is gathered:

- Annual random ride check samples or APC data
- Each ride check is one trip on a route
- AM Peak direction samples Monday through Friday
- PM Peak direction samples Monday through Friday
- Samples collected annually throughout the year

1.3 Vehicle Load Assessment

Using the data above the following analysis is done to determine the vehicle load:

Local Fixed Route Service (Local Bus, Key Local Bus, Limited Stop All-Day)

- Determine number of minority and non-minority routes that have a max load ratio of less than 1.50 for AM and PM Peak times – calculate percentage

- Repeat the calculations for low-income and non-low-income routes
- Compare level of service between minority and non-minority routes and low-income and non-low-income routes

Commuter Express / RAPID Service/Limited Stop Peak

- Determine number of minority and non-minority routes that have a max load ratio of less than 1.50 for AM and PM Peak times – calculate percentage
- Repeat the calculations for low-income and non-low-income routes
- Compare level of service between minority and non-minority routes and low income and non-low-income routes

Community Circulator Service

- Determine number of minority and non-minority routes that have a max load ratio of less than 1.0 for AM and PM Non-Peak times – calculate percentage
- Determine number of minority and non-minority routes that have a max load ratio of less than 1.40 for AM and PM Peak times – calculate percentage
- Repeat the calculations for low-income and non-low-income routes
- Compare level of service between minority and non-minority routes and low income and non-low-income routes

Rural Connector

Determine number of minority and non-minority routes that have a max load ratio of less than 1.35 for all trip times – calculate percentage

Repeat the calculations for low-income and non-low-income routes

Compare level of service between minority and non-minority routes and low income and non-low-income routes

2.0 VEHICLE HEADWAY

Vehicle headway standards are based on the Transit Standards and Performance Measures (TSPM) for regionally funded routes. Transit service standards and performance measures represent rules and guidelines by which the performance of the region's transit system may be evaluated, and decisions regarding transit investments may be prioritized and measured.

2.1 Vehicle Headway Standard

Vehicle headway is the time interval between two vehicles traveling in the same direction on the same route. The following are the vehicle headway standards for the region:

Table 6 – Vehicle Headway Standards

Service Type	Minimum Headway or Daily Trips	Minimum Span Week / Sat / Sun	Minimum Operating Days
Rural Connector	4 trips inbound / 4 trips outbound	NA	Mon – Fri
Community / Circulator	30 min	12 hrs. / 0 hrs. / 0 hrs.	Mon – Fri
Local Bus	30 min*	16 hrs. / 14 hrs. / 12 hrs.	Mon – Sun
Service Type	**Minimum Headway or Daily Trips**	**Minimum Span Week / Sat / Sun**	**Minimum Operating Days**
Key Local Bus	15 min peak / 30 min base*	16 hrs. / 14 hrs. / 12 hrs.	Mon – Sun
Limited Stop Peak	4 trips AM / 4 trips PM	NA	Mon – Fri
Limited Stop All-Day	Headways same as LRT, up to 2X Peak	16 hrs. / 14 hrs. / 12 hrs. (Same as	Mon – Fri
Commuter Express	4 trips AM / 4 trips PM	NA	Mon – Fri
Light Rail Transit	12 min peak / 20 min base	18 hrs. / 14 hrs. / 12 hrs.	Mon – Sun

**60 min early morning and late night*

For rural connector routes, limited stop peak, and commuter express routes, service availability is applied based on a number of daily trips rather than frequency.

2.2 Vehicle Headway Data Collection

Local Fixed Route Service (Local Bus, Key Local Bus, Limited Stop All-Day)

- Measure standard using published fixed route service schedules (no Express, RAPID, Limited Stop Peak, or circulator routes)

Commuter Express / RAPID Service / Limited Stop Peak

- Measure standard using published Express, RAPID and Limited Stop Peak service schedules

Circulator Service

- Measure standard using published circulator route service schedules

Rural Connector

- Measure standard using published Rural Connector service schedules

2.3 Vehicle Headway Assessment

- Determine number of minority and non-minority routes that have a peak headway meeting or exceeding the headway standard for each service type– calculate percentage
- Repeat the calculations for low-income and non-low-income routes
- Compare level of service between minority and non-minority routes and low income and non-low-income routes

3.0 ON TIME PERFORMANCE

3.1 On Time Performance Standard

On time performance is a measure of bus runs for a particular route completed as scheduled. The service standard threshold is defined as 90% or better of all trips on a particular route completed within the allowed on-time window (no more than 0 minutes early and 5 minutes 59 seconds late, compared to scheduled arrival/departure times at published time points).

3.2 On Time Performance Data Collection

- Measure standard using Valley Metro operated local fixed routes.
- Data reported on a monthly basis.
- Use of Vehicle Management System (VMS) data. VMS data not available for the circulators GUS I, II, III; Mesa BUZZ, ZOOM, and Tempe's Orbits

3.3 On Time Performance Assessment

- Determine number of minority and non-minority routes that have an on time performance of 90% or better on an annual basis– calculate percentage
- Repeat the calculations for low-income and non-low-income routes
- Compare level of service between minority and non-minority routes and low income and non-low-income routes

4.0 SERVICE AVAILABILITY

Transit amenities are locally funded and fall under the responsibility of the jurisdictions within which they are sited. The service availability and service availability assessments will be the responsibility of the individual municipalities.

4.1 Service Availability Standard

Service availability is measured by the distribution of bus stops within the regional service area that affords residents accessibility to transit. The service standard is consistent with the TSPM standard and has the following thresholds for each service:

Local Bus and Key Local Bus

- Bus stops are placed approximately one-quarter mile apart. Where development patterns are of higher or lower density than typical within the region, an exception to the recommended stop spacing standard may be warranted.

Limited Stop Peak and Limited Stop All-Day

- Bus stops are placed approximately one mile apart. Where development patterns are of higher or lower density than typical within the region, an exception to the recommended stop spacing standard may be warranted.

Express / RAPID Service[4]

- Express / RAPID stops are strategically placed and are generally located at park-and-ride facilities
- No more than four inbound Express bus stops

- Outbound Express / RAPID stops behave more like a local service and will pick up or drop off passengers more frequently

Community Circulator Service

- Bus stops within the designated stop area of each circulator route are placed no more than one-quarter mile apart
- In the flag stop zone area of each circulator route passengers can be picked up anywhere along the route

4.2 Service Availability Data Collection

- Bus stop database

4.3 Service Availability Assessment

- Identify number of bus stop spacing gaps on each route
- Calculate the number of bus stop spacing gaps that do not meet the standard as a percentage of the total number of bus stop spacing gaps on a given route
- Compare percentage of bus stop location gaps that do not meet the standard by minority versus non-minority routes and low income versus non-low income routes

Regional Service Standards for Light Rail Service

1.0 VEHICLE LOAD

Vehicle Load Standard

Vehicle Load (also known as maximum load) is the ratio of the number of passengers on a vehicle to the number of seats. For the Central Phoenix/East Valley Light Rail line (fixed route service), a single light rail vehicle contains 66 seats and can hold comfortably 140 passengers. The vehicle load threshold for peak service for comfortable accommodations is expressed as a ratio of 2.12. This means that all seats are filled and there are 74 standees per train.

A single vehicle has a maximum capacity (crush factor) of 226 passengers. The vehicle load threshold for peak service for maximum capacity is expressed as a ratio of 3.42. This means that all seats are filled and there are 160 standees per train.

Valley Metro has the ability to operate consists of up to three light rail vehicles.

Vehicle Load Data Collection

- Average weekday loads on the light rail will be determined by the following:
- Ride check the light rail route using the APC data
- AM in the peak direction (6-9 a.m.) Monday through Friday
- PM in the peak direction (3-6 p.m.) Monday through Friday

Samples will be collected semi-annually during the months of April and November to determine if the standard vehicles load is exceeded.

Vehicle Load Assessment

Valley Metro currently has one light rail line operating in the region with all vehicles being exactly the same. Therefore, the data collected above will be used to determine the vehicle load.

2.0 VEHICLE HEADWAY

2.1 Vehicle Headway Standard

Vehicle headway is the time interval between two vehicles traveling in the same direction on the same line. The following are the vehicle headway thresholds for the light rail system:

Service operates regionally every 12 minutes in the peak hours (6 a.m. to 7 p.m.) each weekday, every 20 minutes in the off peak hours (4 a.m. to 6 a.m. and 7 p.m. to 12 a.m.) each weekday, and every 20 minutes all day on weekends.

Table 6 – Vehicle Headway Standards

Service Type	Headway - Peak	Headway – Off Peak
Weekday	12 minutes	20 minutes
Saturday	20 minutes	
Sunday / Holiday	20 minutes	

2.2 Vehicle Headway Data Collection and Service Assessment

Valley Metro currently has one light rail route under operation with 28 stations and the headway is monitored on a daily basis. As new extensions are added to the current light rail ends of line (extending light rail from current end-of-line at Sycamore and Montebello) the service assessment will be for this route in its entirety. As new routes to the system are brought into service, the service assessment will be by individual routes. Headways are monitored at the Operations Center and will be assessed by the following:

- AM in the peak direction (6-9 a.m.) weekdays
- PM in the peak direction (3-6 p.m.) weekdays
- AM in the peak direction (6-9 a.m.) weekends
- PM in the peak direction (3-6 p.m.) weekends

3.0 On Time Performance

3.1 On Time Performance Standard

On time performance is a measure of a light rail trip (The end-of-line Sycamore station to the end-of-line Montebello Station) completed as scheduled. Once the extensions in Mesa and Phoenix are complete and operational, the light rail trip will be measured from the end-of-line Gilbert Road Station to the end-of-line Dunlap Station. The service standard threshold is defined as 93% or better of all trips on light rail route completed within the allowed on-time window (0 minutes early and 5 minutes late of scheduled arrival times).

3.2 On Time Performance Data Collection and Assessment

Valley Metro currently has one light rail route under operation with 28 stations. Valley Metro monitors the

on-time performance on an annual basis and compares year to year. As new extensions are added to the current light rail ends of line (extending light rail from current end-of-line at Sycamore and Montebello) the service assessment will be for this route in its entirety. As new routes to the system are brought into service, the service assessment will be by individual routes. On-time performance is monitored at the Operations Center and will be assessed through the SCADA network by the following:

- AM in the peak direction (6-9 a.m.) weekdays
- PM in the peak direction (3-6 p.m.) weekdays
- AM in the peak direction (6-9 a.m.) weekends
- PM in the peak direction (3-6 p.m.) weekends

4.0 Service Availability

4.1 Service Availability Standard

Service availability measured by the distribution of light rail stations within the light rail route that affords residents accessibility to the regional transit system. The service standard has two thresholds as follows:

- Light rail stations are placed approximately one mile apart. Where development patterns are of higher or lower density than typical within the region, an exception to the recommended stop spacing standard may be warranted.
- General considerations for light rail stations are based on the following criteria:
- Density of population and employment
- Mix of land uses
- Connection to other transit services
- Pedestrian accessibility to the station
- Planning and design characteristics that are supportive of transit oriented development and transit access

4.2 Service Availability Assessment

- Valley Metro will assess the light rail service availability through the following:
- Identify light rail station to station spacing using the light rail station database
- Identify the minority and low-income populations served within 1/2 mile of each station
- Estimate the number of transit connections at each station

* Note that Commuter Express / RAPID Services minority and low-income routes are determined by stop location (rather than full route) since the majority of these routes travel from a park and ride location to a major employment center along a freeway or other corridor without making stops.

More information about this effort available here: http://www.valleymetro.org/publications_reports/transit_standards_performance_measures

SECTION 9 TITLE VI MAJOR SERVICE CHANGE, FARE CHANGE AND IMPACT ANALYSIS POLICIES

OVERVIEW

The following Service and Fare Equity Policies were developed according to new federal requirements of Title VI as outlines in FTA Circular 4702.1B. Both policies, including the Disparate and Disproportionate Burden Policies were adopted by the Valley Metro RPTA Board and Valley Metro Rail Board on March 21, 2013. Valley Metro conducted a number of public meetings throughout the region and held a public hearing on the policies March 5, 2013. The Service Change Policy underwent a minor revision to be consistent with the FTA Circular 4702.1B in regards to the time frame in which temporary and new service would be required to undertake a Title VI analysis. The timeframe was extended to a full 365 days from the previous 180 days. In addition, the definition of low-income population and areas was changed from 80 percent or less of the national per capita income and residential land use area was changed to 150 percent or less of the national per capita income. The Board approved this change, as part of their approval of the 2015 Title VI Program Update on August 13, 2015.

MAJOR SERVICE CHANGE & SERVICE EQUITY POLICY

Purpose of the Policy

The purpose of the Major Service Change and Service Equity Policy is to define thresholds for determining major service changes and whether potential changes to existing transit services will have a disparate impact based on race, color, or national origin, or whether potential service changes will have a disproportionately high or adverse impact on minority and/or low-income populations.

Basis for Policy Standards

Federal law requires the City of Phoenix and Valley Metro to evaluate changes to transit services, as outlined in FTA Circular 4702.1B, effective October 1, 2012. In order to comply with 49 CFR Section 21.5(b)(a), 49 CFR Section 21.5 (b)(7) and Appendix C to 49 CFR part 21, recipients shall "evaluate significant system-wide service and fare changes and proposed improvements at the planning and programming stages to determine whether those changes have a discriminatory impact. For service changes, this requirement applies to 'major service changes' only. The recipient should have established guidelines or threshold for what it considers a 'major' change to be."

Major Service Change Policy

A. <u>Major Service Change</u>

The following is considered a major service change (unless otherwise noted under Exemptions), and will be evaluated in accordance with the regulatory requirements set forth in FTA Circular 4702.1B:

1. **Route-Level Service Reduction or Elimination**

- Reducing an existing route by more than 25% of weekday route revenue miles[6], or
- Reducing an existing route by more than 25% of Saturday route revenue miles[6], or
- Reducing an existing route by more than 25% of Sunday route revenue miles[6], or
- Reducing the number of route directional miles more than 25%[6], or
- A change in a route alignment resulting in a 25% or greater variance from the existing route alignment[6], or
- In situations where service would be reduced or eliminated in jurisdictions where minority and/or low-income populations exceed the transit system service area (Maricopa County) average.

2. **Route-Level Expansion or Addition of a New Route**

- Adding a new route, or
- Expansion of an existing route that increases weekday route revenue miles by more than 25%[6], or
- Expansion of an existing route that increases Saturday route revenue miles by more than 25%[6], or
- Expansion of an existing route that increases Sunday route revenue miles by more than 25%[6], or
- Expanding the number of route directional miles more than 25%[6], or
- A change in a route alignment resulting in a 25%[6] or greater variance from the existing route alignment.
-

B. <u>Minority Disparate Impact Policy (Service Equity Analysis)</u>

When conducting a service change equity analysis, the following thresholds will be used to determine when a service change would have a disparate impact on minority populations:

1. **Route-Level Service Reduction or Elimination**

- Service Level and Service Area Reduction:

[6] A change of 25% in weekly route revenue miles and/or route directional miles is the current City of Phoenix threshold for determining whether a potential transit service change qualifies as a major service change (or "substantial" service change) according to the City of Phoenix resolution (1990). This percentage is generally an industry-wide percentage threshold used by peer transit systems throughout the United States. The City of Phoenix resolution also specifies that a public comment period will be initiated when a change in transit service of 25% or more is determined.

- If the percentage of minority passengers[7] on an affected route is greater than the transit system's minority ridership (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[8]

2. Route-Level Expansion or Addition of a New Route

- Route Level Expansion or Transit System Area Expansion (includes addition of new routes):
  - If a route level expansion or transit system area expansion is considered that coincides with a reduction in transit service on the same route or other routes, and the route(s) considered for service expansion predominantly serve non-minority and/or non-low-income geographic areas while the route(s) considered for reduction predominantly serve minority and/or low-income geographic areas, then a disproportionate burden may be determined. The determination of a disproportionate burden will be based on meeting both of the following criteria:
  -
    - If the percentage of minority passengers[7] on an affected route considered for service expansion is less than the transit system's minority ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus),[8] **AND**
    -
    - If the percentage of minority passengers[7] on an affected route considered for service reduction is greater than the transit system's minority ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[8]

C. <u>Low-Income Disproportionate Burden Policy (Service Equity Analysis)</u>

When conducting a service change equity analysis, the following thresholds will be used to determine when a service change would have a disproportionate burden on low-income populations:

[7] The determination of the transit system and an affected route's minority and/or low-income population will be derived from the most recently completed, statistically valid regional on-board origin and destination survey.

[8] Local routes include local fixed-route bus, light rail, LINK bus, local limited stop bus. Express routes include express bus and RAPID bus. Circulator routes will be evaluated similarly to local routes for fare changes and major services changes, but will be considered separately from local and express services when considered in the context of a region- or system-wide Title VI analysis. Circulator bus services are provided by the municipalities they serve and not the regional transit agency.

1. **Route-Level Service Reduction or Elimination**

   - If the percentage of low-income passengers[7] on an affected route is greater than the transit system's low-income ridership (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[8]

2. **Route-Level Expansion or Addition of a New Route**

   - Route Level Expansion or Transit System Area Expansion (includes addition of new routes):
   -
     - If a route level expansion or transit system area expansion is considered that coincides with a reduction in transit service on the same route or other routes, and the route(s) considered for service expansion predominantly serve non-minority and/or non-low-income geographic areas while the route(s) considered for reduction predominantly serve minority and/or low-income geographic areas, then a disproportionate burden may be determined. The determination of a disproportionate burden will be based on meeting both of the following criteria:

       - If the percentage of low-income passengers[7] on an affected route considered for service expansion is less than the transit system's low-income ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus),[8] **AND**

       - If the percentage of low-income passengers[7] on an affected route considered for service reduction is greater than the transit system's low-income ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[8]

Equity Analysis Data Sources

Category	Action	Sub Action	Evaluation Method
Fare	Adjustment	N/A	O/D[a] profile data of affected fare category and/or Census Data
Service Span	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Service Headway	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Route Length	Reduction	N/A	O/D[a] Data
	Expansion	N/A	Census Data
Route Alignment	Reduced Alignment	N/A	O/D[a] Data
	Expanded Alignment	N/A	Census Data
	Modified Alignment	Eliminated Segment(s)	O/D[a] Data
		Segment(s) to New Areas	Census Data
New Route	New Route	N/A	Census Data

[a] Origin/Destination Survey Data

Exemptions

The major service change thresholds exclude any changes to service that are caused by the following:

- Discontinuance of Temporary or Demonstration Services – The discontinuance of a temporary transit service or demonstration service that has been in effect for less than 365 days.

- Headway Adjustments – Headways for transit routes may be adjusted up to 5 minutes during the peak hour periods, and 15 minutes during non-peak hour periods.

- New Transit Service "Break-In" Period – An adjustment to service frequencies and/or span of service for new transit routes that have been in revenue service for less than 365 days.

- Other Service Providers or Agencies – Actions of other service providers or public agencies providing/administering transit services that are not the responsibility of Valley Metro.

- Natural or Catastrophic Disasters – Forces of nature such as earthquakes, wildfires, or other natural disasters, or human-caused catastrophic disasters that may force the suspension of scheduled transit service for public safety or technical reasons.

- Auxiliary Transportation Infrastructure Failures – Failures of auxiliary transportation infrastructure such as vehicular bridges, highway bridge overpasses, tunnels, or elevated highways that force the suspension transit service.

- Overlapping Services – A reduction in revenue miles on one line that is offset by an increase in revenue miles on the overlapping section of an alternative transit route (an overlapping section is where two or more bus routes or rail lines share the same alignment, stops, or stations for a short distance).

- Seasonal Service and Special Events – Changes to bus service levels on routes which occur because of seasonal ridership changes and event activities served by dedicated temporary bus routes or increased service frequencies.

- Temporary Route Detours – A short-term change to a route caused by road construction, routine road maintenance, road closures, emergency road conditions, fiscal crisis, civil demonstrations, or any uncontrollable circumstance.

Public Participatory Procedures

For all proposed major service changes, City of Phoenix and/or Valley Metro will hold at least one public hearing, with a minimum of two public notices prior to the hearing in order to receive public comments on the potential service changes. The first meeting notice will occur at least 30 days prior to the scheduled hearing date, with the second notice being made at least 10 days prior to the scheduled hearing date. Public materials will be produced in English and Spanish (the metropolitan region's two primary languages), or in other languages upon request, in order to ensure Limited English Proficient (LEP) populations within the transit service area are informed of the proposed service changes and can participate in community discussions. Valley Metro and/or the City of Phoenix will conduct a service equity analysis for the Valley Metro Board of Directors, the City of Phoenix City Council, and the public's consideration prior to any public hearings associated with the proposed service changes.

Definitions

Designated Recipient – The City of Phoenix is the designated recipient for federal funds contributing to transit system capital programs and operations in the greater Phoenix metropolitan region.

Disparate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the minority riders or population of the service area.

Disparate Treatment – An action that results in a circumstance in which minority riders or populations are treated differently than others because of their race, color, national origin and/or income status.

Disproportionate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the low-income riders or population of the service area.

Express Transit Service – Includes Valley Metro designated express bus and RAPID bus services.

High-Capacity Transit (HCT) – A transit facility or service that operates at a consistent, high frequency of service.

Local Transit Service – Includes Light Rail Transit (LRT), and local fixed-route bus, local limited stop bus, LINK bus routes, and circulator/shuttle bus services.

Low-income Person - means a person whose median household income is at or below 150 percent of the U.S. Department of Health and Human Services poverty line.

Low-income Areas – A census tract or other geographic bound area that has a higher percentage of low-income persons (defined above) than the overall average percentage of low-income persons in the route-service area.

Minority Populations & Areas – Minority populations include those persons who self-identify themselves as being one or more of the following ethnic groups: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, as defined in the FTA Title VI Circular. “Minority Areas” are residential land use areas within Census tracts where the percentage of minority persons is higher than the Valley Metro service area average.

Route-Level – Refers to the geographic level of analysis at the route alignment level by which the performance of a transit route is measured for equity.

Route-Service Area – A one-half mile radial buffer on either side of a transit route's alignment. A three-quarter mile radial buffer is used to ensure compliance with the American's with Disabilities Act guidelines.

Service Level – Refers to the span of service (hours of operation), days of operation, trips, and headways (service frequencies) for a transit route or the regional transit system.

Service Area – According to 49 CFR 604.3, geographic service area means "the entire area in which a recipient is authorized to provide public transportation service under appropriate local, state, and Federal law." Valley Metro's service area is considered to be Maricopa County.

Service Span – The span of hours over which service is operated (e.g., 6 a.m. to 10 p.m.). The service span may vary by weekday, Saturday, or Sunday.

Sub-recipient – Valley Metro is a designated sub-recipient of federal funding for capital projects and service operations. Funding is passed onto Valley Metro from the designated recipient, the City of Phoenix.

System-wide – Refers to the geographic level of analysis by which the performance of the entire transit system is measured for equity.

Transit System – A coordinated urban network of scheduled public passenger modes including fixed-route local and express buses, light rail transit, bus rapid transit, and circulator bus services that provide mobility for people from one place to another.

FARE EQUITY POLICY

Purpose of the Policy

The purpose of the Fare Equity Policy is to define a threshold for determining whether potential changes to existing transit fares will have a discriminatory impact based on race, color, or national origin, or whether a potential fare adjustment will have a disproportionately high or adverse impact on minority and/or low-income populations.

Basis for Policy Standards

Periodically, the City of Phoenix and Valley Metro make adjustments to transit fares in order to generate revenues to help sustain transit service operations. Federal law requires the City of Phoenix and Valley Metro to prepare and submit fare equity analyses for all potential transit fare adjustments, as outlined in Federal Transit Administration (FTA) Circular 4702.1B, effective October 1, 2012.

Fare Equity Policy

The following are the City of Phoenix and Valley Metro policies for determining if a fare adjustment will result in a minority disparate impact or low-income disproportionate impact.

A. Minority Disparate Impact Policy (Fare Equity Analysis)

If a planned transit fare adjustment results in minority populations bearing a fare rate change of greater than 4 percentage points as compared to non-minority populations, the resulting effect will be considered a minority disparate impact.

B. Low-Income Disproportionate Burden Policy (Fare Equity Analysis)

If a planned transit fare adjustment results in low-income populations bearing a fare rate change of greater than 4 percentage points as compared to non-low-income populations, the resulting effect will be considered a low-income disproportionate burden.

Table 8 – Equity Analysis Data Sources

Category	Action	Sub Action	Evaluation Method
Fare	Adjustment	N/A	O/D[a] profile data of affected fare category and/or Census Data
Service Span	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Service Headway	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Route Length	Reduction	N/A	O/D[a] Data
	Expansion	N/A	Census Data
Route Alignment	Reduced Alignment	N/A	O/D[a] Data
	Expanded Alignment	N/A	Census Data
	Modified Alignment	Eliminated Segment(s)	O/D[a] Data
		Segment(s) to New Areas	Census Data
New Route	New Route	N/A	Census Data

[a] Origin/Destination Survey Data

Public Participatory Procedures

For all proposed fare changes, City of Phoenix and/or Valley Metro will hold at least one public hearing, with a minimum of two public notices prior to the hearing in order to receive public comments on the proposed fare changes. The first meeting notice will occur at least 30 days prior to the scheduled hearing date, with the second notice being made at least 10 days prior to the scheduled hearing date. Public materials will be produced in English and Spanish (the metropolitan region's two primary languages), or in other languages upon request, in order to ensure Limited English Proficient (LEP) populations within the transit service area are informed of the proposed service changes and can participate in community discussions. Valley Metro and/or the City of Phoenix will conduct a fare equity analysis for the Valley Metro Board of Directors, the City of Phoenix City Council, and the public's consideration prior to any public hearings associated with the proposed fare changes.

DEFINITIONS

Designated Recipient – The City of Phoenix is the designated recipient for federal funds contributing to transit system capital programs and operations in the greater Phoenix metropolitan region.

Disparate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the minority riders or population of the service area.

Disparate Treatment – An action that results in a circumstance in which minority riders or populations are treated differently than others because of their race, color, national origin and/or income status.

Disproportionate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the low-income riders or population of the service area.

Express Transit Service – Includes Valley Metro designated express bus and RAPID bus services.

High-Capacity Transit (HCT) – A transit facility or service that operates at a consistent, high frequency of service.

Local Transit Service – Includes Light Rail Transit (LRT), and local fixed-route bus, local limited stop bus, LINK bus routes, and circulator/shuttle bus services.

Low-income Person - means a person whose median household income is at or below 150 percent of the U.S. Department of Health and Human Services poverty line.

Low-income Areas – A census tract or other geographic bound area that has a higher percentage of low-income persons (defined above) than the overall average percentage of low-income persons in the route-service area.

Minority Populations & Areas – Minority populations include those persons who self-identify themselves as being one or more of the following ethnic groups: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, as defined in the FTA Title VI Circular. "Minority Areas" are residential land use areas within Census tracts where the percentage of minority persons is higher than the Valley Metro service area average.

Route-Level – Refers to the geographic level of analysis at the route alignment level by which the performance of a transit route is measured for equity.

Route-Service Area – A one-half mile radial buffer on either side of a transit route's alignment. A three-quarter mile radial buffer is used to ensure compliance with the American's with Disabilities Act guidelines.

Service Level – Refers to the span of service (hours of operation), days of operation, trips, and headways (service frequencies) for a transit route or the regional transit system.

Service Area – According to 49 CFR 604.3, geographic service area means "the entire area in which a recipient is authorized to provide public transportation service under appropriate local, state, and Federal law."

Service Span – The span of hours over which service is operated (e.g., 6 a.m. to 10 p.m.). The service span may vary by weekday, Saturday, or Sunday.

Sub-recipient – Valley Metro is a designated sub-recipient of federal funding for capital projects and service operations. Funding is passed onto Valley Metro from the designated recipient, the City of Phoenix.

System-wide – Refers to the geographic level of analysis by which the performance of the entire transit system is measured for equity.

Transit System – A coordinated urban network of public passenger modes including fixed-route local and express buses, light rail transit, bus rapid transit, and circulator bus services that provide mobility for people from one place to another.

PUBLIC OUTREACH PROCESS FOR THE MAJOR SERVICE CHANGE AND FARE EQUITY POLICIES 2013

Valley Metro conducted a public outreach program between January 3rd and March 5th, 2013 to seek input from the public including minority and low-income populations on the proposed policies. All member agencies were offered the opportunity to participate in the public outreach program that included open dialogue sessions with local public agency committees, commissions, and special interest groups.

The first task was to engage a wide variety of stakeholders. Valley Metro presented the proposed policies to commissions and advisory boards focused on disability concerns, human relations and transportation throughout the metropolitan Phoenix area. Valley Metro also held a public meeting in a centralized location in conjunction with stakeholder outreach efforts. A presentation shared policies and meeting attendees were able to ask questions and provide comments. Information about the policies was also distributed at other Valley Metro meetings and outreach events. An open public meeting was also held to receive community input on the proposed policies. The following list of public outreach events were provided to those member agencies requesting dialogue sessions:

- January 3rd, 2013 – Phoenix Citizens'' Transit Commission
- February 7th, 2013 – Tempe Mayor's Commission on Disabilities
- February 12th, 2013 – Tempe Human Relations Commission
- February 27th, 2013 – Phoenix Mayor's Commission on Disability Issues
- March 5th, 2013 – Valley Metro Title VI Policies Public Hearing

To create awareness about the policies and the comment period, Valley Metro placed advertisements in Valley-wide and cultural media newspapers. Notification was also provided through email to Valley Metro's stakeholder database, Valley Metro's social media accounts and a news release to the local media. A fact sheet was developed with examples on how the policies would be implemented along with a comment form. These materials along with general information about this effort were placed on Valley Metro's website. Comments were accepted via mail, email, fax and phone.

MAJOR SERVICE CHANGE & SERVICE EQUITY POLICY

Purpose of the Policy

The purpose of the Major Service Change and Service Equity Policy is to define thresholds for determining major service changes and whether potential changes to existing transit services will have a disparate impact based on race, color, or national origin, or whether potential service changes will have a disproportionately high or adverse impact on minority and/or low-income populations.

Basis for Policy Standards

Federal law requires the City of Phoenix and Valley Metro to evaluate changes to transit services, as outlined in FTA Circular 4702.1B, effective October 1, 2012. In order to comply with 49 CFR Section 21.5(b)(a), 49 CFR Section 21.5 (b)(7) and Appendix C to 49 CFR part 21, recipients shall "evaluate significant system-wide service and fare changes and proposed improvements at the planning and programming stages to determine whether those changes have a discriminatory impact. For service changes, this requirement applies to 'major service changes' only. The recipient should have established guidelines or threshold for what it considers a 'major' change to be."

Major Service Change Policy

A. Major Service Change

The following is considered a major service change (unless otherwise noted under Exemptions), and will be evaluated in accordance with the regulatory requirements set forth in FTA Circular 4702.1B:

1. **Route-Level Service Reduction or Elimination**

   - Reducing an existing route by more than 25% of weekday route revenue miles[1], or

[1] A change of 25% in weekly route revenue miles and/or route directional miles is the current City of Phoenix threshold for determining whether a potential transit service change qualifies as a major service change (or "substantial" service change) according to the City of Phoenix resolution (1990). This percentage is generally an industry-wide percentage threshold used by peer transit systems throughout the United States. The City of Phoenix resolution also specifies that a public comment period will be initiated when a change in transit service of 25% or more is determined.

- Reducing an existing route by more than 25% of Saturday route revenue miles[1], or
- Reducing an existing route by more than 25% of Sunday route revenue miles[1], or
- Reducing the number of route directional miles more than 25%[1], or
- A change in a route alignment resulting in a 25% or greater variance from the existing route alignment[1], or

2. **Route-Level Expansion or Addition of a New Route**

- Adding a new route, or
- Expansion of an existing route that increases weekday route revenue miles by more than 25%[1], or
- Expansion of an existing route that increases Saturday route revenue miles by more than 25%[1], or
- Expansion of an existing route that increases Sunday route revenue miles by more than 25%[1], or
- Expanding the number of route directional miles more than 25%[1], or
- A change in a route alignment resulting in a 25%[1] or greater variance from the existing route alignment.

Note that this 25% threshold for a major service change is based on a route in its entirety, as identified above, and not on individual jurisdictional segments of a route.

B. <u>Minority Disparate Impact Policy (Service Equity Analysis)</u>

When conducting a service change equity analysis, the following thresholds will be used to determine when a service change would have a disparate impact on minority populations:

1. **Route-Level Service Reduction or Elimination**

   - Service Level and Service Area Reduction:

     - If the percentage of minority passengers[2] on an affected route is greater than the transit system's minority ridership (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[3]

2. **Route-Level Expansion or Addition of a New Route**

   - Service Level Expansion or Service Area Expansion (includes addition of new routes):

     - If a service level expansion or service area expansion is considered that coincides with a reduction in transit service on the same route or other routes, and the route(s) considered for service expansion predominantly serve non-minority and/or non-low-income geographic areas while the route(s) considered for reduction predominantly serve minority and/or low-income geographic areas, then a disproportionate burden may be determined. The determination of a disproportionate burden will be based on meeting both of the following criteria:

       - If the percentage of minority passengers[2] on an affected route considered for service expansion is less than the transit system's minority ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus),[3] and

       - If the percentage of minority passengers[2] on an affected route considered for service reduction is greater than the transit system's minority ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[3]

[2] The determination of the transit system and an affected route's minority and/or low-income population will be derived from the most recently completed, statistically valid regional on-board origin and destination survey.

[3] Local routes include local fixed-route bus, light rail, LINK bus, local limited stop bus. Express routes include express bus and RAPID bus. Circulator routes will be evaluated similarly to local routes for fare changes and major services changes, but will be considered separately from local and express services when considered in the context of a region- or system-wide Title VI analysis. Circulator bus services are provided by the municipalities they serve and not the regional transit agency.

C. Low-Income Disproportionate Burden Policy (Service Equity Analysis)

When conducting a service change equity analysis, the following thresholds will be used to determine when a service change would have a disproportionate burden on low-income populations:

1. **Route-Level Service Reduction or Elimination**

   - If the percentage of low-income passengers[2] on an affected route is greater than the transit system's low-income ridership (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[3]

2. **Route-Level Expansion or Addition of a New Route**

   - Service Level Expansion or Service Area Expansion (includes addition of new routes):

     - If a service level expansion or service area expansion is considered that coincides with a reduction in transit service on the same route or other routes, and the route(s) considered for service expansion predominantly serve non-minority and/or non-low-income geographic areas while the route(s) considered for reduction predominantly serve minority and/or low-income geographic areas, then a disproportionate burden may be determined. The determination of a disproportionate burden will be based on meeting both of the following criteria:

       - If the percentage of low-income passengers[2] on an affected route considered for service expansion is less than the transit system's low-income ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus),[3] **AND**

       - If the percentage of low-income passengers[2] on an affected route considered for service reduction is greater than the transit system's low-income ridership percentage (within the appropriate dataset's margin of error) by transit classification (local, express, neighborhood circulators, and rural bus).[3]

Equity Analysis Data Sources

Category	Action	Sub Action	Evaluation Method
Fare	Adjustment	N/A	O/D[a] profile data of affected fare category and/or Census Data
Service Span	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Service Headway	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Route Length	Reduction	N/A	O/D[a] Data
	Expansion	N/A	Census Data
Route Alignment	Reduced Alignment	N/A	O/D[a] Data
	Expanded Alignment	N/A	Census Data
	Modified Alignment	Eliminated Segment(s)	O/D[a] Data
		Segment(s) to New Areas	Census Data
New Route	New Route	N/A	Census Data

[a] Origin/Destination Survey Data

Exemptions

The major service change thresholds exclude any changes to service that are caused by the following:

- Discontinuance of Temporary or Demonstration Services – The discontinuance of a temporary transit service or demonstration service that has been in effect for less than 180 days.
- Headway Adjustments – Headways for transit routes may be adjusted up to 5 minutes during the peak hour periods, and 15 minutes during non-peak hour periods.
- New Transit Service "Break-In" Period – An adjustment to service frequencies and/or span of service for new transit routes that have been in revenue service for less than 180 days.

- Other Service Providers or Agencies – Actions of other service providers or public agencies providing/administering transit services that are not the responsibility of Valley Metro.

- Natural or Catastrophic Disasters – Forces of nature such as earthquakes, wildfires, or other natural disasters, or human-caused catastrophic disasters that may force the suspension of scheduled transit service for public safety or technical reasons.

- Auxiliary Transportation Infrastructure Failures – Failures of auxiliary transportation infrastructure such as vehicular bridges, highway bridge overpasses, tunnels, or elevated highways that force the suspension transit service.

- Overlapping Services – A reduction in revenue miles on one line that is offset by an increase in revenue miles on the overlapping section of an alternative transit route (an overlapping section is where two or more bus routes or rail lines share the same alignment, stops, or stations for a short distance).

- Seasonal Service and Special Events – Changes to bus service levels on routes which occur because of seasonal ridership changes and event activities served by dedicated temporary bus routes or increased service frequencies.

- Temporary Route Detours – A short-term change to a route caused by road construction, routine road maintenance, road closures, emergency road conditions, fiscal crisis, civil demonstrations, or any uncontrollable circumstance.

Public Participatory Procedures

For all proposed major service changes, City of Phoenix and/or Valley Metro will hold at least one public hearing, with a minimum of two public notices prior to the hearing in order to receive public comments on the potential service changes. The first meeting notice will occur at least 30 days prior to the scheduled hearing date, with the second notice being made at least 10 days prior to the scheduled hearing date. Public materials will be produced in English and Spanish (the metropolitan region's two primary languages), or in other languages upon request, in order to ensure Limited English Proficient (LEP) populations within the transit service area are informed of the proposed service changes and can participate in community discussions. Valley Metro and/or the City of Phoenix will conduct a service equity analysis for the Valley Metro Board of

Directors, the City of Phoenix City Council, and the public's consideration prior to any public hearings associated with the proposed service changes.

Definitions

Designated Recipient – The City of Phoenix is the designated recipient for federal funds contributing to transit system capital programs and operations in the greater Phoenix metropolitan region.

Disparate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the minority riders or population of the service area.

Disparate Treatment – An action that results in a circumstance in which minority riders or populations are treated differently than others because of their race, color, national origin and/or income status.

Disproportionate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the low-income riders or population of the service area.

Express Transit Service – Includes Valley Metro designated express bus and RAPID bus services.

High-Capacity Transit (HCT) – A transit facility or service that operates at a consistent, high frequency of service.

Local Transit Service – Includes Light Rail Transit (LRT), and local fixed-route bus, local limited stop bus, LINK bus routes, and circulator/shuttle bus services.

Low-income Populations & Areas – Low-income populations are those persons with an income of 80 percent or less of the national per capita income. "Low-income Areas" are residential land use areas within census tracts where the average per capita income is 80 percent or less of the national per capita income.

Minority Populations & Areas – Minority populations include those persons who self-identify themselves as being one or more of the following ethnic groups: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, as defined in the FTA Title VI Circular. "Minority Areas" are residential land use areas within Census tracts where the percentage of minority persons is higher than the Valley Metro service area average.

Route-Level – Refers to the geographic level of analysis at the route alignment level by which the performance of a transit route is measured for equity.

Route-Service Area – A three-quarter mile radial buffer on either side of a transit route's alignment. A three-quarter mile radial buffer is used to ensure compliance with the American's with Disabilities Act guidelines.

Service Level – Refers to the span of service (hours of operation), days of operation, trips, and headways (service frequencies) for a transit route or the regional transit system.

Service Area – According to 49 CFR 604.3, geographic service area means "the entire area in which a recipient is authorized to provide public transportation service under appropriate local, state, and Federal law."

Service Span – The span of hours over which service is operated (e.g., 6 a.m. to 10 p.m.). The service span may vary by weekday, Saturday, or Sunday.

Sub-recipient – Valley Metro is a designated sub-recipient of federal funding for capital projects and service operations. Funding is passed onto Valley Metro from the designated recipient, the City of Phoenix.

System-wide – Refers to the geographic level of analysis by which the performance of the entire transit system is measured for equity.

Transit System – A coordinated urban network of scheduled public passenger modes including fixed-route local and express buses, light rail transit, bus rapid transit, and circulator bus services that provide mobility for people from one place to another.

FARE EQUITY POLICY

Purpose of the Policy

The purpose of the Fare Equity Policy is to define a threshold for determining whether potential changes to existing transit fares will have a discriminatory impact based on race, color, or national origin, or whether a potential fare adjustment will have a disproportionately high or adverse impact on minority and/or low-income populations.

Basis for Policy Standards

Periodically, the City of Phoenix and Valley Metro make adjustments to transit fares in order to generate revenues to help sustain transit service operations. Federal law requires the City of Phoenix and Valley Metro to prepare and submit fare equity analyses for all potential transit fare adjustments, as outlined in Federal Transit Administration (FTA) Circular 4702.1B, effective October 1, 2012.

Fare Equity Policy

The following are the City of Phoenix and Valley Metro policies for determining if a fare adjustment will result in a minority disparate impact or low-income disproportionate impact.

A. <u>Minority Disparate Impact Policy (Fare Equity Analysis)</u>

If a planned transit fare adjustment results in minority populations bearing a fare rate change of greater than 4 percentage points as compared to non-minority populations, the resulting effect will be considered a minority disparate impact.

B. <u>Low-Income Disproportionate Burden Policy (Fare Equity Analysis)</u>

If a planned transit fare adjustment results in low-income populations bearing a fare rate change of greater than 4 percentage points as compared to non-low-income populations, the resulting effect will be considered a low-income disproportionate burden.

Equity Analysis Data Sources

Category	Action	Sub Action	Evaluation Method
Fare	Adjustment	N/A	O/D[a] profile data of affected fare category and/or Census Data
Service Span	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Service Headway	Reduction	N/A	O/D[a] profile data of affected route
	Expansion	N/A	
Route Length	Reduction	N/A	O/D[a] Data
	Expansion	N/A	Census Data
Route Alignment	Reduced Alignment	N/A	O/D[a] Data
	Expanded Alignment	N/A	Census Data
	Modified Alignment	Eliminated Segment(s)	O/D[a] Data
		Segment(s) to New Areas	Census Data
New Route	New Route	N/A	Census Data

[a] Origin/Destination Survey Data

Public Participatory Procedures

For all proposed fare changes, City of Phoenix and/or Valley Metro will hold at least one public hearing, with a minimum of two public notices prior to the hearing in order to receive public comments on the proposed fare changes. The first meeting notice will occur at least 30 days prior to the scheduled hearing date, with the second notice being made at least 10 days prior to the scheduled hearing date. Public materials will be produced in English and Spanish (the metropolitan region's two primary languages), or in other languages upon request, in order to ensure Limited English Proficient (LEP) populations within the transit service area are informed of the proposed service changes and can participate in community discussions. Valley Metro and/or the City of Phoenix will conduct a fare equity analysis for the Valley Metro Board of Directors, the City of Phoenix City Council, and the public's consideration prior to any public hearings associated with the proposed fare changes.

Definitions

Designated Recipient – The City of Phoenix is the designated recipient for federal funds contributing to transit system capital programs and operations in the greater Phoenix metropolitan region.

Disparate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the minority riders or population of the service area.

Disparate Treatment – An action that results in a circumstance in which minority riders or populations are treated differently than others because of their race, color, national origin and/or income status.

Disproportionate Impact – A facially neutral policy or practice that has a disproportionately excluding or adverse effect on the low-income riders or population of the service area.

Express Transit Service – Includes Valley Metro designated express bus and RAPID bus services.

High-Capacity Transit (HCT) – A transit facility or service that operates at a consistent, high frequency of service.

Local Transit Service – Includes Light Rail Transit (LRT), and local fixed-route bus, local limited stop bus, LINK bus routes, and circulator/shuttle bus services.

Low-income Populations & Areas – Low-income populations are those persons with an income of 80 percent or less of the national per capita income. “Low-income Areas” are residential land use areas within census tracts where the average per capita income is 80 percent or less of the national per capita income.

Minority Populations & Areas – Minority populations include those persons who self-identify themselves as being one or more of the following ethnic groups: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, as defined in the FTA Title VI Circular. “Minority Areas” are residential land use areas within Census tracts where the percentage of minority persons is higher than the Valley Metro service area average.

Route-Level – Refers to the geographic level of analysis at the route alignment level by which the performance of a transit route is measured for equity.

Route-Service Area – A three-quarter mile radial buffer on either side of a transit route’s alignment. A three-quarter mile radial buffer is used to ensure compliance with the American’s with Disabilities Act guidelines.

Service Level – Refers to the span of service (hours of operation), days of operation, trips, and headways (service frequencies) for a transit route or the regional transit system.

Service Area – According to 49 CFR 604.3, geographic service area means "the entire area in which a recipient is authorized to provide public transportation service under appropriate local, state, and Federal law."

Service Span – The span of hours over which service is operated (e.g., 6 a.m. to 10 p.m.). The service span may vary by weekday, Saturday, or Sunday.

Sub-recipient – Valley Metro is a designated sub-recipient of federal funding for capital projects and service operations. Funding is passed onto Valley Metro from the designated recipient, the City of Phoenix.

System-wide – Refers to the geographic level of analysis by which the performance of the entire transit system is measured for equity.

Transit System – A coordinated urban network of public passenger modes including fixed-route local and express buses, light rail transit, bus rapid transit, and circulator bus services that provide mobility for people from one place to another.

MEETINGS OF THE

Boards of Directors

Valley Metro RPTA	Valley Metro Rail
MEETING DATE Thursday, August 13, 2015	MEETING DATE Thursday, August 13, 2015
TIME 12:15 p.m.	TIME 1:15 p.m.

LOCATION

Valley Metro RPTA
Lake Powell Conference Room

101 N. 1st Avenue, 10th Floor
Phoenix

Agenda

August 5, 2015

Board of Directors
Thursday, August 13, 2015
Lake Powell Conference Room
101 N. 1st Avenue, 10th Floor
12:15 p.m.

	Action Recommended
1. Public Comment	1. For information

A 15-minute opportunity will be provided to members of the public at the beginning of the meeting to address the Board on all agenda items. The Chair may recognize members of the public during the meeting at his/her discretion. Up to three minutes will be provided per speaker or a total of 15 minutes total for all speakers.

2. Minutes	2. For action

Minutes from the June 18, 2015 Board meeting are presented for approval.

3. Chief Executive Officer's Report	3. For information

Steve Banta, Chief Executive Officer (CEO), will brief the Board on current issues.

CONSENT AGENDA

4A. Contract Extension for ADA Paratransit Eligibility Certification and Fixed-Route Travel Training Services	4A. For action

Staff will request that the Board of Directors authorize the CEO to exercise option years six and seven including a contract value adjustment to the contract with CARE Evaluators for the provision of ADA paratransit eligibility certification and fixed-route travel training services, in an amount not to exceed $1,260,604 for the period of October 1, 2015 through September 30, 2017.

4B. Contract Award for Investment Management Services (IMS) — 4B. For action

Staff will request that the Board of Directors authorize the CEO to execute a contract with PFM Asset Management LLC for Investment Management Services for a not to exceed cost of $60,000 for the one year initial term of the contract with 4 one-year extension options not to exceed $60,000 per year.

REGULAR AGENDA

5. Title VI Program Update — 5. For action

Steve Banta, CEO, will introduce Wulf Grote, Director of Planning and Accessible Transit, who will request that the Board of Directors approve the 2015 Title VI Program Update.

6. October 2015 Valley Metro Transit Service Changes — 6. For action

Steve Banta, CEO, will introduce Wulf Grote, Director of Planning and Accessible Transit, who will request that the Board of Directors authorize the CEO to amend service operator contracts and member agency intergovernmental agreements (IGAs), as necessary, to accommodate the recommended October 2015 service changes.

7. FY 2015 Valley Metro RPTA and Valley Metro Rail CEO Performance Incentive Goals and CEO Performance Incentive Compensation — 7. For action

Steve Banta, CEO, will provide the Board with an overview of the achievements associated with the FY 2015 CEO Performance Incentive Goals and request Board consideration of the CEO Performance Incentive Compensation.

8. Possible Executive Session – Chief Executive Officer Evaluation — 8. For possible action

The Board may vote to enter executive session pursuant to A.R.S. 38-431.01.A-1 for the purpose of discussing the CEO performance incentive goals for the period of July 1, 2014 through June 30, 2015. Discussion and consideration may be both with and without the CEO in attendance during the e-session.

9. Executive Session Action Items — 9. For possible action

The Board may take action related to items discussed as part of Agenda Item 8.

10. Future Agenda Items Request and Report on Current Events — 10. For information and discussion

Chair McDonald will request future agenda items from members, and members may provide a report on current events.

11. Next Meeting — 11. For information

The next meeting of the Board is scheduled for **Thursday, September 17, 2015 at 12:15 p.m.**

Qualified sign language interpreters are available with 72 hours notice. Materials in alternative formats (large print, audiocassette, or computer diskette) are available upon request. For further information, please call Valley Metro at 602-262-7433 or TTY at 602-251-2039. To attend this meeting via teleconference, contact the receptionist at 602-262-7433 for the dial-in-information. The supporting information for this agenda can be found on our web site at www.valleymetro.org.

Information Summary

DATE **AGENDA ITEM 1**
August 5, 2015

SUBJECT
Public Comment

PURPOSE
A 15-minute opportunity will be provided to members of the public at the beginning of the meeting to address the Board on all agenda items. The Chair may recognize members of the public during the meeting at his/her discretion.

BACKGROUND/DISCUSSION/CONSIDERATION
None

COST AND BUDGET
None

COMMITTEE PROCESS
None

RECOMMENDATION
This item is presented for information only.

CONTACT
Steve Banta
Chief Executive Officer
602-262-7433
sbanta@valleymetro.org

ATTACHMENT
None

Information Summary

DATE **AGENDA ITEM 5**
August 5, 2015

SUBJECT
Title VI Program Update

PURPOSE
To request Board approval of the 2015 Title VI Program Update

BACKGROUND/DISCUSSION/CONSIDERATION
Title VI of the Civil Rights Act of 1964 prohibits discrimination by recipients of Federal financial assistance on the basis of race, color, and national origin, including the denial of meaningful access for limited English proficient persons. The Federal Transit Administration (FTA) requires that all recipients, including sub-recipients, of federal funds document their compliance by submitting a Title VI Program once every three years. As a sub-recipient of federal funds, Valley Metro has updated its Title VI Program, in coordination with the City of Phoenix. The last update to the Title VI Program was made in February 2012.

In October 2012, FTA issued new Title VI Requirements and Guidelines (Circular 4702.1B) to provide guidance on new requirements and provide clarity to help ensure that all recipients maintain compliance with their programs. One of the new requirements was to establish policies by April 1, 2013 to identify and evaluate potential equity issues related to changes in transit fares and services. Valley Metro, in coordination with the City of Phoenix, developed the fare and service equity policies to fulfill this requirement. The policies were approved by the Board on March 21, 2013. As part of the 2015 update, Valley Metro is making the following changes to the Major Service Change and Service Equity Policy and Fare Equity Policy:

- In case of route-level expansion or addition of a new route, the terms “Service Level Expansion or Service Area Expansion” will be changed to “Route Level Expansion or Transit Service Area Expansion” to be consistent with the definition of route-level expansion and/or addition of a new route.
- Under exemptions for major service change analysis, “The discontinuance of a temporary transit service or demonstration service that has been in effect for less than 180 days.” has been changed to 365 days to be consistent with the FTA Circular.
- Under exemptions for major service change analysis, “An adjustment to service frequencies and/or span of service for new transit routes that have been in revenue service for less than 180 days.” has been changed to 365 days to be consistent with the FTA Circular.
- Low-Income Population and Areas were previously defined as “those persons with an income of 80 percent or less of the national per capita income” and “residential land use area within census tracts where the average per capita income is 80 percent or less of the national per capita income” respectively. The

per capita income threshold has now been changed to 150% or less of the national per capita income to be consistent with the FTA Circular.

The FTA Title VI Circular 4702.1B requires the plans, policies and items listed in the table below to be included in the Title VI Program and updated as necessary every three years. The table also identifies items Valley Metro staff has updated within its Program and items added to comply with new FTA requirements.

Plan/Policy/Item	Updated since 2012
Title VI Notice to the Public	Yes
Title VI Complaint Form	(New requirement)
List of Title VI Investigations, Complaints and Lawsuits	Yes
Inclusive Public Participation Plan	Yes
Language Assistance Plan	Yes
Demographic Data	Yes
System-wide Service Standards and Policies	Yes
Monitoring Transit Services	Yes
Major Service Equity Policy	(New requirement)
Fare Equity Policy	(New requirement)
Service and/or Fare Change Analyses	Yes
Table depicting the non-elected planning boards, advisory councils or committees membership	(New requirement)
Minutes for the governing body approval of the Title VI Program Update	(New requirement)

COST AND BUDGET
No cost at this time. The cost to conduct the annual monitoring of the system-wide standards and policies and to update the Title VI Program every three years can be accomplished with the level of Valley Metro staff currently budgeted.

COMMITTEE PROCESS
Service Planning Working Group: July 7, 2015 for information
RTAG: July 14, 2015 for information
TMC: August 5, 2015 approved
Board of Directors: August 21, 2015 for action

RELEVANCE TO STRATEGIC PLAN
This item addresses three goals in the Board-adopted FY16-20 Strategic Plan:

- Goal 1: Increase customer focus
  - Tactic E: Enhance services and facilities for seniors and people with disabilities
- Goal 2: Advance performance based operations
  - Tactic A: Operate an effective, reliable, high performing transit system

RECOMMENDATION
It is recommended that the Board of Directors approve the Title VI Program Update.

CONTACT
Wulf Grote, P.E.
Director of Planning and Accessible Transit
602-322-4420
wgrote@valleymetro.org

ATTACHMENT
None

The Title VI Update Report is available upon request.

Valley Metro
Title VI Program

August 2015

General Overview

- Last Title VI Update was Oct. 2012
  - FTA requires update every three years
- FTA issued new Title VI Circular in Oct. 2012
- Phoenix as primary/designated recipient provides oversight and monitoring
- Valley Metro and Phoenix coordinating the development of a regional Title VI Program

2

Program Requirements

Plan/Policy/Item	Updated since 2012
Title VI Notice to the Public	Yes
Title VI Complaint Form	New requirement
List of Title VI Investigations, Complaints and Lawsuits	Yes
Inclusive Public Participation Plan	Yes
Language Assistance Plan	Yes
Demographic Data	Yes
System-wide Service Standards and Policies	Yes
Monitoring Transit Services	Yes
Major Service Equity Policy	New requirement
Fare Equity Policy	New requirement
Service and/or Fare Change Analyses	Yes
Table depicting the non-elected planning boards, advisory councils or committees membership	New requirement
Minutes for the governing body approval of the Title VI Program Update	New requirement

3

Fare and Service Equity Policies

- Evaluates impacts to:
  - Minority populations
  - Low-income populations
- Policies adopted by Board on March 2013

4

Service Equity Policy Change

- "Service Level Expansion" or "Service Area Expansion" will be changed to "Route Level Expansion" or "Transit Service Area Expansion"
- Exemptions for temporary/demonstration and new service "break-in" periods
  - Timeframe adjusted from 180 to 365 days

5

Service & Fare Equity Policy Change

- Low-income person – a person whose median household income is at or below 150 % of the poverty line (current is 80% per capita income)
- Low-income Areas – a census tract or other geographic bound area that has a higher percentage of low-income persons than the overall average percentage of low-income persons in the route-service area

2015 Poverty Guidelines – U.S. Department of Health & Human Services		
Persons in family/household	Poverty Guideline	150% of Poverty Guideline
4	$24,250	$36,375

6

Monitoring Regional Service Standards and Policies

- FTA requires monitoring every three years
- Purpose of Monitoring
  - Identify disparities in the level and quality of Valley Metro's operated transit service provided to different demographic groups
- Results
  - No disparities

7

Recommendation

It is recommended that the Board of Directors approve the Title VI Program Update

8

Agenda

August 5, 2015

Board of Directors – ACTION ITEMS
Thursday, August 13, 2015
Lake Powell Conference Room
101 N. 1st Avenue, 10th Floor
12:15 p.m.

	Action Recommended
1. Public Comment	1. For information

A 15-minute opportunity will be provided to members of the public at the beginning of the meeting to address the Board on all agenda items. The Chair may recognize members of the public during the meeting at his/her discretion. Up to three minutes will be provided per speaker or a total of 15 minutes total for all speakers.

2. Minutes	2. For action

Minutes from the June 18, 2015 Board meeting are presented for approval.

IT WAS MOVED BY COUNCILMEMBER SHERWOOD, SECONDED BY COUNCILMEMBER SICKLES AND UNANIMOUSLY CARRIED TO APPROVE THE JUNE 18, 2015 BOARD MEETING MINUTES.

3. Chief Executive Officer's Report	3. For information

Steve Banta, Chief Executive Officer (CEO), will brief the Board on current issues.

This item was presented for information.

CONSENT AGENDA

4A. Contract Extension for ADA Paratransit Eligibility Certification and Fixed-Route Travel Training Services — 4A. For action

Staff will request that the Board of Directors authorize the CEO to exercise option years six and seven including a contract value adjustment to the contract with CARE Evaluators for the provision of ADA paratransit eligibility certification and fixed-route travel training services, in an amount not to exceed $1,260,604 for the period of October 1, 2015 through September 30, 2017.

4B. Contract Award for Investment Management Services (IMS) — 4B. For action

Staff will request that the Board of Directors authorize the CEO to execute a contract with PFM Asset Management LLC for Investment Management Services for a not to exceed cost of $60,000 for the one year initial term of the contract with 4 one-year extension options not to exceed $60,000 per year.

IT WAS MOVED BY COUNCILMEMBER SHERWOOD, SECONDED BY COUNCILMEMBER PIZZILLO AND UNANIMOUSLY CARRIED TO APPROVE THE CONSENT AGENDA.

REGULAR AGENDA

5. Title VI Program Update — 5. For action

Steve Banta, CEO, will introduce Wulf Grote, Director of Planning and Accessible Transit, who will request that the Board of Directors approve the 2015 Title VI Program Update.

IT WAS MOVED BY COUNCILMEMBER SHERWOOD, SECONDED BY COUNCILMEMBER WILLIAMS AND UNANIMOUSLY CARRIED TO APPROVE THE 2015 TITLE VI PROGRAM UPDATE.

6. October 2015 Valley Metro Transit Service Changes — 6. For action

Steve Banta, CEO, will introduce Wulf Grote, Director of Planning and Accessible Transit, who will request that the Board of Directors authorize the CEO to amend service operator contracts and member agency intergovernmental agreements (IGAs), as necessary, to accommodate the recommended October 2015 service changes.

IT WAS MOVED BY COUNCILMEMBER WILLIAMS, SECONDED BY COUNCILMEMBER KLAPP AND UNANIMOUSLY CARRIED TO AUTHORIZE THE CEO TO AMEND SERVICE OPERATOR CONTRACTS AND MEMBER AGENCY INTERGOVERNMENTAL AGREEMENTS (IGAS), AS NECESSARY, TO ACCOMMODATE THE RECOMMENDED OCTOBER 2015 SERVICE CHANGES.

7. FY 2015 Valley Metro RPTA and Valley Metro Rail CEO Performance Incentive Goals and CEO Performance Incentive Compensation — 7. For action

Steve Banta, CEO, will provide the Board with an overview of the achievements associated with the FY 2015 CEO Performance Incentive Goals and request Board consideration of the CEO Performance Incentive Compensation.

IT WAS MOVED BY COUNCILMEMBER WILLIAMS, SECONDED BY COUNCILMEMBER HEUMANN AND UNANIMOUSLY CARRIED IN ACCORDANCE WITH THE RPTA'S EMPLOYMENT AGREEMENT WITH CEO STEPHEN R. BANTA EFFECTIVE MARCH 1, 2012, THAT MR. BANTA BE PAID THE SUM OF $25,000 IN ADDITIONAL COMPENSATION FOR HIS SUCCESSFUL COMPLETION OF THE FIVE GOALS.

8. Possible Executive Session – Chief Executive Officer Evaluation — 8. For possible action

The Board may vote to enter executive session pursuant to A.R.S. 38-431.01.A-1 for the purpose of discussing the CEO performance incentive goals for the period of July 1, 2014 through June 30, 2015. Discussion and consideration may be both with and without the CEO in attendance during the e-session.

No action was taken on this item.

9. Executive Session Action Items — 9. For possible action

The Board may take action related to items discussed as part of Agenda Item 8.

No action was taken on this item.

10. Future Agenda Items Request and Report on Current Events — 10. For information and discussion

Chair McDonald will request future agenda items from members, and members may provide a report on current events.

11. Next Meeting — 11. For information

The next meeting of the Board is scheduled for **Thursday, September 17, 2015 at 12:15 p.m.**

Qualified sign language interpreters are available with 72 hours notice. Materials in alternative formats (large print, audiocassette, or computer diskette) are available upon request. For further information, please call Valley Metro at 602-262-7433 or TTY at 602-251-2039. To attend this meeting via teleconference, contact the receptionist at 602-262-7433 for the dial-in-information. The supporting information for this agenda can be found on our web site at www.valleymetro.org.

Agenda

August 5, 2015

Board of Directors – ACTION ITEMS
Thursday, August 13, 2015
Lake Powell Conference Room
101 N. 1st Avenue, 10th Floor
1:15 p.m.

Action Recommended

1. Public Comment — 1. For information

A 15-minute opportunity will be provided to members of the public at the beginning of the meeting to address the Board on all agenda items. The Chair may recognize members of the public during the meeting at his/her discretion. Up to three minutes will be provided per speaker or a total of 15 minutes total for all speakers.

2. Minutes — 2. For action

Minutes from the June 18, 2015 Board meeting are presented for approval.

IT WAS MOVED BY VICE MAYOR KAVANAUGH, SECONDED BY MAYOR MITCHELL AND UNANIMOUSLY CARRIED TO APPROVE THE JUNE 18, 2015 BOARD MEETING MINUTES.

3. Chief Executive Officer's Report — 3. For information

Steve Banta, Chief Executive Officer (CEO), will brief the Board on current issues.

This item was not presented.

4. Title VI Program Update — 4. For action

Steve Banta, CEO, will introduce Wulf Grote, Director of Planning and Accessible Transit, who will request that the Board of Directors approve the 2015 Title VI Program Update.

IT WAS MOVED BY VICE MAYOR KAVANAUGH, SECONDED BY MAYOR MITCHELL AND UNANIMOUSLY CARRIED TO APPROVE THE 2015 TITLE VI PROGRAM UPDATE.

5. Gilbert Road Extension Project and Design Services Contract — 5. For action

Steve Banta, CEO, will introduce Rick Brown, Chief Engineer, who will request that the Board of Directors approve the total GRE Project for $152,726,625 which includes Design, Construction, Right-of-Way acquisition, Public Art, Light Rail Vehicles, Professional Services and Finance Costs and authorization for the Chief Executive Officer (CEO) to execute the contract for GRE Design Services with Jacobs Engineering Group, Inc. for a NTE amount of $7,050,000.

IT WAS MOVED BY VICE MAYOR KAVANAUGH, SECONDED BY COUNCILMEMBER HEUMANN AND UNANIMOUSLY CARRIED TO APPROVE THE TOTAL GRE PROJECT FOR $152,726,625 WHICH INCLUDES DESIGN, CONSTRUCTION, RIGHT-OF-WAY ACQUISITION, PUBLIC ART, LIGHT RAIL VEHICLES, PROFESSIONAL SERVICES AND FINANCE COSTS AND AUTHORIZATION FOR THE CHIEF EXECUTIVE OFFICER (CEO) TO EXECUTE THE CONTRACT FOR GRE DESIGN SERVICES WITH JACOBS ENGINEERING GROUP, INC. FOR A NTE AMOUNT OF $7,050,000.

6. Central Mesa Extension Project Contract Contingency Adjustment and Change Order — 6. For action

Steve Banta, CEO, will introduce Rick Brown, Chief Engineer, who will request that the Board of Director authorize the CEO to 1) allocate additional contract contingency in the amount of $3,008,347 for the Central Mesa Extension (CME) Project construction contract and; 2) execute a change order for a comprehensive settlement in the amount of $3,008,347 with Valley Transit Constructors Joint Venture.

IT WAS MOVED BY VICE MAYOR KAVANAUGH, SECONDED BY COUNCILMEMBER HEUMANN AND UNANIMOUSLY CARRIED TO AUTHORIZE THE CEO TO 1) ALLOCATE ADDITIONAL CONTRACT CONTINGENCY IN THE AMOUNT OF $3,008,347 FOR THE CENTRAL MESA EXTENSION (CME) PROJECT CONSTRUCTION CONTRACT AND; 2) EXECUTE A CHANGE ORDER FOR A COMPREHENSIVE SETTLEMENT IN THE AMOUNT OF $3,008,347 WITH VALLEY TRANSIT CONSTRUCTORS JOINT VENTURE.

7. Renewal of Rail Ride Fare Agreement with US Airways Center — 7. For action

Steve Banta, CEO, will introduce Hillary Foose, Director of Marketing and Communication, who will request that the Board of Directors authorize the CEO to renew the fare agreement with Phoenix Arena Development Limited Partnership (PADLP), operator of US Airways Center (USAC), for up to seven years. This agreement combines light rail and event ticketing allowing customers to ride at no additional cost to USAC events.

IT WAS MOVED BY COUNCILMEMBER HEUMANN, SECONDED BY VICE MAYOR KAVANAUGH AND UNANIMOUSLY CARRIED TO AUTHORIZE THE CEO TO RENEW THE FARE AGREEMENT WITH PHOENIX ARENA DEVELOPMENT LIMITED PARTNERSHIP (PADLP), OPERATOR OF US AIRWAYS CENTER (USAC), FOR UP TO SEVEN YEARS. THIS AGREEMENT COMBINES LIGHT RAIL AND EVENT TICKETING ALLOWING CUSTOMERS TO RIDE AT NO ADDITIONAL COST TO USAC EVENTS.

8. FY 2015 Valley Metro RPTA and Valley Metro Rail CEO Performance Incentive Goals and CEO Performance Incentive Compensation — 8. For action

Steve Banta, CEO, will provide the Board with an overview of the achievements associated with the FY 2015 CEO Performance Incentive Goals and request Board consideration of the CEO Performance Incentive Compensation.

IT WAS MOVED BY VICE MAYOR KAVANAUGH, SECONDED BY COUNCILMEMBER HEUMANN AND UNANIMOUSLY CARRIED IN ACCORDANCE WITH THE RPTA'S EMPLOYMENT AGREEMENT WITH CEO STEPHEN R. BANTA EFFECTIVE MARCH 1, 2012, THAT MR. BANTA BE PAID THE SUM OF $25,000 IN ADDITIONAL COMPENSATION FOR HIS SUCCESSFUL COMPLETION OF THE FIVE GOALS.

9. Possible Executive Session – Chief Executive Officer Evaluation — 9. For possible action

The Board may vote to enter executive session pursuant to A.R.S. 38-431.01.A-1 for the purpose of discussing the CEO performance incentive goals for the period of July 1, 2014 through June 30, 2015. Discussion and consideration may be both with and without the CEO in attendance during the e-session.

No action was taken on this item.

10. Executive Session Action Items — 10. For possible action

The Board may take action related to items discussed as part of Agenda Item 9.

No action was taken on this item.

11. Future Agenda Items Request and Report on Current Events — 11. For information

Chair Williams will request future agenda items from members and members may provide a report on current events.

12. Next Meeting — 12. For information

The next meeting of the Board is scheduled for **Thursday, September 17, 2015 at 1:15 p.m.**

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Valley Metro
Title VI Public Participation Plan

May 2015

VALLEY METRO

1.0 Introduction

The regional transit public input/outreach process is conducted by Valley Metro for various transit-related activities and actions. Throughout the year, Valley Metro conducts public outreach activities related to capital projects, transit service changes, fare changes, and other transit-related events. This Title VI Public Participation Plan was established to ensure adequate inclusion of the public throughout the Phoenix metropolitan community in accord with the content and considerations of Title VI of the Civil Rights Act of 1964. Federal regulations state that recipients of federal funding must "promote full and fair participation in public transportation decision-making without regard to race, color or national origin." Valley Metro uses this Plan to ensure adequate involvement of low-income, minority and limited English proficient (LEP) populations, following guidance from the Title VI Requirements and Guidelines for Federal Transit Administration Recipients Circular[1] (Circular).

Involving the general public in Valley Metro practices and decision-making processes provides helpful information to improve the transit system and better meet the needs of the community. Although public participation methods and extent may vary with the type of plan, program and/or service under consideration as well as the resources available, a concerted effort to involve all affected parties will be conducted in compliance with this Plan along with Federal regulations. To include effective strategies for engaging low-income, minority and LEP populations, the Circular suggests that the following may be considered:

- Scheduling meetings at times and locations that are convenient and accessible for minority and LEP communities.
- Employing different meeting sizes and formats.
- Coordinating with community- and faith-based organizations, educational institutions and other organizations to implement public engagement strategies that reach out specifically to members of affected minority and/or LEP communities.
- Considering radio, television, or newspaper ads on stations and in publications that serve LEP populations. Outreach to LEP populations could also include audio programming available on podcasts.
- Providing opportunities for public participation through means other than written communication, such as personal interviews or use of audio or video recording devices to capture oral comments.

Valley Metro currently practices all of these strategies, in compliance with Federal regulations, so that minority, low-income and LEP populations are informed and also have meaningful opportunities to engage in planning activities and provide input as part of the decision-making process.

[1] United States Department of Transportation, Federal Transit Administration, Circular 4702.1B.

2.0 Typical Public Participation Opportunities

Valley Metro provides opportunities to share information or receive public input through a variety of methods for public participation utilized to engage low-income, minority and LEP populations through many outlets.

For planning efforts, including fare and service changes, public meeting locations are held at a centralized area or near affected route areas and bilingual staff is available. Public notices and announcements are published in minority-focused publications; some examples include: the *Arizona Informant* (African American community), *Asian American Times* (Asian American community), *La Voz* and *Prensa Hispana* (Hispanic community). Press releases are also sent to these media sources regarding fare changes, service changes and other programs. Additionally, printed materials, including comment cards or surveys, are available in Spanish.

A key participation effort, the Rider Satisfaction Survey, is conducted every two years. This survey is administered on transit routes across the region, reaching transit riders that live in minority and/or low-income communities. The survey, administered in English and Spanish, measures citizen satisfaction with transit services and captures comments for improvements.

Throughout the year, minority, low-income and LEP populations have access to information via the Valley Metro Customer Service Center. The Customer Service Center is open 6 a.m. to 8 p.m., Monday through Friday; 7 a.m. to 7 p.m. on Saturdays; and 8 a.m. to 5 p.m. on Sundays and designated holidays. Customer Service staff is bilingual.

Also available is the website www.valleymetro.org. Most information including meeting announcements, meeting materials and other program information is available on the website in both English and Spanish. If users would like information in another language, Valley Metro features Google translate on its website. This allows Valley Metro to reach citizens in 91 languages with information on transportation services, proposed service changes and other programs.

3.0 Public Participation Methods

Valley Metro uses several specific public involvement techniques to ensure that minority, low-income and LEP persons are involved in transit decisions. Through the use of public involvement, media outlets and printed or electronic materials, Valley Metro disseminates information regarding planning efforts. These efforts include the activities described below.

- Public meetings, hearings and open houses are held regularly at community-familiar locations with public transportation access and at convenient times, in collaboration with our member cities. These meetings provide an opportunity to meet with citizens and receive their comments and questions on proposed service changes and other programs. For each program, Valley Metro varies its meeting format in order to best engage the targeted population.

- Valley Metro has staff available at public meetings, hearings, events and open houses to answer questions and receive comments in both English and Spanish. Valley Metro also utilizes court reporters to record verbal comments at public hearings.

- Outreach for biannual service changes and other programs are conducted at or near the affected area, for example, along an affected bus route or at an affected transfer location, thus targeting the population that may be most impacted by proposed changes to service or routes. Oftentimes, these efforts are also executed at transit stations, community centers, civic centers, or major transfer locations.

- Coordination with community- and faith-based organizations, educational institutions and other organizations occurs regularly. These coordination efforts assist Valley Metro in executing public engagement strategies that reach out to members of the population that may be impacted.

- Valley Metro conducts specially-tailored transit presentations to community groups. This includes mobility training for senior citizens and people with disabilities, as well as information on how to use the transit system for new residents and refugees. More comprehensive travel training is also conducted monthly at a regional center for customers with disabilities.

- All public meeting notices for biannual service changes and other programs are translated to Spanish. Notices regarding Valley Metro projects and programs are widely distributed to the public through multiple methods, including through community- and faith-based organizations as well as via door hangers, direct mail, newspaper advertisement, electronic messaging (email through existing database), social media, door-to-door canvassing and on-board announcements on the transit system.

- Valley Metro publishes advertisements of any proposed service or fare change in minority publications in an effort to make this information more easily available to minority populations. Additionally, Valley Metro sends press releases regarding service changes and other programs to Spanish-language media.

- Valley Metro offers online participation via social media and e-mail input as an alternative opportunity for comment.

- Major surveying efforts are conducted in both English and Spanish to ensure that the data collected is representative of the general public.

- Valley Metro Customer Service staff is multilingual.

- All comments are documented in a centralized database. For biannual service changes, comments are categorized as “in favor,” “not in favor” or “indifferent.” Comment summary information is provided to Valley Metro’s city partners for review and is also presented to the Valley Metro Board for consideration when taking action on proposed service changes.

Depending upon the type of project, program, or announcement, public participation methods may be customized to ensure that the general public is adequately involved in the decision-making process.

4.0 Conclusion

Valley Metro conducts public outreach throughout the year to involve the general public with activities and transit planning processes. Using a variety of communication techniques such as facilitating meetings at varied times and locations using multiple formats, placing printed materials at multiple outlets and providing opportunities via phone and web to share or collect information, Valley Metro ensures that outreach efforts include opportunities for minority, low-income and LEP populations that may be impacted by the activity or transit planning process under consideration. Valley Metro will continue to involve all communities in an effort to be inclusive of all populations throughout the Metropolitan Phoenix area and also to comply with Federal regulations. Valley Metro will continue to monitor and update this Inclusive Public Participation Plan as part of the Title VI Program which is updated triennially.

Language Assistance Plan

Title VI Program

May 2015

1.0 INTRODUCTION

In 1993, the Valley Metro Regional Public Transportation Authority (RPTA) board adopted the name Valley Metro as the identity for the regional transit system in the Phoenix metropolitan area. Under the Valley Metro brand, local governments joined to fund the Valley-wide transit system that serves more than 73 million riders annually. Valley Metro provides fixed route bus service, light rail service and complementary paratransit service across the region. Valley Metro distributes transit funds from the countywide transit sales tax to its member agencies including the cities of Tempe, Mesa, Glendale, Phoenix, Buckeye, Tolleson, Wickenburg, Surprise, Peoria, Chandler, Gilbert, El Mirage, Avondale, Goodyear, Scottsdale, and Maricopa County. For the most part, Valley Metro and its member agencies utilize service providers for operations of bus, light rail and paratransit services. The cities of Glendale, Scottsdale, Peoria, and Phoenix contract some of their service directly to service providers.

The regional transit system has 44 local bus routes, 15 key local bus routes, 1 limited stop peak and 2 limited stop all-day routes, 20 Express/RAPID routes, 19 community circulator routes, one rural connector route, and one light rail system for a total of 103 regional routes. Eight regional entities provide Dial-a-Ride service for seniors and persons with disabilities, as well as ADA paratransit service for those who are unable to use fixed route bus service.
Valley Metro and the region supports the goal of the U.S. Department of Transportation (USDOT) limited English proficient (LEP) guidance to provide meaningful access to its services by LEP persons. The Federal Transit Administration (FTA) notes that transit agencies that provide language assistance to LEP persons in a competent and effective manner will help ensure that their services are safe, reliable, convenient, and accessible to those persons. These efforts may attract riders who would otherwise be excluded from using the service because of language barriers and, ideally, will encourage riders to continue using the system after they are proficient in English and/or have more transportation options.

1.1 Regulatory Guidance

Title VI of the Civil Rights Act of 1964, provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal financial assistance.

Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency,” issued on August 11, 2000, directs each federal agency to publish guidance for its respective recipients in order to assist with its obligations to LEP persons under Title VI. The Executive Order states that recipients must take reasonable steps to ensure meaningful access to their programs and activities by LEP persons. Providing English-only services may constitute national origin discrimination in violation of Title VI and its implementing regulations.

The FTA Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients", issued in October 2012 reiterates this requirement. Chapter III states that — FTA recipients must take responsible steps to ensure meaningful access to the benefits, services, information, and other important portions of their programs and activities for individuals who are Limited English Proficient (page III-6)."

In the Phoenix Metropolitan Area, there are over seventy different languages identified in households where English is not the predominate language. Using the "Four Factor Analysis" prescribed by the FTA, this plan was developed to ensure that all transit providers effectively communicate with all users of the public transportation agency's services provided.

1.2 Four Factor Analysis

The FTA Circular 4702.1B identifies four factors that recipients of federal funds should follow when determining what reasonable steps should be taken to ensure meaningful access for LEP persons.

The four factor analysis involved the following:

1. Identify the number or proportion of LEP persons eligible to be served or likely to be encountered with transit service.
2. Determine the frequency with which LEP individuals come in contact with transit service.
3. Determine the nature and importance of transit service provided to LEP individuals.
4. Assess the resources available to the recipient for LEP outreach, as well as costs associated with that outreach.

This document describes Valley Metro's four-factor analysis and summarizes its LEP efforts, including staff training, followed by a description of how the plan will be monitored and updated.

2.0 LIMITED ENGLISH PROFICIENT POPULATION (FACTOR 1)

The Factor 1 analysis assessed the number and proportion of persons with limited English speaking proficiency likely to be encountered within the service area, which is defined as a one-half mile radial buffer around all fixed route services. The LEP population is those individuals who reported to the Census Bureau that they speak English "less than very well."

2.1 Evaluation Methods and Data Sources

In accordance with the FTA's policy guidance, the initial step for providing meaningful access to services for LEP persons and maintaining an effective LEP program is to identify LEP populations in the service area and their language characteristics through an analysis of available data. Determining the presence of LEP populations in the Valley Metro service area was completed through an analysis of several data sources, including:

- U.S. Census Bureau, Census 2000
- U.S. Census Bureau, 2013 American Community Survey (ACS) 5-Year Sample

The U.S Decennial Census 2010 data was not used, as the 2010 Census did not include language specific information on the census forms. The Census 2000 data provides some general information about language groups that is included below; though recognized to be 15 years old. Notably the demographic landscape has transformed since 2000, though this dataset provides a historical comparison and additional insight given the long form of Census 2000 provided more detailed sampling for population characteristics like language proficiency as compared to Census 2010 and the ACS, which is more of a random sample.

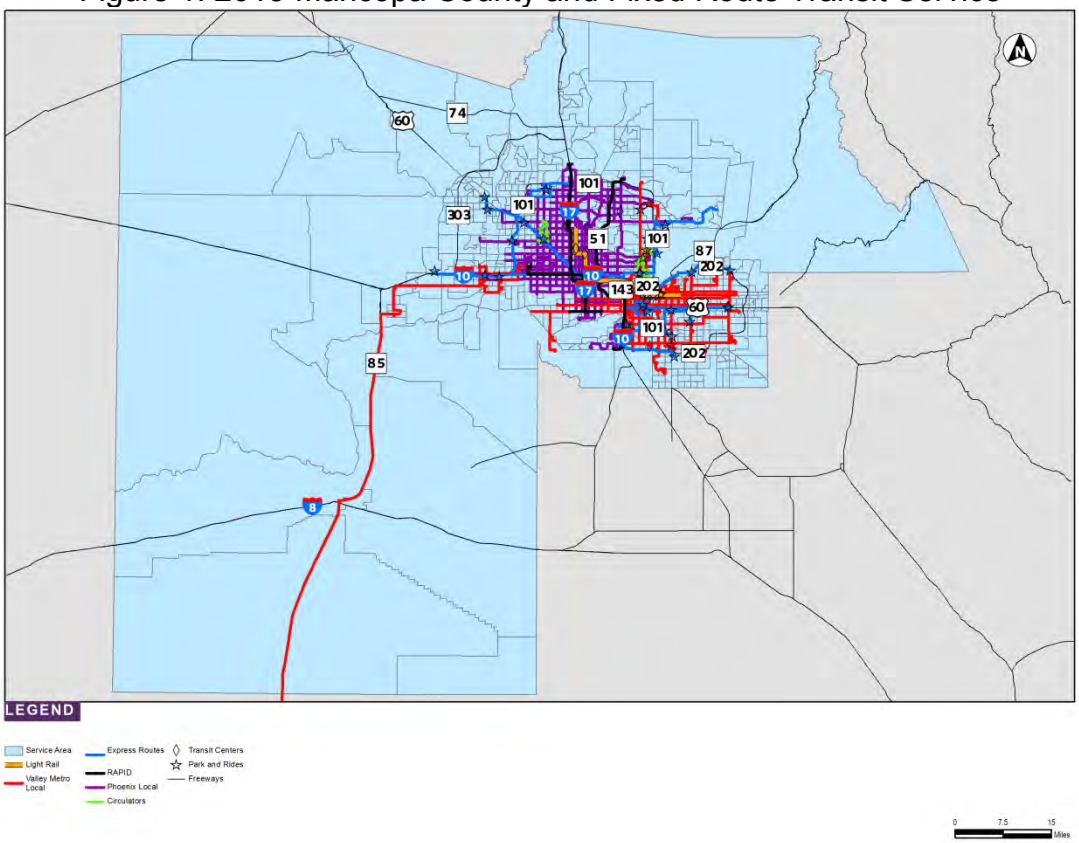
2.2 LEP Population Identification

FTA describes LEP persons as having a limited ability to read, write, speak, or understand English. For this LEP analysis, those who reported to the Census Bureau that they speak English "less than very well" were used to tabulate the LEP population for the transit service area.

Census 2000

U.S. Decennial Census 2000 provides information about English language proficiency within the Valley Metro service area. The census provides information on languages; recognizably this data is 15 years old and may not reflect the current state of the region. These data are available at the census block group and census tract level. There are 618 census tracts with one-half mile of fixed transit service. Figure 1 depicts the census tracts within the County. Census tracts encapsulated within the one-quarter mile buffer are also included in the estimates.

Figure 1: 2015 Maricopa County and Fixed Route Transit Service



The Census 2000 data include the number of persons ages 5 and above who self-identified their ability to speak English as “very well”, “well”, “not well”, and “not at all”. Table 1 shows English proficiency for the County and for Valley Metro’s service area using the Census 2000 data. The table shows that 12.1 percent of the population age 5 and over within the service area reported speaking English less than very well and is considered the overall LEP population. The census tracts within one-half mile of fixed route service have slightly higher population of LEP than Maricopa County.

Table 1: 2000 Census Data by Location

County or Area	Total Population Age 5 and Over	Speaks English Only	Speaks English		Percentage Less than Very Well
			Very Well	Less than Very Well	
Maricopa County	2,832,694	2,148,696	355,963	328,035	11.6%
Census Tracts within ½ -mile fixed routes	2,651,705	1,986,112	344,003	321,590	12.1%

Table 2 displays the data on English language proficiency for the census tracts within one-quarter mile around the fixed route service population ages 5 years and above by the linguistic categories identified by the U.S. Census Bureau, which include Spanish,

Indo-European, Asian or Pacific Islander, and All Other Languages. Predominately the population self-identified as speaking English less than "Very Well" is of Spanish language group, encompassing 10.4 percent of the total population ages 5 years and over. Indo-European, Asian or Pacific Islander, and All Other Languages groups comprised 1.7percent of the population. Of all those speaking English less than very well, the Spanish group comprises 86.0 percent of the total population over age five with limited English proficiency.

Table 2: 2000 Census Data by Language Category

Language Category	Total Population Age 5 and Over	Speaks English				Percentage Less than Very Well
		Very Well	Well	Not Well	Not At All	
Total	2,651,705	344,003	133,047	113,289	75,254	12.1%
English	1,986,112	-	-	-	-	0.0%
Spanish	528,613	252,587	103,991	99,549	72,486	10.4%
Indo-European	66,605	47,582	12,276	5,667	1,080	0.7%
Asian or Pacific Islander	44,109	24,273	12,210	6,372	1,254	0.7%
All Other Languages	26,266	19,561	4,570	1,701	434	0.3%

The Census 2000 data also provide information on linguistically isolated households. "A linguistically isolated household is one in which no member 14 years old and over (1) speaks only English and (2) speaks a non-English language and speaks English 'very well.' In other words, all members 14 years old and over have at least some difficulty with English" (Census 2000). In total, the Census 2000 Summary File 3 data identified 1,048,128 households. The entire membership of a linguistically isolated household would be considered LEP. Table 3 details those data for linguistically and non-linguistically isolated households by language category.

Table 3: 2000 Census Data by Linguistically Isolated Households

Language Category	**Total Households**	**Isolated Households**	**Non-isolated Households**	**Percentage Isolated Households**
Census Tracts 1/2 mile fixed routes	1,053,667	62,471	201,748	5.9%
English	788,723	-	-	-
Spanish	190,507	51,213	139,294	4.9%
Indo-European	40,883	5,161	35,498	0.5%
Asian or Pacific Islander	20,853	4,744	16,109	0.5%
All Other Languages	12,701	1,405	11,296	0.1%

Within the fixed route transit area 5.9 percent of households are considered linguistically isolated. Again, these are predominately Spanish households making up 4.9percent of the total. Remaining languages comprise 1.1percent of households that are classified as linguistically isolated.

Figure 2 shows a map depicting the concentrations of linguistically isolated households in census tracts within one-quarter mile of fixed route service. Most areas throughout the region are mixed, though there are a few pockets of Census blocks that have concentrations of linguistically isolated households, thus identified as persons with limited English proficiency.

American Community Survey

The American Community Survey (ACS) is a continuous nationwide survey conducted monthly by the U.S. Census Bureau to produce annually updated estimates for the same small area (census tracts and block groups) formerly surveyed via the decennial census long-form survey. It is intended to measure changing socioeconomic characteristics and conditions of the population on a recurring basis. It is important to note that the ACS does not provide official counts of the population between each decennial census, but instead provides weighted population estimates.

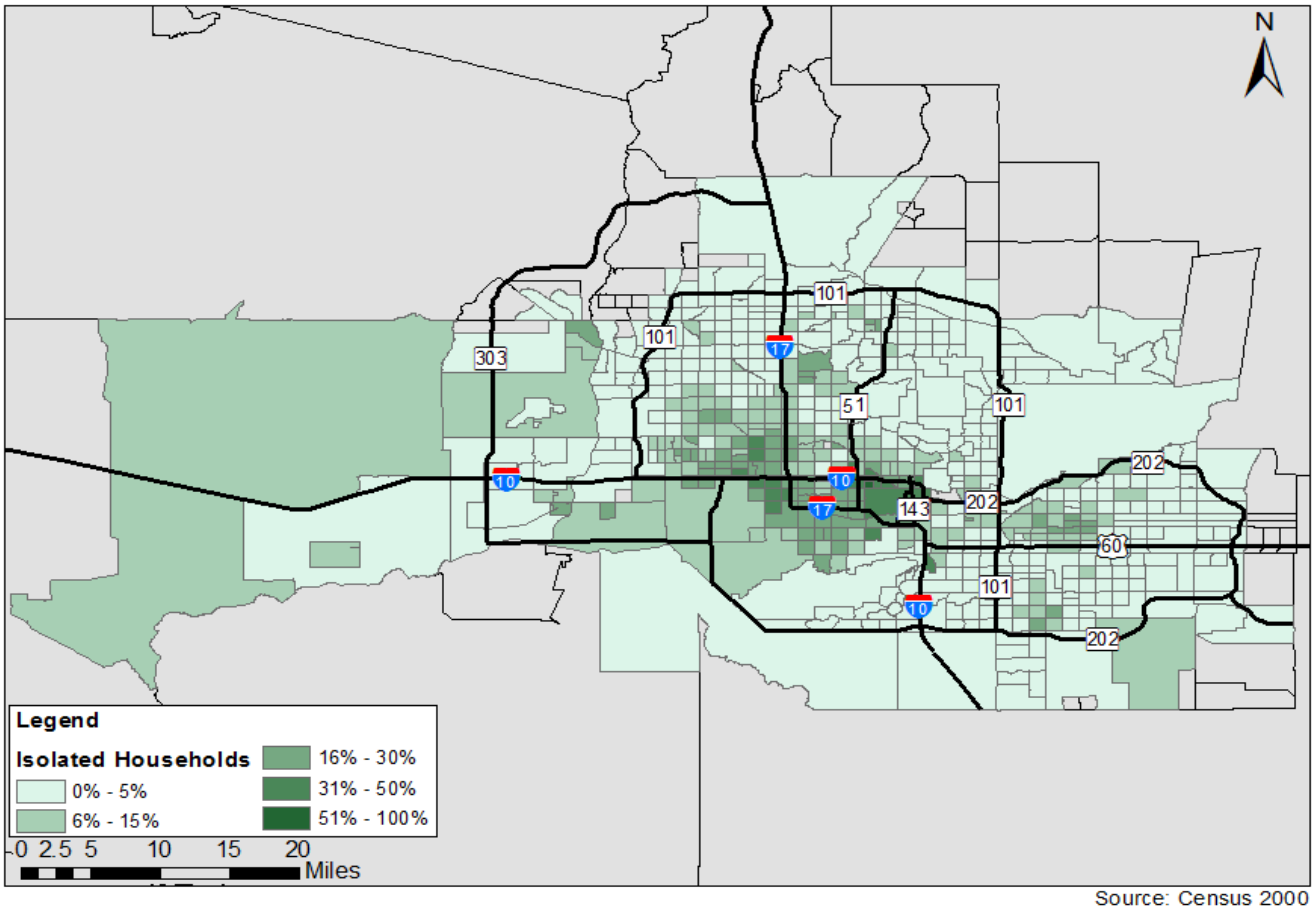
Figure 3 shows the census tracts within the ½ mile buffer of transit routes. Census tracts encapsulated within this area are included in the estimates though they may not be within a ½ mile of a fixed route.

Within this area, the most recent census data from the ACS 2013 data estimate the population age 5 years and older within the service area to be 3,051,428 with 340,076, or 11.1 percent, of the population is LEP; see Table 4.

Table 4: ACS 2013 Data by Location

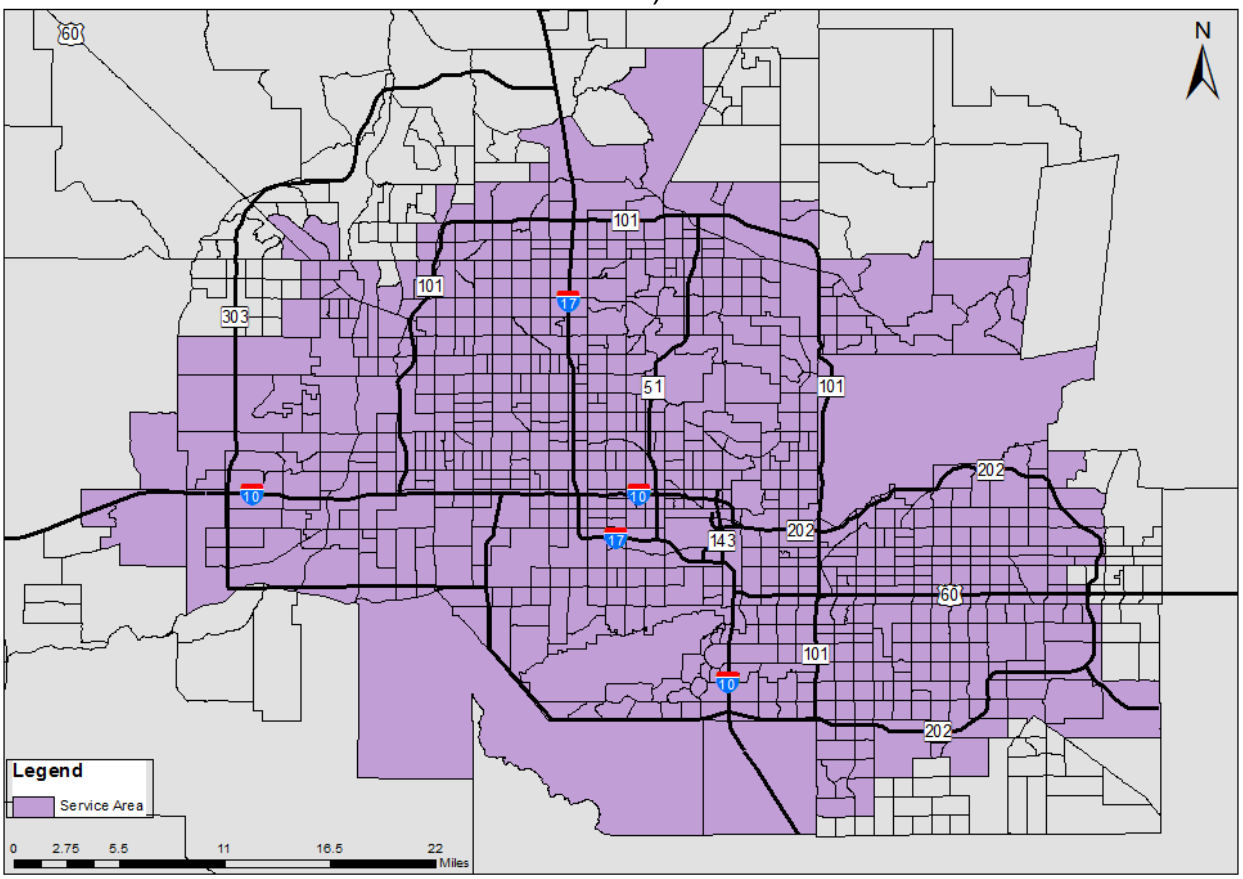
County or Area	Total Population Age 5 and Over	Speaks English Only	Speaks English		Percentage Less than Very Well
			Very Well	Less than Very Well	
Maricopa County	3,610,510	2,660,946	589,679	359,884	10.0%
Census Tracts 1/2-mile fixed routes	3,051,428	2,171,136	540,216	340,076	11.1%

Figure 2: Census tracts with Linguistically Isolated Households



Source: Census 2000

Figure 3: 2015 Census Tracts within One-Quarter Mile of Fixed Route Service (ACS 2013)



Source: ACS 2013

The ACS data show 19 languages or language groups with 1,000 or more LEP persons. However, only one LEP population exceeds 5 percent of the total population of persons eligible to be served or likely encountered. Table 5 shows the populations that meet either of these thresholds using ACS 2013 population by language and ability, sorted by percentage of LEP population.

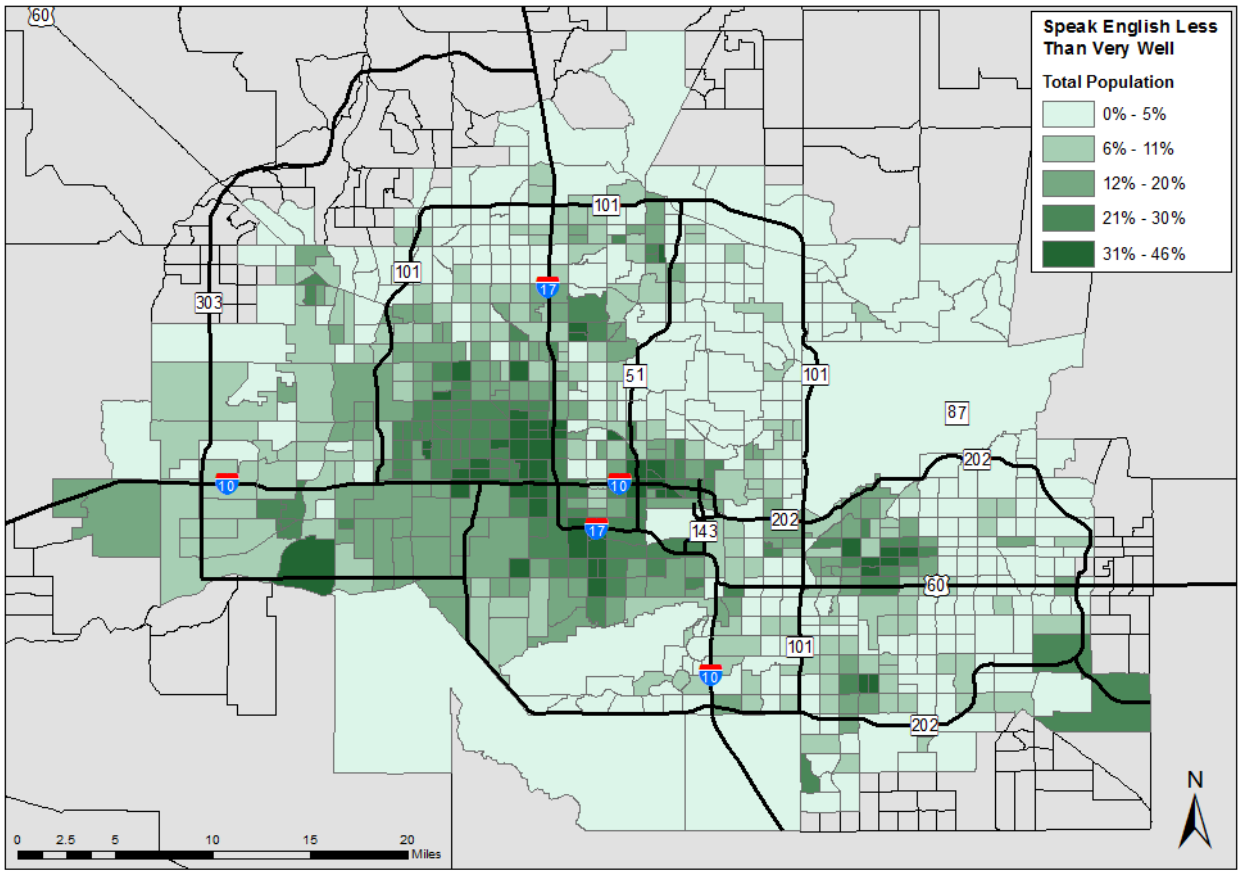
Table 5: ACS 2013 Data by Language within One-Quarter Mile of Fixed Route Service

Language	Speak English		Total Population	Percentage of Language LEP of Total LEP Population
	Less Than Very Well	Very Well		
All Languages	340,076	-	-	100%
Spanish	275,370	416,599	691,969	81.05%
Chinese	9,005	8,305	17,310	2.65%
Vietnamese	9,391	5,669	15,060	2.76%
Arabic	4,908	7,552	12,460	1.44%
Tagalog	4,114	8,918	13,032	1.21%
Other Asian	3,549	7,208	10,757	1.04%
All African Dialects	3,301	4,485	7,786	0.97%
Korean	3,105	3,568	6,673	0.91%
Serbo-Croatian	2,833	4,177	7,010	0.83%
Other Languages	2,227	1,844	4,071	0.65%
Other Indo European	2,132	3,494	5,636	0.63%
Other Indic	1,894	3,989	5,883	0.56%
French	1,788	7,299	9,087	0.53%
Persian	1,788	2,821	4,609	0.53%
Other Pacific Island	1,278	3,037	4,315	0.38%
Russian	1,245	3,017	4,262	0.37%
Japanese	1,236	2,474	3,710	0.36%
Navajo	1,183	7,348	8,531	0.35%
German	1,199	9,624	10,823	0.35%

Within one-half mile of fixed route service, the majority (81%) of the LEP population is the Spanish speaking population; this is the only language group to exceed 5percent of the LEP population. The Spanish LEP population consists of 275,370 persons within the service area. Chinese and Vietnamese followed with 2.65 percent and 2.76 percent respectively, both were approximately 9,000 persons. There are 4,908 Arabic speaking LEP persons or 1.44 percent of the LEP population. The fifth largest LEP population is Tagalog consisting of 4,114 people, or 1.21% of the LEP population within the service area.

Figure 4 shows a map depicting the concentrations of population speaking English Less than Very Well throughout the service area. Most areas throughout the region are mixed, though there are a few pockets of Census blocks that have concentrations of persons with limited English proficiency.

Figure 4: Population Speaking English "Less than Very Well"



3.0 FREQUENCY OF CONTACT WITH LIMITED ENGLISH PROFICIENT POPULATION (FACTOR 2)

The first step of the four-factor LEP needs assessment revealed that the largest language group was overwhelmingly Spanish; followed by Chinese, Vietnamese, Arabic, and Tagalog. Factor 2 is intended to assess the frequency with which LEP persons interact with Valley Metro programs, activities, or services. The USDOT "Policy Guidance Concerning Recipients 'Responsibilities to Limited English Proficient (LEP) Person" (USDOT 2005) advises that:

> *Recipients should assess, as accurately as possible, the frequency with which they have or should have contact with LEP individuals from different language groups seeking assistance, as <u>the more frequent the contact, the more likely enhanced language services will be needed</u> (emphasis added). The steps that are reasonable for a recipient that serves an LEP person on a one-time basis will be very different than those expected from a recipient that serves LEP persons daily.*

The frequency of use was evaluated by assessing current resources, available data, and a short survey of transit employees.

3.1 Evaluation Methods and Data Sources

In an effort to determine the frequency that LEP persons interact with the agency, both quantitative and qualitative methods were used to analyze access to services. Anecdotal information regarding interactions with LEP persons, garnered through conversations with Valley Metro employees is also included in this section. More structured analysis is included using several sources of information:

- Transit Employee Survey
- Customer Service Interactive Voice Response (IVR) Call Log
- Transit Education Program
- Valley Metro Website Translation Data

Together these sources provide a picture of the interaction of LEP persons with programs, activities, or services provided by the agency.

3.2 Frequency of Contact Analyses

With about a quarter of the region speaking more than only English, Valley Metro recognizes the value of providing convenient and efficient information to transit riders. Understanding how often LEP persons are utilizing services will assist in serving customers better in the future with quality services, programs, and activities.

Transit Employee Survey

An employee survey was performed in an effort to determine how often those employees in contact with transit riders regularly encounter LEP persons. During late March and early April 2015, a voluntary survey of customer service and transit employees was conducted regarding the interaction with LEP persons and languages spoken. A copy of the survey instrument can be found as Appendix B. The Valley Metro Customer Service Representatives provide passenger assistance most commonly through email, but also via the phone. In addition, there are several Customer Service Representatives that are dedicated for fare sales, transit information, or are stationed at transit passenger facilities[1] to provide assistance to passengers. Employees surveyed were of one of the following locations:

- Customer Service Representatives (via Customer Assistance System, letter, phone, or email)
- Central Station Transit Center
- Ed Pastor Transit Center

[1] Facilities operated by the City of Phoenix or the City of Tempe

- Metrocenter Transit Center
- Sunnyslope Transit Center
- Tempe Transportation Center

In total 26 respondents provided information about their experiences. Approximately 70% of those surveyed were Customer Service Representatives employed at the Mobility and Customer Service Center.

When asked if representatives have had any requests for materials in another language, 31% responded yes they had encountered a request; see Figure 5. Of these, most interpretation or translation requests were for Spanish.

By cross-referencing the locations of respondents with responses that language assistance had been requested, only three locations had received requests: Central Station Transit Center (50% of requests), the Mobility and Customer Service Center (38% of requests), and Ed Pastor Transit Center (13% of requests).

Languages requested were predominately Spanish (55%) followed by French (18%). See Figure 6 for a full breakdown of the languages requested, including Japanese, Swahili, and Sa'ban.

Figure 5: Requests for Information or Materials in Another Language

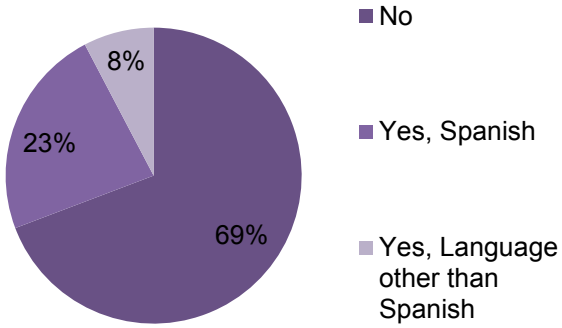
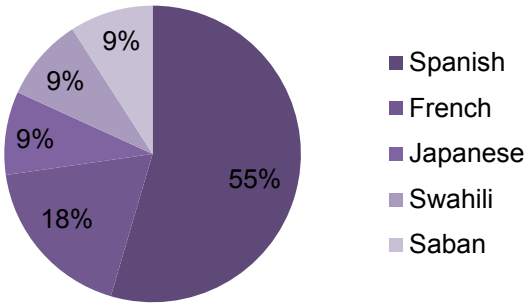


Figure 6: Chart of Requested Languages



Due to a low number of requests that had been received for materials in other languages the questions regarding frequency of requests shown in Table 6 were quite evenly spread.

Table 6: Frequency of Requests Received

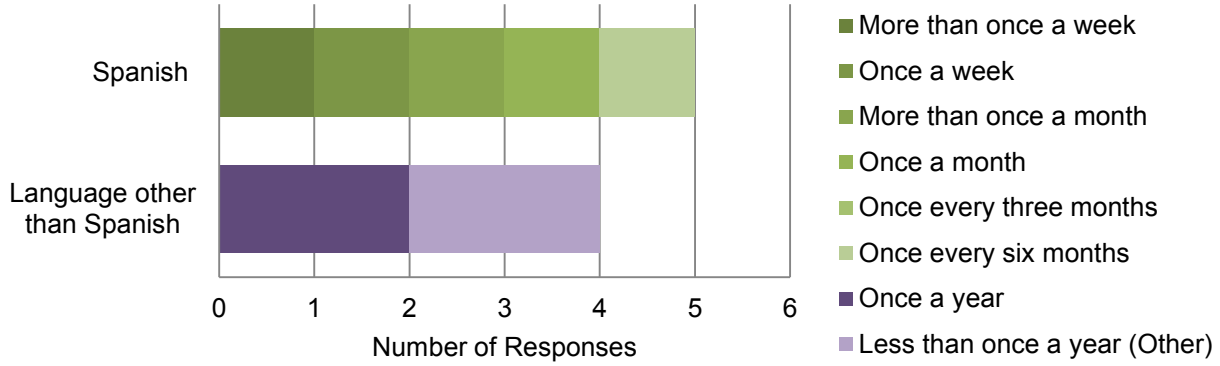
How often do you receive requests?	Number	Percentage
Once a week	1	11%
More than once a week	1	11%
Once a month	1	11%
More than once a month	1	11%
Once every six months	1	11%
Once a year	2	22%
Other	2	22%
TOTAL	9[2]	100%

Recognizing that 60% of language requests were for the Spanish language, the two write-in responses for "Other" provide some telling qualitative information. Those responses were:

- *"French-every six months, Swahili only once ever"*
- *"Once in 19 years" -for Japanese*

These responses were categorized appropriately and cross-referenced with the language requested. See Figure 7 for a comparison. Spanish was much more frequently requested than any other language. Additionally, languages other than Spanish were requested at a less frequent rate.

Figure 7: Language Requested by Frequency



This survey helped support that there are many languages encountered by transit professionals, yet Spanish is the most common and most frequent of those encountered.

Customer Service Interactive Voice Response (IVR) Call Log

The Customer Service Center updated the automated phone system mid-2014[3] to establish the Interactive Voice Response (IVR) feature. With this expansion, the new

[2] One respondent provided two responses – the second being a write in under the "Other" response.

system is able to provide a log to which line callers have requested to be transferred. Available are six topic categories, each in English and Spanish for twelve options total. The topics available include:

- Americans with Disabilities Act (ADA)
- Customer Relations (CR)
- Light Rail
- Lost and Found
- Transit Information (TI)

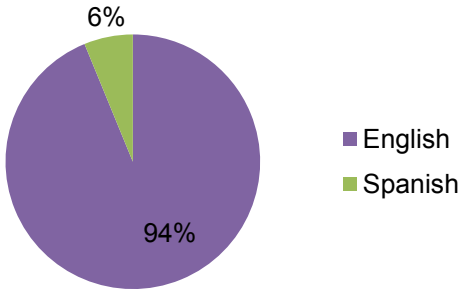
This system allows Spanish-speaking callers to be automatically transferred to a bilingual representative reducing the time it takes to be served in the preferred language. Beyond being more convenient and helpful, this system also is more efficient by reducing the likelihood callers may be redirected to a bilingual representative. Currently, 12 bilingual customer service representatives are employed by Valley Metro. The new phone system prioritizes selection of Spanish calls received. Acknowledging that this is a truncated data set, Table 7 below shows the distribution of calls by option selected, followed by the sum of calls by language.

Table 7: Customer Service Call Log

	Total Calls	% of Total Calls
ADA-English	13,840	1.26%
ADA-Spanish	139	0.01%
CR-English	75,874	6.90%
CR-Spanish	371	0.03%
Light Rail-English	184	0.02%
Light Rail-Spanish	5	0.00%
Lost Found-English	5,073	0.46%
Lost Found-Spanish	22	0.00%
TI-English	936,408	85.16%
TI-Spanish	67,630	6.15%
English	1,031,379	93.8%
Spanish	68,167	6.2%
Total Calls	1,099,546	100.00%

Figure 8 shows a pie chart of the calls by language. Approximately 94% of calls were for English and 6% of calls were for Spanish. At the time of this report, 37 customer service representatives were currently on staff; of these, twelve are bilingual (32%).

Figure 8: Customer Service Calls by Language



When evaluating the customer service call logs, the bulk of calls received are through the

[3] Data available July 2014 through April 2015

English phone lines with a small portion (6%) selecting a Spanish option.

Transit Education Program

Valley Metro has a Transit Education program that presents information to various groups to teach about public transit, benefits of transit, and how to use the system. Staff visit schools, present to new residents and refugee groups, and provide mobility training for senior citizens and persons with disabilities. Additionally, transit information and assistance is provided at community or special events including environmental fairs, transportation or vehicle days, career days, and more. This team also conducts general presentations by request to any group who wants to learn more about the transit system. For more-comprehensive training, monthly sessions are held at the Disability Empowerment Center and Glendale Adult Center.

Discussions with the program staff revealed some helpful anecdotal information. Typically, persons encountered spoke English fluently or well. The second most common language encountered was Spanish. Fifty percent of this team speaks Spanish and regularly provide information in Spanish.

Occasionally, presentations are made to various refugee groups. Due to the varied backgrounds of the participants, the hosting organizations generally provide necessary interpreters. Anecdotally, predominately Arabic and less often Burmese are the languages typically encountered during these presentations. However, it was noted that languages from around the world have been encountered through these group presentations.

Website Translation

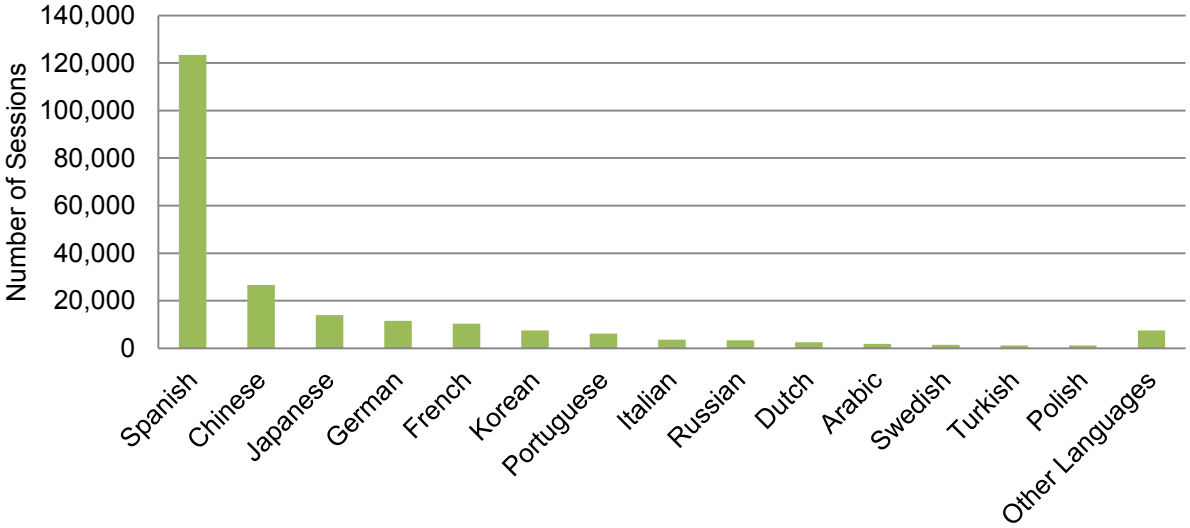
Apart from accessing information via transit employees whether by phone, email, in person or another method, many customers utilize the www.valleymetro.org website for information. The website is equipped with the Google Translate feature, which allows translation into 90 languages. Users have translated the Valley Metro website into 70 different languages using this feature. Approximately 99% of sessions were utilizing the default English setting. The remaining 1% was comprised of 69 other languages. Table 8 provides an itemization of the languages translated and the percentage of sessions. Note that only languages comprising at least 0.01% of total sessions are included below; a full table of entries is available in Appendix C.

Table 8: Website Sessions by Language[4]

Language	Number of Sessions	Percent of Total Sessions
Total	21,614,462[5]	100%
English	21,392,285	98.91%
Other Languages	222,177	1.03%
Language	Number of Sessions	Percent of Total Sessions
Spanish	123,377	0.57%
Chinese	26,684	0.12%
Japanese	13,950	0.06%
German	11,502	0.05%
French	10,316	0.05%
Korean	7,496	0.03%
Portuguese	6,225	0.03%
Italian	3,638	0.02%
Russian	3,303	0.02%
Dutch	2,576	0.01%
Arabic	1,822	0.01%
Swedish	1,483	0.01%
Turkish	1,221	0.01%
Polish	1,127	0.01%
Other Languages	7,457	0.03%

Once again, Spanish was overwhelmingly the most utilized language with the website translation service comprising 0.57% of sessions, followed by Chinese (0.12%), Japanese (0.06%), German (0.05%), and French (0.05%). See Figure 9 below for a chart of the number of translated sessions by language.

Figure 9: Number of Translated Website Sessions by Language



[4] Valley Metro. (2015). Language [Data file]. Available from http://www.google.com/analytics/ce/mws/
[5] There were 13,829 entries excluded from the analysis that did not have a valid ISO language code associated with the website visit; thus, entries were deemed invalid.

The website was translated to an additional 55 languages that each comprises less than 0.01% of the sessions; collectively these viewings attribute to 0.03% of all sessions. These languages include:

- Acoli
- Afrikaans
- Albanian
- Armenian
- Aymara
- Azerbaijani
- Bengali
- Bosnian
- Breton
- Bulgarian
- Catalan
- Croatian
- Czech
- Danish
- Esperanto
- Estonian
- Filipino
- Finnish
- Galician
- Georgian
- Greek
- Gujarati
- Hebrew
- Hindi
- Hungarian
- Icelandic
- Indonesian
- Irish
- Javanese
- Kannada
- Kanuri
- Latvian
- Lithuanian
- Macedonian
- Malay
- Malay
- Malayalam
- Marathi
- Navajo
- Norwegian
- Persian
- Pushto
- Romanian
- Serbian
- Slovak
- Slovenian
- Tagalog
- Telugu
- Thai
- Tonga
- Turkmen
- Ukrainian
- Vietnamese
- Walloon
- Welsh

Persons around the region utilize the website to gather information in languages from around the world using the Google Translate feature. The majority of translated sessions are for the Spanish language (0.57%).

Furthermore, many documents uploaded to Valley Metro's website are translated into Spanish since they are disseminated as paper materials to the public. Individuals may utilize these documents without translating the website into Spanish, but rather use the Google Translate feature. Some of these documents include project updates, route maps and schedules, instructions and applications for a Reduced Fair ID, service change information, policies, brochures, and forms.

Conclusion

The Factor 2 analysis revealed that there is regular contact between the LEP population and Valley Metro personnel. The Transit Employee Survey conducted revealed that 31% of all respondents had encountered an LEP person; of those who had encountered a request for assistance in another language, 55% of requests were for Spanish. The Customer Service Call Log, though limited, showed that a mere 6% of customers utilized one of the six Spanish options. Information from the Transit Education team qualitatively identified Spanish as the main language group, while there were also occasional encounters with Arabic-speaking populations. Finally, translation data from the Valley Metro website indicated 1.03% of sessions were translated; approximately half of which were translated to Spanish. The website was translated to 70 different languages. Overall, there is broad diversity within the Phoenix region that accesses regional transit services, however; these are predominately English and Spanish speaking individuals.

4.0 NATURE AND IMPORTANCE OF THE PROGRAM, ACTIVITY OR SERVICE PROIVDED (FACTOR 3)

The third step in the four-factor LEP needs assessment is an evaluation of the importance of Valley Metro services to persons with limited English proficiency. The first component of the Factor 3 analysis is to identify critical services. Next, input received from community organizations was used to identify ways to improve these services for LEP populations. The U.S. Department of Transportation (USDOT) "Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons" (USDOT 2005) advises that:

> *The more important the activity, information, service, or program, or the greater the possible consequences of the contact to the LEP individuals, the more likely language services are needed. The obligations to communicate rights to an LEP person who needs public transportation differ, for example, from those to provide recreational programming. A recipient needs to determine whether denial or delay of access to services or information could have serious or even life-threatening implications for the LEP individual . . . providing public transportation access to LEP persons is crucial. An LEP person's inability to utilize effectively public transportation may adversely affect his or her ability to obtain health care, education, or access to employment.*

With assistance from Valley Metro's Community Relations and Marketing departments, a list of services provided was prepared and prioritized. The input from community organizations and LEP persons were incorporated to ensure views of the importance of services provided are adequately prioritized.

4.1 Services Provided

In cooperation with Valley Metro's Communications and Operations departments, services currently provided to LEP persons were queried. Typically, materials in both English and Spanish are available on both bus and light rail services. Below is a list of available materials and services in Spanish that includes next bus and light rail specific services:

- Press Releases
- Public materials; including, but not limited to:
  - Route Scout (announcements on buses and light rail)
  - Ride Guide and Destinations Guide
  - Service changes materials

- Transit book
- Website
- Project updates
- Title VI forms
- Large special events materials (e.g. Super Bowl public materials)

- Direct mailers or door hangers for targeted outreach
- Ticket vending machines (Spanish and Braille)
- Bilingual customer service staff
- Email List Serv Messages
- Bus specific services:
  - Car cards (on-board advertisements)
  - Bus signs (i.e. priority seating, caution signs, entry/exit, etc.)
  - Variable message sign that displays announcements on buses
- Light Rail specific services:
  - LRT vehicle signage including priority seating, manners, and other train information
  - VMS Announcements on vehicles and at stations
  - System maps and auxiliary information
  - Operator call boxes on trains
  - Emergency call box at stations
  - Safe place notices

Critical Services

Public transit is a key means of mobility for persons with limited English proficiency. Of those services identified above, a subset of critical services was prioritized to ensure that those services imperative to utilize Valley Metro public transportation options are available to all users.

Basic trip information is available both printed and electronically in Spanish, including service hours, tickets, trip planning, airport and transit connections, parking, bicycles, and services for persons with disabilities. Also available in Spanish is information regarding how to utilize transit, manners, priority seating, caution signs, and exit locations on vehicles. Ticket vending is available in both Spanish and Braille. Emergency notification measures are also translated, including audio VMS[6] Announcements on vehicles (bus and rail), operator call boxes, emergency call boxes, and Safe Place notices.

[6] Variable message signs

Bilingual customer service representatives are available during regular call center hours. Representatives use the same procedures for comments and note that the inquiry was in Spanish so that a bilingual representative is assigned in any follow-up response if needed. Outside of customer service hours, the website is available for translation to most languages at any time. For public meetings and hearings, a Spanish translator is usually available; additional translators are available upon request or appropriate context. Typically, additional translation services requested are provided for American Sign Language through an on-call contract.

Community Outreach

Valley Metro conducted interviews with six community organizations that encounter various LEP populations. The organizations interviewed range from cultural adult centers to refugee services organizations.

Key findings from outreach effort:

- Public transportation is the main form of transportation to access jobs, medical appointments, social services, grocery shopping and school.
- Many of the organizations provide an orientation to transportation services and also provide free transit passes for employment searches.
- Two primary challenges with the public transportation system were voiced, which related to route location and schedule.
    - The schedule does not accommodate early morning or late night shifts.
    - The transit system does not travel to all locations, especially those on the outer reaches of the Phoenix metropolitan region.

Community Organizations Interviews

To garner insight on the use and role of Valley Metro services to the LEP populations within the Phoenix Metropolitan region, six community organizations were interviewed:

- Catholic Charities
- Friendly House
- Refugee Focus
- Arizona Immigration Refugee Services (AIRS)
- Chinese Senior Center
- Hope VI

Organizations were identified to ensure that a wide variety of cultural and language groups were reached over large service areas. These organizations indicated that they serve populations speaking a broad range of languages, including Spanish, Arabic, Somali, Chinese, Burmese and French.

Participating agencies were asked a series of questions from the FTA handbook "Implementing the Department of Transportation's Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons" (FTA 2007b). Organizations interviewed expressed needs of LEP populations regarding language assistance including:

- **System Map Information:** LEP populations have expressed a difficulty in understanding and familiarizing themselves with system maps.
- **On-Board Messaging:** LEP populations have expressed hardship in reading and understanding on-board signage/message boards as well as driver instructions.
- **Transit Service Information:** LEP populations have expressed the desire for information, such as how to ride and fare payment information, be communicated in an understandable format. Symbols could be used to communicate messages to a wider audience. Also, offering orientation to these populations, through their respective agencies, would familiarize them with the transit system.

5.0 CURRENT RESOURCES AVAILABLE AND THE COSTS TO PROVIDE LANGUAGE ASSISTANCE SERVICES (FACTOR 4)

The final step of the four-factor LEP analysis is an evaluation of the current and projected financial and personnel resources available to meet the current and future needs for language assistance. The first component of the Factor 4 analysis was to identify current language assistance measures and associated costs. The next step was to determine what additional services may be needed to provide meaningful access. The USDOT "Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons" (USDOT 2005) advises that:

> *A recipient's level of resources and the costs imposed may have an impact on the nature of the steps it should take in providing meaningful access for LEP persons. Smaller recipients with more limited budgets are not expected to provide the same level of language services as larger recipients with larger budgets. In addition, 'reasonable steps' may cease to be reasonable where the costs imposed substantially exceed the benefits.*

Valley Metro has a strong commitment to reducing the barriers encountered by LEP persons in accessing its services and benefits, to the extent resources are available. Valley Metro currently does not break down all cost expenditures related to providing language assistance. Valley Metro will evaluate how to consolidate its language assistance measures to deliver the most cost-effective services.

5.1 Current Measures and Costs

Costs incurred by Valley Metro for the language assistance measures currently being provided include:

- Translation of materials
- Printing, advertising, or other marketing costs
- Interpretation services
- Staff costs associated with Title VI efforts in adhering to language assistance measures

Typically, an amount is embedded into the project costs by activity (logged under printing or other direct expenses) for translation and production of any materials. Agency wide there is a standing on-call contract for any interpretation needs. Any production costs are included in printing and public meetings budgets. Furthermore, there are bilingual employees that provide intermittent language assistance needs as part of their other duties. Specifically, the Public Relations team has two employees (33% of the department staff) that are bilingual. These employees may be assigned to prepare press releases or media events with Spanish-speaking publications in addition to their typical duties. These soft costs are not tracked, though most of the formal interpretation services are contracted.

Interpreters are contracted for public meetings or hearings to ensure that any language assistance needs are met so that public relations staff can focus on facilitating the event. All hearings are staffed with interpreters while public meetings are staffed depending on the anticipated number of persons reached and upon request. Valley Metro's current contract for interpreters at public meetings allow for approximately $200 per meeting. Annually $5,000-$6,000 is spent for interpreters to staff meetings and public hearings for various projects and efforts. In addition, $800-$1,200 is spent annually for sign language interpreters at requested meetings and public hearings. Costs for translating and producing materials like meeting notices, display boards, news releases, and project update sheets are also budgeted annually; approximately $14,000 - $15,000. In total, approximately $20,000 - $25,000 is contracted out directly in support of language assistance services for interpreters, translation, and materials dependent on the projects and programs implemented each year.

Additional soft costs include other staff time utilized on an ad hoc or regular basis to provide translation or interpretive services. Over thirty percent of Public Relations and Customer Service Representatives are bilingual, servicing Spanish-speaking customers as well as English-speaking customers. Being bilingual is a preferred qualification when hiring customer service staff though not required. There are also bilingual employees

that may assist on an informal, ad hoc basis to communicate with LEPs in other departments.

5.2 Cost-effective Practices

Valley Metro will continue to evaluate ways to improve the cost-effectiveness and the quality of its language services. Additional strategies for saving costs or improving quality may include developing internal and external language services, with the opportunity to coordinate across multiple agencies in the region. Current measures practiced to ensure services are cost effective include:

- bilingual staff trained to act as interpreters and translators
- shared customer service center and other information for combined translation and interpretation resources
- some standardized common documents with transit and other public agencies
- translated vital documents currently posted on <valleymetro.org>

Strategies for consolidating the regional language assistance measures to achieve efficiencies may include:

- creating a one-stop LEP information center for Valley Metro employees
- surveying Valley Metro staff to determine any additional existing multilingual resources
- conducting outreach to various community organizations to secure volunteers for translation and interpretation services that are currently contracted or completed in-house
- consolidating contract services for oral and written translation to secure the most cost-effective rates

Valley Metro continues to use qualified translators and interpreters to uphold the quality of language assistance measures. Valley Metro strives to provide basic informational training for volunteer staff on its language assistance measures.

5.3 Additional Services and Budget Analysis

Valley Metro is committed to reducing the barriers encountered by LEP persons in accessing its services to the extent funding is available. While Valley Metro currently does break down contracted cost expenditures related to providing language assistance, expenditures of efforts for translation and interpretation completed in-house are less well documented. As part of the Language Assistance Plan, Valley Metro will better monitor efforts in the future. Valley Metro will further evaluate how to consolidate its language assistance measures to deliver the most cost-effective services.

The information received from community organizations provided some insight on additional services that may ease access for LEP persons to regional transit services.

The summary above portrays more insight of the interviews conducted. Services requested were centered on service expansions that included increased frequencies and later services at night. However, these would be greater improvements for consideration and prioritization of the system rather than specific services for LEP persons. Therefore, they were excluded here and assigned to the general public process for service requests.

Other requests included using more symbols to depict messaging and system routes. Audio messaging is also shown using VMS[7] that could potentially show messaging in another language as well. The light rail system VMS currently shows messages in English and Spanish. Bus messaging is typically location data and in close proximity depending on stop locations. The feasibility and helpfulness of VMS translation should be evaluated.

As applicable, through the annual budget process, additional services requested or identified may be considered for implementation. In 2015, Valley Metro has shifted to a zero based budget that is approved by two appointed boards: Valley Metro Rail Board and the Valley Metro Regional Public Transportation Authority Board of Directors. Year by year the budget is developed as appropriate to the unique needs and demands of the agency at that point in time.

5.4 Projected Costs

Requests for added services include expanded symbols to understand how to use transit services, on-board messaging, and system map information. With a commitment to providing reasonable language assistance measures, Valley Metro will assess current symbolism used on vehicles, at station locations, and elsewhere to determine the sort of improvements that could be made so that the system is more easily understood visually. With expanded symbolism, it is expected that the need for enhancing the on-board messaging and system map information may be reduced. Furthermore, these could be incorporated into the regular updates of this information and signage. Biannually in coordination with the service changes, updated system maps are produced.

Other improvements would be considered after analyzing the staff costs, third party contract costs, and costs related to volunteer or community organization coordination. These would be evaluated in comparison with anticipated benefits to the LEP population. Other considerations may include operational issues and implementation time.

[7] LINK stations, light rail stations and vehicles are equipped with VMS announcements; most fixed route vehicles are also equipped with VMS capabilities

6.0 LANGUAGE ASSISTANCE MEASURES

Valley Metro is committed to full compliance with Title VI and Executive Order 13166 to provide meaningful access and reduce barriers to services and benefits for persons with limited English proficiency.

6.1 Current Language Assistance Measures

As discussed earlier in this Language Assistance Plan, Valley Metro currently provides both oral and written language assistance. Oral language assistance includes bilingual customer service representatives, speaking Spanish. Additionally, Spanish interpreters are available at public meetings; sign language and other language interpreters are available as requested. On vehicles and at stations, VMS announcements are also in Spanish.

Written Spanish language assistance includes signage, press releases, list serv messages, service change materials, Title VI complaint forms, policies, and procedures. Additional translation of some vital documents is provided, such as schedules, maps, ride and destination guides, route scouts, and more. Meeting notices and public input surveys at public meetings are translated. The website is equipped with the Google Translate feature, which allows translation into 90 languages (www.translate.google.com). Fare vending machines provide Spanish and Braille translations as well.

Notices to the public of language assistance measures are typically provided side-by - side an English version of the document. For example, Ride Guide documents are provided in both English and Spanish and are available together wherever disseminated. Where available, documents are commonly printed on both sides with an English version and a Spanish version on each side of the paper. When calling into the customer service line, the interactive voice response system will ask if Spanish is the preferred language automatically prior to being connected with a representative.

6.2 Staff Training

Specific policies and procedures for interacting with LEP persons are not formally adopted on a standalone basis. These policies and procedures are in essence those for all customers and have been embedded into multiple documents (including the Title VI Plan, trainings, instructions, etc.).

Using the customer service center as an example, Spanish calls are assigned directly to a Spanish-speaking representative through the phone system. In the customer assistance system a note is made that the customer speaks Spanish so that if the query is not able to be responded to immediately, any response is assigned to another

bilingual representative. This training is implanted into general customer assistance staff training to ensure cost effective practices and efficient use of training resources. Title VI of the Civil Rights Act of 1964 is distributed to new employees and where applicable, employees are expected to know how to file discrimination claims based on race, color, or national origin. Additionally, there are related trainings available including quarterly Civil Rights Workshops, training sessions for conducting complaint investigations according to federal guidelines and streamlining the complaint investigative process.

Training for employees who regularly encounter the public may also include:

- Type of language services available,
- How staff and/or LEP customers can obtain these services,
- How to respond to LEP callers,
- How to respond to correspondence from LEP customers,
- How to respond to LEP customers in person, and
- How to document LEP needs.

Valley Metro continues to consider opportunities to provide quality services for LEP persons throughout the service area.

6.3 Future Language Assistance Services

With the development of subsequent Language Assistance Plans, it is expected that through the monitoring, evaluation, and update process that additional services continue to be identified and considered for feasibility of implementation. Valley Metro strives to serve LEP populations adequately with an equal opportunity to use transportation options available. Section 7 provides more information about the monitoring and update process of this plan.

7.0 MONITORING AND UPDATING THE LANGUAGE ASSISTANCE PLAN

Triennially Valley Metro will review, monitor, and update this LAP. Feedback from agency staff and community members will be accepted throughout the year at the email address: TitleVICoordinator@ValleyMetro.org. Additional community feedback may be elicited during the update process. Internal monitoring will be conducted using the template provided from the FTA handbook "Implementing the Department of Transportation's Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons" (FTA 2007b). Using this checklist periodically, stations, vehicles, customer service, community outreach, and public relations are monitored.

Using this information, changes may be made to the language assistance plan recognizing any cost implications and resources available. Depending on this evaluation, language assistance measures may be expanded, modified or eliminated based on their effectiveness.

As the transit service area is modified through service changes, the demographics served will be reviewed to ensure that those high concentrations of LEP persons are reflected accurately in an effort to provide language assistance measures to areas with expanded transit services.

Throughout the monitoring period, Valley Metro will continue to follow the recommendations and use the resources provided by Executive Order 13166, FTA Circular 4702.1B, the USDOT "Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Person" (USDOT 2005), and the FTA handbook "Implementing the Department of Transportation's Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons" (FTA 2007b). Valley Metro will be better able to apply the DOT LEP guidance's four-factor framework and will continue to determine an appropriate mix of language assistance in the preparation of language assistance implementation plans.

APPENDIX A – FULL LIST OF LANGUAGES

ACS 2013 population by language and ability: cells shaded purple in this table meet either the 1,000 persons threshold or the 5% threshold of the total population of persons eligible to be served or likely encountered.

Language Category Group	Total Population	Percentage of Total LEP Population
All Languages Speaks English Less Than Very Well (LEP Population within Service Area)	331,981	-
Spanish	672,220	-
Spanish Speak English Very Well	403,157	-
Spanish Speak English Less Than Very Well	269,063	81.05%
French	8,757	-
French Speak English Very Well	7,023	-
French Speak English Less Than Very Well	1,734	0.52%
French Creole	402	-
French Creole Speak English Very Well	199	-
French Creole Speak English Less Than Very Well	203	0.06%
Italian	4,038	-
Italian Speak English Very Well	3,112	-
Italian Speak English Less Than Very Well	926	0.28%
Portuguese	2,374	-
Portuguese Speak English Very Well	1,840	-
Portuguese Speak English Less Than Very Well	534	0.16%
German	10,437	-
German Speak English Very Well	9,347	-
German Speak English Less Than Very Well	1,090	0.33%
Yiddish	230	-
Yiddish Speak English Very Well	223	-
Yiddish Speak English Less Than Very Well	7	0.00%
Other West Germanic	1,242	-
Other West Germanic Speak English Very Well	1,062	-
Other West Germanic Speak English Less Than Very Well	180	0.05%
Scandinavian	1,212	-
Scandinavian Speak English Very Well	1,100	-
Scandinavian Speak English Less Than Very Well	112	0.03%
Greek	1,518	-
Greek Speak English Very Well	1,163	-
Greek Speak English Less Than Very Well	355	0.11%
Russian	4,225	-
Russian Speak English Very Well	2,996	-
Russian Speak English Less Than Very Well	1,229	0.37%
Polish	3,034	-
Polish Speak English Very Well	2,389	-
Polish Speak English Less Than Very Well	645	0.19%

Serbo-Croatian	6,967	-
Serbo-Croatian Speak English Very Well	4,142	-
Serbo-Croatian Speak English Less Than Very Well	2,825	0.85%
Other Slavic	2,458	-
Other Slavic Speak English Very Well	1,721	-
Other Slavic Speak English Less Than Very Well	737	0.22%
Armenian	798	-
Armenian Speak English Very Well	660	-
Armenian Speak English Less Than Very Well	138	0.04%
Persian	4,439	-
Persian Speak English Very Well	2,731	-
Persian Speak English Less Than Very Well	1,708	0.51%
Gujarati	2,559	-
Gujarati Speak English Very Well	1,982	-
Gujarati Speak English Less Than Very Well	577	0.17%
Hindi	6,413	-
Hindi Speak English Very Well	5,620	-
Hindi Speak English Less Than Very Well	793	0.24%
Urdu	1,445	-
Urdu Speak English Very Well	1,086	-
Urdu Speak English Less Than Very Well	359	0.11%
Other Indic	5,834	-
Other Indic Speak English Very Well	3,960	-
Other Indic Speak English Less Than Very Well	1,874	0.56%
Other Indo European	5,459	-
Other Indo European Speak English Very Well	3,389	-
Other Indo European Speak English Less Than Very Well	2,070	0.62%
Chinese	16,907	-
Chinese Speak English Very Well	8,052	-
Chinese Speak English Less Than Very Well	8,855	2.67%
Japanese	3,682	-
Japanese Speak English Very Well	2,464	-
Japanese Speak English Less Than Very Well	1,218	0.37%
Korean	6,474	-
Korean Speak English Very Well	3,485	-
Korean Speak English Less Than Very Well	2,989	0.90%
Cambodian	1,126	-
Cambodian Speak English Very Well	577	-
Cambodian Speak English Less Than Very Well	549	0.17%
Hmong	8	-
Hmong Speak English Very Well	8	-
Hmong Speak English Less Than Very Well	-	0.00%
Thai	1,424	-
Thai Speak English Very Well	547	-
Thai Speak English Less Than Very Well	877	0.26%
Laotian	580	-
Laotian Speak English Very Well	266	-
Laotian Speak English Less Than Very Well	314	0.09%
Vietnamese	13,965	-

COUNCIL ACTION
ON
AGENDA FOR FORMAL MEETING

WEDNESDAY, SEPTEMBER 9, 2015, 3:00 P.M.
COUNCIL CHAMBERS, 200 WEST JEFFERSON
PHOENIX, ARIZONA 85003

			ACTION
ITEM 1	**DISTRICT 8**	**LIQUOR LICENSE APPLICATION - TORTAS EL REY**	**Recommended for approval**
ITEM 2	**CITYWIDE**	**ORDINANCE S-42019 - PAYMENT ORDINANCE**	**Adopted**
ITEM 3	**CITYWIDE**	**ORDINANCE S-42020 - EXTEND FEDERAL REPRESENTATION CONTRACTS WITH HOLLAND & KNIGHT, LLP AND MURRAY, MONTGOMERY, & O'DONNELL**	**Adopted**
ITEM 4	**CITYWIDE**	**ORDINANCE S-42021 - ACCESS STATE OF ARIZONA CONTRACT FOR COMPUTER HARDWARE AND SUPPORT**	**Adopted**
ITEM 5	**CITYWIDE**	**ORDINANCE S-42022 - RFP 15-183 - STRATEGIC GOAL SETTING CONSULTANT SERVICES**	**Continued until September 30, 2015**
ITEM 6	**CITYWIDE**	**ORDINANCE S-42023 - CONTRACT AWARD FOR REAL PROPERTY ACQUISITION SERVICES**	**Adopted**

			ACTION
ITEM 7	**DISTRICTS 1, 4, 5, 7, AND 8**	**ORDINANCE S-42024 - APPLY FOR, ACCEPT, AND DISBURSE RESILIENCE AMERICORPS GRANT**	**Adopted with modifications**
ITEM 8	**CITYWIDE**	**ORDINANCE S-42025 - AMEND CONTRACT 131679 WITH G FORCE GLOBAL TECHNOLOGIES**	**Adopted**
ITEM 9	**CITYWIDE**	**ORDINANCE S-42026 - STRAND ANALYTICAL LABORATORIES, CT133927, FOR DNA OUTSOURCING**	**Adopted**
ITEM 10	**DISTRICT 2**	**ORDINANCE S-42027 - DEDICATION OF RIGHT-OF-WAY OVER A CITY-OWNED PARCEL OF LAND - SONORAN DESERT DRIVE AND NORTH VALLEY PARKWAY**	**Adopted**
ITEM 11	**CITYWIDE**	**ORDINANCE S-42028 - AMEND CONTRACT 120475 WITH MV TRANSPORTATION FOR OPERATION OF PHOENIX DIAL-A-RIDE AND AHWATUKEE CIRCULATOR SERVICES**	**Adopted**

			ACTION
ITEM 12	**CITYWIDE**	**ORDINANCE S-42029 - PUBLIC TRANSIT 2015 TITLE VI PROGRAM UPDATE**	**Adopted**
ITEM 13	**DISTRICT 1**	**ORDINANCE S-42030 - AV31000084 FAA - PHOENIX DEER VALLEY AIRPORT NORTH RAMP RECONSTRUCTION - DESIGN-BID-BUILD**	**Adopted**
ITEM 14	**DISTRICTS 2, 3, AND 6**	**ORDINANCE S-42031 - WS85050023 - STEEL TANK REHAB PROGRAM - CONSTRUCTION ADMINISTRATION AND INSPECTION SERVICES - CONTRACT AMENDMENT 2**	**Adopted**
ITEM 15	**DISTRICT 8**	**ORDINANCE S-42032 - AV08000072 FAA - PHOENIX SKY HARBOR INTERNATIONAL AIRPORT TERMINAL 4 NORTH APRON RECONSTRUCTION - CONSTRUCTION MANAGER AT RISK CONSTRUCTION SERVICES**	**Adopted as corrected**

			ACTION
ITEM 16	**CITYWIDE**	**ORDINANCE S-42033 - AMEND ORDINANCE S-41883 TO MODIFY EQUIPMENT OWNERSHIP FOR AGREEMENT WITH COX COMMUNICATIONS**	**Adopted**
ITEM 17	**CITYWIDE**	**ORDINANCE S-42034 - PURCHASE OF 250 BIKE RACKS FROM CYCLEHOP, LLC FOR THE CITY'S GR:D BIKE SHARE PROGRAM**	**Adopted**
ITEM 18	**OUT OF CITY**	**ORDINANCE S-42035 - PW1681001-3 - LINE EXTENSION AGREEMENT WITH APS FOR THE CONSTRUCTION OF ELECTRIC DISTRIBUTION FACILITIES**	**Adopted**
ITEM 19	**DISTRICT 4**	**FINAL PLAT - JAG - WELDON AVE - 140107 - SOUTHWEST CORNER OF 30TH AVENUE AND WELDON AVENUE**	**Approved**
ITEM 20	**DISTRICT 6**	**FINAL PLAT - ARCADIA FIESTA - 150042 - SOUTHWEST CORNER OF 32ND STREET AND INDIAN SCHOOL**	**Approved as corrected**

			ACTION
ITEM 21	**DISTRICT 4**	**RESOLUTION 21355 - ABANDONMENT OF EASEMENT - V-140019A - 1717 NORTH 1ST AVENUE**	**Approved**

Vietnamese Speak English Very Well	5,125	-
Vietnamese Speak English Less Than Very Well	8,840	2.66%
Other Asian	10,615	-
Other Asian Speak English Very Well	7,085	-
Other Asian Speak English Less Than Very Well	3,530	1.06%
Tagalog	12,386	-
Tagalog Speak English Very Well	8,380	-
Tagalog Speak English Less Than Very Well	4,006	1.21%
Other Pacific Island	4,162	-
Other Pacific Island Speak English Very Well	2,899	-
Other Pacific Island Speak English Less Than Very Well	1,263	0.38%
Navajo	8,257	-
Navajo Speak English Very Well	7,078	-
Navajo Speak English Less Than Very Well	1,179	0.36%
Other Native North American	2,866	-
Other Native North American Speak English Very Well	2,504	-
Other Native North American Speak English Less Than Very Well	362	0.11%
Hungarian	856	-
Hungarian Speak English Very Well	611	-
Hungarian Speak English Less Than Very Well	245	0.07%
Arabic	12,259	-
Arabic Speak English Very Well	7,400	-
Arabic Speak English Less Than Very Well	4,859	1.46%
Hebrew	1,679	-
Hebrew Speak English Very Well	1,406	-
Hebrew Speak English Less Than Very Well	273	0.08%
African	7,284	-
African Speak English Very Well	4,016	-
African Speak English Less Than Very Well	3,268	0.98%
Other Languages	4,000	-
Other Languages Speak English Very Well	1,805	-
Other Languages Speak English Less Than Very Well	2,195	0.66%

Language Assistance Program Survey 2015

*-denotes required question

*Name: _____

*Email Address: _____

*1. Location

- Customer Service Representatives (electronic, phone, email)
- Central Station Transit Center
- Ed Pastor Transit Center
- Metrocenter Transit Center
- Sunnyslope Transit Center
- Tempe Transportation Center

*2. Have you had any requests for information or materials in other languages?

- Yes
- No

If yes, please complete the remainder of the survey.

If no, thank you for your participation.

3. What language(s) have been requested?

_____

4. How often do you receive requests?

-More than once a week
-Once a week
-More than once a month
-Once a month
-Once every three months
-Once every six months
-Once a year
-Other:

_____

APPENDIX C – WEBSITE SESSIONS BY LANGUAGE

Language	Number of Sessions	Percent of Total Sessions
Total	21,628,079[8]	100%
English	21,392,285	98.91%
Other Languages	222,177	1.03%
Language	**Number of Sessions**	**Percent of Non-English Sessions**
Spanish	123,377	0.57%
Chinese	26,684	0.12%
Japanese	13,950	0.06%
German	11,502	0.05%
French	10,316	0.05%
Korean	7,496	0.03%
Portuguese	6,225	0.03%
Italian	3,638	0.02%
Russian	3,303	0.02%
Dutch	2,576	0.01%
Arabic	1,822	0.01%
Swedish	1,483	0.01%
Turkish	1,221	0.01%
Polish	1,127	0.01%
Czech	839	0.00%
Norwegian	771	0.00%
Danish	726	0.00%
Vietnamese	670	0.00%
Hebrew	645	0.00%
Hungarian	645	0.00%
Finnish	531	0.00%
Thai	335	0.00%
Slovak	309	0.00%
Greek	293	0.00%
Romanian	232	0.00%
Indonesian	217	0.00%
Bulgarian	173	0.00%
Catalan	122	0.00%
Croatian	110	0.00%
Slovenian	101	0.00%
Persian	93	0.00%
Filipino	89	0.00%
Serbian	84	0.00%
Afrikaans	76	0.00%
Lithuanian	67	0.00%
Ukrainian	66	0.00%
Latvian	53	0.00%
Icelandic	31	0.00%

[8] There were 13,829 entries included that did not have a valid ISO language code associated with the website visit; thus the sum of languages will fall short.

Estonian	24	0.00%
Marathi	16	0.00%
Kanuri	15	0.00%
Hindi	10	0.00%
Tagalog	10	0.00%
Azerbaijani	8	0.00%
Breton	8	0.00%
Malay	8	0.00%
Pushto	8	0.00%
Telugu	8	0.00%
Walloon	6	0.00%
Bengali	5	0.00%
Esperanto	5	0.00%
Macedonian	5	0.00%
Navajo	5	0.00%
Albanian	4	0.00%
Malay	4	0.00%
Acoli	3	0.00%
Georgian	3	0.00%
Kannada	3	0.00%
Tonga	3	0.00%
Armenian	2	0.00%
Bosnian	2	0.00%
Galician	2	0.00%
Gujarati	2	0.00%
Irish	2	0.00%
Javanese	2	0.00%
Malayalam	2	0.00%
Turkmen	2	0.00%
Aymara	1	0.00%
Welsh	1	0.00%

MEETING SUMMARY

Date: 5/27/15

Re: LAP Interview – Hope VI

Summary:

Q. What geographic area does your agency serve?

A. There are housing locations between 7th Avenue and 19th Avenue on Buckeye and at 16th Street and Van Buren.

Q. How many people does your agency provide services to?

A. Between 745-800 people.

Q. Has the size of the population you serve increased, stayed the same, or decreased over the past five years?

A. It fluctuates.

Q. What are the countries of origin from which your population has immigrated?

A. Mexico, China, Somalia, Iraq, other Arab countries, Ukraine, other African countries.

Q. Does your population come from an urban or rural background?

A. Varies.

Q. What are the languages spoken by the population you serve?

A. Spanish, Chinese (Mandarin and Cantonese), Arabic, Somali

Q. What is the age and gender of your population?

A. The majority is female ranging from children to elderly.

Q. What is the education and literacy level of the population you serve?

A. High school diploma or less. Most read at a 5th or 6th grade level.

Q. What needs or expectations for public transportation services has this population expressed?

A. The majority use public transportation.

Q. Has the population inquired about how to access public transportation or expressed a need for public transportation service?

A. Yes. Most residents know how to use the system. Bus passes are provided for employment searches.

Q. What are the most frequently traveled destinations?

A. The most frequently traveled destinations include doctor's appointments and the grocery store.

Q. Are there locations that the population has expressed difficulty accessing via the public transportation system?

A. Yes, it can be difficult to use the transportation system, especially Dial-A-Ride, for doctor's appointments.

Q. Do the transit needs and travel patterns of the population vary depending on the age or gender of the population members?

A. Yes. School-age children use public transportation to get to school, seniors use it during the daytime, and for those that work it depends on their shift.

Q. What is the best way to obtain input from the population?

A. Emails, community events, flyers.

Q. Who would the population trust most in delivering language appropriate messages?

A. Case workers, family members, English-speaking children.

MEETING SUMMARY

Date: 5/27/15

Re: LAP Interview – Arizona Immigration Refugee Services (AIRS)

Summary:

Q. What geographic area does your agency serve?

A. The agency provides services across metropolitan Phoenix.

Q. How many people does your agency provide services to?

A. 180 people per year.

Q. Has the size of the population you serve increased, stayed the same, or decreased over the past five years?

A. It has slightly increased.

Q. What are the countries of origin from which your population has immigrated?

A. Iraq, Burmese, Afghanistan, Somalia, Cuba, Congo.

Q. Does your population come from an urban or rural background?

A. It varies. The populations from Iraq and Afghanistan would have an urban background. Populations from other countries will a rural background.

Q. What are the languages spoken by the population you serve?

A. Arabic, Burmese, Spanish, French, Chin, Farsi, Somali.

Q. What is the age and gender of your population?

A. The agency serves males and females ranging from 4 months to 85 years old.

Q. What is the education and literacy level of the population you serve?

A. It varies. The average education level is early high school.

Q. What needs or expectations for public transportation services has this population expressed?

A. The population has expressed that there needs to be increased night time service as well as increased frequency of bus service. They have also expressed a safety concern with riding the bus. The population is also uncomfortable with using maps and cannot understand the signage on the bus or the bus drivers.

Q. Has the population inquired about how to access public transportation or expressed a need for public transportation service?

A. Yes. Some have training before they arrive while others learn about transportation services from their case worker.

Q. What are the most frequently traveled destinations?

A. Between home and the AIRS office or to their work location.

Q. Are there locations that the population has expressed difficulty accessing via the public transportation system?

A. Yes. There is no service to north Scottsdale resorts or to the dairies on the west side.

Q. Do the transit needs and travel patterns of the population vary depending on the age or gender of the population members?

A. The likely users are young and male. Women tend to ride with family or in groups.

Q. What is the best way to obtain input from the population?

A. One on one contact, telephone.

Q. Who would the population trust most in delivering language appropriate messages?

A. Family members, other community members who have shared the same experiences.

MEETING SUMMARY

Date: 5/27/15

Re: LAP Interview – Friendly House

Summary:

Q. What geographic area does your agency serve?

A. The agency provides services across Maricopa County, but mainly serves central and south Phoenix.

Q. How many people does your agency provide services to?

A. 15,000 people per year.

Q. Has the size of the population you serve increased, stayed the same, or decreased over the past five years?

A. It has decreased slightly.

Q. What are the countries of origin from which your population has immigrated?

A. Predominately Spanish-speaking countries as well as Middle East and African countries.

Q. Does your population come from an urban or rural background?

A. Urban.

Q. What are the languages spoken by the population you serve?

A. Spanish, Arabic, Burmese.

Q. What is the age and gender of your population?

A. The agency serves males and females age three to seniors.

Q. What is the education and literacy level of the population you serve?

A. No information available.

Q. What needs or expectations for public transportation services has this population expressed?

A. The population has expressed a need to get to social services.

Q. Has the population inquired about how to access public transportation or expressed a need for public transportation service?

A. No information available.

Q. What are the most frequently traveled destinations?

A. No information available.

Q. Are there locations that the population has expressed difficulty accessing via the public transportation system?

A. No information available.

Q. Do the transit needs and travel patterns of the population vary depending on the age or gender of the population members?

A. Yes. Some utilize carpooling, local buses, or walking for travel.

Q. What is the best way to obtain input from the population?

A. One on one communication, surveys.

Q. Who would the population trust most in delivering language appropriate messages?

A. Case managers, teachers, and staff.

MEETING SUMMARY

Date: 5/27/15

Re: LAP Interview – Chinese Senior Center

Summary:

Q. What geographic area does your agency serve?

A. Mainly about three miles around the senior center, but the center does have people come from around metro-Phoenix.

Q. How many people does your agency provide services to?

A. About 1000 members.

Q. Has the size of the population you serve increased, stayed the same, or decreased over the past five years?

A. Increased.

Q. What are the countries of origin from which your population has immigrated?

A. Southern Asia, China, and Taiwan.

Q. Does your population come from an urban or rural background?

A. Urban.

Q. What are the languages spoken by the population you serve?

A. Chinese/different dialects of Chinese.

Q. What is the age and gender of your population?

A. The age is over 60 and the center sees an equal mix of males and females.

Q. What is the education and literacy level of the population you serve?

A. The majority of the population is educated.

Q. What needs or expectations for public transportation services has this population expressed?

A. The population does not drive so they need public transportation services to get around.

Q. Has the population inquired about how to access public transportation or expressed a need for public transportation service?

A. Yes.

Q. What are the most frequently traveled destinations?

A. The most frequently traveled destinations are to the senior center and to home.

Q. Are there locations that the population has expressed difficulty accessing via the public transportation system?

A. Yes, it is difficult to get to doctor's appointments.

Q. Do the transit needs and travel patterns of the population vary depending on the age or gender of the population members?

A. There is no difference.

Q. What is the best way to obtain input from the population?

A. The best way to obtain input is to use surveys or make announcements.

Q. Who would the population trust most in delivering language appropriate messages?

A. Staff at the senior center.

MEETING SUMMARY

Date: 5/29/15

Re: LAP Interview – Catholic Charities

Summary:

Q. What geographic area does your agency serve?

A. The agency serves central and northern Arizona. Refugee services are focused in Maricopa County.

Q. How many people does your agency provide services to?

A. The agency provides services to 5,000 - 10,000 people per year. The refugee program serves about 1,000 people per year.

Q. Has the size of the population you serve increased, stayed the same, or decreased over the past five years?

A. It has stayed the same.

Q. What are the countries of origin from which your population has immigrated?

A. It continually changes, but primarily the agency serves Arabic, Somali, and Spanish-speaking populations.

Q. Does your population come from an urban or rural background?

A. It is mixed. The population from Iraq has an urban background and the Somali population has a rural background.

Q. What are the languages spoken by the population you serve?

A. Spanish, Arabic, Somali, Swahili, and Burmese.

Q. What is the age and gender of your population?

A. There is a 55% male and 45% female ratio. The agency serves all ages.

Q. What is the education and literacy level of the population you serve?

A. It is mixed. The Iraqi and Cuban populations have a high school or college degree. The Somali population is less educated.

Q. What needs or expectations for public transportation services has this population expressed?

A. Public transportation is the main source of transportation for the refugee populations. One challenge is accommodating for light night shifts. It was suggested that if materials were to be translated into another language that it be Arabic.

Q. Has the population inquired about how to access public transportation or expressed a need for public transportation service?

A. Yes. The agency provides a bus and light rail orientation. It is the most popular program at the agency.

Q. What are the most frequently traveled destinations?

A. Most are traveling from the West Valley to the East Valley.

Q. Are there locations that the population has expressed difficulty accessing via the public transportation system?

A. No information available.

Q. Do the transit needs and travel patterns of the population vary depending on the age or gender of the population members?

A. No.

Q. What is the best way to obtain input from the population?

A. Community forums with professional interpreters.

Q. Who would the population trust most in delivering language appropriate messages?

A. Professionally trained interpreters.

MEETING SUMMARY

Date: 5/27/15

Re: LAP Interview – Arizona Immigration Refugee Services (AIRS)

Summary:

Q. What geographic area does your agency serve?

A. The agency provides services across metropolitan Phoenix.

Q. How many people does your agency provide services to?

A. 180 people per year.

Q. Has the size of the population you serve increased, stayed the same, or decreased over the past five years?

A. It has slightly increased.

Q. What are the countries of origin from which your population has immigrated?

A. Iraq, Burmese, Afghanistan, Somalia, Cuba, Congo.

Q. Does your population come from an urban or rural background?

A. It varies. The populations from Iraq and Afghanistan would have an urban background. Populations from other countries will a rural background.

Q. What are the languages spoken by the population you serve?

A. Arabic, Burmese, Spanish, French, Chin, Farsi, Somali.

Q. What is the age and gender of your population?

A. The agency serves males and females ranging from 4 months to 85 years old.

Q. What is the education and literacy level of the population you serve?

A. It varies. The average education level is early high school.

Q. What needs or expectations for public transportation services has this population expressed?

A. The population has expressed that there needs to be increased night time service as well as increased frequency of bus service. They have also expressed a safety concern with riding the bus. The population is also uncomfortable with using maps and cannot understand the signage on the bus or the bus drivers.

Q. Has the population inquired about how to access public transportation or expressed a need for public transportation service?

A. Yes. Some have training before they arrive while others learn about transportation services from their case worker.

Q. What are the most frequently traveled destinations?

A. Between home and the AIRS office or to their work location.

Q. Are there locations that the population has expressed difficulty accessing via the public transportation system?

A. Yes. There is no service to north Scottsdale resorts or to the dairies on the west side.

Q. Do the transit needs and travel patterns of the population vary depending on the age or gender of the population members?

A. The likely users are young and male. Women tend to ride with family or in groups.

Q. What is the best way to obtain input from the population?

A. One on one contact, telephone.

Q. Who would the population trust most in delivering language appropriate messages?

A. Family members, other community members who have shared the same experiences.

MEETING SUMMARY

Date: 5/27/15

Re: LAP Interview – Refugee Focus

Summary:

Q. What geographic area does your agency serve?

A. The agency provides service across metropolitan Phoenix.

Q. How many people does your agency provide services to?

A. 800 people per year.

Q. Has the size of the population you serve increased, stayed the same, or decreased over the past five years?

A. It has stayed the same.

Q. What are the countries of origin from which your population has immigrated?

A. Afghanistan, Bhutan, Burma (Burmese, Chin, Karen), Congo, Cuba, Columbia, Eritrea, Ethiopia, Iran, Iraq, Somalia, and Sudan.

Q. Does your population come from an urban or rural background?

A. Both.

Q. What are the languages spoken by the population you serve?

A. Amharic, Arabic, Assyrian, Burmese, Chaldean, Chin (Haka, Matu, Khumi, Muzo, and Falam), Dari, Dinka, Dzongkha (Bhutanese), Farsi, French, Hindi, Karen, Kibembe, Kinya-rwanda, Kirundi, Kiswahili, Kunama, Lingala, Nepali, Oromo, Pashto, Spanish, Somali, Thai, and Tigrinya.

Q. What is the age and gender of your population?

A. The agency serves males and females from zero to 96 years old.

Q. What is the education and literacy level of the population you serve?

A. It varies. Some refugees have some schooling while others are college educated.

Q. What needs or expectations for public transportation services has this population expressed?

A. Public transportation services are needed. Free bus passes are also given out by the agency.

Q. Has the population inquired about how to access public transportation or expressed a need for public transportation service?

A. Yes.

Q. What are the most frequently traveled destinations?

A. Work, medical appointments, social services, home, grocery store, school.

Q. Are there locations that the population has expressed difficulty accessing via the public transportation system?

A. Yes. There is no access to resorts in north Scottsdale or south to the casinos. Sometimes the closest bus stop is 20 minutes away. In addition, shifts do not match with the bus schedule. Also, there is difficulty accessing Mohave and 51st Avenue. Shifts at this employment location begin at 6 a.m. The current bus system limits accessibility to employers and can also create long commutes with workers trying to get there on time.

Q. Do the transit needs and travel patterns of the population vary depending on the age or gender of the population members?

A. Yes. Some may attend school; others may work or stay at home.

Q. What is the best way to obtain input from the population?

A. From case workers.

Q. Who would the population trust most in delivering language appropriate messages?

A. Case managers, community leaders.

2010-11 Transit On-Board Survey Final Report

Developed by:

December 2011

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EXECUTIVE SUMMARY

Between October 2010 and February 2011, Valley Metro conducted an on-board transit survey. The purpose of the survey was to better understand the travel pattern of transit users in the metropolitan Phoenix area, particularly the impact that light rail has had on regional travel patterns. The primary objectives for the survey were to:

1. Collect data on transit ridership as part of the "Before and After Assessment of Light Rail" as required by the Federal Transit Administration (FTA) Final Rule on Major Capital Investment Projects. The "Before Survey" was conducted in 2007. This survey provided the "After" data.

2. Update travel pattern data for the region's travel demand computer model to reflect current transit system ridership.

The survey, which included nearly 100 bus routes and all light rail stations, was the largest and most comprehensive origin and destination survey ever conducted by Valley Metro. The goal was to obtain useable surveys from approximately 13,750 passengers. The actual number of usable surveys was 15,780. Of the useable surveys, 4,732 were completed with light rail passengers and 11,048 were completed with bus passengers.

The magnitude of the survey will allow regional planners to better understand the needs and travel patterns of many specialized populations. For example, the final database contains responses from:

- more than 6,600 people who do not have cars
- nearly 1,600 people under age 18
- nearly 1,000 people age 60 or older
- more than 6,000 students, including more than 4,000 college/university students
- nearly 2,000 students in grades K-12
- more than 3,300 people living in households with incomes of less than $10,000 per year
- more than 9,000 people who were employed full or part time
- nearly 3,000 people who were not employed but were seeking work

Major Findings

Ridership reports show that there are approximately 250,000 transit boardings per day or 1.25 million boardings during a typical 5-day work week. By providing residents with a reliable mode of transportation, the region's transit system is having a positive impact on

traffic flow and air quality by reducing the number of trips that would have otherwise been completed by car. Some of the major findings from the survey are described below:

- **Transit Users Are Using Public Transit More Often.** Among those who had been using public transit in the metropolitan Phoenix area at least two years, sixty-one percent (61%) reported that they were using public transportation more often than they did two years ago. Among light rail users, 80% reported that they were using public transit more often than they were two years ago before light rail began operations. The high percentage of light rail users who reported using public transit more often suggests that light rail has significantly enhanced the attractiveness of public transportation in the region.

- **Public Transit Is Important to the Region's Economy.** More than one-third (35%) of all transit trips represented in the survey either began or ended at work. When asked to report their employment status, more than three-fourths (79%) of those surveyed indicated that they were currently employed or seeking work. Among those seeking work, one-third (33%) indicated that they could not have completed their trip if public transportation were not available. Another 11% indicated that they did not know how they would have completed their trip if public transit had not been available.

- **Public Transit Is Important to Education in the Region.** Thirty-eight percent (38%) of those surveyed identified themselves as students, which explains the reason that twenty-nine percent (29%) of all transit trips represented in the survey either began or ended at a college/university or a grade school. On a typical weekday, more than 70,000 school-related trips are completed on public transportation in the metropolitan Phoenix area. If public transportation were not available, 23% of the students surveyed indicated that they would not have been able to get to school. Another 10% did not know how they would have gotten to school if public transit had not been available.

- **The Demographic Profile of Public Transit Riders Has Changed Since the Introduction of Light Rail.**

    - Transit users are more likely to live in households earning $50,000 or more per year. Before light rail service began, one in seven transit users (14%) had an annual household income of $50,000 or more. After light rail service began, nearly one in five (19%) transit users had an annual household income of $50,000 or more.

    - Transit users are more likely to own a vehicle. Before light rail service began, 49% of transit users had at least one vehicle in their household. After light rail service began, 53% had at least one vehicle.

    - Transit users are more likely to be students. Before light rail service began, 27% of the region's transit users were students. After light rail service began, 38% of the region's transit users were students.

SECTION 1: SURVEY DESIGN

Survey Development Process

Valley Metro assembled a technical advisors committee (TAC) to help guide the project to ensure that the survey design would meet a wide range of regional data needs. The TAC included representatives of the following organizations: Valley Metro, the Maricopa County Association of Governments, Metro Light Rail, the Arizona Department of Transportation, the City of Phoenix, the City of Tempe, the City of Glendale, the City of Scottsdale, and others.

The survey development process began by having members of the TAC review the content of Valley Metro's 2007 Transit On-Board Survey. Since one of the objectives for the 2011 survey was to assess changes in ridership patterns as a result of the introduction of light rail service, many of the questions from the 2007 survey were included on the 2011 survey.

After four iterations of input from members of the TAC, all members of the committee were comfortable with the content of the survey. At that point the survey instrument was shared with representatives of the Federal Transit Administration (FTA) to ensure all Federal requirements and expectations for the design of the survey were met. All of the suggestions from the FTA staff were incorporated into the final version of the survey.

Types of Data Collected

The final version of the survey was slightly longer than was originally anticipated. To ensure the length of the survey did not negatively affect the response rate, the survey questions were divided into two categories: "required" and "desired" data as described below.

Required data involved questions for which a response from a respondent was required in order for the survey to be considered complete. The data that were "required" to fulfill the contractual requirements of the project are listed below:

- Type of place where the trip began
- Address where the trip began
- Mode of access to the transit system
- Boarding location
- Alighting location
- Transfers used to get to and from the route/station where the survey was administered

- Mode of egress from the transit system
- Destination address
- Type of place where the trip ended
- The respondent's home address
- Number of operational vehicles available in the household
- Number of occupants in the respondent's household
- Number of adults in the respondent's household
- Number of workers (employed persons) in the respondent's household
- Respondent's employment status
- Respondent's student status
- Respondent's driver's license status
- Age of the respondent
- Annual household income
- Time of day the survey was completed

Desired data involved questions for which a response from a respondent was desired, but was not required in order for the survey to be considered complete. "Desired" questions were to be asked of all respondents who had time to complete the full survey. Although these questions could be skipped if a respondent did not have time to complete the full survey, more than 90% of the respondents completed all of the "desired" questions. The data that were considered to be "desired" are listed below:

- Distance walked from the origin to the transit system (if applicable)
- Distance walked from the transit system to the destination (if applicable)
- Park and ride location (if applicable) on either end of the trip
- Carpool size (if applicable) on either end of the trip
- How long the respondent had been using public transportation
- How the frequency of transit use has changed over the past two years
- Why respondents started using public transit
- How respondents get transit schedule information
- Fare payment method
- How the respondent would make the trip if public transit were not available
- The respondent's race/ethnicity
- Gender of the respondent
- Name of the school where the respondent attends college or school (if applicable)

Other data was added after the survey was administered. The most important type of data that was added following the administration of the survey involved the purpose of the respondent's trip. The purpose of the trip was determined by the types of destinations that were visited by the respondent. The purpose of the trip was classified as one of eight trip purposes that are used by the region's travel demand model:

- **Home-Based Work (HBW)**: trips that began at home and ended at work <u>or</u> began at work and ended at home.

- **Home-Based Shopping (HBS)**: trips that began at home and ended at a shopping area or began at a shopping area and ended at home. If the respondent worked at a shopping area, the trip was classified as a HBW trip.

- **Home-Based College (HBC)**: trips that began at home and ended at a college/university or began at a college/university and ended at home. If the respondent worked at a college/university, the trip was classified as a HBW trip

- **Home-Based School (HSL)** trips that began at home and ended at a K-12 school or began at a K-12 school and ended at home. If the respondent worked at a K-12 school, the trip was classified as a HBW trip

- **Home-Based Medical (HBM)**: trips that began at home and ended at a medical facility (hospital/doctor's office) or began at a medical facility and ended at home. If the respondent worked at a medical facility, the trip was classified as a HBW trip

- **Home-Based Airport (HBA)**: trips that began at home and ended at an airport or began at an airport and ended at home. If the respondent worked at an airport, the trip was classified as a HBW trip

- **Home-Based Other (HBO)**: trips that began at home and ended at any other location not previously listed or began at any location not previously listed and ended at home.

- **Non-Home-Based (NHB)**: trips that did not begin or end at home.

Descriptions of the Survey Instruments

The survey instrument was designed to be administered as a face-to-face interview using tablet PC's and printed surveys.

Printed surveys were printed on heavy card stock for easy distribution and completion. The printed surveys were available in both English and Spanish. Bilingual surveyors were also hired to administer the surveys on tablet PC's in Spanish.

While most respondents completed the survey during their trip, postage-paid return reply envelopes were available for riders who did not have time to complete the survey during their trip. Riders could return the survey by mail or complete the survey on the Internet by going to a website that was printed on the envelope. Each survey contained a serial number that was used by ETC Institute to track the route and sequence in which surveys were completed.

Copies of the printed survey materials are provided in Appendix C of this report.

Screen shots that show how the survey questions appeared on the tablet PCs are provided in Appendix D of this report.

SECTION 2: SAMPLING PROCEDURES

Sampling Goals

In order to ensure that the distribution of completed surveys mirrored the actual distribution of riders who use the region's transit system, Valley Metro established proportional sampling goals for each bus route and light rail station as shown below.

Figure 2.1

Type of Route	% of Riders to Be Surveyed
Local Routes	4.75%
Collector Routes	4.75%
Rural Routes	4.75%
Express Routes	15%
Rapid Routes	15%
Rail Stations	10%

The sampling goals for the survey were set by applying the sampling rates shown in the table above to the August 2010 average weekday ridership for each bus route/light rail station. The goals and the actual number of "complete and useable surveys" are provided in Figure 2.2 (see below and on the following pages).

Figure 2.2

Goal vs. Actual Number of Completed Surveys By Route/Station

Route/Station Name	Goal for Completed Surveys	Actual Number of Complete & Useable Surveys	Within 10 or 10% of the Goal
LOCAL ROUTES			
0 - Central Avenue	249	295	YES
1 - Washington Street	28	29	YES
3 - Van Buren Street	249	249	YES
7 - 7th Street	219	250	YES
8 - 7th Avenue	121	132	YES
10 - Roosevelt Street/Grant Street	140	152	YES
12 - 12th Street	100	175	YES
13 - Buckeye Road	44	46	YES
15 - 15th Avenue	150	183	YES
16 - 16th Street	188	188	YES
17 - McDowell Road	358	362	YES
17A - McDowell Road/Avondale Boulevard	25	52	YES
19 - 19th Avenue	429	488	YES
27 - 27th Avenue	206	215	YES
29 - Thomas Road	502	514	YES
30 - University Drive	130	132	YES
35 - 35th Avenue	302	378	YES
39 - 40th Street	44	69	YES

Figure 2.2 (continued)

Goal vs. Actual Number of Completed Surveys By Route/Station

Route/Station Name	Goal for Completed Surveys	Actual Number of Complete & Useable Surveys	Within 10 or 10% of the Goal
LOCAL ROUTES (continued)			
40 - Main Street	99	242	YES
41 - Indian School Road	423	492	YES
43 - 43rd Avenue	127	132	YES
44 - 44th Street/Tatum Road	92	92	YES
45 - Broadway Road	218	219	YES
48 - 48th Street/Rio Salado Parkway	30	58	YES
50 - Camelback Road	286	293	YES
51 - 51st Avenue	53	62	YES
52 - Roeser Road	38	61	YES
56 - Priest Drive	100	103	YES
59 - 59th Avenue	128	147	YES
60 - Bethany Home Road	128	161	YES
61 - Southern Avenue	277	292	YES
62 - Hardy Drive/Guadalupe Road	77	116	YES
65 - Mill Road/Kyrene Road	54	55	YES
66 - Mill Road/68th Street	52	78	YES
67 - 67th Avenue	117	145	YES
70 - Glendale Avenue/24th Street	341	372	YES
72 - Scottsdale Road/Rural Road	234	251	YES
76 - Miller Road	25	34	YES
77 - Baseline Road	124	125	YES
80 - Northern Avenue	75	75	YES
81 - Hayden Boulevard/McClintock Drive	140	154	YES
90 - Dunlap Avenue/Cave Creek Road	145	183	YES
96 - Dobson Road	107	144	YES
104 - Alma School Road	72	89	YES
106 - Peoria Avenue/Shea Boulevard	169	202	YES
108 - Elliot Road	34	38	YES
112 - Country Club Drive/Arizona Avenue	68	70	YES
120 - Mesa Drive	25	23	YES
122 - Cactus Road	25	25	YES
128 - Stapley Drive	25	30	YES
131 - START	25	28	YES
136 - Gilbert Road	35	35	YES
138 - Thunderbird Road	68	70	YES
154 - Greenway Road	48	48	YES
156 - Chandler Boulevard/Williams Field Road	52	58	YES
170 - Bell Road	124	127	YES
186 - Union Hills Drive	81	81	YES

Figure 2.2 (continued)

Goal vs. Actual Number of Completed Surveys By Route/Station

Route/Station Name	Goal for Completed Surveys	Actual Number of Complete & Useable Surveys	Within 10 or 10% of the Goal
EXPRESS ROUTES			
510 - Scottsdale Express	12	37	YES
511 - Tempe/Scottsdale Airpark Express	8	8	YES
512 - Scottsdale Express	11	22	YES
520 - Tempe Express	13	29	YES
521 - Tempe Express	29	32	YES
531 - Mesa/Gilbert Express	45	56	YES
532 - Mesa Express	21	26	YES
533 - Mesa Express	45	75	YES
535 - Northeast Mesa/Downtown Express	10	12	YES
540 - Chandler Express	25	28	YES
541 - Chandler Express	33	65	YES
542 - Chandler/Downtown Express	32	59	YES
560 - Avondale Express	8	9	YES
562 - Goodyear/Downtown Express	19	19	YES
571 - Surprise Express	20	27	YES
573 - Northwest Valley/Downtown Express	26	29	YES
575 - Northwest Valley Downtown Express	23	28	YES
581 - North Mountain Express	14	14	YES
NEIGHBORHOOD CIRCULATORS/COLLECTOR ROUTES			
Phoenix ALEX	49	49	YES
Phoenix DASH	105	110	YES
Tempe FLASH McCallister	132	134	YES
Glendale Urban Shuttle (GUS) 1, 2, & 3	25	28	YES
Grand Ave Limited	max possible	44	YES
Phoenix MARY	144	151	YES
Mesa Downtown BUZZ	34	35	YES
Tempe Orbit Earth EW Circulator	80	96	YES
Tempe Orbit Jupiter	90	110	YES
Tempe Orbit Mars	88	89	YES
Tempe Orbit Mercury	112	113	YES
Tempe Orbit Venus	87	87	YES
Phoenix Free Airport Shuttle	25	36	YES
SMART Circulator	105	110	YES
Scottsdale Downtown Trolley	25	25	YES
Scottsdale Neighborhood Trolley	82	82	YES
OTHER BUS ROUTES (RURAL, RAPID AND LINK ROUTES)			
660 - Wickenburg Connector	max possible	7	YES
685 - Phoenix/Gila Bend Regional Connector	max possible	8	YES
I-10 East RAPID	113	116	YES
I-17 RAPID	50	53	YES
LINK-Main Street	71	71	YES

Figure 2.2 (continued)

Goal vs. Actual Number of Completed Surveys By Route/Station

Route/Station Name	Goal for Completed Surveys	Actual Number of Complete & Useable Surveys	Within 10 or 10% of the Goal
RAIL STATIONS			
1 - Montebello Avenue & 19th Avenue	323	343	YES
2 - 19th Avenue & Camelback Road	154	264	YES
3 - 7th Avenue & Camelback Road	80	80	YES
4 - Central Avenue & Camelback Road	48	55	YES
5 - Campbell Avenue & Central Avenue	135	136	YES
6 - Indian School Road & Central Avenue	144	148	YES
7 - Osborne Road & Central Avenue	87	83	YES
8 - Thomas Road & Central Avenue	161	178	YES
9 - Encanto Boulevard & Central Avenue	52	52	YES
10 - McDowell Road & Central Avenue	167	183	YES
11 - Roosevelt Street & Central Avenue	205	187	YES
12a - Van Buren Street & Central Avenue	117	133	YES
12b - Van Buren Street & 1st Avenue	88	123	YES
13a - Jefferson Street & 1st Avenue	173	158	YES
13b - Washington Street & Central Avenue	51	72	YES
14A - 3rd Street & Washington Street	86	84	YES
14B - 3rd Street & Jefferson Street	89	96	YES
15a - 12th Street & Washington Street	38	42	YES
15b - 12th Street & Jefferson Street	22	20	YES
16a - 24th Street & Jefferson Street	43	51	YES
16b - 24th Street & Washington Street	38	36	YES
17 - 38th Street & Washington Street	28	41	YES
18 - 44th Street & Washington Street	172	160	YES
19 - Priest Drive & Washington Street	121	124	YES
20 - Center Parkway & Washington Street	34	40	YES
21 - Mill Avenue & Third Street	122	170	YES
22- Veterans Way & College Avenue	211	237	YES
23 - University Drive & Rural Road	310	334	YES
24 - Dorsey Lane & Apache Boulevard	93	100	YES
25 - McClintock Drive & Apache Boulevard	151	184	YES
26 - Smith-Martin Lane & Apache Boulevard	34	30	YES
27 - Price-101 Freeway & Apache Boulevard	153	336	YES
28 - Sycamore & Main Street	386	462	YES
TOTAL	**13750**	**15790**	**YES**

Sampling Goals Were Met On All Routes. The number of complete and useable surveys was within 10% of the goal (or 10 if the sampling goal was less than 100) on all bus routes and all light rail stations that were included in the survey. A survey was considered "complete" if all of the contractually required information was collected. A survey was considered "useable" if it met 100% of the quality assurance and quality control tests that were applied to each record. Overall, the total number of "complete and useable surveys" exceeded the contractual requirements by more than 2,000 surveys.

Methods for Selecting Survey Participants

In addition to setting specific goals for the number of surveys that were completed on each route/station, the consultant, in coordination with Valley Metro developed specific guidelines for selecting survey participants to ensure that the participants would be randomly selected. The processes for selecting survey participants at light rail stations and on bus routes are described below:

- **Light Rail System.** Interviewers were positioned at the entry areas to the fare zones of the light rail stations. As passengers approached the entry areas, every third person was asked to participate in the survey. This was done to ensure that participants were selected at random. If a passenger agreed to participate in the survey, the interviewer would administer the survey. When needed, the interviewer would walk with the passenger and even board the train until the survey was completed. If the survey was not completed before the train departed, the interviewer would ride the train with the passenger until the survey was completed.

- **Bus System.** A random number generator was used to determine which passengers were asked to participate in the survey after boarding a bus. If four people boarded a bus, the tablet PC randomly generated a number from 1 to 4. If the answer was 2, the second person who boarded the bus was asked to participate in the survey. If the answer was 1, the first person was asked to participate in the survey, and so forth. The selection was limited to the first four people who boarded a bus at any given stop to ensure the interviewer could keep track of the passengers as they boarded. For example, if 20 people boarded a bus, the tablet PC program would randomly pick one of the first four people for the survey.

Other Techniques that Were Used to Manage the Sample

Some of the other techniques that were used to manage the sample are described below and on the following page:

- **Daily Reviews of Interviewer Performance.** At the end of each day, the research team evaluated the performance of each interviewer. This included a review of the characteristics of the passengers that were interviewed with regard to age, gender, race, the number of reported transfers, the number of "required data" fields that were completed, the number of "desired data" fields that were completed, and the average length of each interview. These daily reviews allowed the research team to provide immediate feedback to interviewers to improve their overall performance. It also allowed the research team to quickly identify and remove interviewers who were not conducting the survey properly.

- **Oversampling of High Volume Bus Stops.** Valley Metro identified high volume boarding locations along each route (such as schools and major employment centers) prior to conducting the survey on each route. To ensure that these locations were not under-represented during the on-board survey, the Valley Metro consultant had interviewers conduct surveys at these stops while passengers were waiting to board the bus. The sample selection procedures that were used for surveys that were conducted at bus stops were the same as those used at rail stations.

- **Management of the Sample by Time of Day.** In addition to managing the total number of surveys that were completed for each route/station, the Valley Metro consultant also managed the number of surveys that were completed during each of the following four time periods: AM Peak (6am-10am), Midday (10am-2pm), PM Peak (2pm-6pm), and all other hours (before 6am and after 6pm). These four time periods correspond to time periods that are used for regional travel demand forecasting. This was done to ensure that the number of completed surveys for each time period would adequately support data expansion requirements for travel demand modeling. The data expansion process is described in Section 7 of this report.

SECTION 3: PILOT TEST

ETC Institute conducted a pilot test of the Valley Metro Regional On-Board Transit Survey in late September 2010. The purpose of the pilot test was to assess all aspects of the survey including: survey design, sampling methodology, survey implementation, and data processing tasks.

Routes/Stations Involved

The pilot test was administered on eight bus routes and at two light rail stations from 7am to 5pm. The routes and stations that were included in the pilot test are listed below:

Bus Routes
- Route 0 (Central)
- Route 3 (Van Buren)
- Route 40 (Apache-Main)
- Route 62 (Hardy-Guadalupe)
- Route 72 (Scottsdale-Rural)
- DASH Circulator
- Orbit Earth Circulator
- Route 521 (Tempe Express)

Light Rail Stations
- Central Station
- Tempe Transit Center

Personnel and Training

A team of 16 personnel administered the Pilot Test. This included three senior managers: the Project Manager (Chris Tatham) and two field supervisors (Aaron Hekele and Andrew Kolcz). The other positions and number of personnel that were included on the survey team during the pilot test are listed below:

Position	Number of Personnel
Project Team Leader	1
Assistant Team Leader	1
Team Data Specialist	1
Interviewers/Counters	10
Total Personnel	13

Training

All interviewers who conducted the pilot test participated in two days of training prior to the pilot test. The training activities that were covered included:

- An introduction to the project (purpose, scope, etc.).
- Training to use the tablet PCs.
- On-site reconnaissance of the routes and stations that were included in the pilot test. Team members rode each bus route that was included in the pilot test multiple times. Team members recorded all possible stops for each route and developed/tested templates for collecting ridership data.
- Survey administration and sampling procedures.
- Practical exercises to ensure that all interviewers were technically competent to perform all tasks that would be required in the field.

Results of the Pilot Test

The pilot test was administered to a total of 410 riders. Of these 322 completed the survey on tablet PCs. The remaining 88 surveys were completed on paper surveys. Each of the aspects of the pilot test that were assessed is described below.

Assessment of Staff

The overall quality of the staff for the pilot test was excellent. Approximately half of the people who participated in the pilot test had prior experience with the administration of on-board surveys. Of the 17 interviewers who were initially recruited for the pilot test, only one was dismissed for not being technically competent. The remaining 16 people were able to quickly understand and demonstrate the ability to perform the tasks required.

Assessment of Survey Design

Based on the results of the pilot test, a few revisions to the survey instrument were recommended. The most significant revisions are listed below and on the following page:

1) The questions to capture the respondents name and phone number were moved to the end of the survey on the tablet PC version of the survey. This information was initially captured at the beginning of the survey, but interviewers found themselves spending too much time explaining the reason they needed the person's name and phone number, which reduced the amount of time available to administer the survey.

2) The questions about the person's usage of transit in the Phoenix area were reworded. The original question asked if the respondent had started using transit during the past two years. Since many people (especially students) were new to the area, this question was confusing since they had not lived in the area at least two years. The question was changed to "how many years have you been using transit in the Phoenix area?" to improve the quality of the responses to the question.

3) Response choices for the reason riders started using public transit during the past two years were added to the survey because some of the reasons that were mentioned during the pilot test were not originally included on the survey. The reasons that were added included:

   - Started going to school
   - Lost my job
   - Lost my car

4) A question was added to the end of the survey to see if the person had made or will make the same trip in exactly the opposite direction at another time during the day. Respondents who had completed the survey previously in the day did not want to complete the survey again during their return trip, so this question was added to capture trips that would otherwise not be reported.

Assessment of Sampling Procedures
There were no problems with the sampling procedures. The process for randomly selecting riders on buses and at light rail stations as described in Section 2 worked very well.

Assessment of Ridership Counts
As part of the pilot test, ETC Institute tested the manual counting units that were to be used on buses to count boardings and alightings along each route. GPS enabled tablet PCs were used to record the following information each time a bus stopped: the location (latitude/longitude coordinates), time of day, number of boardings, and number of alightings. The accuracy of the counts by location was very good based on a review of the locations that were plotted on maps at the completion of the pilot test. Based on the results of the pilot test, the research team concluded that the GPS enabled tablet PCs would be an accurate method of tracking boarding and alighting counts for the main survey.

Assessment of Survey Length
The survey length was assessed for both the tablet PC and printed versions of the survey. The findings for each version are described below:

- **Tablet PC.** The time it took survey participants to fully complete the survey on a tablet PC ranged from a minimum of 2 minutes and 47 seconds to a maximum of 12 minutes and 16 seconds. The average time was 4 minutes and 38 seconds.

- **Printed Survey.** Two versions of the printed surveys were developed. A four-page version that had more white space and a two-page version printed on legal-sized paper.

    - Of the 50 persons who were given the **four-page** printed version of the survey, only 2 people completed the survey in less than 5 minutes. The average respondent completed the survey in 10 minutes and 21 seconds.

    - Of the 50 persons who were given the **two-page** printed version of the survey, five people completed the survey in less than 5 minutes. The average respondent completed the survey in 8 minutes and 17 seconds.

  The two-page version seemed to work better because it appeared to be shorter to respondents. For this reason, Valley Metro decided to use the two-page version of the survey.

Assessment of Survey Participation.
Overall, 86% of the riders who were asked to complete a survey agreed to participate. Among those who agreed to complete the survey, 92% indicated they had time to complete the full version of the survey; 8% indicated that they did not have time to complete the full version of the survey.

Assessment of Survey Quality
The survey database from the pilot test contained a total of 410 records that were substantially completed and geocoded to X, Y coordinates. The quality of survey data obtained through different methods is compared in Figure 3.1 below.

Figure 3.1

Method of Administration	# Who Started the Survey	# Who Had Time to Complete the Survey	# Surveys that were Fully Useable	% of Complete Surveys that Were Fully Useable
Tablet PC	372	344	322	94%
Paper (administered on board)	100	86	79	92%
Paper (returned by mail)	43	10	9	90%

SECTION 4: SURVEY ADMINISTRATION

Recruiting and Training Interviewers

Assembling a team of high quality interviewers was one of the most important steps in the survey administration process. For this project, ETC Institute complemented its team of professional interviewers with temporary interviewers who were recruited by a local staffing agency in the Phoenix area.

Surveyors were required to have a familiarity with the service area, a solid work history, ability to work with the public, a professional attitude and appearance, and an ability to operate a tablet PC. Each surveyor was required to attend ETC Institute's two-day training session. During these training sessions, surveyors were taught how to operate the tablet PCs and GPS-based ridership counters, how to approach riders, sampling procedures, survey etiquette, and how to deal with various situations that could be encountered during a survey. The training included role-playing and one-on-one tutoring with ETC Institute team leaders. Once the initial training was complete, surveyors spent several days under the supervision of a team leader, who assessed each surveyor's ability to properly conduct surveys. Surveyors who did not demonstrate proficiency in all of the required tasks were released.

Organization of the Survey Team

The survey was administered by five teams who were directly supervised by the project manager. The key individuals who oversaw data collection in the field are listed below. All of these people had at least three years of experience managing on-board surveys in the field.

- Leadership Team:
    - Project Manager – Chris Tatham
    - Assistant Project Manager – Andrew Kolcz
- Team Leader (Bus) – Grace Grimm
- Team Leader (Bus) – MG Casey
- Team Leader (Bus) – Laurel Vine
- Team Leader (Rail) – Aaron Hekele

The organizational structure of each team is described below.

Leadership Team. The leadership team consisted of the project manager, assistant project manager, and 2-3 support personnel. The leadership group was responsible for reviewing the performance of each team and ensuring that the sampling goals for each route/station were met. The leadership team operated from centralized locations, such as a rail station or transit center, so that the performance of all teams could be evaluated.

The selection of bus routes and rail stations to be surveyed each week was carefully planned to ensure the leadership group could directly interface with all routes as they were being surveyed.

Bus Teams. Teams 1, 2, and 3 focused their efforts on the administration of surveys on an average of two bus routes per day.

Each of the bus team leaders supervised a group of approximately 10 surveyors per day. Interviewers were typically deployed on at least two buses running in opposite directions as shown in Figure 4.1 below.

Figure 4.1

Typical Deployment of Bus Survey Teams

Route 1

Bus 1 (Northbound then Southbound):
- Lead interviewer
- Support interviewer
- Boarding/alighting counter

Bus 2 (Southbound then Northbound):
- Lead interviewer
- Support interviewer

Route 2

Bus 1 (Eastbound then Westbound):
- Lead interviewer
- Support interviewer
- Boarding/alighting counter

Bus 2 (Westbound then Eastbound):
- Lead interviewer
- Support interviewer

On high volume routes, interviewers may have been deployed on up to four buses on a route. On low volume routes, interviewers may have been deployed on just one bus serving the route. One person on each route was assigned to record boarding and alighting data.

The responsibilities for each of the positions on the bus team are described below.

- The **team leader** was responsible for ensuring that interviewers were properly trained, equipping interviewers to conduct surveys, scheduling interviewers, inspecting work, and reviewing the data collected before submitting the data to the leadership team at the end of the day.

- The **lead interviewer** was responsible for administering surveys and overseeing survey operations on his/her assigned bus. This included downloading the data from tablet PCs and submitting the data to the Team Leader.

- The **support interviewer** was responsible for conducting interviews. Most of the support interviewers spoke both English and Spanish.

- One person was assigned to conduct boarding and alighting counts on each route. The **boarding / alighting counter** used a GPS equipped tablet PC to record the number of riders who boarded and alighted the bus at each stop. A screen shot of the tablet PC program that was used to record the information is shown in Figure 4.2 to the right. The results of the boarding and alighting counts were used to support the expansion of the data as described in Section 7 of this report.

Figure 4.2

Light Rail Team. The rail team leader supervised a group of approximately 12 surveyors per day. The rail team typically administered the survey to passengers traveling in both directions at two stations per day as shown in Figure 4.3 below.

Figure 4.3

Typical Deployment of Rail Survey Team

Station 1

Eastbound:
- Lead interviewer
- Support interviewer
- Support interviewer

Westbound:
- Lead interviewer
- Support interviewer
- Support interviewer

Station 1

Eastbound:
- Lead interviewer
- Support interviewer
- Support interviewer

Westbound:
- Lead interviewer
- Support interviewer
- Support interviewer

At high volume stations, as many as 12 interviewers may have been used. At low volume stations as few as 3 interviewers may have been used. The responsibilities for each of the positions on the rail team are described below and on the following page:

- The **team leader** was responsible for ensuring that interviewers were properly trained, equipping interviewers to conduct surveys, scheduling interviewers, inspecting work, and reviewing the data collected before submitting the data to the leadership team at the end of the day.

- The **lead interviewer** was responsible for administering surveys and overseeing survey operations at his/her her assigned location. This included downloading the data from tablet PCs and submitting the data to the Team Leader.

- The **support interviewer** was responsible for conducting interviews. Most of the support interviewers spoke both English and Spanish.

Survey Administration Procedures

Timing of the Survey. The survey was administered during weekdays (Tuesday-Thursday) from October 4, 2010 thru February 17, 2011 with the exception of Veterans Day, Thanksgiving, and winter breaks for colleges/schools from December 15, 2010 - January 24, 2011.

The survey was administered at the time of day that coincided with the hours that each route was operational. This was to ensure that the administration of the survey began prior to peak ridership levels in the morning and continued after peak ridership levels in the evening. Although the administration of the survey began as early as 5am and continued as late as 9pm on some routes, most surveys were administered between the hours of 6:00am – 7:00pm.

The project manager coordinated with each transit agency to verify the hours of operation for each route. One week before the survey was scheduled to be conducted, the number of buses to be ridden were assigned to each route. Final staffing assignments were made at that time to ensure that an adequate number of interviewers were assigned.

The procedures for administering the survey are listed below:

- **Prior to the Administration of the Survey**:

  Route Reconnaissance. The team leader for each route conducted a physical reconnaissance of the route. This review included:

  - Ensuring that the stops previously identified matched the route actually being driven. This was done to ensure boarding and alighting data at each stop along the route were being recorded correctly.
  - Identifying large employers and schools along the route, which may have impacted ridership patterns at certain times of the day.
  - Assessing whether a high percentage of the riders did not speak English; if more than 10% of the riders did not speak English, provisions were made to have bilingual interviewers on the route.

  Education/Public Awareness. In order to increase participation in the survey, Valley Metro posted signs and recorded announcements on buses and at rail stations that explained the importance of the survey. The signs were posted on buses, and at light rail stations one week before the survey was conducted. A website was also created to provide riders with more information about the survey.

- **During the Administration of the Survey.** Interviewers selected people for the survey in accordance with the sampling procedures that are described in Section 2 of this report. Once a surveyor had selected a person for the survey, the surveyor did the following:

  - Approached the person who was selected and asked him or her to participate in the survey.

  - If the person refused, the interviewer ended the survey, but the refusal was recorded on the tablet PC so Valley Metro could assess the overall response rate to the survey.

  - If the person agreed to participate, the interviewer asked the respondent if he/she had at least five minutes to complete the survey.

    - **If the person did NOT have at least five minutes,** the surveyor asked the person to provide his/her boarding location, alighting location, name, and phone number. The surveyor then gave the respondent a printed copy of the survey with a return reply envelope. The interviewer told the respondent to return the survey by mail or on-line at the survey website within the next two days. A serial number that was printed on the survey was entered into the tablet PC to allow the research team to track whether or not the respondent completed the survey. If the survey was not returned to ETC Institute by mail or on-line within five days, a phone interviewer from ETC Institute's call center contacted the respondent and asked him/her to provide the information by phone. This methodology ensured that people who completed "short-trips" on public transit were well represented.

    - **If the person had at least five minutes,** the surveyor began administering the survey to the respondent as a face-to-face interview using a tablet PC. After all of the "required" questions had been answered, the interviewer asked the respondent if he or she had 2-3 more minutes to complete the "desired" questions. If the respondent agreed, the surveyor then asked the remaining questions on the survey. In situations where the administration of the survey by tablet PC was not practicable, a printed copy of the survey was used. When a printed copy of the survey was completed, the interviewer still conducted a face-to-face interview with the respondent after the respondent had filled out the questionnaire. During the interview, the surveyor reviewed all answers that were provided by the respondent to ensure the information was legible, accurate, and complete. If the surveyor noticed that the respondent did not properly complete one or more questions, the interviewer made the appropriate corrections to the survey. The completed survey was then entered into the tablet PC later that day.

- **After the Administration of the Survey.** After the surveys were administered, the team leaders for each team consolidated the survey data that was collected by their team and forwarded the data to the Leadership Team. The Leadership Team then reviewed each survey record to ensure that the following information had been provided.

    - Type of place where the trip began
    - Complete address where the trip began
    - Mode of access to the transit system
    - Boarding location
    - Alighting location
    - Mode of egress from the transit system
    - Complete destination address
    - Type of place where the trip ended
    - The respondent's home address
    - Number of operational vehicles available in the household
    - Number of occupants in the respondent's household
    - Number of adults in the respondent's household
    - Number of workers (employed persons) in the respondent's household
    - Respondent's employment status
    - Respondent's student status
    - Respondent's driver's license status
    - Age of the respondent
    - Annual household income
    - Time of day the survey was completed

  If any of the information listed above was missing or incomplete, the Leadership Team forwarded the survey record and corresponding name and phone number of the survey respondent to ETC Institute's call center. Interviewers working in ETC Institute's call center then called respondents who had provided their name and phone number to retrieve the missing information by phone.

  Once survey records were classified as "complete" meaning all of the "required" information had been collected, the records were forwarded to ETC Institute's geocoding manager, who then geocoded the home, origin, boarding, alighting, and destination addresses. The geocoding process is described in detail in the following section (Section 5) of this report.

Survey Response Rate

The overall response rate to the survey was very high. More than ninety percent (90.8%) of the passengers who were asked to participate in the survey agreed to complete the survey. Factors that may have contributed to the high response rate included:

- **Use of Bi-lingual Interviewers**. More than 1,000 surveys were completed in Spanish.

- **Use of Incentives**. A total of $5000 worth of incentives were given to nearly 200 people who were randomly selected from all participants in the survey. The incentives included cash awards of $100 and gift certificates to restaurants and retail stores valued at $10, $25, and $50.

- **Use of Tablet PCs**. Unlike paper surveys which require the respondent to fill out a form, tablet PCs do not require the respondent to do anything other than respond to the question. By reducing the burden on the respondent to participate in the survey, more people were willing to participate. The tablet PCs also caused some passengers to be more curious about the survey, which may have aided the response rate.

- **Effective Pre-Survey Communication By Transit Agencies**. All of the participating transit operators did a good job of informing passengers about the survey. Since most passengers were aware of the survey before they were asked to participate, the overall response rate was probably higher because passengers understood the importance of the survey.

Figure 4.4 (below and on the following pages) shows the actual response rate for each route/station.

Figure 4.4

Response Rate By Route/Station

Route/Station Name	Total Number of People Who Were Asked to Participate in the Survey	Number Who Participated in the Survey	Response Rate
LOCAL ROUTES			
0 - Central Avenue	372	343	92%
1 - Washington Street	36	33	92%
3 - Van Buren Street	273	254	93%
7 - 7th Street	329	313	95%
8 - 7th Avenue	161	145	90%
10 - Roosevelt Street/Grant Street	183	163	89%
12 - 12th Street	250	238	95%
13 - Buckeye Road	52	48	92%
15 - 15th Avenue	264	249	94%
16 - 16th Street	225	198	88%
17 - McDowell Road	377	362	96%
17A - McDowell Road/Avondale Boulevard	61	55	90%
19 - 19th Avenue	567	499	88%
27 - 27th Avenue	233	215	92%
29 - Thomas Road	578	526	91%
30 - University Drive	161	142	88%
35 - 35th Avenue	482	429	89%
39 - 40th Street	84	79	94%
40 - Main Street	328	309	94%
41 - Indian School Road	636	605	95%
43 - 43rd Avenue	151	135	89%
44 - 44th Street/Tatum Road	114	101	89%
45 - Broadway Road	272	234	86%
48 - 48th Street/Rio Salado Parkway	101	94	93%

Figure 4.4 (continued)

Response Rate By Route/Station

Route/Station Name	Total Number of People Who Were Asked to Participate in the Survey	Number Who Participated in the Survey	Response Rate
LOCAL ROUTES (continued)			
50 - Camelback Road	331	295	89%
51 - 51st Avenue	75	66	88%
52 - Roeser Road	79	74	94%
56 - Priest Drive	111	103	93%
59 - 59th Avenue	189	165	87%
60 - Bethany Home Road	206	178	86%
61 - Southern Avenue	340	300	88%
62 - Hardy Drive/Guadalupe Road	158	146	92%
65 - Mill Road/Kyrene Road	77	74	96%
66 - Mill Road/68th Street	118	111	94%
67 - 67th Avenue	190	166	87%
70 - Glendale Avenue/24th Street	431	384	89%
72 - Scottsdale Road/Rural Road	337	314	93%
76 - Miller Road	44	38	86%
77 - Baseline Road	150	132	88%
80 - Northern Avenue	93	80	86%
81 - Hayden Boulevard/McClintock Drive	172	159	92%
90 - Dunlap Avenue/Cave Creek Road	265	247	93%
96 - Dobson Road	224	211	94%
104 - Alma School Road	134	128	96%
106 - Peoria Avenue/Shea Boulevard	239	211	88%
108 - Elliot Road	51	47	92%
112 - Country Club Drive/Arizona Avenue	93	80	86%
120 - Mesa Drive	31	28	90%
122 - Cactus Road	27	25	93%
128 - Stapley Drive	39	35	90%
131 - START	30	28	93%
136 - Gilbert Road	44	38	86%
138 - Thunderbird Road	83	73	88%
154 - Greenway Road	60	52	87%
156 - Chandler Boulevard/Williams Field Road	65	60	92%
170 - Bell Road	145	128	88%
186 - Union Hills Drive	110	99	90%
EXPRESS ROUTES			
510 - Scottsdale Express	41	39	95%
511 - Tempe/Scottsdale Airpark Express	8	8	100%
512 - Scottsdale Express	26	24	92%
520 - Tempe Express	32	30	94%
521 - Tempe Express	35	34	97%
531 - Mesa/Gilbert Express	68	61	90%
532 - Mesa Express	38	37	97%
533 - Mesa Express	88	78	89%
535 - Northeast Mesa/Downtown Express	14	14	100%
540 - Chandler Express	35	32	91%
541 - Chandler Express	74	67	91%
542 - Chandler/Downtown Express	64	60	94%
560 - Avondale Express	10	10	100%

Figure 4.4 (continued)

Response Rate By Route/Station

Route/Station Name	Total Number of People Who Were Asked to Participate in the Survey	Number Who Participated in the Survey	Response Rate
EXPRESS ROUTES (continued)			
562 - Goodyear/Downtown Express	21	20	95%
571 - Surprise Express	33	30	91%
573 - Northwest Valley/Downtown Express	31	29	94%
575 - Northwest Valley Downtown Express	29	28	97%
581 - North Mountain Express	15	14	93%
NEIGHBORHOOD CIRCULATORS/COLLECTOR ROUTES			
Phoenix ALEX	57	51	89%
Phoenix DASH	151	135	89%
Tempe FLASH McCallister	158	135	85%
Glendale Urban Shuttle (GUS) 1, 2, & 3	35	30	86%
Grand Ave Limited	51	46	90%
Phoenix MARY	176	152	86%
Mesa Downtown BUZZ	38	35	92%
Tempe Orbit Earth EW Circulator	113	100	88%
Tempe Orbit Jupiter	143	132	92%
Tempe Orbit Mars	106	93	88%
Tempe Orbit Mercury	161	139	86%
Tempe Orbit Venus	115	105	91%
Phoenix Free Airport Shuttle	63	58	92%
SMART Circulator	127	111	87%
Scottsdale Downtown Trolley	34	30	88%
Scottsdale Neighborhood Trolley	103	93	90%
OTHER BUS ROUTES (RURAL, RAPID AND LINK ROUTES)			
660 - Wickenburg Connector	7	7	100%
685 - Phoenix/Gila Bend Regional Connector	8	8	100%
I-10 East RAPID	130	116	89%
I-17 RAPID	59	55	93%
LINK-Main Street	81	71	88%
RAIL STATIONS			
1 - Montebello Avenue & 19th Avenue	422	389	92%
2 - 19th Avenue & Camelback Road	356	314	88%
3 - 7th Avenue & Camelback Road	101	91	90%
4 - Central Avenue & Camelback Road	70	61	87%
5 - Campbell Avenue & Central Avenue	163	142	87%
6 - Indian School Road & Central Avenue	176	166	94%
7 - Osborne Road & Central Avenue	92	84	91%
8 - Thomas Road & Central Avenue	205	181	88%
9 - Encanto Boulevard & Central Avenue	67	63	94%
10 - McDowell Road & Central Avenue	215	190	88%
11 - Roosevelt Street & Central Avenue	221	197	89%
12a - Van Buren Street & Central Avenue	175	165	94%
12b - Van Buren Street & 1st Avenue	172	159	92%
13a - Jefferson Street & 1st Avenue	194	169	87%
13b - Washington Street & Central Avenue	100	84	84%
14a - 3rd Street & Washington Street	102	88	86%
14b - 3rd Street & Jefferson Street	113	99	88%

Figure 4.4 (continued)

Response Rate By Route/Station

Route/Station Name	Total Number of People Who Were Asked to Participate in the Survey	Number Who Participated in the Survey	Response Rate
RAIL STATIONS (continued)			
15a - 12th Street & Washington Street	46	43	93%
15b - 12th Street & Jefferson Street	23	21	91%
16a - 24th Street & Jefferson Street	65	62	95%
16b - 24th Street & Washington Street	59	55	93%
17 - 38th Street & Washington Street	54	50	93%
18 - 44th Street & Washington Street	197	168	85%
19 - Priest Drive & Washington Street	143	132	92%
20 - Center Parkway & Washington Street	49	45	92%
21 - Mill Avenue & Third Street	214	189	88%
22- Veterans Way & College Avenue	378	348	92%
23 - University Drive & Rural Road	398	355	89%
24 - Dorsey Lane & Apache Boulevard	118	108	92%
25 - McClintock Drive & Apache Boulevard	268	247	92%
26 - Smith-Martin Lane & Apache Boulevard	39	35	90%
27 - Price-101 Freeway & Apache Boulevard	431	397	92%
28 - Sycamore & Main Street	552	519	94%
TOTAL	**19587**	**17777**	**90.8%**

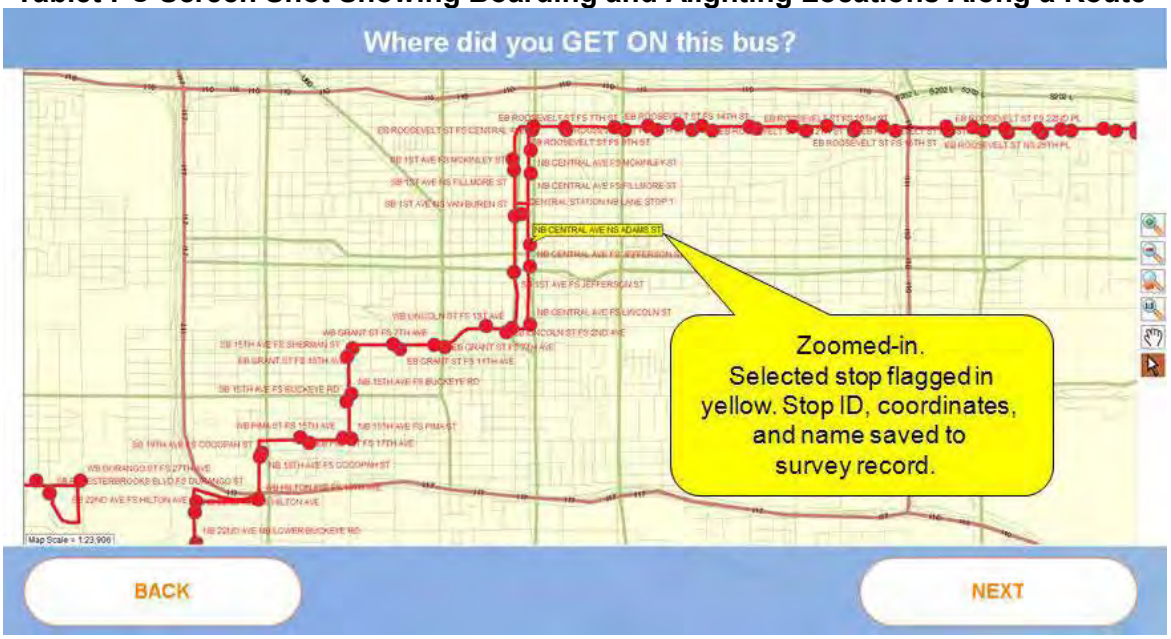
SECTION 5: GEOCODING PROCESS

Process for Geocoding Address Records

Each Valley Metro transit survey record attempted to descriptively convey information about five physical locations: trip origin, trip destination, where the transit user boarded the transit vehicle, where he or she exited the bus or train, and the home/residence location of the transit user. Where locations were reported as intersections, the intersection corner associated with the reported location was also recorded. For the survey to be of use to the underlying transit system modeling effort, the geographic coordinates of all five locations were determined through geocoding.

Effective geocoding depends mainly on the initial quality of the location data. Opportunities for spelling errors in field-recorded addresses were minimized in order to achieve high hit rates and credible geocoding results. The survey instrument, which was set up on a portable tablet PC, was configured with lists of place names relevant to the study area, which were instantly accessible during survey acquisition. These pre-configured lists contained city names, street names, bus route numbers, bus stop names, and train station names. Figure 5.1 (below) shows a screen shot from the tablet PC that allowed interviewers to precisely record boarding and alighting locations while the survey was being administered.

Figure 5.1
Tablet PC Screen Shot Showing Boarding and Alighting Locations Along a Route

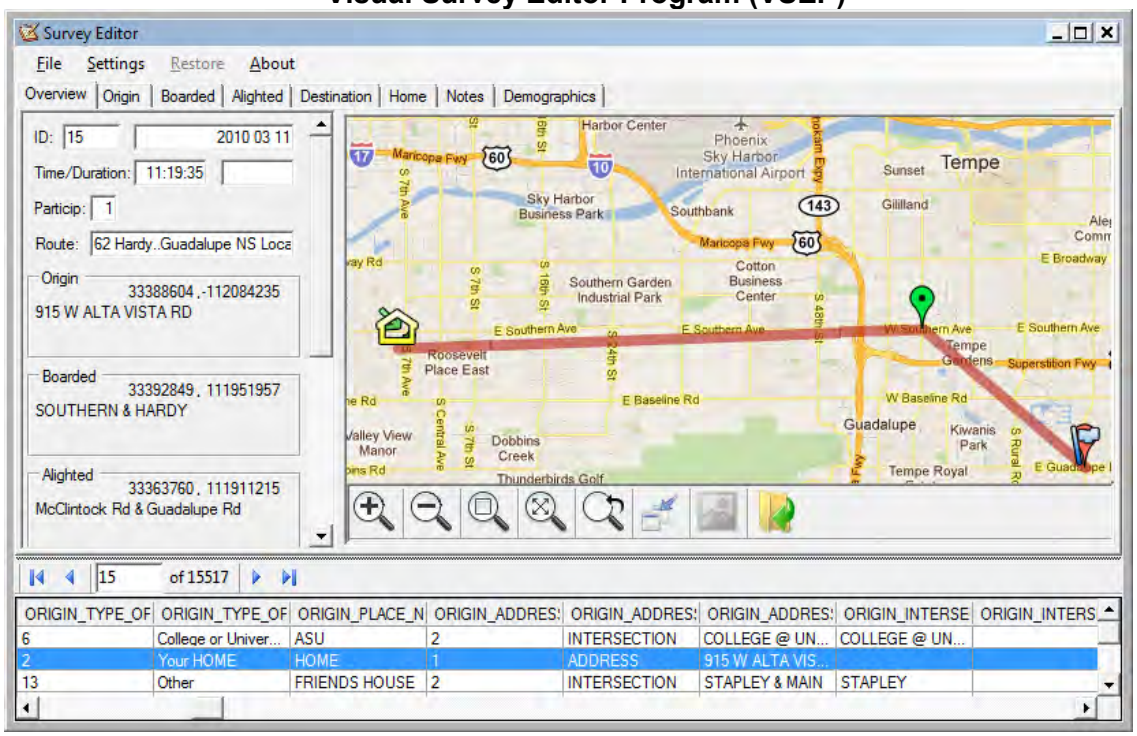


Each inventoried stop on the list was linked to its own unique System ID number which was captured automatically during the survey. The System ID was subsequently used in post-processing to automatically retrieve pre-recorded geographic coordinates of the stop. The coordinates of intersection-based locations were shifted in post-processing approximately 300 feet in the direction of the reported intersection corner to ensure correct TAZ assignment of the reported locations.

Survey records were geocoded in batches as they arrived from the field, after initial high-level cleanup and file formatting. The geocoding process was comprised of several steps which were followed both sequentially and iteratively, based on quality checks. Both automated and manual processes were used to identify the coordinates of reported locations. After the initial cleanup of location data, addresses were geocoded using the TransCAD GIS geocoding routines and Caliper's latest available nationwide street centerlines. Addresses which failed to geocode in this step were subsequently processed inside a geocoding utility published by a commercial mapping provider, using their up-to-date street centerlines.

The remaining non-decodable addresses were then manually corrected and geocoded using ETC Institute's Visual Survey Editor Program (VSEP), depicted in Figure 5-2. This program connects in real-time to an online mapping system and provides address auto-complete and instant map preview of candidate locations to help identify and fix addresses. VSEP allows the editor to view all five points concurrently and to manually adjust point positions on the map to better match their physical locations. This program helps to significantly speed up the survey record review and editing process and helps reduce error rates.

Figure 5.2
Visual Survey Editor Program (VSEP)



Other online mapping resources that were used to edit survey records when the locations could not be found using VSEP included:

- MapQuest
- Yahoo Maps
- Bing Maps
- the United States Geological Survey Geographic Names Information System (USGS GNIS)
- custom web-based geocoding routines such as GetLatLon.com or Geocode.com

The geocoded results were checked for errors recursively, until all five locations within a record were completely geocoded or until a record was declared unfit for further processing. Error checks included comparing attributes derived from the geocoded coordinates to those recorded during the field survey, e.g. city name. Quality checks also comprised proximity tests between the geocoded boarding or alighting locations and the known bus stop locations or line segment representing the bus route. Some of the proximity tests and corrections were performed within TransCAD using custom scripts developed for this project in Geographic Information System Developer's Kit (GISDK). Distances between each consecutive pair of trip points were also computed as a basis of logic checks used to flag records for further (typically manual) verification and correction.

All recorded geographic coordinates were converted to the State Plane Coordinate System (NAD83, AZ Central, feet, HARN datum), before submitting to Valley Metro.

Results of Geocoding Efforts

Figure 5.3 (below) shows that 100% of the records in the final survey database were geocoded to each of the five critical address locations: home, origin, boarding, alighting, and destination.

Figure 5.3

Type of Address	Number of Addresses	Addresses Geocoded to X,Y Coordinates	Percentage of Addresses Ending Inside the Metropolitan Phoenix Area that Were Geocoded to X,Y coordinates
Home Address	15780	15780	100%
Origin Address	15780	15780	100%
Boarding Address	15780	15780	100%
Alighting Address	15780	15780	100%
Destination Address	15780	15780	100%
Percentage of All Addresses	15780	15780	100%

SECTION 6: DATA REVIEW PROCESS (QA/QC)

Many of the processes that were described in the first five sections of this report were essential elements of the overall quality assurance/quality control (QA/QC) process that was implemented throughout the survey administration process. The involvement of the Technical Advisory Committee (TAC) and the FTA in the development of survey questions contributed to the quality of the survey instrument. The establishment of specific sampling goals and the procedures for managing these goals ensured that a representative sample was obtained from each bus route and light rail station. The training of surveyors and the high levels of oversight provided by team leaders and the project manager ensured that the survey was administered properly. Also, the use of the latest geocoding tools contributed to the high quality of geocoding accuracy that was achieved.

This section of the report describes the QA/QC processes that were implemented after the data was collected.

Process for Identifying "Complete and Useable" Surveys

Once a survey had been classified as being "complete", meaning all of the "required data" were provided, the next phase of the QA/QC process was designed to determine the usability of each survey record. The term "useable" was used to identify records that passed all of the QA/QC tests that were applied to a record after it was classified as being "complete." [Note: a list of "required" data that were needed to meet the contractual requirements for completeness is provided in Section 1.]

Pre-Processing Tests

The first step in this process involved the application of a series of QA/QC tests that were conducted before the address fields were processed for geocoding. Some of the specific checks that were conducted during the pre-processing phase included:

- Checking for valid home street names, city names, and zip codes.
- Checking for valid origin street names, city names, and zip codes.
- Checking for valid destination street names, city names, and zip codes.
- Checking for origin place names that could be matched to a pre-existing list of major destinations that had been previously geocoded.
- Checking for destination place names that could be matched to a pre-existing list of major destinations that had been previously geocoded.

- Ensuring the number of household occupants was greater than or equal to the number of employed members of the household.
- Ensuring the number of household occupants was greater than or equal to number of adults in the household.
- Ensuring the respondents who indicated that they were employed also reported that at least one member of their household was employed.
- Ensuring that bus route names and rail station names were consistently spelled and coded correctly.
- Ensuring that the report dates on which the survey was administered were on a Tuesday, Wednesday, or Thursday.
- Ensuring that transfers to a bus route or rail station were possible.
- Ensuring that transfers from a bus route or rail station were possible.
- Ensuring that the number of vehicles available to a respondent's household were consistent with the respondent's reported annual household income.
- Ensuring the time of day a survey was completed was reasonable given the published operating schedule for the route.
- Ensuring the origin type of place code matched the type of place reported by the respondent.
- Ensuring the destination type of place code matched the type of place reported by the respondent.
- Ensuring the station name for the rail station matched the place where the respondent indicated he/she boarded the train.

Records that passed all of the QA/QC tests described above were forwarded to ETC Institute's geocoding section. Records that did not pass all of the tests were sent to ETC Institute's Survey Records Review Team (SRRT) for further review. The SRRT then took one of the following actions:

- They corrected the deficiency in record.
- They directed ETC Institute's call center to contact the respondent by phone (if a phone number were available) to retrieve additional information.
- They reclassified the record as "incomplete" by assigning a value of "3" for the record's Quality Control Flag. This assignment removed the record from further consideration for the final survey database.

Post-Processing Tests

The next step in this process involved the application of a series of QA/QC tests that were conducted after all five addresses were successfully geocoded.

Once all five addresses had been geocoded, the following QA/QC checks were performed to assess the logic and other attributes of the reported trip.

- Ensuring the origin and destination addresses were not the same.
- Ensuring that the boarding and alighting addresses were not the same.
- Ensuring that the respondent did not list the same route as both a "transfer from" and a "transfer to" during their one-way trip.
- Checking to be sure the access mode was appropriate given the distance of travel from the trip origin to place where the respondent initially accessed transit. For example, if a passenger reported that they accessed transit by car but the distance from their origin to the entry point for transit was less than 0.25 miles, the record would have been flagged for further review. Similarly, if a respondent reported that they walked to transit but the distance from the origin to transit was more than 2 miles, the record would have been flagged to check for a missing transfer.
- Checking to be sure the egress mode was appropriate given the distance of travel from place where the respondent exited the transit system to his/her destination.
- Reviewing the total distance the respondent traveled on transit compared to the distance the respondent traveled from the origin to the destination for their trip. For example, if a respondent reported traveling six miles on transit in order to travel 0.5 miles from the origin to the destination for their trip, the record would have been flagged for further review. Similarly, if a respondent reported traveling just 1 mile on transit to complete a 10 mile trip, the records would have been flagged to check for a missing transfer.
- Checking the station where rail passengers boarded the train to see if the direction of travel was possible from the reported boarding location.

Records that passed all of the QA/QC tests described above were forwarded to ETC Institute's Survey Records Review Team (SRRT) for a final visual review of the trip using Visual Survey Editor Program (VSEP), which was described on page 28 in Section 5.

Records that were flagged for further review were forwarded to the appropriate section based on the nature of the flag.

- Issues that involved address geocoding assignments were referred to ETC Institute's geocoding section.
- Issues that needed clarification of data were directed to ETC Institute's call center (if a phone number was available). The call center then contacted the respondent to retrieve additional information as needed.
- All other issues were directed to the ETC Institute's Survey Records Review Team (SRRT).

Records that were corrected were then forwarded to the SRRT for a final visual inspection using the Visual Survey Editor Program (VSEP).

Records that were complete but could have problems with the trip logic or other attributes of the trip were reclassified as "problematic" by assigning a value of "2" as the record's Quality Control Flag. This assignment removed the record from further consideration for the final survey database.

Visual Inspection

The final step of the QA/QC data review process involved a visual inspection of the trip record using the Visual Survey Editor Program (VSEP). The key tasks that were conducted as part of this visual inspection included the following:

- Visually inspecting and examining key variables of survey trips with very short distances (less than 1.0 miles for local bus and light rail trips and less than 4 miles for express and rapid bus trips).
- Visually inspecting the sensibility of trips with zero transfers given the relative location of the boarding and alighting locations relative to the origin and destination.
- Visually inspecting the sensibility of trips that reported three or more transfers.
- Visually inspecting the sensibility of drive access/egress trips given the distance traveled by car relative to the distance traveled by bus or light rail.
- Visually inspecting the sensibility of drive access/egress trips with more than one transfer.
- Visually inspecting sensibility of the origin-to-destination path with respect to the survey route that was used for the trip.

If a record passed all of the visual checks listed above, the record was classified as "useable" and tagged for inclusion in the final survey database by assigning a value of "1" for the records Quality Control Flag.

If a record did not pass all of the visual checks, the record was sent back to the SRRT for further review. If the SRRT was not able to resolve the problem that was identified, the record was reclassified as "problematic" by assigning a value of "2" as the record's Quality Control Flag. This assignment removed the record from further consideration for the final survey database.

Summary of the Data Review QA/QC Process

Among the 17,777 surveys that were originally administered, 16,892 met the contractual requirements for completeness. Of those that were classified as "complete", 15,780 passed all of the QA/QC tests and were subsequently classified as "useable" records. Only the "useable" records (those with a Quality Control Flag of "1") were included in the final survey database that was expanded and used for the analysis in this report. The results of the QA/QC review are shown in Figure 6.1.

Figure 6.1

Data Review QA/QC Summary

Classification	Quality Control Flag Value	Description	# of Surveys	% of All Surveys Administered
Not Complete	3	Missing one or more pieces of required data	885	5%
Problematic	2	All required data was provided but there was a problem with the trip logic or other attribute of the trip	1112	6%
Useable	1	Record passed all QA/QC tests	15780	89%
Total			17777	100%

SECTION 7: DATA EXPANSION PROCESS

This section describes the process for developing the weighting factors that were used to expand the survey database to the total transit ridership in the region. Two types of expansion factors were developed.

- **Unlinked trip weighting factors** were developed to expand the total number of completed surveys to the actual number of transit boardings in the region.

- **Linked trip weighting factors** were developed to adjust the total number of boardings to one-way trips. The linked trip weighting factor accounts for multiple boardings that would occur when a passenger transfers during his/her one-way trip.

Unlinked Trip Weighting Factors for Light Rail

A total of 4,732 surveys were completed with light rail passengers. The number of completed surveys represented 10.5% of the average weekday boardings on METRO Light Rail during the month of April 2011 (44,394 boardings). In order to ensure that the survey data accurately represented the travel patterns of the 44,394 passengers who use light rail service in the region on a typical weekday, weighting factors for unlinked trips were prepared for each survey record based on the direction of travel, time of day, and the path of the trip between the boarding and alighting station.

Estimating Ridership Between Stations

Although METRO Light Rail maintains daily ridership by direction and time of day, METRO Light Rail does not currently maintain data tracking the number of light rail trips that begin and end at each station. The Metro maintains boarding and/or alighting information.

In order to estimate actual ridership between stations, at least one interviewer was assigned the responsibility of administering a boarding/alighting survey to as many light rail passengers as possible at each station. The boarding/alighting survey was administered in conjunction with the main surveying effort, but the survey only included a single question: "At which station will you be getting off the train?" A total of 8,212 light rail passengers completed the boarding/alighting survey.

The station-to-station flows that were captured in the boarding/alighting survey were applied to the actual number of boardings at each station to provide an estimate of the station-to-station ridership in each direction for each of four time periods: AM Peak (6am-9:59am), Midday (10am-1:59pm), PM Peak (2pm-5:59pm), and All Other Hours (6pm-5:59am).

The research team then compared the estimated number of alightings at each station to the actual number of alightings at each station. The actual alighting data was used as a control total to ensure that the estimated ridership between stations was reasonable. If the difference between the estimated number of alightings and the actual number of alightings for any station was more than 10%, the research team applied an iterative balancing process that adjusted the distribution of trips between stations until the difference between the estimated number of boardings and alightings and the actual number of boardings and alightings was nearly zero.

Calculating the Weighting Factors

Once the research team had estimated the actual ridership between stations, the next step was to calculate weighting factors for unlinked trips. This was done by developing three sets of matrices that showed boardings for all 28 light rail stations on one axis and alightings for all 28 stations on the other axis. An example of this process for just three stations is shown in Figure 7.1 below (and at the top of the following page). The first matrix (Step 1) shows the estimated ridership between stations ("NA" indicates that the trip was not possible since table shows eastbound ridership). The second matrix (Step 2) shows the number of completed surveys for each boarding/alighting combination in the matrix. The third matrix (Step 3 – on the following page) shows the weighting factors for unlinked trips which were calculated by dividing the estimated ridership in Step 1 by the number of completed surveys in Step 2.

Figure 7.1

EXAMPLE OF THE METHODOLOGY FOR GENERATING UNLINKED TRIP WEIGHTING FACTORS FOR LIGHT RAIL

EASTBOUND AM

Step 1: Estimated Ridership

	ALIGHTING STATION		
BOARDING STATION	Montebello & 19th Avenue	19th Avenue & Camelback	7th Ave & Camelback
Montebello & 19th Avenue	NA	23	53
19th Avenue & Camelback	NA	NA	34
7th Ave & Camelback	NA	NA	NA

Step 2: Number of Completed Surveys

	ALIGHTING STATION		
BOARDING STATION	Montebello & 19th Avenue	19th Avenue & Camelback	7th Ave & Camelback
Montebello & 19th Avenue	NA	4	7
19th Avenue & Camelback	NA	NA	5
7th Ave & Camelback	NA	NA	NA

Step 3: Unlinked Trip Weighting Factors

BOARDING STATION	ALIGHTING STATION: Montebello & 19th Avenue	19th Avenue & Camelback	7th Ave & Camelback
Montebello & 19th Avenue	NA	5.75	7.57
19th Avenue & Camelback	NA	NA	6.80
7th Ave & Camelback	NA	NA	NA

Note: The weighting factors shown in Step 3 were calculated by dividing the estimated ridership in Step 1 by the actual number of completed surveys in Step 2.

The process shown in Figure 7.1 was completed for each of the following eight types of trips:

- Eastbound Trips during the AM Peak (6am-9:59am)
- Eastbound Trips during the Midday (10am-1:59pm)
- Eastbound Trips during the PM Peak (2pm-5:59pm)
- Eastbound Trips during All Other Hours (6pm-5:59am)
- Westbound Trips during the AM Peak (6am-9:59am)
- Westbound Trips during the Midday (10am-1:59pm)
- Westbound Trips during the PM Peak (2pm-5:59pm)
- Westbound Trips during All Other Hours (6pm-5:59am)

Unlinked Trip Weighting Factors for Bus Routes

A total of 11,048 surveys were completed with bus passengers. The number of completed bus surveys represented 5.5% of the average weekday boardings on the region's bus system during the month of April 2011 (198,947 boardings). In order to ensure that the survey data accurately represented the travel patterns of the 198,947 passengers who use bus service in the region on a typical weekday, unlinked trip weighting factors were prepared for each bus survey record in one of the following two ways:

- **High Volume Routes.** Bus routes with average weekday boardings of 4,000 passengers or more were expanded by direction, time of day, and boarding location. There were a total of 15 routes in this category. The total boardings on these routes was 100,015, which was 50.3% of the region's average weekday bus ridership

- **All Other Routes.** Bus routes with average weekday boardings of less than 4,000 passengers were expanded by direction and time of day. There were a total of 83 routes in this category. The total boardings on these routes was 98,932, which was 49.7% of the region's average weekday bus ridership.

Each of these two methods is described in more detail on the following pages.

Calculating Unlinked Trip Weighting Factors for High Volume Bus Routes

The process for calculating unlinked trip weighting factors for high volume bus routes involved several activities that are described below and on the following pages.

- **Collecting Boarding/Alighting Counts.** Since ridership data at the stop level was not available, the research team conducting boarding and alighting counts on at least one bus that was operating on each route while the survey was being administered.

- **Segmenting Routes Based on the Observed Distribution of Boardings and Alightings.** The boarding and alighting data from the on-board counts were reviewed in GIS to assess the general distribution of ridership along each route by time of day. Based on the observed distribution, the research team divided each route into at least three but no more than six segments. The purpose of the segmentation was to control the expansion of the sample with regard to the location of boardings along a route. The number of segments per route was related to the number of completed surveys along the route and the presence of major ridership generators, such as light rail stations and park and ride lots. Since the sample size was limited to approximately 5% of the total ridership on each route, the number of segments was limited to ensure that most expansion factors would have a value of 40 or less, which was double the value of the average weighting factor. [Note the average weighting factor was 20 since 1 in 20 (or 5%) of the ridership was surveyed]. A list routes that were expanded using this method is provided in Appendix G.

- **Estimating the Total Number of Boardings for Each Segment.** Once each route had been segmented, the percentage of all boardings that were observed in each segment (based on the results of the boarding/alighting counts) was multiplied by the total number of boardings on the route in each direction for each of four time periods: AM Peak (6am-9:59am), Midday (10am-1:59pm), PM Peak (2pm-5:59pm), and All Other Hours (6pm-5:59am). The result of this process was an estimate for the total number of boardings within each segment by direction and time of day.

- **Calculating the Weighting Factors.** Once the total boardings for each segment had been estimated by time of day and direction, weighting factors for each segment were calculated by dividing the estimated number of boardings on each segment by the total number of completed surveys for each segment. A unique set of weighting factors was created for each segment on a route for each of the following types of trips.

    - East or Northbound Trips during the AM Peak (6am-9:59am)
    - East or Northbound Trips during the Midday (10am-1:59pm)
    - East or Northbound Trips during the PM Peak (2pm-5:59pm)
    - East or Northbound Trips during All Other Hours (6pm-5:59am)
    - West or Southbound Trips during the AM Peak (6am-9:59am)

- West or Southbound Trips during the Midday (10am-1:59pm)
- West or Southbound Trips during the PM Peak (2pm-5:59pm)
- West or Southbound Trips during All Other Hours (6pm-5:59am)

A route with three segments would have had 24 unique weighting factors. While a route with five segments would have had 40 unique weighting factors.

Calculating Unlinked Trip Weighting Factors for All Other Bus Routes

The process for calculating unlinked trip weighting factors for other bus routes simply involved dividing the number of boardings in each direction by time of day on each route by the number of surveys that were completed. For most routes, expansion factors were developed for the following eight types of trips. An example of the calculation from Route 62 is shown in Figure 7.2 below:

- East or Northbound Trips during the AM Peak (6am-9:59am)
- East or Northbound Trips during the Midday (10am-1:59pm)
- East or Northbound Trips during the PM Peak (2pm-5:59pm)
- East or Northbound Trips during All Other Hours (6pm-5:59am)
- West or Southbound Trips during the AM Peak (6am-9:59am)
- West or Southbound Trips during the Midday (10am-1:59pm)
- West or Southbound Trips during the PM Peak (2pm-5:59pm)
- West or Southbound Trips during All Other Hours (6pm-5:59am)

Figure 7.2

Unlinked Trip Weighting Factors for Route 62

Direction	Time of Day	Actual Boardings	# Completed Surveys	Expansion Factor
North	AM	216	15	14.38
North	Midday	181	19	9.52
North	PM	291	18	16.15
North	Other	129	6	21.48
South	AM	194	23	8.41
South	Midday	103	9	11.40
South	PM	215	17	12.62
South	Other	175	9	19.44

Linked Trip Weighting Factors for All Records

The linked trip weighting factor adjusts the total number of boardings to one-way trips by accounting for the number of transfers that were completed by each passenger.

The equation that was used to calculate the linked trip weighting factor is shown below:

Linked Trip Weighting Factor = [1 / (1 + # of transfers)]

If a passenger did not make a transfer, the linked trip weighting factor would be 1.0 because the person would have only boarded one vehicle. If a person made two transfers, the linked trip weighting factor would be 0.33 because the person would have boarded three transit vehicle during his/her one-way trip. An example of how the linked trip weighting were calculated is provided in Figure 7.3 below.

Figure 7.3
Sample Calculations of Linked Trip Weighting Factors
+[1/(1+# of transfers)]

Number of Transfers	Calculation	Linked Trip Weighting Factor
None	[1/(1+0)]	1.00
One	[1/(1+1)]	0.50
Two	[1/(1+2)]	0.33
Thee	[1/(1+3)]	0.25

Use of "Dummy" Variables

The final database contains 13 "dummy" variables. These "dummy" variables account for 387 trips that occurred between two rails stations for which no corresponding survey data was collected. For example, ridership data shows that 3 trips per day involve a boarding at Priest Drive & Washington and a alighting at Indian School & Central during the hours of 2pm-6pm on an average weekday. Since none of the completed surveys involved a boarding at Priest Drive & Washington and a alighting at Indian School & Central during the hours of 2pm-6pm, a "dummy" variable was create to capture this trip. Dummy variables account for fewer than 1% of all rail trips, and they are identified with "2011Dummy" in the YEAR field of the database.

Routes that Were Not Included in the 2010-11 Survey

Given the limitation on resources for the project, two rapid routes were not included in the 2011 survey: SR-51 and I-10W. These two routes were not included because ridership levels on these routes have changed by less than 10% since 2007 and there was no reason to suspect that these routes were significantly affected by the introduction of light rail to the region. Although data from these routes was not included in the analysis provided in this report, the 2007 survey data for these routes was added to 2010-11 survey database to ensure that these routes would be accounted for in the database that will be used for regional travel demand modeling,. These records are identified with "2007" in the YEAR field of the database.

SECTION 8: SELECTED FINDINGS

This section highlights selected demographic and trip-related findings from the survey. The results for all questions on the survey based on the mode of travel (bus only vs. light rail only vs. bus/light rail) are provided in Appendix A. The results for all questions on the survey based on the type of service (local, express, circulator, etc.) are provided in Appendix B.

Vehicle Availability

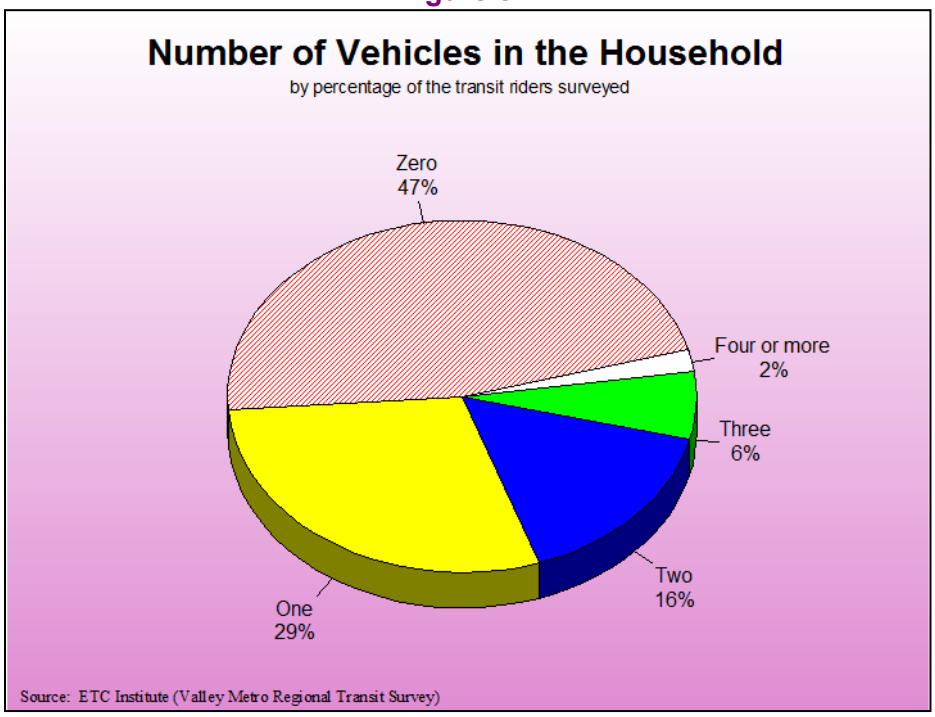
Forty-seven percent (47%) of all transit passengers indicated that they do not have a vehicle available to their household. Light rail passengers were significantly more likely to have a vehicle available to their household than bus passengers (70% light rail only vs. 52% bus only). Light rail passengers were also more than twice as likely to have three or more vehicles available to their household (16% light rail only vs. 7% bus only).

Figure 8.1

Number of Vehicles in the Household

Vehicles	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Zero	48%	30%	52%	47%
One	29%	33%	27%	29%
Two	16%	21%	13%	16%
Three	5%	11%	6%	6%
Four or more	2%	5%	2%	2%

Figure 8.2



Household Size

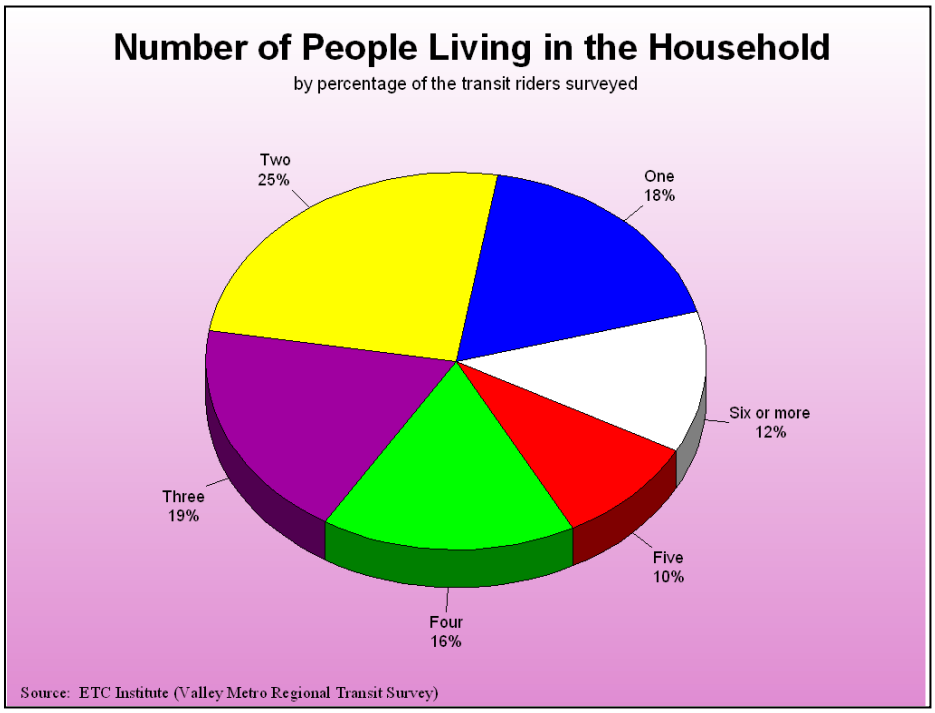
Twenty-two percent (22%) of all transit passengers indicated that they live in households with at least five occupants; 18% reported that they live alone. Bus passengers were significantly more likely to live in households with five or more occupants than light rail passengers (24% bus only vs. 13% light rail only).

Figure 8.3

Number of People Living in the Household

Persons	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
One	17%	20%	21%	18%
Two	24%	30%	26%	25%
Three	19%	20%	18%	19%
Four	16%	18%	15%	16%
Five	11%	5%	8%	10%
Six or more	13%	8%	12%	12%

Figure 8.4



Employed Persons per Household

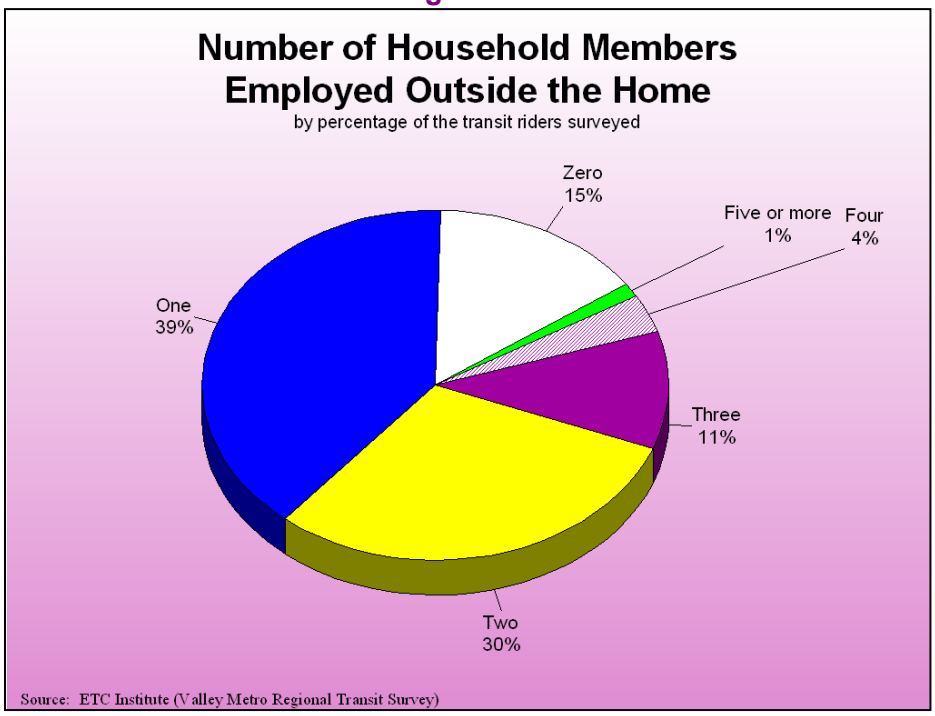
Most (85%) transit passengers reported that they live in households where at least one person is employed. There were no significant differences in the number of employed persons per household based on the mode of travel as shown in Figure 8.5 below.

Figure 8.5

Number of Employed Persons in the Home

Employed Persons	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Zero	15%	14%	15%	15%
One	39%	37%	43%	39%
Two	30%	35%	27%	30%
Three	11%	10%	11%	11%
Four	4%	3%	3%	4%
Five or more	1%	1%	1%	1%

Figure 8.6



Student Status

Thirty-eight percent (38%) of all transit passengers indicated that they were students. Light rail passengers were more likely to be enrolled in a college or university than bus passengers (48% light rail only vs. 21% bus only). Bus passengers were twice as likely to be students in grades K-12 than light rail passengers (14% bus only vs. 7% light rail only).

Figure 8.7

Student Status

Student Status	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Not a Student	63%	45%	66%	62%
Yes-student thru 12th grade	14%	7%	10%	13%
Yes-college/university	21%	48%	22%	24%
Yes-other	1%	0%	2%	1%

Employment Status

More than three-fourths (79%) of all transit passengers indicated that they were employed or seeking work. Bus passengers were more likely to be employed full time than light rail only passengers (38% bus only vs. 34% light rail only). Light rail passengers were more likely to be employed part-time (25% light rail only vs. 20% bus only). The higher percentage of part-time employment among light rail passengers may be related to the fact that a higher percentage of light rail users are college students (as shown in Figure 8.7 above).

Figure 8.8

Employment Status

Employment Status	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Employed full-time	38%	34%	41%	38%
Employed part time	20%	25%	17%	20%
Not currently employed but seeking work	22%	12%	22%	21%
Not currently employed and NOT seeking work	17%	26%	18%	18%
Not employed – retired	3%	3%	3%	3%
Not provided	0%	0%	0%	0%

Driver's License

More than half (53%) of all transit passengers indicated that they do not have a driver's license. Light rail passengers were significantly more likely to have a driver's license than bus passengers (72% light rail only vs. 44% bus only) as shown in Figure 8.9 below.

Figure 8.9

Driver's License Status

Driver's License Status	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Yes	44%	72%	47%	48%
No	56%	28%	53%	53%

Age

Nearly two-thirds (65%) of all transit riders indicated that they were between the ages of 18 and 44; 11% were under age 18, and 23% were age 45 or older. Bus passengers were more likely to be under age 18 than light rail passengers (12% bus only vs. 7% light rail only). Bus passengers were also more likely to be age 45 or older (25% bus only vs. 15% light rail only). Light rail users were more likely to be between the ages of 18-24 than bus passengers (41% light rail only vs. 28% bus only).

Figure 8.10

Ages of Transit Users

Age Range	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Under 18	12%	7%	9%	11%
18-24	28%	41%	25%	29%
25-34	20%	26%	21%	21%
35-44	15%	11%	18%	15%
45-54	15%	7%	17%	14%
55-64	7%	6%	8%	7%
65 or older	3%	2%	2%	2%

Income

More than one-third (34%) of all transit passengers reported annual household incomes below $15,000. Less than one-fifth (19%) indicated they had an annual household income of $50,000 or more, and only 4% reported an annual household income of $100,000 or more. Light rail passengers were more likely to report annual household incomes above $50,000 than bus passengers (28% light rail only vs. 17% bus only) as shown in Figure 8.11 below.

Figure 8.11

Annual Household Income

Annual Income Range	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Below $5,000	16%	9%	15%	15%
$5,000-$9,999	9%	7%	9%	9%
$10,000-$14,999	10%	8%	9%	10%
$15,000-$19,999	8%	6%	8%	8%
$20,000-$24,999	10%	7%	9%	10%
$25,000-$29,999	9%	8%	10%	9%
$30,000-$34,999	7%	9%	9%	8%
$35,000-$39,999	6%	10%	5%	6%
$40,000-$49,999	7%	9%	8%	7%
$50,000-$59,999	5%	7%	6%	6%
$60,000-$69,999	4%	5%	4%	4%
$70,000-$79,999	2%	4%	2%	2%
$80,000-$89,999	2%	3%	2%	2%
$90,000-$99,999	1%	3%	1%	1%
$100,000-$119,999	1%	3%	2%	2%
$120,000 or more	2%	3%	2%	2%
Don't Know	0%	1%	0%	0%

Gender

Fifty two percent (52%) of all transit passengers were male; 48% were female. There were no significant differences with regard to gender based on the mode of travel as shown in Figure 8.12 below.

Figure 8.12

Gender

Gender	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Male	51%	51%	55%	52%
Female	49%	49%	45%	48%

Race/Ethnicity

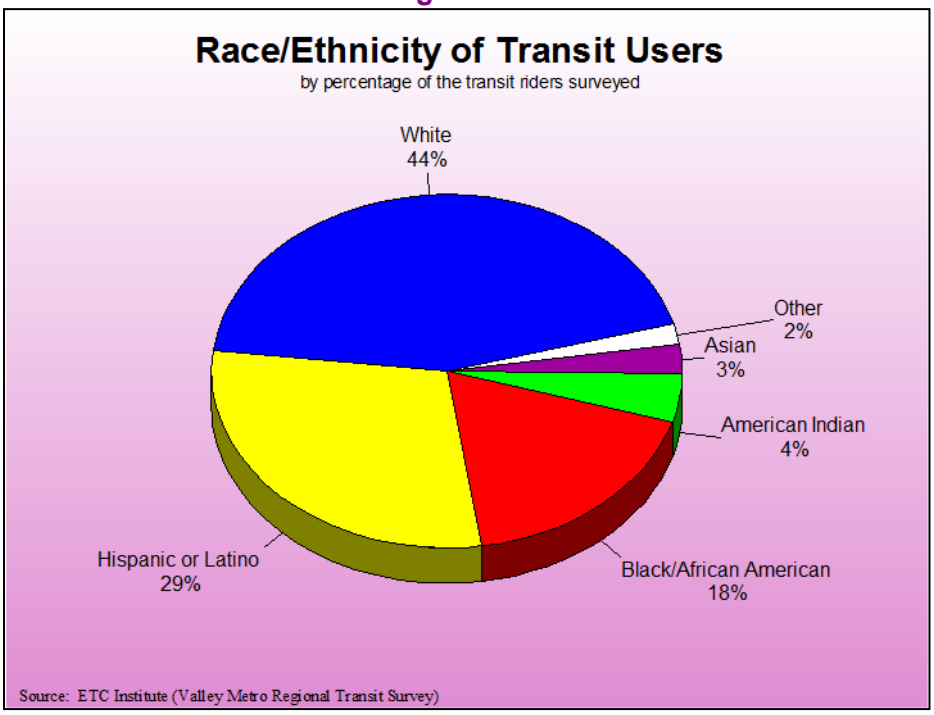
More than 40% of transit riders identified themselves as White; 29% identified themselves as Hispanic or Latino, and 18% identified themselves as Black or African American. Bus passengers were more likely to be Hispanic than light rail passengers (31% bus only vs. 22% light rail only) as shown in Figure 8.13 below.

Figure 8.13

Race/Ethnicity

Race/Ethnicity	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
White	44%	49%	40%	44%
Hispanic or Latino	31%	22%	28%	29%
Black or African American	18%	15%	22%	18%
American Indian	4%	5%	7%	4%
Asian	2%	6%	2%	3%
Other	2%	3%	2%	2%

Figure 8.14



Necessity of Transit Service

More than one-fourth (26%) of all transit passengers reported that they would not have been able to make their trip if public transit were not available. Another ten percent (10%) did not know how they would have made their trip without public transit.

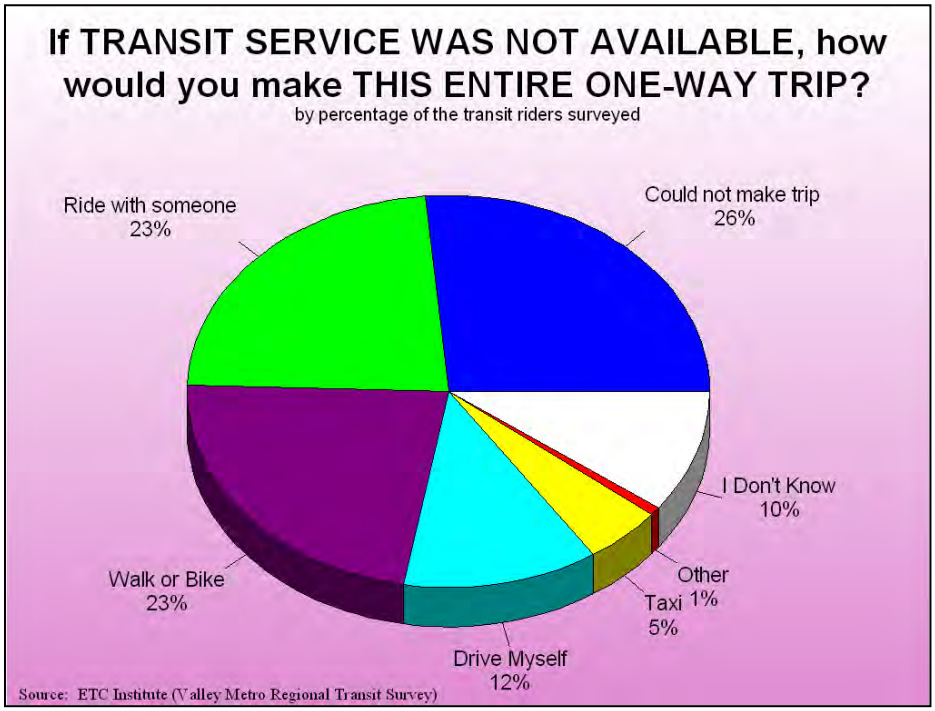
Bus passengers were significantly more likely to be dependent on public transit than light rail passengers. Twenty-nine percent (29%) of bus passengers indicated that they would not have been able to make their trip compared to just 8% of light rail passengers. Light rail passengers were more than four times as likely as bus passengers to report that they would have driven themselves if public transit had not been available (33% light rail only vs. 8% bus only).

Figure 8.15

How Would You Make This Trip If Public Transit Was Not Available?

Mode of Travel Without Transit	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
I could not make this trip	29%	8%	28%	26%
Drive with someone else	23%	23%	24%	23%
Walk or Bike	24%	22%	17%	23%
Drive Myself	8%	33%	14%	12%
Taxi	6%	3%	4%	5%
Other	1%	0%	1%	1%
I Don't Know	10%	10%	12%	10%

Figure 8.16



How Long Passengers Have Been Using Public Transit in the Phoenix Area

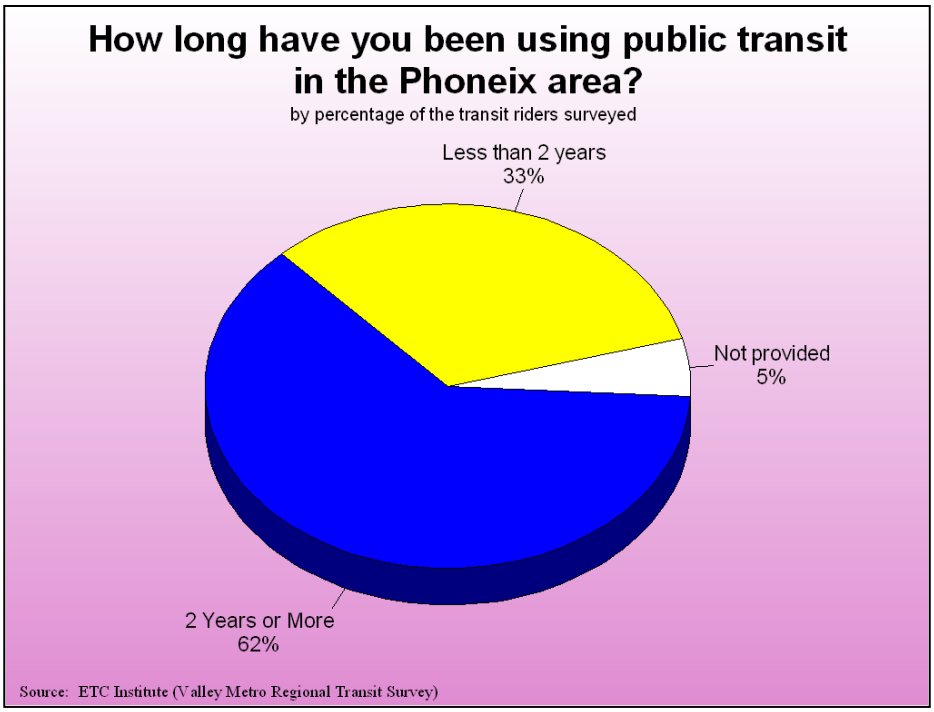
Nearly two-thirds (62%) of all transit passengers indicated that they have been using public transit in the Phoenix area for at least two years. Bus passengers were more likely to have been using public transit for at least two years than light rail passengers (63% bus only vs. 53% light rail only).

Figure 8.17

Length of Time Using Public Transit

Answer	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Less than 2 years	31%	44%	34%	33%
2 Years or More	63%	53%	61%	62%
Don't Know	6%	3%	5%	5%

Figure 8.18



Reasons Passengers Started Using Public Transit During the Past 2 Years

The major reasons that transit passengers started using public transit in the Phoenix area during the past 2 years were: 1) to save money (21%), 2) because they had moved to the area within the last 2 years (16%) and 3) because they had lost their car (16%).

Light rail passengers were nearly four times as likely as bus passengers to report they started using public transit in the last 2 years to save money (44% light rail only vs. 12% bus only). Light rail passengers were also significantly more likely than bus passengers to report that they started using public transit because light rail service began (16% light rail only vs. 1% bus only). Bus passengers were seven times as likely as rail passengers to report they started using public transit because they had lost their car (21% bus only vs. 3% light rail only). Bus passengers were also significantly more likely to report they started using public transit because they had moved to the area within the last 2 years (19% bus only vs. 7% light rail only).

Figure 8.19

Why New Passengers Started Using Public Transit

Answer	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
To save money	12%	44%	29%	21%
Moved to the area within the last 2 years	19%	7%	17%	16%
Lost my car	21%	3%	12%	16%
Started going to school	13%	17%	10%	13%
Do not have a car	14%	5%	13%	12%
Other	9%	4%	7%	8%
Light rail service began	1%	16%	6%	5%
Started a new job	5%	1%	4%	4%
No reason	4%	1%	2%	3%
Employer offered incentives	1%	2%	1%	1%
Lost my job	1%	0%	0%	1%

Frequency of Transit Use Compared to Two Years Ago

Compared to two years ago, sixty-one percent (61%) of riders reported using public transit "much more often" or "more often"; 24% reported using it about the same, 7% were using it less often and 8% did not know how their usage had changed.

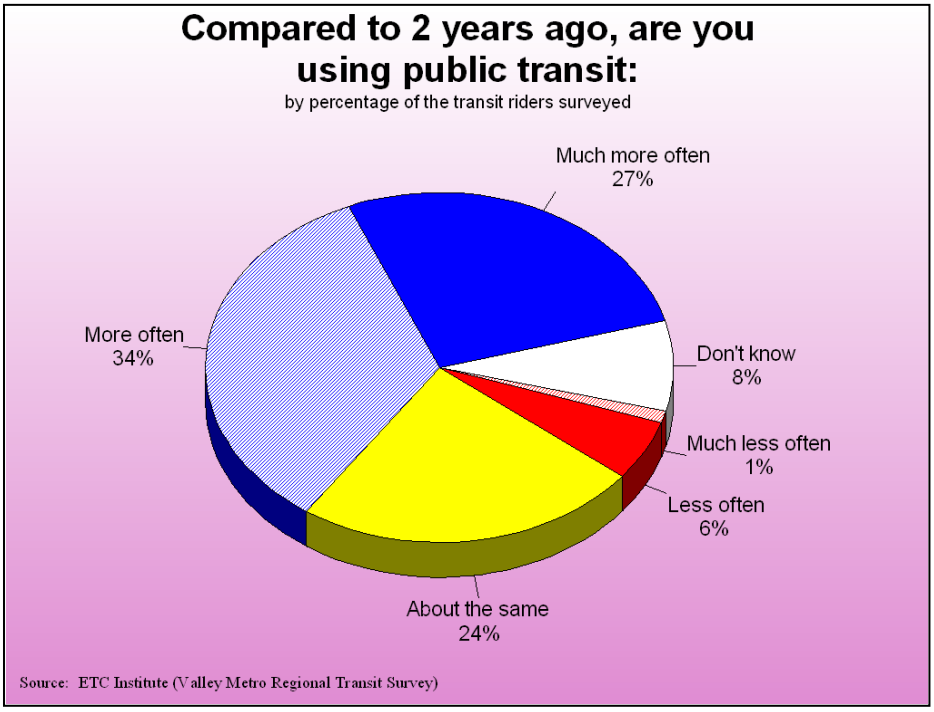
Light rail users were significantly more likely to report that they were using public transit more often than bus passengers. Eighty percent (80%) of light rail only users indicated that they were using public transit "much more often" or "more often" than they were two years ago compared to 57% of bus only users.

Figure 8.20

Frequency of Transit Use Compared to 2 Years Ago

Change in Frequency	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Much more often	24%	38%	31%	27%
More often	33%	42%	38%	34%
About the same	26%	14%	20%	24%
Less often	7%	2%	3%	6%
Much less often	1%	0%	1%	1%
Don't know	9%	4%	7%	8%

Figure 8.21



How Transit Riders Typically Get Transit Schedule Information

The most common ways that all transit riders indicated that they get transit schedule information were: the transit schedule book (32%), the Valley Metro Website (30%) and the customer service telephone number (16%).

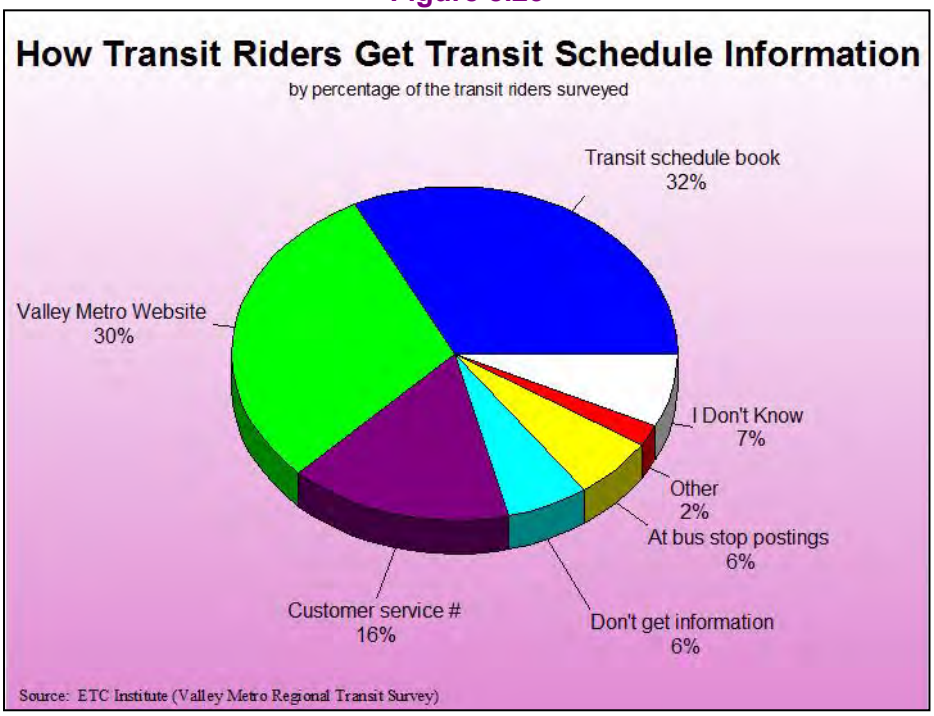
Bus passengers were significantly more likely to use the transit schedule book than light rail passengers (33% bus only vs. 22% light rail only). Light rail passengers were significantly more likely to use the Valley Metro website (51% light rail only vs. 27% bus only).

Figure 8.22

How Transit Riders Get Transit Schedule Information

Source of Information	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Transit schedule book	33%	20%	32%	32%
Valley Metro Website	27%	51%	31%	30%
Customer service telephone number	18%	3%	16%	16%
I Don't get schedule information	5%	16%	7%	6%
Posted schedule at bus stop	7%	4%	6%	6%
Other	3%	2%	2%	2%
I Don't Know	8%	4%	6%	7%

Figure 8.23



Travel Characteristics

Trip Purpose

Home-based work trips accounted for nearly one-third (31%) of all trips completed on public transit. Fifteen percent (15%) of all trips were home-based college trips, 13% were non-home based trips, and 10% were home based-school trips.

Light rail passengers were significantly more likely to complete home-based college trips than bus passengers (34% light rail only vs. 12% bus only). Bus passengers were significantly more likely to use public transit to complete home-based work trips (33% bus only vs. 17% light rail only).

Figure 8.24

Trip Purpose

Trip Purpose	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Home-Based Work Trip (HBW)	33%	17%	33%	31%
Home-Based Other Trip (HBO)	19%	18%	24%	19%
Home-Based College Trip (HBC)	12%	34%	11%	15%
Non-Home Based (NHB)	12%	17%	14%	13%
Home-Based School Trip (HSL)	11%	6%	8%	10%
Home-Based Shopping Trip (HBS)	8%	6%	5%	8%
Home-Based Medical Trip (HBM)	5%	1%	4%	4%
Home-Based Airport Trip (HBA)	0%	1%	1%	0%

Types of Destinations Visited By Transit Users

Forty percent (40%) of all transit trips ended at a person's home. Nearly one in five trips (19%) ended at a passenger's workplace, 10% ended at a social/personal location and 9% ended at college/university.

Light rail passengers were three times more likely than bus passengers to end their trip at a college or university (23% light rail only vs. 8% bus only). Bus passengers were nearly twice as likely as light rail passengers to end their trip at work (20% bus only vs. 11% light rail only).

Figure 8.25

Types of Destinations Visited By Transit Users

Type of Destination	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Home	40%	38%	42%	40%
Workplace	20%	11%	18%	19%
Social/Church/Personal/Friend's House	11%	4%	11%	10%
College/University (Students Only)	8%	23%	7%	9%
Shopping	7%	5%	5%	6%
High School (grades 9-12)	5%	4%	4%	5%
Medical Appointment/Doctor's Visit	3%	1%	3%	3%
Recreation/Sightseeing	1%	3%	2%	1%
Elementary School (grades K-5)	0%	0%	0%	0%
Middle School (grades 6-8)	0%	0%	0%	0%
Hotel	0%	0%	0%	0%
Airport (Air Passengers Only)	0%	1%	1%	0%
Other	5%	11%	8%	6%

How Passengers Access Public Transit

Most (89%) transit passengers indicated that they accessed public transit by walking. Bus passengers were significantly more likely to report walking to public transit than light rail passengers (91% bus only vs. 70% light rail only). Light rail passengers were nearly six times more likely than bus passengers to access public transit by driving alone (11% light rail only vs. 2% bus only). Light rail passengers were also significantly more likely to access public transit by being dropped off by someone else (10% light rail only vs. 3% bus only).

Figure 8.26

Access Mode to Transit System

Access Mode	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Walk	91%	70%	89%	89%
Dropped off by someone else	3%	10%	5%	4%
Bike	3%	8%	4%	4%
Drove alone	2%	11%	2%	3%
Other	0%	1%	1%	1%
Carpooled or vanpooled with others	0%	0%	0%	0%

Riders who indicated that they had walked to the transit system were asked how far they had to walk. More than three-fourths (77%) of those who walked indicated that they walked up to a one-quarter mile. Fourteen percent (14%) reported that they walked between one-quarter and one-half mile. Only 10% indicated that they walked more than one-half mile. Light rail passengers were significantly more likely to report walking between one-fourth and one-half a mile to access transit compared to bus passengers (20% light rail only vs. 13% bus only).

Among those who carpooled/vanpooled to access transit, more than half (59%) indicated there were two people in the carpool/vanpool; 41% reported that there were three or more people in the carpool/vanpool. Rail passengers were significantly more likely to carpool/vanpool in groups of three or more (58% light rail only vs. 35% bus only).

Figure 8.27

Number of People in Carpool/Vanpool (TO TRANSIT)

Carpool Size	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Two	65%	42%	48%	59%
Three or More	35%	58%	52%	41%

How Passengers Traveled From Transit to Their Final Destination

The majority of transit passengers (91%) indicated that they walk to their final destination after using public transit. Bus passengers were more likely to walk than light rail passengers (93% bus only vs. 77% light rail only). Light rail passengers were more than four times as likely as bus passengers to drive to their destination (9% light rail only vs. 2% bus only). Light rail passengers were also three times as likely to be picked up by someone else (6% light rail only vs. 2% bus only).

Figure 8.28

Egress Mode to Destination

Egress Mode	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Walk	93%	77%	92%	91%
Bike	3%	7%	4%	4%
Picked up by someone	2%	6%	3%	3%
Drive alone	2%	9%	1%	2%
Other	0%	0%	1%	0%
Carpool/Vanpool	0%	0%	0%	0%

Riders who indicated that they would walk to their destination were asked how far they would walk. More than three-fourths (77%) of those who would walk to their destination indicated that they would walk up to a one-quarter mile. Fifteen percent (15%) reported that they would walk between one-quarter and one-half mile. Only 10% indicated that they would walk more than one-half mile. There were no significant differences in the distances reported based on the mode of travel (bus only vs. light rail only).

Among those who indicated they would carpool/vanpool to their destination, most (73%) indicated there would be two people in the carpool/vanpool. Twenty-eight percent (27%) indicated there would be three or more. Light rail passengers were significantly more likely to carpool/vanpool in groups of three or more (49% light rail only vs. 15% bus only).

Figure 8.29

Number of People in Carpool/Vanpool (FROM Transit)

Carpool Size	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
Two	85%	51%	52%	73%
Three or More	15%	49%	48%	27%

Transfers

More than half (52%) of public transit users made at least one transfer during their trip. Thirteen percent (13%) made two or more transfers. Passengers who used both a bus and light rail were more likely to make three or more transfers during their trip compared to bus only users (6% bus/light rail vs. 1% bus only).

Figure 8.30

Total Transfers

# of Transfers	Bus Only	Lt. Rail Only	Bus/Lt. Rail	Overall
None	49%	100%	0%	48%
One	42%	0%	61%	39%
Two	9%	0%	33%	11%
Three or more	1%	0%	6%	2%

Trip Distance by Trip Purpose

The mean trip distance (in miles) was calculated in GIS using the straight line distance between the trip origin and destination. Nearly half (49%) of all transit trips were less than five miles. One third (33%) of all trips were between five and ten miles.

Figure 8.31 shows the trip distances by trip purpose. The types of trips with the longest trip distance were: home-based work trips and home-based airport trips. Home-based shopping trips and home-based school trips had the shortest trip distances.

Figure 8.31

Trip Distance by Purpose

Distance	HBW	HBS	HBC	HSL	HBM	HBA	HBO	NHB	Overall
<.5 Mile	0%	1%	1%	1%	0%	0%	2%	2%	1%
0.50-0.99	1%	10%	3%	5%	3%	0%	4%	6%	4%
1.00-4.99	31%	60%	45%	64%	53%	33%	47%	46%	44%
5.00-9.99	38%	22%	33%	26%	35%	41%	31%	33%	33%
10.00-15.99	20%	5%	14%	3%	6%	20%	12%	10%	13%
16.00-19.99	5%	1%	2%	1%	2%	7%	4%	2%	3%
20.00-24.99	3%	0%	1%	0%	1%	0%	1%	1%	1%
> 24.99 Miles	1%	0%	0%	0%	1%	0%	1%	0%	1%
Mean Trip Distance (miles)	8.11	4.05	6.34	4.22	5.65	7.58	6.22	5.54	6.38

Notes: HBW=Home-Based Work Trip; HBS=Home-Based Shopping Trip; HBC=Home-Based College Trip; HSL=Home-Based School Trip; HBM=Home-Based Medical Trip; HBA=Home-Based Airport Trip; HBO=Home-Based Other Trip; NHB= Non-Home Based Trip.

Where Transit Users Live

The table in Figure 8.32 (below) shows the zip codes where the greatest number of surveyed transit users live. Zip codes 85281, 85015 and 85008 were home to the greatest number of transit users in the region. Eight percent (8%) of all transit users in the region live in zip code 85281, 4% of all transit users in the region live in zip code 85015 and 4% live in zip code 85008.

The map in Figure 8.33 (top of the following page) shows where transit users in the region live. The home addresses are plotted as black dots on the map.

The map in Figure 8.34 (bottom of the following page), shows the density of home address by zip code. Zip codes that are home to the most transit users are shaded in dark blue.

Figure 8.32

Where Transit Users Live

Home Zip Code	% of all Home Addresses in Zip Code
85281	8%
85015	4%
85008	4%
85282	3%
85013	2%
85007	2%
85202	2%
85021	2%
85014	2%
85201	2%
85041	2%
85301	2%
85006	2%
85017	2%
85033	2%
85009	2%
85016	2%

Figure 8.33

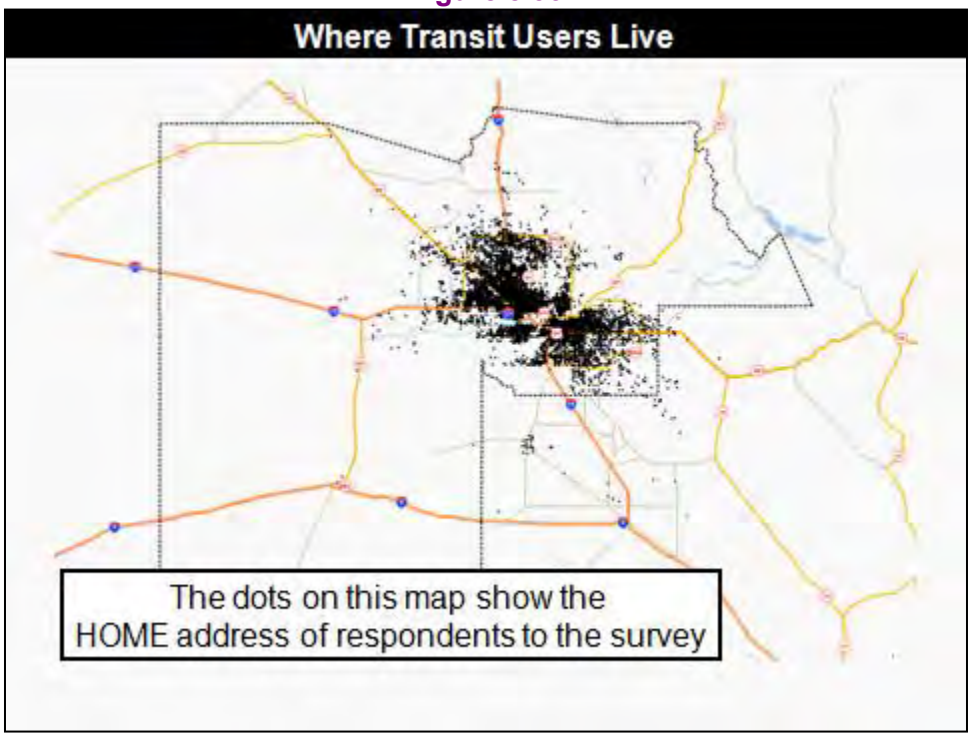
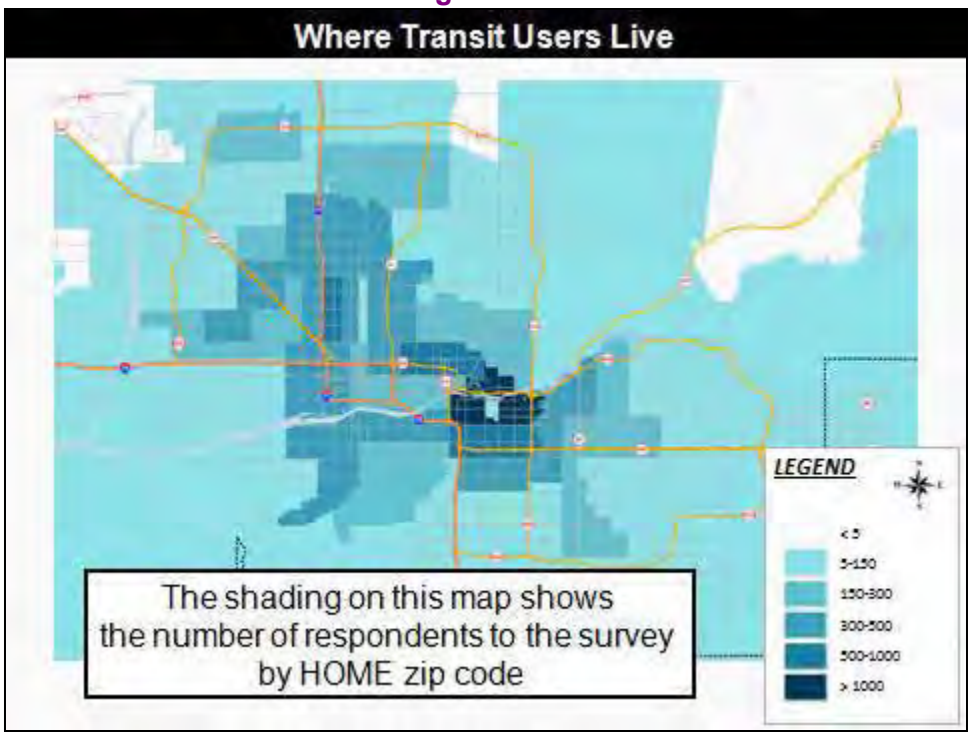


Figure 8.34



Where Transit Trips Began

The table in Figure 8.35 (below) shows the zip codes where the greatest number of transit trips began. Zip code 85281 had the most trip origins for transit in the region. Eight percent (8%) of all transit trips in the region began in zip code 85281. Some of the other prominent zip codes were transit trips began were: 85004 (4%), 85015 (4%), 85003 (4%) and 85287 (4%).

The map in Figure 8.36 (top of the following page) shows where all transit trips in the region began. The origin addresses are plotted as black dots on the map.

The map in Figure 8.37 (bottom of the following page), shows the density of trip origins by zip code. Zip codes with the most trip origins are shaded in dark blue.

Figure 8.35

Where Transit Trips Began

ORIGIN Zip Code	% of all ORIGIN Addresses in Zip Code
85281	8%
85004	4%
85015	4%
85003	4%
85287	4%
85008	3%
85013	3%
85282	3%
85034	2%
85007	2%
85201	2%
85202	2%
85006	2%
85021	2%
85009	2%
85283	2%
85012	2%
85301	2%
85016	2%

Figure 8.36

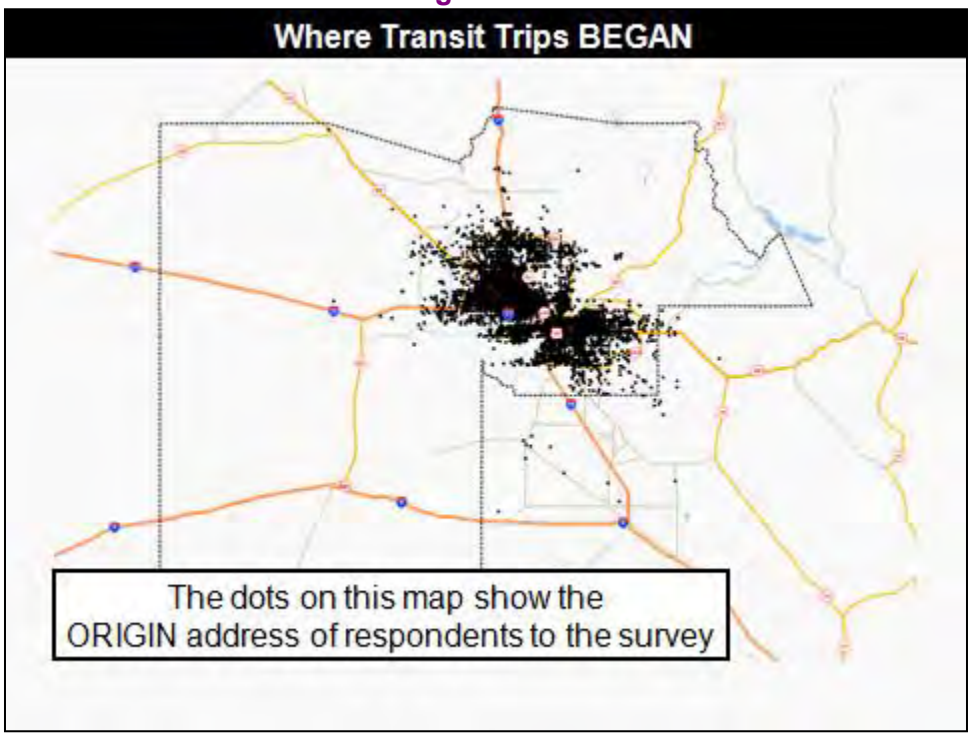
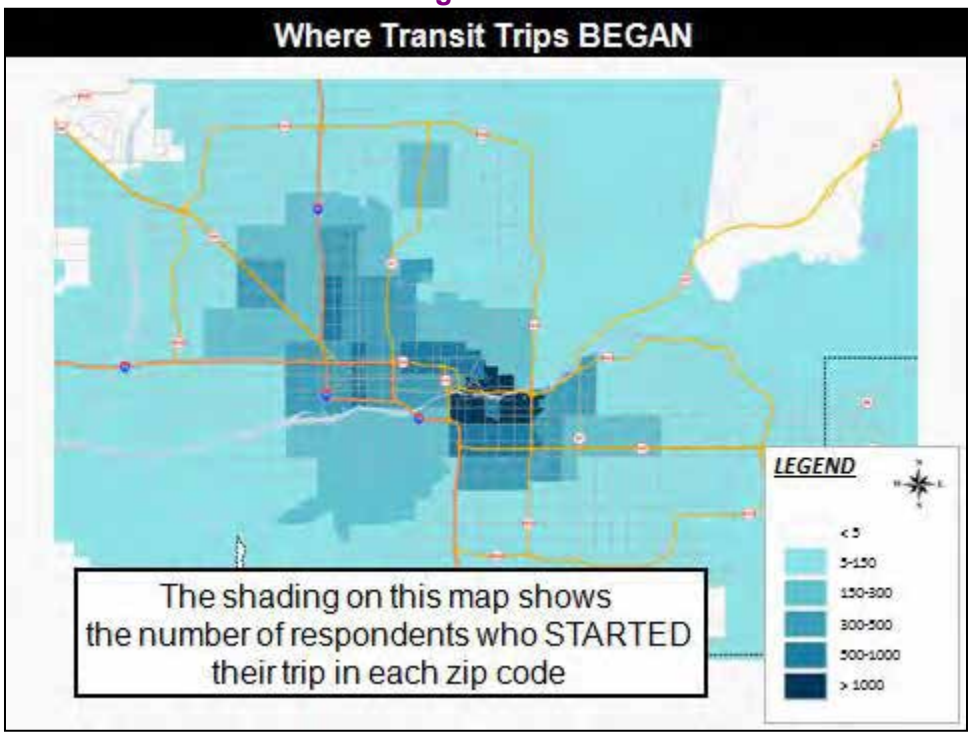


Figure 8.37



Where Transit Trips Ended

The table in Figure 8.38 (below) shows the zip codes where the greatest number of transit trips ended. Zip codes 85281, 85004 and 85287 had the most trip destinations for transit in the region. Eight percent (8%) of all transit trips in the region ended in zip code 85281. Six percent (6%) of all transit trips in the region ended in zip code 85004 and 5% ended in zip code 85287.

The map in Figure 8.39 (top of the following page) shows where all transit trips in the region ended. The destination addresses are plotted as black dots on the map.

The map in Figure 8.40 (bottom of the following page), shows the density of trip destinations by zip code. Zip codes with the most trip destinations are shaded in dark blue.

Figure 8.38

Where Transit Trips Ended

Destination Zip Code	% of all Destination Addresses in Zip Code
85281	8%
85004	6%
85287	5%
85003	4%
85015	4%
85013	3%
85282	3%
85007	3%
85034	3%
85008	2%
85202	2%
85021	2%
85014	2%
85016	2%
85006	2%
85009	2%
85012	2%

Figure 8.39

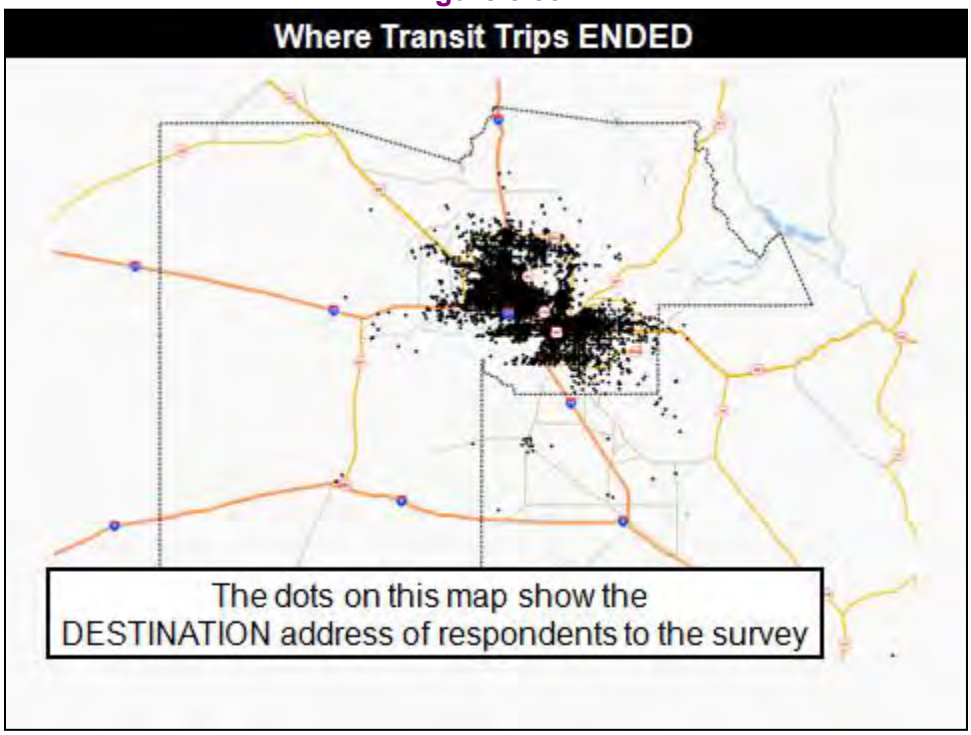
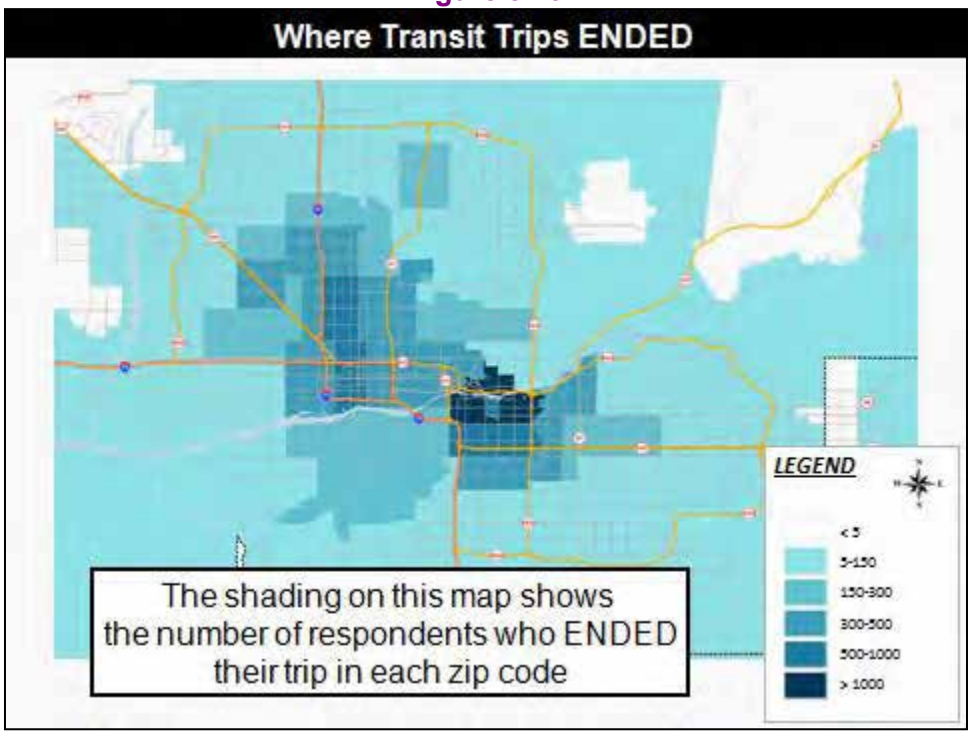


Figure 8.40



Where Transit Riders Boarded

The table in Figure 8.41 (below) shows the zip codes where the greatest number of transit boardings occurred. Zip codes 85281, 85003 and 85287 had the most transit boardings in the region. Nine percent (9%) of all transit boardings in the region occurred in zip code 85281. Eight percent (8%) of all transit boardings in the region occurred in zip code 85003 and 6% of all transit boardings occurred in zip code 85287.

The map in Figure 8.42 (top of the following page) shows where all transit boardings in the region occurred. The boarding locations are plotted as black dots on the map.

The map in Figure 8.43 (bottom of the following page), shows the density of trip boardings by zip code. Zip codes with the most boardings are shaded in dark blue.

Figure 8.41

Where Transit Riders Boarded

ON Zip Code	% of all ON Addresses in Zip Code
85281	9%
85003	8%
85287	6%
85015	5%
85202	4%
85013	4%
85034	4%
85004	3%
85009	2%
85282	2%
85021	2%
85051	2%
85020	2%

Figure 8.42

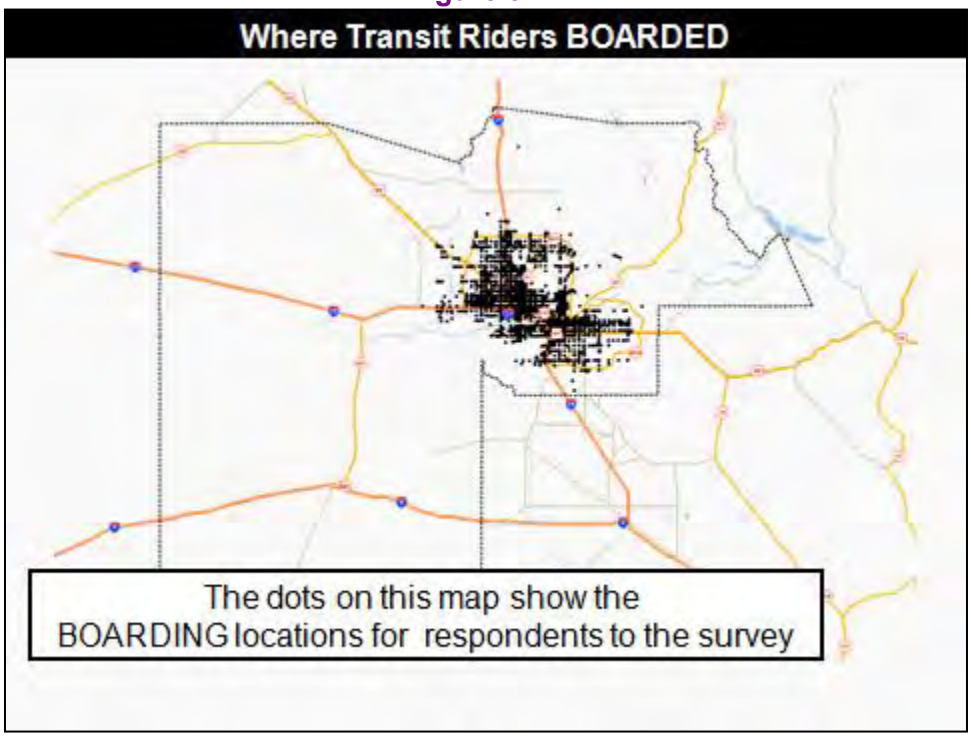
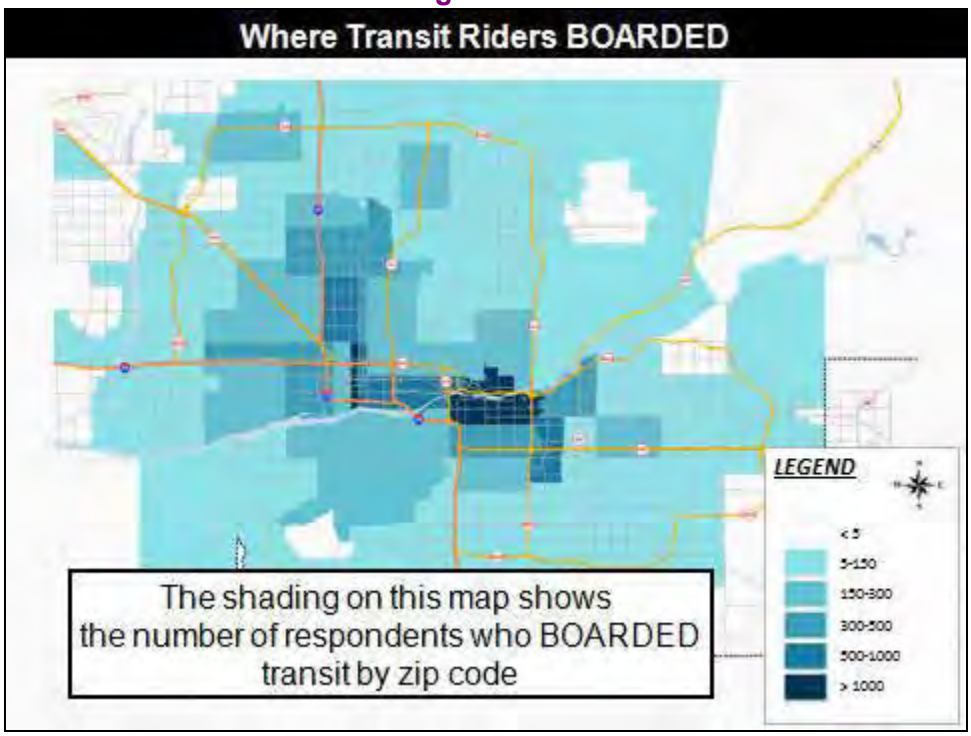


Figure 8.43



Where Transit Riders Alighted

The table in Figure 8.44 (below) shows the zip codes where the greatest number of transit alightings occurred. Zip codes 85003, 85287 and 85281 had the most alightings in the region. Ten percent (10%) of all transit alightings in the region occurred in zip code 85003. Nine percent (9%) of all transit alightings in the region occurred in zip code 85287 and 7% of all transit alightings occurred in zip code 85281.

The map in Figure 8.45 (top of the following page) shows where all transit alightings in the region occurred. The alighting locations are plotted as black dots on the map.

The map in Figure 8.46 (bottom of the following page), shows the density of trip alightings by zip code. Zip codes with the most alighting are shaded in dark blue.

Figure 8.44

Where Transit Riders Alighted

OFF Zip Code	% of all OFF Addresses in Zip Code
85003	10%
85287	9%
85281	7%
85015	5%
85013	5%
85034	4%
85202	3%
85004	3%
85282	2%
85009	2%
85021	2%
85051	2%
85006	2%
85007	2%

Figure 8.45

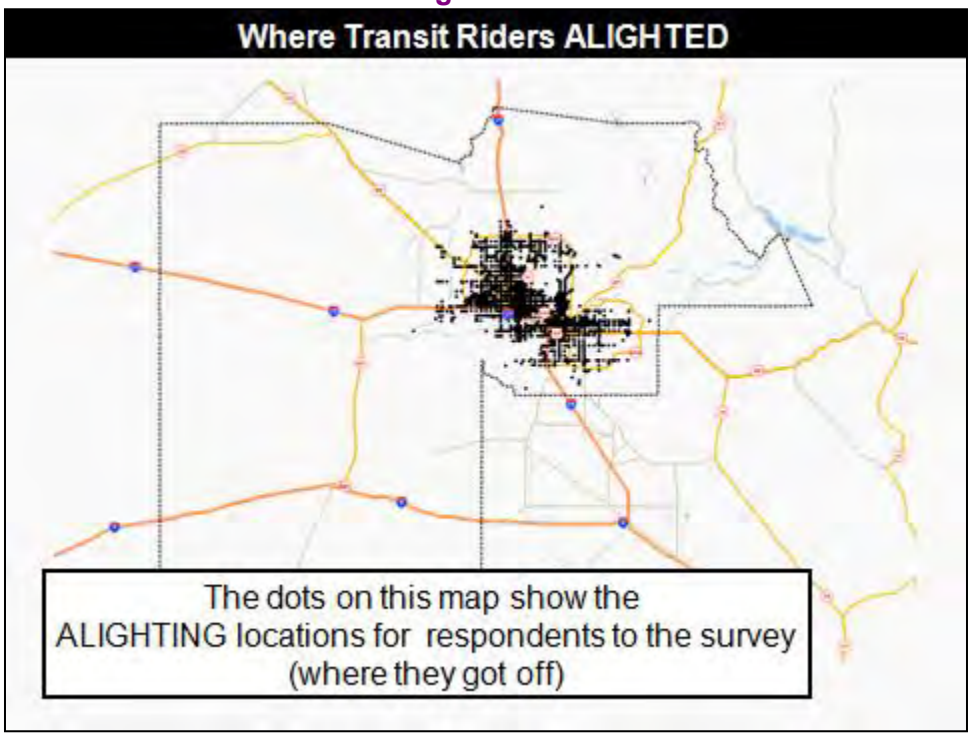
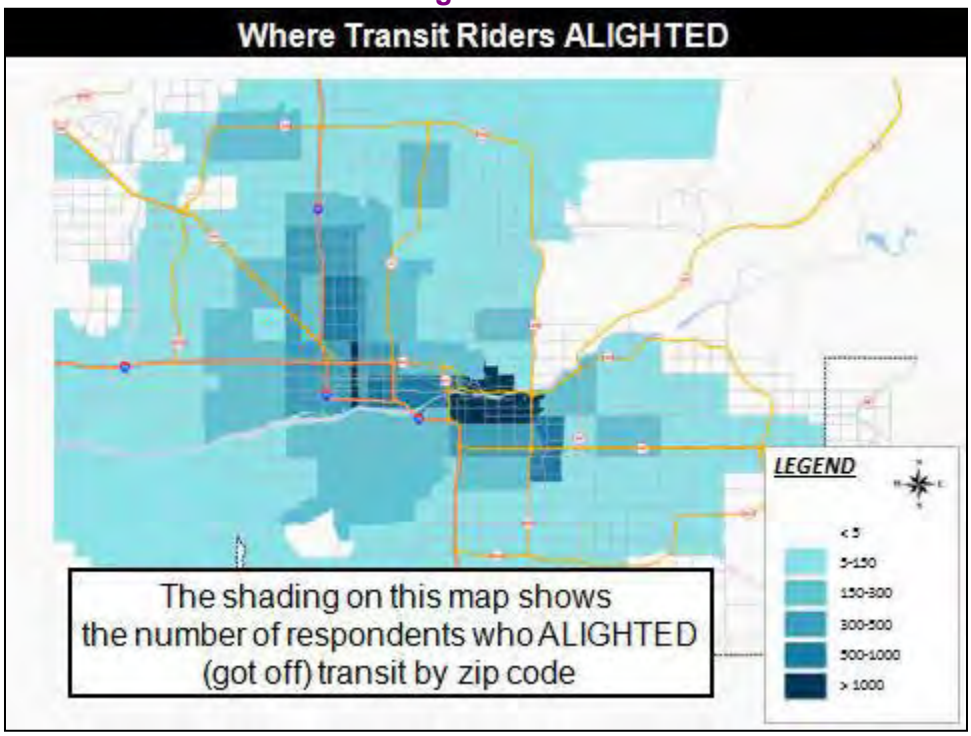


Figure 8.46



SECTION 9: ANALYSIS OF TRENDS (2007-2011)

This section of the report presents a comparative analysis of the data collected in the 2010-2011 on-board transit survey with the data collected in the 2007 on-board transit survey.

Comparison of the 2007 Survey to the 2011 Survey

While most of the survey questions were the same in 2007 and 2011, there were some differences in the sample size and survey administration methodology. Some of these differences are noted below:

- **Sample Size.** In 2007, the survey goal was to obtain 9,700 completed surveys. The actual number of completed surveys was 7,600. In 2011, the survey goal was to obtain 13,750 completed surveys. Of these, 9,635 were to be completed with bus passengers and 4,115 were to be completed with rail passengers. The actual number of completed surveys was 15,780. Of these, 11,048 were completed with bus passengers and 4,732 were completed with rail passengers.

- **Method of Administration**. In 2007, surveys were self-administered. Respondents were given paper surveys and asked to complete them while they were on the bus. In 2011, the survey was conducted as a face-to-face interview, and tablet PCs were the primary method of collecting the data.

- **Timing of Survey Administration.** Both the 2007 and 2011 surveys were administered in the fall season. In addition, both the 2007 and 2011 surveys were not administered on weekends, holidays or after 7 p.m.

- **Participant Selection**. In 2007, all boarding passengers were asked to participate in the survey. Those that agreed to participate were given a paper copy of the survey as described above. In 2011, riders were selected at random to participate using the sampling procedure described in Section 2.

- **Incentives**. In 2007, each rider who completed a survey was given a free-ride ticket. There was also small drawing to encourage participation. In 2011, transit riders were not given tickets for a free ride, but the amount of the incentives was substantially greater. In 2011, $5000 worth of incentives were distributed to survey participants in the form of cash, Visa gift cards, and gift cards to retail stores and restaurants.

- **Response Rate.** In 2007, the response rate to the survey was 17%. In 2011, the response rate to the survey was 91%.

Demographic Characteristics

Household Size

Household size among transit users has generally stayed the same since 2007 as shown in Figure 9.1 (below). Transit users tend to live in larger households than the typical resident of Maricopa County. Thirty-eight percent (38%) of the transit users in the 2011 survey lived in households with four or more occupants compared to 25% of all households in Maricopa County.

Figure 9.1
Household Size

Persons	2011	2007	2009 U.S. Census Estimate Maricopa County (American Community Survey)
One	18%	18%	27%
Two or Three	44%	45%	48%
Four or more	38%	37%	25%

Vehicle Availability

The percentage of transit users that reported having at least one vehicle available to their household increased from 2007 to 2011 as shown in Figure 9.2 below. In 2007, 49% of transit users indicated that they had one or more vehicles in their household. In 2011, 53% indicated that they had one or more vehicles. The percentage with zero vehicles decreased from 51% in 2007 to 47% in 2011.

Figure 9.2
Vehicle Availability

Vehicles	2011	2007
Zero	47%	51%
One	29%	27%
Two	16%	15%
Three	6%	5%
Four or more	2%	2%

Household Income

The percentage of transit users living in households earning $50,000 or more per year increased from 2007 to 2011. In 2007, one in seven transit users (14%) had an annual household income of $50,000 or more. In 2011, nearly one in five (19%) transit users had an annual household income of $50,000 or more. The percentage of transit users earning less than $10,000 per year declined from 27% in 2007 to 24% in 2011.

Figure 9.3

Annual Household Income

Annual Income Range	2011	2007
Less than $10,000	24%	27%
$10,000–$19,999	18%	19%
$20,000–$34,999	27%	24%
$35,000–$49,999	13%	15%
$50,000 or more	19%	14%

Transit users were significantly more likely to live in low income households than the typical resident of Maricopa County. Transit users were four times as likely as the typical resident in Maricopa County to have an annual household income of less than $10,000 (24% transit users vs. 6% Maricopa County). Transit users were nearly three times less likely than the typical resident of Maricopa County to have an annual household income of $50,000 or more (19% transit users vs. 55% Maricopa County).

Figure 9.4

Annual Household Income

Annual Income Range	2011	2009 U.S. Census Estimate Maricopa County (American Community Survey)
Less than $10,000	24%	6%
$10,000–$14,999	10%	4%
$15,000–$34,999	35%	20%
$35,000–$49,999	13%	15%
$50,000 or more	19%	55%

Age

The percentage of transit users who are under age 25 increased from 2007 to 2011. In 2007, 33% of transit users were under age 25. In 2011, 40% were under age 25. Transit users were also typically younger than the general population. Only 2% of transit users were age 65 or older compared to 14% of all residents of Maricopa County. The percentage of transit users who were age 65 and older did not change from 2007 to 2011.

Figure 9.5
Age of Transit Users

Age Range	2011	2007	2009 U.S. Census Estimate Maricopa County (American Community Survey)
Under 25 Years	40%	33%	25%
25-54 Years	50%	57%	51%
55-64 Years	7%	8%	11%
65+ Years	2%	2%	14%

Travel Characteristics

In addition to reviewing changes in demographics, changes in travel characteristics from 2007 to 2011 were also assessed, including the types of places where trips began, trip purpose, modes of access and egress, and sources of bus schedule information.

Types of Places Where Transit Trips Began

Although the percentage of trips that began at home did not change from 2007 to 2011, the percentage of trips that began at work declined from 25% in 2007 to 17% in 2011. The decrease in the percentage of trips that began at work was offset by an increase in the percentage of trips that began at all other types of places. The increase in the percentage of trips that began at non-work locations and the high number of light rail boarding during hours other than the a.m. and p.m. peak travel periods may suggest that transit users are more likely to use transit for non-work trips as a result of the introduction of light rail service to the region.

Figure 9.6

Where Transit Trips Began

	2011	2007
Home	47%	47%
Work	17%	25%
Recreation/Sightseeing/Social /Personal places/Church	9%	7%
College/University (Students Only)	8%	6%
School (K-12) (Student Only)	6%	5%
Shopping Places	5%	4%
Medical Appointment/Doctor's Visit	3%	2%
Other	5%	4%

Trip Purpose

As figure 9.7 shows, there was a significant decrease in the percent of passengers who used public transit to make home-based work trips from 44% in 2007 to 31% in 2011. There was a significant increase in the percent of passengers who used public transit to make home-based other trips from 33% in 2007 to 41% in 2011 and an increase in the percent of passengers making home-based college trips from 7% in 2007 to 15% in 2011. Much like the above findings, these results suggest that the introduction of light rail increased the use of public transit to make trips outside of just work.

Figure 9.7

Trip Purpose

Trip Purpose	2011	2007
Home-Based Other Trip (HBO)	41%	33%
Home-Based Work Trip (HBW)	31%	44%
Home-Based College Trip (HBC)	15%	7%
Non-Home Based (NHB)	13%	16%

Mode of Access to Transit

There were no significant differences in the modes of access to transit from 2007 to 2011. In 2007, 85% of transit users accessed transit by walking. In 2011, 89% indicated that they accessed transit by walking. The percentage who drove alone or biked did not change. The change in the percentage of transit users who used all other modes of access was 2% or less.

Figure 9.8

Access Mode to Transit System

Access Mode	2011	2007
Walk	89%	85%
Dropped off by someone else	4%	6%
Bike	4%	4%
Drove alone	3%	3%
Other	1%	0%
Carpooled or vanpooled with others	0%	2%

Mode of Egress from Transit

There were no significant differences in the modes of egress from 2007 to 2011. In 2007, 90% of transit users egressed transit by walking to their destination. In 2011, 91% indicated that they egressed transit by walking to their destination. The changes in the percentage of transit users who used all other modes of egress was 2% or less.

Figure 9.9

Egress Mode to Transit System

Egress Mode	2011	2007
Walk	91%	90%
Bike	4%	3%
Picked up by someone	3%	4%
Drive alone	2%	1%
Other	0%	0%
Carpool/Vanpool	0%	2%

Dependence on Public Transit

The percentage of transit users who would not have been able to complete their trip if public transit were not available did not change significantly from 2007 to 2011. In 2007, 30% of transit users reported that they would not have been able to complete their trip if transit were not available. In 2011, 29% reported that they could not complete their trip if transit were not available.

Although most of the responses to this question did not change significantly, there was a notable increase in the percentage of transit users who indicated that they would drive themselves to their destination if transit were not available. In 2007, one in twelve (8%) transit users indicated that they would drive themself. In 2011, one in eight (13%) indicated they would drive themself.

Figure 9.10

How Transit Users Would Complete Their Trip If Transit Were Not Available

How Would You Make the Trip	2011	2007
I could not make this trip	29%	30%
Drive with someone else	26%	26%
Walk or Bike	26%	25%
Taxi	6%	9%
Drive Myself	13%	8%
Other	1%	2%

Source of Bus Schedule Information

The percentage of transit users who rely on the Valley Metro schedule book has declined significantly since 2007. In 2007, 65% of transit users relied on the transit book as their primary source of schedule information. In 2011, 37% indicated that they relied on the transit schedule book.

Transit users were significantly more likely to rely on the Valley Metro website in 2011 than in 2007. The percentage of transit users who reported using the website as their primary source of schedule information more than doubled from 17% in 2007 to 35% in 2011.

Figure 9.11
Where Transit Users Get Schedule Information

Source of Information	2011	2007
Transit schedule book	37%	65%
Valley Metro Website	35%	17%
Customer service telephone number	19%	13%
Posted schedule at bus stop	7%	3%
Other	2%	2%

SECTION 10: LESSONS LEARNED AND OPPORTUNITIES FOR IMPROVEMENT

Although the number of completed surveys and the quality of the survey data exceeded the contractual requirements for the project, the research team identified a few opportunities for improvement to enhance the quality of future surveys based on lessons learned from the 2010-11 On-Board Survey. The opportunities are briefly described below and on the following page.

1) **If resources are available, a full stop inventory should be conducted before the administration of future surveys.** During the administration of the 2010-11 survey, it became apparent that the list of bus stops along some routes was not complete. In order to ensure that the list of stops on each route was as complete as possible, the research team had interviewers ride each route and mark the location of bus stops using GPS devices. Since this issue was not identified until after the administration of the survey began, manual geocoding of some bus stops was required on routes for which the stop inventory was not completed prior to the start of survey. If a stop inventory had been completed before the survey began, the location of all bus stops on each route could have been included in the tablet PC survey program, which would have minimized the number of boarding and alighting locations that had to be manually geocoded after the survey was administered.

2) **If resources are available, the sample size for future surveys should be increased.** Although nearly twice as many surveys were collected in 2011 as 2007, the sample was still not large enough to conduct data expansion for all bus routes by direction, time of day, <u>and</u> boarding location. For example, nearly half of the bus routes included in the survey had an average daily ridership of less than 1,000 riders per day. Given the sampling rate of 4.75%, fewer than 50 surveys were collected on routes with an average ridership of less than 1,000 per day. When a sample of fewer than 50 completed surveys was divided in half (to account for the direction of travel), there were typically fewer than 25 surveys available in each direction. When the sample was further divided by four (to account for the four time of day periods), there were typically fewer than 7 surveys available in a given direction for a specific time period, which was not adequate to perform data expansion by boarding location. For this reason, data expansion by boarding location was only performed on 15 routes with an average ridership of at least 4,000 per day. The good news is that these 15 routes accounted for more than 50% of the overall bus ridership in the region, so the majority of the survey records from the 2010-11 survey were expanded by boarding location. If the sample size for bus routes had been increased to 10% of the average daily ridership, data expansion by boarding location could have been completed on nearly three times as many routes.

3) **If resources are available, the sample size for future surveys should be increased to include weekend riders.** One of the original goals for the survey was to gather data about weekend ridership in the region. Unfortunately, the sample size was not sufficient to adequately capture data for weekend ridership without compromising the quality of the data collected on weekdays. In order to ensure that the sample for weekday ridership was sufficient, the resources that were originally allocated for weekend surveys were shifted to weekday surveys to increase the number of surveys that were completed on weekdays. As a result, no weekend ridership data was collected during this survey.

4) **If resources are available, a boarding and alighting count should be completed on all bus routes prior to the administration of future surveys.** Although ridership data for most bus routes was available by direction and time of day, stop level ridership data was limited to the data collected by the survey team. The survey team conducted boarding/alighting counts on at least one bus on each route, but the overall quality of the ridership data to which the survey was expanded would have been improved if boarding and alighting data were available for all buses operating on each route.

5) **A question asking whether or not the respondent has a disability should be included on future surveys.** Since there were concerns that respondents would not have time to finish the survey, the research team eliminated a question that asked the respondent if he/she had a physical disability. Instead of directly asking this question, the research team had planned to identify persons with disabilities based on the fare category selected. Unfortunately, most of the respondents to the survey who had disabilities did not select “person with disability fare.” Instead, most persons with disabilities simply reported their general fare category (e.g., day pass or 31-day pass). As a result, the ability to perform analysis of the 2010-11 survey data for persons with disabilities will be limited.