



CAG GREATER GILA COUNTY TRANSIT FEASIBILITY AND IMPLEMENTATION STUDY

Technical Memorandum 1: Refined Work Plan

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Submitted to:



Submitted by:

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INTRODUCTION

Central Arizona Governments (CAG) was established in 1975 by Executive Order 70-2 signed by the Governor of Arizona. CAG is one of six regional planning districts in Arizona, tasked with providing effective regional planning services to Gila and Pinal Counties. The 2015 CAG *Regional Transportation Plan* identified the need to:

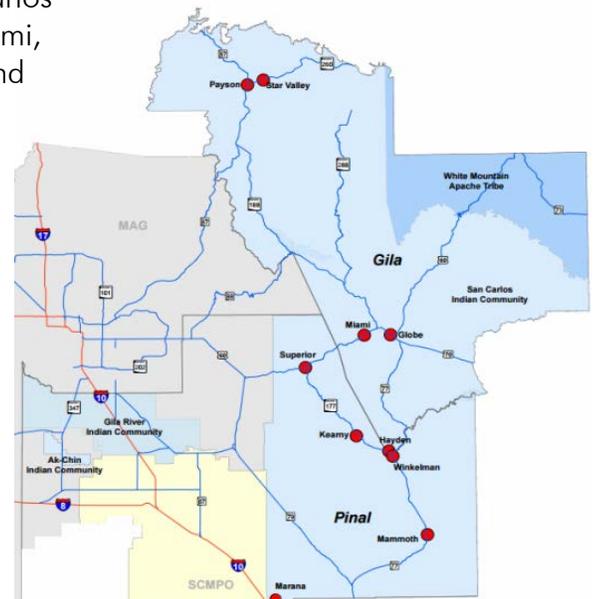
- provide residents in Gila County with improved transit services
- connect rural areas in the CAG region to Maricopa and Pinal counties

CAG initiated this transit study with the primary goal of improving the quality of life for greater Gila County area residents by providing transit services to fulfill their daily commuting needs and to provide transit services for residents to meet medical, educational, shopping, recreational, and emergency travel needs.

Study Area

The study area encompasses unincorporated Gila County, San Carlos Apache Tribe, White Mountain Apache Tribe, Payson, Globe, Miami, Hayden, and Winkelman. The region is primarily rural in nature and includes many residents that are elderly, low-income, and often do not have access to reliable vehicles to reach activity centers. To provide regional access, this study will also include connecting local communities to Maricopa County and eastern Pinal County.

Current transit providers within the CAG region have identified funding, training, reporting and asset management as major challenges for services. Transit operations within rural Gila County are eligible for and receive funding from different federal programs; however, funding intended for rural applications may not be invested in urban operations, and vice versa. This funding limitation presents unique challenges with respect to the design, funding, and implementation of transit options to provide services for local residents to reach the metropolitan Phoenix and Sun Corridor areas for medical, shopping, education, and other purposes.



Project Management

Jacobs' project manager, Rick Powers, PE, will be the primary point of contact for CAG and the Technical Working Group (TWG).

Project Oversight. Rick will meet with the CAG Project Manager once a month to review study progress, present working papers, study findings, and solicit direction. He will also monitor work progress, schedule, and budget to confirm that the project is progressing in a manner acceptable to CAG and the TWG.

Technical Working Group (TWG). A TWG will be established to provide input, oversight, and champion the goals and objectives of the Study. We will work closely with CAG and engage TWG members throughout the study.

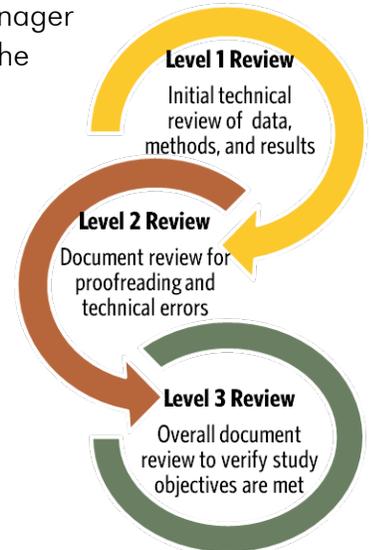
The TWG will include, but not be limited to, regional partners in transit related transportation activities, including:

- Existing 5310 & 5311 transit program providers/recipients
- Central Arizona Governments (CAG)
- Maricopa Association of Governments (MAG)
- Northern Arizona Council of Governments (NACOG)
- Southeastern Arizona Governments Organization (SEAGO)
- Federal Transit Administration (FTA)
- Arizona Department of Transportation (ADOT)

Finalize Scope of Work and Public Involvement Plan. Working with the CAG Project Manager and upon input from the TWG, we will finalize the scope of work and schedule for the study and the public involvement plan that will present and solicit input from stakeholders and the public at the most appropriate milestones.

Quality Assurance/Quality Control

Rick will verify that all submittals (including those from RHBA) are completed prior to milestone dates to allow ample time to perform a thorough quality control review and compliance check. Vamshi will support Rick in all quality control efforts. Jacobs follows strict QA/QC processes that includes internal peer reviews and checks to ensure data accuracy and a three-level QA/QC review (technical data analysis, proofreading, and reviewing against goals and objectives).



SCOPE OF WORK

We will utilize the following Work Plan to prepare a set of feasible transit solutions for the greater Gila County area. The Work Plan presents details about our approach to the overall project.

PHASE 1: FEASIBILITY STUDY

Task 1: Site Analysis

Purpose: Inventory and analyze the socioeconomic, land use, cultural, natural, and transportation conditions in the study area. This is essential to understanding the travel patterns, mobility issues and constraints, and transit needs of area residents.

Task 1.1: Refine Work Plan

- ▶ **Visioning.** A visioning process will be implemented to establish a study direction. At the kick-off meeting, we will initiate a discussion to identify study area issues, identify community values, project expectations, and identify key stakeholders. We will then prepare a study vision with goals and priorities.
- ▶ **Public & Stakeholder Outreach.** Jacobs will work closely with the CAG project manager and the TWG to develop a public involvement plan that will present information to and solicit input from stakeholders and public. Jacobs will work with CAG to publish study related materials on CAG's website.
- ▶ **Refine Work Plan.** Based on the results of the Visioning Process, we will start an open discussion with the CAG Project Manager and the TWG to identify revisions to the work plan and study boundary. The revised work plan will be distributed to the TWG for final approval. It will include a schedule and a staffing plan.

Task 1.2: Current and Future Conditions

Activities under this task include:

- ▶ Obtain, review, and summarize relevant local/regional planning documents, studies, and policy documents.
- ▶ Prepare a list of data to be collected and identify data source for each item.
- ▶ **Demographic Analysis.** Using 2010 Census, American Community Survey (ACS), and Indian Health Services datasets, inventory demographic and socioeconomic characteristics and identify locations of Environmental Justice population groups. Socioeconomic characteristics such as population and housing unit density, age, median income, disabled and elderly populations, poverty status, mean travel time to work, land area, persons per square mile, employment per square mile, and per capita income will be collected for the study area and the project influence area. Utilize readily available employment databases to identify work centers and activity centers (retail shopping, medical, recreational facilities, etc.)
- ▶ Perform a basic Limited English Proficiency 4-factor analysis that includes recommendations and pricing to reduce potential significant impacts and document the findings.
- ▶ **Current Transit Environment.** Inventory and analyze existing public and private transit service in the region including routes, stops, service frequency, ridership, funding levels, equipment, and other technical data. Evaluate the system pros and cons, crossover and redundancy of services. Distinguish routes based on the type of trips they serve – employment, shopping, medical, etc.
- ▶ **Stakeholder Interviews.** Interview stakeholders to discuss current transit needs and issues, and future events/developments that have been planned or are in the planning stages that might affect mobility. Develop a candidate stakeholder contact information and provide to the TWG for prior approval to ensure that a cross-section of transit dependent populations are represented in the interviews. Conduct one full-day of stakeholder interviews at a location selected by CAG. Stakeholders will be divided into focus groups based on their focus area. WebEx/Call-in option will be provided for stakeholders to participate remotely. For stakeholders unable to attend in-person, Jacobs will follow up with a phone call. Critical TWG members such as Cobre Valley Community Transit and Nnee Bich’o Nii Transit will be contacted to understand issues and perspectives related to regional transit coordination. Identify and maintain contact information for key person interviews and groups for public meetings.
- ▶ **Estimate Unmet Travel Demand.** Identify or develop estimates of unmet transit service needs based on both traditional and non-traditional procedures.
 - Non-technical methods may include estimates based on discussions with transit providers, public, TWG, elected officials, non-profit organizations; and public input via surveys such as SurveyMonkey.
 - **Traditional methods** of estimating travel demand will be customized for this particular study and may include:
 - Transit Cooperative Research Program (TCRP) Report 161, "Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation"
 - The Burkhardt and Millar Model
 - The SG & Associates Arkansas Model

All methods consider the needs of transit dependant populations, such as minorities, mobility-limited persons, and persons living below the poverty level. We will identify the method or methods that are most applicable and justify their selection based on experience and/or the results obtained in other communities.

- ▶ Future transit demand estimates will be developed for the each of the five-year time horizons. Gila County travel demand model updated as part of the *Cobre Valley Transportation Plan* will be used to develop these estimates.
- ▶ **Identify Funding Opportunities.** In addition to traditional funding sources, identify alternative funding opportunities including grants guided by the best practices and successes of peer agencies.

PRODUCTS & MEETINGS:

- ▶ **Kick-off meeting with TWG**
- ▶ **Presentation to three Councils introducing the study (by CAG). Jacobs to prepare PowerPoint presentation**
- ▶ **Study Vision/Goals/Objectives**
- ▶ **Revised Work Plan**
- ▶ **Technical memo summarizing existing and future conditions**
- ▶ **Stakeholder Interviews:** One full day of stakeholder interviews. Stakeholders will be divided into focus groups. WebEx/Call-in option will be provided. For stakeholders unable to attend in-person, Jacobs will follow up with a phone call
- ▶ **TWG meeting**

Task 2: Feasibility Review

Purpose: Conduct a feasibility review to verify the need for transit service and establish community support for transit services within the study area.

Task 2.1: Phased Gila and Pinal County Transit Service Profile

Based on results from the previous task, on-going input from the TWG and area stakeholders, and available funding, we will develop a transit service profile. Priority will be given to those projects whose implementation can be accomplished for the lowest investment of funds that would have the greatest positive results and the least negative impact on area Title VI populations. Additional benefits of potential projects such as the ability to serve new residential developments or employment centers, or the ability to enhance area tourism will be considered in the prioritization process. Areas we will address include:

- ▶ Ability of the proposed service additions to meet increased demand.
- ▶ Access to the additional service by pedestrians and bicyclists.
- ▶ Safe operation of the service, including sharing of roadway facilities with motorists by buses and vans.
- ▶ Consideration of sound access management practices in the site selection of bus stops, bus pull-outs, transit routes, and transit maintenance and storage facilities.
- ▶ Potential for public-private partnerships such as the provision of park-and-ride facilities at commercial establishments, and the inclusion of bus pull-outs when intersections and roadway segments along transit routes are improved.

We will base the proposed transit service improvements on anticipated growth, in five year increments, over the next 20 years. We will validate that the requirements of Title VI and related authorities that include Executive Order 12898, Environmental Justice, are considered and applied in all implementation/operation planning stages in Phase I. We will also document its compliance with the applicable requirements of Title VI and Environmental Justice as they pertain to this project.

Task 2.2: Funding Opportunities

We will identify and document funding opportunities for transit improvements, funding sources for special-equipped vehicles, and equipment for the transport of special needs populations. Sources of funding will include the FTA Section 5311 Formula Grants for Rural Area Program, Section 5310 Enhanced Mobility for Seniors and Individuals with Disabilities Formula Program, the FTA's new Section 5312 Mobility on Demand (MOD) "Sandbox" Demonstration Program, Temporary Assistance for Needy Families (TANF), and other funding available through local and Tribal sources, as well as possible public-private partnership opportunities. The study will address the issue that different federal funding sources are applicable to urban areas such as Phoenix, and that sharing funds from different sources is not permitted.

Task 2.3: Public Outreach

We will conduct four public meetings (Globe/Miami, Payson/Star Valley, San Carlos, Canyon Day/Whiteriver); one two-hour session in the afternoon/evening. At these meetings, existing and future conditions and preliminary issues will be presented to the public to seek their input. ***We will also coordinate with the stakeholders to ensure Title VI groups are aware of the public meetings.*** We will develop meeting graphics including display boards, handouts, and a PowerPoint presentation. CAG will provide a translator if needed. A summary of the public involvement activities will be incorporated into *Working Paper 1: Feasibility Review*.

Task 2.4: Feasibility Review Report

We will prepare a Feasibility Review document incorporating the findings from Tasks 1 and 2. The document will include:

- ▶ Site analysis including current and future conditions
- ▶ Forecast of future conditions and deficiencies
- ▶ Summary of public and stakeholder involvement including a brief Title VI summary report
- ▶ Phased Gila and Pinal County transit service profile with recommendations concerning feasible elements for implementation
- ▶ Summary of funding opportunities and constraints

The draft Feasibility Review report will be distributed to the TWG for review and comments. Revisions and comments on the draft report received from the TWG will be incorporated into a Final Feasibility Review document.

PRODUCTS & MEETINGS:

- ▶ **Working Paper 1: Feasibility Review**
- ▶ **Four Public Open Houses:** Globe/Miami, Payson/Star Valley, San Carlos, Canyon Day/Whiteriver; Two-hour afternoon/evening session
- ▶ **Public Meeting Material:** Jacobs will develop handouts and display Boards and present at the public meetings. Jacobs will develop survey forms that will be provided to each individual agency to be distributed at special events such as rodeos and community events
- ▶ **Website:** CAG will host project website and Jacobs will provide content including working papers and other project information. Jacobs will setup SurveyMonkey or similar tool to conduct an online survey.
- ▶ **TWG Meeting**

PHASE 2: IMPLEMENTATION PLAN

Task 1: Develop a Regional Transit Implementation Plan within the Study Area

Task 1.1: System Operating Plan

- ▶ **New Routes and Schedules.** We will develop a draft system operating plan that will include phased implementation for each of the five-year time horizons. The operating plan will include proposed days of operation, hours of service, additional route alignments, and candidate stop locations. A management and maintenance plan will include suggestions for driver training and scheduling and vehicle storage and maintenance. Initial service to be implemented in the near-term will be recommended, together with phased addition and expansion of services as time horizons or demographic thresholds are reached. These recommendations will be documented in the Operating Plan section of the Draft Implementation Plan.
- ▶ **Paratransit Service.** We will inventory and describe existing paratransit service providers within the study area. We will incorporate transit demand projections developed in Phase I and will assess unmet needs. We will incorporate demand-response transit service unmet needs in the overall draft transit plan, including an examination of complementary paratransit service that could be funded through FTA Section 5310 as well as the operation of deviated fixed route service to address demand-response needs. The Paratransit Service element will be incorporated in the Draft Implementation Plan.

Task 1.2: System Budget

Activities under this task will include:

- ▶ **Budget.** Develop the elements that comprise a budget for the draft transit system. We will provide detailed information with respect to transit system needs including the type(s) of vehicles recommended, the passenger capacities of the vehicles, the number of each type required for the fleet, the type of fuel used, and recommended vehicle amenities. The capital costs of the vehicle fleet will be estimated. The number of transit stops, bus pull-outs, and other route elements will be calculated, together with the capital cost for each.
- ▶ **Costs.** Estimate the costs of operating, maintaining, and administering the recommended transit system, considering the total annual vehicle hours and vehicle miles required to serve the proposed route(s) that comprise the system. The total rate per hour for operating, maintaining, and administering the system will be calculated. These cost estimates will include the provision of vehicle storage, maintenance, and fueling facilities.
- ▶ **Fare Structure.** Develop a candidate fare structure for the additional routes and will calculate the annual estimated fare revenues based on the structure. The fare structure will include youth, senior, and student discounts, as well as monthly passes, based on best practices of peer agencies. Zone fares based on distance traveled will be evaluated. The anticipated farebox recovery and required public subsidy that would result from the fare structure will be presented.
- ▶ Best practices of peer agencies with respect to advertising revenue deriving from the operation of the system and its vehicles will be examined. We will provide a list of priority tasks for application to the FTA Section 5310 and 5311 programs.

Task 1.3: Strategy for Marketing Service

Activities under this task will include:

- ▶ **Strategies.** Develop strategies for encouraging the community to embrace the enhanced public transportation system, build public support, and create the political constituency needed to facilitate sustained funding.
- ▶ **Guidelines.** Develop guidelines for preparing promotional marketing campaign materials including press releases for print and electronic media, as well as display advertising. We will document a strategy for introducing the service that could include public tours of the vehicles and system facilities and presentations designed to educate the community, including the schools, business community, and others of the benefits of using (and encouraging others to use) the new service.

Task 1.4: Draft Implementation Plan

We will submit an Implementation Plan Draft Report comprised of the detailed documentation of the result of Phase II to the TWG and CAG project manager.

PRODUCTS & MEETINGS:

- ▶ **Draft Implementation Plan**
- ▶ **TWG Meeting**
- ▶ **Stakeholder Interviews:** One full day of stakeholder interviews. Stakeholders will be divided into focus groups. WebEx/Call-in option will be provided. For stakeholders unable to attend in-person, Jacobs will follow up with a phone call

Task 2: Phase 2 Public Outreach

Task 2.1: Public Meetings

Activities under this task will include:

- ▶ We will conduct four public meetings (Globe/Miami, Payson/Star Valley, San Carlos, Canyon Day/Whiteriver); one two-hour session in the afternoon/evening. ***We will also coordinate with the stakeholders to ensure Title VI groups are aware of the public meetings.*** Details of the *Draft Implementation Plan*, as approved by the TWG, will be presented to the public. Electronic summaries of the plan will also be provided on the CAG's web site for downloading and review by study area residents with internet access.
- ▶ Working with CAG staff, we will attempt to confirm that all the public meetings associated with this project are accessible for those possessing limited proficiency in the English language as well as those with mobility limitations—an important population of transit-dependent persons. We will ensure that all interested stakeholders and members of the public understand the goals and objectives of the study, the options being assessed for routes and services, the methodologies used for estimating ridership, the benefits that the additional transit services will bring to the community, and the need for additional funding. CAG will provide a translator if needed. We will compile a brief Title VI compliance report.
- ▶ We will prepare and present a PowerPoint summary of the plan, provide display boards and handouts for the public, and conduct a question and answer session. CAG will translate the public meeting materials into other languages, if needed. We will document the input from the meetings for further discussion with

the TWG and inclusion in the Final Feasibility and Implementation Plan. We will review the final public feedback with the TWG and modify the proposed system configuration and schedule based on public feedback and consensus by the TWG.

Task 2.2: Final Implementation Plan

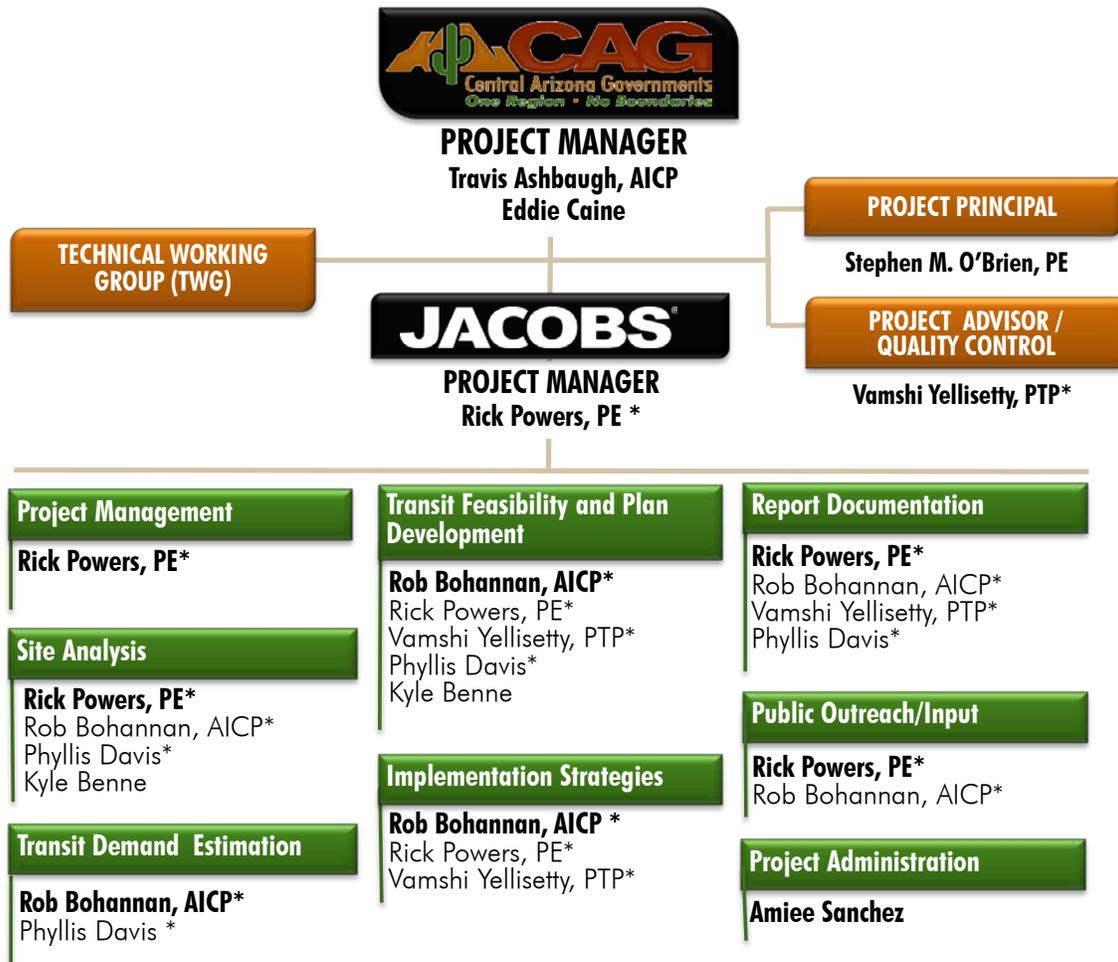
We will revise the Draft Implementation Plan based on feedback from the public meetings and input from the TWG and will submit the Final Implementation Plan to the CAG Project Manager and the TWG for final adoption. We will work with the CAG project Manager to facilitate the adoption of the report by the CAG Transportation Technical Advisory Committee (TTAC), CAG Management Council, and CAG Regional Council.

PRODUCTS & MEETINGS:

- ▶ **Four Public Open Houses:** Globe/Miami, Payson/Star Valley, San Carlos, Canyon Day/Whiteriver; Two-hour afternoon/evening session
- ▶ **Public Meeting Material:** Jacobs will develop handouts and display Boards and present at the public meetings. Jacobs will develop survey forms that will be provided to each individual agency to be distributed at special events
- ▶ **Website:** CAG will host project website and Jacobs will provide content including working papers and other project information. Jacobs will setup SurveyMonkey or similar tool to conduct an online survey.
- ▶ **Title VI Compliance Report**
- ▶ **Final Implementation Plan**
- ▶ **TWG Meeting**
- ▶ **Presentation to CAG TTAC (by Jacobs); Presentation to Management Committee (by Jacobs); Presentation to Regional Council (by Jacobs)**
- ▶ **Presentations to City/Town Councils (by CAG):** Globe/Miami, Payson/Star Valley, San Carlos Apache Tribe, White Mountain Apache Tribe

PROJECT TEAM

The Project Team's structure, staff, and roles are outlined in the organizational chart below.



Bold = Task Leader * = Key Team Member

PROJECT SCHEDULE

The study schedule is illustrated below. The proposed schedule is subject to change based on instruction from the CAG PM.

