

AGREEMENT NO. _____

TEMPE/MESA STREETCAR SYSTEM STUDY

FUNDING AGREEMENT

**BETWEEN THE CITY OF MESA
AND
VALLEY METRO RAIL, INC.**

THIS TEMPE/MESA STREETCAR SYSTEM STUDY FUNDING AGREEMENT ("Agreement") is made and entered into this ____ day of _____, 20____, by and between the CITY OF MESA, a municipal corporation duly organized and existing under the laws of the State of Arizona (hereinafter referred to as "COM" or "CITY") and VALLEY METRO RAIL, INC., a non-profit corporation, duly organized and existing under the laws of the State of Arizona (hereinafter referred to as "VMR"). COM and VMR are collectively referred to as the "Parties."

RECITALS

WHEREAS, VMR was formed by COM and other Member Cities to design, build, operate and maintain the Light Rail Transit System ("LRT System" or the "System"), and,

WHEREAS, VMR is an Arizona non-profit corporation, organized pursuant to A.R.S. § 11-952 which authorizes cities and other public agencies to form a nonprofit corporation to jointly exercise their powers, and under the Urban Mass Transportation Systems Act and more specifically A.R.S. § 40-1152 which authorizes governmental entities to jointly form a nonprofit corporation to provide public transportation services; and,

WHEREAS, COM desires that VMR perform the TEMPE/MESA STREETCAR SYSTEM STUDY ("STUDY") in a transit corridor partially located within the COM, and,

WHEREAS, the Parties agree that the work specified herein is for an analysis concerning a possible streetcar extension and not necessarily for an extension itself; and,

WHEREAS, the Parties have agreed to expend a sum not to exceed THREE HUNDRED THOUSAND DOLLARS (\$300,000) for VMR's expenses incurred in conducting the STUDY, and,

WHEREAS, the purpose of this Agreement is to establish the Parties' duties and responsibilities with respect to the transfer of dollars from COM to VMR to fund the STUDY, and,

WHEREAS, COM has been authorized by its City Council to proceed with this Agreement and VMR has been authorized by its Board of Directors to proceed with this Agreement;

AGREEMENT

NOW THEREFORE, for and in consideration of the mutual covenants and considerations herein contained, it is agreed by the Parties as follows:

SECTION 1. DEFINITIONS

The following capitalized terms shall have the following meaning when used in this Agreement, unless a different meaning is clearly intended:

“VMR” means Valley Metro Rail, Inc., a non-profit corporation, duly organized and existing under the laws of the State of Arizona.

“COM” means the City of Mesa, a political subdivision of the State of Arizona.”

“Effective Date” means the date on which _____ rights granted hereunder become operative, as specified in Section 2 hereof.

“Force Majeure” means any event which: (i) causes either party to be unable to perform under this agreement; and (ii) is outside the reasonable control of the party unable to perform and could not be avoided by such party through the exercise of due care. Force Majeure events include, without limitation: terrorists, earthquakes, fires, floods, tornadoes, wars, labor strikes or similar accidents, disputes or similar events.

SECTION 2. SCOPE OF WORK

VMR shall oversee and manage the work of the consultant in performing tasks assigned to the consultant as indicated in Exhibit "A". VMR shall also diligently pursue completing all tasks per the schedule listed in Exhibit "A". Such work shall be performed by VMR's own employees and/or by competent and professional consultants and/or sub-consultants and included within the Project costs that shall not exceed THREE HUNDRED THOUSAND DOLLARS (\$300,000) for VMR's expenses incurred in conducting the STUDY.

The Study is being funded by COM using local funds for the sum of money indicated in Exhibit "A" as compensation for VMR's expenses incurred in conducting the STUDY.

SECTION 3. COMPENSATION

As soon as reasonably practicable after the effective date of this Agreement, COM shall set aside the sum of THREE HUNDRED THOUSAND DOLLARS (\$300,000) to pay expenses related to this Agreement after they are incurred by VMR. Based on invoices it has received and expenses it has incurred during the completion of this study, VMR shall

submit a quarterly invoice to COM setting forth the amount of funds to be paid. Each of VMR's invoices shall be accompanied by an itemization of monthly expenses incurred during that month and a monthly progress report. As soon as reasonably practicable thereafter, COM shall review VMR's invoice, itemization of expenses and report and pay to VMR all approved expenses from the amount annually set aside; any unapproved expenses shall be administratively resolved and are subject to the Section 13, issue resolution process. Provided, however, that no payment shall be made in the absence of an accompanying itemization of expenses and the quarterly progress report.

VMR shall amend its current annual budget to include this STUDY as an item therein and shall include the remainder of the study costs in its future annual budgets.

SECTION 4. VMR'S OBLIGATIONS

A. VMR shall be responsible for proper accounting, internal control, disbursement and financial reporting of any and all funds received and disbursed from COM to VMR. VMR shall also provide periodic financial updates to COM on the expenditure of funds as well as a final reconciliation of expenditures within sixty (60) days of the completion of the STUDY.

B. VMR shall: (a) maintain such books and records as may be necessary to provide a complete and accurate understanding of all expenditures pertaining to this STUDY; (b) all such expenditures shall be supported by sufficient documentation to assure accurate accounting and appropriate expenditure; (c) all such books and records shall be kept and maintained in accordance with generally accepted accounting principles; and, (d) provide proper internal oversight of this STUDY and of the expenses chargeable to it.

C. VMR agrees to submit Quarterly Reports to the COM as now or hereafter required as part of the Funding Agreement. Quarterly reports are due on or before the 15th of the month following the end of the quarter, (i.e., October 15, January 15, April 15 and July 15). The Quarterly Report should set forth: (a) both project progress and an itemization of expenditures for the previous quarter/interval; and, (b) both projected project progress and projected itemized expenditures for the quarter/interval for the following quarter/interval. Within sixty (60) days of completion of the STUDY, VMR shall complete a Project Completion Report, which includes a summary of the project and finances. The report shall also contain a statement that all project work has been completed to VMR's satisfaction and in compliance with all rules, regulations and laws.

SECTION 5. COM'S OBLIGATIONS

- A.** COM is obligated to pay THREE HUNDRED THOUSAND DOLLARS (\$300,000) to fund the STUDY pursuant to Exhibit "A".
- B.** COM will pay VMR invoices within 30 days of receipt and notify VMR promptly of any problems or concerns with the invoices as submitted for payment.

SECTION 6. TERM OF AGREEMENT

This Agreement shall be operative for a term of twenty-four (24) months per the schedule for completing the STUDY as indicated in Exhibit "A" or the completion of the STUDY. The Parties do not intend that the term of this Agreement shall exceed any limitation imposed by law, including, without limitation, the laws of the State of Arizona, and agree to comply with any applicable requirements of such laws in connection with any renewal of the term of this Agreement.

SECTION 7. EFFECTIVE DATE

The Effective Date of this Agreement is the date first set forth above.

SECTION 8. TERMINATION

This Agreement may be terminated for the convenience of COM upon sixty (60) days prior written notice delivered to VMR. Either party may terminate for default immediately after the conclusion of the notice period as set forth in Section 12.

SECTION 9. AGREEMENT NON-ASSIGNABLE

VMR may not assign or otherwise transfer any of its rights or obligations hereunder to a third Party without the express prior written consent of COM, which may be granted or withheld by COM in its sole and absolute discretion. Any assignment or transfer without such prior written consent shall be void.

SECTION 10. INDEMNIFICATION

Except for claims arising solely and exclusively from the negligent or willful acts or omissions of COM, its officers, officials, agents or employees (hereinafter referred to as "Indemnatee"), VMR shall indemnify, defend, save and hold the Indemnatee harmless from and against any and all claims, actions, liabilities, damages, losses, expenses and costs (including court costs, attorneys' fees and costs of claim processing, primary loss investigation and litigation) (hereinafter referred to as "Claims") for bodily injury or personal injury (including death), loss or damage to tangible property and economic or financial loss of any character or any nature: (1) arising under this Agreement, or (2) caused, or alleged to be caused, in whole or in part, by the negligent or willful acts or omissions of VMR or any of its owners, officers, directors, agents, contractor or employees, including employees from the CITY assigned to work full time for VMR.

It is the specific intent of the Parties to this contract that the Indemnatee shall, in all instances except for loss or damage resulting from the sole and exclusive negligence of the Indemnatee, be indemnified against all liability, loss or damage of any nature whatever for or on account of any injuries to or the death of any person or damages to or the destruction of property belonging to any person, or for economic or financial losses arising out of or in any way connected with the performance of this Agreement.

It is agreed that VMR will be responsible for primary loss investigation, defense and judgment costs.

SECTION 11. INSURANCE

VMR will maintain in force the insurance program approved the by VMR Member Cities' Risk Managers and included in VMR's fiscal year budgets.

SECTION 12. DEFAULT

Either Party shall be deemed in default under this Agreement upon the failure of such Party to observe or perform any material covenant, condition or agreement on its part to be observed or performed hereunder, and the continuance of such failure for a period of thirty (30) days after written notice by the other Party, as required herein. Such notice shall specify the failure and request it be remedied, unless the Party giving notice agrees in writing to an extension of the time period prior to its expiration. However, if the failure stated in the notice cannot be corrected within the applicable period, it will not give rise to a default hereunder if corrective action is instituted within the applicable period and diligently pursued until the failure is corrected. In the event of a default hereunder, the non-defaulting Party may have a breach of contract claim and remedy against the other in addition to any remedy provided or permitted by law; provided, however, that no remedy that would have the effect of amending any provisions of this Agreement shall become effective without the formal amendment of this Agreement.

SECTION 13. ISSUE RESOLUTION

Any dispute arising out of the interpretation of any provision of this Agreement, any policy matter or the determination of an issue of fact, which dispute is not resolved at staff level, shall be referred to VMR's Chief Executive Officer and a representative designated by the COM City Manager. If, after good faith negotiations aimed at reaching an amicable solution, a dispute cannot be resolved, the dispute shall be presented to the VMR Board of Directors for resolution. If not resolved at this level, the dispute may be brought before a court of competent jurisdiction in Maricopa County, Arizona.

SECTION 14. AUDIT

All books, accounts, reports, files and other records relating to this Agreement under the custody or control of VMR or its contractors shall be subject, at all reasonable times, to inspection and audit by COM for five (5) years after completion of this Agreement. Such records shall be produced at VMR offices as and when requested by COM.

SECTION 15. NOTICE

Any notice, consent or other communication ("Notice") required or permitted under this Agreement shall be in writing and either delivered in person, sent by facsimile transmission, deposited in the United States mail, postage paid, registered or certified mail, return receipt requested, or deposited with any commercial air courier or express service addresses as follows:

If intended for VMR:

Valley Metro
Attention: General Counsel
101 N. 1st Avenue, Suite 1300
Phoenix, AZ 85003

and to:

Valley Metro
Attention: Director of Finance
101 N. 1st Avenue, Suite 1300
Phoenix, AZ 85003

If intended for COM:

City of Mesa, Arizona
Office of the City Manager
P.O. Box 1466
Mesa, Arizona 85211

and to:

City of Mesa, Arizona
Public Transit Department
300 East Sixth Street
Mesa, Arizona 85211

Notice shall be deemed received at the time it is personally served or, on the day it is sent by facsimile transmission, on the second day after its deposit with any commercial air courier or express service, if mailed, ten (10) days after the notice is deposited in the United States mail as provided. Any time period stated in a Notice shall be computed from the time the Notice is deemed received. Either Party may change its mailing address, facsimile (FAX) number or the person to receive notice by notifying the other Party as provided in this Section.

Notice sent by facsimile transmission shall also be sent by regular mail to the recipient at the above address. The requirement for duplicate notice is not intended to change the effective date of the Notice sent by facsimile transmission.

SECTION 16. AMENDMENT

This Agreement may be modified or amended only by a written document executed by both VMR and COM, approved as to form by the City Attorney, and filed with the City Clerk. Such document shall expressly state that it is intended by the Parties to amend specifically identified terms and conditions of this Agreement.

SECTION 17. APPLICABLE LAW AND LITIGATION

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Arizona. Any and all litigation between the Parties arising from this Agreement shall be litigated solely in the appropriate state court located in Maricopa County, Arizona.

SECTION 18. NON-WAIVER

No covenant or condition of this Agreement may be waived by any Party, unless done so in writing. Forbearance or indulgence by any Party in any regard whatsoever shall not constitute a waiver of the covenants or conditions to be performed by the other.

SECTION 19. SEVERABILITY

Any provision of this Agreement that is prohibited or unenforceable under the laws of the State of Arizona shall be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof.

SECTION 20. BENEFIT AND BINDING EFFECT

The terms and provisions of this Agreement shall inure to the benefit of and are binding on VMR and COM and their respective successors and permitted assigns.

SECTION 21. SURVIVAL

The indemnifications and limitations on liability provided in this Agreement shall have full force and effect notwithstanding any other provisions of this Agreement and shall survive any termination or expiration thereof.

SECTION 22. FURTHER ASSURANCES

The Parties hereto shall execute such other documents and take such other actions as may be reasonably necessary or proper to achieve the intent and purposes hereof.

SECTION 23. CONFLICTS OF INTEREST

All Parties hereto acknowledge that this Agreement is subject to cancellation by COM pursuant to the provisions of Section 38-511, Arizona Revised Statutes.

SECTION 24. RELATED AGREEMENTS

This Agreement, together with the exhibits, instruments and other documents required to be executed and delivered in connection herewith is intended to be read in conjunction with any and all prior agreements and understandings of the Parties with regard to the subject matter hereof.

SECTION 25. CONSTRUCTION AND INTERPRETATION OF AGREEMENT

This Agreement, and each of its provisions, exhibits, terms and conditions, has been reached through negotiations between the Parties. Accordingly, each of the Parties expressly acknowledges and agrees that this Agreement shall not be deemed to have been authored, prepared or drafted by any particular Party, and that the rule of construction that resolves ambiguities against the drafting party shall not be employed in the interpretation of this Agreement.

SECTION 26. THIRD-PARTY BENEFICIARIES

The Parties do not intend to create rights in or remedies to any third party as a beneficiary of this Agreement or of any duty, covenant, obligation or undertaking established under this Agreement.

SECTION 27. POLICE POWER

The Parties acknowledge the right vested in COM pursuant to general law to exercise its police power for the protection of the health, safety and welfare of its constituents and their properties. Nothing in this Agreement shall be construed as precluding COM from exercising such powers in connection with the subject matter hereof.

SECTION 28. COMPLIANCE WITH THE IMMIGRATION REFORM AND CONTROL ACT of 1986 (IRCA) and with A.R.S. § 23-211 – § 23-214.

VMR understands and acknowledges the applicability of IRCA and of § 23-211 through § 23-214, Arizona Revised Statutes (A.R.S.), to it. VMR shall comply with IRCA and with A.R.S. § 23-211 through § 23-214 in performing under this Agreement. To ensure that VMR and its subcontractors complying with the provisions of this Section, CITY shall have the right to inspect the personnel and related records and papers of VMR and of its subcontractors pertaining to individuals performing work under this Agreement.

Further, CITY is prohibited by A.R.S. § 41-4401 from awarding an Agreement to any contractor who fails, or whose subcontractors fail, to comply with A.R.S. § 23-214(A). For this reason, VMR shall ensure that both it and each of its subcontractors are in compliance with the requirements of A.R.S. § 23-214(A). In addition, both VMR and each of VMR's subcontractors shall warrant their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with A.R.S. § 23-214(A).

A breach of any of the provisions of this Section shall be deemed a material breach of this Agreement and is subject to penalties up to and including termination of the Agreement.

SECTION 29. INCORPORATION OF EXHIBITS

This Agreement in its entirety includes Exhibit "A", which is, by this reference, incorporated herein and made part hereof as though fully set forth. The Exhibit of this Agreement is as follows:

EXHIBIT "A" Scope of Work

IN WITNESS WHEREOF, the Parties have each executed this Agreement as of the date first set forth above.

VALLEY METRO

Scott W. Smith, Chief Executive Officer

By: _____

APPROVED AS TO FORM:

By: _____
Michael J. Minnaugh
General Counsel

CITY OF MESA

Christopher J. Brady, City Manager

By: _____

By: _____
City Clerk

APPROVED AS TO FORM:

By: _____
City Attorney

EXHIBIT A – SCOPE OF WORK TEMPE/MESA STREETCAR SYSTEM STUDY

Project Background and Understanding

The City of Mesa and the City of Tempe are requesting an evaluation of potential future streetcar system extensions to serve key regional activity centers, downtowns, campuses, employment destinations and emerging multi-unit residential developments.

Following completion of the planning, environmental review and preliminary engineering efforts for the current streetcar project serving Downtown Tempe, this new effort will identify feasible future streetcar system extensions connecting downtown Tempe with points of interest and emerging transit corridors in Mesa. The City of Tempe has previously identified possible future streetcar system extensions, with particular interest to extend streetcar service along Rio Salado Parkway through the center of Arizona State University's (ASU) Novus Innovation District to Tempe Marketplace.

The cities of Mesa and Tempe are looking to Valley Metro to assist with the evaluation of other potential high-capacity transit corridors in each city. Immediately east of the Tempe Marketplace is the Riverview District in Mesa that includes Sloan Park and Wrigleyville West, a rapidly re-developing area of Mesa that attracts thousands of trips daily. Dobson Road has shown strong potential as a north-south transit corridor serving west Mesa, with the potential to connect to light rail and three major regional land uses along Southern Avenue including the Fiesta Mall, Mesa Community College and Cardon Children's Medical Center.

This planning study is organized around a variety of topics previously identified by staff from the cities of Mesa and Tempe. Working with Valley Metro's staff and consultants under Valley Metro's Planning and Community Relations Support Services contract (hereafter "Project Team"), this study will examine the following:

- Evaluate future extensions of the Tempe Streetcar serving the City of Tempe and the City of Mesa.
 - Identify possible future streetcar alignments, stop locations and system's needs (e.g., TPSS, signal buildings, operations and maintenance facility).
 - Identify potential constraints or risks to future systems (e.g., overpass of Loop 101 freeway over Rio Salado Parkway; off-wire and pantograph going up and down routinely as a maintenance issue).
- Summarize potential ridership, capital and operating costs, planning and environmental constraints (e.g., traffic, parking, sensitive noise/vibration areas, ROW locations) and community/regional economic impacts.
- Consider overall coordination with transportation plans and other transportation projects identified by Mesa and Tempe:
 - Identify other strategic infrastructure improvements and investments that could be made in the interim to better position the build-out of priority streetcar alignments in Mesa and Tempe.

- Assess land use changes that may help support streetcar service investments in the study area.
- Obtain input internally from Valley Metro, to include lessons learned and other relevant input relating to the current Tempe Streetcar Project:
 - Operations: operational needs, potential challenges, and desires.
 - Design: opportunities for design features to improve system function (e.g. exclusive trackway segments).
 - Safety: consider future risks to the system and strategies to minimize risks.
- Outline a potential “program of projects” summary level schedule and potential funding sources (Prop 500 and federal resources).

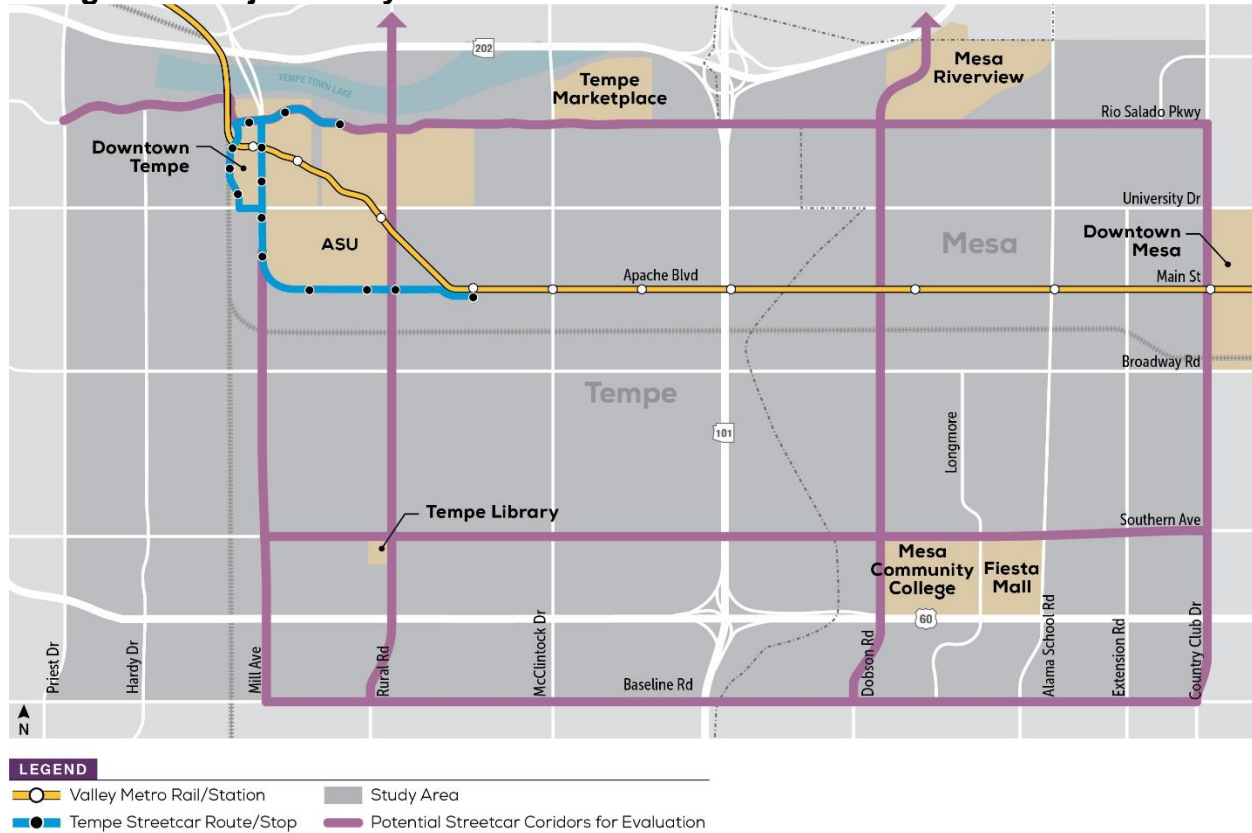
Goals and Definitions

This study is intended to identify a future streetcar system to serve the east valley communities of Mesa and Tempe as a means of providing high-capacity transit options to this region. While the study is to be conducted over the course of two (2) years, the study outcomes are intended to inform a future regional funding initiative for transit capital investments in both cities and identify steps to develop the transit components of a multimodal system. A “feasibility” study refers to a planning study to identify opportunities, constraints, demand for public transportation service, transit demand analysis, connections to other regional transit services and high-level costs for providing the service.

Study Area

For purposes of this planning study, the study area will be divided geographically into two parts: Tempe and Mesa. The project study area is defined as the area bounded by State Route 202 (Loop 202) to the north, Country Club Road to the east, Baseline Road to the south, and Priest Drive to the west. However, given development patterns north of the Rio Salado River and Tempe Town Lake, the study area may include consideration of possible future streetcar service north of the river. Figure 1 displays the study area and potential streetcar corridors identified for project evaluation.

Figure 1. Project Study Area and Potential Streetcar Corridors for Evaluation



Scope of Work

The following is a list of scope tasks outlining the work program for this study:

Task 1: Project Management

Task Objective: This task will include the Project Team's project management and project control activities and contract administration.

Deliverables: The Project Team will prepare an internal Project Management Plan (PMP) to guide the team through the entire study process. The PMP includes a refined scope of work, project schedule and staffing plan. The PMP will identify internal quality control procedures to provide for excellence in technical analysis, accuracy of published findings and readability of deliverables. The Project Team shall require quality control checks at several levels in order to produce products that are accurate, complete, and easy to read and understand; these checks will help keep the project on-schedule and within budget. The Project Manager will review all products prepared or reviewed by persons responsible for individual subtasks before they are formally submitted to the cities. The title page of each deliverable will contain the names of the principal authors and reviewers responsible for the report to demonstrate that a quality product was prepared by qualified professionals. This task will also include labor hours for the Project Principal, Project Manager and Project Control staff for management and related activities. Monthly progress reports will demonstrate the activities conducted by the Project Team toward achievement of

the specified tasks. The progress reports will accompany submitted monthly invoices per standard billing practice currently.

Task 2: Service Goals, Objectives, and Evaluation Criteria Definition

Task Objective: Several possible streetcar system corridors exist within the Study Area, and each corridor has different existing conditions that present opportunities and challenges. In order to objectively evaluate different potential streetcar corridors from one another, a set of service/performance goals, objectives and criteria are necessary. The intent of this task is to identify the goals for future service along with the criteria by which the identified corridors (discussed in Task 3) will be screened in subsequent phases to identify the optimal corridor(s) for advancement into conceptual design, and to prioritize potential alignments within respective corridors for implementation.

The Project Team will also develop a systems-level purpose and need statement that will provide a foundation for review and analysis of the potential streetcar corridors identified during the study. The value of a purpose and need statement goes beyond simply defining and justifying the project; a defensible purpose and need statement is the backbone of the project, outlining the criteria by which alternatives are judged to identify the best and most appropriate transit investment capable of the greatest return on investment. The strength of the purpose and need statement also legitimizes the study and strategically positions potential projects for future funding from the cities, project stakeholders or other governmental partners.

To assist with establishing the direction of the study goals, objectives and evaluation criteria, a Project Management Team (PMT) will be established to provide technical and policy-level guidance throughout the study process. The PMT will be comprised of Valley Metro planning staff and appropriate staff from the cities of Tempe and Mesa. The PMT will meet on a bi-monthly basis to review progress, evaluate alternatives and provide additional direction to the Project Team. The PMT may be called upon to provide guidance on other issues that arise during the course of the study. The PMT could also include specific stakeholders representing business or civic interests. Tasks for this group may include:

- Provide guidance on project goals and objectives, and review study approach.
- Provide input on the future alignments identified.
- Provide input on land uses and suggested land use changes to improve service productivity.
- Review and comment on the findings of the study and recommended actions or next steps to be taken to improve transit in the Study Area (see Figure 1).

Deliverables: The Project Team will prepare a technical memorandum that outlines the goals, objectives and evaluation criteria for the streetcar corridor alternatives developed in Task 3, based on input received from the PMT. This technical memorandum will also outline the systems-level purpose and need statement discussed above.

Task 3: Data Collection, Streetcar Corridor Identification, and Screening Streetcar Corridor Alternatives

Task Objective: Task 3 is comprised of four activities, beginning with the collection of baseline transit propensity data, identification and confirmation of streetcar corridor alternatives and then followed by the screening of the identified corridors with the intended goal of identifying the optimal streetcar corridor alternative(s) for advancement into conceptual design.

- **Task 3.1: Data Collection**

- The purpose of this subtask is to establish the existing conditions within the study area for corridors where a streetcar may be considered. Working with Valley Metro's GIS lead, the Project Team will collect all appropriate data within the project Study Area to assist in evaluating realistic alternatives. This may include demographic information, right-of-way, utilities, land use and zoning, traffic conditions (current and future), existing transit ridership, transit propensity, major destinations, projected growth, etc. This task will also include the preparation of appropriate base maps to assist in the corridor identification, definition and evaluation process.

- **Task 3.2: Identify Corridor Alternatives**

- Based in part on the criteria identified in Task 2, the Project Team will identify streetcar corridor alternatives and work with agencies and stakeholders to develop recommendations for various alternatives to be carried forward for a more detailed definition. Other streetcar corridor options may be added or explored. The Project Team will work with Mesa and Tempe staff to define the alternative(s) recommended to be evaluated.

- **Task 3.3: Ridership Forecasting**

- The Project Team will provide a travel demand forecast for the streetcar corridor alternative(s) carried through Task 4 to assess ridership and possible user benefits using the latest version of the FTA's STOPS model.

- **Task 3.4: Initial Screening of Alignment Alternatives**
 - The Project Team will conduct an initial screening of each corridor alternative identified in Task 3.1 and work with the PMT to develop recommendations for various alternatives to be carried forward for a more detailed definition. This screening will be based on an initial set of criteria defined through input received from the PMT, and will consider how well the various alternatives meet the goals and objectives of the study area and how they compare against evaluation criteria for addressing the Purpose & Need. Streetcar corridor alternatives will be scored, with the top five alternatives advancing to the second screening. Those that remain will still be identified for consideration as potential future HCT corridors, but given a lower priority for implementation.
- **Task 3.5: Second Screening of Corridor Alternatives**
 - Task Objective: Following completion of the initial screening, a second screening of the top five performing corridors that advanced will be conducted. This second screening will subject each corridor to a more rigorous review process based on the criteria established in Task 2, along with input from the PMT. The intent of this process is to identify and prioritize the top performing streetcar corridor alternative(s) for advancement into conceptual design (Task 4).

Deliverables: The Project Team will produce a technical memorandum outlining the data collection process, development of corridor alternatives, and the initial and secondary screening of the alternatives to document the process used to identify the top performing alternatives for advancement into conceptual design.

Task 4: Conceptual Design of Alternatives

Task Objective: Based on the outcome of Tasks 1-3, the Project Team will refine a conceptual level definition of alternatives based on previous work completed. The Project Team will prepare a conceptual level definition for up to three corridor alternatives. This definition will include streetcar alignment conceptual level design drawings, proposed station locations, intermodal transfer stations, right-of-way requirements and identification of anticipated impacts. Identification of major underground and overhead utilities will be initiated during this task to avoid subsequent problems that may be associated with some alternatives due to the need to relocate major utilities.

At a conceptual design level, the Project Team will define:

- Alignment
- Stop locations
- Traffic configuration
- On-street parking
- Turn lane requirements

- Incorporate known/available engineering data (e.g. buried utilities, future land developments)
- Operating plan
- Bus interface

Deliverables: The Project Team will prepare conceptual level CAD drawings in roll-plot print form and digital files illustrating the planned trackway location, stop locations and other applicable streetcar system facilities. A technical memorandum will accompany the drawings that provides organization of the drawings by alternative, as necessary, and that highlights specific features that require further review or attention at later stages of the planning and design process.

Task 5: Preliminary Operating Plan and Capital and Operating Cost Estimates

Task Objective: The purpose of this task is to develop capital and operating costs based on the preliminary alignment concepts.

- **Task 5.1: Capital Cost Estimate(s)**

The Project Team will work with city staff to review the concept designs and the assumptions necessary to provide order-of-magnitude capital cost estimates for up to three alternatives. Capital cost estimates are derived from several factors, but at this stage in project design it is unlikely that all the factors necessary for a reliable capital cost estimate will be available.

Therefore, the capital cost estimates derived shall be provided in cost ranges. The Project Team shall develop a comprehensive capital cost estimate for each alternative to include items such as site preparation; maintenance facility and yard upgrades; streetcar trackway or roadway improvements; stations; equipment; vehicles; structures; streetcar traction power supply; signaling; train control; communications; safety; and right-of-way.

- **Task 5.2: Operating Plan and Cost Estimates(s)**

The Project Team will work with the Valley Metro Operations and Finance divisions to prepare a summary operating plan and operating cost estimate for up to three corridor alternative(s) advanced into conceptual design (Task 4), based on the proposed operating plan, fares and other required information developed in previous tasks. For this planning effort, the Tempe Streetcar fare structure will be assumed.

Deliverables: The Project Team will prepare a technical memorandum documenting the design information and assumptions will be included in a Basis of Capital Cost Estimate for each corridor alternative. This will provide an initial cost log that future planning and design efforts can review and maintain in order to track the development of the cost estimates and how costs were determined. The Project Team will also prepare a technical memorandum that summarizes the preliminary operating plan and operating cost estimate for each alternative advanced into conceptual design. This operating plan will include service frequency and service span assumptions.

The report will contain preliminary capital and operating and maintenance cost ranges for each streetcar alternative advanced into conceptual design, including the corresponding level of equipment needs and system miles. The report will also detail the requirements for maintenance staff, equipment and facilities. Costs will be reported using the FTA standard cost categories (SCC) worksheet.

Task 6: Identify Potential Land Use Enhancements and Coordination with Planned and Programmed Transportation Investments

Task Objective: The purpose of this task is to review existing and planned land use and transportation programs for the cities of Mesa and Tempe to ensure compatibility with the proposed streetcar system alternative(s) previously outlined. Additionally, this task will also identify planned and/or programmed transportation investments in each city so as to identify potential issues, opportunities and avoid conflict between capital projects.

- **Task 6.1: Identification of Land Use Enhancements**

This study presents the unique opportunity to work with the cities of Mesa and Tempe to identify land use enhancements capable of supporting a major capital investment in public transportation such as streetcar. The study area for this project includes several developed urban corridors, but the implementation of a streetcar system provides an excellent opportunity for other public infrastructure improvements and land-side planning to foster community change desired by both cities. This subtask will seek to identify a list of undertakings the cities of Mesa and Tempe could consider along the identified streetcar corridors alternatives to improve the viability of the project corridors for both streetcar and urban development. This effort will include coordination with PMT members.

- **Task 6.2: Coordination with Planned and Programmed Transportation Investments**

This task will consider projects currently planned and/or programmed in the Capital Improvement Programs and city transportation plans in order to identify potential issues, opportunities and avoid conflicts between capital projects/programs.

Deliverables: The Project Team will prepare a technical memorandum documenting the findings of the potential land use enhancements and coordination with planned and/or programmed transportation improvements by both cities. As funding permits, visual simulations of potential development scenarios may be developed to help visualize potential land-side changes. The Project Team will provide relevant, concise information in graphic and tabular form when possible. The Project Team will use GIS when possible to take advantage of the accuracy and efficiencies of data in this format.

Task 7: Prioritization of Alternative Investments and Project Financing

Task Objective: The Project Team will develop a service development plan and implementation strategy for streetcar system investments that provides an initial prioritization list of streetcar alignment alternative investments and actions. Included with this:

- **Task 7.1: Prioritization of Alternatives**

Working with the PMT, the Project Team will develop a prioritization of projects list, inclusive of all alternatives outlined or other transit-supportive investment opportunities as outlined by the PMT. Prioritization of projects will consider the goals for service (Task 2), readiness for implementation (Task 3 and 4) and existing/planned/programmed transportation investments (Task 6). This task is in support of identifying projects for future regional transportation tax propositions.

- **Task 7.2: Project Financing**

The Project Team will prepare a summary of alternative financing mechanisms that may be used to help finance capital projects. This summary will outline the tradeoffs associated with different financing approaches, but is intended to outline the options available to both cities to advance the implementation of the streetcar system.

Deliverables: The Project Team will prepare two technical memorandums. The first a suggested priority list of streetcar alignment alternative investments and other applicable transit-supportive investments (as determined by consensus of the PMT), and the second a summary of potential project financing sources available.

Task 8: Final Report

Task Objective: A final report will be prepared that documents the assumptions, analyses conducted, and results of study and a list of potential actions the cities of Mesa and Tempe could take to prepare for future streetcar system extensions, including potential interim transit enhancements that build demand for priority streetcar alignments. Upon approval by the PMT, the Project Team will prepare a final report documenting the results of the planning study as set forth in the tasks above. The Project Team will also develop a MS PowerPoint presentation that presents the findings in summary form to the PMT.

Deliverables: Based on the technical memoranda prepared for the previous tasks, the Project Team will prepare a final report that details assumptions, data collected and used, and results of the study. A draft final report will first be published and provided to Valley Metro and PMT members for review and comment. Following receipt of comments, the Project Team will prepare the final report for publication anticipated to occur in spring 2020. One bound hardcopy report will be made available to all PMT members and a digital copy will be made available to Valley Metro for publication on the agency's website.

Task 9: Public Involvement

Task Objective: It is recognized that transparency of the planning process is crucial to building community and stakeholder support for the project. For purposes of this study, leadership of public involvement activities will begin with the cities of Mesa and Tempe, with support provided by Valley Metro and the Project Team as requested. The Project Team will provide graphic support and project information to Mesa and Tempe staff to assist in the preparation of publications, news releases, periodic newsletters, fact sheets or brochures that will be distributed to the public by City staff. The project team will support efforts to present the final report

recommendations with Tempe and Mesa city councils, Valley Metro Rail Board of Directors and MAG for consideration for further advancement.

Deliverables: The study will seek to coordinate with other planning efforts currently underway or that will begin during this study's duration. All outreach activities will be coordinated and communicated with Tempe and Mesa project team staff. This includes coordination with Fiesta District Alternatives Analysis public involvement and other planning and outreach efforts by both cities, Valley Metro and MAG. The Project Team may be asked to participate in presentations to city boards such as the Mesa Transportation Advisory Board (TAB) or the Tempe Transportation Commission (TTC) as well as meetings scheduled by either Valley Metro or the cities with interested agencies, community groups and the general public. The Project Team's activities may include interfacing with community members and providing additional staff support as needed for project-sponsored meetings and community events. The Project Team will provide support to city staff seeking action to advance the study's recommended preferred corridors via presentation to city councils. In addition, the Project Team will support the project Valley Metro Rail Board of Directors and MAG review process for study recommendations to advance to the Regional Transportation Plan and will provide MAG with periodic briefings and updates on the project's progress in monthly reports (as directed by Valley Metro).

Project Schedule

The following general project schedule for the study shows the projected timelines for each task identified in Section 2, with the timeline illustrated in Table 1. A detailed schedule will be developed and published with the PMP.

Table 1. Summary Project Schedule

Task		Schedule
1	Project Management	Continuous
2	Service Goals, Objectives and Evaluation Criteria Definition	Q3 – 2018
3	Data Collection, Streetcar Corridor Identification and Screening Streetcar Corridor Alternatives	Q3-Q4 – 2018
4	Conceptual Design of Alternative(s)	Q1-Q2 – 2019
5	Operating Plan and Capital and Operating Cost Estimates	Q3 – 2019
6	Identify Potential Land Use Enhancements and Coordination with Planned and Programmed Transportation Investments	Q4 – 2019
7	Prioritization of Alternative Investments and Project Financing	Q1 – 2020
8	Final Report	Q2 – 2020
9	Public Involvement	As Necessary

Project Budget

The project budget is not to exceed a total of \$600,000, and is outlined below. Table 2 provides a summary project budget. A detailed budget with staffing hours will be developed and published with the PMP.

Table 2. Summary Project Budget

Task	Description	Budget
1	Project Management Plan	\$10,000
2	Service Goals, Objectives, and Evaluation Criteria Definition	\$50,000
3	Data Collection, Streetcar Corridor Identification, and Screening Streetcar Corridor Alternatives	\$200,000
4	Conceptual Design of Alternatives	\$50,000
5	Operating Plan and Capital and Operating Cost Estimates	\$145,000
6	Identify Potential Land Use Enhancements and Coordination with Planned and Programmed Transportation Investments	\$40,000
7	Prioritization of Alternative Investments and Project Financing	\$30,000
8	Final Report	\$40,000
9	Public Involvement	\$35,000
	Total	\$600,000