

**THIS PRINT COVERS CALENDAR ITEM NO.:** 10.4

**SAN FRANCISCO  
MUNICIPAL TRANSPORTATION AGENCY**

**DIVISION:** Transit

**BRIEF DESCRIPTION:**

Authorizing the Director of Transportation to execute four contracts for As-Needed Specialized Vehicle Engineering and Other Related Consulting Services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects. The first three contracts, with Hatch Associates Consultants, Inc., Jacobs Engineering Group Inc., and STV Incorporated, are in an amount not to exceed \$5,000,000, with initial terms of five years with the option to extend for four additional years. The fourth contract, with WSP USA Inc., is limited to an amount not to exceed \$3,800,000 and an initial term of one year. It has an option to extend for four years, but the exercise of the option would require the approval of the Civil Service Commission.

**SUMMARY:**

- The Transit Division is undertaking a series of capital projects to expand, overhaul, replace, upgrade, rehabilitate, and supplement the fleet of transit vehicles, made up of rail vehicles, historic vehicles, cable cars, and electric trolley, diesel-electric hybrid (hybrid), and battery-electric buses.
- On November 7, 2025, the SFMTA issued the RFP to obtain qualified consultants to provide As-Needed Specialized Vehicle Engineering and Other Related Consulting Services. The primary objective of the RFP was to obtain professional services required to support procurement, rehabilitation, maintenance and operation of the transit fleets. On January 6, 2026, the SFMTA received four responses to the RFP.
- Staff recommend approving as-needed professional services contracts with Hatch Associates Consultants, Inc., Jacobs Engineering Group Inc., STV Inc., and WSP USA Inc., to allow staff to use task orders to acquire professional services on short notice and on an as-needed basis.
- The SFMTA will fund the as-needed task orders through the budgets for specific projects.

**ENCLOSURES:**

1. SFMTA Board Resolution
2. Scope of Services
3. Contract No. SFMTA-2026-19-FTA with Hatch Associates Consultants, Inc.
4. Contract No. SFMTA-2026-20-FTA with Jacobs Engineering Group Inc.

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- 5. Contract No. SFMTA-2026-21-FTA with STV Incorporated
- 6. Contract No. SFMTA-2026-52-FTA with WSP USA Inc.

**APPROVALS:**

**DATE**

DIRECTOR \_\_\_\_\_

SECRETARY \_\_\_\_\_

**ASSIGNED SFMTAB CALENDAR DATE:** June 16, 2026

## **PURPOSE**

The purpose of this calendar item is to authorize the Director of Transportation to execute four contracts for As-Needed Specialized Vehicle Engineering and Other Related Consulting Services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects. The first three contracts, with Hatch Associates Consultants, Inc., Jacobs Engineering Group Inc., and STV Incorporated, are in an amount not to exceed \$5,000,000, with initial terms of five years with the option to extend for four additional years. The fourth contract, with WSP USA Inc., is limited to an amount not to exceed \$3,800,000 and an initial term of one year. It has an option to extend for four years, but the exercise of the option would require the approval of the Civil Service Commission.

## **STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES**

Contracts No. SFMTA-2026-19-FTA, SFMTA-2026-20-FTA, SFMTA-2026-21-FTA, and SFMTA-2026-52-FTA would assist in the implementation of the following goals in the SFMTA Strategic Plan:

- Goal 5: Deliver reliable and equitable transportation services.
- Goal 6: Eliminate pollution and greenhouse gas emissions by increasing use of transit, walking, and bicycling.
- Goal 8: Deliver quality projects on-time and on-budget.
- Goal 9: Fix things before they break and modernize systems and infrastructure.
- Goal 10: Position the agency for financial success.

This action supports the following SFMTA Transit First Policy Principles:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
8. New transportation investment should be allocated to meet the demand for public transit generated by new public and private commercial and residential developments.
10. The City and County shall encourage innovative solutions to meet public transportation needs wherever possible and where the provision of such service will not adversely affect the service provided by the Municipal Railway.

## **BACKGROUND**

The SFMTA operates Muni, the city's public transportation system. Muni operates 24 hours a day, 365 days a year. The SFMTA operates a fleet of approximately 900 buses (diesel, hybrid, battery electric buses and electric trolley buses), approximately 140 paratransit vehicles, 167 LRV4 (Siemens) vehicles, and approximately 100 other rail vehicles, including cable cars and historic streetcars, which consist of Milan, Presidents Conference Committee (PCC), and other vintage cars. The SFMTA is in the process of retiring the last remaining LRV2/3 (Breda) vehicles and switching to the full fleet of LRV4 vehicles.

Based on annual ridership, Muni is the fourth largest transit system in the United States, and the San Francisco Bay Area's largest and most heavily used system, transporting approximately 45 percent of all transit passengers in the region. Muni averages approximately 500,000 weekday boardings. Muni's fixed route network consists of 50 motor coach lines, 14 electric trolley bus lines (i.e., rubber-tired vehicles that operate on electricity provided by overhead wires), six light rail lines that operate above ground and in the city's Market Street subway tunnel, three cable car lines, and two historic streetcar lines. The SFMTA, through a contract with a broker, also provides paratransit service for passengers who are unable to use fixed route service.

Muni's infrastructure is composed of more than 200 miles of underground feeder cables and over 70 miles of trackway for rail vehicles and cable cars. Muni also maintains some 200 miles of overhead electrical lines, 10,000 support poles, and over two million square feet of maintenance, warehouse, and repair facilities.

The Transit Division is currently undergoing a comprehensive series of capital projects to expand, overhaul, replace, upgrade, rehabilitate, and supplement its fleet of transit vehicles. Transit vehicles include rail vehicles, historic streetcars, cable cars, electric trolley buses, hybrid buses, and battery electric buses.

The SFMTA's primary objective under the RFP was to obtain resources and expertise to support the Transit Division's capital projects. The RFP sought as-needed specialized vehicle engineering and other related consulting services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects.

Awarding these contracts will provide a bench of consultants who will provide expertise and flexibility for the SFMTA. Tasks will be awarded to the firm that has the most qualified staff available at the time services are needed.

## SCOPE

The selected consultants will provide a broad range of specialized services and staff to complete task orders issued by the SFMTA, either by direct assignment of its own personnel or through sub-consultants projects involving vehicle procurement, maintenance-of-way, operational scenario modeling, asset management, service planning, transit system planning, rehabilitation and replacement, design analysis, structural finite element analysis, engineering calculations, quality control inspection, feasibility studies, administrative support, vehicle acceptance and testing, warranty administration, and federally-required cost analyses. The full range of the scope of work available under these contracts is more fully described in Enclosure 2.

## PROCUREMENT

On November 7, 2025, the SFMTA issued an RFP to obtain qualified consultants to provide as-needed specialized consulting services to support its Transit Division staff in the procurement, rehabilitation, and maintenance of its transit vehicle fleet, transit-related equipment, maintenance-of-way, and various transit systems and facilities.

Hatch Associates Consultants, Inc. (Hatch), Jacobs Engineering Group Inc. (Jacobs), STV Incorporated (STV), and WSP USA Inc. (WSP) responded to the RFP by the January 6, 2026, deadline. The SFMTA formed a technical evaluation panel and a price evaluation panel to review the initial proposals. Both panels scored the proposals and found all of them to be within the competitive range. The SFMTA opted to conduct oral interviews to aid in selecting the top proposers.

On March 11 and 12, 2026, the SFMTA held oral interviews with each of the proposers to address technical questions and any outstanding concerns of the technical panel. The proposers' responses to the oral interview questions were scored by the technical evaluation panel, and each proposer was assigned a final score.

SFMTA staff conducted negotiations with the three highest-ranked firms and seeks to award contracts to each of them pursuant to this RFP—Contract Nos. SFMTA-2026-19-FTA, SFMTA-2026-20-FTA, and SFMTA-2026-21-FTA - each with an initial not-to-exceed amount of \$5,000,000 and an initial term of five years, with the option to extend for four additional years. The three contracts are as follows:

<b>Contract Number</b>	<b>Not to Exceed Amount</b>	<b>Firm Name</b>
SFMTA-2026-19-FTA	\$5,000,000	Hatch Associates Consultants, Inc.
SFMTA-2026-20-FTA	\$5,000,000	Jacobs Engineering Group Inc.
SFMTA-2026-21-FTA	\$5,000,000	STV Incorporated

To support the increasing needs of the Agency that have emerged since the RFP was originally issued, SFMTA staff is also recommending to award a contract to the fourth-ranked proposer. The fourth contract will have an initial not-to-exceed amount of \$3,800,000 and an initial term of one year, with the option to extend for four additional years subject to approval from the Civil Service Commission.

<b>Contract Number</b>	<b>Not to Exceed Amount</b>	<b>Firm Name</b>
SFMTA-2026-52-FTA	\$3,800,000	WSP USA, Inc.

### **STAKEHOLDER ENGAGEMENT**

Various teams within the Transit Division, including Maintenance of Way, Vehicle Maintenance, Service Planning, Transit Administration, Training and Scheduling were involved in defining the scope of services to be delivered under this agreement and in the evaluation of the proposers.

### **ALTERNATIVES CONSIDERED**

It is the policy of the SFMTA Transit Division to be staffed sufficiently to perform the essential work of the Division. However, due to the variety and specialization of this work, employees with the skills and experience required for a particular project are not always readily available. Staff has determined that awarding these contracts is the best solution to provide the support needed by the Agency. Consultant personnel also have expertise from having worked with various other transit agencies, which can provide significant benefit to the SFMTA.

### **FUNDING IMPACT**

Task orders under this contract will be funded through the operating budget and approved capital project budgets. Funding for each task order will be confirmed prior to task issuance.

### **ENVIRONMENTAL REVIEW**

On May 21, 2026, the SFMTA, under authority delegated by the Planning Department, determined that the approval of the contracts is not a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b).

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference.

## **OTHER APPROVALS RECEIVED OR STILL REQUIRED**

Staff obtained approval for as-needed professional services agreements from the Civil Service Commission by PSC No. DHRPSC0005161 on July 7, 2025, and by PSC No. 44741-19/20 on August 16, 2023. The SFMTA will seek Civil Service Commission approval before exercising the option to extend the term of SFMTA-2026-52-FTA beyond May 31, 2027.

The Contract Compliance Office has set a Small Business Enterprise goal of 20% for this project.

The City Attorney's Office has reviewed this calendar item.

The contracts will not require approval from the Board of Supervisors, as they are each under \$10,000,000.

## **RECOMMENDATION**

Staff recommends that the SFMTA Board authorize the Director of Transportation to execute four contracts for As-Needed Specialized Vehicle Engineering and Other Related Consulting Services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects. The first three contracts, with Hatch Associates Consultants, Inc., Jacobs Engineering Group Inc., and STV Incorporated, are in an amount not to exceed \$5,000,000, with initial terms of five years with the option to extend for four additional years. The fourth contract, with WSP USA Inc., is limited to an amount not to exceed \$3,800,000 and an initial term of one year. It has an option to extend for four years, but the exercise of the option would require the approval of the Civil Service Commission.

**SAN FRANCISCO  
MUNICIPAL TRANSPORTATION AGENCY  
BOARD OF DIRECTORS**

RESOLUTION No. \_\_\_\_\_

WHEREAS, The San Francisco Municipal Transportation Agency (SFMTA) wishes to obtain qualified consultants to provide as-needed specialized vehicle engineering and the related consulting services for various projects, including, for example, the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects; and,

WHEREAS, On November 7, 2025, the SFMTA issued a Request for Proposals seeking qualified contractors for as-needed specialized vehicle engineering and other related consulting services; and,

WHEREAS, By January 6, 2026, the SFMTA received proposals in response to the RFP from four firms: Hatch Associates Consultants, Inc., Jacobs Engineering Group Inc., STV Incorporated, and WSP USA Inc.; and,

WHEREAS, A Selection Committee evaluated and interviewed the four proposers and selected Hatch Associates Consultants, Inc., Jacobs Engineering Group Inc, and STV Incorporated as the three highest-ranking proposers; and,

WHEREAS, The SFMTA Transit Division has identified additional future requirements that emerged after the issuance of the RFP, and now recommends the award of a fourth as-needed contract to WSP USA Inc.; and,

WHEREAS, Federal, state, and local sources will provide funding for the services on an as-needed, project-by-project basis; and,

WHEREAS, The Contract Compliance Office has confirmed the consultant's commitment to meeting the 20% Small Business Enterprise participation goal for this contract; and,

WHEREAS, On May 21, 2026, the SFMTA, under authority delegated by the Planning Department, determined that the approval of the contracts is not a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b); and,

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, and is incorporated herein by reference; now, therefore, be it

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Contract No. SFMTA-2026-19-FTA with Hatch Associates Consultants, Inc. for As-Needed Specialized Vehicle Engineering and Other Related Consulting Services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects for an amount not to exceed \$5,000,000, and an initial term of five years with the option to extend for four additional years; and, be it further

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Contract No. SFMTA-2026-20-FTA with Jacobs Engineering Group Inc. for As-Needed Specialized Vehicle Engineering and Other Related Consulting Services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects for an amount not to exceed \$5,000,000, and an initial term of five years with the option to extend for four additional years; and, be it further

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Contract No. SFMTA-2026-21-FTA with STV Incorporated for As-Needed Specialized Vehicle Engineering and Other Related Consulting Services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects for an amount not to exceed \$5,000,000, and an initial term of five years, with the option to extend for four additional years; and, be it further

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Contract No. SFMTA-2026-52-FTA with WSP USA Inc. for As-Needed Specialized Vehicle Engineering and Other Related Consulting Services for various projects, including the implementation and completion of transit vehicle and transit-related equipment procurements, maintenance-of-way projects, operational scenario model projects, asset management projects, service planning projects, transit system projects, and rehabilitation and replacement projects for an amount not to exceed \$3,800,000 and an initial term of one year, with an option to extend for four years, subject to approval from the Civil Service Commission.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of June 16, 2026.

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Secretary to the Board of Directors  
San Francisco Municipal Transportation Agency

## ENCLOSURE 2

Contract Nos. SFMTA-2026-19-FTA, SFMTA-2026-20-FTA, SFMTA-2026-21-FTA, and  
SFMTA-2026-52-FTA

As-Needed Vehicle Engineering and Other Related Consulting Services

### Scope of Services

#### A. General

The Consultant will provide as-needed specialized consulting services for various projects including the implementation and completion of the various transit vehicle and transit-related equipment procurements, maintenance of way projects, operational scenario model projects, asset management projects, service planning projects, various transit system projects, and rehabilitation and replacement projects. Services may include, design analysis, structural finite element analysis, engineering calculations, quality control inspection, feasibility study, administrative support, vehicle acceptance and testing, warranty administration, and cost analysis. The Consultant may be asked to perform other tasks related to the maintenance and operation of the transit vehicles and facilities, including assisting with fare collection, advanced train control system (ATCS), data communications, passenger information system, vehicle telematics systems, charging infrastructure software systems, and associated equipment.

The SFMTA will decide, in its sole discretion, which tasks to assign to the Consultant. The SFMTA may use qualified City staff to the extent possible to provide the technical engineering and quality control services. The services to be provided by the Consultant at the direction and to the satisfaction of the SFMTA may include the following:

#### B. Specific Work Tasks/Phases

##### A. Task 1: Project Management

The Consultant will support the SFMTA in the day-to-day execution of projects related to its transit vehicles, systems and services. Deliverables may include the following:

###### 1. Project Management Plan (PMP)

Develop, implement, and maintain the PMP for transit-related projects, including all related and supporting management documents.

###### 2. Progress Reports

Provide a series of reports that will summarize the progress of activities. The reports should also track any issues that may have occurred during the past reporting period, their status and resolution. Reports may include, but not be limited to: bi-weekly reports, monthly reports, QA reports, trip reports, Federal Transit Administration (FTA) Quarterly Reports, and other reports required by funding agencies.

### **3. Meetings**

Schedule, attend, and document meetings, conference calls, or other review sessions.

### **4. Documentation**

Prepare documentation (letters, reports, presentations).

### **5. Tracking Systems**

Set up and maintain systems to track all project information to allow a project to be effectively managed. Items to be tracked include correspondence, actions, and change orders.

### **6. Stakeholder Outreach**

Prepare presentations, reports, and responses to requests from stakeholders, such as the FTA.

## **B. Task 2: Contract Management**

The Consultant will support the SFMTA Project Manager in managing the projects related to its transit vehicles, systems and services, including performing tasks such as:

### **1. Contract Management**

Support oversight and enforcement of bus and rail vehicle procurement and rehabilitation contracts, including verification of requirements, change orders, deliverables, claims, and payments.

### **2. Schedule Management**

Support development and maintenance of the overall project schedules for a variety of fleet-related projects, including oversight of the bus and rail vehicle procurement and rehabilitation schedule, and other transit-related technology projects such as advanced train control systems. In addition, support integration of the fleet-related project schedules into other agency-wide projects, such as the Train Control System upgrade.

### **3. FTA Compliance**

Conduct reviews, as needed, to verify that the bus and rail vehicles and equipment conform to their respective contract requirements and technical specifications, as well as all federal, state and local requirements. Activities and deliverables may include:

- a. Pre-award and post-delivery Buy America audits, in compliance with 49 CFR Part 663.

- b. Other audits and reviews, as required, to verify that the bus and rail vehicle procurement and rehabilitation contracts are being performed in accordance with all applicable federal, state and local requirements.

#### **4. Cost Estimates**

Prepare independent cost estimates and cost-analyses for any proposed contracts or contract changes (in accordance with FTA requirements, as applicable); identify responsibilities for the changes, and advise on any resulting impacts in scope, schedule and budget.

### **C. Task 3: Design Reviews and Evaluation of CDRLs and Submittals**

Consultant shall support the SFMTA in the review, outreach and response to submittals from rolling stock and other contractor(s), including letters, drawings, design review packages and other Contract Deliverable Requirements List (CDRL) items.

#### **a. Specialized Experts**

Provide specialized experts, as-needed, to cover all vehicle systems, as well as risk assessments, hazard analyses, reliability analyses and systems integration, among others.

#### **b. Submittal Review and Response**

Review and comment on CDRL Items. Review the submittals for compliance with the specifications and meet the project objectives for quality, reliability and maintainability; recommend disposition to the SFMTA. Work with the project team to drive consensus among internal stakeholders to develop an agreed SFMTA position on issues as they arise.

#### **c. System Integration**

Support the SFMTA during planned systems integration reviews to ensure that the vehicle and subsystems perform according to the SFMTA's requirements and expectations, including addressing interface issues with concurrent projects, such as end-of-life technology refresh projects, and the Train Control Upgrade project.

#### **d. First Article Inspection**

Coordinate, attend and oversee First Article Inspections (FAI) for the entire vehicle, including subsystems, establishing a baseline upon which the production units will be based, and changes in configuration will be assessed.

**e. Issue Resolution**

Conduct research into peer agencies, best practices, required standards, and federal, state and local requirements to provide advice and counsel with regards to issues that may arise. Reports or presentations shall be provided as requested by the SFMTA.

**D. Task 4: Quality Assurance (QA) Oversight**

The Consultant will provide QA oversight services to ensure that quality material is used, good workmanship is performed, and work is conducted in accordance with all plans and contract documents, as well as federal, state and local requirements. Activities and deliverables may include:

**1. QA Program Oversight**

Review the applicable QA programs to assure that the contractor’s QA organization follows contractually required processes for controlling the quality of the design, tooling calibration, receiving inspection, corrective actions, and the manufacturing process.

**2. QA Production Oversight**

Conduct checks, as necessary, to assure that quality records are maintained throughout the manufacturing process at both supplier and subcontractor facilities. Assess quality trends and review with SFMTA staff and the contractor to determine any corrective actions.

**3. QA Representative**

Provide a Quality Assurance Representative (QAR) to provide daily (or weekly) written inspection reports as required by the SFMTA. The QAR will use SFMTA-approved procedures to note any deficiencies and corrective actions required.

**4. QA Change Management Oversight**

Review the contractor’s change control, configuration management, and document management systems to verify that they are capable of complying with the contract provisions and are able to monitor changes from the baseline specification.

**5. Receiving Inspection**

Provide incoming or receiving inspection at the SFMTA delivery location to determine whether vehicles or equipment have been damaged in transport or at any other time.

## **E. Task 5: Test Program Oversight**

The Consultant shall provide “test program oversight” services to ensure that the prototype bus and rail vehicles, production vehicles, and rehabilitated bus and rail vehicles perform according to the vehicle contract requirements and technical specifications, including all federal, state and local requirements. Activities and deliverables may include:

### **1. Test Documentation Review**

Review and recommend for acceptance the test and evaluation plans and procedures for all materials, components, subsystems, and completed work requiring testing under the Specifications.

### **2. Test Witnessing**

Witness design, qualification, acceptance and burn-in tests, as required, including tests at contractor’s or its subcontractors’ facilities, the SFMTA site, or third party location.

### **3. Vehicle Acceptance**

Support the SFMTA in acceptance inspection and testing efforts. Once a vehicle or equipment has been delivered to SFMTA but before it is accepted, Consultant shall perform a final audit to verify that the necessary documentation (e.g., weight certificates, Car History Book) is provided with the vehicles.

### **4. Operational Testing**

Support operational testing to confirm compatibility with the SFMTA’s existing system, facilities, and equipment; assist with operator orientation.

## **F. Task 6: Commissioning and Start-up Activities**

The Consultant shall support commissioning and start-up activities prior to the start of revenue service for the new vehicle or equipment. Activities and deliverables may include:

- a.** Review and comment on all support services submittals, including maintenance manuals, parts and operations manuals, training programs, and safety program plans.
- b.** Verify delivery and configuration of as-built drawings and associated documentation.
- c.** Support training program, including testing and acceptance of the training simulator.

- d. Support safety certification of the advanced train control systems, the new rail fleet, and other rail systems in accordance with CPUC General Order 164-D, develop checklists, conduct necessary verifications, obtain sign-off of responsible parties, and prepare mitigation plans, if necessary.
- e. Support revenue readiness activities, including maintenance shop readiness, and verification that the vehicle design will meet its operational requirements for SFMTA routes, including range, gradeability and environmental issues.
- f. Support coordination activities with interrelated projects, such as the Train Control Upgrade project.

## **G. Task 7: Post-Delivery Support**

Consultant shall assist the SFMTA in effectively developing and administering a technical support program as required. This program will cover all post-delivery support requirements, including warranty administration, manual updates and field modification management.

Activities and deliverables may include:

- a. Ensuring that all training, spare parts, special tools, special test equipment, maintenance and operation manuals, and other deliverables are properly provided in accordance with the requirements of the applicable procurement contract.
- b. Support the oversight and tracking of all field modification work, including review of documentation, verification of configuration management, QA oversight of re-work, re-testing, and spare parts reconfiguration.
- c. Monitor the reliability program and work with the SFMTA and the contractor to assure compliance of the fleet with reliability requirements.
- d. Assist in the set-up, execution, administration, and monitoring of the warranty program, including identification and resolution of fleet defects.
- e. Ensure that the preventive maintenance process and operations and maintenance activities are clearly defined and complete.

## **H. Task 8: Transit Management Support**

Consultant shall provide other services as-needed by the SFMTA's Transit Division to support the fleet engineering maintenance and operation of the transit vehicles. Activities may include:

- a. Review plans, checklists and procedures related to vehicle preventive maintenance.
- b. Perform preventive maintenance and inspection audits and reporting.

- c. Evaluate and assist with the implementation of modern and cost-effective maintenance methods for vehicles.
- d. Provide data analysis to identify spikes and shortfalls in vehicle performance.
- e. Review and update operating procedures as necessary.
- f. Assist in the development or updating of operating practices and procedures.
- g. Perform technical evaluations and assist with the implementation of emerging technologies to improve operations and service delivery.
- h. Perform strategic long-term planning of key operations issues.
- i. Provide Transit Operations support, including scheduling analyses and service improvement analyses.
- j. Support Overhaul Programs.
- k. Support alternate equals.
- l. Support parts identification and negotiations.
- m. Support specific failure investigations.
- n. Support writing bulletins.
- o. Support customer experience improvement.
- p. Support training.
- q. Support Budget Planning and Cost Estimating.
- r. Support regulatory compliance.
- s. Support Vehicle Engineering.
- t. Support historic fleet.
- u. Provide Warranty supports for vehicles after acceptance.
- v. Conduct vehicle performance matrices.
- w. Support Non-Revenue Vehicle fleet plan and procurement.

## **I. Task 9: Maintenance of Way**

This task is intended to support a broad range of specialized services related to planning and programming, specialized analytical studies, construction support and management, and start-up and operations planning. Examples of efforts that would be provided under this task include performing field surveys, assisting in the preparation of procurement contracts, preparing QA

oversight, performing audits, performing ultrasonic rail testing, and administering training. Additionally, technical services related to the delivery of technology system projects led by the Maintenance of Way Division would be included in this task.

The Consultant shall provide a broad range of specialized services and staff to complete Task Orders issued by the SFMTA, either by direct assignment of its own personnel or through Subconsultants, including, but not limited to, initial planning and programming, specialized analytical studies, and start-up and operations planning. Task Orders may include:

- a.** Provide support to SFMTA's Maintenance-of-Way Engineering Unit, which includes planning, design review, and field investigation support of transit system improvements, including the traction power system, transit signaling system, and communication system to improve safety and service reliability. The scope of work may also include:
  - i. Prepare design criteria to include and meet all applicable codes and standards.
  - ii. Prepare alternate analyses and recommend overall design approaches.
  - iii. Perform site investigations and functional analyses.
  - iv. Review design packages (plans and specifications)
  - v. Provide technical administrative support (e.g., file drawings, meeting minutes, document control).
  - vi. Incorporate SFMTA's Quality Assurance (QA) program requirements into the design and construction packages.
  - vii. Identify and develop special testing requirements, system cut-over plans, and start-up plans.
- b.** Assist in the preparation of procurement contracts for transit infrastructure components and systems; operating equipment; and long-lead items. The task shall include product research, specifying products, and performing alternative analyses.
- c.** Perform field surveys using licensed surveyors.
- d.** Prepare project management plans in accordance with FTA requirements.
- e.** Prepare QA oversight, audits, plans, training and assistance in accordance with FTA requirements.
- f.** Predict, analyze, prevent and mitigate noise and vibration from transit operations, and equipment, and design and monitor mitigation measures.

- g.** Perform testing as required by the City, including metallurgical, annual ultrasonic rail testing, and other testing requested by SFMTA.
- h.** Perform preliminary and system hazard analyses, failure modes and effects analyses, single-point-of-failure analyses, hazard level classification, and safety certification of systems.
- i.** Perform systems analyses, including communications systems analyses, systems integration, safety processes, configuration management, and related work.
- j.** Perform start-up and commissioning of systems, including integration and pre-revenue “dry-run” testing, developing test procedures, instrumenting vehicles and equipment, conducting tests, and providing test reports and analyses.
- k.** Provide safety certification oversight and required documentation to obtain System Safety and Security Program per CPUC General Order (GO) 164-D. (General Order 164-D requires transit agencies who are building and operating rail fixed guideway systems to establish a System Safety and Security Program.) The scope of work may include:
  - i. Provide safety standards
  - ii. Review the system safety program
  - iii. Review the contractor’s hazard analyses
  - iv. Develop Safety and Security Certification Plans
  - v. Lead Safety & Security Certification Review Committee SSCRC (ongoing)
  - vi. Maintain the Audit Conformance Checklist (ongoing)
  - vii. Review the safety requirements
  - viii. Audit implementation of safety requirements
  - ix. Audit resolution of hazards (ongoing)

## **J. Task 10: Transit Systems**

Under the Task, the Consultant will assist with the procurement of technical services related to the operation of transit-supportive technology systems and system modifications at the application level or higher (e.g., ATCS, fare collection, communications). Examples of efforts that would fall within this task include writing documentation, drafting SOPs, user interface configuration, and defining requirements for new feature requests from system vendors. Tasks may include:

### **1. Concept of Operations / Lifecycle Planning**

The Consultant shall advise the SFMTA on key issues relating to the most effective means to employ technology systems to assist in operations. This may include developing a procurement and lifecycle strategy.

## **2. Procurement Support**

The Consultant shall conduct industry outreach and advise the SFMTA on the available firms and products for individual procurement efforts. This shall include supporting the RFI, RFQ, and RFP processes, in such ways as:

- i. Maintaining industry contacts and communicating with potential vendors on the SFMTA's behalf.
- ii. Facilitating, organizing and staffing RFI or RFP pre-submission meetings.
- iii. Facilitating and organizing vendor presentations.
- iv. Advising the SFMTA on the nature of each vendor's offering.
- v. Drafting language for inclusion in the RFI, RFQ, RFP and sample contract documents.

## **3. Design Support**

In the design phase of a technology procurement project, the Consultant shall review system vendor's design documents and advise the SFMTA and the vendor on potential integration issues, discontinuity between the system design and the concept of operations, or potential design deficiencies. The Consultant shall suggest design solutions for these issues in the design phase so they may correct designs at a minimum of delay and expense to a project.

## **4. Quality Control**

During the production/delivery phase of a technology procurement project, the Consultant shall support the SFMTA's quality control efforts to ensure the equipment being delivered is free from manufacturing or design defects.

## **5. Hardware Integration**

During the design and engineering phases, the Consultant shall support the integration of the new system with the other systems present on the SFMTA's vehicles or in the SFMTA's facilities. The Consultant shall be ultimately responsible to the SFMTA for ensuring that the new system is fully integrated with existing systems to the specifications detailed in the Task Order.

During the production/delivery phase, the Consultant shall support the integration of the new system to the vendor's specifications and any additional specifications that other SFMTA consultants have developed. This support may include activities such as:

- a. Developing an installation/deployment plan compatible with daily SFMTA operations and maintenance.
- b. Overseeing the execution of the installation plan in coordination with the SFMTA Project Manager and operations managers

- c. Training any SFMTA staff as needed to support the installation

## **6. Innovative Solutions**

Throughout the system lifecycle, the Consultant shall support SFMTA operations by designing innovative solutions that require integration between one or more existing systems on board vehicles, on the wayside, in the street environment, or in the control center. This support would not necessarily be connected to a new system procurement; rather, the SFMTA would be seeking advice on how to accomplish the SFMTA's stated goals with existing equipment. The Consultant shall suggest modifications to that equipment, or additional purchases to support the SFMTA's goals.

## **7. List of Systems**

Potential systems requiring the support of as-needed services include:

- i. Farebox Collection System
- ii. Train Control Systems
- iii. Surface Rail Signaling Systems
- iv. Traffic Signals and Transit Signal Priority (TSP) systems
- v. Customer Information System
- vi. On-Board Vehicle Signs and Announcement Systems
- vii. Platform Signs and Announcement Systems
- viii. Vehicle Telematics
- ix. Charging Infrastructure Software Solution
- x. Automatic Passenger Counter system
- xi. Video Surveillance systems
- xii. Transit-Only Lane Enforcement (TOLE) System
- xiii. Collision Avoidance System
- xiv. DriveCam and SmartDrive systems (used for safety incident detection)
- xv. Autonomous Vehicle Technology

## **K. Task 11: Other Services**

Consultant shall provide other services as-needed by Transit Division for the implementation and completion of the Project. Tasks may include, but are not limited to:

- a.** Advise the SFMTA on key issues regarding vehicle and equipment procurement, including compliance, systems integration and deviation from Contract requirements.
- b.** Support project integration into existing systems and emerging programs; these may include maintenance management systems, project management systems, asset management tracking, or other agency-wide systems.
- c.** Develop integration plans to ensure that the new vehicles or equipment operate as intended with the existing infrastructure, including track and overhead, substations, wheel rail interface, charging infrastructure and maintenance facilities.
- d.** Support tasks for long-term fleet planning and replacement, including options, timing and procurement strategies required to maintain the fleet.
- e.** Support with data collection efforts, such as ridership counts, traffic counts, and pedestrian counts.
- f.** Support the Agency's Communications & Marketing Division with graphics for maps, posters, reports, one-pagers, marketing material, and other documents.
- g.** Support data analyses pertaining to service planning activities, including before/after comparisons and trend analysis.
- h.** Support the Agency's Communications & Marketing Division with outreach efforts, including facilitating meetings and providing logistical help and ambassador resources.
- i.** Produce or assist with peer reviews and best practice reviews for activities such as off-wire operation, fallback scheduling, and emergency planning.
- j.** Assist with asset management of transit equipment.
- k.** Prepare fleet retirement plan to determine the best methodology, cost and schedule to retire vehicles as they are replaced and taken out of service.
- l.** Conduct data analyses to identify spikes and shortfalls in vehicle performance.
- m.** Produce or assist with the production of operational scenario models. Models may take into account available ridership, grade, or route data.
- n.** Provide Maintenance Equipment Support with new or existing equipment.

ENCLOSURE 3

Contract No. SFMTA-2026-19-FTA with Hatch Associates Consultants, Inc.  
As-Needed Vehicle Engineering and Other Related Consulting Services

ENCLOSURE 4

Contract No. SFMTA-2026-20-FTA with Jacobs Engineering Group, Inc.  
As-Needed Vehicle Engineering and Other Related Consulting Services

ENCLOSURE 5

Contract No. SFMTA-2026-21-FTA with STV Incorporated  
As-Needed Vehicle Engineering and Other Related Consulting Services

ENCLOSURE 6

Contract No. SFMTA-2026-52-FTA with WSP Incorporated  
As-Needed Vehicle Engineering and Other Related Consulting Services