

Bay Area Infrastructure Financing Authority
Network and Operations Committee

June 14, 2024

Agenda Item 5b

**Services for Express Lane Network Toll System Lifecycle Replacement: i. Contract –
General Systems Consulting Services – Silicon Transportation Consultants, Inc.
(\$4,000,000); ii. Contract – Implementation Advisory Services – Atkins North America,
Inc. (\$500,000)**

Subject:

Request for Committee approval to contract with: i. Silicon Transportation Consultants, Inc. (STC) to serve as the general systems consultant for the lifecycle replacement of the express lane tolling system for the BAIFA Express Lane Network in an amount not to exceed \$4,000,000 through June 30, 2027, and ii. Atkins North America, Inc. to provide implementation advisory services in an amount not to exceed \$500,000.

Background:

BAIFA's toll system host application, implemented in 2017, is nearing its expected useful life of eight to ten years; it will need to be replaced in three years to avoid the risk of disruptions in revenue collection and degraded system performance. The roadside toll system on I-680 in Contra Costa County will require replacement in whole or in part in approximately the same timeframe, while roadside equipment in other BAIFA corridors, and US 101 for which BAIFA provides the toll system through agreement with the San Mateo County Express Lanes Joint Powers Authority (SMCEL-JPA), will require a replacement strategy relative to their respective implementation dates (see Attachment A).

To date BAIFA has relied on one integrator for both roadside system and host application development and maintenance. This approach has allowed BAIFA to manage one contract and hold one vendor accountable for turnkey services and performance metrics; it has also posed some challenges such as high maintenance costs, inflexible/outdated technology, and a system environment that is not conducive to vendor competition, modernization, or innovation. Rather than procuring a combined host and roadside system from a single contractor as before, staff has explored alternatives and performed outreach to industry, and intends to procure the host and roadside systems separately to better-manage risk, foster competitive bidding and encourage a

more diverse marketplace of qualified vendors. The two contracts described below allow BAIFA to proceed in this manner.

General Systems Consultant – Silicon Transportation Consulting, Inc. (STC)

In December 2020, after a competitive procurement, the MTC Operations Committee approved a bench of consultants through the Request for Qualifications (RFQ) for Electronic Payments Consultant Assistance. Under this bench, 14 firms, including STC, were prequalified to provide services in Category D – Technology Oversight. Selection for entry into a contract with one of the prequalified consultants may take place by direct selection or via mini-procurement, pursuant to the terms of the solicitation governing the bench. STC was directly selected to serve as the general systems consultant for the toll system host replacement due to its role in the development of BAIFA’s Next Generation toll system strategy, including eight years supporting BATA and BAIFA toll system programs. Under BAIFA’s last program advisor contract, set to expire June 30, 2024, STC supported BAIFA in developing its strategy for the express lane toll system replacement as a subconsultant to WSP USA. As the general systems consultant under this new contract, STC will provide technical assistance into the next phase of system architecting, vendor procurement, and implementation for the new toll system host. The term of STC’s work is expected to be three years, until after the new host application is operational. STC intends to add HTC Global to its list of subconsultants; HTC Global will supplement the team’s technical capabilities for the design of the logical architecture and eventual oversight of system development and testing.

Implementation Advisor – Atkins North America, Inc. (Atkins)

Through the same 2020 RFQ for Electronic Payments Consultant Assistance, the Operations Committee approved consultants for Category B – Planning, including Atkins. BAIFA seeks to contract with Atkins for implementation advisory services. Atkins key staff will advise BAIFA in areas including program risk management and policy decision-making at the executive and board levels. The term of Atkins’ work is expected to be three years, until the new host application is operational. Key Atkins staff brings 27 years of experience in tolling operations and implementation for the E-470 Public Highway Authority in Aurora, Colorado and leadership roles in various tolling industry associations.

Attachment B includes a summary of STC's and Atkins' small business and disadvantaged business enterprise status.

Recommendations:

Staff recommends that the Committee authorize the Executive Director or designee to negotiate and enter into the following agreements:

- i. with Silicon Transportation Consultants, Inc. (STC) to serve as the general systems consultant for the BAIFA express lanes host application lifecycle replacement in an amount not to exceed \$4,000,000; and
- ii. with Atkins North America, Inc. for implantation advisory services in an amount not to exceed \$500,000.

Attachments:

- Attachment A: Toll System Lifecycle Schedule
- Attachment B: Disadvantaged Business Enterprise and Small Business Enterprise Status
- Committee Approval Sheets


Andrew B. Fremier

Toll System Lifecycle Schedule

Toll System	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035		
Host System	[Redacted]																				
680	[Redacted]																				
880				[Redacted]																	
101							[Redacted]														
80										[Redacted]											

Disadvantaged Business Enterprise and Small Business Enterprise Status

	Firm Name	Role on Project	DBE* Yes/No	If DBE Yes, List #	SBE** Yes/No	If SBE Yes, List #
Prime Contractor	Silicon Transportation Consultants, Inc.	Prime; technical assistance	Yes	43097	No	
Subcontractor	Larson Consulting Associates	Subcontractor	No		No	
Subcontractor	HTC Global	Subcontractor	No		No	
Prime Contractor	Atkins North America, Inc.	Prime; advisory services	No		No	
Subcontractor	Intueor	Subcontractor	Yes	44932	Yes	33586
Subcontractor	LTK	Subcontractor	No		No	
Subcontractor	VRPA	Subcontractor	Yes	12213	Yes	23973

*Denotes certification by the California Unified Certification Program (CUCP).

**Denotes certification by the State of California.

Request for Committee Approval

Summary of Proposed Contract

Work Item No.: 6874

Vendor: Silicon Transportation Consultants, Inc.
Kirkland, Washington

Work Project Title: Silicon Transportation Consultants, Inc for On Call Tolling Support.

Purpose of Project: Design, procure, and implement the next generation express lane system

Brief Scope of Work: Provide technical assistance with the design, procurement, and implementation of the next generation express lane system

Project Cost Not to Exceed: \$4,000,000

Funding Source: BAIFA Rehab Budget

Fiscal Impact: Funding is included in the Fiscal Year 2023-24 BAIFA Express Lanes Rehab Budget.

Motion by Committee: That the Executive Director or designee is authorized to negotiate and enter into a contract agreement with Silicon Transportation Consultants, Inc. for services as described above and in the BAIFA Network and Operations Committee Summary Sheet dated June 14, 2024 and the Chief Financial Officer is authorized to set aside funds in the amount of \$4,000,000 for such contract, as specified above.

BAIFA Network and
Operations Committee:

Carol Dutra-Vernaci, Chair

Approved: June 14, 2024

Request for Committee Approval

Summary of Proposed Contract

Work Item No.: 6874

Vendor: Atkins North America
Denver, Colorado

Work Project Title: Atkins North America for On Call Tolling Support.

Purpose of Project: Design, procure, and implement the next generation express lane system

Brief Scope of Work: Provide system implementation advisory services

Project Cost Not to Exceed: \$500,000

Funding Source: BAIFA Rehab Budget

Fiscal Impact: Funding is included in the Fiscal Year 2023-24 BAIFA Express Lanes Rehab Budget.

Motion by Committee: That the Executive Director or designee is authorized to negotiate and enter into a contract agreement with Atkins North America for services as described above and in the BAIFA Network and Operations Committee Summary Sheet dated June 14, 2024 and the Chief Financial Officer is authorized to set aside funds in the amount of \$500,000 for such contract, as specified above.

BAIFA Network and
Operations Committee:

Carol Dutra-Vernaci, Chair

Approved: June 14, 2024