



STAFF REPORT

MEETING DATE: June 27, 2017
SUBJECT: Authorize Technical Services Agreement for North State Express Connect Business Plan for Intercity Bus Service between Redding and Sacramento
AGENDA ITEM: 14
STAFF CONTACT: Jennifer Pollom, Senior Transportation Planner

SUMMARY:

SRTA circulated a request for proposals (RFP) to complete the grant-funded *North State Express Connect Business Plan* for intercity bus service between Redding and Sacramento. One proposal was received and evaluated. Staff recommends entering into an agreement with Green DOT Transportation Solutions for \$205,852.

STAFF RECOMMENDATION:

It is recommended that the board of directors authorize the chair to sign a technical services agreement (TSA) with Green DOT Transportation Solutions (Green DOT) to complete the *North State Express Connect Business Plan*, for a term ending June 30, 2020, not to exceed \$205,852.

DISCUSSION:

A business plan is needed to improve North State public transportation access to large urban markets in Sacramento and beyond. It is envisioned that the intercity express bus service would provide Shasta, Modoc, Siskiyou, Lassen, Butte, Trinity, Tehama, Glenn, Lake, and Colusa counties convenient access to Sacramento's airport, train station, and downtown.

SRTA was successful in obtaining \$223,203 through the Caltrans Sustainable Transportation Planning Grant Program to provide details for an intercity bus network featuring backbone service on I-5 between Redding and Sacramento with feeder service from surrounding rural counties. In addition to strengthening relationships with state, rail, and regional partners, the business plan will quantify operating and capital costs needed to prepare a Transit and Intercity Rail Capital Program (TIRCP) grant application. Eligible TIRCP expenses include long-range electric buses, charging stations, secure passenger parking, maintenance facility infrastructure, ticketing software, marketing, and performance monitoring.

At the April meeting, the board of directors authorized an RFP for consultant services to complete the business plan. One proposal was received and evaluated by a four-person panel of staff and external stakeholders. The consensus score is provided below:

Lead Consultant	Budget	Consensus Score (out of 100)
Green DOT	\$205,852	70

Green DOT's proposal was responsive to the RFP, the consultant team is qualified, and the cost was determined to be reasonable. Although the proposal lost several points on innovation, project experience, and disadvantage business enterprise participation, Green DOT has successfully completed other projects for SRTA in the past. The proposal scope of work and cost proposal are provided by attachment and will be incorporated into the technical services agreement.

The initial project focus will be on determining capital costs and other details needed for a strong TIRCP grant application. The next call for applications is expected to be in early 2018. A request for authorization to submit the grant application will be presented to the board of directors once the final TIRCP guidelines and call for projects have been made available.

Staff anticipates presenting the North State Express Connect business plan to the board of directors for approval in February 2019.

ALTERNATIVES:

The board of directors may direct staff to recirculate the RFP.

OTHER AGENCY INVOLVEMENT:

The business plan details will be developed in coordination with Caltrans, the California State Transportation Agency, and San Joaquin Joint Powers Authority. Furthermore, SRTA will work with North State transportation and transit agency partners that will benefit from the service, including the Redding Area Bus Authority. The Technical Advisory Committee (TAC) recommends approval of staff recommendation.

FINANCING:

A total project budget of \$367,586 is included in the fiscal year 2017/18 Overall Work Program under Work Element 706.07 (North State Express Connect Business Plan). It includes consultant costs (up to \$205,852 through the Caltrans Sustainable Transportation Planning Program grant) as well as staff time and direct expenses (up to \$144,383 in regional planning funds). A grant fund balance of \$17,351, if needed, will be the subject of a separate future procurement process presented to the board of directors for approval.



Daniel S. Little, AICP, Executive Director

Attachments: Green DOT Transportation Solutions Scope of Work and Cost Proposal

1. TRANSMITTAL LETTER

Transmittal letter is included in the proposal packet as a separate document.

2. STATEMENT OF UNDERSTANDING

Rural northern California suffers from a lack of publicly available and affordable connectivity. This is attributed to a number of reasons, including mountainous topography, geographic isolation, limited financial resources and in some cases a lack of actual users. The reduction of intercity Greyhound service and limited Amtrak passenger service over the past 20 years to regions north of Sacramento has put constraints on access to jobs, services and general access to larger urbanized areas like Sacramento and the Bay Area.

These barriers are being removed with successful intercity transit services such as the Humboldt County connections with Siskiyou and Shasta Counties. This is a start, but in order to reach the emissions and vehicle miles traveled reduction targets at the Federal, State, regional and local levels, more visionary projects must come to realization. The North State Express Connect (NS Express) project aligns with these goals.

The NS Express will connect Shasta County to the City of Sacramento along I-5 as the backbone and additionally connect most of northern California's counties to the backbone through feeder buses. The vision, developed in previous planning efforts, is to utilize 45 foot electric coaches for the backbone service and smaller electric buses connecting 8 regional transit systems to the I-5 coach service. The project will include electric vehicle charging stations, transit stop/hub improvements, access agreements, and extensive coordination between entities.

The purpose of the project is to provide a cost effective, environmentally friendly transportation option for the entire north-state for multiple purposes, including:

- Regular commuters between Redding and Sacramento,
- Travelers to the Sacramento International Airport,
- Access to Sacramento passenger rail (Capital Corridor, San Joaquins, future California High Speed Rail),
- Interregional travel between north-state counties.

The NS Express requires substantial funding to become a reality and this business plan will improve upon the existing project foundation. Original estimates were \$30 million for a 3 year pilot program as identified in the Transit and Intercity Rail (TIRCP) grant application submitted to the Strategic Growth Council in 2016. A funding strategy was outlined in that application and this business plan will improve upon that strategy and ultimately prepare the project for funding.

Green DOT has organized a comprehensive team to prepare the NS Express Connect Business Plan, some of whom helped develop the project foundation in the TIRCP application effort (Green DOT and Grant Management Associates). Each sub-consultant on our team fills a specialty niche required for this project's success. The details of our team and strategic approach are defined in the following proposal sections.

3. PROJECT MANAGEMENT AND TECHNICAL APPROACH

PROJECT MANAGEMENT

Green DOT owner Jeff Schwein will be the designated project manager for this project effort supported by a competent Green DOT staff as well as sub-consultants Nelson\Nygaard, CALSTART, and Grant Management Associates. Jeff employs a combination of two project management methodologies developed by PSMJ Resources, Inc. and professional planner Terry A. Clark, AICP. This reliable method includes shared resource scheduling, consistently held project team meetings, often and consistent client interaction, and monthly pro-

gress reporting (consistent with federal and state funding requirements). The project team will collaboratively develop project approaches and solutions. We find that collaborative planning is the most creative method and delivers expected results. Our project team will provide monthly progress reports to SRTA. Additionally, ongoing communication with weekly updates when the project components are moving quickly will be provided by email to SRTA and relevant project partners. Any changes in the schedule or coordination efforts will be discussed with SRTA should any issues arise.

TECHNICAL APPROACH

1.0 PROJECT INITIATION AND MANAGEMENT

1.1. KICK-OFF MEETING

The project team will coordinate with SRTA and Caltrans staff for an internal kick-off meeting to review and finalize the scope of work, establish communication procedures, and identify other information that will be used throughout the project. This will also serve as an opportunity to clarify team member roles, discuss the initial stakeholder meetings, and refine the engagement strategy.

COMMUNICATION PROTOCOLS

We believe communication is an open dialogue. This open dialogue is successful when built on a solid foundation. The foundation has several significant components: knowledge, trust, solid relationships, basic courtesy and the right resources. The protocol within this project plan lays out sensible processes with practical tools to prepare SRTA for a successful outcome. In addition to traditional meetings, teleconference calls and e-mail may also be used to assist in communication.

DELIVERABLES:

- *KICK-OFF MEETING SUMMARY BETWEEN SRTA, CONSULTANT AND CALTRANS.*
- *PROJECT MANAGEMENT PLAN, INCLUDING THE ROLES OF ALL PROJECT PARTNERS*
- *UPDATED PROJECT TIMELINE, INCLUDING SCHEDULE OF PROJECT MEETINGS AND MILESTONES.*
- *MONTHLY INVOICES ACCOMPANIED BY PROGRESS REPORTS*

2.0 STATE, RAIL, AND NORTH STATE SUPER REGION COORDINATION

2.1. STATE PARTNERSHIP COORDINATION

Many State agencies will be solicited for involvement in this project. Based on our team involvement in previous, similar efforts, we expect State agencies to be supportive and involved in the NS Express project. This project concept moves forward the State's ambition of reduced emissions and a reduction in vehicle miles traveled in the State. Representatives from our project team will set up and attend meetings with Caltrans Districts, Division of Rail and Mass Transit, the Strategic Growth Council, the California Energy Commission, the California State Transportation Agency and others appropriate to the project. Future funding also depends on the relationships built during the project and business plan development processes.

DELIVERABLE:

- *MEETING NOTES FROM INITIAL MEETING, UP TO EIGHT FOLLOW UP MEETINGS*

2.2. RAIL AND PRIVATE PARTNERSHIP COORDINATION

The most notable private partners for this project are the equipment and energy technology suppliers for system. Our project team has extensive experience working with private partners to develop, fund, and implement cost effective low or no energy transit systems. These are critical relationships due to the complexity

of developing energy capture and delivery systems. We will explore the best option for energy use (solar collection or from the grid), energy storage, energy management, charging stations, vehicle type for backbone (long range-up to 200 miles), vehicle type for feeder lines (operating in mountainous terrain), and equipment required to manage the technologically advanced system. In our experience with this project (during the development of the TIRCP application), the Los Angeles Department of Transportation and the San Joaquin Regional Transit Agency, our private partners have been instrumental in providing the technical equipment details needed for the project foundation.

In addition, connections in Sacramento to the Capital Corridor, San Joaquin and eventually the California High Speed Rail lines is critical to the success of the NS Express project. These connections will be primary draws for commuters and interregional travelers. Our project team will coordinate with the Sacramento Regional Transit light rail, the Capital Corridor Joint Powers Authority, the San Joaquin Joint Powers Authority, and Amtrak. Additional partners will include the Sacramento International Airport and transit providers in Yolo, Sutter and Sacramento Counties. Our project team will explore the relationship and potential cooperation between all known and potential project partners.

DELIVERABLE:

- *MEETING NOTES FROM INITIAL MEETING, UP TO EIGHT FOLLOW UP MEETINGS*

2.3. SUPER REGION TRANSIT PARTNERSHIP COORDINATION

The NS Express service will directly affect at least 10 of the 16 counties in the North State Super Region group. The I-5 backbone of the service passes through Shasta, Tehama, Glenn, and Colusa counties and will likely have connecting hubs in each of these. The feeder lines coming in from the periphery will provide service to residents and visitors in counties neighboring the trunk counties as well as counties beyond that.

Our project recognizes the Super Region group as a vital resource for information and valuable partners in the success of the system. We envision the proposed service as a model for future mobility in rural areas that has traditionally been challenging. The Green DOT project team proposes to attend one Super Region meeting at an opportune time during the project development or to present the findings. Additionally, one on one meetings with strategic regions and joining Super Region meetings by conference call will occur to ensure a cooperative foundation is built for the NS Express project. We will use the Super Region partners to access transit agencies and other partners within their regions that may be involved in the project.

DELIVERABLE:

- *MEETING SUMMARIES AND CONTENT MATERIALS FROM MEETINGS.*

2.4. SERVICE OPERATIONS MEMO

The project team will craft an operations plan memorandum to include:

- Options for viable service operations
- Recommended operator
- Requirements to start operation

See Task 10 description for further detail.

DELIVERABLES:

- *SERVICE OPERATIONS TECHNICAL MEMORANDUM*

3.0 E-BUS CHARGING STATIONS AND DOWNTIME PARKING

3.1. SITE ANALYSIS AND RECOMMENDATION

The project team will conduct an analysis of the potential locations for E-Bus charging and overnight bus parking that were identified in the Intercity Study and the TIRCP application. The site analysis will be performed to identify the charging solutions that fit the site and other overall improvements that will be needed. Our project team will work with equipment suppliers to establish baseline and specific needs of the required equipment and include this in the analysis. The E-Bus charging and parking site suitability analysis will be compiled to assure that all attributes that impact the suitability of the specific sites have been identified.

DELIVERABLE:

- *E-BUS CHARGING AND PARKING SITE SUITABILITY ANALYSIS.*

3.2. COST ANALYSIS OF UTILITY REQUIREMENTS FOR PROPOSED E-BUS CHARGING LOCATIONS

The project team will engage with the utilities to determine what the rate structures and demand charges are and the possible impact these have on the deployment of the E-buses. An analysis of existing infrastructure will also be performed. The E-bus charging locations capacity and cost analysis portion will delve into details to answer what the financial impact will be from the charging station deployment.

DELIVERABLE:

- *E-BUS CHARGING LOCATIONS CAPACITY AND COST ANALYSIS.*

3.3. COST ANALYSIS OF INFRASTRUCTURE NEEDS FOR PROPOSED E-BUS DOWNTIME PARKING LOCATIONS

In addition to the upfront infrastructure cost that are due to transformer upgrades etc., an analysis of the overall suitability of the site will be performed. Special attention will be put on the security improvements and other items that need to be in place to assure a successful overall deployment.

DELIVERABLE:

- *E-BUS PARKING INFRASTRUCTURE COST ANALYSIS.*

4.0 AIRPORT TERMINAL AND BUS AND TRAIN STATION AND FACILITIES

4.1. DOCUMENTING FACILITY ACCESS PROCESS

Access to facilities such as airports, transit and rail require cooperation with the operators for connectivity and access. Airport access is specifically unique and requires cooperative agreements and potentially fees for accessing terminals at the Sacramento International Airport. Our project team will work with airport officials and policies and prepare a recommendation for the most effective access plan. We will additionally utilize our coordination efforts defined in Section 2 of this proposal to identify processes required to establish successful access relationships.

DELIVERABLE:

- *FACILITIES ACCESS PROCESS DOCUMENTATION.*

4.2. COST ANALYSIS FOR FACILITY ACCESS

Should facilities where access require fees, our project team will discover and analyze the impacts on the overall project budget and annual operating plan. We will also begin the foundation for negotiating mitigation of these costs through value added benefits of the NS Express service.

DELIVERABLE:

- FACILITIES ACCESS INITIAL AND ON-GOING COST ANALYSIS.

5.0 TICKETING STRUCTURES AUDIT AND INTEGRATION RECOMMENDATION

5.1. TICKETING STRUCTURES AUDIT

In this day and age of nearly ubiquitous smart phone adoption, mobile ticketing can make booking and paying for commuter buses a seamless experience for many riders and help lower the barrier of entry for new transit users. However, the project team understands that while mobile ticketing is an easy option for some riders, it can be intimidating or a non-option for others. Thus, service providers should continue to offer traditional ticketing options to accommodate all riders — particularly those with disabilities, older adults, and low-income residents without smart phones.

the project team will provide an assessment of existing physical ticketing options in the area and will work with local agencies to identify integration and transfer opportunities that consider each leg of the journey. We will provide a summary of opportunities to implement integrated trip ticketing and identify transfer agreement models that can work in the North State Region.

DELIVERABLE:

- TICKETING STRUCTURE AUDIT.

5.2. ON-DEMAND AND SMART PHONE TICKETING

The project team will begin this task with an assessment of current smart ticketing and bus location options currently in use in the North State. We will provide a snapshot of the existing digital ticketing landscape as well as digitally mapped pickup and drop off locations.

The project team will outline specific measures SRTA should take to prepare for a future mobile ticketing rollout in conjunction with start of service. Our approach is in three parts:

1. **Mobile Ticketing:** The project team will suggest mobile application requirements to include in a future software solicitation that accounts for SRTA customer needs such as instructions to riders for storage considerations such as bikes, strollers, luggage, car seats, wheelchairs, and service animal accommodation.
2. **Real-Time Location Information:** We will include a requirement for the provision of real-time arrival information and inclusion of the Google Transit Feed Specification (GTFS) international standard for location accuracy. This will provide precise location information as seen in the “Where’s My Bus” technology. We will work to ensure buses are outfitted with the latest beacon technology that enables GTFS standard to operate in sync with mobile phone GPS data and required for both real-time location information and on-demand coordination.
3. **On-demand potential:** We will assess various on-demand model options for the North State and present different scheduling scenarios in conjunction with Task 10.

DELIVERABLE:

- SMART TICKETING REPORT AND INTEGRATION PATH FORWARD.

5.3. COST ANALYSIS FOR TICKETING INTEGRATION

In gathering pertinent findings and providing recommendations in Task 5.1 and 5.2, the project team will develop a cost analysis for smart ticketing for the North State Express Connect as well as integration with other providers such as Amtrak, Capital Corridor, Altamont Corridor Express, Yolobus, BART, etc. We will look at costing estimates for current mobile ticketing software development projects as well as recommended in-app payment for demand pricing outlined in Task 10.

DELIVERABLE:

- SMART TICKETING AND INTEGRATION COST ANALYSIS.

6.0 RIDERSHIP DEMAND ANALYSIS (INCLUDES DATA PURCHASE)

6.1. BIG DATA TO PINPOINT CURRENT RIDER HABITS

The project team will work with SRTA to determine the specifications for obtaining a large set of data to support the team's understanding of ridership demand for future Express Connect bus service. These costs for purchasing and preparing the data for analysis (e.g. stripping of personal information, etc.) are not included in the budget as currently proposed. Pending discussion with SRTA about the specific goals for the ridership analysis, this data will likely be mobile phone travel pattern data.

DELIVERABLE:

- BIG DATA PURCHASE (NOT A PART OF CONSULTANT BUDGET).

6.2. RIDERSHIP DEMAND ANALYSIS

Understanding existing and future markets for transit is a fundamental part of developing a service plan. Using traditional datasets from the US Census, American Community Survey, and the data purchase from Task 6.1, the project team will examine the service area and the outlying communities to determine the potential and propensity for transit ridership. This information will be assessed in relation to existing intercity transit service and input from local and regional agencies and stakeholders.

We will review the Longitudinal Employer Household Dynamics (LEHD) analysis performed as part of the Intercity Study's ridership demand projections, and compare to our analysis to identify opportunities to provide service to unserved markets. This analysis may include but not be limited to evaluation of existing population and employment densities, analysis of demographic characteristics, identification of major activity centers, and mobile data travel analysis. This latter analysis will be made possible by the Task 6.1 data purchase, and will allow us to analyze recently recorded observations of travel patterns from GPS devices and cellular towers. We have used this data for service planning in both the Los Angeles (Foothill Transit and Culver CityBus) and Atlanta regions to further investigate travel flows to specific zones, such as shopping centers, colleges, and office parks.

DELIVERABLE:

- RIDERSHIP DEMAND ANALYSIS AND STAKEHOLDER CONSENSUS.

6.3. PUBLIC OUTREACH, BRANDING, AND MARKETING

The project team will work on outreach to local agencies and public transportation providers. We will develop the content for an online survey to identify the type of service that would appeal to the North State communities. In order to collect input that is actionable, Nelson\Nygaard has developed an interactive survey tool that allows participants to “design” their ideal transit system within a constrained budget. Not only will this tool educate the public on the financial constraints on transit planning, it will allow us to identify the elements and aspects that are most important to the community. With this information, we can assist SRTA in the development of a name, logo, and brand to make buses, informational tools, and the overall transit program understandable and recognizable, as well as exciting and appropriate for the target markets.

DELIVERABLE:

- *OUTREACH REPORT, BRANDING REPORT, AND MARKETING PLAN.*

7.0 SCHEDULING COORDINATION

7.1. ANALYZE EXISTING SCHEDULES AND IDENTIFY POTENTIAL FOR SCHEDULING COORDINATION

The goal of this task will be to optimize the initial schedule in order to provide travel as seamless as possible within the Shasta County region. The project team will review and compare the initial coordinated schedule developed by Intercity Study with the ridership demand analysis from Task 6.2 to provide a refined schedule. Depending on input from SRTA and the local and regional transit providers, we will develop up to two alternatives based on aspects such as timing needs and stop locations. As part of this task, we will identify strategies and actions SRTA should take to sustain good service integration moving forward.

DELIVERABLE:

- *COORDINATED SCHEDULE AND TWO ALTERNATIVES.*

8.0 SECURE PASSENGER PARKING

8.1. PASSENGER PARKING INFRASTRUCTURE IMPROVEMENTS

Ideally, passengers would have access to NS Express pick up locations by other transit services or bicycle and pedestrian facilities, but this is not always feasible in rural communities. Passengers on the NS Express service require secure places to leave their vehicles when they access pick up locations along the I-5 backbone as well as feeder bus lines. Once the potential routes have been preliminarily vetted, our project team will work with North State Super Region and other partners to identify possible passenger parking locations. Some of these locations have been identified in earlier efforts, including Williams, Redding, and Red Bluff for the I-5 backbone. These and other potential parking locations will be analyzed by our project team.

Where feasible, existing facilities such as current transit centers will be utilized for connections. We will also identify and analyze additional locations required for secure passenger facilities and develop conceptual designs with the appropriate analysis for the business plan. Our team will develop a template that establishes a method for comparison and evaluation.

DELIVERABLE:

- *MOCKUPS AND DESCRIPTIONS OF PARKING INFRASTRUCTURE IMPROVEMENTS.*

8.2. COST ANALYSIS FOR SECURE PARKING INFRASTRUCTURE IMPROVEMENTS

Our project team will perform a comprehensive analysis of the parking infrastructure improvements required for the entire NS Express project. This analysis will include enough detail to solicit support and seek funding to implement the project.

DELIVERABLE:

- SECURE PASSENGER PARKING FACILITIES COST ANALYSIS.

9.0 MAINTENANCE FACILITY CONTRACT OR SITE IMPROVEMENTS ANALYSIS

9.1. REDDING MAINTENANCE FACILITY FOR BUSES, INCLUDING OVERNIGHT BUS STORAGE

Preliminary discussions with the Redding Area Bus Authority took place during the initial project concept development phase for the TIRCP grant application. During these discussions, it was established that utilizing the RABA facilities and training maintenance staff was a feasible option. Our project team will continue this discussion with RABA and analyze facility requirements and feasibility. Originally, up to 4, 45 foot buses would be accommodated by RABA storage facilities overnight.

In addition to a storage facility in Redding, the previous project efforts identified the potential for the storage and charging of 2, 45 foot buses in Sacramento at the Regional Transit bus yard. Our project team will establish communication and coordinate with Sacramento RT to explore opportunities.

DELIVERABLE:

- RABA MAINTENANCE YARD INFRASTRUCTURE, ADMINISTRATIVE AND CONTRACTOR NEEDS REPORT.

9.2. COST ANALYSIS FOR RABA IMPROVEMENTS AND OPTIONAL INDEPENDENT CONTRACTOR

Our project team will coordinate with RABA to explore feasibility for them to act as an independent contract operator for the NS Express service. The team will analyze the costs associated with making improvements to RABA facilities to accommodate operations and maintenance of the entire NS Express project.

DELIVERABLE:

- MAINTENANCE YARD AND BUS STORAGE COST ANALYSIS.

10.0 FARE STRUCTURE AND OPERATING BUDGET

10.1. FARE STRUCTURE

Based on the ridership analysis in Task 6.2, the project team will develop a fare structure with the goal of encouraging longer-range trips. This task will include a review of existing fare policies and procedures and financial analysis of existing fare collection system(s), emphasizing key indicators such as average fare per passenger, subsidy per passenger, farebox recovery ratio, and equity in fare policy.

We will develop a simple fare model to estimate the ridership and revenue impacts of different fare scenarios applying fare elasticities, which represent a given rider's sensitivity to price and thus her propensity to use this transit service. While fare elasticity has a large influence on the response of ridership to changes in fare levels or fare structure, the actual effect on ridership and revenue is not a simple mathematical equation applied across the board. Elasticity is influenced by other factors such as:

- The level of transit service
- Trip characteristics (distance, level of trip chaining, trip purpose)

-
- Competing and complementary travel costs (parking, fuel, transfers)
 - The mix of transit users (percent of adults, seniors, students, children)
 - The trend in transit service levels (increasing or decreasing)
 - Economic conditions

The model will incorporate these influences, to the extent possible, relying on separate modules to evaluate rider responses to price changes separate from changes due to other internal and external parameters. These additional factors may come into play when evaluating possible fare structure alternatives, but modeling them will also provide SRTA with an additional tool when conducting long-range/strategic planning.

The development of potential fare structures will also take into account the feasibility of implementing demand pricing to influence travel behavior, as well as the possibilities and constraints offered by the different ticketing technologies discussed in Task 5.

DELIVERABLE:

- *FARE STRUCTURE THAT ENCOURAGES LONGER TRIPS AND INCLUDES DEMAND PRICING.*

10.2. OPERATING BUDGET AND PERFORMANCE STANDARDS

The project team will develop an operating budget and performance standards for the NS Express Connect service with the goal of implementing an intercity service that will be self-sufficient (or require minimum public gap financing) within five years. This budget will be based on a financial assessment of the costs necessary to implement the Express Connect service and evaluate the current and future financial capacities of this service. This task will involve conducting a best practices review of funding options and model agreements between transit agencies and funding partners, as well as of performance standards of similar intercity services in California.

This financial assessment will focus on developing a short-term plan intended to support the NS Express service, with a five-year time horizon. A financial planning cost model will be developed to ensure SRTA's financial plan supports recommendations over the short, mid, and long term. The assumptions and results of the model will allow SRTA to make informed decisions about its financial capacity to make service changes and improvements. Development of the financial model will consist of the following steps:

- Review SRTA's existing and future resources, drawing on inventory budget, capital costs, agency budgets, and existing financial projections
- Determine the estimated costs of NS Express Connect service and identify potentially untapped revenue streams and opportunities for partnerships
- Develop quantitative tool that combines financial projections by funding sources as well as considers restrictions on different funding sources

We will compile the analysis and best practices findings, including quantitative tools, into a financial plan that presents the operating budget and performance standards.

DELIVERABLE:

- *OPERATING BUDGET AND PERFORMANCE STANDARDS.*

11.0 E-BUS NEEDS AND COSTS ANALYSIS

11.1. E-BUS NEEDS

The project team will leverage its vast E-Bus OEM network to develop an E-Bus capital needs inventory. Various purchase or lease scenarios will be evaluated to find solutions that are suitable for the stakeholders.

DELIVERABLE:

- *E-BUS CAPITAL NEEDS INVENTORY.*

11.2. CAPITAL COST ANALYSES

Standard pricing, equipment pricing, and additional warranty costs will be included in the analysis to give a comprehensive overview of the current pricing and trends. Battery lease programs will also be evaluated to see what savings could be reached when E-Buses are bought with the same cost as conventional diesel buses and the battery lease expenses are taken from the operational budget.

DELIVERABLE:

- *E-BUS PURCHASE AND OPTIONAL LEASE COST ANALYSIS.*

12.0 FINAL BUSINESS PLAN

12.1. FINAL BUSINESS PLAN STRUCTURE

Nelson\Nygard will support Green DOT in packaging product findings into a structure aimed at providing a clear summary of finding and next steps that includes but not limited to sections for an executive summary; introduction; roles and responsibilities; public outreach; expected performance; service integration; operating plan; capital improvement program; fare structure; action plan (including marketing, outreach and advocacy recommendations); and performance standards.

DELIVERABLE:

- *PLAN TABLE OF CONTENTS.*

12.2. COMPILATION OF PRIOR TASKS INTO PLAN SECTIONS

We recommend submitting prior task sections to SRTA for review as plan components during the project. This will culminate in a compilation of the plan sections for SRTA review before the draft and final business plan is prepared.

DELIVERABLE:

- *PLAN OUTLINE.*

12.3. FINAL BUSINESS PLAN

The final business plan will be a consolidation of the previous TIRCP application project foundation and the more mature project developed throughout this business plan development. The final business plan will be organized by sections and include infrastructure analyses and operational analyses. Each section and the entire business plan is intended to be integrated into future applications for funding.

Our project team will release one administrative draft of the business plan for SRTA's review. We will respond to comments with a complete draft North State Express Connect Business Plan for public review. This includes

a presentation to the SRTA Board of Directors or other appropriate entities. The business plan will be made available to the public for a period of 30 days at which time a final plan will be developed for adoption.

DELIVERABLES:

- INITIAL DRAFT PLAN
- DRAFTS OF THE PLAN (MINIMUM FOUR) ADDRESSING EDITS DESCRIBED IN REVIEWS ABOVE
- DRAFT-FINAL NORTH STATE EXPRESS CONNECT BUSINESS FOR BOARD
- PRESENTATION OF DRAFT-FINAL NORTH STATE EXPRESS CONNECT BUSINESS TO BOARD JOINTLY WITH SRTA STAFF
- ADOPTED NORTH STATE EXPRESS CONNECT BUSINESS IN ELECTRONIC FORMAT (E.G. MICROSOFT WORD & EXCEL, ADOBE PDF, OR OTHER AGREED UPON FORMAT)
- 10 COLOR COPIES OF ADOPTED NORTH STATE EXPRESS CONNECT BUSINESS
- ALL PROJECT DELIVERABLES IN A WELL-ORGANIZED ELECTRONIC FILE STRUCTURE AND FORMAT (E.G. MICROSOFT WORD, MICROSOFT EXCEL, ADOBE PDF, OR OTHER AGREED UPON ELECTRONIC FORMAT), INCLUDING RAW AND FINAL DATA, CALCULATION SPREADSHEETS AND SUPPORT FILES

Shasta RTA North State Express Connect Budget Proposal	GREEN DOT			Total GD	CALSTART Program Manager/ Senior Manager/ Project Manager					Toal CS	Nelson/Nygaard				Total N/N	GMA			Total GMA	Direct Costs					Sub Direct	Task Total			
	Principal \$140.00	Principal \$120.00	Assistant \$95.00		Senior Manager/ Executive \$495.65	Senior Program Manager/ Director \$304.25	Project Manager \$228.20	Project Manager \$161.07	Associate \$120.81		Meg Merritt Principal 1 \$180.00	Calli Ceniza Associate 4 \$135.00	Paris Latham Senior GIS Analyst \$130.00	Sam Erickson Senior Assoc. 1 \$150.00		PM \$120.00	GD \$100.00	PC \$50.00		Mileage \$0.55	Copy \$0.10	Meeting Supplies/Expenses \$1.00	Per Diem \$32.00	Direct \$1					
1.0 Project Initiation and Management																													
1.1 Project Initiation and Management	40																												
Total	40	0	0	40	0	0	0	0	0	0	30	30	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	1,525	1,525.00
2.0 State, Rail, and North State Super Region Coordination	\$5,600.00	\$0.00	\$0.00	\$5,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,400.00	\$4,050.00	\$0.00	\$0.00	\$9,450.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,525.00	\$1,525.00	\$16,575.00	
2.1 State Partnership Coordination	25															10	15												
2.2 Rail and Private Partnership Coordination	25															10	15												
2.3 Super Region Transit Partnership Coordination	30															10	15												
2.4 Service Operations Memo	15																												
Total	95	0	0	95	0	0	0	0	0	0	12	24	0	0	36	30	45	0	75	0	0	0	0	0	0	0	0	0	
3.0 E-Bus Charging Stations and Downtime Parking	\$13,300.00	\$0.00	\$0.00	\$13,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,160.00	\$3,240.00	\$0.00	\$0.00	\$5,400.00	\$3,600.00	\$4,500.00	\$0.00	\$8,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26,800.00	
3.1 Site Analysis and Recommendation	5				1	5	10	10	2																				
3.2 Cost Analysis of Utility Requirements for Proposed E-Bus Charging Locations	5				1	5	10	15	2																				
3.3 Cost Analysis of Infrastructure Needs for Proposed E-Bus Downtime Parking Locations	5				1	10	10	15	2																				
Total	15	0	0	15	3	20	30	40	6	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4.0 Airport Terminal and Bus and Train Station and Facilities	\$2,100.00	\$0.00	\$0.00	\$2,100.00	\$1,486.95	\$6,085.00	\$6,846.00	\$6,442.80	\$724.86	\$21,585.61	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,685.61
4.1 Documenting Facility Access Process	5	25																											
4.2 Cost Analysis for Facility Access	6	20																											
Total	11	45	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.0 Ticketing Structures Audit and Integration Recommendation	\$1,540.00	\$5,400.00	\$0.00	\$6,940.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,940.00	
5.1 Ticketing Structures Audit																													
5.2 On-Demand and Smart Phone Ticketing																													
5.3 Cost Analysis for Ticketing Integration																													
Total	0	0	0	0	0	0	0	0	0	0	32	12	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	975
6.0 Ridership Demand Analysis (Includes Data Purchase)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,760.00	\$1,620.00	\$0.00	\$0.00	\$7,380.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$975.00	\$975.00	\$8,355.00	
6.1 Big Data to Pinpoint Current Rider Habits																													
6.2 Ridership Demand Analysis																													
6.3 Public Outreach, Branding, and Marketing	25	50	35																										
Total	25	50	35	110	0	0	0	0	0	0	12	56	56	12	136	0	0	0	0	0	0	0	0	0	0	0	2,100	2,100.00	
7.0 Scheduling Coordination	\$3,500.00	\$6,000.00	\$3,325.00	\$12,825.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,160.00	\$7,560.00	\$7,280.00	\$1,800.00	\$18,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,100.00	\$2,100.00	\$33,725.00	
7.1 Analyze Existing Schedules and Identify Potential for Scheduling Coordination																													
Total	0	0	0	0	0	0	0	0	0	0	4	24	0	8	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0 Secure Passenger Parking	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$720.00	\$3,240.00	\$0.00	\$1,200.00	\$5,160.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,160.00
8.1 Passenger Parking Infrastructure Improvements	10	30																											
8.2 Cost Analysis for Secure Parking Infrastructure Improvements	35	20																											
Total	45	50	0	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0 Maintenance Facility Contract or Site Improvements Analysis	\$6,300.00	\$6,000.00	\$0.00	\$12,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,300.00
9.1 Redding Maintenance Facility for Buses, Including Overnight Bus Storage	5	20					5	10																					
9.2 Cost Analysis for RABA Improvements and Optional Independent Contractor	20	15																											
Total	25	35	0	60	0	0	5	10	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0 Fare Structure and Operating Budget	\$3,500.00	\$4,200.00	\$0.00	\$7,700.00	\$0.00	\$0.00	\$1,141.00	\$1,610.70	\$0.00	\$2,751.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,451.70
10.1 Fare Structure																													
10.2 Operating Budget and Performance Standards																													
Total	0	0	0	0	0	0	0	0	0	0	16	100	0	50	166	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0 E-Bus Needs and Costs Analysis	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,880.00	\$13,500.00	\$0.00	\$7,500.00	\$23,880.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,880.00
11.1 E-Bus Needs					2	3	10	20																					
11.2 Capital Cost Analyses					1	3	10	20								15													
Total	0	0	0	0	3	6	20	40	0	69	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0
12.0 Final Business Plan	\$0.00	\$0.00	\$0.00	\$0.00	\$1,486.95	\$1,825.50	\$4,564.00	\$6,442.80	\$0.00	\$14,319.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,800.00	\$0.00	\$0											