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Road to Coordination: Lessons Learned while Developing the San Luis Obispo County Travel Management and Coordination Center (TMCC)

APRIL 2018

FTA Report No. 0119
Federal Transit Administration

PREPARED BY

United Cerebral Palsy of
San Luis Obispo County &
Ride-On Transportation

RouteMatch

U.S. Department of Transportation
Federal Transit Administration

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Metric Conversion Table

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
LENGTH				
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liter	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
NOTE: volumes greater than 1000 L shall be shown in m^3				
MASS				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")
TEMPERATURE (exact degrees)				
°F	Fahrenheit	5 (F-32)/9 or (F-32)/1.8	Celsius	°C

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13. ABSTRACT

This "Road to Coordination" document was prepared to provide lessons learned from direct participant experience in designing the San Luis Obispo (SLO) County Travel Management Coordination Center (TMCC) under the U.S. Department of Transportation (US DOT) Federal Transit Administration's (FTA's) Mobility Services for All Americans (MSAA) Program. The document begins with a report on the process that the SLO community went through during the two years of its MSAA deployment planning grant. The focus was on developing technology to connect customers with transportation providers of both fixed-route and specialized transportation services. As the project was developed, it became evident that many institutional issues needed to be resolved to begin coordination within the network. This document provides lessons learned from direct experience in designing a TMCC to help a county or region improve its social service transportation network to make it easier for customers to get information about transportation options and schedule rides. The report also reviews the SLO planning process and then focuses on how a region can create its own TMCC planning process, because every region across the United States is unique in its transportation systems, so it is critical that a process be used to build a plan that is best for the community.

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ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
API	Application Program Interface
AVL	Automatic Vehicle Location (satellite navigation)
CAD	Computer-Aided Dispatching (FR system)
CalTrans	California Department of Transportation
CASD	Computer Aided Scheduling and Dispatching (DRT system)
CHC	Community Health Centers
ConOps	Concept of Operations
CSR	Customer Service Representative
CTSA	Consolidated Transportation Services Agency (California)
DRT	Demand-Response Transportation
FHWA	Federal Highway Administration
FR	Fixed Route
FTA	Federal Transit Administration
GPS	Geographic Positioning Systems
ITS	Intelligent Transportation Systems
IVR	Interactive Voice Recognition
JPO	US DOT's ITS Joint Program Office
MSAA	Mobility Services for All Americans
MPO	Metropolitan Planning Organization
PIP	Phased Implementation Plan
PMT	TMCC Project Management Team
Ride-On	Ride-On Transportation
RTA	San Luis Obispo Regional Transit Authority
SCT	South County Transit (administered by RTA)
SLO	San Luis Obispo
SLOCOG	San Luis Obispo Council of Governments
SR	System Requirements
TA	Technical Assistance
TMCC	Travel Management Coordination Center
TMCCAC	Travel Management Coordination Center Advisory Committee
TTT	TMCC Technology Tool (TMCC's technology components)
US DOT	United States Department of Transportation
USDHHS	United States Department of Health and Human Services

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- All members of the Advisory Committee for their engagement and time spent visioning and creating a mobility tool for the community.
- RouteMatch's Todd Allen for many hours of project support, documentation, and stakeholder outreach.

ABSTRACT

This "Road to Coordination" document was prepared to provide lessons learned from direct participant experience in designing the San Luis Obispo (SLO) County Travel Management Coordination Center (TMCC) under the U.S. Department of Transportation (US DOT) Federal Transit Administration's (FTA's) Mobility Services for All Americans (MSAA) Program. The document begins with a report on the process that the SLO community went through during the two years of its MSAA deployment planning grant. The focus was on developing technology to connect customers with transportation providers of both fixed-route and specialized transportation services. As the project was developed, it became evident that many institutional issues needed to be resolved to begin coordination within the network. This document provides lessons learned from direct experience in designing a TMCC to help a county or region improve its social service transportation network to make it easier for customers to get information about transportation options and schedule rides. The report also reviews the SLO planning process and then focuses on how a region can create its own TMCC planning process, because every region across the United States is unique in its transportation systems, so it is critical that a process be used to build a plan that is best for the community.

SECTION

1

Introduction

This "Road to Coordination" document was prepared to provide lessons learned from direct participant experience in designing the San Luis Obispo (SLO) County Travel Management Coordination Center (TMCC) under the U.S. Department of Transportation (US DOT) Federal Transit Administration's (FTA's) Mobility Services for All Americans (MSAA) Program.

The TMCC project started with the award of an MSAA research grant to enhance community mobility while coordinating Demand-Responsive Transportation (DRT) provider resources through use of technology. Not long into the process, the TMCC project's recurring dialogue had created the environment to facilitate "on the ground" steps to enable inter-agency coordination to benefit the customer. This progression led to the interest in preparing this informational document to benefit peer knowledge transfer.

The document also was prepared to help a county or region form a group of stakeholders to look at improving its social service transportation network to make it easier for customers to get information about their transportation options and to schedule their rides. The SLO County TMCC Project was a very involved process, with detailed technical and stakeholder outreach reports. Any community preparing a large-scale deployment planning or implementation project can follow the processes outlined in this document, which emphasizes information-sharing and consensus-building meetings stretched out over a one-year period. Outlines of proposed changes can be written rather than detailed reports.

This document provides lessons learned from direct experience in designing a TMCC to help a county or region improve its social service transportation network to make it easier for customers to get information about transportation options and schedule rides.

The document begins with a report on the process that the SLO community went through during the two years of its MSAA deployment planning grant. The focus was on developing technology to connect customers with transportation providers of both fixed-route and specialized transportation services. As the project was developed, it became evident that many institutional issues needed to be resolved to begin coordination within the network. This report reviews the SLO planning process and then focuses on how a region can create its own TMCC planning process. Every region across the United States is unique in its transportation systems, so it is critical that a process be used to build a plan that is best for the community.

MSAA Grant Award

In July 2015, United Cerebral Palsy of San Luis Obispo's Ride-On Transportation (herein referred to as Ride-On) was awarded a Federal Transit Administration (FTA) MSAA Intelligent Transportation Systems (ITS) research grant to design an interoperable, replicable, and scalable Travel Management Coordination Center (TMCC) for San Luis Obispo County, California. The vision of the community-focused TMCC is "to enhance personal mobility across San Luis Obispo County." The goals of the TMCC project are to use technology in providing real-time transportation information and trip-scheduling choices for the general public (all persons) through the coordination of public and human service Demand-Response Transportation (DRT) providers.

TMCC Development Process

To facilitate this initiative, the MSAA grant sponsored planning and use of the ITS Systems Engineering process to design the TMCC based on community stakeholder need. The ITS Systems Engineering Process includes the creation of a series of technical documents to cover Concept of Operations (ConOps), System Requirements, High-Level System Design, and Phased Implementation Plan. This process enabled the Project Management Team (PMT), stakeholders, and community to better address the TMCC purpose from a needs-based approach.

After the MSAA grant was awarded, the project commenced with a kick-off event to introduce the grant, discuss the concept, and recruit stakeholders to participate in the development of the TMCC. Community stakeholders included the general public, customers, transportation providers, technology specialists, human service agencies, community organizations, information and referral services (i.e., 511 and 211), and local, state, and federal funding partners.

To better understand the community's mobility and information access needs, extensive public outreach was conducted, including presentations for multiple community and human service organizations, citizen conversations, stakeholder communication with consumers, creation of a project website, and conducting a public survey. Outreach and survey results were developed into a list of stakeholder needs that would serve as the TMCC's focus to meet through the planning process.

To facilitate regular stakeholder engagement, a TMCC Advisory Committee was created of interested project stakeholders who met on a quarterly basis. For additional insight, the TMCC's Advisory Committee also established three subcommittees that focused on leveraging stakeholder knowledge in addressing specific aspects of the TMCC—Transportation Providers, Technology, and Users/Riders. Through this process, it became clear that engaging stakeholders in regular dialogue would result in improvements in the coordination and enhancement of demand-response/ paratransit transportation services.

The Road to Coordination

Over the course of TMCC project development, Ride-On and the PMT were asked by FTA and industry peers to share lessons learned to benefit other communities. As a result, this document conveys experiences and lessons learned through the TMCC planning and system engineering process, focusing on community activities in seeking to improve personal mobility, human service and public transportation coordination and discussing technology solutions that can benefit the development of a TMCC.

Highlighted are the challenges encountered as a plan for change in the delivery system of social service, transportation options was developed. SLO's transportation system had been developed over the past 20 years, and the existing funding agencies believed the current system was meeting the needs of the customers, and concern was expressed that any changes would take ridership and revenue from the existing transportation networks. Each transportation provider was focused on improving the system for its own company, but not necessarily for the best interests of riders. That said, resistance from current providers to change may be experienced. SLO's focus remained on what was best for customers who use social service networks. As it moved through the planning process, advantages for the transportation providers and information providers were revealed, and the journey will result in improved service in the region.

SECTION

2

San Luis Obispo County MSAA Project

This section discusses the MSAA project's origin, local background, stakeholders, and the process used in designing the SLO County TMCC.

MSAA Project Origin

The San Luis Obispo MSAA project began with a conversation and idea session to develop technology that would improve customer trip scheduling ease, provide access to all transportation providers, and develop a coordinated network of transportation providers in SLO County. In Spring 2014, FTA released its MSAA Intelligent Transportation Systems (ITS) research funding announcement and call for project proposals. Ride-On and RTA's technology partner, RouteMatch, completed a partnership-oriented MSAA project application to plan and design a replicable and scalable TMCC focused on the initial brainstorming and ideas.

In July 2015, the SLO County partners were notified that their project had been awarded one of four MSAA grants in the US. The planning and system engineering grant provided necessary funding and a process for the partners to evaluate and propose a technology-based solution in meeting citizen mobility and communication needs. The goals of the TMCC project were to use technology to provide real-time transportation information and trip scheduling choices for the general public (all persons) through the coordination of public and human service DRT providers.

The planning and system engineering grant provided necessary funding and a process for the partners to evaluate and propose a technology-based solution in meeting citizen mobility and communication needs. The goals of the TMCC project were to use technology to provide real-time transportation information and trip scheduling choices for the general public (all persons) through the coordination of public and human service DRT providers.

Background

San Luis Obispo County

To provide context for discussion of the TMCC project, it is important to know San Luis Obispo (SLO) County and the transportation providers operating within its borders. SLO County is located on the Central Coast of California, 200 miles north of Los Angeles and 204 miles south of San Francisco. The county encompasses 3,299 square miles and has a population of 281,401. Major transportation corridors include US Highway 101 and California Highway 1 (Pacific Coast Highway). A major rail line serves the

county north-south, and Amtrak passenger rail service is available. The county is home to incorporated and unincorporated areas, including an urbanized area. Communities in the county include Paso Robles, Atascadero, San Luis Obispo, Morro Bay, Avila Beach, and Pismo Beach. Figure 2-1 is a map of the county.

Source: Google Maps

Figure 2-1

Map of San Luis Obispo County

SLO County Transportation and Resource Providers

SLO County is home to public, private, and non-profit organizations that provide DRT services, also known as dial-a-ride and paratransit, as well as fixed-route transportation services for the general public and human service agency customers. The county also is home to transportation information resource agencies that provide customers with information and referral services in the community. The following is an overview of the transportation providers, information resources, and services provided.

Demand-Response Transportation (DRT) Providers

The following is an overview of legally-operating public, private, and non-profit DRT providers and services in SLO County. *(Note: A Transportation Network Company [TNC] that operates illegally in SLO County is not included in this provider compilation.)*

Ride-On Transportation (www.ride-on.org)

Ride-On provides coordinated door-to-door paratransit transportation services for human service, Medicaid, contract, Veteran's Shuttle, and older adult demand-response services. Services are provided 24/7 with 60 vehicles, with advance reservations in SLO County and Santa Maria. Ride-On's call center is available Monday–Friday from 6:30 AM–5:30 PM for transportation information and services. Customers also may request trips on the Ride-On website. Ride-On provides telephone-based Spanish-language translation services for its customers.

RTA (Runabout, Nipomo DAR, Shandon/Templeton DAR, Paso DAR) (http://www.slorta.org/)

RTA provides public fixed-route and Runabout ADA complementary door-to-door paratransit services in SLO County. Runabout service is available 7 days per week, consistent with fixed-route service hours for ADA complementary paratransit-eligible customers. The demand-response call center is available 7 days per week from 8:00 AM–5:00 PM for transportation information and services. Customers also may view RTA information and services on its web-enabled app (RTA and SCT fixed-route services only). RTA provides telephone-based Spanish-language translation services for its customers and the SLO Council of Government's (SLOCOG) Regional Rideshare 511 system.

SLO Safe Ride (https://slosaferide.com/)

Open to the general public, SLO Safe Ride provides curb-to-curb on-call and door-to-door scheduled demand-response transportation services for community and special events 24/7 in SLO County and across the state. The call center is available 7 days per week from 10:00–3:00 AM for transportation services. Customers also may schedule trips by using the SLO Safe Ride app.

Yellow Cab (http://www.sloyellowcab.com/)

Open to the general public, Yellow Cab offers 24/7 on-call demand-response taxi services in San Luis Obispo County and Santa Maria. It provides curb-to-curb and door-to-door services 24/7, and the call center/dispatch is open the same hours. Yellow Cab acquired six accessible minivans in early 2017 and is developing an app to accept customer trip requests.

Smart Shuttle (http://www.smartshuttle805.com/)

Open to the general public, Smart Shuttle provides curb-to-curb and door-to-door scheduled demand-response transportation services to local and out-of-region airports as well as special event and town car services in San Luis Obispo and Santa Barbara counties. Services are provided 24/7, and the call center is open the same hours. Smart Shuttle is developing an app to accept customer trip requests.

City of Morro Bay Call-A-Ride (http://www.morro-bay.ca.us/293/Transit)

The City of Morro Bay provides call-a-ride (DRT), curb-to-curb, flexed fixed-route transportation services for its residents up to ¾ mile. Services are provided Monday– Saturday, and the call center is open from 8:00–10:00 AM Monday through Friday.

Atascadero Dial-A-Ride (http://www.atascadero.org/index.php?option=com_content&view=article&id=633&Itemid=1536)

The City of Atascadero provides door-to-door dial-a-ride DRT services for its residents. The service and call center operate Monday through Friday from 7:30 AM–3:30 PM.

Fixed-Route Transit Providers

SLO Regional Transit Authority (RTA) (http://www.slorta.org/)

RTA provides regional public transit services and complementary ADA Paratransit services throughout San Luis Obispo County. It operates six fixed routes Monday–Sunday, which includes South County Transit operating in southern SLO County and North County Transit operating in northern SLO County. For information on the RTA's Runabout ADA Paratransit services, see above.

City of San Luis Obispo Transit (SLO Transit)
(http://www.slocity.org/government/department-directory/public-works/slo-transit)

The City of San Luis Obispo Transit provides public transit services in the city through eight fixed routes, including a downtown trolley. SLO Transit connects areas across the city with its downtown transit center and the California Polytechnic University (Cal Poly) campus.

Morro Bay Transit (http://www.morro-bay.ca.us/294/Morro-Bay-Transit)

The City of Morro Bay provides public transit services in the city through one flexed fixed route, connecting community interest areas and operating Monday through Sunday.

Transportation Information Resources

SLO Regional Rideshare/511 (http://knowhowtogoslo.org/)

A division of the SLO Council of Governments, Regional Rideshare is the official Mobility Management Agency for the County and provides transportation information and referral to individuals through its 511 telephone service. It also supports commuter, employer, student, and older adult transportation options and coordinates carpool and vanpool options throughout the county and urban area through its "Know How to Go!" program.

211 – United Way of San Luis Obispo
(http://www.unitedwayslo.org/search-2-1-1-slo-county)

211 is a community information and referral service operated by United Way of San Luis Obispo County. It features a "live" 24 hour/day call center located in Ventura and a supporting website to provide community information, including transportation services, for callers in San Luis Obispo County.

Human Service Agencies and Community Organizations

In SLO County, human service agencies fund and support a variety of transportation programs for customer access to community services. The

following are human service agencies and other community organizations that provide this support service.

Community Health Centers (CHC)
(http://www.communityhealthcenters.org/en/san-luis-obispo-casa-st.html)

The CHC is a U.S. Department of Health and Human Service-funded network of health clinics that serve SLO County. The CHC offers transportation assistance to patients who do not have a car and cannot use public transportation.

CenCal Health (Medi-Cal Program) (http://www.cencalhealth.org/)

CenCal Health provides community healthcare choices along with administration of the Medi-Cal Program (Medicaid) for SLO County. It provides transportation funding and contracted services for customers to access necessary Medi-Cal sponsored services.

Community Action Program of San Luis Obispo (CapSLO)
(http://www.capslo.org/)

CapSLO provides a variety of community-based human service programs, including Head Start and client-supportive services such as transportation.

SLO County Department of Social Services (DSS)
(http://www.slocounty.ca.gov/dss.htm)

SLO County DSS provides multiple human support assistance programs, including transportation (bus pass purchases) for persons meeting eligibility requirements.

Tri-Counties Regional Center (http://www.tri-counties.org/)

One of 21 non-profit regional centers in California providing lifelong services and support for people with developmental disabilities residing in SLO County, Tri-Counties Regional Center provides funding to Ride-On for contracted human service transportation.

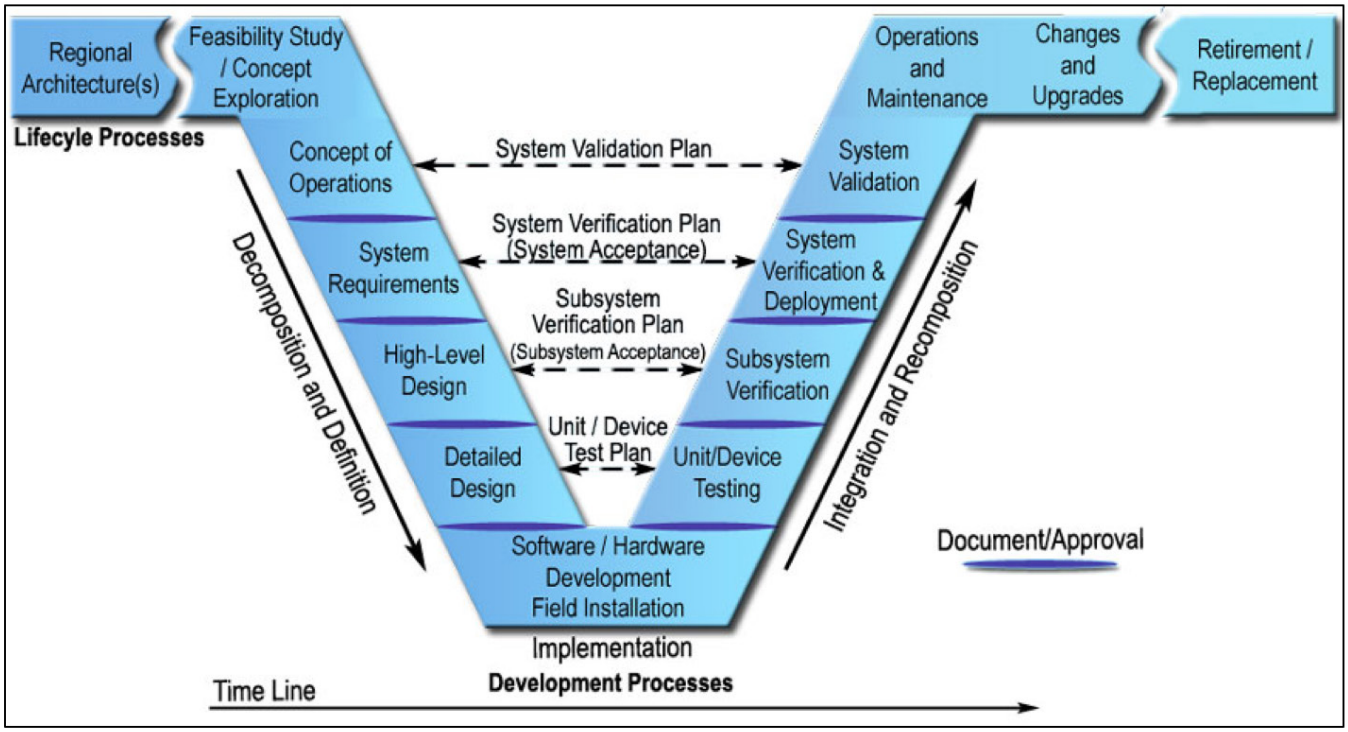
California Consolidated Transportation Service Agency (CTSA)

CTSA supports human service and community agencies and serves as the designated CTSA for SLO County. Ride-On provides CTSA-funded transportation services for participating human service and other community organization client transportation. For a list of CTSA-funded agencies, see Appendix 2.

TMCC Design Process

To commence the MSAA grant, the first step was understanding the process in which the TMCC would be designed. After discussion with FTA, it was determined that the ITS Systems Engineering process would be used in developing the TMCC and its required written deliverables to provide further explanation of the community's interests and details of the TMCC from origin to proposed implementation. The ITS Systems Engineering process includes development of a Project Management Plan, Concept of Operations, System Requirements, High-Level System Design, and Phased Implementation Plan deliverables. This process promotes a stakeholder needs-based project design approach, encouraging all project elements to relate back to initially-elicited customer and stakeholder needs and ensuring that all are addressed. Figure 2-2 is an illustration of the ITS Systems Engineering Process.

The ITS Systems Engineering process promotes a stakeholder needs-based project design approach, encouraging all project elements to relate back to initially-elicited customer and stakeholder needs and ensuring that all are addressed.



Source: USDOT/FHWA

Figure 2-2

USDOT/FHWA ITS Systems Engineering "V" Diagram

Managing the Process – Project Management Plan

Commencing the MSAA project's deliverables, a Project Management Plan (PMP) was created to provide a written account of the MSAA project's process and system of management. The PMP included a project overview (background, problem statement/opportunities, description, tasks and deliverables, milestones schedule, budget) and information on Project Management Team (PMT) organization (structure, roles and responsibilities, staffing), project monitoring and control (internal/external communications and scope/budget, change, schedule, and risk management), and project tracking and reporting.

To facilitate the MSAA grant and PMP, a PMT that consisted of representatives of Ride-On, RTA, and RouteMatch. Ride-On was established to provide daily management of the project; RTA provided grants management expertise and services, project guidance, meeting facilitation, and reporting/billing experience with FTA; and RouteMatch, as the technology partner to Ride-On and RTA, provided technical consulting support in development of the project's deliverables. The PMT met on a regular basis to ensure that the project was being implemented according to the approved grant's scope of work and the PMP. FTA staff and the MSAA Technical Assistance team provided consistent project oversight and communication with the PMP for technical assistance and administrative and project support needs.

Guiding the Process – TMCC Advisory Committee

In commencing the TMCC process, the PMT developed a TMCC Advisory Committee and invited persons across SLO County to attend the initial meeting to become engaged while providing stakeholder input and direction into the project. Ride-On hosted the initial committee meeting, and 26 stakeholders attended from public, private, and private non-profit organizations representing government, transportation, healthcare, human service, information, consulting, and community organizations. Interested individual citizens also attended. At the meeting, the PMT provided an overview of the awarded MSAA grant, including scope and deliverables, deadlines, and definition of a TMCC, and discussed the ITS Systems Engineering process that would be used throughout the project. The PMT asked all stakeholders to refrain from seeking an immediate solution based on existing local partner funding streams. The Advisory Committee then established a recommended meeting schedule (quarterly minimum) to ensure regular project communication and updates. Ride-On and RouteMatch provided staff support to the Advisory Committee in developing agendas, supporting documentation, and preparing meeting notes.

The Advisory Committee's work included the establishment of three subcommittees to address specific project elements—the Transportation Providers, Technology, and User/Rider subcommittees. With composition from the Advisory Committee, the subcommittees typically met on a bi-monthly basis as specific issues warranted. The Transportation Providers Subcommittee

addressed issues related to proposed TMCC interactions among DRT providers such as administrative and operational items, the Technology Subcommittee addressed a wide array of technology issues from overall system structure to specific functionality, and the User/Rider Subcommittee provided feedback from the customer's perspective related to design elements.

Concept of Operations – Determining the TMCC

The TMCC project's Concept of Operations (ConOps) deliverable described the initially-proposed TMCC's characteristics from the project stakeholder perspective. It also sought to provide stakeholders with the proposed TMCC's vision, goals/objectives, initial expectations, anticipated roles and functions, and preliminary operation within the context in which it would work. A detailed description of "what" and "how" the TMCC would operate and by whom was addressed in the System Requirements and High-Level Design stages of the project.

The TMCC project's Concept of Operations (ConOps) deliverable described the initially-proposed TMCC's characteristics from the project stakeholder perspective and sought to provide stakeholders with the proposed TMCC's vision, goals/objectives, initial expectations, anticipated roles and functions, and preliminary operation within the context in which it would work.

To develop a TMCC for a community, the process must reflect the needs of the community. Prior to addressing any initial conception of a TMCC, the ConOps process started with an effort to assess the community's mobility needs and how technology could assist in meeting them. This needs identification process commenced in March 2016 with an Advisory Committee meeting and continued through May 2016. Customer comments were sought and received by Ride-On during this timeframe. Through this process, the PMT identified multiple needs, shortcomings, and technology concerns in the development of the TMCC. The following section provides an overview of the stakeholder comment and needs elicitation process.

Outreach and Collection Process

TMCC customer needs were solicited and received by Ride-On through the following formats. Input on customer needs was critical in the development of the Concept of Operations and served as a basis for the TMCC's proposed services. To facilitate greater general public and human service/community organization comments, Ride-On created a public outreach plan to solicit customer needs for the TMCC (see Appendix C). Through the outreach plan, the following methods were used to solicit and receive customer needs:

- **General Public Outreach** – Ride-On created a project website that included information such as an overview of the TMCC project, and brief English/Spanish customer surveys queried respondents about the level of

difficulty in seeking transportation, how a TMCC could help to overcome transportation difficulties, methods to access community transportation resources, and potential problems foreseen in creating a TMCC. Ride-On also reviewed and discussed survey questions with interested telephone respondents and recorded those customer comments. Overall, Ride-On received 69 survey responses from multiple diverse customer perspectives that provided comments on TMCC project needs and perceived constraints.

- **Human Service Agency and Community Organization Outreach** – Ride-On presented an overview of the MSAA project to the following organizations and sought input on customer needs related to the project:
  - Adult Services Policy Council of SLO County – presentation and committee comments
  - SLO County Department of Social Service – staff outreach/customer feedback
  - CenCal Health (Medicaid) – advisory committee presentation and comments and staff outreach/customer feedback
  - SLO County Senior Commission – presentation and feedback
  - SLOCOG Social Services Transportation Advisory Committee – presentation and comments
  - City of San Luis Obispo Mass Transportation Advisory Committee – presentation and comments
- **TMCC Advisory Committee** – Advisory Committee stakeholders discussed key elements in the development of the TMCC, including identification of needs, creation of project objectives, discussion of DRT provider coordination opportunities, and other items of interest. The following Advisory Committee stakeholder issues were raised in the needs identification process:
  - **TMCC Funding** – Some committee members were interested in learning the TMCC's projected costs prior to system development. The PMT reminded members that the ITS Systems Engineering process would provide a path to determining a proposed TMCC, solutions, and cost. It was critical to reinforce the need to look at "what" the TMCC would do before focusing on "how" the plan would be implemented.
  - **Travel Planning** – Another issue concerned potential changes to the existing system for acquiring trip information, scheduling rides, and coordinating trips among transportation providers. An active telephone and online 511 system currently provided information about transportation providers and social service transportation.
  - **Technology Partner** – With an employee from RouteMatch on the PMT, some committee members were concerned that the final product would consider only RouteMatch products. Ride-On and RTA assured members that RouteMatch staff participation sought only to provide neutral industry education and support the process to determine a TMCC solution, and the Advisory Committee would be engaged in all aspects of the project.

- **TMCC Transportation Provider Subcommittee** – From this subcommittee of public transit, paratransit, private, and human service transportation providers, the PMT asked for input on administrative and operational items such as vehicle insurance, driver training, driver screening, fare structures, technology, maintenance service, and other business issues. Responses from each provider were evaluated, and it was learned that many operational procedures were very similar. Through this assessment, the subcommittee agreed that a minimum level of operational protocols needed to be met by all DRT providers to be a participant in the TMCC. Another issue raised was how to ensure that a DRT provider could share a customer's trip with another provider—what happens if the DRT provider does not provide the ride it received from another agency? These issues would need to be addressed by the subcommittee prior to implementation.
- **TMCC Technology Subcommittee** – Made up of professionals and interested parties who wanted to assess available technology options for the TMCC, this subcommittee was quick to point out that technology is a rapidly-evolving field, and technology solutions for developing the TMCC may not currently be available. Based on initial needs identified, subcommittee members focused on white-boarding ideas for the TMCC's initial proposed high-level system (technology) diagram (see Figure 2-3 later in this section). The Technology Committee then addressed potential options for customer access, database management, and the sharing of data with DRT provider Computer-Assisted Scheduling and Dispatching (CASD) technology systems through this initial concept.

The TMCC Technology Subcommittee was quick to point out that technology is a rapidly-evolving field, and technology solutions for developing the TMCC may not currently be available.

- **TMCC User/Rider Subcommittee** – This subcommittee provided valuable feedback and insights for customer stakeholders, including those who do not have access to a computer or smart phone. It recommended that the TMCC provide transportation information and services through direct communication with customers by telephone or at walk-in locations. In addition, it was concerned with the need to maintain the privacy of all TMCC customer information and compliance with all Health Insurance Portability and Accountability Act (HIPAA) regulations. The subcommittee also suggested including human service agencies as part of the TMCC's DRT provider and information network (if interested in expanding service provision).

Needs and Constraints – Collation Process

During the customer input phase of the project, Ride-On documented the receipt of all customer and other stakeholder needs and constraints in separate Microsoft Excel databases for further analysis and future traceability.

- **Customer Needs** – In reviewing customer needs received, Ride-On staff identified duplicated comments with like patterns and collated them into single customer needs. Table 2-1 illustrates the collated needs. All collated customer needs were then used to create the project's goal-based objectives and support the design of the proposed TMCC.
- **Customer Constraints** – Similar to the needs process, customer constraints received were collated and then categorized by Ride-On staff into Administrative, Operational, and Technology areas. A list of constraints or issues that would be a challenge to the development of the TMCC also was developed. Some key constraints identified include the following (a full list of constraints is provided in Appendix E):
  - DRT providers with different business rules
  - Transportation services with different fare systems
  - Paying for development and maintenance of the TMCC
  - Educating the community about the TMCC
  - Transportation providers unions
  - Maintaining TMCC's proposed technology
  - Older adults and people with disabilities using the TMCC
  - Providing TMCC services in Spanish
  - Introducing new technology and services
  - Developing front- and back-end technology tools

Table 2-1

Collated Customer Needs

Need #	Collated Need
1.00	Provide transportation services and information in-person and by telephone, website, and mobile app.
1.01	Provide customers with transportation service options and agency contact information.
1.02	Use existing 511 and 211 electronic and telephone services.
1.03	Provide accessible services for older adults and persons with disabilities.
1.04	Provide customer with fare comparison of all transportation options (illustrate all available service providers and fares).
1.05	Provide customers with real-time vehicle arrival and travel time information.
1.06	Provide customers with less-than-one-hour DRT provider response time to a ride request.
1.07	Provide customers with in-person (physical location) trip-scheduling capability.
1.08	Provide customer with trip journey planning services (fixed-para-train-taxi, etc.).
1.09	Communicate DRT provider vehicle lift-equipped capability and vehicle capacity to customers.
1.10	Enable direct call transfers between DRT providers.
1.11	Create single telephone number for customers to contact DRT providers.
1.12	Provide customers with 24/7/365/ telephone service availability.
1.13	Create simple-to-use app and website for customers.
1.14	Leverage DRT provider data.
1.15	Enable "new" riders to register for applicable services(s).
1.16	Use existing DRT provider technologies.
1.17	Provide unified fare payment capability.
1.18	Provide customers with secure online access for electronic services.
1.18	Provide customers with confirmed fare after booking trip.
1.19	Provide customers with trip confirmation (after trip scheduled).
1.20	Enable data to be shared among DRT providers.
1.21	Provide trip verification/confirmation (who owns trip—client's host agency?).
2.00	Create DRT provider inter-agency service agreements.
2.01	Establish DRT provider "agency-only" telephone number.
2.02	Identify all DRT provider services available to the public.
2.03	Develop operations coordination protocols between DRT providers (business rules).
2.04	Develop minimum DRT provider levels of insurance, staff training, maintenance.
2.05	Develop DRT provider customer quality assurance measures.
2.06	Encourage customers to use fixed route as option to DRT.
2.07	Understand DRT provider institutional barriers.
2.08	Involve DRT provider governing boards in process as appropriate (those applicable).
2.09	Use existing DRT provider call centers.
2.10	Ensure DRT provider consistency of information communicated to customer.
2.11	Create project name and logo.
2.12	Place logo in visible location on all participating DRT provider vehicles.
2.13	Market and promote TMCC to the public.
2.14	Conduct customer education campaign.
2.15	Establish accounting (payment/reimbursement) procedures between providers.
2.16	Identify fares for all ridership categories.
2.17	Conduct DRT provider staff training.
2.18	Identify DRT provider staff to support TMCC.

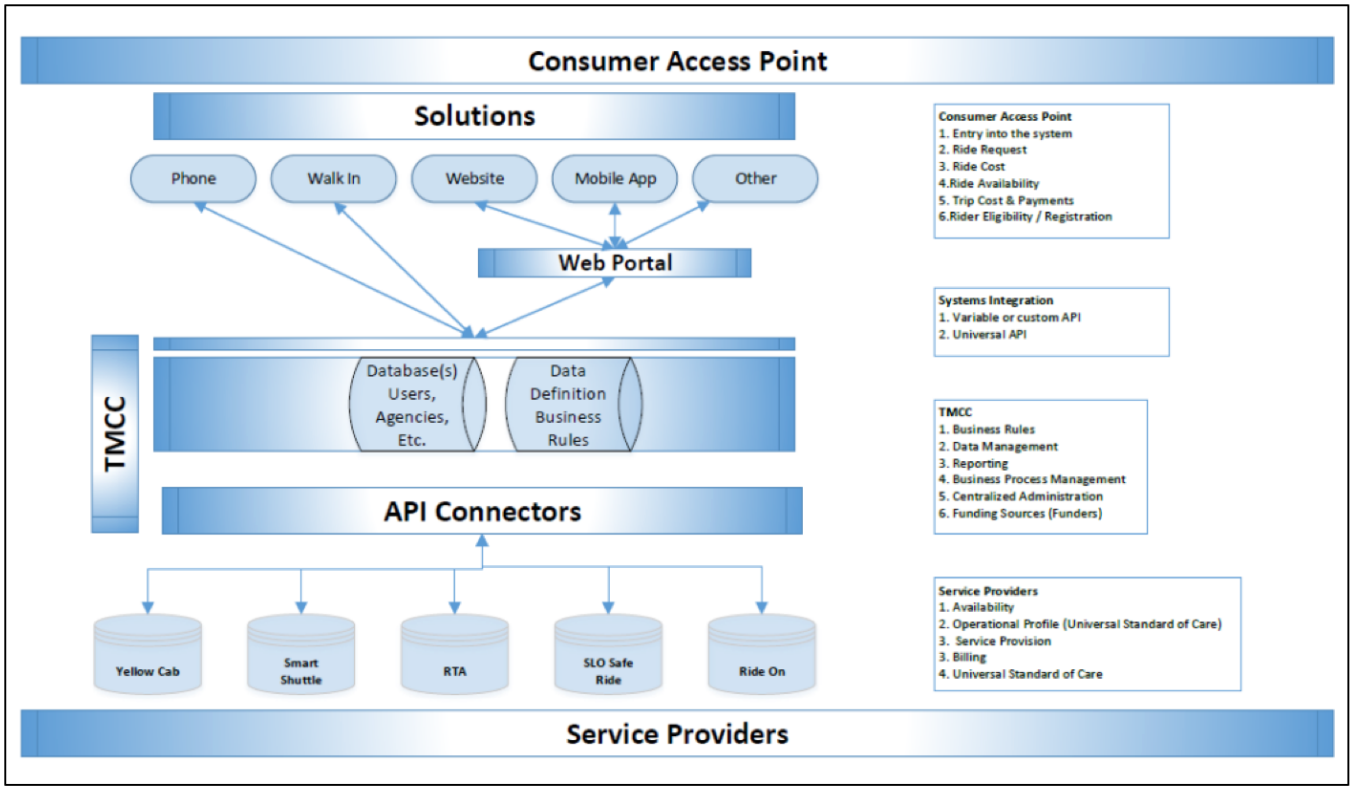
Developing a Conceptual TMCC

TMCC System Boundaries

Based on customer needs input, the ConOps process included the creation of a conceptual TMCC. The creation of system boundaries depicted the proposed environment in which the TMCC would operate in SLO County, including human or machine interaction. A ConOps may feature this conceptual system to provide stakeholders with a better understanding of the proposed TMCC. The system boundaries also featured the proposed hypothetical TMCC system and elements associated with its operation.

Hypothetical TMCC Technology "System"

The TMCC's proposed hypothetical TMCC technology system aimed early in the process to meet customer (user) needs listed in Table 2-1 as well as the project's identified goals and objectives. Through this effort, the PMT initially envisioned the hypothetical TMCC system illustrated in Figure 2-3.



Source: RouteMatch/Technology Subcommittee

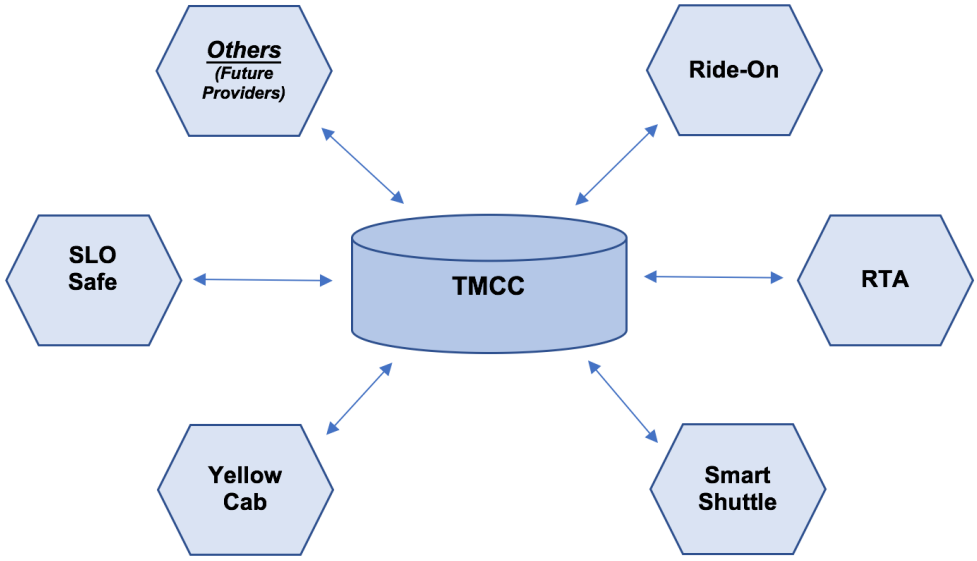
Figure 2-3

Proposed TMCC High Level System (Customer Access Perspective)

Proposed TMCC DRT Service Providers

As illustrated in Figure 2-4 and noted in Table 2-1, the proposed TMCC's services would be supported initially by five DRT providers—Ride-On, RTA, SLO Safe Ride, Yellow Cab, and Smart Shuttle. The system was envisioned to be scalable for additional future DRT provider participation.

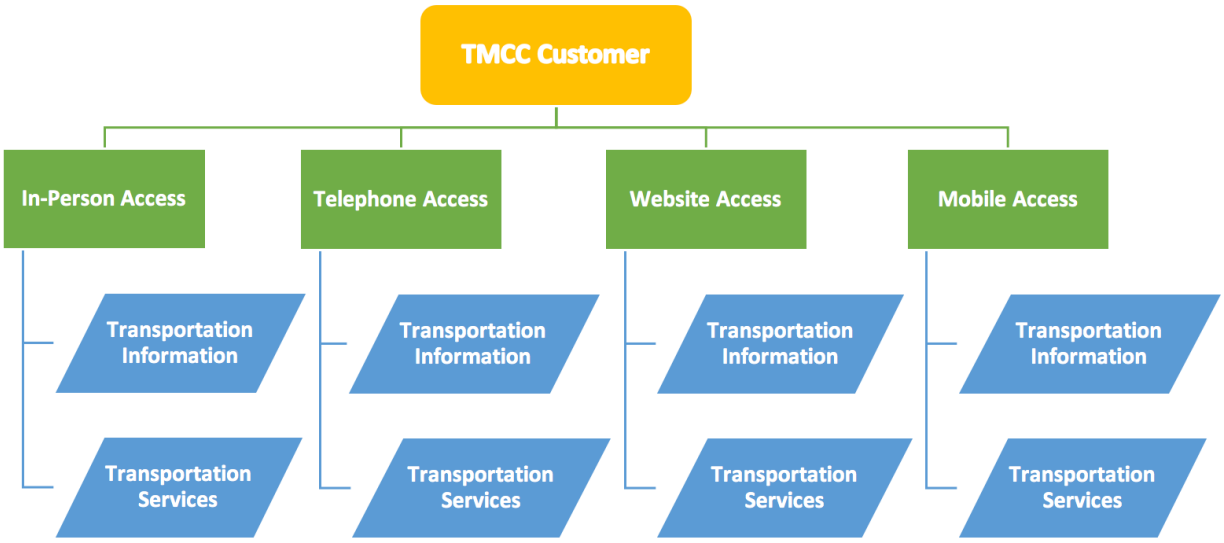
Figure 2-4
Proposed TMCC DRT Service Providers



Source: RouteMatch

Proposed TMCC Customer Access Methods

Based on the needs input, proposed TMCC customer access was addressed early in the ConOps phase and maintained throughout the project through the in-person, telephone, website, and mobile app solutions illustrated in Figure 2-5.



Source: RouteMatch/Ride-On Transportation

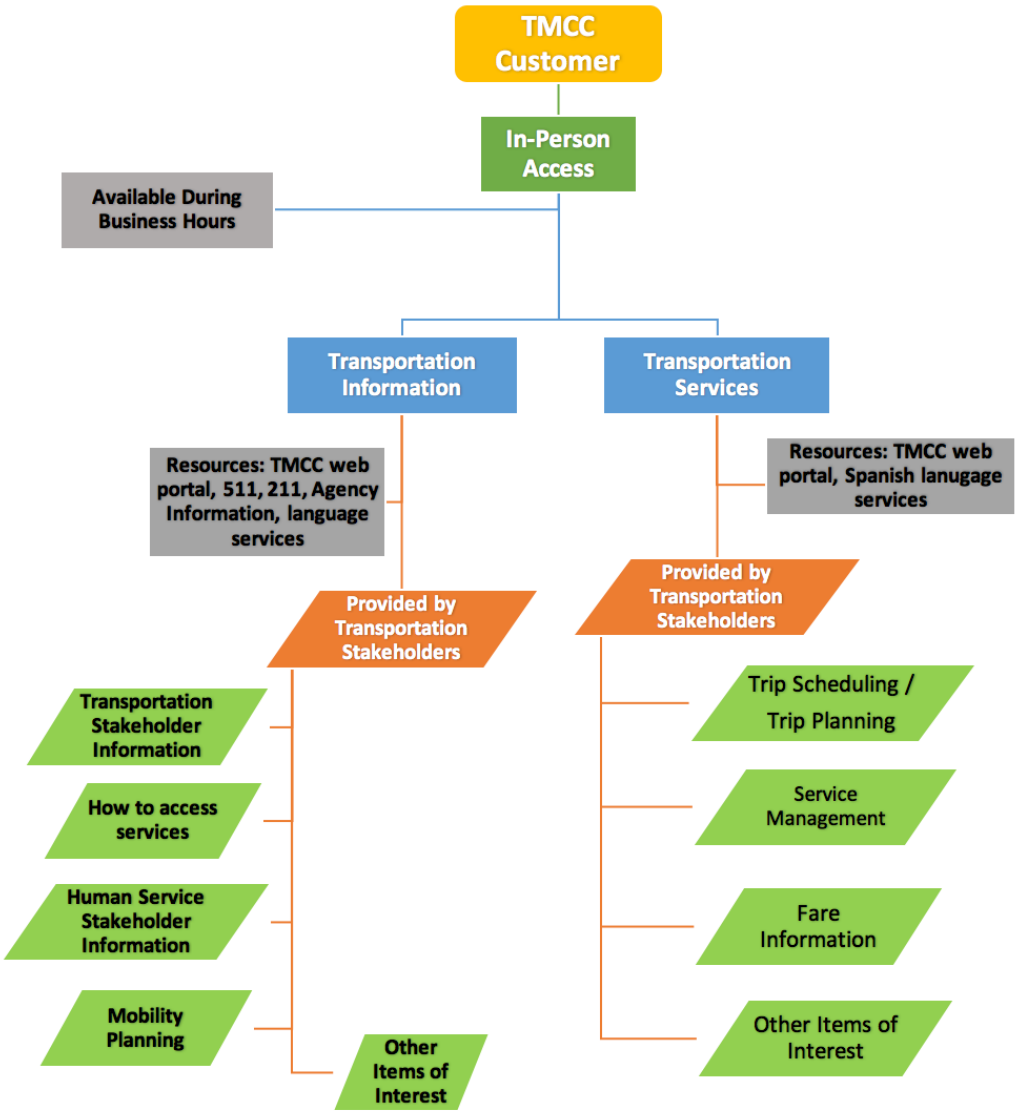
Figure 2-5

Proposed TMCC Customer Access Solutions

- **In-Person Access** – To accommodate in-person customer access, it was envisioned that DRT providers and other interested stakeholders would have the capability to use the proposed TMCC system to assist in providing customers with "personal" services during business hours. Figure 2-6 illustrates in-person access to proposed TMCC services.

Figure 2-6

Proposed TMCC In-Person Customer Access

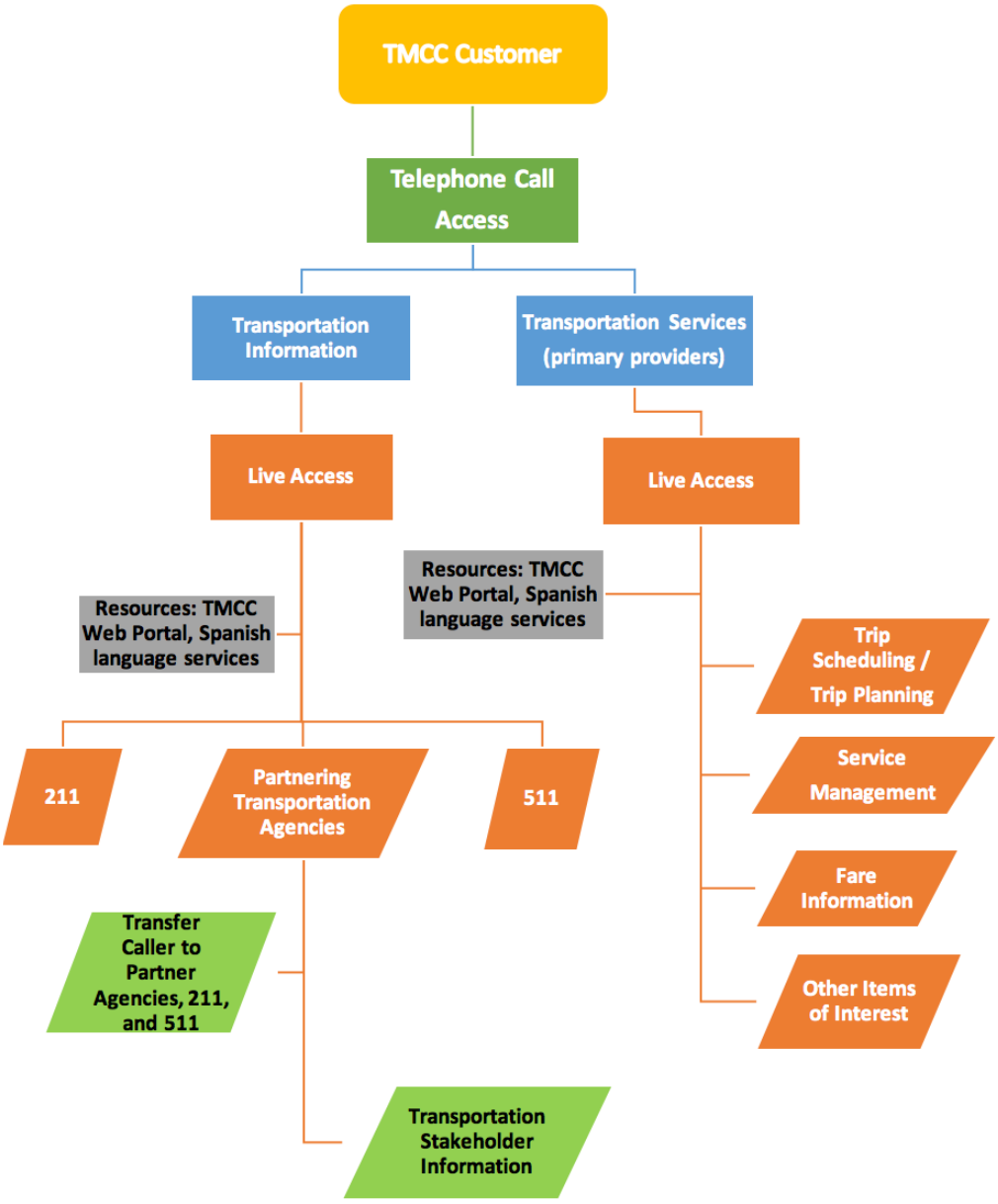


Source: RouteMatch/Ride-On Transportation

- **Telephone Access** – It was proposed that customers be given the ability to either call a single new "one-call" TMCC telephone number or contact their DRT provider directly. TMCC customers also would have access to a "live" customer service representative (CSR) to address questions. Figure 2-7 illustrates proposed telephone access to TMCC services.

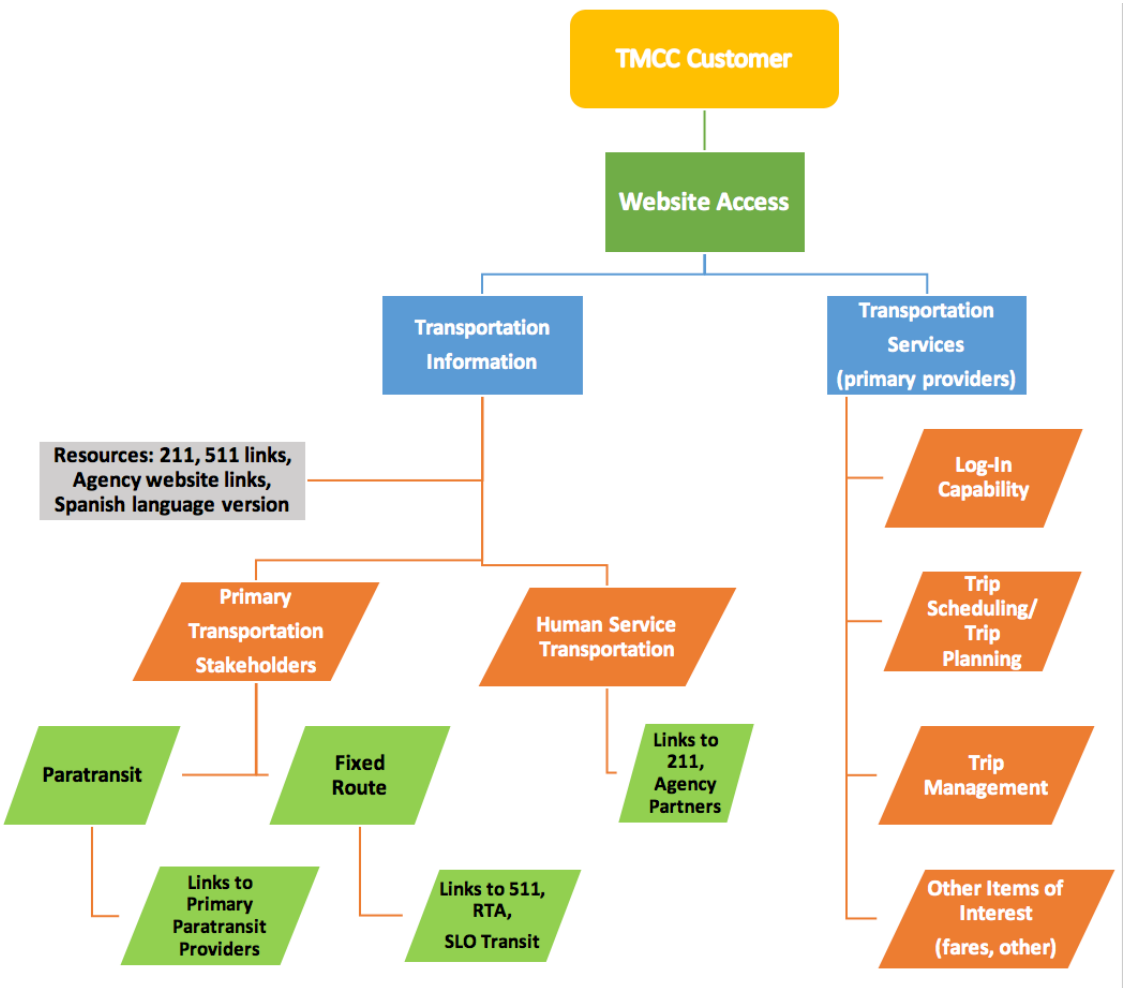
Figure 2-7

Proposed TMCC Telephone Customer Access



Source: RouteMatch/Ride-On Transportation

- **Website Access** – The proposed TMCC system would provide a website to enable customers to access online transportation services and information. Links were proposed to be made available to other stakeholder websites and important resources. Figure 2-8 illustrates the proposed website access to TMCC services.



Source: RouteMatch/Ride-On Transportation

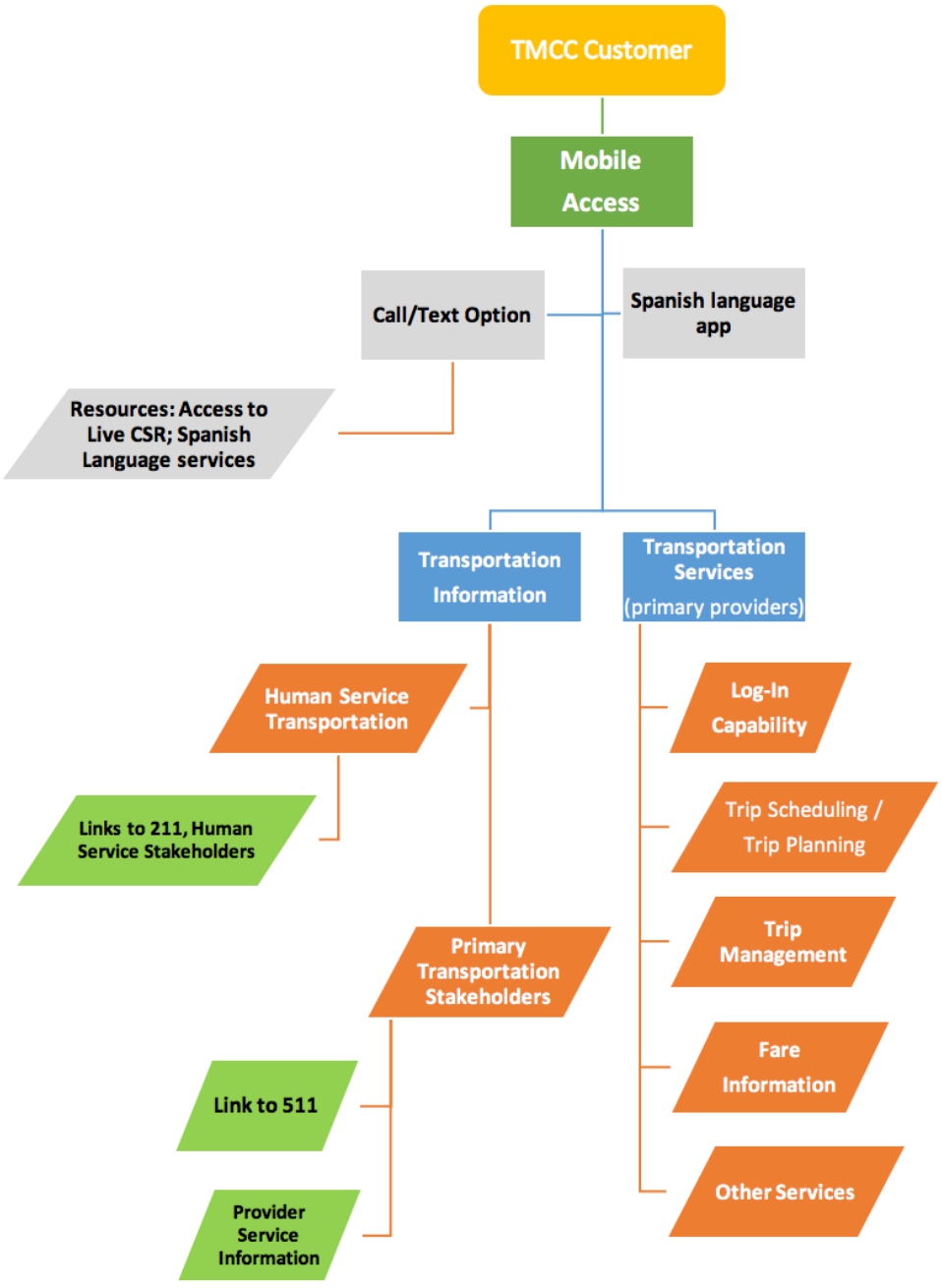
Figure 2-8

Proposed TMCC Website Customer Access

- **Mobile Access** – It was proposed that customers have access to a TMCC mobile phone app that would provide transportation information and services and that was easy to use and easy to understand. Figure 2-9 illustrates the proposed mobile app access to TMCC services

Figure 2-9

Proposed TMCC Mobile Customer Access



Source: RouteMatch/Ride-On Transportation

Proposed TMCC Customer Services

As referenced in the project's goals and objectives, the ConOps defined the TMCC technology system proposed to provide customers with access to real-time services such as DRT trip scheduling and transportation information. The following are examples of customer services proposed in the ConOps to be provided by the TMCC:

- Transportation Information
  - DRT and Fixed-Route (FR) transportation provider information (routes, schedules, contact information, physical location)
  - Links to 511, 211, rideshare, and other project stakeholders
  - Trip itinerary journey planning
- Services – DRT Real-Time Trip Scheduling
  - Customer secure login capability
  - "New" customer registration capability
  - Trip scheduling through all available DRT providers, based on customer eligibility for DRT provider services
  - Proposed DRT trip fare cost information availability
  - Real-time DRT provider vehicle arrival information
  - Common fare system
  - Trip-scheduling confirmation and verification
  - Access to scheduled and completed trip history

Operational and Support Environment

In designing the proposed TMCC, the ConOps also considered initial potential operational and support environment needs for project success, including physical facilities, hardware and software, and any administrative, operations, and other support necessary to operate the TMCC.

Operational Scenarios

The ConOps addressed 10 "normal" and "expanded (unconventional)" scenarios illustrating the current and existing experiences compared to those proposed through the TMCC. The scenarios assisted the PMT to better understand how the current service environment could be impacted by the TMCC.

Summary of Impacts

The final section of the ConOps provided a summary of potential impacts the TMCC may have on the SLO County community. The impacts summarized potential institutional, technical, and regional mobility impacts for further consideration during the proposed TMCC's design process.

System Requirements – What Comprises the TMCC?

The project's System Requirements (SR) process and deliverable focused on "what" the TMCC would do to meet the customer-focused goals and objectives of the proposed system from the technology and non-technology perspectives. The SR also provided detailed TMCC system functions and performance expectations ("what should it do?"). The SR process and deliverable did not address "how" the TMCC would operate. This step would be accomplished in the upcoming High-Level System Design process.

The project's System Requirements (SR) process and deliverable focused on "what" the TMCC would do to meet the customer-focused goals and objectives of the proposed system from the technology and non-technology perspectives.

Creating the System Requirements

The TMCC's SR was created from a multifaceted process (illustrated in Figure 2-10) that commenced with the receipt of stakeholder needs early in the project, the creation of the ConOps, development of preliminary system requirements, documentation, and requirements analysis and review for accuracy.

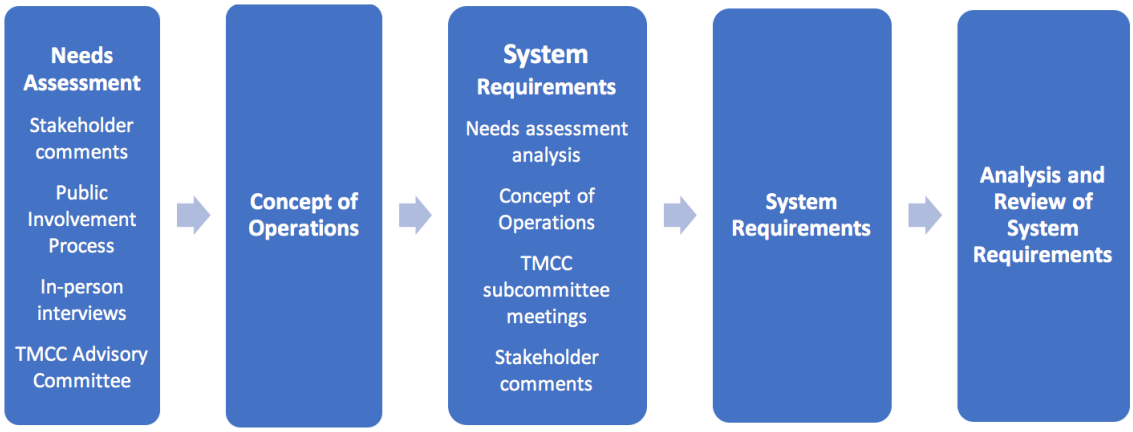


Figure 2-10

TMCC System Requirements Development Process

In preparation for the project's detailed SR, each stakeholder need from the ConOps was reviewed, analyzed, and collated into technology and non-technology categories. The technology-related needs formed the basis for the project's electronic DRT provider information and services functional requirements and framed the initial hypothetical system design, as illustrated in

Figure 2-3. All other needs became the basis for the project's supporting "non-technology" requirements, such as those categorized as Administrative and Operating.

In addition, the TMCC's system requirements included other components from the project's ConOps, including scenario elements, summary of impacts, and hypothetical system design. Alternatives to implement the hypothetical system design would be further evaluated and considered in the next phase of the project, High-Level System Design.

To elicit stakeholder feedback for the SR, the PMT developed a draft set of preliminary requirements for review and discussion with stakeholder members of the project's three subcommittees at their meetings on November 2 and 3, 2016. Subcommittee member comments were received through December 2016 and incorporated into a preliminary set of draft SRs. Through this process, the term "TMCC Technology Tool" (TTT) was created to specifically address the project's technology requirements (formerly known as DRT Provider Services) to reduce any confusion. The TTT was further clarified to comprise three portals, including Customer, Staff, and Provider. The preliminary requirements were revised and shared with FTA and the Technical Assistance (TA) Team for feedback in December 2016. The initial draft System Requirement deliverable was created and provided for FTA and TA Team comment in February 2017 and consisted of sections including Project Enabler, Functional and Non-Functional Requirements (technology and non-technology), System Constraints, and Traceability Matrix sections.

Project Enablers

Deemed critical to the development of the SR, it was important to conduct a baseline review of local conditions that enabled the development of the proposed TMCC, including a review of all stakeholders (addressed earlier), preferred customer access methods (per stakeholder needs elicited), a discussion of existing DRT provider services, an inventory of current technology conditions for all DRT providers, and potential assumptions impacting the project.

In this process, DRT provider surveys were conducted to better understand services provided and technologies in use to enable the creation of an informed SR. These surveys were collated and shared with the Provider Subcommittee and illustrated DRT service characteristics that were critical in the proper formation of the SR. In addition, technology survey responses illustrated DRT provider ITS capabilities such as the use of CASD and mobile technologies with Global Positioning Systems (GPS), website capabilities, and mobile app availability. Each technology response was used by the PMT and the Technology Subcommittee in developing the project's informed, customized SR.

Functional Requirements (Technology)

The creation of the TMCC's functional requirements focused on the development of its technology-related elements. In developing these requirements, the PMT and the Technology Subcommittee sought to address customer needs elicited in the ConOps and were very specific in addressing the elements of high-level functionality, customer access, system input and output, electronic interfaces, and data management and reporting. Providing specificity in the development of the functional requirements enabled a clear understanding of the TMCC's proposed services ("what it is") by all stakeholders. The functional requirements also would serve as basis for future technology procurement specifications.

High-Level Functionality

The creation of high-level system functionality sought to provide overarching clarity for all requirements, including addressing the TMCC's information and service focus, providing initial description of the Customer, Staff, and Provider portals, and level of stakeholder secure access for each portal.

Customer Access

The customer access functional requirements confirmed that the TTT system (three portals) should be accessed by in-person, telephone, website, and mobile app methods, as these access methods were specified by the customer needs elicited.

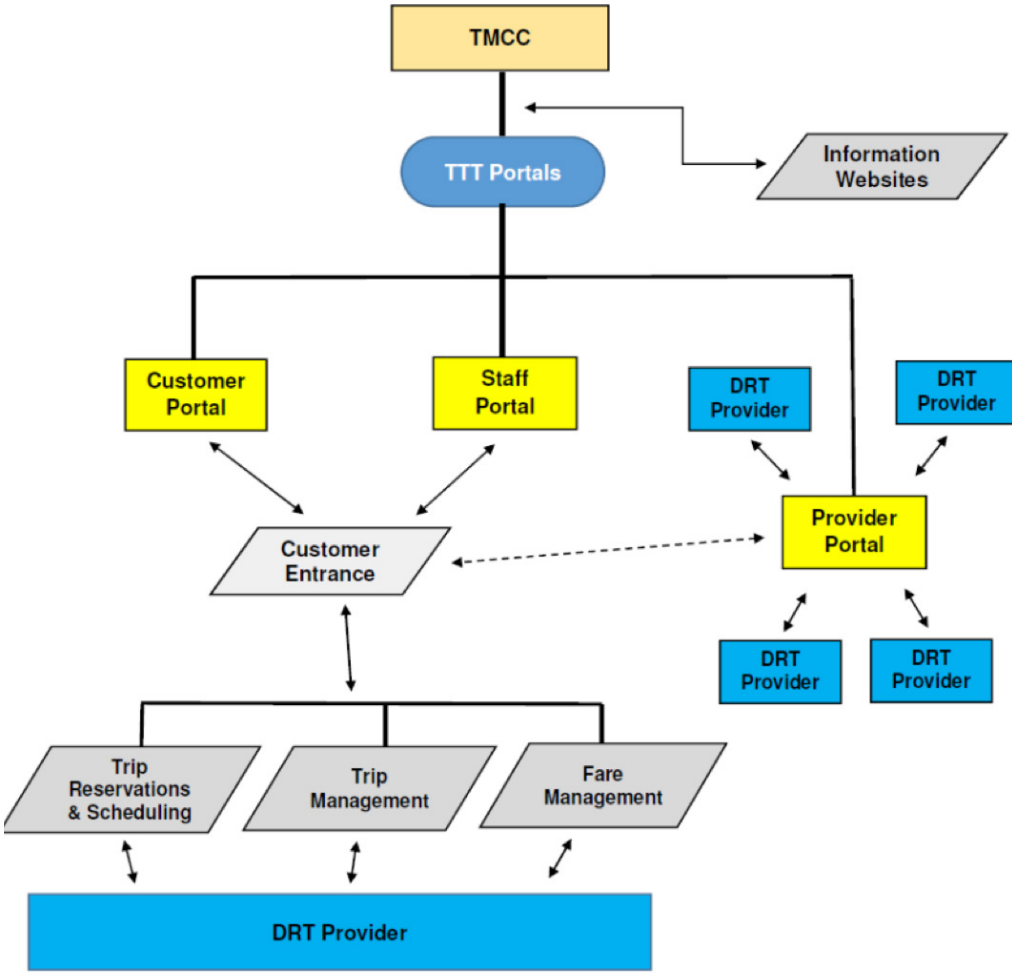
System Input and Output Requirements (TTT)

The system input and output requirements provided the specific answer to "what" the TMCC and TTT's electronic elements were proposed to do. In developing the system's inputs and outputs, the PMT and the Technology Subcommittee separated the TMCC's information and services (TTT) requirements into these two categories and prepared detailed requirements for each component based on customer needs elicited during the ConOps phase of the project. For additional clarity, these requirements were further separated into two additional information flow categories, Input and Output, and documented.

The TMCC's information requirements consisted of providing website and mobile app links to various community organizations such as transportation providers and information resources, human service agencies, emergency management, 511, 211, and links to multimodal trip planning services.

The TTT's service requirements were created leveraging stakeholder needs and consisted of the following components based on its Customer, Staff, and Provider portals. All subsystems required interaction with one another. Figure 2-11 illustrates the TTT portals' relationships with the functional inputs and outputs.

- **Customer and Staff Portals Components** (overview combined due to similar requirements; each portal's access is based on user security level eligibility)
  - **Customer Entrance** – Addresses the system's detailed customer login and profile elements, such as information and trip preferences; each subsystem requires interaction with the other.
  - **Trip Reservations and Scheduling** – Customer trip capability to request services, receive trip options and cost, and request/receive trip confirmation from the DRT provider.
  - **Trip Management** – Options for customers to manage their advance and day-of-service trips with DRT providers, including upcoming reservations, changes, cancellations, ride status, spatial map view of the DRT provider vehicle location, and other items.
  - **Fare Management** – Proposed use of a fare management subsystem allowing direct customer payment of trips originating either through the TTT or to the DRT provider.
- **Provider Portal** – Enables the business "back-end" requirements to be written in meeting the needs of the DRT providers for TMCC service provision while addressing the project's customer-service- and coordination-focused goals. Requirements were prepared for specific capabilities by function in the DRT provider agency, including driver, scheduler, manager, and administrator.



Source: RouteMatch, Ride-On Transportation

Figure 2-11

TMCC System Requirements – Functional Input/Output Process

Data Management and Reporting

The PMT and the Technology Subcommittee prepared specific requirements tied to the overall management, collection, computation, and reporting of data for the TTT and TMCC Administrator. Requirements addressed items such as types and frequency of reports, billing rate calculation, reimbursement to DRT providers, data storage, database record changes, and many others.

Non-Functional Requirements (Non-Technology or Institutional)

To implement the TMCC's proposed customer services (technology), non-functional (non-technology, i.e., institutional) requirements were prepared to ensure project success. Based on stakeholder needs and constraints elicited, the

PMT and the Provider Subcommittee developed the following non-functional requirements to address the TMCC's proposed accessibility, system performance and availability, security, scalability and replicability, administrative, and operational elements:

- **Accessibility** – Requirements for language, TDD/TTY/CA Relay, state and federal law, and a DRT provider helpdesk.
- **System Performance and Availability** – Requirements to express expectations surrounding TMCC administrator access, system availability to customers, system operations, system maintenance, telephone access, and in-person access.
- **System Security** – Central to the success of the TTT, system security requirements to address security standards and elements relating to customer information, DRT providers, and the TMCC/TTT administrator.
- **Scalability and Replicability** – Requirements to address the expectations of TMCC scalability and replicability.
- **Administrative** – Requirements to address administrative items in support of the TMCC, including creation of inter-local agreements as well as policies and procedures, ongoing communication, TMCC staffing, financial, measures for success (performance measurement), marketing, training, emergency management, and other tasks.
- **Operational** – Elements to be addressed in support of the TMCC, such as policy and procedure development, contingency process for vehicle breakdowns, development, emergency support, and overall contingency planning.

System Constraints

The TMCC's ConOps process outlined potential system constraints. Appendix E provides a list of stakeholder constraints received. These administrative, operational, and technical constraints were revisited and referenced in the SR deliverable as a reminder for system success.

Traceability Matrix

A traceability matrix was developed and served as a method to ensure that all TMCC-collated stakeholder needs were addressed in the SR and upcoming High-Level System Design stages of the project. The traceability matrix provided a detailed relational connection between each written SR and stakeholder need as elicited in the ConOps.

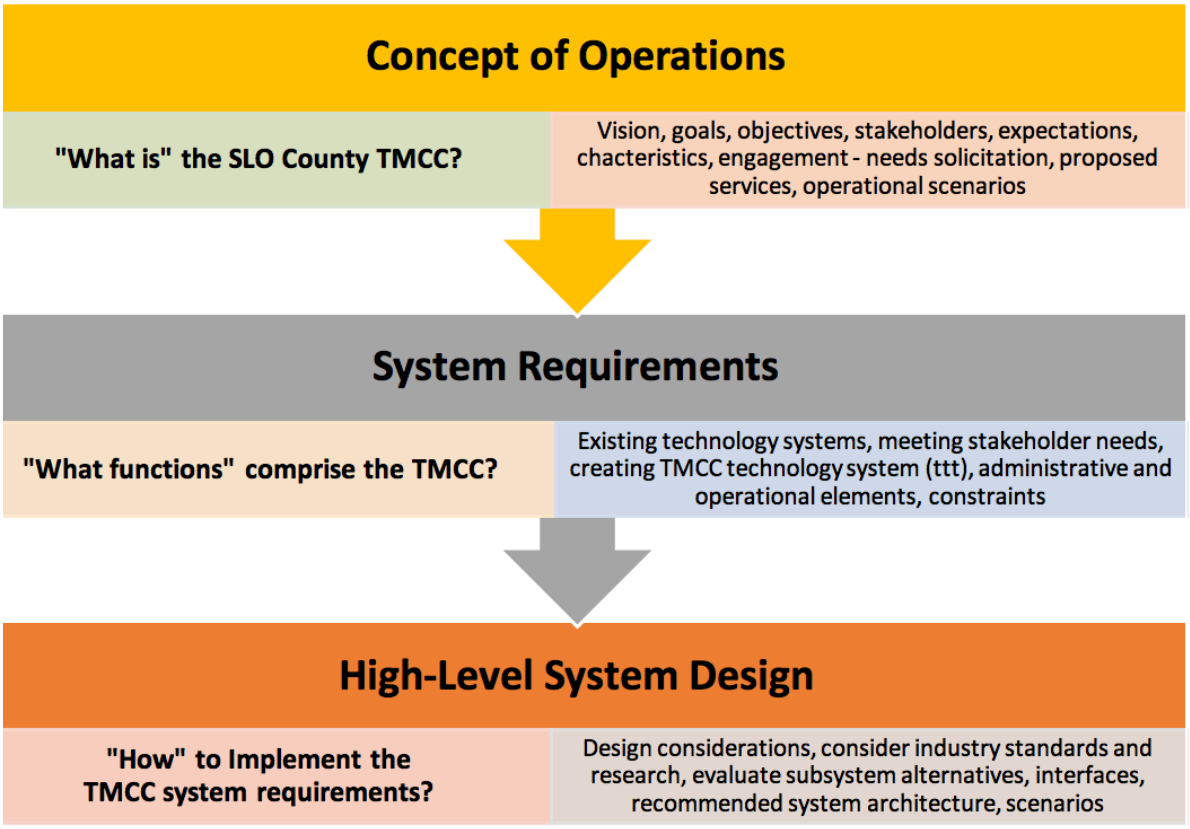
A traceability matrix was developed and served as a method to ensure that all TMCC-collated stakeholder needs were addressed in the SR and upcoming High-Level System Design stages of the project. The traceability matrix provided a detailed relational connection between each written SR and stakeholder need as elicited in the ConOps.

High-Level System Design – How to Design the TMCC

Creating the High-Level System Design

As part of the ITS Systems Engineering process, the High-Level System Design (HLSD) documents "how" the SLO County TMCC's technologies would be implemented to meet the project's SR from a high-level perspective. The HLSD is best explained as a "process of defining a collection of hardware and software components and their interfaces to establish the framework for the development of a computer system." Traditionally, ITS projects consist of multiple computer systems, communication capabilities, geographic location, and staffing interests.

The high-level system design serves as a framework to determine and link these project components. The HLSD uses information from the Concept of Operations and System Requirements documents to ensure the design is sound. Figure 2-12 is an illustration of the HLSD inputs, which consists of the design approach and considerations, design alternatives, recommended TMCC design and architecture, SR analysis and allocation, and operational scenarios.



Source: Ride-On Transportation/RouteMatch

Figure 2-12

High-Level System Design Inputs

Design Approach and Considerations

In approaching the TMCC's HLSD, it was critical for the PMT and the Advisory Committee to address the following items:

- **TMCC Goals and Objectives** – Revisited for overall project guidance.
- **Design Process** – Sought to identify all industry-related research and evaluate current in field technology to conduct a thorough analysis and assessment for design decisions related to the TMCC. Through this process, the existing TMCC project deliverables enabled systems research by engaging stakeholders in the process, and conducting public outreach.
- **Design Assumptions** – Restated the TMCC's proposed customer access methods (in person, telephone, website, mobile app) and services (information and TTT).
- **Constraints and Risks** – Considered and evaluated potential administrative, operational, and technology risks and constraints from the SR process.
- **Alignment with National and Regional ITS Architecture** – Contacted SLOCOG to determine any changes to the regional ITS Architecture; provided update on the project's progress and discussed incorporation of future results.

Design Alternatives

As previously noted, the PMT and the TMCC Advisory Committee and subcommittees were actively engaged in market research, evaluation, review of private sector product demonstration, literature searches, and receipt of peer knowledge transfer in developing the TMCC Access Methods and TTT Portals subsystems' alternatives for evaluation. Based on this research, alternatives and considerations were prepared in developing each subsystem and corresponding component. The following is a brief overview of this work.

The PMT and the TMCC Advisory Committee and subcommittees were actively engaged in market research, evaluation, review of private sector product demonstration, literature searches, and receipt of peer knowledge transfer in developing the TMCC Access Methods and TTT Portals subsystems' alternatives for evaluation.

TMCC Access Methods Subsystem Components

Alternatives were developed for the TMCC's Access Methods subsystem's components, in-person, telephone, website, and mobile app. The following provides an overview of alternatives considered:

- **In-Person and Telephone Access** – Since the ConOps phase of the project, the in-person and telephone methods were expected to be provided

through stakeholders, either at their physical location (where available during business hours) or by telephone, leveraging a live Customer Service Representative (CSR). After-hours calls were proposed to be addressed by an available DRT provider. A toll-free number also was proposed to enable greater access to the TMCC. Therefore, no alternatives were evaluated.

- **Website Access** – TMCC website access was proposed through three alternatives—(1) the 511/Rideshare community website resource, (2) a new TMCC website, or (3) an Open Source software vendor-developed website connected to the TTT. Benefits, challenges, and potential cost implications were considered for each alternative.
- **Mobile App Access** – TMCC mobile app access was proposed through three alternatives—a Commercial Off-The-Shelf (COTS) vendor connected to the TTT, a new mobile app, or an Open Source software vendor-developed mobile app. Benefits, challenges, and potential cost implications were considered for each alternative.

TTT Subsystem Components

Alternatives were developed for the TTT subsystem's components, including Information and Customer, Staff, and Provider portals, proposed to be accessed through the TMCC website and mobile APP. The following is an overview of alternatives considered:

- **Information** – Customer interest to access centralized community transportation information was a known stakeholder need, as elicited in the ConOps and further defined in the SR. To facilitate this process, the Advisory Committee had long envisioned the TMCC's website and mobile app to facilitate these online resource links. Therefore, no alternatives were evaluated.
- **Customer and Staff Portals** – The Customer Portal components were proposed to provide user authorized "front-end" or direct stakeholder access via website or mobile app to the TTT's services, including Customer Entrance (profile), Trip Reservations and Scheduling, Trip Management, and Fare Management. The Staff Portal was proposed to provide authorized stakeholder staff and customer caretakers with direct access to specific elements of the Customer Portal's web and mobile app-based functions to provide direct customer service (via in-person and telephone access methods) and allow customer caretakers the ability to manage services for their loved ones.

  With the Customer and Provider portals' input and output requirements being similar, with a primary exception based on user authentication and capability of access, the PMT, the Advisory Committee, and the Technology Subcommittee developed and evaluated alternatives based on the extensive market research conducted by Ride-On from June 2017 through January 2018. Three alternatives were considered, including (1) a COTS vendor inclusive TTT, (2) Open Source software vendor-developed TTT, and (3) a coalition of local

agencies using Open Source software to develop the TTT. Benefits, challenges, and potential cost implications were considered for each alternative.

- **Provider Portal** – In researching possible alternatives to evaluate and consider in meeting the Provider Portal's requirements, the PMT consulted research collected and market information and sought peer knowledge transfer from FTA and Ride Connection in Portland, Oregon. In reviewing this information, it was determined there was no existing technology solution on the market that met the Provider Portal's requirements. Therefore, the PMT considered the two alternatives, including a locally-developed COTS and Open Source solution and the preparation of a Request for Proposal (RFP) to determine market interest and solutions. Benefits, challenges, and potential cost implications were considered for each alternative.

Recommended Design and Architecture

The evaluation of the TMCC's Access Methods and TTT Subsystems components included PMT staff and Advisory Committee review of each alternative to determine the current best course of action for the MSAA project from the administrative, operations, technology, and financial perspectives. Stakeholder needs were reviewed to ensure that the alternatives met collated needs elicited in making the best selection for a TMCC. The following provides a review of the selected design and architecture.

Customer Access Methods Subsystem Components

- **In-Person Access Method** – TMCC stakeholders, including DRT providers, Fixed-Route providers, and 511/Rideshare and human service agencies, were recommended to serve as in-person access resources for the TMCC and TTT. During regular business hours, authorized stakeholder agency staff were proposed to provide customers with community transportation information and TTT services using the TTT Staff Portal. Additional in-person service provision protocols were proposed to be developed by the partners consistent with those addressed in the SR.
- **Telephone Access Method** – The TMCC's recommended telephone access methods leveraged existing community telephone service resources, including DRT providers, 511, 211 CA Relay, TDD/TTY (connections to Ride-On and RTA), and human service stakeholders. Additional TMCC contact was encouraged through a new toll-free number proposed to contact CSRs at the project's lead agency. For after-hours customer callers seeking to reach a live CSR, call-forwarding services were encouraged to be made available using stakeholder call-forwarding technology to an accepting DRT provider partner. Additional telephone service protocols were recommended to be developed by the stakeholder partners consistent with those addressed in the SR.
- **Website Access Method** – As an existing and developed community resource, the 511/Rideshare website features many travel services, including

transit journey planning and CalTrans highway cameras, as well as the Know How to Go! guide for community transportation information and resources. With this level of community experience and engagement, it was recommended that the 511/Rideshare website be leveraged as the TMCC's website while incorporating community transportation information and TTT Subsystem components, as illustrated in the System Requirements.

- **Mobile APP Access Method** – As part of the TTT Subsystems components alternatives development process, COTS solutions were identified that also provide an existing true mobile app for services while branded under the local transportation organization's name. In considering and choosing this alternative, the Advisory Committee evaluated the solution based on it being existing COTS and developed on a true mobile platform, capability to brand under the local entity's name (i.e., TMCC, etc.), and available from major app stores.

TTT Subsystem Components

- **Information** – Consistent with the alternatives process, the TMCC's website and mobile apps were recommended to facilitate online links to the community's transportation resources consistent with the SR.
- **Customer and Staff Portals** – The recommended alternative featured the use of COTS Vendor Inclusive technologies as developed by private sector businesses that either had created or were developing similar technologies to those illustrated in the System Requirements. Technology had not been implemented as of this report. For these portals, Alternative 1 was considered over Alternative 2 due to cost, technical elements, and its inclusive nature meeting the TTT's requirements; Alternative 3, requiring committed local staff resources, was considered infeasible at the time.

  The recommended alternative used the COTS Vendor Inclusive technology concept, which featured existing elements of the Customer and Staff portals' requirements while incorporating fare management, reporting, and mobile app technologies into a single package. A link from the COTS system to the TMCC website was proposed to facilitate TTT services. The featured technology was proposed to be owned, licensed, supported, maintained, updated, and hosted by the vendor. Interfaces with four DRT provider technologies were included with the proposed system.

  The proposed three-year inclusive total cost was estimated at $214,560–$354,560, which included vendor COTS technology; interfaces; annual hosting, support, and maintenance; additional COTS technology to share trips with non-TMCC DRT providers; and local project administration and DRT provider staff costs.
- **Provider Portals** – The recommended Provider Portal alternative addressed a hybrid concept that proposed using existing COTS technologies and creating a locally-developed solution. Due to the lack of existing COTS technology

comprehensively meeting the Provider Portal's requirements, the recommended alternative proposed use of COTS technology to communicate customer trips between DRT providers, leveraging existing market technology for DRT provider staff instant messaging, and use of OS Clearinghouse technology for local development use in meeting the Provider Portal's requirements.

This preferred option proposed local (or contracted) development, hosting, support, and ongoing maintenance of OS Clearinghouse technologies. Several current national projects have used this technology to transfer ride requests between providers. The Technology Subcommittee encouraged that the Provider Portal be developed in the latest code and referenced that the use of OS technologies in Ruby/Rails code was considered outdated (from a technology perspective).

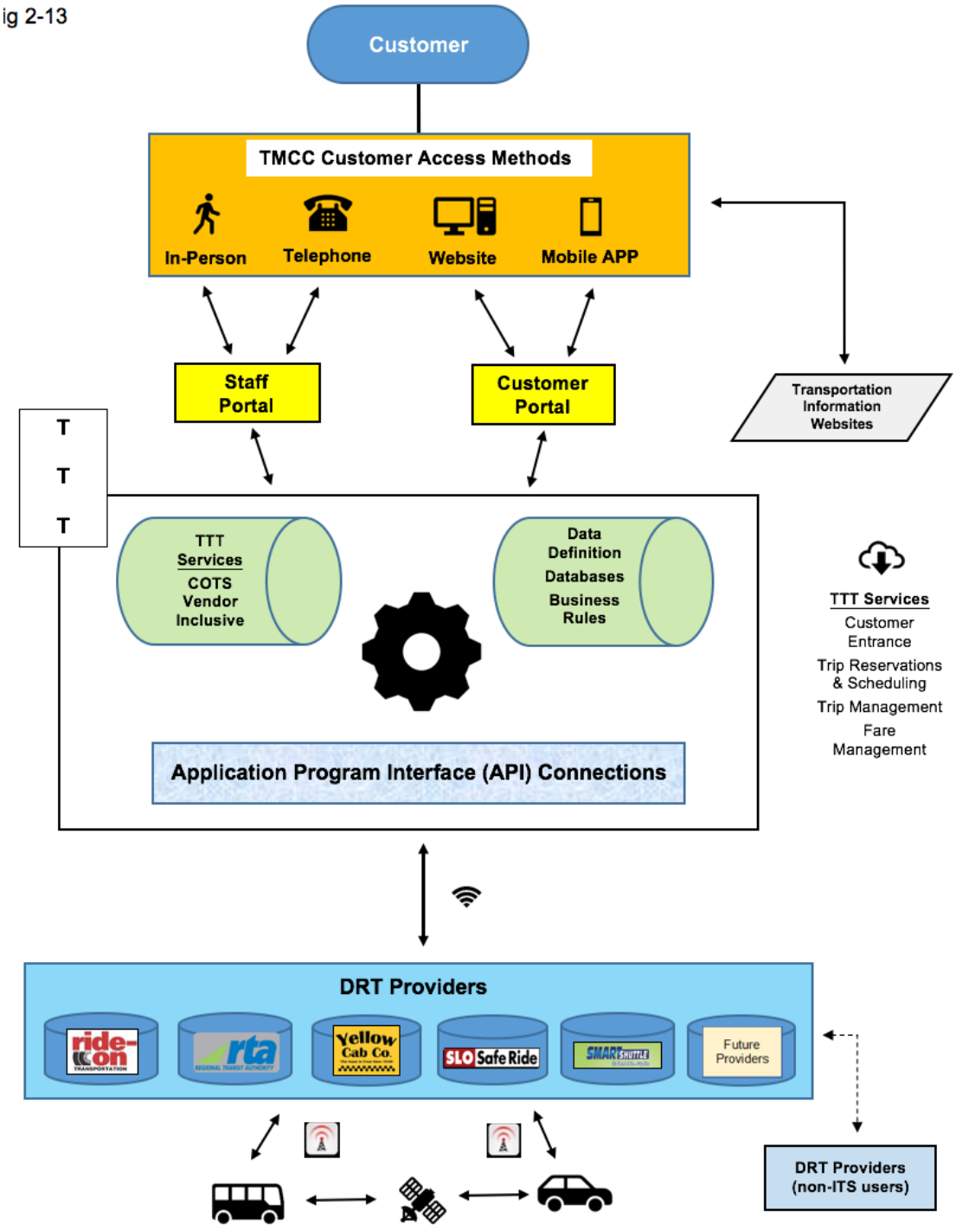
Based on market feedback, the estimated initial minimum cost determined for this recommended alternative was $33,120, with an annual minimum hosting and maintenance estimated minimum cost of $20,720 per year. These cost factors included the use of COTS trip-sharing technology along with estimated TMCC administrator and DRT provider staff oversight time. This estimate did not contain the estimated local development cost using OS software to create the Provider Portal due to unique and new nature of the project.

- **System Interfaces** – The TTT's Subsystem's recommended COTS Vendor Inclusive solution for the Customer and Staff portals was proposed to communicate through an "interface" with four DRT provider CASD technologies. The interfaces would be developed between the chosen TTT Customer and Staff portals vendor and DRT provider vendors. The cost to develop the recommended technology's interfaces was incorporated into its cost. Figure 2 13 illustrates the recommended TMCC system architecture.

Why Create an Interface?

Each TMCC DRT partners uses its own CASD and mobile technologies to manage day-to-day services. These technologies form the basis of the TTT's trip-scheduling and management services. To communicate with the recommended TTT Vendor Inclusive technology, interfaces must be written between each technology partner to enable communication among the systems, essentially passing data back and forth between the technologies. As each DRT provider would continue to manage its own CASD database, an important requirement for the interface was to ensure that the DRT providers' CASD technology suppliers were willing to partner in developing an interface. The TMCC's DRT providers indicated they were open to doing so.

In addition, the TMCC's TTT was envisioned to be scalable, allowing DRT providers that use CASD and mobile technologies across the county, region, or state to participate. Where open data is provided and made publicly available by the host (typically, FR and rail systems), an interface is not required. It was recommended that the TTT use open data for trip planning purposes.



Source: Ride-On Transportation/RouteMatch

Figure 2-13

Recommended TMCC High-Level System Architecture (Customer Access)

System Support, Maintenance, and Contingency

To be efficient and effective in maintaining its recommended service requirements, the TTT proposed to use support, maintenance, and contingency resources from different perspectives, including vendor, system administrator, and DRT provider staff, as addressed in the recommended in the prior section.

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Success Measures

Critical to the success of the TMCC is ensuring that the project's goals and objectives are met while the customers, partnering DRT providers, and supporting stakeholders receive the greatest benefit for its cost. In doing so, the following examples of potential TMCC success measures and opportunities to evaluate cost/benefits were determined by the PMT and the Advisory Committee:

- Access methods availability (i.e., percentage of availability)
- Number of individual customers served
- Number of calls telephone calls addressed
- Number of customer trips scheduled
- Total customer trips provided per day
- Number of individual persons assisted per day
- Mobile app use
- 511 website use
- Staff Portal use
- Customer satisfaction
- Number of inter-agency trips coordinated (shared)

Economic and Customer Service Impacts

The stated mission of the TMCC was to provide "personal mobility across SLO County," enabling customers access to multiple communication methods to receive transportation information and services. The TMCC's proposed services would provide customers with the convenience of searching the community's mobility options, managing their confirmed trips, and providing an automated payment option for services. The TMCC's mission and proposed services would provide the community and project stakeholders with an additional opportunity to expand mobility choices while providing potential enhanced economic impacts to the county. The TMCC would enable potential benefit to customers and DRT providers through the following economic and customer service impact examples.

Economic Impacts – Potential Customer Examples

- **Healthcare Access** – Customer access to healthcare services, including same-day and non-life-threatening, at multiple facilities across the county. Transportation options proposed to be provided through the TMCC also have the potential to reduce public emergency medical transport demand for non-life threatening medical needs.
- **Employment Access** – Access to transportation options that promote employment opportunities across the county and enable customers to evaluate mobility options and costs that benefit their budget, mobility, and access needs.
- **Recreation Access** – Access to mobility options 24/7, enabling customers with connections to recreational opportunities.
- **Aging in Place** – Enable SLO County's older adult population to remain at home and leverage mobility options that best fit their mobility needs, including direct access to their preferred DRT Provider.

Economic Impacts – Potential DRT Provider Examples

- **All DRT Providers**
  - *Resource utilization* – Potential to further maximize resource utilization and service efficiency.
  - *Customer service* – Potential to further enhance customer service through the support of other DRT providers and transportation information in-person and telephone customer service resources.
  - *Operational support* – Potential for DRT providers to use other partners in support of daily operational conditions.
- **Private DRT Providers**
  - *Additional revenue* – Potential to gain additional customers, trips, and revenue through increased visibility and access to the community.
- **Public DRT Providers**
  - *Customer service* – Potential to offer customers with same-day trip options through other DRT providers.
- **Non-Profit DRT Providers**
  - *Operational support* – Capability to extend customer transportation services through other DRT providers, including during peak customer capacity timeframes.
  - *Additional revenue* – Potential to gain additional customers, trips, and revenue through increased visibility and access to the community.

Potential Customer Service Impacts

- **Transportation Information** – Customer access and increased exposure to additional community transportation options, such as DRT provider, human service, and fixed-route transit service.

- **Access Methods** – Customer access to TMCC services through all participating stakeholder locations, including in person and by telephone, along with contacting existing service providers.
- **Transportation Services Availability, Cost, and Access** – Customer ability to compare availability and cost along with making selection of a chosen transportation option through website and mobile app options.
- **Service Hours** – Customer capability to make trip requests 24 hours per day, 7 days per week through the TTT.
- **Trip Management** – Customer management of approved trips and day-of-service status needs, including trip changes and ride status updates.

Requirements: Analysis and Allocation

In development of the HLSD, the project's functional input and output SR were scrutinized by the PMT down to their primary origin and intent to determine their compatibility with TTT subsystem components. The traceability matrix was also reviewed and revised to confirm elicited stakeholder needs were met through the design allocation process.

Operational Scenarios

This section illustrated a sample of potential TMCC and TTT normal and expanded (or unconventional) operational scenarios that could be experienced during the project based on the recommended HLSD's TMCC Customer Access methods, TTT Customer and Staff portals, and TTT Provider Portal subsystems. Developing scenarios enabled the PMT and the Advisory Committee to better understand the proposed TMCC's capabilities in given operational and emergency situations.

Phased Implementation Plan (PIP)

Implementing the Proposed TMCC

With the HLSD's recommended alternatives prepared, the PMT focused attention on developing the project's Phased Implementation Plan (PIP). The PIP provides opportunity to discuss the implementation of the recommended alternatives in terms of a task timeline, responsible parties, and proposed budget.

In preparing the PIP, the Advisory Committee agreed to establish the following system of three phases to implement the TMCC:

- **Phase 1, Initial TMCC Implementation** – Tasks that could be completed in a short time and at low cost.
- **Phase 2, Interim TMCC Implementation** – Tasks that could be completed toward Phase 3, Full Implementation.

- **Phase 3, Full TMCC Implementation** – Considered the "Cadillac" system by the Advisory Committee, this phase consists of full implementation of the TMCC as addressed in the SR and HLSD.

From a budgetary standpoint, the Advisory Committee also recommended securing additional State and Federal grant funds to implement TMCC Phases 2 and 3.

SECTION

3

It Starts with Leadership – TMCC and Coordination

Starting the Coordination Journey – Finding the Right Leader

The MSAA grant enabled the SLO County TMCC project's leadership team to learn much about the process of developing a community-driven TMCC and preparing associated systems engineering/planning documents. The shared experiences that follow should benefit peers in all sizes of community and organization to assist the development their own TMCC while on the "road to coordination." The journey for improved coordination will be initiated by volunteers, so the steps to development of a coordination plan have been made simple to achieve and are spread out over a period of time. The reports for the plan can be outlined to guide the group process to establish an action plan to improve a transportation system.

The first step on the road to coordination is identifying a leader who embraces the vision and serves as its champion in assessing citizen mobility needs, understanding the community's collective transportation resources, and working to coordinate services through a TMCC. This community leader is critical to starting the coordination journey.

The first step on the road to coordination is identifying a leader who embraces the vision and serves as champion in assessing citizen mobility needs, understanding the community's collective transportation resources, and working to coordinate services through a TMCC. This community leader is critical to starting the coordination journey.

The qualities of the leader are many and include someone who considers the local transportation network from the customer point of view. With many transportation providers focused on their own transportation services, the leader should seek to look at improving the entire network to provide better service for all customers. He/she should be trusted by the transportation providers and have awareness of their services and should espouse the vision of developing a TMCC for the community and engaging fellow transportation peers to partner in the visioning process.

How do you find this community leader? It is important to identify a person who gets things done; it may be a person who has started programs such as improving access for older adults, veterans, or persons with disabilities. Then, it is important to meet the leader candidates to explain the benefits of a TMCC, including the

improvement of community transportation for the less mobile members of the community and that a "core" small group of stakeholders comprising a management team and a larger stakeholder group will assist with developing the TMCC.

A strong leader is necessary for directing the group process of recruiting stakeholders and keeping them engaged throughout, given that his/her participation is voluntary. The leader should plan to work with PMT members to schedule meetings, prepare supporting information, and facilitate movement towards developing a TMCC and coordination initiatives. He/she will also need to continually engage stakeholders (who may start to drift away from the process) and be prepared to commit leading the TMCC project.

Project Management Team

With a project leader in place, it is important to recruit several transportation professionals for the PMT. The team should consist of 3–5 members, including the leader, whose role is to assist the leader in receiving stakeholder feedback, processing it, creating a schedule, participating in meetings, and developing the TMCC's plan. The leader may choose to meet with several candidates to discuss the project and have them consider participating in the PMT. The PMT should plan to meet on a regular basis to ensure clear communication.

TMCC Process – Task Timeline

After confirming the project's leadership, the PMT should develop an overall TMCC task and process timeline. The development of the community's TMCC should be spread out over a period of 12–18 months. It is important to allow appropriate time for the PMT, the Advisory Committee, and the subcommittees to meet, develop, review, and agree on a TMCC plan. The following is a suggested timeline that includes tasks for consideration in the developing a plan—with a reminder that all participants in this process are volunteers, so their meeting involvement should be no more than once per month. All monthly tasks are discussed further in upcoming sections of this document.

It is important to allow appropriate time for the PMT, the Advisory Committee, and the subcommittees to meet, develop, review, and agree on a TMCC plan.

- **Month 1: Identify a leader and PMT.** Establish a timeline to develop the TMCC Plan. Develop a list of potential project stakeholders.
- **Month 2: Engage the community.** Develop a community outreach survey. Create project website/webpage to host TMCC resources. Identify groups to conduct presentations and survey.
- **Months 3–5: Conduct community outreach** to increase TMCC awareness and secure completed surveys. Compile a list of potential stakeholders by capturing names and e-mail addresses at each presentation.

Seek articles in local newspapers and use social media to encourage survey completion. Establish an Excel spreadsheet to track results of completed surveys. Compile survey results.

- **Month 6: Hold a TMCC kick-off meeting with stakeholders.** Share results of the survey and create committees to develop the TMCC. Conduct an assessment of the community's transportation resources.
- **Months 7-8: Create and hold meetings of the new Advisory Committee and subcommittees**. Review and discuss the completed transportation assessment. Create TMCC goals and objectives. Complete a survey of all transportation providers. Discuss what the TMCC should do for customers and transportation providers. Review constraints shared in the survey process.
- **Month 9: Hold Advisory Committee meeting of all stakeholders**. Review baseline information on transportation services and methods that people currently use to learn about transportation options. Seek feedback on what the subcommittees envision TMCC's services will be. Discuss how these TMCC features could improve coordination in the region.
- **Month 10: Continue subcommittee meetings and TMCC services discussion.** Share additional ideas with all stakeholders and update the list of TMCC features.
- **Month 11: Have subcommittees meet and begin the process of addressing TMCC features related to their subcommittee**, such as transportation providers discussing coordination improvements.
- **Month 12: Hold an Advisory Committee meeting to review the compiled list of TMCC features**. Create and evaluate alternatives. Discuss and agree on selected alternatives.
- **Month 13: Invite subcommittees to discuss TMCC implementation, including phases.** Consider multiple phases to implement the TMCC based on local conditions. Phase 1 could be no or low-cost features; Phase 2 could be features with limited cost (pre-full TMCC); and Phase 3 consists of full TMCC implementation.
- **Month 14: Hold an Advisory Committee meeting to review and agree on the proposed implementation plan**. Prepare the TMCC plan.
- **Month 15: Provide TMCC Plan to stakeholders for review and comment**. Revise and finalize the TMCC Plan.
- **Month 16: Conduct presentations for stakeholder, human service, and government agencies and organizations** to promote the TMCC Plan.
- **Post-Planning Process: Consider holding Advisory Committee meetings every two months** to review progress in implementing TMCC Phase 1 objectives. Discuss possible funding sources for TMCC phases 2 and 3.

SECTION

4

How to Engage the Community

With the project's leadership in place, the PMT should begin the process of designing the community's TMCC. This effort requires the use of outreach methods that are beneficial to the community in determining its transportation needs. As part of this process, surveying the community, developing a website, making stakeholder contact, collating identified survey needs and constraints, and hosting a TMCC kick-off meeting will enable the TMCC design process to reflect the community's interests.

Surveying the Community

To better understand the community's transportation needs and constraints, the creation and use of a survey can be a useful tool to solicit stakeholder information and feedback in designing a TMCC.

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For the survey document, the PMT should provide a title, date, and brief description of the TMCC effort, including how it could improve mobility in the service area. Then, the PMT should discuss potential questions to include in the survey that are pertinent to the TMCC. It is important to keep the survey short and easy to respond to. Survey questions to consider may include who is completing the survey, the person's mobility needs, access to mobility options (with room for specific responses), how a TMCC could assist with personal mobility, what services a TMCC could provide, and potential barriers for the TMCC. It is also beneficial to invite survey respondents to add their names on the document if they wish to be contacted regarding the survey or for future project updates. Consider preparing surveys in English and other languages pertinent to the community in seeking diverse responses. To view a sample English-language survey, see Appendix F.

In preparing the survey document, the PMT should consider the following planning and outreach, time availability, and management, collation, and compilation requirements.

- **Survey Planning and Outreach** – Consider the best way to get the survey to the intended audience to seek maximum exposure and response. Methods include providing printed handouts to transportation agency and other stakeholder customers, libraries, older adult centers, and community

and human service organization presentations; creating a TMCC website and making the survey available; and leveraging university/community college resources. Once outlets are determined, the PMT should then develop an outreach plan to communicate the survey to all intended recipients. Appendix C provides an example of a survey. This process may also require researching new organizations and contacts, communicating about the survey, and scheduling time to discuss the TMCC.

To present the survey, PMT members should offer to speak with all interested organizations. It is recommended that a brief presentation be developed to provide an overview of the TMCC and the importance of the survey. In developing the presentation, the PMT should include items such as an explanation of what a TMCC is and its design process and discussion on the need for community input/survey, schedule, and upcoming next steps. Keep in mind that community members in attendance will probably have no idea what a TMCC does and how it could improve transportation services. The presentation's goal is to educate the audience so they can envision how the TMCC could improve their access to transportation. The survey will be an exercise for participants to express their perceptions of the benefits and their concerns. In addition, after each presentation, participants should be invited to share their contact information, including name and e-mail address. This information would be used to invite them to attend the upcoming TMCC kick-off meeting.

- **Survey Schedule/Availability** – A specific period of time with a deadline should be determined to receive feedback from all survey respondents. Depending on the PMT's schedule preference, a period of three months should provide enough time to receive a good number of surveys. It is important to provide reminders to persons/organizations wishing to submit a survey to do so by the chosen deadline.
- **Survey Management, Collation, and Compilation** – Before surveys are received by the PMT, an Excel spreadsheet or tracking database should be created to record all responses. This process should enable the PMT to manage all surveys responses into one format that identifies the number of individual survey respondents and their responses to each question.

  After all survey responses are received, they should be analyzed for needs and constraints. These should be separated into separate databases that indicate each with a unique identifier number that relates back to the survey database (to allow for future reference back to the survey response if needed). After reviewing all needs and constraints, all similar responses should be collated (including number of similar references, i.e., 7 similar comments) and saved as new databases with a unique identifying number for each need and constraint that references back to the original survey. Illustrating the survey results in this manner will aid in designing the TMCC to address the needs and concerns of the community.

Creating a Project Website

A website is a great way to communicate all TMCC-related information throughout the design process. In considering how to prepare for a TMCC web presence, it is important for the PMT to determine whether the TMCC's information will be contained on a new website or reside on a web page hosted by a member agency. The hosting agency will also need to identify a staff member to maintain the website/page and keep the information current throughout its life.

It is important for the PMT to determine if the TMCC's information will be contained on a new website or reside on a web page hosted by a member agency. The hosting agency will also need to identify a staff member to maintain the website/page and keep the information current throughout its life.

As part of this new website/page, all TMCC-generated documents, including the survey, can be made available and promoted to the PMT, the Advisory Committee, and all stakeholders (including the public). The TMCC's website/page will then become the design process's centralized information repository. A sample TMCC website can be found at http://www.ride-on.org/msaa.php.

Stakeholder Contact

To better understand all transportation resources the community has to offer, it is critical to contact all stakeholders that may be involved in the TMCC process. After conducting initial community outreach work, the PMT should have a good understanding of the broad range of transportation resources available to the community and how to contact their managers for further engagement. The following are recommendations of how to address all transportation providers, transportation information resources, human service agencies and community organizations, interested citizens, and other groups in seeking their participation in the TMCC design process.

Transportation Providers

Identify and contact all passenger transportation providers in the community inviting them to participate in the TMCC initiative, as they serve as the basis for the TMCC's provider network in meeting customer mobility services. Transportation providers to contact include the following public, private, and non-profit organizations:

- Fixed-Route public transit services
- ADA paratransit services
- Major human service transportation providers
- Private taxi, limo, shuttle, and medical providers

- Rideshare (carpool/transportation demand management)
- Volunteer driver programs
- Other transportation resources and providers

An emphasis point for the PMT to discuss with each provider is the benefits of improving access to their services. Transportation organizations traditionally focus on the provision of their specific services rather than responding to all the mobility needs of community at large. The TMCC is developed with an emphasis on meeting the transportation needs of the community.

Transportation Information Resource Organizations

Engage and invite all transportation information resource organizations to participate in the TMCC process. These local partners also facilitate information-sharing and communicate with customers on the community's mobility options. In addition, they may provide necessary community transportation planning and information and referral services. These organizations may include the following agencies:

- Metropolitan Planning Organizations (MPOs)
- Rural Planning Organizations (RPOs)
- 511 traveler information services
- 211 human service information and referral
- Local government planning agencies
- Other transportation planning and information agencies

Human Service Agencies and Community Organizations

A third group to engage in the TMCC design process is human service and other community organizations. This group purchases, advocates, and leverages using transportation services throughout the community. Many human service and community organizations provide agency operated, purchased, and/or subsidized transportation services (i.e., bus passes) specifically for their clients. They are important TMCC customers and potential providers with the ability to share different perspectives from the agency and client points of view, and they may also be willing to expand their transportation services to passengers beyond their existing clientele. When speaking with these organizations, potential barriers and opportunities may be indicated for the TMCC to address and overcome, such as institutional and funding requirements, service expectations, and client privacy confidentiality laws and regulations.

Interested Citizens

The transportation provider's customers (users of service) are excellent stakeholders to engage in the TMCC process. Interested citizens may be individuals or advocacy groups with knowledge and experience related to using the community's transportation system. A diverse perspective of citizens from

all walks of life should be invited to participate, such as older adults, persons with disabilities, and veterans. Citizen knowledge and experience should also be leveraged when designing a customer-focused TMCC (service).

Funding Partners

As part of the stakeholder outreach process, it is important to invite any other funding partners to participate in the TMCC process. Funding partners may include local, state, and federal government agencies, such as cities/municipalities, regional agencies, state departments of transportation or health and human services, and US DOT/FTA. In addition to potential financial resources, these partners also may provide knowledge transfer and a depth of technical assistance in developing the TMCC.

It is important to invite other funding partners to participate in the TMCC process, including local, state, and federal government agencies such as cities/ municipalities, regional agencies, state departments of transportation or health and human services, and US DOT/FTA.

Technology Partners

With the TMCC focusing on the use of technology to improve the community's mobility, transportation provider and community technology-savvy partners should be invited to participate in the process. These persons do not need to be involved in the provision of transportation. With technology changing at a rapid pace, it is critical to engage transportation provider ITS vendors, knowledgeable website and mobile app developers, fare managers, and other technology-experienced resources to provide informed and unbiased perspectives for the project.

Other Interested Participants

As the number of stakeholders with interest in the TMCC process continues to increase, invite each contact to ask other interested persons to participate and interact with the leader or a PMT member to participate in the process. "Word of mouth" is the best form of advertising throughout any community. Invite all stakeholders to share the TMCC's process and progress within their own networks. This process will also provide the TMCC with continued engagement throughout the community. Use the TMCC e-mail outreach list to keep stakeholders informed about the project.

TMCC Kick-off Meeting

As part of the TMCC outreach effort, it is important to host a TMCC kick-off meeting with a focus on getting all potential stakeholders together to start the TMCC development process. The following provides an overview of the process to invite all stakeholders and prepare for the event.

Calling All Interested Stakeholders

In preparing for the TMCC kick-off meeting, identify a site that has a capacity to hold 30–40 participants and confirm an event date that is at least one month out to provide advance notice. Create a list of meeting invitees from outreach communications (surveys, stakeholder communication) to prepare the formal e-mail invitation. The following stakeholder organizations should be invited to attend:

- Government agency staff
- Public and private transportation providers
- Human service transportation providers
- Funding agencies
- Human service agencies and community organizations with transportation needs
- Transportation service users/riders
- Technology experts
- Other interested participants

In the emailed invitation, ask stakeholders to respond if they will or will not attend the meeting. PMT members should personally contact key agency staff to discuss the importance in their participation in the TMCC development process. When speaking with transportation providers, discuss how the TMCC can seek to improve their services with the potential for new customers and increased ridership. Market the TMCC kick-off meeting through press releases, word of mouth, PMT staff, agency partners, and social media. Remember to emphasize that the community is working together to improve its transportation network.

Meeting Preparation

In hosting a TMCC kick-off meeting, a number of activities should be completed to ensure it is a success, including the following:

- **Consider providing food.** If an option financially, make plans to purchase food and drinks for the meeting. This polite courtesy can draw and sustain attendee participation at meetings.
- **Offer a conference call option**. Make available a conference call option to enable participants to attend the meeting remotely. This allows participation by stakeholders if they are unable to attend in person.
- **Create a meeting agenda.** Develop an agenda that includes conference call information and focus areas for the meeting. Suggested agenda topics include host greeting, introductions by stakeholder agency, TMCC overview, needs and constraints discussion, Advisory Committee/subcommittees creation, and next steps. Distribute the agenda by e-mail to all meeting attendees one week prior to the event date. Appendix D provides a sample advisory committee meeting agenda.

- **Make reminder calls**. Review the list of confirmed participants, and contact individuals who have not responded to date to encourage their attendance.
- **Develop a meeting presentation**. Prepare a PowerPoint presentation or written handout for participants to review during the meeting. The material should correspond to the agenda and include a brief description of the TMCC, results from the needs and constraints survey, the TMCC development process, and upcoming activities.
- **Create Advisory Committee and subcommittees**. In advance of the meeting, the PMT should discuss the creation and amount of monthly stakeholder time commitment for attendees to participate on the TMCC Advisory Committee and the subcommittees. These committees will assist in guiding the development of the TMCC and will seek to assist greater stakeholder ownership in the process and outcome. During the meeting, the PMT should discuss the committee concept, seek consensus on having them, and invite members to participate. The role of the Advisory Committee and the subcommittees is further discussed in the next section.

SECTION

5

How to Engage and Maintain Stakeholder Participation

After conducting community outreach, gaining an understanding of needs, and getting to know the community's transportation resources, it is critical to engage and maintain stakeholder participation in the TMCC process. This section provides insights into engaging stakeholders in recurring dialogue through a TMCC committee process.

TMCC Advisory Committee

After hosting the TMCC kick-off meeting, it is important to start the project design process by hosting interested stakeholders for an initial TMCC Advisory Committee meeting. The initial meeting agenda should enable all stakeholders to introduce themselves and provide an overview of their organization, review the TMCC project, discuss what a TMCC is, consider goals and objectives for the project, elect an Advisory Committee chair and vice chair, share upcoming activities, and discuss the schedule for ongoing Advisory Committee meetings. The committee should also discuss the creation of working subcommittees to address specific issues pertinent to the development of the TMCC. The leader and PMT members should anticipate providing staff support for committee meeting logistics, communication, and materials.

Monthly Stakeholder Engagement – Working Subcommittees

To maintain ongoing stakeholder interest in the project, it is crucial to hold regularly scheduled meetings of the Advisory Committee and create subcommittees based on TMCC design subject areas. The TMCC's detailed work should be done by the subcommittees, which should plan to meet between Advisory Committee meetings. Subcommittee meetings will facilitate the progress of creating the TMCC and greater coordination opportunities through investigating design issues, address barriers for development, and seek detailed solutions for the project.

Subcommittee meetings will facilitate the progress of creating the TMCC and greater coordination opportunities through investigating design issues, addressing barriers for development, and seeking detailed solutions for the project.

Similar to the Advisory Committee, the subcommittees should each select a chair at the initial meeting, and the leader/PMT should plan to complete selection of subcommittee membership. The subcommittee chairs will work with the TMCC leader and the PMT to establish a list of issues on which the subcommittees will work and record the progress of each. The subcommittee chairs (or designees) should plan to report on items discussed at each Advisory Committee meeting. The following are potential subcommittees to consider creating in support of the TMCC.

Transportation Provider Subcommittee (TPS)

A TPS is suggested to encompass all transportation providers referenced in Section 4 to evaluate the community's existing transportation network and consider methods for developing a TMCC while improving the coordination of services.

Transportation Provider Survey

As part of this process, the TPS should prepare a survey to be completed by each provider on administrative and operational items, including driver training, insurance, maintenance, hours of operation, technology used, and other issues of interest. Appendix G provides a sample transportation provider survey. Survey responses received should be collated and shared with subcommittee members. This survey information will provide baseline provider information in designing the TMCC and potentially provide initial opportunities for inter-agency coordination partnerships, such as joint staff training and insurance procurement. This information will later assist in developing the TMCC's administrative and operational requirements.

Meeting Discussion Topics

The TPS should have an organized meeting agenda and plan to discuss multiple issues as part of its regular meetings. Issues to be considered include how transportation information and services are made available to the community, how persons looking for human service transportation seek service options, whom they call, what information is available online, what information is available through mobile app, fixed-route trip planning tools available online, etc. By addressing issues such as these, the TPS can evaluate current access to human service transportation options and brainstorm how this information can be more available to the public.

Consider Multiple Access Models

In designing the TMCC, a TPS goal should include evaluating different models for improving customer access to transportation services. These "access" models could be used to establish one phone number and a website that provide customers with all available transportation options (i.e., "One-Call/One-Click").

Another potential model provides consistent information to several organizations the public could contact to address transportation options. Seeking customer feedback through a needs elicitation process, as discussed in the following section, will provide the committee with input to assist in developing the TMCC's access methods.

Evaluate Opportunity for Inter-Agency Coordination

From a transportation provider perspective, the TPS should plan to discuss the current level of trip-sharing (coordination) between agencies, including existing cooperative services and if those services have an agreement between the two agencies. After determining the current level of coordination among providers, time should be taken to discuss how agencies could improve their customer service through enhanced inter-agency coordination. Some providers may have peak periods of operation when they leverage another provider for services. Most providers would be interested in having an agreement with another provider to call for assistance when a vehicle breaks down or several drivers call in sick. Subcommittee members should be encouraged to brainstorm the benefits of greater coordination between providers.

As part of the provider evaluation and discussion process, the TPS also should discuss the use of technology to improve coordination. Provider survey responses should include an assessment to better understand the level and type of technology in use. If two providers are using the same CASD, they could consider the development of a method to share customer trip information for service provision. The TPS could assist the providers in this process.

Create Inter-Agency Service Agreements

Another critical step in support of the TMCC is to discuss and seek to establish inter-agency agreements between transportation providers, which is necessary prior to the coordination of a single customer trip. The TPS could assist in developing a model agreement establishing the administrative and operational parameters that need to be maintained while the agreement is in place. The agreement should also describe how rider information will be transmitted between providers and financial expectations, such as agreed billing rates and payment processes. The providers will also want to address how transportation data will be sent to the customer's sponsoring agency for reporting purposes. A sample inter-agency service agreement is provided as Appendix H.

Technology Subcommittee (TS)

Comprising the Advisory Committee's technology enthusiasts and transportation provider vendor partners, the TS seeks to evaluate and provide recommended solutions for a TMCC electronic system. This process includes understanding existing transportation provider technology systems, considering TMCC

needs for technology, and discussing how existing technology could improve the community's mobility. The TS should consider everything from initial low-tech methods to full implementation strategies for the TMCC and to enhance coordination.

User/Rider Subcommittee (U/RS)

Supporting the TMCC and its customer focus, the U/RS incorporates the perspectives of all customers, including riders, human service agencies, advocates, and caretakers/sponsors, into developing the TMCC and enhancing inter-agency coordination. U/RS members provide pertinent feedback on all TMCC development aspects, such as the following topics:

- First-hand experience of riders who use the community's transportation system
- Access methods (not everyone has access to a smartphone or computer)
- Providing information in English and Spanish languages
- Providing information for the hearing- and visually-impaired.
- Client access to human service agency services

Marketing Subcommittee (MS)

The MS will evaluate and recommend TMCC promotional items to the public. It should assess the community's current transportation services marketing efforts and provide recommendations on how they may be leveraged in promoting the TMCC. It also should plan to educate the community on the different phases of the TMCC's development, implementation, and coordination opportunities. The MS may make recommendations to either use an existing brand (and expand its marketing services) or develop a new identity for the proposed TMCC.

SECTION

6

Assessing the Community's Transportation Resources

To better understand the community's transportation resources and capabilities, the PMT should leverage stakeholder outreach, the survey, and any additional information to create an assessment of current transportation information and services. This assessment should provide pertinent information to address service and technology characteristics for consideration in the development of the TMCC and coordinated services. The following sections provide items to consider when assessing transportation provider and information resources.

Transportation Providers

In assessing all community transportation providers, the survey and supplemental information will provide the PMT with well-rounded data to leverage in development of a TMCC. The following are specific items to consider for FR and DRT providers.

Fixed-Route (FR) Providers

In creating the assessment, the community's FR providers and services that are available to the public (if not available, skip this subsection) should be identified. Where available, FR transit services traditionally are the community's most cost-effective mobility option and may use technology to inform riders of service-related information. Online and mobile FR trip planning services provide passengers with specific information about their proposed trip, including travel times, fares, transfers, and travel distance to the end destination. Passengers may use this information to determine whether the trip option(s) provided meets their needs. In addition, where multiple providers operate in the same area, surveying intermodal connections is also important to understand whether a coordinated trip is feasible.

Demand-Response Transportation (DRT) Providers

DRT services are provided in many different forms in communities large and small. DRT providers may be public, private, and non-profit organizations transporting the public using many different services. In developing a TMCC, the following items should be considered regarding DRT provider services.

Public Organizations

- **ADA Complementary Paratransit Services** – Available in communities that provide FR public transit services, ADA complementary paratransit services provide approved passengers within ¾ mile of a fixed route with access to the service. ADA paratransit service traditionally requires an application process to verify eligibility for services. The application process

seeks to confirm that the rider cannot use the bus, physician documentation of the disability, and, potentially, a functional assessment of the rider's abilities to use the fixed route. An ADA paratransit system is traditionally a curb-to-curb service that is available during the same hours of operation as the fixed-route system. Passenger fares are regulated by Federal law, allowed to be no more than twice the FR fare, and usually are subsidized. Some ADA paratransit systems also coordinate their services with human service and other community transportation providers to maximize resource use.

- **Community Dial-A-Ride** – These door-to-door demand-response services usually are limited to a smaller geographic region such as a community or town. Seek to determine their service area, hours of operation, and fares. These services are typically subsidized by the community, with fares being reduced for the rider. Ensure that these organizations participate in the TMCC discussion.

Non-Profit Organizations

If the community has non-profit organizations that provide transportation, determine what types of transportation services they provide, the types of vehicles they use, the technology they use, and whether they are available only for agency customers or open to all. In California, each county has a designated Consolidated Transportation Services Agency (CTSA) to provide human service transportation. A good resource for identifying human service transportation providers is to meet with the county's transportation planning agency. If the community has any volunteer driver services, they may be interested in becoming a TMCC provider as well.

Private Transportation Organizations

All private transportation providers operating in the community should be identified. These providers include any taxi, shuttle, Transportation Network Companies (TNCs) (e.g., Uber, Lyft), or other private-for-hire services. These providers are always looking for more business and should be considered as part of the TMCC network. They often ensure that transportation options are available in the evenings and weekends when public and human service transportation may be limited.

Transportation Information Resources

Transportation information providers should be contacted. These organizations vary by community and typically provide a variety of community transportation information and/or referral services. This information may be provided through 511 traveler information, 211 human service information and referral, local transit operators, planning organizations, and other community resources. Seek to understand the mission, services provided, technology, and future plans of these organizations while welcoming them to participate in the TMCC design process.

SECTION

7

Creating the TMCC Plan

After identifying the community's needs, constraints, and transportation resources, the TMCC design process continues through preparation of the plan. The TMCC Plan serves as a roadmap to improving the community's mobility and seeks to document the community's transportation, TMCC process, research, features, alternatives and selected design, implementation phases, and ongoing community support. As the planning process is ever-changing, the document itself should seek to incorporate and address the community's changing needs where feasible. This section provides a step-by-step outline and discussion in creating the TMCC Plan.

The TMCC Plan serves as a roadmap to improving the community's mobility and seeks to document the community's transportation, TMCC process, research, features, alternatives and selected design, implementation phases, and ongoing community support.

Step 1:
Prepare TMCC Introduction

In preparing the TMCC Plan's Introduction, provide an overview of the community's, transportation services/area, reasons for a TMCC, the project's process, and document contents. The following topics should be considered in preparing this part:

- Community overview, including demographics (population, square miles, map, etc.)
- Transportation service and coverage area (i.e., city, county, region, etc.)
- Reason to design a TMCC (explain why the process came to life)
- Project goals and objectives (developed with stakeholders)
- Project leader and PMT (provide an overview of these agencies)
- Participating stakeholders (provide a list and description of each, if available)
- TMCC Advisory Committee and subcommittee names (discuss participants and their roles)
- Review of Plan sections (contents)

Step 2:

List Community's TMCC Needs and Constraints

After providing a project introduction, this section will provide an opportunity to discuss the community's TMCC-related needs and constraints received, outreach methods used to secure them, and collation process to reduce redundancy. As part of this process, use a final "clean" version of the tracking documentation (i.e., spreadsheet) used by the PMT to manage all needs and constraints received. After illustrating the complete needs, pare the list down to a final list of needs and constraints that are unduplicated. This is the primary list of needs to use moving forward in designing the TMCC. Continue referring to this list during the entire TMCC planning process to ensure all needs were met.

Step 3:

Prepare the Community's Transportation Assessment

Prepare a baseline assessment of the community's transportation providers and resources. This information may be obtained from research conducted earlier by the PMT in the TMCC design process (agency outreach and provider survey). In preparing a baseline assessment of the community's transportation, consider including the following topics in this section:

- Transportation providers in the services area – public, private, private, non-profit, human service, others (list services provided, hours/days of operation, call center hours, service area(s), etc.).
- Community transportation information and referral resources (i.e., 511, 211, MPO, planning organizations, human service agencies, etc.)
- DRT provider operational information (how customer trips are scheduled, types of internal/external technology used, etc.)
- Types of transportation coordination occurring in the community
- How transportation services are funded
- Other related items of interest

Step 4:

Create the TMCC: "What is It?"

The part provides an overview of the creation and definition of the TMCC's intended services and requirements. Referred to as the System Requirements or "what" comprises the TMCC, this process is critical for stakeholders to

review customers' collated needs and conduct multiple Advisory Committee and subcommittee meetings in discussing the exact functions the TMCC will address, including those related to technology and non-technology areas of interest. Stakeholders should then review each requirement and agree on their contents prior to proceeding to the next step in this process, essentially creating the details of the TMCC "product." The following topics should be considered in preparing this section.

- **Reviewing Stakeholder Needs**– In reviewing the community's needs, separate them into two categories—Technology-related and Non-technology-related. These categories will assist the PMT, the Advisory Committee, and the subcommittees to review each collated need into framing a preliminary TMCC.
- **Creating a TMCC Vision** – After reviewing the categorized needs, the PMT, Advisory Committee, and subcommittees are in a position to create a preliminary high-level vision of what constitutes the TMCC ("what it will do"). Through this process, the categorized stakeholder needs should assist committee members in outlining a TMCC vision that should be captured in meeting notes and illustrations. Share the vision illustrations with all committee/subcommittee members to ensure they agree, and modify as needed. The agreed high-level vision illustration and discussion notes will then assist the next step in the process, defining the TMCC's specific requirements ("details of what it will do").
- **Developing the Details – TMCC Requirements Preparation** – After agreeing on a common vision for the TMCC ("what it will do"), the next step is to outline all services the TMCC will provide and then create specific details or requirements for each service to ensure needs and committee/subcommittee member comments are addressed. Note that when creating project requirements, there may be temptation to look past this step based on consideration of other factors, such as available budget or funds, to determine what will comprise the TMCC. Do not pass up this step; focus on the customer needs and what they expect the TMCC to do.

  As noted, the TMCC service requirements should be categorized based on technology and non-technology elements, as they may be used in the future as procurement specifications as well. Non-technology requirements may be considered as those institutional or other elements necessary to implement the TMCC. In preparing the TMCC's requirements, make sure to write them in detailed numerical order to ensure clarity, understanding, and referenceable organization. Write the requirements using words such as "shall" or "will." The PMT, the Advisory Committee, and the subcommittees should take time to prepare the requirements, reviewing and revising them, prior to final agreement. See the earlier section on System Requirements for additional information on this process.

SLO MSAA Project Experience and Thoughts for Consideration

Participating in a requirements development process similar to the above, the SLO MSAA project team identified stakeholder needs that recommended that the TMCC provide transportation information and trip-scheduling, management, and fare services through multiple access (communication) methods (i.e., in-person, telephone, website, mobile app). The stakeholder needs were then categorized into those that related to technology and non-technology requirements. The project's PMT, Advisory Committee, and subcommittees then created requirements based on the TMCC project's vision and needs elicited.

In creating the TMCC's transportation services requirements, the PMT, the Advisory Committee, and the subcommittees focused on the identified customer needs for providing services, including (1) trip scheduling, (2) trip management, (3) a fare management process for a trip planning and execution tool, and (4) reporting – data security. The requirements development process enabled stakeholders to put themselves in the customer's position to prepare specifics for each service. The following are steps the SLO MSAA stakeholders followed in considering the requirements for the TMCC's transportation services.

Trip Scheduling – Transportation Information for Trip-Planning Decision-Making

Based on information collected to date, the subcommittees discussed many topics such as (1) how citizens in the service area learn about transportation information options (i.e., was there a website that lists the services, etc.?); (2) if all transportation providers were included in local listings (i.e., private operators and human service transportation providers); (3) the availability of a single telephone number for seeking travel options or the necessary to call all individual providers; and (4) subsidized transportation services available that provide lower fares and require meeting eligibility criteria. To aid in this process, the Marketing Committee addressed these questions.

Next, the SLO PMT encouraged the subcommittees to discuss the best methods for customers to request transportation. The process started by making a list of the modes of transportation available to customers. Also considered were topics such as what information was envisioned for customers (i.e., providing the names of transportation providers, distance traveled, cost of the ride, energy use, etc.), and how customers would access the transportation information (i.e., website or mobile app).

The SLO community has a 511 travel information service operated by SLO Regional Rideshare that hosts a website and phone number to provide transportation information. Prior to the MSAA process, the types of transportation on the site were categorized, requiring customers to view different sections for fixed-route, taxi, private shuttle, and human service

transportation providers. The website did not offer fare information and encouraged customers to call several providers to get the different fares before they made a choice. The TMCC process enabled a partnering effort to evolve the 511 website to ensure that all transportation options are combined on one screen with fare information to allow customers to see the cost of their ride. It is also envisioned that customers will see fixed-route and DRT options, including additional specialized community services such as ADA paratransit, Senior Shuttle, and Veterans' Express.

In speaking with stakeholders during the outreach phase, it was found that most people looking for DRT services, including those from human service agencies, were not calling 511 to explore options. These stakeholders cited directly contacting the agencies that provide the bulk of these services. Also, 511 telephone services usually were answered by a phone tree with confusing terminology for older adults and persons with disabilities seeking transportation options. For instance, when calling and working through the phone tree, older adults needed to know how to press the "shuttle" extension to get information on the Senior Shuttle. The MSAA process created a requirement that transportation information for all providers be available through multiple communication platforms, including a live CSR by telephone.

Transportation Provider Selection

For the SLO TMCC project, the Advisory Committee wanted to go beyond simply providing information on available transportation providers. For the project's transportation services components, the group created the concept of a TMCC Technology Tool (TTT) to connect customers with transportation providers, enabling trip planning, requests, and approval. Providers will receive a customer's trip request, confirm/deny, and communicate with that customer. The customer will receive an electronic confirmation from the provider. The customer can check on their reservation or cancel their ride through the technology tool. See Section 2 for more information on the project's proposed TTT.

Subcommittees should be encouraged to list transportation providers that are be visible to all customers. Determine whether private operators and human service transportation agencies are interested in participating and reach out to all transportation providers to determine if they want to be part of the TMCC transportation network.

Contacting a Transportation Provider to Schedule a Trip

In addition to using the TTT either online or by mobile app, the SLO County MSAA stakeholders also discussed the importance of allowing customers to directly contact the transportation provider. The provider agency's CSR staff would then provide the customer with verbal (by telephone) or in-person services provided electronically. This process required the TMCC designers

to create a security login process with two portals seeking to delineate what components the customers accessed compared to DRT provider staff.

As part of this TMCC design process, discussion topics to be considered should include (1) how customers will contact the chosen provider for their ride, (2) how customers will seek assistance in scheduling a trip, (3) how customers will access a live CSR after regular business hours, (4) how a customer's call can be transferred from one provider to another for trip assistance, and (5) if trip requests are made available either online or by mobile APP, how the customer's ride request can be submitted to the transportation provider.

Receiving Trip Confirmation from Transportation Provider

DRT providers use many methods to enable customers to request and confirm scheduled trip times and fares. Some DRT providers accept ride request information and schedule a trip while the customer is on the telephone, which they consider as confirmation of the ride. The problem with this method is that the caller's plans may change in the week before their ride and they may forget to call to cancel their ride. The TMCC designers felt it important to have a process to contact customers the day before their ride to confirm that they still need the ride. This method will greatly reduce the potential for customer no-show trips.

Another scheduling practice by DRT providers is accepting customer trip requests and scheduling them one day before the ride, which allows the provider to group rides based on demand for each day. The provider then calls the riders in the afternoon of the day before to confirm the ride, pick-up times, and fare. The customer then has an opportunity to cancel the trip prior to the day of the trip. The DRT provider can then manage its trip schedules after the cancellations and add last-minute requests into the gaps in the schedules. Some CASD systems provide automated notification systems that will call riders and provide them with information on their ride. This process also invites the customer to call the provider if they wish to cancel their ride.

For the SLO County MSAA project, it was acknowledged that there are different DRT provider scheduling methods, thus leaving the trip scheduling and confirmation process up to each provider. A response would still be provided through the TTT.

Day-of-Trip Management: Canceling or Changing a Scheduled Trip

How customers manage their trips after they has been scheduled should be considered. This process may include customers being able to check on their pick-up time or wanting to cancel their ride. Consider whether there is interest in a central location to manage customer trips, enable the customer work directly with the transportation provider to manager their ride, or both.

In designing the SLO County MSAA project, the stakeholders determined that there was no interest in centralizing their scheduling and dispatch services. Each DRT provider wanted to maintain control of scheduling its customer trips, drivers, and vehicles. Because of the proposed decentralized DRT provider network structure, the stakeholders envisioned customer interaction managing their ride directly between themselves and the transportation provider. The TTT would also provide an electronic version of this process.

The SLO team also considered how a trip would be monitored and executed. It was concluded that the transportation provider committing to schedule the trip would monitor its execution. If the customer experiences a schedule change that requires a new pick-up time or location, the transportation provider would work with the rider to make the change. If the transportation provider's vehicle is running late, the DRT provider will need to contact the rider with a revised pick-up time.

Fare Management

Current and future type of payment methods available for customers should be considered. Is there interest in a system that sells bus passes for fixed-route and DRT services? Is there interest for human service agencies to be able to fund client transportation through an electronic account?

In designing the SLO County MSAA project's TTT's fare management system, it was important for the designers to consider the list of transportation providers and payment methods researched in Section 6. The project's stakeholders were interested in making the TTT's payment method available for all providers.

The PMT, the Advisory Committee, and the subcommittees also discussed how fares would be collected and distributed for TMCC-sponsored trips, including developing a centralized payment system, having each provider collect the cash, and electronic payment. It was determined that a centralized payment center would need to be considered, providing one organization that acts as the bank and distributes payments to providers. To keep the system simple, it was ultimately decided to recommend that tools be created to enable DRT providers to receive payments in the form of cash, credit/debit card, or PayPal. Customers would also be permitted to directly pay their provider and to replenish their electronic profile's fare account through approved in-person and telephone payment methods.

Ultimately, the SLO County MSAA project's TTT fare management system is considering a centralized payment system that would allow customers to pay for TTT-related trips, including the potential for fixed-route bus passes and other services, from an account they maintain in their electronic profile. The fare management system was also recommended to integrate with all features of the TTT discussed in this section for seamless trip booking, management, and payment of services.

Reporting – Data Security

In determining the TMCC's services, a method to share customer information in a secure manner should be determined. Consider establishing an encrypted data system that allows the TMCC to send secure trip request information without violating customer confidentiality laws.

Reporting and data security were critical discussion items of the SLO MSAA project's Technology Subcommittee. Topics discussed included how providers would secure ride data to complete their reports and complete their billing procedures and how data are submitted back to providers that manage a trip for them under contract. The subcommittee created non-technology requirements to ensure that providers establish inter-agency service agreements and protocols for reporting, coordinating trips, and transmitting data. Technology requirements also were prepared to discuss the TTT's reporting and data security requirements, such as sharing post-trip operational data with the host organization, data encryption, and compliance with HIPPA, technology standards, and applicable state and federal laws.

Step 5:
TMCC Design: How Will It Operate?

After preparing the TMCC's high-level vision and creating the specific requirements for what it will do, how it will operate is next determined. This is best determined by conducting market research to better understand what options exist to create the TMCC, preparing and analyzing alternatives, providing recommended TMCC alternatives, seeking stakeholder agreement, and ensuring that all customer needs have been met. This section provides information on these recommended design process elements.

Conduct Research

To prepare well-rounded alternatives associated with all components of the TMCC, it is recommended to conduct market research through a number of resources. In continuing the research, the PMT should maintain notes of all discussions held, items read, and other resource reviews for future reference. The following are a sampling of resources to leverage in creating the project's alternatives:

- Local/state/federal resources – agency staff, plans, reports, etc.
- Project research material and documentation to date
- Project stakeholders
- US DOT/FTA MSAA and TMCC resources – staff and written documents
- FTA MSAA projects sites
- National and state trade associations
- Transit Cooperative Research Program (TCRP)

- Transportation Research Board reports
- National Center for Mobility Management
- Private consultants
- Technology firms
- Stakeholder constraints
- Others

Create Alternatives

In preparing the TMCC's alternatives, consider all the efforts, such as goals/objectives, needs, constraints, research, visioning, requirements, and other customer-focused items that have led up to this point in the process. The PMT should "whiteboard" or conduct an open discussion with stakeholders to create alternatives that best meet the TMCC's requirements and customer needs. Research and document proposed costs for each alternative through available resources. Prepare a written account of each alternative's pro's/con's, costs, technology, and any other input that will provide the Advisory Committee with the most information to consider a decision.

Selecting a Preferred Alternative

Present the completed list of alternatives to the Advisory Committee and review each item in detail. Encourage open discussion and seek a recommended preferred alternative for each TMCC component. Document the preferred alternative(s) and reasons for their selection.

Stakeholder Agreement

In selecting the preferred alternative(s), ensure that the Advisory Committee's stakeholders are all in agreement with the decision. Additional behind-the-scenes individual discussion may be required by the leader, the PMT, the Advisory Committee Chair, and each stakeholder to ensure that all concerns related to the chosen alternative(s) is addressed. If there are any concerns related to the preferred alternative(s), be open to revising the alternative(s) as needed to meet the stakeholder's interests.

Ensuring Needs Are Met

In seeking to finalize the TMCC's preferred alternative(s) and, ultimately, the chosen design ("what it is and how it will do it"), the PMT should revisit the list of collated stakeholder needs collected in the initial outreach efforts (addressed in Section 4) to ensure that the preferred alternative(s) meet each need. Completing this task will ensure that the TMCC planning process met each customer need.

Step 6:
Implement the TMCC

With the project's design now prepared, including requirements and preferred alternative(s) selected, create a plan to implement the TMCC. As part of the Implementation section's preparation process, it is important to consider the following factors:

- What tasks are necessary to implement the TMCC?
- Are there steps that can be taken to improve coordination?
- What funding is necessary to pay for TMCC implementation?
- How much time is necessary to implement the TMCC?
- What agencies are responsible for TMCC implementation tasks?
- How much staff time will it take to implement the TMCC?
- How many transportation providers will participate in the TMCC?
- Will transportation riders participate in a system to share rides?
- What level of support will you receive from stakeholders to implement the TMCC?
- What success factors (performance measures) should be considered for the TMCC?

In considering responses to these questions, contemplate establishing a series of phases for the Implementation section that may or may not correlate to a time schedule. The Implementation section should include phases and tasks for implementation, a discussion of detailed tasks for completion, coordination activities, task owners, a proposed budget, success measures, and any other items to aid the TMCC's commencement. The tasks listed in this section should continue to be monitored as part of the ongoing TMCC development process after the planning/design portion of the project concludes. TMCC Technology Subcommittee members should also continue to monitor technology changes as implementation progresses.

In developing the SLO County MSAA project's Implementation Plan, the PMT created a system of three phases with tasks that could change at any time based on environmental factors (i.e., funding, etc.) to enable TMCC development. The following is an overview of the proposed phases:

- **Phase 1** consisted of TMCC tasks that could be addressed with either no or low-cost impacts and completed in a short amount of time, such as 0–6 months (i.e., "long-hanging fruit").
- **Phase 2** phase consisted of steps that could be completed "on the way" to implementing the ultimate design of the TMCC. This phase's tasks were proposed to take less funding to implement.

- **Phase 3** provided detailed tasks for implementing the envisioned TMCC and coordination opportunities.

The project's Implementation section will serve as a road map to making TMCC improvements to improve the community's mobility and increase coordination.

Step 7:
Create Community Buy-In and Funding Opportunities

After completing the TMCC's design and implementation processes, it is important for the PMT to revisit the organizations contacted in the initial outreach process and stakeholder organizations to report on the work completed and discuss implementation tasks. Return to these stakeholders as partners in reviewing the proposed TMCC and address all questions and comments related to its design, implementation, and cost. Remember to customize the message to meet different stakeholder information needs. Seek continued support from the community to ensure they are fully engaged in supporting their mobility tool, the TMCC.

In seeking continued support to implement the TMCC, it is important to discuss possible opportunities for local partners to participate in its cost-sharing. TMCC cost-sharing may include local, State, and Federal funds that are eligible to finance activities related to the TMCC's implementation, such as providing outright grant support, matching, private sector partnerships, and other resources. The following are potential sources of local, state, and federal transportation grants.

- Local (varies by community)
  - Local government – Town, City, Township, County, Parish, Borough, departments
  - Non-profit organizations (human service, health, Medicaid, United Way, etc.)
  - Private sector partners
  - MPOs and RPOs
  - Rideshare organizations
- State (varies by state)
  - State DOTs
  - State Departments of Health and Human Service (and affiliated organizations; names vary by state)
  - State Veterans Department or Office
- US Federal
  - Grants.gov (https://www.grants.gov/) – excellent resource to research and apply for US Federal grants

– US DOT/FTA
  - Section 5307 – provides funding to public transit systems in Urbanized Areas (UZA) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances
  - Section 5310 – formula funding to states for the purpose of assisting private nonprofit groups in meeting transportation needs of the elderly and persons with disabilities; large urban areas and state DOTs are eligible for this funding allocation on behalf of recipients
  - Section 5311 – provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000, where many residents often rely on public transit to reach their destinations; state DOTs are eligible for this funding allocation on behalf of recipients
  - Discretionary Capital Grants – competitive funding made available for specific grant program purposes by FTA as appropriated by the US Congress
  - Tribal Transit Program – provides funding to federally-recognized Indian tribes to provide public transportation services on and around Indian reservations or tribal land in rural areas; funding is provided as a set-aside within of the Formula Grants to Rural Areas program and allocated both by statutory formula and through a competitive discretionary program (Source: FTA, "Grant Programs," https://www.transit.dot.gov/grants)

– US Department of Health and Human Services (USDHHS) – human service programs for seniors, Medicaid/Medicare, Native Americans, low income, children, developmental disabilities, etc.

– US Department of Labor – employment programs for seniors, low-income, youth, veterans, vocational rehabilitation

– US Department of Agriculture – programs for housing assistance, rural development, business development

– US Department of Education – programs for education, independent living, rehabilitative services, special education, and persons with disabilities

– Other Agencies with Potential Funding Opportunities:
  - US Department of Housing and Urban Development
  - US Department of Veterans Affairs
  - US Department of Commerce
  - US Department of Energy
  - US Department of the Interior - BIA
  - US Environmental Protection Agency
  - US Department of Justice

SECTION

8

Conclusion

The goal of this document is to motivate communities on their journey towards improved public and human service transportation coordination. The current transportation system was established by the interaction of funding agencies and transportation providers. Keep in mind that there may be resistance from established transportation agencies that are benefiting from current funding streams. By going through the journey to coordination, communities can evaluate what is beneficial for customers to access all transportation options.

Designing a TMCC enables a community to understand its citizens' transportation needs, constraints, transportation providers, services, and opportunities for growth

Coordinating community transportation resources through the development of a TMCC is a journey best undertaken with sound leadership and stakeholder cooperation. Designing a TMCC enables a community to understand its citizens' transportation needs, constraints, transportation providers, services, and opportunities for growth. The TMCC design process also enables transparent stakeholder discussion in creating a plan to evaluate and select alternatives for a sound implementation.

In documenting its journey, the SLO County MSAA PMT hopes others will benefit from the proposed TMCC and its design process. This document also seeks to provide a step-by-step document in developing a local TMCC, plan for its creation, and provide methods leading to greater transportation coordination. The road to coordination is a journey. It is hoped that this peer resource document has assisted communities on their coordination journey.

REFERENCES

Federal Transit Administration, "Grant Programs," https://www.transit.dot.gov/grants.

National Center for Mobility Management, "Funding, Financing, and Fares," https://nationalcenterformobilitymanagement.org/by-topic/by-topic-funding/.

Ride-On Transportation, San Luis Obispo County Travel Management Coordination Center (TMCC) Concept of Operations, September 16, 2016.

Ride-On Transportation, Final Project Management Plan, San Luis Obispo County TMCC Project, January 27, 2016.

Ride-On Transportation, San Luis Obispo County TMCC Final High-Level System Design, March 2018.

Ride-On Transportation, San Luis Obispo County TMCC Final Phased Implementation Plan, March 2018.

Ride-On Transportation, San Luis Obispo County TMCC Final System Requirements, July 13, 2017.

Note: All project documents are available from Ride-On Transportation's MSAA website at http://www.ride-on.org/msaa.php.

APPENDIX

A

Document Version Changes

Version	Date	Description of Changes	Status
01	February 27, 2018	Draft Document	Submitted to FTA for review and comment.

APPENDIX

B

CTSA-Supported Organizations

Performing Arts Foundation	Morro Bay Winter Bird Festival	Ballet Theatre of SLO
Cal Poly University	American Cancer Society	Jubilee by the Sea
San Luis International Film Festival	SLO Arts Council	Monday Club
Youth Works	Bay Foundation of Morro Bay	SLO Chamber of Commerce
SLO Arts Council	Boys and Girls Club of Oceano	Central Coast Gymnastics
SLO Symphony	Campfire Boys and Girls	Canyon Creek Learning Center
South County Youth Coalition	Cuesta College	SLO Sportsmen's Association
Templeton Youth Center	Child Development Center	City of Pismo Beach
SLO YMCA	Economic Opportunity Comm.	Hearst Cancer Foundation
Achievement House	French Hospital	SLO County Veterans' Services
SLO County Dept. of Social Services	Sierra Vista Hospital	Epic Camp
California Children's Services	Life Span	Architectural Society
Bella Vista Center	Morro Bay Senior Center	Cal Poly Trekkers
Arroyo Grande Care Center	Morro Bay Park and Recreation	Hospice Partners of SLO Co.
Pathpoint, Inc.	SLO County Social Services	SLO Kiwanis Club
SLO Health Department	Pacific Repertory Opera	Air Pollution Control District
North County Industries	R&D Transportation	Cambria Historical Society
Lifesteps Foundation, Inc.	San Luis Obispo Park & Recreation	Central Coast Wine Classic
Escuela Del Rio	Transitions Program	Pacific Gas and Electric
Tri-Counties Regional Center	Cambria Community Bus	Veterans Express
People First	Earth Day Celebration	St. Patrick's Church
California Dept. of Rehabilitation	Manse on Marsh	American Heart Association
SLO Devita Dialysis Center	Elderhostel	Mission View Care Center
Danish Care Center	Association of Amputee Surfers	Nature Conservancy
Pacific Care Center	Woods Humane Society	SLO Historical Society
Twin Cities Hospital	Mission View Care Facility	SLO Senior Center
Arroyo Grande Hospital	People Self Help Housing	Elder Hostel

APPENDIX

C

Public Outreach

SLO County Mobility Services for All Americans (MSAA) Project

Deliverable #2: Concept of Operations

Public Input Strategies – Version: 02.11.2016

The following public input strategies are proposed to be used by the Ride-On MSAA Project Management Team in the development of the Travel Management Coordination Center and Concept of Operations deliverable. The Project Management Team will implement these strategies in March 2016 and continue to seek/address ongoing questions/feedback throughout the MSAA process.

MSAA Public Input Strategies

1. Online Survey
    a. Create a project overview presentation for public review.
        i. Create public slideshow. Convert to PDF. Include the following elements:
            1. Background – information about the grant.
            2. Discuss what is a TMCC?
            3. Seek interest in receiving public feedback.
    b. Survey – create and make available on Ride-On MSAA website. (March)
        i. Request visitor to view TMCC overview PDF.
        ii. Ask the following questions:
            1. Survey taker's status – rider, provider, organization, other? (add text space to enter comments)
            2. Do you experience any transportation difficulties? Yes/ No. If yes, provide text space for input.
            3. How can the TMCC assist you in overcoming your transportation difficulties? (add a text box to allow for an answer)
            4. Which of the following options would you use to secure transportation information and/or services? (check all that apply)
                a. Walk-in
                b. Telephone

c. Internet via smart phone
d. Internet via personal computer
e. Other? (add a text box to allow for another answer)

5. Which of the following TMCC functions are of interest to you? (check all that apply)
    a. Community transportation options
    b. Cost
    c. Immediate (0–1 hour) service availability
    d. Accessible vehicles
    e. Guide for senior fares
    f. Travel training (assist you to ride the bus)
    g. Other (add text entry space)
6. Contact Information – enable survey respondents to provide their contact information for future MSAA project updates.

2. Online Questions/Comments – Miscellaneous
    a. Project questions/comments. Create a method on the Ride-On MSAA website to provide comments by e-mail.
3. Marketing:
    a. Outreach card. Promote project and public feedback process through website or contact to Ride-On.
    b. E-mail to all stakeholders. Invite to share with their web or resources.
    c. Webinar. Hold a local project overview webinar for any interested persons. Conduct in mid-late March.
4. Community Presentations (in-person)
    a. Human Service Agency Input (multi-agency meetings)
        i. SLO County Department of Social Service
        ii. Adult Services Policy Council
        iii. CenCal Health
        iv. Senior Commission
    b. Other Groups:
        i. Identify other groups that would benefit from the TMCC and provide an overview presentation

Upcoming MSAA Meetings:

- March 3 – TMCC Advisory Committee subcommittee meetings
- March 4 – Adult Services Policy Council meeting
- March (date: TBD) – Local project overview webinar for community stakeholders. Invite comments through the project website
- March (dates: TBD) – Other in-person public input meetings (to be determined thorough community partners)

APPENDIX

D

Sample Advisory Committee Meeting Agenda

San Luis Obispo County / Ride-On

Mobility Services for All Americans (MSAA) Project

TMCC Advisory Committee – RTA/Runabout Office, San Luis Obispo, CA

January 28, 2016

1) Introductions
   a) Welcome – Geoff Straw, RTA
   b) Introduction and Updates – Mark Shaffer, Ride-On
      i) Name the project
      ii) Community initiative to name project
      iii) New project website
      iv) MSAA Project Management Plan (PMP). Official FTA approval received 1/26/2016
2) Review of Minutes – Kick-Off Meeting, December 15, 2015
3) Overview of MSAA Grant
4) What is a Travel Management Coordination Center (TMCC)?
5) How could a TMCC improve transportation for your organization/business? What barriers do you see to implementing a successful TMCC?
6) What are the steps in developing a TMCC?
7) How will the TMCC benefit the transportation users? How could a TMCC improve the current transportation delivery system?
8) Creation of new Subcommittees:
   a) Transportation Providers
   b) Technology
   c) User/Rider
9) Final Questions and Conversation
10) Next Meeting
11) Closing Comments

APPENDIX

E Customer Constraint Comments Received

Collated Customer Constraint Comments
1.0 Administrative/Policy
1.1 Each transportation partner provides different services with different requirements.
1.2 Community knowing it exists.
1.3 Memory problems of clients.
1.4 Does not seem to address low income issues as well. I may have overlooked that aspect of TMCC.
1.5 Coordination of all the resources. Making it easy for persons who are not technologically savvy.
1.6 Coordinating is only as good as the partners – requires a real commitment.
1.7 Funding to sustain the TMCC.
1.8 Cost. It seems like it would be expensive.
1.9 Older adults especially with cognitive impairment need 1-on-1 in person help, not more technology.
1.10 Community awareness. With any new program, it is the public awareness that it is available that is usually the issue. A well-developed marketing and outreach plan is a must.
2.0 Operational
2.1 RTA and SLO Transit have union labor/service agreement requirements.
2.2 Joint decentralized dispatching opportunities?
2.3 RTA - Need for after-hours services
2.4 Cambria's distance up the coast can be problematic getting services.
2.5 Lack of resources for actual wheels on the ground; if it can help multiple agencies pool to an economy of scale that can free resources for service at needed times, it would help
2.6 Coordinating several providers as integrated system
3.0 Technology
3.1 Operations/Administrative back-end solutions and customer-facing solutions to address.
3.2 Technology breakdown – making sure system is available 24-hour/day + is user-friendly; follow-up is clear; training of staff who answer the phone, reply to digital communication to communicate effectively for people disabilities & older adults.
3.3 Difficult for older adults + persons with disabilities to navigate through the system.
3.4 Delivering "low level" tech options for the aging community. You should look at the ClassPass model for data aggregation: they use multiple backend software platforms, but aggregate schedule, and pricing across millions of providers.
3.5 Cities that are spread out. Multiple entities that would need to be brought into the system. Leadership that can manage such a complicated system.
3.6 Change scares people, especially new software. I could see push-back from agencies who want to maintain the status-quo
3.7 Is this all going to be in Spanish?
3.8 Cost, access to technology needed to use service
3.9 Friend has no internet access. Hope it will be available via telephone.

APPENDIX

F

Outreach Survey

San Luis Obispo MSAA Project

Transportation Needs Public Input Survey

March 2, 2016

San Luis Obispo County, California, is one of three locations nationally to be awarded a United States Department of Transportation Mobility Services for All Americans (MSAA) grant. The focus of the MSAA grant is to work with private, non-profit, and public transportation providers to design a Travel Management Coordination Center (TMCC). Using technology, the TMCC is proposed to enable the coordination of multiple local transportation provider's services and share enhanced mobility options with the community. For more information on the project, please click here.

As the local MSAA team is in the early stages of designing the TMCC, we would appreciate your time taken to complete the brief survey below. You may complete the survey either for yourself, a family member, or other sponsored person who uses door-to-door and public transportation.

1. I am completing this survey for:

    a) Myself

    b) A family member

    c) A client whom my agency serves

    d) Other:_____

2. How difficult is it to get transportation to the places you need to go?

    a) Very difficult

    b) Sometimes difficult

    c) Usually it is not difficult

    d) It is never difficult

    If you answered either A or B above, what makes your access to transportation services difficult? _____

2A. In Question 2, if you answered either A or B, how could a TMCC or centralized transportation center help you to overcome your transportation difficulties? _____

3. Which of the following functions would better assist your use of community transportation resources?

a) Provide information about transportation options

b) Provide cost information for rides

c) Provide information about the time for travel

d) Provide immediate (less than 1 hour) response to ride request

e) Provide accessible vehicle information

f) Includes specialized transportation for seniors or veterans

g) Provides information about travel training on the bus

h) Other: _____

4. What problems do you foresee in creating a TMCC for the community? _____
_____

Thank you for taking time to complete this survey. Your responses provided will assist us to better understand the community's needs in designing a TMCC.

If you would like to receive updates on the progress of the San Luis Obispo County Mobility Services for All Americans (MSAA) project, please feel free to share your contact information below. Your information will only be used to provide you with periodic updates on the project.

Name: _____

Organization (if applicable): _____

E-mail address: _____

Phone: _____

APPENDIX

G

Transportation Provider Committee Survey

MSAA TMCC Transportation Provider Questionnaire

Transportation Provider Name: _____

Person's Name Completing Form: _____

1. How many total vehicles does your fleet operate?
2. How many vehicles do you operate in peak service?
3. How many vehicles have wheelchair lifts?
4. What type of driver licenses do you drivers have?
5. What type of background check do you perform on your new drivers?
6. Do you have pre-hire drug testing?
7. Do you have random, post-accident and reasonable suspicion testing of your drivers?
8. Do new hires take a DMV Class 2 physical (CA requirement)?
9. How many hours of classroom and behind the wheel training do new hires participate in?
10. What level of insurance are you covered for? What is your per accident deductible?
11. How many hours a year do regular drivers participate in training?
12. Do you provide empathy training for drivers in order to work well with persons who have cognitive and physical disabilities?
13. What level of workers' compensation do you have?
14. Do you do your maintenance in-house or do you use a privately-owned shop?
15. What is your pay range drivers?
16. Looking at your most recent payroll, what is the average driver wage (driver pay divided by number of driver hours)?
17. What is your annual budget for driver's wages/benefits?
18. How many total miles does your revenue fleet accumulate in a typical year?
19. What communication system do you use to communicate with drivers when they are operating in revenue service?

APPENDIX

H

Sample Inter-Agency Agreement

UCP/ Ride-On Transportation and Valley Transportation Services

This Provider Service Agreement ("Agreement") is made on the ___ day of _____. 2018 ("Effective Date") between UCP/Ride-On Transportation ('Ride-On") and Valley Transportation Services ("VTS") to increase transportation coordination, as part of the SLO Travel Management Coordination Center (TMCC).

Both organizations have various transportation services to provide rides for customers ("clients") who may need to meet eligibility requirements to receive a reduced fare for their transportation. Each organization will seek acceptance within their contracts to allow the primary providers to move rides to a secondary provider.

The primary provider will ensure that the contracting agency has approved the use of subcontractors to meet the transportation needs for the clients. The secondary provider will need to meet the contract requirements to be eligible to receive ride requests from the primary provider.

The specific requirements and rates for reimbursement will be listed in Appendix A. With the goals of the TMCC to provide better choices for transportation customers both UCP/Ride-On and VTS hereby agree as follows:

1. **Effective Date and Term**

   This Agreement shall become effective as the effective date hereof, with the approval of each organization. This Agreement shall continue in force until it is terminated in accordance with the terms set forth elsewhere in this Agreement.

2. **Services to be Provided**

   Either Party may purchase transportation from the other Party at the rates specified in Appendix A. The Party requesting a ride to be covered by the other Party will be considered as the "Sponsoring Agency". The Party that agrees to provide the ride requested by the Sponsoring Agency will be considered as the "Provider Agency". Each Party will be both a Sponsoring Agency and a Provider Agency, based on funding source for the ride. Each Party can transfer a ride request that is not linked to a contract to meet the customer's transportation request. Both Parties will do their best to schedule a ride request transferred by the other Party.

3. Conditions of Service

Each Party warrants that it is in full compliance with the "Provider Requirements" listed in Appendix B. Further, both parties agree that they will comply with all regulations required by the State of California and the Department of Transportation. Both Providers must comply with the terms of its license and/or certification throughout the term of this Agreement. Providers agree to make available to Clients their transportation services for which it is licensed. Any changes in the Parties licensure status shall immediately be reported to the other Party.

4. Service Planning and Referral Process

Neither Party is obligated or committed to purchase any specific amount of service(s) from the other Party. Either Party can refer a ride to other Party as they deem appropriate and with the permission of their funding agency. The Providers agree to use the designated "Referral Process" to ensure timely ride confirmation and maintenance of the Client's confidentiality.

5. Confidentiality

Each Provider shall treat every aspect of the Services as confidential, including service eligibility, physical or mental health issues or conditions. All information provided by either Party will be transmitted using the TMCC approved system for ride request transmission as listed in Appendix C. All information acquired by either Party in the performance of services, whether written, verbal, electronic or otherwise, shall be regarded as confidential information and all necessary steps shall be taken to safeguard the confidentiality of such information in conformance with federal and state statutes and regulations. Providers agrees that it is prohibited from releasing any and all information without the prior written consent of the Client.

During the course of performance, the Providers may be given information relating to Clients who receive service under this Agreement. The Providers shall safeguard and cause its employees, subcontractors and agents to safeguard, the use and disclosure of such information in accordance with applicable federal and state statutes and regulations concerning confidentiality and a Client except for purposes directly connected with the care of the Client or as required by a Court of Law. The obligation to safeguard Client information includes an obligation to employ appropriate security in transmitting Client Information via online, fax, text or phone, as outlined in Appendix C of this Agreement. Failure to safeguard Client Information could result in termination of this Prover Service Agreement.

6. Hold Harmless

Providers shall accept the amount of payment as defined in Appendix A of this Agreement as payment in full between the two Parties. Payment for Services will not be delayed by conditions between the Sponsoring Agency and their funding source, including governmental funding agencies.

7. Legal Compliance

Each Provider, and as applicable, any drivers or support staff employed or contracted by the Provider, shall at all times during the term of this Agreement comply with all applicable local, state, and federal laws and regulations, including all transportation, healthcare, and fraud, waste, and abuse laws and regulations, HIPPA, and shall hold in good standing any and all licenses and certifications required under such laws and regulations for the provision of Transportation Services as contemplated in this Agreement, including but not limited to a valid driver's license.

Providers shall comply with all applicable local, state and federal safety standards, TMCC Provider requirements listed in Appendix B of this Agreement, procedures and applicable industry and accreditation standards relating to passenger safety and comfort, including but not limited to requirements relating to the maintenance of vehicles and equipment, driver training, passenger and wheelchair accessibility, availability and functioning of seat belts.

8. Indemnification and Required Insurance

Each Provider shall indemnify, defend and hold harmless the other Provider, its officers, directors, employees and agents from or against any and all claims (including attorney's fees and expenses for litigation or settlement) for any loss or damages, bodily injuries, including death, damage to or loss of the use of property caused by the acts or omissions of the other Provider, its officers, directors, employees, agents subcontractors or suppliers in connection with or out of the performance of this Agreement.

Each Provider shall obtain and maintain insurance, including but not limited to automotive liability insurance and general liability insurance, as is necessary to provide coverage for losses and liabilities arising out of the acts and/or omissions of the other Provider (or their respective employees and/or agents) in the performance of, or injuries sustained during the provisions of Services to Clients as contemplated in this Agreement, throughout the term of this Agreement.

Insurance coverage shall be in the amounts that meet or exceed statutory requirements, and acceptable to the TMCC standards outlined in Appendix B of this agreement. At a minimum, each Provider shall provide General Liability limits of not less than $1,000,000 .00 for each occurrence and aggregate bodily injury and property damage and $1,000,000.00 personal injury each occurrence and aggregate; Automotive Liability of no less than $1,000,000.00 combined single limit for bodily injury and damage to property for all owned, leased, hired and non-owned vehicles. Providers shall also maintain uninsured/underinsured motorist coverage and medical payments cover of not less than $1,000,000.00. Higher levels of insurance may be required for some rides based on the requirements of the Sponsoring Agency's funding agencies and will be listed in Appendix D of this Agreement.

Each Provider's insurance coverage will list the other Provider as "additional insureds", and shall be evidenced by certificates of insurance issued by one or more insurance companies licensed to do business in California, containing a thirty (30) day notice of cancellation endorsement.

Each Provider shall obtain and maintain Workers' Compensation Insurance for their employees with limits of no less than $1,000,000.00 per occurrence. Each Provider shall provide a certificate of insurance to the other Provider to evidence the level of workers' compensation insurance.

Each Provider shall forward copies of such certificates of insurance to the other Provider prior to the commencement of transportation services, and shall issue to the other Provider, at any time upon written request, copies of any applicable certificates, renewal, surcharge, cancelation notice, and/or verification of coverage. Each Provider's insurance carrier shall provide the other Provider with at least thirty (30) day advanced written notice in the event of cancellation, restriction or non-renewal of any insurance coverage required herein.

Each Provider will provide the other Provider with a complete list of the Provider's vehicles and drivers to the extent utilized in the service of this Agreement.

Each Provider shall provide the other Provider with a loss run report of all open and closed claims every six (6) months.

9. Vehicle, Driver and Safety Standards

Providers agree to provide services under this Agreement in accordance with the vehicle, driver and safety requirements and standards outlined in Exhibit B of this Agreement at all times. Either Provider reserves the right to require removal of any driver from the provisions of services executed through this Agreement.

10. Employment Status

Each Provider shall at all times to be considered as independent contractors and its employees or agents shall not be considered as employees of the other Provider.

11. Conduct, Criminal Offenses, Fraudulent and Abusive Practices

Each Provider agrees to comply with the TMCC Provider Code of Conduct as outline in Exhibit D of this Agreement.

12. Complaint Resolution and Grievance Procedures

Each Provider may submit informal complaints and grievances to the other Provider to the primary contact member for the other Provider. The parties will work in good faith to resolve such informal complaints and grievances

between themselves. In the event the parties are unable to resolve such issues informally, then the issue will be reviewed by the TMCC Provider Committee for their evaluation of a resolution to the issue.

13. Obligation

The obligations of each Provider, specifically set forth in those sections relating to compensation and rates, record requirements, retention and inspection, safeguarding Client information, hold harmless/indemnification shall survive any cancellation, termination or conclusion of this Agreement.

14. Assignment

Each Provider many not assign, delegate, or transfer this Agreement without the prior written consent of the other Provider. Any attempted assignment or transfer is a violation of this provision is void.

15. Severability

Any determination that any provision of this Agreement or any application thereof is invalid, illegal, or unenforceable shall not affect the validity, legality or enforceability of any other provision of this Agreement (or the enforceability of the provision in other circumstances).

16. Termination

This Agreement may be canceled for any reason and without cause or penalty by either party at any time upon thirty (30) days prior written notice to the other. Each Provider will give the other Provider thirty (30) days to cure the breach to avoid termination of the contract.

17. Provider Representatives

Ride-On's Executive Director, Mark Shaffer, will act as the liaison between Ride-On and VTS. Contact information is as follows:

Mark Shaffer, Executive Director
Ride-On Transportation
3620 Sacramento Drive, Suite 201
San Luis Obispo, CA 93401
Phone: (805) 541-8751
Fax: (805) 543-2045
E-mail: shafmt@aol.com

VTS's _____ will act as the liaison between VTS and Ride-On. Contact information is as follows:

Name:
Title:
Address:
City, State, Zip Code:
Telephone:
Fax:
E-mail:

Appendices

A. Rates of Reimbursement

B. Provider Requirements

C. Transfer of Information

D. TMCC Provider Code of Conduct

U.S. Department of Transportation
Federal Transit Administration

U.S. Department of Transportation
Federal Transit Administration
East Building
1200 New Jersey Avenue, SE
Washington, DC 20590
https://www.transit.dot.gov/about/research-innovation