

Southwest Transit Coordinating Council

Regular Meeting Agenda

Thursday, November 18, 2021, 9:00-11:00 a.m.

Video/Phone Conference – See connection details below

- I. Introductions
- II. Consent Agenda:
 - 1. September 2021 Meeting Minutes
- III. Presentation1. Four Corners Regional Mobility Hub: Final Plan Presentation

IV. Reports

- 1. Transit Provider Updates
- 2. Human Service Provider Updates
- 3. Regional Coordination Updates

Video/Phone Conference Info:

https://zoom.us

1-669-900-6833 (US Toll)

Meeting ID: 988 8606 4474

295 Girard Street, Ste B, Durango, CO 81303 970.779.4592 www.swccog.org

Transit Council Meeting Minutes

Thursday, September 23, 2021, 2:30 p.m. Webinar

In attendance: Sarah Hill – City of Durango Kevin Metzler – Wilderness Journeys Pagosa Michael Koch – Compass Transit Consulting Jennifer Morris – Montezuma County Jay Rhodes – Southern Colorado Community Action Agency Mandi McKinley– Alternative Horizons Patrick Davis – Southwest Rides Kenneth Charles – Town of Dolores Bryce Bierman – Southwest Colorado Council of Governments Jessica Laitsch – Southwest Colorado Council of Governments

I. Introductions

The meeting was called to order at 1:11 p.m.

II. Consent Agenda:

1. July 2021 Meeting Minutes There were no questions or comments.

III. Discussion Items

1. Transit Ticketing App

2. Four Corners Regional Mobility Hub update

Michael summarized various elements of the business plan for the mobility hub including: the Mobility Manager position, marketing responsibilities, and tracking performance metrics. He will provide the document to partner agencies, community partners, vendors, and users by the end of the month as it is almost finalized.

Sarah asked if the rider landing page would be used more as a trip planner or a trip scheduler. Michael explained that the HUB would allow for payment and would provide step-by-step process for riders to find their destination. Sarah asked how the HUB would integrate with current systems, she wants to make sure the scheduling of rides is cooperative, so there is not miscommunication between the HUB and riders. Sarah mentioned the payment app, Token Transit, and the services available. The Token app does not have an overhead cost, Token earns a small percentage of each fare that runs through the app. Michael suggested fare funds could be distributed to the agencies who represent certain sections of the route, noting that an IGA would likely be needed. The fare would be split between the agencies covering the route. Michael mentioned that he will be taking comments after he sends the plan to the council and that Jessica has his contact information if anyone needs it.

IV. Reports

1. Transit Provider Updates

Jennifer reported they have observed an increase in ridership, but they are having a hard time hiring right now. She is looking for a spreadsheet created in 2020 that had salaries for drivers, management, and other jobs for transit agencies. Sarah has the document and will send it to Jennifer.

Patrick reported that Southwest Rides just purchased a new Toyota Sienna for their program.

Sarah mentioned the Durango City Council is considering extending their transit route services to West Highway 160 out of Durango. It will be the normal fixed route service for Durango (7 days a week and stops every half hour). The Council just gave approval to expand transit services, but they still need more vehicles and three more drivers to expand the service.

Jay mentioned the agreement with Token Transit is nearly complete. He met with the Town of Bayfield to bring back route services between Durango and Bayfield within the next 30 days. More drivers would be needed for the route and they have had a hard time hiring drivers. They have had discussions with the Southern Ute Tribe regarding a route that will connect Aztec to the region. Sarah mentioned the group should figure out how to connect the websites to the Token app. Jay, Sarah, and Michael will meet privately to discuss coordination of the Token app and fare structure. Jessica volunteered to schedule a meeting for the group in the next week or two.

- 2. Human Service Provider Updates
- 3. Regional Coordination Updates

V. Adjournment The meeting was adjourned at 1:54 pm

SOUTHWEST COLORADO COUNCIL OF GOVERNMENTS DIGITAL MOBILITY HUB IMPLEMENTATION PLAN



DRAFT FINAL

November 10th, 2021



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I. Introduction

The purpose of this study is to provide a plan that provides a framework for a digital mobility hub for the Southwest Region of Colorado, encompassing the jurisdictions of the Southwest Colorado Council of Governments (SWCCOG). This plan will include specifications that can be used to help guide programmers and vendors in launching a digital platform that provides improved public access to transit information in the region as well as be used as a tool to increase coordination amongst providers in the region.

As the world has become increasingly connected through digital outlets and real-time technology, there has been a push in the transit industry to keep up with the times and develop innovative ways to connect with the digital world. Digital mobility hubs that have been developed include SmartColumbus (Columbus, OH) and GO!Vermont (Vermont Dept of Transportation). The Colorado Department of Transportation (CDOT) is currently working on digitizing information from providers across the state into a single state-wide digital mobility hub. The SWCCOG has been no exception and understands the needs of its rural residents and visitors to better understand the mobility options available in an area that is limited in transit resources.

What is a Digital Mobility Hub?

While some agencies may have information available through digital and mobile applications, such as a website and/or rider mobile app, a digital mobility hub offers a single-point connection where riders can access information about all providers in a county, region or state. Data managed through General Transit Feed Specifications (GFTS) databases and direct updates through providers assist in the accuracy of information provided through these hubs.

These hubs can be as simple as a website with a list of area providers and basic contact information or as intricate as offering travel planning services, digital fare payment options, real-time tracking of provider vehicles in the area, as well as features that allow coordination between transit agencies. There are states and regions around the country that have developed such hubs or are currently in the development process. There are different models and approaches to managing the data required, which will be discussed further in this study.

The value for rural areas in having such hubs is their ability to share information not only for riders but also providers to improve their services and planning capabilities for riders and clients. These hubs are not restricted to use by public transit agencies (both general and specialized) but can also incorporate information by private providers that may service areas publicly-funded agencies do not or cannot service.

Previous Plans & Studies

The plans reviewed included:

- Regional Public Transit Feasibility Report (2015)
- Four Corners Coordinated Transit Plan (2018)
- SWCCOG Cortez to Durango Transit
- 2045 Southwest Regional Transportation Plan (2020)
- City of Bellevue Smart Mobility Plan (2018)
- FTA Report 0185, MOD Sandbox Demonstration: VTrans Open TripPlanner

II. Existing Provider Coverage

To understand the complexity of how service is provided in the area, agencies were asked about the areas they serve. Below is information on transit organizations in the region and their general service areas. It will help provide a picture on where service gaps exist and where service is duplicated. Understanding how the region is serviced will help guide the project team's recommendations in how simple or complex the digital mobility hub's structure should be and in what manner a digital mobility hub can be utilized to geotarget rider audiences.

Providers

Southwest Colorado is fortunate to have a number of transit agencies that provide service in the area. The agencies who provide transit service in the region are listed in Table 1, along with general service and fare information.

Category	Provider	Main Service Area
	Durango Transit	Durango City Limits
	Mountain Express	Pagosa Springs area, limited service to Arboles
General Public	SoCoCAA Road Runner	Ignacio, Bayfield, Durango
	Montezuma County	Montezuma County, Dove Creek, Durango
	Bustang Regional Service	Durango, Cortez, Dolores, Telluride, Montrose, Grand Junction
	Community Connections, Inc.	La Plata & Montezuma Counties
Specialized	Dolores County Senior Services	Dove Creek, Cortez, Durango, Monticello (UT), Farmington (NM)
Public	La Plata County Senior Services	La Plata County
	Southwest Rides - SWCI	La Plata County
	Animas Transportation	Archuleta, La Plata, Montezuma Counties (NEMT provider)
Private	Cortez Cab	Montezuma County, Dove Creek, Durango
For-Profit	Durango Cab	Archuleta, La Plata, Montezuma Counties (NEMT provider)
	Wilderness Journeys	Archuleta & La Plata Counties (NEMT provider)

Table 1: Providers in the Region

General Public

General public transit is considered service that is available to anyone and is publicly funded. These largely include municipal or county systems. There are no limits on who is eligible for rides, however, there are typically more restrictions on where service is provided (for instance only within city or county limits). Fares are often subsidized by federal or state grant programs.

While these providers may offer specialized paratransit service, the bulk of their service is open to the broader public.

Specialized Public

These agencies are largely publicly funded or are non-profit organizations. Riders do not need to be a client of the program, although there are eligibility requirements that must be met prior to using the service. Agencies typically fall under a 'senior services' division of a County government but can be any service that has an open-door policy to the public. Fares are subsidized through state or federal grants, but Medicaid usually covers the bulk of eligible trips.

Private For-Profit

This category largely encompasses taxi service, ride hail programs, and limousine services. Services are provided at-cost to riders and agencies may be selective about whom they serve. While the fare to riders is normally higher with these agencies, they are generally less restricted on what areas they can serve. Many of these providers are also eligible to provide Non-Emergency Medical Transportation (NEMT) service that can be covered for the rider by Medicaid.

Transit Service Coverage

It is important to understand how service is provided in the region and what coverage is available as this will steer the direction of the complexity of the digital mobility hub model.

There are areas in the region that are covered quite well (specifically La Plata County) and areas that lack service or may be underserved. Generally speaking, service after 4pm and weekend service is absent across a majority of the region, except as offered by private providers. Durango Transit offers the longest service hours as they operate later than 8pm as well as provide service on Saturdays and Sundays, however, it is the most restricted in its service area. Archuleta County's Mountain Express Transit (MET) has recently expanded their program to include operating on Saturdays and even a route to Arboles twice a month. Service on most public holidays is only offered by taxi and limousine companies.

This area is also directly adjacent to three other states; Arizona, New Mexico, and Utah. Dolores County Senior Services provides services to Monticello, Utah for medical trips and as far south as Farmington, New Mexico. Southwest Rides (SWCI) and Community Connections also provide rides to Farmington for medical purposes.

III. Regional Technology Profile

Understanding what technology exists in the region will help guide the project team on how to best structure the mobility hub for the region. This will also be helpful for SWCCOG when they go to bid for a vendor and/or coordinate with the State on the Connected Colorado project. As

the region is quite rural and mountainous, cellular coverage and internet service can be strong in one area and very poor in an area that is directly adjacent.

Cellular Coverage

The service area for the major mobile phone companies varies greatly, however, there are some providers that do offer coverage across the region. These maps are not pin-point accurate, and there may be localized areas where coverage can drop or simply not be available. **Figures 1-4**, below, are meant to provide a general idea of coverage by provider. The providers in the area with the most expansive coverage are AT&T and Verizon.



Figure 1: Sprint Coverage

Source: Let's Talk



Figure 2: AT&T Coverage

Source: Let's Talk



Figure 3: T-Mobile Coverage

Source: Let's Talk



Figure 4: Verizon Coverage

Source: Let's Talk

Broadband Access

There are many ways in which residents, visitors, businesses, and organizations can connect to the digital mobility hub using the internet, otherwise known as broadband connection. To better understand potential riders' and clients' access to digital platforms, different ACS information was reviewed. The information in the following maps was compiled by the United States Department of Commerce, National Telecommunications and Information Administration (NTIA) utilizing American Community Survey (ACS) 2015-2019 5-Year data. This source uses several different data sources to represent potential broadband availability within the United States. Options are limited in the region and providers offer different levels of service in megabytes per second (Mbps). **Figure 5** shows areas where no broadband providers reported fixed consumer services at 25/3 mbps, where "25" represents the download speed and "3" represents upload speed. This speed was considered the minimum reasonable standard in 2018.





Source: BroadbandUSA.maps.argis.com

The information in **Figure 6** shows areas, on a census tract level, where 25% or more of households reported no internet access at all.



Figure 6: Regional Areas Reporting No Internet Access

Figure 7 shows census tracts across Colorado where 25% or more of residents reported no internet access. Southwest Colorado is outlined in yellow. We can see that the region has one of the higher rates of residents reporting no internet access.



Figure 7: Statewide Areas Reporting No Internet Access

Another source that tests broadband speeds is the Ookla test. Speedtest by Ookla is a web service that provides free analysis of internet access performance metrics, such as connection data rate and latency (speedtest.com). **Figure 8** shows areas where the broadband speed tested below the minimum standard of 25/3mbps.



Figure 8: Ookla Reported Substandard Broadband Speed

Overall, there are options to connect to broadband in the region, however the mode of connection, provider, and speeds are quite limited outside the more developed communities. Durango has the greatest access to broadband service, while Pagosa Springs has the second-best access. Ignacio, Mancos, and Cortez have more than one option for connection, however, Dove Creek has the most limited access and options for broadband service.

It is important to note that while not everyone has access to broadband service to connect to a digital mobility hub, many human service agencies and non-profits can already utilize the hub to relay information to riders that have access to telephone service. This is very useful information to understand so that appropriate options can be developed to support the digital mobility hub at varying levels of broadband speed.

Provider Technology Portfolio

There is currently very limited use of on-board technology in the area. Durango Transit has the most comprehensive technology package in the region. No other providers in the area reported having sophisticated technology much beyond scheduling and rider tracking.

Conclusion

Many households and agencies do not currently have access to broadband or cellular services that meet national standards. Similarly, many systems in the area have limited or no technology packages that currently allow for integration into a real-time digital mobility hub. The reasoning behind the lack of technology is two-pronged; funding and lack of reliability.

Funding to develop strong reliable digital networks in rural areas is not as robust as it is in urban, or even small-urban, areas. There is also a lack of funding and, perhaps more importantly, staffing resources to dedicate to implementing technology packages on small rural transit systems. There is also hesitancy with rural providers to consider implementing a more sophisticated technology package for their systems as they understand the lack of reliable broadband and cellular networks in the region.

IV. Challenges and Approaches

This section identifies the barriers to full regional integration of a regional digital mobility hub and partner participation. The two biggest issues with developing a regional mobility hub are technology access and an appropriate management and maintenance structure to create and maintain a digital mobility hub. Funding is largely related to both and will be discussed further in this report as it relates to the identified issues.

Technology Access & Equity

Many parts of the region lack cellular and broadband access that meets national minimum standards. There is also not a high rate of technology package usage by providers. This presents an issue when looking at developing a digital mobility hub. The fewer providers who participate in the hub, the less-reliable the information will be deemed by the general public and the harder it will be for agencies in the region to coordinate.

Constructing and developing a larger network or cellular towers or broadband cables for the region would not only be cost-prohibitive, but also a very timely and potentially political process. As such, opportunities do exist to improve the technology portfolio for the area through collaboration with the Colorado DOT and potentially cellular and broadband providers. This plan, coupled with collaborative work with the State, could assist in bringing in more dollars for technology enhancements in the region and even small improvements to cellular and broadband networks.

Management & Maintenance

There is currently no formal structure in the region to develop and maintain a digital mobility hub. It will be important to the longevity of the digital mobility hub platform that it is not only developed in a competent and viable manner, but that an appropriate maintenance plan is developed. This can take the form of many different types of models or structures, including having the hub managed and maintained by a regional mobility manager, a sponsor agency in the region, a paid vendor, a consultant, or any mix of the aforementioned.

The vitality of the hub will be determined by the structure of development and maintenance plan as well as the region's local providers to continue to participate in the hub.

V. Business Plan

The business plan provides information needed to develop and launch a regional digital mobility hub for the Southwest Colorado Council of Governments (SWCCOG) for the purpose of improving coordination and mobility for transit providers and riders. The development of this hub not only assists SWCCOG in reaching its own agency goals, but also provides a valuable resource to the populations that depend on travel by means other than a personal vehicle. The hub will also provide a resource for budget-friendly and/or environmentally conscious visitors wishing to explore this unique and beautiful area of Colorado.

The hub provides a level playing field for all systems in the region to have equal access and disseminate information through a common medium. Roles of the different players in the hub are defined as well as the structure of the hub itself. A marketing plan is included that provides information on how to promote the hub from within the transit community and to the outside world. To help understand how the hub will practically function, a section has been included discussing how information is recalled and utilized in a practical sense. The costs and funding possibilities for this hub have been outlined and identified, along with an implementation plan to develop and launch of the hub.

This plan also takes advantage of the concurrently developing statewide mobility hub to assist in covering start-up costs. This allows for greater integration of regional information into the statewide hub, providing an even greater benefit to the riders and human service agencies in the region.

Roles & Definitions

This section identifies technical terms and key players in the structure of the digital mobility hub as well as their roles.

The **Hub** refers to the digital mobility hub for the Southwest region of Colorado. This relates to all stages of the platform that are utilized to improve information on transit and mobility in the area.

API Keys (Application Programming Interfaces) help build software and define how pieces of software interact with each other. They control requests made between programs, how those requests are made, and the data formats used. They provide the conduit for internal applications, customer-facing applications, and application integrations to exchange data and information.

GTFS is an acronym for 'General Transit Feed Specifications.' This is a common format to represent public transportation schedules and associated geographic information. GTFS "feeds" allow public transit agencies to publish their data and assist developers in writing applications that consume that data in an interoperable way. This is commonly used for services that operate on a published route and schedule.

GTFS-Flex is an extension of General Transit Feed Specifications (GTFS) designed to enable trip planning for demand-responsive and paratransit service that do not maintain a regular schedule or route.

The **Mobility Manager** is a position that provides direction and assists in facilitating projects that improve transit and mobility in the region. This person is responsible for improving business and community support for transit, paratransit, and commercial transportation service in the region. The person filling this position would provide technical assistance and/or be responsible for soliciting professional consultants when required. There is an expectation this person will oversee and contribute to regional projects aimed at improving coordination efforts between agencies throughout the region, specifically for elderly, disabled, low-income and other populations protected by Title VI and Environmental Justice. The mobility manager creates agendas, prepares memos, and facilitates meetings for the SWCCOG Transit Council, and performs other duties as assigned that contribute to improving the state of transit in southwest Colorado.

As it relates to this project, the mobility manager will be responsible for assisting in the creation and maintenance of the digital mobility hub. Largely, the mobility manager for the region acts as a liaison between the Transit Council and the Connected Colorado team at CDOT, ensuring provider data for the region was updated and information was flowing to the CDOT platform smoothly.

Providers are organizations that provide transportation services within the SWCCOG region and connect to other parts of Colorado, Utah, and New Mexico. These are organizations that actively participate and update their information on the digital mobility hub, including (but may not be limited to) GTFS databases, fare information, and any other pertinent information a rider may need to understand and complete a trip. Providers may contribute financially to supporting the hub and actively marketing the hub within their own networks and public outreach portals.

Community Partners include any agency or organization that utilizes the hub for their clients and/or the community at large but does not operate transit service directly. This group largely consists of health, human, and social service agencies. The primary function of community partners is to connect riders to the hub, act as ambassadors, assist with marketing/outreach initiatives, and promote the benefits of the hub.

Vendors are the organizations or companies that would contract with SWCCOG to develop the software, maintain the hub, and provide other complementary capital for the project. These entities that provide services such as building databases for General Transit Feed Specifications (GTFS), GTFS-Flex, scheduling software, Automatic Vehicle Locator (AVL) technology, digital fares, Automatic Passenger Counters (APCs), and any other technology that can be utilized on the platform.

Users of the system are considered current or potential riders as well as agents representing a current or potential rider but may not be utilizing the transit service themselves.

Hub Structure

The hub is a software that is hosted through a website platform involving sophisticated dynamic elements. This allow providers' service information to be shared regionally through a network where a platform shows a quick preview of performance and quick access to the databases they already maintain with their existing vendors. The hub also allows providers to share real-time performance and vehicle location information with each other to help improve coordination and mobility for users in the region. The main components included in the hub are:

Data Structure & Management

The data that feeds the hub will be directly received from each provider's technology vendors utilizing an online platform where they have access via a unique username and password. A figure showing the structure of the hub is included as **Figure 1**. Data not only feeds into the hub from providers, but providers utilize the platform to obtain information on other providers in the region, so the flow of data can be bi-directional and improve coordination among providers.

Figure 1: Digital Mobility Hub Structure



Provider-Facing Platform

This aspect of the hub allows individual accounts to be created for each provider in the region that is participating in the program. When a provider logs onto the platform, they will see information to include, but is not limited to:

- Agency Name, Address, Contact Information.
- A map showing the real-time location of the provider's fleet and other agency vehicles in the region.
- The same map will integrate information brought in front COtrip.org to relay information on current traffic patterns in the area.
- Hyperlinks to other provider pages for general information and knowledge.

A mock-up layout of the landing page for providers has been included as **Figure 2**. This is a simple example of the page providers view after they login to the platform.

Public-Facing Platform

The public facing platform is the main way in which the general public and human service agencies interact with the hub. This includes a website and mobile app that allows users to, at a minimum:

- Trip planning capability (with a single agency or multiple agencies, as required), including the ability to select options, including whether they required ADA access, if they had a bike (or other equipment), or other special requests. It also allows the rider to designate whether the trip purpose was for Non-Emergency Medical Transportation (NEMT).
- View the real-time location of the vehicles they have selected for their trip. "Track Your Trip"
- Provide information on fares required to complete the trip

A basic layout of the landing page is mocked-up in **Figure 3**. Users and community partners who input the URL address for the Hub will be greeted by this page.

The structure of the hub should be designed to be scalable for the future and to incorporate other potential functions that increases mobility and coordination.

Figure 2: Provider-Facing Landing Page



Figure 3: Public-Facing Landing Page



Marketing Plan

The area in which this digital mobility hub will be marketed is defined by the boundaries of the SWCCOG. Understanding the limited network of broadband and cellular coverage in the region, it is imperative strategic marketing is done. Not only directly for the hub site and from participating agencies but also to human and social service agencies. Information will be organized in a way that allows these agencies to promote within their structures and to other organizations in their own networks.

There are primarily two different ways in which information for this hub is disseminated and shared: Internally & Externally.

Internal Marketing

The definition of internal marketing is how the COG coordinates with local transit agencies, both public and private and provide information on how the agency can participate in the digital mobility hub. The SWCCOG Mobility Manager will develop a packet of information that includes details on what technology packages are required to participate in the program and what (if any) financial contributions are expected/encouraged.

External Marketing

External marketing will be done as a 'public facing' task that is led by the Mobility Manager. This requires not only directly marketing the hub to the public but speaking with and providing information to social and human services agencies. As the region does not currently have a high level of cellular and broadband connectivity, it is important to understand how the rural non-digital population connects to service centers and ensure those centers are adequately trained on how to utilize the hub to the benefit of their organizations and their clients.

Funding to promote the hub should be a budget item included in the SWCCOG ledger. Materials can be as simple as a flyer, brochure, or paid digital advertising space.

Practical Application

Provided below are examples of how each type of transit service will be connected to the hub and how provider information is utilized in the analysis of trip planning, fare payments, trip scheduling, and agency contact information.

Regardless of the type of service that is utilized to complete a trip, each user will begin by inputting origin and destination information as well as any specific trip accommodations, such as whether the trip is for ADA or Non-Emergency Medical Transportation (NEMT) purposes, or if any special equipment (skis, bike, etc) will also need to be transported with the rider. The following subsections explain all potential results that can result from user queries.

General Public Fixed-Route Transit Service

GTFS data for all applicable providers is recalled and put into a format that will trip details, including the fare required to complete the trip. The user is then given details on location and service of stops that accommodates their trip, what (if any) transfers are required, the total fare amount to complete the trip, as well an option to purchase fare directly through the hub.

Contact information for all agencies required to complete the trip will be provided to the user. If a ticket is purchased through the hub, it is sent to the user's mobile phone and/or by e-mail.

General Public On-Demand Services

Should a user query a trip that results in the exclusive use of on-demand services, GTFS-Flex information is recalled showing the fare required to complete the trip, provider service hours, and contact information. It will then be the responsibility of the user to contact the provider directly to schedule the trip, however, the user is still offered a payment option through the digital mobility hub.

Americans with Disabilities Act (ADA) Trips & Non-Emergency Medical Transportation (NEMT) If a user selects in their query that they are seeking a ride suited for ADA or NEMT purposes, it will direct them to the providers that can cover their trip. As these services require users be prequalified, only contact information is provided to the user. Scheduling and payment of the service is then directly handled by the provider.

Fixed-Route & On-Demand Crossovers

For queries that result in a trip requiring service from both on-demand and fixed-route providers, GTFS-Flex and GTFS data is recalled. An itinerary that includes approximate travel time and fare required to complete the trip is then provided. The user will be offered a payment option through the hub, however, it will be the responsibility of the user to contact the on-demand provider to schedule their trip.

Private Providers

All queries will result in a list of privately-operated providers that offer service in the areas covering the user's trip, along with estimated fares to complete the trip. This information will be pulled from the existing Google database associated with Google Transit.

In all cases that do not fall under ADA and NEMT trip purposes, the trip generator will provide multiple options to users, in two columns. One column provides information on public transit services and one column provides information on privately-operated services. The options that provide the quickest trip will be offered towards the top, with other suitable options following below that. Private providers are organized according to existing Google algorithms.

Financial Plan & Funding Opportunities

The COG is not currently in a financial position to immediately begin solicitation for a firm to develop and launch the digital mobility hub. It is estimated the cost to successfully launch the hub is approximately \$430,000. On-going maintenance costs are estimated around \$25,000, which covers software updates/maintenance and on-going marketing efforts. A breakdown of costs is provided in **Table 1**. Note that CDOT is covering the costs associated for GTFS and GTFS-Flex databases for the providers in the region. It should also be noted that providers will select their fare collection vendor and that vendor will work with firm selected by SWCCOG to integrate their data into the mobility hub. As there are currently talks about all providers in the region utilizing the same fare collection vendor, this process could potentially be expedited. As such, SWCCOG should provide any assistance to facilitate agreements between agencies related to 'fare share' agreements.

	Cost			
Item		Setup	(On-Going
GTFS & GTFS-Flex		State Paid	ς,	State Paid
Fare Collection Software	E	By Provider	В	By Provider
Software Development/Data Hub	\$	350,000.00	\$	5,000.00
Marketing & Web Design	\$	100,000.00	\$	20,000.00
Total	\$	450,000.00	\$	25,000.00

Table	1:	Setup	&	On-Going	Costs
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For costs not covered by the State or providers, SWCCOG does have opportunities to obtain this funding through capital grant programs. The funding sources in **Table 2** can be utilized to obtain funding for all elements related to setup costs of the hub.

Table 2: Funding Sources

Funding Source		Local Match		Grant Amount	
Multime del Octione Fund (MMAOF)	ć		ć	(2022)	
iviuitimodal Options Fund (iviiviOF)	Ş	60,000.00	Ş	120,000.00	
Funding Advancements for Surface Transportation and					
Economic Recovery (FASTER)	\$	30,000.00	\$	150,000.00	
FTA 5310 Mobility Management Capital Funding	\$	16,000.00	\$	80,000.00	
FTA 5311 Formula Grants for Rural Areas (Capital)	\$	20,000.00	\$	100,000.00	
Total	\$	126,000.00	\$	450,000.00	

To help with local matching dollars for grant programs, the SWCCOG may seek support through annual contributions from the region's providers, local governments, tourism boards, and other agencies that benefit from the hub's information.

VI. Implementation

This section describes the implementation strategies to successfully create and launch the digital mobility hub on a regional level. As previously noted, CDOT is concurrently developing a statewide digital mobility hub. This plan is compatible with the statewide hub but can be implemented and launched independently.

Strategy & Planning

The COG should continue to support the coordination projects in the region that will ultimately be integrated into the regional digital mobility hub. These projects include:

- Providing support for systems to obtain advanced technology packages, including at a minimum, Automatic Vehicle Locator (AVL) packages for all agencies operating general public transit service.
- Leading the effort to develop fare share agreements between agencies across the region. These agreements can be developed as a Memorandum of Understanding (MOU) or Intergovernmental Agreements (IGA's). Considering the agreements would be handling fiscal elements of operations, the IGA model is recommended as they typically tend to hold more weight legally should any issues arise.
- Participating in discussions at the state level to ensure compliance with the statewide digital mobility hub effort. The COG will act as the liaison for the region with the state in efforts to continue development of the hub.

These efforts, and others identified by the regional Transit Council, ensure the accurate development and integration of elements into the hub. It also improves the overall coordination between agencies in the region.

The COG should prioritize the digital mobility hub on the region's project list. This will assist in securing statewide and federal funding to develop and launch the digital mobility hub. The project can be broken down into three phases, as seen in **Table 3**.

	Action
	Prioritize digital mobility hub project for the region
Phase I	Pursue funding sources as available
	Develop RFP for development of a digital mobility hub
	Secure funding for digital mobility hub
Phase II	Release RFP for develop of a digital mobility hub
	Make project award
	Create a project steering committee
Dhasa III	Develop final specifications for digital mobility hub
Phase III	Digital mobility hub is developed by software firm
	Launch of digital mobility hub

Table 3: Implementation Phases

Stepped Approach

Considering the costs to develop all elements of the hub are quite high for a project of this size for this region. The COG is still able to move forward and take a stepped approach to creating the hub. This version of the hub would have a similar public-facing landing page with Google Transit planning capabilities. This inaugural version of the hub will still provide users with travel information mentioned in the "Practical Application" section, however, no payment option would be provided. Links would be provided to the digital fare vendors for each system involved in their travel itinerary. If this approach is taken, it is recommended that the COG also create a page with a list of providers in the region, graphically identifying each provider's service area.

This approach does not allow for a provider login to view performance statistics that allow for a higher-level of coordination between agencies, so the COG should continue to pursue funding that allows development of the more sophisticated elements of the hub. It is important that the Mobility Manager maintains close contact with the smaller providers in the region and acts as an advocate on the statewide level to ensure any service updates or technical issues related to fare collection or GTFS databases are resolved in a timely manner.

This approach would have very little impact on the current budget for SWCCOG as the features of this level of hub are free. The costs to develop the GTFS and GTFS-Flex databases are covered by the State and the code to incorporate the Google Trip Planner feature is free (although the COG will need to coordinate with the State's vendor, Trillium, to receive this code). Costs would largely be limited to the design of the website and annual costs related to maintaining the website address and web host services. **Table 4** shows the costs to be budgeted for this level of hub development.

		Cost			
Item			Setup		On-Going
GTFS & GTFS-Flex		ر ب ا	State Paid	0,	State Paid
Fare Collection Software		В	ly Provider	By Provider	
Marketing & Web Design		\$	50,000.00	\$	15,000.00
	Total	\$	50,000.00	\$	5,000.00

Table 4: Introductory Hub Costs