

# DENVER MOVES: TRANSIT

## FINAL SCOPE OF WORK

### TASK 1 PROJECT MANAGEMENT

#### Task 1.1 Ongoing Project Management

Project management will span the entire project and include preparation of status reports, tracking, and review of billing. Throughout the project, our goal is to ensure the project remains on schedule and within budget. The Consultant shall work with City and County of Denver (CCD) in developing the project management approach that best serves the project. The management and support of the project will include the following management roles and the teams/committees described in the following tasks.

The CCD Project Director will provide senior oversight throughout the *Denver Moves: Transit* project. The Project Director will also participate in management project leadership team meetings that are created for this project.

The CCD Project Manager will be responsible for the day-to-day management of the Consultant team including primary authority for contract management, review consultant progress reports and invoices, hold regular meetings with the Project Management Team (PMT), and lead the various project meetings with the support of the Consultant Project Manager (see following tasks). The Consultant Project Manager will be the primary contact for overall project day-to-day coordination. The Consultant Project Manager shall provide monthly progress/upcoming activities reports to the CCD Project Manager.

#### Task 1.2 Kickoff Meeting / Refine Project Plan

The Consultant, in coordination with CCD staff, will organize a kickoff meeting to initiate the *Denver Moves: Transit* plan. Our team will spend several days in Denver and schedule a series of meetings and activities designed to ensure the project begins with clarity, momentum, and enthusiasm. At a minimum, we propose to use our initial time on site for the following activities:

- **Conduct a Project Management Team Meeting** to review the scope and refine the schedule; discuss objectives, priorities, and local issues and sensitivities; identify and obtain available data; understand critical administrative protocols such as invoices and progress reports; and schedule future meetings.
- **Meet with *Blueprint and Denver Moves: Pedestrian and Trails* Project Managers and Consultant Teams** to discuss each projects' scope and schedule. This meeting will help define key milestones, data needs overlap, shared tasks, and refine the project schedule.
- **Discuss Data Needs** in coordination with the four-plan effort (*Blueprint Denver* update, *Game Plan* update, *Denver Moves: Pedestrian and Trails Plan*, and *Denver Moves: Transit Plan*) to identify the applicable data that will be used in the analyses in the following tasks. During the project kick-off meeting, CCD staff and the Consultant will discuss data needs, sources of data, and what data will be provided by CCD, Regional Transportation District (RTD), Denver Regional Council of Governments (DRCOG), Colorado Department of Transportation (CDOT), or gathered by the Consultant.
- **Discuss Stakeholder Interviews** to determine who should be interviewed and discuss the schedule for completing the interviews. Conducting these interviews early in the process is critical, and we will work closely with staff to plan and schedule the interviews.

- **Refine Public Involvement Strategy** that includes a variety of outreach techniques needing to be coordinated and prioritized between CCD, the four-plan effort, and the Consultant (see Task 2: Public Involvement). As part of the kickoff meeting, we propose to discuss, finalize, and schedule initial outreach activities, including the best approach for engaging upfront with City Council members. We will also discuss initial outreach materials, such as project webpage content and a project fact sheet (in coordination with the four-plan effort).
- **Tour Study Area** so we can look at transit service in Denver together and discuss issues and opportunities. The tour and follow up discussion will include both CCD and RTD staff. We will encourage staff to show us opportunity areas, such as high ridership corridors, up-and-coming neighborhoods, and places slated for future growth. Likewise, we will also want to see places that are challenging for transit to serve.
- **Conduct Debriefing Meeting** with staff. We suggest using this time for the Consultant team to share what we learned during our time on site, including our impressions of opportunities and challenges. We can also use this time to review next steps and clarify issues as needed. The goal of the kickoff meeting activities is to begin work efficiently and effectively and to learn as much about transit in Denver as possible. At the end of our time on site, we will create a short-term action plan that clearly lists immediate and near-term work to advance the project.

Following the kickoff activities, we will submit a Project Management Plan and a revised project schedule reflecting the protocols agreed upon at the kickoff meeting. We will also submit meeting notes from this and future strategy sessions and meetings.

### *Task 1.3 Project Management Team and Technical Advisory Committee*

The Consultant shall attend internal committee/team meetings with CCD, as requested, with responsibilities including but not limited to: preparing meeting materials/presentations, meeting notes/summaries, presenting information, and meeting facilitation. (Note: Public advisory group meetings, such as the Task Force, are included in Task 2.)

- **Project Management Team (PMT):** CCD project management shall hold biweekly PMT meetings with key Consultant team staff to provide guidance on project progress, deliverables, and public engagement. Monthly meetings will be held in-person at the CCD office, and others will be via teleconference/video conference call. To ensure additional coordination and communication with the other planning efforts, the *Denver Moves: Transit* internal PMT will also consist of project management representatives from the other three plan updates occurring at the same time as *Denver Moves: Transit*.
- **Technical Advisory Committee (TAC):** The TAC will meet monthly to review plan progress. TAC membership is still being determined but is likely to include CCD staff and sister agencies (e.g., RTD, CDOT, and DRCOG). The role of the TAC is to weigh in on technical issues and plan deliverables that may impact other agencies or jurisdictions.

### *Task 1.4 Regional Transportation District (RTD) Coordination*

Since RTD is the agency for providing mass transit services in Denver, and CCD currently does not seek to operate a transit system at this time, it will be important to coordinate and collaborate with RTD throughout this planning project. The Consultant shall interview key RTD staff shortly after project kick-off, as coordinated by CCD, to understand how RTD currently operates and provides service throughout the entire region and to determine RTD's future plans and vision. Through the data and document review in Task 3, the Consultant will also review current and future RTD plans.

CCD has coordinated with RTD staff to identify the representative(s) from RTD that will be members of project committees. CCD will also schedule special meetings throughout the project to meet with key RTD management, operations, and planning staff. The Consultant shall attend these meetings.

### *Task 1.5 Ongoing Project Coordination and Communications*

In addition to regularly-scheduled meetings and calls, it is anticipated that the Consultant will participate in ongoing project coordination and communication with CCD, between team members, and with various stakeholders. This communication may include participation or assistance with the Executive Leadership Team, Multi-Plan Coordination Team, Internal Working Groups, and individual stakeholders. While many tasks assume a high level of team coordination and coordination between CCD staff and the Consultant team, this task is intended to provide for a certain level of unanticipated, but required, coordination and strategy development above and beyond the base scope of work.

### *Task 1.6 Ongoing Coordination with Other Citywide Plans*

The Consultant is part of a much larger constellation of planning teams developing four citywide plans concurrently. These four planning processes—*Blueprint Denver*, *Game Plan*, *Denver Moves: Transit*, and *Denver Moves: Pedestrians and Trails*—are being coordinated under a single marketing and communications strategy. Thus, it will be critical to a successful transit plan to participate in ongoing coordination and information-sharing with the other three concurrent efforts. This will likely include meetings, phone calls, data transfers, coordinated materials, meeting coordination, and consistent appearance of project deliverables and outreach materials.

#### **Task 1 Deliverables**

- Monthly progress reports and invoices
- Kickoff meeting agenda and summary notes
- Project Management Plan
- Master schedule updates
- Biweekly PMT meeting agendas and notes
- Monthly TAC meeting agendas and notes

## **TASK 2 COMMUNITY OUTREACH AND ENGAGEMENT**

We propose a multi-faceted public involvement process—potentially including but not limited to the tools and techniques described below—designed to provide a breadth of techniques to maximize participation in the *Denver Moves: Transit* plan and to support collaboration among the four-plan effort. We present this list of methods as a menu, with the expectation that we will discuss it with staff to create a Public Involvement Plan that best addresses the project needs, expectations, and interests. One of our first tasks after the project kickoff meeting will be to finalize the Public Involvement Plan that outlines the specifics of our outreach efforts.

This Public Involvement Plan, and all subsequent engagement activities, will be coordinated with the four-plan effort to both save costs and present an integrated message to the public. Engagement activities that could be easily coordinated with the four-plan effort (particularly *Blueprint Denver*), and potentially provide cost savings for CCD, are indicated parenthetically below. We will spend up to the total amount identified in the budget for public engagement, and the scope items below can be considered a menu from which CCD and the Consultant can choose.

### *Task 2.1 Public Involvement Plan*

The purpose of community outreach and engagement is to gain an understanding of the future transportation needs and vision of Denver residents. However, to gain the clearest understanding possible, it is critical that we reach people who may not typically participate in planning processes or who are less inclined to engage with local government. We know that gaining trust in communities of color, economic hardship, and cultural diversity takes time and an authentic commitment to understand what matters most in relation to transit service and accessibility.

In addition to working closely with the Task Force, four plan Community Group, Registered Neighborhood Organizations, and other established groups, the team will identify representative community members and communicate through the most effective communications channels by creating a Public Involvement Plan that charts a path toward engaging young people, seniors, people of color, non-native English speakers, and those who face systemic barriers that make it difficult to overcome health and wealth disparities.

The plan will stratify Denver into market segments and apply appropriate communication tools to reach each market. For example, we may use direct social media for younger community members and direct-touch outreach at businesses and activity hubs frequently visited by underrepresented populations, such as schools, parks, and churches. Innovative outreach tactics will help boost attendance at community meetings and achieve more equitable input from residents.

The Public Involvement Plan will outline our approach to all future outreach tasks and coordination with the four-plan effort, including stakeholder interviews, project materials, online surveys, in-person surveys, and stakeholder meetings and charrettes. It will detail the ways we intend to seek and secure broad participation, the types of materials we expect to use (e.g., bilingual flyers, newspaper articles, website updates, social media), and our expected outcomes. We will provide a final outreach plan summary for inclusion in the final plan.

### *Task 2.2 Citywide Planning Communications Strategy Support*

Simultaneous with the development of *Denver Moves: Transit*, CCD will be undertaking an update of *Blueprint Denver*, development of *Denver Moves: Pedestrian and Trails*, and an update of *Game Plan*. To help coordinate these four citywide planning efforts, CCD has hired a separate team to develop a communications and engagement strategy for all four planning efforts. This communication coordination will allow collaboration at key milestones and create a consistent message to the community during these multiple plan updates. The Consultant shall review the Citywide Planning Communications Strategy and identify how the *Denver Moves: Transit* public engagement efforts align with this strategy.

The Consultant Public Outreach Lead, when requested by the CCD Project Manager, will attend quarterly Citywide Planning Coordination Meetings.

### *Task 2.3 Stakeholder Identification and Database (opportunity for four plan coordination)*

The project team will develop and maintain a stakeholder database throughout the project's duration. This database will include: stakeholder name, contact information, preferred method of contact, and potential key concerns and/or areas of project interest. This database will be shared and combined with a larger database maintained by the four-plan effort; the four-plan database may be also used by the Consultant for outreach tasks.

By developing a stakeholder database and tracking all interactions throughout the project—whether online, in person, or via sign-in sheets—we will monitor our success at implementing the outreach plan. Regular analysis of our contacts compared to our targets will allow us to make real-time adjustments to the plan, changing tactics and reallocating budget as needed.

#### *Task 2.4 Stakeholder Interviews*

In study areas that include very diverse communities, there is often an even wider variety of viewpoints. A key first step in developing a shared transit vision that engenders widespread support will be to identify key issues at the outset so that they can be addressed over the course of the project.

One of the most effective ways that we have found to do this is to conduct stakeholder interviews with individuals and small groups at the beginning of the project. We will meet with 15-20 key individuals—identified in partnership with CCD—who may be representatives of major employers, agencies (such as RTD board members), educational institutions, social and human services providers, medical facilities, and elected officials. We conduct these interviews as “structured conversations” in which we start with specific topics, and then discuss those topics at the level of detail that the stakeholder desires (rather than a stricter question and answer format). We have found that this approach has been particularly effective in quickly and accurately identifying major issues, concerns, and desires.

Furthermore, to encourage participants to speak frankly, our typical approach to ensure confidentiality is to present results so that comments are not attributed to specific individuals but instead presented by theme. It may be possible to coordinate stakeholder interviews with other four-plan efforts.

#### *Task 2.5 Denver Moves: Transit Stakeholder Groups*

##### Task Force

There are multiple stakeholders that will be critical to the success of this project, and the *Denver Moves: Transit* Task Force will provide feedback on the *Denver Moves: Transit* plan at key junctures. It will be important for the Task Force to provide insight critical to developing and refining outreach efforts; setting the project’s vision, goals, and objectives, and assessing trade-offs; and ultimately determining the transit improvement strategies that will be pursued. CCD will create the Task Force, with input by the Consultant on Task Force membership. The Consultant will attend bimonthly Task Force meetings and develop agendas, materials, and notes for those meetings.

##### Youth Stakeholder Group

The Youth Stakeholder Group is expected to include 12-15 teenagers of diverse backgrounds and perspectives. The group will meet quarterly to provide feedback on key elements of *Denver Moves: Transit*, such as outreach and engagement, the plan’s vision and goals, and prioritized corridors. While the Youth Stakeholder Group will provide a very important perspective for our planning effort, the youth will also have an opportunity to learn about transit planning and other CCD activities. This may encourage them to pursue internships or careers in transportation, providing a much longer-term benefit to CCD and Denver as a whole. This group could serve as an advisory panel for the full four-plan effort, and membership is yet to be determined. The Consultant will attend quarterly Youth Stakeholder Group meetings and develop agendas, materials, and notes for those meetings relevant to *Denver Moves: Transit*.

##### Four-Plan Community Group (name TBD)

The Four-Plan Coordination Team is currently defining the ways in which to engage additional leaders and members of the public in addition to the Task Force. The Four Plans have identified the need for a Community Group, but membership of, the name for this group, and meeting occurrence are still being determined. The Consultant will attend the Community Group meetings and support the development of materials, as needed. Quarterly meetings are assumed until further defined.

### *Task 2.6 Collateral Outreach Materials*

Working with CCD and the other planning efforts to determine the most desirable types of collateral outreach materials, the Consultant will develop brochures, fact sheets, fliers, and/or door hanger notifications to inform the community about the project and to advertise all activities and meetings. The Consultant will develop materials using a template consistent with the project brand (to be developed by others through the four-plan coordination team), which can be easily updated, printed, and/or distributed through electronic means and placed on the project webpage (to be developed and maintained by others).

All outreach materials will be developed using symbolic and simple messaging that will lower barriers to participation for those with reading challenges and non-native English language speakers. Furthermore, all printed materials will have a procedure for translation and publicity, including a bilingual message and contact information for further details in residents' primary languages.

If budget allows, the Consultant will propose additional types of incentives to generate interest in the project in creative ways, such as transit passes or in-bus advertising.

### *Task 2.7 Assistance for Elected Officials and Other Presentations*

The Consultant will assist in developing presentations, including compiling technical and outreach data, for formal committee/Mayor's Office/City Council meetings throughout the planning process. This will include, but is not limited to, presentations on the vision and goals, state of the system, scenarios, corridors, and final plan. These presentations will be coordinated with the four-plan effort.

### *Task 2.8 On-the-Street Engagement*

People are busy; this does not mean they do not care about the project or have significant opinions to share, but in the day-to-day life of work, child or elder care, and ordinary household tasks, there is not much time left in the day for a two-hour meeting in a distant community hall. No matter how much outreach, how much advertisement, how much logistical organizing, or even how much public interest there is, the business of life often gets in the way of meeting participation. We present the options below as a menu from which CCD and the Consultant can identify the best strategies for Denver, in coordination with the four-plan effort. We intend to support a variety of in-person engagement activities that could include, but are not limited to, the types of approaches described below.

#### *Select Public Meetings (opportunity for four-plan coordination)*

As other, more convenient and immediate avenues of input are made available, it has become much more difficult to attract people to traditional project meetings, and as a result, they now provide a much smaller proportion of overall input. However, they are still important, and we propose to conduct two public meetings at key milestones throughout the project (which can be coordinated with milestones of the other ongoing planning efforts):

1. Following completion of Task 3: Existing System Assessment, to present those findings and solicit input on new strategies and the development of a vision and goals; and
2. Near the end of the study, to present the proposed plan.

As described, each of these meetings will be designed to include a "hook" to encourage attendance and participation. This will include focusing meeting topics on issues particularly important to specific areas or groups, including interactive exercises, such as in-meeting text surveys or clicker voting. For both meetings, we will seek venues that are easy to reach and provide universal accessibility.

Translation/interpretation will be arranged, and any necessary accommodations for people with disabilities will be made.

Create a Project Bus (opportunity for four-plan coordination)

As another way of bringing the project to where people already are, we propose to develop a project bus. This vehicle would be wrapped in the project's branding to grab attention and interest. Removing several seats provides space for boards, displays, and opportunities to engage. The bus can also be utilized for "mobile meetings" of the Task Force or other project stakeholders to provide a transit experience in real time. It is assumed that CCD will provide the vehicle for this activity.

Mobile Visioning Lab (opportunity for four-plan coordination: "Plan Van")

In addition to, or rather than, using a bus for a mobile project presence, we could develop a mobile visioning lab (or a mobile transit lab or "plan van") that could be used at existing events or parked in a neighborhood, at a park-n-ride lot, or on a college campus to attract people to tell us what they think about transit and transportation in Denver. Much like the project bus described above, the mobile visioning lab would be wrapped in the brand of the four-plan effort and would include space for boards and other information as well as activities to solicit feedback. The benefit of using a vehicle smaller than a bus is that it is more flexible and can fit in more locations. The downside is that it may be somewhat less identifiable as a part of *Denver Moves: Transit*. The mobile visioning lab presents tremendous opportunities for community partnerships, especially in neighborhoods where people may be more reluctant to engage in traditional planning outreach activities. It is assumed that CCD will provide a city or leased vehicle for this activity.

Participate in Community Events (opportunity for four-plan coordination)

During the course of the project, a number of community events will be held in Denver that will attract large numbers of people with whom we will be able to interact to share information about this project. There are also many groups with regular standing meetings at which we can provide project updates and distribute materials. The Consultant will attend key events and participate in different capacities, as appropriate, which could include presentations, the use of the project bus or mobile visioning lab, trade-off exercises, pop-up activities, and a combination of tools.

Conduct Bus Stop Outreach

The Consultant will work with CCD staff to identify up to five key transit locations (e.g., high bus or rail ridership locations) that will be targeted as "outreach hubs" during key phases of the project. We will prepare engaging and graphically rich materials (e.g., posters, maps, wraps) for the stops and, if budget allows, create an interactive display to gather real-time feedback from people waiting at the stop. Outreach activities at RTD facilities will be coordinated with the RTD staff members on the Task Force.

Facilitate Drop-In (Storefront) Community Workshops (opportunity for four-plan coordination)

We will facilitate up to four drop-in community workshops at two phases of the project, which can be coordinated with other ongoing planning efforts. The first workshop will be held to seek feedback on the scenarios and the second will be held to seek feedback on the corridors. We will work with CCD staff to identify an engaging and accessible location—such as a coffee shop, storefront, or other community gathering place—where various groups and individuals can come by throughout our stay to examine progress, comment on the team's ideas, and provide other forms of input.

The workshops will be designed in a multi-media format that provides multiple ways to communicate information. Techniques will include informational boards for browsing, one-on-one access to team members, trade-off games, design tables where people can look over maps or draw their own ideas, activities for children, presentations on key information and concepts, and polling exercises using the

latest polling technology. All information gathered will be posted to the project website, and people unable to attend will be able to give feedback through the website.

CCD will be responsible for advertising the drop-in workshops through existing channels (e.g., project website, social media) and securing locations and logistics, with advice from the Consultant. The Consultant will provide translation and interpretation services, provide technical expertise, facilitate meetings, and develop presentation and communication materials.

### *Task 2.9 Online or Virtual Engagement*

Digital communication methods have become the most effective way to provide and solicit input on transit projects, and we now typically receive more than 10 times more input via web-based methods than via public meetings. For this project, we intend to support a variety of online engagement forums that could include, but are not limited to, the types of approaches described below. All of these options would be coordinated with the four-plan effort to ensure that the public is receiving consistent information and messages throughout the project.

#### *Provide Supportive Content for Project Website*

The Consultant will provide content for the project website, to be hosted and maintained by others through the four-plan coordination effort. Substantial updates will occur no more than once per month. We propose to develop posts on a variety of project issues, including goals and objectives, service trade-offs, proposed scenarios, recommendations, and event/activity announcements.

#### *Use Facebook, Twitter, LinkedIn, and other Social Media (opportunity for four-plan coordination)*

In addition to the traditional website, projects must increasingly maintain a presence and activism on social media outlets. Social media exponentially broadens the reach of communication efforts and supports a wide variety of input, information sharing, and engagement. Through the four-plan coordination, social media will likely be conducted through the existing CCD social media accounts or any four-plan-branded social media accounts. The Consultant's use, coordination, and content contribution of social media will be further defined during project kick-off.

#### *Facilitate a Telephone Town Hall (opportunity for four-plan coordination)*

A Telephone Town Hall is one giant "conference call" to engage the region. Using an existing list, such as active registered voters, technology allows thousands of people in a short period to join a conference call. On the call, the Consultant will describe the plan update process and facts and trends about transit in Denver. The participants will have the opportunity to ask questions, and respond to a limited number of survey questions to help set direction for the plan. Publicity through traditional and social media following the Telephone Town Hall will report polling results, thereby raising public awareness and creating the "buzz" that makes people more interested in participating.

#### *Project Videos (opportunity for four-plan coordination)*

Similar to the work done for *Denver Moves: Broadway*, the Consultant will create a series of short videos that engage Denver residents in sharing their vision for transit. While the content of the videos will be determined in coordination with CCD and the four-plan effort, options might include people's transit stories (love on the bus!), how they are traveling that day (sometimes transit works and sometimes it doesn't), a "day in the life" of an RTD operator or a light rail train (to humanize transit), or a time-lapse video of a particularly busy bus stop (to illustrate how it changes throughout the day and how important it is to have all-day frequent service in key locations).

### Conduct Online Surveys (opportunity for four-plan coordination)

We propose to design and implement two web-based surveys; one at the beginning of the project and one at the end. Each survey will consist of approximately 10 questions requiring simple “yes/no” answers, multiple choice questions when possible, plus a selected number of open-ended responses that enable respondents to provide the full picture of their opinions, interests, travel patterns, and preferences. The purpose of the initial survey is to allow both current and non-transit users to provide input about the types of changes that would be needed to make them more likely to ride in the future. For the first survey we will use an approach that gauges people’s values for transit. The purpose of the final survey will be to get people’s feedback on the recommended plan.

### Text Surveys (opportunity for four-plan coordination)

To quickly engage people in answering a single question about *Denver Moves: Transit*, the Consultant could develop a text survey (allowing people to respond by texting a letter that answers a multiple choice question). This type of survey works particularly well on in-bus advertising cards, at bus stops, or at other places where people might have just a minute of time to participate. This could be done at multiple points throughout the project and in coordination with the four-plan effort.

### “Build Your Own Transit System” Exercise (opportunity for four-plan coordination)

During phase two of the four-plan website implementation, the Consultant will coordinate with CCD and RTD staff to develop an online engagement tool (including establishing parameters for improvements) that walks participants through a series of visually-oriented trade-offs exercises. This would work somewhat like a visual choice survey allowing people to select from various features that could enhance transit service, whether stops, stations, vehicles, etc. As participants develop their system, they can see benefits in terms of ridership, travel time, or environmental outcomes in real time. This tool brings value because it helps people to understand the trade-offs associated with transit service planning and benefits associated with how transit resources are allocated. It also plays an important role in helping to shape the system vision by providing an understanding of the system elements that people value the most.

The exercise incorporates technical data into a web-based planning model that allows people to “design their own transit system” given a set level of resources (usually a financial limitation). People would be given a budget for each element (stop, station, vehicle, information kiosk, etc.) and costs for various features, requiring them to select between multiple features and to prioritize based on a limited budget.

After people prioritize their desires for the system, they will be asked follow-up questions about why they made those choices and how adding those features might change their use of transit or the value of transit for Denver. The exercise could address the following topics, at a minimum, and there is great flexibility to tailor it in the way that makes the most sense for Denver.

- Access to transit – What features make your trip to transit safe, secure, and enjoyable?
- Design of the stop – How does the waiting experience affect your use of transit? How can it be made more appealing, comfortable, and even fun? How can transit waiting be integrated with the urban environment? What could make waiting time more productive, engaging, and social?
- Design of the vehicle – What features are desired to enhance the on-vehicle experience and reduce the negative impacts of transit vehicles operating on public streets and near pedestrian-oriented public places?

This task will provide an interactive forum that allows residents to respond to graphic or photo cues rather than simply responding to a text survey.

## Task 2 Deliverables

- Public Involvement Plan that includes in-person and online engagement strategies
- Stakeholder database
- Summary of stakeholder interviews
- Agendas, materials, and summaries for stakeholder group meetings
- All materials and supports for selected outreach strategies
- Data files from all surveys, summarizing priorities, votes, and open-ended comments
- Summary report of public involvement

## TASK 3: DENVER MOVES: TRANSIT STATE OF THE SYSTEM REPORT

The *Denver Moves: Transit State of the System* report will communicate key transportation issues and trends to the public, while also serving as a foundational report to develop a vision for transit in Denver. The report will include a high-level summary of existing conditions that will make information graphical and interesting to a broad audience and focus on data analysis that matters for project decision making. The Consultant will review existing documents, available data, and perform on-site assessments and user-experience surveys (Task 2) to document and map the existing and future conditions of Denver, including multimodal transportation demand, population growth, community needs, and economic development. It is assumed that most of the required data will be collected from existing sources of data held by CCD, RTD, DRCOG, CDOT, and other agencies or organizations.

The Consultant will identify the applicable data that will be used in the analyses below in coordination with the four-plan effort. During the project kick-off meeting, CCD staff and the Consultant will discuss data needs, sources of data, and what data will be provided by CCD, RTD, DRCOG, CDOT, or gathered by the Consultant. Data collection will also be coordinated with the data needs of the other three plans as described in Task 1.

### Task 3.1 Document and Policy Review

The Consultant will collect and review relevant data and reports provided by CCD, RTD, and area municipalities. Collection efforts will be started before the project initiation trip (Task 1.2) and continue throughout the project, with supplemental material requested as needed. The Consultant will review the following documents and studies, including, but not limited to:

- Strategic Transportation Plan (2008)
- Pedestrian Master Plan (2004)
- *Denver Moves: Bicycles* (2011)
- *Denver Moves: Enhanced Bicycle Facilities* (2015)
- *Game Plan* (2001)
- Denver Comprehensive Plan 2000
- *Blueprint Denver* (2002)
- Downtown Multimodal Access Plan (DMAP)
- Small Area Plans/Next Step Studies/Neighborhood Plans/Transit Oriented Development (TOD) Plans<sup>1</sup>
- Transit Oriented Denver (2014)

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<sup>1</sup> Specific plans, significant to transit recommendations, will be identified during project kick-off.

- Colfax Corridor Connections (2015)
- Strategic Parking Plan (2010)
- Living Streets Initiative Summary Document
- West Side Transit Enhancement Study (2012)
- Previous transit studies performed by RTD, DRCOG, and other agencies

This task will include an evaluation of how existing plans and policies fit within the context of changing federal transportation policy and related state, regional, and local goals for energy, climate change, housing affordability, equity, livability, and walkability.

The document and policy review will be summarized in a table that includes the name of the plan, the plan purpose, goals/vision, and relevant policies, principles, and strategies.

### *Task 3.2 Existing Service and Access Overview*

The Consultant will work with CCD and RTD staff to collect existing performance data for all fixed-route bus and rail services in Denver (both local and regional routes serving Denver) as well as paratransit services. The analysis will include, but is not necessarily limited to:

- Summary of fixed-route (local and regional RTD routes that serve Denver), private shuttle, and paratransit services.
- Average daily ridership for local fixed-route service and regional fixed routes serving Denver.
- Operating and cost indicators for the most recent five years presented at the system level.
- Analysis of past, current, and future RTD routes serving Denver to assess how well the route serves its intended markets, how each route compares to the overall transit system in Denver, and what changes could be made to improve route performance and responsiveness to community needs.<sup>2</sup> This work will be based on RTD's existing service standards and will be done by assessing performance (i.e., service hours, service miles, operating costs, number of trips, stop level ridership, on-time performance, transfers, span and frequency, and route capacity/load). This assessment will be used to identify key corridors or segments for more fine-grained analysis and understanding of underlying issues affecting transit performance and passenger experience.
- Analysis of the feasibility and potential impacts of any pending or proposed transit plans and projects that have been set by RTD and others.
- General assessment of stop and station access conditions (not stop-by-stop), focusing on amenities as well as elements of the passenger experience, first/last mile access, multimodal connectivity, and system accessibility.
- Analysis of areas of transit access deficiencies using Walk Score with a particular focus on geographic areas with the highest density of transit-dependent populations (based on the Transit Market Analysis in Task 3.3 below). This will be closely coordinated with the *Denver Moves: Pedestrian and Trails* plan.
- Areas of first mile/last mile service deficiencies. (First/last mile connections related to sidewalks will be coordinated with the *Denver Moves: Pedestrian and Trails* plan).
- Transit corridor physical design characteristics and impacts on current or future transit operations (e.g., speed, reliability, loading delay).
- Prioritization of modes along transit corridors to inform and/or support *Blueprint Denver* (e.g., street hierarchy).

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<sup>2</sup> The opening of the RTD bus rapid transit and rail lines in 2016 will be documented and included in the analysis.

- Evaluation of current plans and schedules and system integration strategies for RTD FasTracks and other future services.
- Description of existing transit facilities and park-n-ride locations, including vehicular and bicycle parking, bus frequency and routing, and passenger amenities, focusing on the passenger experience along with first/final mile access and multimodal connectivity

### *Task 3.3 Transit Market Analysis*

The Consultant will gather and analyze data from the 2010 Census, population estimates from CCD and DRCOG, and forecast data available through the Denver Comprehensive Plan and *Blueprint Denver*. The components of the market analysis are outlined below. Information will be portrayed in GIS-based maps where appropriate.

#### Transit-Use Propensity

Demographic characteristics known to have an impact on transit ridership will be used to establish “transit-use propensity.” Demographic information will be portrayed in GIS-based maps depicting the spatial distribution of populations with similar demographic characteristics. This information will provide a thorough understanding of the markets that influence the current and potential demand for transit services in the city and county. Those characteristics include:

- Income and poverty
- Age (particularly the elderly and youth ages 12-15)
- People with disabilities
- Auto ownership
- Population density
- Home ownership

#### Current Travel Patterns

A summary of existing travel patterns to, from, and within Denver will be documented based on Census data. If commuter surveys are available—with data analysis already completed by CCD, RTD, DRCOG, the Downtown Denver Partnership, or other outside agency—this information will be included in the travel pattern analysis.

#### Current and Projected Population and Employment

Current and projected population and employment data will be obtained from DRCOG to demonstrate where existing and future growth will be.

#### Current and Projected Land Use

The market analysis will be supplemented with an examination of current and projected land use plans and major development areas, economic analysis including current and future development, including an assessment of the likelihood, time horizons, locations/opportunities, and intensities of transit-supportive land use development. The data used in this task is an output of the DRCOG regional travel demand model; strong coordination with the *Blueprint Denver* effort will be essential to document projected land use. Both existing and future major employment centers, higher education institutions, entertainment venues and cultural attractions, high-density housing and mixed-use areas, transportation hubs, retail centers, medical facilities, and other significant destinations and travel generators will be identified and documented.

### Current and Future Travel Demand Assessment

The Consultant will use the regional travel demand model (or local data to this effect developed through the *Denver Moves: Transit* process) to evaluate current and future origins and destinations for transit and all travel. It will be important to look at the full spectrum of future travel demands, not just transit, as this plan will develop a strategy to gain mode share from current single-occupancy vehicle (SOV) travelers. U.S. Census Bureau Longitudinal Employer-Household Dynamics data (home to work travel patterns) could also be used to supplement the assessment. A current travel shed evaluation of where and by which mode a person in Denver can travel within a certain number of minutes will also be documented.

#### *Task 3.4 Peer Review*

Benchmarking the relative scale of transit system use, investment, and quality against national peer cities helps reveal the potential trajectory for transit system growth to stakeholders, technical staff, and elected leadership.

The peer review will benchmark the performance of RTD service against other transit systems that operate a similar mix of services, operate within a similar built environment, and are of similar size in terms of fleet, ridership, and service hours. The point of the benchmarking exercise will be not only to measure whether Denver's transit service productivity and efficiency indicators are appropriate to the conditions of operations, but also to measure whether the cost structure, revenues, and overall expense of delivering service is appropriate when compared to its peers.

Through consultation with CCD staff, the Consultant will select four to six peer cities for this review and gather data using the most recent data available in the National Transit Database, from local transit operators, and from the local jurisdiction.

#### *Task 3.5 Case Studies and Best Practices*

The Consultant shall complete up to three (3) case studies of communities in the United States with transit-city relationships similar to what Denver is exploring through the development of *Denver Moves: Transit*. The Consultant shall also research best practices in fostering city-transit relationships where the city is not owner/operator of transit.

The Consultant shall research and identify examples of the various local transit funding mechanisms and resources (e.g., propositions, taxes, fees) and implementation resources (e.g., staff) used in other cities throughout the United States. Findings from this research will be used to educate the public and to inform the development of strategies in Task 9.

#### *Task 3.6 System, Multimodal Connectivity, and Community Needs Analysis*

The Consultant will prepare a System, Multimodal Connectivity, and Community Needs Analysis to determine mismatches between existing transit supply and current demand as well as foreseeable gaps based on population and employment projections, growth patterns, and travel demand patterns. Coordinating this task with the four-plan effort will be critical.

The Needs Analysis will be iterative and will use the Existing Service and Access Overview (Task 3.2) and Travel Market Analysis (Task 3.3) to help understand how existing service levels relate to overall corridor travel demand and identify corridors or markets that may be underserved, have too much service, or are ineffectively served. The Needs Analysis will be fourfold:

- **Transit Service Needs:** Undertake a qualitative assessment to identify market areas that are currently served where demand is greater than supply; market areas that are inefficiently served or where service levels are too high for demand; corridors that have a mismatch between service type/operational characteristics and markets served; and corridors that are not served but where significant demand exists. RTD service standards will be considered as part of the assessment.

- **Transit Facilities and Access Needs:** Identify locations where transit amenities are insufficient or lacking; identify transit access barriers or deficiencies including pedestrian conditions and bicycle system access and parking. This assessment is based on work conducted in Task 3.2 and uses a qualitative approach. Standards that may be used for the analysis could include the number of boardings at a stop and the amenities present.
- **Programmatic Needs:** Identify policies and programs that are either hindering access to transit or are needed to expand access to transit.
- **Community Needs:** While many of the community-identified needs will be highlighted in the categories above, the Needs Assessment will include a summary of the community's transit needs identified during the project kick-off with the *Denver Moves: Transit* Task Force and Technical Advisory Committee and input from the public and stakeholder engagement activities.

The results of the needs analysis will be communicated in a memorandum with maps and graphics.

### *Task 3.7 State of the System and Opportunities Report and Summary Presentation*

The analysis conducted in Tasks 3.1-3.6 will culminate in a *Denver Moves: Transit* State of the System report from which the identification of corridors and development of scenarios will build. This report will also serve as a tool to educate the public about existing transit service, and will highlight opportunities to enhance the transit system and the rider experience.

The Consultant will compile all of the information gathered in Task 3 and develop an easy to understand State of the System and Opportunities Report with Executive Summary.

#### **Task 3 Deliverables**

- **Document and Policy Review** summarized in a table
- **Needs Analysis** memorandum
- **Draft and Final State of the System Report and Executive Summary** in a heavily graphic format, including associated maps and graphics and summary of case studies and best practices

## **TASK 4 TRANSIT VISIONING**

The public outreach process described in Task 2 and the system assessment described in Task 3 will provide a basis for developing the goals and vision for the future of transit service in Denver. We recognize the importance of the community's participation in this task to ensure buy-in as we work together to understand the values at play and the ways that trade-offs inform decision-making.

### *Task 4.1 Draft Long-Term Vision and Goals*

The team will identify and compile community goals and objectives relating to transit and mobility in Denver. The results of initial community outreach strategies will be incorporated to gain a better understanding of community goals and objectives for transit as well as desired outcomes for the entire community. With assistance from CCD staff and the Task Force, the team will develop a draft vision and set of goals that will be vetted through workshops and will ultimately guide the development of alternatives and recommendations through the next phases of the study. Development of the vision and goals will be completed in coordination with the four-plan effort.

### *Task 4.2 Visioning Workshops*

The draft vision and goals developed in the previous task along with data and findings from the market analysis will form the backbone of up to three visioning workshops. The workshops will engage staff, the Task Force, Youth Stakeholder Group, four-plan Community Group, Technical Advisory Team, City

Council, the Mayor's Office, RTD Board Members that represent Denver, other key external stakeholders, and the public in a discussion of transit in Denver.

Visioning will focus on community goals, values, and needs rather than specific corridors, service, or route design proposals. While informed by previous tasks, the visioning process will be open-ended to allow for a values-based discussion of the role and mission of CCD within the city's transit environment. Equally important will be to help participants articulate how success is measured. This is a critical step as it forms part of the decision-making framework for displaying trade-offs and decisions inherent in the process of designing and then selecting a future transit scenario for Denver. Our team will develop all materials (agendas, handouts, evaluation forms) for the workshops and provide staffing and facilitation; CCD staff will schedule the workshops, identify meeting rooms, and send invitations. To promote cross-pollination of ideas, the visioning sessions will be targeted to mixed groups of participants rather than just single-interest groups.

The workshops will allow small groups of stakeholders—supported by a facilitator and notetaker—to get their ideas for transit on paper and quickly understand the trade-offs associated with those ideas. The Consultant will prepare all materials for the workshops and provide a summary of results.

#### *Task 4.3 Develop Evaluation Framework*

Ultimately, developing a transit plan involves identifying programs and services that both best meet community goals and are also technically sound and financially sustainable options. To do this, we will create an evaluation framework that lays out clear goals and objectives and related evaluation criteria based on the results of the workshops. We like to create the goals as part of the visioning workshop so they reflect broad input. The process of establishing goals helps clarify and confirm the vision with the participants.

We know that goals and objectives sometimes can be tedious and reduce, rather than increase, people's interest in a project. To avoid this, we use a "less is more" approach in which we focus on the goals and objectives that are most important to stakeholders, as opposed to every concept possible. We also group goals and objectives into themes to which stakeholders can easily relate. This approach also helps to facilitate decision making.

Following the development of the goals and objectives, we will develop specific evaluation criteria for each objective. These will consist of a combination of quantitative and qualitative measures:

- Ridership
- Travel time savings and reliability
- Operating costs
- Capital costs
- Cost effectiveness
- Support for local plans
- Support for local businesses
- Ability to stimulate transit-oriented development
- Technical feasibility
- Financial feasibility
- Environmental impacts
- Implementation challenges
- Right-of-way/property impacts
- Mobility and accessibility for transit-dependent populations

The evaluation framework will consider traditional transit and transportation project factors (ridership, network impacts, operating and capital costs, connectivity, environmental justice and Title VI) as well as community factors (economic impacts, land use and development potential, environmental impacts).

This approach allows us to tie the results of *Denver Moves: Transit* directly to the newly developed vision in a way that is understandable, but also allows the study team to follow an easily recognizable evaluation process that incorporates both quantitative measures, such as ridership and costs, plus qualitative measures, such as community preferences and aspirations. It also allows for seamless integration with the four-plan effort.

#### Task 4 Deliverables

- Memorandum summarizing draft vision and goals
- Workshop plan and all materials for Visioning Workshops, including summary of outcomes
- Evaluation framework, including final vision and goals

## TASK 5 SYSTEM SCENARIO DEVELOPMENT

This task will be closely coordinated with the Scenario Analysis task of *Blueprint Denver*, which will result in the development of three to four land use and transportation scenarios that are optimized for particular strategic goals such as mobility, economic development, and/or equity. These scenarios can then be overlaid (i.e., mixed-and-matched) to create scenarios that support the greatest number of community goals. To better support coordination with the overall *Blueprint Denver* scenario, the development of transit network scenarios has been moved ahead of the corridor analysis task. Key subtasks of the corridor analysis work are included in this task where they are necessary to support the scenario analysis process, while others will be informed by the scenario analysis and are included in Task 6.

### Task 5.1 Establish Evaluation Framework and Conduct Initial Transit Corridor Analysis

To inform the development of transit network scenarios as part of the overall *Blueprint Denver* scenario analysis and support the more detailed evaluation of corridors in Task 6, the Consultant will develop a transit evaluation framework, identify modeling and analysis tools, and conduct an initial segment-level analysis of current and potential transit corridors. This work will include the following steps:

- **Identify transit system development goals.** As described in Task 4 above, the Consultant will engage with key partners and stakeholders to identify and validate transit goals and objectives.
- **Develop evaluation framework.** The Consultant will develop a Multiple Account Evaluation (MAE) framework, similar to others we have used successfully on many transit projects. The MAE process engages technical staff and advisory committee members to develop locally-focused criteria under each of four or five major evaluation categories, such as environment, economy, community, and deliverability. The process will be coordinated with the *Blueprint Denver* scenario analysis process, and will incorporate key goals and measures from both *Blueprint Denver* and DRCOG's Scenario Planning (and other ongoing planning efforts, as appropriate).
- **Propose Modeling and Analysis Tools.** The Consultant will propose the appropriate modeling and analysis tool(s)<sup>3</sup> to better understand opportunities, concerns, and trade-offs

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<sup>3</sup> Depending on the modeling tool identified for use in this project, coordination with DRCOG and RTD at project start-up and throughout the project will define the Consultant level of effort in modeling activities for this project. (It is not assumed that RTD will complete modeling for *Denver Moves: Transit*.)

and benefits within the transit system scenarios and in relation to other modes of travel and other variables such as land use. The Consultant shall provide staff knowledgeable in calibrating and running these models. Potential tools include a Nelson\Nygaard ridership forecasting methodology, the URBEMIS smart trip generation tool, and the DRCOG regional travel demand model. In addition to key measures of transit mobility, transit deliverability, economic development, equity, and environmental outcomes, we can employ our suite of modeling tools to measure changes in mode share, overall system ridership, vehicle miles traveled per capita, and GHG emissions.

- **Evaluate arterial corridor “segments” using screening criteria.** Rather than evaluating the existing system, we evaluate the potential of transit markets in key segments of the arterial network. This phase focuses on the measures we know drive transit demand, indicating where transit service is in balance with land use density and form, where there is likely unmet demand, and where future growth will increase demand. This task will also account for corridors that may be important for reasons beyond those listed above, such as historically underserved areas, by incorporating transit-dependent populations, demographics, and other factors in the evaluation criteria. Operating cost comparisons are not included at this stage of analysis.

### *Task 5.2 Scenario Evaluation*

Developing and refining system scenarios will illuminate outcomes of varying strategic investment priorities. Scenarios will illustrate possible futures (not “the” future plan), test key constraints, highlight trade-offs, and inform decisions. Jarrett Walker is an expert in talking simply about trade-offs in transit system design, and he will help facilitate a series of workshops with the Task Force and other key groups.

Using the modeling and analysis tools identified earlier in this task, the Consultant will develop and evaluate transit network scenarios in coordination with the *Blueprint Denver* scenario analysis process. It is anticipated that this would include three to four scenarios, including a no-action future scenario. The evaluation of these scenarios will allow CCD to better understand opportunities, concerns, and trade-offs within the transit system scenarios, relationships to other modes of travel, and other key components including economics and land use.

### *Task 5.3 Estimating Other Outcomes/Attributes*

During the scenario evaluation, the Consultant shall also consider how the scenarios tie in with other department projects (such as the four-plan effort), goals, and activities including those initiated by Denver’s Department of Environmental Health and the Mayor’s Office of Sustainability.

The Consultant shall propose how to estimate other outcomes of the scenarios evaluated above, including, but not limited to, change in greenhouse gas (GHG) emissions, change in vehicle miles of travel per capita (VMT), and trip length. This analysis would be coordinated with *Blueprint Denver* to align methodologies and avoid duplication of effort. Other examples of potential outcomes to evaluate include those listed in DRCOG’s Scenario Planning/Scenario Analysis documents.

### **Task 5 Deliverables**

- **Corridor Evaluation Methods Technical Memorandum** outlining the approach and modeling/analysis methodology that will be used to evaluate corridors in this and later tasks
- **Transit Network Scenarios Report**, including matrices, maps, and graphics documenting and illustrating potential transit network scenarios; identifying opportunities, concerns, and trade-offs; and summarizing calculated outcomes/attributes (this could be a standalone report, or inputs provided into an overall report on the *Blueprint Denver* scenario analysis)

## TASK 6 CORRIDOR SCREENING AND EVALUATION

Based on the *Blueprint Denver* update and *Denver Moves: Transit* scenario analysis, previous work completed as part of the Strategic Transportation Plan, enhanced transit corridors identified in *Blueprint* (2002), technical data, stakeholder feedback, plan goals and objectives, and the Corridor Prioritization Criteria developed in this task, the Consultant shall work with CCD to identify and prioritize corridors that link neighborhoods, businesses, civic amenities and parks, schools, and major activity centers (employment, retail, etc.). This will include a high-level evaluation of transit-compatibility relative to walk and bike access, land use and zoning, presence of transit dependent populations, geographic and social equity, and other factors to develop an appropriate network of transit corridors. This task shall include a series of public engagement/input activities held independently or in concert with the four-plan effort.

The consultant will work with CCD to develop corridor prioritization criteria based on the goals and objectives developed and existing/future conditions evaluated in previous tasks. The criteria will be used to identify and prioritize key corridors.

### *Task 6.1 Land Use Analysis*

Land use and transportation share an extremely important relationship. In the development of criteria for corridor prioritization, evaluation of land uses and patterns should play an important role. In close coordination with the City's Community Planning and Development (CPD) and Office of Economic Development (OED) Departments, this planning effort will coordinate with CPD's update to *Blueprint Denver*. The Consultant shall give particular attention to the following:

- Current citywide and neighborhood plans may or may not have contemplated how public transit could shape urban form and vice versa; opportunities should be noted and recommendations made (as needed/appropriate).
- Related to the above, the Consultant shall work with CPD to develop transit-supportive land uses and connections to Areas of Change identified within the update to *Blueprint Denver*.
- Funding strategies that are potentially tied to land use should be explored within Task 9.
- Local transit connectivity needs and opportunities shall be evaluated. This includes, but is not limited to: an evaluation and prioritization of key characteristics for local travel that supports livable neighborhoods and a vibrant local economy; and an evaluation of shorter trips made locally throughout the day, especially in mixed-use contexts, in addition to peak hour commutes.
- Through the evaluation of corridors and system scenarios, the Consultant shall evaluate economic development opportunities and recommended corridors that might be prioritized for benefits other than specifically transportation demand. This high-level evaluation will be coordinated with *Blueprint Denver*.
- The Consultant shall create materials to aid in the understanding of the trade-offs and benefits between the quality of transit service and the level of land use intensity.

Portions of this task may be completed early in the process, but results data will be refined to corridor geographies and analysis requirements during this task.

### *Task 6.2 Development of Corridor Prioritization Criteria*

The Consultant shall help develop corridor prioritization criteria based on the goals and objectives adopted in Task 4.2 and 4.3, the Transit Multiple Account Evaluation Framework developed in Task 5, and the results of the scenario analysis completed in Task 5. The criteria should be based on transit mobility

needs identified in the previous tasks. The criteria will ultimately be used to prioritize corridors and establish corridor typologies. Once draft criteria are developed, a public engagement activity will be conducted (preferably in connection with other four-plan efforts) to gather public feedback.

### Task 6.3 Detailed Corridor Analysis

Building on the Scenario Analysis task, the Consultant will conduct a detailed corridor analysis to evaluate and prioritize a set of corridors using the corridor prioritization criteria developed in the previous subtask. As noted elsewhere, the *Denver Moves: Transit* corridors help define the enhanced transit corridors in the *Blueprint Denver* update and vice versa. This will include the following steps:

- **Identify analysis corridors.** Based on the evaluation of segments and network scenarios in Task 5, a set of up to 25 complete transit corridors will be identified for analysis. In most cases these will be existing transit routes or corridors; but previous work in Tasks 3 and 5 may also identify a need for new options for connecting markets. This work is done in consultation with the PMT and the Technical Advisory Committee.
- **Conduct detailed evaluation of leading corridors.** The MAE criteria developed in Task 5 will be applied to the top 20-25 corridors to provide a detailed analysis of potential performance and achievement of local goals.
- **Identify “priority bus” corridors and corridors meriting “intermediate to high capacity” transit investments.** These two sets of corridors will form the backbone of Denver’s Frequent Transit Network. Improvements to existing services and planning for new or enhanced services in these corridors will be the focus of the plan’s short- and mid-term recommendations.

### Task 6.4 Corridor Typologies and Transit Corridor Toolbox

Based on the results from the previous tasks, the Consultant shall identify and recommend service characteristics for the various corridors. These service typologies would act as a high-level recommendation for each corridor, to guide CCD planning and investment priorities and coordination with RTD. These service types would not recommend a specific mode/technology, but will function as standards for holistic corridor design—providing guidance for different modal choices (in coordination with *Denver Moves: Pedestrian and Trails* and *Denver Moves: Bicycles*)—and service type and will be based on implementation criteria that set minimum targets for land use mix, design, density, accessibility, demand management, parking, and other key factors. The corridor typologies may identify potential tiers of appropriate technologies (e.g., bus rapid transit, local service upgrades). The typologies will guide specific transit speed and reliability improvements (e.g., curb extensions, queue jump lanes), traffic signal and ITS treatments, passenger information and technology enhancements, and stop/station design and features.

A *Denver Moves: Transit Corridor Toolbox* will be developed to ensure key design and implementation recommendations are accessible and targeted for investment for future analyses and other corridor projects.

### Task 6 Deliverables

- **Land Use Technical Report**, including:
  - Recommendations for existing/ongoing plans and policies (particularly *Blueprint Denver*), which would mutually support Denver’s transit system and community vision.
  - Recommendations for transit-supportive land uses and connections to Areas of Change identified within the updated *Blueprint Denver*. These could be recommendations from or to *Blueprint*. Matrices, maps, and/or other graphic representations that clearly illustrate the

relationship between land use and transit in Denver, intensity/mix of uses relative to mode choice, and geographic areas of special focus for any of the elements listed above.

- **Corridor Detailed Evaluation Report** describing:
  - The process by which goals and objectives were translated into market-based prioritization criteria
  - Matrix or infographic illustrating relationship between corridor typologies and project goals and objectives
  - Maps/graphics/matrices illustrating recommended application of the corridor typologies
- **Final Corridor Typologies and Prioritization Toolbox**, including corridor prioritization criteria and corridor typologies that can be applied in future analyses and other corridor projects.

## TASK 7: STATION/STOP TYPOLOGY

The Consultant shall further identify and evaluate improved station/stop amenities and transit community design principles based on plan goals and objectives outlined in Task 4 to inform the system scenarios. This task will be conducted in coordination with *Blueprint Denver's* concept land use and neighborhood context, and will support *Blueprint's* Enhanced Transit Corridors for street typology framework. The deliverables in this task build on and expand previous CCD work (e.g., TOD Plan, West Side Study) and will be refined in coordination with CCD staff to avoid overlap with existing publications and ensure support for other plans' guidelines.

### Task 7.1 *Transit Places Design Book*

The Consultant will develop a transit-oriented community framework document, titled *Denver Moves: Transit Places Design Book*. The Transit Places Design Book will serve as a companion piece to the *Denver Moves: Transit Corridor Toolbox* (see Task 6.4) and set guidelines for accessible stations and stops, critical to vibrant transit communities. The Design Book will establish the types of access investments and station amenities needed to support transit corridors. Employing the 6D approach to walkable, transit-oriented community design, the Consultant will craft a concise transit-oriented community framework that organizes development, transit access, pedestrian and bicycle access, and urban design for the access shed surrounding Denver's frequent transit corridors. This includes guidance for station/stop areas located within existing developed areas and new growth centers that have yet to be developed. The Design Book will provide background on transit-oriented community types and zones and basic design principles and strategies underpinning access and transit community design. The Transit Places Design Book will include but will not be limited to principles related to:

- Land use mix
- Densities
- Density distribution
- TDM and parking policy overlay framework
- Street and block configuration
- Street design principles (plans, cross sections)
- Pedestrian network and amenities
- Universal accessibility
- Placemaking, plazas, squares, and parks
- Personal safety and security

### *Task 7.2 Station/Stop Typology Concepts*

The Consultant shall develop station/stop typology concepts and guidelines based on community goals, corridor typology recommendations, and technical evaluation. These concepts should identify what types of amenities and access improvements are appropriate for each corridor and transfer point within Denver. Level of amenities, access improvements, and supporting services to be considered as part of each station/stop type include walking infrastructure, shelter design, wayfinding and real-time passenger information, bicycle parking and access needs, feeder service facilities, drop-off amenities, and shared mobility amenities, among others. Since not every stop/station will be the same, this task will create a toolbox/menu of the various station/stop types and amenities that could be applied to all stops within Denver with similar characteristics. Concepts will include considerations for multimodal connectivity and accessibility improvements and close coordination with the four-plan effort. This task is not intended to create a specific typology for every station/stop in the existing and/or future transit system.

This task will consider the previous work completed in the *TOD Plan* and *Westside Transit Enhancement Study* (2012). That study evaluated over 200 bus stops in West Denver and created a typology framework for stop amenity standards based on technical analysis and goals. Another resource for stop improvements will be the *Colfax Corridor Connections* study, which identified a series of amenities to support the proposed Bus Rapid Transit concept.

### *Task 7.3 Urban Mobility Hub Concepts*

Urban Mobility Hubs are locations where transportation modes intersect and provide the opportunity to link those modes together in one location, which could also be coupled with additional amenities and services (e.g., bicycle racks, retail/mixed-use services, shared mobility such as bike share, car share, shared parking, etc.). The hub locations may also provide opportunities for transit-supportive land use development to support transit ridership increases.

Much like Denver's communities and urban centers, each future mobility hub may look and operate differently than the next. The Consultant shall identify potential Urban Mobility Hub types (scope and scale) and locations in Denver. This task shall be based on the existing and future needs and goals (community, economic, and transportation) identified in this study and in partnership with the four-plan effort. The Consultant will develop an Urban Mobility Hub Concept memo that identifies the types of mobility services that could potentially co-locate at key transportation hubs throughout the city—whether they are transit services, shared mobility options, or end-of-trip amenities. The Consultant will also provide insight as to how connected vehicles may influence access and mobility at these hubs in the future. The memo will include a mobility hub location map that illustrates where mobility hubs serve urban development nodes and how they connect with the broader multimodal network (including transit, bikeway, bike share, and pedestrian connections).

In partnership with CCD and the Task Force, the Consultant will identify up to eight (8) hubs for which we will develop conceptual diagrams and up to four (4) 3D renderings to illustrate the mobility, demand management, land use and placemaking, and implementation elements of Denver's mobility hubs.

### **Task 7 Deliverables**

- **Transit Places Design Book** (draft and final)
- **Station/Stop Typology Concepts Report**, including graphics that illustrate stop amenity standards for Denver
- **Urban Mobility Hub Memo**, including hub definition, typology concepts memo, and potential locations map
- **3D Renderings** for up to four (4) urban mobility hubs

## TASK 8: PROPOSED IMPROVEMENT PRIORITIZATION AND CONCEPTUAL COST ESTIMATES

### *Task 8.1 Prioritization Methodology*

The Consultant will work with CCD in developing the methodology to prioritize the proposed and needed improvements identified in the previous tasks. The methodology will include multiple factors that will be identified in coordination with CCD and throughout the planning effort.

### *Task 8.2 Proposed Improvements and Conceptual Costs*

The Consultant will apply the prioritization methodology to identify which improvements are short-term, mid-term, and long-term. This task will also include a rough order of magnitude cost for each of the improvements, services, or programs identified in the study, including capital and operating costs. Operating costs will be forecast by developing a conceptual operating plan for a particular service improvement (e.g., hours, frequency) and applying an average operating cost from RTD that is appropriate for that service type. This may require a modal assumption or could be provided for service type options.

### **Task 8 Deliverables**

- **Prioritization Methodology Memo** describing the methodology for prioritizing proposed improvements
- **Proposed Improvements List** containing the prioritized improvements and conceptual costs for each

## TASK 9: FUNDING, GOVERNANCE, TRANSIT POLICY, AND IMPLEMENTATION STRATEGIES

### *Task 9.1 Funding Strategies and Governance for Implementation*

Informed by the peer review and case studies completed in Task 3, the Consultant will work with CCD to identify viable local, state and federal financing mechanisms to implement the various system scenarios created in Task 5, corridors identified Task 6, and projects further prioritized in Task 8. These funding opportunities will be evaluated and recommended based on what is feasible in Denver and the state of Colorado.

### *Task 9.2 Governance*

This task will be a critical step in developing an implementation-focused plan that provides CCD and its partners with actionable steps to secure funding and guide investment. To maximize utility of the analysis, this task will be completed once corridor prioritization is complete in close coordination with CCD and RTD staff.

Building off of the best practices and peer review work done in Task 3 and the funding research in Task 9.1, the Consultant will match funding sources with potential uses and explore dedicated funding streams, such as direct recipient status for FTA funding. Tailoring this work to the local context will ensure that CCD and its partners are well-positioned to move quickly from planning to implementation.

The Consultant will document the range of potential governance structures available to Denver, supplementing existing expertise with research and discussions with technical and policy team members to determine which models are most applicable to Denver.

Governance issues will be compared as they relate to key issues and opportunities raised during the planning process. Some topics, currently within RTD's purview, that could be evaluated include:

- Operating/capital cost comparisons: human resources, vehicle maintenance and fueling, legal counsel, non-vehicle maintenance, road supervision, grants management, service planning, fare collection, ownership vs. lease of facilities and equipment
- Siting/development of maintenance facilities
- Service quality
- Regional vs. local service coordination/service integration
- Workforce issues (e.g., securing enough bus operators)
- Contracting requirements
- Transition issues

### *Task 9.3 Transit Policy Recommendations*

The Consultant will provide recommended new citywide policies and updates to any citywide transit-related policies identified in the development of the plan goals and objectives (Task 4). This task will also include identification of any other CCD or department policies, ordinances, rules, or regulations that may be affected. The Consultant will also coordinate policy recommendations with the update to *Blueprint Denver* and other ongoing planning efforts.

### *Task 9.4 Implementation Strategies*

The Consultant will identify near-term, mid-term, and long-term implementation strategies based on project prioritization, funding opportunities, governance definitions, policy updates, and political and community prioritization. Implementation strategies will include service, capital, and programmatic strategies including transportation demand management-type measures (e.g., pass programs, “buying up”/subsidizing additional transit services, advocacy/marketing). The implementation strategies will be closely coordinated with the four-plan effort.

This task will identify phasing opportunities, an ongoing approach to RTD coordination and implementation, potential demo or pilot projects, short-term operational improvements (e.g., transit only lanes, transit signal priority, queue jumps), and cost-neutral revisions to current service. Funding impacts and funding sources for any resources needed beyond RTD’s current operating costs will be identified as part of this task.

### **Task 9 Deliverables**

- Funding Strategies memo
- Governance Options memo
- Transit Policies matrix
- Implementation Strategies matrix
- Memorandum containing recommended funding strategies, governance, transit policies, and implementation strategies

## **TASK 10: PLAN PREPARATION, REVIEW, AND COMPLETION**

### *Task 10.1 Draft Plan*

The Consultant will prepare a draft *Denver Moves: Transit* plan that will include a clear plan for action to deliver a more useful and attractive transit product to current and future transit customers, while helping CCD meet broad economic, environmental, and quality of life goals. The final plan will include:

- Operating, capital, and programmatic near, medium, and long-term priorities, including detailed action items and implementing partners
- Improved understanding of city transit and transportation priorities and clear policies/guidelines for working with RTD and other partner transit agencies to deliver on *Denver Moves: Transit* recommendations
- Order of magnitude operating and capital cost requirements to meet plan priorities and support growth in service and capital development

The final plan will be a 50-page or less, readable and high quality summary document accessible to a broad audience, supported by technical appendices in Word format. The final plan materials will be delivered in print format for ease of sharing with CCD departments, other agencies, partners, and the public to launch Denver into its next generation of transit service. This plan will be highly graphic and usable for public entities, including the general public. This plan will include an Executive Summary that can be distributed as a stand-alone document.

The development of the draft and final plan will be coordinated with the Citywide Planning Communication Strategy to ensure the *Denver Moves: Transit* plan is formatted similarly to the final products of *Blueprint Denver*, *Denver Moves: Pedestrian and Trails*, and *Game Plan* update.

CCD and advisory teams will review the draft plan and provide consolidated comments to the Consultant. As part of Task 2 (Public Outreach and Engagement), the Consultant will propose a method in which to collect public feedback on the draft plan. The Consultant will incorporate two rounds of edits from CCD (which will include public feedback that has been summarized by the Denver staff team) and one from City Council.

#### *Task 10.2 Final Plan*

The Consultant will edit and finalize the plan, incorporating the feedback received from CCD staff, advisory teams, and public review of the draft plan. CCD will review the final plan prior to printing and publication.

#### **Task 10 Deliverables**

- Draft and final plans, including a stand-alone Executive Summary/shortened version for public distribution, marketing materials, and appendices
- A final plan in both PDF and editable Adobe InDesign electronic format

### **TASK 11: ADDITIONAL SERVICES**

The project may extend into 2018 and will require additional scoping and budgeting at that time. At the request of the CCD Project Manager and with written confirmation, the Consultant will provide additional services, including:

- Additional services required for the first 18 months of the project, including but not limited to: analysis, meeting attendance, document and graphic production, support for outreach tools/activities, additional outreach event attendance, and coordination support activities for the four-plan effort.
- Continued project support (beyond 18 months) including, but not limited to: meeting attendance, additional document production, additional analysis, implementation support, and coordination for the four-plan effort and alignment with the *Blueprint Denver* schedule.

Before any additional services are provided, the additional services scope and required level of effort will be agreed upon by the CCD Project Manager and the Consultant Project Manager.

## Task 11 Deliverables

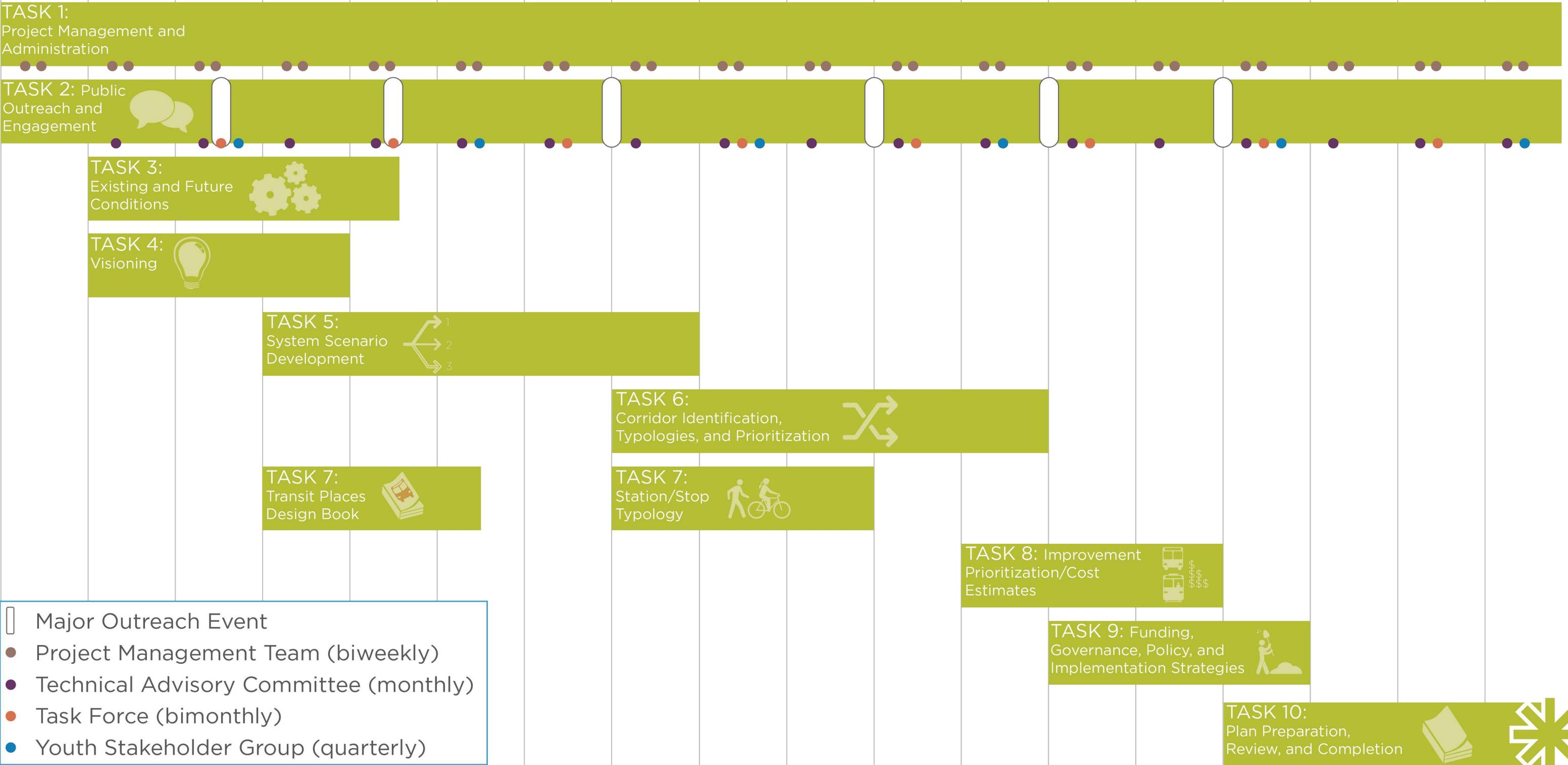
- TBD

### SCOPE AND BUDGET ASSUMPTIONS

The following assumptions were used to develop the scope of work and associated budget:

1. Meeting attendance assumptions will be developed in coordination with the CCD project manager.
2. For the *Denver Moves: Transit* final plan document, the consultant will create an administrative draft, a stakeholder review draft and a final draft. For all other deliverables, the consultant will provide an administrative draft and a final draft.
3. CCD staff will provide a single, consolidated set of substantive edits for each draft document prepared for this project. All comments between commentators must be resolved by the client before providing the comments to the consultant team. The consultant team will complete up to two rounds of edits based upon substantive client comments on each document.
4. The level of effort for each task is specifically identified in the project budget. During the planning process, the consultant will provide a single, digital copy of all products and materials prepared for the *Denver Moves: Transit* process with the exception of the Final Plan report.
5. The budget assumes that the Consultant will be responsible for all printing, packaging, and mailing related to the project, including materials for public workshops, Task Force Meetings, TAC meetings, meeting notices, and any copies of draft or Final Plan for the public. The Consultant will be reimbursed for the approved expenses related to printing and mailing.
6. The four-plan website, which will house the *Denver Moves: Transit* content and tools, and four-plan effort brand will be developed and maintained by others as part of CCD's four-plan effort. The website-related scope items in Task 2 are for the consultant team to provide content to CCD.
7. CCD will provide the consultant with a complete and up-to-date GIS database that includes all of the existing conditions in the CCD necessary for the planning and design process. Our scope and budget assumes that the information will be up-to-date and any cleanup work will be completed by the client.
8. The Consultant assumes that all CCD data and information provided by CCD staff is accurate and reliable. Time spent to revise work based on inaccurate or incomplete information is not included in the scope of work or budget. Any corrections or cleanup work will be completed by the client.
9. CCD staff will be responsible for logistics related to meetings, workshops, and hearings except as otherwise noted in the Scope of Work. This includes but is not limited to: mailings (such as invitations to events), meeting organization, and finding and securing facilities. The Consultant Public Engagement Lead may be consulted to provide feedback on meeting facilities.

2016 MAY JUN JUL AUG SEPT OCT NOV DEC 2017 JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT



- Major Outreach Event
- Project Management Team (biweekly)
- Technical Advisory Committee (monthly)
- Task Force (bimonthly)
- Youth Stakeholder Group (quarterly)

**Disclaimer:** This is a proposed schedule to be finalized during the project kickoff meeting, subject to refinement based on coordination with the four-plan effort.

