

Big Cottonwood Canyon Mobility Action Plan

Detailed Work Plan

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AECOM

Prepared for:

Central Wasatch Commission

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Introduction

The purpose of this Detailed Work Plan is to outline the scope, milestones, and deliverables—and their corresponding assumptions and target dates—for AECOM’s development of the Big Cottonwood Canyon (BCC) Mobility Action Plan (MAP), which is being prepared for, and in close coordination with, the Central Wasatch Commission (CWC). Development of the MAP is proposed to occur between October 2022 and May 2023. Milestone and interim dates are summarized herein, and a full project schedule is provided as Appendix A.

Task 1: Project Initiation & Administration

This task accounts for initiation of the project, as well as general management and administration over the course of the study. The task includes project kickoff and initiation, general management activities including recurring management meetings, invoicing and project status updates, and development of basic guiding principles/documents to guide the development of the MAP development process.

Project Kickoff and Management

Detailed Work Plan and Schedule

AECOM and the CWC will work closely to confirm the project team expectations, roles/responsibilities, detailed activities, deliverables, and milestones documented in this Detailed Work Plan. This Detailed Work Plan will be presented to the CWC Transportation Committee in October 2022 for approval. As noted in the Introduction, this Detailed Work Plan outlines activities, deliverables, milestones, and their corresponding assumptions and dates. The proposed project schedule is included as Appendix A. The AECOM Project Manager will manage staff, deliverables, and coordination with the CWC to deliver and progress the project according to the agreed-upon schedule. The AECOM Project Manager will update the schedule if/as needed over the course of the project, and will reference the schedule in regular coordination with the CWC Project Manager.

General Project Administration

Biweekly management meetings will occur between the AECOM and CWC Project Managers; these meetings will include status updates, confirmation of recently completed and upcoming tasks, and review of schedule and budget updates. Ongoing, consistent coordination will occur between the AECOM and CWC Project Managers independent of the biweekly management meetings. Any challenges or delays will be discussed, and proposed solutions identified and documented.

The AECOM Project Manager will closely manage the AECOM staff and subconsultant(s), including status and quality of all related work products and deliverables, communicating and coordinating all project components with the CWC Project Manager, and confirming that project progress abides by the agreed-upon scope and timeline. The AECOM team is staffed in a manner that assigns relevant technical expertise to specific tasks and deliverables with clear expectations of level of effort and delivery timelines.

Monthly Invoicing and Reporting

AECOM will submit monthly invoices, including subconsultant work, to the CWC Project Manager. Monthly progress reports will be submitted with the invoices, including a summary of work completed during the invoice period, updates on progress made toward each respective deliverable, and any events or milestones expected in the next month.

Vision, Goals and Guiding Values Development

AECOM will assist the CWC in developing, refining, documenting, and communicating the Vision, Goals, and Guiding Values of the BCC MAP. AECOM will review and compile key takeaways and principles from the CWC MTS Pillars, Mountain Accord, and other state transportation, social, and environmental goals. This information will be utilized to assist and coordinate with the CWC, and any necessary stakeholders, to confirm the Vision, Goals, and Guiding Values. AECOM will compile this information, how the goals and values were determined, and how they relate to and reinforce the CWC MTS Pillars, Mountain Accord, etc.

Performance Measurement Framework

Starting in October 2022, AECOM will work closely with the CWC Project Manager to develop and refine key performance indicators (KPIs) and metrics to enable monitoring of progress over time. This information will be compiled into a framework memo that lists KPIs along with a plan for the CWC to continue monitoring performance toward implementation of the plan moving forward.

Deliverables

Item	Timing / Frequency	Assumptions
Vision, Goals & Guiding Values Memo	<ul style="list-style-type: none"> Draft: Early November Final: Late November 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final) Final memo will be included in the Final BCC MAP document as an introductory chapter
Performance Measurement Framework Memo	<ul style="list-style-type: none"> Draft: Early November Final: Late November 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final)
Meeting Agendas & Summaries	<ul style="list-style-type: none"> Agendas will be distributed 1 business day prior to one-on-one stakeholder and technical meetings Draft meeting summaries will be provided no later than 2 business days after meeting occurrence 	<ul style="list-style-type: none"> AECOM will develop agendas, meeting materials, and meeting summaries for biweekly management meetings, one-on-one meetings with stakeholders, technical meetings AECOM will support CWC in development of agenda, materials for CWC Transportation Committee, Board, or Stakeholder Council meetings
Invoices & Progress Reports	<ul style="list-style-type: none"> Monthly 	<ul style="list-style-type: none"> Invoices and supporting progress reports will be submitted to CWC on a monthly basis

Task 2: Outreach & Engagement

This task covers AECOM’s community outreach and stakeholder engagement activities for the BCC MAP. This task builds upon the recognition that the community and the CWC Transportation Committee, Stakeholders Council, and Board have been involved in and aware of past BCC studies, and that there is already a baseline understanding of the canyon issues and needs. AECOM will build upon that starting point for developing community and stakeholder coordination messaging and materials.

Community Outreach Framework Memo

AECOM, in coordination with the CWC, will develop a Community Outreach Framework Memo outlining the community and stakeholder engagement expectations and activities to be carried out over the course of the project. The framework memo will detail key outreach methods/strategies, timing, and materials to be developed and provided in support of these efforts. It is anticipated community outreach/engagement points will occur at key milestones over the course of the project.

Project Webpage and Social Media Toolkits

Community outreach throughout the study will primarily consist of utilizing existing communication channels in place through the CWC and its partners, including website and social media updates to keep the community informed about how the project is moving forward. AECOM will assist the CWC in developing project branding and styles to be used for outreach materials through the life of the project.

The CWC’s existing website will function as the project website and will house a page specific to the BCC MAP for updates, materials, surveys, etc. AECOM will develop the content in coordination with the CWC—including schedule updates, graphics, infographics, and/or surveys—and will provide the approved content to CWC and its partners to post on their respective websites and social media platforms at key project milestones. AECOM will coordinate with the CWC to confirm the utilization of partner websites, social media platforms, etc., to disseminate information and AECOM will supply content and information to be posted to those sites once confirmed.

CWC Transportation Committee, Stakeholder, and Board Meetings

A cornerstone of the engagement task will include information gathering, updates, interim findings, and feedback through the CWC Transportation Committee, Stakeholder Council, and Board meetings/workshops as outlined below. It is anticipated the key touchpoints will generally be soliciting feedback and approval for the Vision, Goals, and Guiding Values; providing interim findings and status updates mid-process; and sharing and receiving approval for the final recommendations of the BCC MAP.

The CWC Project Manager will coordinate and administer these meetings, and AECOM will assist in preparing presentation and workshop materials, preparing meeting agendas and summaries, and conducting follow-up on action items. The Community Outreach Framework Memo will further detail timing of these workshops, topics to be covered in each proposed meeting/workshop, and expected materials/content to be presented.

In addition, AECOM will coordinate with the CWC Project Manager to conduct one-on-one meetings with CWC entities, stakeholders, and partners to identify and collect available data and information, technical details to be utilized for analysis or conceptual design considerations, and jurisdictional and regulatory considerations. The meetings will vary in timing, frequency, and nature, and are expected to include the following entities, at a minimum: the Utah Department of Transportation (UDOT), the Utah Transit Authority (UTA), the U.S. Forest Service (USFS), the Salt Lake City Public Utilities Department (PUD), the Wasatch Front Regional Council (WFRC), and other jurisdictions and entities depending on needs for additional data and information.

Transportation Committee, Board, and Stakeholder Meeting Summary

Topic	Entities Involved	Timing / Frequency	Assumptions
Transportation Committee Workshop	CWC Project Manager, CWC Transportation Committee, AECOM Project Manager and technical staff support, as needed	At key milestones (5 meetings assumed): October, November, December, February, April	<ul style="list-style-type: none"> Meetings/workshops at key project milestones, assumed to include project kickoff, confirmation of goals and vision, preliminary findings of mobility and gaps analysis, mobility hub considerations, presentation of MAP CWC Project Manager to coordinate meeting logistics, administer meeting; AECOM to provide support, develop materials, and attend to aid in presentation and/or field questions
Stakeholders Council Workshop	CWC Project Manager, CWC Stakeholders Council, AECOM Project Manager and technical staff support, as needed	At key milestones (2 meetings assumed): January, April	<ul style="list-style-type: none"> Meetings/workshops at key project milestones, assumed to include preliminary findings/mobility hub considerations, presentation of draft MAP CWC Project Manager to coordinate meeting logistics, administer meeting; AECOM to provide support, develop materials, and attend to aid in presentation and/or field questions

Topic	Entities Involved	Timing / Frequency	Assumptions
Board Workshop	CWC Project Manager, CWC Board Members, AECOM Project Manager and technical staff support, as needed	At key milestones (3 meetings assumed): January, March, May	<ul style="list-style-type: none"> Meetings/workshops at key project milestones, assumed to include preliminary findings/mobility hub considerations, presentation of draft MAP, final MAP approval CWC Project Manager to coordinate meeting logistics, administer meeting; AECOM to provide support, develop materials, and attend to aid in presentation and/or field questions
One-on-One Stakeholder Meetings	CWC Project Manager; Representatives from CWC Entities, Stakeholders, etc.; AECOM management and/or technical staff	Regular, as needed	<ul style="list-style-type: none"> Will vary in timing, nature, and attendees depending on need for technical information, data sets, jurisdictional or regulatory guidance/constraints, etc. Scheduling and attendance will be a combination of CWC Project Manager and AECOM team depending on meeting and nature of its focus

Outreach Summary Memo

AECOM will develop concise outreach summary memos after key outreach events, activities, or phases. These interim memos will be reviewed by the CWC, and will be compiled into a final Outreach Summary Memo as part of the Final BCC MAP.

Deliverables

Item	Timing / Frequency	Assumptions
Community Outreach Framework Memo	<ul style="list-style-type: none"> Draft: Late October Final: Early November 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final)
Website and Social Media Update Materials	<ul style="list-style-type: none"> Ongoing, at key project milestones 	<ul style="list-style-type: none"> AECOM to develop any content needed for website or social media updates; CWC or partner stakeholders will be responsible for posting content on their respective websites and/or social media platforms Updates to be provided at key milestones All content developed by AECOM to be reviewed by the CWC Project Manager at a minimum prior to distribution or publication
Outreach Summary Memo	<ul style="list-style-type: none"> Draft: Early May Final: Mid May 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final) Will be part of Final BCC MAP package, and will incorporate interim outreach summary memos compiled over the course of the study

Task 3: Mobility Network Analysis

This task describes the process for collecting and analyzing relevant datasets to establish a comprehensive understanding of the mobility network, and identifying and prioritizing key barriers for multimodal transportation in BCC.

Relevant Document and Plan Consistency Review

AECOM will review appropriate documents to establish a foundational knowledge of the region's current transportation network, primarily focusing on plans, policies, proposals, and visions that relate directly to transportation and land-use policies related to BCC, but not to exclude others as relevant. Key foundational documents will include the CWC Pillars and Mountain Accord documentation, recommendations, and guidance. As noted in Task 2, AECOM will work with the CWC staff, UDOT, UTA, SLC PUD, and USFS to consider existing management plans, roadway design, transit service considerations, evaluation, implementation practices, and jurisdictional constraints or opportunities. Building on the information from the document review and these one-on-one meetings, AECOM will identify consistency across relevant jurisdictional plans and policies, define the relationship of the BCC MAP to other plans, and identify any additional steps that may be needed to consider prioritizing goals and objectives across documents.

Data Collection

As described above and in Task 2, AECOM will coordinate with the CWC, UTA, UDOT, ski resorts, etc., to identify, prioritize, and collect a select set of existing data. Data sets assumed to be currently available include:

- Traffic volumes, historical travel times, limited StreetLight data, transportation system movements, safety and collision data (availability and collection of these data sets to be confirmed with UDOT)
- Transit ridership data (availability and assumptions behind this information to be coordinated with UTA)
- Bike/pedestrian data (availability and collection to be confirmed with UDOT, WFRC, city partners)
- 5-Year American Communities Survey (ACS) data (assuming 2020 census data; readily available online)
- Community feedback received through related outreach efforts (including the SLC Watershed Management Plan Update, BCC Visitor Use Study, among others)

After developing a comprehensive list of desired data sets and information, AECOM will confirm the list with the CWC and identify the appropriate agencies, departments, contacts, and methods to identify and collect any existing data.

If required or desired data sets are found to be lacking or outdated, AECOM will confirm with CWC and any relevant agencies (e.g., UDOT or UTA) the appropriate next steps or assumptions to make for those data sets. AECOM will work closely with the CWC to prioritize and collect remaining data necessary to conduct the BCC MAP analyses and make project recommendations. Part of this effort may include identifying non-vital data collection efforts that will not be utilized during the BCC MAP development process, but should be included as an action item resulting from the BCC MAP. Any data collection not feasible to conduct during the BCC MAP process may be identified as a recommendation of the BCC MAP for the CWC to complete later.

In addition to data collection, AECOM will coordinate with the CWC to identify and conduct limited staff-level interviews to fully document internal processes or policies that may become subject to recommendations for enhancement through the BCC MAP process.

Existing Mobility Conditions and Gaps Analysis

AECOM will synthesize the aforementioned data and analysis, along with stakeholder input, to identify past or newly documented gaps observed regarding processes, plans, projects, or policies presenting opportunities to better integrate multi-modalism and leverage technology to improve circulation. This exercise will also include an evaluation of both available modes and supportive infrastructure (or lack thereof). Gaps, challenges, and barriers identified across multiple modes, plans, and jurisdictions will then be compiled and a ranking exercise developed that will result in a final list of prioritized barriers to

be addressed by the BCC MAP. The ranking exercise will utilize criteria (to be confirmed with the CWC) such as traffic impacts, transit travel time, environmental impacts, safety, parking, stakeholder preference, and/or potential multimodal user experience.

AECOM will compile the following into the Existing Conditions and Gaps Analysis Memo: current conditions and relationships between adopted plan, policies, and projects with the BCC MAP moving forward; an inventory of existing and potential transportation choices and supportive infrastructure, considering the existing regional transportation system; and the list of prioritized barriers to be addressed by the BCC MAP. This information/memo will collectively serve as the basis for developing mobility network solutions and recommendations.

Deliverables

Item	Timing / Frequency	Assumptions
Existing Mobility Conditions & Gaps Analysis Memo	<ul style="list-style-type: none"> • Draft: Early December • Final: Late December 	<ul style="list-style-type: none"> • 2 rounds of CWC review of the memo (Draft/Final)

Task 4: Mobility Hubs Assessment & Recommendations

This task includes the activities supporting the mobility hub assessment, location and amenity identification, and documentation of corresponding recommendations, standards, and implementation strategies.

Review Best Practices and Siting Criteria

AECOM will conduct a comprehensive literature review of best practices related to mobility hubs, supplemented by professional knowledge and experience implemented and in other states regarding other emerging and relevant practices. AECOM will draft siting criteria specific to BCC by cross-referencing the criteria developed for such agencies as the Colorado Department of Transportation and the Texas Department of Transportation with the corridor and its context. The results of this exercise will be verified with the CWC to assure buy-in on the criteria that will be used to screen potential hub sites.

BCC Mobility Hub Siting Criteria and Design Standards

AECOM will work with the CWC to develop and confirm a tailored working definition of a mobility hub. The mobility hubs selection process will include consideration and confirmation of the Little Cottonwood Canyon Environmental Impact Statement preferred alternative mobility hub recommendations. AECOM will work with the CWC to develop standard criteria to identify the optimal locations and composition of each hub. AECOM will leverage UDOT and UTA bus rapid transit (BRT) design standards to guide the conceptual design at each hub location. By utilizing these design standards, it will ensure that transit operators will be able to use the stops along the corridor in the short- or long-term. Without knowing the long-term operator for the corridor, it will be important to develop recommendations that provide flexibility in the operator and the type of fleet that can stop at the hub locations.

Mobility Hubs Analysis and Recommendations Memo(s)

Once the site locations have been identified, AECOM will conduct network analyses using ArcGIS tools to measure the connectivity of modes around the sites. In addition to informing the connectivity and potential ridership catchment areas the analysis will also identify gaps within the network. An amenities list will be developed that will be used to identify what types of stop amenities will be at each hub location (such as benches, WiFi, public information displays, emergency telephones). The level of amenities will be based on the projected ridership at the hub and the context of the hub (does it have parking or is it connected to hiking trails). A mobility hub typology guideline will be developed to provide the overall structure and methodology to guide the analysis. Each hub location will have its own area analysis memo to record the recommendations

that underpin the amenities and phasing of the hub sites. By developing specific memos for each hub location, they can be easily packaged for grant applications and phased funding implementation.

Mobility Hub Implementation Strategy

AECOM will develop an implementation strategy memo, to be incorporated into the Final BCC MAP, that provides: 1) guidance on varying levels of coordination necessary to convene multiple modes, including private and public partnerships; 2) preliminary scoping, cost estimates and narrative language for potential mobility hub locations that will facilitate future grant applications; 3) a brief section of potential financing and resources available to develop multi-modal mobility; and 4) an action agenda indicating supplementary steps the CWC should take to support the development and implementation of mobility hubs throughout BCC.

Deliverables

Item	Timing / Frequency	Assumptions
Best Practices & Siting Criteria Review Summary Memo	<ul style="list-style-type: none"> Draft: Mid November Final: Late November 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final)
BCC Mobility Hub Siting Criteria & Design Standards	<ul style="list-style-type: none"> Draft: Early December Final: Late December 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final)
Travel Catchment Infographic	<ul style="list-style-type: none"> January 	<ul style="list-style-type: none"> 2 rounds of CWC review (Draft/Final) To be provided in high-resolution format for potential posting to websites or with other graphics
Mobility Hubs Analysis & Recommendations Memo(s)	<ul style="list-style-type: none"> Draft: Late December Final: Late January 	<ul style="list-style-type: none"> 2 rounds of CWC review of each site's memo (Draft/Final) Memo will be developed for each proposed site
Conceptual Renderings	<ul style="list-style-type: none"> Draft: Late December Final: Late January 	<ul style="list-style-type: none"> 2 rounds of CWC review (Draft/Final) To be provided in high-resolution format for potential incorporation into other materials
Mobility Hub Implementation Strategy	<ul style="list-style-type: none"> Draft: Early February Final: Late February 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final)

Task 5: Draft & Final Mobility Action Plan

This task includes the activities and deliverables associated with development and presentation of the BCC MAP document.

MAP Outline

Beginning in November 2022, AECOM will work with the CWC Project Manager to develop the draft MAP outline. This outline will establish the overall structure of the BCC MAP, including an Executive Summary, incorporation of memos and components prepared over the course of the study, and the implementation strategy. The final version of the BCC MAP outline will be reviewed and approved by the CWC.

BCC MAP Implementation Strategy

AECOM will develop a BCC MAP implementation strategy that compiles key outcomes and deliverables. The strategy will describe the following:

- Funding and resource considerations, including potential funding sources for proposed projects/program and corresponding eligibility requirements
- Policy recommendations
- Anticipated barriers to implementation
- Level of NEPA analysis in consultation with potential lead NEPA agencies (i.e., USFS and UDOT)
- Incorporation of the Performance Monitoring Plan defined in Task 1 to track implementation, anticipated milestones, and metrics of success
- Recommendations for community outreach next steps to ensure equitable, accessible engagement

As part of the implementation plan, AECOM will prepare single-page, implementation summary sheets for any identified projects or programs. The sheets are anticipated to include summaries of the following:

- Brief project definition, summary
- Corresponding policy or program recommendations
- Project timing, priority, and readiness for next steps
- Opportunities for integration with joint or other long-term solutions
- Potential class of action for environmental (NEPA) review, likely lead agency, environmental next steps
- Potential funding sources, and corresponding eligibility requirements, competitiveness considerations, and potential agency to lead funding request process
- Unknowns or TBD

Draft and Final BCC MAP

This task describes the development and finalization of the primary deliverable from the BCC MAP process—the Draft and Final BCC MAP document. It is anticipated to be a comprehensive action plan detailing recommended projects and pilots, plans, policy reform, policy creation, and/or process improvements that will assist regional partners in further developing and refining a regional transportation system that meets current and future needs. The recommendations will be tied to a phasing plan, with a greater level of implementation guidance placed upon near- to mid-term recommendations.

AECOM will compile, refine, and build upon the key deliverables from the preceding tasks to package the Draft BCC MAP into a single cohesive document. AECOM will work with the CWC to incorporate an assortment of narrative, photographs, infographics, charts, tables, and maps to effectively communicate the findings and recommendations of the process. As part of this document, AECOM will develop a visually pleasing, accessible Executive Summary for general distribution to the community. AECOM will coordinate with the CWC to confirm translation needs and options for the Draft and Final BCC MAP. The CWC and AECOM Project Managers will present the Draft MAP to the CWC Transportation Committee, CWC Stakeholders Council, and CWC Board for feedback in spring 2023.

AECOM will integrate comments and make necessary changes requested by the CWC Project Manager and any additional relevant reviewers the Project Manager identifies, within reason, to prepare and obtain approval of the Final BCC MAP. The Final BCC MAP will be submitted in PDF format.

AECOM will present the Final BCC MAP to the CWC Transportation Committee and CWC Board for adoption in May 2023. The CWC and AECOM Project Managers will attend both meetings to best present the findings and takeaways of the final plan and field any questions.

Deliverables

Item	Timing / Frequency	Assumptions
MAP Outline	<ul style="list-style-type: none"> Draft (developed in coordination with CWC Project Manager): Mid November Final: Late November 	<ul style="list-style-type: none"> AECOM to develop in close coordination with CWC Project Manager 1 round of CWC review of final MAP outline
BCC MAP Implementation Strategy	<ul style="list-style-type: none"> Draft: Late February Final: Early April 	<ul style="list-style-type: none"> 2 rounds of CWC review of the memo (Draft/Final) Second CWC review will be incorporated into first review of Draft BCC MAP
MAP Report	<ul style="list-style-type: none"> Draft: Early April Final: Early May 	<ul style="list-style-type: none"> 2 rounds of CWC review of the Draft BCC MAP 2 rounds of CWC review of the Final BCC MAP BCC MAP will incorporate previously reviewed/completed memos and sections as developed over the course of the study CWC Project Manager, with support from AECOM, will present Final BCC MAP to CWC Transportation Committee and Board for approvals

Appendix A: BCC MAP Development Schedule

Tasks & Activities	2022			2023					
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
TASK 1. PROJECT INITIATION & ADMINISTRATION									
NTP	●								
Project Kickoff Meeting	●								
Monthly Invoicing & Reporting		●	●	●	●	●	●	●	
Detailed Work Plan	★								
Vision, Goals & Guiding Values Development	■		○						
Performance Measurement Framework	■		★						
TASK 2. OUTREACH & ENGAGEMENT									
Community Outreach Framework	■		★						
Community, Stakeholder Outreach	★								
Outreach Summary Memo								★	
TASK 3. MOBILITY NETWORK ANALYSIS									
Relevant Document & Plan Consistency Review	■								
Data Collection	■								
Existing Mobility Conditions & Gaps Analysis	■		★						
TASK 4. MOBILITY HUBS ASSESSMENT & RECOMMENDATIONS									
Review Best Practices & Siting Criteria	■		★						
BCC Mobility Hub Siting Criteria & Design Standards	■								
Mobility Hubs Analysis & Recommendations	■			★					
Mobility Hub Implementation Strategy	■				★				
TASK 5. DRAFT & FINAL MOBILITY ACTION PLAN									
Mobility Action Plan Outline		■	★						
BCCMAP Implementation Strategy			■	■	■				
Draft & Final BCCMAP			■	■	■	■	■	★	
Final MAP Adoptions, Presentations & Contract Close-out									●

★ Deliverable ★ Transportation Committee, Stakeholder Council, and/or Board Meeting