WORK PLAN

This work plan outlines planning tasks associated with developing a bicycle and pedestrian master plan (BPMP) for Lindon. This will include existing conditions summary, developing proposed recommendations, public outreach, and delivery of a final report. The Fehr & Peers Team will provide planning services to Lindon City for this study.

TASK 0.0 | PROJECT MANAGEMENT

The Fehr & Peers Team will conduct project management tasks to keep the Lindon BPMP on scope, schedule, and budget. The Fehr & Peers Team will prepare, schedule, and facilitate regular (6) Project Team meetings on issues relating to the overall direction and progress of the Lindon BPMP. The Fehr & Peers Team will also conduct bi-weekly phone calls with Lindon and MAG project managers. The Fehr & Peers Team will also prepare monthly invoices and progress reports for the Lindon BPMP Project Manager. Steering Committee meetings will be approximately 2 hours long.

Deliverables

- Invoice and progress reports on a monthly basis
- Agendas, handouts, and preparation materials for monthly Project Team meetings
- Minutes and assignments from meetings

Assumptions

- Project Team consists of a pre-selected group of representatives from the City and public interest groups, in addition to the Fehr & Peers Team members.
- 10-month schedule (to be completed by August 2014)
- 6 Steering Committee meetings

TASK 1.0 | PROJECT KICK-OFF

Task 1.1 | Initial Kick-Off Meeting

The Fehr & Peers Team will arrange, prepare for, host and document a project kickoff meeting. The purpose of this meeting will be:

- Introduce members of the project team
- Clarify roles and expectations for team members, decision makers, and the public
- Discuss and prioritize goals and objectives
- Verify the approval process
- Verify existing information, including the Lindon City General Plan, Lindon City Alternative Transportation Master Plan Map, Utah Collaborative Active Transportation Study (UCATS), regional transportation plans, GIS data, traffic data, and bicycle/pedestrian plans in neighboring communities such as American Fork, Orem, and Pleasant Grove.
- Discuss existing and potential bicycle and pedestrian facilities.
- Identify concerned citizens and public agencies
- Ideas for Steering Committee members to establish their own active transportation goals throughout the course of the study
- Identify dates for Salt Lake City Bike Tour

Task 1.2 | Salt Lake City Bike Tour

The Fehr & Peers Team will lead up to ten (10) people on a bike tour of Salt Lake City to observe infrastructure types. The Fehr & Peers Team will arrange transportation to and from Salt Lake City. Potential dates will be discussed with the Steering Committee at the kick-off meeting.



Deliverables

- Meeting materials and minutes
- Project team contact sheet and organizational chart
- Communication organizational chart
- Map, tour schedule, transportation for Salt Lake City tour

TASK 2.0 | ESTABLISH SPECIFIC GOALS, OBJECTIVES, AND POLICIES (GOP)

Fehr & Peers will assist the Steering Committee in identifying a purpose, goals, objectives, and policies. The GOP will be based on existing GOPs from up to three surrounding communities, from the Lindon General Plan Streets & Transportation and Parks & Trails chapters, and up to three national cities. The final GOP will be presented at the first Open House.

Deliverables:

- Sample goals, objectives, and policies
- Recommended goals, objective, and policies

TASK 3.0 | EXISTING CONDITIONS EVALUATION

The Fehr & Peers Team will prepare an evaluation of existing bicycle and pedestrian conditions and issues. The Fehr & Peers Team will review related plans for UCATS, Pleasant Grove, American Fork, and Orem. The Fehr & Peers Team will document current and proposed future bicycle and pedestrian routes and bicycle and pedestrian trip generators.

Task 3.1 | Existing Data Collection

In this task, The Fehr & Peers Team will review current planning documents and maps including, but not limited to:

- Lindon City General Plan
- MAG Regional Transportation Plan
- UCATS
- Bicycle and Pedestrian plans for Pleasant Grove, American Fork, and Orem
- GIS data
- Land use plans
- Population data
- Traffic data
- Census data
- Accident and Safety data, if available
- Previously conducted surveys

The Fehr & Peers Team will work with MAG and Lindon City to collect information about operations and maintenance expenditures for two (2) bicycle and pedestrian facilities. The Fehr & Peers Team will also identify opportunities to integrate bike facility planning with transit.

Task 3.2 | Inventory Existing Pedestrian Facilities

The Fehr & Peers Team will create an inventory of pedestrian facilities based on available GIS data, and update the inventory using aerial imagery. This task assumes one field visit to verify locations and types of sidewalks and crosswalks.

Task 3.3 | Review, Map, and Analyze Barriers and Safety Data

The Fehr & Peers Team will utilize available collision data, barrier mapping from UCATS, and public input gathered at the public open about barriers and safety to prepare a memo of existing barriers and safety issues.



Task 3.5 | Benefits Research

The Fehr & Peers Team will collect and summarize economic and health benefits of bicycling and walking.

Task 3.4 | Existing Conditions Report

The Fehr & Peers Team will combine the existing conditions data gathered in Tasks 3.1-3.3 into an existing conditions report. The Fehr & Peers Team will submit this report to the Steering Committee for review and comment.

Deliverables

- Existing conditions report and maps
- Inventory of existing pedestrian facilities in GIS.

Assumptions

• This task assumes that collision data relating to cyclists and pedestrians will be available through Lindon City for local roads and from UDOT for state-owned roads.

TASK 4.0 | NEEDS AND ATTITUDE SURVEY

The Fehr & Peers Team will create a Needs and Attitude survey and circulate for review and comment by the Steering Committee. The Fehr & Peers Team will make revisions to the draft and produce a final version for inclusion (via weblink) on the project website and available at the first public open house. The online survey will include pictures and graphics to illustrate different types of facilities and situations in order to help respondents understand the topics more fully. The Fehr & Peers Team will download results of the survey after it closes and produce a summary report of the findings.

Deliverables:

- Word-based draft document of survey questions
- Final online survey hosted by Survey Monkey, linked to the project website
- Summary report describing the results of the survey

TASK 5.0 | PUBLIC PARTICIPATION PROGRAM

The Fehr & Peers Team will hold a series of workshops/meetings to gather public opinion. We will work closely with the Steering Committee to identify effective dates and locations for outreach. We will review public outreach strategies and materials with the Steering Committee prior to any events.

The Fehr & Peers Team recommends the first open house immediately after the existing conditions inventory. A second open house would be held after recommendations are created. All open houses will be noticed using the project website, the City website, local newspapers, radio, television, and through flyers at local bicycle shops, community centers, and grocery stores.

The Fehr & Peers Team will invite all City Council members to public outreach events and will send public open house materials to all City Council members.

Task 5.1 | Project Website

The Fehr & Peers Team will create content for a project-specific page on the City website to provide updates and notices about the BPMP. This page would provide general information about the plan, purpose and goals, and link to outreach materials, including best practices and rules of the road. The Fehr & Peers Team will post the draft master plan to the page for public feedback. The Fehr & Peers Team will provide periodic content to City staff for use on the Lindon Facebook page as well.



Task 5.2 | Existing Conditions Open House

The Fehr & Peers Team will conduct an open house to introduce the project to the community. The Fehr & Peers Team will review open house strategies and format with the Steering Committee prior to the open house. At the existing conditions open house, The Fehr & Peers Team will collect feedback regarding existing facilities and issues. The Fehr & Peers Team will create a board to educate the public on economic and safety impacts of bicycle and pedestrian infrastructure.

Task 5.3 | Public Mobile Outreach

The Fehr & Peers Team will create information for an informal public mobile outreach for one (1) special event. The Fehr & Peers Team will work with the Steering Committee to determine at which event outreach should be conducted. Public mobile outreach should come between the two open houses. The Fehr & Peers Team will create project-related information for display at bicycle shops. It is assumed the City will distribute flyers to local businesses.

Task 5.2 | Recommendations Open House

The Fehr & Peers Team will conduct an open house to present recommendations of the plan. The Fehr & Peers Team will review open house strategies and format with the Steering Committee prior to the open house. The Fehr & Peers Team will present the proposed system of facilities for public feedback. The Fehr & Peers Team will show renderings of up to three (3) proposed projects.

Deliverables

- Content for website and Facebook posts, including graphics, surveys, discussion prompts, and notices
- Content for Open Houses, including boards, graphics, maps, and summary
- Content for mobile outreach, including boards, graphics, maps, and summary
- Public involvement summary appendix, with records of participation and materials

Assumptions

• City will distribute flyers to local businesses

TASK 6.0 | PROPOSED BICYCLE/PEDESTRIAN SYSTEMS AND SUPPORT FACILITIES DEVELOPMENT

The Fehr & Peers Team will use the GOP and existing conditions, discussions with the Steering Committee, and input gathered through public open houses and surveys to develop a system of facilities and support amenities. Emphasis will be placed on connections to existing bicycle and pedestrian facilities, existing and future transit facilities, and connecting to neighboring jurisdictions.

Task 6.1 | Design Standards

Fehr & will develop and recommend up to six (6) cross-section renderings for design guidance. The Fehr & Peers Team will provide drafts of the cross-sections and distribute them to the Steering Committee for their review. After receiving feedback from the committee, The Fehr & Peers Team will finalize the cross-section graphics.

Task 6.1a | Decision Matrix

The Fehr & Peers Team will create a flow chart and corresponding tables to walk the user through appropriate crosswalk locations and types. For bicyclists, we will create a chart of bicycle facilities based on traffic levels, travel speeds, and level of protection.



Task 6.2 | Proposed System

Task 6.2a | Develop the Recommended Bicycle and Pedestrian Network

Based on input from public outreach and the Steering Committee, the GOP, and existing conditions evaluation, The Fehr & Peers Team will recommend a network of bicycle and pedestrian facilities that incorporate the existing bicycle and pedestrian facilities. The Fehr & Peers Team will base barriers to active transportation on previous UCATS work. Proposed pedestrian facilities may include sidewalks or other projects that improve safety or accessibility (crosswalks, curb ramps, etc.). Proposed bicycle facilities may be located on existing roadways, on proposed roadways, trails on not-yet-existing corridors, or on other rights-of-way such as railroads, waterways, or utility corridors.

Task 6.3b | Recommendations for Amenities

The Fehr & Peers Team will develop recommendations for locations of bicycle and pedestrian amenities. Support facilities could include bicycle parking, pocket parks, benches, and/or trash can locations. The Fehr & Peers Team will create a preference survey for the Steering Committee to identify the look and feel of support facilities. The Fehr & Peers Team will utilize all feedback collected to date to develop a memo outlining expected active transportation amenities that should be developed by Lindon City. Photo and graphic examples will be included to depict the amenities. The Fehr & Peers Team will develop recommendations for the location of new active transportation amenities. These amenities will primarily be recommended for the primary transportation facilities that are included in the overall project plan. The Fehr & Peers Team will provide these recommendations in a graphic presentation format and/or as GIS data.

The Fehr & Peers Team will create bicycle parking recommendations that the City can adopt. The Fehr & Peers Team will provide short- and long-term bicycle parking recommendations. The Fehr & Peers Team for Steering Committee review and finalize them based on comments received.

Deliverables

- Draft and final design standard cross sections
- Pedestrian- and bicycle-based decision matrices
- GIS-based mapping, graphics, project descriptions for proposed projects
- Support facilities map, survey and results
- Draft and final recommendations for both short-term and long-term bicycle parking

TASK 7.0 | IMPLEMENTATION PLAN

Task 7.1 | Project Prioritization

The recommended improvements will be prioritized by the project team and Steering Committee. The Fehr & Peers Team will then develop a ranking and phasing for recommended improvements. The Fehr & Peers Team will work with the Steering Committee to determine up to ten (10) criteria for ranking. Sample criteria include:

- Closure of critical gaps in existing system
- Improvement that serves an immediate safety need
- Segment that will attract a high use
- Current availability and/or suitability of right of way
- Integration into the existing and planned local and regional bikeway system
- Interface with other modes
- Local political and community support
- Programmed transportation improvements, such as planned overlays or roadway reconstruction, if available through Lindon or MAG



Task 7.2 | Monitoring and Performance Evaluation

The Fehr & Peers Team will create a plan for monitoring and evaluating the performance of the system and identify benchmarks for comparison. This plan will focus on showing progress and being able to justify spending based on measured results. Performance measures could include:

- Plan implementation
- Bicycle and pedestrian user counts
- Reduction in bicycle- and pedestrian-involved crashes
- Changes in the perception of the safety in walk and bicycling

Deliverables

- Prioritized list of proposed projects
- Monitoring and performance evaluation plan

TASK 8.0 | PROJECT COST ESTIMATES AND FUNDING SOURCES

Task 8.1 | Determine Plan Phasing and Conceptual Costs of Proposed Projects

The Fehr & Peers Team will organize the proposed system into phases for implementation (short, medium, and long-range). The Fehr & Peers Team will prepare planning-level cost estimates for Phase 1 projects. Estimates will include scope of proposed projects, potential right-of-way conflicts, and preliminary sketches. Maintenance costs will also be identified.

For up to three high-priority projects, The Fehr & Peers Team will prepare grant-ready fact sheets. The grant-ready fact sheets can be used with applications for grant funding, such as the Transportation Alternatives program. The Fehr & Peers Team will work with the Steering Committee to identify the three high-priority projects.

Task 8.2 | Identification of Funding Sources:

The Fehr & Peers Team will identify local, state, federal, and other funding sources for the planning and implementation of bicycle and pedestrian facilities.

Deliverables

- Cost estimates, including maintenance costs, for major projects and the entire proposed system
- Fact sheets
- Matrix of potential funding sources

TASK 9.0 | DRAFT MASTER PLAN

The Fehr & Peers Team will prepare an administrative draft Lindon City Bicycle and Pedestrian Facilities Master Plan, incorporating information from previous tasks. The Fehr & Peers Team will document the results of all public outreach. The draft master plan will be presented to the Steering Committee and made available for public comment via the project website. The Fehr & Peers Team will conduct up to two (2) rounds of comment.

Deliverable

• Draft Lindon City Bicycle and Pedestrian Facilities Master Plan

TASK 10.0 | FINAL MASTER PLAN

The Fehr & Peers Team will incorporate the comments received on the draft report from the Steering Committee into the final report. We will present the plan at one (1) public hearing with the Planning Commission and one (1) public hearing with the City Council.

Deliverables

Presentations to Planning Commission and City Council



• Final Lindon City Bicycle and Pedestrian Facilities Master Plan in digital PDF and 25 bound color, hard copies, inclusive of all drawings, maps, and diagrams

TASK 12.0 | BOULDER BIKE/PED TOUR

The Fehr & Peers Team will lead up to ten (10) people on a one-day field trip to Boulder, Colorado. Lindon and MAG staff should lead the decision of who shall attend the field-trip. The Fehr & Peers Team will brief the group on the trip at a Steering Committee meeting prior to the trip. The Fehr & Peers Team will work with the Steering Committee to find an appropriate date for the tour. The Fehr & Peers Team will arrange flights, shuttle vans, meals, and bicycle rentals.

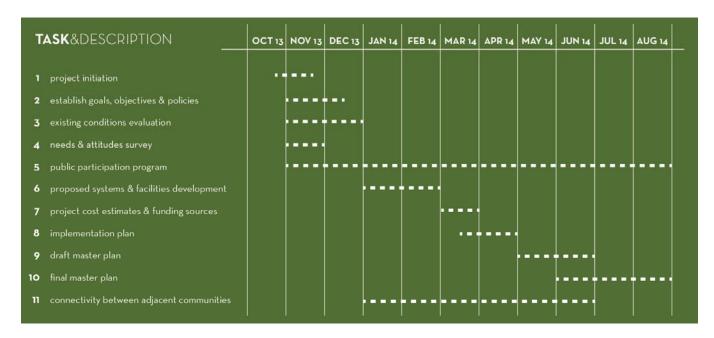
Deliverables

- Maps, tour schedules, lists of items to bring, and other such items to hand out to trip participants
- Arrangement of all travel
- Leading of the tour group on foot and by bike while in Boulder
- Photos of the group's activities

Assumptions

• The Boulder tour will be completed in one day and no accommodation costs have been assumed.

SCHEDULE





Cost Proposal Lindon BPMP

Fehr & Peers

		Jon	Maria	Julie	Kyle	Mardi	Travis	Tom	Josh	CRSA			
		Regional PIC	Project	Planner	Engineer	Admin	Alta PM	Alta	Alta		Total Hours	TOT	AL COST
Task	Description	Regional FIC	Manager	riumei	Eriguieei	Aumin	Allu FI4	Planner	Planner		by Task	B'	Y TASK
Task 0: Project Management													
	Project Management & Meetings		45	35		10	20	8			118	\$	14,765
	oject Initiation												
	Initial Kick-off Meeting		4	6			4	2			16		1,950
	Salt Lake City Bike Tour		12	12							24	\$	3,060
	tablish Specific Goals, Objectives, and Policies												
	Establish Specific GOP	1	2	4			2				9	\$	1,220
Task 3: Existing Conditions Evaluation													
	Existing Data Collection		1	8								\$	1,060
	Inventory Existing Pedestrian Facilities		1		12						13		1,640
	Review, Map, and Analyze Barriers and Safety		1	8	2		3				14		1,715
	Benefits Research		1	6							7	-	830
3.5	Existing Conditions Report	1	2	4							7	\$	950
Task 4: Needs and Attitudes Analysis													
	Needs and Attitudes Survey	1	2				4	24			31	\$	2,950
Task 5: Pu	ublic Participation Program												
5.1	Project Website		2	24							26		3,040
5.2	Existing Conditions Open House		8	12							20	\$	2,500
5.3	Recommendations Open House		8	12							20		2,500
5.4	Public Mobile Outreach			8							8	\$	920
Task 6: Pr	oposed Bike/Ped Systems and Support Facilities D	Development											
	Design Standards		2	4			4	18			28	\$	2,720
6.2	Proposed System	1	16	30			8	32			87	\$	9,540
Task 7: Pr	oject Cost Estimates and Funding Sources												
7.1	Determine Estimated Costs of Proposed Projects	1	4		12						17	\$	2,270
7.2	Identification of Funding Sources		1	4							5	\$	600
Task 8: Implementation Plan													
	Project Prioritization		4	8	2						14		1,730
8.2	Monitoring and Performance Evaluation		4	8							12	\$	1,480
Task 9: D	raft Master Plan												
	Draft Master Plan	1	6	14							21	\$	2,660
Task 10: F	inal Master Plan									•			
	Final Master Plan		10	12							22	\$	2,780
Task 12: E	Boulder Field Trip												
12.1	Boulder Field Trip						16		16		32	\$	3,760
	•												
Total Hours		6	136	219	28	10	61	84	16	0	554		
Rate		\$210	\$140	\$115	\$125	\$110		\$80	\$100	\$0			
Labor Costs		\$1,260	\$19,040	\$25,185	\$3,500	\$1,100	\$8,235	\$6,720	\$1,600	\$9,280			\$75,920
Direct Costs (travel, copies, etc.)													\$5,969.10
Total Estimate									\$81,889				