Redmond Transportation Master Plan Scope

Task 1: Project Management and Coordination

We will initiate the project with an email with City staff that will establish communication protocols, clarify Redmond's expectations on deliverables, and highlight schedule milestones or other key points.

We will send monthly invoices and progress reports to document scope progress, budget expenditure, and any issues. In the case of unanticipated issues or scope changes, Marissa will coordinate with City staff to address any concerns.

Task 1 Assumptions:

1. Project team progress calls will be via Teams call
2. City staff will lead the project kick off meeting
3. Consultant will schedule and lead the progress calls and provide agenda topics and action items

Task 1 Deliverables:

1. Monthly invoices and progress reports
2. Attendance at regular, biweekly virtual meetings with agenda topics and action items
3. Schedule for when tasks will be completed and meetings will be held

Task 2: Street System Plan

We will develop a Street System Plan that will define how Redmond will build out a multimodal street network by defining/refining policies and strategies. This plan will present the current state of the transportation network and define how to address streets where many modes converge and where right of way may be limited.

2.1 Network Analysis

This task will provide a baseline understanding of how Redmond's street network functions today and in the future. To achieve this, we will analyze the performance of the following modes:

- Pedestrian (based on the presence of a sidewalk, and pathways and connections to notable trip generators like schools, bus stops, light rail stations, grocery stores, etc.) It is assumed that City staff will conduct this analysis, and hand off the finalized pedestrian network in GIS format.
- Bicycle (based on our team's related work on the city's updated bicycle network; this will include identifying a design that meets LTS expectations while also being mindful of geometric constraints)
- Vehicle (based on an operations assessment of key arterial streets using data from the EIS model runs)
- Freight (reconfirming the primary and truck access streets with city staff)
- Transit (focusing on frequent transit routes)

The City is expected to prepare an existing conditions analysis, but the consultant team will evaluate 2050 conditions with the aim of identifying where there are planned improvements or operational issues that might make it challenging to accommodate all modes on a given street.

As part of the analysis, we will work with city staff to identify potential changes to the current auto corridors and explore updated metrics to evaluate auto performance. At this point, we see potential in updating the current method to one based on the Highway Capacity Manual, leveraging output from the BKRCast model, but final decisions will be made in conjunction with city staff.

2.2 Modal Integration Strategy Development

Using the updated bike network as a starting place, we will review the results of the vehicle corridor speed evaluation, presence of freight and transit traffic, and consider available right of way to identify an integrated multimodal network. To support this network development, we will craft policies and strategies that advance City goals and help to resolve modal network conflicts. Strategies may apply network-wide or be corridor-specific and address modal priority, decision processes, or other approaches that City staff can easily reference when programming capital projects and retrofitting existing streets to achieve City goals and Comprehensive Plan policies.

Task 2 Assumptions:

- City will provide the following data:
    - Sidewalk GIS data
    - Freight corridors in GIS
    - Any available data on street right of way dimensions
    - Speed output data from latest version of the BKRCast model

Task 2 Deliverables:

- Bike Network Dataset supported by the Modal System Integration Strategy - identify the corridors where the installation of the bike facilities require a decision about the reduction of a vehicle LOS and/or significant construction cost.
- Updated set of primary vehicle corridors with associated vehicle LOS results
- Updated set of freight corridors
- Transit corridors
- Integrated Complete Streets network map
- Modal integration policies and strategies

For all Task 2 deliverables, it is assumed there will be three submittals: draft 1 (staff review), draft 2 (Planning Commission/Council review), and final.

Task 3: Transit Strategic Plan

Working with the City staff, we will craft a transit strategic plan for Redmond. Key tasks will include:

- Virtual meeting to discuss the City's thoughts on the East Link Connections restructure
- Transit propensity mapping using census data and Redmond 2050 land use data to identify if there are portions of the city that have substantial gaps in transit service levels given potential transit demand
- Based on the output of Task 2, a revised set of potential transit corridors
- Develop a list of potential transit speed and reliability improvements for future transit corridors
- Identify areas for Metro Flex service

Task 3 Assumptions:

- One virtual workshop with City staff to determine goals for the Transit Strategic Plan.

- City will provide the existing Transit Chapter of the TMP in Word document format for updates.

Task 3 Deliverables:

- Future transit network map
- Technical memo that outlines transit strategies and frames the Transit Chapter of the TMP.

Task 4: Pedestrian Chapter

To support the TMPs Pedestrian Chapter, we will conduct the analyses in the subtasks below.

4.1 Crossing Analysis

We will start this task by gathering data from Redmond on the location of existing "low stress" crosswalks of arterials (we will not evaluate local or connector streets). We will refine the definition of low stress crosswalks, but they are expected to include all signalized crossings, roundabout crossings, and RRFB crossings.

With the data gathered, we will work with City staff to determine a reasonable crossing frequency based on land use and transit presence. Once the frequency is established, we will identify corridor segments that do not meet the crossing frequency. The output will be in a map and table to be reviewed by City staff to identify if any of the missing crossings should be exempted because of technical, land use, environmental, or other constraints.

4.2 Sidewalk Alternatives

Our team will lead a meeting with Redmond staff (transportation, street maintenance, and stormwater) to kick off the task to show solutions for alternative sidewalk design to curb and gutter. This would help the team to get information on the City's ideas and concerns around alternative sidewalk designs in a range of contexts. Toole Design will review current Redmond Policies, Code, and Design Guidance, including Rustic Streets in the Willows/Rose Hill Subarea Zoning Code and neighborhood covenant language, to identify policy support and/or policy code revisions needed for alternative sidewalk implementation and maintenance. Our team will support City staff in developing and defining a decision process for where sidewalk alternatives would be appropriate and applicable. Factors to review may include but not be limited to adjacent land uses, environmentally critical areas, speed, volume, drainage patters/stormwater management, parking/access, or pedestrian demand.

Based on existing conditions of street segments where there are no sidewalks, the team will develop and "test" the decision process for up to 8 sidewalk alternatives scenarios will be evaluated considering PROWAG, level of traffic stress, MUTCD, Redmond and WSDOT standard details and specifications, stormwater code compliance, and regional best practices. A toolkit of solutions that can be applied in may include but not be limited to – shared street, sidewalk on one side, at grade but physically separated/buffered from vehicles, space allocation for pedestrians with pavement markings only, or asphalt path.

Task 4: Assumptions:

The City will provide the following data:

- Street centerline
- Functional classification
- Traffic volume
- Traffic signals
- Lane count*
- Stop signs
- Posted vehicle speed
- Rapid flash beacons*
- Pedestrian crossing island*
- Curb ramps
- Points of interest categorized by destination type (e.g., transit, school, park, shopping)
- Processed and cleaned GIS data for fatal and serious injury crashes over the last 5 years

*The City will take the lead and work with the consultant to develop this data.

Task 4 Deliverables:

- Brief technical memo outlining analysis method for crossing analysis.
- Map of low-stress crossing gaps.
- Database of low-stress crossing gaps categorized by destination type (e.g., transit, school, park, shopping, etc.), and recommended feasible locations for new crossings at up to 20 locations.
- Technical memo describing the sidewalk alternatives including shared streets, summarizing policy recommendations, PROWAG requirements and considerations, and decision process, street typologies where alternative sidewalks may be applicable, photos of a relevant street, conceptual cross section in the format of a design guidance/engineering standard plan (not illustrative).

Task 5: GHG Analysis

The core outcomes of Task 5 will be to determine the baseline VMT conditions and evaluate different scenarios to identify which strategies and transportation projects will provide substantial progress towards reducing per-capita VMT. To identify the most effective recommendations to reduce VMT and GHG emissions, we propose to first conduct a travel market assessment using our team's established VMT+ data. This analysis will identify the key travel markets, such as residents and employees, for trips into and out of Redmond, which will help to identify which trip types would be most affected by VMT reduction strategies and projects.

Following this initial analysis, we will use Redmond's travel demand model to forecast future baseline VMT and mode shares based on the Redmond 2050 preferred land use scenario. This step will emphasize the role that the Redmond 2050 land use strategy has in reducing VMT per capita through increased housing and job density across the city. We will also use industry-standard elasticities and the output of our TDM+ tool to identify the range of GHG emissions reduction benefits that could result from different packages of projects and strategies (e.g., implementation of a connected low-stress bike network, 100% of households within 1/2 of HFT). Strategies that are outside the control of Redmond, but would benefit the city (e.g., regional tolling/congestion pricing, road usage charges, etc.) will also be highlighted, but not analyzed. Note that this task will not calculate future GHG emissions or total GHG emissions reductions, but rather identify the types of projects and strategies that could have the most benefit for Redmond assuming the 2050 land uses are in place.

Given that individual projects and strategies can be difficult to isolate VMT benefits from, we will work with Redmond staff to develop up to three scenarios for evaluation. Scenarios can be defined by implementation timeframe (near, mid- long-term) or associated cost (small, medium, or large-scale).

As an optional task, we could summarize the final recommended GHG reduction strategies in a storymap that could be hosted on the City's website.

Task 5 Assumptions:

- One virtual workshop with City staff to determine applicable VMT reduction strategies.
- Puget Sound Regional Emissions Analysis (PSREA) will be used to understand the impact of state and federal strategies, including EV adoption, on future transportation emissions.

Task 5 Deliverable(s):

- Technical memo summarizing the GHG reduction scenarios and recommended policies
- Optional storymap

Task 6: Facilitation and Communication

Our team will plan to virtually attend up to three City Council meetings. We will work with City staff to identify relevant topics, as well as identify key staff from the team to attend each meeting.

Task 6 Assumptions:

- Our team will work with City staff to identify key participants and meetings.
- City staff will coordinate attendance at City Council meetings.

Task 6 Deliverables:

- Prepare materials and virtually attend up to three City Council meetings

Redmond TMP - Budget

		Fehr & Peers						Toole Design					
Task #	Tasks	Principal in Charge	Project Manager	Senior Planner/ Engineer	Junior Planner/ Engineer	Graphics	Admin	Senior Planner/ Engineer	Junior Planner/ Engineer	Labor Costs	Direct Costs	Task Subtotal	
		$ 380	$ 220	$ 300	$ 145	$ 205	$ 145	$ 274	$ 145				
1	Project Management											**$ 9,940**	
1.1	Project Management	10	20				12			$ 9,940			
2	Street System Plan											**$ 55,334**	
2.1	Network Analysis	8	20		60	8	4	8	60	$ 29,245			includes attendance at up to 1 bi-weekly mtgs for Toole Design
2.2	Modal Integration Strategy Development	6	16		28	8	3	12	75	$ 26,089			includes attendance at up to 4 bi-weekly mtgs for Toole Design
3	Transit Strategic Plan											**$ 17,075**	
3.1	Transit Strategic Plan	4	12	16	36	12	3			$ 17,075			
4	Pedestrian Chapter Support											**$ 29,968**	
4.1	Crossing Analysis	6	16		36	4	3	4	4	$ 13,951			includes attendance at up to 1 bi-weekly mtgs for Toole Design
4.2	Sidewalk Alternatives	2	4		6	2		24	45	$ 16,017	$ 200		includes attendance at up to 4 bi-weekly mtgs for Toole Design
5	GHG Analysis											**$ 25,060**	
5.1	GHG Analysis*	8	24	12	64	16	4			$ 25,060			
6	Facilitation and Communication											**$ 20,290**	
6.1	Facilitation and Communication	16	28		20	12	3	4	8	$ 20,290			
	Labor Total	**60**	**140**	**28**	**250**	**62**	**32**	**52**	**192**	**$ 157,667**			
	Technology and Security Fee**										**$ 1,780**		
	Total (Labor + Expenses)									**$ 159,447**			

Notes:

This fee reflects information known to date, actual costs may change throughout scoping process as needs are identified.

This fee proposal is valid for a period of 90 days from the proposal submittal date.

Actual billing rate at the time of service may vary depending on the final staffing plan at the time the project starts; the overall fee will not be exceeded.

Mileage is billed at the IRS rate plus 10% handling fee.

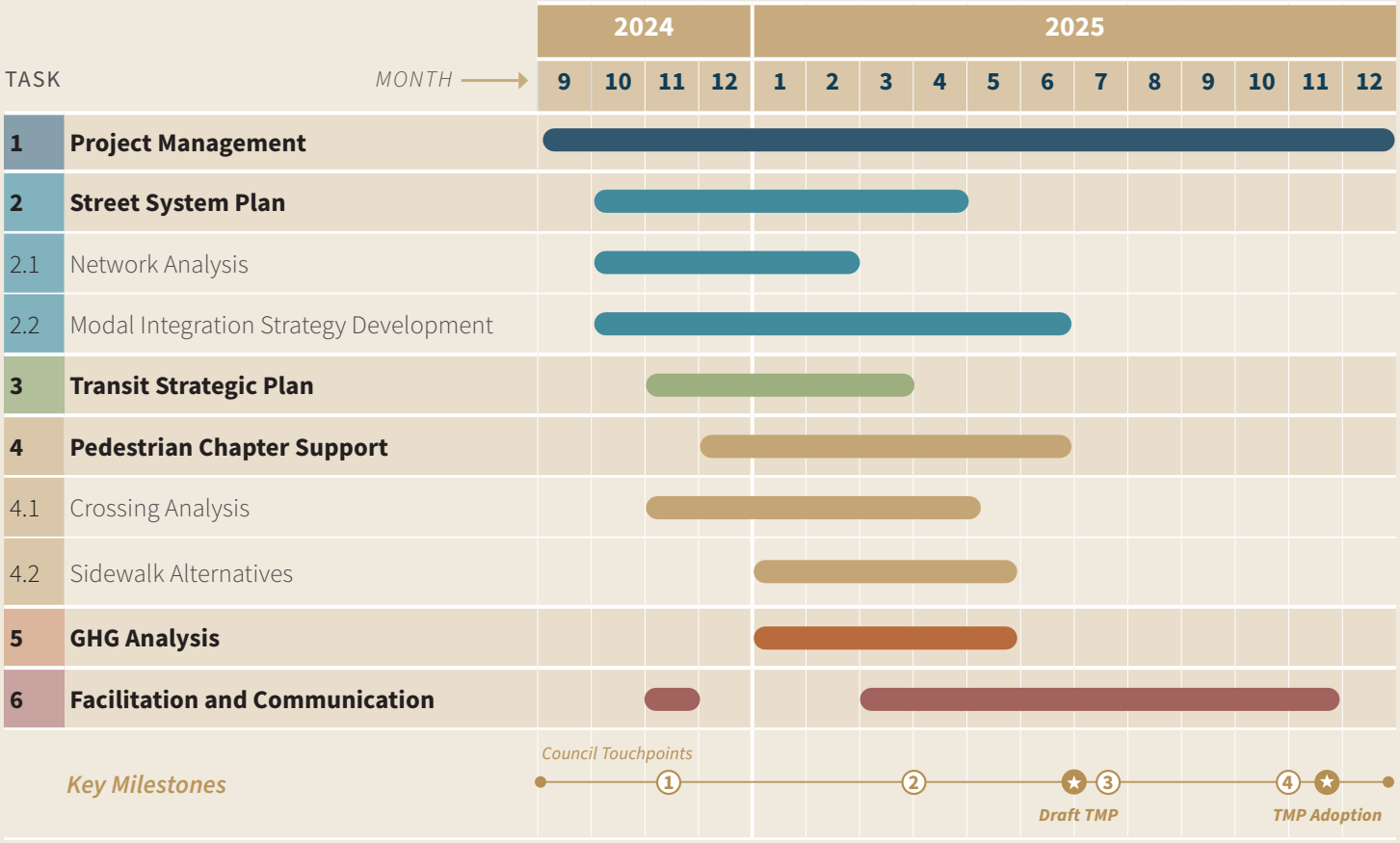
All other direct expenses are billed with 10% handling fee.

**If budget allows, an optional storymap may be included for an additional $10,000 with written approval from City staff.*

***Technology and Security Fee includes expenses related to software, computers, servers, and services to protect data; billed as a percentage of labor.*

Redmond TMP

Project Schedule



List of Deliverables and Tentative Deadlines

Fehr & Peers has a demonstrated track record of being highly responsive to our clients' schedule constraints. Before our projects begin, we analyze and forecast the time and resources needed to complete project deliverables by their scheduled due date. We check in weekly to ensure our projects have the proper staff to meet deadlines and adjust staffing as needed.

In addition to our local professionals, Fehr & Peers has a deep bench of qualified staff (200+ planners and engineers firm-wide) who can assist as needed. Above is our proposed monthly schedule for completing the project within the City's timeline.