

MEMORANDUM #1

Date:	May 15, 2023	Project #:	27003.004
To:	Project Management Team (PMT)		
From:	Jacki Smith, PE & Matt Kittelson, PE		
Project:	South Madras Refinement Plan		
Subject:	Technical Memorandum #1 – Goals and Objectives (Task 3.1)		

This memorandum provides the project purpose and background for the South Madras Refinement Plan along with the goals, objectives, and evaluation criteria. The goals and objectives will help ensure key issues are addressed throughout the planning process while the evaluation criteria will be used to select and prioritize preferred transportation system improvements. The goals, objectives, and evaluation criteria may also inform recommendations for policy language that will serve as guidance for future development of the transportation system.

01 | PROJECT PURPOSE AND BACKGROUND

The purpose of the South Madras Concept Area Refinement Plan is to address existing and future safety and operational challenges along US 97/US 26 in southern Madras. This plan will provide a short-term and long-term vision for the corridor that will support economic development within Madras and provide for the continuing function of US 97, US 26, and OR 361 as important local and regional connections within Central Oregon and state.

Madras is a critical economic center for Jefferson County. Located between Warm Springs Reservation and Redmond, Madras is served by two critical highway corridors east of the Cascades – US97 and US26. These highways are important routes for regional, statewide, and west coast travel, including freight activities. US97 and US26 converge within Madras and travel through the heart of downtown Madras as a couplet with two travel lanes in both directions. South of L Street the couplet connects to a three-lane section with one lane both southbound and northbound with a center turn lane.

High regional and recreational travel during the summertime will often result in substantial queuing south of the one-way couplet within city limits which creates challenges for turning movements and east-west access across the highway for vehicles. Crossing movements for pedestrians and bicycles are particularly difficult in peak times in south Madras.

Additionally, the City has identified large vacant land in South Madras as prime opportunity for economic development. Increased development in south Madras will result in higher travel demand for both the highways and turning movements to/from the highways which will further exacerbate already challenging existing conditions.

A Refinement Plan for the segment of US 97 between the southern City limits and the southern couplet, also known as the "Southern Y", was recommended in the 2018 update to the City of Madras Transportation System Plan ("TSP"). This project is consistent with the TSP recommendations.

STUDY AREA

The study area includes the land located within the southern portion of Madras bordered by J Street to the north, Culver Highway to the west, Colfax Lane to the south, and Adams Drive to the east. Figure 1 illustrates the Study Area.

02 | PROBLEM STATEMENT

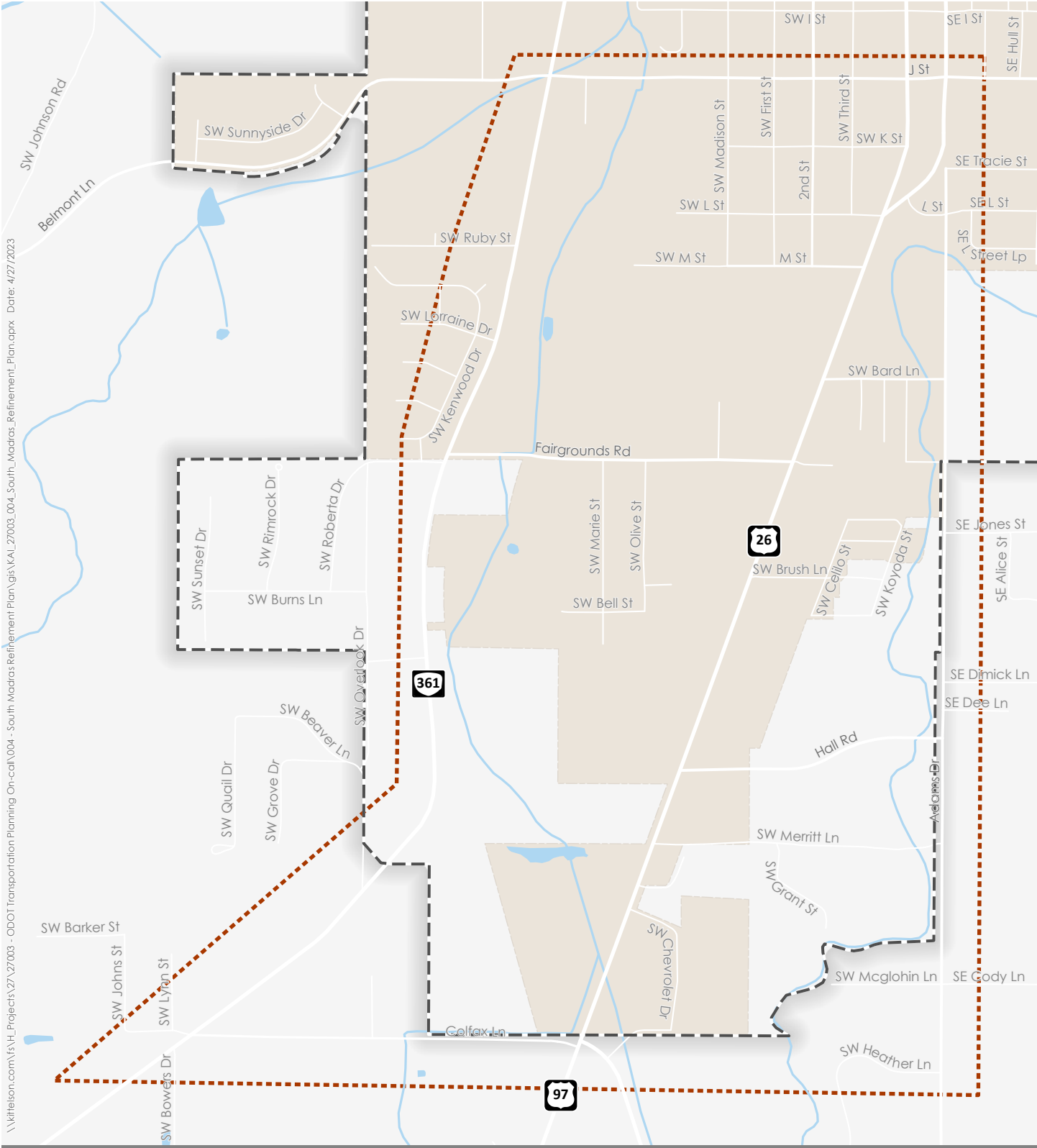
US 97 through the South Madras Concept Area has high travel demand along the highway and lacks critical connections east and west of US97 for all users necessary to support the City's desire to develop large portions of vacant lands in the area necessary for economic development.

03 | CORRIDOR FUNCTION

US97 is a critical roadway facility for the City of Madras in meeting the needs of both local and regional users. The Oregon Highway Plan (OHP), City of Madras Transportation System Plan (TSP) and Jefferson County TSP all reference the contextual preferences, policies, and needs of the US97 corridor in the study area. Key elements in the identified plans are as follows:

- ▶ US97 is an important statewide freight route for the state. Maintaining efficient, continuous flow on the highway with minimal highway interruptions is critical to the flow of goods and services along the corridor.
- ▶ The US97 corridor attracts a high recreational demand – increasing highway ADT by approximately 50% during peak summer months. The corridor should provide adequate capacity for local, regional, and recreational travel needs. This may include investing in parallel routes that reduce the reliance on US97.
- ▶ The US97 corridor is a key network for multimodal use including transit ridership. Cascade East Transit (CET) provides fixed route services throughout Central Oregon including two routes to Madras (Route 22: Redmond to Madras and Route 20: Madras to Warm Springs). Providing transit access for users decreases overall vehicle miles traveled and creates an equitable alternative for people who are unable or choose not to drive a personal vehicle.

- ▶ Turning movements to and from the highway near an urban area can result in operational and safety issues. Addressing and improving key local connections to the highway increases the functionality of the community, creates parallel routes, provides alternative access options for local traffic and businesses, and promotes improved multimodal crossings.






-  Study Boundary
-  City Limits
-  Urban Growth Boundary



Figure 1

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04 | GOALS AND OBJECTIVES

This section summarizes the proposed goals and objectives for the South Madras Refinement Plan. Those presented are based on the goals and policies in the City of Madras Comprehensive Plan and TSP, which were developed as part of the last TSP update to guide the City's 20-year vision of transportation system needs.

The objectives shown in *italics* are applicable to the overall transportation system but will not impact the development of the South Madras Refinement Plan. The objectives shown underlined are new relative to the Comprehensive Plan and TSP.

GOAL #1 MOBILITY AND CONNECTIVITY

Promote a transportation system that provides efficient connections for all users within Madras and meets existing and future mobility needs.

Objectives:

1. Identify the 20-year roadway system needs to accommodate developing or undeveloped areas without straining limited financial resources. Emphasis should be placed on maintenance, operations, management, and service improvements rather than large capital improvements.
2. *Promote a city road system that facilitates transportation for all users between various areas of the city and between principal highways.*
3. Promote a local road system that serves as access to commercial and residential areas.
4. Preserve the function, operation, capacity, level of service, and safety of state highways and local roads in a manner consistent with adopted State of Oregon and local plans.
5. *Maintain roadway cross-section standards that balance the needs of all users with the primary purpose of the roadway.*
6. *Coordinate with the Oregon Department of Transportation (ODOT) to identify and incorporate priority roadway improvements and maintenance needs.*
7. Improve traffic circulation within the city while considering the local character of each area.
8. *Update policies and standards that address street connectivity, spacing, and access management.*
9. Ensure that local connections are maintained or enhanced through redevelopment to minimize reliance on major street connections.

10. Improve roadway connectivity and parallel routes on the local transportation network to redistribute local traffic volumes and reduce traffic demand on state facilities.

GOAL #2 ECONOMIC DEVELOPMENT

Provide a transportation system that supports existing industry and encourages economic development and job creation in the City, especially within key development areas. Improve short- and long-term transportation infrastructure to support local and regional travel and livability.

Objectives:

1. Develop and promote a multimodal transportation network that supports existing industries and economic diversification in the future, especially in the downtown core.
2. *Identify the 20-year roadway system needs to accommodate developing or undeveloped areas without straining limited financial resources.*
3. *Promote railroad freight service via the BNSF Railway.*
4. Prioritize improving and maintaining the key freight routes of US 26, US 97 and OR 361 through Madras.
5. Support truck access to industrial sites, including turn and acceleration/deceleration lanes that meet installation criteria where appropriate.
6. Promote and plan for future industrial, commercial, and residential growth areas.

GOAL #3 SAFETY

Provide a transportation system that improves safety and multimodal accessibility throughout the city and especially within the downtown core.

Objectives:

1. Promote a transportation system that facilitates safe multimodal corridors in Madras.
2. *Ensure existing roadways are designed, constructed, and maintained to an appropriate standard for their expected use, vehicle speeds, and vehicle traffic.*
3. Reduce incidence and severity of all crashes.
4. *Provide a transportation system that allows for adequate emergency vehicle access to all land uses.*

GOAL #4 MULTIMODAL USERS

Provide a multimodal transportation system that permits the safe and efficient transport of people and goods through active modes.

Objectives:

1. *Support the development of regional public transit opportunities.*
2. *Consider bicycle and pedestrian facility needs during construction of new roads and during upgrades to existing roads.*
3. *Review facilities for compliance with the Americans with Disabilities Act (ADA).*
4. *Develop and promote an interconnected network of low stress bicycle and pedestrian facilities and high quality transit facilities within Madras.*
5. *Examine the need for specific enhanced pedestrian crossing locations.*

GOAL #5 ENVIRONMENTAL

Provide a transportation system that balances transportation services with the need to protect the environment.

Objectives:

1. *Develop a multimodal transportation system that avoids reliance upon one form of transportation and that minimizes energy consumption and air quality impacts.*
2. *Develop and upgrade transportation facilities in a manner consistent with the adopted OTP, the OHP, and the TPR, and ensure that valuable soil, water, scenic, historic, and cultural resources are not damaged or impaired.*
3. *Comply with all applicable State and federal environmental regulations.*

GOAL #6 PLANNING AND FUNDING

Maintain the safety, physical integrity, and function of the City's multimodal transportation network.

Objectives:

1. *Maintain long-term funding stability for transportation maintenance projects.*
2. *Evaluate new, innovative funding sources for transportation improvements.*
3. *Ensure that the existing transportation network is conserved and enhanced through maintenance and preservation.*

4. Continue and enhance relationships and improve coordination between the City, Jefferson County, ODOT, and the Federal Highway Administration (FHWA).
 - a. Cooperate with ODOT in the implementation of the STIP.
 - b. Encourage the improvement of state highways.
 - c. Encourage planning coordination between the City, the County, and the State by establishing cooperative transportation improvement programs, funding alternatives, and schedules.
 - d. Work with applicable jurisdictions to establish the right of way needed for new transportation facilities identified in the TSP.
 - e. Work with Cascades East Transit, ODOT, Jefferson County, and regional transit partners to enhance regional transit service.
 - f. Leverage federal and State transportation funding programs. Encourage citizen involvement in identifying and solving local transportation issues.

05 | EVALUATION CRITERIA

This section summarizes the proposed evaluation criteria for the South Madras Refinement Plan. Given the unique nature of this project, the proposed evaluation criteria reflect only the goals and objectives that will result in a meaningful difference in the evaluation.

PROPOSED EVALUATION CRITERIA

The proposed evaluation criteria are summarized below. A qualitative process using the evaluation criteria will be used to consider potential solutions and prioritize projects developed through the planning process. The rating method used to evaluate the solutions is described below.

Most Desirable: The concept addresses the criterion and/or makes substantial improvements in the criteria category. (+2)

Desirable: The concept addresses the criterion and/or makes improvements in the criteria category. (+1)

No Effect: The criterion does not apply to the concept or the concept has no influence on the criteria. (0)

Less Desirable: The concept does not support the intent of and/or negatively impacts the criteria category. (-1)

Least Desirable: The concept substantially negatively impacts the criteria category. (-2)

At this level of screening, the criteria will not be weighted; the ratings will be used to inform discussions about the benefits and tradeoffs of each solution. Table 1 presents the evaluation criteria that will be used to qualitatively evaluate the potential solutions developed through the planning process.

Table 1

Goal	Objective	Evaluation Criteria
<p>Goal #1: Promote a transportation system that provides efficient connections for all users within Madras and meets existing and future mobility needs.</p>	<ul style="list-style-type: none"> ▶ Identify the 20-year roadway system needs to accommodate developing or undeveloped areas without straining limited financial resources. Emphasis should be placed on maintenance, operations, management, and service improvements rather than large capital improvements. ▶ Promote a local road system that serves as access to commercial and residential areas. ▶ Preserve the function, operation, capacity, level of service, and safety of state highways and local roads in a manner consistent with adopted State of Oregon and local plans. ▶ Improve traffic circulation within the city while considering the local character of each area. ▶ Ensure that local connections are maintained or enhanced through redevelopment to minimize reliance on major street connections. ▶ Improve roadway connectivity and parallel routes on the local transportation network to redistribute local traffic volumes and reduce traffic demand on state facilities. 	<ul style="list-style-type: none"> ▶ Does the project alternative promote the use of the local road system? ▶ Does the project alternative improve traffic circulation within the study area? ▶ Does the project alternative meet mobility targets through 2045? ▶ Does the project alternative represent an investment that works toward the long-term solution for the corridor?
<p>Goal #2: Provide a transportation system that supports existing industry and encourages economic development and job creation in the City, especially within key development areas. Improve short- and long-term transportation infrastructure to support local and regional travel and livability.</p>	<ul style="list-style-type: none"> ▶ Develop and promote a multimodal transportation network that supports existing industries and economic diversification in the future, especially in the downtown core. ▶ Prioritize improving and maintaining the key freight routes of US 26, US 97 and OR 361 through Madras. ▶ Support truck access to industrial sites, including turn and acceleration/deceleration lanes where appropriate. ▶ Promote and plan for future industrial, commercial, and residential growth areas. 	<ul style="list-style-type: none"> ▶ Does the project alternative at least maintain the carrying and dimensional capacity for statewide freight movement? ▶ Does the project alternative address mobility and serviceability for local and regional freight activity? ▶ Does the project alternative address existing gaps or deficiencies in the vehicular, transit, and/or pedestrian network? ▶ Does the project alternative support business activity in and around the study area?
<p>Goal #3: Provide a transportation system that improves safety and multimodal accessibility throughout the city and especially within the downtown core.</p>	<ul style="list-style-type: none"> ▶ Promote a transportation system that facilitates safe multimodal corridors in Madras. ▶ Reduce incidence and severity of all crashes. 	<ul style="list-style-type: none"> ▶ Does the proposed alternative address an area with an identified crash history?
<p>Goal #4: Provide a multimodal transportation system that permits the safe and efficient transport of people and goods through active modes.</p>	<ul style="list-style-type: none"> ▶ Develop and promote an interconnected network of bicycle, pedestrian, and transit facilities within Madras. ▶ Examine the need for specific enhanced pedestrian crossing locations. 	<ul style="list-style-type: none"> ▶ Does the proposed project alternative provide enhanced crossing opportunities for multimodal users?
<p>Goal #5: Provide a transportation system that balances transportation services with the need to protect the environment.</p>	<ul style="list-style-type: none"> ▶ Develop a multimodal transportation system that avoids reliance upon one form of transportation and that minimizes energy consumption and air quality impacts. ▶ Develop and upgrade transportation facilities in a manner consistent with the adopted OTP, the OHP, and the TPR, and ensure that valuable soil, water, scenic, historic, and cultural resources are not damaged or impaired. 	<ul style="list-style-type: none"> ▶ Does the proposed project element reduce the reliance on vehicular traffic? ▶ Is the proposed project alternative consistent with adopted plans?
<p>Goal #6: Maintain the safety, physical integrity, and function of the City's multimodal transportation network.</p>	<ul style="list-style-type: none"> ▶ Maintain long-term funding stability for transportation maintenance projects. 	<ul style="list-style-type: none"> ▶ Could the proposed project alternative be considered for Federal Raise Grant Funding?