W 8 a

MEMORANDUM **CH2MHILL**

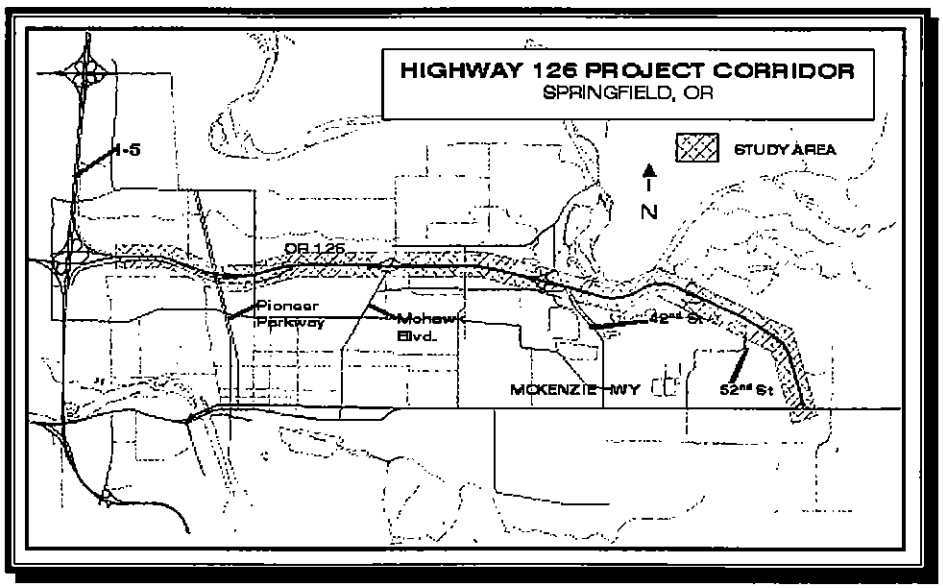
OR 126 Expressway Management Plan - Update

TO: Springfield City Council; Lane County Board of Commissioners

COPIES: Kirsten Pennington, CH2M HILL

FROM: Tom Boyatt, ODOT; Jay McRae, CH2M HILL

DATE: September 10, 2004



What is an Expressway?

OR 126 is designated as an Expressway from the I-5 interchange to Main Street/McKenzie Highway. Expressways are defined in the Oregon Highway Plan (OHP) as:

> ". . . complete routes or segments of existing two-lane and multi-lane highways and planned multi-lane highways that provide for safe and efficient high speed and high volume traffic movements. Their primary function is to provide for interurban travel and connections to ports and major recreation areas with minimal interruptions. A secondary function is to provide for long distance intraurban travel in metropolitan areas."

Expressways are important for moving high volumes of vehicle, freight and transit traffic quickly through an area and providing important safety and bypass routes.

Expressways are a subset of the National Highway System (Interstate and Statewide Highways). OR 126 is a Statewide Highway, under state jurisdiction.

What is the OR 126 Expressway Management Plan?

According to the Major Investment Policy (Policy 1G) of the Oregon Highway Plan, the Oregon Department of Transportation (ODOT) is required to prepare an Expressway Management Plan (EMP) for this segment of OR 126. An EMP is required before any major roadway improvements can be made to the expressway, including intersections or interchanges. Due in part to the level of growth expected in the area, there is anticipated need for major roadway improvements along the OR 126 corridor.

EMPs are intended to benefit the public welfare by preserving safety and mobility along a corridor. EMPs guide the transformation of Expressways toward a limited access facility with interchanges (i.e. no at-grade intersections or approaches). The purposes of eliminating at-grade intersections along an expressway are to enhance safety and protect the function of the roadway in the face of future expected growth in the area. EMPs plan for future growth to protect transportation investments on behalf of state, regional and local agencies and taxpayers. EMPs must include analysis of adjacent land uses and high levels of coordination with affected jurisdictions, agencies, property owners and other stakeholders.

EMPs and closely related Interchange Area Management Plans (IAMPs) are mandated by the OHP (Policy 3c), Oregon Administrative Rule 734-051-0125/0155 (Access Management Spacing Standards and Plans for Interchange Areas), and the Oregon Transportation Investment Act conditions for interchanges adopted by the Oregon Transportation Commission (OTC). Before funding can be released for major interchange improvements, the OTC must "acknowledge" that the EMP/IAMP was developed cooperatively between ODOT and local agencies, including adoption by appropriate local agencies.

The OR 126 EMP is important for ODOT, the City of Springfield, Lane County, and the Central Lane Metropolitan Planning Organization (MPO), as well as for the traveling public and those owning property or with other interests along the corridor. Anticipated growth and new developments along the OR 126 corridor, and the pending completion of the Jasper Road Extension through the Jasper/Natron area, require that a plan for the expressway be enacted sooner rather than later. The EMP will include short-, medium- and long-range strategies to address transportation issues.

What is the Status of the OR 126 EMP?

The OR 126 EMP has three phases.

- Phase 1 - Work is underway to complete an analysis of existing policies and transportation conditions, identification of future needs ("no-build" scenario), and development of a stakeholder involvement program.
- Phase 2 – Is currently being scoped to begin by December 2004. This phase is specific to the 'at-grade' eastern end of the corridor and includes public involvement, identification and evaluation of improvement alternatives, short/medium/long term recommendations and the agency approval process.
- Phase 3 – Continues Phase 2 for the western end of the corridor. Phase 3 is not currently scheduled.

What are the Project Goals for the OR 126 EMP?

OR 126 Expressway Management Plan Team Vision

Develop a plan with flexible phasing approaches for implementation that can be approved locally and acknowledged by the state partners.

Goal 1. Mobility and Capacity.

1a. Ensure that the OR 126 EMP seeks to preserve and enhance mobility along the OR 126 Expressway (Interstate 5 to McKenzie Highway/Main Street).

1b. Ensure that the OR 126 EMP provides solutions that improve traffic operations along the corridor and at corridor interchanges and intersections.

1c. Ensure that the OR 126 EMP addresses interchange/intersection issues at the following specific locations: Main Street/McKenzie Highway, Q Street, Mohawk Boulevard, 52nd Street and 42nd Street.

1d. Ensure that the OR 126 EMP helps to further the goal of a multimodal transportation system that serves the needs of residents, businesses, visitors and freight.

Goal 2. Safety.

2a. Ensure that the OR 126 EMP provides solutions that improve transportation safety along the corridor and at corridor interchanges and intersections.

Goal 3. Coordination and Communication.

3a. Ensure that the OR 126 EMP works to be consistent with goals and objectives of the state, region, county and local communities regarding transportation.

3b. Ensure that the OR 126 EMP clearly communicates ODOT's policies regarding expressways and interchange area management plans.

3c. Ensure that the OR 126 EMP planning process includes communications with public and elected officials regarding project goals and purpose, as well as the structure of the planning process (see *Appendix A, Expressway and Interchange Area Management Plan Approval Matrix*).

Goal 4. Land Use.

4a. Ensure that the OR 126 EMP promotes the facilitation of a balance between land use and transportation.

4b. Ensure that the OR 126 EMP recognizes the importance of environmental, natural, cultural and historical features.

Goal 5. Transit, Pedestrian and Bicycle Transportation.

5a. Ensure that analysis, planning and recommendations in the OR 126 EMP integrate transit, pedestrian and bicycle transportation modes when appropriate, to serve all members of the community.

Goal 6. Funding and Implementation.

6a. Ensure that the OR 126 EMP seeks to protect public investment in existing facilities and future improvements.

6b. Ensure that the OR 126 EMP leads to project recommendations that can garner public support for implementation.

What are the Major Findings from Phase 1?

As of 9/10/04, the major findings from Phase 1 include the following:

- **Plan and Policy Review**
  - OR 126 in Springfield (I-5 to McKenzie Highway) is an important federal, state, regional and local transportation corridor.
  - There are several federal, state, regional and local plans and policies that influence the management of OR 126.
  - There are significant planned developments and anticipated growth that will likely cause increases in traffic volumes along OR 126 (e.g. Peace Health hospital and plans related to the Gateway Mall) and potential for land development in the Jasper/Natron area.

- **Geometric Deficiencies**
  - OR 126 can be characterized as a facility with conflicting form and function. Parts of the facility look like a freeway with substandard horizontal and vertical curves and outdated interchanges on the west end of the mainline. While the east end is a hybrid freeway/arterial with at grade intersections which contributes to speed management and safety problems for drivers unfamiliar with the area.
  - Route continuity – in this case the abrupt change between an interchange environment and an at-grade intersection environment – is a significant issue for the corridor, in that it minimized the effectiveness of the route as an expressway.

- Existing intersection/interchange spacing does not meet the accepted state standards.
- Driveway and public street access spacing from interchange ramp terminals do not meet spacing requirements.

- **Safety Deficiencies**
- Vehicle collisions along the corridor are primarily concentrated at interchanges and intersections, although there are also patterns of collisions on the mainline between the Mohawk interchange and 42nd Street.
- Rear-end collisions are the most common type of crashes on this segment of OR 126, indicating issues with route continuity (e.g. the abrupt roadway transition near 52nd Street from interchanges to an at-grade intersection).

- **Operational (Traffic Congestion) Deficiencies**
- Operational deficiencies cause delay for drivers and freight movement, which affects travel times, livability and the economy.
- Currently, the OR 126 mainline and the Interstate 5 ramps do not demonstrate weekday peak hour operational deficiencies, according to accepted standards. However, the OR 126 mainline does demonstrate deficiencies in the 2025 "no-build" scenario.
- Several of the existing peak hour operational deficiencies in the study area are on the local street network in the vicinity of OR 126 rather than on OR 126 itself.
- ***Existing*** operational deficiencies occur at: Q Street/2nd Street, Pioneer Parkway/OR 126 Eastbound on- and off-ramps, Pioneer Parkway/Centennial Boulevard, Mohawk Boulevard/OR 126 Eastbound Ramps, Mohawk Boulevard/18th Street, 42nd Street/Marcola Street, OR 126/42nd Street Westbound and Eastbound ramps, 52nd Street/OR 126 intersection, OR 126/Main Street intersection, and 58th Street/Main Street.
- ***Future Year 2025*** "no-build" operational deficiencies will continue at the locations listed above as well as at the following additional locations: Q Street/Laura Street/OR 126 Westbound on-ramp, Pioneer Parkway/Hayden Bridge Road, Pioneer Parkway/Q Street, 19th Street/Hayden Bridge Road, 19th Street/Marcola Road, Mohawk Boulevard/OR 126 Westbound Ramps and Jasper Road/Mt. Vernon Road.

See Next Page for Operational Deficiencies Table

(Level of Service and V/C)

OR 126 Weekday PM Peak Hour Level of Service and Volume/Capacity Ratios

Existing and Year 2025 "No-Build"

	EXISTING			YEAR 2025 NO BUILD		
Interchange/ Intersection Name	LOS	v/c	Adequate? [1]	LOS	2025 v/c	Adequate?
Shelley St/Laura St	B	0.19	Yes	B	0.25	Yes
Laura St/Q St	D	0.61	Yes	F	1.0	No
Pioneer Pkwy/Hayden Br Rd	C	0.70	Yes	F	1.0	No
Pioneer Pkwy/S St	A	0.40	Yes	A	0.55	Yes
Pioneer Pkwy/Q St	C	0.66	Yes	E	1.0	No
Q St/OR 126 WB offramp	A	0.52	Yes	C	0.70	Yes
2nd St/Q St	F	0.97	No	F	1.0	No
OR 126 EB ramps/Pioneer Pkwy	D	0.92	No	D	0.89	No
Pioneer Pkway/Centennial Bvd	D	0.92	No	E	1.0	No
19th St/Hayden Br Rd	C	0.55	Yes	F	1.0	No
19th St/Marcola	D	0.72	Yes	F	1.0	No
Mohawk Bvd/OR 126 WB ramps	B	0.67	Yes	C	0.86	No
Mohawk Bvd/OR 126 EB ramps	C	0.84	No	C	0.98	No
18th St/Mohawk Bvd	E	0.87	No	F	1.0	No
Mohawk Bvd/Olympic	B	0.65	Yes	B	0.77	Yes
Marcola/42nd St	E	0.60	No	F	1.0	No
42nd St/OR 126 WB ramps	F	0.76	No	C	0.77	No
42nd St/OR 126 EB ramps	E	0.92	No	B	0.80	No
42nd St/Olympic	C	0.86	Yes	B	0.66	Yes
52nd St/High Banks	C	0.05	Yes	C	0.04	Yes
OR 126/52nd St	C	0.81	No	F	1.0	No
52nd St/G St	A	0.03	Yes	A	0.05	Yes
52nd St/F St	A	0.04	Yes	A	0.05	Yes
54th St/Main St	B	0.49	Yes	B	0.80	Yes
OR 126/Main St	D	1.0	No	F	1.0	No
Main St/58th St	D	0.86	No	F	1.0	No
Jasper Rd/Mt Vernon Rd	C	0.53	Yes	F	1.0	No

Standards: V/C = 0.85 for ramp termini & other city/county intersections (OHP). V/C = 0.90 for district/local road intersections within MPO (OHP). V/C = 0.75 for mainline and ramp terminals (HDM). LOS = D at signalized intersections (City of Springfield and Lane County).

[1] Adequacy is determined by comparing the calculated v/c against both the OHP and HDM (most stringent), and where appropriate, local LOS standards. If the standard is not met then, response to adequate is "no".