Bypass #16 - Bend Parkway (new alignment for US 97) (MP 134.76-141.83)

Description: The Parkway is on new alignment for US 97 through Bend. US 97 is a Statewide Highway on the National Highway System that goes from Biggs Junction to the California state line. The Bend Parkway is a 6.9-mile long, four-lane limited access facility, with a raised median, bike lanes on the shoulders, sidewalks in some areas, and left-turn lanes at selected intersections. It includes signalized intersections and interchanges. It begins just north of the US 20/US 97 junction north of Bend and extends south to about Romaine Village Way. The design speed is 45 mph.

Draft Environmental Impact Statement (DEIS): 1991
Construction: The Bend Parkway was constructed in sections from 1996 to 2002.

Purpose and need:

- To add capacity to US 97 to allow Bend's transportation system to safely and efficiently accommodate existing and future traffic volumes.
- To meet the goal and objectives of the Access Oregon Highway program by improving capacity, safety and travel time.
- To improve the operation of the local street network.

The Draft Environmental Impact Statement envisioned access management agreements with the City of Bend and Deschutes County. Raised medians and access control were anticipated to improve safety. The DEIS also saw a transfer of the former US 97 after the completion of the Bend Parkway and local agencies' funding local street improvements supporting the project.

Background:
Prior to 1962, the original route of Highway 97 through Bend was (north to south) 1st Street, Pennsylvania Avenue, Hill Street, Wall Street, Franklin Avenue, and 3rd Street (see map on next page). There are no records in Region 4 files on why it was built, but most likely it was a result of perceived congestion in the downtown area. Average traffic volumes on the old route through downtown were about 6,000 to 7,000 vehicles per day. After the bypass was built, these traffic volumes decreased the following year to about 4,000 to 5,000 vehicles per day, as traffic began using the new route. In the decades that followed, traffic and population steadily increased, with traffic increasing much more rapidly than population (see Table 1 below).

Table 1 - Summary of Population & Traffic Trends in Bend (1960-1994)

Year	City Population	% Increase in Population	Traffic (ADT)
1960	11,936	5%	3,600
1970	13,710	15%	
1980	17,263	26%	
1990	20,447	18%	
1994	29,425	44%(in only 4 years)	32,200
% Increase 1960-1994		**146%**	**800%**

Concurrent with these increases in population and traffic, significant changes were occurring in Bend's development pattern. These changes included subdivisions and

partitions into smaller lots, increased development (commercial, residential, and industrial), and a development pattern that generally relied upon the highway for direct access, commercial services and local trips around town.

From 1979 through 1984, the City of Bend focused on improving a parallel local arterial (Division Street) that helped improve and supplement the function of the highway. Without this parallel local arterial, traffic volumes and associated congestion on the highway would have been considerably more severe. A portion of the Parkway utilizes the Division Street alignment.

Illustration of Highway Routing: Before & After the 1st Bypass

Figure 1 - Highway Routing <u>before</u> the 1st Bypass (circa 1961)

Note: Highway routing is shown in bold

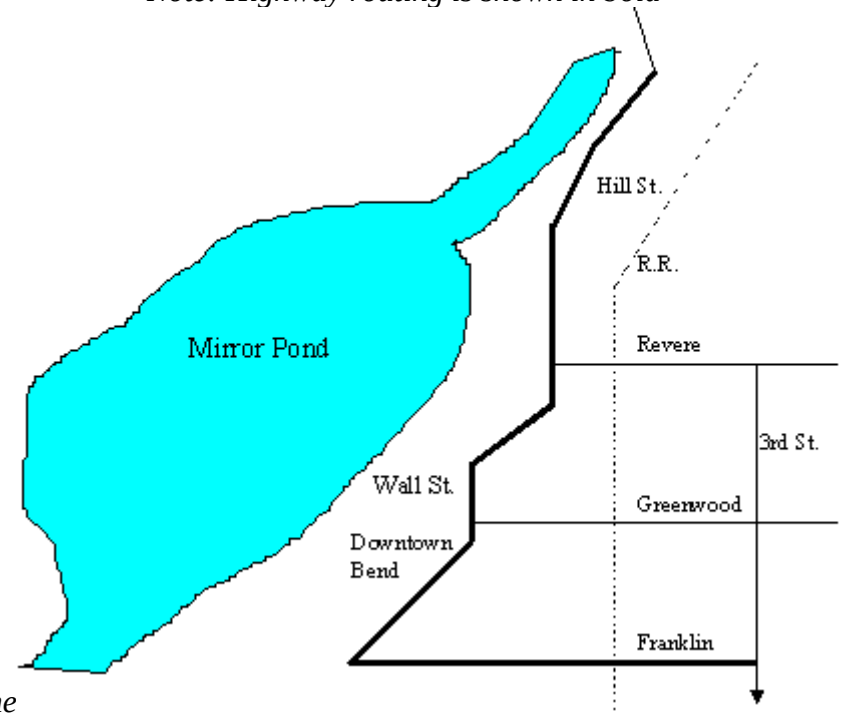

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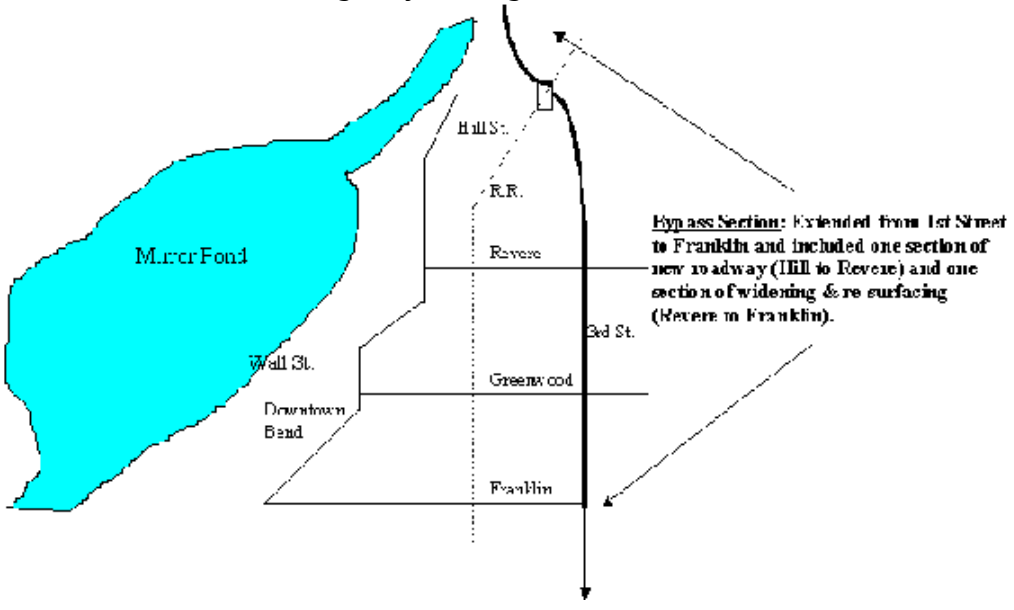
Figure 2 - Highway Routing <u>after</u> the 1st Bypass (circa 1962)

Note: Highway routing is shown in bold



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Land use: The Parkway is consistent with the *Bend Urban Area General Plan*. Although the DEIS said the Parkway would not significantly affect the overall supply of land in any comprehensive plan or zoning designation, the DEIS noted that there would be increased pressure for more intense uses at the north and south termini of the Parkway.

Traffic volumes: Third Street, the former US 97, is one of the few primary north-south routes through Bend. A traffic survey in 1988 found that a significant proportion of the traffic congestion is local. The DEIS found most of the project area operated at Level of Service C or D and was projected to decline to Level of Service E or F by 2015.

Crash rate: The number of accidents on US 97 in the Parkway project area was higher than the statewide average for primary, non-freeway highways. The Parkway has not been open long enough to obtain comparable crash data.

Analysis:
The original US Highway 97 was designated in 1926. The highway was rerouted from downtown onto Third Street (a local street) in the early 1960s. Numerous improvements have been made to US 97 (Third Street) over the last couple of decades to increase the capacity and flow of north - south traffic in Bend.

Third Street served as US 97 and was the primary north - south arterial for the City of Bend. Its function, in addition to serving as a state highway and providing for local trips, was to accommodate access to commercial properties abutting the highway. In other words, it served the full range of functions from providing the local access to commercial businesses to accommodating local trips through town, to serving through trips on US 97.

US 97 was rerouted out of downtown onto Third Street, but was never intended to function as a bypass of the community. A significant volume of the traffic accommodated on Third Street was local. The Parkway was developed to relieve the volumes of local trips in addition to providing more efficient flow for US 97 through traffic.

The major cause of failure on Third Street was the growth in Central Oregon that resulted in significant increases in traffic volumes. There was insufficient capacity on north-south arterials to accommodate the demand. The majority of traffic on Third Street was local traffic or traffic that was destined to the Bend area. The increased volume caused significant congestion, particularly at primary intersections with east-west arterials, resulting in increased numbers of accidents and inadequate levels of service. The frequency of driveways and direct access to commercial property compounded the problem of congestion that resulted in a reduced capacity.

The Parkway was completed in 2001 and has functioned as US 97 since that time. The Bend Parkway incorporated access and land use management techniques to avoid problems encountered with Third Street.

1. **Access control:** Access rights to abutting properties were purchased for the entire length of the Parkway.

2. **Public road spacing**: The connection and spacing of local roads were carefully designed and will be managed to maintain the long-term function of the Parkway. An intergovernmental agreement was signed which recognizes that ODOT will close or

restrict public road connections if they begin to affect the safety and function of the Parkway.

3. **Coordinated development review:** The city, county, and ODOT have a close working relationship in reviewing and appropriately mitigating all private or public development actions (partitions, zone changes, site plan review, etc.) which might potentially affect the Parkway.

4. **Cooperative long-range planning of the urban transportation system:** The city, county, and ODOT are working closely together on a long-range transportation plan that will include a number of measures that will maintain the function of the Parkway (development of a good local grid system, mixed use development, provision of alternative transportation modes, etc.).

The termini of the Bend Parkway are currently the focus of two projects funded by the Access Management Bonding Fund. These are to provide a median treatment and access changes at the northern end of the Parkway and to acquire right of way and access control at the southern end to protect the present facility and extensions to it.

Conclusion: In retrospect, it is easy to identify a number of land use and growth management techniques that theoretically could have maintained (for some undefined longer period) the function and capacity of the US 97 on Third Street. However, it is important to recognize that these techniques are to a large extent the result of these earlier "failures." Without them, it is questionable whether ODOT would have had the cultural, political, and technical advances that currently allow incorporation of the Parkway techniques mentioned above. Whether it would have been possible to implement these types of measures 25 years ago is doubtful. It is increasingly apparent that they should be considered and incorporated in current project development and implementation activities.

Primary sources:

- *The Bend Bypasses: A Historical and Contemporary Perspective, July 1996 (unpublished paper by Mark DeVoney)*
- *Email from Bob Bryant, Region Manager, Region 4*
- *U.S. 97 Bend Parkway, The Dalles-California Highway, Draft Environmental Impact Statement, June 1991*
- *Bend Parkway, U.S. 97, The Dalles-California Highway, Final Environmental Impact Statement, 1992*