

Aesthetic and Safety Improvement, SR-99 – Pacific Hwy. South at Des Moines

Project Description

Location

City of Des Moines

SR-99 (Pacific Highway South) MP 15.34 – MP 16.51

Purpose & Need

The purpose of the project is to improve traffic congestion, operations, and safety; provide facilities for transit and pedestrians; and encourage economic redevelopment along the SR-99 corridor through the city of Des Moines.

The existing roadway is an undivided five-lane facility with a two-way left-turn lane (TWLTL) and paved shoulders. Significant segments of the roadside have unlimited or undefined access.

Initial Design Concept

To increase capacity and mobility and relieve congestion, SR-99 will undergo changes in the following areas: roadway cross-section; the placement and type of intersection signals; pedestrian features; access control; and aesthetic treatments.

One of the specific features that will be included in this project is a landscaped median that eliminates the existing two-way left-turn lane. The median is installed to improve both pedestrian and vehicular safety. A low profile concrete barrier protects the treed median. An evaluation of the median design is being conducted to determine the impact of the treed median design on vehicular and pedestrian safety. In addition, curbs and gutters will be installed along the highway, and a six-foot landscaped planter will be built on each side of the street.

The project will also install equipment needed to support transit signal priority. Des Moines and King County Metro may consider the installation as a trial project. A High Occupancy Vehicle and Business Access lane will be added in each direction of the route, as well as bus pullouts and new transit shelters. Other features will be included to support the pedestrian activity, such as sidewalks on both sides of the highway, new street and sidewalk lighting, and a pedestrian-activated signal.

Two new signals will be installed, and two existing signals will be upgraded. Turn lanes will be added where appropriate, and driveways will be consolidated.

Gateway treatments will be constructed at either end of the project with "Welcome to Des Moines" signs and steel sailboats on poles (which will be able to spin like weathervanes).

Exhibit 1 – Project Vicinity Map



Exhibit 2 – Existing Gateway Treatment



Challenges

Challenges

- Community collaboration
- Funding for the project
- Construction under traffic
- Right of way acquisition
- Environment impacts
- Relocating utilities

The information-sharing and community feedback process undertaken by the project staff, the community, and the stakeholders impacted the project and required extensive effort from all parties to achieve the final product. There were several public meetings to ensure the project would meet the defined objectives while being completed on time and within budget.

Factors that affect the construction of this project include building the project while maintaining traffic flows, and achieving compliance with environmental requirements. Utility relocation plays a pivotal role in the project, requiring coordination between the construction work schedule and utility relocation, and purchasing land for widening the roadway.

Funding

Project funding sources include federal, state, and local funds. The total project budget is about \$15 million.

Schedule

This project began with preliminary engineering in 1997. The design phase and right of way acquisition began in 2000, and was completed in 2003. Construction began in fall of 2003 and will be completed in early 2005.

Process

Exhibit 3 – Existing Roadway Without Sidewalk



Exhibit 4 – Existing Median



Public Participation

There are numerous stakeholders in the project, including the cities of Des Moines, Kent, and SeaTac (Kent is contributing to the funding, and both Kent and SeaTac are constructing similar projects); the citizens of Des Moines; funding partners, including the federal government, State Transportation Improvement Board, Washington State Department of Transportation (WSDOT), King County Metro, Qwest, Puget Sound Energy, and Comcast; the Highline Water District and Midway Sewer District; and the Fire and Police Departments (both of which have expressed interest in the new lighting, traffic signals, and opticom system).

Starting in 1997, the city held a series of workshops and open houses to gather feedback from the citizens and businesses. Presentations on the project were periodically made before City Council meetings, which were televised and available for view on the Internet. During construction, the city maintained a telephone hotline with project updates, and a website with photos, updates, and 2-week construction schedules.

Results

Design /Construction Considerations

After a series of open houses and workshops with businesses and citizens in 1997, alternatives were developed, shared with the community, and refined. The City Council adopted the preferred alternative and design report in 1999.

City staff participated in several meetings with other cities and WSDOT, and sought WSDOT assistance in developing alternatives for median cross over treatments, which resulted in the proposal to include a low-profile concrete barrier along the median. The introduction of the low median barrier curb to the project helped in the approval process for planting trees in the median on this 45 mph state highway. Once staff determined that the barrier was a viable and beneficial option, along with allowing the City to plant trees on the State Highway, a public presentation was made to Council.

Solutions

- Public participation
- City contributed more money
- Work with contractor to lessen traffic impact
- Work on design elements without affecting budget
- Communication with other agencies
- Coordinate work with utilities companies before construction started

Exhibit 5 – Proposed Gateway Welcome Sign



Exhibit 6 – Proposed Median and Sidewalk with Planting.



Exhibit 7 – Proposed Low Barrier Median Curb with Illumination

