

Potential Locations for a US 101 Pedestrian Overcrossing

PREPARED FOR: Seaside Transportation System Plan
Project Management Team

PREPARED BY: Theresa Carr, CH2M HILL

COPIES: Steve Durrant, Alta Planning + Design
Darren Hippenstiel, CH2M HILL
Terra Lingley, CH2M HILL

DATE: March 11, 2010

This memorandum describes a series of potential locations for a pedestrian overcrossing of US 101 considered as part of the Seaside Transportation System Plan (TSP). A total of six locations are reviewed and summarized in this document, including a brief description of the location; a conceptual layout showing location and relative footprint; and pros and cons of each potential crossing location. This analysis responds to a request from the Hood to Coast organization to consider a pedestrian overcrossing that could be used by runners and walkers participating in that race every August.

All concepts made the following assumptions:

- Vertical clearance over the highway would be 17' 6"
- Bridge deck would be 6'
- Ramps would be constructed to meet Americans with Disabilities standard of maximum 6 percent

The Seaside TSP Project Management Team (PMT) met in March 2010 to discuss the pedestrian overcrossing concept and the potential crossing locations. The group does not recommend furthering the concept in the TSP for three main reasons:

1. **Limited transportation benefit** – Regardless of location, the placement of an overcrossing of US 101 where it would provide transportation benefit in Seaside is severely limited. Locations farthest away from Broadway were thought to have some use, but the length of the ramps required to meet six percent max grade as per ADA requirements requires substantial out-of-direction travel for bicyclists and pedestrians. The PMT believed that most pedestrians would make use of crossing locations at nearby signals (Broadway, Avenue F/G, 12th Avenue) or at proposed crossing islands (3rd Avenue, Avenue B).
2. **Visual/aesthetic impacts** – Each of the crossing locations must meet vertical clearance of 17' 6" for a statewide highway, plus a 6' bridge deck, using no more than six percent max grade. This equates to roughly ¼ mile length ramps. Crossing location

concepts considered a variety of ramp types including switchback, u-shaped structures, and corkscrew ramps. None of these ramp types were considered acceptable from a visual/aesthetic standpoint. Any ramp would need to be placed in an urban environment, along a scenic coastal route in front of businesses, homes, or both. The PMT had significant concern about visual impacts associated with the overcrossing ramps.



Pedestrian overcrossing example of a local street

3. **Cost** – an order of magnitude cost was developed for the most simple of the six concepts. Assuming no right-of-way acquisition would be required, the estimated overcrossing construction cost was \$3.3 Million.

The pages below provide detail on the six crossing locations considered.

Location 1: Third Avenue

Description

This concept location is centered at Third Avenue with switchbacks at Fourth Avenue and at Second Avenue. Ramps initiate on the west side of the highway at the property line north of Third Avenue, and on the east side of the highway at the property line north of Second Avenue. Stairs are located on both sides of the highway at Third Avenue.

Conceptual Layout



Pros/Cons

Pros	Cons
<ul style="list-style-type: none"> Minimizes property impacts Convenient to new potential bike/ped bridge over Necanicum River at 4th Avenue 	<ul style="list-style-type: none"> Two properties are still impacted, including one potential displacement Visual impacts considered to be substantial in front of existing residential developments. Hood to Coast participants would need to walk some blocks along US 101 to use overcrossing Ramps on eastern side of US 101 would impact existing walkway

Location 2: Second Avenue (Switchback)

Description

This concept location is centered at Second Avenue with switchbacks on the west side of US 101 at Third Avenue and at Second Avenue. Ramps initiate on the west side of the highway on the south side of Third Avenue. On the east side of the highway one gradual ramp climbs from the north side of Broadway, in back of the Chamber of Commerce and on the property of the Broadway Middle School. Stairs are located on the east side of the highway at Second Avenue, and on the west side of the highway at Third Avenue.

Conceptual Layout



Pros/Cons

Pros	Cons
<ul style="list-style-type: none"> Minimizes property impacts – no acquisition impacts to private businesses or residences Convenient to new potential bike/ped bridge over Necanicum River at 4th Avenue Direct connection to Middle School and Broadway Convenient for Hood to Coast participants 	<ul style="list-style-type: none"> Crossers may just choose to cross at Broadway at street level instead of mounting bridge ramps Visual impacts considered to be substantial in front of existing businesses, residences, and services. Ramps on eastern side of US 101 would impact existing walkway Impacts associated with loss of parking in Broadway Middle School / Chamber of Commerce lot.

Location 3: Second Avenue (U Shape)

Description

This concept location is centered at Second Avenue similar to Location 2. The difference is that Location 3 does not contain switchbacks, instead focusing on gradual ramps on both the east and west sides of US 101 to the south. The connection point is at Oceanway on both sides of the highway. Stairs are located on both sides of the highway at 2nd Avenue. First Avenue is closed under this overcrossing location concept.

Conceptual Layout



Pros/Cons

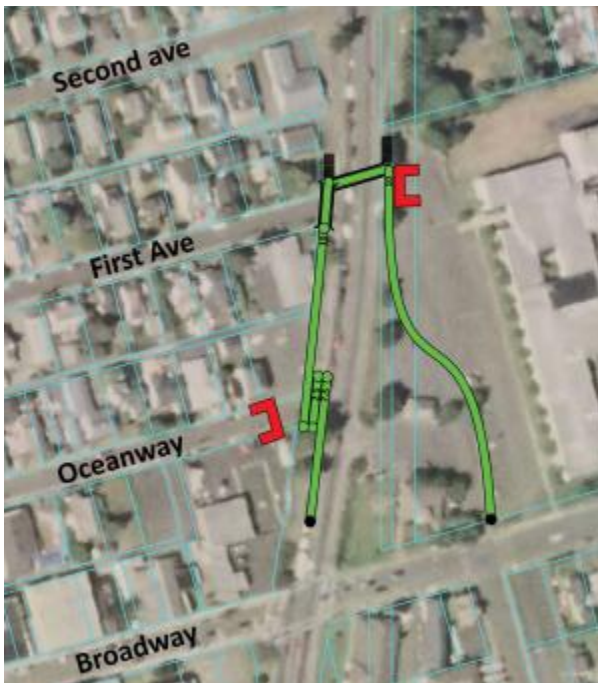
Pros	Cons
<ul style="list-style-type: none"> Minimizes property impacts – no acquisition impacts to private businesses or residences Convenient for bicyclists and pedestrians to existing bridges over Necanicum River at First Avenue and Broadway, and over Neawanna Creek at Broadway Direct connection to Middle School and Broadway Convenient for Hood to Coast participants 	<ul style="list-style-type: none"> Crossing option closes First Avenue, a bridge street to auto traffic. Crossers may just choose to cross at Broadway at street level instead of mounting bridge ramps Visual impacts considered to be substantial in front of existing businesses, residences, and services. Ramps on eastern side of US 101 would impact existing walkway

Location 4: First Avenue

Description

This concept location is centered at First Avenue with switchbacks on the west side of US 101 at Oceanway. Ramps initiate on the west side of the highway on the north side of Broadway. On the east side of the highway one gradual ramp climbs from the north side of Broadway, in back of the Chamber of Commerce and on the property of the Broadway Middle School. Stairs are located on the east side of the highway at First Avenue.

Conceptual Layout



Pros/Cons

Pros	Cons
<ul style="list-style-type: none"> Minimizes property impacts – no acquisition impacts to private businesses or residences Convenient for bicyclists and pedestrians to existing bridges over Necanicum River at First Avenue and Broadway, and over Neawanna Creek at Broadway Direct connection to Middle School and Broadway Convenient for Hood to Coast participants 	<ul style="list-style-type: none"> Closes Oceanway to auto traffic (not a bridge street) Crossers may just choose to cross at Broadway at street level instead of mounting bridge ramps Visual impacts considered to be substantial in front of existing businesses, residences, and services. Ramps on eastern side of US 101 would impact existing walkway

Location 5: Avenue A

Description

This concept location is centered at Avenue A with switchbacks on the west side of US 101 at Broadway and on the east side of US 101 at Avenue B. Ramps initiate on the east and west side of the highway at Avenue A. Stairs are located at Avenue A.

Conceptual Layout



Pros/Cons

Pros	Cons
<ul style="list-style-type: none"> Minimizes property impacts Convenient for bicyclists and pedestrians to existing bridges over Necanicum River at Broadway and Avenue B, and over Neawanna Creek at Broadway Direct connection for Safeway customers and central location in heart of pedestrian activity Convenient for Hood to Coast participants 	<ul style="list-style-type: none"> Some property impacted on both sides of the highway – sliver impacts to the Safeway and MacDonald’s on the east and business properties on the west Crossers may just choose to cross at Broadway at street level instead of mounting bridge ramps Visual impacts considered to be substantial in front of existing businesses and services.

Location 6: Avenue C

Description

This concept location is centered at Avenue C with switchbacks on the west side of US 101 at Avenue D and on the east side of US 101 at Avenue B. Ramps initiate on the east side of the highway in front of the Safeway. On the west side of the highway, ramps initiate at Avenue C. Stairs are located at the overcrossing.

Conceptual Layout



Pros/Cons

Pros	Cons
<ul style="list-style-type: none"> • Minimizes property impacts • Convenient for bicyclists and pedestrians to existing bridges over Necanicum River at First Avenue and Broadway, and over Neawanna Creek at Broadway • Direct connection for Safeway customers and central location in heart of pedestrian activity • Convenient for Hood to Coast participants 	<ul style="list-style-type: none"> • Some property impacted on both sides of the highway – sliver impacts to the Safeway and MacDonald’s on the east and business properties on the west • May be difficult to retain auto access along Avenue C with construction of pedestrian ramp • Visual impacts considered to be substantial in front of existing businesses and services.

Summary of Findings

The Seaside TSP PMT does not recommend furthering a pedestrian overcrossing of US 101 concept in the TSP due to several reasons described above, and specifically due to an overcrossing’s limited transportation benefit, visual impacts, and cost to construct and maintain.