



Pedestrian Study

Oregon Highway 99E: Naef Road (Milepost 8.99) to Arlington Road (Milepost 11.04)

A study was initiated as a result of citizen concerns along the OR 99E (McLoughlin Boulevard) corridor which encompasses the current ODOT project area from Naef Road to the Clackamas River Bridge. The crash data evaluated pedestrian and bicycle crashes between January 1, 2007 to April 30, 2012 from Naef Road (Milepost 8.99) to Arlington Road (Milepost 11.04).

The study found that within the 5 year-4 month period, there were a total of 322 reported crashes within this segment of highway. 17 were pedestrian crashes and 10 were bicycle crashes. Of the total number of crashes 15 (or 4.6%) were coded as night time crashes involving either a pedestrian or bicyclist.

An ODOT traffic investigator collected all the available crash data, pedestrian crossing counts, bus stop locations, potential traffic generators and existing pedestrian facilities for evaluation by ODOT Region 1 engineers. The available data concluded the following:

- ◆ Data showed that pedestrian crossings within this segment of highway from Naef Road (Milepost 8.99) to Arlington Road (Milepost 11.04) are low and did not demonstrate a concentration of pedestrians crossing at any one specific uncontrolled intersection.
- ◆ The pedestrian crash data is very random and spread out along the corridor, not showing a concentration of pedestrian activities at any specific location.
- ◆ The existing crash data at this time show no pedestrian or bicycle crashes correlate with a lack of sidewalk; all recorded crashes occurred where there is existing sidewalk.
- ◆ No recorded crashes occurred with pedestrians walking parallel to the highway.

As a result of the available data, ODOT Region 1 Traffic Engineers concluded that Rectangular Rapid Flashing Beacons (RRFB) or “pedestrian friendly” flashing yellow arrows on OR 99E approaches would not be installed as part of this project for the following reasons:

- ◆ A Rectangular Rapid Flashing Beacon would have low usage, due to low pedestrian crossings.
- ◆ A Rectangular Rapid Flashing Beacon would increase the number and severity of rear-end crashes, due to low usage.
- ◆ A Rectangular Rapid Flashing Beacon would have low stopping compliance, due to low usage.
- ◆ Having a dedicated pedestrian phase on OR 99E, which is a major arterial highway for the region, would have a large impact on operations in the area, which could result in more crashes if motorists do not obey the traffic signal. ODOT is adopting the practice of having the flashing yellow arrows not be operated the same time a pedestrian signal is called.



The decoded crash information that was reported to the State is attached and can also be found on the project website:

<http://www.oregon.gov/ODOT/HWY/REGION1/pages/OR99E-Naef-Road-to-the-Clackamas-River.aspx>

For more information please contact Dee Hidalgo, ODOT Community Affairs, 503-731-8237.

OR 99E: NAEF RD TO ARLINGTON RD

PEDESTRIAN & BICYCLE CRASHES 1/1/2007 – 4/30/2012

MP 8.99 TO MP 11.04

In the 5 year 4 month period there were a total of 322 reported crashes within this segment of highway. 17 pedestrian crashes & 10 bicycle crashes. Of the total number of crashes 15 (4.6%) were coded as night time crashes involving either a pedestrian or bicyclist. The information below contains the data for all reported pedestrian and bicycle crashes within the 5 year 4 month period.

* Outside City Limits **Inside City Limits

PED NIGHT TIME CRASHES = 12

(PED DAY TIME CRASHES = 5)

- ❖ Signalized & lighted = 4
- ❖ Unsignalized & not lighted = 2
- ❖ Midblock = 6

TOTAL BY YEAR: 2007 = 2, 2008 = 3, 2009 = 3, 2010 = 2, 2011 = 2, 2012 (4 mo) = 0

PEDESTRIAN NIGHT TIME CRASHES

1) * MP 9.22 (Roethe Rd signalized & lighted) – Inj B

- 11/26/2008 – 6 pm, dusk, ped crossing east to west struck southbound veh. **Ped failed to yield right of way.**
 - **Alcohol Involved**
 - Lighting on NE and SW corners at Roethe Rd. Numerous ped generators at this intersection.
 - Bus Stop northbound (lighted) and southbound (lighted) far side at this intersection.

2) * MP 9.32 (**midblock**, south of Roethe Rd MP 9.22) – **Fatal**

- 8/5/2010 – 3 am, dark/lit, southbound veh struck 18 y/o ped crossing midblock west to east. **Ped illegally in road, ped clothes not visible.**
 - **Drugs Involved**
 - No lighting. Car lots both sides of roadway (neighborhoods either side)
 - No Bus Stops, between northbound and southbound stops.

3) * MP 9.37 (**midblock**, north of Ina Ave unsignalized MP 9.40) – Inj C

- 11/19/2008 – 5 pm, dark, cloudy/wet, southbound veh struck 74 y/o ped crossing midblock west to east. **Ped illegally in road, ped failed to yield right of way.**
 - No lighting. Small strip mall on west side, EconoLodge & neighborhoods on east side.
 - Bus Stops northbound and southbound at Roethe Rd (MP 9.22)

4) * MP 9.50 (**midblock**, north of Boardman Ave unsignalized MP 9.51 w/raised ped island and lighting on west side) – Inj B

- 5/13/2009 – 11 pm, dark, wet/rain, ped crossing midblock from east to west struck southbound veh. **Ped failed to yield right of way.**
 - **Alcohol Involved**
 - Lighting on NE and SW corners of Boardman Ave
 - Bus Stops northbound and southbound on far side of Boardman Ave

5) * MP 9.52 (**midblock**, south of Boardman Ave unsignalized MP 9.51 w/raised ped island and lighting on west side) – **Fatal**

- 11/28/2007 – 6 am, dark, fog/wet, southbound vehicle struck ped in wheel chair crossing midblock west to east. **Ped illegally in road, ped failed to yield right of way, ped clothes not visible.**
 - Lighting on NE and SW corners of Boardman Ave
 - Bus Stops northbound and southbound on far side of Boardman Ave

6) * MP 9.76 (Arista Dr unsignalized, t-intersection) – Inj C

- 10/26/2009 – 6 pm, dark/lit, cloudy/wet, southbound vehicle struck 4 y/o ped crossing west to east. **Driver failed to yield right of way.**
 - No lighting. Roakes, neighborhoods on west side, strip mall on east side.
 - Bus Stop northbound far side of Jennings Ave (signalized MP 9.80) and southbound near MP 9.86.

7) * MP 9.80 (Jennings Ave signalized & lighted) – Inj C

- 4/8/2008 – 7 pm, dusk, rain/wet, vehicle turning left from the east to the south struck ped crossing in the crosswalk from east to west. **Driver failed to yield right of way.**
 - Lighting on NE and SW corners of this intersection. Used car lot on west side, Shell Gas Station/Mini Mart on east side.
 - Bus Stop northbound on far side of intersection, southbound near MP 9.86.

8) * MP 9.95 (**midblock**, north of Hull Ave unsignalized MP 9.97) – **Fatal**

- 8/19/2011 – 11 pm, dark/lit, northbound veh struck ped crossing midblock west to east. **Ped illegally in road, ped clothes not visible.**
 - Lighting on the NE and SW corners of Hull Ave. Neighborhood on west side, Bus Stop and Mini Mart on east side.
 - Bus Stop northbound at this location (far side Hull Ave, lighted) and far side southbound.

9) * MP 10.12 (**midblock**, north of Meldrum Ave unsignalized MP 10.14) – **Fatal**

- 11/27/2009 – 8 pm, dark, southbound veh struck 60 y/o ped crossing midblock east to west. **Ped illegally in road, ped failed to yield right of way.**
 - No lighting at this location, 1 luminaire on SW corner of Meldrum Ave. Value Village and car lot on west side, car rental on east side.
 - Bus Stops northbound and southbound at this location.

10) ** MP 10.30 (Glen Echo Ave signalized & lighted) – Inj C

- 11/10/2010 – 9 pm, dark / lit, fog, westbound veh (18 y/o) turning left east to south struck 18 y/o ped crossing from west to east in crosswalk. **Driver failed to yield right of way.**
 - Lighting on NE and SW corners of this intersection. Burgerville & car lot on west side, Chevron Gas Station/Carwash and Tebo's on east side.
 - Bus Stops northbound (lighted) and southbound on far side of intersection.

11) ** MP 10.90 (Dartmouth St unsignalized, t-intersection) – Inj C

- 1/7/2007 – 3 am, dark, cloudy / wet, southbound veh (61 y/o) struck ped crossing west to east at unsignalized, unmarked intersection. **Driver failed to yield right of way.**
 - No lighting at this location. Texaco/mini mart and car lot on west side, McLoughlin Market and Bikini Girl Baristas on east side.
 - No Bus stops at this location. Closest are approx. 670' in either direction.

12) ** MP 11.02 (River Rd signalized & lighted) – Inj B

- 11/19/2011 – 9 pm, dark / lit, veh turning left from east to southbound struck ped crossing east to west in crosswalk. **Driver failed to yield right of way.**
 - Lighting on NE and SW corners of this intersection. Cash for Gold on west side, car lot on east side.
 - Bus stop northbound on far side, southbound on near side.

PED DAY TIME CRASHES = 5

- ❖ Signalized = 4
- ❖ Unsignalized w/ped island = 1

TOTAL BY YEAR: 2007 = 0, 2008 = 0, 2009 = 0, 2010 = 2, 2011 = 1, 2012 (4 mo) = 2

PED DAY TIME CRASHES

1) * MP 9.22 (Roethe Rd signalized) – Inj B

- 4/15/2011 – 3 pm, day, rain, wet, veh (16 y/o driver) turning left from the east to the south struck ped crossing from west to east. **Driver at fault, failed to yield right of way.**
 - Numerous ped generators at this intersection.
 - Bus Stop northbound and southbound far side at this intersection.

2) * MP 9.80 (Jennings Ave signalized) – Inj C

- 4/13/2012 – 2 pm, southbound veh struck ped crossing in the crosswalk from west to east. **Driver disregarded traffic signal. Ped in nonvisible clothing.**
 - Used car lot on west side, Shell Gas Station/Mini Mart on east side.
 - Bus Stop northbound on far side of intersection, southbound near MP 9.86.

3) * MP 9.97 (SE Hull Ave unsignalized w/ped island) – Inj B

- 2/18/2012 – 11 am, day, veh turning left from the east to the south struck ped (21 y/o) crossing from east to west. **Driver at fault, proceeded after stopping at Stop sign, failed to yield right of way.**
 - Neighborhood on west side, Bus Stop and Mini Mart on east side.
 - Bus Stops far side of intersection both directions.

4) ** MP 11.02 (River Rd signalized) – Inj C

- 11/13/2010 – 1 pm, rain/wet, veh (74 y/o) turning left from the east to south struck ped crossing west to east in crosswalk. **Driver failed to yield right of way.**
 - Lighting on NE and SW corners of this intersection. Cash for Gold on west side, car lot on east side.
 - Bus stop northbound on far side, southbound on near side.

5) ** MP 11.02 (River Rd signalized) – Inj B

- 1/28/2010 – 2 pm, veh turning right from the west to south struck ped crossing east to west in crosswalk. **Driver failed to yield right of way. Ped in nonvisible clothing.**
 - Lighting on NE and SW corners of this intersection. Cash for Gold on west side, car lot on east side.
 - Bus stop northbound on far side, southbound on near side.

BICYCLE NIGHT TIME CRASHES = 3

(BICYCLE DAY TIME CRASHES = 7)

- ❖ Signalized & lighted = 1
- ❖ Midblock & not lighted = 1
- ❖ Driveway related = 1

TOTAL BY YEAR: 2007 = 0, 2008 = 1, 2009 = 1, 2010 = 1, 2011 = 0, 2012 (4 mo) = 0

BICYCLE NIGHT TIME CRASHES

1) * MP 9.20 (**midblock** – north of SE Roethe Rd, signalized, lighted @ MP 9.22) – Inj B

- 7/22/2010 – 10 am, **dark/lit**, northbound veh struck bicyclist traveling northbound that turned left in front of veh midblock (turn crash). **Bicycle illegally in road, improper turn, clothes not visible.**
 - **Alcohol Involved**
 - Lighting at SE Roethe Rd. Numerous ped generators at this location.
 - Bus Stops far side at SE Roethe Rd both directions.

2) ** MP 10.30 (Glen Echo signalized & lighted) – **Fatal**

- 10/28/2008 – 11 pm, **dark/lit**, northbound veh struck bicyclist (17 y/o) crossing west to east in crosswalk (angle crash). **Bicyclist disregarded traffic signal, improper/no lights.**
 - Lighting on NE and SW corners of this intersection. Burgerville & car lot on west side, Chevron Gas Station/Carwash and Tebo's on east side.
 - Bus Stops northbound (lighted) and southbound on far side of intersection.

3) ** MP 10.45 (Driveway/Alley related, no lighting) – Inj A

- 1/12/2009 – 5 pm, **dark/lit**, wet/cloudy, bicyclist traveling southbound in bike lane struck northbound veh turning left into KIA driveway (turning crash). **Driver failed to yield right of way, improper turn (left turn in front of oncoming traffic)**
 - No lighting with the exception of ambient lighting from large car lots on both sides of roadway.
 - Bus Stops at Glen Echo MP 10.30 northbound (lighted) and southbound on far side of intersection.

BICYCLE DAY TIME CRASHES = 7

- ❖ Signalized = 3
- ❖ Unsignalized = 1
- ❖ Midblock = 3

TOTAL BY YEAR: 2007 = 2, 2008 = 2, 2009 = 1, 2010 = 2, 2011 = 0, 2012 (4 mo) = 0

BICYCLE DAY TIME CRASHES

1) * MP 9.13 (**Alley / midblock** – north of SE Roethe Rd, signalized @ MP 9.22) – Inj A

- 6/15/2008 – 3 pm, **day**, veh turning right from alley east to north struck bicycle traveling southbound (turn crash). **Driver at fault, failed to yield right of way.**
****Note – Coding details are suspect for this crash, do not make sense for the directions listed.**
 - No lighting at this location. Numerous ped generators at this location.
 - Bus Stops far side at SE Roethe Rd both directions.

2) * MP 9.22 (Roethe Rd signalized) – Inj C

- 6/12/2008 – 6 pm, **day**, bicycle traveling southbound struck veh traveling westbound (angle crash). **Bicycle failed to yield right of way.**
 - Numerous ped generators at this intersection.
 - Bus Stop northbound and southbound far side at this intersection.

3) * MP 9.39 (**midblock** - north of Ina Ave unsignalized MP 9.40) – Inj C

- 9/2/2007 – 2 pm, **day**, bicycle (23 y/o) traveling westbound struck veh turning right from the south to the east (angle crash). **Bicycle failed to yield right of way.**
 - No lighting. Small strip mall on west side, EconoLodge & neighborhoods on east side.
 - Bus Stops northbound and southbound at Roethe Rd (MP 9.32)

4) * MP 9.40 (Ina Ave unsignalized t-intersection) – Inj C

- 10/3/2009 – 5 pm, **day**, veh turning right from the south to the east struck bicycle traveling southbound (angle crash). **Driver at fault, failed to yield right of way, HOWEVER, location of crash indicates bicycle would have been traveling the wrong way in the bike lane.**
 - No lighting. Small strip mall on west side, EconoLodge & neighborhoods on east side.
 - Bus Stops northbound and southbound at Roethe Rd (MP 9.32)

5) * MP 9.80 (Jennings Ave signalized) – Inj B

- 2/2/2010 – 4 pm, **day**, veh (66 y/o driver) turning left from the east to the south struck bicycle (19 y/o) traveling westbound (turn crash). **Driver at fault, failed to yield right of way.**
 - Lighting on NE and SW corners of this intersection. Used car lot on west side, Shell Gas Station/Mini Mart on east side.
 - Bus Stop northbound on far side of intersection, southbound near MP 9.86.

6) * MP 9.81 (Jennings Ave signalized) – Inj B

- 7/5/2007 – 3 pm, **day**, veh turning right from the west to the south struck bicycle (11 y/o) traveling westbound (turn crash). **Driver at fault, failed to yield right of way.**
 - Lighting on NE and SW corners of this intersection. Used car lot on west side, Shell Gas Station/Mini Mart on east side.
 - Bus Stop northbound on far side of intersection, southbound near MP 9.86.

7) ** MP 10.66 (**midblock** - north of Gloucester St signalized MP 10.75) – Inj B

- 5/2/2010 – 1 pm, **day**, bicyclist traveling northbound in bike lane (wrong way) struck veh turning right from driveway (AutoTown) to southbound (turn crash). **Bicycle illegally in roadway.**
 - Very large car lots on both sides of the roadway that span 1,300' north of this location to Gloucester St.
 - Bus Stops northbound 480' to the north of this location and southbound far side of Gloucester St (MP 10.75)