



STATE OF DELAWARE  
**DEPARTMENT OF TRANSPORTATION**  
800 BAY ROAD  
P.O. Box 778  
DOVER, DELAWARE 19903

SHAILEN P. BHATT  
SECRETARY

**MEMORANDUM OF MEETING**

**Date:** March 26, 2013

**Date of Meeting:** March 21, 2013

**Location:** TMC – Newark Conference Room

**Topic:** Pedestrian/Bicycle Safety Working Group

**Attendees:** Anthony Aglio – DelDOT Planning  
Natalie Barnhart – DelDOT  
Dave Blankenship – City of Wilmington  
Sarah Coakley – DelDOT Planning  
Heather Dunigan – WILMAPCO  
Dan Garibaldi – University of Delaware Police  
Peter Haag – DelDOT Traffic  
Dawn Hopkins – DelDOT  
Lt. Robert Jones – Delaware State Police  
Alison Kirk - Office of Highway Safety  
Richard Klepner - Office of Highway Safety  
Earl “Rusty” Lee – University of Delaware  
Mark Luszczyk – DelDOT Traffic  
Jana Simpler – Office of Highway Safety  
Rich Vetter – Dover/Kent MPO  
Adam Weiser – DelDOT Traffic  
James Wilson – Bike Delaware  
John Yeomans – Alcohol & Tobacco Enforcement

---

The purpose of this meeting was to review data related to pedestrian and bicycle fatal crashes and to discuss ideas and methods for improving pedestrian and bicycle safety through engineering, education, and enforcement related initiatives. Our goal is to reduce the number of fatal crashes involving pedestrians or bicyclists by 5 percent every three years.

**General Discussion:**

- Adam Weiser discussed the purpose and goals of the working group and asked everyone in attendance to introduce themselves.
- Adam Weiser reviewed a PowerPoint presentation (attached) that reviewed data trends related to pedestrian and bicycle fatal crashes as well as historical ideas/methodologies that have been implemented in an effort to reduce these types of crashes.
- The majority of the discussion afterwards focused on ideas related to engineering, enforcement and educational countermeasures. See the detailed discussion bullets below.

- Lt. Jones recommended that the group look at states that have similar roadway/environmental conditions to Delaware and that have lower pedestrian fatal crash rates. We could poll those states for ideas on what has worked to keep their crash rates down.
  - ACTION ITEM: DelDOT Traffic will look at the surrounding states and make contact through FHWA to get information about successful pedestrian safety initiatives. This information will be shared with the group at the next meeting.

### **Engineering Countermeasures:**

- Heather Dunigan commented that crosswalk spacing may be an issue which could be forcing pedestrians to cross mid-block.
- Anthony Aglio asked if we have looked at bus stop locations in relation to pedestrian facilities. Mark Luszc and others responded that we look at bus stops in relation to pedestrian facilities for all of our engineering reviews. This was a major topic of discussion for the US Route 13 pedestrian safety audit and some improvement recommendations were made to improve bus stop locations.
- James Wilson noted that most of the fatalities are occurring on high-speed corridors. He asked if anyone has looked at the difference between dark/unlit and dark/lit pedestrian crashes. Richard Klepner responded that the split is about 50-50. James continued to ask if DelDOT is still looking at its lighting warrants. Mark Luszc responded that DelDOT has looked at its lighting warrants compared to other states and there is not much guidance available. At this time, DelDOT is maintaining its current lighting warrants.
- Natalie suggested that we look into some type of barrier to keep pedestrians from crossing where we don't want them to cross. She suggested something adjacent to the curb. Mark noted that there are potential maintenance issues that would need to be evaluated.
  - ACTION ITEM: DelDOT Traffic will look into some options and present them to the group at a future meeting.
- James Wilson asked about pedestrian median refuge areas. The group discussed the pros and cons of this type of treatment and it was determined that these would be considered where appropriate for both vehicular and pedestrian safety.
- James Wilson suggested surveying corridors to determine the worst mid-block crossings, distances to signalized crosswalks and look at building refuge areas. Adam stated that DelDOT could rank corridors based on all reportable pedestrian and bicycle crashes and complete pedestrian safety audits on the top ranked locations to review the following:
  - Evaluate signal timings along high pedestrian/bicycle crash corridors in regards to pedestrian crossing times and prioritization.
  - Evaluate sidewalk conditions.
  - Evaluate DART facility locations
  - Evaluate the use of physical deterrents along target area roadways.
  - Evaluate the potential for alternate pedestrian treatments including the use of a barrier and/or median refuge islands.
  - Prioritize improvements based on available funding
- Heather Dunigan stated that WILMAPCO has a sidewalk GIS layer. After the meeting, she sent an email to Adam Weiser with this information. Sarah Coakley also suggested checking with Ralph Reeb regarding a statewide sidewalk inventory. Natalie suggested overlaying the sidewalk inventory with bus stop locations and look for incomplete segments. Richard Klepner also suggested looking at schools given that the 2012 data indicates an increase in pedestrians involving school age children.
  - ACTION ITEM: DelDOT Traffic will look at the crash data related to school age children and provide information to Sarah Coakley for potential outreach related to the Safe Routes to School program.
  - ACTION ITEM: OHS will reach out to Dean Betts at the Department of Education to discuss the overall Strategic Highway Safety Plan, pedestrian and bicycle safety and better school planning in an effort to accommodate all users of the transportation system. DelDOT will attend this meeting with OHS.
- James Wilson asked about the opportunity to improve pedestrian signal timings on high speed corridors during the 9PM – 12AM timeframe to get more of a “hot response” signal operation for pedestrians. Mark Luszc stated that DelDOT could evaluate this idea further. Mark also indicated that the new push buttons

have an indicator light that is lit when a pedestrian activates the pedestrian signal. Adam asked if these could be installed as a systemic upgrade at all signalized intersections.

- ACTION ITEM: DeIDOT Traffic to evaluate the provision of “hot response” pedestrian signal timing on certain corridors.
- ACTION ITEM: DeIDOT Traffic to develop an estimate for installing new pushbuttons with indicators at all signalized intersections with pedestrian crossings. Likely to be funded with safety funds as a systemic upgrade.
- Dave Blankenship stated that the City of Wilmington is looking at using thermal cameras.
  - ACTION ITEM: Dave will provide information related to the thermal cameras to Adam Weiser.
- James Wilson asked if the operational cost of lighting was the major issue associated with lighting costs or if it was the installation cost that is preventing more lighting from being installed across the state. Mark stated that there are concerns with operational and/or installation costs depending upon the locations of where the lighting is recommended. James asked if “part-time” lighting could be looked at. Mark stated that this is a possibility.

#### **Enforcement Countermeasures:**

- John Yeomans asked if there was any correlation between the impairment related pedestrian crashes and from which establishment the pedestrians were coming from. Richard Klepner provided a map that showed the locations of alcohol service establishments in relation to pedestrian crashes. Lt. Jones suggested that during the safety checks, we could find out where the pedestrians was coming from in an effort to get the necessary information that John is requesting.
- Cpl Garibaldi asked about funding for 2-3 hour blocks for enforcement/check point activities. Jana responded that funding has been provided for OT enforcement in the past and that funding was allocated to the departments based on the locations of crashes. OHS is looking at an initiative to provide OT for making contacts with the pedestrians, but more of an educational outreach as opposed to an enforcement effort.
- Lt. Jones recommended providing a poster, similar to that for click-it or ticket that provides data related to pedestrian and bike crashes.
  - ACTION ITEM: DeIDOT Traffic to provide one-page summary of crash data to Lt. Jones for distribution at his upcoming Traffic Lieutenant’s meeting. This is to be completed prior to 4/8/13. This can also be discussed at the Pedestrian Strategic Meeting with OHS and their PR firm.

#### **Educational Countermeasures:**

- Natalie asked about what types of education/outreach can be conducted to reduce crashes related to the 45 to 54 year old male age group. Alison responded that several outreach initiatives have been undertaken in the past and OHS is looking at other ideas. Suggested ideas include pedestrian safety checks, informational flyers, bus backs and advertisements inside buses, media exposure and even sidewalk decals/stenciling to direct pedestrians to “safe” crossing locations. Alison also provided some examples of “give-away” items to increase pedestrian visibility and awareness.
- Dave Blankenship asked if there was a way to partner with DART related to outreach. Alison suggested having their PR firm have an intern ride on the buses and handout information.
  - ACTION ITEM: OHS to look into having physical PR presence on DART buses to distribute pedestrian safety information. To be discussed at upcoming Pedestrian Strategic Meeting.
- Dr. Lee stated that LTAP could help with outreach.
- Natalie suggested putting a decal on sidewalks with an “in your face” type message to get people to use crosswalks.
  - ACTION ITEM: At the Pedestrian Strategic Meeting discuss ideas/concepts related to an “in your face” sidewalk detail. Also look at the possibility of a public slogan contest.
  - Joint Education campaign between DeIDOT and Office of Highway Safety
    - Press event/public outreach campaign (includes television, newspaper, notifications at pedestrian/bicycle facilities, etc.)
  - Implement sidewalk street deals, especially in local jurisdictions, to emphasizing pedestrian safety.
  - Encourage schools to provide bicycle/pedestrian safety education, especially to children under 14.
  - Implement driver’s education improvements to emphasize vehicle pedestrian right-of-way and laws

**The next meeting will be scheduled for the end of April/beginning of May. Adam Weiser will send out some dates to determine availability.**

The above is a memorandum of understanding between the parties regarding the topics discussed and the decisions reached. Any participants desiring to add to, or otherwise amend the minutes, are requested to put their comments in writing to the writer within seven (7) days; otherwise, the minutes will stand as written.