

Pedestrian Council ANNUAL REPORT

2016



Table of Contents

Executive Summary	3
Data Presented to and Reviewed by the Pedestrian Council	4-5
Subcommittee Summaries	
Education and Enforcement	5-7
Legislative and Policy	7-10
Built Environment	10-11
Topics planned to be discussed in 2017.....	12-13
Appendices	
Appendix A, Executive Order 54	14-17
Appendix B, List of 2016 Pedestrian Council Members	18-19
Appendix C, List of 2016 Subcommittee Members	20
Appendix D, List of 2016 Support Staff	21
Appendix E, Copies of Presentations.....	22-44

Executive Summary

The Advisory Council on Walkability and Pedestrian Awareness (hereinafter, “Pedestrian Council”) was reestablished by Governor Markell through Executive Order 54 on October 12, 2015 to address concerns related to the high number of pedestrian fatalities, lack of awareness about pedestrian laws, and desire to improve the walkability of the state.

In 2016, 27 pedestrians were killed on Delaware roadways. While this was a decrease from 2015, when 36 pedestrians died, it represents an alarmingly high percentage of the total number of persons killed in crashes (22.5 percent). The 2015 national average of pedestrians killed relative to the total number of persons killed in crashes was 15 percent.

The Pedestrian Council was charged with advising the Secretary of the Delaware Department of Transportation (DelDOT) on making walking a safe, convenient, efficient, and comfortable means of transportation. Jonathan Kirch, Executive Director of the American Heart Association of Delaware, and Jana Simpler, Director of the Office of Highway Safety, served as chair and co-chair, respectively, of the council for 2016.

Key Accomplishments

Key accomplishments of the Pedestrian Council in 2016 include the following actions:

- Support of the Walkable Bikeable Summit
- Support of DelDOT’s completion of its Complete Streets Implementation Plan
- Review of legislative opportunities, regarding traffic rules, and pedestrian policies
- Support of E-crash reporting updates to improve pedestrian data collection
- Support of increased opportunities for pedestrian safety education and enforcement

Recommendations

The Pedestrian Council made recommendations to educate people on pedestrian safety, identify and fill in pedestrian network gaps, and to improve pedestrian safety, as follows:




- Recommends that DelDOT work with state and local education and enforcement experts to develop and conduct a pedestrian safety education class. The council endorses the class as an educational supplement to pedestrian ticketing.
- Advises DelDOT to prioritize, fund and expand its Pedestrian Safety Audit Program. Pedestrian Safety Audits are a national best practice for improving network connectivity and reducing pedestrian crashes. Pedestrian network improvements shall be programmed into the Capital Transportation Plan (CTP) within one year following the completion of the audit.
- Recommends amending Delaware Code to grant DelDOT the power and authority to temporarily trespass on private property to reconstruct existing public use pedestrian facilities to a contemporary standard. This is to reduce time and difficulties encountered by DelDOT during these types of projects.
- Recommends that DelDOT develop guidance and design standards for pedestrian median and sidewalk barriers, and prioritize locations for their use. This is to encourage pedestrians to use safer crossing facilities at signalized intersection locations.

Data Presented to and Reviewed by the Pedestrian Council

Prior to making recommendations, the Pedestrian Council requested and was provided with presentations on existing conditions, initiatives, programs, and plans regarding the pedestrian mode, as noted below. Full copies of the presentations are available in an appendix.

Presentations on Existing Conditions, Initiatives, Programs & Plans	
	<p>At the January 2016 meeting, the Pedestrian Council heard a presentation on the history and accomplishments of the 2007 Pedestrian Council, including developing the Statewide Pedestrian Action Plan, establishing a pedestrian facility inventory, developing a transition plan to address noncompliance, and promoting the Complete Streets Policy.</p>
	<p>In February, Richard Klepner, Management Analyst at the Office of Highway Safety, gave a presentation on 2012-2015 pedestrian crash data and current education and enforcement strategies. Mark Luszcz, DeIDOT Chief Traffic Engineer, presented on Delaware's pedestrian safety problem and current engineering strategies. This presentation included information on Delaware's 2015 Strategic Highway Safety Plan, and pedestrian crash data from 2007-2014, including specific information regarding roadway functional classification, municipalities, location within or adjacent to the roadway, time of day, day of week, month of the year, gender and age, lighting and surface condition, and driver and pedestrian actions prior to and at the time of a crash.</p>
	<p>At the March meeting, Jeff Niezgoda, Assistant Director, Local Systems Improvement, and Paul Moser, Planner, provided information on the various types of pedestrian improvement projects implemented by this DeIDOT section; including Transportation Alternatives Program, Bike and Pedestrian Improvement Program, State Trails and Pathways Program, Scenic Byways, Industrial Track Greenway Phase 3; and the pedestrian project prioritization process being developed.</p>
	<p>In April, Rob McCleary, PE, DeIDOT Chief Engineer, presented on DeIDOT's sidewalk ownership and obligations, including that the extent of DeIDOT responsibility is dependent upon sidewalk location.</p>

March 27, 2017 draft

Presentations on Existing Conditions, Initiatives, Programs & Plans	
<p>Long-Range Transportation Plan Update</p> 	<p>At the May meeting, Tim Snow, DelDOT Regional Systems Planning gave a presentation on the Long Range Transportation Plan update process.</p>
	<p>In June, Connie Holland, Director, Office of State Planning Coordination provided information on the Preliminary Land Use Service (PLUS) process and local comprehensive plans.</p>
<p>Pedestrian Survey Report – Highlights</p> 	<p>Richard Klepner, Office of Highway Safety, presented the results of a Pedestrian Survey at the August meeting.</p>

Subcommittee Summaries

The Pedestrian Council established three subcommittees in order to address each area comprehensively. The three subcommittees are Built Environment, Legislative and Policy, and Education and Enforcement. Chairs of the subcommittees asked stakeholders and subject matter experts to join each of the subcommittees, in order to provide additional input to the Pedestrian Council. Each of the subcommittees developed recommendations that were then reviewed and approved by the Pedestrian Council.

Education and Enforcement

The Education and Enforcement Subcommittee met seven times to discuss education and enforcement gaps and make recommendations to improve pedestrian safety. Crash data shows that most roadway fatalities involving pedestrians share similar characteristics. Crashes tend to occur on high speed multilane roadways, at night, not within a crosswalk or at an intersection, with the pedestrian often being under the influence.

Using this data, as well as discussions with various parties representing those with disabilities, state and local law enforcement, driver education, and many others, this Subcommittee created the following recommendations that were approved by the Pedestrian Council:

- Recommend that DelDOT work with Delaware State Police, local law enforcement, Office of Highway Safety, and others to develop and conduct a “Share the Road Safety Class” and that the Pedestrian Council endorse the class as an educational supplement to pedestrian ticketing.

Based off a similar program in Portland, Oregon, that targets pedestrians, bicyclists, and vehicle drivers that are ticketed for various offenses related to pedestrian safety. This class is a one-time opportunity for offenders to have their tickets dismissed in exchange for an educational experience on how non-motorized and motorized users of the roadways should interact with each other. The class is sustained through a small fee, much cheaper than the overall cost of a ticket. Portland officials have considered their program to be successful, although it is mostly targeted at bicyclists. This class would be voluntary for individuals ticketed.

- Recommend that DelDOT establish and use data-driven thresholds for targeted outreach to specific schools regarding the Safe Routes to Schools program.

As of now, Safe Routes to Schools improvements work on a voluntary basis or through some other improvement system. This recommendation is to establish data sets that would assist schools in determining if they have a pedestrian issue. This would allow DelDOT to create a greater sense of urgency for needed improvements. Although ineligible for Safe Routes to Schools, this program could be expanded to high schools and universities.

- Recommend that DelDOT work with the Office of Highway Safety, Department of Education, and school districts to conduct crossing guard training prior to each school year and that the Pedestrian Council endorse the recommendation that crossing guard training be required on an annual basis for all non-law enforcement crossing guards in Delaware.

Through conversations with AAA Mid-Atlantic and with DelDOT, it was clear that there was a gap in training for crossing guards in Kent and Sussex Counties. It is important that crossing guards know the responsibilities of being a crossing guard and can become the prime educator for teaching children how to cross the road properly. Very few school districts in these two counties have participated in free training for crossing guards, and when asked to participate earlier this year, many were non-responsive. By making training mandatory, this will eliminate this need.

- Recommend that DelDOT work with the Office of Highway Safety, Department of Education, and school districts to consider including pedestrian safety education for school aged children.

Children 5-9 years old rank as one of the most common age groups to be hit and injured by a vehicle in Delaware. Most of these crashes are on low speed roadways limiting the severity of the injury. This is to help teach children at a younger age the proper way to behave on/around roadways.

- Recommend that section 3.2.14 of the Defensive Driver curriculum be amended from its current language of “Pedestrian” to read “Pedestrians, including pedestrian safety, yielding to pedestrians, White Cane Law, and active traffic devices for pedestrian crossing such as HAWK signals and Rectangular Rapid Flashing Beacons.”

The current curriculum for defensive driving courses had a one word statement of “pedestrians”, which meant that any education involving pedestrians would be extremely limited. With new laws involving vulnerable users, White Cane Law, as well as pedestrian dedicated traffic signals, it is important that Delaware’s drivers be educated on how they operate.

- Recommend upon request that the annual Pedestrian Council budget consider including pedestrian safety and educational materials.

Conspicuity Enhancement is an effective, science-based traffic safety countermeasure for reducing pedestrian crashes. The purpose of enhancing conspicuity for pedestrians is to increase the opportunity for drivers to see and avoid pedestrians, particularly at night. Pedestrians who are more visible are less likely to be struck. In accordance with Delaware’s Strategic Highway Safety Plan, the Delaware Office of Highway Safety has an implementation strategy in place to distribute retro-reflective materials as part of pedestrian safety and educational campaign efforts. This recommendation is for the Pedestrian Council to assist OHS by providing funding for these giveaway items.

Legislative and Policy

The Legislative and Policy Subcommittee met five times in 2016 in order to review traffic rules to help support a safe pedestrian environment, provide advice regarding implementation of DelDOT’s Sidewalk and Multi-Use Path Maintenance Policy, and to make recommendations regarding the Statewide Pedestrian Action Plan. The subcommittee reviewed DTC’s bus stop policy and identified gaps in the state’s E-Crash reporting system regarding data that would be helpful for analyzing and developing strategies to reduce pedestrian crashes and fatalities and serious injuries. The subcommittee developed the following recommendations approved by the Pedestrian Council:

- Adopt the revised bus stop policy being prepared by the Delaware Transit Corporation that contains the following language:
 - ❖ A joint DelDOT Traffic/DTC engineering review shall be undertaken for any proposed new bus stops along multilane commercial highways that are located more than 200 feet from a signalized crosswalk to determine the appropriate means of crossing pedestrians across the highway at the midblock bus stop location before the new bus stop is constructed.
 - ❖ If data indicates that an existing bus stop generates midblock crossings, DTC and DelDOT will make every effort to move the bus stop to a safer location within the near vicinity or provide a safe, accessible midblock pedestrian crossing at the site of the bus stop.

March 27, 2017 draft

DelDOT Traffic's Pedestrian/Bicycle Safety Working Group identified a correlation between locations of pedestrian fatal crashes and high numbers of transit users getting on and off buses. Anecdotal evidence exists of bus passengers being involved in pedestrian crashes. Additionally, DTC's Bus Stop Policy has not been revised since 2000. The subcommittee thought that reviewing the policy could be an opportunity to make possible pedestrian-safety motivated revisions to ensure safe access for pedestrians, safe pull-offs for buses, and not promoting mid-block activity.

- Adopt a Complete Streets Implementation Plan that contains the following:
 - ❖ More specific recommendations related to development projects, including requirements for developers along multilane commercial corridors to provide necessary pedestrian safety infrastructure to prevent midblock crossings from occurring due to development of specific parcels. Requirements for non-motorized safety improvements on these corridors will be provided by the Safety Programs Manager or designee.
 - ❖ More specific recommendations related to school projects
 - ❖ Improved guidance regarding the selection of design speeds for non-freeway classified roadways that promote slower vehicular speeds and more compatibility with non-motorized road users.
 - ❖ In the section “New Roads, Road Expansion & Roadway Redesign Projects”, add the following policy direction: “Widening projects will strongly consider and include as appropriate all pedestrian safety countermeasures including but not limited to signalized crosswalks, lighting, well placed bus stops and barriers to discourage pedestrian crossings at inappropriate locations.”
 - ❖ More specific requirements for Department projects to extend the limits of Capital projects to include key pedestrian origins and destinations if necessary to ensure that these origins and destinations are connected seamlessly to safe pedestrian road crossing infrastructure.
 - ❖ In addition, DelDOT will offer, on an annual basis, training regarding Complete Streets for DelDOT and/or Municipal design, construction, maintenance staff and consultants. DelDOT will define staff required to take this training.

DelDOT's Complete Streets Policy has been in effect since 2010. However, the Complete Streets Implementation Plan is still being finalized. This recommendation is based on the fact that mid-block crashes on multilane commercial highways account for most pedestrian fatalities in Delaware. Additionally, it needs to be recognized that high speed roads are generally incompatible with pedestrian safety and comfort. The Built Environment Subcommittee also approved the training recommendation, in order to ensure that all persons tasked with implementing capital projects are aware of the policy, implementation plan, and best practices.

- Revise the state’s E-Crash Form so that it automatically prompts investigating officers to provide the pedestrian trip origin and destination (if known) for pedestrian crashes. It is noted that this recommendation is currently being implemented by the Delaware Criminal Justice Information System (DELJIS) and is in production as of December 2016.

For pedestrian crashes, DelDOT Traffic’s Pedestrian/Bicycle Safety Working Group identified the need for trip information. The State’s “E-Crash form does not currently prompt police to provide trip information for pedestrian crashes. Engineers and others are missing a critical piece of the puzzle when analyzing pedestrian crashes because of the absence of data on trip origins/destinations for pedestrians involved in crashes.

- DelDOT will prioritize, fund and expand the Pedestrian Safety Audit Program to complete a minimum of three (3) corridor audits per year. Improvements shall be programmed into the Capital Transportation Plan (CTP) within one year following the completion of the audit. One or more representatives from the Delaware Transit Corporation shall participate in all Pedestrian Safety Audit Program site visits.

One of the strategies in Delaware’s Strategic Highway Safety Plan to reduce pedestrian fatalities and serious injuries is to conduct pedestrian safety audits at high-crash locations. DelDOT’s crash data review identified principal arterial roadways in New Castle County with a high concentration of pedestrian crashes. DelDOT Traffic Safety leads the safety audits, which include the following steps: review pedestrian & bicycle crash history along the corridor; perform pedestrian observations & counts; compile existing data, including pedestrian facilities (sidewalk, pedestrian signals, etc.), bus stop locations and ridership data, roadway facilities (channelization, lighting, etc.), and vehicular and pedestrian volumes; develop existing condition maps; conduct walking tour of corridor with stakeholders; perform additional analysis to evaluate potential improvements (short and long-term); and present improvements to stakeholders for concurrence. This recommendation is to expand the program to ensure that all high-crash corridors are evaluated and to also consider corridors with similar characteristics in order to prevent pedestrian crashes along these corridors from increasing. The Built Environment Subcommittee also approved this recommendation.

- To reduce time and difficulties encountered when DelDOT reconstructs existing public use pedestrian facilities crossing private property, amend Delaware Code to grant DelDOT the power and authority to temporarily trespass on private property to reconstruct existing public use pedestrian facilities to a contemporary standard.

Currently DelDOT has powers and authority to grant access to the public roadway network; has power and authority to require pedestrian facilities in the public right of way during development coordination or public works permitting activities; and has the power of eminent domain to acquire property rights for public purposes. Over the course of time pedestrian facilities have been constructed in the public right of way and standards for pedestrian facilities have evolved. DelDOT has a responsibility to the pedestrian in the public right of way and is leveraging as many resources as possible to bring pedestrian facilities to contemporary standards. When DelDOT has a proposed project, such as an alteration (pavement rehabilitation) project, DelDOT desires to remedy as many non-compliant pedestrian features as possible. When DelDOT desires to remedy pedestrian features this may temporarily affect private property owner rights. A typical process when

trespassing on private property would involve a right-of-way acquisition phase which can create challenges even though the end result is a modern pedestrian facility in the public right-of-way.

- DelDOT Planning liaisons with each local land use agency should promote non-motorized road user safety and accessibility concerns with the land use agency when reviewing development of parcels along roads and work to incorporate necessary developer improvements to promote safe non-motorized movements.

The purpose of this recommendation is to improve DelDOT coordination with local land use agencies and to provide additional guidance to DelDOT's Development Coordination section regarding its role in implementing the Department's Complete Streets Policy.

Built Environment

Since June 2016, the Built Environment Subcommittee met monthly to review existing programs and develop recommendations to help improve the condition of the pedestrian network and reduce pedestrian injuries and fatalities in the State of Delaware. Presentations were made to help educate the subcommittee members on various programs, policies, and design standards used both in and out of the state. Presentations were made on the following subjects:

- DelDOT Design Standards
- Utility Coordination
- Complete Streets Policy and Implementation Plan
- Pedestrian Barriers
- Training
- Pedestrian Action Plan
- DelDOT's Prioritization Process
- Crosswalk and Lighting Design
- Maintenance of DelDOT Pedestrian Facilities

Based on these presentations at both the Pedestrian Council and Built Environment Subcommittee meetings, the subcommittee developed the following recommendations approved by the Pedestrian Council:

- Recommend that DelDOT develop guidance and design standards for pedestrian median and sidewalk barriers, and prioritize locations for their use.

Median barrier or sidewalk fencing to deter pedestrians from crossing at inappropriate locations has been identified as a long-term recommendation in DelDOT's Pedestrian Safety Audits for after other improvements have been completed. Other states have tried barrier/fencing at similar high-crash locations, where other engineering improvements have also been made to improve the safety and accessibility of controlled crossings and to enable pedestrians to safely reach these crossing locations. However, there are no

guidance or design standards for them, or a process to prioritize locations for their use. Considerations such as context sensitive design and crashworthiness need to be included. The Legislative and Policy Subcommittee also endorsed this recommendation.

- DelDOT create a method of publicly tracking and recording progress on implementing the complete streets policy and reporting on waivers granted.

DelDOT's Complete Streets Policy and draft implementation plan reference a waiver process and also suggest that data be collected on DelDOT's efforts to implement the policy. This recommendation is to implement these elements and provide a public tracking and reporting method.

- Update department's sidewalk maintenance policy to include a schedule of inspection. Dedicated funding and resources shall be made available for maintenance and repair of on and off-road DelDOT bicycle and pedestrian facilities.

One thing that DelDOT does well is measuring road conditions and DelDOT has a robust maintenance model in its handling of roadway maintenance. Parity of pedestrian facilities is needed, with dedicated staffing, funding, and other resources to maintain those pedestrian facilities that DelDOT is responsible for.

- There should be one section, with appropriate resources (e.g. staffing, funding, etc.), within DelDOT that coordinates various programs to ensure gaps in the bike and pedestrian networks are filled and resources are maximized. This section shall be responsible for ensuring project limits include key origins and destinations and are connected to the network at logical termini.

While DelDOT has an approved Complete Streets Policy and Pedestrian Accessibility Standards, DelDOT staff with multi-modal expertise and responsibilities are scattered within the agency and are often not included in project scoping decisions or Department plan reviews until the later phase. Additionally, there is the need to keep pedestrian facility inventory information updated and to improve project coordination.

- Recommend that DelDOT complete and implement the ADA Transition Plan in accordance with FHWA requirements.

DelDOT is working on finalizing and obtaining Federal Highway Administration approval of its ADA Transition Plan. DelDOT has an obligation to alleviate all of the non-compliant features within its right-of-way. This recommendation is to prioritize the resources necessary to implement the Plan.

Topics for Future Discussion

The following topics were discussed by the Pedestrian Council or its subcommittees in 2016. But recommendations were not finalized and additional discussion is planned.

- Increasing awareness and enforcement of Delaware's White Cane Law

Although recommendations were made, through continued discussions, it became obvious that much more work would be needed to improve awareness and enforcement of this important law. Individuals that are visually impaired are Delaware's most vulnerable users. Both the general public and law enforcement should be made aware of this law. This was deemed to be a major program area for when the Education and Enforcement Subcommittee reconvenes.

- Drivers' Education

Drivers' Education is free for 10th grade students to take one time, except for special education classrooms. The Delaware Drivers Safety Education Association (DDSEA) makes decisions regarding the program and curriculum. The Education and Enforcement Subcommittee has been asked to review the DMV Driver Manual and Drivers' Education test and to make recommendations regarding inclusion of additional pedestrian safety information for DDSEA consideration.

- Pedestrians under the influence

Although crash data shows that the frequency of pedestrians under the influence in a crash is minimal, it is a significant factor in fatal crashes. The Education and Enforcement subcommittee will continue to work with DSP and other related agencies to discuss possible new enforcement methods.

- Complete Community Enterprise Districts

Hazard to pedestrians is far more limited when streets enjoy heavy pedestrian traffic and vehicles travel at low speeds. The development of mixed-use, walkable, bikeable and transit-served communities holds the potential to make this state safer for pedestrians. However, it depends on the coordination of land use planning and multimodal transportation investments. A new state law in Delaware, passed earlier in 2016, created a mechanism for state and local governments in Delaware to align their decision making and to jointly put in place the interconnected and interdependent policies necessary to enable this type of development.

Under the new law in Delaware, local governments and the state department of transportation (DelDOT) can jointly designate "Complete Community Enterprise Districts". Within a designated District, the local government partner must zone and plan for mixed uses and higher density development (necessary for transit service to be

March 27, 2017 draft

operationally efficient) and relinquish counter-productive and burdensome parking regulations. In return, DelDOT must design streets in the District to be slow so that both walking and cycling are safe and inviting and must also prioritize capital investments in transit, walking and cycling improvements.

The Council and its members can play an important role in supporting the future designation and subsequent development in Complete Communities; a long-term but game changing strategy for reducing our pedestrian fatality problem. Complete Communities simultaneously address other goals, notably: accessibility and connectivity with the potential to make transit a more viable option for all Delaware citizens.

- Creating a means for any individual to report deficiencies in the pedestrian environment

Originally this recommendation came from the Built Environment Subcommittee in order to create a separate means for professionals conducting travel training and orientation to report deficiencies in the pedestrian environment. Discussion at the December Pedestrian Council meeting centered around expanding this recommendation to make it easier for anyone to report such deficiencies. The recommendation was tabled, in order to review the existing “Report a Road Condition” function on the DelDOT website.

Appendix A, Executive Order 54

STATE OF DELAWARE



**EXECUTIVE DEPARTMENT
DOVER**

**EXECUTIVE ORDER
NUMBER FIFTY-FOUR**

TO: HEADS OF ALL STATE DEPARTMENTS AND AGENCIES

**RE: REESTABLISHMENT OF THE ADVISORY COUNCIL ON WALKABILITY AND
PEDESTRIAN AWARENESS**

WHEREAS, pedestrian related fatalities have been consistently high in recent years (25 deaths in 2013; 27 deaths in 2014; 26 deaths in 2015 to date); and

WHEREAS, there is a desire to eliminate pedestrian fatalities in Delaware; and

WHEREAS, my administration's First State Trails and Pathways Initiative, Executive Order No. 6, and Executive Order No. 26 promote the walkability of communities by linking communities through interconnected pathway networks, creating and maintaining Complete Streets, and focusing transportation investment in Level 1 Investment Areas of the Strategies for State Policies and Spending; and

WHEREAS, during 2014 Delaware Department of Transportation ("DelDOT") accomplished many pedestrian focused improvements along our roadways such as the installation of a pedestrian-hybrid beacon at the intersection of DE Route 8 and Heatherfield Way and upgrades to pedestrian facilities (crosswalks, pedestrian signals/buttons) at 28 intersections; and

WHEREAS, Delaware has an extensive network of greenways, trails, sidewalks and pathways for the enjoyment of its citizens and visitors; and

WHEREAS, improving the walkability of a community increases property values by making these communities more connected, linking our work, schools, parks, libraries and businesses together; and

WHEREAS, land-use and traffic patterns and a lack of interconnectivity in many suburban areas make families dependent on motor vehicles for almost every activity; and

March 27, 2017 draft

Appendix A, Executive Order 54

WHEREAS, there is a lack of understanding of Delaware law relating to pedestrians and how motorists are expected to approach and respond to pedestrians in crosswalks and how pedestrians are expected to follow rules of the road.

NOW, THEREFORE, I, JACK A. MARKELL, by virtue of the authority vested in me as Governor of the State of Delaware, do hereby declare and order the following:

1. The Advisory Council on Walkability and Pedestrian Awareness (hereinafter, "Pedestrian Council") is hereby reestablished. The Pedestrian Council shall consist of no less than eighteen members which shall include the following:
 - a. The Secretary of the Delaware Department of Transportation ("DelDOT");
 - b. The Secretary of the Delaware Department of Natural Resources and Environmental Control ("DNREC");
 - c. The Secretary of the Department of State ("DOS")
 - d. The Secretary of Delaware Safety & Homeland Security ("DSHS);
 - e. The Secretary of the Department of Health and Social Services ("DHSS");
 - f. The Secretary of the Department of Education ("DOE");
 - g. The Chair of the State Council for Persons with Disabilities;
 - h. The Chair of the Delaware Developmental Disabilities Council;
 - i. The Chair of the Wilmington Metropolitan Area Planning Council;
 - j. The Chair of the Dover/Kent Metropolitan Area Planning Council;
 - k. The Sussex County Administrator;
 - l. The President of the Delaware Healthcare Association;
 - m. The Executive Director of the American Heart Association of Delaware;
 - n. The DelDOT ADA Title II Coordinator;

Appendix A, Executive Order 54

- o. The Department of State ADA Title II Coordinator;
 - p. One citizen representative who has a physical disability appointed by the Governor;
 - q. One citizen representative who has a visual impairment appointed by the Governor; and
 - r. Such other persons as the Governor may from time to time appoint.
2. All members of the Pedestrian Council serving by virtue of position may appoint a designee to serve in their stead. All members shall be appointed by and serve at the pleasure of the appointing authority. The Chair shall be elected by a majority of the members of the Pedestrian Council.
3. The Delaware Department of Transportation ("DelDOT") shall provide staff and fiscal support to the Pedestrian Council as part of DelDOT's ongoing responsibility.
4. The Pedestrian Council shall advise the Secretary of DelDOT on the following issues in an effort to make walking a safe, convenient, efficient, and comfortable means of transportation:
- a. Identifying gaps in the system of pedestrian paths and sidewalks in an effort to create a system of sidewalks and pathways that is continuous and interconnected;
 - b. Providing advice regarding design standards for crosswalks, sidewalks and pathways ensuring ADA compliance;
 - c. Providing advice regarding implementation of DelDOT's Sidewalk and Multi-Use Path Maintenance Policy;
 - d. Reviewing traffic rules to help support a safe pedestrian environment;
 - e. Providing advice regarding accessibility and connectivity in an effort to make transit a more viable option for all Delaware citizens; and
 - f. Developing strategies for pedestrian safety education and awareness.
5. The Pedestrian Council shall assist DelDOT with the periodic re-evaluation and implementation of the Statewide Pedestrian Action Plan and shall make recommendations regarding the prioritization of pedestrian infrastructure improvements especially within Level 1 and 2 Investment Areas.

Appendix A, Executive Order 54

6. The Pedestrian Council shall provide a report of its activities and any recommendations annually to the Office of the Governor and any affected state agency on a yearly basis.

7. Executive Order No. Eighty-Three, issued by Governor Ruth Ann Minner, dated March 9, 2006, is hereby rescinded.



APPROVED this 13th day of October 2015

A handwritten signature in blue ink, appearing to be 'Ruth Ann Minner', written over a horizontal line.

Governor

ATTEST:

A handwritten signature in blue ink, written over a horizontal line.

Secretary of State

Appendix B, list of 2016 Pedestrian Council Members

Pedestrian Council Members				
	<i>Contact</i>	<i>Appointed</i>	<i>Title</i>	<i>Alternate</i>
Secretary of DeIDOT	Jennifer Cohan			Deputy Secretary Nicole Majeski
Secretary of DNREC	David S. Small	Susan Moerschel	Park Administrator I	
Secretary of DOS	Jeffrey W. Bullock	Douglas Denison	Director of Community Relations	
Secretary of DSHS	James N. Mosley	Jana Simpler	Director of Office of Highway Safety	
Secretary of DHSS	Rita M. Landgraf	Richard Killingsworth	Chief, Health Promotion and Disease Prevention	
Secretary of DOE	Steven Godowsky	Tina Shockley	Education Associate, Policy Advisor	
Chair of the State Council for Persons with Disabilities	Jamie Wolfe			
Chair of the Delaware Developmental Disabilities Council	Barbara Monaghan			
Chair of the Wilmington Metropolitan Area Planning Council	John Sisson			Tigist Zegeye
Chair of the Dover/Kent Metropolitan Area Planning Council	Bradley S. Eaby	Rich Vetter	Executive Director of the Dover/Kent County MPO	Jim Galvin
Sussex County Administrator	Todd Lawson	Janelle Cornwell	Planning Manager	
President of the Delaware Health-care Association	Wayne Smith			
Executive Director of the American Heart Association of Delaware	Jonathan M. Kirch			

March 27, 2017 draft

Appendix B, list of 2016 Pedestrian Council members

Pedestrian Council Members				
	<i>Contact</i>	<i>Appointed</i>	<i>Title</i>	<i>Alternate</i>
DeIDOT ADA Title II Coordinator	John McNeal			Todd Webb
Department of State ADA Title II Coordinator	Marsha L. Carson		Human Resources Specialist II	
One citizen representative who has a physical disability appointed by the Governor				
One citizen representative who has a visual impairment appointed by the Governor				
Such other persons as the Governor may from time to time appoint	James Lardear		Director, Public and Government Affairs at AAA Mid-Atlantic	
Such other persons as the Governor may from time to time appoint	William Payne			

March 27, 2017 draft

Appendix C, List of 2016 Subcommittee Members

Built Environment Subcommittee Members

Chair, John Sisson	John.Sisson@state.de.us
Co-chair, Rich Vetter	rich.vetter@doverkentmpo.org
Janelle Cornwell	janelle.cornwell@sussexcountyde.gov
Paul Moser	Paul.Moser@state.de.us
John McNeal	John.McNeal@state.de.us
Susan Moerschel	Susan.Moerschel@state.de.us
Barbara Monaghan	stallio7679@gmail.com
Tom Nickel (George LeCates, alternate)	Thomas.Nickel@state.de.us
Linda Osiecki	Linda.Osiecki@state.de.us
William Payne	ubpayne@verizon.net
Adam Weiser	Adam.Weiser@state.de.us
Debra Young	dyoung@empowerability.com
Todd Webb	Todd.Webb@state.de.us

Education and Enforcement Subcommittee members

Chair, Richard Klepner	richard.klepner@state.de.us
Co-chair, Peter Haag	Peter.Haag@state.de.us
Tina Shockley	tina.shockley@doe.k12.de.us
Linda Osiecki	Linda.Osiecki@state.de.us
Darlene Cole	Darlene.Cole@state.de.us
Matt Cox	Matthew.Cox@state.de.us
Brian Clarke	BrianA.Clarke@state.de.us
Lauren DeVore	Lauren.Devore@state.de.us
Todd Webb	Todd.Webb@state.de.us

Legislative and Policy Subcommittee members

Chair, Jim Lardcar	jlardcar@aaamidatlantic.com
Co-chair, James Wilson	james@bikede.org
Jamie Wolfe	j.wolfe6@icloud.com
Richard Klepner	richard.klepner@state.de.us
Nicole Majeski	Nicole.Majeski@state.de.us
Bill Thatcher	Bill.Thatcher@state.de.us
Adam Weiser	Adam.Weiser@state.de.us
Amy Wilburn	dioglaert@verizon.net
Tom Nickel	Thomas.Nickel@state.de.us
Matt Cox	Matthew.Cox@state.de.us

March 27, 2017 draft

Appendix D, List of 2016 Support Staff




Support Staff	
Drew Boyce	Director of Planning
Sarah Coakley, AICP	Pedestrian Coordinator
Kate Smagala	McCormickTaylor
Sonia Marichic-Goudy	McCormick Taylor


March 27, 2017 draft

Appendix E, Copies of Presentations

Advisory Council on Walkability and Pedestrian Awareness

TUESDAY, JANUARY 26, 2016
11:00AM - 12:00PM
DELDOT ADMINISTRATIVE BUILDING
800 BAY ROAD
DOVER, DE
FARMINGTON/FELTON CONFERENCE ROOM

Sponsored by:  DELDOT
CUB TAYLOR

WELCOME




- Welcome and Introductions
- Review of Executive Order #54
- Presentation on the History and Accomplishments of the 2007 Pedestrian Council
- Discuss the Goals of the Pedestrian Council
- Discuss Roles and Responsibilities
 - Election of the Chair
 - DelDOT Staff Support
 - Establish Subcommittees
- Future Meetings
- Public Comment



Executive Order #54

Re-established Advisory Council on Walkability and Pedestrian Awareness

- Signed by Governor Markell October 12, 2015
- Replaces Governor Minner's Executive Order #83 dated March 9, 2006
- Shall consist of no less than 18 members
- Assist DelDOT with re-evaluation, implementation, and recommendations regarding the Statewide Pedestrian Action Plan and prioritization of pedestrian infrastructure improvements

Goals of Executive Order #54

- Identify gaps in the system of pedestrian paths and sidewalks to create continuous, interconnected pathways
- Provide advice regarding design standards for crosswalks, sidewalks, and pathways ensuring ADA compliance
- Provide advice regarding implementation of DelDOT's Sidewalk and Multi-Use Path Maintenance Policy
- Review traffic rules to help support a safe pedestrian environment
- Provide advice regarding accessibility and connectivity to make transit a more viable option for DE citizens
- Develop strategies for pedestrian safety, education, and awareness

History of 2007 Pedestrian Council

- Executive Order #83 - Governor Minner's Goals
 - Ensuring that paths and sidewalks are continuous and interconnected where feasible
 - Developing consistent design standards for crosswalks, sidewalks and pathways
 - Clarifying maintenance responsibility for sidewalks
 - Reviewing traffic rules and driver behavior to help support a safer pedestrian environment
 - Promoting land use and traffic patterns that encourage walking and reduce air pollution
- Developed, adopted, and implemented Statewide Pedestrian Action Plan
- Represented broad range of community interests




March 27, 2017 draft

Appendix E, Copies of Presentations

Accomplishments of 2007 Pedestrian Council Goal 1: Inventory and Plan

- Established a pedestrian facility inventory
 - Working on maintaining it
- Developed a transition plan for noncompliance



Accomplishments of 2007 Pedestrian Council Goal 1: Inventory and Plan

- Promoted Complete Streets Policy toward interconnection
 - Project by project basis
 - Completed review process for Complete Streets Design Guide
 - Working towards getting the Guide printed



- Created system to prioritize needs- in progress

Accomplishments of 2007 Pedestrian Council Goal 1: Inventory and Plan

- Integrated walkability, environmental stewardship, and land use planning
- Revised DelDOT's organizational structure
 - Established a Title II ADA Coordinator
 - Provided staff for the position
 - Moved position to Office of the Secretary




EVERYONE IS A PEDESTRIAN

Accomplishments of 2007 Pedestrian Council Goal 2: Standards and Guidelines

- Revised the framework for policy development using Complete Street Policy – in progress
 - Requires constant monitoring
- Ensured inclusion of all special needs groups
 - Children, senior citizens, and disabled
- Developed guidelines for all roadways and ADA Compliance
 - Daily activity to ensure compliance to highest feasibility

Accessibility 











Accomplishments of 2007 Pedestrian Council Goal 3: Implementation and Education

- Educated and coordinated with all agencies – ongoing
- Minimized institutional and procedural barriers of pedestrian facilities - ongoing

Accomplishments of 2007 Pedestrian Council Goal 3: Implementation and Education

- Educated and coordinated with all agencies
 - Training Program Created
- Minimized institutional and procedural barriers of pedestrian facilities
 - Accomplishing this through the creation of Pedestrian Access Route (PAR) group
- Reviewed traffic rules, driver behavior, and pedestrian behavior to improve safety through education
 - Implemented under Strategic Highway Safety Plan




March 27, 2017 draft

Appendix E, Copies of Presentations

Accomplishments of 2007 Pedestrian Council Goal 3: Implementation and Education

- Promoted safe travel for pedestrians using the 4-E's
 - Engineering, Education, Enforcement, and Encouragement
 - SRTS Train The Trainer courses including walkability audits
 - Walkability workshops to help local communities
 - Strategic Highway Safety Plan emphasizes pedestrian safety
 - Develop statewide transportation educational curriculum for schools (www.bestde.org)



Accomplishments of 2007 Pedestrian Council Goal 4: Responsibility and Funding

- Clarified pedestrian facility maintenance responsibilities of State, Counties, Municipalities, and Private Parties
 - Ongoing recovery and review of all known and discoverable Municipal Maintenance Agreements
 - Will take two to three years to complete



Accomplishments of 2007 Pedestrian Council Goal 4: Responsibility and Funding

- Developed model maintenance programs across the state
 - Began through University of Delaware's Institute for Public Administration (IPA)
 - Compiled in two documents:
 - Complete Streets in Delaware: A Guide for Local Governments (2011)
 - Winter Maintenance of Pedestrian Facilities in Delaware: A Guide for Local Governments (2012)



Accomplishments of 2007 Pedestrian Council Goal 4: Responsibility and Funding

- Developed financial incentives encouraging counties and municipalities to create and implement pedestrian facilities
 - In Progress



Goals of Executive Order #54

- Identify gaps in the system of pedestrian paths and sidewalks to create continuous, interconnected pathways
- Provide advice regarding design standards for crosswalks, sidewalks, and pathways ensuring ADA compliance
- Provide advice regarding implementation of DelDOT's Sidewalk and Multi-Use Path Maintenance Policy
- Review traffic rules to help support a safe pedestrian environment
- Provide advice regarding accessibility and connectivity to make transit a more viable option for DE citizens
- Develop strategies for pedestrian safety, education, and awareness

Roles and Responsibilities


- Election of Chair
- DelDOT provides Staff Support
- Establish Subcommittees
 - Legislative and Policy
 - Built Environment
 - Education and Enforcement



March 27, 2017 draft

Appendix E, Copies of Presentations

Pedestrian Crashes and Fatalities



Richard Klepner
February 23, 2016

Overall Picture - Fatalities

- Since 2012, 118 pedestrian fatalities, with 35 in 2015.
 - 48% of pedestrian total crashes occur between 8 PM and 2 AM.
 - 50% of pedestrians were under the influence of drugs and/or alcohol.
 - 67% of pedestrians killed were between the ages of 30-64.
 - 72% occurred in New Castle County.

Overall Picture – Fatalities (cont.)

- 79% occurred in dark conditions
 - 54% in dark – unlighted conditions
- Saturday is the highest for pedestrian crashes and Sundays the lowest.
- Tendency to be on multilane, high speed roadways.

Pedestrian Action During the Fatal Crash (2012-2015)

Action	Total	%
Dark/Dark	25	25%
Disabled Vehicle Related	0	0%
Entering/Exiting Parked/Stopped Vehicle	1	1%
Failure to Obey Traffic Signs, Signals, Or Other	1	1%
Failure to Yield Right of Way in Roadway Improperly	15	14%
	28	25%
Inattentive / Talking, Eating, Etc / No Proper Action	6	6%
	5	5%
Not Visible	24	22%
Other	3	3%
Unknown	6	5%
Wrong Way Riding or Walking	3	3%

Speed Limit Where Pedestrian Fatal Crash Occurred

Speed Limit	Total	% of Crashes
≤20	3	3%
25	12	11%
30	0	0%
35	11	10%
40	14	13%
45	19	17%
50	30	28%
55	17	16%
65	3	3%

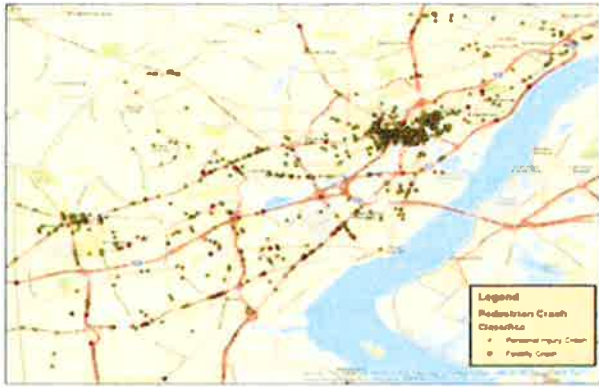
Location Prior To Crash (2012-2015)

Location	Total	%
Intersection - Marked Crosswalk	15	19%
Intersection - Other	2	2%
Median/Crossing Island	0	0%
Midblock - Marked Crosswalk	1	1%
Non-Trafficway Area	2	2%
Other	3	2%
Shoulder/Roadside	12	9%
Sidewalk	7	5%
Travel Lane - Other Location	60	46%
Unknown	10	8%

March 27, 2017 draft

Appendix E, Copies of Presentations

North of Canal Pedestrian Crashes (2012-2015)



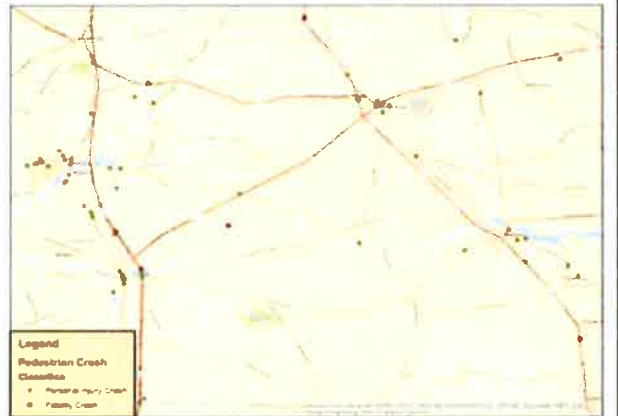
Wilmington Crashes (2012-2015)



Dover/Camden/Milford (2012-2015)



Western Sussex (2012-2015)



Beaches (2012-2015)



Beaches (2014-2015)



March 27, 2017 draft

Appendix E, Copies of Presentations

Current Marketing and Enforcements

Happy Crab Campaign – Beach Areas
 "How Did the Chicken Cross the Road" – Rest of Delaware

Questions?

DELAWARE STRATEGIC HIGHWAY SAFETY PLAN: TOWARD ZERO DEATHS

Presentation to:
 Pedestrian Council
 February 23, 2016

- ### Agenda
- What is the Strategic Highway Safety Plan?
 - Pedestrian Crash Data
 - Evaluation of 2010 To-Do List
 - 2015 Strategies
 - Next steps

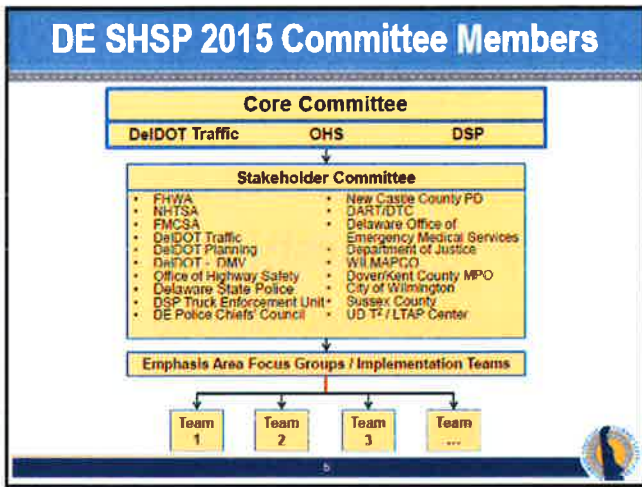
Delaware's SHSP

DELAWARE STRATEGIC HIGHWAY SAFETY PLAN: TOWARD ZERO DEATHS



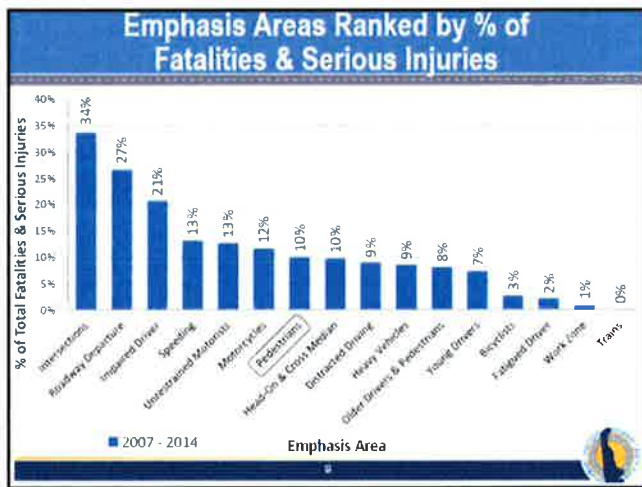
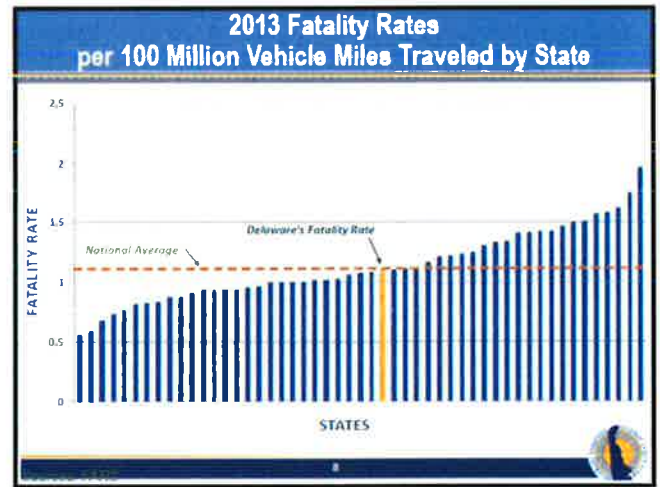
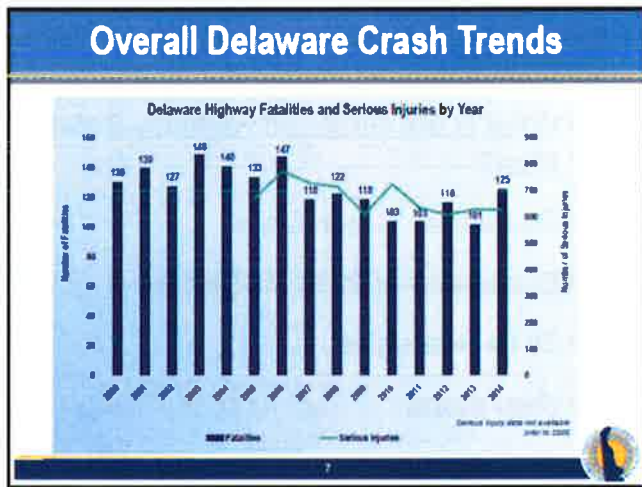
March 27, 2017 draft

Appendix E, Copies of Presentations



Mission Statement

The *Delaware Strategic Highway Safety Plan: Toward Zero Deaths* aims to eliminate fatalities and serious injuries on Delaware's roadways through a multi-agency approach that utilizes education, enforcement, engineering and emergency service strategies.

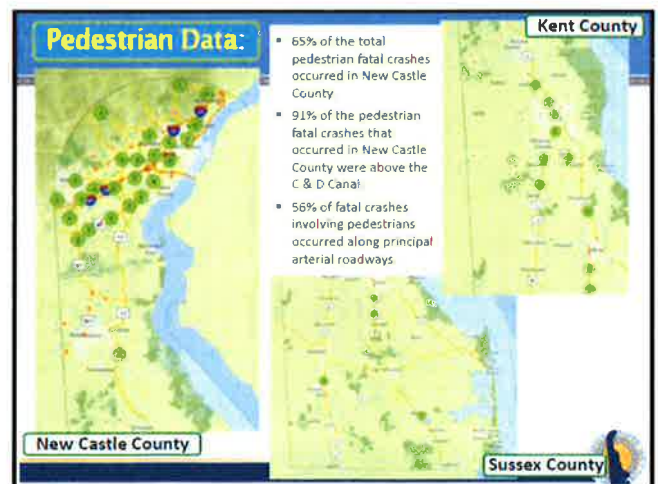
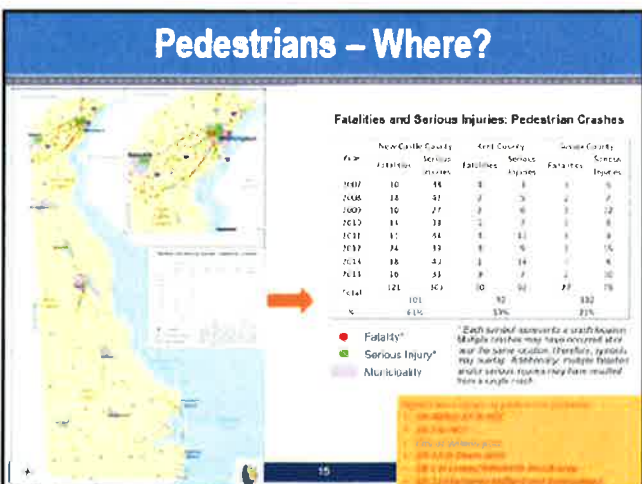
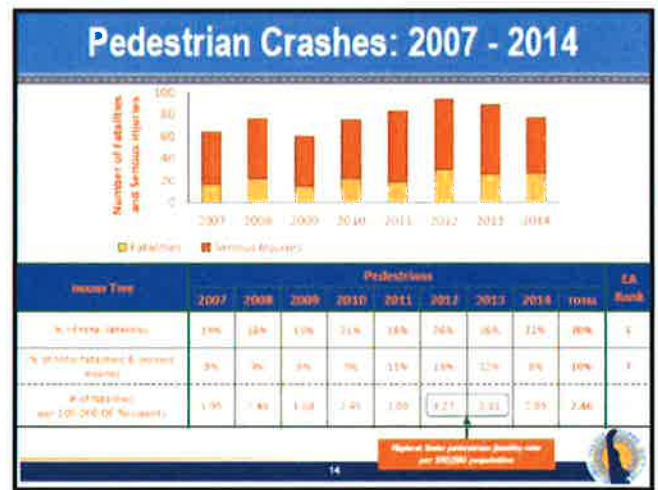
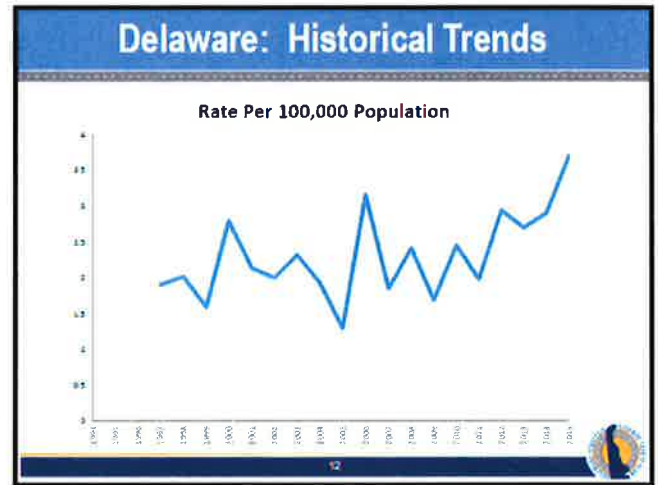
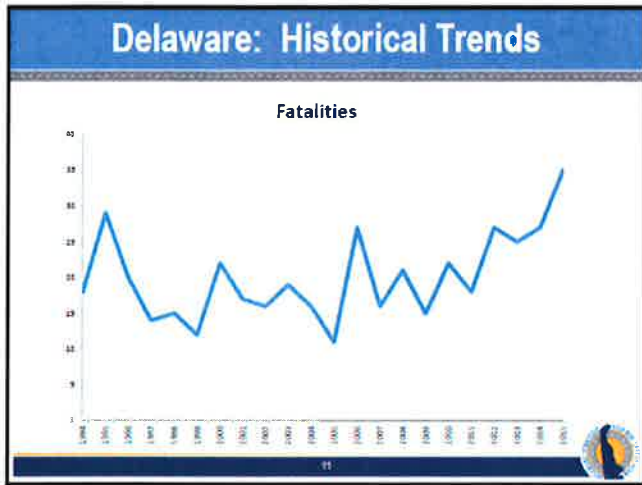


Pedestrian Data

DELAWARE STRATEGIC HIGHWAY SAFETY PLAN: TOWARD ZERO DEATHS

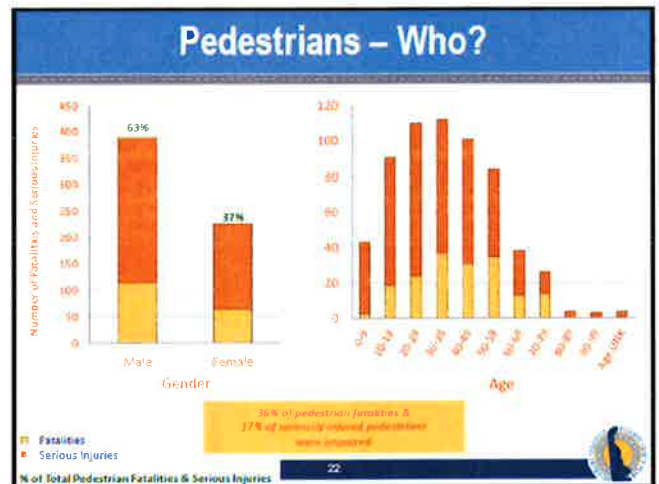
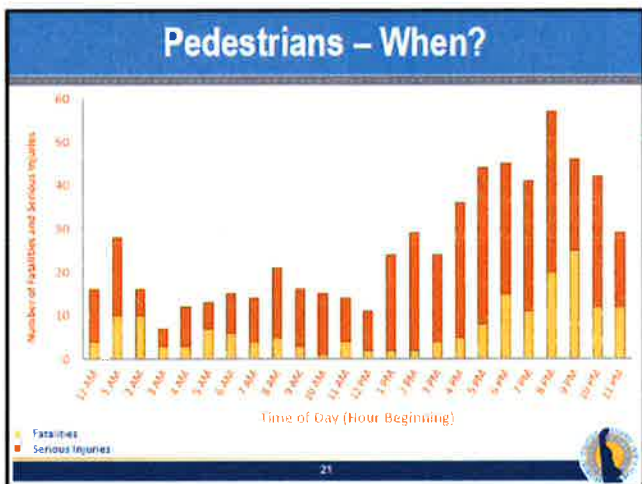
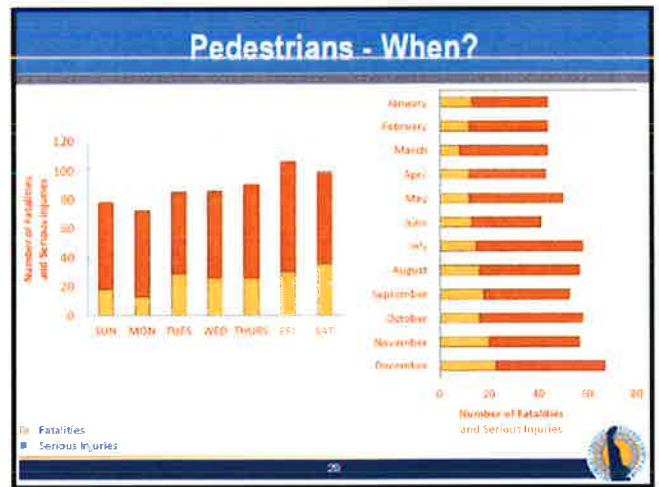
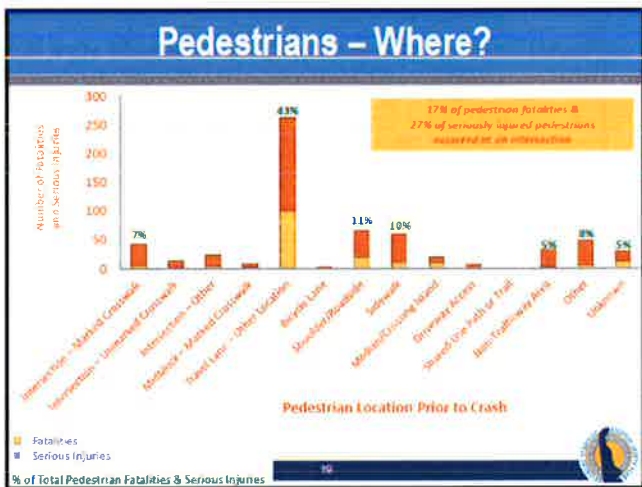
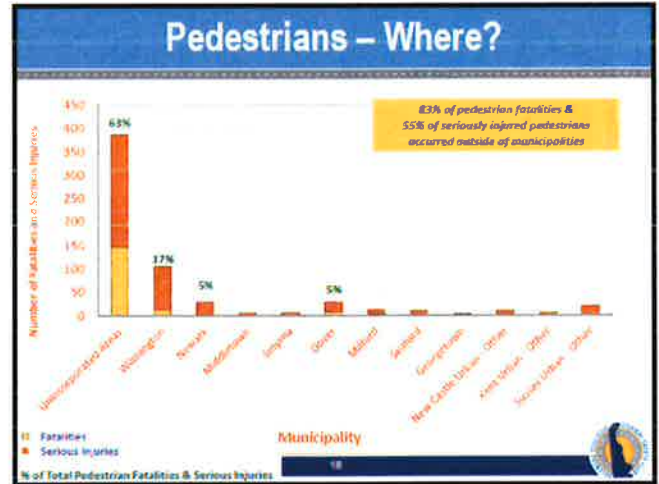
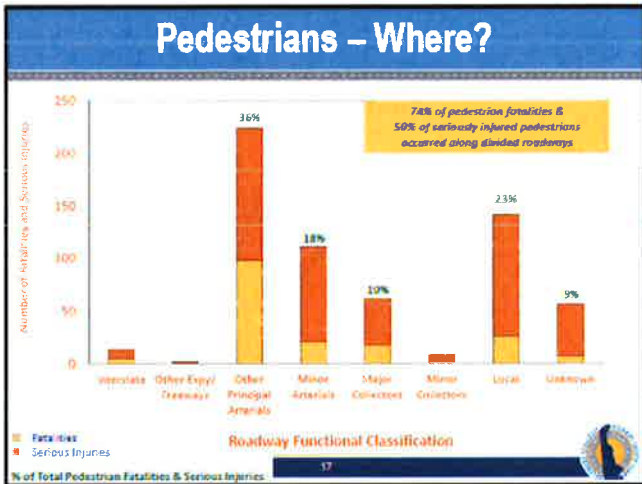
March 27, 2017 draft

Appendix E, Copies of Presentations



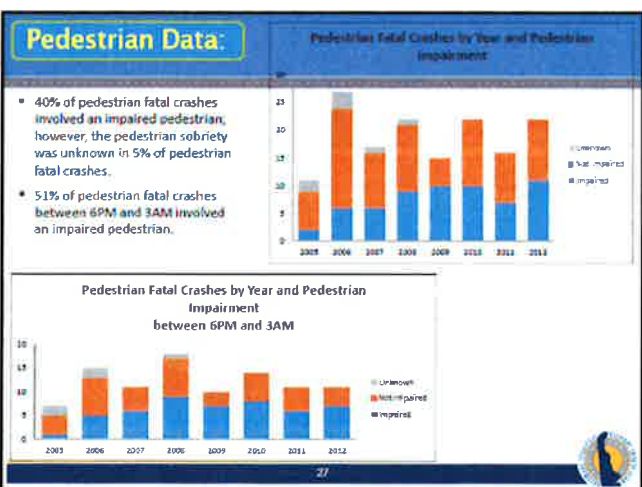
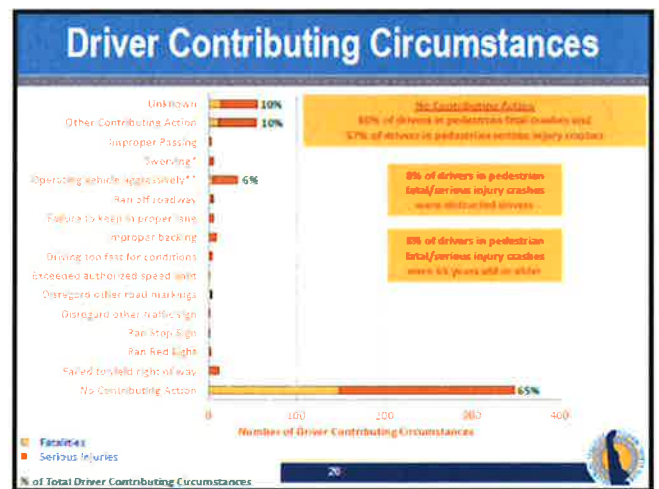
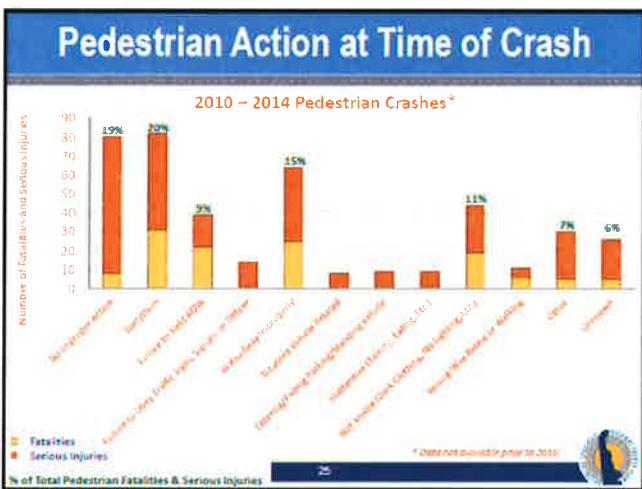
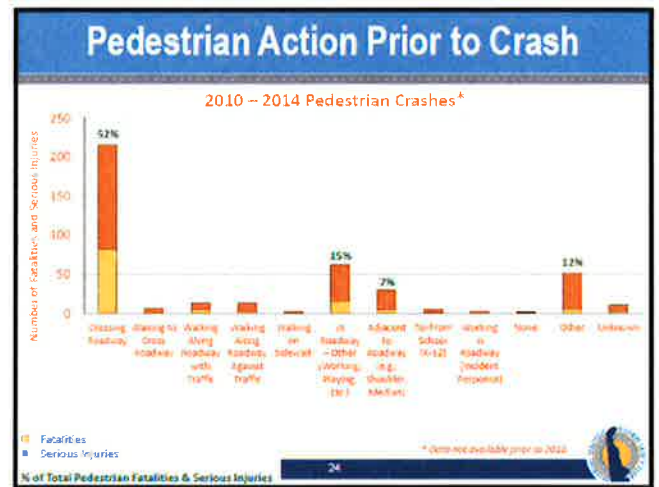
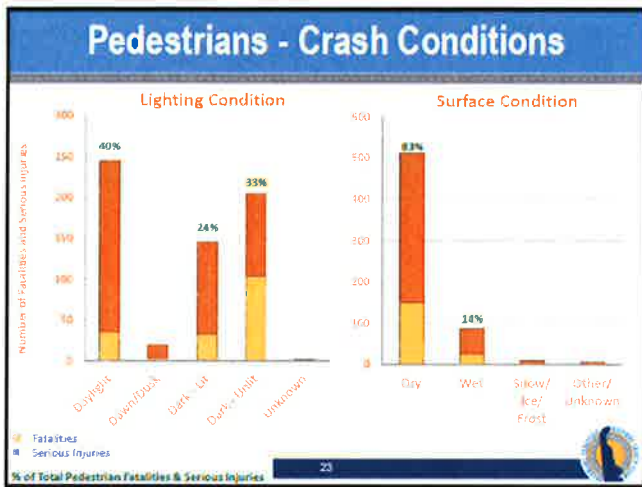
March 27, 2017 draft

Appendix E, Copies of Presentations



March 27, 2017 draft

Appendix E, Copies of Presentations



2010 SHSP To-Do List

DELAWARE STRATEGIC HIGHWAY SAFETY PLAN: TOWARD ZERO DEATHS

REVISED 2011

March 27, 2017 draft

Appendix E, Copies of Presentations

2010 SHSP: Our Plan & Progress

Strategies and Programs to Improve Pedestrian Safety

	What did we plan to do? (2010 SHSP Strategies)	What did we do?
Education	<p>Conduct media outreach</p> <ul style="list-style-type: none"> ✓ Emphasize pedestrian safety, vehicle/pedestrian rights of way, pedestrian responsibilities and the dangers of walking while impaired ✓ Participate in health and safety fairs ✓ Develop consistent messages to the public ✓ Increase high visibility education, especially among high-risk groups ✓ Increase risk perception by publicizing information about enforcement initiatives ✓ Use billboard, radio, and TV advertisements ✓ Encourage drivers to slow down and look for pedestrians, particularly in commercial and residential corridors ✓ Educate pedestrians on the dangers of walking along or crossing roadways while under the influence of alcohol and/or drugs <p>Implement driver's education improvements to emphasize vehicle/pedestrian right-of-way and laws</p>	<p>Walk Smart</p> <ul style="list-style-type: none"> • Zombie/Walking Dead Campaign • Happy Crab Campaign <p>Summer Wave Pedestrian outreach (DE OHS partnership with Ocean City, MD)</p> <p>Live pedestrian safety demonstrations (NCC & SC)</p> <p>Safe Routes to School Program</p>

2010 SHSP: Our Plan & Progress

Strategies and Programs to Improve Pedestrian Safety

	What did we plan to do? (2010 SHSP Strategies)	What did we do?
Enforcement	<ul style="list-style-type: none"> ✓ Conduct high visibility enforcement campaigns to ensure pedestrians and drivers alike are obeying pedestrian safety laws ✗ Evaluate the use of automated speed enforcement in school zones ✓ Increased penalties for drivers convicted of inattentive or careless driving resulting in injury to a "vulnerable user" 	<p>Targeted enforcement campaigns</p> <ul style="list-style-type: none"> • SR 2 • US 13 • SR 1 <p>Passed Senate Bill 269 (August 2010)</p>

2010 SHSP: Our Plan & Progress

Strategies and Programs to Improve Pedestrian Safety

	What did we plan to do? (2010 SHSP Strategies)	What did we do?
Engineering	<p>Review and policy initiatives</p> <ul style="list-style-type: none"> ✓ Consider and evaluate accommodations early in the planning process for all new projects (review crossing at existing crossings) ✓ Provide consistent pedestrian crossing design ✓ Improve design to focus on high-visibility, multimodal, and low-traffic ✓ Advocate adequate crossing times for older pedestrians ✓ Improve maintenance of pedestrian accommodations ✓ Consider lighting, signage, and other safety features with guidance for reducing street lighting to reduce pedestrian crashes <p>Identify and target location improvements</p> <ul style="list-style-type: none"> ✓ Evaluate and identify pedestrian and bicycle hotspots ✓ Address and improve rural traffic calming, bicycle and pedestrian accommodations ✓ Install crosswalk signage ✓ Improve lighting pedestrian crossings to increase visibility ✓ Conduct crosswalk audits to improve visibility and reduce pedestrian crashes ✓ Conduct street lighting evaluations with a focus on pedestrian pedestrian crashes 	<p>Implemented Coastal Streets, Jersey Pedestrian Accommodations and Pedestrian Safety Program</p> <p>Safe Routes to School Program</p> <p>Crosswalk and Multiservice Path Maintenance Policy (effective July 17, 2013)</p> <p>Pedestrian/Bicyclist Advisory Group</p> <p>Updated Traffic Calming Design Manual (2012)</p> <p>Reviewed 3 Pedestrian Courts</p> <p>Pedestrian Safety Audits along High-Risk Corridors</p> <ul style="list-style-type: none"> • SR 2 • SR 13 • SR 1 <p>Pedestrian Safety Evaluation (Detailed Improvements)</p> <ul style="list-style-type: none"> • Crosswalk Pedestrian Signals • Pedestrian Hybrid Beacons (PHB) • Pedestrian Automated Crossing Beacons • Urban Street Light Beacons • Pedestrian Hybrid Beacons (PHB) (Approved) <p>Participating through 11/14/16 projects and the Traffic Calming Program</p>

NCHRP Strategies to Address Crashes Involving Pedestrians

- Reduce Pedestrian Exposure to Vehicular Traffic
 - Provide sidewalks/walkways and curb ramps
 - Install or upgrade traffic and pedestrian signals
 - Construct pedestrian refuge islands and raised medians
 - Provide vehicle restriction/diversion measures
 - Install overpasses/underpasses
- Improve Sight Distance and/or Visibility Between Motor Vehicles and Pedestrians
 - Provide crosswalk enhancements
 - Implement lighting/crosswalk illumination measures
 - Eliminate screening by physical objects
 - Signals to alert motorists that pedestrians are crossing
 - Improve reflectorization/visibility of pedestrians
- Reduce Vehicle Speeds
 - Implement road narrowing measures
 - Install traffic calming – road sections & intersections
 - Provide school route improvements
- Improve Pedestrian and Motorist Safety Awareness and Behavior
 - Provide education, outreach, and training
 - Implement enforcement campaigns

2015 SHSP Strategies

Pedestrian: Emphasis Area Fact Sheet

Emphasis Area #	7	Emphasis Area Goal	
Brief Background / Description of Emphasis Area	<p>Pedestrians</p> <p>Delaware ranks 20th in the nation for pedestrian deaths and serious injuries. Delaware has the highest rate of pedestrian deaths per 100,000 population in the nation.</p> <p>Background: Pedestrian deaths and serious injuries are preventable. Many pedestrian crashes occur at intersections, crosswalks, and along residential streets. Pedestrians are most vulnerable when crossing roads with high traffic volumes and speeds.</p> <p>Strategies: The Delaware Department of Transportation (DelDOT) is committed to reducing pedestrian deaths and serious injuries through a variety of strategies, including: <ul style="list-style-type: none"> • Improving crosswalk design and signage • Installing pedestrian signals and hybrid beacons • Implementing traffic calming measures • Improving street lighting • Conducting pedestrian safety audits • Providing pedestrian safety education and training • Implementing enforcement campaigns </p>		
Strategies	<p>EA Fatalities & Serious Injuries by Year</p> <p>Crash Data Highlights</p>		

March 27, 2017 draft

Appendix E, Copies of Presentations

Pedestrians

Strategies to Reach Goal

- Continue a multi-agency approach to addressing pedestrian safety issues
- Develop and distribute consistent public information messages to increase public awareness and laws on pedestrian safety
- Conduct high-visibility enforcement campaigns targeting both pedestrians and drivers to promote pedestrian safety
- Improve infrastructure (e.g., sidewalks, crosswalks, lighting, transit facilities) to reduce pedestrian exposure and the potential for pedestrian-vehicle conflicts, and increase pedestrian visibility and awareness
- Research and implement the latest pedestrian safety "best practice" treatments and devices
- Conduct pedestrian safety audits at high-crash locations
- Install effective countermeasures to improve pedestrian safety at high crash locations and consider pedestrians when installing roadway improvements
- Perform before/after studies to evaluate and identify the most effective pedestrian safety treatments
- Ensure drivers education instructors emphasize vehicle/pedestrian laws in their lesson plans
- Support legislative action to strengthen pedestrian safety laws and enforcement efforts
- Develop policies and/or guidelines to support pedestrian safety measures

Data Trends: 2007 to 2014 Pedestrian Fatalities & Serious Injuries

- 36% occurred in urban areas
- 69% were in New Castle County
- 63% were male
- 58% involved no contributing factor on the part of the vehicle driver
- 52% were 20 to 49 years old
- 51% occurred between 4 PM and 11 PM
- 42% occurred along divided roadways
- 36% occurred on principal arterials
- 33% of pedestrian fatalities were exposed
- 33% occurred during dark (unlit) conditions
- 33% occurred on a Friday or Saturday
- 29% occurred at an intersection

Next Steps

DELAWARE STRATEGIC HIGHWAY SAFETY PLAN
TOWARD ZERO DEATH

DELRHSP.COM

Next Steps

- **March 2016 – Review SHSP action item list**
- **Spring 2016 – Start barrier planning/design**
- **Spring 2016 – Implement first RRFB**
- **Summer 2016 – Begin next Pedestrian Safety Audit**
- **Spring 2017 – Formal SHSP stakeholder update meeting**
- **On-Going:**
 - Support Pedestrian Council
 - Continue Pedestrian Working Group
 - Support Walkable / Bikeable Delaware Summit
 - Focus on implementation of Pedestrian Audit Recommendations

Thank You

Mark Luszczycki
 DelDOT Chief Traffic Engineer
 E: mark.luszczycki@state.de.us
 P: 302.659.4062

DELDOT LOCAL SYSTEMS IMPROVEMENT

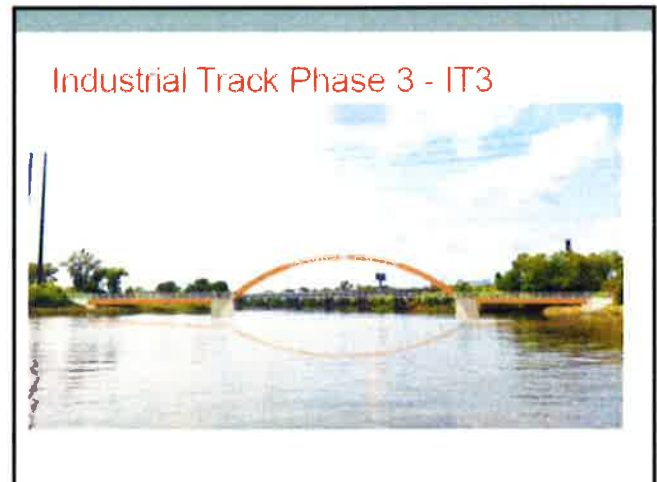
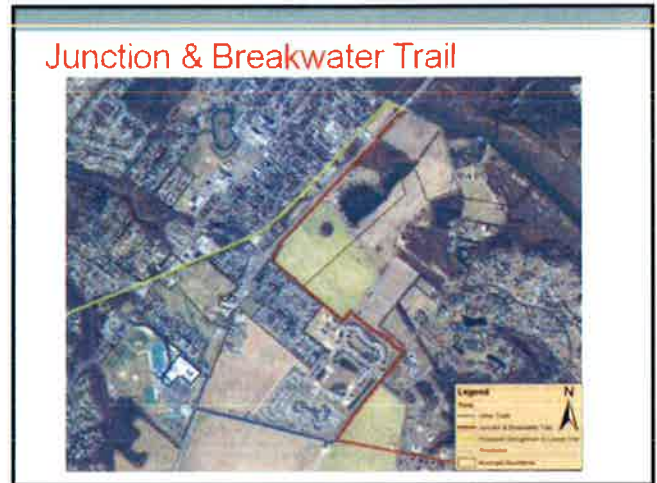
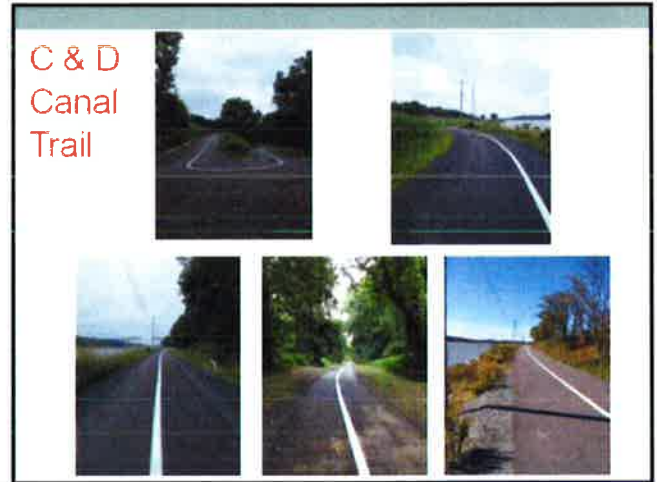
Project Prioritization

Local Systems

- Section within DelDOT Planning, manages:
 - Transportation Alternatives Program (TAP)
 - Bike/ Ped Improvement Program
 - State Trails and Pathways Initiative
 - Scenic Byways
 - Industrial Track Greenway Phase 3
- Projects originate from:
 - Communities
 - Municipal Plans
 - Metropolitan Planning Organization (MPO's)
 - Legislative requests

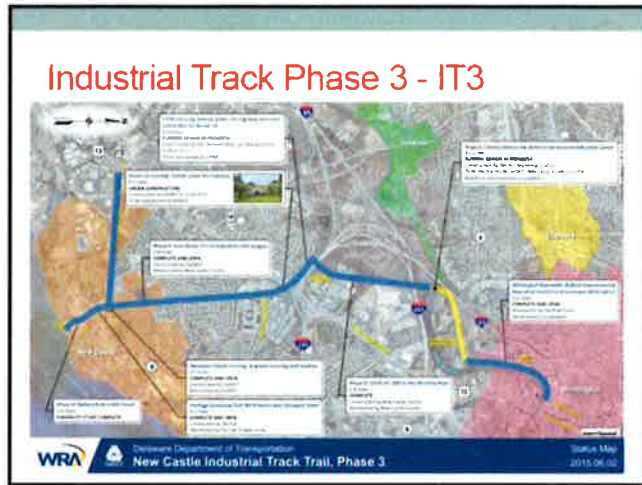
March 27, 2017 draft

Appendix E, Copies of Presentations



March 27, 2017 draft

Appendix E, Copies of Presentations



Project Prioritization

- Establish data driven prioritization process for funding proposed projects
 - State Trails and Pathways Initiative
 - Bike and Pedestrian Improvement Programs
- ~\$4 million annual budget for TAP
 - 80% Federal
 - 20% State
 - Legislative Support
 - Capital Program Funds
 - Community Funds
- ~\$4 million for Bike/ Ped Improvement Pool

Criteria

- Connectivity
- Strategies for State Policies and Spending
- Public Transit Access
- Population Proximity
- Access to Recreation
- Access to Public Schools
- ADA Remediation

Connectivity

- Projects which build off of existing trail and sidewalk networks
- Fill in missing links to provide more robust, connected non-motorized networks

Strategies for State Policies and Spending



- Projects in Investment Level 1 and 2 areas

March 27, 2017 draft

Appendix E, Copies of Presentations



Transit Access

Projects with access to the transit system

Population

Projects with a high population within a two mile bike ride or half-mile walk

Recreation

Projects that increase non-motorized access to parks and other recreation opportunities



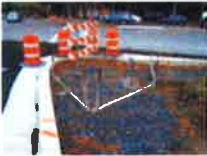


Public Schools

Projects which make walking to school a safer option for more Delawareans





ADA Remediation

Projects that remediate existing non-compliant curb ramps and non-compliant sidewalk segments

Prioritization Process

- Strategies for State Policies and Spending
- Connectivity
- Public Transit Access
- Access to Recreation
- Access to Transit Hubs
- Access to Public Schools
- ADA Remediation
- Population Proximity



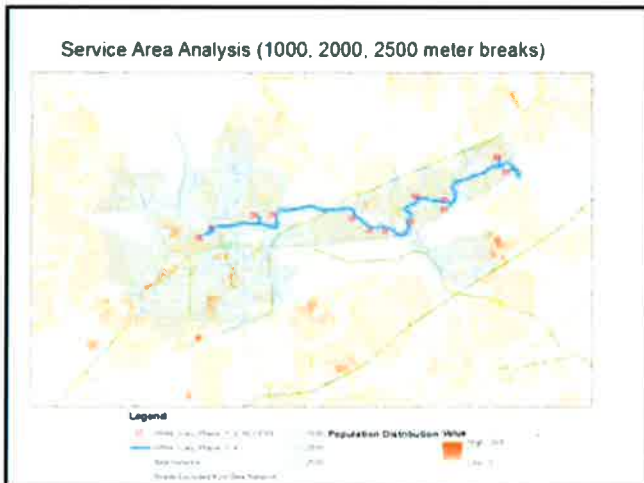
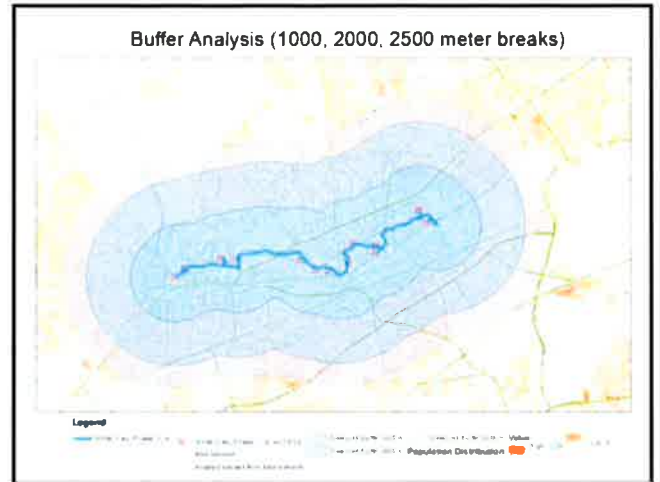
Weighted criteria, prioritize projects based on DelDOT desired outcomes

March 27, 2017 draft

Appendix E, Copies of Presentations

Technology to make it possible

- Developing an extension for ArcGIS (mapping software)
- Evaluates assets in proximity to new bicycle and pedestrian projects
- Models streets and paths where someone may walk or bicycle





Traffic Stress




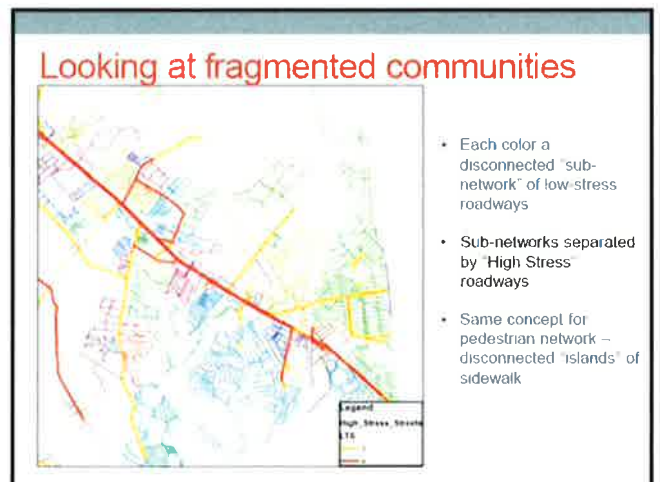
Different Modes, Different Needs, Different Networks

Bicycle Network



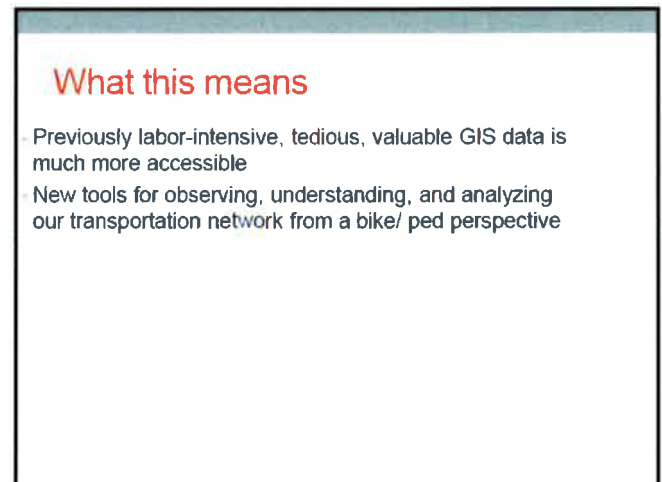
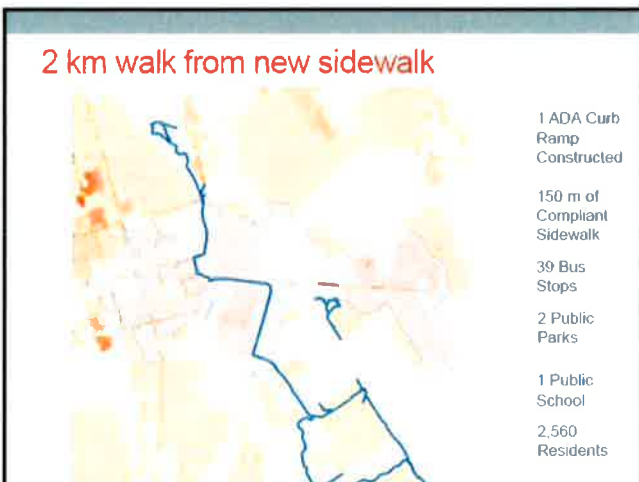
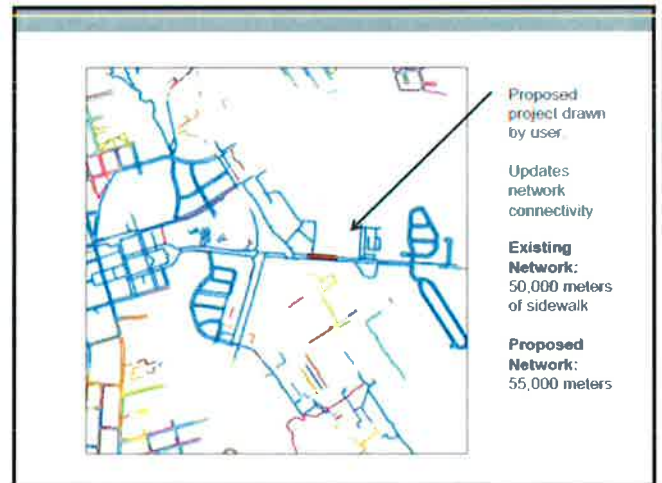
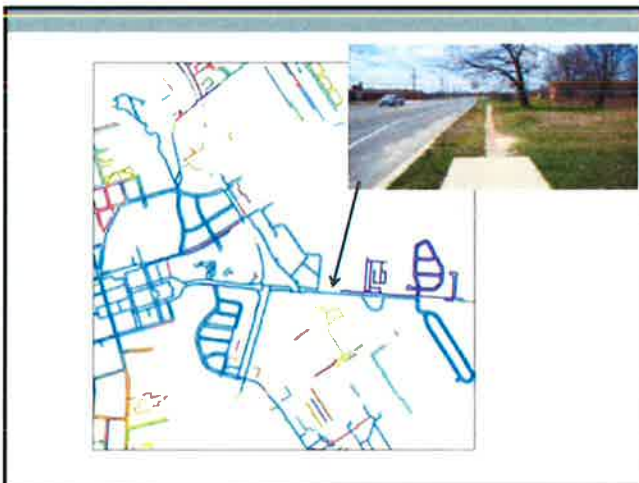
Pedestrian Network





March 27, 2017 draft

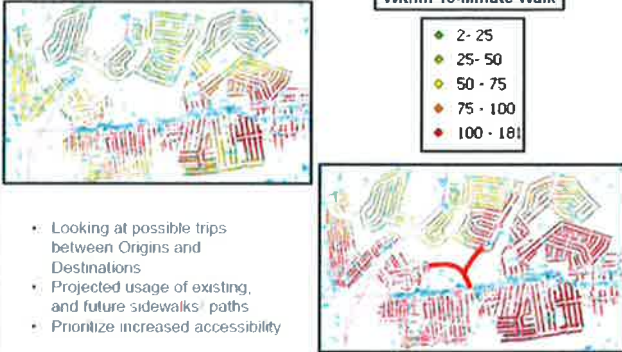
Appendix E, Copies of Presentations



March 27, 2017 draft

Appendix E, Copies of Presentations

Where we're headed



Number of Destinations, Within 15-Minute Walk

- 2 - 25
- 25 - 50
- 50 - 75
- 75 - 100
- 100 - 181

- Looking at possible trips between Origins and Destinations
- Projected usage of existing, and future sidewalks/ paths
- Prioritize increased accessibility

Sidewalks

DeIDOT's Ownership and Obligations

Who owns the sidewalks?

It depends...

- Where is the sidewalk?
 - On a DeIDOT maintained road?
 - In a municipality?
 - In a subdivision?
- Ownership and maintenance obligations are fragmented

Sidewalk Ownership

- DeIDOT Maintenance Number Roads = DeIDOT
- Roads through Municipalities maintained by the State via agreement = Not DeIDOT (Municipality or Homeowner)
- Subdivisions in unincorporated areas = Not DeIDOT. (Dedicated to Public Use ≠ Ownership by the State)
- Leading to Schools = A mix of owners: DeIDOT, School District, or "other lands or rights of way provided for such purpose".

Sidewalk Maintenance

- DeIDOT Maintenance Roads = DeIDOT
- Roads through Municipalities maintained by the State via agreement = Municipality (see Charter & Town Agreement)
- Subdivisions in unincorporated areas = Not DeIDOT (HOA or Homeowners)
- Leading to Schools = Schools plow snow, otherwise DeIDOT via 14 De.C. §2305(a).

Permitting & Inspection

- DeIDOT Maintenance Roads = DeIDOT
- Roads through Municipalities maintained by the State via agreement = DeIDOT (for safety)
- Subdivisions in unincorporated areas = DeIDOT (for safety) via 17De.C. §146
- Leading to Schools = DeIDOT

March 27, 2017 draft

Appendix E, Copies of Presentations

Enforcement of ADA Standards

- DeIDOT Maintenance Roads = DeIDOT Obligated.
- Roads through Municipalities maintained by the State via agreement = Municipality Obligated.
- Subdivisions in unincorporated areas = Unclear who is obligated, probably HOA or County.
- Leading to Schools = DeIDOT & School District obligated, but we don't know the break point between the agencies.

ADA Complaint Investigation

- DeIDOT Maintenance Roads = DeIDOT Obligated.
- Roads through Municipalities maintained by the State via agreement = Municipality Obligated
- Subdivisions in unincorporated areas = DeIDOT can, but will turn over to HOA.
- Leading to Schools = DeIDOT & School District obligated, but we don't know the break point between the agencies.

Sidewalk Expansion/Gap Filling

- DeIDOT Maintenance Roads = DeIDOT Obligated
- Roads through Municipalities maintained by the State via agreement = Municipality Obligated
- Subdivisions in unincorporated areas = DeIDOT can, but so can others.
- Leading to Schools = DeIDOT & School District obligated, but we don't know the break point between the agencies.

Spending Authority

- DeIDOT Maintenance Roads = State and Federal \$ eligible
- Roads through Municipalities maintained by the State via agreement = State and Federal \$ eligible
- Subdivisions in unincorporated areas = CTF eligible. Possibly other \$ is eligible depending on circumstances.
- Leading to Schools = SRTS & CTF eligible. Possibly other \$ is eligible depending on circumstances.

ADA Transition Plan Obligation

- DeIDOT Maintenance Roads = DeIDOT Obligated
- Roads through Municipalities maintained by the State via agreement = Municipality Obligated
- Subdivisions in unincorporated areas = HOA Obligated if one exists, otherwise we don't know who is obligated.
- Leading to Schools = DeIDOT & School District obligated, but we don't know the break point between the agencies.

Other Issues?

- Most likely there are
- There is much left to learn
- Legal actions may be needed to sort it out

March 27, 2017 draft

Appendix E, Copies of Presentations

Long-Range Transportation Plan Update



Building upon policies

- Performance metrics
- Alternative performance metrics to move beyond methods relying on LOS
- Analyzing dollars spent and outcome of policy initiatives

Supporting innovative technologies

- Helping attract and retain businesses
- "Drone-friendly"
- DeIDOT task force led by Randall Weideman
- Technologies needed

Freight

- DelMarVa Freight Plan
- FAST Act
- Supply Chain Analysis

Land Use

- Decisions will be responsibility of Counties
- Complete Communities toolbox
- Strengthening TID policy

Timeline for Completion

<u>Trends Analysis</u> <small>(JMT, 4Ward, DeIDOT)</small>	4/11/16 – 5/13/16
<u>Leading Practices</u> <small>(JMT, 4Ward, RAW, DeIDOT)</small>	5/9/16 – 6/17/16
<u>Visioning</u> <small>(JMT, Remline, DeIDOT)</small>	5/16/16 – 7/22/16
<u>Policy Recommendations</u> <small>(JMT, 4Ward, RAW, DeIDOT)</small>	7/25/16 – 8/19/16
<u>Economic Analysis / Fiscal Plan</u> <small>(4Ward)</small>	4/25/16 – 9/2/16
<u>Draft Plan</u> <small>(JMT, 4Ward, Remline, DeIDOT)</small>	8/15/16 – 12/2/16
<u>Final Plan</u> <small>(JMT, Remline, DeIDOT)</small>	12/1/16 – 12/30/16

March 27, 2017 draft

Appendix E, Copies of Presentations

Planning Efforts

- WILMAPCO RTP
- Freight Plan
- Bike and Ped Plan
- DTC

Outreach

- TAC
- PAC
- CTP Hearings
- Website
- Survey
- DelDOT Bicycle Advisory Committee

Pedestrian Survey Report – Highlights



Presented by
Delaware Office of Highway Safety

Richard Klepner
Data and Program Analyst

May 5, 2016

Richard.Klepner@state.de.us

Delaware Office of Highway Safety

(302) 744-2689

Why do a survey?

- ▶ Delaware has one of the worst pedestrian fatality rates in the country.
 - ▶ Between 2011 and 2015, pedestrian fatalities nearly doubled (19 → 36)
- ▶ Holes within crash data
- ▶ Lack of recent research into pedestrian behavior

Richard.Klepner@state.de.us

Delaware Office of Highway Safety

(302) 744-2689

Methodology

- ▶ Office of Highway Safety partnered with AB+C and The Delaware Research Company to conduct the survey.
- ▶ 267 completed responses but not all questions were answered.
- ▶ A surveyor was placed onto DART buses targeting high pedestrian crash roadways.
 - ▶ Kirkwood Highway
 - ▶ Dupont Highway (New Castle County)
 - ▶ US Route 40

Richard.Klepner@state.de.us

Delaware Office of Highway Safety

(302) 744-2689

Methodology (cont.)

- ▶ Statistical reliability with a confidence level of 95%
- ▶ Confidence interval or 5.9%
- ▶ Additionally, this survey targeted pedestrians using DART buses. This survey does not represent pedestrians who do not use the DART system.

Richard.Klepner@state.de.us

Delaware Office of Highway Safety

(302) 744-2689

March 27, 2017 draft

Appendix E, Copies of Presentations

Respondent Characteristics

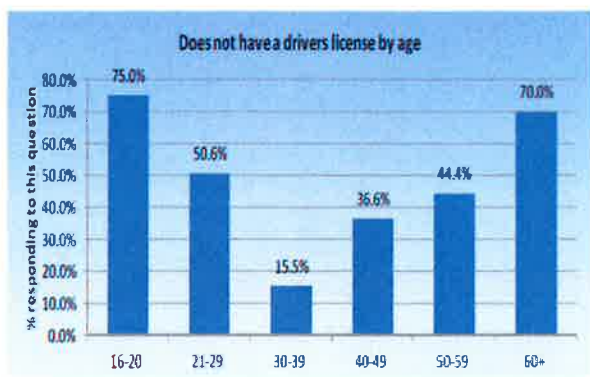
- ▶ 45.3% were women and 54.7% were men.
- ▶ Two-thirds were under the age of 40.
- ▶ Two in five do not possess a driver's license.
- ▶ More than four in five own a cell phone.

Richard Klipner@state.de.us Delaware Office of Highway Safety (302) 744-2689

16-20 year old pedestrians

- ▶ Three in four did not have a driver's license.
- ▶ More likely to walk along highways at night
- ▶ This group was more likely to listen to headphones while walking
- ▶ Does not believe risky behavior is dangerous
- ▶ Almost all responded that they cross highways without using traffic signals or crosswalks
 - ▶ Responded that signals take too long
 - ▶ They jaywalk because they "do it all the time and never had a problem"

Richard Klipner@state.de.us Delaware Office of Highway Safety (302) 744-2689



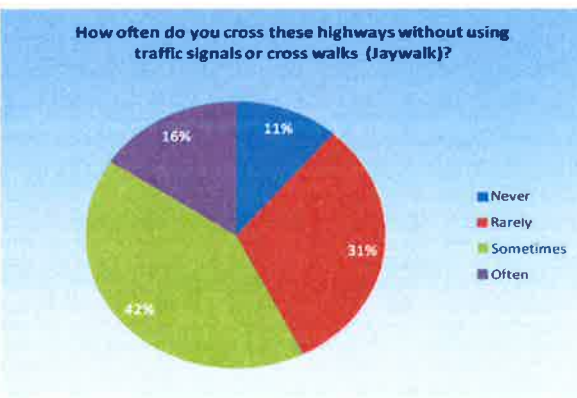
Richard Klipner@state.de.us Delaware Office of Highway Safety (302) 744-2689



Richard Klipner@state.de.us Delaware Office of Highway Safety (302) 744-2689



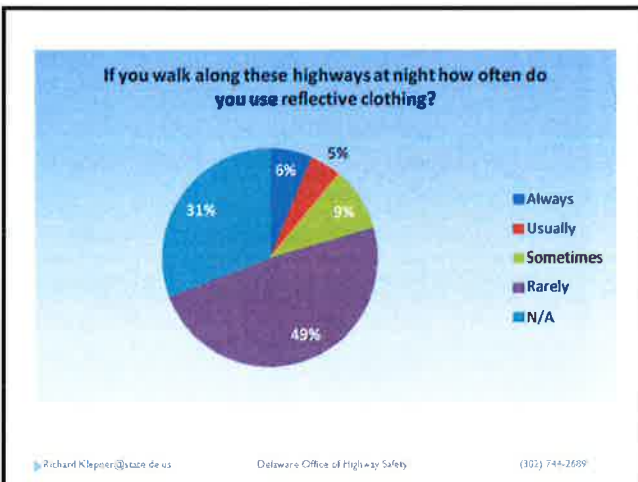
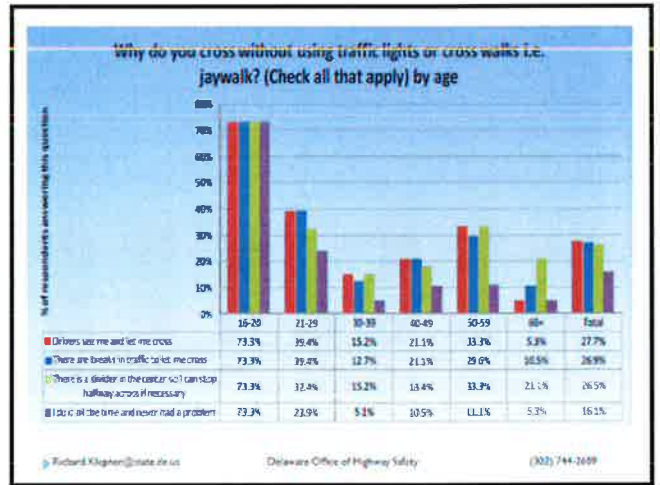
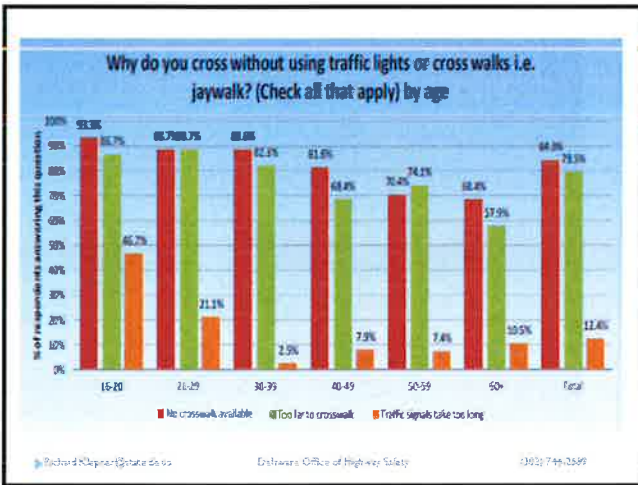
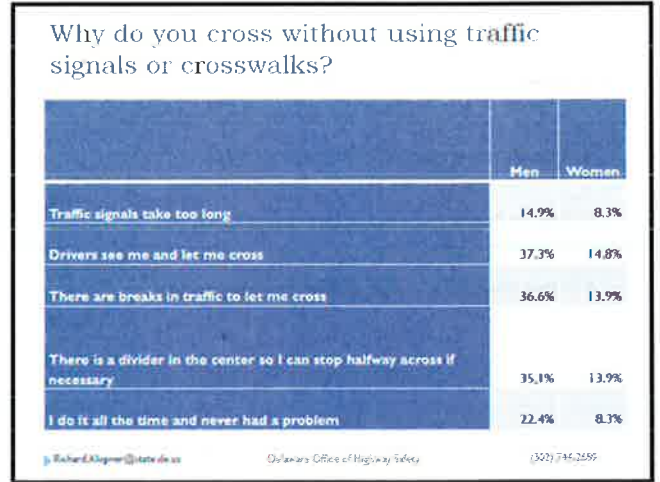
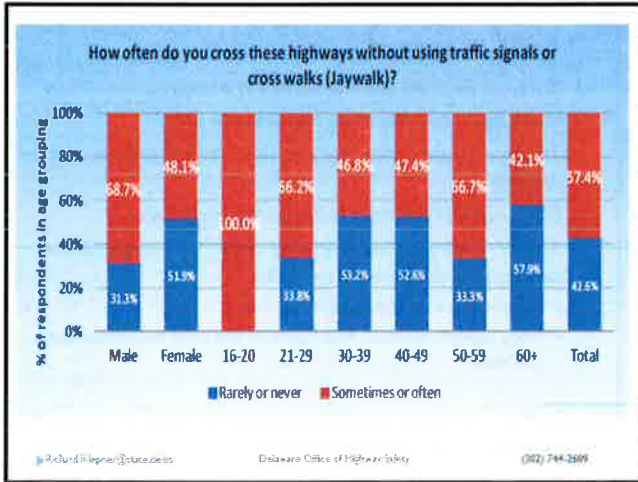
Richard Klipner@state.de.us Delaware Office of Highway Safety (302) 744-2689



Richard Klipner@state.de.us Delaware Office of Highway Safety (302) 744-2689

March 27, 2017 draft

Appendix E, Copies of Presentations



Questions?

Richard Klepner@state.de.us | Delaware Office of Highway Safety | (302) 744-2689

March 27, 2017 draft