Policy, Systems and Environmental Change Strategies for Improved Pedestrian Safety for Oregonians

Motor vehicle crashes contribute substantially to unintentional injury-related deaths, one of the five leading causes of death among Oregonians.¹ And, while motor vehicle traffic deaths have decreased in Oregon, there has been relatively little reduction in pedestrian deaths and injuries related to motor vehicle crashes. Motor vehicle-pedestrian crashes increased from 612 in 2001 to 849 in 2011.² Annually, those crashes cause approximately 50 deaths and more than 200 pedestrians to be hospitalized.³ In 2011, 47 pedestrians died and 831 were injured.*⁴

Nationally, pedestrian travel makes up 10.5% of all trips, and pedestrians represent 13% of all motor vehicle traffic-related deaths. Overall, the annualized, age-adjusted traffic–related pedestrian death rate was 1.58 per 100,000 population (2001-2010).⁵ Oregon 2011 data show pedestrians represented 13.9 % of all motor vehicle traffic-related deaths with a pedestrian death rate of 1.19 per 100,000.⁶ Comparing 2008 to 2011, two age groups showed a difference among numbers of deaths and injuries: Oregonians aged 65+ (from 53-76) and children ages 0-14 (from 62-106).⁷ According to the Centers for Disease Control and Prevention, the overall pedestrian death rate is likely to increase with the aging and growing racial/ethnic diversity of the U.S. population.

Risk factors for pedestrian injuries and deaths in Oregon include both driver and pedestrian use of alcohol and drugs, not yielding, being distracted, driver speed and pedestrians crossing streets. A review of pedestrian crashes shows nearly half of the injuries and deaths occur in urban areas on urban roadways. Crashes are higher in October, November, December and January, with the highest occurring in December. Most crashes occurred around the 6:00 p.m. hour and over half were in intersections or crosswalks. The deadliest time for pedestrians is during dark light conditions where there are no street lights.

Walking is a universal form of transportation that offers not only health benefits for the individual, but benefits the environment, the economy and society—it improves engagement between people and their surroundings. It serves as a critical mode of transportation, particularly for those without a car and those who need access to public transportation, jobs, health care, food, schools and other essential services.

¹, ³ Oregon Public Health Division, State Health Profile, Sept. 2012
², ⁴ Oregon Department of Transportation, Transportation Safety Division
⁵ Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report, 4/19/2013, Vo. 62, No. 15
⁷ ODOT, Transportation Safety Division, Oregon Traffic Safety Performance Plan, 2012
* Crash Analysis and Reporting, Oregon Department of Transportation definition of “injured” includes injuries of all severities (minor, moderate and major).

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In 2012, the Centers for Disease Control and Prevention (CDC) provided the Injury and Violence Prevention Program (IVPP) funds to develop and implement a pedestrian safety policy plan. The IVPP convened the Oregon Pedestrian Injury Prevention Policy Workgroup in October 2012. Workgroup members included key stakeholders in pedestrian safety. Using the Policy, Systems & Environmental Change (PSE) framework, the multi-disciplinary workgroup met three times to develop policy and systems objectives, strategies and measures to improve pedestrian safety.

The Workgroup identified four priority areas for policy change:
- Built Environment and Engineering
- Law Enforcement
- Public Education
- Data Collection and Evaluation

For each priority area, the Workgroup identified several strategies, and prioritized selected short-term (one to two years), mid-term (three to five years), and long-term (more than five years) strategies they felt needed to be implemented. These strategies give communities, organizations, cities, counties, and the state immediate and specific ways to prevent pedestrian deaths and injuries, and to improve pedestrian safety overall. Small task groups (made up of members from the large workgroup and additional agencies implementing selected strategies) will assist with and monitor implementation from 2013 through 2015.

While the priority areas and strategies do not cover all pedestrian safety issues, significant progress to reduce pedestrian injuries overall can be made if action is taken and sustained in the four recommended priority areas.

These priorities and strategies serve as our state’s “roadmap” over the next few years and can be used by all stakeholders at multiple levels.

Photo: Pedestrian Safety Workshop: A Focus on Older Adults, NHTSA
VALUE: Everyone travels. Our built environment can support safer walking and improve pedestrian safety.

RATIONALE: There is a clear link between the design of a community and its relationship to one’s likelihood of walking. Walking behavior is highly influenced by the presence and quality of sidewalks, access to transit, and community land use patterns. Factors that affect the actual or perceived safety for pedestrians in a community may include such elements as safe crossings, crime, and street lighting.

SHORT-TERM STRATEGIES:
- Include health and safety as a primary goal in ODOT policy and Oregon statutory language (e.g. duties of commission in preparing and implementing state transportation policy ORS 184.618).
- Ensure that state-funded transportation system plans incorporate transportation safety plans which include policy and project level initiatives to address pedestrian safety.
- Require local transportation agencies to utilize How to Develop a Pedestrian Safety Action Plan prepared by FHWA and NHTSA, and develop a traffic safety action plan with a focus on pedestrian safety.
- Require inclusion of proven pedestrian safety strategies in local transportation system plans and design standards.
- Encourage local jurisdictions to implement a policy to ensure community roads are planned, designed, and constructed for safe walking, biking and driving.

MEASURES OF SUCCESS:
- Health and safety is included in ODOT policy and Oregon statutory language.
- Local agencies are developing Transportation Safety Action Plans (TSAPs) with a focus on pedestrian safety.
- Local transportation agencies will utilize the How to Develop a Pedestrian Safety Action Plan to develop a traffic safety action plan.
- Pedestrian safety strategies are incorporated and implemented into transportation system plans and design standards.
- Local jurisdictions adopt a policy to ensure safe walking, biking and driving in subsequent construction projects.
MID-TERM STRATEGIES:

- Revise local and State transportation fee and funding structure language to allow for multi-modal (pedestrian) improvements.
- Promote and encourage pedestrian road safety audits to identify and address pedestrian safety issues, especially at locations serving “vulnerable” users, such as low-income neighborhoods, schools, senior centers, and assisted living facilities.
- Include multi-modal transportation system performance measures to inform funding choices.
- Include pedestrian and bicycle access and safety as selection criteria when siting new schools or redeveloping existing schools.
- Include pedestrian and bicycle access and safety as a criteria when siting community services, or redeveloping community services, such as libraries and public buildings.
- Allow the voluntary use of yellow school bus funds to be spent on active transportation to school strategies like walking and biking school buses.

MEASURES OF SUCCESS:

- Local and State fee and funding structure language allows for multi-modal improvements and projects.
- Walkability audits are conducted by local agencies and community organizations.
- Transportation system performance measures include those for multi-modes.
- When siting new schools or redeveloping existing schools, pedestrian and bicycle access and safety are used as selection criteria.
- When siting new community services or redeveloping existing community services, pedestrian and bicycle access and safety are used as selection criteria.
- Yellow school bus funds are utilized on active transportation to school strategies.

POLICY CHANGE IN ACTION

Approval Process for New Pedestrian Crossings at Mid-Block Locations and Uncontrolled Intersections:

The purpose of this Policy is to adopt a procedure to allow new pedestrian crossing to be established at mid-block location and uncontrolled intersections on roads under county jurisdiction, based upon an engineering study by the applicant, and review and approval by the County Engineer.

Board of County Commissioners of Washington County
Adopted 11/23/2010

www.co.washington.or.us/LUT/Divisions/LongRangePlanning/Publications/upload/14-2.pdf

Photo: Pedestrian Safety Workshop: A Focus on Older Adults, NHTSA
VALUE: Law enforcement, crash investigation, and complete crash data can influence individual behavior and inform pedestrian safety policy.

RATIONALE: Law enforcement agencies are critical partners in pedestrian safety improvement. Comprehensive investigations and improved documentation will yield data that presents a complete picture of pedestrian crashes. Enforcement of pedestrian laws will support changes in community norms.

SHORT-TERM STRATEGIES:

• Require investigations of pedestrian and bike crashes that include serious injury in addition to fatalities.
• Increase training opportunities for officers and crash reconstructionists on causal issues regarding pedestrian safety and pedestrian/motor vehicle crashes.
• Require law enforcement agencies to provide officers with the opportunity to take the Pedestrian Safety Training for Law Enforcement (CD-ROM) online training free through NHTSA at http://mcs.nhtsa.gov/index.cfm/product/786/nhtsa-pedestrian-safety-training-for-law-enforcement-cd-rom.cfm
• Increase training opportunities for non-law enforcement personnel (teachers, transportation professionals, community members, etc.)
• Advocate for increased police patrols for preventing alcohol and drug impaired driving, bicycling and incapacitated walking.

MEASURES OF SUCCESS:

• Investigation of pedestrian and bike serious injury and fatal crashes has increased.
• Law enforcement training academy includes causal issues regarding pedestrian safety and pedestrian/motor vehicle crashes in crash investigation curriculum.
• Law enforcement agencies provide the opportunity for officers to take the free Pedestrian Safety Training for Law Enforcement (CD-ROM) training.
• Non-law enforcement personnel have access to training opportunities.
• Police patrols for preventing alcohol and drug impaired driving, bicycling and incapacitated walking has increased.

Photo: Portland Bureau of Transportation
MID-TERM STRATEGIES:

• Increase training opportunities for judges and crash investigators on causal issues regarding pedestrian safety and pedestrian/motor vehicle crashes.
• Change federal and state policy for pedestrian enforcement funding to allow communities to use funding for public awareness effort identified by the community rather than restricted to crosswalk enforcement.

MEASURES OF SUCCESS:

• Judges and crash investigators are trained on the causal issues regarding pedestrian safety and pedestrian/motor vehicle crashes.
• Funding is available for pedestrian safety enforcement and awareness opportunities based on community need.

POLICY CHANGE IN ACTION

The Pedestrian Network Analysis Project identifies key locations within the Portland region where pedestrian investments will provide better access to transit stops and have the strongest potential to improve pedestrian safety, both actual and perceived, and increase the number of people walking and using transit.

TriMet, Pedestrian Network Analysis
PUBLIC EDUCATION

VALUE: Strategic communication is a critical feature of a comprehensive pedestrian safety initiative.

RATIONALE: According to the Federal Highway Administration, states and cities that conduct strong community education on pedestrian safety report declines in fatality rates. Targeted communication can teach pedestrians, drivers and cyclists of all ages about traffic laws and to understand how their actions contribute to safe communities.

SHORT-TERM STRATEGIES:

• Require Department of Motor Vehicles (DMV) to post ODOT’s Oregon Pedestrian, Bicycle and Driver Rules online and maintain the link.
• Require DMV to provide Provisional Driver’s License (GDL) information and access to the Parent Guide for parents and caregivers of youth taking driver’s permit tests.
• Implement evidence-based public awareness and education campaigns on distracted walking.
• Provide stipends for students who cannot afford drivers education.
• Assure driver’s education curriculum includes information on pedestrian and bicycle safety and rules.
• Secure sustainable funding for Safe Routes to School Programs from State and Federal sources to encourage and enable safe walking and bicycling to school.
• Implement evidence-based educational campaigns aimed at driver behaviors that detract from the safe walking and biking.
• Implement evidence-based public awareness and education campaigns on pedestrian safety that reach all age groups.

MEASURES OF SUCCESS:

• The public is provided access to current pedestrian, bicycle and driver rules of the road in DMV offices and online.
• Parents and caregivers receive GDL information and access to the Parent’s Guide at the DMV when their child tests for a driver’s permit.
• Evidence-based public awareness and education campaigns on distracted walking are implemented.
• Families of students eligible for driver’s education course reimbursement are aware of and took advantage of the opportunity.
• Driver’s Education courses include pedestrian and bicycle safety information.
• Sustained State and Federal funding for Safe Routes to Schools programs is secured.
• Educational campaigns aimed at driver behaviors that detract from the safe walking and biking are conducted.
• Public awareness and education campaigns are targeted to all age groups.
MID-TERM STRATEGIES:

- Require written (online) testing of all licensed drivers upon license renewal every eight years.
- Build traffic safety information into K–12 education curriculum, working toward requiring traffic safety education in curriculum standards.

MEASURES OF SUCCESS:

- Drivers will be required to take a written (on-line) test every 8 years as part of the license renewal process.
- K–12 curriculum materials on safe travel are available and the Department of Education and schools are encouraged to incorporate them.

POLICY CHANGE IN ACTION

Safe Routes to School infrastructure has been shown to increase physical activity in children by 20 to 200 percent; also, the safety benefit generates up to a 49 percent decrease in childhood bicycle and pedestrian collision rates.

American Public Health Association
DATA COLLECTION AND EVALUATION

VALUE: Data is necessary to inform strategies and policies, and provides a basis for evaluation.

RATIONALE: Oregon needs reliable, timely and complete documentation of crash events that is fed into data systems and used to analyze pedestrian safety issues.

SHORT-TERM STRATEGIES:

- Establish data workgroup to inventory current systems at local and State levels, define gaps, and optimize data collection and sharing to inform pedestrian safety strategies and policies.
- Identify and address emerging issues in pedestrian safety in an annual forum with stakeholders.
- Survey literature for evidence-based diversion programs specific to pedestrian offenses and share with stakeholder group.

MEASURES OF SUCCESS:

- Data workgroup convened and a report shared with stakeholder group.
- Emerging issues in pedestrian safety are shared at least annually with stakeholder group.
- Summary of evidence-based diversion programs provided to stakeholder group.

MID-TERM STRATEGY:

- Evaluate and implement promising new technologies and strategies for pedestrian safety.

MEASURE OF SUCCESS:

- Promising new technologies and strategies for pedestrian safety are evaluated and implemented.

LONG-TERM STRATEGY:

- Encourage Oregon Bicycle & Pedestrian Advisory Committee (OBPAC) to continue identifying and addressing emerging issues in pedestrian safety and develop safety action plans for statewide implementation.

MEASURE OF SUCCESS:

- The Oregon Bicycle & Pedestrian Advisory Committee (OBPAC) develops and implements safety action plans statewide.

Photo: Evergreen Road Crossing, Washington County

Photo: Portland Bureau of Transportation
Current ODOT Transportation Policy
ORS 184.618 Duties of commission in preparing and implementing state transportation policy.
(1) As its primary duty, the Oregon Transportation Commission shall develop and maintain a state transportation policy and a comprehensive, long-range plan for a safe, multimodal transportation system for the state which encompasses economic efficiency, orderly economic development and environmental quality. The plan shall include, but not be limited to, aviation, highways, mass transit, pipelines, ports, rails and waterways. The plan shall be used by all agencies and officers to guide and coordinate transportation activities and to insure transportation planning utilizes the potential of all existing and developing modes of transportation.

(2) As the plan is developed by the commission, the Director of Transportation shall prepare and submit to the commission for approval, implementation programs. Work approved by the commission to carry out the plan shall be assigned to the appropriate unit of the Department of Transportation.

(3) The director and members of the commission shall give safety, economic development and the provisions of industrial site services priority in fund allocation decisions.
[1973 c.249 §12; 1983 c.362 §1; 1983 c.553 §1; 1993 c.741 §7; 1999 c.969 §3]

Every Body Walk!

http://t4america.org/resources/dangerousbydesign2011/

http://centerforactivedesign.org/promotingsafety

Metro State of Safety Report, A compilation of information on roadway-related crashes, injuries, and fatalities in the Portland Metro region and beyond, April 2012.

TriMet Pedestrian Network Analysis, A safer, easier, more comfortable walk to transit, 2011.


Oregon Bicycle and Pedestrian Mode Plan.

DESCRIPTION OF POLICY, SYSTEMS AND ENVIRONMENTAL CHANGE

Policy, systems and environmental change is a way of modifying the environment to make healthy choices practical and available to all community members. By changing laws and shaping physical landscapes, a big impact can be made with little time and resources. By changing policies, systems and/or environments, communities can help tackle health issues like injuries, obesity, and diabetes.

About Policy Change

• Policy change includes the passing of laws, rules, protocols, and procedures designed to guide or influence behavior. Policies can be either legislative or organizational.
• Government bodies (federal, state, local level) school districts and schools, park districts, healthcare organizations (hospitals, health systems) worksites and other community institutions (jails, daycare centers, senior living centers, faith institutions) all make policy change.
• Examples: Adding a tax on tobacco products, passing a law allowing residents to plant community gardens in vacant lots, and clean indoor air laws.

About Systems Change

• Systems change impacts all elements of an organization, including social norms or an organization, institution, or system. Often systems change focuses on changing infrastructure within a school, park, worksite or health setting.
• Examples: Ensuring a hospital system goes tobacco free.

About Environmental Change

• Environmental change includes physical, social or economic factors designed to influence people’s practices and behaviors.
• Environmental change can be as simple as installing bike signage on already established bike routes or as complex as sidewalk installation and pedestrian friendly intersections to promote walking and biking.
• Examples: A municipality undertakes a planning process to ensure better pedestrian and bicycle access to main roads and parks; and charges higher fees or taxes for tobacco products to decrease their use.

Examples of Policy, Systems and Environmental Change Plans in Action

• Michigan Cancer Consortium – Policy, Systems, and Environmental Change
  www.michigancancer.org/policy_systems_environchange.cfm
OREGON PEDESTRIAN INJURY PREVENTION POLICY WORKGROUP

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