### Promote Park(ing) Day

**Definition** Popularized by the San Francisco–based design group, Rebar, Park(ing) Day is an annual event on the third Friday of September during which activists and community groups legally take over a curbside parking spot and reinvent the space for pedestrian purposes. Groups have created public parks, public reading rooms, curbside cafes, bocci courts, and mini beaches within parking spots. By 2011, 35 countries have hosted nearly 1,000 Park(ing) Day events.

### **Benefits**

- Temporarily transforms storage space for a private vehicle into dynamic, pedestrianoriented public space
- Activates the streetscapes
- Sparks public debate about the use of public rights-of-way
- Encourages community-driven streetscape improvements to better accommodate all street users, not just cars
- Provides a fun opportunity for encouraging pedestrian advocacy

#### **Considerations**

- Local regulations may not permit curbside parking uses other than parking
- Allotting time and funding for permits
- Ensuring adequate litter and trash removal
- Potential pushback from local businesses due to loss of parking

### Appropriate Contexts

 Curbside locations with regulated parking for two or more hours

### Guidance

 The goal of Park(ing) Day is to experiment with new forms of public space. Avoid exploiting the premise with commercial or promotional activities

- Consider your audience when choosing a location: If creating a park, consider a spot in an area underserved by public parks; if advocating for a public-policy change, choose a spot near that public agency
- Provide seating and shade
- Install a ground cover for better visual impact
- Set up plastic bollards or cones to buffer your space from cars
- Prepare to pay: Scope out the payment system of your parking spot, and have quarters or a credit card handy
- Create a team of collaborators to share planning, transportation, and implementation responsibilities
- Install signs to inform the public about Park(ing) Day and your event
- Research local parking laws and publicspace ordinances to address any concerns of residents or police officers
- Promote your event: Alert the media, post information on community listserves and blogs, and post wayfinding signs
- Prepare talking points about the goals of your Park(ing) Day event
- Document the event with photos and/or video
- Recycle project materials wherever possible
- Clean up your park(ing) spot thoroughly afterward to avoid fines or tickets

### **Professional Consensus**

 In the absence of endorsements from national associations or governmental departments, cities are turning to best practices employed by other municipalities

Enforcement

### Examples

In 2011 alone, community groups implemented 965 Park(ing) Day events in 162 cities and 35 countries, including:

- Salt Lake City, UT
- Spartanbura, SC
- <u>Springfield</u>, <u>MO</u>
- New Orleans, LA
- Syracuse, NY
- Omaha NF
- Raleigh, NC
- Toledo, OH



Park(ing) Day in San Francisco, CA. Source: Rebar Art & Design Studio



Park(ing) Day in Santa Rosa, CA. Source: Greenbelt Alliance, Flickr

### Start Up Jane's Walks

**Definition** Jane Jacobs Walk is a series of neighborhood walking tours (and/or bike rides, transit rides, or wheelchair rides) that helps community members learn and respond to the complexities of their city through personal and shared observation. All tours are given and taken for free and coordinated through the Center for the Living City, a nonprofit organization created by supporters of Jane Jacobs. The event takes place annually on the first weekend of May.<sup>1</sup>

### **Benefits**

- Provokes community discussions about streetscapes and street life
- Creates new social-walking opportunities
- Encourages walking and cycling
- Helps build community
- Offers community members a new perspective of city streets

### **Considerations**

 Develop relationships with community members to clarify the program and its goals, and to encourage participation

### **Appropriate Contexts**

- Locations with collective histories and connections to tour members, such as residential neighborhoods, downtowns, or parks
- Rapidly changing neighborhoods, waterfronts, or manufacturing districts that are home to multiple histories and cultures
- Bicycle trails and mixed-use trails through recreational areas

#### Guidance

- Reach out to a broad base of potential walkers, including neighborhood associations, business improvement districts, community groups, youth organizations, and school associations for tour themes and to recruit tour-takers
- Schedule your tour for the first weekend in May to build on the legacy of Jane Jacobs and highlight walking advocacy

- Make sure locations and routes are accessible
- Go on a trial run of your tour before the event to time the route and ensure locations haven't been blocked by unforeseen circumstances
- Read up on Jane Jacob's theories and highlight them during the tour
- Create a listserve, website, Facebook page, or some way to update participants about tour themes, locations, and logistical details
- Encourage participants to ask questions and offer insights. The tours work best as a collective conversation about everyone's shared surroundings
- Share the experience afterward: Upload pictures to your website, Facebook page, or shared online photo account. Write blog posts or send out a follow-up email about the event<sup>2</sup>

### **Professional Consensus**

 The Department of City and Metropolitan Planning at the University of Utah hosts the Center for the Living City and the Jane Jacob Walk program

### **Examples**

Jane Jacobs Walks took place in more than 30 U.S. cities, including:

- · Carthage, MS
- Detroit, MI
- Nashville, TN
- Provo, UT
- Tampa, FL

Advocacy
Policy
Land Use
Design & Engineering
Encouragement & Education

Enforcement



A Jane's Walk threading through Kensington Market in Toronto, ON. Source: BriYYZ, Flickr

 $<sup>1. \ \ \, \</sup>text{Jane Jacobs Walk. What is Jane Jacobs Walk? About Jane Jacobs Walk. n.d.} \, \underline{\text{http://www.janejacobswalk.org/about-jane-jacobs-walk/what-is-jane-jacobs-walk/what-jane-jacobs-walk/what-is-jane-jacobs-walk/what-is-jane-jacobs-walk/what-jane-jacobs-walk/what-jane-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacobs-walk/what-jacob$ 

<sup>2.</sup> Municipal Arts Society. Jane's Walk NYC. 2012. http://mas.org/programs/janeswalknyc/

### Use Apps to Encourage Walking

**Definition** Using open-source data, geographic information systems, and mobile technology, software developers can create phone and online applications to tell people when the next train, taxi, or bus is coming, that there's a fun landmark or park around the corner, or how to use a myriad of transportation systems effectively to get from point A to point B without using a car.

### **Benefits**

- Allows people to make better-informed decisions about transportation options
- Manages passengers' transportation expectations
- Demystifies non-car transportation options
- Reduces dependence on the private automobile for transportation needs
- Better integrates walking into transportation options

### **Considerations**

- Not everyone has access to mobile technology
- Source data isn't always reliable
- Updating the technology with new information

### **Appropriate Contexts**

• Countries, states, counties, cities, towns

#### Guidance

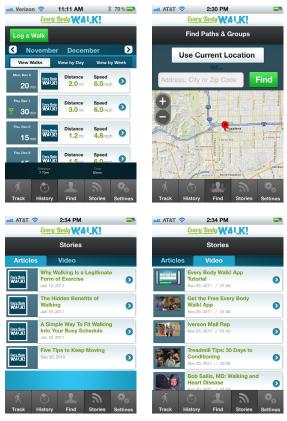
- Encourage transit and transportation agencies to publicly release relevant data
- Encourage mobile-technology application innovation through app competitions
- Use satellite and GPS technology to track uses, taxis, and trains in real time

### **Professional Consensus**

 In the absence of endorsements from national associations or governmental departments, cities are turning to best practices employed by other municipalities

- HopStop (79 cities and counting)
- NextBus (91 transit systems and counting)
- Taxi Magic (40 cities and counting)
- Adventure Walks (San Francisco; Washington, DC; and counting)
- Every Body Walk!
- American Heart Association's <u>Walking Paths</u> app

Enforcement



Program elements of the Every Body Walk! app. Source: Every Body Walk!

### Case Study: United States

In January 2011, Kaiser Permanente and about 50 other organizations partnered to launch the national campaign Every Body Walk! The online campaign, produced by media team GerberRigler, encourages Americans to walk 30 minutes a day, five days a week. One of the centerpieces of the campaign is the free Every Body Walk app. The app, which is compatible with iPhones and Androids, logs individual walks, counts calories burned, and maps your routes for future reference. Users can share walks and their walking progress with friends on Facebook and find new routes by using an interactive map to look for nearby walking clubs and paths. The app also has a video section where users can get tips from health experts and watch films about walk-friendly communities.<sup>1</sup>

The free Every Body Walk! app came in second in About.com's Best Walking App—Readers' Choice Awards 2012, outperforming most other for-profit apps.<sup>2</sup> While the Every Body Walk app is only one element of the walking campaign—recent highlights include a Funny or Die video featuring the cast of the TV show West Wing promoting walking<sup>3</sup>—the app is the means by which the campaign guides and supports individuals striving to incorporate more walking into their daily routines.

<sup>1.</sup> Every Body Walk! Every Body Walk! App. Kaiser Permanente. http://everybodywalk.org/app.html

<sup>2.</sup> Gerber, Brian; Rigler, Thomas. Personal correspondence. May 18, 2012.

<sup>3.</sup> Bumgardner, Wendy. Best Walking App—Readers' Choice Awards 2012 March 29, 2012. About.com. <a href="http://walking.about.com/od/maps/tp/Best-Walking-App-Readers-Choice-Awards-2012.htm">http://walking.about.com/od/maps/tp/Best-Walking-App-Readers-Choice-Awards-2012.htm</a>

## Expand **Driver's Education** into **Mobility Education**

**Definition** Mobility education supplements traditional driver's education to teach multimodal and trip-planning skills in addition to driving techniques. Mobility education informs students how to do the following: ride a bike, judge the walkability of streets and neighborhoods from a pedestrian's perspective, take and plan transit trips, account for the financial responsibility of car ownership, compare the health impacts of transportation behaviors, and consider the mobility possibilities of new technologies such as Skype and car-sharing.

### **Benefits**

- Teaches all new drivers the financial, health, and environmental impacts of transportation behaviors
- Increases familiarity with multiple modes of transportation
- Gives drivers the perspectives of cyclists, pedestrians, and transit users with whom they share the road

#### **Considerations**

- Reach out to law enforcement when crafting the mobility-education curriculum
- Run mobility-education workshops and informational sessions about updated traffic laws for local law enforcement

### **Appropriate Contexts**

- Private driver-training schools
- Grant-funded programs
- Traffic-safety education
- Weekend workshop offerings
- State policy initiative
- Federal policy initiative

### Guidance

- To better integrate mobility education into existing driver-education methods, craft mobility education into supplementary modules that can be taught either by specialized instructors or by instructional DVDs with accompanying pre-made tests
- Build mobility education into state and national campaigns against distracted driving
- Frame mobility choices in terms of financial responsibility: the difference between an annual \$8,000 outlay for car ownership and the savings of reducing or investing that amount<sup>1</sup>
- Incorporate parental involvement into curriculum, use crash statistics involving teenaged drivers, and create a parentstudent driver contract based on safety and mobility choices
- Familiarize drivers with traffic-control devices used for traffic calming and bicycle routes

#### **Professional Consensus**

 In the absence of endorsements from national associations or governmental departments, states are turning to best practices employed by other jurisdictions

Encouragement & Education

Enforcement

### **Examples**

While no state has fully adopted mobility education into its driver's education curriculum to date, many states have made incremental steps toward that goal. They include:

- Washington: The state legislature passed House Bill 2564 in 2008, which mandated the inclusion of pedestrian and bicycle safety education in the Driver's Education curriculum, but did not fund it
- New Jersey: As part of the Governor's fiveyear \$74-million <u>pedestrian safety initiative</u>, the state's Motor Vehicle Commission, Attorney General's Office, and the Department of Education edited the NJ Driver Manual to emphasize pedestrian safety and the responsibilities of both motorists and pedestrians, and added test questions about pedestrian-safety laws into the NJ driver examination
- Georgia: The Georgia Department of Drivers Services rewrote and expanded the pedestrian-related content of the <u>Georgia</u> <u>Drivers Manual</u> in 2007
- Wisconsin: The state DMV added pedestrian-safety component to its Driver's Handbook in 2010. The Madison DOT distributed pedestrian- and bicyclesafety instructional DVDs to driver's-ed instructors and distributed premade tests on the subject matter so that it could be easily integrated into the established curriculum. The pedestrian-safety DVD had been made by the traffic-enforcement safety department of the Madison Police Department. The Madison DOT then obtained the bicycle-focused training video from the Illinois DOT

### Case Study: Federal Way

The <u>Mobility Education Foundation</u> ran a mobility-education pilot course in Federal Way, Washington, in 2007. The Federal Way Public Schools Traffic Safety Education program typically offers two sections of driver education at Todd Beamer High School. The foundation offered one of the two sections an expanded "Driver Education PLUS" course with supplemental training run by Mobility Education instructors.<sup>2</sup>

While Washington State required only 30 hours of instruction spanning a minimum of 35 days, the standard Federal Way Public Schools Traffic Safety Education "Driver Education" course included 34 hours of classroom and 6 hours of behind the wheel (BTW) instruction. Classroom lessons were taught in 17 after-school meetings over two months, and BTW instruction was held during six drives meeting the state requirement of 6 hours.<sup>3</sup> The "Driver Education PLUS" curriculum supplement involved 12 hours of additional instruction:<sup>4</sup>

- 6 hours of training on bicycles
- 2 hours of transit training
- 2 hours of walkable communities training
- 2 hours of technologies training

Mobility Education Foundation representatives taught the supplemental instruction and attended the 17 other classes to participate in class discussions. Students of both driver education sections took a 20-question quiz on the first and last day of class.<sup>5</sup>

Quiz questions assessed student knowledge regarding safety, health, environment, cost, and



Excerpt of a Mobility Education Foundation promotional brochure. Source: Mobility Education Foundation

operations of the multimodal transportation system. Students in the PLUS pilot were more knowledgeable with respect to the true costs of transportation and had transit and cycling skills that were superior to their peers who attended the standard Driver Education course.<sup>6</sup>

- 1. Mobility Education Foundation. New Transportation Thinking for a 21st Century World Brochure.
- $2. \ \ Mobility\ Education\ Foundation.\ Federal\ Way,\ WA\ Driver\ Education\ PLUS\ Pilot\ Report.\ 2008.$
- 3. Levinger, David. Mobility Education Foundation. Personal correspondence. October 2011.
- 4. Mobility Education Foundation. Federal Way, WA Driver Education PLUS Pilot Report. 2008.
- 5. Mobility Education Foundation. Mob Squad One Day Course. 2008.
- 6. Mobility Education Foundation. Federal Way, WA Driver Education PLUS Pilot Report. 2008.

### Create a

### Safe Routes to Schools Program

**Definition** Safe Routes to School programs make it safe, convenient, and fun for children to be able to walk to and from schools. The program targets pedestrian and bicycle improvements around schools and is based on evaluation, education, encouragement, enforcement, and engineering.

### **Benefits**

- Creates a safer walking environment for everyone using the streets
- Induces drivers to slow down
- Encourages walking as a transportation option
- Increases physical activity
- Interests policy makers in other walking strategies

### **Considerations**

- · Limited federal funding
- Negotiating neighborhood desires when implementing infrastructure improvements
- Parents will like solutions that involve parental supervision

### **Appropriate Contexts**

- Federal funds must be spent within 2 miles of schools on infrastructure improvements
- Drop-off zones where parents and buses can drop off children who live farther away to walk the rest of the way to school

#### Guidance

- Form a Safe Routes team at the school including parents, school officials, and city officials
- Form a task force at the city or school-district level to encourage collaboration between the city and schools to improve traffic safety and promote the program
- Prioritize schools based on traffic-safety needs
- Use the 5E's:
  - » Evaluation: Start with an evaluation of existing conditions at the school or school district. Use <u>standardized data-collection</u> <u>forms</u> for student tallies and parent surveys

- » Engineering: Begin with a community walking audit of barriers for children walking and bicycling to school. Request signal timing based on the slower walking speeds of children (3' per second)
- » Education: Teach children bicycle and pedestrian traffic-safety skills in the classroom. Educating parents to drive safely also improves traffic safety
- » Encouragement: Organize walk- and bike-to-school days, contests, and other promotions to encourage walking. Also set up walking school buses and bike trains (parent-led programs where neighbors to walk with children)
- » Enforcement: Partner with law enforcement to station crossing guards at street corners
- Implement improvements: Use regular maintenance funds for short-term improvements such as striping and signage. Apply to departments of transportation for longer-term infrastructure needs, or find additional funding
- Use the Safe Routes to School to School National Partnership's <u>Local Policy Guide</u> to support the program

#### **Professional Consensus**

- The <u>Safe Routes to School (SRTS) Program</u> is administered by the Federal Highway Administration's Office of Safety<sup>1</sup>
- Endorsed by AASHTO, the Governors Highway Safety Administration, FHWA, and the National Center for Safe Routes to School in the report: Safe Routes to School Noteworthy Practices Guide: A Compendium of State Safe Routes to School Program Practices
- The Safe Routes to School National Partnership published case studies and benefits in their Congressional report: <u>Safe Routes to School:</u> <u>Helping Communities Save Lives and Dollars</u>
- The Safe Routes to School National Partnership lists benefits in its <u>referenced fact sheet</u>



The Safe Routes to School program at Red Pine Elementary School in Eagan, MN, also encouraged cycling to school. Source: National Center for Bicycling and Walking



A walking-school-bus initiative in Chicago, IL. Source: Chicago Department of Transportation

### Examples

- The Federal government mandates a full-time Safe Routes to School program coordinator within the departments of transportation of all 50 states
- As of December 2011, more than 12,300 schools in 50 states received federal funding for Safe Routes to School program

### Case Study: Eagan

Eagan, MN, is a suburb from Minneapolis–Saint Paul and its Red Pine Elementary serves 950 children from the town and several surrounding farming communities. Eagan has a network of sidewalks and crosswalks in the neighborhoods around school, providing safe infrastructure for walking and bicycling.

In spite of these safe facilities, many parents were in the habit of driving their children to school—resulting in significant traffic backups that often extended a quarter-mile from the school and onto a nearby highway. Red Pine Elementary principal realized that Safe Routes to School education and encouragement activities were necessary to shift some of these car trips to walking and bicycling.

With a small \$10,000 Safe Routes to School non-infrastructure award, the school implemented a comprehensive encouragement and education strategy. The school first produced a Safe Routes to School map to identify sidewalks, crosswalks, school patrols, and safer walking routes. Children in adjacent neighborhoods were invited to join walking school buses. Drop-off zones were added at the beginning of the walking-school-bus routes to allow children from farther away to join the walking school bus and reduce traffic at the school. The school implemented these provisions as one of their initiatives to increase health and physical activity—in addition to incentives to walk and run at recess, fitness fairs on the weekends, and bicycle donations to low-income children.

With this comprehensive approach, Red Pine Elementary more than doubled the number of children regularly walking and bicycling to school—from 75 to 200 children. The number of cars dropping children off at school declined from 100 cars to about 40 cars—nearly eliminating traffic backups around the school.<sup>2</sup>

<sup>1.</sup> Federal Highway Administration. Office of Safety. Safe Routes to School. http://safety.fhwa.dot.gov/saferoutes/

<sup>2.</sup> Hubsmith. Deb. Director of Safe Routes to School National Partnership. Personal correspondence. July 2012.

## Create a Safe Routes to Transit Program

**Definition** A Safer Route to Transit program targets pedestrian improvements around transit stops and the walking or cycling routes used to reach them.

### **Benefits**

- Tailors responses to the needs and concerns of specific walking populations
- Creates a safer walking environment for everyone using the streets
- Induces drivers to slow down
- Encourages transit use
- Encourages walking as a transportation option
- Reduces automobile dependency

### **Considerations**

- Coordinating traffic-calming plans with the needs of emergency responders
- Funding traffic-calming and/or infrastructure improvements
- Coordinating infrastructure improvements to optimize costs and benefits

### **Appropriate Contexts**

- Vicinity of bus stops and subway stations
- The major foot and cycling routes to reach transit stops

#### Guidance

- Demonstrate the need. Collect:
  - » Baseline data, such as the number, attributes, and circumstances of pedestrian crash injuries and fatalities
  - » Traffic volumes and speeds
  - » Ridership attributes (who arrives to stations and how)
  - » Population statistics by geographical distribution (e.g., area densities of senior populations or youth populations)
  - » Adequacy of existing infrastructure (sidewalk gaps, crosswalks, etc.)
- Also survey residents about mobility concerns and priorities
- Publicize the demonstrated need for targeted infrastructure improvements:
- » Set up meetings with local representatives, advocacy groups, community organizations, and city agencies
- » Write press releases and invite mainstream and social media representatives to cover the story
- Collaborate with departments of transportation, city planning, transit providers, local residents, and advocates to systematically address safety concerns and improvements

### **Professional Consensus**

 Targeted pedestrian safety improvements around transit stops are endorsed by the Federal Highway Administration in its <u>Pedestrian Safety Guide for Transit Agencies</u> guidebook

- New York, NY
- Atlanta, GA: Safe Routes to Transit Task Force

Enforcement



Before: 86th Street and 20th Avenue, Brooklyn, NY. Source: New York City Department of Transportation



After: 86th Street and Bay Parkway, Brooklyn, NY. Source: New York City Department of Transportation

### Case Study: New York

Created through New York City Mayor Michael Bloomberg's 2007 PlaNYC strategic plan, the Safe Routes to Transit program within the New York City Department of Transportation (NYCDOT) aims to improve pedestrian conditions in and around transit stops throughout the city. The Safe Routes to Transit program addresses three main transit conditions: unsafe bus stops under elevated subway structures, congested sidewalks next to subway entrances, and incomplete pedestrian infrastructure at bus stops.

The Bus Stops under the Els initiative identified 42 locations in the Bronx, Brooklyn, and Queens in need of safety improvements, such as changing the shape of the roadway and constructing raised bus stops to provide people a safer place to stand while waiting for the bus.

In its Subway/Sidewalk Interface initiative, the agency uses data collected in a joint-survey with the Department of City Planning to prioritize pedestrian-safety improvements at 23 subway stops. Improvements at those locations include widening narrow sidewalks, extending crossing intervals, and reducing traffic congestion near station entrances and exits.

In its third initiative, Sidewalks to Buses, NYCDOT is installing new sidewalks, crosswalks, and waiting areas at bus stops where that infrastructure currently doesn't exist. The agency has pledged to install up to a quarter-mile of new sidewalk and pedestrian improvements at up to 15 bus stops per year through 2030.<sup>1</sup>

 $<sup>1. \</sup>quad \text{New York City Department of Transportation. Safe Routes to Transit. Pedestrians \& Sidewalks. n.d. \\ \underline{\text{http://www.nyc.gov/html/dot/html/sidewalks/safertstransit.shtml}}$ 

## Create a **Safe Routes for Seniors** Program

**Definition** A Safe Routes for Seniors program targets pedestrian improvements in areas with senior centers, hospitals, and large numbers of senior residents.

### **Benefits**

- Tailors responses to the needs and concerns of seniors
- Creates a safer walking environment for everyone using the streets
- Induces drivers to slow down
- Encourages walking as a transportation option

### **Considerations**

- Coordinating traffic-calming plans with the needs of emergency responders
- Funding traffic-calming and/or infrastructure improvements
- Coordinating infrastructure improvements to optimize costs and benefits

### **Appropriate Contexts**

- Vicinities or senior centers and hospitals
- Districts with high densities of senior residents

### Guidance

- Demonstrate the need. Collect:
  - » Baseline data, such as the number, attributes, and circumstances of pedestrian crash injuries and fatalities
  - » Traffic volumes and speeds
  - » Population statistics by geographical distribution (e.g. area densities of senior populations)<sup>1</sup>
  - » Adequacy of existing infrastructure (sidewalk gaps, crosswalks, etc.)
- Also survey residents about mobility concerns and priorities
- Publicize the demonstrated need for targeted infrastructure improvements:
- » Set up meetings with local representatives, advocacy groups, community organizations, and city agencies
- » Write press releases and invite mainstream and social media representatives to cover the story
- Collaborate with departments of transportation and health, transit providers, senior center staff, seniors, health-care providers, and advocates to systematically address safety concerns and improvements
- Request signal timing based on the slower walking speeds of seniors (3 feet per second) to give pedestrians enough time to safely cross

### **Professional Consensus**

 Endorsed by Transportation for America in its June 2011 report <u>Aging in Place, Stuck without</u> <u>Options</u>

- · Chicago, IL
- New York, NY
- San Francisco, CA



Crossing 72nd Street, New York, NY. Source: Ed Yourdon. Flickr

### Case Study: New York

As more people live longer and age in place, creating communities that are easy, enjoyable, and safe for older adults to walk through is crucial for both transportation and public-health considerations. So, in 2003, Transportation Alternatives (TA), a New York City-based transportation advocacy organization, created a Safe Routes to Seniors program. With funding from the New York State Department of Health's Healthy Heart program, TA partnered with community groups in eight neighborhoods that had large senior populations to better understand obstacles to walking. Senior residents documented dangerous walking conditions using maps, measuring wheels, stop watches, and disposable cameras. TA also hosted four workshops to give seniors a chance to generate design solutions. TA's work helped construct 65 pedestrian safety improvements to improve walking conditions for over 26,000 seniors in two New York City neighborhoods.<sup>1</sup>

The TA program also inspired the New York City Department of Transportation (NYCDOT) to create its own Safe Routes for Seniors program. NYCDOT's program examined accident histories across the city to identify 25 neighborhoods that have both a high density of senior citizens and a high number of pedestrian accidents or injuries—including the TA-identified neighborhoods of Flushing, the Lower East Side, and Brighton Beach. The agency's engineers assess pedestrian conditions in those neighborhoods from a senior's perspective to implement improvements, such as extending pedestrian crossing times at crosswalks, shortening crossing distances, altering curbs and sidewalks, restricting vehicle turns, and narrowing roadways.



<sup>1.</sup> Transportation Alternatives, Safe Routes for Seniors Final Report. June 2009. http://www.transalt.org/files/newsroom/reports/2009/Safe\_Routes\_for\_Seniors.pdf

<sup>2.</sup> Ibid

<sup>3.</sup> New York City Department of Transportation. Safe Routes for Seniors. Pedestrians & Sidewalks. n.d. http://www.nyc.gov/html/dot/html/sidewalks/safeseniors.shtml

## Establish Walking Meetings at Work

**Definition** Walking meetings are small-group business discussions that take place while walking, usually outdoors, instead of around a conference table.

### **Benefits**

- Energizes people and makes them more alert
- Helps people stay fit
- Breaks up a workday
- Stimulates oxygen flow in the body and brain to increase creativity and the ability to solve problems faster
- Reduces office energy demands

### **Considerations**

- External distraction, such as ambient noise or cell phone use
- Route restrictions, such as narrow sidewalks or corridors, can hinder group conversations
- Accommodating diverse walking paces

### **Appropriate Contexts**

- Parks, trails, or greenways
- Urban areas with adequate walking infrastructure like sidewalks and crosswalks
- Indoors areas like convention centers or malls

### Guidance

- Determine the meeting agenda beforehand
- Determine the route and length of the walking meeting beforehand, taking into consideration the fitness and mobility levels of attendees
- Inform everyone they should wear comfortable shoes
- Schedule the walking meeting early to set the tone for the day; or late in the afternoon to reenergize attendees
- Check the weather and prepare accordingly
- Avoid noisy roads and those that are distracting and/or dangerous<sup>2</sup>
- Give employees individual pedometers to track and encourage walking

### **Professional Consensus**

 Encouraged by the American Heart Association

- Rockland, MA: EMD Serono
- Minneapolis, MN: Salo
- Orlando, FL: Florida Hospital

Encouragement & Education

Enforcement



A walking meeting at the Kaiser Permanente Executive Leadership Summit in Ellwood, CA. Source: Dr. Ted Eytan, Flickr

### Case Study: Washington, DC

Dr. Ted Eytan, a Permanente Federation director at Kaiser Permanente, has been a big proponent of walking meetings for years. Dr. Eytan has not only integrated them into his office operations, but has also published <u>instructions</u> on his blog, <u>tedeytan.com</u>, on how others can do the same. The inspiration came from an office walking challenge where employees were handed free pedometers.<sup>3</sup> Coworkers decided to rack up steps on their pedometers by walking during company meetings instead of sitting around a table.<sup>4</sup>

Dr. Eytan continued the practice long after the end of that original walking challenge. When he began a new position at Kaiser Permanente in Washington, DC, he instituted walking meetings there as well. Dr. Eytan's support of walking meetings is not an exception within Kaiser Permanente, but an example of a sea change both within the institution and the country as a whole. Kaiser Permanente now endorses walking meetings as a standard business practice<sup>5</sup> and evens funds a national education campaign, called Every Body Walk!, to promote walking in and outside the work place.

<sup>1.</sup> Feet First. Guide to Walking Meetings. http://feetfirst.org/walks/walking-meetings

<sup>2.</sup> Ibid

<sup>3.</sup> Eytan, Ted. The Art of the Walking Meeting, TedEytan.com, January 10, 2008. http://www.tedeytan.com/2008/01/10/148

<sup>4.</sup> Willians, David K. Dr. Ted Eytan of Kaiser on health IT, walking meetings, innovation (transcript) Health Business Blog. January 4, 2011. <a href="http://www.healthbusinessblog.com/2011/01/dr-ted-eytan-of-kaiser-on-health-it-walking-meetings-innovation-transcript/">http://www.healthbusinessblog.com/2011/01/dr-ted-eytan-of-kaiser-on-health-it-walking-meetings-innovation-transcript/</a>

Aubrey, Allison. Is It Possible to Walk and Work at the Same Time? NPR. May 7, 2012. http://www.npr.org/blogs/health/2012/05/07/152157560/is-it-possible-to-walk-and-work-at-the-same-time

<sup>6.</sup> Eytan, Ted. Walking Meetings Featured on ABC News, Washington, DC. TedEytan.com. May 3, 2012. http://www.tedeytan.com/2012/05/03/10626

## Use **Walk Score** to Your Advantage

**Definition** The web-based real estate assessment tool Walk Score allows users, whether they are city-planning departments or individuals, to see and assess the walk-, bike-, and transit-friendliness of addresses and neighborhoods.

### **Benefits**

- Allows users to quickly assess walking, biking, and transit conditions in different neighborhoods
- Allows users to make livability comparisons between different locations
- Helps integrate land use into transportation and development-planning decisions
- Quantifies the value of walkability, transit access, and bikeability within real estate evaluations
- Allows resource-strapped cities and communities to perform low-cost walkability assessments
- Helps communicate planning goals for neighborhoods and transit hubs<sup>1</sup>

### **Considerations**

- Currently measures distance as the crow flies rather than along existing street and sidewalk networks, though a "StreetSmart" version is available in beta form
- Walk Score algorithm doesn't customize how individuals might value nearby destinations differently<sup>2</sup>
- Walk Score doesn't account for the width of streets, traffic, or other obstacles to walking, though the company has plans to integrate that type of data into walking evaluations
- Walk Score's accuracy depends on the database of destinations used by Google Maps

### **Appropriate Contexts**

- Any of the 2,500 cities currently assessed by Walk Score
- Transit (bus, train, ferry, light-rail) corridors and transit-oriented developments

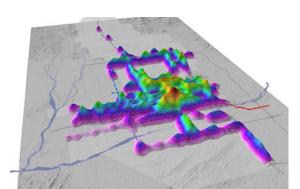
### Guidance

- Incorporate Walk Score into real estate evaluations to encourage development toward more walkable goals
- Incorporate Walk Score data into planning analyses for transit-oriented developments
- Incorporate Walk Score data when evaluating the walkability of sidewalk and street networks and prioritizing improvement projects

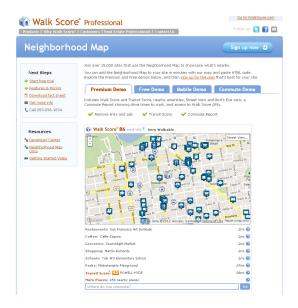
#### **Professional Consensus**

- Supported by grants from the <u>Rockefeller</u> Foundation
- Supported by grants from the <u>Robert Wood</u> <u>Johnson Foundation</u>
- Endorsed by Harriet Tregoning, Director, Washington DC Office of Planning

- Walk Score's walkability index has been incorporated into 15,000 websites<sup>3</sup>
- Multiple U.S. cities have incorporated Walk Score into planning analyses, including:<sup>4</sup>
- » Phoenix, AZ
- » Washington, DC



Phoenix, AZ, used Walk Score data to analyze existing rail stations and model the performance of proposed stations. Source: Walk Score, http://www.walkscore.com/pdf/WS-Phoenix-TOD.pdf



Walk Score assesses neighborhoods in terms of amenities within walking, cycling, and transit distances. Source: Walk Score, walkscore.com

### Case Study: Phoenix

The Phoenix Planning Department used Walk Score data to analyze the performance of existing light rail stations and to look at how proposed stations might perform if they were within a walking network connecting passengers to desired amenities.<sup>3</sup>

Walk Score data helped planners clarify which corridors and station locations performed best from a land use perspective. Phoenix plans to use Walk Score data in a similar fashion to evaluate the performance of the city's canal corridors.<sup>4</sup>

<sup>1.</sup> Langdon, Philip. Walk Score could lead to better-planned transit networks. New Urban News. Vol. 16. No. 6.

<sup>2.</sup> Cortright, Joe. Walking the Walk: How Walkability Raises Home Values in U.S. Cities. CEOs for Cities. August 2009. http://blog.walkscore.com/wp-content/uploads/2009/08/WalkingTheWalk\_CEOsforCities.pdf

<sup>3.</sup> Walk Score: Year in Review. January 12, 2012. http://www.walkscore.com/professional/neighborhood-map.php

Cortright, Joe. Walking the Walk: How Walkability Raises Home Values in U.S. Cities. CEOs for Cities. August 2009. http://blog.walkscore.com/wp-content/uploads/2009/08/WalkingTheWalk. CEOsforCities.pdf

<sup>5.</sup> Langdon, Philip. Walk Score could lead to better-planned transit networks. New Urban News. Vol. 16. No. 6.

<sup>6.</sup> Walk Score Data for Planning & Research, Case Study: Analyzing Light Rail Station Area Performance in Phoenix, http://www2.walkscore.com/pdf/WS-Phoenix-TOD.pdf

## **Enforcement** Tactics

### Introduction

This chapter consists of tactics that can either be adopted by law-enforcement agencies or used to supplement those agencies. A few of these enforcement tactics are legislative amendments aimed to increase drivers' responsiveness and responsibility toward more vulnerable road users.

These tactics rely on successful communication and coordination between multiple agencies and audiences, including law-enforcement officers themselves.

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Pedestrian-traffic managers, New York, NY. Source: Sam Schwartz Engineering

## Train Law-Enforcement Officers in **Pedestrian Laws** and **Safety**

**Definition** Provide an education course on pedestrian and bicycle safety geared toward and taught to law-enforcement officers to help them create safer walking and bicycling communities. The training curriculum typically covers state laws and statutes relating to pedestrian and bicycle safety, the causes of common crashes involving pedestrians and bicyclists, how to investigate and report those crashes, and sample enforcement guidelines.

### **Benefits**

- Fills a frequent gap in formal law-enforcement officer education
- Teaches officers the leading causes of pedestrian crashes
- Clarifies which laws to enforce for the safety of walkers and cyclists
- Educates all those who are pulled over about the law and proper interactions between walkers, cyclists, and drivers
- Helps prevent dangerous behaviors on the road

### **Considerations**

- Institutional resistance from the perception that pedestrian and bicycle behavior is outside the scope of police concern
- Financial and time constraints: Who pays for the trainings? How long can departments spare officers to attend training sessions?
- Bureaucratic hurdles: Who creates and vets the curriculum? Who runs the course?

### **Appropriate Contexts**

- Local
- State

### Guidance

- Identify a champion in law enforcement to help plan and implement the training
- Partner with law enforcement in creating the curriculum
- Seek funding from state highway safety agencies who can also provide state peaceofficer standards and training certification so officers receive training credit for course attendance; federal safety agencies may vet curriculums

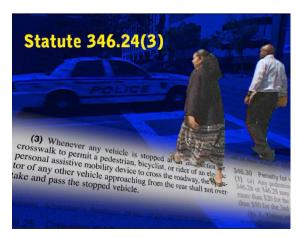
- Frame the training as a means of improving overall community safety
- Recruit police training staff for training sessions
- Make the training as easy as possible to attend:
- » Divide training sessions into short modules to be taught separately
- » Hold training sessions within precincts
- » Fit in trainings during roll call
- » Create and distribute DVDs of training materials
- Survey participants before and after trainings to gauge their knowledge of pedestrian laws and crash-prevention measures
- Distribute detailed training manuals to participants
- Consider using the free NHTSA-produced, "Pedestrian Safety Training for Law Enforcement" video<sup>1</sup>

### **Professional Consensus**

- Listed by the National Pedestrian and Bicycle Information Center<sup>2</sup>
- Endorsed by the Federal Highway
   Administration: "It is an essential component of bicycle and pedestrian programs that seek to enable all users to share roadways safely"<sup>3</sup>
- National Highway Traffic Safety Administration endorses and develops law-enforcement curricula regarding pedestrian and bicycle safety

- Louisiana<sup>4</sup>
- Wisconsin
- Portland, OR
- · Chicago, IL

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Wisconsin DOT and the Bicycle Federation of Wisconsin created 10-minute training sessions about pedestrian and bicycle laws and crash-prevention tactics for law-enforcement officers. Source: Pedestrian Safety for Law Enforcement, WisDOT

### Case Study: Wisconsin

In 2007, the Wisconsin Department of Transportation updated its bicycle-training program for law-enforcement officers, which had been created in 1995 through a National Highway Traffic Safety Administration (NHTSA) grant, to include pedestrian statutes and crash-prevention techniques. The course is designed to give lawenforcement officers the basic knowledge, tools, and resources to create safe walking and bicycling environments in their districts. The two-day course includes classroom, walking, and on-bike components, and is taught by staff of the transportation-consulting firm WE BIKE. Topics covered include definitions, state laws and statutes relating to pedestrian and bicycle safety, the causes of common crashes involving pedestrians and bicyclists, how to investigate and report those crashes, sample enforcement guidelines and actions, as well as relevant organizations and contacts. All training participants also receive a manual summarizing the course materials. Training costs are currently covered by an NHTSA grant, but the program hopes to be selfsustaining through course fees.

A challenge of the program, however, is finding police departments with enough staff and resources to be able to spare officers for two days in order to attend these trainings. As a result, WisDOT and the Bicycle Federation of Wisconsin created 10-minute training sessions for law-enforcement officers as part of their recent "Share & Be Aware" Campaign for road safety (which was funded by the federal Transportation Enhancements program). These 10-minute trainings will be given during police precinct roll calls either by Share & Be Aware bicycle ambassadors or through DVD presentations.<sup>5</sup>

National Highway Traffic Safety Administration. NHTSA Pedestrian Safety for Law Enforcement. October 2011. http://mcs.nhtsa.gov/index.cfm?fuseaction=product.display&product\_ID=786

<sup>2.</sup> Pedestrian and Bicycle Information Center. Training Law Enforcers. http://www.bicyclinginfo.org/enforcement/training.cfm

Federal Highway Administration. Bicycle and Pedestrian Program. The Nonmotorized Transportation Pilot Program. http://www.fhwa.dot.gov/environment/bicycle\_pedestrian/ntpp/index.cfm

<sup>4.</sup> Greater New Orleans Pedestrian & Bicycle Program. Enforcement for Pedestrian and Bicycle Safety. Regional Planning Commission and Louisiana Department of Transportation and Development. Spring 2010. http://www.planning.uno.edu/BikePed/PDFs/bike-ped\_enfrc-manul\_2010.pdf

<sup>5.</sup> Corsi, Larry, Pedestrian and Bicycle Safety Program Manager, WisDOT, Personal correspondence, October 4, 2011.

### Pass a

### **Vulnerable-Users Statute**

**Definition** This is a legislative statute that requires higher penalties for drivers who harm more vulnerable roadway users, such as pedestrians and cyclists. The statute should include a "due care" provision, if one is not already enacted in state law, requiring drivers to look out for and avoid striking vulnerable persons in the roadway.

### **Benefits**

- Better balances punishment to the consequences of negligent driving
- Encourages cautious driving
- Provides legal support to injury claims caused by unsafe motorists

### **Considerations**

- A vulnerable-user bill should not contradict existing statutes and liability arguments
- Legislation that requires jail time or trial proceedings may overburden a constrained court system
- Providing professional legal assistance to draft the legislation and committed, multiyear legislative efforts and advocacy to build the political support to pass the bill

### **Appropriate Contexts**

- Local
- State

### Guidance

- Create a campaign to move the statute
  through the legislative process: Define the
  problem; develop a statewide coalition;
  prepare fact sheets; organize news stories,
  letters, and phone calls to legislators
  to gather support and sponsors for the
  proposed legislation; and maintain the
  political momentum to move the bill through
  committee, past floor votes in both state
  houses; and obtain the governor's signature
- Seek assistance: State highway safety agencies may provide help and leadership; the National Highway Traffic Safety Administration can identify best practices
- Use testimony of families and victims to build legislative support

- Build support from diverse stakeholders, e.g., farmers can help if tractor drivers are included as a class of vulnerable roadway users
- Survey and amend existing statutes, including:
  - » Penalties for careless driving
- » Department procedures regarding length of driver's-license suspensions
- » Trial entry proceedings in non-default cases
- » Provisions of judgment
- » Criteria requiring a defendant appear in court
- » Admissibility of traffic-offense procedures in subsequent civil actions
- Consult police officers to insure law is practically enforceable
- Define and assign new responsibilities like monitoring careless drivers, supervising community service, and tracking fines or license suspensions to agencies, including court systems and district attorney offices
- Encourage legislative support and agency cooperation by highlighting the law's safety benefits for children and highway workers

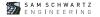
#### **Professional Consensus**

- In the absence of endorsements from national associations or governmental departments, cities are turning to best practices employed by other municipalities
- Vulnerable User Statutes have passed several state legislatures, though they have faced political resistance in California<sup>1</sup> and Texas<sup>2</sup>

### **Examples**

Vulnerable Roadway User laws have been passed by the following state legislatures:

- Delaware<sup>3</sup>
- New York<sup>4</sup>
- Oregon<sup>5</sup>



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Cycling between vehicular travel lanes on an Oregon road. Source: Oregon DOT

### Case Study: Oregon

In 2007, the Oregon Legislature passed the Vulnerable Roadway User statute (ORS 811.135). The act created a higher penalty for careless driving if it contributed to serious physical injury or death to a "vulnerable user of a public way." If that occurred, the act mandated either community service and driver-improvement education, or a substantial fine and a mandatory one-year license suspension. The law went into effect January 1, 2008.

The Bicycle Transportation Alliance (BTA) Legislative Committee advocated that the concept of a Vulnerable Roadway User could be a legal term to provide stronger protection of vulnerable user groups, such as pedestrians, cyclists, and rollerbladers. The term forged a new way for law enforcement and the court system to address pedestrian and cyclist injuries caused by careless drivers. Previously, Oregon law simply mandated a fine in response to a careless driving incident. Before the Vulnerable Roadway User statute, the state did not suspend

the licenses of convicted drivers or require that they make a court appearance. The new bill included a noncriminal alternative of a \$12,500 fine (up from \$750) and a one-year license suspension. A traffic-safety course and one to two hundred hours of community service were included as an alternative to the fine and suspension. If the program is successfully completed, the suspension and fine would be suspended.

Creating a new legal concept required amending a considerable number of other statutes. The responsibility for administering the program monitoring careless drivers and supervising community service and any fines or license suspensions also had to be assigned to various agencies.

In 2011, Oregon amended its Vulnerable Roadway User statute to give police officers the discretion to note that an offense "appears to have" contributed to the serious physical injury or death of a vulnerable user, rather than requiring them to conclude that it was the exact cause of the serious physical injury or death. The change aimed to improve law enforcement's ability to enforce the law. As a result, the Portland Police Department lowered the severity of crash that would trigger a full police investigation for a vulnerable roadway user. A full police investigation is now triggered when a vulnerable roadway user is taken away by an ambulence, instead when a victim is entered in the trauma system.

Roth, Matthew; Rhodes, Michael. California Assembly Hits, Kills Traffic Justice Bill. April 20, 2010. http://sf.streetsblog.org/2010/04/20/california-assembly-hits-kills-traffic-justice-bill/

<sup>2.</sup> Perry, Rick. Gov. Perry Vetoes SB 488. June 19, 2009. http://www.stc-law.com/pdf/Texas%20VRU%20Bill.pdf

 $<sup>3. \ \</sup> State of Delaware. Governor Signs "Vulnerable Users" Law. August 12, 2010. \\ \underline{http://governor.delaware.gov/news/2010/1008august/20100812-law.shtml}$ 

<sup>4.</sup> New York State Vehicle and Traffic Law. Section 1146. http://public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+&QUERYDATA=\$\$VAT1146\$\$@TXVAT01146+&LIST=SEA4+ &BROWSER=BROWSER+&TOKEN=45956353+&TARGET=VIEW

<sup>5.</sup> Oregon Department of Transportation. Bicycle and Pedestrian Program. Laws and Regulations. http://www.oregon.gov/ODOT/HWY/BIKEPED/laws\_regs.shtml

### Provide Training Instead of Fines

**Definition** Training instead of fines gives first-time traffic offenders of certain violations—whether they are drivers, pedestrians, or bicyclists—the option of taking a safety class instead of paying a fine. Citation receivers who successfully complete the class receive an automatic or discretionary dismissal (no conviction) or a sentence of discharge (conviction entered but no fine), depending on the traffic violation.

### **Benefits**

- Increases knowledge of and compliance with traffic regulations
- Reduces preventable crashes
- Provides eligible first-time offenders with incentives to take a safety class
- Improves awareness of the social and economic impacts of traffic-law violations and the benefits of walking, cycling, and using transit

### **Considerations**

- Loss of fine revenue from dismissed or discharged citations
- Time and resource commitment from safetyclass staff
- Resource and financial requirements for a tracking system to coordinate class participants and court records
- Translation services or multilingual instructors to reach non-English-speakers

### **Appropriate Contexts**

- Local
- State—dependent upon programs working with circuit and municipal courts and statewide statutes to authorize court and police referrals to traffic-education classes as well as indemnify traffic-education classes from litigation

#### Guidance

- Collaborate with all program partners from the start, including: police, courts, local and state departments of transportation, health sector, and advocates
- Create the means of tracking class participants within traffic-court records
- Instruct law-enforcement officers and court staff on eligibility requirements and procedures for class admission, court procedure, and case disposition.
- Distribute and encourage law-enforcement officers and court staff to provide referral slips to eligible defendants when the defendant is cited for the violation and at his or her arraignment in court
- Instruct the citing officer to note on the citation a recommendation to either dismiss or discharge the fine upon successful completion of the safety course
- Require advance registration (or assign course dates) to give safety-class staff enough time to confirm eligibility of attendees
- Set class fees low enough to encourage attendance, but high enough to fund the program

### **Professional Consensus**

 A comparative study about seat belt education programs is endorsed by the National Highway Traffic Safety Administration.
 The study is relevant to Share the Road Safety Class (SRSC) because both use "highly visible enforcement" with education to change driving behavior and attitudes!

### **Examples**

 Despite more than 300 requests nationwide for program materials, only <u>Portland</u>, <u>OR</u>, runs a training-instead-of-fines program<sup>2</sup>

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Mike Morrison from Trauma Nurses Talk Tough. in Portland, OR. Source: Jonathan Maus, Bike Portland

### Case Study: Portland

Trauma Nurses Talk Tough, a program of the Portland-based Legacy Health System, collaborated with the City of Portland, Multnomah County courts, Portland Bureau of Transportation, Portland Police Bureau, the Bicycle Transportation Alliance, and Willamette Pedestrian Coalition to offer eligible first-time traffic offenders—drivers, pedestrians, and bicyclists—the option of taking a Share the Road safety class instead of paying a fine.

Ticketed violators who provide the court with their class-completion certificate can have their citation dismissed or discharged. Eligible traffic violations fall within three general categories:

- Being in the wrong place on the road (such as a car in a bike lane)
- Failure to yield the right of way
- The non-use of safety equipment

Law-enforcement officers writing the citation or court staff at the arraignment process refer ticketed violators to the Share the Road class. In nearly four years of providing the class, TNTT has seen 14,000 participants. Citation receivers are eligible for a dismissal or discharge only if they haven't taken the safety class before. Share the Road instructors maintain a database of class attendees and check that registered students haven't already participated in the program. The database includes the citation receiver's name, date of birth, court case number, type of traffic violation, source of the class referral, and date of class completion. That information is then entered into the court's computer records system within five days after each class.

The two-hour discussion is taught twice a month at the 125-seat Legacy Emmanuel hospital auditorium by a judge, a police officer, a trauma nurse, and either a bicycle or pedestrian advocate. The class explains Oregon law as it relates to drivers, pedestrians, and bicycles; presents videos, photos, and scenarios where people risk being hurt as a result of unsafe bicycling, walking, and driving behavior; and explains the physical, emotional, and legal consequences of traffic violations and crashes involving pedestrians, cyclists, and drivers. At the end of the class, each participant receives a certificate of completion, which he or she then files with the court for an automatic or discretionary dismissal or sentence of discharge (depending on the traffic violation).<sup>3</sup>

Increasing Seat belt use rates in rural communities. National Highway Traffic Safety Administration.
 <a href="http://www.nhtsa.gov/people/injury/airbags/RuralCrashes/pages/IncreaseSBUse.htm">http://www.nhtsa.gov/people/injury/airbags/RuralCrashes/pages/IncreaseSBUse.htm</a>

<sup>2.</sup> Morrison, Mike. Trauma Nurses Talk Tough. Personal correspondence. October 2011.

<sup>3.</sup> Legacy Health System. Trauma Nurses Talk Tough. Court-ordered classes. Share the Road Safety Class. http://www.legacyhealth.org/body.cfm?id=981

## Install **Red-Light Cameras** and **Speed Cameras**

**Definition** Red-light cameras and speed cameras are automated trafficenforcement systems that photograph vehicles whose drivers run red lights or drive faster than the posted speed limit. Cameras typically record the date, time of day, time elapsed since the beginning of the red signal (where applicable), vehicle speed, and license plate. Tickets or citations are then mailed to the vehicle owners, based on a review of photographic evidence. Localities typically approach red-light- and speed-camera programs by holding either the driver or the registered owner responsible for the infraction.

#### **Benefits**

- Deters would-be violators1
- Red-light cameras significantly <u>decrease</u><sup>2</sup> right-angle crashes (red-light-running crashes)<sup>3</sup>
- Red-light cameras <u>reduce</u> fatal red-lightrunning crashes in cities where they are installed<sup>4</sup>
- Speed cameras reduce all crashes up to 49%, reduce injury crashes up to 50%, and reduce crashes involving fatalities and serious injuries up to 44% in the vicinity of camera sites
- Over wider areas, speed cameras reduce all crashes up to 35% and reduce crashes involving fatalities and serious injuries up to 58%. These trends were either maintained or improved with time<sup>5</sup>

### **Considerations**

- Red-light cameras may increase the number of rear-end crashes at signalized intersections with cameras. (Weighed by the economic impact and severity of injuries, the study found the overall effect of cameras positive)<sup>6</sup>
- Safeguarding legal due process in automated enforcement and penalization

### **Appropriate Contexts**

- Implementable on a city- or countywide basis with state authorization
- Locations where red-light running and speeding impair walkability
- Red-light cameras:
  - » High-risk intersections, determined by the number of crashes or an analysis of the number of crashes attributable to red-light running; citation data; or complaints

- » Intersections where an engineering study concluded that engineering improvements, driver-education initiatives, or other countermeasures would not be effective in reducing crashes from red-light running<sup>7</sup>
- Speed cameras:
  - » School zones
  - » Construction zones
  - » Residential areas
  - » Areas near parks
- » Areas with many seniors
- » Areas with high levels of pedestrian and bicycle activity

### Guidance

- Involve stakeholders, including state
  department of motor vehicles, state and local
  police, traffic engineering department, public
  attorney's office, public information office,
  the judiciary, community representatives,
  advocates, and the photo-enforcement
  services contractor
- Avoid the appearance of conflict of interest:
   Verify and oversee the contractor and compensate the contractor solely on the value of the equipment or services provided
- Avoid appearance of a money grab:
   Emphasize deterrence through signage and public outreach, avoid excessive penalties and late fees, oversee site selection, adequately fund camera equipment and operations to avoid dependence on fine revenue, install supplemental speed-limit signs along enforced routes, and conduct audits
- Run the program past a legal review
- Run an awareness campaign before implementation and on an ongoing basis
- Evaluate program performance and results



### **Professional Consensus**

- Red-light cameras are endorsed by Federal Highway Administration (FHWA) and National Highway Traffic Safety Administration (NHTSA) within a comprehensive approach to intersection safety<sup>8</sup>
- Speed cameras are endorsed by the FHWA and NHTSA within a comprehensive approach to speed management?
- FHWA published guidance on red-lightcamera systems<sup>10</sup>
- FHWA published guidance on speed-camera systems<sup>11</sup>



Automated enforcement in Chicago, IL. Source: Tripp, Flickr.

### **Examples**

More than 550 U.S. localities run red-light-camera programs, including<sup>12</sup>:

- Charlotte, NC
- Chicago, IL
- New York NY
- Sacramento, CA
- San Diego, CA

More than 111 jurisdictions installed speed cameras, including<sup>13</sup>:

- Arizono
- Colorado
- Marylance
- Oregon
- Washingtor



A red-light camera installed in Manchester, CT. Source: Mira Hartford, Flickr

- 1. Insurance Institute for Highway Safety News Release: Camera enforcement in 14 large cities reduces rate of fatal red light running crashes by 24 percent. February 1, 2011. http://www.iihs.org/news/rss/pr020111.html
- 2. Safety Evaluation of Red-Light Cameras. April 2005. http://www.fhwa.dot.gov/publications/research/safety/05048/12.cfm
- 3. Hu, Wen; McCartt, Anne T., Teoh; Eric R. Effects of Red Light Camera Enforcement on Fatal Crashes in Large US Cities. Insurance Institute for Highway Safety. February 2011.
- 4. Insurance Institute for Highway Safety News Release: Camera enforcement in 14 large cities reduces rate of fatal red light running crashes by 24 percent. February 1, 2011. http://www.iihs.org/news/rss/pr020111.html
- 5. Wilson, C.; Willis, C.; Hendrikz, J.K.; Le Brocque, R.; Bellamy, N. 2010. Speed cameras for the prevention of road traffic injuries and deaths. The Cochrane Library 2010, Issue 10. Oxfordshire, England. As reported by the Insurance Institute for Highway Safety. http://www.iihs.org/research/qanda/speed\_lawenf.aspx#cite11
- 6. Safety Evaluation of Red-Light Cameras. April 2005. http://www.fhwa.dot.gov/publications/research/safety/05048/12.cfm
- 7. Federal Highway Administration National Highway Traffic Safety Administration. Guidance for using red light cameras. March 2003. <a href="http://www.google.com/url?sa=t&rct=j&q=red%20light%20cameras%20where%20location%20appropriate&source=web&cd=4&ved=0CF0QFjAD&url=http%3A%2F%2Fwww.nhtsa.gov%2Fpeople%2Fin jury%2Fenforce%2Fguidance03%2Fguidancereport.pdf&ei= 9W6T-LuGvHG6AHgwbTpCg&usg=AFQjCNHoxs8Q\_Erupdrg\_jBFAEygQyxM1A</a>
- $8. \ \ Federal\ Highway\ Administration.\ Office\ of\ Safety.\ Red-Light\ Camera\ Q\ \&\ As.\ \underline{http://safety.fhwa.dot.gov/intersection/redlight/cameras/qas.cfm\#q3}$
- Federal Highway Administration. Executive Summary. Speed Enforcement Camera Systems Operational Guidelines. March 2008. http://safety.fhwa.dot.gov/speedmgt/ref\_mats/fhwasa09028/5.htm
- $10. Federal\ Highway\ Administration.\ Red\ Light\ Camera\ Systems.\ \underline{http://safety.fhwa.dot.gov/intersection/redlight/cameras/fhwasa05002/fhwasa05002.pdf}$
- 11. Federal Highway Administration. Speed Enforcement Camera Systems Operational Guidelines. March 2008. http://www.google.com/url?sa=t&rct=j&q=speed%20 enforcement%20camera%20systems%20operational%20guidelines&source=web&cd=1&ved=0CFMQFjAA&url=http%3A%2F%2Fwww.nhtsa.gov%2FDOT%2FNHTSA%2FTraffic%2 520Injury%2520Control%2FArticles%2FAssociated%2520Files%2F810916.pdf&ei=4Ni6T93yNs-d6AHrpZjmCg&usg=AFQjCNEHvEA8gKO2BFF3QS1KhNmgQJcnqQ
- 12. Insurance Institute for Highway Safety. Communities using red light and/or speed cameras. May 2012. <a href="http://www.iihs.org/laws/cameramap.aspx">http://www.iihs.org/laws/cameramap.aspx</a>
  13. Ibid

## Strengthen Street-Crossing Ordinances

**Definition** This tactic entails amending existing state vehicle and traffic statutes to give pedestrians a way to signal to oncoming traffic that they intend to cross before having to step into the roadway.

### **Benefits**

- Allows pedestrians to exercise their right-ofway without putting themselves in the path of oncoming vehicles
- Teaches safe pedestrian practices to children and seniors
- Clarifies the law for police officers

### **Considerations**

- Legal fees to create the statute amendment
- Resource requirements to advocate for the amendment and build legislative support

### **Appropriate Contexts**

- Local legislature or ordinance
- State legislature

### Guidance

- Retain all pedestrian right-of-way statute language
- Add a definition of "crossing the roadway" to the definitions section of vehicle and traffic laws
- Clarify and expand the definition of "crossing the roadway" to mean when any part or extension of a pedestrian—eg., foot, cane tip, wheelchair, leashed animal, or crutch—moves into the roadway and the pedestrian intends to cross
- Create a strategic coalition with nontraditional partners, including the disabled community, seniors, advocates for the blind, and dogwalkers

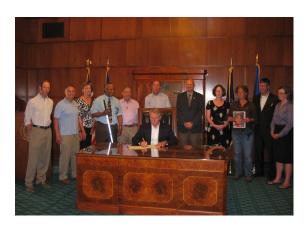
### **Professional Consensus**

 In the absence of endorsements from national associations or governmental departments, cities are turning to best practices employed by other municipalities

### **Examples**

Portland, OR

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Governor John Kitzhaber of Oregon signing the street-crossing bill into law August 24, 2011. Source: Ray Thomas, Swanson, Thomas & Coon

### Case Study: Oregon

Ray Thomas, an Oregon bicycle and pedestrian lawyer, and the Willamette Pedestrian Coalition had been trying for years to induce drivers to yield more consistently to pedestrians in crosswalks. Oregon's existing statute specified that a driver shall stop and remain stopped for a pedestrian when he or she is crossing the road in a crosswalk.

But how could pedestrians "trigger" this statute to get drivers to yield to them—without putting themselves into the path of an approaching car? So Thomas and the Willamette Pedestrian Coalition tried to clarify the existing statute language regarding pedestrian rights-of-way in crosswalks to make it easier for drivers to understand and the police to enforce. The team considered the phrase "crossing the roadway" and

proposed adding the term to the statute's definitions section. The proposed definition listed descriptive scenarios that would indicate to drivers when pedestrians were "crossing the roadway."

ORS 801. "Crossing" or "Cross" the Roadway in a Crosswalk.

Crossing or Cross the Roadway in a Crosswalk occurs when any part or extension of a pedestrian, including but not limited to a foot, wheelchair wheel, cane, crutch, bicycle tire, or leashed animal, moves into the roadway and the pedestrian intends to cross the roadway.

Each scenario was designed to correspond to a supporting constituency, e.g., "foot" for slow-walking seniors, "bicycle wheel" for cyclists, "wheelchair" for the disabled constituency, "cane" for the blind community, and "leashed animal" for dog walkers. Thomas added the last phrase "and the pedestrian intends to cross the roadway" in response to political concerns that pedestrians might try to mislead drivers contrary to the bill's intention.

Thomas and the Willamette Coalition then created a coalition based on these constituencies and hired a lobbyist, whose salary was paid for by the Willamette Pedestrian Coalition and Bicycle Transportation Alliance. While this bill was making its way through the legislative process, Oregon experienced a political backlash against the cyclist community. As a result, Thomas highlighted the elderly, disabled, and blind advocates within the coalition. He wrote a public letter of support and attached it to the cover of the bill draft, which proved instrumental in contextualizing legislation for politicians. Once the bill made it to the legislative council, its language was adopted wholesale. Thomas also prepared testimonials for the public hearing about the bill, many of which came from former clients he'd represented over the years. The bill passed both houses, and Governor Kitzhaber signed it into law August 24, 2011.

# Install **Pedestrian-Traffic Managers** at Problematic Intersections

**Definition** Pedestrian-traffic managers (PTMs) are trained, uniformed individuals that direct pedestrians across intersections or along crowded, mixed-use paths where conflicts between pedestrians, cars, and/or bicycles are frequent. While they are not authorized to direct vehicle traffic, pedestrian managers can use their arms, voices, whistles, or physical barriers to establish boundaries between modes of transportation.

### **Benefits**

- Reduces pedestrian-vehicule conflicts
- Improves quality of life for residents by decreasing honking and blocked intersections
- Clarifies and reinforces safe road behavior

### **Considerations**

- Potential difficulty in establishing authority with pedestrians and drivers
- Manpower and supervision costs

### **Appropriate Contexts**

- Intersections with high rates of collisions between pedestrians, vehicles, and/or bicycles
- Congested intersections where vehicles frequently block crosswalks
- Any intersection with high volumes of pedestrian and/or vehicle traffic, including construction sites, shopping malls, specialevent venues, schools, hospitals, and religious institutions

### Guidance

- Create a committee of traffic engineers, law enforcement offices and members of the community to identify problem locations and oversee pedestrian-traffic management in those greas
- Consider the following when assigning PTMs:
- » Vulnerable pedestrians
- » Width of the street and/or number of lanes
- » Length of sight distance
- » Vehicle speeds
- » Presence of traffic signals, signals, and pavement markings
- » The number of safe gaps in traffic
- » Volume of traffic and pedestrians

- Hire pedestrian managers with experience in managing people and vehicles, such as retired traffic-enforcement agents or police officers
- Train employees using nationally recognized traffic safety standards
- Train employees using classroom and field exercises covering:
  - » Basic traffic laws including pavement markings and signage
  - » Work-zone safety elements
  - » Proper use of traffic signs and signals
  - » Methods of signaling drivers and taking advantage of gaps in traffic
- » Crossing procedures and way to teach them to pedestrians
- » Site-specific traffic factors and potential traffic hazards
- » Professional work responsibilities
- » Proper use of safety equipment
- » Procedures for crashes
- Design mandatory pedestrian-manager uniforms to be clearly visible and identifiable to both drivers and pedestrians
- Differentiate the mandatory pedestrianmanager uniforms from those of regular lawenforcement officers<sup>1</sup>

### **Professional Consensus**

 The 2009 Manual on Uniform Traffic Control Devices (MUTCD) provides guidance on school crossing guards but doesn't address pedestrian management

### **Examples**

New York, NY



Pedestrian-traffic managers on the streets of New York, NY. Source: Sam Schwartz Engineering

### Case Study: New York

The streets leading up to the Holland Tunnel in Manhattan experience daily traffic congestion: Cars routinely block intersections and crosswalks, forcing pedestrians to weave in between trucks and vans to cross the road. These traffic problems are especially acute along the six lanes of Varick Street, where blocked intersections prevent cross-street traffic from getting through, leading to excessive horn honking.

The Hudson Square Connection, which is the affected neighborhood's Business Improvement District (BID), hired Sam Schwartz Engineering (SSE) pedestrian-traffic managers (PTMs) at select locations along Varick Street to keep intersections and crosswalks clear to improve pedestrian safety and keep cross-street traffic moving. SSE then compared traffic and quality-of-life conditions with and without PTMs on Varick Street. Its study showed that PTMs helped reduce crosswalk blockages by up to 43%, intersections blockages by up to 61%, and horn honks by up to 53%. In addition to the measured benefits, field observations showed reduced jaywalking and generally safer pedestrian behavior at the locations with PTMs.<sup>2</sup>



Pedestrian-traffic managers on the streets of New York, NY. Source: Sam Schwartz Engineering

<sup>1.</sup> Sam Schwartz Engineering. Pedestrian & Traffic Management: Program Guidelines.

 $<sup>2. \</sup> Sam Schwartz \ Engineering. \ Pedestrian \ \& \ Traffic \ Management on \ Varick \ Street: Pilot \ Program \ Evaluation \ Study. \ January \ 24, 2012. \ I.$ 

## Organize **Pedestrian Safety-Enforcement** Operations

**Definition** Pedestrian safety-enforcement operations are police-run public-education and enforcement efforts to improve driver compliance to pedestrian yield laws. During an operation, one police officer or community volunteer acts as a pedestrian while being monitored by another officer who then pulls over non-yielding drivers to give warnings or citations.

### **Benefits**

- Raises driver awareness of pedestrian right-ofway
- Raises public awareness of pedestrian rightof-way
- Reduces number of pedestrian complaints at intersections
- Reduces collisions, injuries, and economic losses associated with crashes

### **Considerations**

- Providing adequate staffing and funding
- Potential negative public reaction to enforcement operation
- Long-term impacts of operation on pedestrian safety

### **Appropriate Contexts**

- Local
- State

#### Guidance

- Seek funding sources such as National Highway Traffic Safety Administration grants, which are administered by a state highwaysafety agency
- Schedule operations in the daytime in clear weather
- Select locations where pedestrian accidents have occurred and/or where pedestrians report difficulty getting across the street
- Measure and calculate braking and sight-line distance for each operation in advance to ensure accurate citations
- Notify the public in advance of the time, location, and purpose of the planned pedestrian safety-enforcement operation through press releases, news articles, and TV reports to avoid charges of entrapment and to promote awareness of pedestrians

- Notify elected officials and invite them to witness the operation
- Invite local departments of transportation or pedestrian-advocacy groups to provide educational and safety materials at the operation
- Reach out to pedestrian advocates, police agencies, and local government
- Alert approaching drivers of the operation to emphasize the educational aspect of event
- Assign a minimum of five officers to the operation location:
  - » One to two plainclothes officers or community volunteers (pedestrian decoys)
  - » One spotter
  - » Two or more uniformed officers in chase vehicles
- Provide radios to all officers in the operation for better coordination
- Clothe decoy pedestrians in highly visible clothing. Effectiveness does not depend on whether the officer is in uniform or plainclothes
- Station another officer nearby to pull over and issue warnings or citations (possibly with training programs instead of fines) to any violators
- Record the operation to show in court, if needed
- Inform drivers of their right to contest the citation in court
- Document and publicize the operation and its results to the public and media before, during, and afterward<sup>1</sup>

### **Professional Consensus**

 Pedestrian enforcement operations are eligible for federal, state, and local transportation-safety grants







Top: Police in Alpharetta, GA, conducting a pedestrian safety-enforcement operation. Source: PEDS.org, Flickr

Center: Georgia State University Police conducting a pedestrian safety-enforcement operation, Atlanta, GA. Source: PEDS.org, Flickr

Bottom: Georgia State University Police conducting a pedestrian safety-enforcement operation, Atlanta, GA. Source: PEDS.org, Flickr

### Case Study: Las Vegas

Las Vegas, NV, has tried to address its high rates of pedestrian fatalities through targeted enforcement operations to reinforce safe driver and pedestrian behaviors. Nevada funds these enforcement operations by making pedestrian safety eligible for targeted-enforcement federal highway safety grants. Staffing limitations are addressed through the Joining Forces program, which is a multi-jurisdictional law-enforcement program created by a statewide memorandum of understanding that allows law-enforcement officers in one state jurisdiction to issue tickets in another for targeted-enforcement operations concerning driving under the influence, speed, seat belts, and pedestrian safety.

Law-enforcement officers work with UNVL Safe Community Partnership (SCP) program, a local transportation-safety-advocacy organization, to plan pedestrian safety-enforcement operations. Officers select the location of the operation in high risk areas (based on ongoing data collection) and run the operation based on a two-day training provided by SCP.

Before and after each event, SCP performs media outreach, which is a key component of the operation's success: The goal of an individual operation isn't so much to ticket offending drivers, but to publicize the need to yield to crossing pedestrians. The more media attention a pedestrian safety-enforcement operation receives, the more that safety message is reinforced to the general public. The most recent operation consisted of an officer in a leprechaun costume (courtesy of SCP) walking in Las Vegas crosswalks before St. Patrick's Day. The media picked up the story and ran with it: More than 80 articles were published nationwide and 175 million viewers were estimated to have seen it on the evening news.<sup>2</sup>

- Chicago, I
- Madison W
- Oregon
- Utah
- Washington, DC

<sup>1.</sup> Oregon Department of Transportation. Targeted Pedestrian Enforcement Operations Guidebook. April 25, 2001.

<sup>2.</sup> Erin Breen. UNLV Safe Community Partnership. Personal correspondence. May 8, 2012.











