

Most Dangerous Roads for Walking

And How States Can Make them Safer



Tri-State Transportation Campaign
February 2011

Introduction

The most dangerous places for people to walk are wide, high-speed roads designed to move as many cars as fast as possible, with little if any consideration for pedestrians. In New Jersey, downstate New York, and Connecticut, nearly two-thirds of regional pedestrian fatalities occur on multi-lane thoroughfares known as arterials, like the Burlington Pike running along the New Jersey side of the Delaware River, and the Hempstead Turnpike bisecting Nassau County.

Key Findings

- More than 1,200 pedestrians have been killed in collisions with cars in our region between 2007 and 2009.
- The most dangerous roads for walking in the entire region are the Hempstead Turnpike in Nassau County, NY, northern Broadway in Manhattan, Burlington Pike in Burlington County, NJ, and the Sunrise Highway in Suffolk County, NY. In Connecticut, Route 1 (running the entire length of the state from Stamford to New London) was the most dangerous road with 6 fatalities.
- Nearly two-thirds of pedestrian deaths in our region occur on multi-lane thoroughfares known as arterials.
- Pedestrian safety projects offer inexpensive ways to reduce pedestrian deaths and injuries.

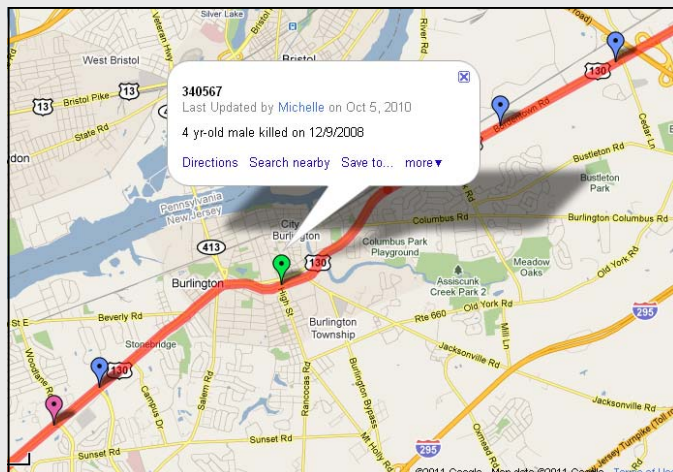
This report, *Most Dangerous Roads for Walking*, uses three years of federal data to pinpoint the exact location of each pedestrian death in downstate New York, New Jersey, and Connecticut. Using newly available latitude and longitude data, we mapped each of these fatalities through interactive Google Maps (see box below).

We then review available crash information to determine if pedestrian fatalities are more likely to occur on certain types of road-

County/Borough/State Fact Sheets

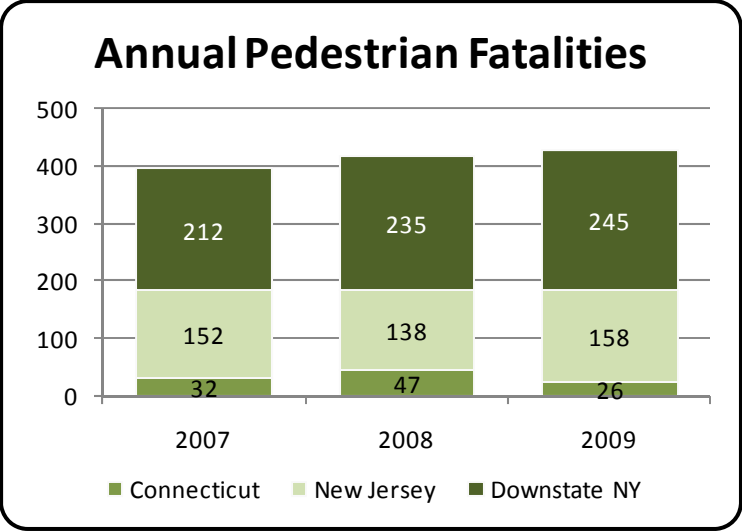
The Campaign has produced county fact sheets (and a statewide sheet for Connecticut) identifying the most dangerous roads in the region. Each fatality is mapped through Google Maps, and includes the date of the crash, crash location, and the available demographic data for the victim. Through these Google Maps, users can zoom in on the exact crash location and even pull up street view photos of the location.

<http://www.tstc.org/danger11/>



ways. As noted above, we concluded that more than 60 percent of regional pedestrian fatalities occurred on arterial roadways.

Overall, a staggering number of pedestrians are killed in the tri-state region every year. From 2007 through 2009, more than 1,200 pedestrians were killed in collisions with cars or trucks in Connecticut, New Jersey, and downstate New York. The annual figure has begun to creep up again, after declining dramatically in 2007 when tri-state residents cut back on driving in response to fluctuating gasoline prices and the economic recession. Preliminary data for 2010, however, show pedestrian fatalities may be falling again, dropping by more than 11 percent in New Jersey, for example.



Source: TSTC Analysis of NHTSA’s FARS database, 2007-2009.

Fortunately, state departments of transportation and communities across the region are beginning to recognize the dangers of conventional road design to pedestrians and have responded by passing Complete Streets laws and policies which encourage traffic engineers to take the needs of pedestrians, bicyclists, seniors, children and others into consideration when building a new road or retrofitting an existing street. Still, much more needs to be done to keep pedestrians safe on the tri-state region’s roads.

Region-wide Recommendations

Detailed recommendations specific to New Jersey, New York, and Connecticut are listed at the end of this report. But several recommendations apply to all three states:

- Make pedestrian safety a policy and investment priority;
- Protect the most vulnerable pedestrians through increased spending on Safe Routes to School, Safe Routes to Transit and Safe Routes for Seniors programs;
- Designate a fair share of federal funding to improving bicycling and walking;
- Enact meaningful complete streets laws so that new or retrofitted roads safely accommodate bicyclists, pedestrians, transit riders, and motorists, of all ages and abilities; and,
- Regional congressional delegation should fight to protect and expand federal programs that provide significant funding for bicycle and pedestrian projects.

The Region's Most Dangerous Roads for Walking

With 12 pedestrian fatalities in three years, Route 24 (Hempstead Tpke, Conklin St.) in Nassau County on Long Island was the most dangerous road across all three states in the region for pedestrians. Close behind was Broadway in Manhattan with 11 deaths (all but one in northern Manhattan), followed by US-130 (Burlington Pike) in Burlington County, New Jersey, with 10 deaths over three years. Route 27 (Sunrise Hwy) in Suffolk County on Long Island ranked 4th with 9 fatalities, followed by Atlantic Ave in Brooklyn, and 7th Ave and the Henry Hudson Pkwy/West Street in Manhattan, each with 8 deaths over three years.

Importantly, this simple ranking is based only on the number of fatalities along a stretch of roadway within each county or borough and does not factor in the length of each road.

The list below ranks all roads in the region with 5 or more pedestrian fatalities during the period 2007 through 2009.

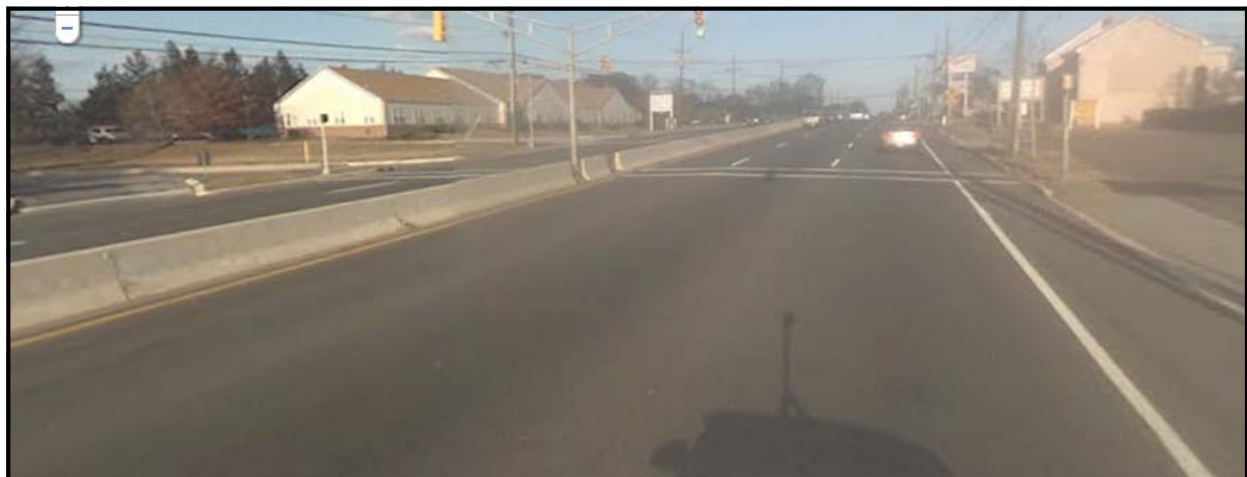
Table 1. Most Dangerous Roads for Walking (CT, NJ, downstate NY)

Rank	Change in Ranking/ (Prior Year's Rank)	Road	County	2007	2008	2009	Total
1	— (1)	SR-24 (Hempstead Tpke/Conklin St)	Nassau, NY	2	4	6	12
2	↑ (7)	Broadway	Manhattan, NY	2	3	6	11
3	— (3)	US-130 (Burlington Pike)	Burlington, NJ	4	3	3	10
4	↓ (2)	SR-27 (Sunrise Hwy)	Suffolk, NY	4	0	5	9
5	↓ (3)	Atlantic Ave	Brooklyn, NY	3	4	1	8
5	↑ (8)	7th Ave	Manhattan, NY	4	2	2	8
5	new	Henry Hudson Pkwy/West St	Manhattan, NY	2	3	3	8
8	↑ (17)	US-322/40 (Blackhorse Pike/Albany Ave)	Atlantic, NJ	3	0	4	7
8	— (8)	US-1	Middlesex, NJ	3	1	3	7
8	— (8)	Route 549	Ocean, NJ	4	3	0	7
8	— (8)	US-1&9	Union, NJ	0	4	3	7
8	— (8)	Kings Hwy	Brooklyn, NY	1	4	2	7
8	↑ (17)	Ocean Pkwy	Brooklyn, NY	3	2	2	7
8	↑ (17)	Bowery	Manhattan, NY	2	3	2	7
8	new	SR-27 (Sunrise Hwy)	Nassau, NY	3	0	4	7
8	↓ (3)	SR-25 (Middle Country Rd)	Suffolk, NY	1	4	2	7
8	new	Broadway	the Bronx, NY	1	3	3	7
8	↑ (24)	Grand Concourse	the Bronx, NY	2	3	2	7
19	↓ (8)	US-30 (White Horse Pike/Absecon Blvd)	Atlantic, NJ	3	1	2	6
19	↑ (24)	Route 21 (McCarter Hwy)	Essex, NJ	4	0	2	6

Table 1. Most Dangerous Roads for Walking (CT, NJ, downstate NY) Cont'd

Rank	Change in Ranking/ (Prior Year's Rank)	Road	County	2007	2008	2009	Total
19	new	John F Kennedy Blvd	Hudson, NJ	4	0	2	6
19	new	Route 35	Middlesex, NJ	1	1	4	6
19	↑ (24)	Route 28 (North Ave/Front St/Westfield Ave)	Union, NJ	0	4	2	6
19	↓ (17)	4th Ave	Brooklyn, NY	3	1	2	6
19	↑ (24)	Neptune Ave	Brooklyn, NY	4	1	1	6
19	↓ (17)	Amsterdam Ave	Manhattan, NY	2	1	3	6
19	↓ (3)	3rd Ave	Manhattan, NY	3	3	0	6
19	↓ (8)	Merrick Rd	Nassau, NY	2	2	2	6
19	new	Cross Bay Blvd	Queens, NY	3	0	3	6
19	new	Jamaica Ave	Queens, NY	1	2	3	6
31	↓ (24)	US-9	Monmouth, NJ	1	1	3	5
31	↓ (8)	US-9	Ocean, NJ	1	1	3	5
31	new	Eastern Pkwy	Brooklyn, NY	1	1	3	5
31	↓ (24)	Queens Blvd	Queens, NY	1	2	2	5
		Route 1 (Boston Post Rd)	Connecticut (statewide)	5	1	0	6

With the exception of the routes in New York City, each of these roadways typify the high-speed arterial found to be the most dangerous type of road for pedestrians (see next section). And even in Manhattan, Brooklyn, and Queens, the most dangerous routes are multiple lanes across and busy with speeding traffic.



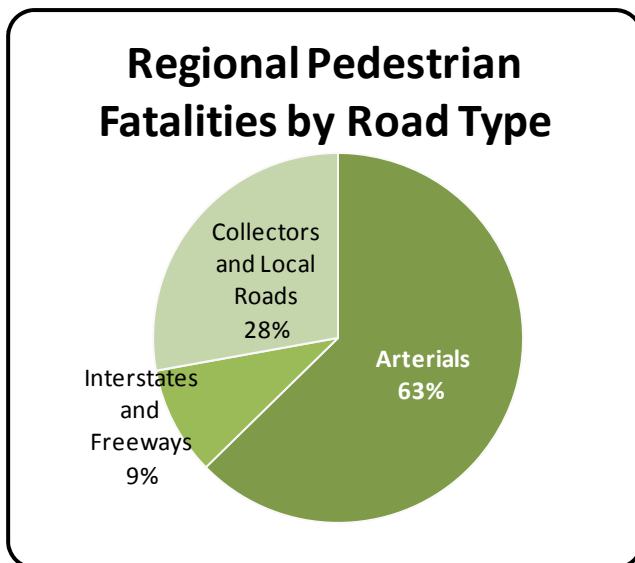
Burlington Pike in Burlington County, New Jersey, ranks third on our list of most dangerous roads in the region. The image above, just a quarter of a mile from one of the road's ten pedestrian fatalities shows one of the few crosswalks along the route. A six-foot gap in the otherwise nearly continuous Jersey barrier permits students to cross the six-lane road to enter the high school (though the crosswalk dumps those would-be pedestrians onto a muddy patch of grass and leaves them on their own to negotiate their way through a stream of turning vehicles).

Deadly Road Designs

Our analysis confirms that the vast majority of pedestrians are killed while walking along or crossing major thoroughfares described by traffic engineers as arterials. These roads typically have at least two lanes in each direction and accommodate prevailing travel speeds of 40 mph or greater. Such high travel speeds give drivers little time to react, particularly when they are distracted by cellphones or other devices. And pedestrians struck by a vehicle traveling at this speed have a dismal 15 percent chance of survival. In contrast, pedestrians hit by cars traveling at 30 mph have a 45 percent chance of surviving a collision.



The intersection of Sunrise Highway and Wantagh Ave in Nassau County typifies the region's dangerous road design. 14-year old high school student Brittany Vega was killed crossing this intersection on her way to school last September. Her tragic death has sparked calls for traffic calming and more rational street design.



Source: TSTC Analysis of NHTSA's FARS database, 2007-2009.

Another common feature of arterials, at least outside of New York City, is that they lack pedestrian infrastructure – sidewalks are often missing, crosswalks and crossing signals are scarce, and medians, if they exist, offer little protection from speeding traffic. In short, these types of roads are downright hostile to people on foot.

Most arterials are also lined with shops and restaurants, doctor's offices, post offices, banks, and grocery stores. In many communities the only place to buy groceries or meet life's other daily needs is in the strip mall along the highway. For people who

drive, accessing these places might mean suffering through the aggravation of traffic jams and the frustration of not finding a close parking spot. But for people who choose not to drive, or can't drive because they are too young, too old, too infirm, or too poor to afford a car, a trip to the store to pick up a gallon of milk often means a harrowing walk through a gauntlet of dangers.

In the tri-state region, 63 percent of all 1,243 pedestrian fatalities for which road type was recorded occurred on arterials. Only 28 percent occurred on local roads, and 9 percent occurred on Interstates and free-ways (pedestrians killed on limited access roads are typically motorists looking for help with a stranded vehicle).

Conclusion and Recommendations

This analysis clearly shows that typical suburban-style road design puts pedestrians at unnecessary risk. Fortunately, slow, but steady progress is being made to correct the mistakes of conventional engineering. In our region, Connecticut has implemented a "Complete Streets" law requiring that new construction seek to accommodate the needs of all road users – pedestrians, bicyclists, transit riders, and motorists. And late last year, outgoing governor Jodi Rell announced significant changes to ConnDOT's bicycle and pedestrian policies aimed at improving the delivery and increasing the funding available for bicycle and pedestrian projects. New Jersey's Department of Transportation has increased funding for bicycle and pedestrian programs and recently signed a Complete Streets policy. New York State has implemented a SafeSeniors program seeking to address pedestrian safety for older New Yorkers, and under the direction of Department of Transportation Commissioner Janette Sadik-Khan, New York City has emerged as a national leader in carving out safe public spaces for pedestrians and bicyclists. Elsewhere in downstate New York, at least six communities have adopted Complete Streets policies or resolutions.

But with approximately 415 pedestrians killed in our region every year, we still have a long way to go. All three states need to prioritize pedestrian safety in their transportation policies, plans, and spending. Within the region, pedestrian safety projects can produce dramatic safety improvements (and create much-needed construction jobs) at a fraction of

the cost of a typical road project. Below are specific recommendations the states can adopt to cut these tragic and preventable deaths.

New Jersey

- Direct NJDOT to report annually on efforts to implement complete streets policies.
- Increase Local Aid funding (a primary source of funds for pedestrian and bicycle projects) as part of the Transportation Trust Fund reauthorization plan.

New York

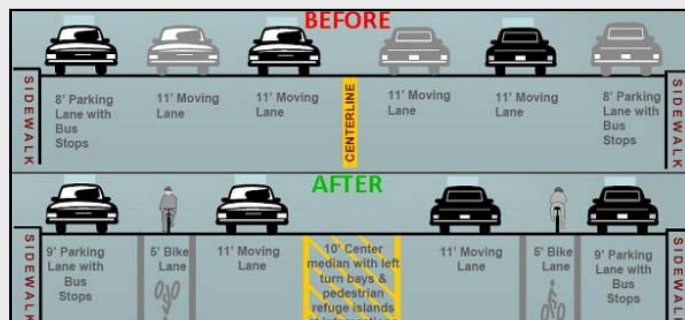
- Work with new leadership at New York State DOT (Joan McDonald has been nominated to run the agency) to fix the state's most dangerous roads for pedestrians.
- Support passage of Complete Streets legislation.
- Reinstate full funding to Long Island's Local Safe Streets and Traffic Calming program and ensure funds are utilized to improve locations with high numbers of pedestrian or cyclist injuries or fatalities.
- Create a statewide Safe Routes to Transit program and expand the SafeSeniors program to other regions of the state.

Fixing Arterials – Traffic Calming and “Road Diets”

One of the most effective ways to improve local pedestrian safety is through traffic calming. Traffic calming uses engineering techniques to force drivers to slow down and pay greater attention to their surroundings. The Institute of Traffic Engineers (ITE) defines traffic calming as “changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes, in the interest of street safety, livability, and other public purposes.” Traffic calming techniques range from the installation of speed humps to the complete re-engineering of roadways, all with the goal of reducing traffic speeds. Studies have found crash reductions of between 20 and 70 percent, depending on the type of traffic calming measure implemented.

One highly successful approach to improving arterial safety is an engineering solution known as a “road diet.” Typically, road diets convert a four-lane arterial with modest traffic into a two-lane road with a middle turning lane, and bicycle lanes, on-street parking, or wider sidewalks.

Because they reduce the number of travel lanes and remove turning vehicles from the flow of traffic, road diets have been shown to reduce collisions by between 25 and 44 percent, making the streets safer for pedestrians and motorists alike.



NYCDOT put Allerton Avenue in the Bronx on a “road diet” in the fall of 2009.

Federal Funding for Pedestrian Safety—TE, CMAQ and HSIP

Significant federal funding is available for pedestrian safety programs and projects. While nearly all federal “highway” funding can be used for bicycle and pedestrian projects, three federal funding programs specifically list improving the walking and bicycling environment as eligible activities — Transportation Enhancements (TE), Congestion Mitigation and Air Quality Improvement Program (CMAQ), and the Highway Safety Improvement Program (HSIP).

Unfortunately, few states have taken full advantage of these federal programs for bicycling and walking projects, instead spending much of the funding on road projects.

And those same programs have now come under attack from Republicans in Congress who view pedestrian safety projects as a wasteful distraction during the current federal transportation funding crisis.

Connecticut

- Pass “vulnerable users” legislation that enhances penalties for careless drivers who injure or kill walkers, bikers, emergency personnel, and others. enhanced penalties for careless drivers who injure or kill walkers, bikers, emergency personnel, and others.
- Direct ConnDOT to report annually on efforts to implement complete streets policies.
- Create and fund state Safe Routes to Transit and Safe Routes for Seniors programs.
- Designate at least 10% of federal Highway Safety Improvement Program (HSIP) money and 10% of federal Congestion Mitigation and Air Quality (CMAQ) funding for programs that prevent traffic injuries and fatalities.

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