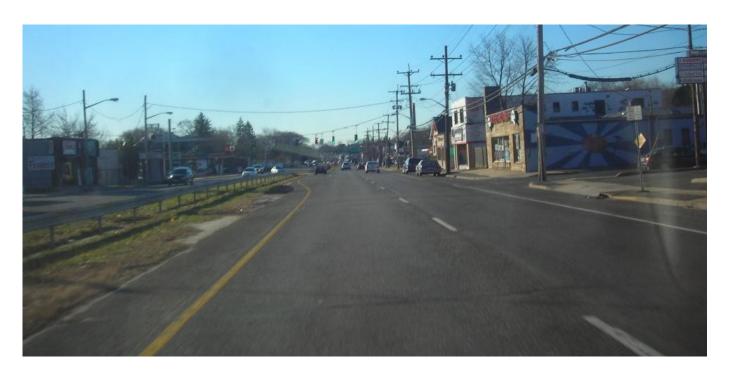
Most Dangerous Roads for Walking

And How States Can Make them Safer



Route 110, Long Island, New York Image by Dougtone

Tri-State Transportation Campaign February 2013

Introduction

In the three years from 2009 through 2011, 1,242 pedestrians were

Key Findings

- More than 1,200 pedestrians have been killed in collisions with cars in our region between 2009 and 2011.
- Based on total pedestrian fatalities, the most dangerous roads for walking in the entire region are SR-24 (Hempstead Turnpike) in Nassau County, Upper Broadway in Manhattan and SR-25 (Jericho Turnpike) in Suffolk County.
- Almost 60 percent of pedestrian deaths in our region occur on multi-lane thoroughfares classified as arterials.
- Pedestrian fatalities decreased in 2011 in New York and Connecticut but increased slightly in New Jersey.
- Nassau County's SR-24 (Hempstead Turnpike) is the most dangerous road for pedestrians for the fifth consecutive year since the Campaign's first analysis.
- Traffic calming infrastructure and camera technology are inexpensive ways to reduce pedestrian deaths and injuries.

killed in collisions with vehicles in Connecticut, New Jersey and downstate New York. Almost 60 percent of these fatalities occurred on arterial roadways, high-speed roads often with multiple lanes in each direction and few pedestrian amenities such as marked cross-walks or pedestrian count-down signals.

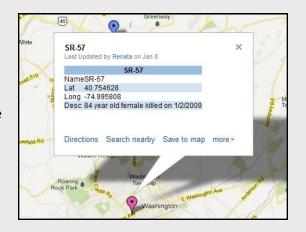
This report, Most Dangerous Roads for Walking, uses three years (2009, 2010 and 2011) of federal data to pinpoint the exact location of each pedestrian death in Connecticut, New Jersey and the 12 downstate New York counties and examines the roadway classifications at each fatality location. Interactive Google Maps that show pedestrian fatalities in each county and borough are accessible through TSTC's website, http://tstc.org/reports/danger13/index.php. These maps allow users to see where clusters of fatalities have occurred as well as view all fatalities in the county or borough.

From 2009 through 2011, pedestrian fatalities steadily decreased in downstate New York. In New Jersey, the number of pedestrians killed

County/Borough/State Fact Sheets

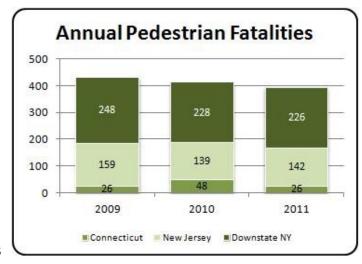
The Campaign has produced county fact sheets (and a statewide sheet for Connecticut) identifying the most dangerous roads in the region. Each fatality is mapped in Google Maps and includes the date of the crash, crash location and the available demographic data for the victim. The county boundaries or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

http://tstc.org/reports/danger13/index.php



dropped in 2010, but increased slightly in 2011. In Connecticut, pedestrian fatalities increased in 2010, but decreased in 2011.

While pedestrian fatality numbers have fluctuated in the three years examined, two things remain consistent. The largest share of pedestrian fatalities (almost 60 percent of the fatalities) continue to occur on arterial roadways even though this type of road comprises only about 15 percent of the three states' total lane miles. Another



Source: TSTC Analysis of NHTSA's FARS database, 2009-2011.

disturbing trend is that many of the roads that topped the most dangerous list in the Campaign's 2012 *Most Dangerous Roads for Walking* reports remain at the top in this year's analysis. Nassau County's SR-24 (Hempstead Turnpike) has been the region's most dangerous road for pedestrians since the Campaign's first analysis released in 2008 (examining data from 2005-2007). Other roads that continue to top the most deadly list for over two years include Burlington County's US-130 (Burlington Pike) in New Jersey, upper Broadway in Manhattan and US-1 in Connecticut.

Communities across the tri-state region along with county and state governments have continued to make progress in designing and

Region-wide Recommendations —

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

- Make pedestrian safety a policy and investment priority in transportation budgets and capital plans;
- Protect the most vulnerable pedestrians through increased spending on Safe Routes to School,
 Safe Routes to Transit and Safe Routes for Seniors programs;
- · Prioritize federal funding from MAP-21 to improving bicycling and walking;
- Track and monitor complete streets laws to ensure 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 such as TIGER and Transportation Alternatives that provide significant funding for bicycle and pedestrian projects.

redesigning streets for pedestrians, bicyclists and drivers. Complete streets policies, which require roads to accommodate all users, have been signed into law in New York and Connecticut, and New Jersey's Department of Transportation has adopted a complete streets policy. In addition, counties and municipalities throughout the tri-state area have adopted complete streets policies to ensure that roads under local and county jurisdictions will be made safer for all users. Still, more needs to be done for the region's pedestrians.

The Region's Most Dangerous Roads for Walking

For the fifth time, Nassau County's SR-24 (Hempstead Turnpike/Fulton Ave/Conklin Ave) is the region's most dangerous road for pedestrians. In the three years from 2009 through 2011, 14 pedestrians died on SR-24. Broadway in Manhattan (12 pedestrian fatalities) and SR-25 (Jericho Turnpike/Middle Country Rd/Main Rd), 11 pedestrian fatalities)¹ are the region's second and third most deadly roads respectively for pedestrians. With nine pedestrian fatalities from 2009 through 2011 each, Atlantic County's US-322/40 (Blackhorse Pike), Burlington County's US-130 and Middlesex County's Route 1, along with SR-110 (New York Ave/Broadhollow Rd) in Suffolk County and SR-27 (Sunrise Highway) in Nassau County round out the region's eight most deadly roads.

Importantly, this simple ranking is based only on the number of fatalities along a road in each county or borough and does not factor in the length of each road or look at pedestrian injuries. However, deaths on SR-24 were clustered in the Town of Hempstead and all but one of the fatalities on Manhattan's Broadway were north of 96th street. While SR-25 (Jericho Turnpike) stretches 65 miles across Suffolk County, the majority of the pedestrian deaths occurred in the approximately 11 miles between the Towns of Smithtown and Brookhaven.

Many of the region's most dangerous roads are high-speed arterials that have little or no pedestrian infrastructure like sidewalks, pedestrian count-down clocks, pedestrian islands, or clearly-marked crosswalks.

Table 1 ranks all roads in the region with five or more pedestrian fatalities during the period from 2009 through 2011. (Next page.)

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

Rank	Change in Ranking (Prior Year's Rank)	Road	County	2009	2010	2011	Total
1	-	SR-24 (Hempstead Tpke, Fulton Ave)	Nassau, NY	6	5	3	14
2	-	BROADWAY	Manhattan, NY	6	4	2	12
3	个 (6)	SR-25 (Jericho Tpke, Middle Country Rd) ¹	Suffolk, NY	2	1	8	11
4	个 (6)	SR-27 (Sunrise Hwy)	Nassau, NY	4	3	2	9
		SR-110 (New York Ave, Broadhollow Rd,					
4	个 (6)	Broadway)	Suffolk, NY	1	3	5	9
4	个 (14)	US-322/40 (Blackhorse Pike, Albany Ave)	Atlantic, NJ	4	2	3	9
4	↓ (3)	US-130 (Burlington Pike)	Burlington, NJ	3	4	2	9
4	个 (6)	ROUTE 1 ²	Middlesex, NJ	3	3	3	9
9	↓ (3)	SR-27 (Sunrise Hwy) ³	Suffolk, NY	2	4	2	8
9	个 (26)	US-30 (Whitehorse Pike)	Camden, NJ	1	2	5	8
9	new	ROUTE 9 ⁴	Middlesex, NJ	3	1	4	8
12	个 (14)	AMSTERDAM AVE	Manhattan, NY	3	2	2	7
12	new	WOODHAVEN BLVD	Queens, NY	1	2	4	7
12	个 (14)	5TH AVE/WICKS RD/CR-13	Suffolk, NY	2	4	1	7
15	↓ (14)	OCEAN PKWY	Brooklyn, NY	2	2	2	6
15	new	RT 501 (JFK Blvd)	Hudson, NJ	2	1	3	6
15	↓ (14)	US-46	Morris, NJ	2	3	1	6
15	个 (26)	ROUTE 9	Ocean, NJ	3	1	2	6
15	↓ (5)	ROUTE 1&9 (US-1)	Union, NJ	3	2	1	6
15	new	SR-27A (Merrick Rd, Montauk Hwy)	Suffolk, NY	1	3	2	6
15	new	SR-454 (Veterans Memorial Hwy)	Suffolk, NY	1	2	3	6
22	↓ (6)	BROADWAY	Bronx, NY	3	1	1	5
22	个 (26)	E GUNHILL RD	Bronx, NY	1	4	0	5
22	new	EASTERN PKWY	Brooklyn, NY	3	0	2	5
22	个 (26)	MERRICK RD	Nassau, NY	2	1	2	5
22	个 (26)	7TH AVE	Manhattan, NY	2	1	2	5
22	new	2ND AVE	Manhattan, NY	0	3	2	5
22	↓ (14)	JAMAICA AVE	Queens, NY	3	2	0	5
22	new	SR-21 (McCarter Hwy) ⁵	Essex, NJ	1	2	2	5
22	new	US 1 & 9 (Tonnelle Ave)	Hudson, NJ	1	2	2	5
22	↓ (14)	ROUTE 35	Middlesex, NJ	4	1	0	5
22	new	SR-25A (E Main St, Fort Salonga Rd) ⁶	Suffolk, NY	2	1	2	5
n/a		US-1	Connecticut	0	5	1	6

¹ Total includes two fatalities that occurred on the jointly-named portion of SR-25 and SR-25A. The fatalities are identified in the National Highway Traffic Safety Administration's Fatality Analysis Reporting System as occurring on SR-25A.

² Total includes three fatalities that occurred on the jointly-named portion of Route 1 and Route 9. The fatalities are identified in the National Highway Traffic Safety Administration's Fatality Analysis Reporting System as occurring on Route 1.

³ Four fatalities occurred on Route 27 where pedestrians are not permitted. These fatalities are not included in the total.

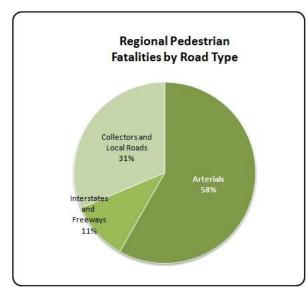
⁴ Total includes two fatalities that occurred on the jointly-named portion of Route 9 and Route 35. The fatalities are identified in the National Highway Traffic Safety Administration's Fatality Analysis Reporting System as occurring on Route 9.

⁵ An additional fatality occurred on Route 21 where pedestrians are not permitted. This fatality is not included in the total.

⁶ Two fatalities occurred on the jointly-named portion of SR-25 and SR-25A. These fatalities are included in the SR-25 total but not in the SR-25A total.

Deadly Road Designs

In the tri-state region, 58 percent of recorded pedestrian fatalities occurred on arterial roadways, a total of 720 pedestrian deaths from 2009-2011. Collector roads (roads that connect local roads to arterials) and local roads made up 31 percent of the total 1,242 pedestrian



Source: TSTC Analysis of NHTSA's FARS database, 2009-2011.

fatalities (387 deaths), and Interstates and freeways accounted for 11 percent of the pedestrian fatalities (129 deaths).⁷ The road type for six fatalities was not recorded because the data was not provided.

Arterial roads often have at least two lanes in each direction, accommodate vehicle speeds of 40 mph or more and, outside of urban areas, tend to lack pedestrian infrastructure such as well painted, visible crosswalks, count-down clocks and adequate sidewalks. In short, arterials are designed with vehicles in mind, not pedestrians. The Federal Highway Administration's and the National Highway Traffic Safety Administration's How to Develop a Pedestrian Safety Action Plan describes arterials

as roads "intended to carry large amounts of motor vehicle traffic long distances at higher speeds." However, pedestrians and bicyclists are not prohibited from these roads and with walking and bicycling increasing throughout the region, it is important to make sure these roads are safer for pedestrians and bicyclists.

Given their unfriendly pedestrian design, it comes as no surprise that arterials make up almost 60 percent of pedestrian fatalities in the tri-state region, yet account for approximately only 15.3 percent of lane miles in New York, New Jersey and Connecticut.

Dangerous roads — arterials and others — can be designed and redesigned with the safety of all users in mind. Relatively low-cost improvements such as crossing islands, curb ramps and visible

⁷ Analysis of most dangerous roads excludes Interstates, highways and other roads where pedestrians are prohibited.

^{8 &}quot;How to Develop a Pedestrian Safety Action Plan." Federal Highway Administration and National Traffic Safety Administration. March 2009. http://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwasa0512.pdf. (8.)

Union County's Route 1&9: Improvements Needed for a Dangerous Road

Six pedestrians were killed on Route 1&9 in Union County from 2009 through 2011. The road has consistently been one of Union County's most dangerous roads for pedestrians and has topped the list of most dangerous roads for New Jersey in all the Campaign's previous *Most Dangerous Roads for Walking* reports. The North Jersey Transportation Planning Authority (NJTPA), the metropolitan planning organization for Northern New Jersey, calls the seven-mile stretch in Union County "one of the densest areas in the state in terms of population, transportation use, and development." It notes that there "are numerous bus routes, and the downtown districts of the three cities each



Union County's Route 1&9 near where two pedestrian fatalities occurred. Image: Google Maps.

have rail stations along the Northeast Corridor" and that "over four miles of the seven mile corridor has a crash rate higher than the state average for similar roadways."

NJTPA's Route 1&9 Corridor Study notes that the New Jersey Department of Transportation has done work on Route 1&9 and "the section of highway was designated a Safe Corridor." The Study identifies additional ways of making this roadway safer, improving the quality of life along it and providing redevelopment opportunities such as "more visible crosswalk designs, upgraded pavement markings and a

review of the spacing of stop bars and crosswalks where high speed sections of the corridor meet the more suburban setting with higher pedestrian activity."¹¹

crosswalks save lives, make streets more appealing, encourage more active transportation such as walking and biking and may even spur economic growth in communities.

9 "Union County: Route 1&9 Corridor Study." *Summary of Subregional Studies FY 2010-2011*. Northern Jersey Transportation Planning Authority Subregional Studies Program FY 10-11. http://www.njtpa.org/Plan/Subregional_studies/documents/subStudiesfinalweb.pdf>. (31.)

10 A "Safe Corridor" is defined by the New Jersey Department of Transportation as "as a segment of highway, under the jurisdiction of the New Jersey Department of Transportation (Department) which, based upon crash rates, fatalities, traffic volume and other highway traffic safety criteria, is identified by the Commissioner of Transportation as a segment warranting designation as a "Safe Corridor". Within such designated "Safe Corridors" there is a doubling of fines for select motor vehicle offenses such as speeding, reckless driving, and failure to stop at a stop sign. The monies collected from this doubling of fines are deposited into the Highway Safety Fund and disbursed, through a grant program, to those municipalities with a Safe Corridor within their jurisdiction, for education, enforcement, capital undertakings and other related measures that foster highway safety." *Report on Safe Corridors*. New Jersey Department of Transportation. 2008. https://www.state.nj.us/transportation/publicat/Imreports/pdf/2008safecorridorsreport.pdf>. (2)

Speeding Vehicles and Pedestrian Fatalities

According to the New York City Department of Transportation, pedestrians hit by vehicles travelling 40 mph are 3.5 times more likely to be killed than pedestrians struck by a vehicles travelling the City speed limit, 30 mph. ¹² Speed cameras, which enforce posted speed limits by recording vehicles that speed through intersections, are a low-cost, quick way to change driver behavior and make streets safer for all.

Conclusion and Recommendations

In the three years from 2009 through 2011, 1,242 pedestrians lost their lives on roads in downstate New York, New Jersey and Connecticut. Nearly 60 percent of these deaths occurred on arterial roadways.

Across the tri-state region, many communities, elected officials and agencies are working to redesign dangerous roads, but more must be done to ensure the safety of all and to prevent needless deaths. All three states should make pedestrian safety a policy and investment priority. Below are specific recommendations the states can adopt to lower the pedestrian death toll.

Connecticut—

- Redesign Connecticut's Highway Design Manual, Connecticut's standard road design reference book, to address the goals and policies set forth in the state's Complete Streets law.
- Pass a vulnerable users bill which would increase penalties for careless drivers who injure or kill pedestrians, cyclists, police officers and other users of the road who are most at risk
- Create a Safe Routes to Transit and a Safe Routes for Seniors programs which would identify transit stops and areas with high densities of senior citizens or senior amenities as priorities to enhance pedestrian safety.

^{12 &}quot;New Yorkers Know it All ... Except the Speed Limit." New York City Department of Transportation. http://www.nyc.gov/html/dot/html/about/knowthespeedlimit.shtml.

New Jersey-

- Pass a vulnerable users bill.
- Municipalities and counties that have passed complete streets policies should create implementation plans.
- Allocate funding to regional trails such as The Circuit in Southern New Jersey so that these trails can serve as key transportation corridors.
- Prioritize pedestrian and bicycle improvements on roads that provide access to these trails to create a safe road network.

New York—

- Create a Long Island Safe Routes to Transit program that would target areas around transit stations and stops for pedestrian safety improvements.
- Increase funding for pedestrian and bicycle projects in the NYSDOT capital plan.
- Implement a speed camera demonstration project in New York City that will help ensure vehicles maintain posted speed limits.
- Nassau County, home of the region's most dangerous road for pedestrians, should pass a county complete streets policy.

Brooklyn's 4th Ave: Safety Improvements for a Dangerous Road

Running from Bay Ridge to Downtown Brooklyn, Brooklyn's Fourth Avenue was named one of the borough's most dangerous roads in the Campaign's 2012 and 2011 reports. From 2007 through



An expanded pedestrian island on 4th Ave and 25th Street. Image: TSTC.

2011, there were seven pedestrian fatalities along this roadway. Good news for pedestrians came in May 2012 when Brooklyn Community Board 7 voted in favor of New York City Department of Transportation's (NYCDOT) plan to improve pedestrian safety along this corridor, from 65th Street to 15th Street.

In the fall of 2012, NYCDOT began implementing a road diet and widened 52 crossing islands, resulting in a street that is easier and less dangerous for pedestrians to cross.

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