

**Complete Streets:
Highway Law & Pedestrian
Safety and Mobility
in
New York State**

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**NY Consolidated Law
Highway - Section 331
Consideration of Complete Street Design**



COMPLETE STREETS LEGISLATION

Effective February 11, 2012 , the law:

- Requires consideration of complete street design features for projects undertaken by the Department of Transportation, municipalities and public authorities that receive both state and federal funding and are subject to department of transportation oversight.
- Requires consideration of convenient access and mobility on the road network by all users of all ages, including motorists, pedestrians, bicyclists, and public transportation users.



COMPLETE STREETS LEGISLATION

Recognize the needs of the users and the network context:

- The legislation provides a list of features and elements that may be considered in complete street design.

These features and elements include but not limited to -

Sidewalk

Share the road signage

Crosswalks

Lane striping

Curb cuts

Bicycle lanes

Road diets

Bus pull outs

Pedestrian control signalization

Raised crosswalks and ramps



COMPLETE STREETS LEGISLATION

Exceptions to the law exist, when documented and set forth in publically available documents:

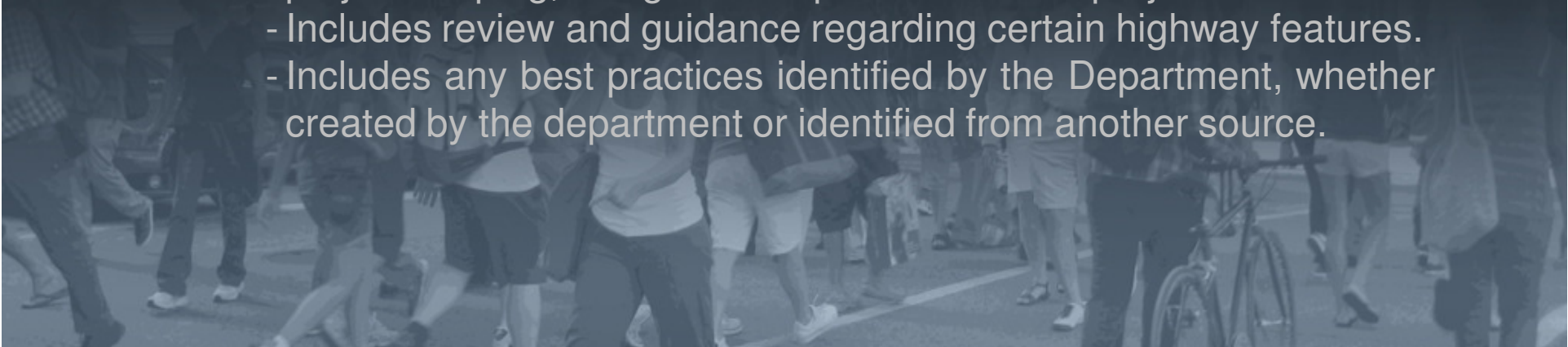
- Shall not apply when bicyclists and pedestrians are prohibited by law.
- Shall not apply when cost is disproportionate to the need as determined by factors such as land use context, current project traffic volumes, and population density.
- Shall not apply when demonstrated lack of need including factors such as land use, current project traffic volumes, or lack of community support.
- Shall not apply when the use of design features would have an adverse impact on, or be contrary to, public safety.



COMPLETE STREETS LEGISLATION

Effective February 11, 2012 , the law:

- Does not require any municipality to expend monies for complete street design, other than monies provided by the state and federal governments for complete street features, but does not preclude the department or municipality from spending monies from its own budget for complete street design features.
- Requires the Department of Transportation to produce a report within two years of the effective date of the law, that:
 - Documents compliance with this law and change of procedures to institutionalize complete street design features into the planning, project scoping, design and implementation of projects.
 - Includes review and guidance regarding certain highway features.
 - Includes any best practices identified by the Department, whether created by the department or identified from another source.



A lot has changed.....

1969



2009



CONTEXT SENSITIVE DESIGN

NYSDOT Context Sensitive Solutions

- Engineering Instruction 01-020
CSS strives for outcomes that meet transportation service and safety needs, as well as environmental, scenic, aesthetic, cultural, natural resource, and community needs.



New York State Department of Transportation

COMPLETE STREETS IMPLEMENTATION

- Programs
- Policy & Procedures
- Design standards



New York State Department of Transportation

EXISTING PROGRAMS



Smart Growth Undertaken a comprehensive, agency-wide, phased implementation effort to integrate the requirements of Law into the existing, federally-required transportation project development process

NYSDOT Bicycle and Pedestrian Program Responsible for promoting bicycle and pedestrian access, mobility, and safety as a routine part of all Department sponsored activities. Reviews policies and programs and NYSDOT guidance regarding the accommodation of bicyclists and pedestrians; distribution of technical and engineering guidance to all Regional and Main Office program and executive level staff.

A **Regional Bicycle and Pedestrian Coordinator** is responsible for promoting bicycle and pedestrian issues within each region.

Safe Routes to School (NYSDOT) \$27.5 million in funding for 89 projects, benefitting 181 schools in 67 communities.

SafeSeniors (NYSDOT) Pilot program to address senior pedestrian crashes on Long Island.

Bicycle - Pedestrian Initiative (NYSDOT) Committee convened to examine standards, policies and programs relating to non-motorized travel. Drafting new policy to ensure non-motorized transportation is considered in the early planning stages of projects.

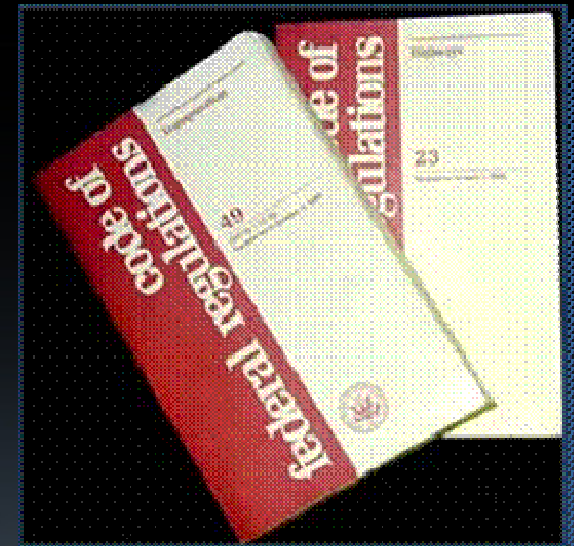
Pedestrian Signal Countdown Timers (NYSDOT) Nearly 3,000 pedestrian countdown timers installed from 2005 to 2009 as part of a plan to upgrade traffic signals and pedestrian control at intersections.

New York State Department of Transportation

EXISTING POLICY & PROCEDURES

Federal Authority

Current surface transportation authorization legislation
23 CFR Part 652 – Pedestrian and Bicycle Accommodation and Projects
23 USC Section 217 – Bicycle Transportation and Pedestrian Walkways
23 USC Section 402 – Highway Safety
23 USC 109(a)(35) – Transportation Enhancement Activities
23 USC 109(m) – Protection of Nonmotorized Transportation Traffic
23 USC 103(b)(6) Section 103 – Federal – aid systems [Eligibility for National Highway System Funds]
23 USC 134 – Metropolitan Planning
23 USC 135 – Statewide Planning
23 USC 152 - Hazard Elimination
23 USC Section 206 – Recreational Trails Program
23 USC Section 204 – Federal Lands Highway Program
23 USC Section 162(c)(4) – National Scenic Byways Program
Section 1602 of TEA-21 – High Priority Projects and Designated Transportation Enhancement Activities
49 USC Section 5307 – Transit Enhancement Activity
49 CFR 27.7 – Nondiscrimination on the Basis of Disability in Programs or Activity Receiving Federal Financial Assistance
28 CFR 35.150 Transition Plan (America with Disability Act of 1990)
National Manual on Uniform Traffic Control Devices for Streets & Highways



Source: www.fhwa.dot.gov

EXISTING POLICY & PROCEDURES

Pedestrian Safety in NYSDOT Project Development

Planning & Scoping

- Pedestrian safety issues and needs are considered as part of the effort to identify the project area's safety, mobility, infrastructure, community, and environmental conditions, needs, and objectives.
- "Pedestrian accommodation" is one of 17 items considered to be Critical Design Elements in the Project Scoping Report.
- Project Development Manual (PDM) 3.2.2.2 - *Project Issues, Elements, and Initiatives* lists "Bicycle and pedestrian considerations" as an issue requiring analysis and consideration during scoping.
- Safety Considerations, Accident History & Analysis are a consideration on every project.
- Public involvement efforts give the community an opportunity to alert NYSDOT to a potential or existing pedestrian situation that may not be evident in the accident history.



EXISTING POLICY & PROCEDURES

Pedestrian Safety in NYSDOT Project Development

Design

Highway Design Manual

Chapter 18 – Pedestrian Facility Design provides procedural requirements for determining if pedestrian facilities are warranted; and provides guidance to design, construct and maintain these facilities.

“...Department policy...aligns with FHWA policy (23 CFR 652.5) which requires that the safe accommodation of pedestrians and persons with disabilities should be given full consideration during the planning, design, and construction phases of federal aid highway projects. The Department has determined that this policy also applies to all projects, regardless of the fund source, including 100% state-funded projects.”

- 18.5.2 *Pedestrian Data Acquisition* (for use in PSRs and DADs)

“Pedestrian accident history, including causes and site context (roadway description and surrounding land use). Pedestrian accident history should include actual recorded incidents and local feedback on perceived safety. The absence of an accident history does not necessarily indicate a safe and accessible condition exists for pedestrians. Information may be gathered from local highway supervisors, local police, residents or business owners.”

- 18.6.1 *Pedestrian Facility Design under the Americans with Disabilities Act (ADA)*

The Department has a duty to construct, maintain, monitor, and update, any facility it owns or maintains to meet the most current ADA standards.

- 18.6.1.1 *Additional Design Considerations for Persons with Special Needs*

Includes “Older Persons” and “Visually Impaired Persons”

EXISTING POLICY & PROCEDURES

Pedestrian Safety in NYSDOT Project Development

Design

Design Approval Document

Chapter 3.3.2 - Multimodal considers accommodations for pedestrians, as indicated by completion of a standardized 'Pedestrian Generator Checklist,' (HDM Ch. 18) to determine if pedestrian facilities are needed. The checklist is submitted to the Regional Bicycle and Pedestrian coordinator for review.

Chapter 4.2.1 -Social considers impacts (including mobility) on:

- Elderly and/or Disabled Persons or Groups
- Transit Dependent, Pedestrians, and Bicyclists

18-6 PEDESTRIAN FACILITY DESIGN	
Exhibit 18-1 Pedestrian Generator Checklist	
P.I.N.:	Project Location:
PEDESTRIAN GENERATOR CHECKLIST	
<i>Note: The term "generator" in this document refers to both pedestrian generators (where pedestrians originate) and destinations (where pedestrians travel to). A check of "yes" indicates a potential need to accommodate pedestrians and coordination with the Regional Bicycle and Pedestrian Coordinator is necessary during project scoping. Answers to the following questions should be checked with the local municipality to ensure accuracy.</i>	
1. Is there an existing or planned sidewalk, trail, or pedestrian-crossing facility?	YES <input type="checkbox"/> NO <input type="checkbox"/>
2. Are there bus stops, transit stations or depots/terminals located in or within 800 m of the project area?	YES <input type="checkbox"/> NO <input type="checkbox"/>
3. Is there more than occasional pedestrian activity? Evidence of pedestrian activity may include a worn path.	YES <input type="checkbox"/> NO <input type="checkbox"/>
4. Are there existing or approved plans for generators of pedestrian activity in or within 800m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as schools, parks, playgrounds, places of employment, places of worship, post offices, municipal buildings, restaurants, shopping centers, or other commercial areas, or shared-use paths?	YES <input type="checkbox"/> NO <input type="checkbox"/>
5. Are there existing or approved plans for seasonal generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as ski resorts, state parks, camps, amusement parks?	YES <input type="checkbox"/> NO <input type="checkbox"/>
6. Is the project located in a residential area within 800 m of existing or planned pedestrian generators such as those listed in 4 above?	YES <input type="checkbox"/> NO <input type="checkbox"/>
7. From record plans, were pedestrian facilities removed during a previous highway reconstruction project?	YES <input type="checkbox"/> NO <input type="checkbox"/>
8. Did a study of secondary impacts indicate that the project promotes or is likely to promote commercial and/or residential development within the intended life cycle of the project?	YES <input type="checkbox"/> NO <input type="checkbox"/>
9. Does the community's comprehensive plan call for development of pedestrian facilities in the area?	YES <input type="checkbox"/> NO <input type="checkbox"/>
10. Based on the ability of students to walk and bicycle to school, would the project benefit from engineering measures under the Safe-Routes-To-School program? Eligible infrastructure-related improvements must be within a 3.2 km radius of the project.	YES <input type="checkbox"/> NO <input type="checkbox"/>
<i>Note: This checklist should be revisited due to a project delay or if site conditions or local planning changes during the project development process.</i>	
Comments:	
Regional Bicycle and Pedestrian Coordinator:	
Project Designer:	

New York State Department of Transportation

EXISTING POLICY & PROCEDURES

Pedestrian Safety in NYSDOT Project Development

Construction

Highway Design Manual

16.4.4.2 - *Maintenance and Protection of Pedestrian and Bicycle Traffic*

Section 619 of the Standard Specifications provides for the safe passage of pedestrians and bicyclists over any portion of the highway under construction where traffic is to be maintained.



EXISTING POLICY & PROCEDURES

Features Identified in Complete Street Law:

- Sidewalks (HDM Ch. 18 – Pedestrian Facility Design, 18.5, 18.6,)
- Paved Shoulders Suitable for Use By Bicyclists (HDM Ch. 17 – Bicycle Facility Design, 17.4)
- Lane Striping (HDM Ch. 17 – Bicycle Facility Design, 17.4; MUTCD, Part 9)
- Bicycle Lanes (HDM Ch. 17 – Bicycle Facility Design , 17.4)
- Share The Road Signage (HDM Ch. 17 – Bicycle Facility Design, 17.4; MUTCD, 2C.51)
- Crosswalks (HDM Ch.18 – Pedestrian Facility Design, 18.7; MUTCD Section 3B.18)
- Road Diets (HDM Ch. 25 – Traffic Calming, 25.6, Table 25-1)
- Pedestrian Control Signalization (HDM Ch.18 – Pedestrian Facility Design, 18.7; HDM Ch. 11 – Signs, Signals and Delineation, 11.3; MUTCD, Chapters 4C, 4D, 4E, 4F)
- Bus Pull Outs (HDM Chapter 24 – Mobility Measures, 24.3; HDM Ch. 18 – Pedestrian Facility Design, 18.10)
- Curb Cuts (HDM Ch. 5 – Basic Design, Appendix A , HDM Ch. 18 – Pedestrian Facility Design, 18.7)
- Traffic Calming Measures (HDM Ch. 25 – Traffic Calming)

...most design features are included in the Department's existing design standards



New York State Department of Transportation

EXISTING DESIGN STANDARDS

Pedestrian Facility & Safety Design Elements

New sidewalk installation



Region 1



Pedestrian lighting



EXISTING DESIGN STANDARDS

Pedestrian Facility Safety Design Elements



Typical Pedestrian
Street Crossings

In-road
crosswalk
lighting

Region 2



EXISTING DESIGN STANDARDS

Pedestrian Facility Safety Design Elements

Signage and Signals at
Pedestrian Street Crossings



Pedestrian
Refuges



Intersection
Curb Extensions



New York State Department of Transportation

EXISTING DESIGN STANDARDS

Pedestrian/Bicycle Facility Safety Design Elements



R5 Kensington Expressway/Humboldt Parkway

Over/Under passes

R7 Route 37



New York State Department of Transportation

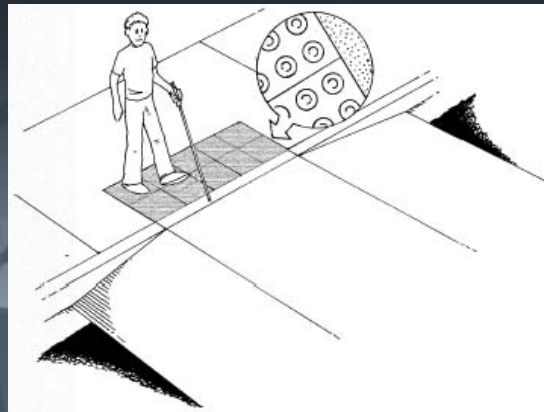
Design features yet to be implemented-

HAWK Beacons at Pedestrian Street Crossings



	What Drivers See	What Pedestrians See
①	 DARK	 Push the button.
②	 FLASHING	
③	 STEADY	
④	 STEADY	 Start crossing.
⑤	 ALTERNATING FLASH Stop. Then go if clear.	 FLASHING Continue crossing.
⑥	 DARK	

Raised
Crosswalks



Source: www.fhwa.dot.gov

CONTEXT

Why care about streets and their design?

- Streets are a major SHARED public resource that are under-utilized.
- Streets and network design address big issues:
 - Climate change
 - Energy independence
 - Health and safety





Used by Permission: Project for Public Spaces

WWW.CONTEXT SENSITIVE SOLUTIONS.ORG

New York State Department of Transportation

Complete Streets

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