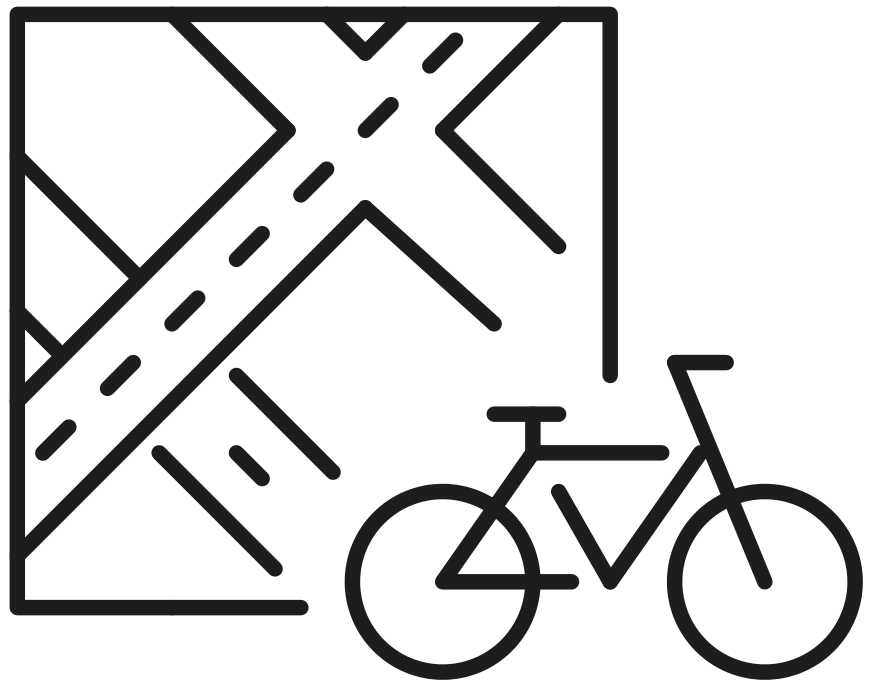


BICYCLE-FRIENDLY **STREETSCAPE** **GUIDELINES**



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Bicycle-Friendly Streetscape Guidelines

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1. Introduction

As the seventh oldest settlement in the United States, Dover's roadway system predates modern transportation. Recognizing the increasing importance of alternative transportation, the City of Dover aims to create a connected network of safe routes for cyclists sharing roadways with motor vehicles and buses. This effort acknowledges existing constraints, such as limited right-of-way and pavement widths due to historical development and geographical limitations.

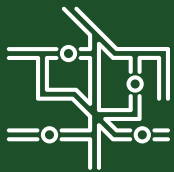
The City's existing policies support incorporating Complete Street elements into new and reconstructed streets. This document provides guidelines for incorporating bicycle infrastructure during routine road restriping, offering a more immediate approach than waiting for full reconstruction. When adequate roadway width is unavailable for dedicated bike lanes, shared lane markings, or "sharrows," and appropriate signage will be considered to indicate shared use by motorized and non-motorized vehicles. These guidelines consider factors such as traffic volume, right-of-way width, pavement width, on-street parking, curbing, and sidewalks.

In addition to enhancing on-street cycling infrastructure, the City is investing in off-street alternatives to improve connectivity and safety for cyclists and pedestrians. The Community Trail serves as a vital off-road route within the City's core, linking key destinations and providing a safer, more accessible option for non-motorized travel. The upcoming Phase IV expansion will extend the trail from the existing trailhead at Central Avenue/NH Route 108 to the Dover Middle and High School campuses, through 33 acres of Bellamy Park, and out to Knox Marsh Road/NH Route 155. By integrating off-street pathways with the on-street bicycle network, Dover is working toward a more comprehensive and connected active transportation system.

2. Master Plan Consistency and Objectives

A Master Plan is a comprehensive plan which guides the long-term physical development for a community. It is used to shape city and community policy decisions and is particularly useful in defining land use regulations and long-term capital budgeting priorities. The Master Plan prioritizes sustainable resource management and smart growth strategies, integrating input from residents through public engagement to reflect community needs and interests.

These guidelines implement objectives and action items outlined in the 2016 **Transportation Chapter** of the Master Plan,¹ specifically:



Objective C3: Provide a bicycle network that is integrated into the City's transportation system.



Action Item TC 3.1: Implement a policy that evaluates the possibility of restriping City Streets during routine paving/maintenance to incorporate bike lanes or sharrows before the work is performed.

These guidelines are also in line with the 2023 **Vision Chapter** of the Master Plan,² specifically:



Pillar 6: We have a robust transportation system that encourages safe and appealing pedestrian, transit, and other alternative transportation options that connect us to the broader region.



Vision Element 6.3: Bike infrastructure, including protected bike lanes, bike rentals, and storage are available throughout the City.

2. Master Plan Consistency and Objectives

These guidelines are based on the Master Plan objectives and the following goals:



Affordable Travel Options

The national average cost of owning and operating a new car in the U.S. in 2024 was \$12,297 annually, or about \$1,024 per month.³ Cycling offers a significantly more affordable alternative.



Mobility for Non-Drivers

Safe and accessible pedestrian and bicycle infrastructure is crucial for individuals who cannot drive due to age, disability, financial limitations, or other reasons.



Enhanced Road Safety

Bike lanes and sharrows improve safety for all road users by increasing predictability, clearly marking crossings, and promoting awareness of shared road use.



Traffic Congestion Reduction

Promoting cycling encourages shorter trips by non-motorized means, reducing the number of vehicles on the road and alleviating traffic congestion.



Environmental Benefits

Reduced vehicle use leads to lower emissions and improved air quality.



Economic Development

Research indicates a positive correlation between walkable and bikeable communities and local economic vitality.⁴

3. How to Use This Document

The Community Services Department should consult this document before routine street restriping. Full street reconstructions should adhere to the City's Complete Streets and Traffic Calming Guidelines, (included as Appendix A in this document), incorporating engineering designs that exceed these guidelines whenever possible.

Recognizing the diverse layouts and needs of Dover's streets, a "one-size-fits-all" approach is not feasible, nor desirable. This document outlines the minimum best management practices. The City's Transportation Advisory Commission should be consulted for community input on proposed improvements, especially in complex situations like varying on-street parking, right-of-way widths, or curbing.

This document should be used in conjunction with resources from the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO) regarding bike lane design and intersection treatments. Suggested resources can be found in the Citations and Resources section of this document.

Resource Background:

- The Federal Highway Administration is a division of the United States Department of Transportation (USDOT) that provides stewardship over the construction, maintenance and preservation of the Nation's highways, bridges and tunnels.

FHWA also conducts research and provides technical assistance to state and local agencies to improve safety, mobility, and to encourage innovation.

- The American Association of State Highway and Transportation Officials is a nonprofit organization that is a standards setting body which publishes specifications, test protocols, and guidelines that are used in highway and transportation design and construction throughout the United States.

It represents all transportation modes: air, highways, public transportation, active transportation, rail, and water.

4. Street Hierarchy and General Guidelines



The proposed bicycle network aims to connect key destinations, such as transit, schools, employment centers, retail areas, and essential services. Aligned with the Transportation Chapter of the Master Plan, the network prioritizes safety, connectivity, and equity. Due to Dover's historical development, the safest route may not always be the most direct.

Dover's City Code defines three street categories:

Arterial Roads: A road designed or utilized primarily for high vehicular speeds or for heavy volumes of traffic on a continuous route, with intersections at grade, and which may have direct access to abutting properties and on which geometric design and traffic control measures are used to expedite the safe movement of through traffic.

Collector Streets: A street which carries, or is proposed to carry, intermediate volumes of traffic from local streets to arterial roads and which may or may not be continuous.

Local Streets: A street used primarily for access to abutting properties providing for minimum speeds and traffic volumes. Also referred to as "minor" or "secondary" streets.

Generally, local streets do not require striped bike lanes. However, sharrows may be useful for cyclist wayfinding. Collector streets and arterial roads should include a minimum 5-foot bike lane or sharrows on the curb side of the travel lane where feasible and appropriate. Painted bike lanes should be a minimum of 5-feet wide with curbs and 3-feet wide without curbs.

4. Street Hierarchy and General Guidelines

The following facility types will be used to create a connected network suitable for cyclists of all abilities:

Bike Lanes: Designated lanes separated from traffic, ideal for higher speed and volume roads. They provide both vertical and horizontal separation. Bike lanes may be delineated with white striping or, where feasible, green paint. Minimum dimensions are 5-foot wide without parking or 6-foot wide with parking and may include a 2-3 foot buffer between parking and/or the travel lane.



Example: Bike Lanes

Wide Shoulders: Paved shoulders, (3-4 feet wide), striped for bicycle use, suitable for rural areas or areas with variable right-of-way widths.



Example: Wide Shoulders

Shared-Lane Markings (Sharrows): Used when dedicated bike lanes are not feasible or to provide wayfinding to cyclists. Sharrows and "Share the Road" signage indicate shared use by cyclists and motorists. Travel lanes should be at least 11-feet wide. Sharrows should be placed every 250-feet along the curb side.



Example: Shared-Lane Markings

Signed Routes: Low-speed, low-volume routes with signage indicating destinations and distances.



Example: Signed Routes

5. Infrastructure Improvements by Street Type

These infrastructure recommendations form an interconnected citywide network. The plan is designed to evolve, with opportunities for lane reconfigurations during the annual street line painting program. These guidelines are intended for general paving and restriping programs, not major reconstructions, which will be addressed during the Capital Improvements Program (CIP) design phase.

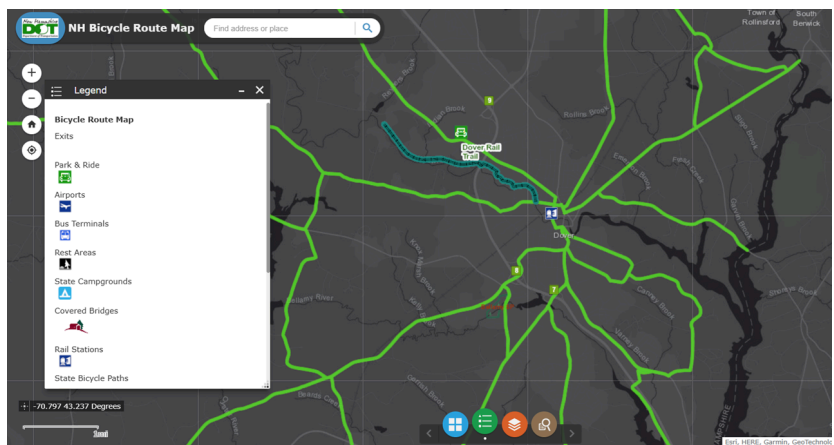
FHWA workbook on Incorporating On-Road Bicycle Networks into Resurfacing Projects⁵ provides recommendations for resurfacing and restriping processes, timelines, methods, and practices to avoid.

The workbook should be consulted for methods, including:

- Lane narrowing / lane diet
- Roadway reconfiguration / road diet
- Parking removal
- Shoulder paving

This document exclude routes with existing or planned improvements by the State of New Hampshire (ex. New Rochester Road from Somersworth to Indian Brook Drive). Lastly, state-owned and -maintained roads such as Littleworth Road and Knox Marsh Road have also been excluded.

Furthermore, this document is intended to work in collaboration with the New Hampshire Department of Transportation (NHDOT) Bicycle Route Map,⁶ which intends to link Dover's transportation infrastructure with regional and statewide routes. The link to this interactive map can be found in the Citations and Resources section of this document.



NHDOT Bicycle Route Map.

5. Infrastructure Improvements by Street Type

The following cross-sections are recommended based on street type and right-of-way width:

a. Arterial Roads

- **80' Right-of-Way, No On-Street Parking:** Two 10' travel lanes in each direction and 6' bike lanes in each direction, with 2-3' buffers where possible. *Example: Potential for Central Avenue from Indian Brook Drive to Glenwood Avenue, Indian Brook Drive from Central Avenue to Sixth Street.*
- **60' Right-of-Way, On-Street Parking on Both Sides:** One 10-11' travel lane in each direction, 7' parking bays, and 5' bike lanes in each direction, with 2-3' buffers where possible. *Example: Potential for Portland Avenue from Atlantic Avenue to Chapel Street, Broadway from Oak Street to Central Avenue, Washington Street from Arch Street to Chestnut Street (Collector), Sixth Street from Hillside Drive to Chestnut Street).*
- **60' Right-of-Way, On-Street Parking on One Side:** One 11-12' travel lane in each direction, 7' parking bay, 5' bike lanes in each direction, with 2-3' buffers where possible, and a turning lane between travel lanes. *Example: Potential for Portland Avenue from Oak Street to Atlantic Avenue, Chestnut Street from Sixth Street to Washington Street.*

b. Collector Streets

- **50' Right-of-Way, No On-Street Parking (Lower Density Areas):** One 12' travel lane in each direction and 6-8' shoulders in each direction or 5' bike lanes with 2-3' buffers where possible. *Example: Potential for Sixth Street from Rochester to Indian Brook Drive, Tolend Road from Barrington to Columbus Avenue, Dover Point Road from Stark Avenue to Old Dover Point Road.*
- **50' Right-of-Way, No On-Street Parking:** One 11' travel lane in each direction and 5' bike lanes in each direction. *Example: Potential for Sixth Street from Indian Brook Drive to Hillside Drive, Glenwood Avenue from Sixth Street to Central Avenue, Washington Street from Tolend Road to Arch Street, Durham Road from Back River to Madbury.*
- **50' Right-of-Way, No On-Street Parking, 32-35' Existing Paved Width:** One 11' travel lane in each direction and 5' bike lanes in each direction and include 2-3' buffers where possible. *Example: Potential for Tolend Road from Columbus Avenue to Washington Street, Stark Avenue from Central Avenue to Dover Point Road, Durham Road from Back River to Madbury.*

5. Infrastructure Improvements by Street Type

The following cross-sections are recommended based on street type and right-of-way width:

c. Local Roads

Shared-lane markings, also called sharrows, and “Share the Road” signs are recommended on the following roadways:

- Old Dover Point Road from Dover Point Road to Gerrish Road
- Gerrish Road from Old Dover Point Road to Spur Road
- Spur Road from Gerrish Road to Boston Harbor
- Middle Road from Court Street to Dover Point Road
- Henry Law Avenue from Washington Street to Back Road
- South Watson Road from Central Avenue to Court Street
- Portland Avenue from Main Street to Chapel Street
- Atlantic Avenue from Portland Avenue to Oak Street/Cochecho Street/Gulf Road
- Chapel Street from Main Street to Portland Avenue
- St. John Street from Chapel Street to Broadway
- Oak Street from Portland Avenue to Atlantic Avenue
- Locust Street, from Washington Street to Central Avenue (*if a bike lane is not feasible*)
- Mast Road from Durham Road to Spruce Lane
- Spruce Lane from Mast Road to Back River Road
- Durham Road from Back River Road/Central Avenue to Mast Road (*This is locally signed as the Wildcat Bike Route.*)
- Fourth Street from Washington Street to Chestnut Street
- Bellamy Road from Cataract Avenue to Durham Road
- Horne Street from Glenwood Avenue to Sixth Street
- Alumni Drive from Durham Road to Bellamy Road

Streets listed above have a speed limit of 30 miles per hour.

5. Infrastructure Improvements by Street Type

The Manual on Uniform Traffic Control Devices (MUTCD) 11th Edition, Section 9E.09,⁷ should be consulted for standards, guidance, and options regarding shared-lane markings. The standards include restrictions on locations where markings shall be placed. For example, markings shall not be used in:

- Shoulders;
- Bicycle lanes or in designated extensions of bicycle lanes through intersections or driveways;
- The transition area where a motor vehicle entering a mandatory turn lane must weave across bicyclists in bicycle lanes;
- Bicycle boxes;
- Shared-use paths or shared-use path crossings; and
- Physically-separated bikeways, either in the roadway or on an independent right-of-way.

Guidance information for marking placement is included and intended to prevent collisions. Dooring is a common accident between motorists and cyclists. It occurs when a motorist parks their vehicle parallel to oncoming traffic and opens their door into the travel or bicycle lane. Examples of guidance information include:

- If used in a shared lane with on-street parallel parking, shared-lane markings should be placed so that the centers of the markings are a minimum of 12 feet from the face of the curb, or from the edge of the pavement where there is no curb,
- At non-intersection locations, the shared-lane marking should be spaced at intervals of not less than 50 feet or greater than 250 feet,
- The first shared-lane marking downstream from an intersection should be placed no more than 50 feet from the intersection,
- If used on a street without on-street parking that has an outside travel lane that is less than 14 feet wide, shared-lane markings should be placed so that the centers of the markings are a minimum of 4 feet from the face of the curb, or from the edge of the pavement where there is no curb,
- Shared-lane markings should not be placed on roadways that have a speed limit of 35 mph or greater.

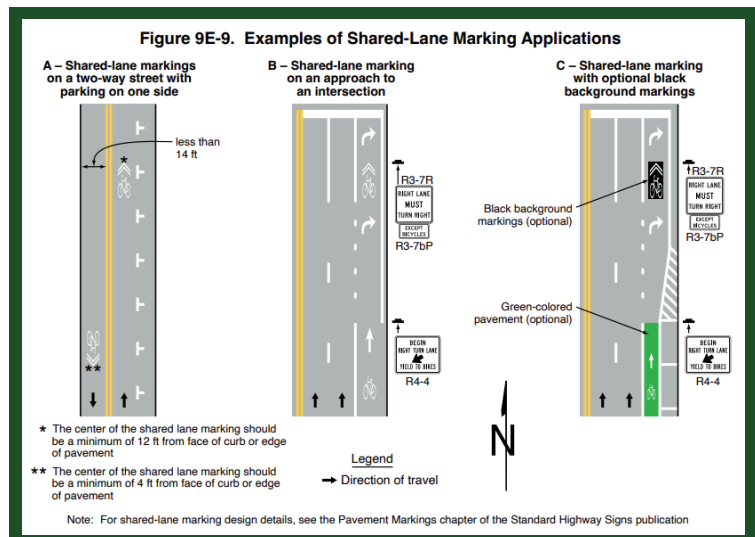


Figure 9E-9. Examples of Shared-Lane Marking Applications, MUTCD 11th Edition.

5. Infrastructure Improvements by Street Type

The following roadways are recommended to have “Share the Road” signage:

- Rutland Street from Silver Street to Central Avenue
- Cataract Avenue from Bellamy Road to Rutland Street
- Back Road from Court Street to Middle Road
- Spur Road from Gerrish Road to Boston Harbor Road
- Middle Road from Court Street to Dover Point Road (*Known as the Pete Gabarro Bike Route*)
- Piscataqua Road from Back River Road to Madbury
- Mast Road from Back River Road to Spruce Lane
- The portion of the Dover Community Trail from Central Avenue to the Transportation Center

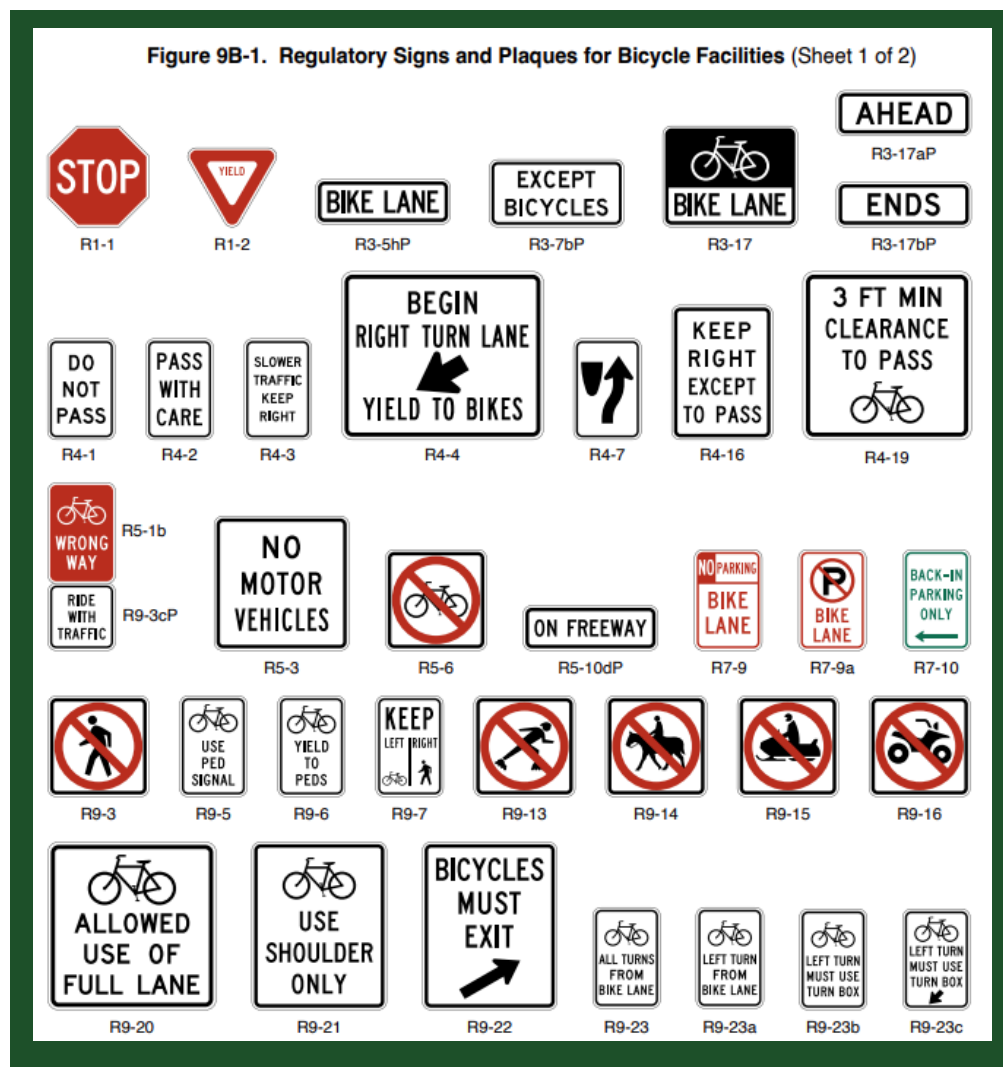


Figure 9B-1. Regulatory Signs and Plaques for Bicycle Facilities, MUTCD 11th Edition.



6. Implementation

Implementation will be phased as follows:

- **Short-Term (1-2 years):** Key safety upgrades and pilot projects.
- **Mid-Term (3-5 years):** Major infrastructure expansions.
- **Long-Term (6+ years):** Network completion and ongoing maintenance.

Master Plan Recommendations and Action Items

The annual update on Master Plan recommendations can be utilized to track progress on Master Plan implementation and review specific action items. This update provides an overview of completed, ongoing, and upcoming initiatives, ensuring transparency and accountability in the City's long-term planning efforts. It highlights key achievements, adjustments to priorities, and any new considerations that have emerged. The most recent update, which includes details on various projects and progress, can be accessed through the 2025 Update on Recommendations - Executive Summary.⁸

7. Citations and Resources

Citations

- ¹2016 Transportation Chapter of the Master Plan:
https://www.dover.nh.gov/Assets/government/city-operations/2document/planning/master-plan/Transportation/Dover_Trans_Chapter_Adopted.pdf
- ²2023 Vision Chapter of the Master Plan:
https://www.dover.nh.gov/Assets/government/city-operations/2document/planning/master-plan/Vision/Vision%20Chapter,%20Appendix_Adopted.pdf
- ³American Automobile Association (AAA). (n.d.). Your driving costs. Retrieved from <https://exchange.aaa.com/automotive/aaas-your-driving-costs/>.
- ⁴Liu, J. (2019). Understanding Economic and Business Impacts of Street Improvements for Bicycle and Pedestrian Mobility – A Multi-City Multi-Approach Exploration [Phase 2]. National Institute for Transportation and Communities. Retrieved from <https://nrtc.trec.pdx.edu/research/project/1161>.
- ⁵Federal Highway Administration (FHWA). (2016). Incorporating On-Road Bicycle Networks into Resurfacing Projects. Retrieved from <https://highways.dot.gov/safety/pedestrian-bicyclist/safety-tools/pg-1-6-incorporating-road-bicycle-networks-resurfacing>.
- ⁶NHDOT Bicycle Route Map: <https://nh.maps.arcgis.com/apps/webappviewer/index.html?id=49c702c328d84a29af3b4a27eb271b37>
- ⁷Federal Highway Administration (FHWA). (2023). Manual on Uniform Traffic Control Devices (MUTCD), 11th Edition: Section 9 – Traffic Control for Bicycle Facilities. Retrieved from https://mutcd.fhwa.dot.gov/pdfs/11th_Edition/part9.pdf.
- ⁸2025 Update on Recommendations - Executive Summary:
https://www.dover.nh.gov/Assets/government/city-operations/2document/planning/master-plan/Summary/Complete%202025%20Summary_Final_v2.pdf

Resources

- Project for Public Spaces: <https://www.pps.org/>
- National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide: <https://nacto.org/publication/urban-bikeway-design-guide/>
- Transportation Research Board (TRB) Highway Capacity Manual: <https://www.trb.org/Main/Blurbs/175169.aspx>
- USDOT Level of Service Case Studies: <https://www.transportation.gov/office-policy/transportation-policy/level-service-case-studies>

7. Citations and Resources

Resources

Institute of Transportation Engineers (ITE) Resources:

- Implementing Context Sensitive Design on Multimodal Corridors: A Practitioner's Handbook: <https://ecommerce.ite.org/imis/ItemDetail?iProductCode=IR-145-E>
- Trip Generation Manual: <https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>

American Association of State Highway and Transportation Officials (AASHTO) Resources:

- Guide for the Development of Bicycle Facilities: <https://store.transportation.org/item/publicationdetail/5371>
- Roadside Design Guide: <https://highways.dot.gov/safety/pedestrian-bicyclist/safety-tools/51-52-roadside-design-guide-4th-edition>

Federal Highway Administration (FHWA) Resources:

- Bikeway Selection Guide: <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-07/fhwasa18077.pdf>
- Evaluation of Shared Lane Markings: <https://www.fhwa.dot.gov/publications/research/safety/pedbike/10044/index.cfm>
- Small Town and Rural Multimodal Networks Guide: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/
- Road Diet Information Guide: <https://highways.dot.gov/safety/other/road-diets/road-diet-informational-guide>
- Rumble Strips and Rumble Stripes Website: <https://highways.dot.gov/safety/rwd/keep-vehicles-road/rumble-strips>
- Separated Bike Lane Planning and Design Guide: <https://highways.dot.gov/safety/pedestrian-bicyclist/safety-tools/pg-89-101-separated-bike-lane-planning-and-design-guide>
- Shared Use Path Calculator: <https://highways.dot.gov/safety/pedestrian-bicyclist/safety-tools/pg-5-11-shared-use-path-level-service-calculator>
- Proven Safety Countermeasures: <https://highways.dot.gov/safety/proven-safety-countermeasures>
- Incorporating On-Road Bicycle Networks into Resurfacing Projects: <https://highways.dot.gov/safety/pedestrian-bicyclist/safety-tools/pg-1-6-incorporating-road-bicycle-networks-resurfacing>

8. Appendix

Appendix A

- City of Dover Complete Streets and Traffic Calming Guidelines

Complete Streets & Traffic Calming Guidelines

I. VISION

Dover's streets and public ways will be convenient, safe, and accessible for all transportation users, including pedestrians, bicyclists, motorists and mass transit vehicles and riders, regardless of age and physical ability.

II. CORE COMMITMENT

Purpose

The purpose of this document is to guide local decision makers and city staff, using a context-sensitive approach, to develop a transportation network that serves the widest range of Dover's residents possible. Complete streets are not intended to be prescriptive, and instead act as a framework for creating a more level playing field for travel modes.

Definitions

"Complete Streets" means streets and ways designed and operated to be safe and accessible for all users regardless of age, physical ability or mode of transport, and have an ease of use whether the user is moving along or across the street.

"Traffic Calming" means addressing the "too many cars, going too fast past my house" concern increasingly brought forward by residents. This concern may be a result of many factors, including speeding and drivers looking for short cuts (normally off arterials onto neighborhood streets). Overall it is intended to address safety and neighborhood quality of life.

All Users and Modes

The City of Dover shall implement, design, construct, operate and maintain appropriate facilities for pedestrians, bicyclists, motorists's, transit vehicles and riders, children, the elderly, and people with disabilities in all retrofit or reconstruction projects subject to the exceptions contained herein.

Capital Improvements Planning

As Capital Improvement Plans are developed for the construction of new streets, or the rehabilitation and replacement of existing streets, Complete Streets and Traffic Calming principles will be incorporated into design and engineering plans as appropriate.

Projects and Phases

As transportation projects are considered, each phase will be an opportunity to create safer, more accessible streets for all users. These phases include, but are not limited to: planning, programming, design, right-of-way acquisition, construction engineering, construction, reconstruction, operation and maintenance.

Complete Streets and Traffic Calming principles will be applied on all City projects. When a project is maintaining a street, rather than constructing/reconstructing it, care should be given to review opportunities to make smaller improvements, which will result in a greater ease of access and improved safety; however strict implementation of the principles will not be required.

Exceptions

Complete Streets and Traffic Calming principles will be applied in all street construction/reconstruction and retrofit projects, undertaken by the City, except in certain unusual or extraordinary circumstances outlined below. Even under the conditions outlined below, a project's impact will be evaluated for the effect it would have on the usefulness of the street for all users, now and in the future, and the ability to implement other adopted plans in the future.

- Where pedestrians and bicyclists are prohibited by law from using the facility.
- Where existing right-of-way does not allow for the accommodation of all users, and purchase of additional right of way is not feasible.
- Where a cost benefit analysis proves that the cost of implementing the policy would be disproportionate to the need.
- Where application of principles is unnecessary or inappropriate because it would be contrary to public safety and increase risk of injury or death.
- Where application of principles would create unreasonable adverse impacts on the environment or on neighboring land uses.
- Where regular maintenance or repair work does not require new design and engineering plans for a full retrofit of a street.

When street construction/reconstruction or retrofit of a street are proposed in the Capital Improvements Plan, a determination that a project will or will not meet Complete Streets/Traffic Calming principles will be presented to the City Council.

III. BEST PRACTICES

Design Guidance and Flexibility

The City shall follow accepted or industry standards and use the best and latest design standards available, including:

- Relevant City policies, ordinance, and guidance documents as amended
 - *City of Dover Crosswalk Policy*
 - *City of Dover Construction Guidelines (Section 2, pages 3 and 4)*
 - *Article VII, Section 157-31 of the Land Subdivision Regulations of the City of Dover*
- American Association of State Highway and Transportation Officials (AASHTO)
 - *Guide for the Development of Bicycle Facilities* (4th Edition, 2012)
 - *Guide for the Planning, Design and Operations of Pedestrian Facilities* (2004)
 - *A Policy on Geometric Design of Highways and Streets* (2011)
- American Planning Association (APA)
 - *Complete Streets: Best Policy and Implementation Practices* (2010)
- American Planning Association (APA) & American Society of Civil Engineers (ASCE)
 - *U.S. Traffic Calming Manual* (2009)
- Federal Highway Administration (FHWA)
 - *Manual of Uniform Traffic Control Devices (MUTCD)*
 - *PEDSAFE: Pedestrian Safety Guide and Countermeasures Selection System*
- Institution of Transportation Engineers (ITE)
 - *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach* (2010)
 - *Neighborhood Street Design Guidelines* (2010)
- National Association of City Transportation Officials (NACTO)
 - *Urban Bikeway Design Guide* (2nd Edition, 2012)
 - *Urban Street Design Guide* (2013)
- U.S. Architectural and Transportation Barriers Compliance Board (the Access Board)
 - *Complete Streets Complete Networks: A Manual for the Design of Active Transportation*

Public Participation

During the planning, design and review phases of projects every effort shall be made to encourage public participation and to incorporate feedback as part of the final design review. Neighborhood meetings shall be held with the affected abutters.

Context Sensitivity/Streetscape

During the planning, design and review phases of projects every effort shall be made to reflect the context and character of the surrounding neighborhood. Where possible it is desirable to enhance the existing character of a street, and not replace it. Efforts shall be taken to incorporate streetscape amenities which promote a pedestrian friendly environment, such as street trees, pedestrian scale street lighting, landscaping and way finding, where appropriate.

Green & Complete Streets

In addition to providing safe and accessible streets in the City of Dover, a complete streets approach generates environmental protection and stormwater management benefits. Complete streets encourage travel by non-motorized means, thereby reducing emissions that impact local air quality and contribute to climate change. Traditional street design emphasizes space for vehicles and maximizes application of impervious surfaces that generate stormwater. Wherever possible, innovative and educational stormwater infrastructure and best management practices, such as vegetation, landscaping, and on-site stormwater treatment infrastructure, including bioswales, planters, rain gardens, and street trees, shall be designed and integrated into the construction/reconstruction or retrofit of a street. These elements not only treat stormwater, but they can also be used to create an attractive streetscape and slow vehicles speeds – which is critical for pedestrian safety.

Performance Measures

Complete Streets should be continuously evaluated for success and opportunities for improvement. This policy encourages the regular evaluation and reporting of progress through the following performance measures:

Measures for Trend Analysis

These measures are primarily used for reporting, analysis, and general planning. Each measure has a desired trend that is compared to observed trends; desired trends may be modified in response to changing data and goals. See Appendix A for detail on desired and observed trends.

- User data – bike, pedestrian, transit, and traffic
- Number of modes incorporated into each project
- Number of citizen compliments and complaints per year
- Linear feet of connected pedestrian accommodations built
- Number of ADA accommodations built
- Miles of bike lanes/trails built or striped
- Number of ADA compliant transit stops accessibility accommodations built
- Number of new street trees planted
- Average life of street trees
- Number of exemptions from this policy approved

Measures for Project Prioritization

These measures are tied to more specific objectives and are designed to directly inform investments in improvement of the transportation network. Objectives and analysis are based on data that is already available or collected by the city (e.g. crash data).

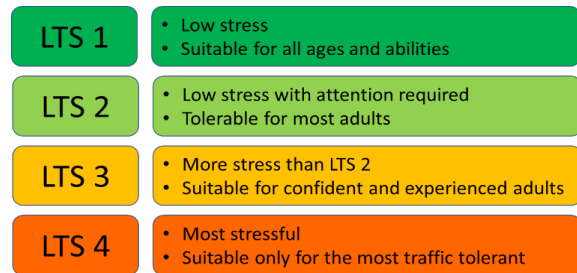


Figure 1 – Bicycle Level of Traffic Stress Rating Scheme

	Performance Measure	Objective
Measures for Project Prioritization	Number of fatalities and serious injuries	Reduce the number of fatalities and serious injuries
	Number of non-motorized fatalities and serious injuries	Reduce the number of non-motorized fatalities and serious injuries
	Percent of households connected by LTS 1-2 streets	Increase the connectivity of the non-motorized network
	Percent of households connected by sidewalks	Increase the connectivity between and within residential-zoned areas
	Percent of city sidewalks that are ADA compliant	Increase accessible sidewalk network

IV. IMPLEMENTATION

The City views Complete Streets and Traffic Calming as integral to everyday transportation decision-making practices and processes. To this end:

- All proposed or planned City street construction/reconstruction or retrofit of a street, including construction or repairs to sidewalks identified in the Capital Improvements Plan shall include a review for application of the Complete Streets and Traffic Calming principles and will automatically require compliance with current design requirements under the Americans with Disabilities Act. These principles shall be reviewed by the City Engineer and the Department of Planning and Community Development.
- A checklist shall be developed giving specific guidance for principles to be included in the review of projects.
- As part of the proposed Capital Improvements Plan review, the Planning Department shall make an annual report to the City Council showing progress made in implementing this policy.
- Prior to releasing bid documents for plans, the Transportation Advisory Commission shall be apprised of which principles have been incorporated into street designs.
- Any department retaining a transportation consultant shall incorporate Complete Streets and Traffic
 - Calming principles into any transportation plans and programs as appropriate.
- When available, the City shall encourage staff professional development and training on non-motorized transportation issues through attending conferences, classes, seminars, and workshops.

Appendix A – Performance Measures for Trend Analysis

	Performance Measure	Observed trend	Desired Trend
Performance Measures for Trend Analysis	User data – bike, pedestrian, transit, and traffic		▲
	Number of modes incorporated into each project		▲
	Number of citizen compliments and complaints per year		▲
	Linear feet of connected pedestrian accommodations built		▲
	Number of ADA accommodations built		▲
	Miles of bike lanes/trails built or striped		▼
	Number of ADA compliant transit stops accessibility accommodations built		▲
	Number of new street trees planted		▲
	Average life of street trees		▲
	Number of exemptions from this policy approved		N/A