
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, motorist'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 principals 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).

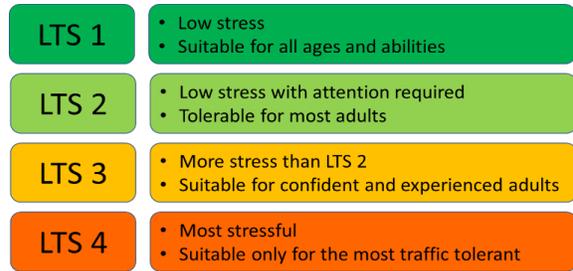


Figure 1 – Bicycle Level of Traffic Stress Rating Scheme

	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