



North Carolina Department of Transportation Complete Streets Implementation Guide

The North Carolina Department of Transportation (NCDOT) Complete Streets Implementation Guide (Guide) is designed to assist NCDOT staff engineers, project managers and designers in implementing the Complete Streets Policy as adopted by the NCDOT Board of Transportation. This document provides comprehensive guidance for incorporating a Complete Streets approach into NCDOT's planning, programming, design, and maintenance processes.

Elements of this Guide:

- 1. Complete Streets Project Evaluation Methodology**
- 2. Planning**
- 3. Project Development**
- 4. Resurfacing and Maintenance Activities**
- 5. Work Zone Accommodations**
- 6. Related Policies**
- 7. Cost Share**
- 8. Design Guidance**
- 9. Administration**

This Guide will be updated periodically as processes and procedures are refined, with a comprehensive review and update every five years, beginning in August 2024.

1. Complete Streets Project Evaluation Methodology

All projects will be evaluated using the Complete Streets project evaluation methodology attached and referenced herein. The five-step evaluation methodology will assist project managers and engineers in identifying bicycle and pedestrian needs, selecting the appropriate facility type, and estimating added impacts to the project.

2. Planning

NCDOT Complete Streets Implementation Guide

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This section outlines the approach for ensuring Complete Streets elements are evaluated as a roadway project is planned, prioritized and programmed. Each proposed roadway project will include the preparation of a Complete Streets Project Sheet as detailed below. The Project Sheet will identify planned multi-modal facilities and document [facility selection decisions](#) in the course of project development.

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2.1 Adopted Plans

A Comprehensive Transportation Plan (CTP) is a mutually adopted transportation planning document that identifies the multi-modal transportation needs of a community or jurisdiction. The CTP may include and/or reference locally adopted plans for public transportation, bicycle facilities, pedestrian facilities and greenways. The adopted CTP will be considered the controlling plan for the identification of non-motorized facilities to be evaluated as part of a roadway project. Other locally adopted plans will be considered so long as 1) the planned facility addresses a transportation need and 2) the planned facility meets the design guidance standards referenced in Section [8](#).

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2.2 Complete Streets Project Sheet (Prioritization 6.0)

For projects where a project sheet has yet to be developed as part of the CTP process, a Complete Streets Project Sheet will be used to document the types of pedestrian, bicycle, public transit, and other multimodal facilities to be evaluated in each roadway project. This sheet will be submitted during the Strategic Prioritization submittal process. The Complete Streets Project Sheet will carry forward as a key document in the Project Advancing Transportation through Linkages, Automation, and Screening (ATLAS) workbench, allowing any personnel to access the project later in development.

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2.3 Complete Streets Project Sheet (within the CTP)

Comprehensive Transportation Plans (CTP) developed through NCDOT's Transportation Planning Division identify projects to address network deficiencies for motorists, pedestrians, bicyclists, and transit users. Complete Streets Project Sheets are being introduced into the [revised](#) CTP process. The Project Sheet outlines the recommended improvement, proposes a typical cross-section for roadway projects, explains the identified need for the project, provides current and projected traffic volume and capacity, identifies high-level environmental constraints and provides Complete Street recommendations. These sheets lay the foundation for Complete Streets facilities and serve as a starting point for projects selected for Strategic Prioritization submittal and carry forward as a key document in the project development phase. [The information and data points within the Project Sheets may be considered for decision-making within Steps 1 -3 of the Complete Streets Evaluation Methodology Guidance.](#)

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2.4 Exceptions to Policy

The Complete Streets Project Sheet will [document the outcomes of the Complete Streets Evaluation Methodology Guidance \(i.e. Steps 1-5\), alternative evaluation criteria, and decisions on project inclusion from the Complete Streets Review Team \(i.e. "exceptions"\)](#). Exceptions may be requested [after the Project Engineer has documented the decisions reached under the Complete Streets Evaluation Methodology Guidance and indicated the Step where a decision of excluding a Complete Street facility\(ies\) was reached. This request may be](#) considered any time throughout the process through the

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Complete Streets Program Administrator in the Integrated Mobility Division.

A multi-disciplinary Complete Streets Review Team will review all requests for exceptions to the Complete Streets Policy. The Review Team will consider the justification for the proposed exception as detailed on the Complete Streets Project Sheet [and within the Complete Streets Evaluation Methodology Guidance](#) and decide whether to recommend approval of the exception. Exceptions will be automatically granted if requested by the local government.

If the exception is not approved, the Review Team will initiate additional discussion with relevant parties, including the Project Manager, to explore options and alternatives for including appropriate multi-modal elements in the project [such as consideration of additional alternative facility elements or design concepts, increased local cost share, and/or an alternative plan for add the enhancements through other methods or projects](#). If necessary, the decision will be elevated to the Chief [Operating Officer](#) and/or Secretary for a final decision.

The Complete Streets Review Team consists of:

- Complete Streets Program Administrator,
- State Traffic Engineer or designee,
- State Roadway Engineer or designee,
- Integrated Mobility Division Director or designee, and
- Division Planning Engineer/Corridor Development Engineer or designee.

3. Project Development

The [Project Development Network \(PDN\)](#) carries a project from concept to the specific roadway design to be constructed. The [PDN](#) process considers the context, constraints and purpose of a project. All planned facilities will receive the same consideration as a project moves through the development process.

The Complete Streets Project Sheet will carry forward with a project through [the PDN stages](#). Project managers will use the Complete Streets Project Sheet [in PDN Stage 1](#) for determining facilities to be included in preliminary project design alternatives. [Information within the Complete Streets Project Sheet may be revised, verified, or revisited in PDN Stage 2 depending on new analyses, data availability, etc.](#)

The Complete Streets Project Sheet will be a 'key document' in the Project Advancing Transportation through Linkages, Automation, and Screening (ATLAS) workbench, allowing all personnel working on the project throughout the development process to refer to the information. Project ATLAS features a workbench tool to organize technical reports and data needed during project delivery. As part of the Workbench structure, the Project Manager will be responsible for documenting how Complete Street elements are reflected in the project design.

3.1 Project Development

The Project Engineer will coordinate with NCDOT's Integrated Mobility Division (IMD) on all programmed roadway projects. The Integrated Mobility Division will participate in scoping meetings and [respond to Project Engineer requests for guidance on](#) facility recommendations and design guidance as appropriate. [Project Engineers should refer to the steps identified in the Complete Streets Evaluation Methodology](#)

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[Guidance for identifying and incorporation Complete Streets elements.](#)

3.2 Bridge Projects

The Complete Streets Project Sheet will be integrated into the Structures Management Planning Process for bridge replacements and refurbishments. Until specific procedures are complete, the Project Engineer will coordinate with the Integrated Mobility Division through scoping requests to incorporate Complete Streets elements in bridge designs for each bridge replacement project undertaken by NCDOT.

[For bridge projects where a present transportation need has been identified:](#)

- [Pedestrian facilities will be included if there is a present identified pedestrian transportation need.](#)
- [Bicycle facilities will be included if there is a present identified bicycle transportation need.](#)
- [Multi-use facilities will be included if there is a present identified multi-use transportation need.](#)

[Due to the long useful life of bridges, on bridges with shoulder approach sections, where:](#)

- [There is a reasonable expectation of future pedestrian need, sufficient deck space and weight capacity will be made available on the replacement bridge for future construction of sidewalks.](#)
- [There is a reasonable expectation of future bicycle need, sufficient width and weight capacity for bike facilities will be provided.](#)
- [There is a reasonable expectation of future multi-use need, sufficient width and weight capacity for the appropriate facility will be provided on and/or below the structure.](#)

3.3 Equal or Better Performance of a Facility [and Alternative Facilities](#)

Conditions often change between the time a project is added to the STIP and the when the project development process begins that may support the incorporation of a different type of bicycle or pedestrian improvement than shown in an adopted plan. NCDOT will review an alternative facility(ies) to the bicycle and/or pedestrian facility type proposed in the adopted plan [based upon the evaluations and decisions reached within the Complete Streets Evaluation Methodology Guidance](#) or upon the written request of the local representatives to the Project Engineer.⁴ The Project Engineer will [document the evaluation of the alternative facility\(ies\) and consult with the Complete Streets Program Administrator for additional guidance as needed.](#) The [facility decision documentation will be incorporated in ATLAS or a relevant NCDOT project tracking mechanism in coordination with IMD, if there are considerable cost and or schedule impacts that cannot be resolved through selection of an alternative facility, the Project Engineer should submit a project request to the Complete Streets Review Team as identified in Step 5 – Final Analysis of the Complete Streets Evaluation Methodology Guidance.](#)

4. Resurfacing and Maintenance Activities

4.1 Scheduled Resurfacing

¹ Table 3 within the [Complete Streets Evaluation Methodology Guidance](#) includes pedestrian and bicycle facilities and other roadway improvements that can accommodate those users based upon roadway configuration, operational speeds, demand level, and vehicle volumes.

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 A pedestrian need is identified through an adopted plan, sufficient deck space will be made available on the replacement bridge for future construction of sidewalks.
 A bicycle need is identified through an adopted plan, sufficient width for bike facilities will be provided.
 A multi-use path or sidepath need is identified through an adopted plan, sufficient width for the appropriate facility will be provided on and/or below the structure.

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 Purpose and need of the proposed facilities
 Current or anticipated land use context of the project area
 Traffic count data (current and forecasted through design year)
 Design and operational speed
 Safety and cCrash history
 Topographic and geometric features of the roadway
 SafetyCost and schedule impacts

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Each year, a county-level resurfacing schedule is developed within each NCDOT Division. NCDOT Division staff will meet with local agencies to review the scheduled roadways and identify locations to evaluate Complete Streets improvements. These may include striping, markings and associated signage.

The following process will be followed to review resurfacing projects for complete street improvements:

- The Operations Program Management Unit will coordinate with the Integrated Mobility Division to identify planned facilities within the project limits suitable for implementation in conjunction with maintenance activities.
- Identified locations for Complete Streets improvements will be noted on a resurfacing list distributed to each unit of local government.
- The local government concurrence with recommended Complete Streets improvements will be provided to the local NCDOT Division in writing.
- Completed improvements will be incorporated into the Pedestrian and Bicycle Infrastructure Network (PBIN) and ATLAS upon completion.

4.2 Addition of Rumble Strips/Stripes

Rumble strips/stripes are recognized as a safety countermeasure to reduce lane departure motor vehicle crashes. Rumble strips/stripes, raised traffic bars, asphalt or concrete dikes, reflectors and other such surface alterations where installed on roadways without full access control will be placed in a manner as not to present hazards to bicyclists or interfere with existing on-road bicycle facilities.

Rumble strips/stripes will not be extended across the shoulder of the roadway or other areas intended for bicycle travel. For shoulders suitable for bicycle use, refer to the authoritative design references outlined in Section 8 of this Guide. The Mobility & Safety Division in coordination with the Integrated Mobility Division will evaluate situations on a case by case basis where rumble strips/stripes recommended for safety may conflict with bicycle travel.

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5. Work Zone Accommodations

The continuity of existing bicycle and pedestrian facilities will be maintained during construction and maintenance activities. During the construction phase of a roadway project, NCDOT's [Guidelines for the Level of Pedestrian Accommodation in Work Zones](#) will be followed.

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6. Policy References

6.1 Eliminated Policies

The following policy documents are superseded by the Complete Streets Policy (2019):

- *Complete Streets Policy* (2009) and *Complete Streets Planning and Design Guidelines* (2012)
- *Bicycle Policy* (2009, update)

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- *Pedestrian Policy Guidelines* (2001)
- *Administrative Action to Include Local Adopted Greenway Plans in the NCDOT Highway Planning Process* (1994)

6.2 Related Policies

[The NCDOT Roadway Design Manual \(RDM\) includes policies for bicycle and pedestrian facilities in addition to design specifications.](#) The following policy documents include elements related to Complete Streets implementation:

- *Traditional Neighborhood Development Manual* (2000).[_](#)
- *Bridge Policy* (2000).[_](#)
- *Policy on Street and Driveway Access to North Carolina Highways* (2003).[_](#)
- *Exceptions to Maintenance Responsibilities on State Highway System Streets in Municipalities* (2003).[_](#)
- *Guidelines for Inclusion of Greenway Accommodation Underneath a Bridge as Part of a NCDOT Project* (2015).[_](#)
- *Subdivision Roads: Minimum Construction Standards* (2016).[_](#)

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7. Cost Share

7.1 Complete Street Cost Share

The table below illustrates the funding responsibilities for Complete Streets incorporating bicycle and pedestrian and public transportation facilities.

Complete Street Cost Share			
Facility Type	In Plan <u>and</u> <u>Need Identified</u> <u>Through</u> <u>Evaluation</u> <u>Process</u>	Not in Plan, but Need Identified	Betterment
Pedestrian Facility	NCDOT pays full	Cost Share	Local
On Road Bicycle Facility	NCDOT pays full	NCDOT pays full	Local
<u>Shared-use Path/Sidepath</u>	<u>NCDOT pays full</u>	<u>Cost Share</u>	<u>Local</u>
<u>Separated Bicycle Facility</u>	NCDOT pays full	Cost Share	Local
Greenway Crossing	NCDOT pays full	Cost Share	Local
Transit Facilities*	NCDOT pays full	Cost Share	Local

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NCDOT will pay the full cost of bicycle and pedestrian enhancements when in a qualifying Plan – either directly or by reference as described in Section 1.1 – and the need for the enhancement is identified through the Complete Streets evaluation process. Facilities will be designed based on the authoritative design references outlined in Section 8 of this Guide and will be informed by the Complete Streets Evaluation Methodology Guidance. NCDOT will fully fund the cost of designing, acquiring right of way, and constructing facilities, not including elements identified as betterments as defined in Section 7.3 and those instances where the Local Government Agency (LGA) has increased its cost share participation.

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NCDOT is responsible for the full cost of bridge replacements and bridge widenings, including approved pedestrian and bicycle facilities on the structure. Bridges will not be included in the total project construction cost for cost-sharing purposes.

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7.2 Cost Share Formula

Bicycle and pedestrian facilities incidental to a roadway project where a need has been identified through the project scoping process but not identified in an adopted plan may be included in the project. Inclusion of these incidental facilities requires the local jurisdiction to share the incremental cost of constructing the identified improvements, based on the population thresholds below.

Cost Share Formula		
Jurisdiction Population*	Cost Participation	
	NCDOT	Local
> 100,000	80%	20%
50,000 to 100,000	85%	15%
10,000 to 50,000	90%	10%

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< 10,000	95%	5%
*For counties, the non-municipal county population, OSBM		

NCDOT will estimate the incremental cost of proposed improvements. The percentage of the total cost share for these improvements will be set according to the population of the jurisdiction in the most recent [annual certified estimate of population](#) as determined by the state demographer, and executed through a local agreement.

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7.3 Betterment

A roadway project betterment is defined as:

- A requested bicycle, pedestrian or public transportation improvement that exceeds the recommendations appearing in an adopted plan and/or exceeds the needs identified through the project development process; or
- Aesthetic materials and treatments, if this cost is determined to exceed the cost of standard construction materials; or
- Landscaping in excess of standard treatments as defined by NCDOT [Roadside Aesthetics Policy](#); or
- Lighting in excess of standard treatments as defined by NCDOT lighting policy.

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The additional costs associated with inclusion of these elements in a roadway project are the responsibility of the local jurisdiction, executed through a local agreement.

7.4 Maintenance

A local maintenance agreement will be executed within the timeframe identified in the PDN, for all separated bicycle and pedestrian improvements (e.g., sidewalk or shared-use path) inside or outside a municipal boundary. In the event an agreement cannot be reached, the next highest non-separated facility type will be evaluated for inclusion in the project. Exceptions may be made on a case-by-case basis and NCDOT may agree to maintain separated facilities when a maintenance agreement is not in place in unique project areas of high pedestrian/bicycle demand or high risk related to crossing distance or other conditions.

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8. Design Guidance

The NCDOT **Roadway Design Manual** will serve as the authoritative reference for Complete Streets design. Cross-sections from the Manual will be used in each stage of project planning, prioritization and development.

American Association of State Highway Transportation Officials (**AASHTO**) guides will serve as authoritative references for street design and will be used in coordination with the NCDOT Roadway Design Manual.

National Association of City Transportation Officials (**NACTO**) guides will serve as supplemental references for street design and will be used in coordination with the NCDOT Roadway Design Manual and AASHTO guides, including—but not limited to—guidance on bikeways, transit, intersections, and

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[urban street design](#).

The Federal Highway Administration (**FHWA**) provides supplemental guidance on selecting appropriate bicycle and pedestrian facilities. These include guides on countermeasures, bikeways, raised medians and other facilities.

9. Administration of the Policy

The Complete Streets Core Technical Team (CTT) will meet quarterly to oversee the implementation of Complete Streets. The primary role of the CTT will be to review and maintain the Implementation Guide, recommend updates and process improvements and establish performance metrics for implementation. The CTT will direct the implementation of recommendations contained within the NCDOT Complete Streets 2.0 Recommendations document.

The CTT is comprised of representatives of the following units:

- ADA/Title VI Office
- Integrated Mobility Division
- Chief Deputy Secretary's Office
- Division of Highways
- Environmental Policy Unit
- Mobility & Safety
- Planning & Programming
- Rail Division
- Roadway Design Unit
- Technical Services
- Transportation Planning Division

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NCDOT Complete Streets Policy – Frequently Asked Questions (FAQs)

General

Question: What projects are subject to [the Complete Streets Policy](#)?

- [The Complete Streets Policy requires NCDOT planners and designers to consider and incorporate multimodal facilities in the design and improvement of all appropriate transportation projects in North Carolina.](#)

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Question: What types of projects are not subject to the Complete Streets Project Evaluation Methodology process as described in the Implementation Guide?

- [The Complete Streets Project Evaluation Methodology does not apply to the project types listed below. Many of these project types include alternative review processes for which to address Complete Streets elements:](#)
 - Independent bike/pedestrian projects which are subject to STI legislation (EB STIP Projects);
 - Emergency repairs;
 - Interstate projects where Y-line roadways/facilities are **not** modified;
 - Safety projects (such as at-grade rail crossing improvements, Spot Safety and Mobility projects, and High Impact/Low Cost Program projects);
 - Maintenance and Highway Maintenance Improvement Program (HMIP) projects (excluding preservation or resurfacing projects that allow for the marking of shoulders as bicycle accommodations). Consult the forthcoming *NCDOT Complete Streets Resurfacing and Maintenance Activities Implementation Guidance* for direction on this specific alternative evaluation process;
 - Metropolitan Planning Organization (MPO) or Rural Planning Organization (RPO) funded projects, though they are required to meet NCDOT design criteria and may follow the Complete Streets Project Evaluation Methodology or an alternative methodology that is equal or greater to determine need and select the appropriate facility(ies).

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Question: How will the Complete Street cost share impact roadway projects currently in the STIP?

- Projects that have not yet completed a final environmental document will fully comply with the updated policy, including the revised cost share provisions.

If a project has a completed final environmental document but the local agreement has not been executed, additional complete streets elements will be considered if the additional elements do not require a change to the environmental document and the requested elements fit within the approved typical section of the project.

If a project has a completed final environmental document but the local agreement has not been executed, the cost share will be calculated based on the Complete Streets Guidance document.

If a project has a completed final environmental document and the local agreement has been executed, no changes will be considered, and the cost share provisions agreed to in the local agreement will be honored.

Question: Does the new Complete Streets Policy apply only to projects submitted for P6.0 and not P5.0?

NCDOT Complete Streets Policy – Frequently Asked Questions (FAQs)

- The Complete Streets Policy applies to all projects that do not have a finalized environmental document. See response to the second question above.

Planning

Question: What qualifies as an acceptable transportation plan?

- The mutually adopted Comprehensive Transportation Plan (CTP) will be considered the controlling plan for the identification of non-motorized facilities to be evaluated as part of a roadway project. The CTP customarily incorporates recommendations from other locally adopted plans. Other locally adopted plans not incorporated into a CTP will be considered so long as 1) the planned facility addresses a transportation need and 2) the planned facility meets the design guidance standards referenced in the *Implementation Guide*.

Question: If a new state, regional or local plan is adopted during the project development phase prior to completion of the Environmental document, will this plan serve as an eligible adopted plan for purposes of implementing the Complete Streets Policy?

- An eligible plan adopted prior to the finalization of the environmental document can be referenced for policy compliance. For any plan that is anticipated to be adopted during this phase, ongoing coordination is expected between the local/state/regional entity administering development of the plan and NCDOT's Project Development units.

Question: If a plan only identifies a pedestrian and/or bicycle need (such as with many CTPs) for a specific roadway corridor, will the Complete Streets cost share formula apply?

- When a need along a specific roadway corridor is identified on an adopted plan, this will serve to meet the plan requirement guiding cost share application. The *Complete Streets Project Evaluation Methodology* includes resources to supplement the transportation need determination. These supplementary resources include a demand estimation tool, observed demand, transit ridership, crash history, and forecasted land use. The determination of the facility constructed will be based on prevailing authoritative design guidance – NCDOT Roadway Design, AASHTO Guides and other supporting resources—in consideration of roadway conditions, anticipated use, and project constraints.

Question: When other locally adopted plans are considered outside of the CTP, what does the phrase “addresses a transportation need” indicate (Section 2.1 in the *Implementation Guide*)?

- This is defined by the planned facility recommendations connecting to an existing or planned bicycle or pedestrian network. Planned facilities that do not connect to a bicycle or pedestrian transportation network must provide justification for a stand-alone facility such as providing local connections to schools, parks, transit facilities, or a well-defined and documented key destinations as defined by the authoritative references for Complete Streets design.

Question: Does NCDOT delineate between facilities designed to serve a transportation need versus facilities designed for a recreational purpose?

- As indicated in the *Implementation Guide* and defined in the preceding question, planned facilities must address a transportation need. Multimodal facilities incorporated as part of a highway project do not have a specifically defined purpose and need differentiating from the planned or programmed highway project. All facilities constructed as part of a highway

NCDOT Complete Streets Policy – Frequently Asked Questions (FAQs)

project aim to serve a transportation need even if those facilities provide connections for multiple travel purposes.

Exceptions

Question: If exceptions to the Complete Streets Policy are not approved by the Complete Streets Review Team (Section 2.4 of the *Implementation Guide*), will this necessitate the re-scoring of projects submitted during the Strategic Prioritization process?

- NCDOT has a policy that covers the possible re-prioritization of committed STIP projects that have significant changes. This policy screens projects with major cost or scope changes to determine if re-scoring the project is appropriate. A project will only be re-scored when significant scope changes result in the project transforming into a fundamentally different project.

Question: Will all Complete Streets Project Sheets be reviewed for exceptions to the Complete Streets Policy?

- All projects submitted through NCDOT’s Strategic Prioritization Process will be required to attach a Complete Streets Project Sheet. Only projects selected for funding and listed on the draft STIP will be reviewed for Complete Streets elements and exceptions to the policy.

Question: Does the second exception in the Policy, “Areas in which the population & employment densities or level of transit service does not justify the production of multimodal facilities”, mean that NCDOT will not build / maintain facilities in an area where densities are low? Is there a density requirement – how low is too low?

- A facility must serve a transportation purpose and address a transportation need to be constructed by NCDOT. Transportation need may be demonstrated through review of existing population, employment, and zero-vehicle households (as described in the *Complete Streets Evaluation Project Methodology* and incorporated in the demand estimation tool), counts (bicycle, pedestrian, and transit), observed demand, and anticipated land use that is confirmed with the Local Government Agency (LGA) or MPO/RPO, among other sources. Locations that have no or intermittent non-motorized activity are likely to receive consideration for shared roadways or no facilities, except for project areas that contain state or region-wide project facilities like those identified in the Great Trails State Plan. All exceptions are subject to approval by the Complete Streets Review Team.

Question: Are rural areas and small rural towns considered for complete streets elements? What about rural areas with popular bicycle-and-pedestrian-focused destinations?

- Yes, all projects subject to this policy will be evaluated for inclusion of complete street elements, including rural areas. The process detailed in the *Complete Streets Project Evaluation Methodology* begins with a review of the CTP and locally adopted plans to identify need and includes specific guidance for areas with estimated intermittent and low bicycle and pedestrian demand (likely rural and incorporated rural town areas). This process consists of consultation with the relevant LGA, MPO, or RPO on anticipated land use, a gap analysis to support network

NCDOT Complete Streets Policy – Frequently Asked Questions (FAQs)

connectivity, observed demand, and proximity to state or region-wide facilities. The process for facility selection, assessing and reducing impacts, and securing a maintenance agreement (if applicable) applies to all eligible projects.

Question: What is the preferred method for documenting exceptions on the Complete Streets Project Sheet?

- Exceptions for each mode should be documented within the relevant section – pedestrian facilities, bicycle facilities, public transit improvements. In the Exceptions section of the Project Sheet, language should be added if no facilities for pedestrians, bicycles or public transportation will be evaluated and/or if only certain modes will not be evaluated.

Question: When the municipality wishes to submit an exception, who is authorized to do so for the municipality?

- Exceptions submitted by the municipality, must be done so in the form of an adopted letter from the highest-ranking local official. Some examples include: Mayor, City Manager, County Chairman, County Manager, etc. These exceptions will be reviewed by the Complete Streets Review Team. The exception letter may be attached to the Complete Streets Project Sheet.

Question: The Complete Streets Project Sheet indicates that pedestrian and bicycle facilities as part of a highway project may be exempt if the location is greater than one mile from any existing or planned pedestrian facility, residential or commercial land use, school or public transit stop. Does this apply to state or region-wide projects like the Mountains to Sea Trail, East Coast Greenway, Carolina Thread Trail, Piedmont Legacy Trails, and the Great Trails State Plan?

- No. The focus of statewide planning initiatives is on shared-use paths that can serve transportation purposes, providing connections between where people live, work, and play. Shared-use paths are referred to as trails, greenways, multi-use paths, rail-trails, and in the case of trails along roadways, side paths. If multimodal facilities are identified that will support the connection of these planned state or region-wide initiatives and fall within the right-of-way of a NCDOT highway project, those planned facilities shall be included as part of the highway project under the Complete Streets Policy.

Project Development

Question: A local bicycle plan calls for bike lanes and the locality requests a multi-use path on both sides of the road. Are both multi-use paths paid by NCDOT or is there a cost share portion?

- The Equal or Better Performance of Facility stipulation in the *Implementation Guide* allows for a locality to request a different facility type if an alternative facility is viewed as more appropriate than what is identified in the local plan. NCDOT will review an alternative facility(ies) to the bicycle and/or pedestrian facility type proposed in the adopted plan based upon the evaluations and decisions reached within the *Complete Streets Project Evaluation Methodology* or upon the written request of the local representatives to the Project Engineer. The Project Engineer will document the evaluation of the alternative facility(ies) and consult with the Complete Streets Program Administrator for additional guidance as needed. The Complete Streets Review Team and the Project Engineer will evaluate and provide a decision for this type of request. Otherwise, anything beyond what is recommended from the *Complete Streets Project Evaluation Methodology* would be viewed as a betterment, with the locality fully responsible for funding the extra width needed for the multi-use paths.

Resurfacing and Maintenance Activities

Question: How often will resurfacing lists be submitted to impacted local governments?

- Annually, a five-year resurfacing list will be distributed to each local government where a resurfacing is scheduled or anticipated over the next five-year period. The list will identify locations where planned facilities with complete street elements align with resurfacing projects.
- Link: [HMIP Plans](#)
- The forthcoming *NCDOT Complete Streets Resurfacing and Maintenance Activities Implementation Guidance* provides information on the integration of the Complete Streets Policy and maintenance activities.

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Question: Will there be opportunities for the implementation of road diets with resurfacing projects?

- Due to the potential impact of the elimination of travel lanes on an area’s overall transportation system, road diets require a greater degree of evaluation. For this reason, road diets are commonly viewed as an individual roadway improvement project that may be beyond the scope of standard roadway resurfacing. Local governments are encouraged to coordinate with their local Highway Division and the Integrated Mobility Division concerning opportunities to incorporate road diet design in resurfacing projects, particularly focusing on projects scheduled in the later years of the Highway Maintenance Improvement Program (HMIP).
- See the forthcoming *NCDOT Complete Streets Resurfacing and Maintenance Activities Implementation Guidance* and the *NCDOT Lane Reallocation Guidance* for additional information on opportunities to include complete streets elements through resurfacing and road diets.

Question: Will improvements outside a municipal boundary and within NCDOT right-of-way be subject to a local maintenance agreement?

- Except in special circumstances, NCDOT will not construct separated facilities without a maintenance agreement. Separated facilities are those where NCDOT maintenance vehicles are unable to mount the vertical delineation between the travel lane and the pedestrian and/or bicycle facility. Additionally, any vertical elements would have to meet breakaway crash worthiness and approvals from the NCDOT Signing and Delineation Unit.
- NCDOT will maintain **non-separated** bicycle and pedestrian facilities or infrastructure that accommodates those users within the roadway at locations outside municipal limits where a county maintenance agreement has not been executed. Examples of non-separated complete streets elements may include bicycle lanes, buffered bicycle lanes, and paved shoulders.

Question: Do facilities have to be completely within NCDOT right of way in order to be maintained by NCDOT? What if the plan calls for a multi-use path and parts of it are built in an easement?

- Except in special circumstances, NCDOT will not construct separated facilities without a maintenance agreement. Separated facilities are those where NCDOT maintenance vehicles are unable to mount the vertical delineation between the travel lane and the pedestrian and/or bicycle facility. NCDOT will only maintain facilities within the right of way. Where there is an exception to maintain a facility, NCDOT will only maintain a facility within the right of way.

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Work Zone Accommodations

Related Policies

Question: The 2012 Complete Streets Planning and Design Guidelines have been superseded and eliminated. When will new complete streets planning and design guidelines be released?

- Complete Streets design will be incorporated into the update of the NCDOT Roadway Design Manual, which along with the AASHTO guides will serve as NCDOT’s authoritative design references. There will not be a new version of the eliminated Complete Streets Planning and Design Guidelines.

Cost Share

Question: Will NCDOT fully fund and construct the specific type of facility that is recommended in a state, regional or locally adopted transportation plan?

- Project development that begins with CTPs and locally adopted plans allows for continued project and facility refinement. NCDOT will review the facility type proposed in the adopted plan and evaluate the project as described in the *Complete Streets Project Evaluation Methodology*. NCDOT will fully fund the selected facility as part of a roadway project if it is specifically identified in an adopted plan (see Planning section above for details on adopted plans), there is a transportation need, a maintenance agreement is reached (for separated facilities), and impacts are minimized. In addition, in order for NCDOT to incorporate and fund a bicycle, pedestrian and/or public transportation facility in roadway and bridge projects, the facility recommendations identified in state, regional or locally adopted plans must be consistent with design guidance outlined in NCDOT’s Roadway Design Manual and American Association of State Highway Transportation Officials (AASHTO) guides. Any portion of a requested/planned bicycle, pedestrian and/or public transportation improvement that exceeds NCDOT’s authoritative references for street design will be viewed as a betterment.

The project development process may uncover certain environmental, schedule, cost, and other impacts that influence final project design. Final complete streets design will be guided by identified need, plan recommendation, minimizing impacts, and prevailing design guidance. These considerations are described in the Step 4 and Step 5 of the *Complete Streets Project Evaluation Methodology*.

Question: Within the Cost Share table in Section 7.1 of the *Implementation Guide*, what does “Not in plan, but need identified” mean?

- This section concerns if a need for bicycle, pedestrian and/or public transportation facilities is identified during the project development scoping process. This information may come from the Integrated Mobility Division scoping reports and/or other state/local agencies when providing project comments.

Question: Is there a constraint to how much NCDOT will pay for Complete Streets elements?

- Through the Project Delivery Network (PDN), NCDOT Project Engineers must consider all project impacts and assess options to reduce impacts. The *Complete Streets Project Evaluation Methodology* details how the Project Engineer evaluates impacts of integrating of complete streets elements, including cost impacts. Projects that exceed a 10% increase of overall project costs for integrating Complete Streets components or result in significant schedule impacts may

NCDOT Complete Streets Policy – Frequently Asked Questions (FAQs)

warrant greater scrutiny (higher costs are anticipated for bridge, urban, and constrained project areas). Greater scrutiny may result in continuation with the preferred selected project, selection of a different facility with lower impacts, increased cost share, or an alternative inclusion plan. An analysis of historical NCDOT project let lists has shown that integrating Complete Streets components has increased overall project costs on average between from 2% to 10% for most projects.

Question: What is meant by the statement “NCDOT is responsible for the full cost of bridges” in Section 7.1 of the *Implementation Guide*?

- NCDOT will fully fund the cost of bridges including approved bicycle and pedestrian facilities (or the provision of space for future construction of said facilities) where identified in a state, regional or local plan and/or where a bicycle/pedestrian need has been determined during the scoping and project development process.

Question: In the event that an improvement is identified in an adopted plan and it is outside of municipal limits, would the county be considered the government jurisdiction under the Cost Share table in Section 7.4 of the *Implementation Guide*?

- Yes, and the county population is defined as the population within unincorporated areas of the county only.

Question: If a roadway project traverses multiple jurisdictions where some jurisdictions have an adopted plan, and some do not, how will cost share be handled?

- Cost share will be applied to each jurisdiction individually as determined by the presence of an adopted plan. Further evaluation by the project manager and coordination with the Complete Streets Review Team will be necessary for projects spanning multiple jurisdictions.

Question: If a road improvement project has been delayed and the local government did not originally participate in sidewalk match requirements due to cost barriers, can the project be revisited to apply updated cost share percentages?

- Projects that have not yet completed a final environmental document will fully comply with the updated policy, including the revised cost share provisions. See response to the second question in the General section.

Question: Will NCDOT project funding include right-of-way acquisition necessary for funding complete streets elements?

- NCDOT will fully fund the cost of right-of-way acquisition for the selected complete streets elements if the project is an eligible plan, meets the design criteria defined in the *Implementation Guide*, and satisfies the metrics identified in the *Complete Streets Project Evaluation Methodology*. These metrics include transportation need determination, facility selection, assessing impacts, and minimizing impacts (i.e. cost, schedule, and environmental). If the project is not identified in a plan, but a need for bicycle, pedestrian and/or public transportation facilities is determined during the project development scoping process, then cost share requirements will apply. If the project or portion of the project is identified as a betterment, then the local entity will be responsible for the full cost.

Question: What is the difference between multi-use paths and side paths and how is cost-share applied?

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A pedestrian need is identified through an adopted plan or a transportation need determination, sufficient deck space will be made available on the replacement bridge for future construction of sidewalks.¶
A bicycle need is identified through an adopted plan or a transportation need determination, sufficient width for bike facilities will be provided.¶
A multi-use path or sidepath need is identified through an adopted plan or a transportation need determination, sufficient width for the appropriate facility will be provided on and/or below the structure.¶

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NCDOT Complete Streets Policy – Frequently Asked Questions (FAQs)

- The biggest distinction between a multi-use path (also referred to as a shared-use path or SUP) and a side path is locational - They are otherwise identical in function and use. A side path is a multi-use path constructed along but separated from a roadway, within the road right of way. A multi-use path can be located anywhere and can function independent of a roadway improvement. The Complete Streets policy is intended to capture improvements within the road right of way, including side paths and multi-use path crossings.

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Question: When the *Implementation Guide* refers to landscaping and lighting betterments, does this refer only to landscaping and lighting betterments that are part of Complete Streets projects, or to all landscaping and lighting betterments?

- The *Implementation Guide* only refers to betterments associated with a complete streets project.

Design Guidance

Question: Will NCDOT consider improvements for rideshare, connected/autonomous, and electric vehicles as a component of Complete Streets?

- The Policy states that evolving transportation technology options are an integral part of the State’s transportation vision. The consideration of new transportation technologies will be guided by the availability of appropriate design guidance and standards. As stated in the Policy, “Planning, implementation and design guidelines will be updated periodically to address changes in Departmental policies and procedures and to reflect new transportation technologies and innovations.”

Question: How will NCDOT determine which side(s) of the road will receive a complete streets element like a sidewalk, bicycle lane, or shared-use path?

- The *Complete Streets Project Evaluation Methodology* includes a Facility Selection and Accommodation Matrix that provides NCDOT Project Managers with guidance for selecting the preferred and secondary facility options—if unable to accommodate the preferred facility(ies)—given the roadway’s operating speed, vehicle volumes, lane configuration, and anticipated bicycle and pedestrian demand. For pedestrians, the guidance indicates the preferred facilities of sidewalk on one side in Low demand areas (e.g. rural areas), one or both sides in Medium demand areas (e.g. suburban areas), and both sides in High demand areas (e.g. urban and urban core areas). Sidewalk placement is dependent on the distribution of development along the roadway, and for balanced development, sidewalks should be considered on both sides of the roadway. Where land development is not consistent along both sides of the roadway and there is potential for pedestrian and/or bicycle crossings, consider including sidewalks on both sides of the roadway. Project Managers will review local plans, evaluate the network, review site constraints, and exercise engineering judgement when selecting the location of complete streets elements. In situations where demand is present or anticipated for both pedestrians and bicyclists, the Project Manager should follow the Facility Selection and Accommodation Matrix to accommodate both user types.

Administration

NCDOT Complete Streets Policy – Frequently Asked Questions (FAQs)

Question: How are NCDOT stormwater staff involved with complete streets and are there opportunities to incorporate innovative stormwater management within complete streets?

- NCDOT's Hydraulics Unit will be consulted regarding collaborative approaches to incorporating complete streets elements in roadway projects as part of Stage 2 of the PDN.

Question: Is there an NCDOT, local, MPO, county, etc. staff group which will analyze this policy and decide how to address questions and policy gaps?

- A Technical Team comprised of representatives outlined in the *Implementation Guide* will continually meet to respond to external and internal policy related questions. The role of this group is to review and maintain the *Implementation Guide*, recommend updates and process improvements, and establish performance metrics for implementation. The supporting resources such as the *Complete Streets Project Evaluation Methodology* and the forthcoming *Complete Streets Resurfacing and Maintenance Activities Implementation Guidance* were developed in consultation with various NCDOT units, Divisions, and external stakeholders.