

CRCOG Complete Streets Policy: DRAFT Best Practices Report

August 17, 2018

This best practices report has been prepared by Toole Design Group (TDG) to inform the preparation of a complete streets policy for the Capitol Region Council of Governments (CRCOG). The report covers ten themes that CRCOG identified as important or particularly relevant to the region. TDG reviewed highly-regarded and effective complete streets policies and supporting documents from around the country and distilled pertinent policy language into a concise overview of best practices for each theme. An overview of all policies reviewed is provided in Table 1.

The Capitol Region of Connecticut is comprised of 38 diverse communities covering over 1,000 square miles and a population base of nearly one million people. CRCOG is the largest regional council in Connecticut in both physical size and population. Within the region, municipalities range in population from over 120,000 people in Hartford to well under 5,000 people in some of the region's smaller towns. A central focus of the complete streets policy for CRCOG will be acknowledgement of the unique challenge of crafting a policy that accommodates a wide range of community contexts, all while working toward a unified goal of advancing connectivity for all people across the region.

Summary of Policy Review

TDG looked to leading regional and municipal complete streets policies, in addition to supporting documents such as guides and plans, to develop an overview of policy best practices for each of the ten themes identified by CRCOG. The themes covered in the best practices report include:

Theme 1: Economic Development

Theme 2: Public Health

Theme 3: Equity

Theme 4: Modal Hierarchy

Theme 5: Integrating Policy with Network Planning

Theme 6: Land Use and Context Sensitivity

Theme 7: Promoting Complete Streets

Theme 8: Interjurisdictional Guidance

Theme 9: Funding Programs

Theme 10: Implementation

The results of this best practices report will eventually feed into the preparation of the region's first Complete Streets policy. There are ten nationally-recognized elements of a complete streets policy, as developed by the National Complete Streets Coalition (NCSC). Specific policy language and guidance extracted from the policy review is organized by these ten elements, with the intent of clarifying how the best practices explored here could play a direct role CRCOG's approach to their complete streets policy. The ten elements include:

1. **Vision and intent:** Includes an equitable vision for how and why the community wants to complete its streets. Specifies need to create complete, connected, network and specifies at least four modes, two of which must be biking or walking.
2. **Diverse users:** Benefits all users equitably, particularly vulnerable users and the most underinvested and underserved communities.
3. **Commitment in all projects and phases:** Applies to new, retrofit/reconstruction, maintenance, and ongoing projects.
4. **Clear, accountable expectations:** Makes any exceptions specific and sets a clear procedure that requires high-level approval and public notice prior to exceptions being granted.
5. **Jurisdiction:** Requires interagency coordination between government departments and partner agencies on Complete Streets.
6. **Design:** Directs the use of the latest and best design criteria and guidelines and sets a time frame for their implementation.
7. **Land use and context sensitivity:** Considers the surrounding community's current and expected land use and transportation needs.
8. **Performance measures:** Establishes performance standards that are specific, equitable, and available to the public.
9. **Project selection criteria:** Provides specific criteria to encourage funding prioritization for Complete Streets implementation.
10. **Implementation steps:** Includes specific next steps for implementation of the policy.

Table 1: Complete Streets Policy Review Summary Table

Jurisdiction	Pop	Policy Level		Themes Covered									
		City	Regional or State	Econ Dev	Public Health	Equity	Modal Hierarchy	Policy & Network Planning	Context & Design	Promoting Complete Streets	Inter-jurisdictional Guidance	Funding Streams	Implementation
Binghamton Metropolitan Transportation Study (NY)	250,000		X	X	X			X	X	X	X	X	X
Indianapolis MPO (IN)	1,900,000							X	X	X		X	X
Little Rock (AR)	200,000	X										X	
Los Angeles County Metro (CA)	9,600,000		X	X			X	X	X	X	X	X	X
Massachusetts Department of Transportation (MA)	6,900,000		X			X		X		X		X	
Metropolitan Government of Nashville and Davidson County (TN)	625,000		X		X	X	X	X		X	X	X	X
Minneapolis (MN)	415,000	X				X	X	X				X	X
Monterey Bay Area (CA)	760,000		X			X				X		X	X
New Orleans (LA)	390,000	X				X							X
Omaha (NE)	445,000	X		x				X	X		X		X
Palm Beach MPO (FL)	1,400,000		X				X	X		X		X	

Theme 1: Economic Development

Economic development is key component of achieving CRCOG's vision for a competitive, vibrant, and green region. Attracting and retaining a highly educated and mobile workforce by creating places where they want to live is one of the challenges identified by the *Capitol Region Plan of Conservation and Development: Vibrant. Green. Connected* (2014-14).¹

Largely considered an outcome of building complete streets, economic development is often part of the vision and intent and performance measures of a policy or plan. Over the last decade, many studies have sought to quantify complete streets' positive economic impacts, including their impacts on property values, private investment, consumer spending, local business, and individual transportation spending.^{2,3,4,5,6}

Vision and intent

Around the country, municipalities, counties, and regions have integrated economic opportunity into the vision and intent of their complete streets policies.

"The goals of this Complete Streets policy are...to create a comprehensive, integrated, and connected transportation network that supports compact, sustainable development and provides livable communities." – BMTS (Binghamton, NY)

"To create great places and enhance our quality of life, the City of Omaha will provide safe, accessible streets for all users. Complete Streets will enhance Omaha's quality of life over the long-term with a well-balanced and connected transportation system that provides for economically sound and connected development patterns, public health and safety, livability, equity, affordability, economic activity, and excellence in urban design and community character." – City of Omaha, NE

"Foster healthy, equitable, and economically vibrant communities where all residents have greater mobility choices." – Metro (Los Angeles, CA)

Diverse users

Policies seek to ensure that meeting the needs of all users of the transportation system are balanced with the transportation needs of commercial vehicles.

"Movers of commercial goods are another important user of the transportation system, as they provide significant economic benefits to Los Angeles County and enable goods, primarily by truck, to travel to and from warehouses, to local retail stores, businesses, and homes." – Metro (Los Angeles, CA)

Performance measures

Economic performance measures are suggested by the NCSC and may include metrics for access to opportunities (e.g. percentage of jobs available via 30-minute bike ride on comfortable streets), employment (e.g. permanent jobs created by projects), land value, parking utilization, and retail vibrancy (e.g. vacancy rates, number of customers by mode).⁷

Theme 2: Public Health

Injuries and deaths on the nation's roads affect hundreds of thousands each year, with a disproportionate share of vulnerable users (people walking and biking) suffering serious or fatal injuries. Safety is a significant public health issue that is inextricably linked to a complete streets approach to planning and design. Other public health benefits – including lower obesity rates, decreased risk of chronic disease, better air quality, and improved mental health – are also common desired outcomes of complete streets policies. Public health outcomes are often included as a part of the vision and intent of a policy. However, some agencies have incorporated public health criteria into project selection criteria as well, solidifying the role of public health in the effective implementation of complete streets.

Vision and intent

Safety is often a cornerstone of complete streets vision statements. However, other positive health outcomes are sometimes embedded within these opening clauses as well.

“The goals of this Complete Streets policy are...to ensure safety, ease of use, and ease of transfer between modes for all users of the transportation system.” – BMTS (Binghamton, NY)

“The Bicycle and Pedestrian Advisory Committee, Green Ribbon Report on Environmental Sustainability, the Nashville Livability Project Report, and the Healthy Nashville Leadership Council have all endorsed or recommended Complete Streets because of their mitigating impact on air pollution, greenhouse gas emissions, and public health problems such as obesity and asthma, and traffic hazards for pedestrians and bicyclists.” – Nashville-Davidson Co., TN

Diverse users / project selection criteria

According to the NCSC, alleviating disparities in health should be reflected in project selection criteria.⁸

Access Nashville 2040 used High Health Impact Areas, areas with identified health disparities, as a prioritization criterion for walking and cycling projects. Public health officials are consulted in project prioritization.

“In communities without complete sidewalk networks, transit is less viable and more expensive to implement, household transportation and health care costs are higher, pedestrian injuries and deaths are more frequent, and people who are unable to drive are socially isolated.” – Nashville-Davidson Co., TN

More information on health equity is included in Theme 3 below.

Performance measures

Public health indicators are important for jurisdictions seeking to comprehensively measure the success of their active transportation investments. Measures may include health indicators, such as obesity, asthma, cardiovascular disease, diabetes, and traffic injuries and fatalities; and those that are correlated with health outcomes, such as air pollution concentrations and active transportation mode splits. Some MPOs have used health impact assessments (HIAs).⁹

Theme 3: Equity

Increasingly, complete streets policies seek to lay a foundation for repairing decades of disinvestment in nonmotorized transportation modes, with an emphasis on broadening safe and convenient transportation options for the most vulnerable or underserved populations. Many policies identify equity in the vision and intent. However, equity can be given even more weight when it is incorporated into multiple elements of the policy, such as performance measures and project selection criteria.

Vision and intent

Equity is often built into vision and intent statements as part of the justification and critical need for complete streets.

“In an equitable transportation system, all residents share in the costs and benefits associated with transportation investments within the overall system in a way that is fair and transparent. Major infrastructure investments that serve the greater good should not unduly burden any particular person or group with environmental or economic costs.” – Nashville-Davidson Co., TN

“... According to the 2019 American Community Survey, approximately 20% of New Orleans households do not own a personal automobile.” – City of New Orleans, LA

“People experiencing poverty or language barriers, people of color, older adults, youth, people with disabilities and other groups with limited or no access to a vehicle tend to experience a disproportionately small share of benefits from transportation investments focused on motorists. Complete street design attempts to restore equity in the transportation system by improving transportation options for non-drivers and enabling greater use of the transportation system.” – Monterey Bay Area, CA

Performance measures

Equity performance measures may be outcome- or process-based. A recent study by the NCSC compiles a list of such measures, designed to identify and prioritize groups that stand to benefit most from complete streets implementation.¹⁰

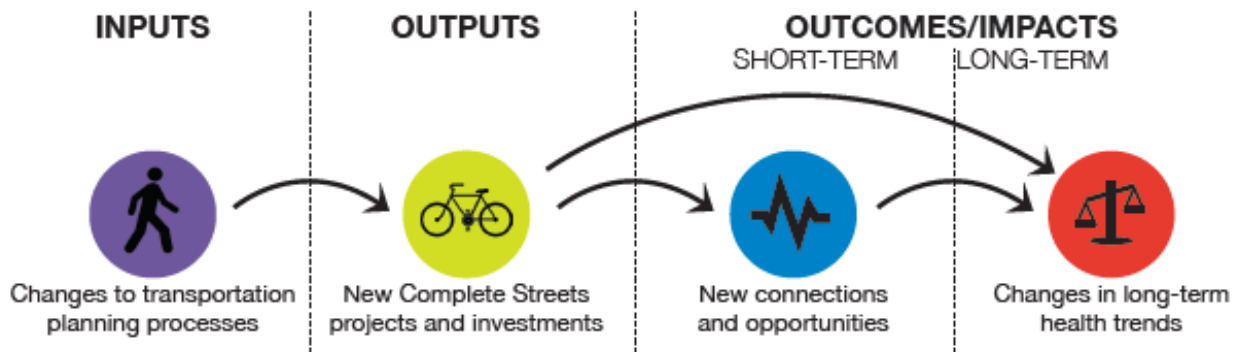


Figure 1. NCSC Performance Measures Approach

Project selection criteria

Achieving equity in complete streets means equitably distributing available funding. Numerous jurisdictions at the municipal, regional, and state level have embedded equity-based criteria into their project selection processes. In Massachusetts, for example, the state requires that one-third of all

funding allocated through their complete streets funding program be allocated to municipalities below the median household income, ensuring cities and towns with a smaller tax base and fewer planning and design resources are guaranteed a portion of the available funding.¹¹ Some MPOs give project prioritization weight to measures of disadvantaged or vulnerable community status.¹²

Theme 4: Modal Hierarchy

Over the past century, nearly all American streets and roads were designed or modified with personal motor vehicles given highest priority. Since complete streets accommodate all transportation users, achieving this balance often requires reordering this conventional hierarchy. While the majority of complete streets policies are neutral on modal priority, some give pedestrians, bicycles, transit vehicles, and shared-ride or delivery vehicles higher priority than personal motor vehicles.

Vision and intent

For some policies, establishment of a revamped modal hierarchy is central to the policy purpose.

“The overarching policy purpose is the establishment of a modal priority framework that prioritizes public right-of-way use in the following order: walking, biking or taking transit, and driving motor vehicles.” – City of Minneapolis, MN

Diverse users

Policies that contain modal hierarchies may connect modal priority to safety.

“Safety of the most vulnerable street users must be the highest priority, because they are the most at risk.” – City of Minneapolis, MN

Modal priorities place pedestrians at the top. People walk for some portion of all trips and are therefore prioritized above all other modes. Example hierarchies are shown in Table 2 and Figure 2.

Table 2: Example Modal Hierarchies

Rank	Minneapolis	Nashville	Palm Beach
1	Walking	Pedestrians	Pedestrians
2	Biking or transit	Bicyclists	Bicyclists
3	Driving	Transit Users	Transit Users
4		Moving Goods	Commercial Vehicles
5		Car Sharing	Personal Vehicles
6		Personal Car	

Land use and context sensitivity

Policies without discrete modal hierarchies may still include policy language that suggests modal prioritization based on context.

“Modal priorities may need to be established for key arterials based on context sensitive evaluations, public feedback, and a review of relevant data. Some streets may be prioritized for transit travel, others for walking, bicycling, vehicle travel, goods movement, or other types of modes.” – Metro (Los Angeles, CA)

Performance measures

Improved safety, connectivity, and convenience through the application of complete streets is best measured by real changes in an area’s mode split. Palm Beach MPO codified their commitment to implementing complete streets by establishing mode split goals for the years 2025 and 2040.

Table 3: Example Mode Split Performance Measures from Palm Beach MPO

Mode	Current Mode Split	2025 Target	2040 Target
Pedestrians	1.5%	3.5%	5%
Bicyclists	0.5%	1.5%	3%
Transit Users	1.9%	3%	5%

Project selection criteria

At the regional level, modal hierarchies can play a meaningful role in project selection.

“Applications will be scored and prioritized for inclusion in the TIP based on their ability to demonstrate how the project will improve the transportation network’s safety and convenience for all users, following the Transportation Hierarchy illustrated above and the goals, objectives, and values in the adopted LRTP.” – Palm Beach (FL) MPO

Transportation User Considerations

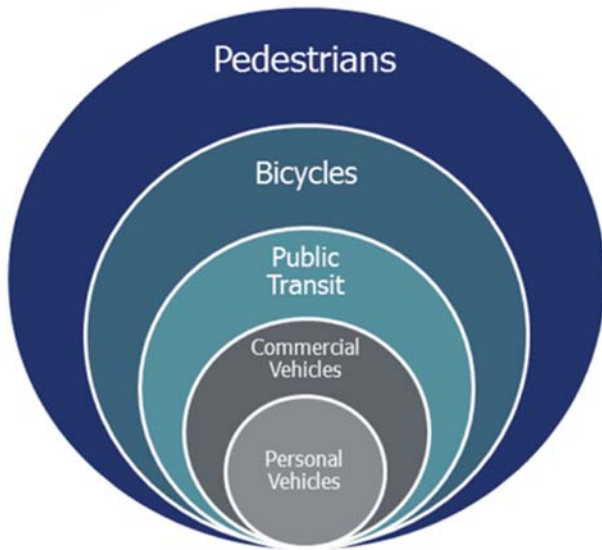


Figure 2. Modal priority graphic from the Palm Beach MPO Complete Streets Design Guidelines

Theme 5: Integrating Policy with Network Planning

Mapping a regional complete streets network informs project prioritization. While every street should accommodate all modes, maps can indicate where there are critical gaps in the network, where there is latent demand for active transportation, and where there are traditionally underserved communities. Most complete streets policies seek to jumpstart this process, identifying the need to develop or revisit existing network plans that should be updated or created to reflect the new complete streets policy.

Vision and intent

Vision statements may include language tying the policy to previously completed or future planning endeavors, aiming to connect two planning initiatives and strengthening both.

“Access Nashville 2040 and its component plans, including, but not limited to the ‘Major and Collector Street Plan,’ has been adopted by the Planning Commission as a component of the General Plan, implementing Nashville’s Complete Streets Policy by establishing the use of a system of Public Ways that supports all users...” – Nashville-Davidson Co., TN

“This [complete streets policy] approach is consistent with – and builds on – guidance that Minneapolis has already established in its transportation policy plan, Access Minneapolis, its Comprehensive Plan (the Minneapolis Plan for Sustainable Growth), and many other adopted policies.” – Minneapolis, MN

Jurisdiction

A mapped complete streets network can be a basis for proactively engaging partner jurisdictions to jumpstart critical projects, readily implementable projects, or other projects of regional significance.

“Partner with local jurisdictions and agencies to expedite implementation of high priority active transportation projects.” – Metro (Los Angeles, CA)

Design

Mapping a complete streets network influences design by informing potential project limits and facility types and dimensions. Palm Beach MPO mapped Lane Elimination Candidate roads – based on existing number of lanes and current and future traffic volume projections – and Flexible Right-of-Way Corridors – based on existing number of lanes and right-of-way width. BMTS emphasized the importance of selecting logical termini for projects to “include connections through potentially challenging locations, such as overpasses, railroad crossings, and bridges.” The agency also emphasized how the regional multi-use trail network complements the on-road network.

“Multi-use trails shall be thought of as a complementary system of off-road transportation routes primarily for bicyclists and pedestrians that serve as a necessary extension to the roadway network. Multi-use trails shall not be used to preclude on-road bicycle and pedestrian facilities, but rather to supplement a system of on-road bicycle and pedestrian facilities.” – BMTS (Binghamton, NY)

Land use and context sensitivity

Palm Beach MPO’s Complete Streets Design Guide connects complete streets design, street type, and land use and context with the help of maps. See Figure 3.

Performance measures

Jurisdictions can track progress in building out their recommended complete streets network by updating network maps and reporting on metrics such as miles of new bike infrastructure, linear feet of new pedestrian accommodations, and miles of multi-use paths.

Collecting data and measuring progress are important not only for revising and continually improving the effectiveness of the complete streets policy, but for recognizing and celebrating successes that directly result from the policy. In New Orleans, for example, the mileage and quality of bike facilities both increased significantly following the adoption of their complete streets ordinance in 2011.

Project selection criteria

Regional agencies may elect to prioritize projects within an identified network.

“Applications will be scored and prioritized for inclusion in the TIP based on their ability to demonstrate how the project will improve the transportation network’s safety and convenience for all users, following the Transportation Hierarchy illustrated above and the goals, objectives, and values in the adopted LRTP.” – Palm Beach (FL) MPO

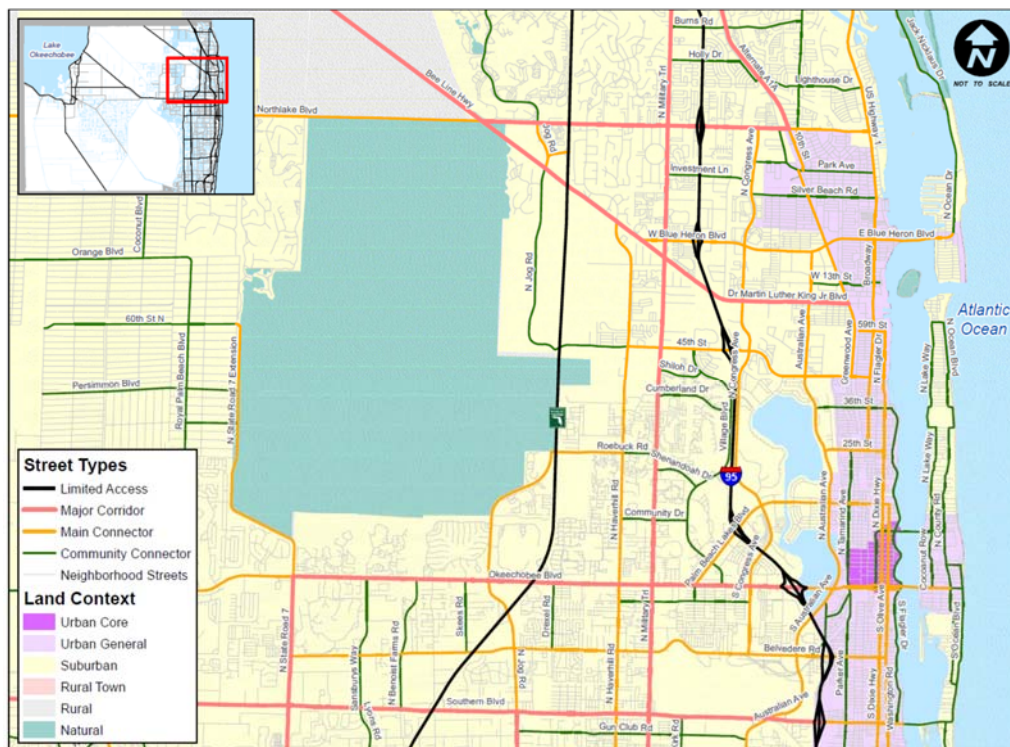


Figure 3. Palm Beach MPO Complete Streets Design Guide map showing street types and land uses. Cross-referencing the maps and typical section design guidelines allows the implementing agency to identify the appropriate complete streets elements and their dimensions.

Theme 6: Land Use and Context Sensitivity

Land use and context sensitivity is one of the NCSC's ten critical policy elements. The challenge of building context-sensitive complete streets is magnified at the regional level, where the range of contexts is likely to vary significantly more than within a single municipality.

Vision and intent

A strong commitment to context-sensitive street design can help build consensus for a new policy.

“The Policy demonstrates Metro’s ongoing commitment to...ensuring that streets form a comprehensive and integrated transportation network promoting safe and convenient travel for all users while preserving flexibility, recognizing community context, and using design guidelines and standards that support best practices.” – Metro (Los Angeles, CA)

Clear, accountable expectations

While land use and context-sensitivity are important considerations for complete streets design, it is also an important consideration for the rare cases when projects need to be excepted from complete streets requirements. The NCSC offers examples where context clearly points the way to exceptions, for example, a pedestrian mall or a street that has no current or planned transit service.

“Where the costs of acquiring right-of-way to provide separate accommodations for each mode of travel are cost-prohibitive, innovative or multi-use facilities within the existing right-of-way that accommodate both pedestrians and bicyclists may be considered, if appropriate for the roadway and its context.” – Omaha, NE

Design

Design guidelines show how different kinds of streets in different parts of a region or community can accommodate all modes. Combining text and detailed graphics, the purpose of complete streets design guidelines is to recommend the elements of a street’s typical section and the dimensions of those elements. However, streets and roads pass through varying land uses, from urban to rural. Moreover, the conventional system for defining the purpose of a street, by functional classification, largely valued streets based on their ability to serve automobile mobility and access. This system is “unsuitable for the diversity of land uses and travel characteristics throughout an urban area”.¹³

Complete Streets design guidelines provide flexibility by defining *typologies*. Each typology has recommended street design elements and dimensional ranges. For example, a major arterial in a rural residential area may have a shared use path, while a major arterial in an urban area may have sidewalks and protected bike lanes, but each provides low-stress bicycling and walking facilities.

“It is important to note that complete streets may look different for every project and road type. For example, wide lanes or paved shoulders may be sufficient in a rural area, whereas sidewalks and/or bike lanes are needed in an urban setting.” – BMTS (Binghamton, NY)

“Historical street design processes focused largely on the movement of motor vehicles, designing to its ‘functional classification’ rather than examining the street’s role within a community. By contrast, context-sensitive design recognizes that streets vary in function in separate land use contexts and that design should respond to that changing purpose.” – Palm Beach (FL) MPO

Jurisdiction

Most regional governments have limited to no land-use permitting authority, but land use regulations at the local level can have a substantial impact on complete streets. A growing number of communities are adopting form-based codes as a tool for bringing about walkable corridors. Like zoning codes, form-based codes regulate development, they but put a greater emphasis on regulating physical form than zoning, which is most centered on regulating uses and density. A greater flexibility of allowed uses may contribute to more mixing of uses, which in turn may promote trip distances conducive to walking and cycling. Form-based code also may also make a corridor or an area more attractive for multimodal travel by requiring or encouraging human-scaled urban design and placemaking elements.

In the CROCOG region, the Town of Canton's *Canton Village Districts Form-Based Design Code* is one example of how local land use regulation can contribute to progress on complete streets.¹ One of the goals of the code is to “promote and facilitate a safe and comfortable pedestrian scale environment”. The code has three major components: a regulating plan, building form standards, and urban space standards. The urban space standards have recommended street sections and dimensions, as well as recommendations for the “furniture zone” between the sidewalk and curb. An excerpt from the standards’ intent language makes clear the connection between form-based code and complete streets:

These are streets – not highways, arterials, or collectors and must be developed as such to create pedestrian-oriented places. “Walkable” streets that are comfortable, efficient, safe, and interesting.

Streets must balance the needs of all forms of traffic – auto, transit, bicycle, and pedestrian to maximize mobility and convenience for all Town residents and visitors. The character will vary depending on their location: some streets will carry a large volume of traffic while others provide a more active and intense urban pedestrian experience.

¹ <http://www.townofcantonct.org/news/?FeedID=1524>

Theme 7: Promoting Complete Streets

Regional complete street policies are more effective when complemented by the adoption of similar principles by local jurisdictions. Helping cities and towns take the first step toward implementation – by providing resources, sample policies, education, and design guidance – has been used by regional agencies across the nation to promote complete streets. One example of this is the Monterey Bay Area’s Complete Streets Guidebook, which is a step-by-step resource for developing and implementing local complete streets policies, tailored to the unique needs of the region.

While this approach removes some of the upfront work for municipalities to implement their own policies, sample policies should be written in such a way that adoption is not thoughtless; a municipality’s adoption of a complete streets policy should reflect a strong commitment. Another effective approach has been developed and employed by at least one state DOT (MassDOT), whereby cities and towns that adopt their own complete streets policy become eligible for funding that would otherwise be unavailable. In Massachusetts, this has led to over 160 of the state’s 351 municipalities to pass an approved policy.

Vision and intent

At almost every jurisdictional level, promotion of complete streets may be found in the vision and intent portion of a policy.

“The Palm Beach MPO will seek to promote Complete Streets by prioritizing the funding of Complete Street infrastructure projects, providing educational opportunities, and encouraging local jurisdictions to adopt and implement local Complete Streets policies.” – Palm Beach (FL) MPO

Jurisdiction

Aligning the goals of member jurisdictions with a regional vision is a central component of implementing complete streets across a region. Encouragement of municipal policies is a common approach, however it is difficult to quantify how effective encouragement may be without leveraging other elements of the policy, such as funding.

“BMTS will promote the complete streets concept throughout the region and, therefore, recommends that all local jurisdictions adopt a comprehensive complete streets policy.” – BMTS (Binghamton, NY)

“Adoption of this guidebook represents an agency’s commitment to incorporate complete streets into policy, project evaluation, design, implementation, training, and public involvement. Jurisdictions may also adopt a complete streets ordinance or resolution that references the Monterey Bay Area Complete Streets Guidebook.” – Monterey Bay Area, CA

Design

Promoting complete streets designs at the regional level begins with a strong staff understanding of leading multimodal transportation practices. Policies may elect to identify strategies to promote complete streets internally, understanding that MPO staff are a resource for municipalities.

“The Metropolitan Government shall encourage staff professional development and training on the latest and best practices in multimodal-transportation and green-street infrastructure by attending conferences, classes, seminars, and workshops.” – Nashville-Davidson Co., TN

“In addition, the MPO will encourage local jurisdictions to adopt a local Complete Streets Policy and actively seek to provide Complete Streets educational opportunities.” – Palm Beach (FL) MPO

Performance measures

The Palm Beach MPO Complete Streets Policy recognizes the importance of actively promoting complete streets to their municipal partners and has established performance measures to ensure this important promotional work does not fall to the wayside. Their policy identifies a target of 13 municipal policies adopted by 2025 and 20 by 2040. They have also identified metrics for providing annual workshops: Two annual workshops each year by 2025 and four annual workshops by 2040.

Recognizing the role analysis plays in design, the Monterey Bay Area Complete Streets Guidebook also points out the shortcomings of traditional traffic analysis (LOS) and offers alternative analytical approaches that better address all modes.

“Although it has the advantage of being highly standardized and widely used, traditional vehicular LOS measurement does not account for all users of a roadway nor tradeoffs between different modes...The revised version of the Highway Capacity Manual, adopted in 2010, includes methods (referred to as Multimodal LOS), for measuring the quality of travel for bicyclists and pedestrians, including comfort and sense of safety.” – Monterey Bay Area, CA

California is now phasing out LOS as a required measure of the transportation impacts of developments and capital projects and replacing it with vehicle miles traveled (VMT) and similar measures.

Project selection criteria

Linking complete streets policy adoption to funding is an effective way to encourage local jurisdictions to see the value of implementing complete streets. The model adopted in Massachusetts – whereby communities gain access to state funding by adopting complete streets policies – has proven extremely successful for advancing municipally-led complete streets projects.

Implementation steps

The Metro (Los Angeles) Complete Street Reference Guide chaperones local jurisdictions through the process of conceptualizing and constructing complete streets policies, complete with discussions about the tradeoffs between competing road users, specifics on available funding, and an extensive list of resources for additional design and research guidance.¹⁴

MPOs can promote complete streets by demonstrating public support for local projects through letters of support. Several regional planning agencies accept requests for letters of support for local projects that meet specific criteria in order to build support or momentum within the community. For example, the Des Moines Area MPO invites requests for letters of support for grant applications or other funding opportunities provided they meet specific criteria, such as inclusion in the TIP or consistency with the long-range transportation plan. MPOs may also write letters of support for local jurisdictions applying for non-MPO competitive funding. If the MPO is given a review opportunity for a local land use development application, a review letter may also comment on complete streets aspects of the project.

Theme 8: Interjurisdictional Guidance

Today, as communities large and small seek to improve multimodal transportation conditions, the importance of complete streets for state-maintained facilities is clear. Even on controlled-access facilities, complete streets may be pertinent for example where a multi-use path runs adjacent to an interstate highway enables bicycle and pedestrian travel (with several examples in the CRCOG region).

MPOs can influence complete streets implementation at the local level, not only through programming policies and procedures, but also by facilitating cross-collaboration and reducing barriers to cross collaboration. Large projects with many stakeholders may be daunting for a community to undertake. Identifying the processes, design requirements, and points of contact to eliminate some of those barriers may help communities take the first steps toward an important complete streets project.

Vision and intent

At the regional level, interjurisdictional cooperation is often baked into opening policy statements.

“The Policy is intended to achieve the following goals...facilitate multi-jurisdictional coordination and leverage partnerships and incentive programs to achieve a “complete” and integrated transportation system that serves all users.” – Metro (Los Angeles, CA)

Jurisdiction

Specific important players in the transportation system may be called out directly in the policy, ensuring transparency of process and holding various agencies accountable to participation in the policy.

“Local municipalities or NYSDOT shall coordinate their projects with adjacent municipalities to ensure consistency of facilities... Every project shall involve the local transit agency in the project development process to ensure that sufficient accommodation of transit vehicles, and access to transit facilities is provided.” – Binghamton Metropolitan Transportation Study Complete Streets Policy

“Foster partnerships with the State of Tennessee, the Nashville Area MPO, neighboring communities and counties, utility providers, private parties, the Mayor’s Bicycle & Pedestrian Advisory Committee, business and school districts to develop facilities and agreements that further the Green and Complete Streets policy” – Nashville-Davidson Co., TN

“... Metro approaches implementation of regional policies through a combination of financial investments based on policy-driven funding criteria; by providing a policy framework and guidance to local agencies; and through collaboration with local jurisdictions and regional, state, and federal partners to advance the region’s transportation agenda.” – Metro Complete Streets Policy

Design

One challenge to implementing complete streets in a multi-jurisdictional area is lack of clarity about which policies, design guides, or processes should be followed when a project has multiple stakeholders. The Metro Complete Streets Reference Guide – a companion document to their complete streets policy – seeks to remove this interjurisdictional barrier by identifying the state-level reference documents and processes required for project on state-owned roads.

Implementation steps

The Monterrey Bay Area Complete Streets Guidebook recommendations include complete streets design training and certification for local staff members, enforcement by local and state law enforcement agencies, and design guidance for local agencies. The guidebook helps local jurisdictions meet state requirements to include complete streets policies into their general (comprehensive) plans.

The policy may also identify a process for hosting collaborative meetings on a regular basis to bring relevant players to the table to enhance cross collaboration.

“The City will meet at least annually with representatives of Metro Transit, Douglas County, MAPA and NDOR to review best practices in Complete Streets implementation and evaluate cross-agency efforts.” – Omaha Complete Streets Policy

Theme 9: Funding Programs

As agencies that allocate state and federal funding, MPOs use programming policies and project prioritization criteria as tools to advance complete streets throughout their respective regions. Several successful approaches have been implemented, including requiring all MPO-funded projects to adhere to a regional complete streets policy and establishment of MPO funding programs specifically for active transportation projects. One of the primary examples is the federal Transportation Alternatives Program (TA or TAP). Without specific complete streets requirements for funded projects, however, the policy may not lead to meaningful changes.

Commitment in all projects and phases

By requiring complete streets considerations for all types of projects, the MPO can reduce the likelihood of missed opportunities.

“BMTS requires that all local projects receiving BMTS allocated federal funding adhere to this policy.” – BMTS (Binghamton, NY)

“The Palm Beach MPO Complete Streets Policy shall apply to all state and federally funded transportation projects that are included in the Palm Beach MPO’s TIP.” – Palm Beach MPO

Clear, accountable expectations

Successful policies outline a clear process for exceptions to complete streets in MPO-funded projects.

“Any exception to the Green and Complete Streets Policy, including for eligible private projects, must receive an interdepartmental staff review and approval – among the Mayor’s Director of Infrastructure, the Director of Public Works, the Director of Planning, and the Director of Metro Water Services – and be documented with publicly-available, supporting information that indicates a basis for the decision.” – Nashville-Davidson Co., TN

An MPO may also choose to identify a specific subset of funding streams that will require complete streets components to be integrated into a project receiving MPO-allocated funds.

“The recommendations and requirements within the IMPO Complete Streets Policy will apply to Surface Transportation Block Grant (STBG) and Transportation Alternatives Program (TAP) projects within the urbanized area boundary (UAB)... Projects funded under the Highway Safety Improvement Program (HSIP) and the Congestion Mitigation and Air Quality program (CMAQ) are excluded from this policy. Both funding categories award funding after considering cost/benefit analysis. Complete streets elements could affect the cost/benefit ratio by increasing the cost without a proportional increase in benefits...” – IMPO (Indianapolis, IN)

Exceptions should be rare and not the norm. Commonly excepted project types or situations include ordinary maintenance activities, some projects on controlled-access highways, and projects facing extreme topographical or natural resource constraints or excessively disproportionate costs for complete streets elements. Complete streets policies may recognize that a necessary investment in a complete streets-exempt project may warrant a greater effort to accommodate a wider range of users on a nearby corridor or project.

“Exceptions may be appropriate when...an affected roadway prohibits use by specified users (such as a limited-access highway or a pedestrian mall), in which case a greater effort shall be made to accommodate those specified users elsewhere.” – Nashville-Davidson Co., TN

The “excessive cost” contingency should be reviewed on a case by case basis, not a pre-defined percentage of overall costs. On their own, street components traditionally considered complete streets elements – like bike lanes and crosswalks – generally represent a relatively small amount of an overall project budget.¹⁵ Agencies should shy away from defining an aspirational goal or required percentage of overall project budgets for complete streets elements. Rather, a policy should encourage a comprehensive approach to street planning and design as opposed to a process of fitting in complete streets elements as requisite afterthoughts.

If the scope of a funded project is substantially changed such that it no longer meets complete streets standards, the policy language should identify a clear process for review and possible rescission of funds to protect the integrity of the process.

“After the IMPO has committed funding to a project, IMPO staff should be notified immediately of significant project scope changes.” – IMPO (Indianapolis, IN)

Performance measures

Regional policies based on MPO-allocated funds should prepare to measure their investments through the use of data collection and performance tracking.

“In addition, all relevant capital grant funding recipients shall perform evaluations of how well the streets and transportation network planned, designed, implemented, and funded by Metro are serving each category of users by collecting baseline data and collecting follow-up data after project implementation. This requirement has been incorporated into the 2015 Call for Projects cycle and will apply to all subsequent capital grant funding program cycles.” – Metro (Los Angeles, CA)

Project selection criteria

Project selection criteria can be at least two types: screening and prioritization.

A screening criterion sets a necessary condition for funding eligibility.

“MassDOT requires that the municipal Complete Streets Policy be adopted as a bylaw, ordinance or administrative policy by the municipality’s highest elected body (i.e. Mayor or Board of Selectmen) and include at least one public meeting.” – MassDOT Complete Streets Funding Program

A clear benefit of MassDOT’s strategy is its competitive nature. In an environment where funding is limited and the agency (in this case, the state) is offering significant financial support to the most qualified projects, municipalities are incentivized to not only prepare and adopt high-scoring complete streets policies, but plan and design projects that will stand out as stellar additions to the complete transportation system. The result is better, more thoughtful designs.

A prioritization criterion gives more or less points to a candidate project as part of a composite score.

“Applications will be scored and prioritized for inclusion in the TIP based on their ability to demonstrate how the project will improve the transportation network’s safety and convenience for all users, following the Transportation Hierarchy illustrated above and the goals, objectives, and values in the adopted LRTP.” – Palm Beach MPO

“An increasing share of Call for Projects funds over the last ten years has been used to promote active transportation projects. Since the 2011 Call for Projects cycle, Metro has included an impact checklist in applications to encourage applicants to document how the needs of pedestrians and bicyclists were considered in the process of planning and/or designing the proposed project. Within the Regional Surface Transportation Improvements modal category, a significant number of points have been assigned to encourage multimodal projects. With each cycle of the program, Metro continues to refine the application and process to encourage multimodal projects that benefit the region. – Metro (Los Angeles, CA)

Complete streets play a role in CROG’s LOTCIP screening and prioritization criteria, with bike-ped set-asides and projects getting extra points for being pedestrian, bicycle, and transit supportive; promoting multimodal safety near schools; incorporating traffic calming; and supporting transit-oriented development. With the Complete Streets Plan and Policy, CROG may assess opportunities to build on these LOTCIP program parameters.

Implementation steps

Few funding streams dedicated to complete streets projects are established, excepting programs like MassDOT’s complete streets funding program, which was established via the state’s 2014 Transportation Bond Bill. The program provides up to \$50,000 in technical assistance for creation of a complete streets prioritization plan and up to \$400,000 for construction of complete streets infrastructure projects.

A policy may also identify potential non-MPO funding programs to advance complete streets. The Monterey Bay Complete Streets Guidebook, for example, identifies potential funding sources, including the statewide Active Transportation Program (ATP), development impact mitigation fees, and a local transportation sales tax measure.

Funding contributions to complete streets: federal STBG and CMAQ

Complete streets policies should apply to all funding programs managed by the MPO, unless specific characteristics of the funding source suggest it should be exempt (see the IMPO example above). Different states have different policies on how some federal funding sources are administered at the regional level. The STBG program (formerly STP) has long been a principal federal funding source. With the federal FAST Act (2015), the TA program was placed under the STBG umbrella as a set-aside. The FAST Act continued the suballocation of STBG funding for urbanized areas greater than 200,000 in population. Some states, including Connecticut with LOTCIP, have federal-state funding exchange programs that provide state funding to urbanized areas in lieu of STBG (STP) funding. The latter is then prioritized for state-maintained facilities, though MPOs can still submit applications for CTDOT to study certain corridors for potential future STP-Urban-funded projects.¹⁶

Transportation for America (TfA) notes that MPOs can make full use of the program's broad flexibility for eligible projects to ensure significant program allocations go toward multimodal investments.¹⁷ TfA recommends five actions MPOs can take toward this objective:

- Set criteria to match funding with long-range policy goals
- Establish specific set-aside funding categories to advance specific regional priorities
- Blend funding programs to maximize eligibility
- Take advantage of federal flexible funding provisions to increase transportation options
- Support and oversee public-private partnerships

While some states give MPOs discretion for allocating federal CMAQ funding (for MPOs whose boundaries cover air quality nonattainment or maintenance areas), other states manage CMAQ at the statewide level as a competitive grant program. The latter is the case for the State of Connecticut. However, MPOs and Rural COGs in Connecticut play a role in the program by soliciting and prioritizing local project proposals to be submitted to CTDOT for consideration.¹⁸ Another aspect of CMAQ is that it has broad project eligibility. It can be a significant funding source for sidewalks, bike facilities, and transit stops – all advancing complete streets objectives. However, some CMAQ-funded projects advance regional alternative transportation and air quality goals but are not directly related to complete streets, e.g. transit vehicle fleet replacement. CMAQ's broad eligibility can entail a balancing act, where the administering agency may face a challenge in funding different project types and agency priorities with limited funding.¹⁹ Given those caveats, some considerations for ensuring that complete streets goals play a significant role in CMAQ include:

- The emissions reduction benefits of complete streets elements such as sidewalks, bicycle facilities, and bus stops should be fully captured in cost effectiveness calculations.
- Consider opportunities to benefit all users even if the CMAQ project type primarily focuses on one mode. For example, how can a traffic signal optimization project focused on motor vehicle flow also improve level of service for pedestrians, bicyclists, and transit users?
- An MPO with discretion over CMAQ funding may consider a set-aside within its program specific to a complete streets objective. For example, the Puget Sound Regional Council (Seattle, WA, area) sets aside 10 percent of CMAQ funds for bicycle and pedestrian priorities (as well as 10 percent of STP funds above and beyond the federally-required TA set-aside).²⁰

Funding contributions to complete streets: local sources

Federal funding commonly requires at least a 20 percent non-federal match, although there are many exceptions to this. MPOs may require a greater match for specific regional funding programs or certain projects. They may also leverage other discretionary funding to cover some or all of the match requirement. There is a tradeoff in that a local match may be a challenge relative to some local jurisdictions' budgets; at the same time, requiring local contributions may stretch available program funding further, potentially allowing the program to fund more projects. If not a requirement, local match funding could be incentivized through project selection criteria.²¹ Another benefit of local match funding is that it may strategically benefit a project's overall cost effectiveness score – for example, for CMAQ when the benefit-cost ratio counts only the federal share of the project toward the cost (denominator).²²

The Atlanta Regional Commission's (ARC) long-standing Livable Centers Initiative (LCI) program promotes walkable and bikeable communities by linking multimodal transportation investments with planning for mixed-use, mixed-income neighborhoods that allow residents to walk or bike to shopping, dining, and other activities. LCI planning and capital project grants are 80 percent federally-funded, with recipients contributing the 20 percent match.²³

In general, MPOs can advance complete streets most effectively when they make strategic use of all levels of funding. As TfA notes:

In an era of limited resources, simply funding traditional projects with traditional sources is unlikely to meet a region's needs. Innovative MPOs find creative ways to blend different federal, state and local funding sources together into a complete funding package to advance projects that will meet the region's goals.²⁴

Theme 10: Implementation

The path to complete streets implementation starts with an MPO's core plans: the LRTP and the TIP. These plans are federally required to incorporate proposed improvements for walking, bicycling, and public transportation.²⁵ A complete streets policy can augment existing core plans, influence the next plans, or both. As part of TIP development, the MPO should incorporate complete streets in its project selection criteria and set aside robust funding for active transportation projects. It then becomes the responsibility of local jurisdictions to design and build funded projects.

Commitment in all projects and phases

Complete streets considerations should be incorporated from the beginning of project development. Without addressing the needs of all modes in the purpose and need and conceptual planning stages, it may be more challenging to add the appropriate facilities during final design.

“All departments, agencies, or committees will review and modify current standards, including but not limited to internal policies, codes and ordinances, to ensure they effectively implement Green and Complete Streets principles; and such groups shall incorporate Green and Complete Streets principles into all future planning documents, manuals, design standards, checklists, decision-trees, rules, regulations, programs, and other appropriate endeavors.” – Nashville-Davidson Co., TN

“Every federally funded transportation improvement project phase should be approached as an opportunity to create safer, more accessible roadways for all users. Project phases include planning, programming, design, right-of-way acquisition, construction, construction engineering, reconstruction, and operations as well as any change to transportation facilities within street rights-of-way such as capital improvements, re-channelization projects, and major maintenance.” – IMPO (Indianapolis, IN)

Design

Developing a complete streets design manual brings agencies together to specify how streets and roads should look and operate. The process of creating the guidelines – allowing all municipal voices to be heard and concerns to be raised in a collaborative way – is a significant part of the value of the design manual. Complete streets design guides have been developed as a result of the passage of complete streets policies in communities around the nation, including Alexandria, VA; New Haven, CT; Dallas, TX; Tacoma, WA; Monterey Bay, CA; Boston, MA; Las Vegas, NV; Charlotte, NC; and Charlottesville, VA.

In the event that a new design guide is not desired, a successful policy will identify a preferred design guide or concise list of guidance documents.

“The Urban Street Design Guide is a publication of the National Association of City Transportation Officials, hereinafter referred to as “the NACTO Guide”, that has been endorsed by the United States Department of Transportation, the Tennessee Department of Transportation, and Metro Public Works, that provides design guidelines for green and complete street elements.” – Nashville-Davidson Co., TN

Performance measures

A policy may include metrics for measuring the success of the policy implementation. Other agencies have identified that metrics will be established, without specifying what they are.

“The Metropolitan Government shall measure the success of this Green and Complete Streets policy using performance measures selected by the Planning Commission, and as-derived from NashvilleNext Guiding Principles including measures around equity. The performance measures shall be annually reported to the public at-large via a widely-accessible format, such as Nashville.gov and Metro’s Open Data Portal.” – Nashville-Davidson Co., TN

Project selection criteria

At the regional level, successful complete streets policies will call for the integration of complete streets standards into the project selection process immediately upon adoption.

“Require that by January 1, 2017, cities and the County shall have an adopted Complete Streets policy, an Adopted City Council Resolution supporting Complete Streets, or an adopted General Plan consistent with the Complete Streets Act of 2008 in order to be eligible for the next cycle of Metro capital grant funding programs including the 2017 and subsequent Call for Projects...” – Metro (Los Angeles, CA)

Implementation steps

In addition to core planning, programming, and design guidance, regional complete streets policies can outline other ways to support complete streets development.

- A Complete Streets Implementation Plan with detailed steps and a timeline for completing them.
 - Examples: Metro (Los Angeles, CA); Omaha, NE
- A working group or committee to help carry out the policy.
 - See Table 4 for examples.
 - According to the NCSC, the committee is a “critical accountability measure” and “should include both external and internal stakeholders as well as representatives from advocacy groups, underinvested communities, and vulnerable populations such as people of color, older adults, children, low-income communities, non-native English speakers, those who do not own or cannot access a car, and those living with disabilities.”²⁶

Table 4. Examples of complete streets advisory committees established or recommended by policies

Policy	Committee name	Responsibilities
IMPO	Complete Streets Task Force	Reviews exceptions
Metro (L.A.)	Complete Streets Working Group	Provide technical assistance
Omaha	Complete Streets Omaha Working Group and Stakeholder Committee	Partnership of public, nonprofit, and private entities that helped fund and write the policy and oversee the subsequent design manual development

- Recommendation for periodic review and updates to the policy
 - Examples:
 - Metro (Los Angeles, CA): every five years
 - IMPO (Indianapolis, IN): every two years.

- Encourage member jurisdictions to pass complete streets policies and update standards, guidance, and programs to align with the implementation of complete streets.
 - Examples:
 - BMTS (Binghamton, NY): “Local governments are encouraged to adopt Complete Streets Policies consistent with this regional policy as well as federal and state design standards. NYSDOT should work with the BMTS to ensure consistency in polices at the state, regional and local level.”
- Provide technical assistance, resources, and training for local jurisdictions
 - Metro (Los Angeles, CA): developed sample complete streets policy and sample complete streets resolution text for local jurisdictions to use
 - Monterey Bay Area, CA: provides and recommends comprehensive complete streets resources for member jurisdictions

Example: From Policy to Project Implementation

A complete streets project in the northern Los Angeles County community of Lancaster, CA, shows how complete streets implementation can lead to transformative results for economic vitality:

“The City of Lancaster used a Complete Streets approach for the redesign of Lancaster Boulevard. The nine-block revitalization project features a center plaza for walking and community events, angled parking, enhanced crosswalks, abundant landscaping and lighting, and outdoor seating. Lancaster’s redesign revitalized this commercial core while making the street safer and more inviting for people walking and biking. The project has spurred economic investment and job growth in the area, supporting existing and new businesses and providing additional sales tax revenue for the City.”



Lancaster Boulevard before Complete Streets redesign



Lancaster Boulevard after Complete Streets redesign

Source: City of Lancaster (CA) Master Plan of Complete Streets. <http://www.cityoflanasterca.org/about-us/departments-services/development-services/planning/master-plan-of-complete-streets>

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