

# Baltimore City Draft Complete Streets Manual Scope

## March 1, 2019

### **Description**

As a part of the recent adoption of a formal Complete Streets Ordinance in the City of Baltimore, the Baltimore City Department of Transportation (BCDOT) and the selected consultants have been tasked with developing the City's Complete Streets Manual. The purpose of the Complete Streets Manual is to provide guidance to City practitioners developing roadway improvements, identify the modal hierarchy, street typologies, promote equity and transparency, and recommend options for multimodal improvements to achieve the City's long-term planning goals. The manual will also address coordination with other related guidance documents and manuals.

The following scope details the tasks to develop the Complete Streets Manual including important coordination with a variety of stakeholders and coordinating elements of complementary guidance and design documents.

#### ***1: Project Kick-off / Coordination Work Session***

The consultant and BCDOT will take part in all Complete Streets Advisory Committee meetings to solicit feedback from the represented agencies and incorporate recommendations into the work plan for the development of the Complete Streets Manual.

The consultant will facilitate a project kick-off / coordination work session with BCDOT to discuss the project scope, stakeholder coordination, and initial data needs. The work session will first include the project team members to discuss the key project milestones and associated deliverables, as well as the strategic approach to reaching consensus with important stakeholders throughout the process.

The second portion of the work session will expand the attendees to include key internal City stakeholders. The purpose of this session is to introduce City officials of multiple departments to the complete streets manual purpose, schedule, and stakeholder involvement in the development of the manual. This session will include an opportunity for these attendees to provide feedback.

#### ***2: Data Inventory***

To meet the October deadline for completing a Draft Complete Streets Manual, the consultant will use best available information from the City. Once the available data is collected, the consultant will review the data to identify critical gaps, if any exist.

The Data Collection effort will focus on the following content:

- Existing and planned pedestrian and bicycle facilities, major transit facilities and routes.

- The Baseline Report for the Comprehensive Transportation Plan
- MTA system map, ridership, and density needs
- Designated truck routes (local and thru), NHS routes, snow emergency routes, master-planned bicycle and “tourism-based” routes.
- Neighborhood boundaries and council district boundaries.
- Existing Major Employment Centers (Businesses, Retail, Industry, Medical, etc.).
- Existing Educational Centers (Colleges, Universities, Baltimore City Schools, etc.).
- US Census Data (Residential and Employment Data).
- Baltimore City Residential Communities.
- Funded transportation projects.
- The street functional classes.

Through consultation with the agencies represented on the Advisory Committee, the consultant will include additional data sources and plans relating to water/sewer infrastructure, land use planning, housing, emergency routes, and transit. The consultant will prepare / update GIS mapping and graphics, overlaid onto a base map. This information will be included in the Complete Streets Manual when referencing Baltimore streets as examples of the new street typologies.

### ***3: Develop Draft Manual Introduction and Overview***

The consultant will prepare the detailed outline and overview information, including the introduction, glossary, and guide to practitioners on “How to Use This Manual.” The introduction will describe: the importance of the relationship between the other planning and design documents (Multi-modal Long-Term Comprehensive Transportation Plan, Freight Plan, Transit Plan, Bicycle Plan, etc.); and the desired modal hierarchies. The "How to Use This Manual" Section will identify how the Complete Streets efforts are to be incorporated into typical project management workflows (planning, design, resurfacing, reconstruction, maintenance). Manual outline, introduction / overview section, example illustrations.

### ***4. Identify Modal Hierarchy and Street Typologies***

The consultant in consultation with BCDOT and Advisory Committee representatives, will develop a modal hierarchy and street typology categories for the City streets, based on examples of best practices completed by other NACTO cities, and tailor them to Baltimore. The many neighborhoods in Baltimore have different contexts, from grid networks to more suburban layouts. Street typologies will account for these contexts, at the category level. The Complete Streets typologies will coordinate with the traditional functional classifications in the latest edition of the AASHTO Green Book, other Baltimore manuals, and considerations outlined in §40-37 of the draft legislation. The consultant and BCDOT will collaborate with NACTO staff when developing the typical sections.

In addition to consulting NACTO Staff, the consultant will work closely with the Advisory Committee Planning Department representative or their designees in aligning street typologies to the land use context. Prior to finalizing the street typologies, the Advisory Committee will be consulted to ensure consensus on the typologies since they affect operations for everyone.

The consultant will develop typology summaries with: (1) an overview; (2) typical section concept graphic(s); (3) modal hierarchy; and (4) Baltimore-specific examples. The summary will possess dimensional “ranges” for each street element (travel lane, parking lane, sidewalk, buffer, bike lane, etc.). It is anticipated there may be as many as 16 different typical sections, considering the various contexts (downtown, industrial, neighborhood, suburban) and street types (transit corridor, neighborhood primary access, neighborhood street, commercial “main street”, shared street, pedestrian-only street, etc.).

### ***5. Develop Complete Streets Design Standards***

Upon concurrence with the typical sections developed as part of Task 4, the consultant will develop design standards for the Complete Streets elements based on street typology and requirements outlined in the legislation (§40-27 through §40-30).

Task 5 includes the development of sub-sections for the design of sidewalks, bicycle facilities, transit streets and transit access, green infrastructure, roadway crossings and intersections, curb management, corner radii, and pavement surfaces. The subsections will focus on how to incorporate complete streets and provide options that are applicable to the various street typologies. This will provide a practical and feasible toolkit of improvement options. The consultant will include either photo or rendering examples and typical designs of each feature with dimensions and cross-slopes. The typical sections will present underground utilities and SWM as they are normally installed on City streets, with notes advising the designer that the type and locations of underground features are widely varied. Suggested subsections are listed as follows:

The 13 federal provisions will be reviewed to determine where there is conflicting guidance to the complete streets design guide to determine if the City needs to seek waivers for federal funding compliance.

Sustainable Stormwater Management: “Green” stormwater management features will be incorporated into the design details where appropriate; with notes to the designer advising the ability to incorporate the features are dependent upon the location of underground utilities.

Multimodal Signal Operations: This design guidelines subsection will include a section on traffic signal operations and the relationship of shorter cycle lengths and transit signal priority on other modes. This section will include an overview of signal operations based on the modal hierarchy determined for the street, as it operates individually as well as part of a multimodal network.

Complete Streets Curb-space Management: This subsection will address the competing needs for curb-space now and in the future, with competition from a wide variety of demands. This

subsection will address prioritization and design standards, as well as eliminating or moving parking for multimodal mobility opportunities such as transit priority lanes. The development of curbspace management standards will involve close coordination and collaboration with the Maintenance sections of different Departments within the City so that a strategy can be developed around how recommended treatments can be maintained and kept in a state of good repair.

Project Delivery Guidance: This section will provide direction on how to identify and resolve any major disparities between criteria that would be required for a federally/state funded project, NACTO recommendations and the recommendations made in the Complete Streets Ordinance: I.e., the 13 controlling criteria from AASHTO and major differences from the Maryland MUTCD.

Interim / Quick-build Strategies: The design guidelines will also include short-term “tactical” solutions, with examples, that could be implemented on a trial or permanent basis.

The consultant will collaborate with NACTO staff and member cities when developing the designs for the Complete Streets elements; and internal stakeholders to coordinate standards with other City guidelines and standards. Complete Streets Design Standards unique to Baltimore City will include city-specific “case studies” where each design element could apply from a variety of neighborhoods throughout the city. There will be one case study for each design element.

## **6. Develop Project Prioritization Process**

The consultant, in conjunction with members of the BCDOT Project Team and Advisory Committee representatives, will develop a framework for prioritizing Complete Streets improvements city-wide. This framework will align with the complete street goals, objectives, and performance measures developed under Task 8. The BCDOT will be involved with determining and finalizing the weight or ranking measures depending on the level of importance outlined in legislation, determined by elected officials or based on the City’s preference.

The prioritization process will be closely coordinated with the City’s Toward Zero Action Plan, ensuring a focus on safety and implementation of Toward Zero initiatives. This section will provide guidance on the importance of implementing the City’s Toward Zero Action Plan, linking the subsections above to emphasize the importance of safety on City Streets and how to apply tools such as traffic control device placement and quick-build strategies to control speed and improve pedestrian and bicycle safety throughout the City in an equitable manner.

The prioritization process will also be coordinated with ongoing efforts around equity and sustainability being led by the Planning Department. An equity assessment is required as part of the project prioritization process that shall consider transportation disparity trends based on race, gender, sexual orientation, age disability, ethnicity, national origin, and income. As part of the incorporation of the equity assessment into the project prioritization process, recommendations will be developed to eliminate structural and institutional discrimination in transportation based on immutable characteristics.

Additional considerations included in the project prioritization process are as follows:

- a) Assessment of the need for Complete Streets improvements based on safety, accessibility, equity, economic development, facility network connectivity and non-motorized mobility metrics.
- b) Identification of pilot projects and initiatives that implement the Toward Zero Action Plan using Complete Streets manual design standards. Example projects include quick-build strategies to address priority safety concerns based on crash data and equitable geographic distribution of projects.

The consultant will work with the BCDOT to identify projects already in the CIP that should include Complete Streets design elements.

### ***7. Identify and Coordinate Changes to the Project Delivery Process***

The BCDOT is currently undertaking a consultant led effort to redefine the BCDOT's project delivery process. As part of the Complete Streets Ordinance, the Complete Streets Manual must include a project delivery process. The two efforts in redefining a project delivery process agency wide and defining a process around complete streets will be coordinated. The consultant will develop guidance for incorporating Complete Streets into the project delivery process that includes the follow elements:

- Project phase identification,
- Chart listing the types of projects subject to Complete Streets,
- Decision tree, and a
- Project management checklist that ensure projects fulfill the complete streets goals and ideals, while also being compliant with the Complete Streets Ordinance.

Specific tasks relating to Complete Streets include data gathering, public involvement, design review, utility coordination, and funding identification. As part of the project delivery process development, policies will be developed around community engagement that overcome barriers to engagement associated with race, income, age, disability, English language proficiency, and vehicle access of populations affected by a project. Strategies to measure the success in overcoming these barriers will be developed and included in the manual.

### ***8. Develop Performance Measures and Reporting Framework and Year One Annual Report***

The consultant will work closely with BCDOT staff and the Complete Streets Advisory Committee to establish trackable measures of effectiveness relating to safety, mobility, livability, accessibility, equity, and economic development goals, consistent with the City master plan, neighborhood and-small area plans, renewal of infrastructure, the Transportation Equity Gap Analysis, and other planning documents. The consultant will identify the additional data collection needs to support the performance tracking efforts and include the requirements and

methods in the Complete Streets Manual. Guidance will focus on developing and maintaining the data for the new GIS layers established as part of Task 2.

- a) Trackable performance measures and a recommended reporting framework.
- b) Recommendations for a multimodal data collection process to quantify the progress towards meeting City goals based on data-driven performance measures, using existing resources and identifying new data collection methods and technologies.

### ***9. Compile Draft Complete Streets Manual***

The consultant will prepare the draft manual, including a standalone Executive Summary. The manual will also be compiled into PDF format for distribution to the Advisory Committee and internal stakeholders. The draft and final PDF file will include clickable references that enable the user of the manual to move to references within the document and internet links outside of the manual.

### ***10. Compile Final Complete Streets Manual***

Based on the feedback received from the public hearings, public comment, and presentations to the Land Use and Transportation Committee, the consultant will make changes to the draft manual. The appearance of the draft manual will also be upgraded using graphic design software. The manual will be uploaded to the BCDOT website as a full document and by chapter. Comments and responses to public input that were incorporated into the final manual will be documented and shared on the website.

The manual will be developed in a manner that will allow for future expansion of the content to be displayed in an interactive online format. While the manual will be in standard pdf/hard copy format, BCDOT may pursue future development of an interactive website around Complete Streets that helps an average user digest the contents of the manual and its applicability.