

# VIII. Next Steps

The City of Houston has undertaken this planning level study to identify near- and long-term transportation system needs within the Northwest study area. This study sets a vision for future transportation facilities within the study area through an examination of multiple transportation modes and project concepts. This study examined project concepts that can ultimately be fed into the City’s Capital Improvement Program process as described in more detail within subsequent sections of this chapter, CIP Manual Summary.

Additionally, this study promotes several concepts that are policy oriented. These items can be addressed through the annual review process that several City documents undergo, which is described in subsequent parts of this Chapter.

Finally, these recommendations are not intended to be static. The intent of this study, and other mobility studies in which the City is a partner, is to develop a set of projects and policy recommendations that can be used in determining sub-regional priorities. These priorities can be further examined within the broader citywide capital programming and pre-engineering process.

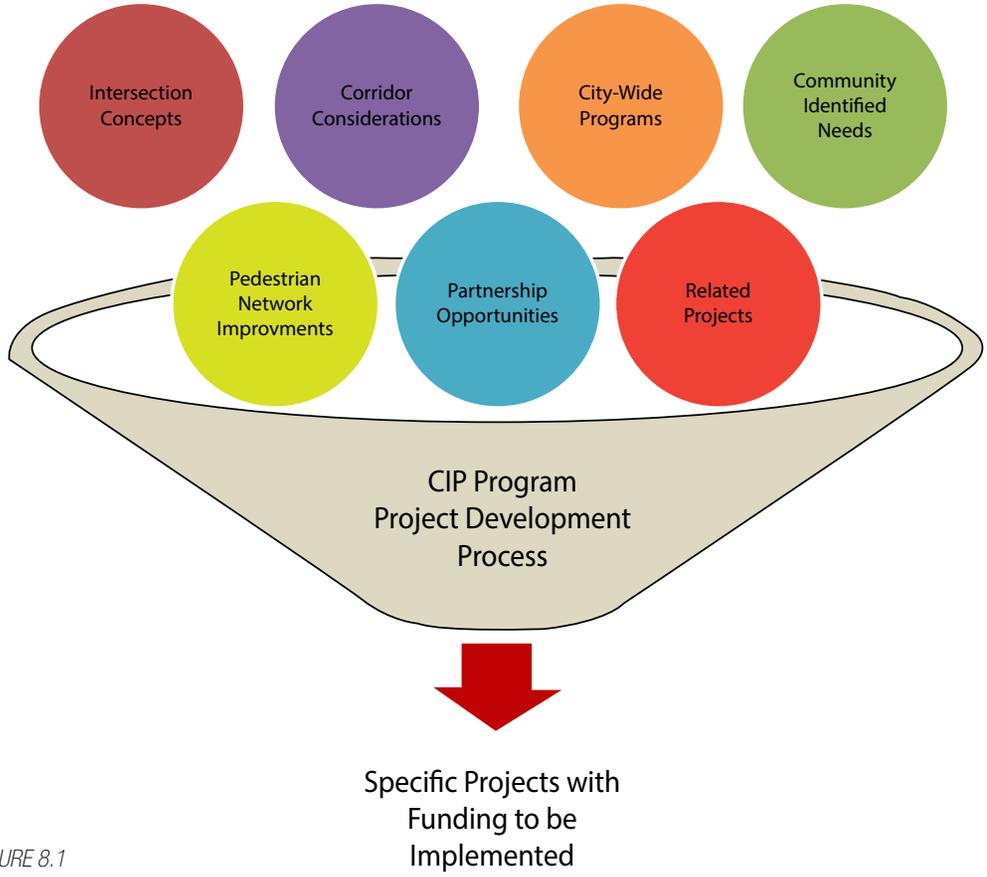


FIGURE 8.1

## Outcomes of this Study

The specific project concepts identified for both the short and long-term will be analyzed through the lens of several different departments within the City which include, but are not limited to:

- Planning and Development Department can use the recommendations to ensure that right-of-way is preserved where appropriate. The Department is responsible for defining the multi-modal classification process via the MTFP.
- The Department of Public Works and Engineering will work through their annual engineering process to develop further details regarding the solutions discussed in this report for specific intersections.
- The Department of Public Works and Engineering will be responsible for analyzing the broader projects within the scope of their annual projects review process that is highlighted within the CIP Process Manual for Infrastructure Programs.

Each of these items are discussed in more detail in the following sections.

## CIP Process Manual Summary

The single largest program that will be used for the implementation of the Heights-Northside Study will be the Rebuild Houston Initiative. All City departments and divisions play a role in defining projects for consideration for the Rebuild Houston process. Given the link between the street infrastructure concepts presented within this Report, Rebuild Houston provides a viable, long-term funding source for identified improvements. The process for Capital Improvement Projects (CIP) can be broken into two phases:

- Programming Phase, projects to be constructed within the next five years
- Planning Phase, projects estimated to occur within the next six to ten years.

Many of the projects identified through this study fall under the Planning Phase which involves several additional steps before funding is programmed. It is at this stage, however, where projects and related elements are first prioritized, that includes incorporating multi-modal concepts resulting from this and other mobility studies.

The following graphic provides an overview of the Planning Phase, however it is recommended that the most recent version of the Capital Improvement Plan Process Manual be examined for pertinent changes throughout the life of this document. The graphics shown are representative of graphics found in Version 3.0 of the above referenced manual.

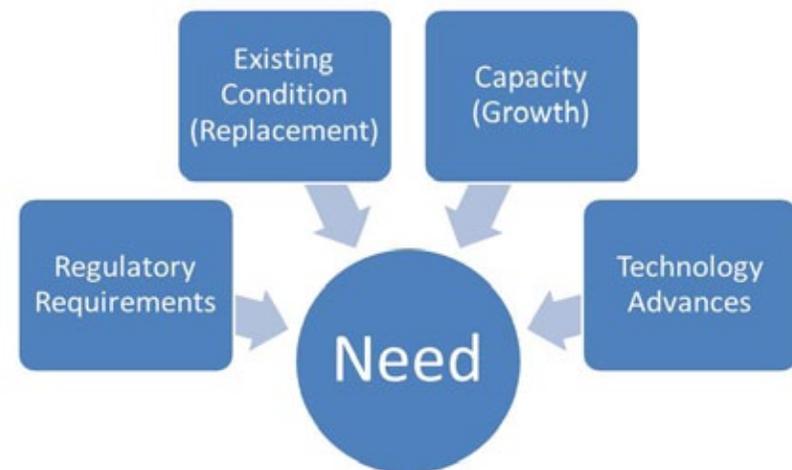


FIGURE 8.2

The planning phase of the CIP process is arranged in four distinct steps (Figure 8.3). Need identification is the first step of the planning phase and starts with a comprehensive assessment of existing conditions. A Need is determined every time that the existing infrastructure does not meet the Level of Service (LOS) defined in the City of Houston Infrastructure Design Manual (IDM). Potential infrastructure improvements result include:

- Replacement – where existing condition of the infrastructure no longer meets the standard LOS and is beyond routine maintenance, or
- Right-of-way – where demand right-of-way results in existing conditions congestion or higher capacity.

Where need is determined, multi-modal considerations, as determined by these mobility studies efforts, should be used to evaluate a roadway’s project infrastructure such as sidewalks, neighborhood traffic management and commuter bicycle infrastructure. These identified elements may then be prioritized and further evaluated in the third step of the planning process where solutions, including potential roadway designs, are considered.

Project that reach the top of the prioritization list become candidate needs and moved into solution development. In this step, pre-engineering is performed to identify and develop candidate projects for inclusion in future CIPs. Candidate projects identified and developed during the planning phase are not automatically added to the CIP.

Final incorporation of candidate projects and related design considerations are determined in the Programming Phase of the CIP process.

The Project Needs are then developed further through the process including: pre-engineering, project coordination and review, coordination with other entities, additional engineering, and programming the project within the CIP and including funding for the construction of the project.

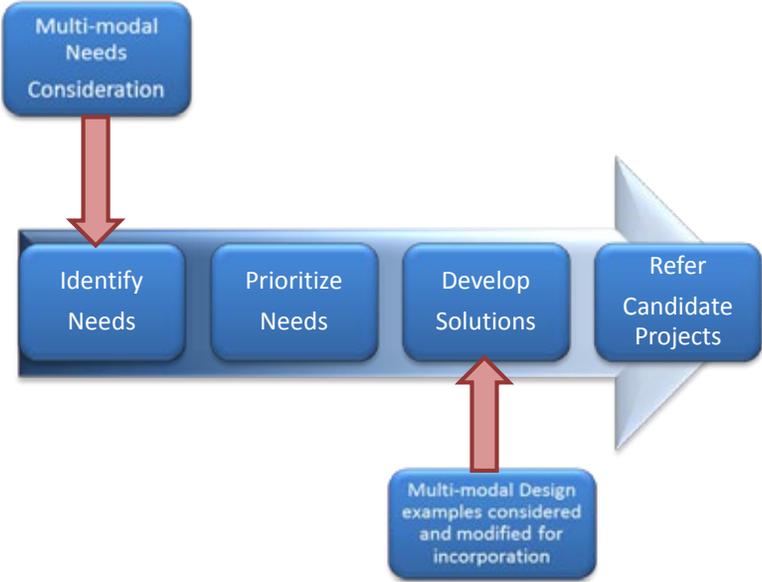


FIGURE 8.3

## Potential Policy Updates

During the planning process, discussions with City staff led to the realization that there may be a need to update some of the existing City Policies related to street definitions and the application of the Alternative Cross-Sections that are defined in Chapter 10, Appendix 2 of the Infrastructure Design Manual. Most notably several gaps within the options that were identified through this process include a need to:

- Create additional cross section alternatives for 60 and 70-foot corridors that act as Urban Avenues;
- Create Transit Corridor Definitions that do not rely on exclusive lane treatments;
- Define cross sections for Urban Streets that reflect a 50 and 60-foot right-of-way pattern for streets that currently act as Collectors but are not defined on the MTFP as such; and
- Consider use of “Target Speed” instead of “Design Speed”.

Additional public outreach will likely be warranted during the pre-engineering and final engineering phases of a specific project development process. These outreach activities and the level of detail covered should be governed by the complexity of the project. For example, a sidewalk project with an identified gap in the network requires a smaller sphere of additional outreach, likely only with affected property owners. Meanwhile, a corridor study to implement one of the corridor concepts identified above, should have a detailed public involvement process, as defined previously in this Report.

## Updates to MTFP

The Major Thoroughfare and Freeway Plan (MTFP) is another major policy that will be used by the City’s Planning and Development Department to further the multi-modal

transportation concepts that were developed during this planning effort. By ensuring that roadways within the study area are appropriately classified and designated within the MTFP, Planning staff at the City have the ability to secure right-of-way, coordinate projects, and explore non-motorized connections within other planning and design activities where vehicular considerations allow. This tool also allows the staff to communicate the long-term vision of a corridor as redevelopment continues within the study area.

Additionally, there is a need to examine related policies to further define the proposed multi-modal classification system. Revisions to the main body of policies that define the application of the MTFP have proven difficult given the use of the definitions contained within the MTFP throughout sections of the Local Development Code. As such, it is recommended that a sub-classification system be established within the existing MTFP ordinance so that as sub-regions are analyzed more thoroughly the multi-modal classification system can be utilized without adversely impacting the remaining elements of the code.

## Coordination with Other Entities

One of the most critical components to moving concepts and associated recommendations discussed in this document forward is coordination. It is recommended that preliminary or planning level activities be coordinated through the Planning and Development Department to ensure a consistent approach to system-level planning. Implementation of general-level planning concepts and projects, however, are more appropriately executed by Public Works and Engineering where segments of the greater system are evaluated on a project-by-project basis. To ensure consistency, it is recommended that the Planning and Development Department work with Public Works to ensure that the intent of the system-level planning is appropriately translated to on-the-ground project implementation.

Another important component of the coordination efforts includes the integration of concepts and plans being developed by agencies other than the City of Houston. Examples include those projects under design by either a Management District, a TIRZ, or a Private Sector entity.

Ensuring that the plans and projects developed by these outside partners are in line with the ideas presented by this report will help to ensure connectivity within the overall transportation system. Additionally, these coordination efforts will help to promote alternative modes of transportation within an area of the City that is currently experiencing a high rate of densification with expectations that this higher rate of density will continue throughout the planning horizon.

## Project Phasing

Given the pre-engineering level of detail associated with this effort, defining project phasing and costing beyond concepts of near- and long-term is difficult. The City of Houston, through the Rebuild Houston Initiative, is in the process of developing and refining the city-wide project prioritization process which will be used to determine corridor-based projects throughout the City - corridors evaluated as part of this Study, will enter this process.

In addition, the Department of Public Works and Engineering (PWE) has established criteria by which the intersections signal upgrades are prioritized, and funded for improvement. As outlined in the 2012 Capital Improvements Plan Process Manual, intersection improvements include upgrading equipment and associated hardware and software to support traffic signal timing and coordination. In some cases reconfiguration of turning lanes or lane configuration can improve area-wide flow. Need for improvements to signalized intersections is driven by two factors, replacement of prior technologies or non-functioning equipment and intersection performance. Intersections with equipment that are not capable of being coordinated area-wide are considered a need. In the future these intersections will also be evaluated for capacity. Need for new signalized intersections will be analyzed separately by the Manual on Unified Traffic Control Devices (MUTCD) signal warrant process.

The long-term project list can be examined over the next twenty years to determine phasing that is appropriate given verified needs. As part of this study, the following were identified as critical improvement corridors. Conceptual improvements presented in this report will be analyzed to move beyond the planning stages and into preliminary and final engineering. The final step for any of these projects will be securing funding through either a Capital Improvements Plan (CIP), a coordinated project with one of the Management Districts or TIRZs within the study area, or an outside funding source such as a Private Sector Partner or State and Federal funding opportunities.

These corridors include:

- 20th
- 19th
- Shepherd
- Durham
- Main St
- Hardy
- Hempstead

These critical corridors were identified due to their impact on:

- Overall grid connectivity
- Capacity
- Intersection level of service
- Ability to accommodate additional modal uses

As opportunities arise for coordination between projects, including projects such as utility replacements (which already require the street to be reconstructed), the projects identified for near and long-term improvements will be re-examined as appropriate.