

PLAN4Health Nashua

Land Use Regulatory Audit Findings — Executive Summary

Audit Introduction



Benches and plantings on Main Street.



Covered bicycle parking in South Nashua.

What is a Land Use Audit?

Land use audits are designed for communities who want to analyze their land use regulations and related documents to see how well they support specific goals and identify gaps for improvement.

Why is this Audit Important?

The Plan4Health Nashua project and audit is focused on promoting complete streets guidelines that support equitable access to safe, healthy multi-modal transportation, economic growth, and quality of life in Nashua.

What Topics are Addressed?

This audit is divided into the following five topics:

1. Safety
2. Transportation
3. Land Use
4. Design
5. Site Specific



in a nutshell

This audit analyzes land use regulations to identify how well they support complete streets and identify gaps for improvement.

Which Documents were Reviewed?

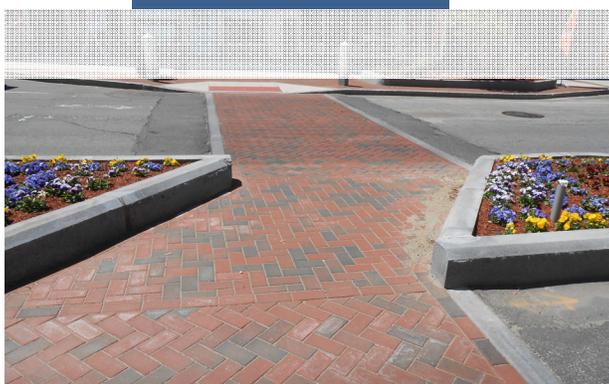
- Land Use Code
- Code of the City of Nashua
- Roadway and Sidewalk Design Standards
- City of Nashua Master Plan
- Downtown Master Plan
- East Hollis Street Master Plan
- Tree Streets Plan

Understanding the Audit

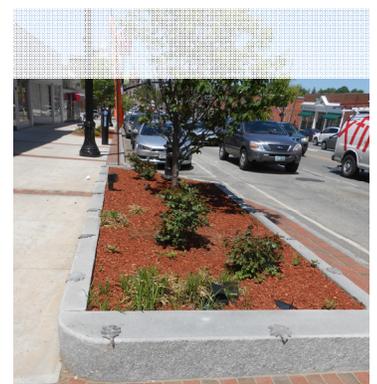
Each of the five topic areas include an analysis, potential action steps and a matrix of all of the criteria used to review and evaluate each topic area. The matrix also indicates how thoroughly each element is addressed for each topic. The suggested action steps could be implemented by the city to better meet the needs of pedestrians and bicyclists. This is further discussed in the Nashua Complete Streets Guide, 2016.



Wide sidewalks span the Nashua River Bridge on Main Street.



Attractive plantings and varied pavement materials on Main Street.



Gardens provide some buffer between sidewalks and traffic.

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1

Safety



Narrow travel lanes on State Street in Downtown Portsmouth encourage slower speeds.



Temple Street in Downtown Nashua includes elevated pedestrian crossings.

Analysis

In recent years, infrastructure maintenance considerations, and particularly challenges in addressing maintenance backlogs, have captured more public attention. This is due in part to the large share of bridges and roadways in the region constructed in the middle and late twentieth century that now demand expensive maintenance attention, and also to the particularly harsh winters the region has experienced in recent years. Nashua would benefit from a publicly accessible plan framework that indicates how the city plans for and prioritizes road and sidewalk maintenance over time. The city would also benefit from a comprehensive cost-benefit analysis to determine the long-term maintenance costs associated with new infrastructure and new development and the ability of the city to comfortably assume those costs. The city should always factor long-term maintenance costs into the evaluation of new development and new infrastructure.

Traffic calming measures are only mentioned in passing in the Land Use Code, and their imple-



in a nutshell

Incorporate cost-benefit analysis into new infrastructure and service needs associated with new development.

mentation is wholly limited to the discretion of the Planning Board. The city would benefit tremendously from additional references in the Land Use Code as well as the development of a plan identifying proposed locations and types of traffic calming measures for future implementation.

Several of the city planning guidance documents, and particularly the Downtown Master Plan, include specific examples of roadways that would benefit from safety installments, largely in the form of traffic calming enhancements. As bicycle and pedestrian offerings in Nashua expand, the city would be well-served to increase awareness of its facilities through improved way-finding signage and branding (an effort that has already occurred at the grassroots level in the Tree Streets). Whenever possible, the city should incorporate its growing arts community in the design of traffic calming and lighting installations to accomplish the dual objectives of showcasing Nashua as an arts destination while making for a more vibrant and pedestrian-friendly streetscape.

Potential Action Step: *Traffic Calming Plan*

Development of a Traffic Calming Plan identifying specific locations and traffic calming measures would serve as a great planning and budgetary tool for staff and elected officials. In addition, it could be used by the Planning Board and developers in the site plan review process. A number of opportunities exist throughout the city, and more specifically in the denser areas of Central Nashua, to implement low-cost measures that have the impact of slowing traffic and contributing to a more welcoming pedestrian and cyclist environment. Many areas of Central Nashua are pedestrian friendly, while areas such as Main

Street south of West Hollis Street, and portions of Kinsley and East Hollis Streets are more auto-dominated.

Potential Action Step: *Maintenance Planning*

Nashua would benefit from a long-term plan and prioritization of maintenance needs specific to trails, bike lanes, and sidewalks. This is particularly important in that Nashua is situated in an area with a harsh winter environment, significant tree cover and older infrastructure. While the city has plans in place to address snow maintenance on sidewalks surrounding public schools, it is advisable to extend such efforts to additional areas of the city.

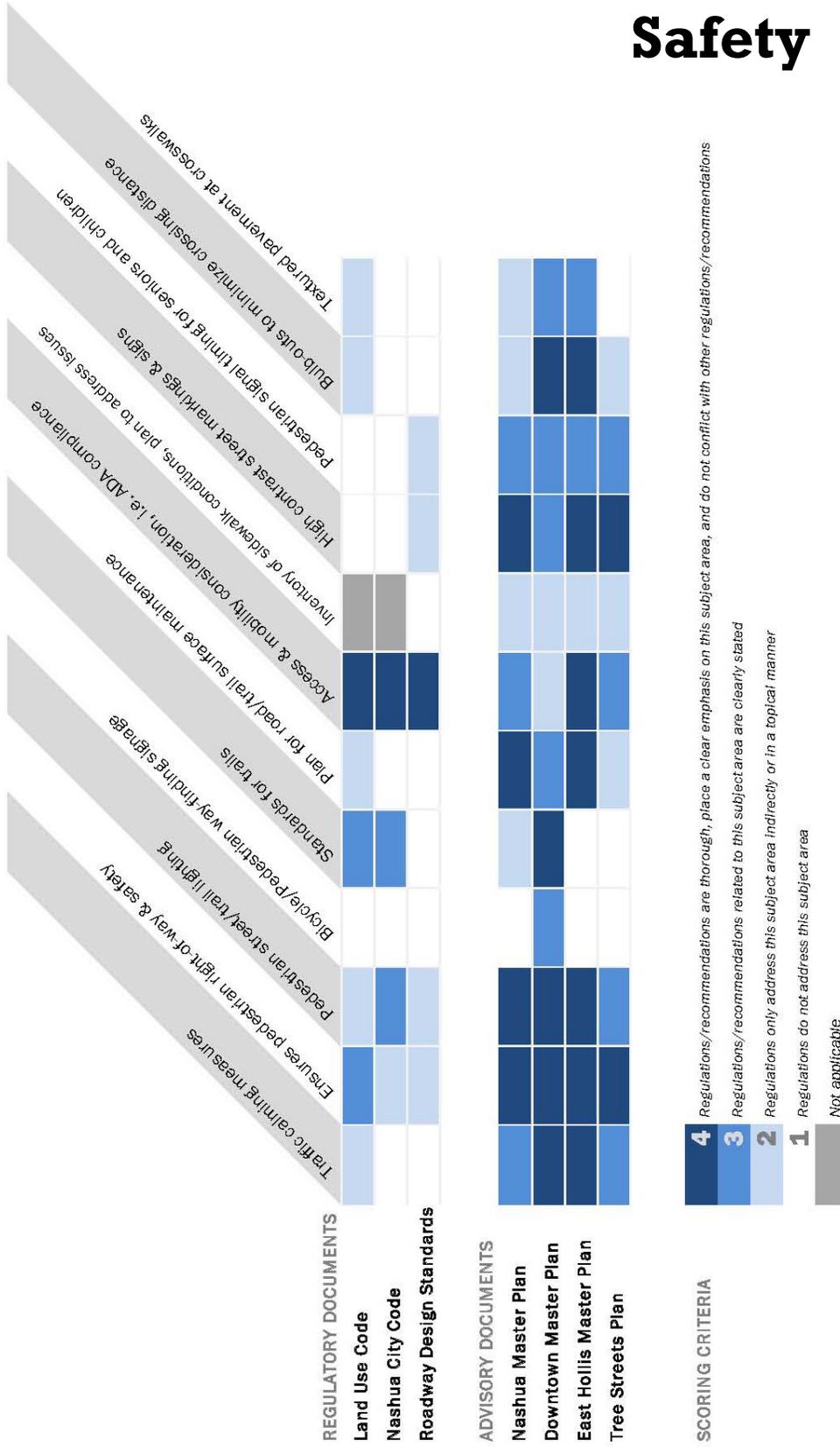
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Safety

1

PLAN4HEALTH AUDIT FINDINGS: SAFETY SCORECARD



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2

Transportation



The Nashua River Rail Trail offers excellent access for pedestrians and cyclists.



Though Nashua's transit system is relatively extensive in the city, it is not yet fully incorporated into city zoning codes.

Analysis

Progress related to more complete thoroughfares in Nashua for all transportation users appears to be somewhat stymied, at least in part, due to the fact that the city's land use regulatory documents do not yet reflect the city's current commitment to improved conditions for all users. A first step would be to update the Standard Specifications for Road Construction (1986) and Sidewalk Construction (1995), and make them consistent with current and desired practice. In addition, the development of a Complete Streets Design Guideline Manual would address bicycle and pedestrian needs and the sharing of transportation facilities. This type of manual would provide design guidance to developers and can also address maintenance needs and establish standard sidewalk widths.

The allowed maximum curb cut of 36 feet for new



in a nutshell

Prioritize the update of city regulatory documents to reflect focus on the sharing of transportation facilities among all users.

two-lane roads in the city is excessive and may have the effect of encouraging speeding and contributing to an unattractive or unsafe bicycle or pedestrian experience. Additionally, the Land Use Code includes transit-oriented development zoning in anticipation of passenger rail service. Since passenger rail is not yet imminent in the region, the city may wish to allow a modified version of such zoning in areas with high levels of public transit and pedestrian connectivity.

Much of the focus of city regulatory documents, and the Nashua Master Plan (2000) is on the provision of separate facilities, like paths and trails, for bicycle and pedestrian users. While trails are vital components of a more complete pedestrian and bicycle environment, more focus has shifted in recent years to retrofitting existing roadways so that they are more accommodating of pedestrians and cyclists. Both guidance and regulatory documents should reflect this shift.

Potential Action Step: *Maintenance & Master Planning*

The City of Nashua lacks a plan that specifically addresses future improvements for pedestrians and bicycle users. The city should consider adopting a citywide Pedestrian and Bicycle Plan for specific infrastructure expansions or improvements with realistic benchmarks for implementation. This is a particularly opportune time, as the opening of the Broad Street Parkway open new areas to pedestrian and bicycle traffic. These recommendations should be incorporated into both the Nashua Master Plan and the Downtown Master Plan when they are updated.

Additionally, as noted in the Transportation Scorecard, maintenance of existing facilities appear to be only lightly addressed

in city regulatory documents and snow maintenance in particular remains challenging. The city might consider updating its maintenance strategies and incorporating them into long-range plans.

Potential Action Step: *Update the Standard Specifications for Road & Sidewalk Construction*

The Standard Specifications for Road Construction was developed in 1986 and the Standard Specifications for Sidewalk Construction was completed in 1995. These documents address typical materials and general construction guidelines for roads and sidewalks. An update of both documents would ensure that they are reflective of current standards and practices to best meet the needs of all transportation users.

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Transportation

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PLAN4HEALTH AUDIT FINDINGS: TRANSPORTATION SCORECARD

REGULATORY DOCUMENTS	Land Use Code	Nashua City Code	Roadway Design Standards	ADVISORY DOCUMENTS	Nashua Master Plan	Downtown Master Plan	East Hollis Master Plan	Tree Streets Plan
Incentives for transit-oriented development	4	4	4	4	4	4	4	4
Walkable neighborhoods and trail systems	4	4	4	4	4	4	4	4
Planned sidewalk/trail improvements & maintenance	4	4	4	4	4	4	4	4
Safe routes to school plans	4	4	4	4	4	4	4	4
Inventory of sidewalks near schools, maintenance plans	4	4	4	4	4	4	4	4
Incorporation of bicycle lanes or sharrows	4	4	4	4	4	4	4	4
Incorporation of public transit facilities	4	4	4	4	4	4	4	4
Incorporation of park-and-ride facilities	4	4	4	4	4	4	4	4
Coordination with NTS for transit improvements	4	4	4	4	4	4	4	4
Bridges required to have sidewalks or shoulders	4	4	4	4	4	4	4	4
Transit shelters or street furniture	4	4	4	4	4	4	4	4
Prioritize quadrant funds for sidewalk maintenance	4	4	4	4	4	4	4	4
Maintenance plan for resurfing bike lanes, crosswalks	4	4	4	4	4	4	4	4

- 4** Regulations/recommendations are thorough, place a clear emphasis on this subject area, and do not conflict with other regulations/recommendations
- 3** Regulations/recommendations related to this subject area are clearly stated
- 2** Regulations only address this subject area indirectly or in a topical manner
- 1** Regulations do not address this subject area
- Not applicable

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3

Land Use



The Railroad Square area of Downtown Nashua includes a vibrant, diverse mix of businesses and residences.



The Nashua Farmers Market represents a prime opportunity to expand the city's local foods market. (Photo: Nashua Farmers Market)

Analysis

Over the last decade, economic and social trends have favored small scale entrepreneurship and access to local goods and foods, however neither the city's codes nor its master plans support these trends. Mobile food trucks and vendors, farmers markets, street festivals and community gardens have exploded in popularity, particularly in urban areas. Terms like the 'sharing economy' and 'makers movement' also permeate the public dialogue. Increasingly startup businesses are looking to share resources and supplies and collaborate with their peers. Live/work spaces are increasingly popular and services like Uber have helped reshape the transportation dynamic and improve livability for those without access to a vehicle. All of these trends can contribute to a more lively and vibrant street environment and a more inviting pedestrian and bicycle atmosphere. The city should consider more fully accommodating them in city codes and master plan documents.



Update city master plans and regulatory documents to reflect more current economic, technological, consumer, and demographic trends.

Potential Action Step: *Consider extending overnight on-street parking to all Central Nashua neighborhoods*

As the city pursues redevelopment efforts and more housing options in Downtown Nashua, parking shortages are likely to grow. On-street parking contributes to a more inviting street environment in that parked cars represent a barrier between pedestrians on sidewalks and traffic lanes. It also reduces the need to pursue structural demolitions for the purpose of adding new parking. The city should consider broader adoption of on-street parking.

Parking remains a challenging issue in Nashua. The core neighborhoods of the city predate the automobile and space for parking is limited. The city should consider extending its Tree Streets on-street overnight parking program to other neighborhoods. This would reduce the need to demolish homes and structures to create parking lots, a practice that can negatively impact the fabric of neighborhoods. Over time, investments in pedestrian/bicycle and transit infrastructure, the growth of transportation sharing services like Uber, and mixed-use development that centers residences near commercial and employment centers should help reduce overall parking demands.

Nashua generally allows mixed-use development in most of its core neighborhoods. The city has recently adopted a Transit Overlay District to a large area of the East Hollis neighborhood to support mixed-use development. This builds upon recommendations in the East Hollis Master Plan, and should promote redevelopment efforts in a neighborhood with a high number of brownfield sites.

Potential Action Step: *Consolidate master plans*

The City maintains a Downtown Master Plan, East Hollis Street Plan, and Tree Streets Plan in addition to the city Master Plan. While attention to individual neighborhoods is laudable, the city might consider consolidating its central neighborhood plans into a single document, particularly since all of the above neighborhoods are located in the city center. This would eliminate redundancies and ease the review process. However, new neighborhood plans might benefit more disconnected areas, including South Nashua and Route 101A area.

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Land Use Regulatory Audit Findings – Executive Summary

4

Design



Textured crosswalks like this one on Main Street help increase the visibility of pedestrian crossings for motorists.



Improving pedestrian access along the Merrimack River, pictured above in Lowell, would aid the city's Nashua River efforts.

Analysis:

The dense nature of Nashua's Downtown and core neighborhoods, as well as competing financial demands, makes the provision of design elements that support bicycling and walking more challenging. However, it is certainly not impossible to implement such measures even in the tightest of configurations, and the city should be proactive in identifying areas for improvement. The narrow nature of many roadways in the central areas of the city acts as a traffic calming device in itself that is supportive of bike and pedestrian traffic.

One area consistently identified as in need of significant improvement is Main Street south of the East/West Hollis Street intersection. The lack of on-street parking (or any type of barrier separating pedestrians from car traffic), wide travel lanes, and a land use pattern that can be auto-centric contributes to a significant degradation in the quality of the pedestrian and bicycle experience. Additional challenges include limited right-of-way and utility poles lining the street.



Overhaul of roadway/sidewalk standards is an excellent place to start in fully incorporating Complete Streets into city processes.

Potential Action Step: *Improve accessibility to playgrounds and parks*

Nashua enjoys a large variety of parks and playgrounds, both large and small in scale. With maintenance funds squeezed, the city is not currently interested in expanding parkland. However, Nashua could make better use of existing parks by improving pedestrian and bicyclist access to parks already in use. The city's current efforts to improve access to Mine Falls Park from the Tree Streets neighborhood is an excellent example of such efforts already underway in the city, however there are many other examples of barriers in accessibility regarding parks and pedestrians and cyclists.

The development of a citywide Complete Streets Design Guideline Manual presents an excellent opportunity to more fully incorporate infrastructure and design elements that are supportive and welcoming of walking and cycling traffic. This guidance document should be referenced whenever pedestrian or bicycle improvements are considered in the city.

In recent years, Nashua has focused pedestrian/cyclist access improvements along the Nashua Riverfront. While the city Land Use Code does note the importance of public access along riverfronts, the city might consider expanding design standards or regulations relating to development along waterfronts to ensure that private sector developments and redevelopments are complementing and enhancing city investments

In the design area, as in most elements examined for this audit, master plan documents are more expansive than city codes and roadway design standards.

Potential Action Step: *Develop a Complete Streets Design Guideline Manual*

Perhaps the most efficient and straightforward mechanism to increase Complete Streets implementation across the city is through the development of a Complete Streets Design Guideline Manual that could address design elements to enhance provision for pedestrians and bicyclists. Eventually elements could be included in the Land Use Code, adding strength and making them enforceable by staff and local boards during the review process.

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Design

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PLAN4HEALTH AUDIT FINDINGS: DESIGN SCORECARD

	Street and bike lane connectivity	Curb cut frequency	Public facilities such as restrooms, buffets and seating	Playgrounds	Inclusion of street furniture, public art and murals	Street trees, buffers, planting strips	Requirements to buy utilities	Pedestrian refuges or raised medians	Roadway minimum, maximum widths	Sidewalk minimum, maximum widths	Design standards for rural and urban streets	Standards for angled crosswalks, speed tables etc.	Promotion of varied streetscape materials
REGULATORY DOCUMENTS													
Land Use Code	4	4	4	4	4	4	4	4	4	4	4	4	4
Nashua City Code	4	4	4	4	4	4	4	4	4	4	4	4	4
Roadway Design Standards	4	4	4	4	4	4	4	4	4	4	4	4	4
ADVISORY DOCUMENTS													
Nashua Master Plan	4	4	4	4	4	4	4	4	4	4	4	4	4
Downtown Master Plan	4	4	4	4	4	4	4	4	4	4	4	4	4
East Hollis Master Plan	4	4	4	4	4	4	4	4	4	4	4	4	4
Tree Streets Plan	4	4	4	4	4	4	4	4	4	4	4	4	4

SCORING CRITERIA

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Site Specific Design



The Merchants Exchange Building graces one of the most vibrant stretches of Main Street in Downtown Nashua.



The Gateway Hills development in South Nashua includes several design enhancements, including separated use trails.

Analysis

Nashua's land use regulations related to Downtown mixed-use districts include a great deal of flexibility related to site-specific design that helps contribute to a more accommodating streetscape environment for all travelers. For example, the Land Use Code does not require a minimum number of off-street parking spaces for uses in downtown districts and requires certain building design standards that enhance the pedestrian environment.

It has been more difficult to achieve the same level of pedestrian access in the busy mixed-use corridors of Route 101A and Daniel Webster Highway, where commercial uses have expanded in recent decades such that they now dwarf those found in Downtown Nashua. As the City of Nashua is largely built-out, most development proposals are for the redevelopment of existing sites. This can pose more challenges in locating bike paths,



in a nutshell

Outlying mixed-use corridors in city are not pedestrian/bicycle friendly and would benefit from more attention regarding site specific design.

pedestrian walkways and sidewalks due to the need to retrofit existing infrastructure. These busy commercial corridors would greatly benefit from dedicated bicycle lanes, as well as additional pedestrian amenities.

Although the city does permit shared use parking under its Land Use Code, it might consider incentives to encourage the expanded use of shared facilities. In some areas of the city, parking facilities appear to be overly abundant. Additionally, clear unimpeded pedestrian access from the sidewalk to a structure's

front entrance, though required in downtown districts, should be incorporated into all new development proposals.

Whenever possible, the city should preserve historic structures with adaptive re-use potential as federal tax incentives can sometimes make redevelopment of older buildings more financially attractive to developers than new development.

Potential Action Step: *Enhance existing commercial corridors*

Over the last few decades the city has experienced considerable growth along its commercial corridors, most noticeably along Daniel Webster Highway in South Nashua and the Route 101A corridor. As both corridors are largely built-out, redevelopment of existing sites rather than new development is currently more prevalent. Redevelopment and infill is a great use of these corridors, however this is also associated with the need to retrofit existing infrastructure to meet the current needs of pedestrians and bicyclists.

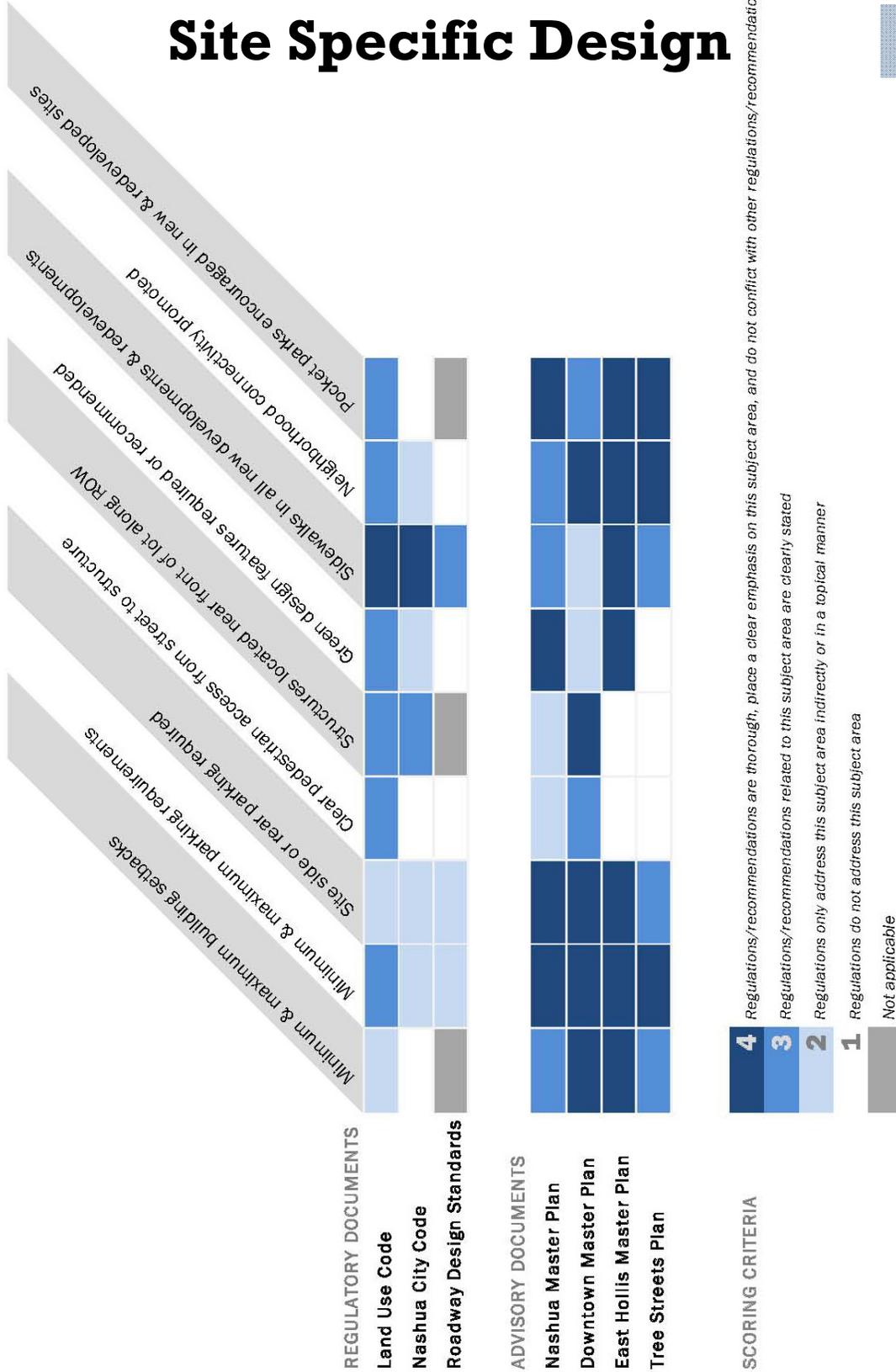
These commercial corridors would largely benefit from improved pedestrian access and dedicated walkways both within existing sites and between adjacent commercial developments. Most sites do not provide for a well defined network of pedestrian ways so people tend to drive between sites rather than walk. The addition of simple measures such as benches, street trees, art work and lighting would vastly improve the overall pedestrian experience. There have been numerous accidents between pedestrians or bicyclists and vehicles along these highly traveled commercial corridors which could be reduced through enhanced crosswalks and dedicated bike lanes.

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PLAN4HEALTH AUDIT FINDINGS: SITE SPECIFIC DESIGN SCORECARD

Site Specific Design



PLAN4Health Nashua



Value yesterday.



Enhance tomorrow.



Plan today.



NASHUA REGIONAL PLANNING COMMISSION

