

Town of West Hartford: Principles For Transit-Oriented Development

New Britain-Hartford Busway Station Area Planning Project

Prepared for the West Hartford Station Area Planning Municipal Advisory Committee. This document was not adopted by the committee; it is issued as a reference for the Town and its citizens.

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Transit-Oriented Development Principles

What is Transit-Oriented Development and Why Consider It?¹

Transit is an important component of life in any metropolitan area, linking jobs, housing, recreation, and services. Compact, mixed-use development goes hand-in-hand with transit systems, because both serve pedestrians and reduce auto-dependency. In the late 19th and early 20th centuries, many cities were built up around transit systems of railroads, subways, and/or streetcars. By the 1890's throughout greater Hartford, the region had an extensive and excellent system of streetcars and rail service. At first, residents were loyal to public transportation and were reluctant to accept the automobile despite the fact that the American automobile industry got its start in Hartford.² Nevertheless, interest in the automobile grew and by 1930, automobiles had replaced the region's streetcar system as the dominant mode of transportation.

Across the nation in the 1970s, problems such as traffic congestion, suburban sprawl, and downtown decay generated new interest in Transit Oriented Development (TOD). Some smaller-sized cities have made remarkable progress in the area of TOD in recent years. In the 1970s, Portland, Oregon embarked upon a strategy to counter the forces of suburban sprawl, investing heavily in the transit system and focusing high-density development in the downtown area and around light-rail stations and bus routes. As a result, Portland has become one of the most transit-friendly cities in the country. The downtown is a vibrant commercial center, and the city is becoming a popular tourist destination.

In the Hartford region, buses carry many workers to their jobs, and many city and some suburban residents use the bus system in off-peak hours for a variety of other trips. Since 1997, ridership in the region has been on an upward trend, even though most routes follow older development patterns. CROCOG completed a Regional Transit Strategy in 2001 and is certain that there is unmet transit need in the region that can be tapped, especially if transit operations better reflect current development patterns.

With the planned construction of the New Britain/Hartford busway³, there is an opportunity to use the new transit line as a framework for TOD. The busway stations could be surrounded with compact, mixed-use, pedestrian-friendly villages, townhouse neighborhoods, or office clusters. Although such development would not eliminate the need for cars, it would increase the opportunity and the feasibility of taking transit for some people, particularly for the commute to work, and thus reduce today's dependency on the automobile.

¹ This explanation of TOD is an extract from chapter 5 of the *Livable Communities Toolkit: A Best Practices Manual for Metropolitan Regions* prepared by Abeles Phillips Preiss & Shapiro, Inc. for the Capitol Region Council of Governments in 2002. The complete chapter is available at www.crcog.org/publications.

² Weaver, Glen. *Hartford: An Illustrated History of Connecticut's Capital*. Hartford: Windsor Publications, 1982. Albert Pope started the Pope Manufacturing Company in Hartford in 1890, and in 1895, Pope and his colleagues produced their first gasoline-powered automobile, the "Pope Hartford". By 1897, Pope unwisely shifted his focus from gasoline to electric automobiles, and Detroit soon took over Hartford's role as the center of gasoline-powered automobile production in the U.S.

³ A "busway" is defined as a type of rapid transit that functions similarly to a light rail system. It follows a fixed, exclusive guideway that is not accessible to other vehicles. The busway vehicles are rubber-tire, like a car, not rail. Busway stations are in fixed locations that are more widely spaced than on-street bus stops, and buses would run on a more frequent schedule than local buses, more akin to a subway system.

Many transit systems are designed in a "park-and-ride" format, where a transit line is superimposed upon a predominantly auto-oriented landscape. Although the park-and-ride format is an improvement because it increases transportation options, the transit-oriented option is even better because it can combine land use and transportation making efficient use of both. In the transit-oriented option, land use, development, and street patterns are actually re-organized in order to encourage walking to and from the station and to concentrate development where infrastructure can support it. The station area is not just a parking lot, but an activity center and neighborhood node. Emphasis is placed on architectural detailing and facades, streetscape amenities, landscaping, and parks to create a sense of place and high quality of life.

Although transit does not unilaterally redefine market and development patterns, it can serve as a framework for new and clustered development *when coordinated with TOD planning and zoning techniques*. Transit serves pedestrians. If the areas around the station are zoned for higher-density, mixed-use, pedestrian-friendly development, then pedestrians can be enticed to walk from the transit station to their destination or from their point of origin to the station. A TOD plan would:

- 1 Provide real alternatives to driving and reduce auto-dependency;
- 2 Generate pedestrian activity that can support retail stores (if the scale of development is sizable);
- 3 Create opportunities for infill development and redevelopment in underutilized areas;
- 4 Generate more market support for higher-density housing, in part by reducing auto-dependency for commuters.

Much of the literature on TOD has focused on rail systems. However, a busway — with a dedicated right-of-way and fixed stops — would function like a rail transit system and therefore contains the elements essential for a TOD market response: a fixed place in space that developers can count on and fast, convenient service that riders can count on.

What Role do these TOD Principles have in Municipal Land Use Policy?

The New Britain/Hartford busway will run from downtown Hartford along the Amtrak right-of-way, running just through or near the Asylum Hill and the Parkville neighborhoods of Hartford, the Elmwood section of West Hartford, the northwestern areas of Newington, and along the east side of New Britain and into downtown New Britain. Following this path, the busway will cut through extremely different neighborhoods, built with a wide range of land uses and densities. Nearly all areas along the planned New Britain/Hartford busway have already been developed, but there are opportunities for infill development and intensification, through brownfield reclamation, development of vacant lots or parking lots, and/or redevelopment. In each community through which the busway runs, the character of TOD would have to be tailored to the local conditions while preserving standards essential for TOD. These principles are guidelines that should assist localities in their efforts to ensure the transportation investment provides economic and community benefits at the same time local land use practices support the public's transportation investment.

The TOD Principles were prepared as the first step in a much more detailed area plan for seven of the stations. The intent was to provide some general information for all station areas so that even for those areas that do not have a full station area plan, some preliminary guidelines will exist. The seven station areas for which detailed plans were prepared are: Downtown New Britain, East and Cedar Streets (a combined plan encompassing both stations), New Park at Flatbush Avenue, Park Street, Sigourney at Aetna, and Union. The five stations for which only Principles were prepared are: East Main Street, Newington Junction, Elmwood, New Park at Kane Street, and the Legislative Office Building.

The Principles, along with the full station area plans, were prepared under the direction of Municipal Advisory Committees with technical assistance provided by the Capitol Region Council of Governments and a TOD consultant team led by the Crosby | Schlessinger | Smallridge. The committees consisted of municipal staff and elected officials as well as members of local boards, commission, and/or neighborhood/business associations. *A committee's adoption of the Principles does not in itself change local land use policies but does begin the discussion towards consideration of revised land use policies that are specific only to the ¼ to ½ mile radius around each station.* Actual policy change, such as amendments to Plans of Conservation and Development, zoning, capital improvements, or economic incentives will still need to go through local public processes.

An Introduction to General TOD Principles

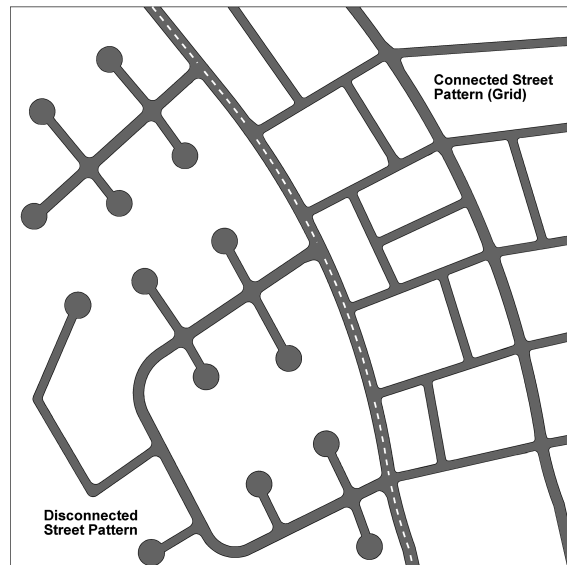
This Introduction section presents Transit-Oriented Development (TOD) principles generally applicable to the areas around rapid transit stations, such as the stations along the New Britain-Hartford Busway. There are two main categories of consideration in transit supportive assessments: Station Approach & Access and Station Area Development. Both of these apply **only** to the rapid transit area of influence, which is ¼ to ½ mile around a station, with the ¼ mile being of greatest importance. This standard is used because ½ mile around a station is approximately the comfortable walk distance to and from a station.

While these principles may contrast with other municipal development policies, policymakers and citizens should consider that Transit-Oriented Development policies would only be applied to very particular area(s) within a community. The premise is that a municipality crafts special development policies for the area because of the unique opportunities the rapid transit investment offers. TOD strives to coordinate a major investment of the public's resources in transportation with the use of land around the investment to make both more efficient.

These principles are presented as activities that should be considered in all station areas, and evaluated for appropriateness, but may not apply to all areas because of the particular characteristics of a station area. Following the introduction are specific transit-supportive ideas for the actual station areas themselves.

Station Approach & Access

- Work towards providing direct pedestrian connections from surrounding neighborhoods such as that provided by a grid street system. The adjacent illustration shows two different approaches to street systems. A connected (grid) street system is one in which streets are continuous, or connect to other through streets, with no dead ends or cul-de-sacs. Pedestrians can take the easiest and most direct routes to the transit station and other destinations under the grid pattern.
- As capital budgets allow, consider prioritizing improvements that would create a safe walking environment (adequate sidewalk width, pedestrian scale lighting, designated crosswalks, limited curb cuts – as illustrated in the attached prototypical sections).



- Consider implementing roadway sections provided in attached prototypical sections as one mechanism to help control vehicular speed and to better define areas for respective travel modes. Traffic calming techniques such as reducing the travel lane width and incorporating planting strips may also be helpful to balance the mix of transportation modes (walking, bicycling, motoring) that are likely to be utilized around a station.
- Consider incorporating access management techniques such as shared driveways and turning movement restrictions (e.g. right turn in/right turn out).
- Create gateways where appropriate to establish that one is entering a different, and transit-oriented, place.
- Pay attention to and examine pedestrian access at underpasses and overpasses. Walkways and stairs should provide direct and safe pedestrian access and clear lines of site between the street, station and platforms, with no blind corners and no dead ends.
- Provide adequate, safe vehicular and pedestrian access to new development around the stations.

Station Area Development

- Encourage development of mid to high density housing and/or commercial and office uses that create high-density employment.
- Discourage new heavy industrial or auto-oriented uses; encourage change of use from existing heavy industrial or auto-oriented uses. Auto-oriented uses include those uses such as auto sales and service, stores that specialize in large and/or bulk items, and other uses that are land intensive with low employment densities. People driving to a business in a station area do not make it “auto-oriented”. Transit-oriented development recognizes that businesses in the station area will need to rely on vehicular traffic as well as transit riders.
- Some light industrial uses can be transit supportive if they have the following characteristics: high employment density; no outdoor storage; buildings sited to face street, attractive street edge and pedestrian-friendly entrance for employees; loading and truck parking to back of site, screened from view from active pedestrian streets.
- Encourage commuter and neighborhood uses such as convenience stores, drycleaners, daycare, video rental and restaurants with take-out service immediately adjacent to the station.
- Work towards creating amenities (plazas, streetscape improvements, open space) to attract new transit-oriented development.
- Encourage development of active ground floor commercial uses to increase street level activity around stations.
- Explore joint development opportunities such as retail, office (public or private) or medium to high-density housing. Joint development is a type of development in which a public agency joins with a private developer or other public agency to bring about transit-supportive development, generally on the station site. Potential incentives to developers include cost savings such as shared costs for site preparation and land acquisition.
- To enliven pedestrian environment, site buildings at street edges

- Encourage shared parking as well as parking that is easily accessible on foot to many destinations so that customers can “park once and shop often”.
- Encourage infill development to fill gaps in street edge
- Explore opportunities to change street patterns to provide better parcelization of larger properties.
- Change parking regulations to provide both minimums (which may be less than that required in areas not as well served by transit) and maximums (for example, 5% above minimum) and shared parking incentives to encourage transit use and increase the density of development around the stations

The following pages provide some TOD ideas for specific station areas along the New Britain-Hartford Busway; these are based on examination at all stations of:

- Development opportunities, the market for TOD-related land uses, ownership patterns, available land and existing uses
- The physical environment including vehicular and pedestrian access and physical attributes/constraints
- The regulatory environment

The package for each municipality includes:

- A map of the existing zoning for the area encompassing each of the stations
- A map indicating housing density along the entire corridor
- A map indicating generalized land use along the entire corridor
- Guidelines for prototypical roadway sections

The package for each station area includes:

- A brief written description of the station area and the design principles
- An opportunities and constraints map of the station area
- A plan of the area within the quarter mile radius around the station illustrating the Design and Development Principles
- A proposed site plan for the Elmwood station

Note: The package does not include the Flatbush Station. Design Principles for this station will be included in the full Station Area Plan to be developed in the next phase of this study.

Elmwood

Existing Conditions

New Park Avenue and New Britain Avenue east of the station in this location are dominated by cars and trucks with primarily auto-oriented retail uses and/or industrial uses, multiple curb cuts and little pedestrian amenity. New Britain Avenue west of the station is more like a traditional neighborhood with several buildings at the street edge, and improved sidewalks with bricks, planting and lighting. There are four houses across from the station on the west side of New Park Avenue. Behind these houses is a light industrial area that is restricted from redevelopment by a flood storage agreement with the City of Hartford.

Although much of the area is included within a Traditional Neighborhood Development Overlay Zone, the uses allowed for the underlying zoning districts apply. The ¼ mile area around the station includes a General Business District and a General Industrial District. Both of these zones exclude residential development and are designed to accommodate auto-oriented, pedestrian unfriendly uses such as motor vehicle sales, service and repair, wholesale business and store warehouses, and industrial/manufacturing uses. The General Industrial District also allows outdoor storage, contractor yards, and vehicle intensive uses such as trucking.

The station site is a long, narrow parcel at the intersection of New Park Avenue and New Britain Avenue. Because of the length of frontage along New Park Avenue, the height of the viaduct structure (rail and busway), the viaduct and the embankment walls supporting the busway along the back of the site will be visually prominent at this important intersection. There are no immediate development opportunities on the station site, primarily as a result of the inability to accommodate any additional parking on the site and the long narrow parcel configuration, although there are potential TOD opportunities proximate to the station.

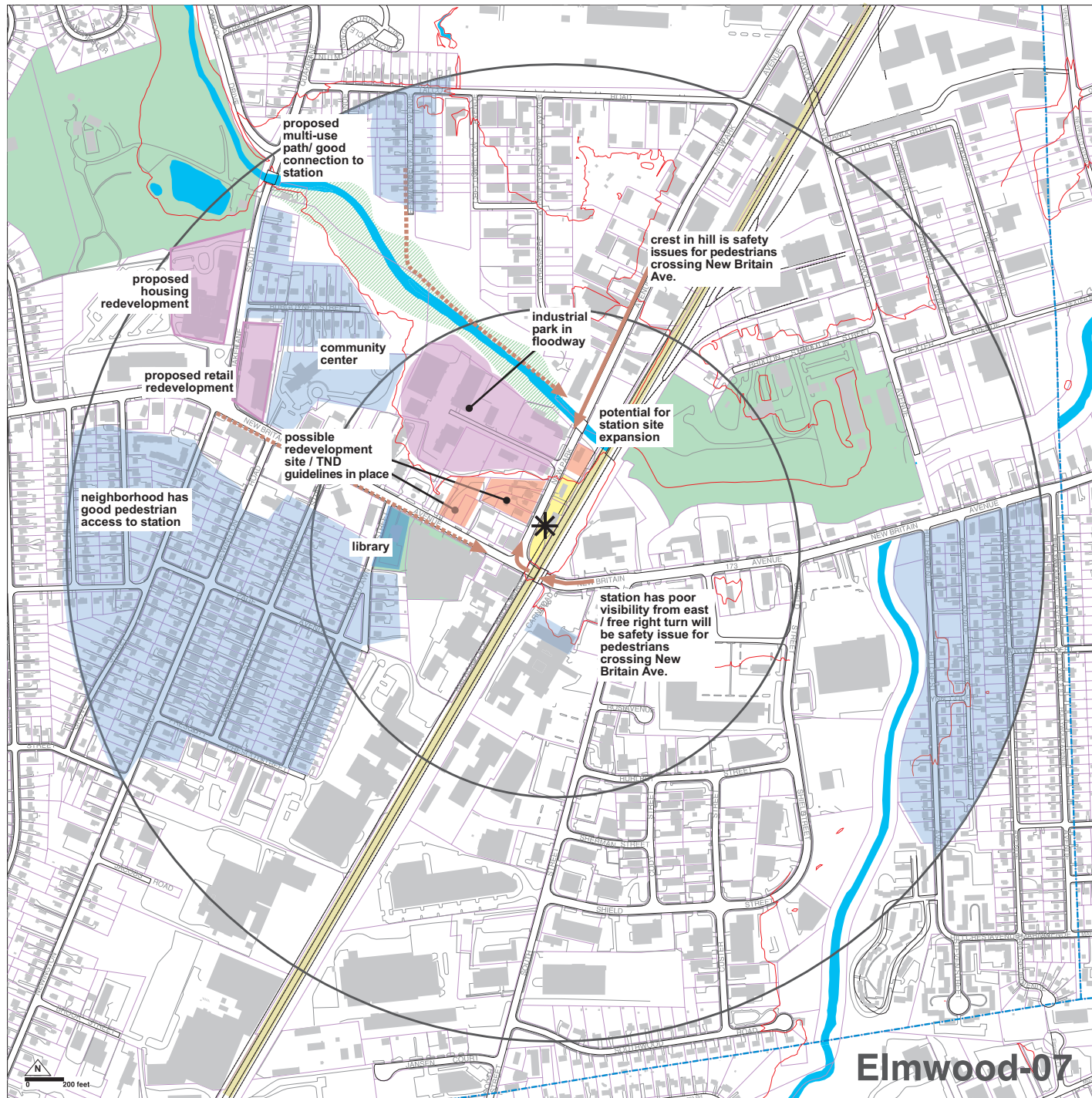
Design Principle Recommendations

The following recommendations, specific to the Elmwood Station Area, are in addition to the general principles on pages 1 and 2, which apply to all of the stations:

1. Upgrade the pedestrian environment on New Britain Avenue east of the station and New Park Avenue (see attached prototypical roadway sections). Prioritize improvements to New Britain Avenue east of the station, which already serves a significant number of transit riders.
2. Reconfigure the station site plan to make the station building a handsome and prominent architectural feature. Relocate the station towards the middle of the site closer to the platforms and the crest of the hill on New Park Avenue. Use landscaping and a plaza to create a new civic amenity at this important gateway to the Elmwood neighborhood to attract development.
3. Redevelop appropriate adjacent parcels for TOD uses over the long term.
4. Rezone the area within the quarter mile radius to encourage TOD uses and discourage/prohibit auto-oriented uses. The underlying zoning for the Traditional Neighborhood Development district should be changed to BC – Central Business District or CBDH – Central Business District-High Intensive. These districts allow the desired mix of commercial and residential uses, with residential densities of up to 43 units per acre (based on required square footage/unit; parking, lot coverage, open space and FAR requirements would reduce the actual achievable densities).

5. Create safe and attractive pedestrian crossings *simultaneously* with the placement of the busway station from the west side of New Park Avenue, from east of the station along New Britain Avenue and from the proposed Trout Brook path.
6. Explore the potential long-term redevelopment of the larger parcels north and south of New Britain Avenue for mid to high density housing, retail or office use to create more transit-oriented uses and a pedestrian friendly street edge. If these parcels are redeveloped, plans should include a pedestrian connection through the development linking the station to the northeast to the residential neighborhood to the southwest.
7. Build on the capital improvements and prior efforts already invested in Elmwood to strengthen the existing commercial area along New Britain Avenue, west of the busway, in the existing Traditional Neighborhood Development zone.

Issues & Opportunities Elmwood

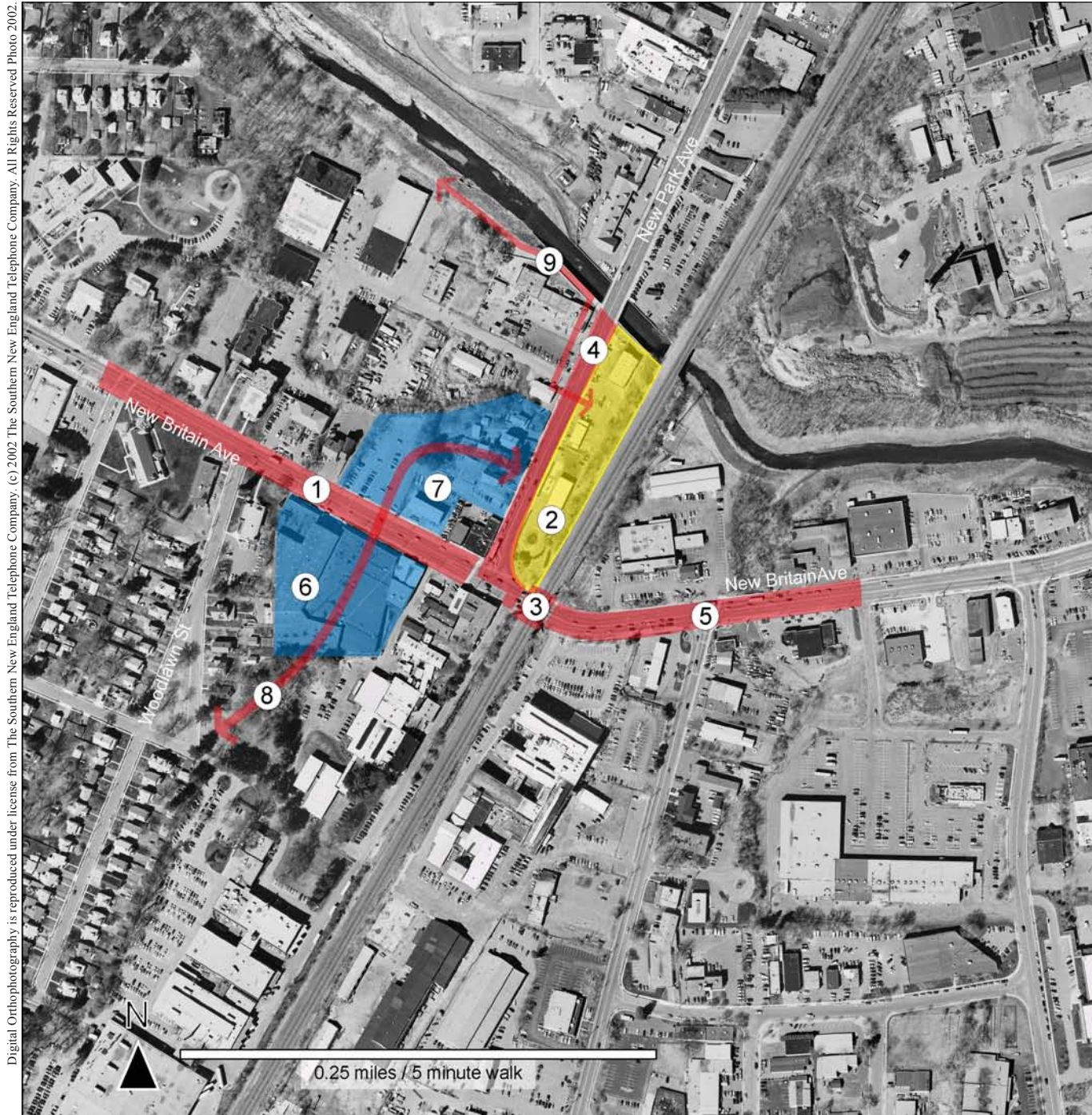


-  quarter and half mile radius (5 & 10 minute walk)
-  potential development opportunity
-  transit patron origins and destinations
-  key pedestrian routes to transit stations
-  station site
-  other issues or opportunities - see note

Design & Development Principles

Elmwood

- 1 Upgrade streetscape along south side of New Britain Ave. to match the quality of the north side. Reduce number of curbs cuts on north side of street.
- 2 Create amenities at station to attract new transit oriented-development (plaza, open space, streetscape improvements).
- 3 Improve pedestrian environment at underpasses; use new bridge construction to create gateway feature on New Britain Ave. that relates to town.
- 4 Create safe walking environment. Limit new or reduce existing curb cuts, improve lighting and paving quality, and increase sidewalk width. Provide crosswalks.
- 5 Create a safe walking environment. Minimize curb cuts and, provide designated crosswalks, pedestrian scale lighting, and adequate sidewalk width.
- 6 Encourage redevelopment for mid to high density housing, retail, and/or office uses. Discourage new industrial or auto-oriented uses.
- 7 Encourage development of mid to high density housing, retail, office uses. Use new buildings to create consistent street edge.
- 8 Provide pedestrian connection between neighborhood and station through new development, if and when it occurs.
- 9 Provide direct pedestrian connection between greenway and station.



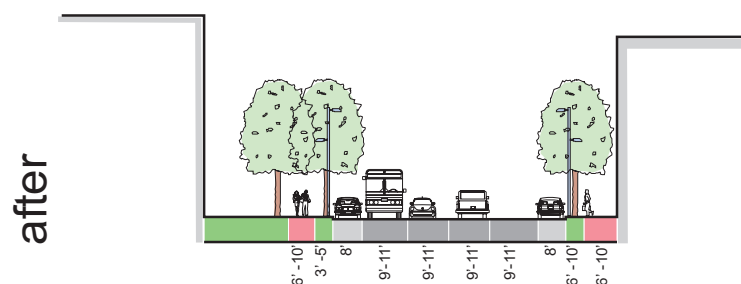
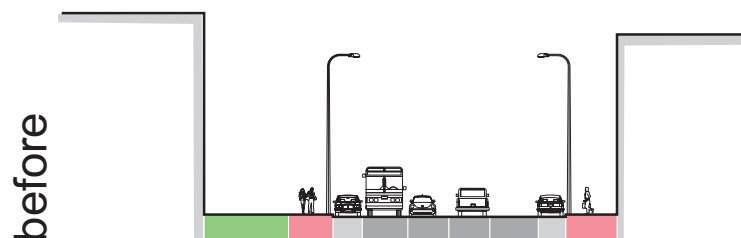
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Busway Station Concept Elmwood



Typical Roadway Cross Sections

Urban Roadway - (e.g. north end of New Park Ave.)

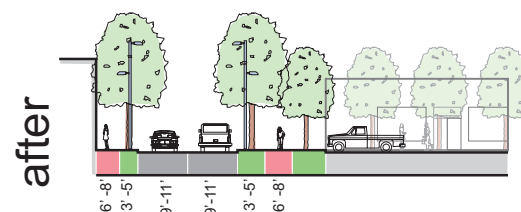
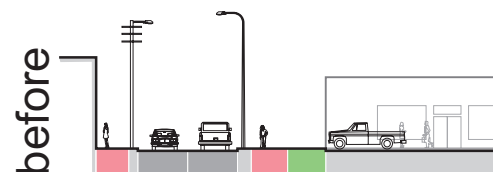


Replace cobra lighting with pedestrian scaled lights. Where possible put utilities underground.

travel lanes
 parking / shoulder
 grass / planting strip
 sidewalk

40 ft

Neighborhood Commercial Street (e.g. East Main Street)



Replace cobra lighting with pedestrian scaled lights. Where possible put utilities underground.

Create pedestrian routes from sidewalk to storefront in locations where stores do not front on sidewalk.

The philosophy behind these cross-sections is to emphasize the creation of public spaces that feel comfortable and safe, draw more people, and attract development. Some points to keep in mind are listed below:

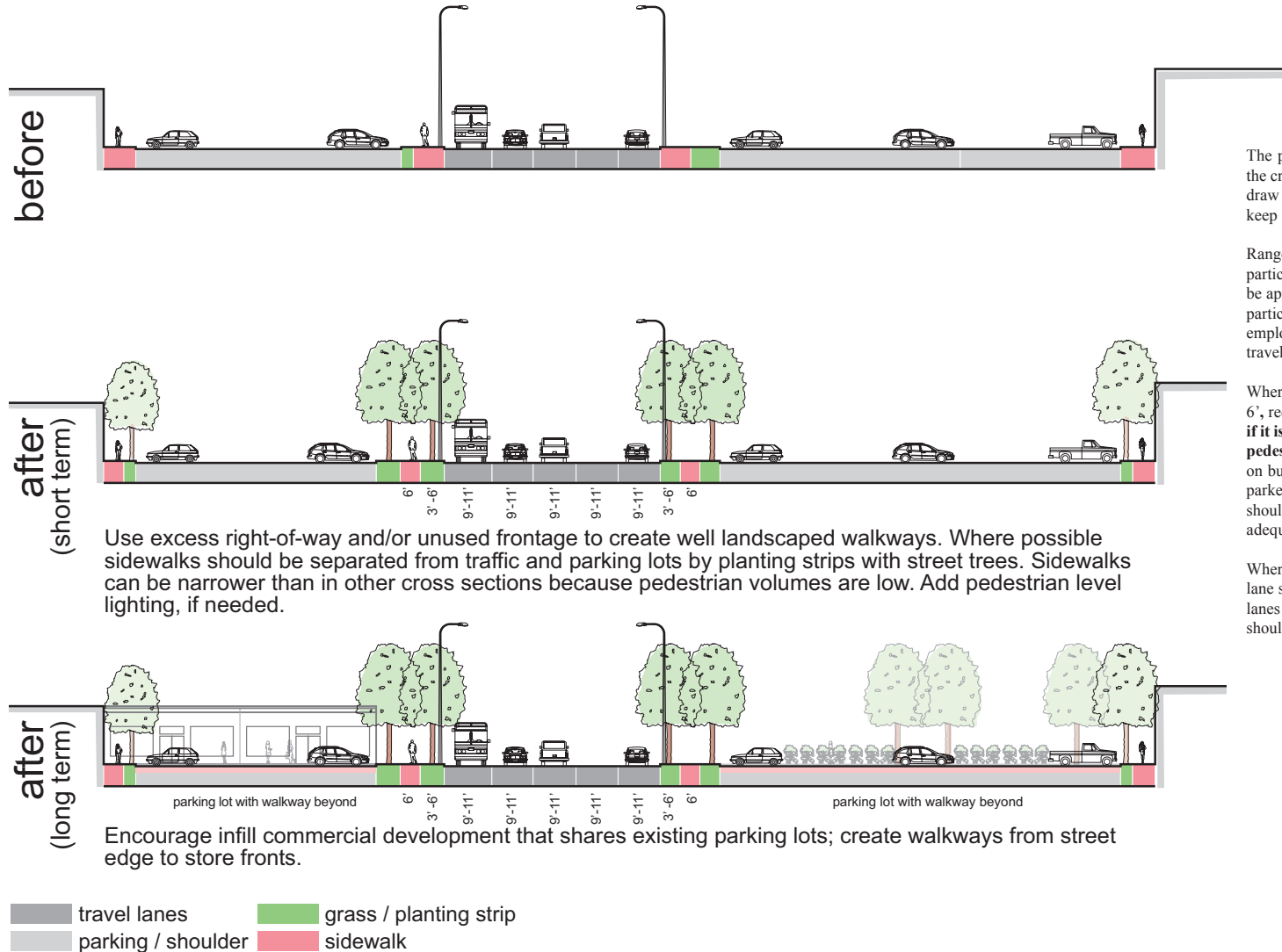
Ranges for cross-section components provide flexibility for particular situations or local protocols. However, it may not be appropriate to use the lowest number for each component, particularly on heavily traveled streets. Furthermore, to employ some narrower travel lanes may require that other travel lanes are wider (e.g. a 12' center turn lane).

Where right of way is limited and sidewalks are wider than 6', reducing the sidewalk to 5' may be a necessary trade-off **if it is the only way to provide a buffer between pedestrians and traffic**. Pedestrians feel safer, particularly on busy streets, when a planted strip, street trees, or parallel-parked cars separate the sidewalk from travel lanes. This should be undertaken with caution, as 5' is generally not adequate.

Where possible, provide bike lanes along all streets; a bike lane should never be placed on just one side of a street. Bike lanes can range from 4'-8', although a lane next to a curb should be a minimum of 5'.

Corridor-wide Typical Roadway Cross Sections

Commercial Strip - (e.g. New Park Ave. south of Flatbush)



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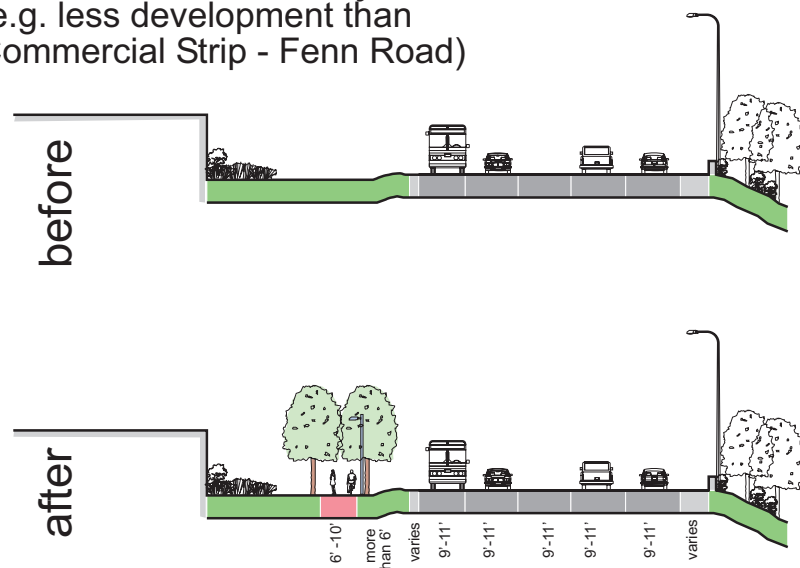
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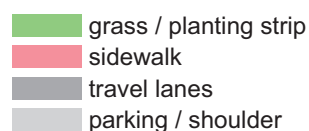
40 ft

Typical Roadway Cross Sections

Suburban Roadway (e.g. less development than Commercial Strip - Fenn Road)



Make use of unused frontage land to provide well landscaped and well lit sidewalks that make pedestrian connections between important land uses. Add pedestrian level lighting along sidewalk.



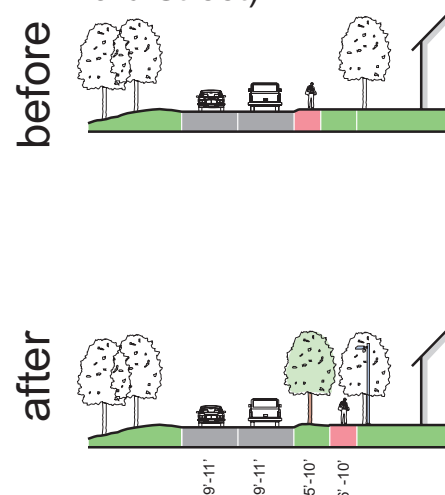
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Where possible, provide bike lanes along all streets; a bike lane should never be placed on just one side of a street. Bike lanes can range from 4' - 8', although a lane next to a curb should be a minimum of 5'.

Suburban Roadway - (e.g. low density residential - Willard Street)



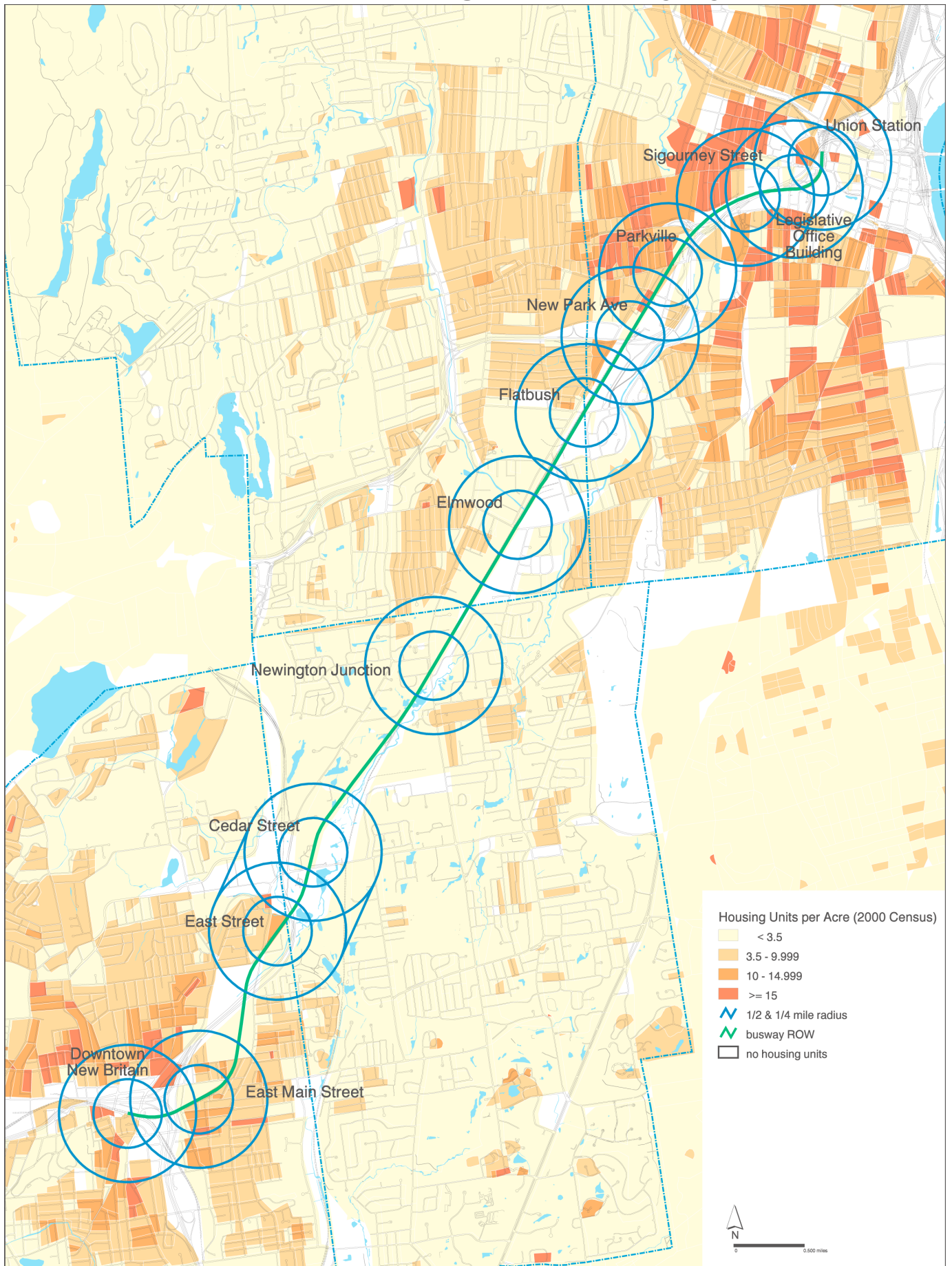
Where possible, move sidewalks away from travel lane and provide generous planting strip; landscape to separate sidewalks from fast moving traffic; and provide pedestrian level lighting. Because pedestrian volumes are low, sidewalk only needs to be 5 feet. If sidewalk will also be used as a segment of the multi-use path, it should be at least 10 feet wide.

40 ft

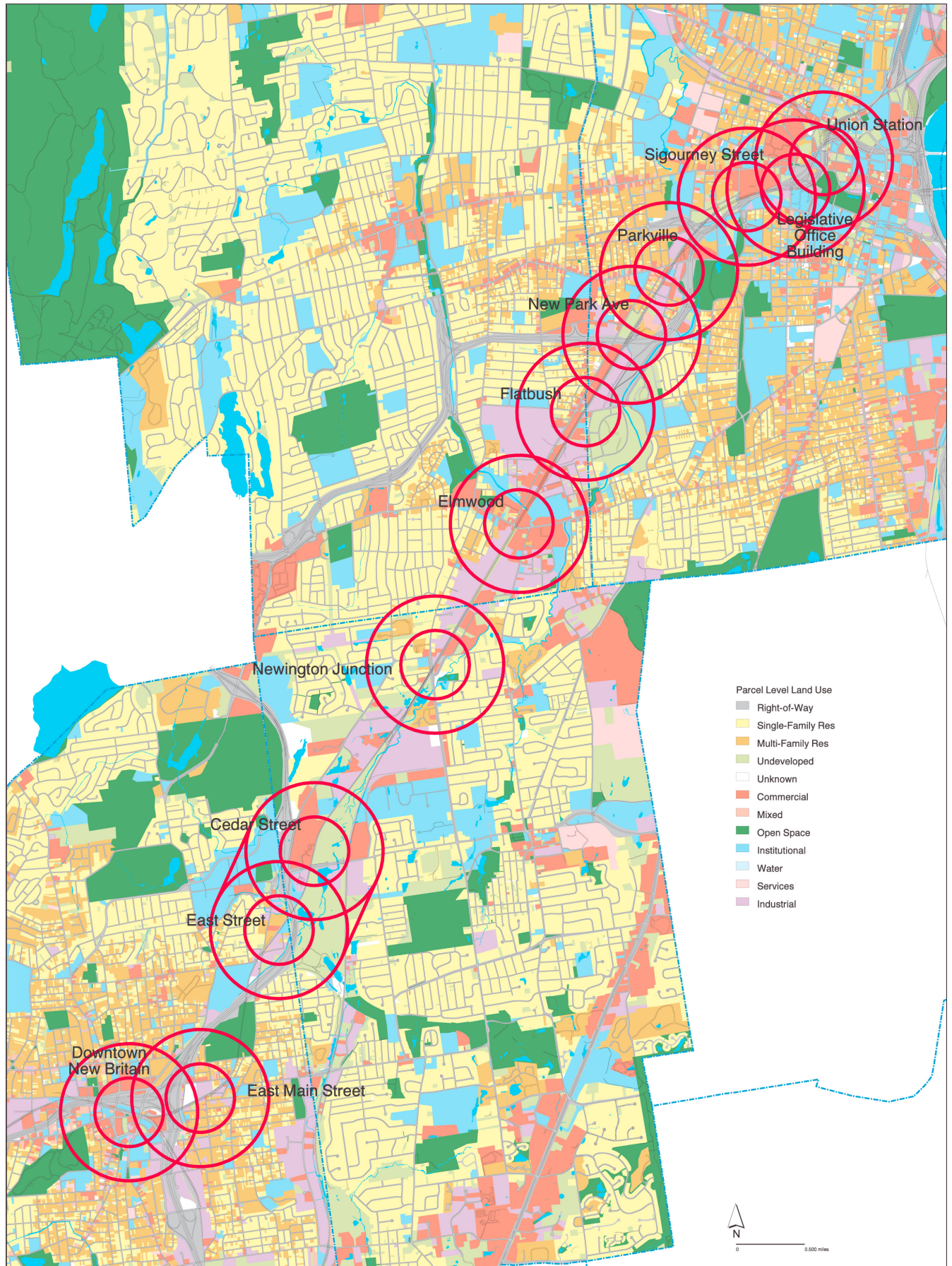
Corridor-wide
West Hartford Station Area Zoning



Corridor-wide Housing Unit Density by Census Block



Corridor-wide Land Use by Parcel



(data from CRCOG and the City of New Britain)