

# Local IMPACT

## Strategies to Promote Mobility

September 2016

# Acknowledgements

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# Introduction

## WHAT MAKES A COMMUNITY WALKABLE?

Walkable communities are designed on a human scale. These spaces are built to provide a range of services like stores, parks, and schools within walking distance of homes and businesses. Traditionally, this is how neighborhoods were designed before the invention of the automobile and the construction of the national highway system.

However, since that turning point, development across the nation has typically prioritized cars over people. In conjunction with zoning codes that strictly separated land uses (commercial, residential, industrial), communities were designed around the idea that residents would travel by car, and therefore marginalized pedestrian concerns. As a result, residential neighborhoods were physically separated from the places people work, shop, and play. These conditions created the foundation of what we now call "sprawl" - spread-out, automobile oriented land use patterns.

These sprawling development patterns leave neighborhoods generally ill-equipped to provide residents with access to the resources they need to lead healthier lives. Today, many residential neighborhoods and job sites are completely automobile-dependent, located in places where everything is out of reach without a vehicle, eliminating the simple ability to walk for daily errands. As a result, populations have become heavily reliant on cars, and seldom regularly walk, bike, or take public transportation.

Realizing these issues, planners in many communities are now turning back to more traditional neighborhood development styles, often centered around "Main Streets." These places put pedestrians on equal footing with drivers and place a wide range of amenities within reach of homes, creating vibrant, people-friendly places.

## HOW CAN MOBILITY IMPROVE POPULATION HEALTH OUTCOMES?

Many of today's diseases are "lifestyle diseases", or connected to how people live their lives. These conditions, like obesity, diabetes and heart disease, are now responsible for approximately two out of every three deaths worldwide.<sup>1</sup> Chronic health problems also account for about 75% of healthcare spending in the U.S.<sup>2</sup> Regular physical activity, like walking or biking, can help stave off these diseases. Therefore, promoting mobility, or the ability of individuals in the community to easily walk or bike to get around, can help curb these trends.

Walking is the most common physical activity and helps prevent negative health outcomes. Even incremental personal choices, when taken in aggregate, can have substantial impacts on health. So even short walks or bike rides, if taken regularly, can bring significant health benefits in the long term.

The likelihood that individuals will engage in regular physical activity can be heavily influenced by their environment. Tightly-knit communities with schools, job sites and other amenities nearby make daily walking and bicycling much more convenient and common than more sprawling areas. Similarly, other features, such as sidewalks, bike lanes, multi-use trails and access to public transportation, can encourage physical activity and improve public health.

In general, more walkable neighborhoods that cater to active lifestyles have more physically active residents with lower rates of chronic health conditions.<sup>3</sup> Meanwhile, residents in rural areas have been shown to have lower physical activity rates and higher obesity rates than their urban counterparts.<sup>4</sup>

## HOW CAN PLANS AND POLICIES PROMOTE WALKING?

While going on a walk or bike ride is a personal choice, the built environment plays a large role in encouraging or discouraging that choice. Although it is possible for residents in any neighborhood to simply take a walk, that possibility is greatly increased when there are destinations within walking distance of homes - like supermarkets, schools, and public parks. For instance, when destinations are within one mile, 40% of people choose to walk, rather than drive to work, school, or shopping.<sup>5</sup> Through planning and zoning, municipalities can permit or incentivize more compact, pedestrian friendly land use patterns that put more destinations within walking distance of residents.

In addition to nearby destinations, amenities such as lighting, crosswalks, benches and street trees, help create a more vibrant pedestrian environment. These features build a perception of order, safety and liveliness along streets that can attract more pedestrians to walkable places. Municipal plans can propose implementation and funding strategies to improve pedestrian environments along local streets. Local zoning codes can regulate that districts adhere to pedestrian friendly design guidelines.

Beyond streets, scenic, natural areas can also attract outdoor physical activity. Providing for scenic parks and multi-use trails in the plans and policies of local communities can ensure that these amenities are within reach of neighborhoods. Local policies can also promote mobility in ways that do not necessarily involve physical interventions on the ground. For instance, through community outreach to increase public awareness of local opportunities for walking and bicycling.

## WHAT ARE OTHER BENEFITS OF PROMOTING MOBILITY?

Walkable communities often witness a variety of significant benefits. Pedestrian friendly places are safer, generally reporting lower rates of accidents involving pedestrians than more sprawling areas.<sup>6</sup> Also, promoting walkable places generally helps focus development near existing neighborhoods, thereby limiting construction on undeveloped land and protecting the environment.

Concentrating development and providing for active modes of transportation can also bring a number of economic benefits to communities. For instance, sprawling development extends the reach of public services, roads and other infrastructure. This increases long term costs of infrastructure maintenance and can limit a community's capacity to withstand economic uncertainties. In addition, bike lanes, sidewalks and multi-use trails are generally cheaper to maintain than vehicular roads.<sup>7</sup>

Along with decreasing tax burdens, walkable places can also add to revenues. For example, pedestrian friendly settings can attract shoppers and tourists and increase retail activity. Active transportation features can also increase property values. For example, one study showed a 10% rise in sales prices for homes near bike paths.<sup>8</sup>

Many communities are witnessing firsthand how offering ample options for healthy lifestyles can give cities, towns and regions a competitive economic advantage over places built primarily for automobile travel. Market demand has been driving the development of places that support active living in recent years. Studies show that 68% of young adults cite proximity to parks as an important characteristic in choosing where to live.<sup>9</sup>

# Environmental Scan of Mobility Promoting Plans and Policies across Western New York

An extensive review of municipal comprehensive plans and ordinances can help illuminate how local planning efforts, policies, and regulations promote pedestrian mobility and access. This review looks at a diverse set of actions, policies and principles that have been embraced in previous studies as key enablers of walking and physical activity within a community. These span a wide range of activities, including efforts to revitalize walkable areas, expand trails, and improve pedestrian safety. The scan sheds light on common tactics municipalities use to promote walking and bicycling, and helps reveal where gaps in implementation capacity exist by comparing the support for these strategies across different types of communities.

## Documents Reviewed in the Scan

### Local Comprehensive Plans

Municipalities create comprehensive plans to outline the future of their community and strategies for achieving it. They are typically the product of a comprehensive planning process, often involving direct community input. The goals, processes, and strategies presented in these plans represent the direction of a community. These documents can shed light on how specific strategies that explicitly or indirectly promote walking and physical activity are endorsed in a community. Comprehensive plans provide the justification for the policies and regulations found in the municipality's ordinance.

### Municipal Ordinances

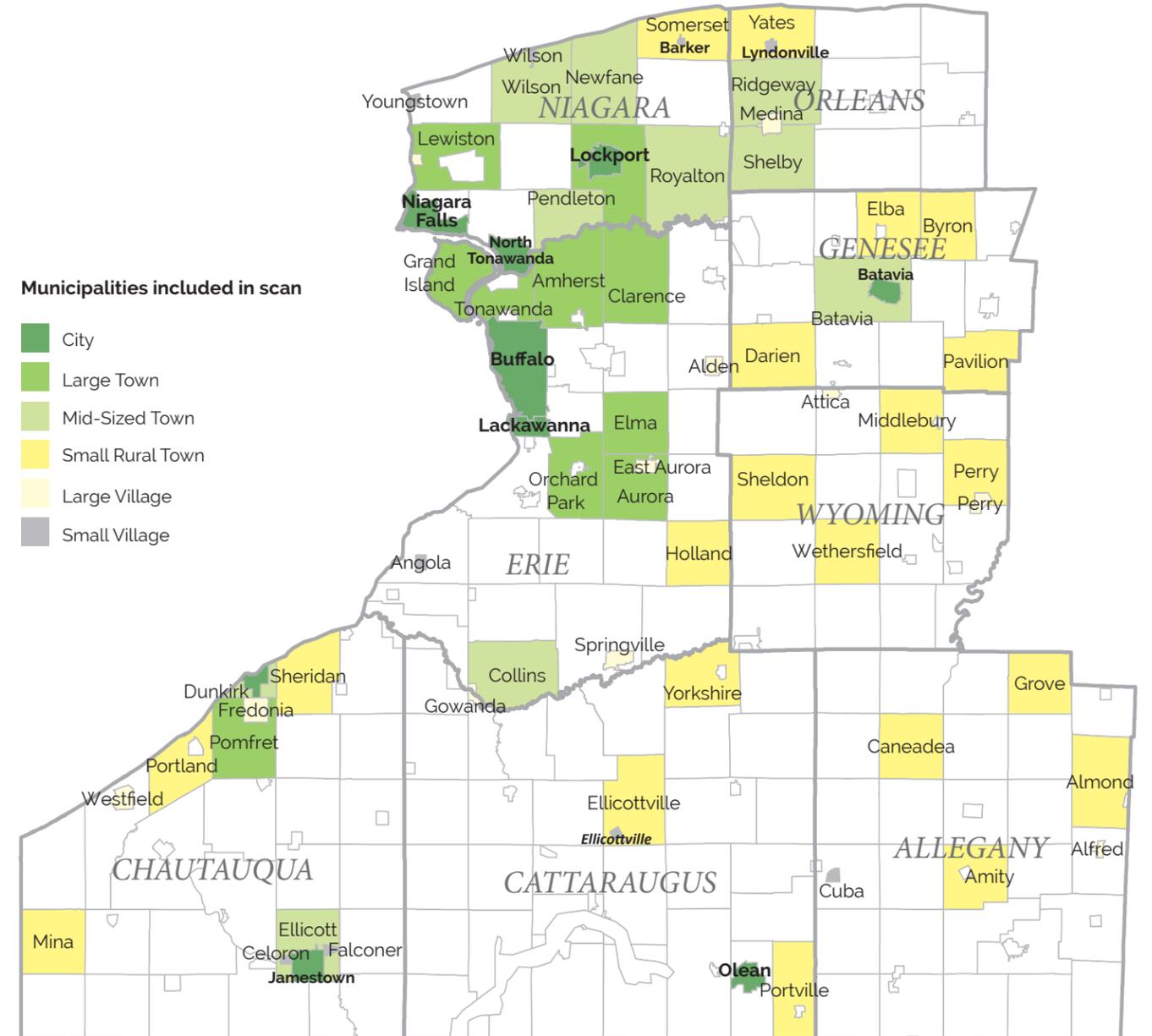
These legislatively codified documents detail the regulations enacted into local law by a municipality. Ordinances lay out basic rules, guidelines and decision-making processes that dictate how land is developed or conserved, thus impacting pedestrian mobility in both indirect and direct ways. Many of these provisions are specified in zoning district regulations. The act of zoning divides a municipality into different districts and dictates what type of development will be allowed in each designated "zone," such as commercial, residential, or industrial. Furthermore, beyond regulating just the type of use, ordinances also determine the physical limitations on the design, siting and appearance of structures.

## Municipalities Included in the Scan

The environmental scan focuses on over sixty target communities, including rural towns, villages, suburbs and cities across Western New York, to ensure the study is representative of the region's diverse municipalities. For the purposes of this review, communities are categorized by the type of municipality (cities, towns or villages) and their population size.

All cities are grouped together. While cities across the region range widely in population size, their incorporation as a city speaks to their community character. Cities are typically older establishments, with more compact, traditional development patterns. Cities, including smaller ones, often represent important employment and activity centers in relation to surrounding communities. This scan includes all nine incorporated cities across Western New York.

Towns across the region are classified by population size. Large towns (with over 10,000 people) are mostly urbanized, and often located in Erie and Niagara counties. Mid-sized towns range from 5,000-10,000 people and are developed to some extent and usually located closer to the region's core cities. Small rural towns have populations under 5,000, lie in more rural areas, and are sometimes centered around villages. Often, these are small villages with under 2,500 people while larger villages tend to be in the urbanized areas of Western New York.



# Understanding how strategies that promote mobility are supported in local plans and policies

## Overview

The most recent comprehensive plans and municipal ordinances were collected for all communities shown on the previous map. Through an extensive review, these documents were assessed consistently by applying a uniform scoring guide to test for the prevalence of a distinct set of strategies that research has shown to promote walking and bicycling at the community level. These criteria were selected from a review of prevailing research on the implications of community design, land use and transportation policies on mobility and public health. Various existing planning toolkits, community walkability assessment methods, and public health evaluation rubrics for local plans were helpful in establishing the approach of this study.

## Types of strategies that help promote mobility

These strategies cover a broad range of policies and issues and are grouped into four categories:

- LAND USE
- PEDESTRIAN-FRIENDLY DESIGN
- TRANSPORTATION
- PLANS, POLICIES AND COMMUNITY PRACTICES

### 27 Strategies for Action/Policy

The scan assesses the prominence of 27 distinct policy issues and action steps that planners and decision makers can employ to promote mobility and physical activity, either directly or indirectly.

Each strategy considered in this scan is explained and investigated in detail separately throughout this report.

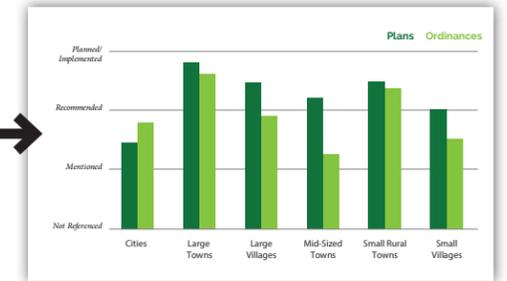
Acknowledging the significant overlap across these policy types, individual strategies were grouped into the most relevant category in terms of this assessment. As the selected strategies cannot be seen as an exhaustive list of all the possible local strategies to promote mobility, the scan also includes other policies that promote mobility but either do not fit neatly within, or extend beyond, the specific strategies tested.

## Scoring guide used to rate support for strategies in plans and ordinances

The level of support for each strategy in every document reviewed was scored using the guide below. The table includes hypothetical examples related to public parks to show how pieces of language in both plans and ordinances were assigned scores.

Score	Description	Comprehensive Plan Example	Zoning Ordinance Example
<i>Not referenced</i>	Not addressed or mentioned	-	-
<i>Mentioned</i>	Mentioned briefly. Demonstrates awareness without proposing specifics to address the policy/issue.	"Maintain and improve the town's parks."	"One purpose of the Low Density Residential District is to encourage the clustering of residential dwellings in order to preserve natural open spaces."
<i>Recommended</i>	Suggested or recommended. A targeted policy, program or intervention is put forth as guidance, but does not ensure implementation.	"Improve the availability of recreational opportunities along the town's waterfront park."	"If new subdivisions are formed, they shall dedicate at least 8% of total land within for parks, playgrounds, or other recreational purpose."
<i>Planned/ Implemented</i>	Proposed, planned or existing policy. A specific policy is proposed with detailed steps or key actors listed in order to guide and ensure implementation.	"It is proposed to convert the town-owned vacant parcels at the intersection of Main and First Street into overlook parks with pedestrian seating, lighting, and tree planting for visitors to relax and enjoy the waterfront."	"The formation of a designated open space preservation district to exclusively contain open areas and parks dedicated to passive and active recreation uses."

## Uncovering how these strategies are promoted in local plans and ordinances



Once all local documents were reviewed, the scores assigned to each strategy were aggregated by community type. The average level of support shown for each strategy in both plans and ordinances was then calculated for every type.

Throughout this report, charts like the one above are used to compare the average level of support for each of the 27 strategies across different community types. Each chart displays the calculated average level of support of one strategy in plans and ordinances across every community type.

The bars representing the average level of support usually fall somewhere in between the distinct scores listed in the scoring guide. In this case, the average level of support can be seen as falling between two levels. Looking at the above example for instance, plans for cities, on average, at least mentioned, but did not formally recommend this example strategy.

By evaluating this broad set of criteria across distinct categories using a uniform rubric, the scan helps reveal overall trends, strengths, and gaps, across the range of mobility enhancing techniques employed in different types of communities across Western New York.



**ENVIRONMENTAL SCAN**

# Land Use

The connection between land use and transportation is strong and inextricable. In order for active transportation modes to be viable in a community, the land use within must maintain a certain density and form. Spread out, automobile-oriented development increases the demand for vehicular travel by increasing travel distances. Rigid separation of land uses restricts mobility and reduces positive public health outcomes by limiting the number of destinations residents can access by walking or bicycling. In contrast, walkable places are characterized by a compact network of buildings that puts a range of uses - including retail, offices and public spaces - within walking distance of homes.

Undoubtedly, market forces can have a notable impact on a community's ability to create vibrant, walkable places. However, through strategic planning efforts and zoning stipulations, communities can create a supportive policy environment that promotes, or at least allows for, walkable places where a mix of building types are close to each other.

The set of policy types reviewed here support land uses that are more conducive to walking. This section explains these policy actions and their capacity to improve mobility. Illustrative local examples are highlighted before taking a closer look at how strongly each policy is supported across different types of communities.

**ENVIRONMENTAL SCAN**

**LAND USE:**

# Mixed-Use Development

Mixed-use development places a variety of land uses - residential, commercial, and public - within close proximity to each other and to residents. This "traditional neighborhood" development pattern differs from automobile oriented forms of development which tend to strictly separate uses by isolating homes from the places people work and recreate.

**How can it promote mobility?**

The best motivation to walk is having places to walk to. Mixed-use development locates retail, services and other destinations close to homes and jobs and thereby encourages walking and bicycling. Residents of mixed-use communities have been shown to weigh less, be more active, and experience lower rates of chronic disease than rural counterparts.<sup>10</sup>

**What do these policies look like in Western New York?**

**In Comprehensive Plans...**

All types of municipalities can promote mixed-use development to some extent through planning. Certain plans make general recommendations to encourage mixed-use development, while others lay out specific policy measures to maintain and enhance mixed-use districts.

For instance, the rural Town of Pavilion in Genesee County states, "It is the policy of the town to have a hamlet that... includes a balanced mix of... development that maintains the town's rural character". Other plans can be more specific. The Town of Pomfret in Chautauqua County recommends multi-story, pedestrian-oriented, mixed-use buildings types in hamlets. Other places, like Buffalo, endorse form-based zoning which separates districts based on physical building appearance, and does not strictly regulate use.

**In Municipal Ordinances...**

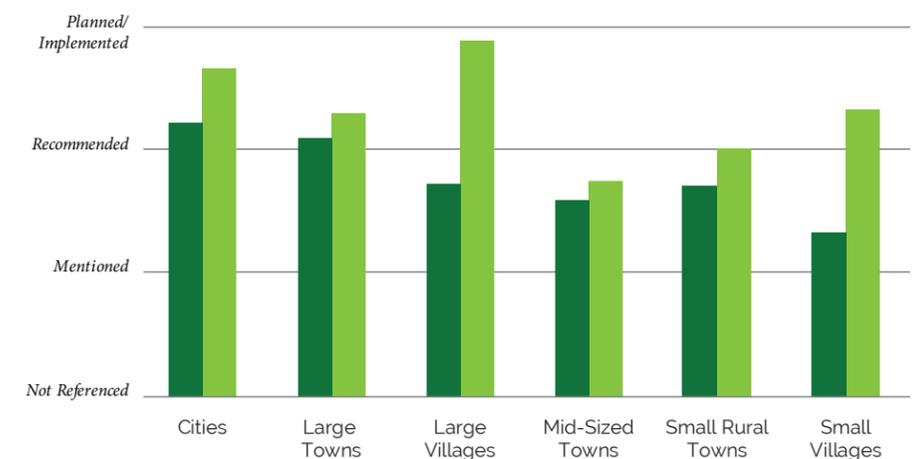
Mixed-use development can be promoted in ordinances through the stated intent and the permitted uses of established zoning districts.

The City of Olean promotes mixed-use development in the written intent of its City Center district - "to develop with higher intensity mixed-use development that can support walkability and a vibrant urban environment." Additionally, when stipulating permitted uses in downtowns, hamlets, and neighborhood commercial districts, codes can list a variety of residential and retail uses alongside one another. Other districts commonly allow mixed-use to a lesser extent by permitting essential services in residential areas, or requiring special use permits for divergent uses.

**How is mixed use development promoted in plans and ordinances in WNY?**

Mixed-use development is supported to some extent in most municipalities reviewed. Across all community types, mixed-use districts in zoning codes are more common than proposals for mixed-use in plans. A range of uses is often permitted by right in many districts of cities, large towns and villages. Meanwhile, smaller towns and villages were more likely to allow a mix of uses by special permit only, or to permit limited or "essential" services in residential districts. Support of mixed-use districts in comprehensive plans was stronger in larger municipalities with generally greater planning capacity.

*On average, how is mixed-use development promoted in PLANS and ORDINANCES?*



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# Revitalization

Revitalization efforts reinvest in existing communities. They include infill development policies which direct future development to vacant or underused areas, adaptive re-use projects which re-purpose underused structures, and historic preservation programs. Revitalization efforts can range from the renovation of a single building, to reinvestment programs aimed at whole neighborhoods or business districts.

## How can it promote mobility?

Revitalization initiatives promote reinvestment within existing, and often economically distressed, communities. This approach helps fill in retail corridors and bring life back to older neighborhoods. Revitalization efforts can therefore improve physical activity levels among current residents simply by adding more places, like shops or job sites, within walking distance of existing neighborhoods. Focusing these efforts in distressed communities works to serve populations most vulnerable to deleterious health outcomes.<sup>11</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Municipalities can act to target new growth in existing, urbanized areas, which in turn reduces sprawl. Comprehensive plans can recognize existing neighborhood centers or village hamlets, and prioritize their redevelopment.

Niagara Falls' comprehensive plan identifies "several underutilized parcels... that offer significant potential for redevelopment." The provision goes on to promote collaborative work with the state and local developers in pursuing a strategic renewal project. Another example of a cohesive planning approach to revitalization can be found in the Town of Lockport. This plan adheres to a county-wide framework for redevelopment, establishes a prioritized approach for regional reinvestment, and identifies roles and responsibilities for local and regional leaders.

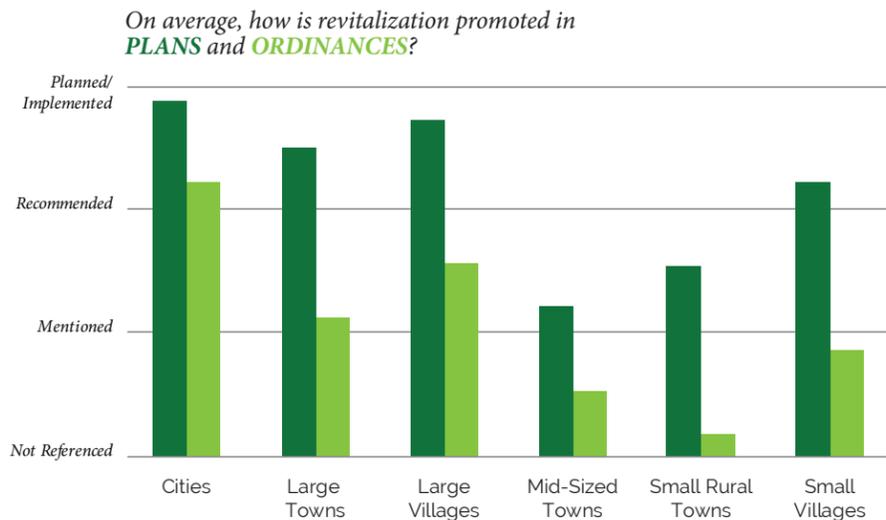
#### In Municipal Ordinances...

Zoning district regulations can provide the incentives necessary to promote revitalization efforts. Districts like "Business Revitalization Zones," and "Historic Overlay Districts," can lay out funding mechanisms for parcel redevelopment.

The purpose of Jamestown's historic overlay district is "to promote and enhance the architectural heritage of the historically significant sectors of the City; ...and to permit new construction in a manner which complements the existing urban form of the district." Municipalities may also form a Historic Preservation Board or Commission, with the authority to designate historical assets and districts in order to restore, enhance and perpetuate these assets and thereby promote the general welfare of the community.

## How is revitalization promoted in plans and ordinances in WNY?

Across the region, revitalization efforts are more prevalent in comprehensive plans than in zoning regulations. Like other pedestrian-oriented land use elements, revitalization efforts are more common in larger municipalities. Expectedly, cities promote revitalization efforts, like urban infill development, in their comprehensive plans more robustly than other municipality types. Smaller towns generally do not focus on revitalization, partly because most have limited possibilities for revitalization.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# Sustainable Development

Many of the policies included in this section could be considered sustainable development principles which are applicable to various types of development climates. For the purposes of this review, the "sustainable development" criteria included general policies to combat sprawl in the low growth context of Western New York.

## How can it promote mobility?

Sprawling development patterns limit transportation choices and present challenges for active living. Sustainable development combats these trends by focusing growth near existing infrastructure, which commonly improves mobility by placing more destinations within walking or bicycling distance of community residents.<sup>12</sup> Whereas many of the more discrete policies tested in this section also fit under sustainable development, plan and ordinance elements that promoted sustainable development principles more broadly are examined here.

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Sustainable development policies aim to site new development close to existing development. These policies seek to limit infrastructure expansion that would overburden a municipality's tax budget while restricting development of natural, open spaces.<sup>13</sup>

In a collaborative regional plan, municipalities in the Chadwick Bay area sought to create a clearly defined urban growth boundary which would prohibit development from occurring beyond a given zone. Another example is seen in Yorkshire, whose plan recommended that no new roads be developed in the town for 15 years. These policies are responding to a perceived regional need to concentrate new development in areas with existing infrastructure, and may also help promote investment in more walkable, pedestrian friendly neighborhoods.

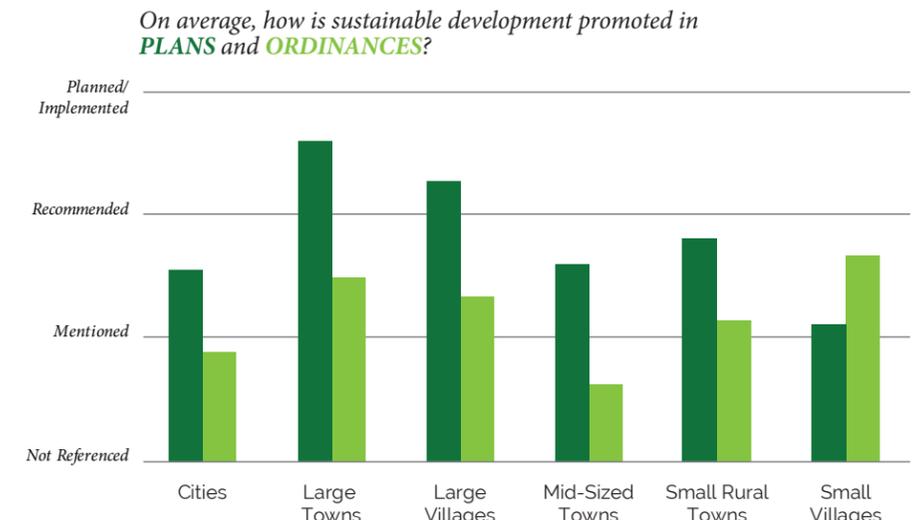
#### In Municipal Ordinances...

In zoning codes, "Open Space" and "Conservation" districts can severely restrict land use. The purpose of Grand Island's Open Space District is to "delineate those areas where substantial development of the land in the way of buildings or structures is not desirable." By strictly limiting the type of development that can occur in undeveloped areas, demand for land and development in the urban core is increased, and can more effectively leverage market forces to steer development in a more cost effective manner.

New York has also implemented the "Smart Growth Public Infrastructure Act" in 2010, which requires most state agencies and authorities to prepare a Smart Growth Impact Statement prior to approving or funding any public infrastructure project to ensure the project is consistent with Smart Growth principles.

## How is sustainable development promoted in plans and ordinances in WNY?

Promoting Sustainable Development is generally more of a focus in plans than in ordinances. Large towns and villages, places with typically higher development pressures, were most likely to recommend sustainable development initiatives in comprehensive plans. Overall, cities were found to have slightly fewer sustainable development initiatives than most other community types, including rural towns. However, sustainable development strategies in surrounding towns can in turn promote more development in nearby cities and villages.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# “Smart” siting of public buildings

As public buildings, such as schools, are common destinations for residents, a local government can add prime destinations within walking distance of neighborhoods by strategically siting public buildings. Similarly, promoting new development near existing public places, can also promote walking and bicycling by putting more residents and workers within reach of public buildings.<sup>14</sup>

### How can it promote mobility?

Siting public buildings outside of neighborhood, town and village centers can prevent many residents from being able to walk to these shared spaces. For instance, school children may not be able to walk to school if the school is located well outside of local neighborhoods. Policies on siting of schools, community centers, post offices and other public buildings along “Main Streets”, or within neighborhoods can increase rates of active transportation.<sup>15</sup>

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

Comprehensive plans can demonstrate an awareness of how the designated uses of parcels interact with each other. The plan for Western Orleans County recommended that town and village zoning regulations be revised to ensure that commercial, industrial, and high density residential development be permitted in and adjacent to villages and hamlets, where government offices and public buildings are currently located.

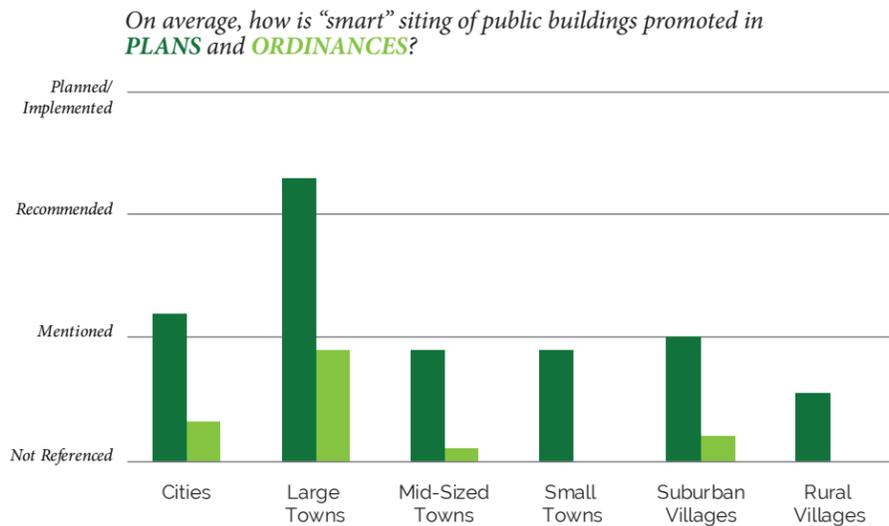
Many rural areas have nodes of development around intersections of major routes. Clustering development around these areas can increase walking to these nodes of activity from nearby neighborhoods. Yorkshire’s policy recommends the, “clustering of development activity to make the best use of existing services, preserving agricultural land and create “nodes” of activity”. These nodes function to deter lengthy “strip” developments that detract from rural character.”

##### In Municipal Ordinances...

While zoning codes cannot identify specific parcels for public development, subdivision regulations can guide how large public investment projects occur. The town of Lockport’s subdivision regulations state that, “adequate sites for schools, parks, playgrounds, and other community services shall be located so that residents of all neighborhoods shall have convenient access to such facilities”.

### How is “smart” siting of public buildings promoted in plans and ordinances in WNY?

When looking at the “smart growth” policies specific to publicly-owned buildings in comprehensive plans, large towns and villages scored higher than other community types. On average, plans supported “smart” siting of public buildings more so than zoning codes regulated such strategies, although it was common for small villages to have a supportive zoning regulation without specific support of these policies in comprehensive plans.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# Pedestrian-friendly parking guidelines

Parking lots attract increased volumes of automobile traffic and discourage pedestrian activity on streets. Parking guidelines can limit the expansion of surface parking and shield pedestrians from vehicle lots and traffic.

### How can it promote mobility?

An abundance of parking in mixed-use districts and along “Main Streets” can deter active transportation by creating “gaps” in the built environment and promoting an increased use of automobiles in these areas.<sup>16</sup>

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

Plans that advocate for pedestrian friendly parking guidelines recognize that more intensive utilization of the existing parking inventory can maintain and increase levels of business activity. From this perspective, the parking supply is seen more as a support function for public and private downtown activities rather than a revenue producing activity in its own right.

Niagara Falls responds to these concerns with their policy: “Favor and nurture pedestrian environments over automobile environments, if required at all, and utilize design standards to camouflage parking through design and landscaping.”

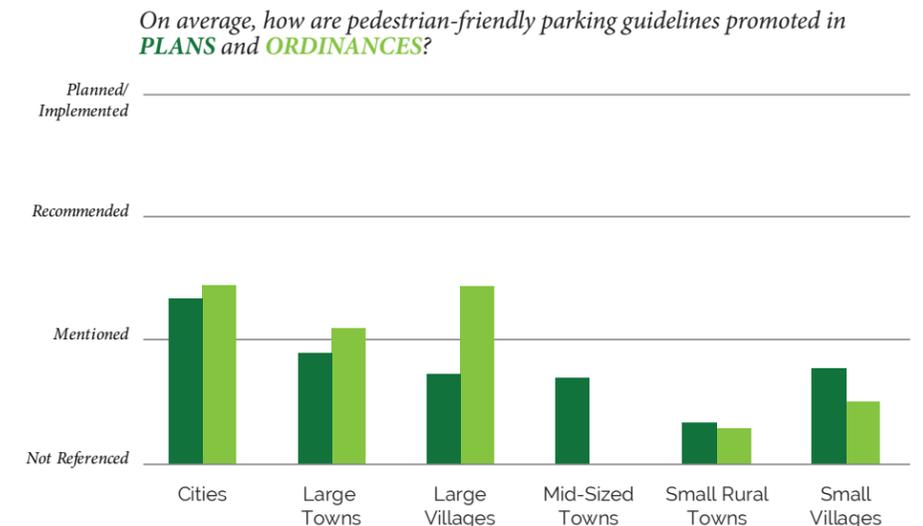
##### In Municipal Ordinances...

Through zoning and development standards, municipalities can implement parking requirements that reduce the prominence of parking in these areas to create a more pedestrian-oriented environment and promote active transportation. Regulations can include reducing or removing the parking space requirements for new developments, increasing fees for parking, establishing a maximum number of allowed parking spaces for new developments, forming shared parking arrangements, providing financial incentives for alternatives to surface lots, and allowing on street parking in pedestrian areas.

In Olean, the City Center district only allows parking lots and structures through approval of special use permits. Through this process, plans for parking in the district are subject to planning board review. This gives the public more control over the look and feel of parking arrangements along walkable street corridors.

### How is pedestrian friendly parking promoted in plans and ordinances in WNY?

Measures to restrict parking in walkable areas or provide parking to promote pedestrian activity were generally rare in the communities scanned. True to character, cities, large towns and villages were the most likely community types to mention pedestrian-friendly parking guidelines in the documents reviewed. Calling for pedestrian-oriented parking is more of an advanced strategy to promote mobility, and is potentially best-suited for these types of municipalities.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# Provision, protection of public parks and recreation areas

Robust plans and provisions for parks and recreation areas provide residents with opportunities for active recreation and physical activity and often show that health-related issues are a community concern.<sup>17</sup>

## How can it promote mobility?

Sound provisions to maintain and enhance public parks and facilities can provide multiple benefits to promote walking and physical activity outdoors; providing destinations for community members to walk to (especially in rural areas), programming for facilities, and promoting equitable access to open space.<sup>18</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

In rural areas where market forces generally make walkable places dominated by retail activity hard to sustain, creation of parks and recreation opportunities are key to improving public health. Rural area comprehensive plans can work to preserve open space and scenic resources for passive and active recreation programming.

Plans can also be instructive on how to fund park creation and maintenance. The Chadwick Bay Area Plan states, "all communities should make provisions in their land use regulations to obtain park land or payment in lieu of land to meet impacts of new development."

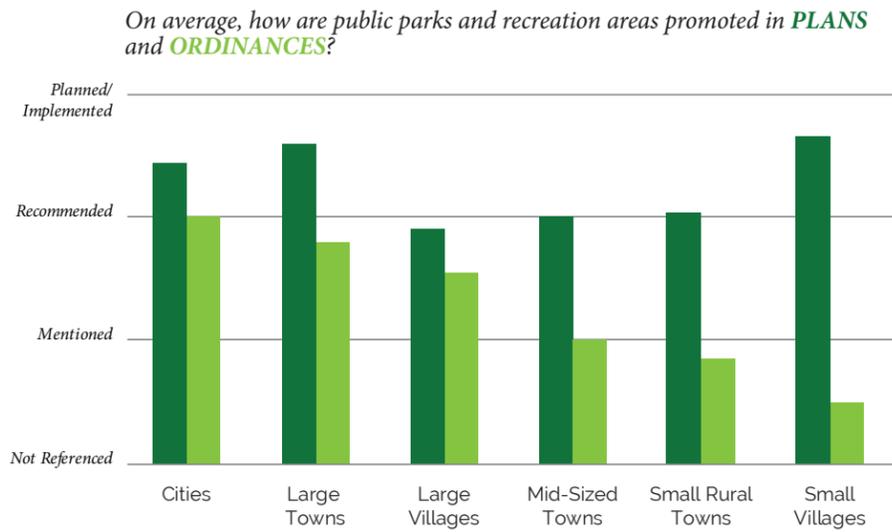
#### In Municipal Ordinances...

Strong Open Space and Agricultural District regulations can preserve natural and scenic areas for active recreation. Dunkirk's Open space district is designated, "to provide for park, recreation and open space uses of the City of Dunkirk's parks and open space areas. The OS District is established to include public recreation facilities to ensure their continuation as parks and open space."

In areas with more consistent development pressure, Cluster Development and Planned Unit Development regulations can be tailored to require that a certain amount of parks and recreation spaces be set aside when new neighborhoods are developed, or alternatively, that developers are charged a recreation fee to fund public parks.

## How are parks and recreation areas promoted in plans and ordinances in WNY?

Most municipalities reviewed included some recommendations for public open spaces. As with other policies investigated, explicit support in formal plans and zoning regulations lessens as communities decrease in size. As seen here, the larger the community size, the more likely that municipality is to make provisions for public open space in its ordinance. While small villages were just as likely as cities and large towns to plan for public open spaces, they were much less likely community type to have implemented some open space provisions in their zoning regulations.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# Land Conservation

Land conservation policies and programs prohibit development on lands with important natural resources and wildlife habitat. Conserving natural land creates scenic places for pedestrians and bicyclists to enjoy while forcing development closer to existing places, which could in turn make them more walkable.<sup>19</sup>

## How can it promote mobility?

Natural open space is a common destination for walking and bicycling trips so preserving these areas, and their scenic vistas, can promote active transportation and provide other environmental services that help promote healthy lifestyles. In rural areas, creating attractive destinations for physical activity are integral in promoting public health. Land conservation also helps focus development in areas already served by infrastructure, which also can promote mobility by adding destinations within walking distance of existing neighborhoods.<sup>20</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Comprehensive plan language can advocate and lay out strategies to steer development away from precious natural resources.

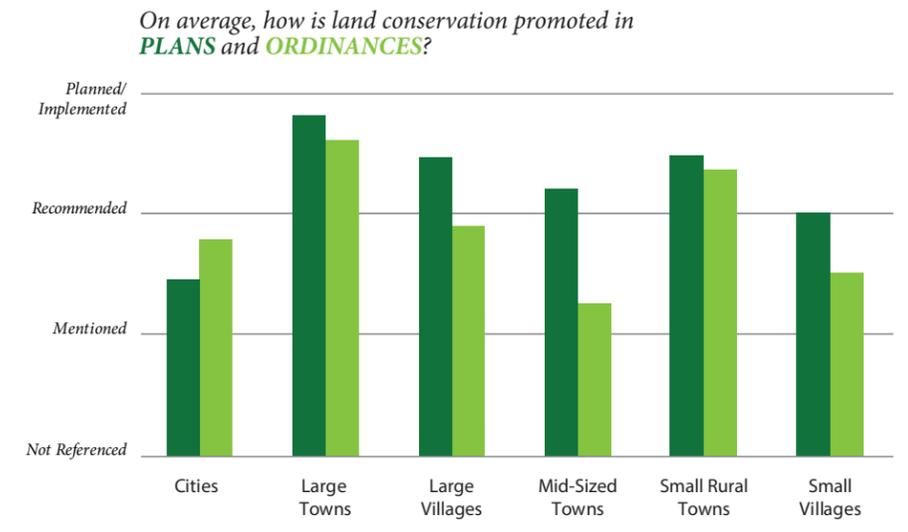
In an effort to alter market forces, the Village of Perry is targeting land conservation as a means of increasing land values and development pressure within the village core, specifically along its Main Street. The purpose of this strategy states, "to achieve increased values is to limit supply. By limiting the supply of developable land on the fringe...what is developable grows in value." Thus, by limiting the development potential of land surrounding the village, the demand for development within the village is increased. This increased demand could be leveraged to expand and enhance the village's walkable, mixed-use corridors.

#### In Municipal Ordinances...

The goal of land conservation can be accomplished with strong provisions for open space and agricultural districts. The Town of Lockport's Agricultural District is intended, "to accommodate farming, forestry, livestock maintenance and other related activities. Such uses are an essential part of the rural economy of the Town and the agrarian character of portions of the community... These activities shall not be compromised by development and shall be enhanced by the protection offered herein."

## How is land conservation promoted in plans and ordinances in WNY?

Like other land use elements investigated, the conservation of natural land and wildlife habitat is seen most strongly in larger communities with more acute development pressures. Although, smaller and mid-sized rural towns, with a wealth of open space to protect, were nearly as likely as larger towns and villages to at least make plans to preserve land. Outside of cities, communities endorsed land preservation strategies more strongly in comprehensive plans than zoning regulations.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# Multi-Use Trails/Greenways

Multi-use trails, or greenways, allow for a range of recreational uses; walking, bicycling, and even snowmobiling. They can range in the type of amenities provided according to their intended use, and can connect to parks, or waterfronts, and stretch across multiple jurisdictions to form extensive trail networks.<sup>21</sup>

## How can it promote mobility?

Communities designed for active living feature public places that encourage physical exercise. While these facilities can include playgrounds and pools, established multi-use trails specifically help promote mobility by providing thoroughfares for pedestrian and bicycle travel that are isolated from vehicle traffic. These spaces often provide unique access and views of scenic destinations, like waterfronts and other natural assets, creating unique attractions to draw people to recreational activities.<sup>22</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Comprehensive plan goals that support greenways can be approached from both a recreational and connectivity perspective. Multi-use paths can create a recreational destination to encourage physical activity and can be programmed to feature multiple tourism-related attractions. Multi-use trails can also increase pedestrian connectivity between locations and incentivize active modes of transportation.

The Chadwick Bay Area Plan recognizes the recreational opportunity in multi-use trails. It makes recommendations to, "Develop a regional recreation trail "spine" that services both residents and tourists." This group of communities, advances trail development as a means of connectivity by, "identifying priorities for expanding and developing a town wide pedestrian sidewalk/trail network and bicycle routes to expand connectivity through the community, especially near schools, businesses, and parks."

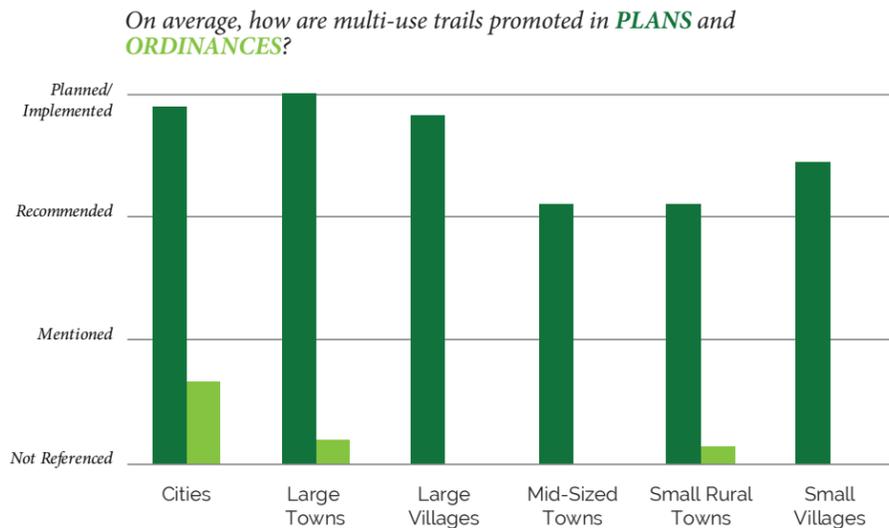
#### In Municipal Ordinances...

Municipalities can implement trail overlay districts to guide the development of a trail network. Also common is using abandoned railways in "rails-to-trails" programs. Lackawanna has both a Seaway Trail Overlay District and a Smokes Creek Overlay District. While also having conservation purposes, the districts recognize the value in preserving these natural amenities for recreational and connectivity uses.

Lackawanna also proposes reactivating abandoned rail lines as multi-use trails: "When no longer in use by the railroad operator, bridges, trestles, culverts, tunnels, or other structures that may have considerable value for, and may potentially facilitate, the development of recreational trails, such structures should be preserved and maintained for this purpose."

## How are multi-use trails promoted in plans and ordinances in WNY?

Plans for multi-use trails are laid out in most comprehensive plans. However, like other pedestrian features, this holds less true in smaller, somewhat more rural towns. Keeping with this trend is worth noting here, as greenways are less urban-oriented than other pedestrian features, and generally more apt in rural areas than other pedestrian elements. This again points to the relatively limited implementation capacity in these communities. Trails and greenways are not commonly handled by zoning district regulations in specific terms.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

LAND USE:

# Other land use policies that enhance mobility

Other land use planning efforts to promote mobility include endorsement of regional land use plans, specific regulations to prohibit automobile-oriented development types, and general suggestions that help ensure pedestrians and bicyclists are considered when land use decisions are made.

## How can it promote mobility?

These other policies and provisions for land use and zoning help promote walking and bicycling in indirect ways by enabling coordination of land use decisions across jurisdictional boundaries, or by better aligning land use goals with transportation investments of the community. Other policies and provisions ensure pedestrians and bicycles are considered in land use decisions.

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Plans can propose a number of land use policies that could help promote mobility and physical activity. One could be a recommendation to prohibit drive-thru restaurants and other automobile-oriented developments in mixed-use districts or along walkable corridors. For instance, the City of Batavia's plan suggests disallowing office parks on a section of Main Street.

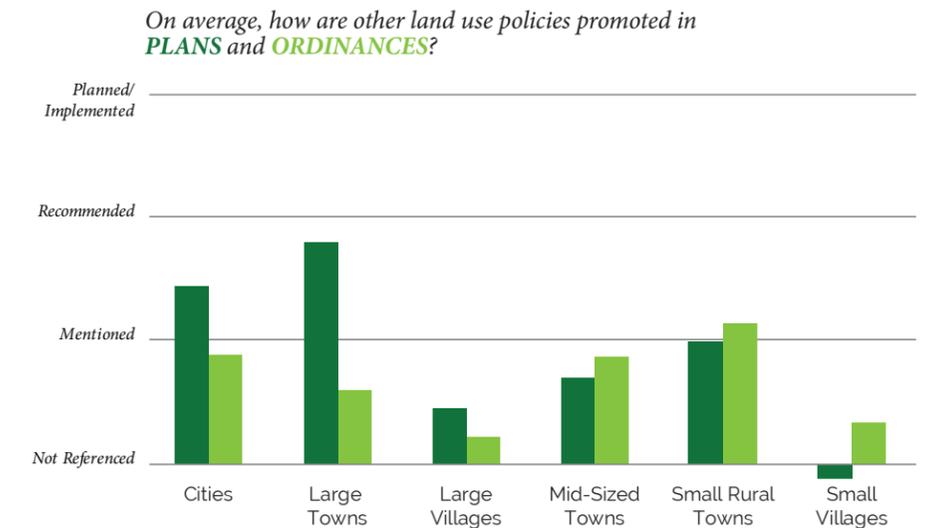
Comprehensive plans can also include recommended site plan designs. In the City of Buffalo's latest comprehensive plan, a series of detailed, suggestive site plans for various neighborhoods are put forth. These help perpetuate community character by providing prospective developers with a common framework for how different neighborhoods are intended to look at a very granular level.

#### In Municipal Ordinances...

Many municipalities feature site plan review. In these review processes, the review board must consider a statute enumerated list of factors. Often times they stipulate pedestrian circulation must be considered: "The interior circulation system is adequate to provide safe accessibility to all parking areas and ensure adequate separation of pedestrian and vehicular traffic." Further requirements of site plan review can be for pedestrian amenities. For instance, a provision in Grand Island's ordinance states, "Community trash receptacles, benches, light standards and other 'street furniture' should be of materials and the design that is compatible with the village atmosphere and integrated into an overall design concept for the site."

## How are other land use policies promoted in plans and ordinances in WNY?

As the discrete criteria tested in the land use section were broad and inclusive, relatively few mobility-promoting land use policies were found in comprehensive plans or zoning codes that fit into the "other" category. Those communities that did go above-and-beyond by including other land use elements to implicitly support mobility were a mix. Cities, large and small towns were the only community types to mention a mobility-supporting land use policy, on the average.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

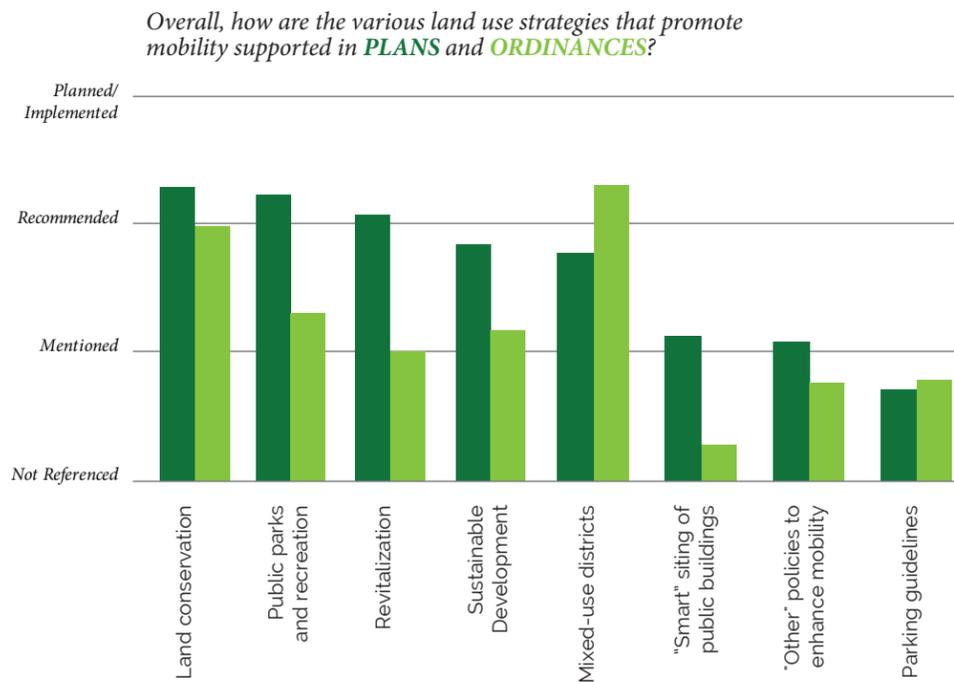


## LAND USE: Summary of Support for Land Use Strategies that Promote Mobility

Overall, strategies included in this section of the review are more common in plans than those reviewed in later sections. However, some land use related actions and policies are promoted more frequently than others, with major variations by the type of community being planned for.

### How common are land use strategies to promote mobility across WNY?

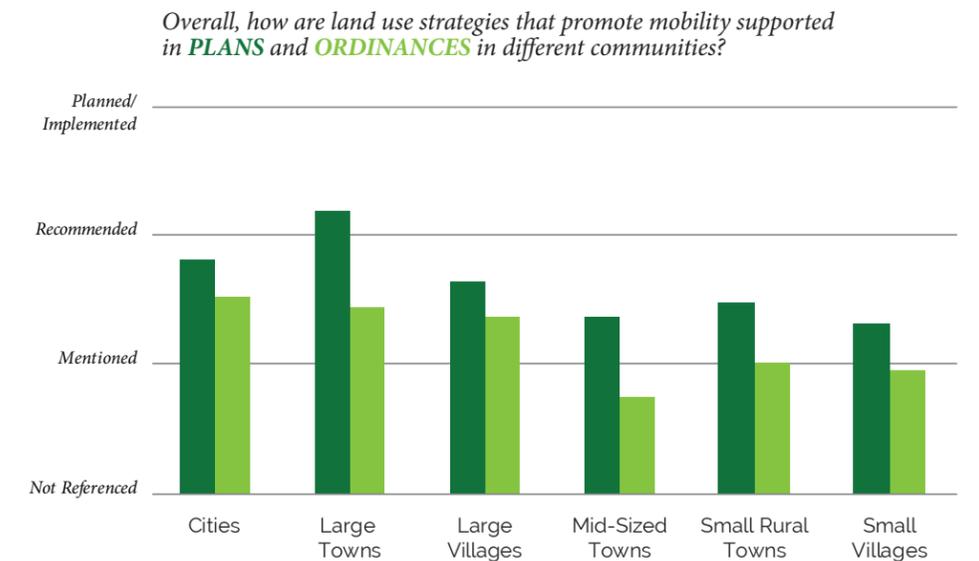
Mobility promoting actions and policies related to land use are supported relatively strongly across the region. Strategies related to protecting natural land and providing public open spaces were the most common in this section. Other broad land use strategies that help promote mobility, like revitalization, mixed-use districts and general sustainable development strategies were also commonly mentioned or recommended in both plans and ordinances. Land use strategies specific to pedestrian-friendly parking guidelines were least common in this section. Other than mixed-use districts, all policies here were typically supported more prominently in ordinances than in comprehensive plans.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

### What community types are most supportive of land use strategies to promote mobility across WNY?

Land use strategies to promote mobility are generally more common in larger municipalities. On average, large towns supported land use strategies that help promote mobility, like land conservation, more heavily in comprehensive plans than any other community type. Cities, large towns and villages were seen to support land use policies that promote mobility in their comprehensive plans equally well. Smaller municipalities with lower development pressures and planning capacity, in general, were less likely than larger communities to suggest strategies to promote mobility through land use policy in their plans and ordinances.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.





ENVIRONMENTAL SCAN

# Pedestrian Friendly Design

Vibrant walkable places cater to the needs, tastes and concerns of pedestrians. Streets in walkable places are built on a human scale, lined with buildings that sit within steps of the sidewalk. They have abundant pedestrian amenities, such as lighting, sidewalks, crosswalks and benches, designed to make pedestrians feel safe and secure. These amenities can attract more pedestrians to walkable places and extend walking trips. Municipal plans can propose implementation and funding strategies to make streets more suitable and inviting to pedestrians. Policies and design requirements that ensure pedestrian guidelines are followed can also be stipulated in zoning district regulations of municipal ordinances.

The set of policy types reviewed here support design elements that enable and encourage pedestrian activity and other modes of active transportation, like bicycling. In general, the measures examined here are more specific than other categories of this review. Municipal plans and ordinances across the region typically do provide for, or at least recognize, the advancement of mobility by laying out provisions for many of these pedestrian elements.

ENVIRONMENTAL SCAN

PEDESTRIAN FRIENDLY DESIGN:

## Building Facades

The facade is the street-side exterior, or “face” of a building. Establishing programs to improve existing facades, or consistent construction and design guidelines for future development, can help a community both maintain and revive a unique form and character; one more inviting to pedestrian activity.<sup>23</sup>

### How can it promote mobility?

Street vibrancy can be promoted with attractive building design and inviting facades with doors and windows lining the street. Charming facades can be functional too, like a restaurant with street side seating. In this way, building improvements can directly provide streets with a sense of life, bringing more feet and eyes to the street which in turn increases perceptions of community and safety.<sup>24</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Comprehensive plans can state design and aesthetic styles to promote the existing character of the community. Ellicottville encourages, “the use of shared driveways, excellent design, and high quality facades to ensure that future development is in keeping with the character of the Town.”

The Village of East Aurora lays out a number of provisions that, when taken together, create strong guidelines for inviting facades. These recommendations include: “1. Encourage architectural designs and development styles that are in harmony with the existing character of the Village; and 2. Promote streetscape and roadway improvements to further enhance the aesthetics and pedestrian oriented character of the business district; etc.”

#### In Municipal Ordinances...

Site plan review standards and design requirements are the best opportunity to set guidelines for building facades. Ellicottville helps ensure attractive streets in its central village by requiring, “Structures greater than 60 feet, but less than 120 feet in length must exhibit a prominent shift in the facade of the structure so that no greater than 75% of the length of the building facade appears unbroken.” The Village of East Aurora also includes site plan review criteria like the promotion of a unique village identity, the creation of architectural harmony, preservation of pedestrian character, and the reduction of visual clutter.

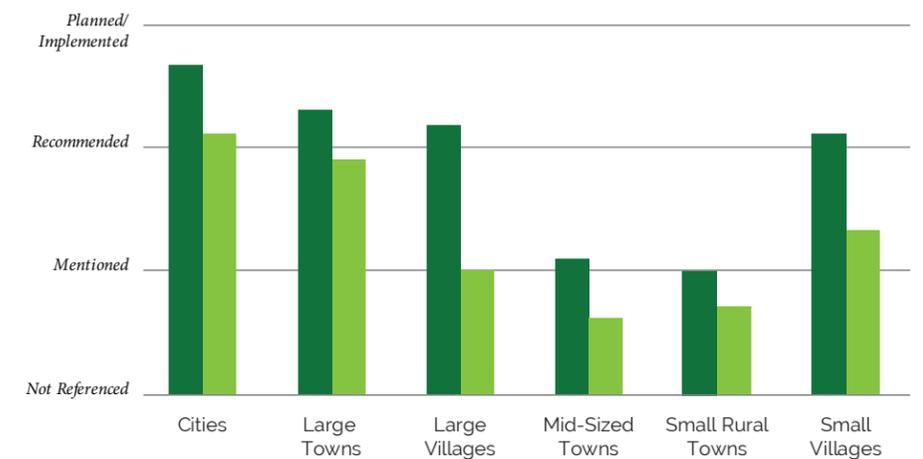
Alternatively, Niagara Falls promotes inviting facades by providing a height bonus which is contingent on pedestrian oriented street level enhancements, such as the arrangement of windows and doors on buildings, construction materials, and other design suggestions.

### How are inviting building facades promoted in plans and ordinances in WNY?

On average, street connectivity is addressed more strongly in comprehensive plans than in zoning codes throughout all types of communities.

Large suburban towns with development pressures pay just about as much attention to street connectivity as cities. In smaller, more rural areas there is little attention given to enhancing the connectivity of street grids.

On average, how are inviting building facades promoted in PLANS and ORDINANCES?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PEDESTRIAN FRIENDLY DESIGN:

# Pedestrian-Scale Setbacks

Another important pedestrian-scale design standard is the minimum front setback of buildings, or, the distance from the street to the front of the building. Where larger setbacks help accommodate vehicles, shorter setbacks help create a pedestrian-scale environment.<sup>25</sup> Pedestrian-scale setbacks, as well as lot widths, are applicable to retail and mixed-use districts where walking destinations exist.

**How can it promote mobility?**

Large setbacks can hamper community walkability by restricting the accessibility of building entrances from the street. Short setbacks frame the street and thereby improve pedestrians' perceptions of these areas as safe and convenient places for walking. Zoning districts with small or no minimum setbacks permit building-lined streets, therefore providing passers-by with windows to look into and front doors to walk into.<sup>26</sup>

**What do these policies look like in Western New York?**

**In Comprehensive Plans...**

While policy statements should reflect those stated in the "Lot Width" section, municipalities can also study these issues to build context-specific guidance. For example, the Town of Amherst leveraged a "Context-Sensitive Highway Design Report" to promote access and connectivity, by limiting the number of curb cuts, providing vehicular/pedestrian connections between adjacent developments, and providing pedestrian/sidewalk connections between adjacent neighborhoods and retail centers.

**In Municipal Ordinances...**

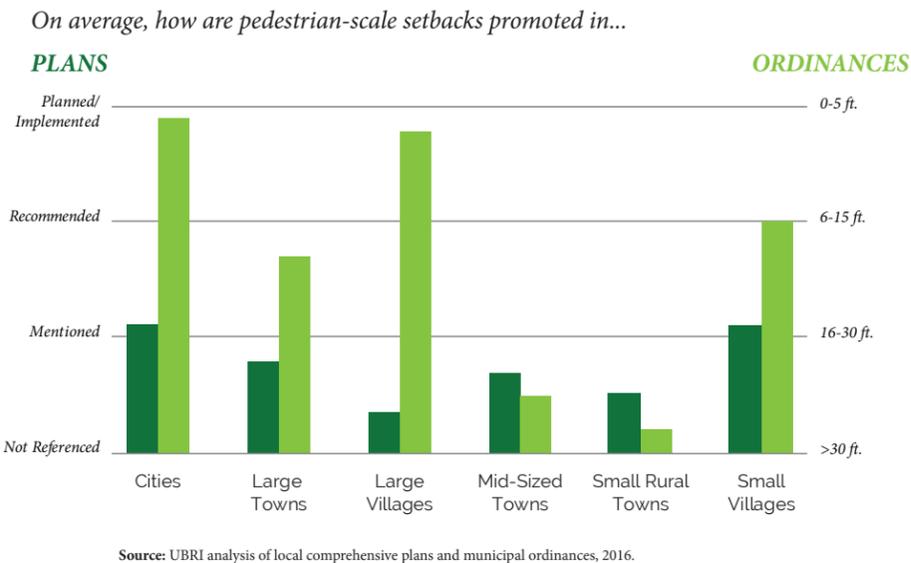
Like lot widths, setbacks are implemented using regulated design measurements in zoning ordinances. For this review, setbacks in the most central commercial district of each municipality were evaluated. The highest scoring setbacks were zero.

In lieu of standards that meet these specifications, town ordinances can enable planning boards to limit setbacks in specified zones. One such review process exists in the Town of Amherst, whose subdivision regulations state, "A plan for safe and convenient pedestrian circulation within the subdivision and between the subdivision and surrounding areas shall be provided.. The pedestrian circulation plan as approved by the Planning Board shall be based on expected use and function consistent with the following standards."

**How are pedestrian-scale setbacks promoted in plans and zoning in WNY?**

Pedestrian scale setbacks have been implemented in many districts throughout the region despite a lack of explicit recommendations to do so in formal plans.

Cities and villages, with traditional downtowns and Main Streets are most likely to have pedestrian scale setbacks of less than 15 ft in commercial districts. Towns are more likely to allow for automobile-oriented retail districts, so pedestrian scale setbacks are less common. But like cities and villages, the bigger the town the more likely it is to have pedestrian scale design built into its zoning district regulations.



PEDESTRIAN FRIENDLY DESIGN:

# Pedestrian-Scale Lot Widths

Urban design standards address the form and character of the community. Minimum lot widths have particular significance in creating vibrant urban environments.<sup>27</sup> Larger lot widths help accommodate vehicles and "big box" commercial development, while narrow widths create a street environment scaled to pedestrians.

**How can it promote mobility?**

The form and character of the community can help promote walking and reduce dependence on driving. In comparison to sprawling commercial strip development, pedestrian scaled places allow people on foot to circulate with ease and comfort. Large minimum lot widths can encumber the formation of walkable places simply by restricting how close together buildings can be placed. Shortening lot widths, or reducing minimum lot sizes, in retail and mixed-use areas puts more places within reach of pedestrians.<sup>28</sup>

**What do these policies look like in Western New York?**

**In Comprehensive Plans...**

Many communities across Western New York have been established for some time, and feature areas with traditional street environments scaled for pedestrians. Effective plans seek to protect and expand these areas by respecting their design. Ellicottville's plan states, "New buildings should relate to the surrounding environment with regard to texture, scale, massing, proportion, and color. A strong visual relationship between the building, the site, and adjacent development is vital for overall design compatibility. Emphasis should be placed on creating an interesting visual impression. Buildings should be constructed to achieve a human scale and interest. Clusters of smaller buildings of varied size and orientation are encouraged, instead of vast single buildings"

**In Municipal Ordinances...**

Lot width standards are common in zoning district regulations. For the purposes of this review, lot widths in central business, mixed use or neighborhood commercial districts were evaluated.

Development standards should be overt in their attempt to create pedestrian scaled areas. At the maximum, the code should simply require that in presently urbanized areas, lot widths should be zero feet.

Ordinances can also include in their purpose and site review standards like Batavia's which state, "Buildings which are 'squat' in proportion or which have very strong horizontal elements that dominate the facade are discouraged."

**How are pedestrian-scale lot widths promoted in plans and zoning in WNY?**

Comprehensive plans did not typically suggest restricting lot size. However, many communities do have pedestrian scale lot widths in commercial, or mixed use zoning districts. In nearly all of the cities and villages scanned, zoning regulated pedestrian scale minimum lot widths (under 50 feet) in central business or commercial districts. Towns were generally less likely to zone for pedestrian-scale minimum lot sizes. These findings reflect the nature and design of these communities. Towns can take other measures to promote physical activity, including supporting existing walkable places in nearby cities and villages.



PEDESTRIAN FRIENDLY DESIGN:

# Street Connectivity

Street connectivity measures how well-connected the street pattern is in a neighborhood, and is a good indicator of the number of alternate routes available for pedestrian travel.<sup>29</sup>

### How can it promote mobility?

Increasing the connectivity of streets, by adding intersections and decreasing the length of street blocks, creates more potential routes for people to walk, while increasing the number of stops cars have to make. Designing a street network with a greater number of blocks, and intersections, puts more destinations within reach, while creating a more pedestrian friendly environment.<sup>30</sup> Dense, connected street patterns can boost walking rates.<sup>31</sup>

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

Municipalities can plan to improve connectivity within and between neighborhoods by proposing design guidelines that promote pedestrian circulation in new developments, or by advocating for expanding village street grids.

They can also study these issues to provide context-specific guidance. For example, the Town of Amherst leveraged a "Context-Sensitive Highway Design Report" to promote access and connectivity, by limiting the number of curb cuts, providing vehicular/pedestrian connections between adjacent developments, and providing pedestrian/sidewalk connections between adjacent neighborhoods and retail centers.

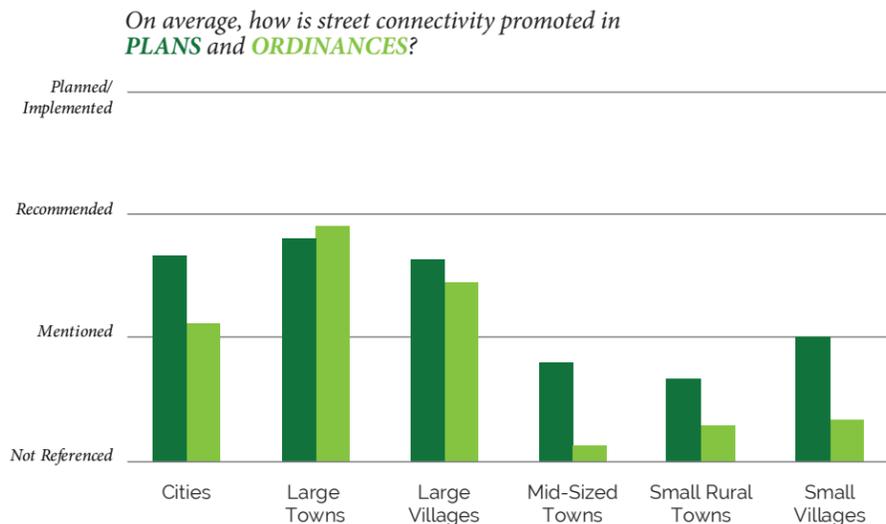
##### In Municipal Ordinances...

Through zoning, municipalities can put in place mechanisms to ensure new developments enhance street connectivity. One way is to require that prospective developers provide a pedestrian circulation plan for Planning Board review. Another way to increase connectivity is by limiting block length in new developments to be 500' or less.

The Town of Amherst has a review process in its subdivision regulations. It states, "A plan for safe and convenient pedestrian circulation within the subdivision and between the subdivision and surrounding areas shall be provided... The pedestrian circulation plan as approved by the Planning Board shall be based on expected use and function consistent with the following standards." This allows the reviewing board to deliver input on proposed pedestrian connectivity.

### How is street connectivity promoted in plans and ordinances in WNY?

In general, improving connectivity of streets for pedestrians and bicyclists is less evident in local plans and zoning codes than other pedestrian design guidelines. The region's cities and villages, which are more built out, typically address street connectivity to a lesser extent than large towns, which generally have more open space, development pressures, and more detailed subdivision regulations. Smaller towns, on average, did not mention street connectivity in either plans or zoning codes, though, like other community types, they were more likely to do so in plans.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PEDESTRIAN FRIENDLY DESIGN:

# Sidewalks

Well-maintained, connected sidewalks can provide a safe and convenient path for pedestrians to travel and can help promote recreational walking even in exclusively residential neighborhoods.

### How can it promote mobility?

People who report having access to sidewalks are 28% more likely to be physically active. Walking offers important public health benefits, but safe and attractive sidewalks and footpaths are needed to attract walkers and assure their safety.<sup>33</sup>

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

Planning provisions for sidewalks are straightforward. In rural areas, where sidewalks may not be present at all, recommending expansion of sidewalks to one side of the street is appropriate.

In other areas where sidewalks are already adequately provided, provisions like Olean's emphasis on the need to maintain scrutiny over the condition of sidewalks more adequately addresses conditions. Their plan states, "maintain, enhance, and extend sidewalks in the city. Fill in missing sidewalks and extend sidewalks to destinations such as parks and other recreational facilities, and the downtown area."

##### In Municipal Ordinances...

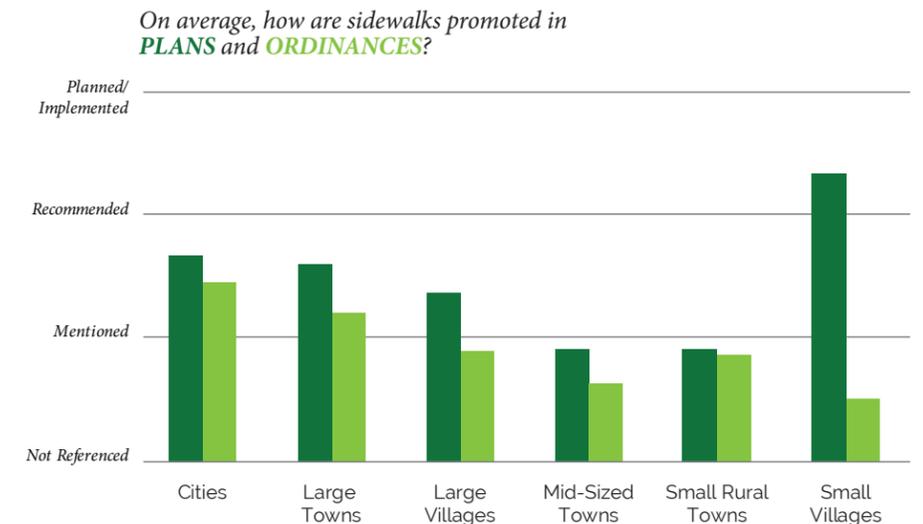
Municipal ordinances can have separate sections regulating sidewalks. In more rural settings, municipalities impose the responsibility for costs of sidewalk repair on landowners. In other areas, the costs are imposed on the municipalities itself. Both strategies have their merits, and the context of each area should determine what is most appropriate.

More relevant are sidewalk requirements for new developments and their streets. The City of Olean requires that "concrete sidewalks be installed along both sides of all new streets." Provisions like this help ensure that new development projects will serve the basic needs of pedestrians.

### How are sidewalks promoted in plans and ordinances in WNY?

Municipalities did not make provisions of sidewalks in comprehensive plans and zoning codes as much as for other pedestrian design elements.

On average, small villages were the most likely to recommend provisions for new or improved sidewalks in plans. This might be a product of community size, since smaller municipalities may face relatively more community pressure to address sidewalks at specific locations. As small villages were also the least likely to address sidewalks in their zoning, this could also increase their desire to plan to improve or add sidewalks.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PEDESTRIAN FRIENDLY DESIGN:

# Street Lighting

Street lighting improves safety for pedestrians and bicycles and also can create a more aesthetically pleasing pedestrian street.<sup>34</sup>

### How can it promote mobility?

Street lighting contributes directly to the safety of vehicular traffic at night, and improves both the visibility and the perception of safety for pedestrians. Lights promote a sense of security by making pedestrians more visible to each other and to drivers passing by. Street lighting can also be carefully designed to add visual interest and support a more walk-friendly sense of place.<sup>35</sup>

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

Provisions for street lighting are well represented in the comprehensive plan for the City of North Tonawanda. The plan declares an intent to increase "pedestrian scaled lighting" and other pedestrian amenities along specific streets in its downtown area. North Tonawanda also made more general plans to, "Maintain and improve the lighting conditions, both in scale and intensity, along streets and dedicated pedestrian pathways to promote a sense of security for the public."

##### In Municipal Ordinances...

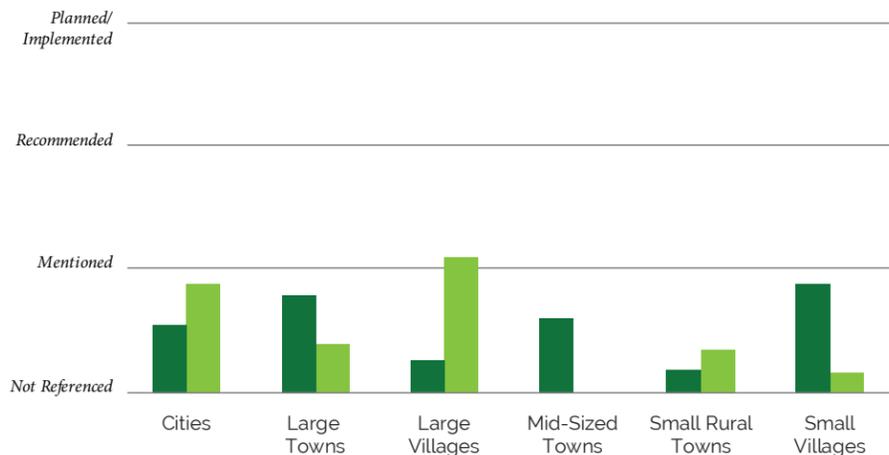
Municipalities can develop their own funding initiatives to provide street lighting. However, to alleviate the costs to municipalities, subdivision regulations can impose construction of street lighting facilities on developers. Municipalities can also establish standards for street lighting facilities. For instance, the Village of East Aurora's standards include the following provisions: "(1) To provide safe roadways for motorists, cyclists and pedestrians. ... (3) To ensure that sufficient lighting can be provided where needed to promote safety and security... (6) To regulate the type of light fixtures, lamps and additional lighting hardware." Clearly, these provisions are carefully constructed to consider the impact street lighting has on pedestrians and the community.

### How is street lighting promoted in plans and ordinances in WNY?

Typically, street lighting was rarely recommended in the documents of the municipalities scanned.

Somewhat more so than other pedestrian elements, street lighting may be seen as primarily a state responsibility, as in many towns it is most needed primarily along state routes, which may make it less of a concern for local planning and zoning. However, this scan reveals a lack of specific attention to pedestrian street lighting, although a lack of heightened specificity in planning documents may not impede implementation of light features on frequented streets.

On average, how is street lighting promoted in **PLANS** and **ORDINANCES**?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PEDESTRIAN FRIENDLY DESIGN:

# Safe Street Crossings

Crosswalks painted on streets, crossing lights for pedestrians, and timed traffic signals can all help ensure pedestrians safely cross the street, limiting the number of accidents and elevating the perception of safety.<sup>36</sup>

### How can it promote mobility?

Children in neighborhoods with sidewalks and controlled intersections have been shown to be more physically active than those in places with road hazards and unsafe intersections. Improving traffic signals, sidewalks and crosswalks has also been found to increase the number of children walking or bicycling to school. Perceptions of order and safety are important for creating walkable communities in places that already have active living infrastructure, and safe crossing measures help enhance those perceptions.<sup>37</sup>

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

Plans should direct where and how crosswalks will be implemented. Requiring crosswalks to be raised above grade or demarcated by eye-catching patterns are useful ways to increase the visibility and efficacy of crosswalks. The town of Amherst's provision is straightforward and clear: "Safe, clearly demarcated pedestrian crossings should be added where components of this network of pedestrian and bicycle facilities cross major roadways."

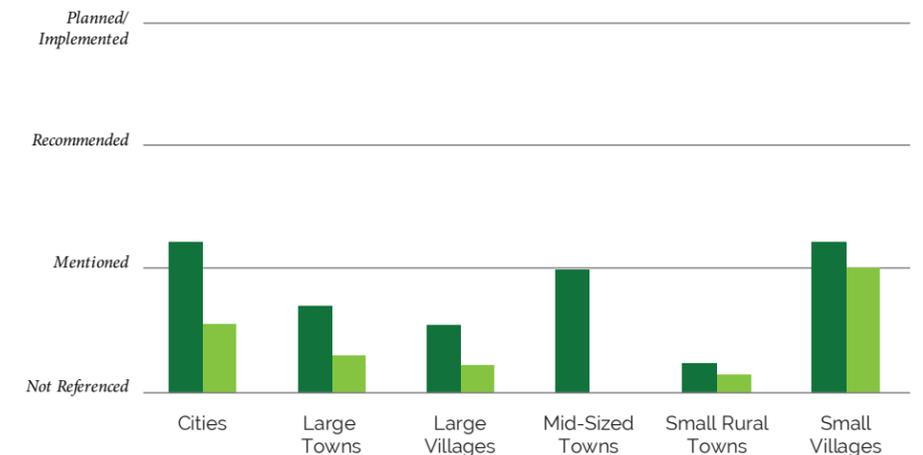
##### In Municipal Ordinances...

In ordinances, municipalities can specify exactly how crosswalks will operate. The Town of Orchard Park dictates, "Pedestrian crosswalks not less than 10 feet wide shall be required where deemed essential to provide circulation or access to schools, playgrounds, shopping centers, transportation and other community facilities." Buffalo has broad provisions for crosswalks that recognize pedestrian access on streets in an encompassing way: "A crosswalk, defined as a lateral extension of a sidewalk through an intersection, may be marked or unmarked. Legally, crosswalks exist at all intersections (including T-intersections) unless specifically prohibited."

### How are safe street crossings promoted in plans and ordinances in WNY?

In general, safe street crossing features, such as crosswalks and pedestrian signals, were rarely mentioned among the documents scanned. Cities, small villages and mid-sized towns were more likely than other communities to discuss safe street crossings for pedestrians and bicyclists. Like lighting features, the level of specificity needed to score high in this criterion is not as much of an impediment to implementation as it would be for other pedestrian features, like multi-use trails for instance.

On average, how are safe street crossings promoted in **PLANS** and **ORDINANCES**?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PEDESTRIAN FRIENDLY DESIGN:

# Universal/Inclusive Design

Universal design approaches encourage active lifestyles and transportation modes for seniors, children and people with disabilities.<sup>38</sup>

### How can it promote mobility?

Plans and policies can be focused on improving accessibility for vulnerable populations, like seniors, children, low-income groups and people with disabilities. These policies include providing child care centers, multi-generational recreation centers, and universal design guidelines that allow disabled residents equal access to services, and give all residents the ability to "age in place." More compact land-use patterns and complete streets have also been shown to increase bike and walking trips made by seniors.<sup>39, 40</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

In general, plans can demonstrate an awareness of the increasing average age in most western New York communities, and be responsive in preparing for the rise in this population. The plan for Western Orleans county considers the changing preferences of an aging population, recommending that, "Senior citizen apartments would be appropriate in areas within walking distance of stores and services in downtown Medina. As relatively few residents of senior citizen housing own cars, parking would be less of a concern than with other multi-family dwellings"

The City of Olean is also sensitive to these needs. It states, "a compact, pedestrian friendly city with good health services will be attractive to retirees. Explore the independent and assisted living options desired by seniors and develop neighborhood housing, transportation and support options that can be marketed to seniors as a non-institutional alternative."

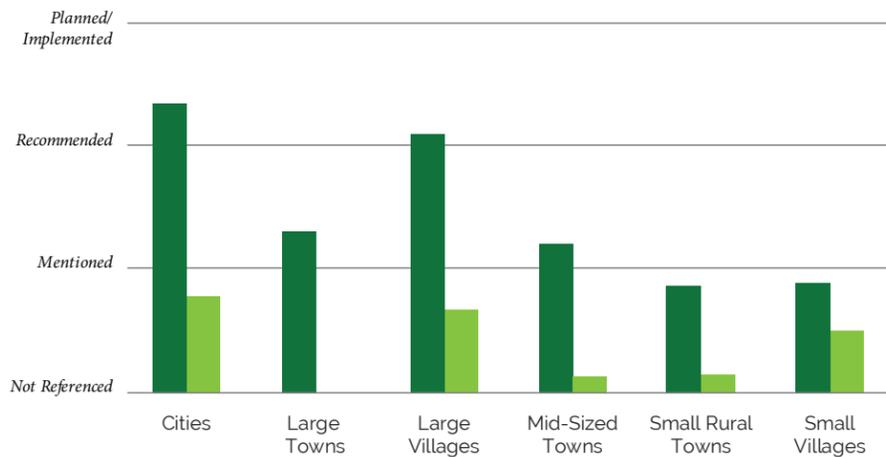
#### In Municipal Ordinances...

Zoning district regulations can ensure that essential services for vulnerable populations, like child care, and assisted living facilities, are allowed by right in one or more residential districts. The City of Olean accomplishes this in a simple provision that states, "Adult Care and Senior living facilities are allowed by right in City center and neighborhood center districts, as long as they are above commercial uses."

### How are inclusive design standards promoted in plans and ordinances in WNY?

While adherence to inclusive design guidelines is dictated by Americans with Disabilities Act (ADA), paying special attention to inclusive design features can help make streets and places more accessible to all users. Cities and large villages were most likely to plan for adding universal design elements to local streets in their comprehensive plans. As with some other pedestrian features, attention to detail in the documents reviewed reflects less of an impediment to implementation than other policies and issues included in this scan.

On average, how is inclusive design promoted in PLANS and ORDINANCES?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PEDESTRIAN FRIENDLY DESIGN:

# Other Pedestrian Amenities

There are numerous other amenities, like benches and gathering places, that help enhance walkable places. Policy steps like establishing overall design standards, or concentrating pedestrian activity in discrete areas, as well as other measures to enhance pedestrian-friendly environments beyond the other criteria listed, are also considered here.

### How can it promote mobility?

Community gathering places, street furniture, public art, restrooms and various other accommodations provide a much richer and comfortable environment for pedestrians. By creating places to sit, relax, socialize, or simply enjoy a view, these amenities promote walking and can extend walking trips.

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Plans can promote adding a wide range of pedestrian amenities in general or propose the application of certain features in specific corridors or public spaces. These specific directions can include more innovative tactics. For instance, the City of North Tonawanda proposes public art, along with other pedestrian features, in certain areas of its downtown.

More generally, comprehensive plans can also encourage pedestrian accessibility in the planning and siting of new development.

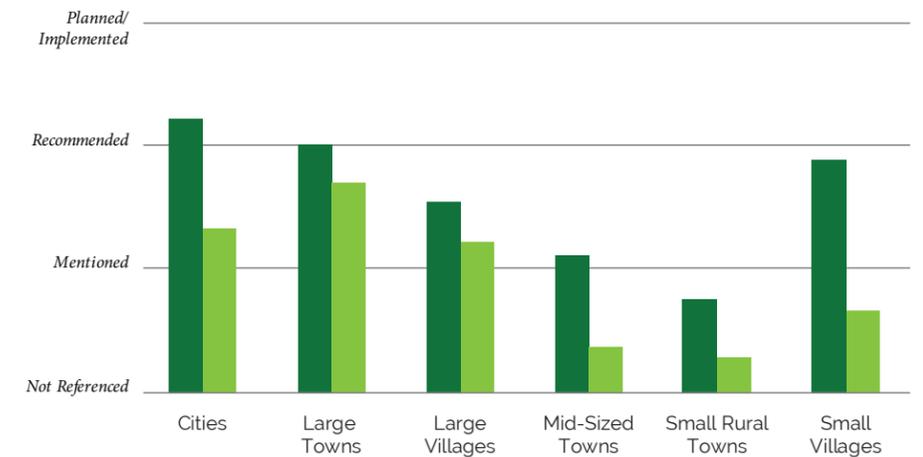
#### In Municipal Ordinances...

Zoning district regulations in pedestrian oriented neighborhoods can call for other pedestrian features, and even lay out general design requirements for these features. The Town of Grand Island is one example; the architectural and design guidelines of its historic Ferry Village district state, "community trash receptacles, benches, light standards and other "street furniture" should be of materials and the design that is compatible with the village atmosphere and integrated into an overall design concept for the site."

### How are other pedestrian amenities promoted in plans and ordinances in WNY?

Like pedestrian design elements in general, cities, large towns and villages were the most likely municipalities to have additional provisions and plans for pedestrian-friendly design elements, like street benches. Also sticking with the trend seen with most pedestrian features, these other pedestrian features were seen more commonly, and supported more strongly, in plans than in zoning district regulations.

On average, how are other pedestrian amenities promoted in PLANS and ORDINANCES?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

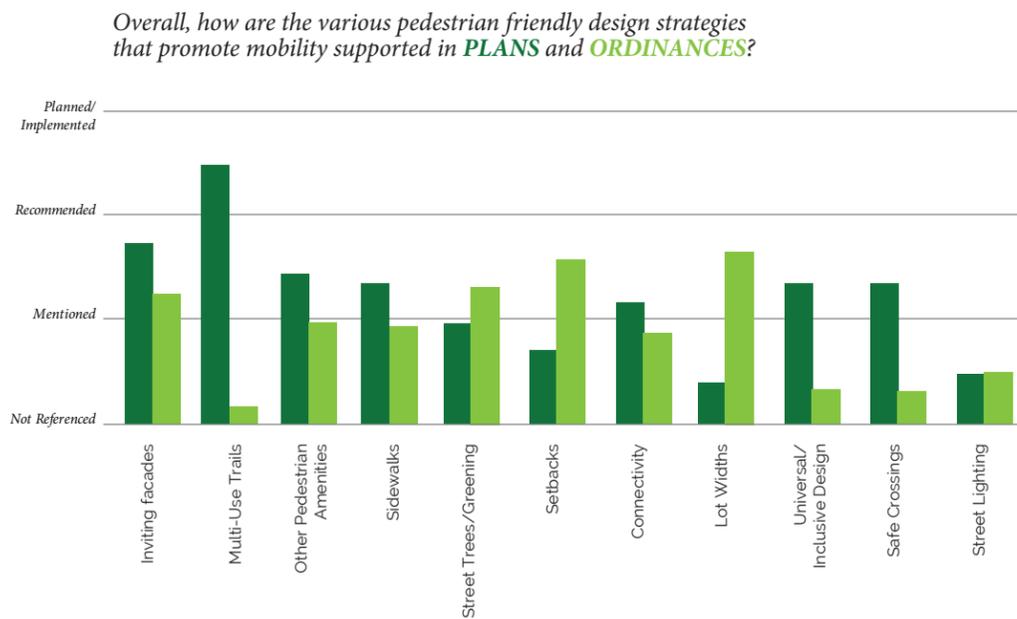


## PEDESTRIAN FRIENDLY DESIGN: Summary of Support for Pedestrian Friendly Design Strategies that Promote Mobility

Overall, criteria included in this section of the review are more common in ordinances than those in previous sections. However, more specific pedestrian friendly design strategies are supported less often than more general strategies, with notable differences in support level across various types of communities.

### How common are pedestrian design strategies to promote mobility across WNY?

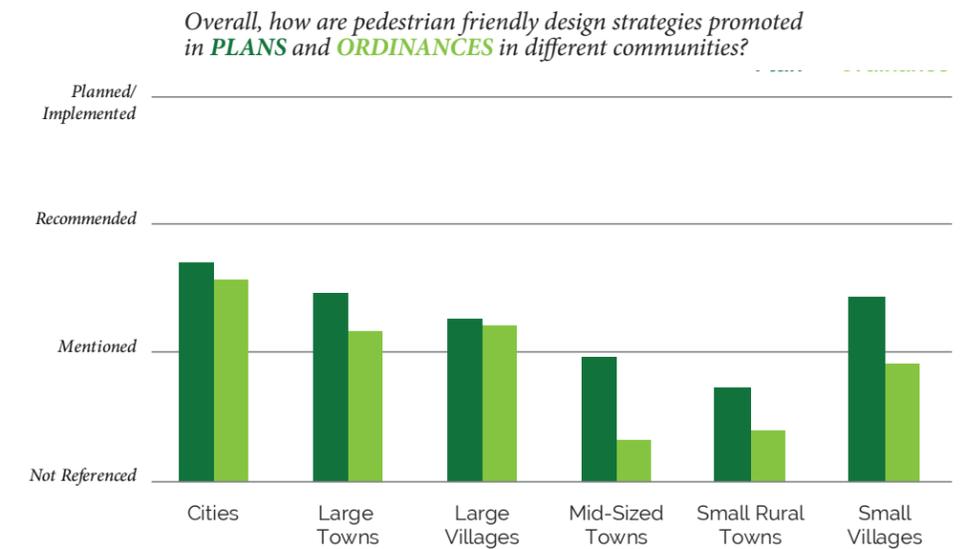
Looking at combined support in both plans and ordinances, facades were the most promoted strategy reviewed in this section. However, when only considering comprehensive plans, multi-use trails were the most heavily supported pedestrian design strategy in this review. Pedestrian scaled setbacks and lot widths were the most commonly supported in looking at municipal ordinances in this section, and the only one to be more heavily promoted in ordinances than comprehensive plans. Other specific policy types and pedestrian amenities like safe street crossings and lighting, were the least supported pedestrian design elements in the municipalities reviewed.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

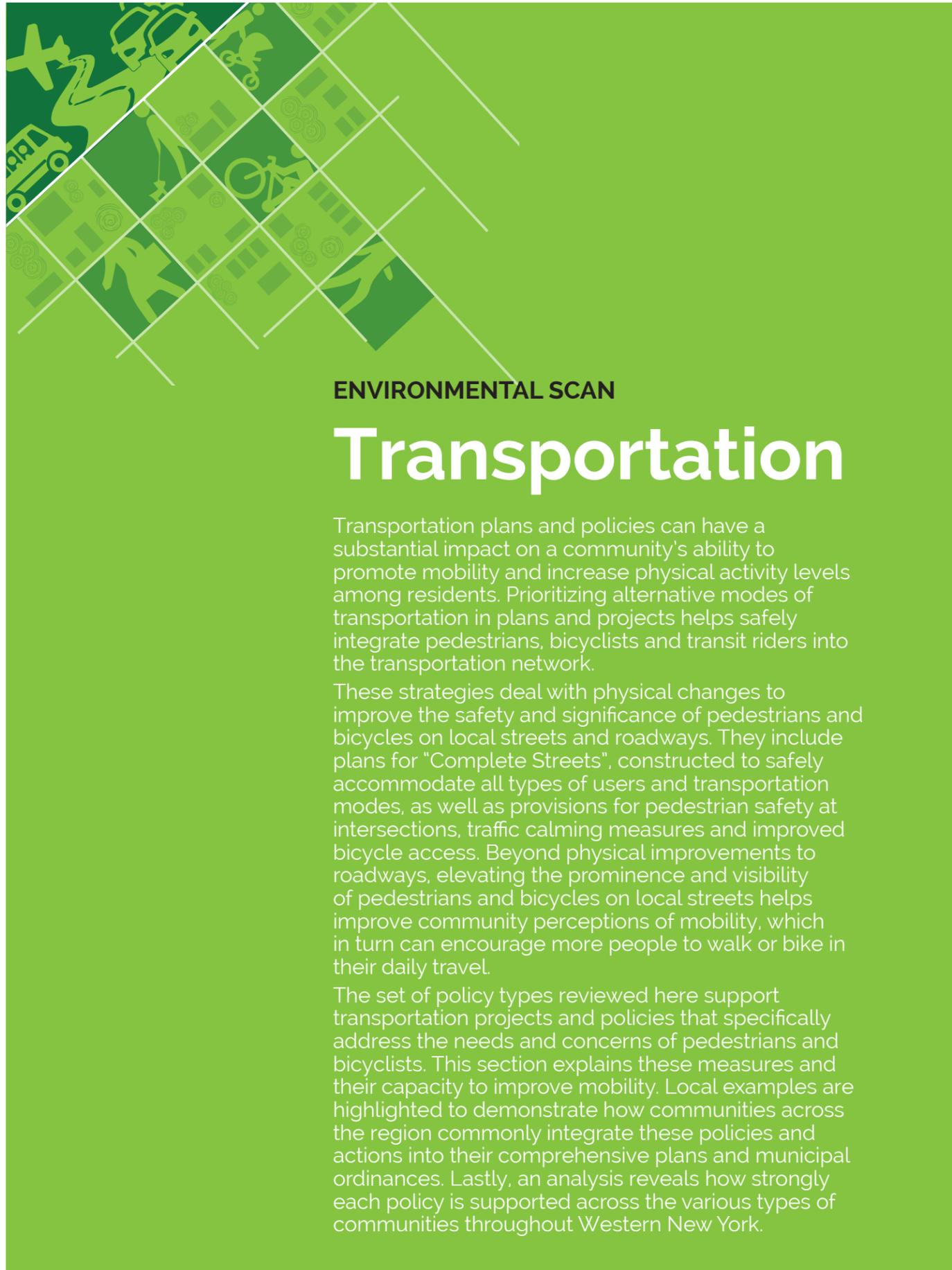
### What community types are most supportive of pedestrian design strategies to promote mobility across WNY?

Cities favored pedestrian design strategies most heavily than any other community type looked at, followed by large towns and villages of all sizes. Across the region, communities support these policies and guidelines more heavily in plans than in their ordinances. Smaller and more rural towns were the only community types found to rarely mention these policies, on average, in their plans or ordinances.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.





ENVIRONMENTAL SCAN

# Transportation

Transportation plans and policies can have a substantial impact on a community's ability to promote mobility and increase physical activity levels among residents. Prioritizing alternative modes of transportation in plans and projects helps safely integrate pedestrians, bicyclists and transit riders into the transportation network.

These strategies deal with physical changes to improve the safety and significance of pedestrians and bicycles on local streets and roadways. They include plans for "Complete Streets", constructed to safely accommodate all types of users and transportation modes, as well as provisions for pedestrian safety at intersections, traffic calming measures and improved bicycle access. Beyond physical improvements to roadways, elevating the prominence and visibility of pedestrians and bicycles on local streets helps improve community perceptions of mobility, which in turn can encourage more people to walk or bike in their daily travel.

The set of policy types reviewed here support transportation projects and policies that specifically address the needs and concerns of pedestrians and bicyclists. This section explains these measures and their capacity to improve mobility. Local examples are highlighted to demonstrate how communities across the region commonly integrate these policies and actions into their comprehensive plans and municipal ordinances. Lastly, an analysis reveals how strongly each policy is supported across the various types of communities throughout Western New York.

ENVIRONMENTAL SCAN

TRANSPORTATION:

## Transit-Oriented Development & Transit Access

Transit-oriented development (TOD) concentrates a mix of homes and businesses along transit corridors and near mass transit stops. General steps to enhance access to public transit, such as extending public transportation service routes, similarly help integrate walking and biking into the transportation mix.<sup>41</sup>

### How can it promote mobility?

Improving transit access increases the likelihood that people will use public transportation, and therefore, the chances they will walk or bike as part of their daily travel. Public transportation also provides convenient access to distant destinations. Neighborhoods that employ TOD have been shown to increase the likelihood that residents will be physically active. As a result, residents with transit options have been found to weigh less and experience lower rates of chronic disease than others without transit access.<sup>42</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Municipalities currently served by a public transportation provider can promote access through a range of plan recommendations. At a minimum, they can make general suggestions to work with public transportation providers, like the Niagara Frontier Transportation Authority (NFTA), to identify opportunities for expanding service and increasing demand for public transportation. Plans can also suggest that public transit access be a primary consideration in siting new development, and that land uses close to transit stops provide a variety of uses at high densities in support of transit. Communities with limited transit service can recommend additional bus stops, or existing service improvements.

Communities not currently served by public transportation providers can promote development at intersections, or nodes, with relatively high levels of activity in order to increase the viability of transit service in more remote municipalities.

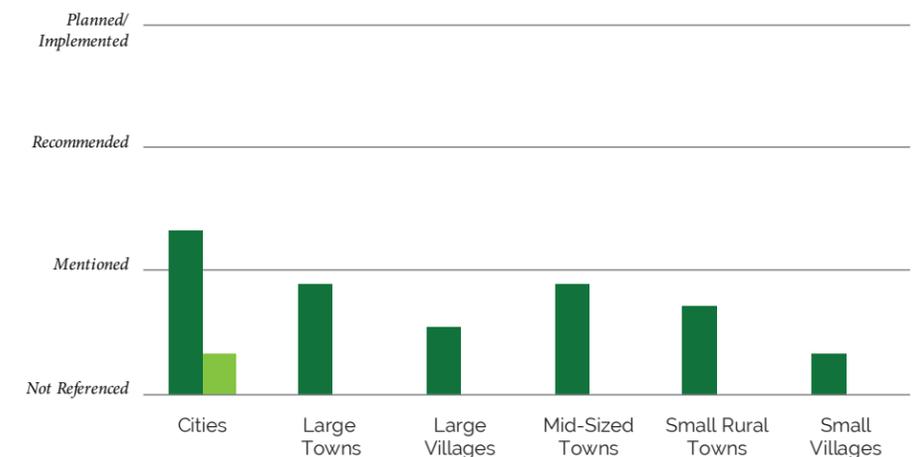
#### In Municipal Ordinances...

The City of Buffalo, which has by far the most widespread access to transit of any municipality across Western New York, is the only community to explicitly incorporate TOD into its zoning district regulations. The "Buffalo Green Code" states that providing for "mixed use centers of high intensity, in strategic locations such as on the edges of downtown or proximate to light rail rapid transit" as the purpose of the city's mixed-use core zoning district. Other communities can promote transit access in more indirect ways, for example, by permitting high densities and a range of uses in areas with existing access to transit.

### How is transit access promoted in plans and ordinances in WNY?

Naturally, transit-oriented development and other policies to promote access to transit are found more commonly, though not exclusively, in the municipalities with current access to transit. These stipulations are found in many comprehensive plans, and are more pronounced in plans for municipalities with larger population size and densities. The City of Buffalo was the only municipality tested to implement Transit-oriented development explicitly through zoning regulations.

On average, how is transit access promoted in PLANS and ORDINANCES?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

TRANSPORTATION:

# Traffic Calming or Reduction

Traffic reduction strategies include both slowing traffic and measures to reduce vehicle miles traveled.<sup>43</sup>

### How can it promote mobility?

Traffic reduction has health implications by reducing the potential for injuries and fatalities resulting from crashes, as well as improving air quality through reduced vehicle emissions.<sup>44</sup>

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

Comprehensive plans can lay out general guidelines to encourage vehicular traffic to respect pedestrian spaces and safety. More commonly, plans suggest specific types of traffic calming techniques to employ. Some go further by applying particular strategies to targeted areas where reducing the volume and speed of traffic is most needed. Traffic calming interventions can be an important strategy for rural towns to improve safety for pedestrians while still accommodating a significant amount of heavy tractor trailer and through-traffic at busy intersections. For example, the comprehensive plan for the Town of Pavilion in Genesee County suggests a number of traffic calming measures in its central district. The plan states, "Utilize traffic calming techniques to improve safety for pedestrians and motorists in the hamlet area, such as curb bulb-outs, medians, well-defined crosswalks (e.g. brick-paved), speed humps, and speed monitoring devices."

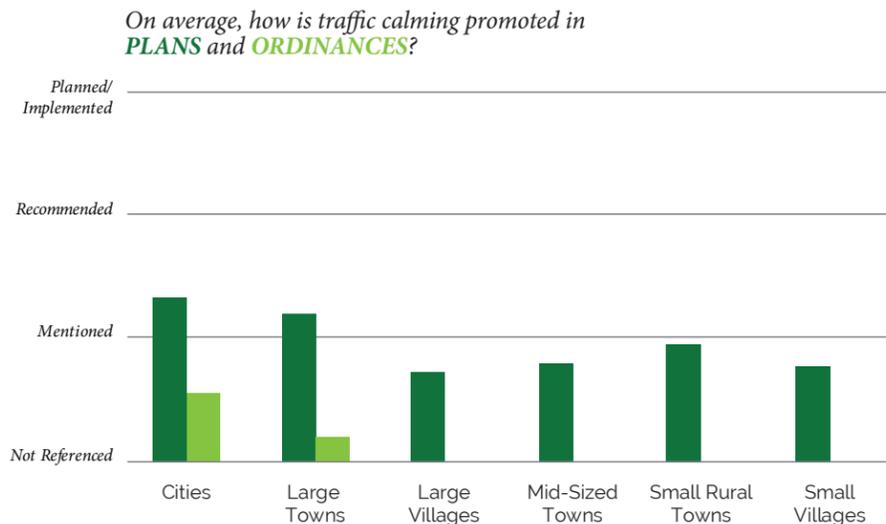
##### In Municipal Ordinances...

Communities have an opportunity to integrate traffic calming strategies into municipal ordinances through zoning district regulations, subdivision requirements or design guidelines. For instance, the "Streets" subsection of the Town of Amherst's subdivision design standards make it clear that, "Traffic calming and access management measures shall be used in conjunction with a connected roadway network" when new subdivisions are developed.

Zoning can also specify a variety of traffic calming measures for existing roads. The City of Buffalo's ordinance stipulates that, "Traffic calming measures, such as full closures and half closures, speed tables, lateral shifts and chicanes, knockdowns, chokers, and center island narrowing, may be considered in right-of-way construction, reconstruction, and reconfiguration projects, subject to approval by the Commissioner of Public Works, Parks, and Streets."

### How is traffic calming promoted in plans and ordinances in WNY?

Traffic calming measures are well-considered in comprehensive plans, but not often enforced through zoning. On average, a consideration of traffic calming is shown in comprehensive plans in all municipalities. This finding is more true for plans in communities with higher traffic volumes on local roads- cities and large towns. In other municipality types, traffic calming was not typically mentioned. However, there may be a reduced need for traffic calming measures in villages with low maximum speed limits on most streets.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

TRANSPORTATION:

# Bike Access

A range of infrastructure changes can be made to enhance bike access. These can include the addition of designated on-street bike lanes, separated cycle ways, bike racks, or even bike "hubs" offering various amenities for bicyclists, like secure parking and showering stations, near employment and activity centers.

### How can it promote mobility?

Enhancing bike access in any way improves mobility of residents by making it safer and more inviting to bike in order to get from place to place. Additionally, interventions that enhance bicycle activity help create a more pedestrian-friendly street environment, raise awareness, and increase walking rates as well.

#### What do these policies look like in Western New York?

##### In Comprehensive Plans...

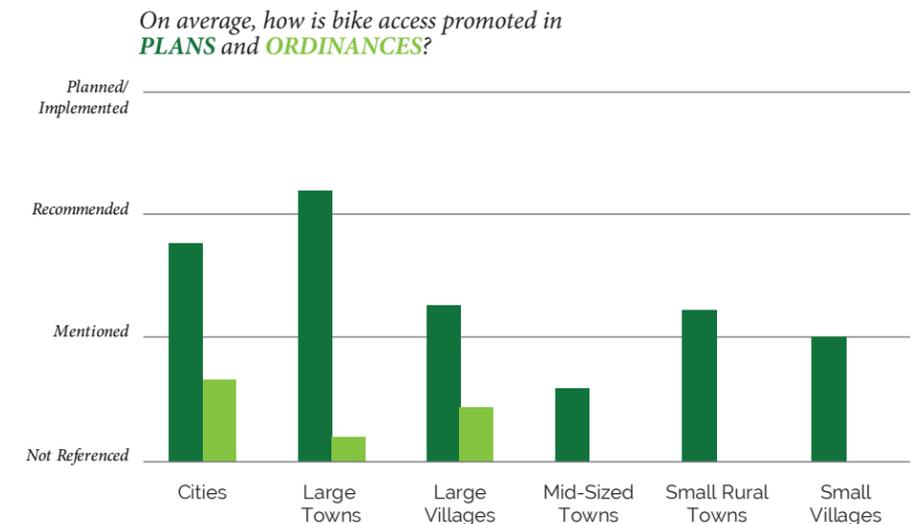
Comprehensive plans can help communities safely and sufficiently promote access for bicycles on local roadways in a number of ways that apply to a wide range of community types. In the broadest terms, plans can declare a general intent to enhance bike access along certain corridors. The Village of Westfield's plan suggests accommodating bicycles on major roadways by road striping, to "provide a safer lane for bicyclists to use, segregating them from motorists and pedestrians." More robust plans suggest a wider range of amenities, including bike racks and directional signage for bicyclists, and strategically target them along designated routes. Plans to enhance bike access can be strengthened by connecting new amenities with existing bike lanes and trails.

##### In Municipal Ordinances...

Through zoning district regulations and site plan review processes, municipalities can require developers to make provisions to improve bicycle access. The City of Olean for instance, ensures that bike parking be provided when any future development project be put in place. Specifically, it states that "Any development which involves new construction of a principal building, expansion of an existing principal building by 2,500 square feet or more, substantial renovation of an existing principal building, or a change of use, must provide bicycle parking in accordance with this section." Another example can be seen in the Village of Lewiston, which designates separated "bikeways" within the right-of-way along specific street segments in its village code.

### How is bike access promoted in plans and ordinances in WNY?

Of all community types, large towns were the most likely to recommend enhanced bike access in comprehensive plans, on average. Meanwhile, cities were the most likely to promote bicycle access through municipal codes. Across all community types, plans suggesting new amenities and routes for bicyclists were much more common than enforcement of these provisions in municipal ordinances.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

TRANSPORTATION:

# Complete Streets

"Complete Streets" are comprehensive, integrated transportation networks with infrastructure and designs that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, motor vehicle drivers, and public transportation.<sup>45</sup>

## How can it promote mobility?

Complete Street policies are designed to promote the mobility of people of all ages and abilities, including children, youth, families, older adults, and individuals with disabilities. They enhance safety for pedestrians and bicyclists by allowing for, or designating, space for all modes of transportation. By allowing active transportation on the street, Complete Street policies can also make areas more vibrant and people-friendly, adding a sense of life and activity that remains absent on streets built primarily to accommodate vehicles.<sup>46</sup>

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Municipalities can plan to improve connectivity within and between neighborhoods by proposing design guidelines that promote pedestrian circulation in new developments.

They can also study these issues to build context-specific guidance. For example, the Town of Amherst leveraged a "Context-Sensitive Highway Design Report" to promote access and connectivity, by limiting the number of curb cuts, providing vehicular/pedestrian connections between adjacent developments, and providing pedestrian/sidewalk connections between adjacent neighborhoods and retail centers.

#### In Municipal Ordinances...

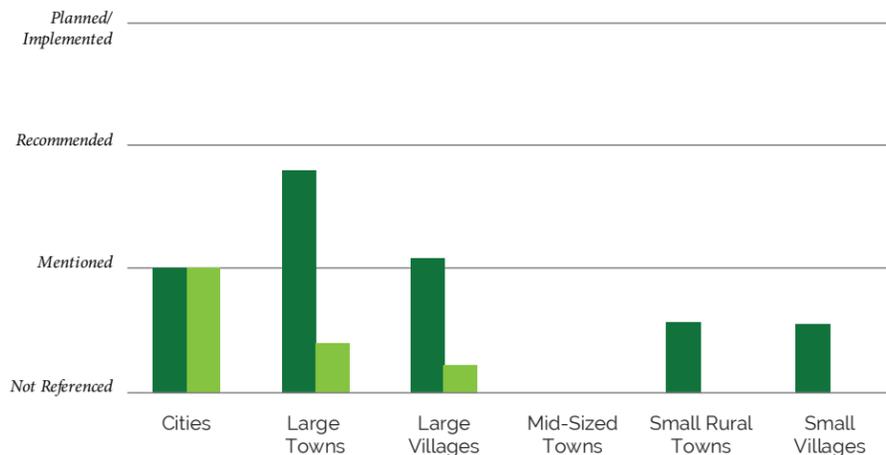
New York State's Complete Streets Act became law in 2011. This mandates local, county and state agencies to consider the movement of pedestrians, bicyclists as well as motorists in transportation projects involving the construction of new facilities that leverage state or federal funding. While municipal codes predate this act, some related provisions can be seen across the region.

The City of Dunkirk's ordinance recognizes that all types of transportation modes need to be accommodated on local streets in order to "improve transportation options, safety and accessibility for all users." Buffalo enforces Complete Streets through the city's Green Code, which states, "All public and private vehicular rights-of-way must be complete streets, designed for safe, comfortable, and convenient movement both along and across rights-of-way by people of all ages and abilities, using multiple modes, consistent with the city's complete streets policy".

## How are Complete Streets promoted in plans and ordinances in WNY?

The larger, more urbanized towns reviewed suggested Complete Streets in their comprehensive plans more commonly than large villages and cities overall. Still cities, led by the City of Buffalo, were found to have implemented Complete Streets ordinances more often than any other type of municipality. This gap reveals an unfulfilled appetite for Complete Streets, that towns face barriers to implementing through zoning laws. It could also reflect a natural lag in implementation, as municipalities adjust to the New York State Complete Streets Act which took effect in 2012.

On average, how are Complete Streets promoted in PLANS and ORDINANCES?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

TRANSPORTATION:

# Other Transportation Policies to Enhance Mobility

These efforts can include endorsement of regional transportation plans, establish a framework for diverse transportation choices through general suggestions, or regulatory measures that ensure pedestrians and bicyclists are considered when roadways are constructed or altered.

## How can it promote mobility?

Other policies and provisions for transportation infrastructure can also help promote mobility. In general, these measures help to ensure that pedestrians, bicyclists and transit riders are adequately considered in transportation decisions. These actions can further help increase mobility and its related health benefits, for instance by reducing the perceived risk of injury associated with walking and bicycling.

### What do these policies look like in Western New York?

#### In Comprehensive Plans...

Comprehensive plans can support or endorse regional transportation plans, which often include far-reaching recommendations on pedestrian and bicycle features. Similarly, plans can also make proposals to coordinate transportation decision making across jurisdictional boundaries, which can be particularly useful in developing regional trail networks or improving pedestrian connectivity between a village and its surrounding town. Plans can also make general recommendations to better align transportation investments with the land use goals of a community, these measures often encourage mobility indirectly. Other plans investigate strategies to guide implementation. For instance, Olean's plan recommends that the city "investigate partnerships and funding opportunities to improve mobility for all residents."

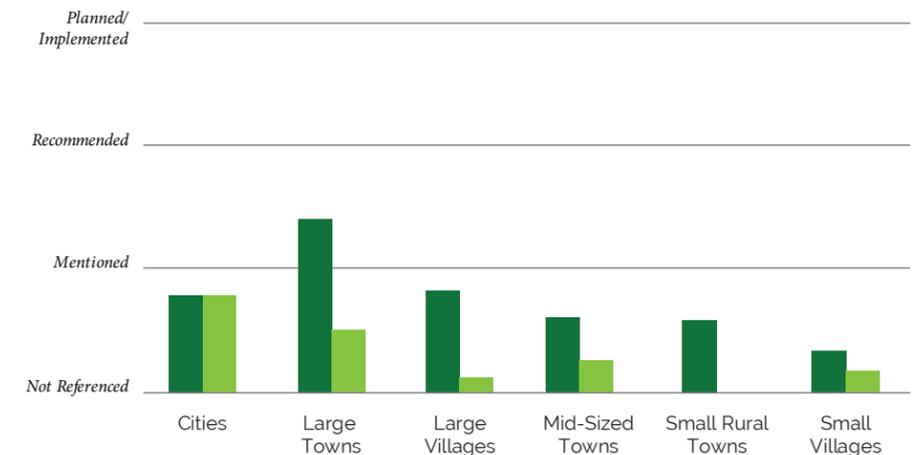
#### In Municipal Ordinances...

A few communities did lay out additional provisions related to transportation policy in their municipal ordinances to promote mobility. One way was by stipulating detailed road specification standards, including standards for construction materials, sidewalks and other details. Another way is to consider provisions for the safe and efficient movement of pedestrians and bicyclists in site plan review processes. These provisions can also be extended to off-road paths. For instance, the Town of Tonawanda requires that "All plans shall include provisions for pedestrians, and bicyclists, rollerbladers, and other non-vehicular traffic, and minimize vehicular crossings over the Riverwalk."

## How are other transportation policies that support mobility promoted in plans and ordinances in WNY?

Other municipal plans and zoning stipulations to promote mobility through transportation policy were generally rare in this review. Large towns were the only community type found to consider at least one other mobility enhancing transportation policy in their comprehensive plans, on average. Like transportation measures in general, these policies were more common in plans than in municipal ordinances.

On average, how are other transportation policies promoted in PLANS and ORDINANCES?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

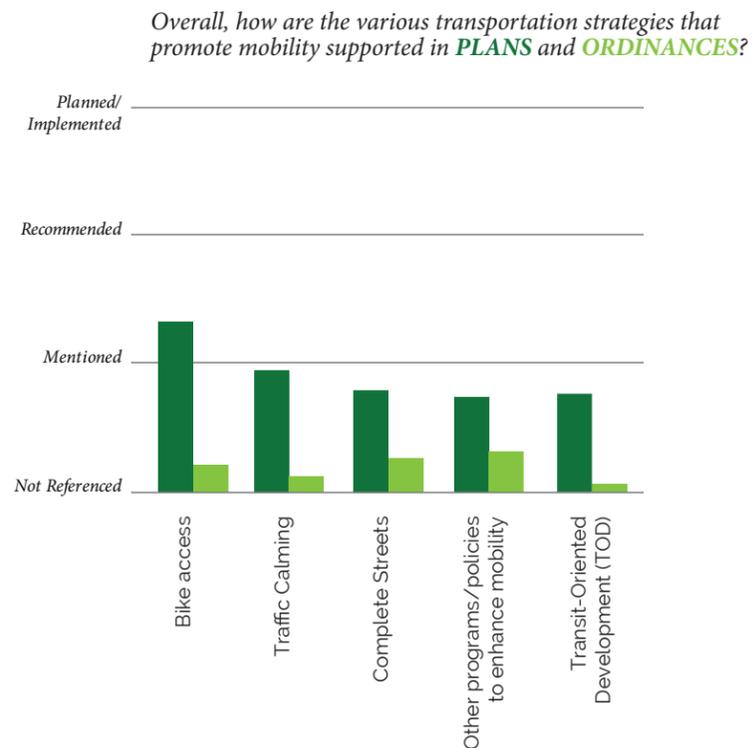


## TRANSPORTATION: Summary of Support for Transportation Strategies that Promote Mobility

Overall, transportation related strategies to promote walking and physical activity are less common than those related to land use and design. However, some of these transportation related plan elements and processes are promoted more frequently than others, with major variations by the type of community being planned for.

### How common are transportation strategies that promote mobility across WNY?

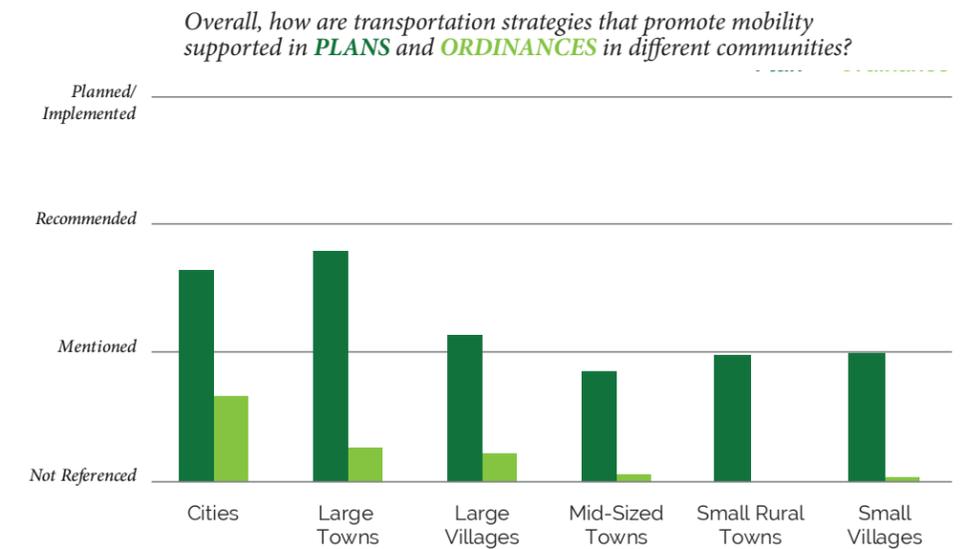
Strategies to promote mobility and improve pedestrian environments through transportation policy are, as a whole, rarely a focus of formal comprehensive plans and municipal ordinances across Western New York. As public transportation is infrequent or unavailable in most parts of the region, TOD strategies are least common among all transportation related policies scanned. Measures to improve bike access are the most commonly supported transportation planning strategies to promote mobility in municipal plans and ordinances. General suggestions for traffic calming measures are also fairly typical, and like all policy types considered here, this holds more true for plans than ordinances.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

### What community types are most supportive of transportation strategies to promote mobility across WNY?

This chart looks at the frequency of transportation related strategies in the aggregate across community types. Cities, large towns and, to a lesser extent, villages across the region do commonly address some transportation related policy or program that supports mobility. Transportation related policies are typically much less of a focus in zoning regulations and municipal ordinances than strategies related to land use or street design. However, some larger municipalities do address things like bike access, transit-oriented development and complete streets in their ordinances.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.





ENVIRONMENTAL SCAN

# Planning Process and Policies

Some policies and planning efforts can help improve community mobility without necessarily changing the physical layout of streets or buildings on the ground. These community practices, municipal policies, and planning elements promote mobility by raising awareness of pedestrian issues and more broadly, by demonstrating a consideration for public health. These include financing programs, pedestrian plans and inter-jurisdictional arrangements that can all be leveraged to promote walking and physical activity.

As such, the criteria included in this section are different in nature than previous categories and are typically not applicable to municipal ordinances. Therefore, with one exception, the criteria in here are only examined in planning documents. Still, these policies and plan elements are generally harder to find than the physical interventions reviewed previously. However, searching for these elements can reveal something unique and important about the prominence of mobility and public health in community plans and policies. Perhaps more so than any other category reviewed, inclusion of these plan elements and policies indicates a heightened concern for mobility, and also public health, in the goals and vision of the community.

ENVIRONMENTAL SCAN

PLANNING PROCESS AND POLICIES:

## TIP/Municipal Financing Program

Transportation improvement programs (TIP's), lay out all transportation projects seeking the use of public funds within a region or municipality. These projects and programs can be leveraged to improve pedestrian and bicycle features along the streets and roadways of a community.

### How can it promote mobility?

Metropolitan Planning Organizations develop long-range transportation plans and advance them with transportation improvement programs that list short-term transportation projects in need of federal funding. Provisions of these projects and programs can often be tailored to promote active transportation. In some cases, municipalities may form a similar capital improvement program independently, which could similarly be leveraged to revitalize environments that support mobility.

### What do these programs look like in Western New York?

#### In Comprehensive Plans

The comprehensive plans of several municipalities provide sound examples of how municipalities can lay out strategies to go after TIP, or similar funding for pedestrian oriented transportation projects.

Plans can, at a minimum, include New York State's TIP in a list of potential funding sources for plan implementation. More detailed plans can propose that construction projects on specific streets pursue federal funding through the state's TIP.

Several plans also make suggestions to establish similar financing programs at the municipal level. For example, The Village of Attica specifies plans for a municipal financing program for street maintenance. The village's comprehensive plan states "Implement an overall roadway improvement plan (through a Village-wide CIP) which identifies and prioritizes streets that need repair and/or replacement."

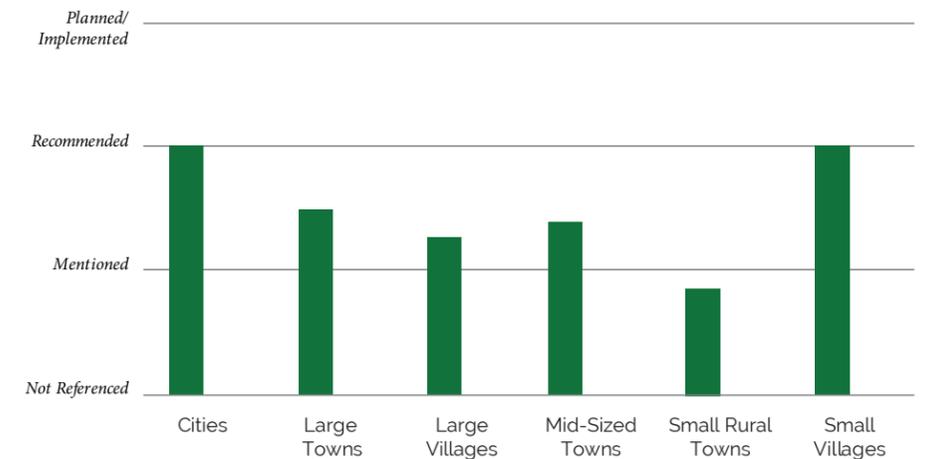
Other plans go further by making the need for pedestrian oriented improvements an explicit focus of proposed municipal financing programs. For example, the City of Olean proposes adding a sidewalk plan to an existing Capital Improvement Program (CIP), to establish a protocol for the financing of sidewalk construction and maintenance.

Plans can also suggest funding programs that are broader in scope to add to the pedestrian environment in existing neighborhoods. For instance, the Town of Amherst gets more specific with its intentions for a capital improvement program. It suggests that capital investment should be targeted to, "support desired types and locations of private development, particularly in older, developed parts of Amherst. Examples include streetscape improvements to improve visual character and encourage business investment in older commercial areas..."

### How are state or municipal-based transportation improvement programs addressed in WNY plans?

Cities and the small villages scanned were equally likely to recommend applying for state TIP financing, or instituting a similarly structured municipality-based capital financing program to incentivize developing and enhancing pedestrian-friendly streets and walkable places. Large and mid-sized town typically either mentioned or recommended pursuing capital financing programs, and small rural towns were least likely to do so among the communities reviewed.

On average, how are transportation improvement programs promoted in PLANS?



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PLANNING PROCESS AND POLICIES:

# Explicit Focus on Mobility or Public Health

Institutionalizing the role of public health in municipal ordinances and ongoing planning processes helps ensure that mobility considerations will be addressed as development decisions are made.

### How can it promote mobility?

In addition to discrete recommendations to promote active transportation, plans and ordinances can institutionalize the role of mobility and public health in their community decision making by listing these concerns in the goals, vision and intent of plans and zoning regulations.

#### What do this focus look like in Western New York?

##### In Comprehensive Plans...

In the broadest sense, most plans have an inherent focus on public health. This is typically shown in general plan goals, that state, for example, "to support the general well-being of the community." Plans can go further by explicating the promotion of physical activity and the improvement of public health outcomes in stated mission statements or plan goals, though this discrete focus is generally rare.

Plans can also demonstrate some heightened concern for mobility and public health by thoroughly integrating these issues in the analyses, strategies and elements they include. Plans can also include studies of the projects it proposes. For instance, the Town of Grand Island demonstrates a particular concern for physical activity levels by recommending a wide range of parks, trails and recreation spaces with the stated intent of providing numerous active and passive recreation opportunities for residents.

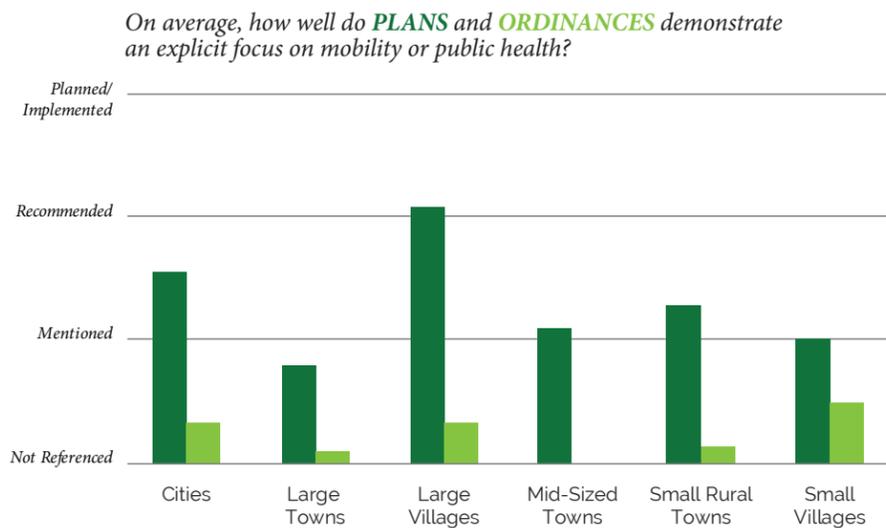
##### In Municipal Ordinances...

Zoning laws are legally bound to promote the safety, health and general welfare of the public as an extension of the municipality's police power. As such, the purpose of local zoning codes always has this general language.

Some municipalities go a bit further in detailing the public health implications of establishing zoning laws. For instance, the zoning code for the Town of Mina in Chautauqua County lists numerous health implications for zoning in its stated purpose. It states, "A zoning law: 1. ensures that appropriate amounts of light, air, and open space are available for all residents; 2. reinforces health standards, particularly with respect to sewage and water-related problems; and 3. keeps unhealthy situations from arising which could cause disease or injury."

### How well do plans and zoning ordinances in WNY demonstrate an explicit focus on mobility or public health?

This is the only criteria tested in the plans and processes section where inclusion in municipal ordinances is applicable. A handful of zoning codes did demonstrate, to some degree, a focus on mobility or public health beyond the basic legal requirements. Across the region, plans were more likely to demonstrate this explicit focus than zoning codes, with large villages and cities being the most likely communities to do so.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PLANNING PROCESS AND POLICIES:

# Pedestrian Plan, or Other Plan that Promotes Mobility

Pedestrian master plans represent a comprehensive framework to identify pedestrian needs and deficiencies, examining potential improvements and prioritizing implementation strategies. They can be developed for an entire city or for a specific area, such as a downtown.

### How can it promote mobility?

Pedestrian master plans bring heightened significance to mobility concerns and address public health issues more directly than general plans. By focusing explicitly on walking and/or bicycling these types of plans tend to produce more detailed, and more spatially-discrete visions and action steps for enhancing pedestrian environments and improving safety of active transportation, generally leading to more actionable recommendations for enhancing mobility than comprehensive plans.

#### What do these plans look like in Western New York?

##### In Comprehensive Plans

Planning efforts focused on mobility can be included in the proposals of comprehensive plans. For instance, the City of Olean's plan makes a suggestion to, "Conduct a recreational needs survey to identify specific needs and opportunities for passive and active recreational facilities."

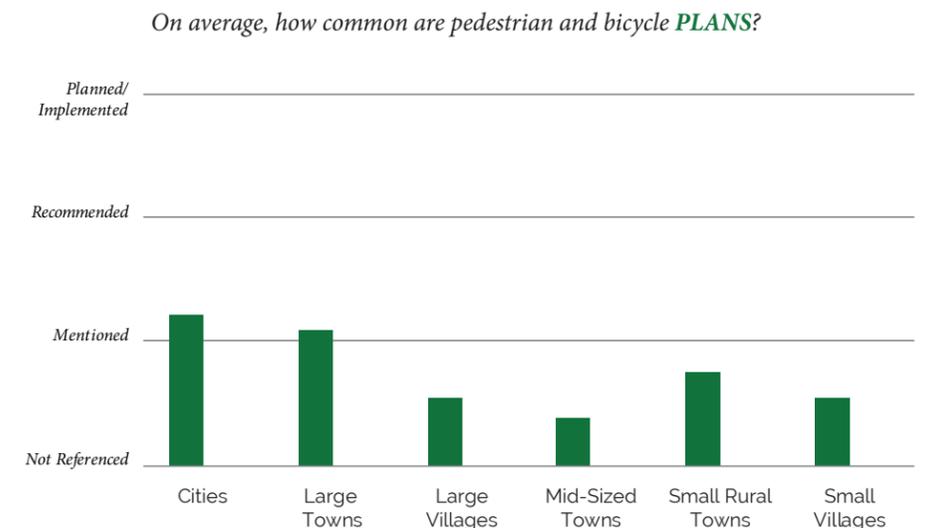
Going further, municipalities can supplement their comprehensive plans by creating stand-alone pedestrian, or bicycle, master plans that focus exclusively on mobility concerns. These formal pedestrian and bicycle plans are typically created for municipalities with greater planning capacity and community support. For instance, a Bicycle Master Plan was recently developed for the City of Buffalo. The plan includes an analysis of existing conditions and proposes goals, strategic projects and funding sources to guide plan implementation.

Neighborhood level plans can also be created with an explicit focus on pedestrian and bicyclist concerns. For instance, the master plan for the Buffalo Niagara Medical Campus includes many suggestions to improve the pedestrian environment within this major employment and activity center.

Regional plans for pedestrian and bicycle facilities can also be made. While these can be useful, especially to municipalities with limited planning capacity, regional pedestrian and bicycle plans were not reviewed in this scan.

### How common are pedestrian and bicycle plans in WNY?

Plans, planning efforts, and comprehensive plan sections, that explicitly serve the needs and concerns of pedestrians or bicyclists are generally rare across the municipalities surveyed. These plans and efforts are most common in cities and large towns than other places, and also somewhat more common in small, rural towns than villages and mid-sized towns.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PLANNING PROCESS AND POLICIES:

# Analysis of Pedestrian/Bicycle Facilities and Routes

Analyzing the existing conditions of the pedestrian environment, or creating a baseline assessment, is one of the first steps that communities can undertake to understand and improve mobility for residents when updating their general plans.

## How can it promote mobility?

Plans that analyze current conditions regarding bicycling and pedestrian routes and amenities demonstrate a thorough concern for the needs of pedestrians and bicyclists. By mapping out routes, or listing assets and destinations for walking and biking, plans can help elevate the significance of mobility concerns in future decisions for their community. More thorough analyses that point out gaps in the existing condition and recommend changes help establish a framework for enhancing a community's pedestrian facilities.<sup>47</sup>

### What do these plan elements look like in Western New York?

#### In Comprehensive Plans

Comprehensive plans can include thorough analyses of the existing conditions of a community's active transportation infrastructure, like trails, sidewalks and bike lanes. For instance, the plan for the Town of Dunkirk includes an assessment of current infrastructure, which details street segments and intersections in need of improvements to pedestrian safety and convenience. It includes pictures of roadway conditions where improvements are needed and detailed, pedestrian oriented reasons for these measures. The Town of Dunkirk's plan also addresses pedestrian concerns when assessing the town's commercial district, "the design of the abutting uses contributes to... auto-dependency; deep, front-loaded parking lots, lack of internal pedestrian rights of way, and the lack of continuous sidewalk along the roadway combine to make the town's primary commercial center fairly inaccessible for those

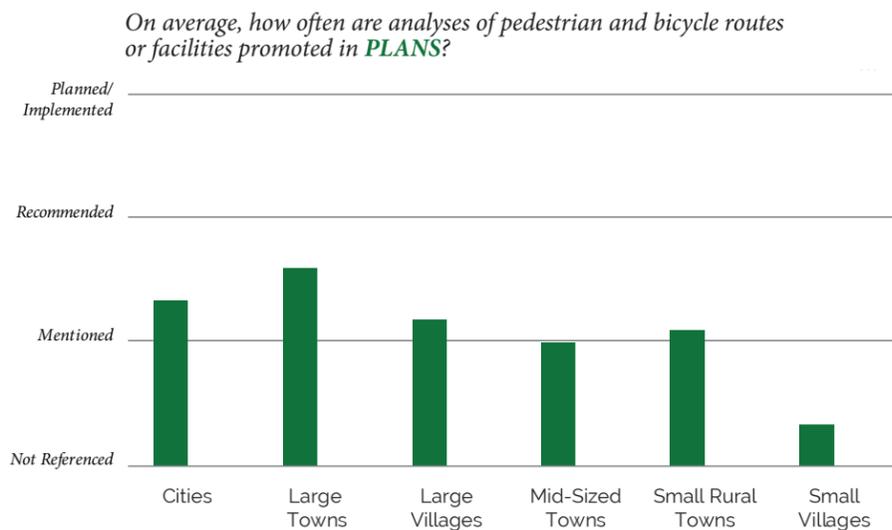
without personal vehicles (such as college students and the elderly)."

The City of Buffalo's plan goes further by including a detailed assessment of the existing community resources available to promote activity throughout the year, including parks, trails, playgrounds, pools and ice rinks.

Other plans can call for separate studies to investigate pedestrian and active transportation concerns more deeply, or point to previous assessments and plans. The Town of Lockport points to a "Trails, Pathway and Connectivity Plan" that was developed to improve conditions for bicyclists and pedestrians in the town and identifies trails, pathways, and connectivity as important community issues.

## How often are analyses of pedestrian and bicycle routes or facilities included in WNY plans?

Outside of small villages, all municipalities typically had some, albeit brief, analysis of active transportation modes in their comprehensive plans. Communities with greater planning capacity and more sizable populations were generally more likely to earn points by analyzing pedestrian traffic and safety, laying out possibilities for bicycle routes, or inventorying pedestrian assets. As with other criteria reviewed, this limited technical capacity could potentially be filled be supported by regional agencies or partnerships.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PLANNING PROCESS AND POLICIES:

# Informational outreach to promote access to places for recreation

Community outreach to promote physical activity can include informational brochures, navigational signage, updates to municipal websites, and other steps to increase awareness of local opportunities to engage in physical activity.

## How can it promote mobility?

Improving public awareness of places to engage in outdoor recreation can directly enhance mobility. Messages promoting social and entertainment benefits of physical activity have been shown to be more successful than those that only promote health benefits.

### What do these plan elements look like in Western New York?

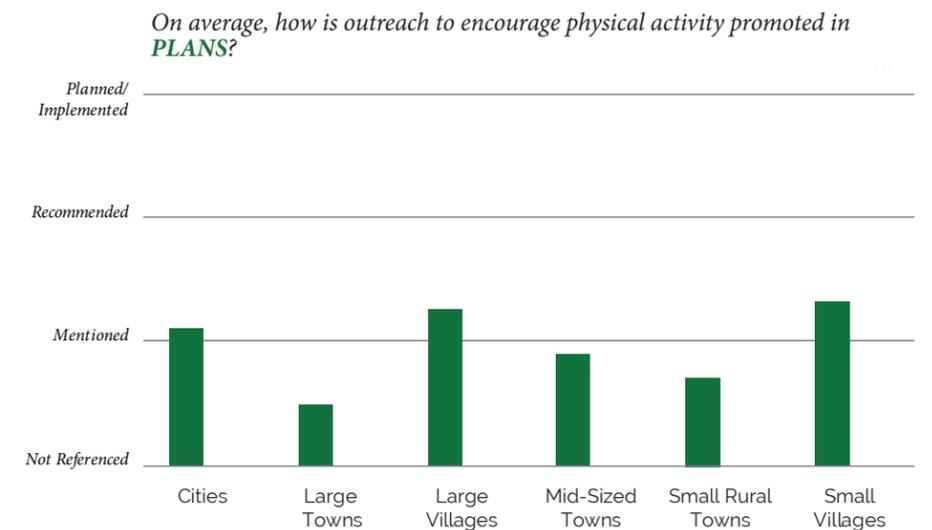
#### In Comprehensive Plans

In many cases, outreach activities to promote mobility, such as adding navigational signage to pedestrian areas, or community education programs on the benefits of physical activity, are not dealt with by comprehensive plans. Still, some communities do make clear plans for outreach and promotion of physical activity. For instance, the City of North Tonawanda intends to, "develop promotional materials for residents and visitors that improve the awareness of the variety of environmental and recreational opportunities found in the City. Improve the presence and information available on the City's website, including location maps and a brief fact sheet about each recreational area."

An alternative form of outreach is collaboration between community groups, local officials and the general public. In one more explicit example of this type of proposal, Angola's plan states "promote partnerships to enhance recreational opportunities for the residents of the Village of Angola".

## How is outreach to encourage physical activity promoted in WNY plans?

Most of the plans reviewed did not specify steps to engage in community outreach in ways that would promote mobility or enhance public health. Cities and villages were more likely than the towns scanned to take steps like marketing pedestrian-oriented places to promote tourism, or expanding pedestrian signage.



Source: UBRI analysis of local comprehensive plans and municipal ordinances, 2016.

PLANNING PROCESS AND POLICIES:

# Joint-use agreements

Joint-use agreements are formal arrangements between two or more government entities that establish terms and conditions for sharing public facilities, some of which promote walking. For example, a school district may enter into a joint-use agreement with a town to open its athletic fields to residents after school hours.

### How can it promote mobility?

In many communities, safe places to exercise are few and far between. One way to increase the opportunity for residents to engage in physical activity in this situation is to support joint use agreements. These arrangements can open schoolyards and gymnasiums to community use, or allow schools to share recreation space in community parks. While local governments do not have the ability to unilaterally require joint use in general plans, they can encourage partnerships with school districts and others.

### What do these policies look like in Western New York?

#### In Comprehensive Plans

Suggestions for joint-use agreements can be somewhat common in comprehensive plans, especially when those plans are also joint efforts between neighboring municipalities with ample public facilities for physical activity. A good example of this is seen in the plan for the Chadwick Bay area in Chautauqua County. The plan acknowledges the wide range of resources that can be used by residents, like county fairgrounds, conference grounds and the campuses of SUNY Fredonia, and BOCES. It also lists existing joint-use arrangements between Fredonia and Pomfret, and between Portland and Brocton.

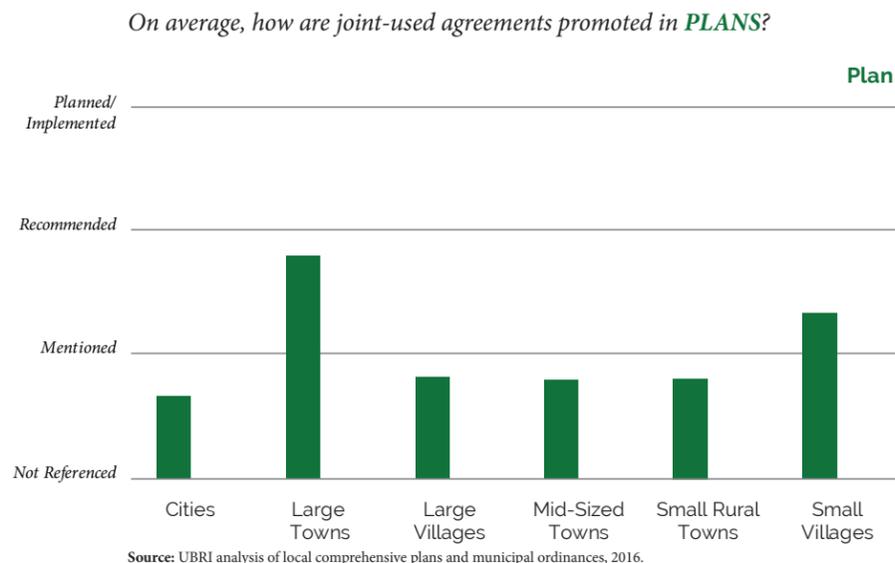
Overall, the most common joint-use agreements to promote physical activity are likely those between municipalities and school districts. Sometimes plans

can include suggestions to perpetuate or enhance these arrangements. For example, Olean's plan recommends for the city to, "continue to work with the School District to maximize the access of residents to school recreational facilities outside of school hours."

Provisions for joint-use arrangements in zoning ordinances are generally rare, although one such example can be found in the City of Niagara Falls' code which encourages shared parking arrangements between private lots and businesses in its central business district.

### How are joint-use agreements addressed in WNY plans?

Joint-use agreements were seen most commonly in the large towns scanned. Small villages also embraced joint-use agreements in their planning documents more commonly than other community types. However, the infrequent mention of joint-use agreements in planning documents may reflect a lack of plan specificity more so than a lack of established agreements in the communities surveyed.



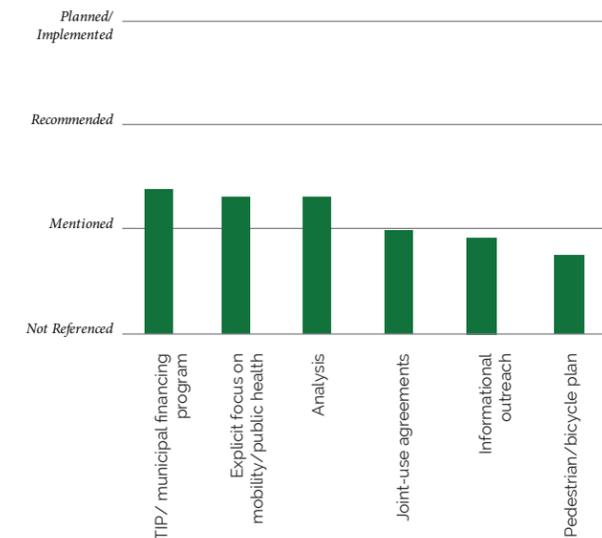
# PLANNING PROCESS AND POLICIES: Summary of Policies and Ordinances to Promote Mobility

Overall, general municipal policies and plan elements that could positively impact a community's mobility are commonly addressed in municipal plans, although typically in a limited manner.

### How common are policies and planning elements that promote mobility across WNY?

Suggesting pursuit of state Transportation Improvement Program funding, or instituting a similar local program to incentivize developing and enhance pedestrian-friendly streets and walkable places is the most commonly supported general policy measure reviewed in plans. Large and mid-sized town typically either mentioned or recommended pursuing capital financing programs, and small rural towns were least likely to do so among the communities reviewed. Plans that exhibited an explicit focus on pedestrian mobility or public health were also fairly common, as were plans that had some form of analysis regarding pedestrian facilities.

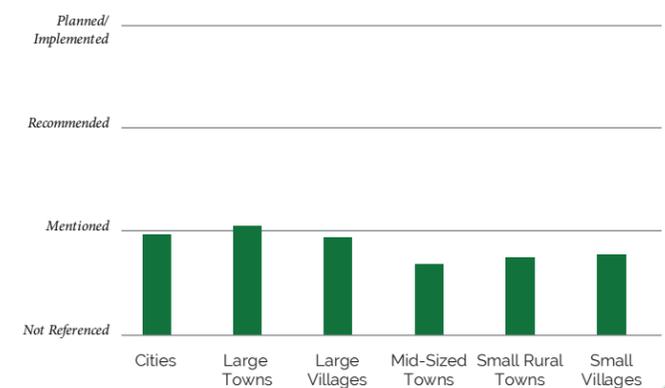
Overall, how are the various pedestrian friendly design strategies that promote mobility supported in **PLANS** and **ORDINANCES**?



### How are plan elements and policies that promote mobility addressed in WNY plans overall?

This chart looks at the aggregate frequency of strategies in this section across community types. Cities, large towns and, to a lesser extent, villages across the region do commonly include some of these plan elements to support mobility. These plan elements and programs are usually less of a focus in smaller and more rural municipalities. On average, the large towns reviewed in this plan demonstrated the strongest support for mobility through the additional plan elements and programs included in this review.

Overall, how are plan elements and other policies that promote mobility supported in **PLANS** and **ORDINANCES** in different communities?



# Environmental Scan Summary

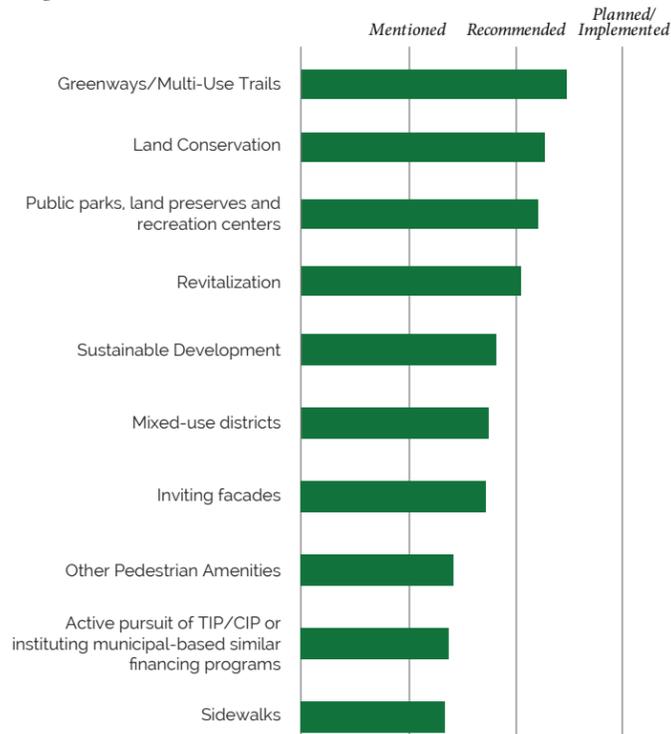
This summary synthesizes the information detailed for each individual criteria across the wide range of strategies reviewed to discover specific policy strengths and opportunities to promoting mobility through policy and planning across Western New York.

## What mobility-promoting strategies were most strongly supported overall?

### In Comprehensive Plans...

Looking across the comprehensive plans for the wide range of community types reviewed in this scan, multi-use recreational trails were the most heavily supported strategy to promote mobility. Other land use measures, like land conservation, provision for public parks and sustainable development, were also commonly adopted to varying degrees. Pedestrian design strategies, like provisions for sidewalks, inviting facades, and other pedestrian amenities were also fairly typical. Transportation strategies, like enhancing bicycle and transit access on local roadways, appear much less frequently in comprehensive plans and are not found among this list of plan strategies with the most support.

What mobility-promoting strategies were most strongly promoted in **PLANS**?



### In Municipal Ordinances...

The strategies that are well within the purview of zoning district regulations, mixed-use districts, and pedestrian scale setbacks and lot widths, are unsurprisingly the most strongly supported by municipal ordinances. Land conservation is also frequently supported by ordinances, nearly as much as it is by comprehensive plans. Other pedestrian amenities, like street trees, welcoming facades, parks and other pedestrian amenities are also frequently supported. As was the case for comprehensive plans, elements regarding transportation strategies are less frequently covered by municipal ordinances than land use and design strategies to promote pedestrian mobility.

What mobility-promoting strategies were most strongly promoted in **ORDINANCES**?



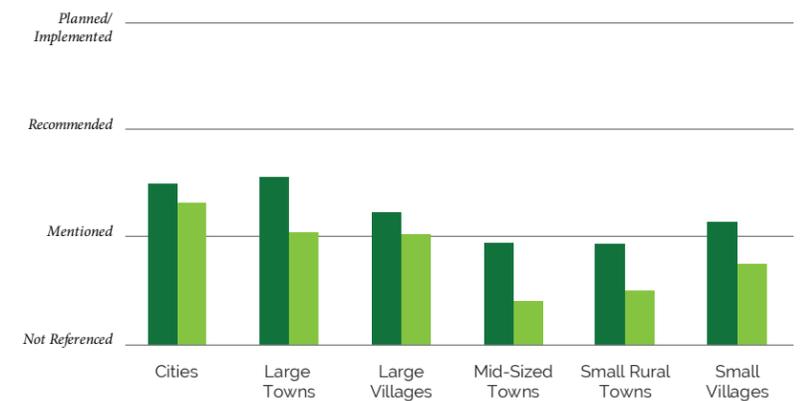
## What types of communities most strongly promoted mobility in their comprehensive plans and municipal ordinances?

Looking across all the criteria included in this scan, the comprehensive plans of cities and large towns generally scored highest in terms of the average level of support for strategies that promote mobility. These communities are typically located in the more metropolitan parts of the region, and fall within the top third of both plans and zones scored in this review (see maps below).

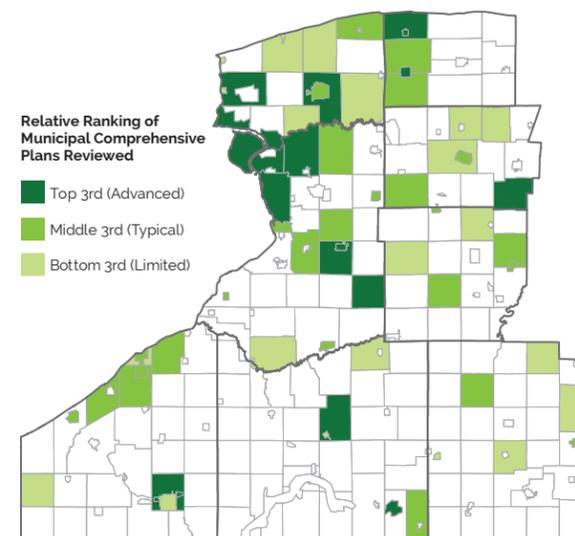
Overall plan support for mobility measures appears related to the population size, and thereby the typical planning capacity, of a community. This trend also holds true, though slightly less so, for municipal ordinances. However, population size does not explain all the variation in support for mobility measures across the region. It also has to do with the community character, and cities and villages, even smaller ones, are typically more conducive to physical activity than towns. Some plans and ordinances of smaller municipalities do demonstrate more advanced support for mobility measures, often helped by collaborating on plans with neighboring municipalities.

City ordinances were shown to be the most supportive of mobility compared to any other community type. Large towns and villages scored equally well in the average level of ordinance support for the mobility measures reviewed.

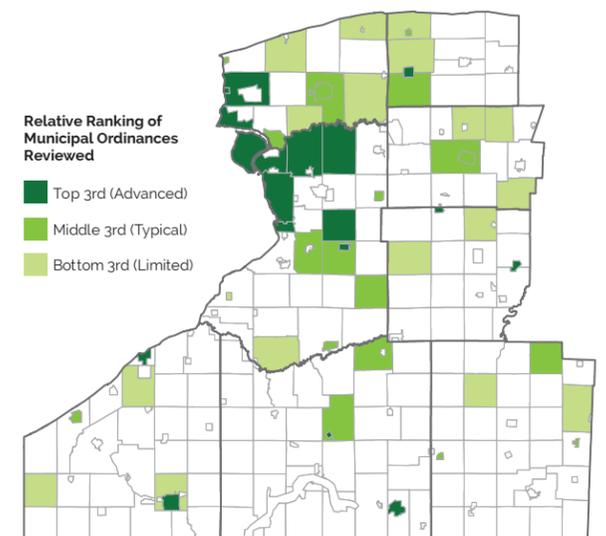
On Average, how is mobility promoted in **PLANS** and **ORDINANCES**?



Mobility Promotion in Comprehensive Plans



Mobility Promotion in Municipal Ordinances



# A Look at Current Conditions

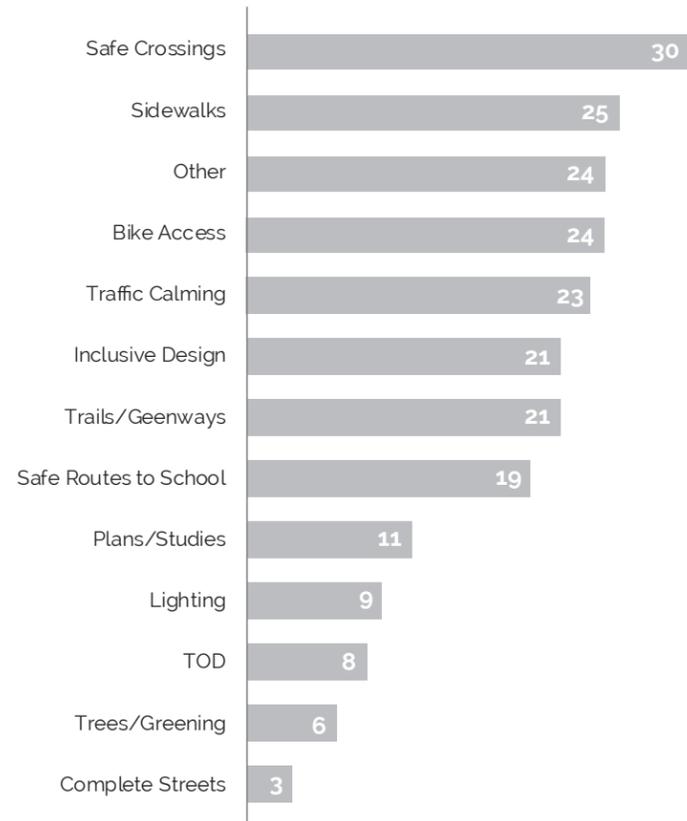
While municipal plans and codes can shed light on how strongly mobility is supported by community goals and policies, a look at the existing state of pedestrian environments across the region is also useful. While a thorough, on-the-ground assessment of walkability across the region is not within the scope of this review, several indicators are available to shed light on how pedestrian mobility is being promoted throughout the region and where current walkable places exist.

## What transportation projects are being implemented to support mobility?

A range of transportation projects to enhance mobility have been undertaken or planned in recent years. Projects funded through the State Transportation Improvement Program (STIP) of the New York State Department of Transportation (NYSDOT) were scanned for mobility interventions, or projects that improve safety, accessibility and comfort for pedestrians and bicycles along local roadways. The scan included recently completed, ongoing and planned projects funded through the 2010-2017 fiscal years. Overall, about 25% of STIP projects listed involved some element that improved conditions for pedestrians and bicyclists on local roads.

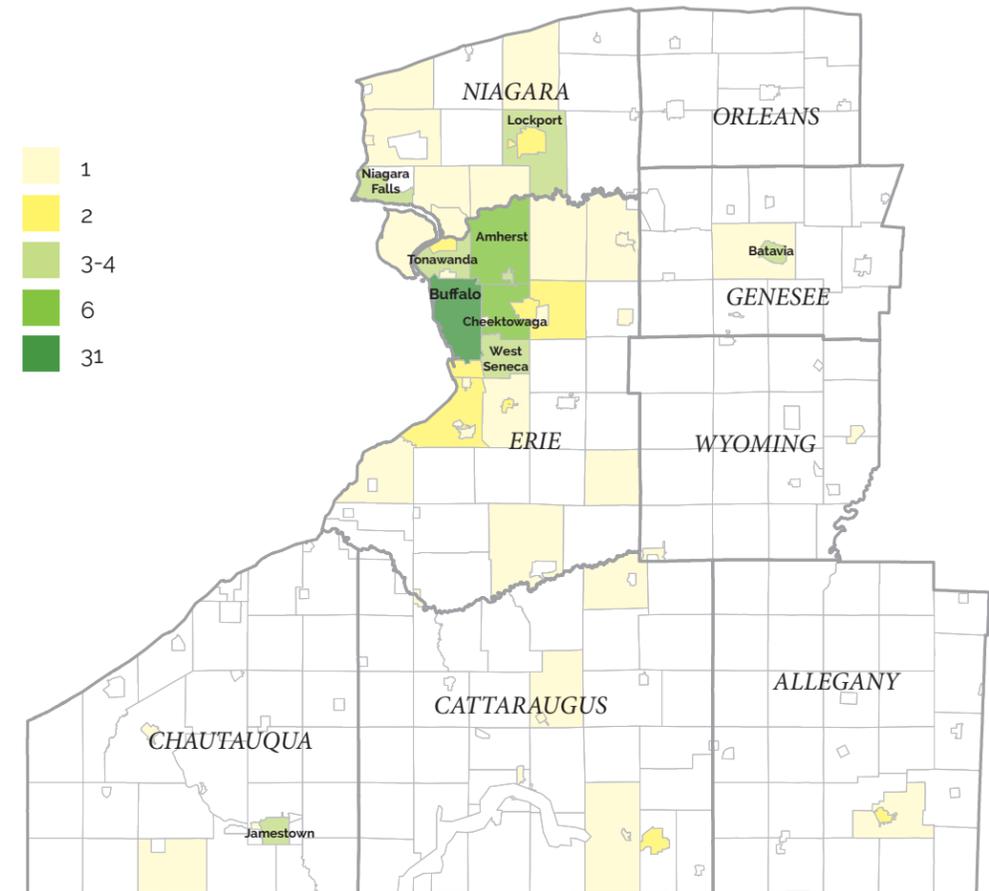
Among these projects, most involved the fundamentals - crosswalks, sidewalks and other general pedestrian amenities, like benches. They also included support of broader initiatives that promote pedestrian access and mobility. Steps to improve access and convenience for bicyclists, like adding bike lanes, parking and safety features, were also among the more common mobility enhancements made in these projects. Traffic calming measures, like lane reductions, were also common. So too was funding for multi-use trails and projects that explicitly improved access for people with disabilities on local sidewalks and public spaces, measures which improve access for all. Safe Routes to Schools programs were somewhat less common. Planning efforts, street lighting and transit-oriented development project were more rarely an area of focus for these projects. Complete Street projects were least common among all the types of pedestrian improvements tested.

STIP projects promoting mobility by type, 2010-2017



Source: UBRI analysis of data from the NYSDOT Statewide Transportation Improvement Program Database, Fiscal Years 2010-2013 and 2014-2017.

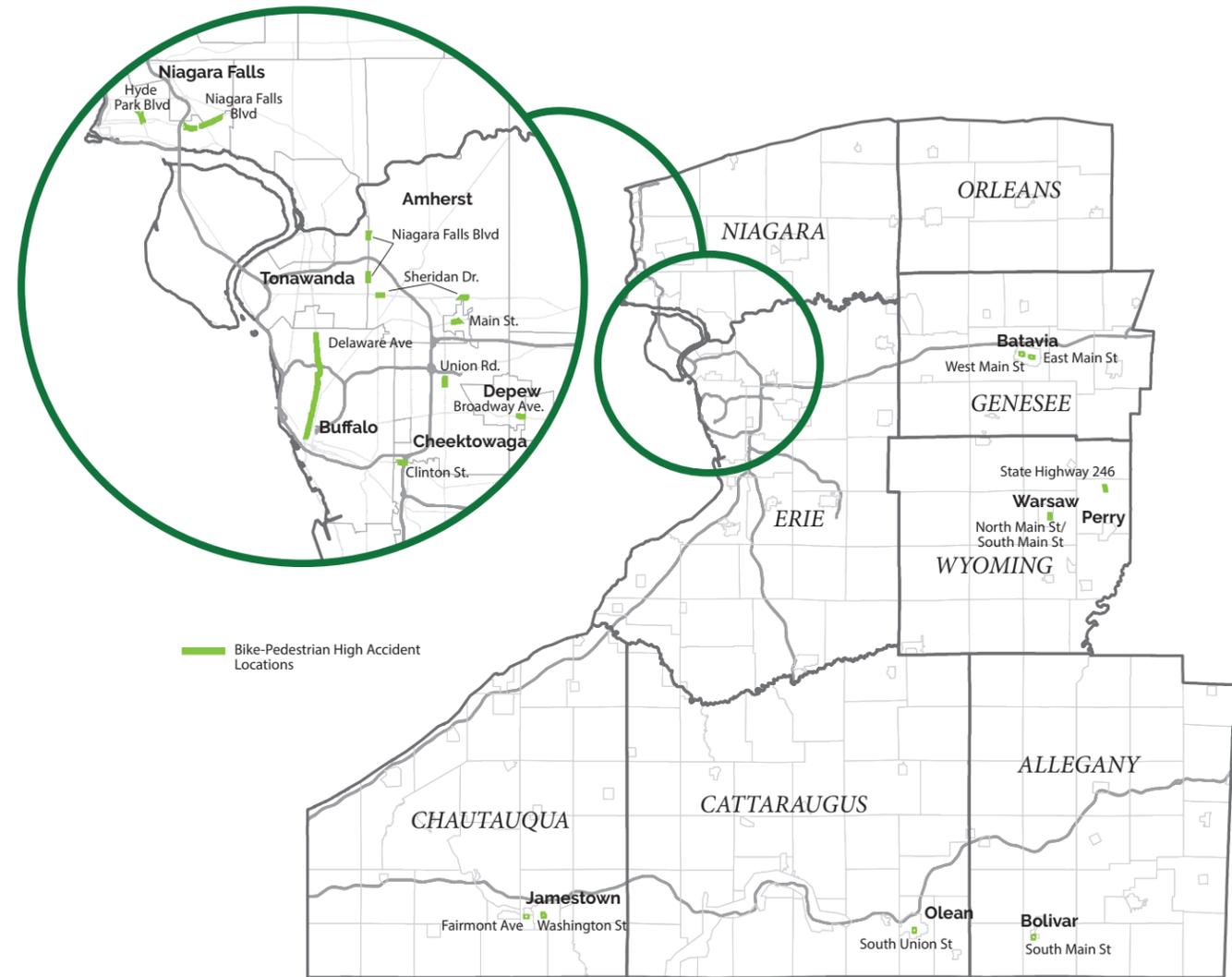
Number of STIP projects promoting mobility by Municipality



Source: UBRI analysis of data from the NYSDOT Statewide Transportation Improvement Program Database, Fiscal Years 2010-2013 and 2014-2017.

Looking at the number of pedestrian oriented STIP projects implemented in each municipality, the city of Buffalo clearly stands out. The region's central city accounts for one out of every five mobility-promoting STIP projects across Western New York. Neighboring towns, like Amherst and Cheektowaga, also have recently implemented a relatively high number of STIP projects that promote mobility. With three or four projects, the cities of Niagara Falls and Batavia, along with several towns also have implemented a few pedestrian oriented transportation projects through the state program. Many other towns and villages have one or two STIP improvements related to pedestrians or bicycles, though fewer are in more rural counties. For instance, Orleans county did not record one pedestrian related STIP project, while only two were found in Wyoming county (in the villages of Arcade and Perry). This points to a possible gap in planning capacity and focus for pedestrian concerns in more sparsely populated areas.

### Where are priority areas for improvements to pedestrian and bicycle safety?

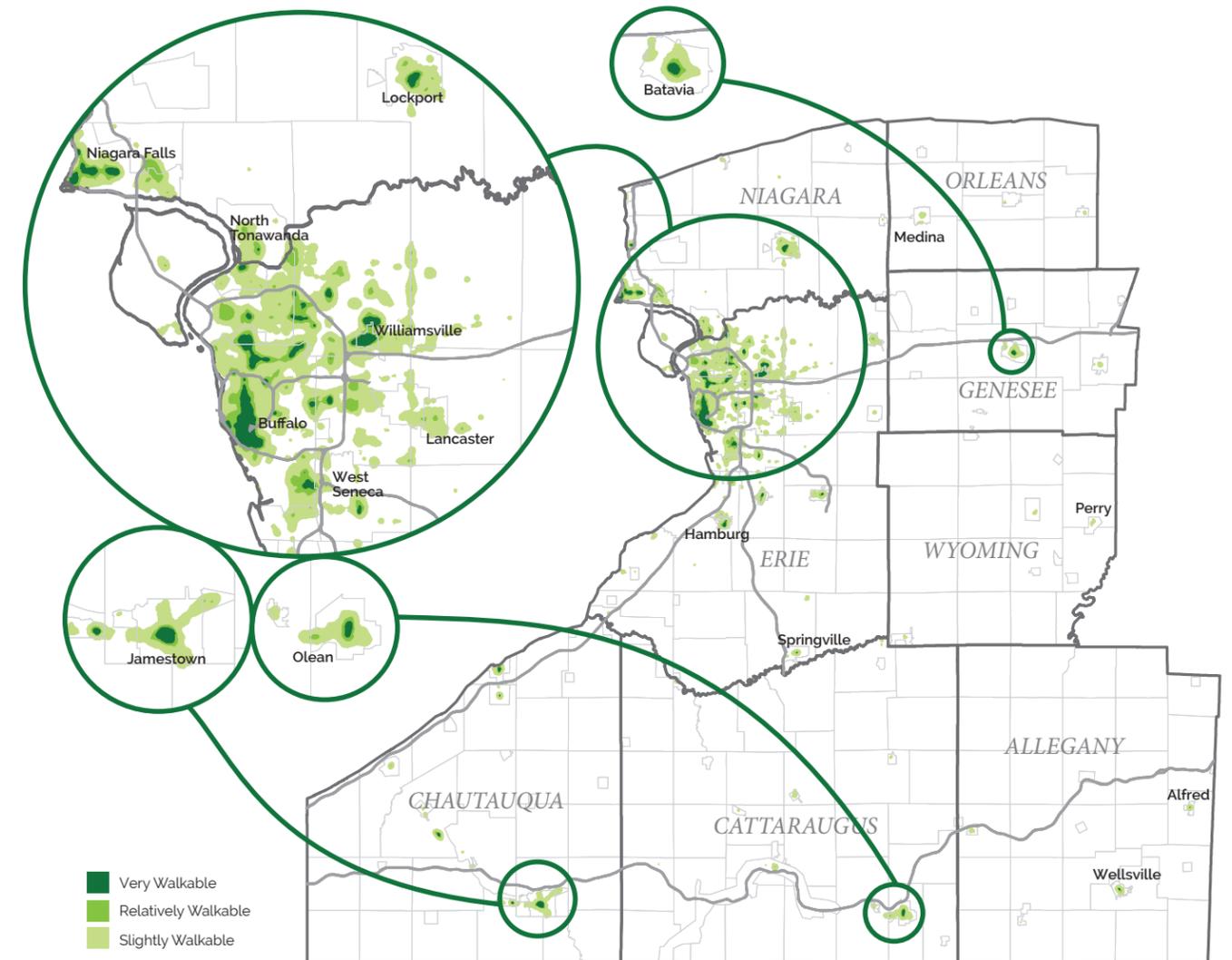


Source: NYSDOT, Priority Investigation Locations for Pedestrian Crashes (2014). Courtesy of the Greater Buffalo Niagara Regional Transportation Council.

The map above shows priority investigation locations (PIL's) for automobile accidents involving pedestrians or bicycles. These represent street segments where the rate of collisions between cars and pedestrians exceeds the average for a similar road type. In the most recent crash data (2014), the majority of these locations exist within the metropolitan areas of the region - in Niagara Falls, Buffalo and its inner ring suburbs. Several others exist in cities like Batavia and Jamestown, as well as in more rural villages.

Many of the most dangerous corridors for pedestrians throughout the region are characterized by automobile oriented development patterns and feature more lanes, higher speed limits, and generally far fewer pedestrian amenities than the region's most walkable places. Meanwhile, by offering a range of retail, restaurants and other activities, many people, particularly those without a car, are often still attracted to these areas. However pedestrians are not only disadvantaged, but unsafe, along streets with heavy traffic, retail activity, and few pedestrian features.

### Where are Western New York's walkable places?



Source: UBRI analysis using data from ReferenceUSA Business Database (2016); County Parcel Data (2010-2015); and U.S. Census Roads (2014).

Walkable places offer a variety of destinations, like shops, restaurants, parks, and schools, in close proximity to one another typically along streets that accommodate pedestrians safely. The map above shows where such places exist across Western New York.

Walkable places tend to lie within cities and larger villages, and are more common in the metropolitan core. Most areas in places like Buffalo, Niagara Falls and Lockport are at least somewhat, if not very, walkable. These areas can extend to inner ring suburbs, like Amherst and Cheektowaga. Although these places can offer a variety of amenities to attract pedestrians, they are often situated along automobile oriented commercial corridors, featuring "big box" stores and multi-lane roads, which makes these areas less walkable. Further out, places like Hamburg and Lewiston are centered around walkable streets in traditional village neighborhoods.

Other cities, like Jamestown, Olean and Batavia also provide various amenities for pedestrians in downtowns. Rural communities have limited walkability, although somewhat walkable areas exist in villages like Medina, Wellsville and Perry. To promote mobility while keeping with the rural character of these areas, strategies to enhance and create other amenities, like multi-use trails, parks and natural preserves, can be prioritized.

# Survey of Local Planners and Decision Makers

## About the Survey

This survey was distributed to local officials and planners to shed light on how intently mobility is considered in plans, policies and development decisions across Western New York. Respondents were asked about the common challenges faced by planners and decision makers in promoting these steps in their communities. The survey also asked how mobility and active transportation are prioritized in the daily activities and community goals of the personnel surveyed.

A number of survey respondents shared their experiences implementing mobility promoting strategies similar to those reviewed previously. Some respondents also shared the impact and successes they saw from the steps they took to promote mobility in their communities.

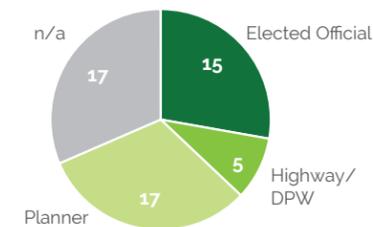
By providing this information, planners and officials help to reveal some of the issues that motivate communities to take actions that promote mobility, and the common barriers and challenges they face in doing so.

## Who took the survey?

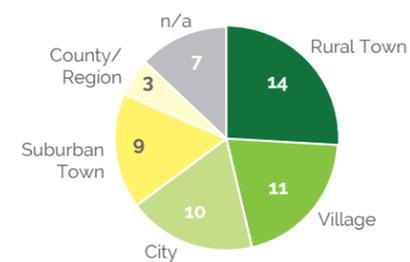
In total, 54 planners and officials responded to the survey. Nearly one third of respondents were local planners; slightly less (28%) were elected officials – mayors, supervisors and clerks. A few others (10%) were supervisors of local highway or public works departments. The remaining 17 respondents did not specify a position.

More respondents worked in rural towns than any other community type – comprising over 25% of our survey responses. Another 20% of respondents worked for villages, and slightly less (19%) represented suburban towns and cities (17%). A few (3) respondents came from organizations serving entire counties or regions. Seven respondents did not specify which community type they serve.

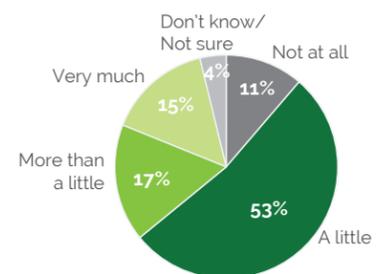
### Responses by Job Title/Position



### Responses by Municipalities



### How involved are residents in the planning processes in these communities?

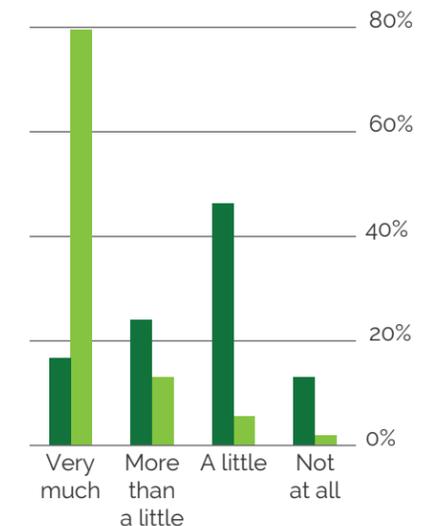


## What did respondents say about the role zoning, land use and transportation policies can play in promoting mobility?

The majority (67%) of those who took the survey believe that proactive planning and zoning can affect personal mobility in local communities. Excluding a few (7%), the rest agreed that zoning and planning measures can at least have a small impact on physical activity levels.

When asked how much personal mobility and physical activity are considered in community decision-making processes, nearly half (46%) of respondents said that they were considered a little, but only 17% suggested these issues were very much a consideration currently. But when asked the extent to which these issues should be taken into consideration, over four times as many said that personal mobility/physical activity should very much be considered in local decision-making processes. Comparing these two questions reveals a general opinion among respondents – that promoting physical activity should be taken into greater consideration when making decisions that affect land use and transportation in the communities they serve.

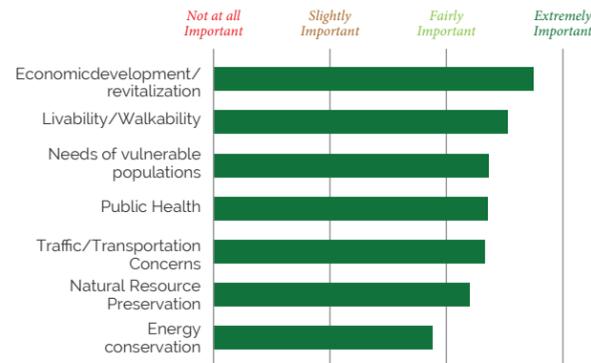
### How personal mobility and physical activity are currently considered, versus how they should be considered in decision-making around local land use and transportation policies.



### How important are mobility and public health compared to other issues in local planning?

Overall, economic development was the only issue that respondents saw as more important than promoting the livability and walkability of their communities. Public health, along with the needs of vulnerable populations and transportation concerns, were slightly less significant, but still fairly important.

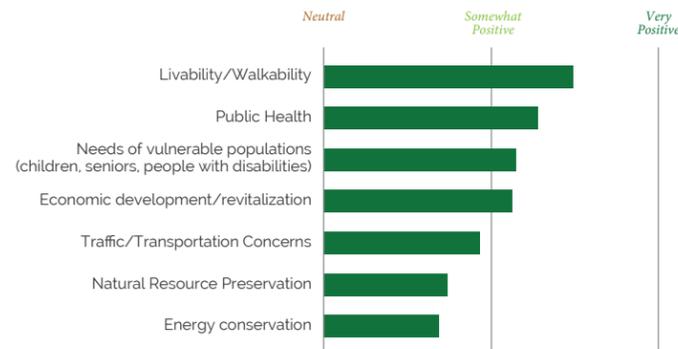
Relative importance of issues in local planning efforts, average of all survey responses



### How did respondents think promoting mobility would impact other issues in their communities?

Survey respondents were generally optimistic about the impact that steps taken to promote mobility through their roles in their communities would positively impact mobility. The perceived impact these measures would have on public health were also notably positive. The effect of such measures on economic development concerns was less favorable, but still somewhat positive in general.

How respondents felt strategies to promote mobility would impact other issues



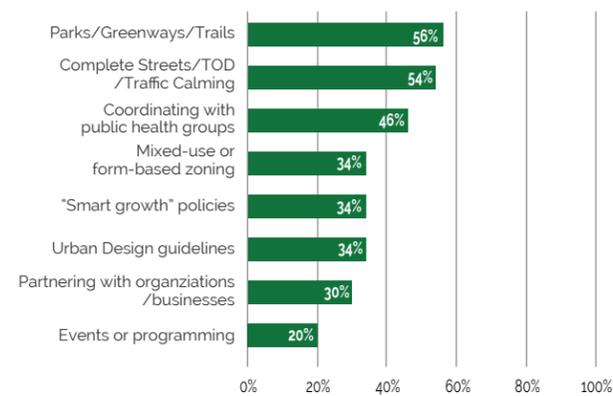
### What steps are local planners and decision makers taking to promote mobility in communities across WNY?

Overall, nearly three-quarters of survey respondents suggested they had experience implementing some sort of strategy to promote mobility or physical activity in their community. Respondents from cities were most prone to do so, while those from large, suburban towns were least likely to affirm any implementation experience.

% of Respondents who were involved in taking steps to support mobility	
City	80%
Village	73%
Rural Town	72%
Other	70%
Suburban Town	67%
<b>OVERALL</b>	<b>72%</b>

Among respondents who shared their experience implementing strategies in support of mobility, more than half said they had experience with parks or trails, and with pedestrian-oriented transportation interventions, including "Complete Streets" and traffic calming. Just over a third said their experience included "Smart growth", zoning, and urban design policies. A slightly smaller share (30%) reported collaborating with local groups or businesses to promote mobility or public health, while fewer still (20%) had experience with events or programming to promote physical activity.

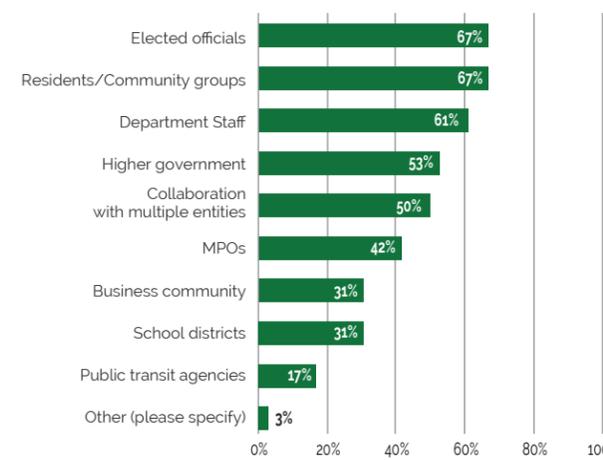
Share of survey respondents with experience implementing selected mobility-enhancing actions and policies.



### What issues and personnel helped implement mobility-enhancing actions and policies?

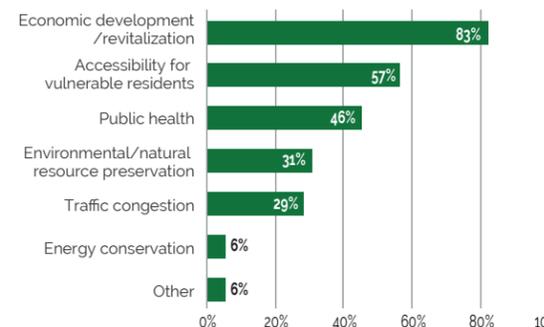
About two-thirds of respondents sharing their implementation experience said that both elected officials and residents/community groups helped take steps to support mobility. 6 out of 10 said department staff helped in this regard while over half were assisted by higher levels of government and collaboration with multiple groups.

Personnel that helped survey respondents implement mobility-enhancing policies/actions.



Community goals for economic development were by far the strongest motivation for respondents taking steps to promote mobility. Improving the accessibility for vulnerable residents, like seniors and low-income populations was also common (57%). Less than half (46%) were motivated to improve public health. Under a third were driven by traffic and environmental concerns.

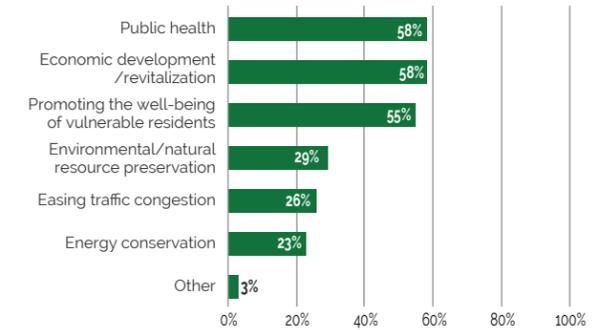
The issues that motivated mobility-enhancing policies/actions.



### What successes and challenges were seen implementing mobility-enhancing projects?

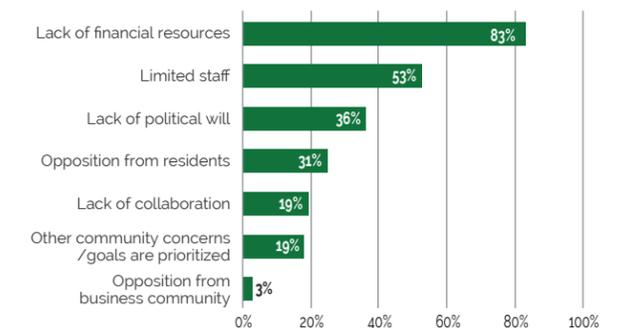
Although economics was a more common driver of mobility-enhancing projects, public health was just as likely to be one positive result of implementation. These two successes were slightly more common than promoting the well-being of vulnerable populations.

Successes local planners and decision-makers saw by taking steps to support mobility.



Finances seem to be the greatest hurdle in promoting mobility-enhancing projects as most respondents (83%) were challenged by a lack of financial resources. Over half said having more people on staff would have helped, while opposition from the business community was by far the least common challenge reported. Other challenges mentioned in survey comments included driver attitudes, awareness, and caution, a lack of development pressures and concerns among residents that additional regulations may impede economic development efforts.

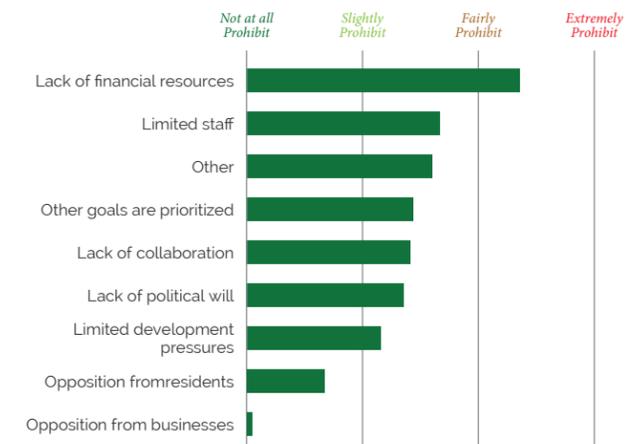
The challenges faced by local planners and decision-makers during implementation.



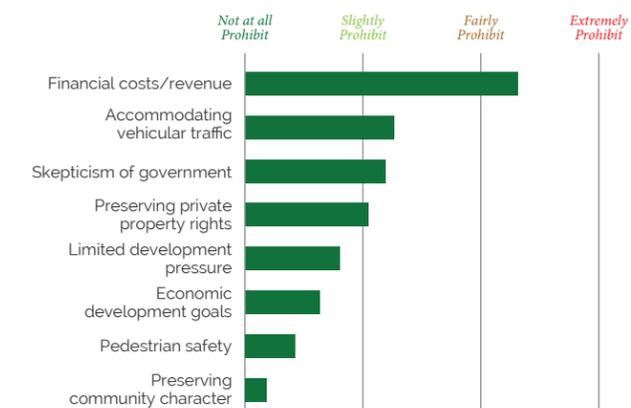
**What issues/concerns hinder the promotion of physical activity in community-decision making processes?**

Looking across all respondents, whether or not they claimed implementation experience, financial issues were the biggest concern, among the community as well as planners and officials themselves, that challenged the support of strategies to promote physical activity. Other issues, like limited staff, also challenged the promotion of physical activity in community decision making processes. Some community concerns, such as the need to accommodate automobile traffic, were slightly prohibitive of strategies to promote physical activity.

**Challenges that Prohibit the Promotion of Physical Activity in Community Decision-Making Processes.**



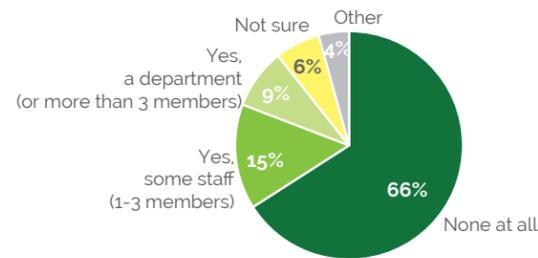
**Community Concerns that Prohibit the Promotion of Physical Activity in Community Decision-Making Processes.**



**Do communities have staff dedicated to promoting public health?**

Overall, 2 out of 3 respondents indicated having no staff dedicated to promoting public health in their organization. Most of the respondents who did work directly with public health were planners. A lack of health related officials working directly with planners and decision makers highlights the need for these officials to consider the promotion of public health in the daily activities of their position and organizational goals. One way of addressing this need could be through collaboration with public health departments.

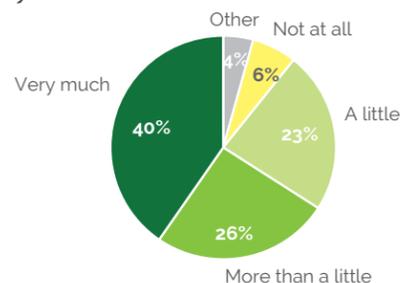
**Share of respondents with staff dedicated to public health**



**Are planners and officials willing to collaborate with other groups to promote public health and mobility?**

One possible way for departments and staff to incorporate public health and mobility into their operations without having to hire more staff and expend limited financial resources is through collaboration. More than not, respondents indicated a willingness to collaborate with other organizations, departments and community groups specializing in public health. These collaborative efforts could also extend across municipal boundaries. Planners and elected officials surveyed were more eager than staff of highway and public works departments to collaborate in this way.

**Share of respondents willing to collaborate to promote public health or mobility**



**Can the Survey tell us anything about how to promote mobility-enhancing projects better in the future?**

While the results of this survey can not be assumed to be fully representative of the region as a whole, they do reveal some clear, interesting findings.

For one, planners and local officials are generally supportive of efforts and strategies to enhance mobility and promote public health outcomes in their communities. In general, respondents perceived a need for greater consideration of these issues in community decision making processes.

Responses also suggest that experience with strategies to promote mobility through land use and transportation projects and policies is common among local planners and officials. Planners and officials also seem to acknowledge the importance of promoting mobility and public health and see these strategies as beneficial to other community goals, such as economic development. However, the capacity for implementation may be limited by community concerns about the impact steps to promote mobility would have on other community goals, such as economic development. This suggests that public outreach efforts may be helpful in promoting mobility in some towns by educating the community on the various benefits of walkable places.

Survey results suggest that collaboration can be used to fill some of the gaps in implementation capacity, and a willingness among planners and implementers for organizations and jurisdictions to team together to promote public health outcomes.

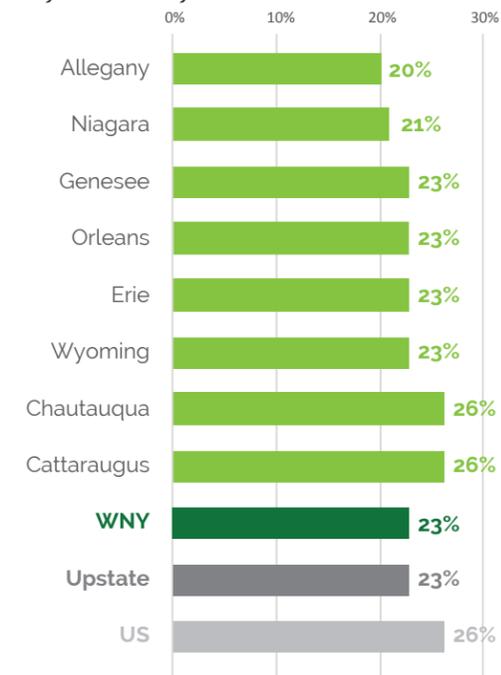
# Indicators of Physical Activity and Public Health Outcomes

After a deep look at the planning and policies put in place to support mobility, it is important to reflect on indicators of physical activity levels and public health outcomes across Western New York, and especially in the communities scanned. Comparing how physically active populations are in their leisure time or their commute to work, as well as rates of chronic diseases and childhood obesity, in communities across the region lends a clearer perspective to the role of planning and policies in promoting public health.

## How common is leisure-time physical activity for adults across WNY?

A useful indicator of physical activity levels among residents of Western New York comes from the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System which annually reports the percentage of population over 20 that are physically inactive outside of work from phone surveys. WNY has a slightly higher share of adults not engaging in physically activity than Upstate, but a notably lower share than the US as a whole. However, a few of the region's more rural counties do nearly match the national rate. However, some counties whose municipalities were found to be relatively highly supportive of strategies to promote physical activity, like Erie, have higher shares of inactive adult populations than counties with less robust plans and ordinances to promote physical activity, like Allegany. This demonstrates how factors beyond the strategies covered in this review, such as income, educational attainment levels and individual lifestyle preferences, also have a large part in shaping physical activity levels of local populations.

Share of Adults 20+ Not Engaging in Leisure Time Physical Activity

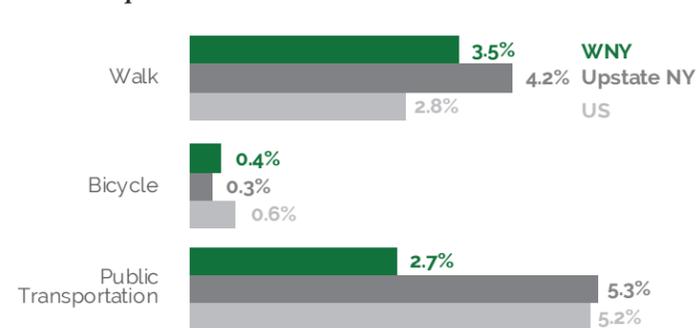


Source: CDC, National Center for Chronic Disease Prevention and Health Promotion (2013).

## How common is commuting via active transportation across WNY?

In WNY, the share of workers who walk to work is higher than across the nation overall. However, the region's share of commuters who walk is smaller than upstate New York as a whole. Compared to all of upstate NY, a slightly higher share of WNY workers bike to work, although the region's share is lower than the nation's. Only 2.7% of workers in WNY commute via public transportation – or just over half the rates of Upstate NY and U.S. The next page looks at how these rates shift across the various communities of Western New York, which helps reveal how the endorsement of local planning and policies to improve pedestrian mobility actually correlate with physical activity levels.

Share of Workers Walking, Biking or taking Public Transportation to Work



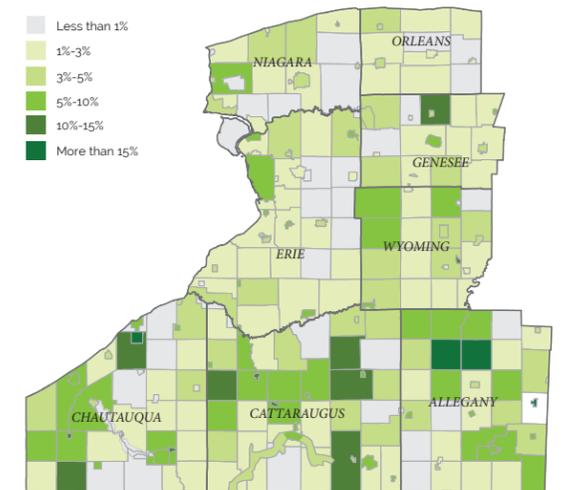
Source: U.S. Census Bureau, American Community Survey, 5-year estimates (2014).

## Do municipalities with more robust planning and zoning have higher shares of workers commuting via active transportation?

Active transportation commuting rates vary widely across the region. Municipalities with the highest percentages of workers walking or biking to work are typically seen near cities and villages with more compact, pedestrian oriented neighborhoods. This includes college towns – like Alfred, Batavia (with Genesee Community College), Fredonia, and Canadea (Houghton). Buffalo, with the highest concentration of development and population density in the region, surprisingly has lower active transportation commuting rates than many towns in more rural surroundings, although rates are higher than other similarly built cities, like Niagara Falls. However, if factoring in public transportation, the city of Buffalo, where 12% of workers commute by transit, has the highest share of active commuters. Other communities serviced by the NFTA, like Amherst, Niagara Falls, also have relatively high shares of public transit riders which are matched by rural communities with more infrequent transit and taxi service.

The chart to the right shows the share of workers commuting via active transportation modes in municipalities covered by this review. Municipalities were grouped into three tiers based on the total support for pedestrian mobility strategies in their plans and ordinances (see maps on page 46). There appears to be some, but not a complete, correlation between the level of support for mobility strategies in plans and ordinances to the share of workers who commute by walking and biking. However, this correlation is greatly influenced by the comparatively high share of public transportation commuters in the municipalities that scored highest in this review.

Share of Workers Walking or Biking to Work by Municipality



Share of Workers Commuting via Alternative Transportation Modes in Municipalities Reviewed



Source: UBRI analysis of data from the U.S. Census Bureau, American Community Survey, 5-year estimates (2014).

## How do indicators of public health in WNY compare to New York state?

The New York State Department of Health (NYSDOH) provides data on numerous indicators of chronic health conditions that help reveal the variations in public health outcomes across Western New York. These chronic conditions, like diabetes, circulatory problems (e.g., heart disease) and obesity can all be thought of as lifestyle diseases since it is widely acknowledged that increased levels of physical activity can help reduce rates of these conditions.

Comparing Western New York as a whole to all of New York State, the region generally performs on par with the state. While overall hospitalization rates due to diabetes in the region are slightly lower than the state overall, hospitalizations due to circulatory conditions are somewhat higher. Overall, hospitalization rates due to all chronic conditions (which includes diabetes, circulatory problems, along with respiratory conditions like asthma) are slightly lower in Western New York than the state as a whole. Looking at the share of students of all ages that are reported to be either overweight or obese, Western New York school districts are nominally higher than across the state. The next page examines how these rates vary across the communities of Western New York

Measure	WNY	NYS
Observed Diabetes ER Visit Rates (per 100,000 population)	<b>178</b>	<b>224</b>
Observed Circulatory-Related ER Visit Rates (per 100,000 population)	<b>488</b>	<b>456</b>
Observed ER Visit Rates for Chronic Conditions (per 100,000 population)	<b>1,474</b>	<b>1,563</b>
Pct. Of Students Overweight/Obese	<b>34.2%</b>	<b>33.9%</b>

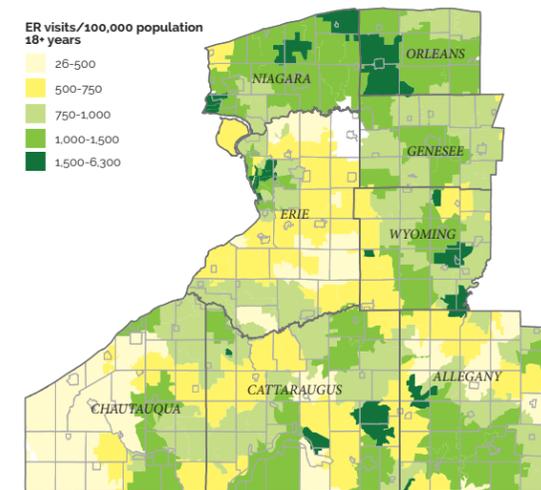
Source: NYS DOH, Prevention Quality Indicators (2009-2012); Student Weight Status, Percent Overweight and Obese by School District, (2012-2014). Average rates are calculated from annual data. Population numbers from the American Community Survey, 5-year estimates (2012) are used to calculate the WNY average regional rate.

## Do municipalities with more robust planning and zoning have lower rates of chronic health conditions?

The map at right shows the number of emergency room visits per 100,000 people for all chronic conditions by ZIP code across the region. Neighborhoods with the highest hospitalization rates for chronic conditions often lie in urban areas where poverty is concentrated - in Niagara Falls and the east side of the city of Buffalo. Other areas with high hospitalization rates for chronic health issues exist in rural population centers, like Medina, Olean, and Perry. In general, more suburban and affluent ZIP codes experience lower hospitalization rates due to chronic health conditions. As these areas are characterized by automobile oriented development, this map shows that other factors, such as poverty and access to healthy food, must have a profound impact on health outcomes that extends beyond land use patterns to support walking and physical activity.

The chart to the right shows the emergency room visit rates in municipalities covered by this review which were grouped into three tiers based on support for pedestrian mobility strategies in their plans and ordinances (see maps on page 46). There appears to be limited correlation between planning and policy support for walking and physical activity to observed health outcomes in these communities. Those municipalities that scored highest in this review have the highest hospitalization rates for chronic conditions. This again points to the prominence of other environmental factors, such as income, educational attainment and access to healthy food, in shaping the public health outcomes in a community.

Emergency Room visits due to all chronic conditions by ZIP code



Average ER visit rates for chronic conditions in Municipalities Reviewed



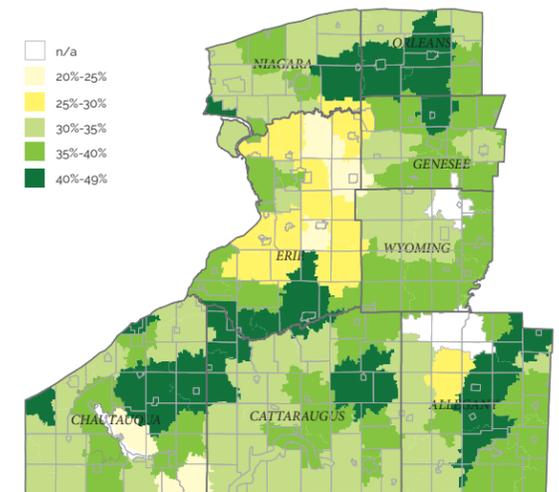
Source: UBRI analysis of data from the NYS DOH, Prevention Quality Indicators, 2009-2012. Average rates are calculated using annual data from 2009-2012.

## Do municipalities with more robust planning and zoning have lower rates of childhood obesity?

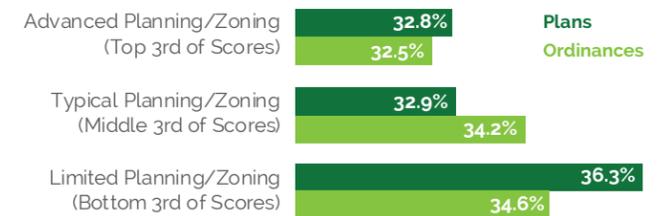
This map displays the average share of students in each Western New York school district reported as being either overweight or obese from 2012 to 2014. School districts with the highest shares of students reported as overweight or obese are more common in rural areas across the region, however cities like Niagara Falls and Dunkirk also have childhood obesity/overweight rates exceeding 40%. Other city school districts, like Buffalo, Lockport and North Tonawanda also have relatively high shares of students either overweight or obese. The lowest rates of childhood obesity can often be found in the region's suburban school districts, like Clarence and East Aurora. This map shows that the nature and character of the communities where children grow up can be one of the more substantial environmental factors in shaping a child's lifestyle choice. This can have lasting health impacts throughout their lifetime.

The chart to the right shows the share of students overweight or obese in municipalities covered by this review, which were classified into three tiers based on support for pedestrian mobility strategies in their plans and ordinances (see page 46). This indicator does demonstrate a straightforward, but relatively minor, correlation between planning and policy support for walking and physical activity to observed public health outcomes. Those municipalities that scored highest in this review have the lowest rates of childhood obesity or chronic conditions. This points to the possibility that the character of a community, as well as the support for planning and zoning strategies that promote physical activity, can have an impact on observed health outcomes, particularly for school children.

Percent of Students Overweight/Obese by School District



Average Students by Score Ranking for Municipalities Reviewed



Source: UBRI analysis of data from the NYS DOH, Student Weight Status by School District, 2012-2014.

# Findings

The review of plans and ordinances that served as the centerpiece of this document revealed some interesting conclusions. These findings are further clarified by the results of the survey, indicators of health outcomes and the current conditions regarding pedestrian mobility across Western New York. This section integrates the information analyzed throughout the various components of this document. In doing so, this synthesis sheds light on regional strengths when it comes to promoting walking and physical activity through local planning and policy, as well as current barriers and potential opportunities that could be leveraged to better enable the residents of Western New York to lead more active, healthy lifestyles.



For one, most of the region's communities seem to support sustainable development strategies that implicitly promote physical activity. These policies often reinforce one another. For example, the most commonly supported strategies in this review, land conservation and mixed-use development, can work together. By restricting development, effective land conservation helps build development pressure within compact, mixed-use town and village centers.

Multi-use trails were also commonly promoted in local plans. These assets create opportunities to access scenic and natural resources throughout the region. Although rural areas generally lack the compact land use patterns that make for walkable places, these communities often do provide outdoor recreational opportunities.

In general, strategies to support physical activity are more common in the types of places best positioned to promote active lifestyles, namely, cities and villages. Even the smallest villages were more supportive of strategies to promote mobility than surrounding towns. Rural villages have the capacity to become regional activity centers that provide surrounding populations with a pedestrian-friendly environment.

Many communities have recently completed or begun transportation improvement projects with a pedestrian focus (see page 47). Although STIP projects are concentrated in more populous, urbanized communities, the data shows that many communities are leveraging this financing mechanism for pedestrian friendly improvements.

Another regional strength was shown in the survey where respondents demonstrated a commitment to proactive approaches to support mobility and public health in their communities. These local officials also shared an understanding of the myriad benefits such strategies would have on multiple community goals, such as economic development.



Planning can be a cumbersome and time consuming process for any community, but especially smaller ones with limited planning capacity. Some plans for smaller towns had fairly robust support for pedestrian mobility, however this planning rarely took effect in ordinances or STIP projects. Overall, local plans supported mobility more than ordinances, and this gap was often greatest in small villages with newer plans and older codes. Rural survey respondents were also more likely to see limited staff and resources as a challenge to implementation. Moreover, some towns that were not reviewed lack a comprehensive plan, zoning, or even both, which greatly limits the ability to implement strategies to improve public health outcomes.

According to the survey, limited finances are the biggest challenge to implementing public health strategies. This issue is intensified by sprawling land use and decreasing revenues. Despite a decades-long decline in population, the region's urbanized area has drastically expanded. As a result, the costs of infrastructure maintenance and public services has grown while the tax base has declined. This dynamic strains municipal budgets making it more difficult to fund strategies.

Safety remains a primary concern. Although many recent and ongoing improvements to local roadways improve pedestrian safety, street segments with a high number of accidents involving pedestrians exist in all types of communities (see page 48). Safety concerns are heightened in retail corridors that attract pedestrians to roads designed mainly for vehicles.

The lack of public transportation service throughout the region also limits the support of some strategies, like transit oriented development. Lastly, the survey suggests that community support for strategies that promote walking may be limited by low public awareness of the many benefits these strategies offer.



Collaboration across municipal boundaries may have the greatest potential to overcome the barriers revealed in this scan. By collaborating, communities can build capacity to plan and implement strategies to promote walking and improve health outcomes among their populations. The benefits of collaborative planning were evident in this review. Some rural towns who partnered with neighboring municipalities on their comprehensive plans were more supportive of mobility-enhancing strategies than similar towns who developed plans independently. Survey results suggest an eagerness among planners and decision makers to collaborate on efforts that promote physical activity and public health. Regional support systems, local businesses, inter-municipal partnerships and technical assistance from county governments or municipal planning organizations could help initiate the collaboration needed to heighten support for mobility and public health in local planning and policy.

There also appears to be a broad window of opportunity for more proactive transportation planning. While transportation related strategies can often have direct and substantial impacts on pedestrian safety and convenience, they were much less of a focus in local plans and policies.

Since the survey showed financial constraints as the greatest impediment to implementing strategies to promote mobility, it must be noted that a wide range of technical assistance and funding options to carry out many of the strategies reviewed in this document are available at the state and federal level. Community outreach, education and marketing may also help attract local residents to existing resources, like the region's walkable places and outdoor recreational assets, to increase physical activity levels and improve public health outcomes.

# Data Sources & Notes

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## A LOOK AT CURRENT CONDITIONS

**STIP Projects:** NYSDOT Statewide Transportation Improvement Program Database, Fiscal Years 2010-2013 and 2014-2017. Accessed August, 2016 at <https://www.dot.ny.gov/programs/stip/stip-project-rpt>

**Priority Investigation Locations:** NYSDOT, Priority Investigation Locations for Pedestrian Crashes (2014). Courtesy of the Greater Buffalo Niagara Regional Transportation Council.

**Walkable Places:** Walkability scoring is similar to that employed by Duncan, Aldstadt, Whalen, Melly, and Gortmaker in "Validation of Walk Score® for estimating neighborhood walkability: an analysis of four US metropolitan areas." International journal of environmental research and public health 8, no. 11 (2011).

Scores are based on location of amenities research has found to be drivers of walking and applies a weighting scheme based on proximity and amenity type where amenities that are closer and better drivers of walking score higher. The measure factors for walker-friendliness by reducing scores in areas with fewer intersections per square mile, and longer blocks. Business locations are provided by Reference USA, U.S. Business Database (2015). Supermarkets and full-service restaurants are selected by NAICS code given a weight of 3. Coffee shops and general retail (including smaller grocery, clothing, and department stores) are selected and given a weight of 2. Other retail and entertainment such as theaters, gyms, arcades are given a weight of 1. Park, school, bank, library locations are selected from the most recent tax parcel data for the various counties (2010-2015) by property class (461-463, 611-615, 960-963) and given a weight of 1. The concentration of amenities (applying above weights) within several distances is calculated giving sites in closer proximity higher scores (<.25 mile = 100; .25-.5 mile = 87.5; .5-.75 mile = 57.5; .75-1 mile = 26.25; 1-1.25 mile = 8.75; 1.25-1.5 = 2.5). All weighted layers are aggregated. Scores are then reduced by other street characteristics using 2015 TIGER/Line Roads Shapefiles prepared by the U.S. Census Bureau. Scores are reduced systematically by: intersection density (per square mile); average block length (meters); speed limits; and the number of lanes. Scores are then normalized (0-100) on a 0-100 scale so walkability is relative to the region's "most walkable" places.

## INDICATORS OF PUBLIC HEALTH

**Physically Inactive Adult Population:** Centers for Disease Control and Prevention: Division of Nutrition Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion (2013). Accessed August, 2016 at [https://nccd.cdc.gov/NPAO\\_DTM/IndicatorSummary.aspx?category=71&indicator=36&year=2013&yearId=17](https://nccd.cdc.gov/NPAO_DTM/IndicatorSummary.aspx?category=71&indicator=36&year=2013&yearId=17)

**Share of Workers Actively Commuting to Work:** U.S. Census Bureau, American Community Survey, 5-year Estimates (2014).

**Emergency Room Visits for Chronic Conditions:** NYS DOH, Prevention Quality Indicators, 2009-2012. Average rates are calculated using annual data from 2009-2012. Accessed July, 2016 at [https://apps.health.ny.gov/statistics/prevention/quality\\_indicator](https://apps.health.ny.gov/statistics/prevention/quality_indicator)

**Percent of Students Overweight/Obese by School District:** NYS DOH, Student Weight Status by School District, 2012-2014.

