Village of Ossining

Mobility & Parking Management Study: Final Report

June 2021

NELSON NYGAARD

In collaboration with FHI studio HAASMEDIA DADRAS ARCHITECTS

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Plan Recommendations

This section identifies a set of mobility and parking recommendations for Downtown Ossining. For each strategy a set of key actions is identified to suggest specific implementation opportunities. The recommendations are organized into sections that focus on specific mobility and parking conditions and improvement objectives, as follows:

- **Parking Supply** – Expand the supply of public parking, in lieu of parking reserved for a particular development or set of land uses.
- **Effective Parking Capacity** – Expand the capacity of existing parking supplies to avoid the cost and physical impact of constructing new supplies.
- **Parking Demand Management** – Redistribute demand more evenly across all available options, to ease capacity constraints in high-demand locations and at high-demand times.
- **Parking Operations & Administration** – Improve the efficiency and effectiveness of basic parking operations and policy/program administration.
- **Mobility Improvements** – Reduce parking demand by making more spaces function as "park once" options for all downtown trips; reduce parking demand by improving non-driving modes of access.

Parking Supply Recommendations

Peak-hour utilization surveys suggest that the current capacity of the Village's downtown lots is sufficient to meet the parking needs of today's businesses, commuters, residents, and visitors. This suggests that most employee and visitor parking frustrations can best be addressed through better management of existing resources. Importantly, this will allow supply-development strategies to focus on longer-term needs and bigger-picture opportunities, such as redeveloping downtown-core Village lots.

Explore the potential to create angled parking on Academy Place.

If converted to one-way traffic, the width of the right-of-way on Academy Place is sufficient to accommodate angled parking. The angled-parking option that would yield the greatest space gain is 60-degree parking on the north side of the block with parallel parking on the south side. This would yield an increase of up to 80% over the current supply.

Key Actions

Explore the viability of the following changes:

- Converting this block to one-way, westbound traffic
- Striping 60-degree-angled parking spaces along the north side of the block
- Leaving the parking configuration on the south side of the block unchanged
- Metering the first several spaces off Spring Street, to increase turnover and availability for visitors.
  - Consider regulating the remaining spaces via two-hour time limits to further accommodate visitor parking demand on this block.

The topmost consideration in exploring this option will be to assess any potential negative impact on police-response movements in and out of the department's parking lot at Spring Street the corner. It will also be important to mitigate any negative impacts on Bee-Line bus service, which travels along this street.

Seek other opportunities to add on-street parking.

Figure 1 Private curb-cut converted to parking via parking meter in Charlotte, NC

The Route 9 Study just getting started may identify opportunities to add on-street parking within the study area. As part of that study's focus on reducing traffic speeds and increasing pedestrian safety and comfort, the addition of on-street parking may prove to be an effective strategy to do so while also adding parking supply.

The Village should also explore opportunities to work with the owners of private lots that have excessive or redundant driveways that reduce curbside parking capacities.

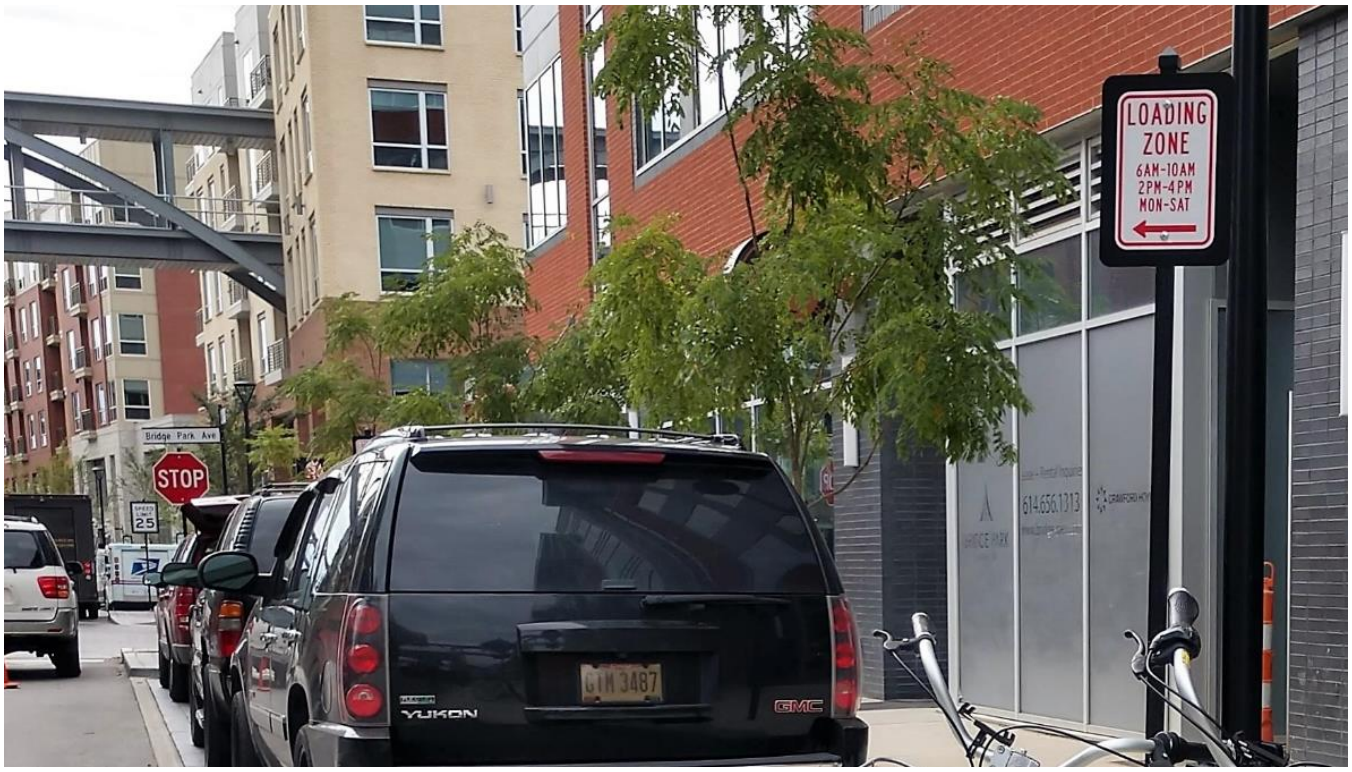
Key Actions

- Explore options to close disused or excess curb cuts to recapture on-street parking spaces.
- Consider opportunities for adding on-street parking as a traffic-calming strategy for Route 9 redesign recommendations.

Use variable regulations to create more loading capacity.

Create loading zones to support local businesses, while varying the hours by location to balance this activity with parking demand throughout the day. Providing generous areas for loading on primary commercial blocks (Spring Street, Main Street, etc.) during early morning hours also creates an incentive to schedule deliveries at these low-traffic times. During the midday peak through the evening, shifting loading zones to side streets can maintain the accommodation of deliveries while preserving the most convenient spaces for visitors/customers at these critical business peak times.

Figure 2 Early Morning and Afternoon Loading Zones Leave Room for Parking at Other Times



Key Actions

Shift Loading Zone/Parking throughout the day, as follows:

- Key Blocks of Spring and Main Streets:
  - Prioritize loading/unloading during early mornings – 6am – 10am
    - ✓ Monitor these locations to ensure that they are sufficient to accommodate the increasing demand for the delivery of people and goods (ride services, restaurant curbside pickup, grocery deliveries, Amazon, etc.)
  - Prioritize short-term/metered parking from late-morning through the evening – 10am – 8pm
- For the first 80-100 feet on adjacent blocks:
  - Prioritize short-term parking during early mornings – 6am – 10am
  - Provide midday loading zones, from 10am to 4pm
    - ✓ Monitor these locations to ensure that they are sufficient to accommodate the increasing demand for the delivery of people and goods (ride services, restaurant curbside pickup, grocery deliveries, Amazon, etc.)

Change 2-Hour spaces along Central Avenue to 8-Hour spaces

Utilization patterns demonstrate consistently low utilization of the 2-hour spaces along these blocks. Expanding time limit to accommodate nearby employees may trigger better use of these convenient spaces.

Key Actions

- Convert all 2-hour spaces along Central Avenue to 8- hour spaces.

Continue to Explore Redevelopment Opportunities for Village Lots.

Village-operated lots in Downtown Ossining offer two distinct, mutually supportive opportunities to catalyze downtown land use development and growth – sites for new development and sites for developing "replacement parking" to facilitate new development elsewhere.

1. Lots with high development value, which are likely to attract significant land use development
   a. These include Lots 5, 6, 8, and 15
2. Lots with significant potential for the development of structured parking that can provide replacement parking to enable the redevelopment of other Village lots
   a. These include lots 7 and 8

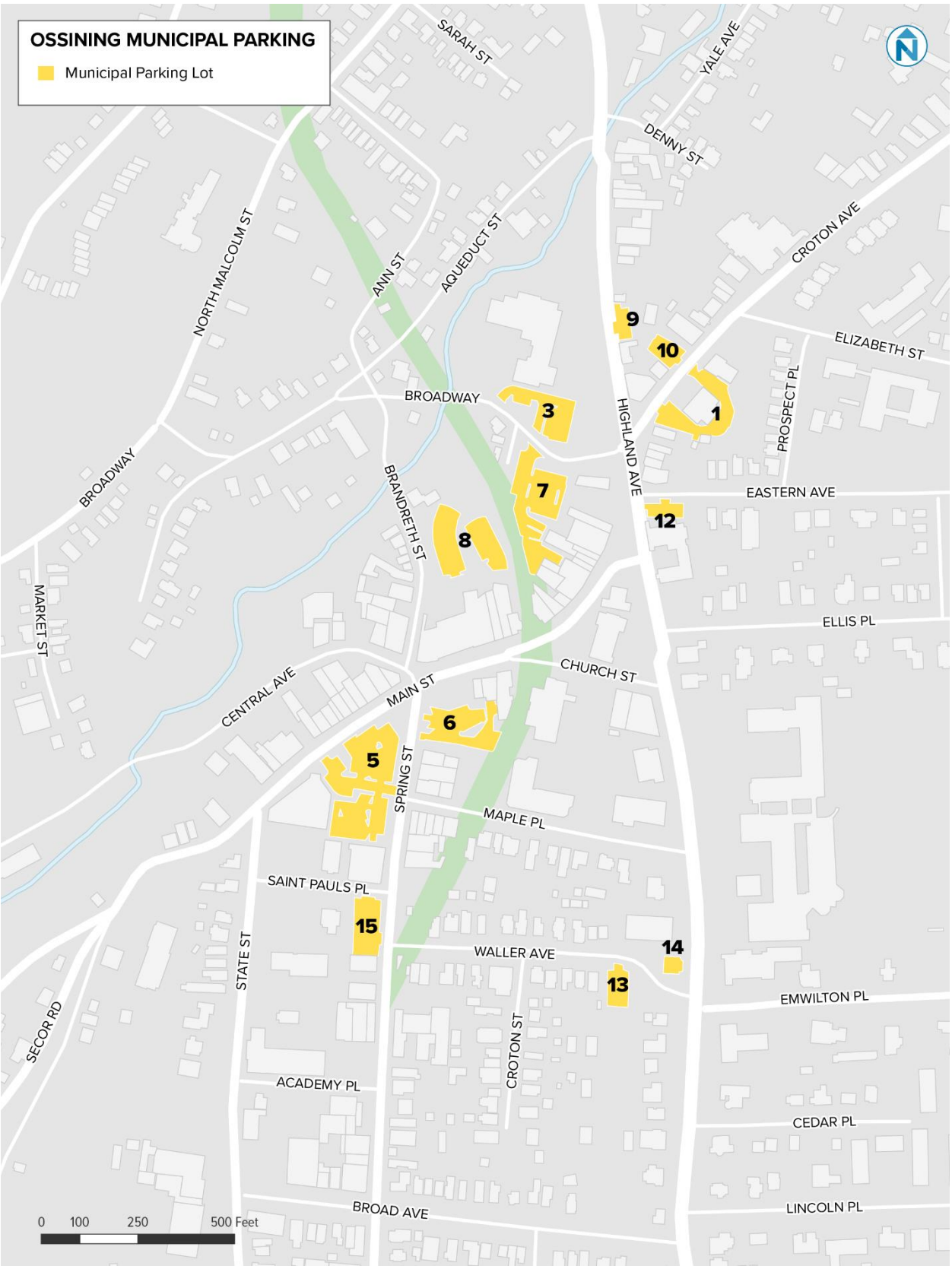
These lots generally lack the spatial capacity to accommodate both redevelopment and supply replacement investments, suggesting the need to develop a coordinated development plan that includes at least two lots and a public-private investment partnership.

Key Actions

- Identify priority lots for attracting private development to include a mix of street-level commercial space and upper floor residential or employment uses.
- Identify viable lots for public or public-private investment in supply development of capacity sufficient to replace the parking capacity of the lots identified for redevelopment.
- Identify challenges to both basic financial viability and attracting developers of a desirable quality.
- Outline parameters of potential RFP seeking investment, to prioritize:
  - Development characteristics
  - Contextual design compatibility
  - Cost-sharing efficiencies for, and optimized public access to, parking developed to support the project.

See Village Lot map on next page.

Figure 3 Downtown Municipal Parking Lots



Update the Village Code with strategic downtown parking standards.

The Village maintains fairly standard parking requirements for development within the study area, most of which is zoned as Village Center, with some areas zoned as Two-Family Residence Districts (T Zone). Such parking requirements can be an obstacle to development in walkable urban centers. While it is common for such requirements to be waived, it is worth exploring code updates that might provide more consistent benefits to the Village, and more predictable project-review outcomes for developers.

Key Actions

- Develop incentives to include shared parking in new, private development
  - This can be done by establishing a parking maximum limit on private/accessory parking spaces, allowing more parking on-site only if it is shared.
  - Those developers who want more on-site parking than the maximum would allow as private parking will have an incentive to share their parking in order to get approval for the amount of parking they prefer.
  - Even though this parking would have to be shared, it would serve as "overflow" parking for the development to meet occasional peak parking needs.

Add an In Lieu of Parking fee option to the code.

A "fee in lieu of parking" option allows developers to "buy down" their parking requirement through contributions to a public fund that can be used for investments in public parking and/or mobility improvements. This would make it feasible for smaller projects to be built with no on-site parking, preserving their full lot for higher-value uses and avoiding inefficient, sidewalk-disrupting driveways along downtown streets. At the same time, a progressive fee structure would make it less likely that larger projects would use this option, making use of their larger parcel sizes to perhaps engage the Village about developing a public-private parking facility to meet their parking requirements.

Key Actions

- Implement an In Lieu Fee option within the Village development code, allowing developers to contribute to a Downtown Parking and Mobility Fund in lieu of fully meeting their project's minimum parking requirement.
- Use a progressive fee structure to both facilitate infill development and encourage developers of larger projects to meet their requirements on-site, or via public-private investment with the Village.
- Establish an enterprise fund, which should capture all fee proceeds above administrative costs, that can only be spent on investments in public parking or mobility expansion/improvement projects.

Figure 4 Recommended Progressive Fee Structure

Required Spaces Waived via Fee Payment	Fee Per Space Waived
1 - 5	$5,000
6 - 10	$10,000
11 - 20	$20,000
21 - 30	$30,000
Over 30	$50,000

Parking Capacity-Expansion Recommendations

Remove meters where utilization is consistently below 50%.

Utilization patterns that demonstrate consistently low utilization of metered parking blocks and/or lots suggest an opportunity to increase their appeal by removing their cost.

Key Actions

- Bag meters for 30 days, and observe changes in utilization
- Pilot this on Croton Avenue between Elizabeth Street and Belleview Avenue
- Replace with time limits

Remove daytime permit parking in Lots 5 and 6

Increase visitor parking capacity in these Downtown Core lots by shifting permit parking to other locations.

Key Actions

- Convert all permit spaces to metered parking during daytime hours.
- Continue to allow evening and overnight parking via permits in these spaces.
- Convert commensurate number of time-limited or metered parking spaces to permit spaces in lots 7 and 8.

Use pay-by-phone technology to encourage off-hour sharing of private lots.

Engage owners of private parking lots to leverage this payment platform to monetize available parking capacities, by coordinating with the Village and its pay-by-phone vendor. This has been used to good effect in several cities, with lot owners setting the hours and rates that allow public use of lots when they tend to be underutilized and resulting revenues (minus a vendor fee) being sent directly to the lot owner when payments are made.

Key Actions

- Work with owners of private lots in key downtown locations which experience predictable patterns of underutilization
- Connect lot owners with the Village's pay-by-phone vendor to assess options for:
  - Setting hours of public access
  - Setting a fee for public parking
  - Installing signage to identify the hours and rates for parking in the lot
  - Exploring permit options for downtown employees or residents
    - ✓ This could be a way of marking use of the underutilized parking in the private lot next to Lot 8 to provide more employee parking for Open Door

Designate a pickup/dropoff zone to mitigate Main Street congestion.

Every downtown visitor or employee who arrives via a shared or hired ride (taxi, Lyft, Uber, dropped off by friend or relative, etc.) frees up a parking space for someone else to use. The popularity of this arrival mode, however, has increased traffic congestion at key points along Main Street. Accommodating this traffic via a designated pickup/dropoff (PUDO) zone located convenient to downtown businesses could help mitigate this impact on traffic while encouraging further use of desirable means of downtown access.

PUDO Zones

Increased ride-service activity has prompted many municipalities to standardize the pickup/dropoff (PUDO) Zone concept, which can facilitate the safe and efficient movement of people and goods to and from the curbside in high-activity locations. By providing designated space for passenger and commercial-goods PUDO activity, these zones can reduce double parking and queue lengths while making nearby destinations easier to access.

Key Actions

- Work with key downtown trip generating businesses to identify locations for a PUDO zone, and the hours when such traffic tends to be significant.
- Explore options for creating one or more PUDO zones that align with these locations and can accommodate these schedules.

Increase resident access to Village lots near Ossining Station.

Parking in the Main/Secor Commuter Lot is currently restricted to vehicles with a Train Station Parking Permit, except for weekends and holidays. This lot, however, used to be maintained as a parking resource for residents of the surrounding blocks, which were densely developed without off-street parking leaving many homes today dependent on hardship parking permits.

Key Actions

- Consider converting this lot to a Municipal Parking lot.
  - Require a day use or overnight permit for all spaces in the lot.
- Consider similar conversions among current Train Station lots.

Expand employee parking options via shared parking.

Explore opportunities to use virtual-permit technology to unlock capacity in private lots.

Key Actions

- Work with private-lot owners with excess capacities to explore virtual-permit options for daytime employee parking, using the Village's pay-by-phone system to facilitate payment for use of these spaces.
  - This may be particularly effective for employers located at a distance from Village permit lots, particularly in the southwest areas of downtown.
  - Overnight permits may also prove attractive to downtown and near-downtown residents with limited parking options.

Parking Demand Management Recommendations

Create cost tiers for Village-lot parking permits.

When all or most parking options are priced the same, demand will become concentrated among the spaces and lots that are closest to the center of downtown activity. This attracts drivers to the parking options offering the least chance of finding a space. This creates the perception that there is "nowhere to park" downtown which so often baffles parking managers who know just how many spaces go unused all day. The most effective means of encouraging broader use of all parking options is to use pricing to create an incentive for more drivers to choose not to park where demand is highest. Modest shifts in demand patterns can create sustainable levels of parking availability where demand is highest, making Downtown Ossining more convenient to access by car and clarifying that there is always somewhere to park (though some options will cost more than others).

Key Actions:

- Designate Lots 5, 6, and 8 (Main/ Spring & Brandreth) as Downtown Core lots.
- Convert all 3-hour free parking spaces to metered spaces in these lots.
- Create a discount permit that <u>cannot</u> be used in Downtown Core lots during weekday hours.
- Ensure at least a 25% cost difference between these rates
- Increase the differential if availability does not improve in Downtown Core lots after six months

Create cost tiers for metered parking.

The Village can simplify the visitor parking experience by creating two tiers for meter rates, applying them in a logical pattern, and using meter marking, maps, and information to make this pattern well known. This will allow even first-time visitors to anticipate where their free, standard-cost, and higher-cost parking options are before driving all over downtown.

Key Actions

- Tier 1 Zone: Charge a premium rate:
  - On Main Street, between State Street and Highland Avenue
  - On Spring Street, from Broad Avenue to Main Street.
- Tier 2 Zone: Charge a standard rate:
  - For all other metered blocks
  - In all Village Lots with metered parking spaces
- Ensure at least a 50% cost difference between these rates
- Promote the availability of free parking in all other locations, including on a Village Parking Map

Define a demand-based approach for rate-setting.

Clarify that the primary objective of the Village's parking management efforts is to maintain consistent levels of availability among all parking options, and that the rates that the Village charges for permits and for metered parking are set for the purpose of keeping high-demand parking options accessible. Articulating this policy and posting it on the Village's webpage for parking information can help clarify the rationale for current rates and future adjustments.

Demand-Based Pricing

Applies the basic economic dynamic of "supply and demand" to the pricing of public parking options. Where and when demand is higher than the available supply, the price is raised until the resulting drop in demand creates availability. Where and when demand is much lower than the supply, the price is lowered to encourage more drivers to use these options. In either case, the primary objective is to make all parking options easier to access.

Key Actions

- Adopt and post a policy of performance-based pricing for all Village-managed parking options
  - This helps to clarify that parking rates are set based on demand, and for the purpose of making more options more consistently available, and not for the sake of generating revenue
  - Formal Board of Trustees approval could be sought to provide Village staff with direct authority to adjust rates based on documentation of Key Performance Indicator measures.
- Define Space Availability as the Key Performance Indicator for price-setting
  - Define "availability" as the percent of spaces in a lot or on a block that are available at any given time.
- Set availability target/s
  - 15% is a standard target for on-street blocks
  - 10 for smaller lots is recommended
  - 5% for larger lots is recommended
- Monitor availability to inform pricing changes.
  - Complete random counts of downtown blocks and Village lots throughout the year
  - Counts should be completed on mid-week weekdays around midday

- Track the average availability measures for each block and lot and identify averages that remain more than 10 percentage points above or below target for more than a year.
- Consider meter/permit-rate changes for these blocks and lots

Change the hardship permit rate structure to reduce cost and overuse.

The availability of LPR technology, and the recent transition toward virtual permits that this technology enabled, present important options for improving overnight parking options for Village residents, while also discouraging overuse of this option.

Key Actions

- Use LPR to transition to pay-per-use pricing to incentivize minimal use of hardship parking options
  - Use the Village's LPR system to convert hardship permits to virtual permits
  - Convert the price of hardship permits to a pay-per-use model, charging permit holders only for the dates when their hardship-permit-linked plate is recorded to be parked on the street during overnight hours.
- Use a pro-rated daily charge so that the cost for those who rely on this parking every day is comparable to the cost of an annual permit.
- Consider an escalating fee for multiple hardship permits provided for the same household.
  - Set a second-permit fee at 125% of the fee for the first permit
  - Increase the fee for each additional permit by an additional 25%

Align pricing schedules with demand, not the workweek.

Shifting enforcement schedules to better correspond to demand peaks can make these areas more accessible when restaurants, coffee bars, and other gathering places are busiest, while providing a few hours of free parking to attract more morning activity.

Key Actions

- Adjust meter enforcement hours and calibrate with the recommended zones for meter-rate tiers:
  - Tier 1 Zone: 10am – 8pm
  - Tier 2 Zone: 10am – 6pm
- Enforce Monday - Saturday

Develop strategic downtown parking standards for the Village Zoning Code.

Complement parking standards with incentives to include non-driving mobility accommodations, amenities, and benefits/programs.

Key Actions

- Provide options for developers to reduce their parking requirements by including mobility accommodations, amenities, and benefits/programs that can attract households with below-average car ownership rates, such as:
  - Indoor bike parking and/or bike-maintenance amenities
  - Shared bikes or scooters, either public or proprietary to residents/tenants
    - ✓ Priority can be given to battery-assisted options for navigating Ossining's sloping terrain.
  - On-site car-share, either public or proprietary to residents/tenants
  - Shuttles to Ossining Station

Parking Operations & Administration Recommendations

Expand Use of LPR for parking enforcement.

The Village's investment in LPR technology and systems creates an opportunity to improve the operational/administrative effectiveness of several Village parking functions.

Key Actions

- Monitor time limits more accurately, with automated documentation to improve citation and collection processes.
  - These compliance-monitoring improvements will support enforcement that combines 1) more active monitoring, and 2) citations and fines that avoid punitive costs for one-time mistakes while increasing the cost for repeated violations.
- Transition all permits to virtual permits, with registered license plates maintained in a database
  - This would facilitate a transition to a pay-per-use model for "hardship" permits.
  - Such a pricing model will provide an incentive for residents to use these permits less frequently, thus potentially freeing up overnight capacity for those who most need it.
  - This could be phased in based on staffing and equipment capacity to ensure effective enforcement.
    - ✓ This could also be piloted in areas with persistent hardship-parking challenges that could be eased through pay-per-use permit rate incentives.

Explore options for using LPR to track parking utilization/availability.

There are software packages that work with LPR operating systems to convert plate reads into occupancy counts, to provide a consistent stream of data that can be used to measure availability across downtown, at all times and days when LPR is being used to enforce time limits (or other parking regulations).

Key Actions

- Work with LPR vendor to identify options for adding this functionality
- Identify the benefits of such capacity to better assess its cost/benefit merits
- These include:
  - Supporting demand-based pricing of permit and short-term parking
  - Informing other parking-management decisions, based on a better understanding of where/when supplies are either constrained, well balanced, or underutilized
  - Being able to track the impact of policy, regulation, and pricing changes on parking utilization patterns
  - Being able to track demand/supply conditions, and their patterns over time and space, to better inform cost/benefit assessment of potential supply-expansion opportunities

Improve parking Wayfinding to guide visitors to right-fit parking options.

Wayfinding is a means of providing intuitive visual cues and information to drivers, upon arrival. The first objective of wayfinding, therefore, should be to reinforce information provided to drivers before they arrived, and direct them to their parking option of preference. At the same time, effective wayfinding can provide visual information that suggests parking opportunities and guide drivers toward their "right fit" options, even if they knew nothing of these options before arriving. This can include varying meter types or markings that correspond to pricing and/or time limits and branding off-street locations that accommodate hourly parking. Better identifying Downtown parking facilities that cater to hourly parking should be part of the Communications Plan as well.

Coordinated Wayfinding

provides information to users that allows them to make informed decisions about which streets and routes to choose to arrive to their destinations. Wayfinding can be used as an economic development tool, directing people on bikes or foot toward shopping sites such as retail corridors, farmers markets, and special events.

Key Actions

- Simplify lot regulations
  - Seek to make most lots either all meter, all permit, or all time limited, rather than a mixture of all in each lot
- Redesign wayfinding signage to be more conspicuous to visitors
- Only provide wayfinding for lots available to the public (time limited or metered)
- Favor signage towards facilities for which a right turn is required rather than a left turn across heavily trafficked roadways
- Place wayfinding and lot signs in locations that are conspicuous to drivers
- Use consistent color scheme to indicate the type of parking provided
- Redesign lot signs to better convey the type of regulation in the lot.
- Re-name lots to correspond with adjacent street names to facilitate easier navigation.
- Consistently place signs at lot entrances

Figure 5 Recommended wayfinding sign locations and directional cues

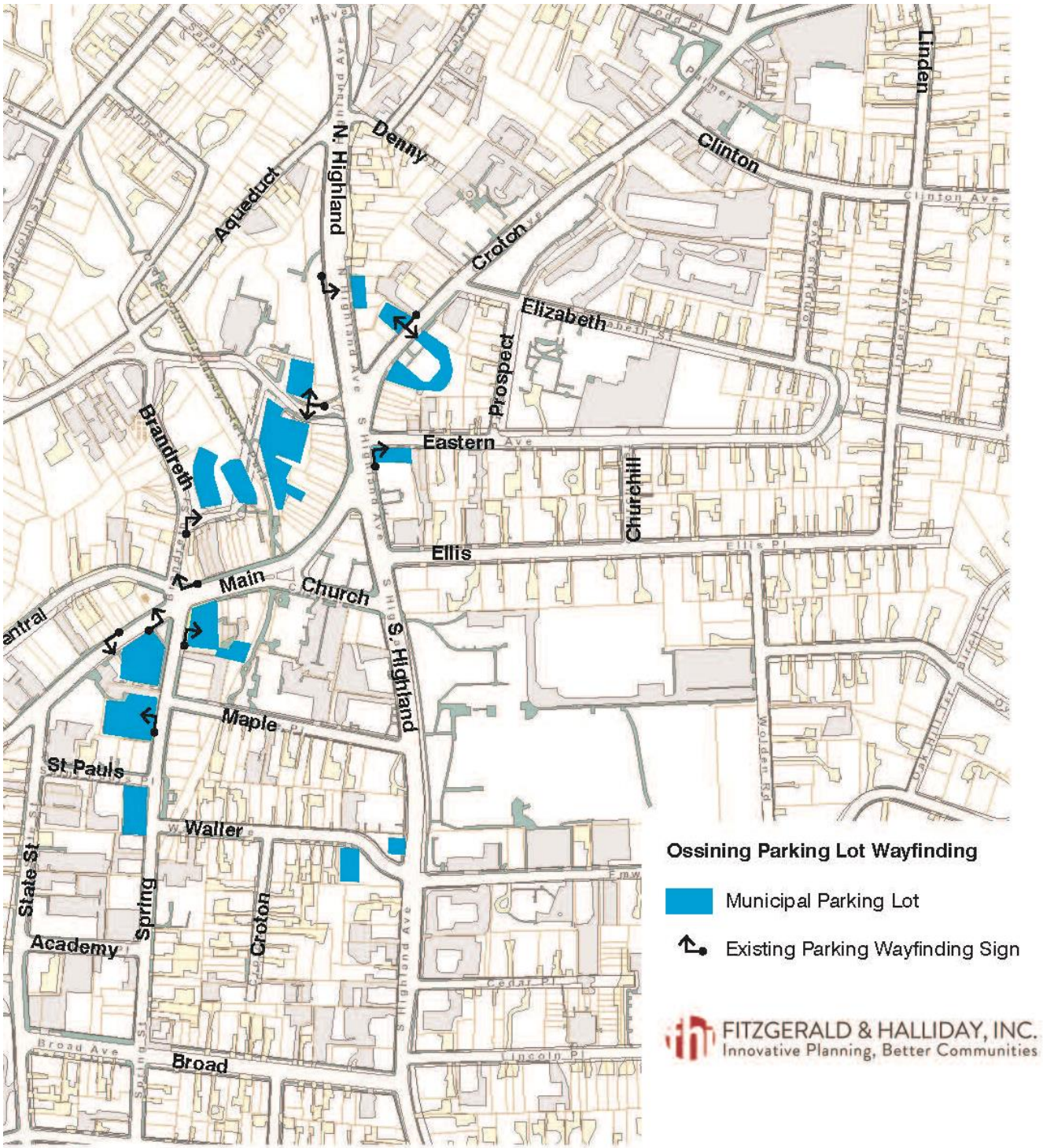


Figure 6 Example of Recommended Parking wayfinding signs

Figure 7 Example of Lot Sign Recommendations

Formalize and promote a Snow Clearance policy regarding on-street parking.

During cold-weather months, restrict daytime parking on most residential streets to alternate sides, to facilitate snow clearance and to ensure that travel-lane clearance widths remain sufficient for emergency access.

Key Actions

- From November through May, restrict daytime (8am to 5pm) parking, including for vehicles with hardship permits, to aternate sides of the street, as follows:
  - On odd-numbered calendar dates, parking is only allowed on the odd-numbered side of the street
  - On even-numbered calendar dates, parking is only allowed on the even-numbered side of the street

Mobility Improvement Recommendations

Coordinate parking and pedestrian wayfinding to promote Park Once opportunities.

A "park and walk" or "Park Once" strategy will help achieve a more multi-modal, less car-dependent, mobility system for Downtown Ossining.

Key Actions

- Identify parking lots suitable for visitors
- Use wayfinding and lot-entrance signage to direct visitors toward these options and to identify them upon arrival
- Consistent Village branding across the signs will mark the Park Once opportunity that Village Lot status conveys
- Provide pedestrian wayfinding signage and information to mark directions and walking distances to nearby destinations, points of interest,
  - This can include pedestrian wayfinding maps that mark destinations as well as walking pathways around Downtown.

Figure 8 Visitor-Lot Parking Signage in Port Jefferson, NY

Image Source: patch.com

Figure 9 Examples of Clear, Visitor-Focused Wayfinding and Signage with Parking Information

Improve walking facilities.

All trips, regardless of the primary mode, start and end on foot. Comfortable walking facilities ensure that walking-distance trips (<0.5 mile) can be done safely and encourage drivers to park once and walk to destinations within the Downtown, reducing the parking demand. The actions recommended below would help improve safety, access to transit, and overall walkability in downtown.

Key Actions

- Ensure that streets and sidewalks are designed to promote an healthy, active and safe lifestyle.
- Enhance existing pedestrian crossings where appropriate, and add new crossings at key locations (e.g. Main Street, Route 9, Spring and State Streets). See Figure 6.
- Shorten crossing distances and add curb extensions and pedestrian islands at key intersections to reduce vehicle speeds and create safer crossing conditions. See Figure 6.
- Ensure bus stops are fully and safely accessible from both sides of a road to promote their usage. Crosswalks providing access to bus stops should be accessible for those using assistive devices and people with no or low vision.
- Ensure that all parking facilities are universally accessible, and that all crosswalks and sidewalks are ADA compliant. Curb ramps should be provided in locations with a change in grade. See Figure 6.
- Use traffic calming features to encourage lower vehicular speeds.

Figure 10 Bike Valet Can Make Arriving Downtown and Event in Itself

Expand Bike infrastructure and amenities.

Each downtown trip completed by bike leaves one parking space open for another trip made by car. Providing attractive bike parking options can encourage more bike trips at far less cost and in much less space compared to meeting automobile parking needs. A single vehicle parking space can accommodate eight or more parked bikes. Furthermore, studies have shown that, in many cases, bicycle customers frequent neighborhood commercial districts more often compared to driving customers.[1]

Key Actions

- Look for sponsors to fund a new **bike rack program** and bike repair stations to be installed throughout downtown Ossining.
  - Safe, secure bike parking ensures that the beginning and end of every cycling trip is safe and stress-free.

Public Bicycle Repair Stations are great additions to bicycle infrastructure. These stations have common bike tools to address the most common repair needs, secured by metal cable to a central hub that is affixed to the pavement. Bike repair stations could be added to wayfinding maps, to increase exposure and public knowledge of these resources.

[1] *Bike Lanes, On-Street Parking and Business, Clean Air Partnership, 2009.* http://www.bikeleague.org/sites/default/files/bikeleague/bikeleague.org/programs/bicyclefriendlyamerica/bicyclefriendlybusiness/pdfs/toronto_study_bike_lanes_parking.pdf

  - Placing easily accessible, well-lit, and sheltered bicycle parking at major destinations and trip generators, such as the Metro-North Station, can increase ridership.
  - Prominently located bike parking facilities can encourage people who drive to try biking to regular destinations.
- Install **bike repair stations** in key locations to encourage regular cycling among downtown employees, residents, and visitors
- Mark bike parking locations on the Village Parking Map and any other wayfinding maps (such as those located along the Old Croton Aqueduct trail).

Improve synergies with the Old Aqueduct Trail (OCA).

As a north-south spine for active transportation, and with the proposed connection to the North County Trail via proposed bike facilities on Route 133, the OCA plays a key role in facilitating local and regional trips. Bringing more local and regional trail users to downtown Ossining will reduce parking demand and increase economic activity.

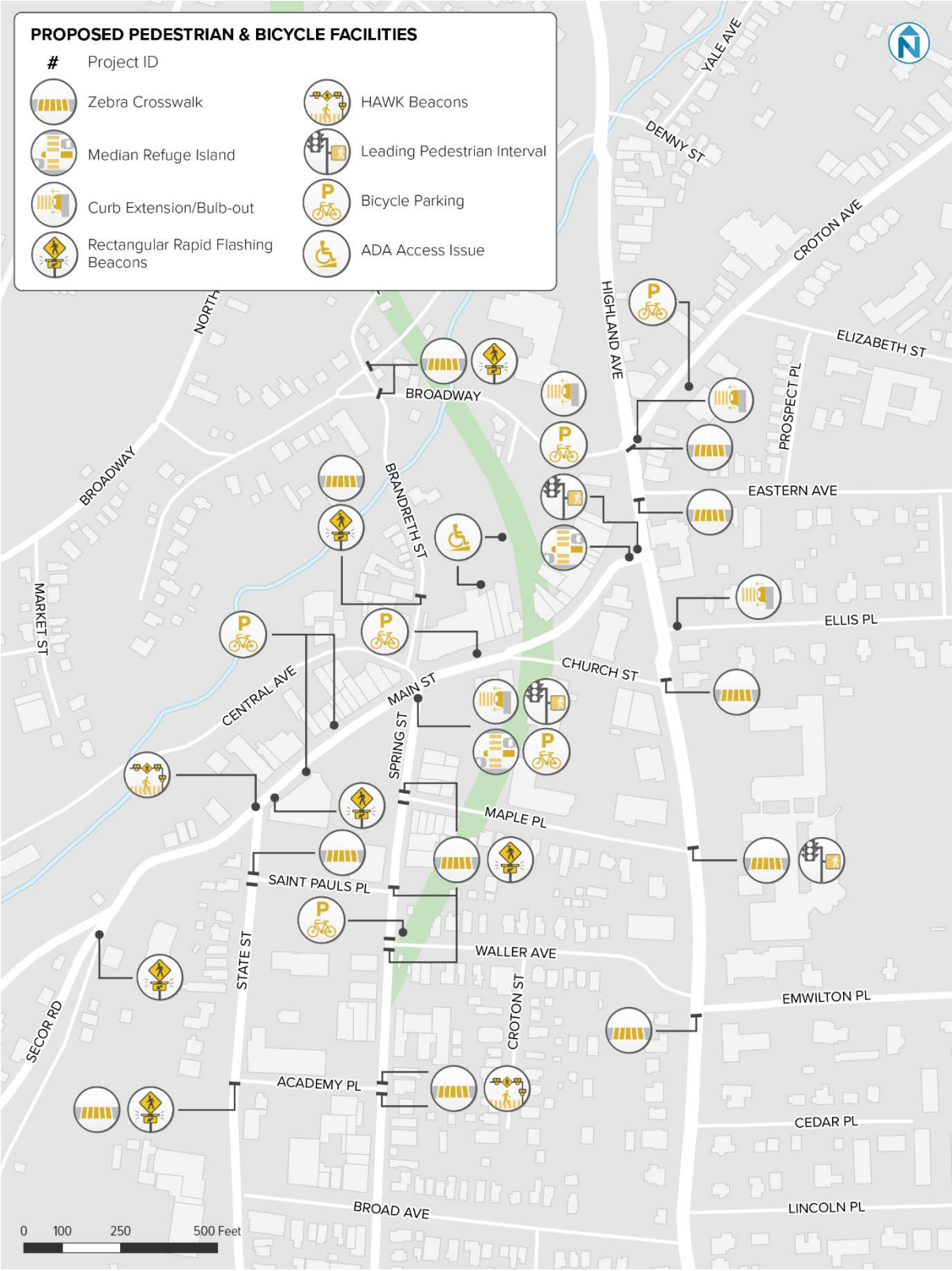
Key Actions

- Update existing maps of historic landmarks with regional connections and key local and regional destinations, local businesses, transit, bike racks, and parking supply locations.
- Add signage along the OCA trail with walking times to key destinations and biking times to regional destinations.
- Ensure that the OCA trail accesses are ADA compliant wherever possible.
- Offer **bike valet services** during market days and event dates, located at key points of access between the trail and downtown.
  - This typically involves engaging a local advocacy group or bike shop that sets up a controlled area for storing bikes
  - This area is staffed by volunteers, and prominently placed for easy access and visibility for those arriving on bikes.

Improve and expand downtown's walking and cycling networks.

Key opportunities to improve and expand the downtown walking and cycling networks conditions are identified in the map on the next page.

Figure 11 Strategic Improvements for the Pedestrian and Biking Network



Expand connections to the waterfront and Ossining Station.

On-demand shared services, such as shuttles and battery-assist shared bikes/scooter, can provide important non-driving connections between downtown and the Metro-North station and ferry terminal, Village park-and-ride lots, and other waterfront destinations. Such services would reduce short vehicle trips and provide a fast and reliable transportation option that addresses the impact of topography, which can discourage people from walking or conventional biking. Electric-assist bikes and scooters can be used on public streets in New York State, but local municipalities retain authority to prohibit or regulate their use. These vehicles are excluded from the definition of a motor vehicle and can be operated on roads with speed limits of 30 mph or less, including in bike lanes and on bike paths.

Key Actions

Continue ongoing vendor conversations/negotiations:

- Continue the conversations with Bird to potentially implement a pilot program of e-scooters.
- Continue the conversation with Circuit and secure funds to pilot a microtransit shutle program.

Convene a Shared Mobility Working Group with Village staff:

- The first priority for this group should be to update enforcement provisions and explore a permitting scheme to allow the Village to control how Share Mobility Entities (SME) may operate in the public right-of-way (ROW).
- Members of this group should also meet with key stakeholders likely to be impacted by the implementation of any of these Pilot programs.
- The group should discuss the following items with the SMEs before the implementation of the program:
  - Length of the program
  - Service area
  - Fleet size
  - Alternatives to smartphone apps for more equitable access to SME services
  - Data sharing: the vendor should provide real time data to the Village, and weekly reports of the system usage, and the data should automatically become property of the Village
  - Data privacy: the vendor will need to clarify which data will be accessed and for what purpose it will be used
  - Fee: the Village and the vendor should arrive to an agreement on the cost to the vendor of the permit to operate within the Village public right of way, and the additional costs to the Village as a result of Village staff having to remove e-scooters in areas where they are not permitted
  - Fare:
    - ✓ Explore different fare schemes to make the service available to all visitors and residents (lower fares or full exemptions should be considered for low-income populations)
    - ✓ Engage Metro-North Railroad and Bee Line to discuss fare integration for those using the shared services to access transit
  - Education: the vendor should facilitate in-person safety education trainings and demonstrations
  - Brochures should be provided in both languages, with the same information, in key locations like example, the Village Hall, the Library, schools, churches, etc

Develop additional, complementary opportunities

- Work collaboratively with municipalities along Metro-North rail lines to pool funding for first/last mile operations to transit.

  - Partnering with other municipalities could help market first/last mile transportation options and thereby bring more people to transit, reduce parking demand at rail stations, and reduce the number of rail-adjacent local trips prior made by private vehicle.
- Explore funding sources for continuing first/last mile transportation that proves successful after pilot programs.
  - Grant money is a good source to fund pilot programs, but more sustainable funding source are needed to cover the operating costs of transportation program
  - One common source of revenue is advertisement on vehicles.
  - Another recommended option is the establishment of a "parking benefit" program, which would dedicate a portion of parking revenues – from meters and permits and potential from In Lieu Fee payments – toward downtown mobility improvements.

Advertise any/all pilot program/s on all regular channels that the Village uses, and a public meeting should be held to explain how the system will work, both in Spanish and English.

Key Actions Specific to an e-Scooter Program

The Shared Mobility Working Group should discuss

- Safety concerns
- Circulation/parking requirements
- Permits required for a proper installation of the program within the right-of-way
- Requirements for re-balancing operations to ensure effective distribution of scooters and to avoid scooter parking congestion
- Customer response
- Fleet adjustments
- Priority service areas

Key Actions Specific to a Shuttle Program

The Shared Mobility Working Group should discuss

- Circulation/parking/pick-up and drop-off requirements
- Permits required for a proper installation of the program within the right-of-way
- Customer response
- Priority service areas
- Vehicle suitability for Ossining's characteristics (topography and cold weather)
- Demand requests

Promote NY511 Rideshare's many commuter benefits.

Drive-alone trips and parking demand can be greatly reduced by organizing a ride-matching service within the community to help drivers identify potential driving companions. The New York State Department of Transportation maintains a ride-matching service, "511NY Rideshare," to match carpoolers who share similar origins and destinations. In addition to organize carpooling and vanpooling ride-matchings, 511NY Rideshare also provides information about workplace commuter benefits, public transportation, bicycling, walking or telework with the goal of reducing traffic congestion and improving air quality in New York.

Key Actions:

- Use targeted marketing, outreach, and promotions to encourage visitors, residents, and commuters to register on 511NY Rideshare platform to build a critical mass, making it more likely to find other ride matches.
- Engage with large employers and trip generators, such as Open Doors and the Ossining Children Center, to demystify the carpool platforms and offer targeted promotions or incentives to pair employees and families together.

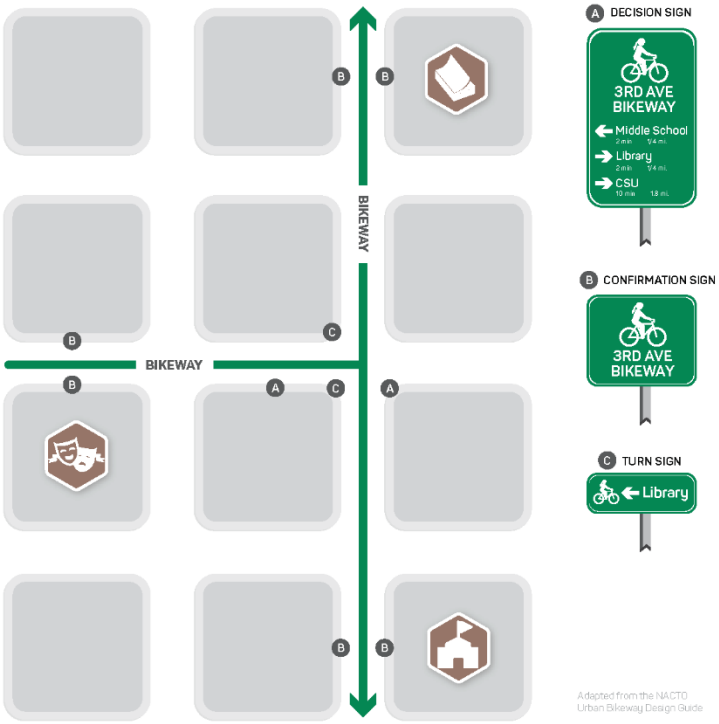
Invest in multimodal wayfinding.

There are three main categories of wayfinding signs:

- Decision signs: these are placed at intersections of streets and bike facilities, and include directional cues to key destinations to inform the pedestrian and bicyclist of the best route to get to their destination.
- Confirmation signs: let users know that they are on the chosen route
- Turn signs: alert users where to turn to continue on their chosen route, and are often paired with pavement markings (particularly in the bicycle network) to ensure that users don't miss the turn

Signs should indicate the time and distance to reach specific destinations, and those with maps should identify and include an index of key landmarks. Wayfinding signage design should be consistent across a geographic area, and across transportation modes.

Figure 12 Example of a Bicycle Wayfinding System



Source: Chico Bicycle Plan, Nelson\Nygaard

Key Actions:

- Develop a Multimodal Wayfinding Plan, with a comprehensive network of wayfinding design elements to help pedestrians and bicyclists reach their destinations and navigate in the Downtown.
- Add pedestrian-scaled orientation maps for Downtown. These may be placed at the pedestrian exits of municipal parking facilities, the Metro-North station, and centrally located Downtown sidewalks and corners.
- Destination-oriented signage that profiles the walking times and distances between major Downtown locations.
- Additional directional signage to re-orient people walking back to the Metro-North Railroad station after visiting for the day or evening.

Action Plan & Implementation Guides

This section provides an implementation guide for the Mobility and Parking Management Plan, focusing on immediate to short-term recommendations. For each of these recommendations, the following have been identified:

- Key Actions
- Implementation leads and supporters
  - Leads: who will initiate and sustain implementation efforts
  - Partners: Internal Village partners
  - Champions: External partners
- Cost Factors: Where possible specific cost estimates, otherwise order-of-magnitude estimates
- Estimated cost to implement as recommended
- Other Key Factors: Any other noteworthy implementation barriers and/or assets

The Action Plan is split into guides for Quick Win Opportunities and Short-Term Priorities guides.

Quick Win Opportunities Guide

This guide focuses on recommendations that are expected to benefit from broad support, minimal resistance, and few logistical or cost barriers.

Quick Win Recommendations	Key Actions	Implementation Leads	Key Partners	Cost Factors	Other Key Factors
Create more employee parking options	Convert all 2-hour, non-metered spaces along Central Avenue to 8- hour spaces	Village Planning staff, DPW	OPD	Less than $5,000 for new signs, installation	This will have synergies with recommended changes to Village Lot daytime permit rates to keep more spaces available to meet downtown employee parking demand.
Explore options for redeveloping Main/Spring Street lots	▪ Define criteria for coordinated redevelopment of multiple Village lots, including strategic replacement-parking options ▪ Outline parameters of potential RFP seeking investment partner	Village Planning staff	Developers	Staff Time Only	See appendix for examples to guide development of the RFP.
Remove meters where utilization is consistently below 50%.	Pilot this on Croton Avenue between Elizabeth Street and Belleview Avenue ▪ Bag meters for 30 days ▪ Maintain time limits ▪ Observe changes in utilization ▪ Engage with adjacent business owners for their feedback on any positive/negative results from these changes. ▪ Remove meters if utilization increases but availability remains consistent ▪ Return to metered parking if pilot results are not deemed positive to area businesses.	DPD, Village Planning staff (for organizing, executing utilization observations, and making final decision on preferred regulation)	OPD, Affected business owners	Staff Time Only	Use this change as a pilot to also develop an approach and protocols for utilization observations that will be critical to informing and assessing changes to meter and permit rate changes.
Formalize a performance-based approach to setting meter and permit rates.	▪ Define an approach to rate setting that is based on maintaining availability and customer choice, and post this on the Village's parking information webpage.	Village Planning staff	Board of Trustees	Staff Time Only	Board of Trustees support could provide formal authority for setting rates based on documented utilization/availability conditions – thus avoiding the need to secure formal approval for individual rate changes.
Update the Village Zoning Code	▪ Provide options for developers to reduce their parking requirements by including mobility accommodations, amenities, and benefits/programs	Village Planning staff	Board of Trustees	Staff Time Only	Complement these changes with Village efforts to provide public mobility accommodations, such as

Quick Win Recommendations	Key Actions	Implementation Leads	Key Partners	Cost Factors	Other Key Factors
	▪ Prioritize incentives for preferred forms of mobility accommodations, such as those that better connect downtown to the riverfront and rail station – e-bikes, shuttles, transit benefits, for example				more/better bike racks and integration with the aqueduct trail access points.
Improve Wayfinding	▪ Focus on guiding visitors to right-fit parking options ▪ Simplify lot regulations to clearly distinguish permit from visitor parking locations ▪ Consistently place signs at lot entrances that emphasize visitor parking locations ▪ Mark permit parking locations within the lot, not at lot entrances ▪ Include information on hours/days when permit spaces can be used by visitors ▪ Mark bike parking locations on the Village Parking Map and any other wayfinding maps (such as those located along the Old Croton Aqueduct trail).	Village Planning staff	DPW	Less than $5,000 for sign relocations and new sign design, purchase, and installation	Coordinate with other recommendations involving new sign creation and installation, for cost, function, and logistical efficiencies.
Re-name lots to facilitate wayfinding for visitors.	▪ Names that correspond with adjacent street names are recommended for more intuitive wayfinding for visitors	Village Planning staff	DPW	Less than $5,000 for new signs, installation	Coordinate with other recommendations involving new sign creation and installation.
Formalize and promote a Snow Clearance policy	▪ Restrict daytime (8am to 5pm) parking, including for vehicles with hardship permits, to alternate sides of the street	Village Planning staff, DPW	OPD	Less than $10,000 for new signs, installation	Coordinate with other recommendations involving new sign creation and installation.
Promote NY511 Rideshare to downtown employers and commuters, and Village residents.	▪ Use targeted marketing, outreach, and promotions to encourage residents and commuters to register on 511NY Rideshare platform to build a critical mass, making it more likely to find other ride matches. ▪ Engage with downtown employers to promote these services, and to demystify carpooling with information on modern/digital platforms.	Village Planning staff	Ossining Chamber of Commerce, Downtown Development Fund Council	Staff Time Only	Coordinate with 511NYRideshare staff who should be able to provide guidance on promoting awareness and use of their services.

Short Term Priorities Guide

This guide focuses on recommendations that are expected to require 1-2 years for implementation, with this time spent building support, securing funding, or simply focusing on the list of Quick Win recommendations.

Short-Term Priority Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
Expand Use of LPR technology	▪ Use to monitor time limits more accurately with "digital chalking".	Village Planning staff	OPD	▪ Staff Time Only, and only for the setup and training. ▪	This may be something that waits for potential technology improvements to reduce the processing time required for "digital chalking".
Create more resident parking options	▪ Consider converting the Main/Secor Commuter Lot to a Municipal Parking lot. ▪ Require a day use or overnight permit for all spaces in the lot.	Village Planning staff, DPW	OPD	▪ Less than $5,000 for new signs, installation. ▪ May be revenue positive, as this change should lead to more lot use and permit sales.	Monitor utilization to inform decisions about maintaining, adjusting, or reversing this change.
Use variable regulations to create more loading capacity.	▪ Use variable regulations to provide more loading capacity during mornings without reducing afternoon parking capacities. ▪ This can both encourage earlier deliveries and allow the Village to provide more ample space for loading at these times, since it can be recaptured as parking for most of the day.	Village Planning staff, DPW	OPD, Downtown Businesses	▪ Less than $10,000 for new signs, installation	Ensure buy-in from key businesses, including regarding regulatory schedules that favor more access for loading vs. parking throughout the day and week.
Explore the potential to create angled parking on Academy Place.	If determined to not impair OPD vehicle exit movements: ▪ Convert this block to one-way, westbound traffic. ▪ Stripe 60-degree-angled parking spaces along the north side of the block. ▪ Leave the parking configuration on the south side of the block unchanged. ▪ Meter the first several spaces off Spring Street, to increase turnover and availability for visitors. ▪ Consider regulating the remaining spaces via two-hour time limits to further accommodate visitor parking demand on this block.	Village Planning staff, DPW	OPD	▪ Less than 10,000, for cost of restriping plus new signs and their installation.	If this proves viable, this will have synergies with the above recommendation to "use variable regulations to create more loading capacity" as the new metered space could serve as commercial loading zones during the afternoon to support Spring Street deliveries while preserving on-street parking for Spring Street customers.

Short-Term Priority Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
Update the Village Zoning Code	▪ Add an In Lieu of Parking fee option to the code. ▪ Use a progressive fee structure to encourage the fee option for smaller projects, while encouraging larger projects to minimize their use of this option. ▪ Capture fee revenue into a fund that is dedicated to investment in downtown parking and mobility capital projects.	Village Planning staff	BOT	▪ Staff Time Only ▪ Will ultimately become revenue positive, though this revenue should be set aside exclusively to fund investments in downtown parking assets and related mobility investments	Coordinate with other Village Zoning Code updates.
Remove daytime permit parking in Lots 5 and 6	▪ Convert all permit spaces to metered parking during daytime hours ▪ Continue to allow evening and overnight parking via permits in these spaces. ▪ Convert commensurate number of time-limited or metered parking spaces to permit spaces in lots 7 and 8.	Village Planning staff	Downtown Businesses	▪ Staff Time Only ▪ Increase revenue from the metered spaces	
Create cost tiers for Village-lot parking permits.	▪ Designate Lots 5, 6, and 8 (Main/ Spring & Brandreth) as Downtown Core lots ▪ Convert all 3-hour free parking spaces to metered spaces in these lots ▪ Create a discounted permit that cannot be used for permit parking in these three lots, to be sold at a reduced rate to incentivize use, while keeping the standard permit that can be used for permit spaces in any lot. ▪ Start with a 25% discount off the standard permit rate. ▪ Adjust this if the discounted permit proves more/less attractive than is desired. ▪ Base this determination on late-morning availability within the Downtown Core lots – seeking an optimal range of 10-20% of spaces available at that time (see Performance Monitoring Plan).	Village Planning staff		▪ Staff Time Only ▪ Reduced revenue from the discounted permit should largely be offset by more employees purchasing these permits rather than parking in visitor spaces and shuffling their cars every three hours	Several facts are useful to address the equity concerns over restricting the most convenient parking options to those who can best afford the higher permit: ▪ The tiers are proposed to be created by offering a discounted option from the current rate, and not by making any permit more expensive than it currently is. ▪ Stakeholder input suggest that many employees are already choosing less convenient parking options to avoid the cost of Village lot permits, including by parking in free spaces meant for visitors and moving their cars to avoid time limit violations; by contrast the proposed discounted permit will provide another option for reducing their parking costs (and one without the risks of incurrent expensive parking tickets).
Create cost tiers for metered on-street parking.	Create a Tier 1 Zone in which meters should charge a premium rate:	Village Planning staff, DPW	OPD	▪ Less than $10,000 for new signs, installation	▪ Ensure at least a 50% cost difference between these rates.

Short-Term Priority Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
	▪ On Main Street, between State Street and Highland Avenue ▪ On Spring Street, from Broad Avenue to Main Street. Create a Tier 2 Zone in which meters should charge a standard rate: ▪ For all other metered blocks ▪ In all Village Lots with metered parking spaces				▪ Promote the availability of free parking in all other locations, including on a Village Parking Map
Align pricing schedules with demand patterns.	Adjust meter enforcement hours and calibrate with the recommended zones for meter-rate tiers: ▪ Tier 1 Zone: 10am – 8pm ▪ Tier 2 Zone: 10am – 6pm Continue to enforce time limits starting at 8am.	▪ Village Planning staff, DPW	OPD	▪ Staff Time Only (if signs updates are completed in coordination with implementation of Tiered Meter Rates recommendation_. ▪ Should ultimately be revenue-positive, as meter enforcement schedules will more closely overlap with times of greater visitor parking demand.	▪ Coordinate with Tiered Meter Rate implementation. ▪ Market as an example of how demand-based pricing can result in lower parking costs – in this case, free parking between 8am and 10am.
Expand Use of LPR technology	▪ Once the monitoring of time limits becomes an established practice, begin charging an hourly or flat rate for longer stays in the non-permit spaces within Village lots. ▪ Use pay-by-phone technology to facilitate payments for stays beyond posted time limits in these spaces. ▪ Use LPR to track overstays with active "pay to stay" payments for overstaying time limits. ▪ This is an incremental step in exploring metering all visitor parking, while using pay-by-phone technology to offer the first hour or two free. ▪ Monitor lot utilization to ensure this does not lead to constrained availability, should downtown employees choose to pay for these more convenient spaces (though this is unlikely if payments can be effectively enforced).	▪ Village Planning staff, DPW	OPD	▪ Staff Time Only	Leverage vendor services to better understand functional options, benefits, and implementation needs.

Short-Term Priority Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
Designate a pickup/dropoff zone to support/manage ride-service arrivals in downtown.	▪ Continue to explore the costs/benefits of designating a PUDO zone on Main Street or within Village lot 8 (Brandreth).	Village Planning staff, DPW	Downtown businesses, OPD	▪ Staff Time Only to explore the options. ▪ Less than $5,000 to implement either option (for striping, signs, and installation)	▪ There is significant resistance to the Main Street location. ▪ However, a PUDO zone that requires drivers to circle back to and navigate a popular parking lot will face significant use barriers, resulting in Main Street remaining the primary location for this traffic/activity. ▪ Implementing either of these options within the next two years will require a concerted, comprehensive review of all options and an engagement of key stakeholders. ▪ The potential improvements, however, suggest that such a priority be given to this strategy so that implementation may be achieved along this timeline.
Improve Wayfinding	▪ Redesign wayfinding signage ▪ Redesign lot signs ▪ Incorporate branding that signifies public parking that is maintained by the Village ▪ Incorporate best practices in signage design to minimize ADA and language barriers.	Village Planning staff	DPW	Estimated $25,000 for sign design, new signs, and installation	▪ Coordinate with other recommendations involving new sign creation and installation. ▪ See appendix on wayfinding signage design guidelines
Provide more bike parking and other amenities to leverage connections to Aqueduct Trail and other local/regional cycling connections.	▪ Look for sponsors to fund a new bike rack program. ▪ Include bike repair stations and wayfinding near connections to the trail to set expectations of bike accommodations in downtown.	Village Planning staff	DPW, downtown businesses, bike advocacy groups	Potentially revenue neutral, leveraging advertising potential of the program.	Monitor utilization to inform any decisions to relocate racks, increase racks/station, or hold on expansion (once a critical mass of racks and stations has marked downtown as a center for cyclist accommodations).
Expand Use of LPR technology	▪ Use to monitor time limits more accurately with "digital chalking".	Village Planning staff	OPD	Staff Time Only, and only for the setup and training.	This may be something that waits for potential technology improvements to reduce the processing time required for "digital chalking".
Improve walking facilities	▪ Ensure that streets and sidewalks are designed to promote a healthy, active, and safe lifestyle.	Village Planning staff	DPW	Staff time	Prioritize locations where recent crashes have occurred, and where pedestrian desire lines are significant, and demand is high

Short-Term Priority Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
	▪ Enhance existing pedestrian crossings where appropriate, and add new crossings at key locations ▪ Shorten crossing distances and add curb extensions and pedestrian islands at key intersections to reduce vehicle speeds and create safer crossing conditions. ▪ Ensure bus stops are fully and safely accessible from both sides of a road to promote their usage. ▪ Ensure that all parking facilities are universally accessible, and that all crosswalks and sidewalks are ADA compliant. Curb ramps should be provided in locations with a change in grade. ▪ Add traffic calming features to slow vehicle speeds in Downtown streets			▪ Implementation cost[2]	

[2] https://www.dot.ny.gov/programs/completestreets/funding

Longer-Term Opportunities

This guide focuses on recommendations that will take a more time and likely a more sustained effort to complete effective implementation.

Longer-Term Opportunity Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
Seek other opportunities to add on-street parking.	▪ Explore options to close disused or excess curb cuts to recapture on-street parking spaces.	Village Planning staff, DPW, Zoning staff	Property Owners who may be open to these opportunities to create more curbside parking.	▪ Less than $5,000 in capital costs to close each curb cut. ▪ Note: If the block is metered, installing a meter can effectively "close" a curb-cut, reducing the upfront implementation cost and creating a revenue-positive opportunity	Promote the shared benefits of closing unneeded curb cuts – more public parking capacity, fewer turning movements complicating downtown traffic, and safer walking conditions – to build support for this initiative.
Use pay-by-phone technology to encourage off-hour sharing of private lots.	▪ Work with pay-by-phone vendor to develop an outreach strategy to private lot owners. ▪ Identify "best bet" lots that combine convenient location with ownership that is likely to be open to participation. ▪	Village Planning staff, private vendor	Lot owners	Staff Time Only	▪ Monitor impacts of Quick Win and Short-Term recommendations on Village lot demand and revenue before investing too much time in this option, which will create competition for Village lot permits. ▪ Nonetheless, this should be considered an important strategy for reducing parking-replacement needs for the eventual redevelopment of Village lots 5, 6, and/or 15 (Main/ Spring & Spring/ St. Paul's). ▪ This may also be the best means of finding "right fit" permit options for employees and/or residents with parking needs in locations and/or at times not well served by Village lots and standard lot permits.
Create more resident parking options	▪ Consider changing more Village-maintained commuter parking lots to lots accessible to residents.	Village Planning staff, DPW	OPD	▪ Less than $5,000 for new signs, installation. ▪ May be revenue positive, as this change should lead to more lot use and permit sales.	Monitor utilization to inform decisions about maintaining, adjusting, or reversing this change.
Expand Use of LPR technology	▪ Transition all permits to virtual permits	Village Planning staff, OPD	Residents, property owners	Staff Time Only	Leverage vendor services to better understand functional options, benefits, and implementation needs.

Longer-Term Opportunity Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
	▪ Pilot pay-per-use virtual permits for Hardship overnight parking, focusing on locations with very high Hardship parking demand.				
Change the hardship permit rate structure to reduce cost and overuse.	Pilot pay-per-use virtual permits for Hardship overnight parking, focusing on locations with very high Hardship parking demand.	Village Planning staff, OPD	Residents, property owners	Staff Time Only	Leverage vendor services to better understand functional options, benefits, and implementation needs.
Coordinate parking and pedestrian wayfinding to promote Park Once opportunities.	▪ Provide pedestrian wayfinding signage and information to mark directions and walking distances to nearby destinations, points of interest, ▪ Include pedestrian wayfinding maps that mark destinations as well as walking pathways around Downtown. ▪ A particular focus should be placed on marking the most direct route between Village parking lots and the closest downtown destinations – potentially revealing walking routes that are not obvious to drivers. ▪ Destination-oriented signage can promote local destinations by highlighting them in walking time estimates on guidepost signs. ▪ Directional signage can re-orient people walking back to the Metro-North Railroad station after visiting for the day or evening.	Village Planning staff, DPW	Downtown businesses as potential sponsors	▪ $2,000 – $7,500 for each kiosk. ▪ Less than $1,000 for smaller guideposts. ▪ Plus, installation and maintenance costs ▪ Potentially revenue neutral, leveraging advertising potential to attract sponsors.	See Wayfinding appendix for more details.
Improve synergies with the Old Aqueduct Trail (OCA).	▪ Add signage along the OCA trail with walking and biking times to key downtown Ossining destinations. ▪ Ensure that the OCA trail accesses are ADA compliant wherever possible. ▪ Offer bike valet services during market days and event dates, located at key points of access between the trail and downtown.	Village Planning staff, DPW	Downtown businesses as potential sponsors, bike advocacy groups	▪ Seek sponsors to cover the cost of signage and maps, based on the potential to bring more daytrippers to downtown businesses ▪ ADA-compliance costs are an investment against non-compliance cost risks ▪ Bike valet should be revenue neutral, typically operated by a local bike shop or advocacy group for tips/advertising	Coordinate with trail managers and similar trail planning/improvement efforts, for cost, design, messaging, and other synergies.

Longer-Term Opportunity Recommendations	Key Actions	Implementation Lead	Key Partners	Cost Factors	Other Key Factors
Expand connections to the waterfront and Ossining Station.	▪ Continue to weigh the cost/benefit of non-driving mobility enhancements for better connections between this set of key activity/economic centers. ▪ E-scooter vendors are interested in operating in Ossining, providing a potential solution, but one with safety risks that would need to be mitigated in any operating approval provided to the Village. ▪ E-bikes offer similar mobility enhancement, reducing the grade barriers between these areas; but, these vehicles are more expensive than a typical bike, and thus would require some kind of sponsorship for implementation. ▪ The pending shuttle program offers some promise, though the reliance on fare payments is likely to dampen ridership potential	Village Planning staff, DPW, OPD	Potential funding sources/partners: area businesses, developers, Town of Ossining	Seek funding sources/partners to minimize costs to Village	▪ New mobility modes and services are emerging at an unprecedented rate, minimizing the need to rush into any solution that is not a good fit, or not a fit yet. ▪ Meantime, prioritize any/all potential improvements to walking conditions along primary routes between downtown and the waterfront.

Performance-Monitoring Plan

Following is a guide for monitoring the effectiveness of key study recommendations, as implemented through the Action Plan outlined above, and through that for monitoring the "performance" of the Village's overall downtown parking and mobility system. This plan emphasizes the importance of one Key Performance Indicator which is the most essential performance measure for any urban parking plan – how consistently and easily a parking space can be found across the downtown. The first section below, therefore outlines:

- A definition of this indicator
- Target measures for it
- A process by which measures can be taken to compare with the targets
- Measurement thresholds that indicate the need for implementation adjustments to achieve targets

This section is followed by an overview of secondary performance indicators for specific elements of the Action Plan, to guide the Village in assessing their effectiveness toward advancing overall plan goals.

Parking Key Performance Indicator: Availability

Availability, defined in terms of the proportion of viable parking spaces that remain vacant and available for parking at a given point in time, is recommended as the primary KPI for downtown parking management. Achieving optimal availability conditions can bring about several parking-management objectives. Customer experiences will improve, as more parking options are more consistently available, more of the time. Furthermore, traffic and emissions will decrease, as finding a space no longer entails extraneous driving.

Performance Target

The performance measure to target can be loosely described as a modest but obvious and consistent level of availability among all primary parking options — just enough so that the empty spaces are apparent to drivers looking for a space – particularly during peak-demand conditions.

On-Street

The most widely-adopted target measure for on-street availability is 15% of spaces — just enough so that one or two spaces are empty on most block faces.

Off-Street

Performance targets for off-street parking are less standardized as they are (or should be) dependent upon facility programming and design, which can be highly variable compared to on-street parking. We recommend setting an availability target of 5% for the permit spaces, and 10% for the non-permit spaces, in any given Village lot.

Tracking Measures

Quarterly occupancy counts of are recommended for tracking availability measures. Counts should be completed on weekday, preferable in the midweek. For permit spaces, counts should be completed around 10am or 11am. All other spaces (on- and off-street) should be counted between Noon and 2pm. On-street counts should focus on blocks with metered parking and adjacent blocks that appear well utilized.

Thresholds for Triggering Change

On-Street

- Consider increasing meter rates within Tier 1 or Tier 2 zones if availability is consistently below the target level (essentially near 0%) across a year of counts.
  - Rate changes should be applied at the zone level, to maintain the clear and logical pattern of higher/lower parking rates.
  - Zones can be adjusted overtime, should some utilization patterns indicate that the current designations to not align with demand patterns, or as demand patterns may change, but the maintenance of zone-based pricing tiers is recommended.
- Consider decreasing meter rates within Tier 1 or Tier 2 zones if availability is consistently above 25% across a year of counts.

Off-Street

- Consider increasing permit costs if availability is consistently below the target level (essentially near 0%) within any given Village lot across a year of counts.
- Consider decreasing permit costs if availability is consistently above 15% among permit spaces within any given Village lot across a year of counts.

Secondary Performance Indicators

The tables below identify performance indicators for the plan's Quick Win and Short-Term recommendations.

Quick Win Recommendations	Performance Indicators
Convert all 2-hour, non-metered spaces along Central Avenue to 8- hour spaces	Increased utilization of the spaces converted to 8-hour parking.
Explore options for redeveloping Main/Spring Street lots	Increased developer interest in the Village lot sites
Remove meters where utilization is consistently below 50%.	Increased utilization of the spaces converted to free parking.
Update the Village Zoning Code	Use of these provisions by developers
Improve Wayfinding to parking for visitors	More even use of visitor parking spaces across all Village lots and less traffic volumes in Downtown streets
Formalize and promote a Snow Clearance policy	Compliance with restrictions, feedback from fire, rescue, and police on any improvements to conditions on key blocks.
Promote NY511 Rideshare to downtown employers and commuters, and Village residents.	Participation rates among provided services

Short-Term Priority Recommendations	Performance Indicators
Consider converting the Main/Secor Commuter Lot to a Municipal Parking lot.	Increased utilization of this lot, reduced hardship permit applications from the areas around this lot.
Use variable regulations to create more loading capacity.	Reduced delivery-vehicle double parking on Spring and Main Streets
Designate a pickup/dropoff zone to support/manage ride-service activity in downtown.	Reduced double parking, reduced stopping in travel lane
Provide more bike parking and other amenities to leverage connections to Aqueduct Trail and other local/regional cycling connections.	Feedback from businesses, including potentially from customer surveys, indicating more business from trail users
Improve walking facilities	Reduction of crashes