VILLAGE OF TARRYTOWN
BOARD OF TRUSTEES
WORK SESSION 6:15 P.M.
WEDNESDAY, MAY 15, 2019
Tarrytown Village Hall
One Depot Plaza, Tarrytown, New York

Open Session

Board of Trustees Concerns

1. Station Area Overlay Zone – George Janes to attend re: Score Card
2. Parking Task Force – David Kim to Attend from CPMC
3. IMA with Other Municipalities re: Recycling Grant
4. Irvington Airbnb Law
5. Irvington – Accessory Apartments
6. Fire Department LOSAP Software Program
7. Bus Shuttle
   --Litfest
   --Street Fair
8. Lot 37, Depot Plaza Rezoning WD to ID
9. Open Parking Area – Residential Districts
10. Bike Law
11. Replacement Garbage Truck

. Executive Session

A. Lieutenants Collective Bargaining
B. Building Department Intern
C. Police Parking Enforcement Staffing
D. Day Camp Employees
E. Parks Seasonal Employee
F. Tax Certioraris

Village of Tarrytown
Comprehensive Plan & Station Area Zoning

ARTICLE ___ STATION AREA OVERLAY

1. Intent and Purpose

The intent and purpose of the Station Area Overlay District (SAO) is to create a built environment that implements the goals and objectives for the station area as detailed in the Tarrytown Comprehensive Plan. Property owners with an eligible parcel(s) in this district can apply to receive an SAO designation which can be affixed to a qualifying parcel of land. Once a parcel receives an SAO designation, the parcel is governed by the use, dimensional and other provisions of the SAO zoning regulations, and SAO zoning replaces the existing zoning. The intent of the SAO is to enable and implement the goals and recommendations outlined in the Village of Tarrytown Comprehensive Plan. The SAO is designed to provide flexibility that will allow different types of uses and forms, while still protecting the interests of the Village. The intent is to allow exceptional and signature developments that are consistent with the Comprehensive Plan, while the specifics have not yet been imagined.

2. Definitions and Word Usage

Unless defined herein in the general definitions in Chapter 305, the following definitions apply.

Affordable Housing
Reference § 305-130.

Blue / Green Strategies
Refer to Blue Roofs and Green Infrastructure below.

Blue Roofs
Rooftop systems that control the discharge of stormwater into a municipal system by detaining stormwater on a roof and until the peak rate of discharge is reduced. (Source: adapted from New York State Department of Environmental Conservation

Cooperative Housing, Collective Housing, Cooperative Living, or Share Housing
A shared living arrangement in a multi-unit building where certain facilities are shared between building occupants, for example kitchen, living, or toilet/bathing facilities.

Green Infrastructure
Green infrastructure includes a wide array of practices at multiple scales to manage and treat stormwater, maintain and restore natural hydrology and ecological function by infiltration, evapotranspiration, capture and reuse of stormwater, and establishment of natural vegetative features. On the local scale green infrastructure consists of site- and neighborhood-specific practices and runoff reduction techniques. (Source: NYSDEC, Stormwater Management Design Manual)

LEED
Leadership in Energy and Environmental Design (LEED) is a rating system devised by the United States Green Building Council (USGBC) to evaluate the environmental performance of a building and encourage market transformation towards sustainable design. (Source: U.S. Green Building Council)

LEED Certification
A designation given to projects that demonstrate adherence to prerequisites and earn credits across nine measurements for building excellence from integrative process to indoor environmental quality. Based on the number of credits achieved, a project earns one of four LEED rating levels: LEED Certified, LEED Silver, LEED Gold or LEED Platinum. The LEED rating systems work for all buildings at all phases of development and are meant to challenge project teams and inspire outside-the-box solutions. (Source: U.S. Green Building Council)

Live-Work Space or Live/Work Unit
A building or space within a building used jointly for commercial and residential purposes. (Source: American Planning Association / Planning Advisory Service)

Passive House Standards
Passive House building is an internationally recognized, performance-based energy standard in construction that comprises a set of design principles used to attain a quantifiable and rigorous level of energy efficiency within a specific quantifiable comfort level. A passive building is designed and built in accordance with these five building-science principles:

1) Employs continuous insulation throughout its entire envelope without any thermal bridging.
2) The building envelope is extremely airtight, preventing infiltration of outside air and loss of conditioned air.
3) Employs high-performance windows (typically triple-paned) and doors.
4) Uses some form of balanced heat- and moisture-recovery ventilation and a minimal space conditioning system.
5) Solar gain is managed to exploit the sun's energy for heating purposes in the heating season and to minimize overheating during the cooling season

(Source: Passive House Institute US)

Shared Parking
A land use/development strategy that optimizes parking capacity by allowing complementary land uses to share spaces, rather than producing separate spaces for separate uses. In effect, shared parking makes spaces publicly accessible rather than reserved for a particular tenant or property owner. Parking may be privately constructed and operated, depending on a contractual agreement, but should remain within the government's jurisdiction for long-term transport planning purposes. (Source: Institute for Transportation and Development Policy)

Transit-Oriented Development (TOD)
A land use strategy that focuses development around locations that are well served by transit, and that typically includes a mix of land uses, and a more dense development pattern. (Source: Westchester County Planning)

Workforce Housing
One or more dwelling units made available to households earning between 60 and 120 percent of Westchester Area Median Income. (Source: adapted from Urban Land Institute)

Acronyms
MDP Master Development Plan
MNR Metro-North Railroad
MHW Mean High Water
SAO Station Area Overlay
SLR Sea-Level Rise

3. Boundaries of the Station Area Overlay District
The boundaries of the SAO District are shown on the SAO District Map at _____.

4. Authority
The Village Board has the authority to grant eligible parcel(s) an SAO designation as set forth below in §305-XX.E "Eligibility". A parcel located within the mapped SAO District must receive an SAO designation by the Village Board prior to the Planning Board determining whether to grant or approve a Site Development Plan.

5. Eligibility
This section sets forth standards under which parcels would be eligible for SAO designation by the Village Board. The criteria in this section are separate and distinct from site plan and subdivision requirements which address more specific site layout and design requirements.

1. The parcel is located within the SAO designated area as identified on the Village Zoning Map
2. The applicant states their intention to submit a Master Development Plan consistent with § 305-XX(9)
3. The decision to approve or decline a parcel for SAO designation is purely a legislative determination entirely within the legislative discretion of the Village Board. The Village Board shall have the right to reject any parcel for SAO designation at any stage of the process. As part of its decision to approve a parcel from SAO designation, the Village Board shall determine what the proposed site development plan is consistent with the following SAO objectives:
    a. Promote sustainable development and growth; improve local mobility and regional access; reduce dependence on personal vehicles; connect all parts of the village; expand housing options for a diverse, multi-generational community; protect natural resources; connect and enhance open space resources; strengthen connections to the Hudson River; reduce greenhouse gas emissions; and, minimize local impacts of climate change.

6. Procedure for SAO Designation

An SAO designation can only be granted by the Village Board subject to the following procedure.

1. Pre-application conference. The applicant must, prior to formal submission of their SAO designation application, meet in a pre-application conference with the SAO review staff made up of Village Staff and one member of the Planning Board, to review the requirements and procedures and discuss the planning concepts for the proposed development. The Applicant will pay the pre-application meeting fee (as established by the Village Board).
2. Submission of an application package for a SAO designation to the Village Clerk: The application package shall contain the following required documents and fees:
    a. an SAO Designation Application Form.
    b. A conceptual plan.
    c. Long-form Environmental Assessment Form.
3. Preliminary Village Board action. At its sole discretion, the Village Board will determine whether: (i) to reject the SAO designation application; or (ii) to refer it to the Planning Board for Master Development Plan review and Site Development Plan review.

4. Village Board Referral to the Planning Board. If the Village Board determines that the application may continue and refers it to the Planning Board, the Applicant is required to submit a Master Development Plan consistent with § 305-XX(9) and a site development application in accordance with Article XVI, including all required forms, plans and documents, as well as, required fees and escrow.
5. Master Development Plan and Site Development Plan review by the Planning Board: The Planning Board shall begin the Site Development Plan review, review the Master Development Plan based upon the Performance Criteria set forth in § 305-XX(10), and schedule a public hearing on Master Development Plan and Site Development Plan application in accordance with the requirements set forth in Article XVI. During this step, the Village Board will receive periodic updates from the Planning Board as part of the coordinated review. As soon as practicable, the Planning Board shall complete the scoring process and assign a score based upon the Scorecard (Attachment __).
    a. Prior to determining whether to grant or deny Site Development Plan approval, the Planning Board shall send a written report to Village Board setting forth: (1) the Planning Board's evaluation of the Master Development Plan based upon the eight Performance Criteria and the Planning Board assigned score based upon the Scorecard (Attachment __); and (2) the Planning Board's recommendation that the SAO designation be granted, with or without conditions, or denied and its reasons for such recommendation. The Master Development Plan must receive a passing score based upon the Scorecard to proceed.
    b. Before issuing its report and/or taking any action, the Planning Board shall fully comply with SEQRA.
    c. While the Village Board is considering the Planning Board's report, any public hearing before the Planning shall be adjourned and held open until such time as the Village Board makes a determination on the proposed SAO designation.
6. Decision of Village Board. Upon the Village Board's receipt of the Planning Board's report, along with Master Development Plan, if the Village Board elects to proceed it shall schedule a public hearing on the proposed SAO designation and following said hearing, may by resolution, act either to approve, approve with modifications and/or conditions, or disapprove the SAO designation. The Village Board shall fully comply with SEQRA prior to issuing any designation.
7. Completion of Land Use Review Process. If the Village Board determines to approve the SAO designation (including to approve with modification and/or conditions), the Planning Board will place the application on its first available agenda and will continue with its Site Development Plan review and any other required land use approvals (such as preliminary and final subdivision review). The Applicant shall not be able to apply the SAO designation unless and until the Planning Board grants Site Development Plan approval.

7. Use Regulations

A. Pre-existing Uses and Buildings.

Any building permit or Site Development Plan approval issued before the date of adoption of this Section shall remain in effect for the underlying zone that the parcel is located within until a project is granted an SAO designation by the Village Board as set forth in §305-XX E Eligibility. Buildings existing before the date of adoption, or subsequent amendment, of this Section are allowed to expand and modify as permitted under the underlying zoning unless they have previously received an SAO designation. Once a parcel receives an SAO designation, the parcel is governed by the use, dimensional and other provisions of the SAO zoning regulations, and SAO zoning replaces the existing zoning.

B. Permitted Uses

Any principal use permitted in any district in the Village of Tarrytown or any combination of such uses is a use permitted in the SAO provided the proposed use's Master Development Plan receives a receive a passing score on the SAO Scorecard as described in § 305-XX(9)(C).

8. Density/Development Regulations

A. Building Height Measurement in SAO

Building height for buildings permitted in the SAO district is measured from the average elevation of the existing (predevelopment) grade of the property, or from a plane formed by the Base Flood Elevation from the Federal Emergency Management Agency's 2014 preliminary Flood Insurance Rate Map (pFIRM), or subsequent revisions, plus three feet, whichever is higher. Building height is the vertical distance from the higher of these points to the highest point of the roof for flat roofs, to the deckline of mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs.

B. Maximum Building Height.

1. The maximum base height permitted for buildings east of the Metro North Railroad tracks is six stories or 72 feet, whichever is less. After six stories or 72 feet, a 40-foot setback is required, with the maximum tower height of ten stories or 120 feet, whichever is less. The maximum building height permitted west of the Metro North Railroad tracks is five stories or 60 feet, whichever is less. Reference Neighborhood Character below for a complete description of the Performance Criteria.

2. The rooftop obstructions are not permitted to exceed the maximum building height unless granted a waiver by the Planning Board. For the purpose of this provision, rooftop obstructions are defined as:

- Parapets less than four feet,
- Stair and elevator bulkheads,
- Cooling towers, water tanks, and other mechanical equipment which occupy less than 20% of the roof area,
- Skylights or other daylighting devices,
- Decking and other surfaces for recreational activities,
- Vegetation, planting boxes less than four feet, soil and drainage systems, arbors, trellises, water collection devices and sun control devices,
- Solar energy systems less than four feet.
- And other similar type items

In no case can rooftop obstructions exceed the maximum building height by more than 10 feet, west of the Metro North Railroad tracks, or 20 feet, east of the Metro North Railroad tracks.

9. Master Development Plan and SAO Scorecard

For any Applicant seeking SAO designation, the applicant shall prepare a Master Development Plan (MDP). The MDP shall be consistent with the adopted Tarrytown Comprehensive Plan and Tarrytown's adopted Local Waterfront Revitalization Plan (if applicable, currently N/A). The purpose of an MDP is to provide additional information so that the proposed use and development can be evaluated based upon the Performance Criteria set forth in § 305-XX(10) and assigned a score based upon the SAO Scorecard (see Attachment _____).

A. Master Development Plan.

At minimum, an MDP shall include the following drawings and materials: (a) site plan that complies with the requirements of Article XVI; (b) Landscape plan; (c) Streetscape plans and elevations; (d) Parking plan; (e) Visual Analysis including rooftop obstructions if applicable; (f) Preliminary Infrastructure Analysis; and (g) Phasing plan, if the project is to be built in phases

The MDP must also include a discussion of required utilities and a plan for the supply of water and wastewater disposal, which must include a discussion of the current condition and capacity of all public utilities that the development will be required to use. The MDP must also show how any development in the SAO will be resilient to periodic storm events and long-term sea level rise. The MDP must also include a viewshed analysis and photosimulations that demonstrate the development's impact on the viewpoints identified in section _____. The MDP shall also contain such other information as the Planning Board deems necessary to demonstrate how the proposed development performs against the Performance Criteria found in § 305-XX(10)

B. Review of MDP

The Planning Board shall review and evaluate the MDP according to Performance Criteria identified in § 305-XX(10). The Planning Board, may refer the Master Development Plan to a planner, attorney, engineer, landscape architect, environmental expert or other professional necessary to enable it to review such application. Fees for such services will be paid in accordance with § 305-138(B) and § 305-138(C).

C. Scoring the MDP

The Planning Board will use the SAO Scorecard (see Attachment ___) to evaluate a MDP's performance against the Performance Criteria. The scores an MDP receives on each component of the performance criteria will be determined by the Planning Board, as assisted by professional staff and experts working on their behalf. At their option, the Planning Board may also choose to weight elements of the scorecard differently based upon the nature of the development described in the MDP. Using the SAO Scorecard and a 100-point scale, a score of 75 is a passing score. A passing score is a condition to the granting of Site Development Plan approval. An MDP that does not receive a passing score will not be eligible for SAO Designation and a failing MDP will not be referred from the Planning Board to the Village Board for further review.

10. Performance Criteria

Master Development Plans are evaluated against eight Performance Criteria. Performance Criteria and their Components are categories of public concern identified in the Village of Tarrytown Comprehensive Plan against which all MDPs are evaluated. Performance Criteria are made up of Components, which are implemented through the SAO Scorecard. MDPs must receive a passing score from the SAO Scorecard to be eligible for an SAO designation by the Village Board. Low scores in one Performance Criterion may be offset by high scores in other Performance Criteria to achieve a passing score. There are eight Performance Criteria, each with their own Goals and Components as set forth below:

1. Land use

Goals:

East of the tracks, the mix of land uses in the Station Area will help create a dynamic, transit-oriented neighborhood that anchors the area around the Metro-North Railroad (MNR) Station. This land use mix will promote the village as a regional hub and destination, while serving Tarrytown's residential population through the provision of neighborhood amenities, as well as broadening the local economy and growing the tax base. Any residential component should include a mix of housing unit sizes and models that will serve the needs of a wide range of living needs and incomes. Office spaces may include co-working, incubator spaces, and live-work.

West of the tracks, the mix of land uses will prioritize public access and water-based recreational uses that enable the waterfront to become a year-round destination within the village.

Components:

- The MDP incorporates the mix of uses reflecting the goals of the area. Retail uses will be planned to support the other proposed uses of the SAO and not supplant the existing downtown retail.
- The MDP shows workspaces that are flexible and expand the range of offerings within Tarrytown.

2. Mobility & Access

Goals:

All developments will enhance pedestrian safety and access within the SAO. All developments and their pedestrian, vehicle, and bicycle access will be coordinated with the street network, connect to each other and facilitate access to the waterfront, the Station, the adjacent downtown area, and encourage access to Tarrytown and nearby destinations beyond the Station Area.

Components:

- The MDP shows Complete Streets, defined as roadways planned and designed to consider the safe, convenient access and mobility of all roadway users of all ages and abilities.[1]

[1] As discussed in Chapter 398 of the Laws of the State of New York. Information about Complete Streets is distributed by NYS DOT here: https://www.dot.ny.gov/programs/completestreets. The Planning Board may update or replace these guidelines as necessary.

- The MDP improves connections between new facilities and all transit modes at Depot Plaza.
- The MDP provides access to new and existing parks.
- The MDP demonstrates that every unit has a direct pedestrian route to the MNR station, including through a building, provided public access is maintained, or to an intersection that has a direct pedestrian route to the train station.
- Where applicable, the MDP improves the connection between the MNR Station and downtown.

3. Transportation & Parking

Goals:
All developments will support the transit-oriented goals for the Station Area while providing parking types and levels sufficient for the land uses proposed.

Components:

- The MDP demonstrates how all parking needed by residents, workers, customers, and visitors will be provided. Solutions may be shared or separate, structured on-site, off-site, above ground, or below ground. Any parking facilities must include car share, bicycle parking, and electric vehicle / electric bike charging infrastructure.
- All parking solutions should minimize surface parking lots.
- The MDP demonstrates how it will accommodate different modes of transportation, which may include bicycles, bike share, ride share, and transit.
- Any commuter parking that is displaced will be replaced in a structure within the SAO.

4. Affordable Housing

Goals:
Any residential component of developments within the SAO will expand the supply of permanently affordable housing and offer alternative models of housing within Tarrytown in order to serve a range of resident incomes and household types. The minimum requirement for the affordable component will follow § 305-130, although it is highly desirable to exceed the quantity and/or level of affordability provided by the code minimums.

Components:

- The MDP includes a mix of unit types, sizes, and price points. These may include workforce housing, live/work units, and cooperative housing.
- The MDP includes residential units for both renters and owners.
- The MDP should include units that are managed as permanently affordable housing.[2] All affordable units should be integrated within mixed-income buildings.
- The MDP includes a provision for senior housing in the Station Area. Innovative siting of senior housing, such as it being located near or within the same building as day-care or nursery schools, is encouraged.

[2] Reference § 305-130.

5. Neighborhood Character

Goals:
Development in the SAO will create a sense of place and arrival at the train station, completing the waterfront neighborhood. Development east of the tracks will maintain a scale and block structure that supports street-level activities and enhances the transition from the waterfront, to the Station Area, and to the village downtown. Development in the SAO will not impact public scenic views of the Hudson River and Palisades.

Components:

- The Visual Analysis, included with the MDP, must demonstrate no significant impact on public scenic viewsheds, including views to the Hudson River and Palisades. The technique for photosimulations is described in § 305-XX(11). This impact will be demonstrated with verifiable digital photomontages of the proposed development from the following viewpoints:
  - View along Wildey St at N Broadway – toward the Hudson River
  - View from Neperan Rd at Grove St – W/NW toward the Hudson River
  - View along Altamont Ave – W toward the Hudson River
  - View along Benedict at Rosehill Ave – toward the Hudson River
  - View along Main St at Broadway – toward the Hudson River
- The MDP shows uses that are consistent with residential and recreational uses (e.g. MDP demonstrates no impacts to air quality, water quality; the MDP does not describe uses that introduce significant noise and vibrations).
- The MDP contains active and transparent ground floor uses designed for pedestrian access and circulation with building orientation planned to improve wayfinding, access, and contribute to a sense of arrival at the train station.
- The MDP shows a development that is designed primarily around the pedestrian and not the automobile.
- The MDP's landscape plan is complete and includes native plantings, street trees and full-cutoff, non-polluting light fixtures to encourage dark sky lighting. The landscape plan must be coordinated with any village street furniture.

Methods:
The photosimulations required to demonstrate the impact on the viewpoints listed in the Neighborhood Character Performance Criteria must be performed as follows.

1. The photosimulations must be produced using a technique that merges and existing conditions photograph with an elevated 3D computer model of the Master Development Plan and references. The existing photograph and the 3D computer model must be merged using references that exist in both the photograph and the 3D model. The photosimulations should accurately represent the MDP using photorealistic textures that portray the facades and building colors proposed. Streets, sidewalks, landscaping, and anything placed on a roof are a part of the MDP and should be shown in the photosimulations. The lighting used in the photosimulation should be set to the time of day and time of year of when the photographs were taken.

2. The existing condition photographs should be taken from the viewpoints identified from the location that provides the best view toward the project. They must show leaf-off, no snow conditions and must be taken when atmospheric conditions are clear. Photographs should be taken with at least a 50mm equivalent (normal) lens or

telephoto lens. Wide angle lens may only be used when they are necessary to include all elements of the MDP within the frame of the photograph.

3. The Planning Board may require an audit of the photosimulations to ensure that the proper methods have been used and that they accurately reflect all of details of the MDP. The applicant must provide reasonable access to the data used to produce the visual simulations, and the personnel who produced the visual simulations must granted to auditors identified by the Planning Board, should the Planning Board believe that such audit is required.

6. Infrastructure

Goals:
All developments will minimize their impact on existing infrastructure.

Components:

- The MDP includes an infrastructure plan providing for stormwater capture as per code and incorporates blue / green strategies, including for example: green roofs, blue roofs, detention tanks, green infrastructure, and permeable surfaces within or under the development site inclusive of roads and sidewalks. At a minimum, all streetscapes must include green infrastructure.
- The development shall not result in a net increase in infrastructure costs to the Village.
- The MDP utilizes onsite renewable sources to meet its energy requirements
- The MDP places new infrastructure below grade *as feasible and necessary* for resiliency plans.

7. Open Space

Goals:
All developments will improve access to and continuity between existing public open spaces and the Hudson River.

Components:

- The MDP identifies public and private open spaces within all developments.
- Where applicable, the MDP preserves public view corridors and respects a development buffer of 50 feet from shoreline as measured by the Mean High Water (MHW) line along the Hudson River, except where the use of water is an integral part of such structure.
- Riverfront facades shall not exceed 150 feet in length.
- The MDP provides public access to the water, including points where the public may reach the river. This may include one or more kayak and/or boat launches with adjacent storage racks.

8. Sustainability & Resiliency

Goals:
All developments will promote human health and safety and minimize resource consumption, including water and energy, waste, and greenhouse gas emissions.

Development should incorporate renewable energy systems, adaptability to a changing climate, and resiliency to extreme weather events.

Components:

- The MDP demonstrates holistic consideration for the environmental performance of sites and buildings, which may be satisfied through building and site design that achieve LEED Silver or higher ratings,[3] or conform to / exceed Passive House Standards,[4] or equivalent standards in effect at the time of application.
- The MDP is designed to account for sea level rise, as described in 6 NYCRR Part 490, and to be adaptable to changing projections. The MDP must demonstrate that it does not worsen the potential for flooding within the SAO. The base level(s) of any building must be designed to enable adaptation for sea level rise, including retrofit for wet flood proofing.
- The MDP site and buildings are designed to moderate the impacts of extreme heat and rain events.
- Greywater is captured to irrigate landscaping, gardens or parks.

11. Expiration, Revocation, and Enforcement

An SAO designation shall expire if the SAO designated use or uses cease for more than 24 consecutive months for any reason, if the applicant fails to obtain the necessary Building Permits or fails to comply with the conditions of the site development plan approval as described in § 305-143.

An SAO designation may be revoked by the Village Board of Trustees if the permittee violates the conditions of the site development plan approval or engages in any construction or alteration not authorized by the site development plan. Any such unauthorized or unapproved construction or alteration will immediately trigger a suspension of all work on site and fines as determined by the Village Board of Trustees.

[3] https://new.usgbc.org/leed-v4
[4] https://www.passivehouse-international.org/index.php?page_id=150

Summary

Category	Maximum Possible Score	Actual Score
Land Use	12.5	9.7
Mobility & Access	12.5	8.3
Transportation & Parking	12.5	8.3
Affordable & Senior Housing	12.5	7.6
Neighborhood Character	12.5	10.0
Infrastructure	12.5	9.7
Open Space	12.5	10.4
Sustainability & Resiliency	12.5	6.9
Total Performance	**100**	**71.1 Fail**

Notes:

The minimum passing score is 75 (normalized)

Except where noted, a score of zero for any criterion will result in a category score of zero

Where a criterion does not apply, enter "NA" and provide explanation

Land Use

Number of valid criteria (enter 1, 2 or 3) 3

Criteria	Score
Mix of uses	**2**
Appropriateness of uses	**2**
Presence of adverse uses	**3**

Total Land Use Performance	
Possible	9
Achieved	7
Normalized to 12.5 scale	9.72

Explanation

0=Development does not significantly advance the goals of the station area
1=Development advances the goals of the station area, but does not mix uses
2=Development advances the goals of the station area and provides a significant mix of uses
3=Development advances the goals of the station area, provides a significant mix of uses that complement existing uses in the Downtown area

0=Uses provided are redundant with other uses in Tarrytown
1=Uses moderately expand the range of offerings in Tarrytown
2=Uses significantly expand the offerings in Tarrytown
3=Uses significantly expand the offerings in Tarrytown and include at least one of the desired uses identified in the goals

0=Contains uses contrary to the goals of the station area (**Noxious uses** (e.g. uses that are dirty, loud, create noxious odors, produce off site vibrations, are visually disturbing, and similar), **uses that produce little street activity** (e.g. storage (bulk-, mini-, outdoor-, self-), warehouses and similar, or **uses that require large amounts of ancillary storage space** (e.g. some car dealers, sawmills, some large-scale manufacturing, and similar.)
3=Does not contain uses contrary to the goas of the station area

Mobility & Access

Number of valid criteria (enter 1, 2, 3 or 4)	4

Criteria	Score
Complete Streets	2
Depot Plaza	2
Parks, community uses and public open space	2
Connections between Depot Plaza and Downtown	2

Total Mobility & Access Performance	
Possible	12
Achieved	8
Normalized to 12.5 scale	8.33

Explanation

0=Development does not follow most Complete Street principles
1=Development mostly follows Complete Street principles
2=Development follows all Complete Street principles
3=Development follows all Complete Street principles with excellence

0=Development does not consider connections to Depot Plaza
1=Development maintains connections to Depot Plaza
2=Development improves connections to Depot Plaza and provides every unit a direct pedestrian path to Depot Plaza
3=Using design excellence, development improves existing connections and makes new connections to Depot Plaza, including providing every unit a direct pedestrian path to Depot Plaza
0=Development does not provide or improve access to parks, community uses and public open space
1=Development improves access to parks, community uses and public open space
2=Development significantly improves access to parks, community uses and public open space
3=Through design excellence, development significantly improves access to parks, community uses and public open space
0=Development does not improve connections between Depot Plaza and Downtown
1=Development improves connections between Depot Plaza and Downtown
2=Development significantly improves connections between Depot Plaza and Downtown
3=Through design excellence and/or innovation, development significantly improves connections between Depot Plaza and Downtown

Mandatory passing score

Transportation & Parking

Number of valid criteria (enter 1, 2, 3 or 4)	4

Criteria	Score
Parking plan	**2**
Parking location and design	**2**
Travel modes	**2**
Commuter parking	**2**

Total Transportation & Parking Performanc	
Possible	12
Achieved	8
Normalized to 12.5 scale	8.33

Mandatory passing score

12

Explanation

0=Parking plan incomplete and/or does not demonstrate how parking needs will be met
1=Adequately demonstrates how parking needs will be met
2=Adequately demonstrates how parking needs will be met and includes car share, bicycle parking, and electric vehicle / electric bike charging infrastructure
3=Same as 2, and also shares spaces between resident, customer and commuter parking to minimize the number of spaces
0=Parking plan incomplete and/or only accommodates parking through surface parking lots
1=The majority of necessary parking provided in one or more structures
2=Necessary parking provided using a combination of structured, surface, on-site, off-site, above ground and below ground strategies designed to hide parked cars from view
3=Same as 2, but with structures designed to be used for other purposes if parking needs change in the future
0=Does not demonstrate flexibility of travel mode
1=Development accommodates bicycles, bike and car share, and transit
2=Development is designed for pedestrians, bicycles, bike and car share, and transit
3=Development is designed for, and encourages alternative modes of travel, including pedestrians, bicycles, transit, and bike and cars share, and integrate with existing modes
0=Commuter parking not replaced
1=Less than all commuter parking is replaced
2=All commuter parking is replaced
3=All commuter parking is replaced and provided to the Village to operate

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Affordable & Senior Housing

(Category N/A for non-residential development, ar

Number of valid criteria (enter 1, 2, 3, 4, 5 or 6) 6

Criteria	Score
Permanently affordable housing	2
Level of affordability	2
Location of affordable units	3
Mix of units types	2
Ownership	1
Senior housing	1

Total Affordability Performance	
Possible	18
Achieved	11
Normalized to 12.5 scale	7.6

ıd development with fewer than 10 dwelling units)

Explanation
0=Zero to 9% of units
1=10 to 19% of units
2=20 to 29% of units
3=30% or more of units
0=None, or more than 120% of AMI
1=Average between 81% and 120% of AMI
2=Average between 61% and 80% of AMI
3=Average 60% or less of AMI
0=No affordability
1=Off-site
2=On-site, separate building
3=On-site, mixed in-building
0=Little variation of unit types and price points
1=Variation of either price points or unit types
2=Varies price points and unit types
3=Varies price, unit, types, and provides options for rental and ownership
1=100% renter or owner-occupied
3=Substantial mix of renter and ownership options
1=No provision for senior housing
2=Provision of on or off-site senior housing
3=Provision of on-site senior housing and day-care/Nursery School combination

Neighborhood Character

Number of valid criteria (enter 1, 2, 3, 4, or 5) 5

Criteria	Score
Impact on public scenic viewsheds	1
Ground floor uses	3
Design	2
Landscape plan	3
Uses	3

Total Neighborhood Character Performanc	
Possible	15
Achieved	12
Normalized to 12.5 scale	10.00

Explanation
0=No change
1=Reduced
2=Eliminated
3=Eliminated using best practices
0=No plan
1=Minimally provided
2=Provided
3=Provided using best practices
0=Net increase in Village water costs
2=No net increase in Village water costs
3=Net decrease in Village water costs
0=Net increase in Village sewer costs
2=No net increase in Village sewer costs
3=Net decrease in Village sewer costs
0=Infrastructure elements visible
1=Infrastructure elements minimally visible
2=Infrastructure elements minimally visible and incorporated into design
3=Infrastructure elements not visible
0=Less than 10% energy requirements provided by onsite renewable sources
1=10% to 20% energy requirements provided by onsite renewable sources
2=20% to 40% energy requirements provided by onsite renewable sources
3=40% or more energy requirements provided by onsite renewable sources

Open Space

Number of valid criteria (enter 1, 2, 3, 4 or 5)	2

Criteria	Score
All public and private open space identified in the MDP	3
Development preserves public view corridors	2
Development respects a development buffer of 50 feet from the Hudson River, except where the use of water is an integral part of such structure (e.g. water dependent uses)	na
Riverfront facades do not exceed 150 ft. in length	na
Development provides public access to the water where applicable	na

Total Open Space Performance	
Possible	6
Achieved	5
Normalized to 12.5 scale	10.416667

Explanation
0=No
3=Yes
0=No
1=Partially
2=Mostly
3=Entirely
0=No or partially
1=Yes
2=Yes, and buffer is publicly accessible
3=Yes, and publicly accessible buffer significantly exceeds 50'
0=No
1=No, but exceptions are water dependent uses
2=Yes, always
3=All riverfront facades less than 200'
0=No
1=Yes, pedestrian access only
2=Yes, pedestrian access with boat and/or kayak launches
3=Same as 2, with adjacent storage racks for boats and/or kayaks

Notes

West of the tracks only

West of the tracks

West of the tracks

Sustainability and Resiliency

Number of valid criteria (enter 1, 2, 3, 4, 5 or 6)	6

Criteria	Score
LEED NB	1
OR	
Passive House	
Graywater	1
Design to moderate the impacts of extreme heat and rain	2
Sea-Level Rise (SLR)	3
Flooding within SAO	3
Energy Performance	1

Total Sustainability Performance	
Possible	18
Achieved	10
Normalized to 12.5 scale	6.9444444

Explanation

0=No certification
1=Certified
2=Silver
3=Gold & Platinum

0=Does not Meet Passive House Standards
3=Meets Passive House Standards

0=Does not use or capture graywater
1=Captures graywater for treatment
2=Captures some graywater for reuse
3=Captures all graywater for reuse

0=No special design features
1=Minimal design features
2=Design features incorporated
3=Exceptional design features incorporated

0=Does not consider SLR
1=Minimal design accommodations for SLR
2= Design considers SLR
3= Buildings designed to flood

0=Worsens potential for flooding outside site
2=Does not worsen the potential for flooding
3=Reduces potential of flooding
1=meets NYS energy efficiency standards
2=shows increase of at least 25% above NYS energy efficiency standards
3=shows increase of at least 40% above NYS energy efficiency standards

Newly added

VILLAGE OF TARRYTOWN
COMPREHENSIVE PLAN MANAGEMENT COMMITTEE

Comprehensive Plan Action Proposal — Action # 19-01

Date: May 8, 2019

Action: Parking Management Plan — **Study** or **Implementation**

Purpose/Scope:
To develop an implementation plan that result in more efficient use of parking resources for the whole of Tarrytown with special attention to the Main Street business district and North Broadway cooridor.

Work Product:
An Integrated Parking Plan that
(1) Define Scope - geographic area of analysis (functional scale of parking activities)
(2) Define Problem - where, when and to whom inadequate parking occurs and for what types of trips
(3) Strategic Planning Context – planning coordinated with our community objectives articulated in the Comprehensive Plan update.
(4) Establish Evaluation Framework - basic structure for analyzing options, practical ways to measure progress toward objectives
(5) Survey Conditions – the number of available spaces in an area (supply) and the occupancy of spaces during peak hours (demand)
(6) Identify and Evaluate Options - develop and evaluate a list of potential solutions
(7) Develop An Implementation Plan that include phases and contingency options.

Sponsoring Committee Member: David Kim

Sponsoring Trustee (Determined by BOT): TBD

Lead Entity: Parking Management Committee

Other Participation: Designated member of the Chamber of Commerce
Village Manager (or designated delegate)
Chief of Police (or designated delegate)

Consultant: TBD

Funding: Grants, parking revenue

Schedule: Fall 2019 – Initial implementation strategies for BOT action
End of 2019 – Complete Implementation Plan

Progress:

VICTORIA Transport Policy INSTITUTE
EFFICIENCY • EQUITY • CLARITY

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Info@vtpi.org
250-360-1560

Parking Management

Strategies, Evaluation and Planning

12 September 2016

by
Todd Litman
Victoria Transport Policy Institute

Abstract

Parking management refers to various policies and programs that result in more efficient use of parking resources. This report summarizes the book, *Parking Management Best Practices* (Planners Press, 2006), which describes and evaluates more than two-dozen such strategies. It investigates problems with current parking planning, discusses the costs of parking facilities and potential savings from improved management, describes specific parking management strategies and how they can be implemented, discusses planning and evaluation issues, and describes how to develop optimal parking management in a particular situation. Cost-effective parking management programs can usually reduce parking requirements by 20-40% compared with conventional planning requirements, providing many economic, social and environmental benefits.

An shorter version of this paper was presented at the
Transportation Research Board 2007 Annual Meeting (www.trb.org)
Paper 07-1581

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Contents

Introduction

Parking is an essential component of the transportation system. Vehicles must park at every destination. A typical automobile is parked 23 hours each day, and uses several parking spaces each week. Parking convenience affects the ease of reaching destinations and therefore affects overall accessibility.

Parking facilities are a major cost to society, and parking conflicts are among the most common problems facing designers, operators, planners and other officials. Such problems can be often defined either in terms of *supply* (too few spaces are available, somebody must build more) or in terms of *management* (available facilities are used inefficiently and should be better managed). Management solutions tend to be better than expanding supply because they support more strategic planning objectives:

- Reduced development costs and increased affordability.
- More compact, multi-modal community planning (smart growth).
- Encourage use of alternative modes and reduce motor vehicle use (thereby reducing traffic congestion, accidents and pollution).
- Improved user options and quality of service, particularly for non-drivers.
- Improved design flexibility, creating more functional and attractive communities.
- Ability to accommodate new uses and respond to new demands.
- Reduced impervious surface and related environmental and aesthetic benefits.

Parking management refers to policies and programs that result in more efficient use of parking resources. Parking management includes several specific strategies; nearly two dozen are described in this report. When appropriately applied parking management can significantly reduce the number of parking spaces required in a particular situation, providing a variety of economic, social and environmental benefits. When all impacts are considered, improved management is often the best solution to parking problems.

Parking Management Principles

These ten general principles can help guide planning decision to support parking management.

1. *Consumer choice.* People should have viable parking and travel options.
2. *User information.* Motorists should have information on their parking and travel options.
3. *Sharing.* Parking facilities should serve multiple users and destinations.
4. *Efficient utilization.* Parking facilities should be sized and managed so spaces are frequently occupied.
5. *Flexibility.* Parking plans should accommodate uncertainty and change.
6. *Prioritization.* The most desirable spaces should be managed to favor higher-priority uses.
7. *Pricing.* As much as possible, users should pay directly for the parking facilities they use.
8. *Peak management.* Special efforts should be made to deal with peak-demand.
9. *Quality vs. quantity.* Parking facility quality should be considered as important as quantity, including aesthetics, security, accessibility and user information.
10. *Comprehensive analysis.* All significant costs and benefits should be considered in parking planning.

Parking Management Benefits

- *Facility cost savings.* Reduces costs to governments, businesses, developers and consumers.
- *Improved quality of service.* Many strategies improve user quality of service by providing better information, increasing consumer options, reducing congestion and creating more attractive facilities.
- *More flexible facility location and design.* Parking management gives architects, designers and planners more ways to address parking requirements.
- *Revenue generation.* Some management strategies generate revenues that can fund parking facilities, transportation improvements, or other important projects.
- *Reduces land consumption.* Parking management can reduce land requirements and so helps to preserve greenspace and other valuable ecological, historic and cultural resources.
- *Supports mobility management.* Parking management is an important component of efforts to encourage more efficient transportation patterns, which helps reduce problems such as traffic congestion, roadway costs, pollution emissions, energy consumption and traffic accidents.
- *Supports Smart Growth.* Parking management helps create more accessible and efficient land use patterns, and support other land use planning objectives.
- *Improved walkability.* By allowing more clustered development and buildings located closer to sidewalks and streets, parking management helps create more walkable communities.
- *Supports transit.* Parking management supports transit oriented development and transit use.
- *Reduced stormwater management costs, water pollution and heat island effects.* Parking management can reduce total pavement area and incorporate design features such as landscaping and shading that reduce stormwater flow, water pollution and solar heat gain.
- *Supports equity objectives.* Management strategies can reduce the need for parking subsidies, improve travel options for non-drivers, provide financial savings to lower-income households, and increase housing affordability.
- *More livable communities.* Parking management can help create more attractive and efficient urban environments by reducing total paved areas, allowing more flexible building design, increasing walkability and improving parking facility design.

This report describes various parking management strategies, how to evaluate these strategies and develop an integrated parking plan, plus examples and resources for more information. Most parking management strategies have been described in previous publications but no existing document describes them all or provides guidance on planning and implementing a comprehensive parking management program. This report summarizes the book *Parking Management Best Practices*, published by Planners Press in 2006. If you find this report useful, please purchase the book for more information.

Examples

Below are three illustrative examples of parking management programs.

Reducing Building Development Costs

A mixed-use building is being constructed in an urban or suburban area that will contain 100 housing units and 10,000 square feet of commercial space. By conventional standards this requires 200 parking spaces (1.6 spaces per housing unit plus 4 spaces per 1,000 square feet of commercial space), costing from $2 million for surface parking (about 9% of the total development costs), up to $6 million for underground parking (about 25% of total development costs). However, because the building is in a relatively accessible location (on a street that has sidewalks, with retail business and public transit services located nearby) and onstreet parking is available nearby to accommodate occasional overflows, the building owners argue that a lower standard should be applied, such as 1.2 parking spaces per housing unit and 3 spaces per 1,000 square feet of commercial space, reducing total requirements to 150 spaces. To further reduce parking requirements the developer proposes the following:

- *Unbundle parking*, so parking spaces are rented separately from building space. For example, rather than paying $1,000 per month for an apartment with two parking spaces renters pay $800 per month for the apartment and $100 per month for each parking space. This typically reduces parking requirements by 20%.
- Encourage businesses to implement *commute trip reduction programs* for their employees, including *cashing out* free parking (employees are offered $50 per month if they don't use a parking space). This typically reduces automobile commuting by 20%.
- *Regulate* the most convenient parking spaces to favor higher-priority uses, including delivery vehicles and short errands, and handicapped users.
- Include four *carshare vehicles* in the building. Each typically substitutes for 5 personal vehicles, reducing 4 parking spaces.
- Incorporate excellent *walking facilities*, including sidewalk upgrades if needed to allow convenient access to nearby destinations, overflow parking facilities and transit stops.
- Incorporate *bicycle parking* and changing facilities into the building.
- Provide *information* to resident, employees and visitors about transit, rideshare and taxi services, bicycling facilities, and overflow parking options.
- Develop a contingency-based *overflow parking plan* that indicates where is available nearby if on-site facilities are full, and how and *spillover impacts* will be addressed. For example, identify where additional parking spaces can be rented if needed.

This management program allows total parking requirements to be reduced to 100 spaces, providing $100,000 to $500,000 in annualized parking facility capital and operating cost savings (compared with $20,000-$50,000 in additional expenses for implementing these strategies), as well as providing improved options to users and reduced vehicle traffic.

Increasing Office Building Profits and Benefits

An office building has 100 employees and 120 surface parking spaces, providing one space per employee plus 20 visitor spaces. The building earns $1,000,000 annually in rent, of which $900,000 is spent on debt servicing and operating expenses, leaving $100,000 annual net profit.

Parking management begins when a nearby restaurant arranges to use 20 spaces for staff parking during evenings and weekends for $50 per month per space, providing $12,000 in additional annual revenue. After subtracting $2,000 for walkway improvements between the sites, and additional operating costs, this increases profits 10%. Later a nearby church arranges to use 50 parking spaces Sunday mornings for $500 per month, providing $6,000 in annual revenue. After subtracting $1,000 for additional operating costs, this increases profits by another 5%. Next, a commercial parking operator arranges to rent the building's unused parking to general public during evenings and weekends. This provides $10,000 in net annual revenue, an additional 10% profit.

Inspired, the building manager develops a comprehensive management plan to take full advantage of the parking facility's value. Rather than giving each employee a reserved space, spaces are shared, so 80 spaces can easily serve the 100 employees. A commute trip reduction program is implemented with a $40 per month cash-out option, which reduces parking requirements by another 20 spaces. As a result, employees only need 60 parking spaces. The extra 40 parking spaces are leased to nearby businesses for $80 per month, providing $32,000 in annual revenue, $9,600 of which is used to fund cash-out payments and $2,400 to cover additional costs, leaving $20,000 net profits.

Because business is growing, the tenant wants additional building space for 30 more employees. Purchasing land for another building would cost approximately $1 million, and result in two separate work locations, an undesirable arrangement. Instead, the building manager stops leasing daytime parking and raises the cash-out rate to $50 per month, which causes an additional 10 percentage point reduction in automobile commuting. With these management strategies, 87 parking spaces are adequate to serve 130 employees plus visitors, leaving the land currently used by 33 parking spaces available for a building site. To address concerns that this parking supply may be insufficient sometime in the future, a contingency plan is developed which identifies what will be done if more parking is needed, which might involve an overflow parking plan, providing additional commuter incentives during peak periods, leasing nearly parking, or building structured parking if necessary.

This parking management plan saves $1 million in land costs, a $50,000 annualized value. Parking spaces can still be rented on weekends and evenings, bringing in an additional $25,000. These parking management strategies increased total building profits about 75%, allow a business to locate entirely at one location, and provide parking to additional users during off-peak periods. Other benefits include increased income and travel options for employees, reduced traffic congestion and air pollution, and reduced stormwater runoff.

Downtown – Addressing Parking Problems

A growing downtown is experiencing parking problems. Most downtown parking is unpriced, with 2-hour limits for on-street parking. During peak periods 90% of core-area parking spaces are occupied, although there is virtually always parking available a few blocks away, and many of the core spaces are used by commuters or long-term visitors, who moved their vehicles every two hours to avoid citations.

Local businesses asked the city to build a $5 million parking structure, which would either require about $500,000 in annual subsidies or would require user charges. Experience in similar downtowns indicates that if most public parking is unpriced, few motorists will pay for parking so the structure would be underutilized and do little to alleviate parking problems. Local officials decide to first implement a management program, to defer or avoid the need for a parking structure. Parking surveys are performed regularly to track utilization and turnover rates, in order to identify problems. The program's objectives are to encourage efficient use of parking facilities, insure that parking is convenient for priority uses (deliveries, customers and short errands), and maintain parking utilization at about 85%. It includes the following strategies:

- Increase enforcement of regulations, particularly during busy periods, but insure that enforcement is friendly and fair.
- Reduce on-street time limits (e.g., 2-hours to 90 minutes) where needed to increase turnover.
- Expand core area boundaries to increase the number of spaces managed for short-term use.
- Encourage businesses to share parking, so for example, a restaurant allows its parking spaces to be used by an office building during the weekdays in exchange for using the office parking during evenings and weekends.
- Encourage use of alternative modes. The city may partner with the downtown business organization to support commute trip reduction programs and downtown shuttle service.
- Develop special regulations as needed, such as for disabled access, delivery and loading areas, or to accommodate other particular land uses.
- Implement a residential parking permit program if needed to address spillover problems in nearby residential areas, but accommodate non-residential users as much as possible.
- Provide signs and maps showing motorists where they may park.
- Have an overflow parking plan for occasionally special events that attract large crowds.
- Establish high standards for parking facility design, including aesthetic and safety features, to enhance the downtown environment.
- Price parking, using convenient pricing methods. Apply the following principles:
    - Adjust rates as needed to maintain optional utilization (i.e., 85% peak occupancy).
    - Structure rates to favor short-term uses in core areas and encourage longer-term parkers to shift to other locations.
    - Provide special rates to serve appropriate uses, such as for evening and weekend events.
    - Use revenues to improve enforcement, security, facility maintenance, marketing, and mobility management programs that encourage use of alternative modes.

Paradigm Shift

Parking planning is undergoing a *paradigm shift*, a fundamental change in how a problem is perceived and solutions evaluated. The old paradigm assumes that parking should be abundant and free at most destinations. It strives to maximize supply and minimize price. The old paradigm assumes that parking lots should almost never fill, that parking facility costs should be incorporated into the costs of buildings or subsidized by governments, and that every destination should satisfy its own parking needs.

The new paradigm strives to provide *optimal* parking supply and price. It considers too much supply as harmful as too little, and prices that are too low as harmful as those that are too high. The new paradigm strives to use parking facilities efficiently. It considers full lots to be acceptable, provided that additional parking is available nearby, and that any spillover problems are addressed. It emphasizes sharing of parking facilities between different destinations. It favors charging parking facility costs directly to users, and providing financial rewards to people who reduce their parking demand.

The old paradigm tends to resist change. It places a heavy burden of proof on innovation. The new paradigm recognizes that transport and land use conditions evolve so parking planning practices need frequent adjustment. It shifts the burden of proof, allowing new approached to be tried until their effectiveness (or lack thereof) is proven. Table 1 compares the old and new parking paradigms.

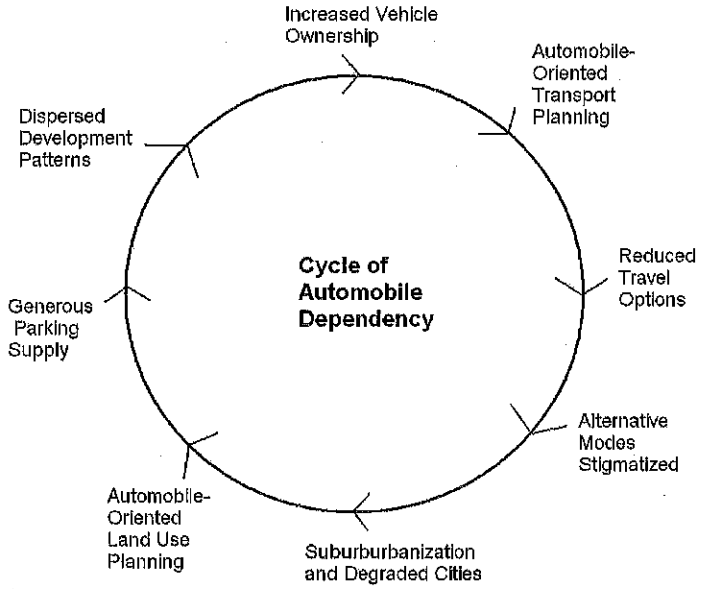
Table 1 **Old and New Parking Paradigms Compared**

Old Parking Paradigm	New Parking Paradigm
"Parking problem" means inadequate parking supply.	There can be many types of parking problems, including inadequate or excessive supply, too low or high prices, inadequate user information, and inefficient management.
Abundant parking supply is always desirable.	Too much supply is as harmful as too little.
Parking should generally be provided free, funded indirectly, through rents and taxes.	As much as possible, users should pay directly for parking facilities.
Parking should be available on a first-come basis.	Parking should be regulated to favor higher priority uses and encourage efficiency.
Parking requirements should be applied rigidly, without exception or variation.	Parking requirements should reflect each particular situation, and should be applied flexibly.
Innovation faces a high burden of proof and should only be applied if proven and widely accepted.	Innovations should be encouraged, since even unsuccessful experiments often provide useful information.
Parking management is a last resort, to be applied only if increasing supply is infeasible.	Parking management programs should be widely applied to prevent parking problems.
"Transportation" means driving. Land use dispersion (sprawl) is acceptable or even desirable.	Driving is just one type of transport. Dispersed, automobile-dependent land use patterns can be undesirable.

Parking management changes the way parking problems are defined and solutions evaluated.

The old paradigm results in *predict and provide* planning, in which past trends are extrapolated to predict future demand, which planners then try to satisfy. This often creates a self-fulfilling prophecy, since abundant parking supply increases vehicle use and urban sprawl, causing parking demand and parking supply to ratchet further upward, as illustrated in Figure 1.

Figure 1 **Cycle of Automobile Dependency**



Generous parking supply is part of a cycle that leads to increased automobile dependency. Parking management can help break this cycle.

It is important to define parking problems carefully. For example, if people complain about a parking problem, it is important to determine exactly what type of problem, and where, when and to whom it occurs. Increasing supply helps reduce parking congestion and spillover problems but increases most other problems. Management solutions tend to reduce most problems, providing a greater range of benefits and so are supported by more comprehensive planning.

How Much Is Optimal?

Optimal parking supply is the amount that motorists would purchase if they paid all costs directly and had good parking and transport options. But conventional planning practices reflect an assumption that it is desirable to maximize parking supply and minimize user charges. They consider parking management a measure of last resort, to be applied only where it is infeasible to expand supply.

Conventional planning determines how much parking to provide at a particular site planners based on recommended minimum parking standards published by various professional organizations. This provides an *index* or *parking ratio* used to calculate the number of spaces to supply at a particular location. These are *unconstrained* and *unadjusted* values, which generally reflect the maximum supply that could be needed.

These standards are often excessive and can usually be adjusted significantly downward (Topp 2009). To appreciate why it is helpful to know a little about how parking standards are developed. Conventional parking standards are based on parking demand surveys, the results of which are collected and published in technical reports such as ITE's *Parking Generation*. This process implies a higher degree of accuracy than is actually justified. Fewer than a dozen demand surveys are used to set standards for many land use categories. The analysis does not usually take into account geographic, demographic and economic factors that can affect parking demand, such as whether a site is urban or suburban, and whether parking is free or priced.

These standards err toward oversupply in many ways. They are derived from parking demand studies that were mostly performed in automobile-dependent locations. They are generally based on 85th percentile demand curves (which means that 85 out of 100 sites will have unoccupied parking spaces even during peak periods), an 85th occupancy rate (a parking facility is considered full if 85% of spaces are occupied) and a 10th design hour (parking facilities are sized to fill only ten hours per year). Applying these standards results in far more parking supply than is usually needed at most destinations, particularly where land use is mixed, there are good travel options, parking is managed for efficiency or priced.

Most people planning apply parking standards have little understanding of the biases and errors they contain, and the problems created by excessive parking supply. The application of generous and inflexible parking standards is often defended as being *conservative*, implying that this approach is cautious and responsible. Use of the word *conservative* in this context is confusing because it results in the opposite of what is implied. Excessive parking requirements waste resources, both directly, by increasing the money and land devoted to parking facilities, in indirectly, by increasing automobile use and sprawl. Better parking management actually tends to be more *conservative* overall.

Alternative Ways To Determine How Much Parking To Supply

There are better ways to determine how much parking to supply at a particular site. *Efficiency-based standards* size facilities for optimal utilization. This means that most parking lots are allowed to fill, provided that management strategies can insure user convenience and address any problems. For example, parking facilities at a store can be sized to fill daily or weekly, provided that overflow parking is available nearby, motorists have information about available parking options, and regulations are adequately enforced to address any spillover problems that develop.

Efficiency-based standards take into account geographic, demographic and economic factors that affect parking demand. They also reflect the relative costs and benefits of different options, so less parking is supplied where parking supply is relatively costly to provide or where management programs easy to implement. Efficiency-based standards should also reflect strategic planning objectives such as a desire for more compact development, or to reduce traffic.

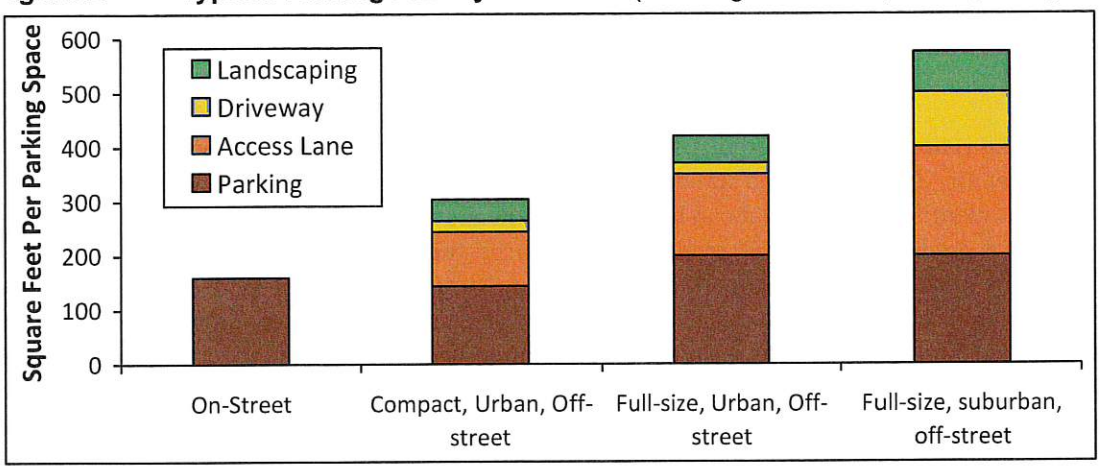
Because it is not possible to predict exact parking demand and management program effectiveness, efficiency-based standards rely on *contingency-based planning*, which means that planners identify solutions that can be deployed if needed in the future. For example, if a new building is predicted to need 60 to 100 parking spaces, the conventional approach is to supply either the middle value (80 spaces), or the maximum value (100 spaces). With contingency-based planning, the lower-bound value (60 spaces) is initially supplied, conditions are monitored, and various strategies are identified for implementation if needed. This may include banking land for additional parking supply and various parking management programs. This allows planners to use lower parking standards with the confidence that any resulting problems can be easily solved.

Parking Facility Costs

A major benefit of parking management is its ability to reduce facility costs (Parking Costs," Litman, 2003). Parking facility costs are usually borne indirectly through rents, taxes and as a component of retail goods, so most people have little idea of parking facility costs and the potential savings from more efficient management.

A typical parking space is 8-10 feet (2.4-3.0 meters) wide and 18-20 feet (5.5-6.0 meter) deep, totaling 144-200 square feet (13-19 sq. meters). Off-street parking requires driveways and access lanes, and so typically requires 300-400 square feet (28-37 square meters) per space, allowing 100-150 spaces per acre (250-370 per hectare).

Figure 2 **Typical Parking Facility Land Use** ("Parking Evaluation," VTPI, 2005)



Land requirements per parking space vary depending on type and size. Off-street spaces require driveways and access lanes. Landscaping typically adds 10-15% to parking lot area.

The direct, annualized costs of providing parking (not including indirect costs such as stormwater management, environmental impacts, aesthetic degradation, etc.). This varies from about $250 per space if otherwise unused land is available, and construction and operating costs are minimal, to more than $2,250 for structured parking with attendants. On-street parking spaces require less land per space than off-street parking, since they do not require access lanes, but their opportunity costs can be high if they use road space needed for traffic lanes or sidewalks. The *Parking Cost, Pricing and Revenue Calculator* (www.vtpi.org/parking.xls) can be used to calculate these costs for a particular situation.

In addition to these direct costs, generous parking supply imposes indirect costs, including increased sprawl, impervious surface and associated stormwater management costs, reduced design flexibility, reduced efficiency of alternative modes (walking, ridesharing and public transit use), and increased traffic problems. Put more positively, parking management can help solve a variety of economic, social and environmental problems, increase economic productivity, and make consumers better off overall.

Parking Management Strategies

This section describes a variety of specific parking management strategies. For more information see Litman (2006a), Willson (2015), and related chapters in VTPI (2005).

Shared Parking

Shared Parking means that a parking facility serves multiple users or destinations ("Shared Parking," VTPI, 2005). This is most successful if destinations have different peak periods, or if they share patrons so motorists park at one facility and walk to multiple destinations. Parking facilities can be shared in several ways.

- *Shared Rather Than Reserved Spaces*. Motorists share parking rather than being assigned reserved spaces. For example, 100 employees can usually share 60-80 spaces, since at any time some are on leave, in the field, commuting by an alternative modes or working another shift. Hotels, apartments, and dormitories can share parking spaces among several units, since the number of vehicles per unit varies over time. Sharing can be optional, so for example, motorists could choose between $60 per month for a shared space or $100 for a reserved space.
- *Share Parking Among Destinations.* Parking can be shared among multiple destinations. For example, an office building can share parking with a restaurant or theater, since peak demand for offices occurs during weekdays, and on weekend evenings for restaurants and theaters, as indicated in Table 2. Sharing can involve mixing land uses on single site, such as a mall or campus, or by creating a sharing arrangement between sites located suitably close together.

Table 2 **Typical Peak Parking Periods For Various Land Uses**

Weekday	Evening	Weekend
Banks and public services		
Offices and other worksites	Auditoriums	
Park & Ride facilities	Bars and dance halls	
Schools, daycare centers and colleges	Meeting halls	
Factories and distribution centers	Restaurants	Religious institutions
Medical clinics	Theaters	Parks
Professional services	Hotels	Shops and malls

This table indicates peak parking demand for different land use types. Parking can be shared efficiently by land uses with different peaks.

- *Public Parking Facilities.* Public parking, including on-street, municipal off-street, and commercial (for profit) facilities generally serve multiple destinations. Converting from free, single-use to paid, public parking allows more efficient, shared use.
- *In Lieu Fees.* "In lieu fees" mean that developers help fund public parking facilities instead of providing private facilities serving a single destination. This tends to be more cost effective and efficient. It can be mandated or optional.
- *Special Parking Assessment.* Businesses in an area can be assessed a special assessment or tax to fund parking facilities in their area, as an alternative to each business supplying its own facilities. This is often implemented through a downtown business improvement district.

Parking Regulation

Parking regulations control who, when and how long vehicles may park at a particular location, in order to prioritize parking facility use. The table below describes common regulations and the type of parking activity they favor.

Table 3 **Common Parking Regulations**

Name	Description	Favored Activity
User or vehicle type	Spaces dedicated to loading, service, taxis, customers, rideshare vehicles, disabled users, buses and trucks.	As specified.
Duration.	Limit parking duration (5-minute loading zones, 30-minutes adjacent to shop entrances, 1- or 2-hour limits).	Short-term users, such as deliveries, customers and errands.
Time period restrictions	Prohibit occupancy at certain times, such as before 10 am, to discourage employee use, or between 10 pm and 5 am to discourage resident use.	Depends on restrictions.
Employee restrictions.	Require or encourage employees to use less convenient parking spaces.	Customers, deliveries and errands.
Special events	Have special parking regulations during special events.	Depends on restrictions.
Accommodate short-term users.	Provide options for vehicles that make numerous short stops, such as special parking passes.	Delivery and service vehicles.
Residential parking permits	Use Residential Parking Permits (RPPs) to give area residents priority use of parking near their homes.	Residents.
Options for special users.	Establish a system that allows specific parking spaces to be reserved for service and construction vehicles.	Vehicles used for special activities.
Restrict overnight parking	Prohibit overnight parking to discourage use by residents and campers.	Shorter-term parkers
Street cleaning restrictions	Regulations that prohibit parking on a particular street one day of the week to allow street sweeping.	Street cleaning. Insures motorists move their vehicles occasionally.
Large vehicle restrictions	Limit on-street parking of large vehicles, such as freight trucks and trailers.	Normal-size vehicles
Arterial lanes	Prohibit on-street parking on arterials during peak periods, to increase traffic lanes.	Vehicle traffic over parking.
abandoned vehicles	Have a system to identify and remove abandoned vehicles from public parking facilities.	Operating vehicles.

Various regulations can increase parking efficient and prevent problems.

More Accurate and Flexible Standards

More accurate and flexible standards means that parking requirements at a particular location are adjusted to account for factors such as those in Table 4 (Cuddy 2007; Engel-Yan and Passmore 2010; Litman 2009).

Table 4 **Parking Requirement Adjustment Factors**

Factor	Description	Typical Adjustments
Geographic Location	Vehicle ownership and use rates in an area.	Adjust parking requirements to reflect variations identified in census and travel survey data.
Residential Density	Number of residents or housing units per acre/hectare.	Reduce requirements 1% for each resident per acre: Reduce requirements 15% where there are 15 residents per acre, and 30% if there are 30 residents per acre.
Employment Density	Number of employees per acre.	Reduce requirements 10-15% in areas with 50 or more employees per gross acre.
Land Use Mix	Range of land uses located within convenient walking distance.	Reduce requirements 5-10% in mixed-use developments. Additional reductions with shared parking.
Transit Accessibility	Nearby transit service frequency and quality.	Reduce requirements 10% for housing and employment within ¼ mile of frequent bus service, and 20% for housing and employment within ¼ mile of a rail transit station.
Carsharing	Whether a carsharing service is located nearby.	Reduce residential requirements 5-10% if a carsharing service is located nearby, or reduce 4-8 parking spaces for each carshare vehicle in a residential building.
Walkability	Walking environment quality.	Reduce requirements 5-15% in walkable communities, and more if walkability allow more shared and off-site parking.
Demographics	Age and physical ability of residents or commuters.	Reduce requirements 20-40% for housing for young (under 30) elderly (over 65) or disabled people.
Income	Average income of residents or commuters.	Reduce requirements 10-20% for the 20% lowest income households, and 20-30% for the lowest 10%.
Housing Tenure	Whether housing are owned or rented.	Reduce requirements 20-40% for rental versus owner occupied housing.
Pricing	Parking that is priced, unbundled or cashed out.	Reduce requirements 10-30% for cost-recovery pricing (i.e. parking priced to pay the full cost of parking facilities).
Unbundling Parking	Parking sold or rented separately from building space.	Unbundling parking typically reduces vehicle ownership and parking demand 10-20%.
Parking & Mobility Management	Parking and mobility management programs are implemented at a site.	Reduce requirements 10-40% at worksites with effective parking and mobility management programs.
Design Hour	Number of allowable annual hours a parking facility may fill.	Reduce requirements 10-20% if a 10th annual design hour is replaced by a 30th annual peak hour. Requires overflow plan.
Contingency-Based Planning	Use lower-bound requirements, and implement additional strategies if needed.	Reduce requirements 10-30%, and more if a comprehensive parking management program is implemented.

This table summarizes various factors that affect parking demand and optimal parking supply.

Reduce Residential Street Width Requirements

Most jurisdictions require wide residential streets in order to provide on-street parking. This practice is not justified for safety or by consumer demands, since many households would not choose to pay for parking if it were unbundled, and so represents a hidden subsidy of automobile ownership and use (Guo, et al. 2012). Reducing minimum residential street widths in municipal zoning codes and development policies allows developers to build *new urbanist* communities with narrower streets and less parking, and rely more on efficient parking management.

Parking Maximums

Parking Maximums means that an upper limit is placed on parking supply, either at individual sites or in an area. Area-wide limits are called *Parking Caps*. These can be in addition to or instead of minimum parking requirements. Excessive parking supply can also be discouraged by reducing public parking supplies, imposing a special parking tax, and by enforcing regulations that limit temporary parking facilities. Maximums often apply only to certain types of parking, such as long-term, single-use, free, or surface parking, depending on planning objectives.

Remote Parking and Shuttle Service

Remote Parking (also called *Satellite Parking*) refers to the use of off-site parking facilities. This often involves shared facilities, such as office workers parking at a restaurant parking lot during the day, in exchange for restaurant employees using the office parking lot evenings and weekends. It can involve use of public facilities, such as commercial parking lots. Remote parking can also involve use of parking facilities located at the periphery of a business district or other activity center, and use of overflow parking during a special event that attracts large crowds. Special shuttle buses or free transit service may be provided to connect destinations with remote parking facilities, allowing them to be farther apart than would otherwise be acceptable. Another type of remote parking is use of *Park & Ride* facilities, often located at the urban fringe where parking is free or significantly less expensive than in urban centers.

Figure 3 **Overflow Parking Sign**

Remote parking requires providing adequate use information and incentives to encourage motorists to use more distant facilities. For example, signs and maps should indicate the location of peripheral parking facilities, and they should be significantly cheaper to use than in the core. Without such incentives, peripheral parking facilities are often underused while core parking is congested.

Smart Growth

Smart growth (also called *New Urbanism, Location Efficient Development* and *Transit Oriented Development*) is a general term for development policies that result in more efficient transportation and land use patterns, by creating more compact, development with multi-modal transportation systems ("Smart Growth," VTPI 2005).

Smart growth supports and is supported by parking management. Parking management reduces the amount of land required for parking facilities, reduces automobile use and increases infill affordability. These land use patterns, in turn, tend to reduce vehicle ownership and use, and so reduce parking requirements. They allow more sharing of parking facilities, shifts to alternative modes, and various types of parking pricing. Smart growth usually incorporates specific parking management strategies, as indicated in Table 5. Effective parking management is a key component of smart growth.

Table 5 **Conventional and Smart Growth Parking Policies**

Conventional Parking Policies	Smart Growth Parking Policies
Managed only for motorist convenience	Managed for transport system efficiency
Maximum parking supply	Optimal parking supply (not too little, not too much)
Prefers free parking	Prefers priced parking (user pays directly)
Dedicated parking facilities	Shared parking facilities
Favors lower-density, dispersed development	Favors compact development.

Walking and Cycling Improvements

Walking and Cycling (together called *Non-motorized, Active* or *Human Powered* transport) improvements support parking management strategies in several ways ("Walking and Cycling Improvements," VTPI 2005):

- Improving walkability (the quality of walking conditions) expands the range of parking facilities that serve a destination. It increases the feasibility of sharing parking facilities and use of remote parking facilities.
- Improving walkability increases "park once" trips, that is, parking in one location and walking rather than driving to other destinations, which reduces vehicle trips and the amount of parking required at each destination.
- Walking and cycling improvements allow these modes to substitute for some automobile trips.
- Walking and cycling improvements encourage transit use, since most transit trips involve walking or cycling links.

Increase Capacity of Existing Parking Facilities

Increase capacity of existing parking facilities means that parking supply increases without using more land or major construction. There are various ways to do this:

- Use currently wasted areas (corners, edges, undeveloped land, etc.). This can be particularly appropriate for small car spaces, motorcycle and bicycle parking.
- Where there is adequate street width, change from parallel to angled on-street parking.
- Maximize the number of on-street parking spaces, for example, by using a curb lane for parking rather than traffic during off-peak periods, and designating undersized spaces for small cars or motorcycles.
- Provide special, small parking spaces for motorcycles. Allow and encourage motorcycles to share parking spaces when possible.
- Reduce parking space size. Shorter-term parking requires larger spaces, but employee and residential parking spaces can be somewhat smaller. A portion of spaces can be sized for compact vehicles, which require about 20% less space than full-size stalls.
- Use car stackers and mechanical garages. These can significantly increase the number of vehicles parked in an area. However, they are only suitable for certain applications. They generally require an attendant to move lower-level vehicles when needed to access upper-level vehicles, and stackers may be unable to accommodate larger vehicles such as SUV, vans and trucks.
- Use valet parking, particularly during busy periods. This can increase parking capacity by 20-40% compared with users parking their vehicles. Commercial lots often have attendants park vehicles during busy periods, but not off-peak.
- Remove or consolidate non-operating vehicles, equipment, material and junk stored in parking facilities, particularly in prime locations.

Mobility Management

Mobility Management (also called *Transportation Demand Management* or *TDM*) is a general term for strategies that increase transportation system efficiency by changing travel behavior (VTPI 2005). It may affect travel frequency, mode, destination or timing (for example, shifting from peak to off-peak). There are many different mobility management strategies, as summarized in the table below.

Table 6 **Mobility Management Strategies** (VTPI 2003)

Improved Transport Options	Incentives to Shift Mode	Land Use Management	Policies and Programs
Alternative Work Schedules	Bicycle and Pedestrian Encouragement	Car-Free Districts	Access Management
Bicycle Improvements	Congestion Pricing	Compact Land Use	Campus Transport Management
Bike/Transit Integration	Distance-Based Pricing	Location Efficient Development	Data Collection and Surveys
Carsharing	Commuter Financial Incentives	New Urbanism	Commute Trip Reduction
Guaranteed Ride Home	Fuel Tax Increases	Smart Growth	Freight Transport Management
Security Improvements	High Occupant Vehicle (HOV) Priority	Transit Oriented Development (TOD)	Marketing Programs
Park & Ride	Pay-As-You-Drive Insurance	Street Reclaiming	School Trip Management
Pedestrian Improvements	Parking Pricing		Special Event Management
Ridesharing	Road Pricing		Tourist Transport Management
Shuttle Services	Vehicle Use Restrictions		Transport Market Reforms
Improved Taxi Service			
Telework			
Traffic Calming			
Transit Improvements			

Mobility management includes numerous strategies that affect vehicle travel behavior. Many affect parking demand.

Mobility management both supports and is supported by parking management. Mobility management programs often reduce parking demand, and many parking management strategies help reduce vehicle traffic create more accessible land use patterns or support other mobility management objectives.

Parking Pricing

Parking Pricing means that motorists pay directly for using parking facilities ("Parking Pricing," VTPI 2005; Shoup 2005). This may be implemented as a parking management strategy (to reduce parking problems), as a mobility management strategy (to reduce transport problems), to recover parking facility costs, or to raise revenue for any purpose (such as funding local transport programs or downtown improvements). It is often intended to achieve a combination of objectives.

Currently, most parking is inefficiently priced; it is provided free, significantly subsidized, or bundled (automatically included) with building purchases and rents, forcing consumers to pay for parking facilities regardless of whether or not they want it. When motorists do pay directly for parking, it is often a flat annual or monthly fee, providing little incentive to use an alternative mode occasionally. Rates should be set to optimize parking facility use, called *performance-based pricing*, which means that about 15% of parking spaces are vacant and available at any time (Shoup 2006 and 2008).

Improve Parking Pricing Methods

Much of the resistance to parking pricing results from inconvenient pricing methods:

- Many require payment in specific denominations (coins or bills).
- Many require motorists to predict how long they will be parked, with no refund available if motorists leave earlier than predicted.
- Some payment systems cannot easily handle multiple price structures or discounts.
- Some are confusing or slow to use.
- Some have high equipment or enforcement costs.
- Enforcement often seems arbitrary or excessive.

Better payment methods are available. Newer electronic systems are more convenient, accurate, flexible, and increasingly cost effective. They can accommodate various payment methods (coins, bills, credit and debit cards, and by cellular telephone or the Internet), charge only for the amount of time parked, incorporate multiple rates and discounts, automatically vary rates by day and time, and are convenient to use. Some can be integrated with payment systems for other public services such as transit, roads tolls, and telephone use. Some employ contactless technology which automatically deducts payment. Newer systems also produce printed receipts and record data for auditing, which prevents fraud and increases convenience for customers, operators and local governments. They can also automatically record data on utilization and turnover, which improves planning and administration.

Financial Incentives

Financial Incentives means that travelers (particularly commuters) are offered financial benefits for reducing their automobile trips ("Commuter Financial Incentives," VTPI, 2005). These benefits represent the cost savings that result from reduced parking demand. There are various types of incentives. *Parking cash-out* means that commuters who are offered subsidized parking can choose cash instead. *Transit benefits* means that employees receive a subsidized transit pass. *Universal transit passes* means that a group purchases discounted, bulk transit passes for all members. Another incentive is to provide *discounted* or *preferential parking* for rideshare (carpool and vanpool) vehicles. Consumers value these options because they provide positive rewards for those who reduce vehicle trips and parking demand.

Financial incentives such as transit benefits and parking cash-out typically reduce automobile travel 10-30%, depending on the value of the incentive, and various factors. In urban areas commuters tend to shift to walking and transit. In suburban areas they tend to shift to cycling and ridesharing. These programs have been particularly successful at college and university campuses.

Unbundle Parking

Unbundling means that parking is rented or sold separately, rather than automatically included with building space. For example, rather than renting an apartment with two parking spaces for $1,000 per month, the apartment would rent for $800 per month, plus $100 per month for each parking space. This is more equitable and efficient, since occupants only pay for parking they need.

Parking can be unbundled in several ways:

- Facility managers can unbundle parking when renting building space.
- Developers can make some or all parking optional when selling buildings.
- In some cases it may be easier to offer a discount to renters who use fewer than average parking spaces, rather than charging an additional fee. For example, an office or apartment might rent for $1,000 per month with two "free" parking spaces, but renters who only use one space receive a $75 monthly discount.
- Parking costs can be itemized in lease agreements to help renters understand the parking costs they bear, and to help them negotiate reductions.
- Informal unbundling can be encouraged by helping to create a secondary market for available spaces. For example, office, apartment and condominium managers can maintain a list of residents who have excess parking spaces that are available for rent.

Parking Tax Reform

Parking tax reform includes various tax policies that support parking management, including *commercial parking taxes* (a special tax on parking rental transactions) and *per-space parking levies* (a special property tax applied to parking facilities). These can help reduce parking supply and increase parking prices, as well as providing revenues for public programs.

Bicycle Parking and Changing Facilities

Bicycle parking and changing facilities increase the convenience and security of bicycle transportation ("Bicycle Parking," VTPI 2005). In some situations, bicycle parking facilities can substitute for a portion of automobile parking, particularly if implemented as part of a comprehensive bicycle improvement and encouragement program. Optimal bicycle parking supply depends on the level of cycling that occurs in that community and the type of destination. Some destinations, such as schools, campuses and recreation centers have 10-20% of visitors arrive by bicycle, at least during fair weather.

Improve User Information and Marketing

User information refers to information for travelers about parking availability, regulations and price, and about travel options, such as walking, ridesharing and transit. Many parking problems result in part from inadequate user information. User information can be provided by signs, maps, brochures, websites, and electronic guidance systems. It is particularly useful if there is a perceived parking shortage, although space are actually available in an area.

Improve Enforcement and Control

Improve Enforcement and Control means that parking regulations and pricing requirements are enforced more frequently, more effectively and more considerately. Evading parking regulations is a folk crime. Many otherwise upstanding citizens who otherwise never steal will proudly ignore parking regulations and evade payments, reducing their effectiveness. Improving enforcement and control supports parking management by increasing regulatory and pricing effectiveness. As parking management activities expand, so too should enforcement activities.

Transportation Management Associations and Parking Brokerage

Transportation Management Associations (TMAs) are private, non-profit, member-controlled organizations that provide transportation and parking management services in a particular area, such as a commercial district, mall or medical center ("Transportation Management Associations," VTPI 2005). TMAs can be an effective way to implement parking management programs. TMAs are typically funded through dues paid by member businesses, and local government grants.

Overflow Parking Plans

Overflow parking plans describe the management strategies that will be applied when parking facilities fill, for example, during special events, peak shopping periods, or temporary reductions in parking supply. Because most parking facilities are sized to accommodate peak demands that seldom occur, an overflow parking plan can significantly reduce the amount of parking needed, and provide reassurance that reduced supply will not create problems.

Address Spillover Problems

Spillover parking problems refers to the undesirable use of offsite parking facilities, such as when business customers and employees park on nearby residential streets or use another

businesses' parking lot. Concerns about spillover impacts are used to justify excessive parking requirements and opposition to management solutions. Addressing spillover problems can increase parking management program acceptability and effectiveness. There are several ways to address spillover parking problems.

- Provide information indicating where motorists may and may not park.
- Use regulations to control spillover impacts, such as time limits and permit programs on residential streets near activity centers.
- Use pricing to control spillover impacts, such as charging non-residents for parking on residential streets near activity centers, and businesses charging non-customers for using in their parking facilities.
- Create *Parking Benefit Districts* in areas that experience parking spillover problems, so on-street parking is priced (residents can be exempt).
- Compensate people who bear spillover parking impacts. For example, a high school can send complementary sport event tickets to residents of nearby streets who experience spillover parking problems.
- Establish a monitoring program to identify where parking spillover is a problem. This may include surveys to identify who is parking where, and ways for residents and businesses to report spillover problems.

Improve Parking Facility Design and Operation

Parking facility design and operation refers to physical layout, construction and day-to-day management. Improved design and operation can better integrate parking facilities into communities, improve the quality of service experienced by users, support parking management, and help address specific problems.

Summary

The table below summarizes potential parking management strategies and their impacts.

Table 7 **Parking Management Strategies**

Strategy	Description	Typical Reduction	Traffic Reduction
Shared Parking	Parking spaces serve multiple users and destinations.	10-30%	
Parking Regulations	Regulations favor higher-value uses such as service vehicles, deliveries, customers, quick errands, and people with special needs.	10-30%	
More Accurate and Flexible Standards	Adjust parking standards to more accurately reflect demand in a particular situation.	10-30%	
Parking Maximums	Establish maximum parking standards.	10-30%	
Remote Parking	Provide off-site or urban fringe parking facilities.	10-30%	
Smart Growth	Encourage more compact, mixed, multi-modal development to allow more parking sharing and use of alternative modes.	10-30%	✓
Walking and Cycling Improvements	Improve walking and cycling conditions to expand the range of destinations serviced by a parking facility.	5-15%	✓
Increase Capacity of Existing Facilities	Increase parking supply by using otherwise wasted space, smaller stalls, car stackers and valet parking.	5-15%	
Mobility Management	Encourage more efficient travel patterns, including changes in mode, timing, destination and vehicle trip frequency.	10-30%	✓
Parking Pricing	Charge motorists directly and efficiently for using parking facilities.	10-30%	✓
Improve Pricing Methods	Use better charging techniques to make pricing more convenient and cost effective.	Varies	✓
Financial Incentives	Provide financial incentives to shift mode such as parking cash out.	10-30%	✓
Unbundle Parking	Rent or sell parking facilities separately from building space.	10-30%	✓
Parking Tax Reform	Change tax policies to support parking management objectives.	5-15%	✓
Bicycle Facilities	Provide bicycle storage and changing facilities.	5-15%	✓
Improve Information and Marketing	Provide convenient and accurate information on parking availability and price, using maps, signs, brochures and the Internet.	5-15%	✓
Improve Enforcement	Insure that regulation enforcement is efficient, considerate and fair.	Varies	
Transport Management Assoc.	Establish member-controlled organizations that provide transport and parking management services in a particular area.	Varies	✓
Overflow Parking Plans	Establish plans to manage occasional peak parking demands.	Varies	
Address Spillover Problems	Use management, enforcement and pricing to address spillover problems.	Varies	
Parking Facility Design and Operation	Improve parking facility design and operations to help solve problems and support parking management.	Varies	

This table summarizes the parking management strategies described in this report. It indicates the typical reduction in the amount of parking required at a destination, and whether a strategy helps reduce vehicle traffic, and so also provides congestion, accident and pollution reduction benefits.

Not every strategy is appropriate in every situation. Actual impacts vary depending on geographic and demographic factors, how a strategy is implemented and other factors. Below are some general guidelines.

- Impacts are higher where there are more parking and travel options. For example, parking pricing will have greater demand reduction impacts if implemented in conjunction with improvements in rideshare and public transit services.
- Financial incentives tend to have greater impacts on lower-income consumers.
- Some strategies are complementary. For example, shared parking becomes more effective if implemented with suitable regulations, pricing and walkability improvements.
- Impacts generally increase over time as programs mature. A Low value may be appropriate the first year, but increases to Medium after two or three years, and High after five or ten years.

Special care is needed when predicting the impacts of a program that includes multiple parking management strategies. Be careful to take into account strategies with overlapping impacts. For example, Transportation Management Associations (TMAs) provide an institutional framework for implementing strategies that directly affect parking requirements. While it would be true to say that a TMA can reduce parking requirements by 10-30% compared with not having such an organization, it would be incorrect to add the demand reductions of the TMA to the impacts of the individual strategies it helps implement.

Total impacts are multiplicative not additive. Shared parking reduces the parking requirements by 10%, to 90% of the original level. The 10% reduction of Parking Pricing reduces this further to 81% of the original level, and another 10% reduction from Mobility Management results in 73% of the original level, a 27% reduction, somewhat less than the 30% reduction that would be calculated by adding three 10% reductions.

Some combinations of strategies have synergistic effects (total impacts are greater than the sum of their individual impacts), and so become more effective if implemented together. For example, sharing parking and walkability improvements may each reduce parking requirements just 10% if implemented alone, but 25% if implemented together because they are complementary.

Developing An Integrated Parking Plan

Below are recommendations for integrated parking planning. This should be adjusted to reflect the needs of a particular situation.

Define Scope

Define the geographic scope of analysis, such as the site, street, district/neighborhood and regional scale. It is desirable to plan for a walkable area, such as a business district or neighborhood, since this is the functional scale of parking activities.

Define Problems

Carefully define parking problems. For example, if people complain of inadequate parking it is important to determine where, when and to whom this occurs, and for what types of trips (deliveries, commuting, shoppers, tourists, etc.).

Strategic Planning Context

Parking planning should be coordinated with a community's overall strategic vision. This helps insure that individual decisions reflect broader community objectives.

Establish Evaluation Framework

Develop a comprehensive *evaluation framework*. This provides the basic structure for analyzing options, insuring that critical impacts are not overlooked and different situations are evaluated consistently. A framework identifies:

- *Perspective and scope*, the geographic range and time-scale of impacts to consider.
- *Goals* (desired outcomes to be achieved) and *objectives* (ways to achieve goals).
- *Evaluation criteria*, including costs, benefits and equity impacts to be considered.
- *Evaluation method*, how impacts are to be evaluated, such as benefit/cost analysis.
- *Performance indicators*, practical ways to measure progress toward objectives.
- *Base Case* definition, that is, what would happen without the policy or program.
- *How results are presented*, so results of different evaluations can be compared.

Survey Conditions

Survey parking supply (the number of parking spaces available in an area) and demand (the number of parking spaces occupied during peak periods) in the study area.

Identify and Evaluate Options

Develop a list of potential solutions using ideas from this report and stakeholder ideas. Evaluate each option with respect to evaluation criteria.

Develop An Implementation Plan

Once the components of a parking management plan are selected, the next step is to develop an implementation plan. This may include various phases and contingency-based options. For example, some strategies will be implemented the first year, others within three years, and a third set will only be implemented if necessary, based on performance indicators such as excessive parking congestion or spillover problems.

Conclusions

Current parking planning practices are inefficient, resulting in economically excessive parking supply, increased automobile traffic, and more dispersed destinations, contributing to various economic, social and environmental problems. There are many reasons to use management strategies that result in more efficient use of parking resources, in order to address parking problems without expanding supply.

Parking facilities that serve multiple destinations and are efficiently regulated or priced to favor higher value users (for example, delivery vehicles and customers over commuters and residents) tend to be efficiently used. On-street metered parking and commercial parking are particularly suitable for this type of management, and so should be favored over unpriced, off-street parking that serves a single destination.

This report describes more than two-dozen management strategies that result in more efficient use of parking resources. These strategies are technically feasible, cost effective, and can provide many benefits to users and communities. Although all of these strategies have been implemented successfully in some situations, they are not being implemented as much as economically justified, due to various institutional barriers. Parking management implementation requires changing the way we think about parking problems and expanding the range of options and impacts considered during planning.

Most parking management strategies have modest individual impacts, typically reducing parking requirements by 5-15%, but their impacts are cumulative and synergistic. A comprehensive parking management program that includes an appropriate combination of cost-effective strategies can usually reduce the amount of parking required at a destination by 20-40%, while providing additional social and economic benefits.

Management solutions represent a change from current practices and so various obstacles must be overcome for parking management to be implemented as much as optimal. Current planning practices are based on the assumption that parking should be abundant and provided free, with costs borne indirectly, incorporated into building construction costs or subsidized by governments. Current parking standards tend to be applied inflexibly, with little consideration of demographic, geographic and management practices that may affect parking requirements. Parking management requires changing current development, zoning and design practices. This requires that public officials, planners and the public change the way they think about parking problems and solutions, and become familiar with the full menu of parking management strategies available and the benefits they can provide. It requires an institutions and relationships, such as transportation management associations, and activities to improve enforcement and addressing potential spillover impacts.

This report summarizes the book *Parking Management Best Practices*, by Todd Litman, published by Planners Press in 2006. If you find this report useful, please purchase the book, which contains more detailed information.

References And Resources For More Information

Paul Barter (2010), *Parking Policy in Asian Cities*, Asian Development Bank (www.adb.org); at http://bit.ly/1RuGEdd and www.slideshare.net/PaulBarter/barter-for-adb-transport-forum-2010.

Paul Barter (2011), *Promising Parking Policies Worldwide: Lessons for India?* presented at the International Conference on Parking Reforms for a Livable City, 17 August 2011, New Delhi (www.reinventingparking.org/2011/10/promising-parking-policies-worldwide.html).

CNU (2008), *Parking Requirements and Affordable Housing*, Congress for the New Urbanism (www.cnu.org); at www.cnu.org/node/2241.

Matthew R. Cuddy (2007), *A Practical Method For Developing Context-Sensitive Residential Parking Standards*, Dissertation, Rutgers University; at http://bit.ly/1WPUSxp.

James M. Daisa and Terry Parker (2010), "Trip Generation Rates for Urban Infill Uses In California," *ITE Journal* (www.ite.org), Vol. 79, No. 6, June 2010, pp. 30-39.

Joshua Engel-Yan and Dylan Passmore (2010), "Assessing Alternative Approaches to Setting Parking Requirements," *ITE Journal* (www.ite.org), Vo. 80, No. 12, December, 30-25.

FHWA (2012), *Contemporary Approaches to Parking Pricing: A Primer*, Office of Operations (www.ops.fhwa.dot.gov), U.S. Federal Highway Administration; at http://bit.ly/22qQ816.

Zhan Guo, et al. (2012), *Amenity or Necessity? Street Standards as Parking Policy*, Mineta Transportation Institute (http://transweb.sjsu.edu); at http://bit.ly/25oAFE6.

HUD (2008), "Parking Regulations and Housing Affordability," *Regulatory Barriers Clearinghouse*, Volume 7, Issue 2, US Department of Housing and Urban Development, (www.huduser.org); at www.huduser.org/rbc/newsletter/vol7iss2more.html.

Angus Hulme-Moir (2010), *Making Way for the Car: Minimum Parking Requirements and Porirua City Centre*, Thesis, School of Geography, Environment and Earth Sciences, Victoria University of Wellington (http://researcharchive.vuw.ac.nz/handle/10063/1458).

International Parking Institute (www.parking.org) provides information and other resources for Parking Management professionals.

ITDP (2015), *Parking Guidebook for Beijing*, Institute for Transportation and Development Policy (www.itdp.org); at www.itdp.org/parking-guidebook-for-beijing.

Michael Kodransky and Gabrielle Hermann (2011), *Europe's Parking U-Turn: From Accommodation to Regulation*, Institute for Transportation and Development Policy (www.itdp.org); at www.itdp.org/documents/European_Parking_U-Turn.pdf.

Douglas Kolozsvari and Donald Shoup (2003), "Turning Small Change Into Big Changes," *Access 23*, University of California Transportation Center (www.uctc.net), Fall, pp. 2-7; www.sppsr.ucla.edu/up/webfiles/SmallChange.pdf.

J. Richard Kuzmyak, Rachel Weinberger, Richard H. Pratt and Herbert S. Levinson (2003), *Parking Management and Supply*, Chapter 18, Report 95, TCRP, TRB (www.trb.org).

Todd Litman (2004), *Parking Requirement Impacts on Housing Affordability*, VTPI (www.vtpi.org); at www.vtpi.org/park-hou.pdf.

Todd Litman (2005), "Parking Costs," *Transportation Cost and Benefit Analysis: Techniques, Estimates and Implications*, VTPI (www.vtpi.org); at www.vtpi.org/tca/tca0504.pdf.

Todd Litman (2006), *Parking Taxes: Evaluating Options and Impacts*, VTPI (www.vtpi.org); at www.vtpi.org/parking_tax.pdf.

Todd Litman (2006), *Parking Management Best Practices*, Planners Press (www.planning.org); www.vtpi.org/PMBP_Flyer.pdf.

Todd Litman (2006), *Parking Management: Innovative Solutions To Vehicle Parking Problems*, Planetzen (www.planetizen.com/node/19149).

Todd Litman (2007), *Pavement Busters Guide*, VTPI (www.vtpi.org); at www.vtpi.org/pavbust.pdf.

Todd Litman (2007), *Parking Management: Comprehensive Implementation Guide*, VTPI (www.vtpi.org); at www.vtpi.org/park_man_comp.pdf.

Todd Litman (2008), *Recommendations for Improving LEED Transportation and Parking Credits*, VTPI (www.vtpi.org); at www.vtpi.org/leed_rec.pdf.

Todd Litman (2009), *Land Use Impacts On Transport: How Land Use Factors Affect Travel Behavior,* VTPI (www.vtpi.org); at www.vtpi.org/landtravel.pdf.

Todd Litman (2010), *Parking Pricing Implementation Guidelines: How More Efficient Pricing Can Help Solve Parking Problems, Increase Revenue, And Achieve Other Planning Objectives*, Victoria Transport Policy Institute (www.vtpi.org); at www.vtpi.org/parkpricing.pdf.

Todd Litman (2011), "Why and How to Reduce the Amount of Land Paved for Roads and Parking Facilities," *Environmental Practice*, Vol. 13, No. 1, March, pp. 38-46 (http://journals.cambridge.org/action/displayJournal?jid=ENP); at www.vtpi.org/EP_Pav.pdf.

Todd Litman (2010), *Affordable-Accessible Housing In A Dynamic City: Why and How To Support Development of More Affordable Housing In Accessible Locations*, Victoria Transport Policy Institute (www.vtpi.org); at www.vtpi.org/aff_acc_hou.pdf.

Michael Manville and Donald Shoup (2005), "People, Parking, and Cities," *Journal of Urban Planning and Development*, December, pp. 233-245; at

http://shoup.bol.ucla.edu/People,Parking,CitiesJUPD.pdf; summarized in *Access 25*, (www.uctc.net), Fall 2004, pp. 2-8.

MRSC (2005), *Downtown Parking Solutions*, Municipal Research and Service Center of Washington (www.mrsc.org/Subjects/Transpo/Tpark/transsolut.aspx).

MTC (2007), *Smart Parking Seminar — Developing Policies for Your Community*, Metropolitan Transportation Commission (www.mtc.ca.gov/planning/smart_growth/parking_seminar.htm). Also see, *Developing Parking Policies to Support Smart Growth in Local Jurisdictions: Best Practices at* www.mtc.ca.gov/planning/smart_growth/parking_seminar/BestPractices.pdf.

Vinit Mukhija and Donald Shoup (2006), "Quantity Versus Quality in Off-Street Parking Requirements," *Journal of the American Planning Association*, Vol. 72, No. 3, Summer, pp. 296-308; at http://shoup.bol.ucla.edu/QuantityVersusQualityInOff-StreetParkingRequirements.pdf.

National Parking Institute (www.parking.org) is an organization for parking professionals.

Nelson/Nygaard (2009), *Getting More with Less: Managing Residential Parking in Urban Developments with Carsharing and Unbundling*, City CarShare (www.citycarshare.org); at www.citycarshare.org/download/CityCarShare2009BestPracticesReport.pdf.

NEMO Project (www.nemo.uconn.edu) addresses impervious surface impacts.

Oregon Downtown Development Association (2001), *Parking Management Made Easy: A Guide to Taming the Downtown Parking Beast*, Oregon DOT and Dept. of Environmental Quality (www.lcd.state.or.us); at www.oregon.gov/LCD/docs/publications/parkingguide.pdf.

Parking Today Website (www.parkingtoday.com) has information and links to parking resources.

Parking Network (www.parking-net.com), provides information for parking professionals.

Parking Reform website (www.parkingreform.org) promotes various reforms, particularly parking pricing with revenues returned to local communities.

PAS (2009), *Parking Solutions: Essential Info Packet*, Planning Advisory Service, American Planning Association (www.planning.org): at www.planning.org/pas/infopackets. These packets consist of compilation of related documents that provide practical information on various parking management strategies, suitable for use by planners and developers.

Push and Pull (http://push-pull-parking.eu/index.php?id=57) project website provides information on various parking management programs in Europe.

Gabriel Roth (1965), *Paying for Parking*, Hobart Paper 33 (London); at www.vtpi.org/roth_parking.pdf.

Daniel Rowe, et al. (2013), "Do Land Use, Transit and Walk Access Affect Residential Parking Demand?" *ITE Journal*, Vol. 83. No. 2, February, pp. 24-28; at http://1.usa.gov/1UgmpEE.

Summarizes King County *Right Size Parking Project* results (http://metro.kingcounty.gov/up/projects/right-size-parking).

Donald Shoup (1995), "An Opportunity to Reduce Minimum Parking Requirements," *Journal of the American Planning Association*, Vol. 61, No. 1, Winter 1995, pp. 14-28.

Donald C. Shoup (1999), "In Lieu of Required Parking," *Journal of Planning Education and Research*, Vol. 18, pp. 307-320, available at (www.sonic.net/~woodhull/trans).

Donald Shoup (1999b), "The Trouble With Minimum Parking Requirements," *Transportation Research A*, Vol. 33, No. 7/8, Sept./Nov., pp. 549-574; at www.vtpi.org/shoup.pdf.

Donald Shoup (2005), *The High Cost of Free Parking*, Planners Press (www.planning.org).

Donald Shoup (2008), *The Politics and Economics of Parking On Campus*, University of California Los Angeles (http://shoup.bol.ucla.edu/PoliticsAndEconomicsOfCampusParking.pdf).

Patrick Siegman (2008), *Less Traffic, Better Places: A Step-by-Step Guide to Reforming Parking Requirements*, San Diego Section of the Amercian Planning Association (www.sdapa.org); at http://sdapa.org/download/PatrickSiegman_SDParkingSym_7-14-06.pdf.

Mott Smith (2006), *Onsite Parking: The Scourge of America's Commercial Districts*, Planetizen (www.planetizen.com/node/19246).

Ruth Steiner, et al. (2012), *Impact of Parking Supply and Demand Management on Central Business District (CBD) Traffic Congestion, Transit Performance and Sustainable Land Use*, Florida DoT Research Center (www.dot.state.fl.us/research-center); at http://bit.ly/1sS3GH6.

Christopher A. Topp (2009), *Arapahoe County Parking Utilization Study Concerning Residential Transit Oriented Development*, School of Public Affairs, University of Colorado Denver; at www.vtpi.org/topp_parking.pdf.

USEPA (2006), *Parking Spaces / Community Places: Finding the Balance Through Smart Growth Solutions*, Development, Community, and Environment Division (DCED); U.S. Environmental Protection Agency (www.epa.gov/smartgrowth/parking.htm).

VTPI (2005), *Online TDM Encyclopedia*, Victoria Transport Policy Institute (www.vtpi.org).

Rachel Weinberger, Mark Seaman and Carolyn Johnson (2008), *Suburbanizing the City: How New York City Parking Requirements Lead to More Driving*, University of Pennsylvania for Transportation Alternatives (www.transalt.org); at www.transalt.org/files/newsroom/reports/suburbanizing_the_city.pdf.

Rachel Weinberger, John Kaehny and Matthew Rufo (2009), *U.S. Parking Policies: An Overview of Management Strategies*, Institute for Transportation and Development Policy (www.itdp.org); at www.itdp.org/documents/ITDP_US_Parking_Report.pdf.

Wilbur Smith Associates, Michael R. Kodama Planning, Richard Willson, KT Analytics and Rick Williams Consulting (2006), *Developing Parking Policies to Support Smart Growth in Local Jurisdictions: Best Practices*, Metropolitan Transportation Commission (www.mtc.ca.gov); at www.mtc.ca.gov/planning/smart_growth/parking_study/Nov06/MTC_Parking_BestPracticesDraft.pdf.

Richard Willson (2015), *Parking Management for Smart Growth*, Island Press (http://islandpress.org); at http://islandpress.org/book/parking-management-for-smart-growth.

www.vtpi.org/park_man.pdf

VILLAGE OF IRVINGTON
NEW YORK

INCORPORATED 1872

4

March 25, 2019

Ms. Carol A. Booth
Village Clerk
Village of Tarrytown
One Depot Plaza
Tarrytown, NY 10591

Dear Carol:

Please find enclosed a draft of a Local Law being considered by the Village Board of Trustees at their April 1, 2019 meeting. This Local Law seeks to amend the Irvington Zoning Code to permit short-term rentals.

If you have any questions or concerns, please feel free to contact our Village Administrator, Larry Schopfer at (914) 591-4358 or lschopfer@irvingtonny.gov.

Sincerely,

Karen

Karen A. Buccheri
Secretary to the Village Administrator

85 MAIN STREET - IRVINGTON, N.Y. 10533
TELEPHONE: (914) 591-7070 - FAX: (914) 591-4072
E-MAIL: office@irvingtonny.gov - WEB SITE: http://www.irvingtonny.gov
facebook.com/irvingtonvillage - twitter.com/irvingtonny

4

DRAFT

LOCAL LAW ___ OF 2019

AMENDING THE IRVINGTON ZONING CODE TO PERMIT SHORT-TERM RENTALS
(March 14, 2019)

Be it enacted by the Board of Trustees of the Village of Irvington that the Zoning Code is amended as follows:

Section 1: Section 224-3 (Definitions) is hereby amended by adding the following definition:

SHORT-TERM RENTAL - Rental of a whole or partial dwelling unit to visitors for dwelling, sleeping or lodging, for a period of no less than 24 hours or more than 30 consecutive days. The term "short-term rental" does not include bed-and-breakfast establishments, as permitted by §§ 224-8.D(7) and 224-36.B.

SHORT-TERM RENTAL UNIT – The portion of the dwelling unit rented out for short-term rental.

Section 2: Section 224-8 (One-Family Residence Districts, Use Regulations) is hereby amended by adding the following new accessory use to subsection B:

(11) Short-term rentals in accordance with Article XXXII of the Zoning Code.

Section 3: Subsection 224-8.B(11) is hereby redesignated as 224.8.B(12).

Section 4: Section 224-36.A (Business District, Use Regulations) is hereby amended by adding the following new use:

(19) In one-family, two-family and other dwelling units, short-term rentals in accordance with Article XXXII of the Zoning Code.

Section 5: Subsection 224-36.A (19) and (20) are hereby redesignated as 224-36.A (20) and (21), respectively.

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Section 6: The Zoning Code of the Village of Irvington is hereby amended by adding the following new article regulating Short-Term Rentals:

ARTICLE XXXII

Short-Term Rentals

§ 224-205. Purposes.

The purposes of this Article are to:

A. Legalize and regulate short-term rentals in the Village of Irvington and assure that short-term rental units meet applicable health, fire and safety standards.

B. Preserve the residential character of the Village.

C. Provide economic support for Village residents who would benefit from rental income.

D. Provide lodging for visitors to the Village and encourage tourism in the Village.

§ 224-206. Registration required.

No short-term rental is permitted to be established, maintained, operated or advertised unless it complies with the requirements of this Article and until it is registered in accordance with this Article.

§ 224-207. Requirements for short-term rental registration. A short-term rental (STR) unit may be registered only if the following requirements are met:

A. The dwelling unit in which the STR unit is located shall remain a single dwelling unit with housekeeping facilities in common, and may be rented to not more than one family, as defined in § 224-3.

B. The dwelling in which the STR unit is located must be the primary residence of the person renting out the STR unit.

C. The dwelling unit in which the STR unit is located must have been in

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existence in its present size for at least five years prior to the initial application for registration.

D. The dwelling, including the STR unit, must be in compliance with the Village Zoning Code, the New York State Uniform Fire Prevention and Building Code, and the Property Maintenance Code of New York State.

E. For one-family (attached and detached) and two-family dwellings, no exterior changes, including exterior lighting, shall be made to the dwelling that would alter the one- or two-family character and appearance of the residence.

F. No sign other than a sign permitted by § 224-192.A(3) shall be allowed.

G. A short-term rental is not permitted on the same lot as an accessory apartment.

H. No more than 50 short-term rentals may be registered at any one time throughout the Village. The limit on the number of STRs registered may not be varied by the Zoning Board of Appeals.

§ 224-208. Requirements for operating the short-term rental.

A. The maximum number of days a dwelling or part of dwelling may be rented out as a short-term rental is 180 days per year.

B. A short-term rental may not be used to host parties or other gatherings or events at the dwelling.

C. A written notice on a form to be provided by the Village, which contains information about relevant Village parking laws, garbage and recycling rules and schedules, and snow removal, and identifies the party(ies) responsible for responding to complaints about the STR, shall be completed and left at a conspicuous location inside the STR unit and maintained at such location by the operator of the STR and displayed at all times.

D. While a short-term rental unit is rented, the owner or lessee of the dwelling unit shall be responsible and available during the entire time of rental, for the purpose of responding within 30 minutes to complaints regarding the condition, operation, or conduct of occupants and or guests of the short-term rental unit. If the owner or lessee is not available, (s)he must

designate a person who will be so responsible. Prior to the beginning of any short-term rental period, the name(s) and telephone number(s) of the responsible party(ies) must be provided on the written notice required by paragraph C above.

E. Any person renting out a STR shall use best efforts to insure that the occupants and/or guests of the STR do not create unreasonable noise or disturbance, engage in disorderly conduct, violate any provision of the Irvington Code, or violate any law pertaining to disorderly conduct, the consumption of alcohol, or the use of illegal drugs.

F. A person renting out a STR, upon receiving notification that an occupant or tenant of his/her STR unit has created unreasonable noise or disturbance, engaged in disorderly conduct, or committed violations of the Irvington Code or any applicable law, shall respond within 30 minutes of the time the initial call was made, and shall take corrective action to address any violation and use best efforts to prevent the recurrence of such conduct.

G. A dwelling with a STR unit is subject to periodic inspections by the Building Department and Fire Inspector to ensure continued compliance with all applicable codes.

H. The person renting out the STR shall maintain a record of the number of guests and the beginning and ending dates of each short-term rental. Such record shall be submitted to the Building Department along with the application to renew the STR registration.

§ 224-209. Registration procedure.

A. The owner or lessee of the dwelling must file a registration form with the Village Building Department containing an affidavit demonstrating compliance with § 224-207.A through G above. The registration form must be accompanied by the non-refundable fee provided in Chapter 114.

B. The Building Inspector shall conduct a physical inspection of the proposed STR unit and the dwelling in which it is located. Registration shall not be permitted unless the Building Inspector finds that the STR complies with § 224-207.A through H above.

C. Registration of the STR will not be permitted if there are unresolved Code compliance issues, outstanding Village fines or fees, or unpaid taxes.

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D. Registration of the STR must be renewed annually, on the same terms and subject to the same fee as the initial registration.

E. The registration shall expire automatically upon a change in ownership of the dwelling in which the STR is located.

F. All persons who operate or advertise short-term rentals shall register the STR within 45 days of the date this local law is adopted. If the STR is not registered within 45 days, the person operating the STR shall be deemed in violation of this Article.

G. Short-term rentals are subject to any intervening changes in the Zoning Code, the New York State Uniform Fire Prevention and Building Code, and the Property Maintenance Code of New York State, including discontinuing them as a permitted use. Renewal of registration shall be denied if short-term rentals are no longer a permitted use or if the short-term rental no longer qualifies under the requirements of this Article.

§ 224-210. Enforcement.

A. Violations. Any person who rents out or offers to rent out his or her premises as a short-term rental without first registering it in accordance with this Article, or who violates any other provision of this Article, shall be in violation of this Article. The fine for a first violation shall be $500. The fine for a second violation shall be $1000. Violations shall be enforced as provided in § 95-12 of the Code of the Village of Irvington.

B. Presumptive evidence. The presence or existence of the following shall create a rebuttable presumption that a property is being utilized as a short-term rental:

(1) The property is offered for lease or rent on a short-term rental website, including but not limited to Airbnb, HomeAway, VRBO and similar websites.

(2) The property is offered for lease or rent by the use of any other advertising mechanism for a period of less than 30 days.

C. Revocation of registration. In addition to any penalties provided in § 224-10.A, the Board of Trustees may revoke the registration of any short-term rental if:

(1) It finds the STR to be in material breach of the requirements of this Article, or

(2) The operator of the STR is found guilty of two violations of this Article.

D. Procedure for revocation.

(1) If a person is found guilty of two violations of this Article, or if the Board of Trustees believes that there may be a material breach of the requirements of this Article, it shall hold a public hearing on the violations.

(2) Notice of the hearing shall be given to the operator of the short-term rental at least 15 days before the date of the hearing.

(3) In addition, notice of the hearing shall be published in the official newspaper of the Village at least 10 days before the date of the hearing.

(4) The decision of the Board of Trustees on revocation of the registration shall be by resolution. The decision of the Board of Trustees shall be final.

Section 7: Chapter 114 (Fees) is hereby amended by adding the following:

224-209	Short-term rental registration	$ 250
224-209	Short-term rental registration renewal	$ 150

Section 8: All ordinances, local laws, and parts thereof inconsistent with this local law are hereby repealed.

Section 9: This local law shall take effect immediately upon filing in the office of the New York Secretary of State.

Chapter 224. Zoning

Article XXXI. Accessory Apartments

§ 224-201. Requirements for special permits for accessory apartments.

No special permit for an accessory apartment pursuant to §§ 224-8D, 224-15A, 224-17A, and 224-36A(15) shall be authorized by the Planning Board unless the Planning Board finds that all of the following requirements are met:

A. The accessory apartment must be in a one-family dwelling in compliance with this Zoning Code.

B. The accessory apartment must be located in the principal building or in a permitted accessory building. [Amended 5-21-2018 by L.L. No. 7-2018]

C. The owner of the single-family residence must occupy either the principal dwelling or the accessory apartment as a principal residence.

D. An accessory apartment shall not include more than two bedrooms.

E. The single-family residence for which the accessory apartment special permit is sought must have been in existence in its present size for at least five years prior to the application for the special permit.

F. No exterior changes shall be made to the building in which the accessory apartment is located that, in the opinion of the Planning Board, would alter the single-family character and appearance of the residence.

G. The accessory apartment shall not adversely affect the character of the neighborhood in which it is located. In applying this requirement, the Planning Board shall consider the effect of the proposed accessory apartment on parking, traffic, noise, congestion, appearance and any other factor that the Planning Board deems relevant to the character of the neighborhood. The Planning Board may refuse to issue a special permit if it finds that the number of such approved apartments in the neighborhood, including the one proposed, will adversely affect the character of the neighborhood.

H. The accessory apartment must comply with the New York State Uniform Fire Prevention and Building Code, including all requirements for a dwelling unit.

I. No violations of the Irvington Code shall exist at the time of application for an accessory apartment special permit.

J. No more than 50 accessory apartment special permits may be in existence at any one time. The limit on the number of accessory apartment special permits may not be varied by the Zoning Board of Appeals.

FIRE RESCUE SYSTEMS

May 9, 2019

Tarrytown Fire Department
50 Main Street
Tarrytown, NY 10591

To Whom it May Concern,

The software in this package sold by Fire Rescue Systems(a division of SCM Products, Inc.) is Proprietary and can only be purchased through Fire Rescue Systems. All support of this package can only be performed by Fire Rescue Systems(a division of SCM Products, Inc.)

Thank you,

Keith M Siegel

Keith M Siegel
Fire Rescue Systems

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FIRE RESCUE SYSTEMS

SCM

60 Plant Ave Suite 2, Hauppauge, NY 11788
Tel. (631) 234-1304 Fax. (631) 910-2030

QUOTE

Number AAAQ20152805

Date May 9, 2019

Sold To

Tarrytown Fire Department

50 Main St
Tarrytown, NY 10591

Sales Rep

Keith Siegel

(631) 235-1863

Thank you for your interest in our Product Family. The Following is a quote covering the products and services that you requested.

Line	Description	Qty	Unit Price	Ext. Price
1	Dispatch Lite	1	$9,995.00	$9,995.00
2	County Interface	1	$1,995.00	$1,995.00
3	Paging Software Module	1	$1,995.00	$1,995.00
4	Mobile Responder System Interface	1	$2,495.00	$2,495.00
5	Mobile Responder System Droid App (Up to 50 users)	1	$495.00	$495.00
6	NFIRS Module	1	$1,995.00	$1,995.00
7	Bulletin Board/ Run Sheet Printer Interface	1	$1,995.00	$1,995.00
8	Roster and Service Awards	1	$5,995.00	$5,995.00
9	Inventory Maintenance	1	$2,995.00	$2,995.00
10	Finger Reader (Cost Per Unit)	5	$2,245.00	$11,225.00
11	Finger Reader Interface (One Time Fee)	1	$1,995.00	$1,995.00
12	GIS Map Import	1	$1,495.00	$1,495.00
13	Import Roster/Service Awards, NFIRS, Inventory from Existing Vendor	1	$5,995.00	$5,995.00

This quote is based on the Fire District agreeing to provide the following:
1. High Speed Internet Connection (Cable or DSL) at all station locations for installation and support of all Fire Rescue Systems Software. network confiifuration, administrative network login, and file permissions.
2. District will provide all hardware (other than Finger Readers), including printer(s), Bulletin Board Monitors(s), Baluns, server/workstation(s).
3. District agrees to provide all cabling and installation of Finger Readers.
4. Additional modules, system configuration, customization, custom reports, training, network licensing, data conversion.

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Line	Description	Qty	Unit Price	Ext. Price
14	Installation and Training on all Applications Quoted	1	$12,615.00	$12,615.00

SubTotal	$63,280.00
Tax	$0.00
Shipping	$0.00
Total	**$63,280.00**

Signature: _____

Approval Date: _____

Payment Terms: 50% Due at the start of the project
50% Due at the completion of the project

The yearly service agreement cost for the entire quote including the additional software pieces is $6,476.25 and $1,750.00 for the finger readers.

This quote is based on the Fire District agreeing to provide the following:
1. High Speed Internet Connection (Cable or DSL) at all station locations for installation and support of all Fire Rescue Systems Software. network confifuration, administrative network login, and file permissions.
2. District will provide all hardware (other than Finger Readers), including printer(s), Bulletin Board Monitors(s), Baluns, server/workstation(s).
3. District agrees to provide all cabling and installation of Finger Readers.
4. Additional modules, system configuration, customization, custom reports, training, network licensing, data conversion.

SCM

QUOTE

Number AAAQ20152804

Date May 9, 2019

60 Plant Ave Suite 2, Hauppauge, NY 11788
Tel. (631) 234-1304 Fax. (631) 910-2030

Sold To

Tarrytown Fire Department

50 Main St
Tarrytown, NY 10591

Sales Rep

Keith Siegel
(631) 235-1863

Thank you for your interest in our Product Family. The Following is a quote covering the products and services that you requested.

Line	Description	Qty	Unit Price	Ext. Price
1	Auto Directions Module (requires a waiver)	1	$1,995.00	$1,995.00
2	Mobile Data Terminal Interface (One time fee)	1	$2,495.00	$2,495.00
3	Mobile Data Terminal Client (Air Card Service Required) (Cost Per Unit)	3	$1,195.00	$3,585.00
4	GPS Modem Interface (Server) (One time fee)	1	$1,995.00	$1,995.00
5	GPS Laptop Interface (Cost Per Unit)	3	$495.00	$1,485.00
6	Installation and Training on MDT Devices	1	$2,100.00	$2,100.00

SubTotal	$13,655.00
Tax	$0.00
Shipping	$0.00
Total	**$13,655.00**

Signature: _____

Approval Date: _____

Payment Terms: 50% Due at the start of the project
50% Due at the completion of the project

This quote is based on the Fire District agreeing to provide the following:
1. High Speed Internet Connection (Cable or DSL) at all station locations for installation and support of all Fire Rescue Systems Software. network confifuration, administrative network login, and file permissions.
2. District will provide all hardware (other than Finger Readers), including printer(s), Bulletin Board Monitors(s), Baluns, server/workstation(s).
3. District agrees to provide all cabling and installation of Finger Readers.
4. Additional modules, system configuration, customization, custom reports, training, network licensing, data conversion.

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PROPOSAL

Number AAAQ20152790

Date May 9, 2019

60 Plant Ave Suite 2, Hauppauge, NY 11788
Tel. (631) 234-1304 Fax. (631) 910-2030

Sold To	Ship To
Tarrytown Fire Department 50 Main St Tarrytown, NY 10591 **Phone** (914) 631-8908 **Fax**	**Tarrytown Fire Department** 50 Main St Tarrytown, NY 10591 **Phone** (914) 631-8908 **Fax**

Here is the quote you requested.

Salesperson	State Contract #	NYS Vendor ID	Terms
Keith Siegel	PM68162	1000031408	

Qty	Part No.	Description	Unit Price	Ext. Price
3	CF-20G5-05VM	PANASONIC : Public Sector Spec - Standard,Win10 Pro,I5-7Y57,vPro,10.1in WUXGA 10-pt Touch+Digitizer,8GB,256GB SSD,Intel Wi-Fi A/B/G/N/AC,TPM 2.0,BT,Dual Pass (CH1:WWAN/CH2:WWAN-GPS),4G LTE-Advanced Multi Carrier (EM7455) - For Medic upfont in dock, 2 ambulances in back for Patient Care no dock	$3,783.12	$11,349.36
3	AP-PAN-CCGPD-Q-BL	PANASONIC : Antenna plus kit for 3 MDTs.	$242.82	$728.46
3	11798	Power Supply for Cradles	$124.66	$373.98
		2007 Tahoe		
1	C-HDM-136	Universal Heavy Duty Vehicle Mount	$74.23	$74.23
1	C-HDM-202	8.5" Heavy Duty Telescoping Pole, short handle	$123.82	$123.82
1	C-HDM-303	Heavy duty fixed top offset platform, 6" offset	$34.00	$34.00
1	C-MD-202	Tilt swivel motion device	$64.10	$64.10
1	C-HDM-401	Heavy duty stability side support arm, Mounts to OEM 42.18 frame under passenger glove box door	$50.62	$50.62

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Qty	Part No.	Description	Unit Price	Ext. Price
1	CG-X	Chargeguard-select	$73.42	$73.42
1	DS-PAN-1002-2	DEVMT,DOCKST,PAN,20,	$1,176.71	$1,176.71
		2011 Tahoe		
1	PKG-PSM-102	PKG,BASE,VMT,HDM,TAH,00-14,	$253.84	$253.84
1	C-HDM-401	Heavy duty stability side support arm, Mounts to OEM 42.18 frame under passenger glove box door	$50.62	$50.62
1	CG-X	Chargeguard-select	$73.42	$73.42
1	DS-PAN-1002-2	DEVMT,DOCKST,PAN,20,	$1,176.71	$1,176.71
		2016 Tahoe		
1	PKG-PSM-176	PKG,BASE,VMT,HDM,SILVR,14-18,TAH,15-19, 244.31 2015 Tahoe, Suburban, and 2014-2015 Chevrolet Silverado 1500, 2500 and 3500 pickup Standard Passenger Side Mount Package	$293.17	$293.17
1	C-HDM-401	Heavy duty stability side support arm, Mounts to OEM 42.18 frame under passenger glove box door	$50.62	$50.62
1	CG-X	Chargeguard-select	$73.42	$73.42
1	DS-PAN-1002-2	DEVMT,DOCKST,PAN,20,	$1,176.71	$1,176.71
3	Truck Install	Truck Install - Installation of Mounts and tablets into 3 vehicles.	$625.00	$1,875.00

SubTotal	$19,072.21
Tax	$0.00
Shipping	$0.00
Total	**$19,072.21**

Signature: _____

Approval Date: _____

Pricing on this quote is valid for 30 days.

Please contact me if I can be of further assistance.

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VILLAGE OF TARRYTOWN BOARD OF TRUSTEES
COUNTY OF WESTCHESTER: STATE OF NEW YORK
----------x

In the Matter of the Petition of

TARRYTOWN SELF STORAGE II, LLC
Petitioner,

PETITION FOR AMENDMENT TO VILLAGE OF TARRYTOWN ZONING MAP

For Amendment to the Village of Tarrytown Zoning Map.

Parcel: 1.70-29-37
----------x

TO THE MEMBERS OF THE BOARD OF TRUSTEES OF THE VILLAGE OF TARRYTOWN:

PETITIONER, TARRYTOWN SELF STORAGE II, LLC ("Petitioner"), with its principal place of business at 34 Norm Avenue, Bedford Hills, NY 10505, by its attorneys, McCullough, Goldberger & Staudt, LLP, hereby petitions the Board of Trustees of the Village of Tarrytown ("Tarrytown", or the "Village") for an amendment to the Zoning Map of Tarrytown (the "Zoning Map") as follows:

INTRODUCTION AND HISTORY

1. Petitioner is a duly formed and existing limited liability company under and by virtue of the laws of the State of New York.

2. Petitioner is the owner of a parcel of land totaling approximately 0.2 acres of real property located on the east side of South Depot Plaza, south of the intersection with Depot Plaza, in the Village of Tarrytown. The Property is shown and designated on the Town of Greenburgh Tax Map as Tax Parcel 1.70-29-37 (hereinafter this parcel shall be referred to as the "Property"). The Property is improved with an approximately 4000 square foot, one story, former warehouse building, which is currently vacant (the "Building"). A copy of a survey of the Property is attached as Exhibit A.

3. The Property is located within the WD Waterfront Zoning District as indicated on the Zoning Map. It is bordered by the Industrial "ID" District to the west and the Mixed Use "MU" and

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Multifamily "M3" Districts to the east. A copy of the relevant portion of the Village Zoning Map with the parcel highlighted is attached as Exhibit B.

4. To the north of the property is municipal parking lot. Directly to the south of the Property is Metro North property that is utilized for parking and storage. East of the Property are the multifamily homes on Franklin Court. Adjacent to the Property to the west is another lot owned by Petitioner (Lot 38) and immediately south of that a lot currently owned by 15 South Depot Realty, LLC (Lot 39). The entire area had, prior to the 1960's, been owned by the New York Central Railroad ("NYCRR"). In 1964, Lots 38 and 39 were conveyed by the NYCRR to Dorothy Goldberg. Lots 38 and 39 are currently zoned ID, although it is unclear as to when they were zoned with this designation. The Property was conveyed by the NYCRR to Morris Goldberg in 1967 (deed recorded in 1969). The Property had been a portion of a much larger property, much of which remains owned by the successor to the NYCRR today, and all of which is zoned WD District, despite clear separation from the Village's waterfront. The Property was never rezoned from WD, despite the construction of the Building and the industrial/warehouse use.

5. The Property is separated from the river by several other properties, as well as Metro North train tracks, which creates a significant separation from the Village's waterfront, making the waterfront zoning somewhat illogical. In addition, the Property is small and does not even meet the minimum lot area requirement for the WD District. Most important, given the Property's location and size, none of the permitted uses in the WD District are possible or appropriate for the Property. The permitted uses in the WD include parks and playgrounds; a seaplane base or off-street private parking and outdoor vehicle parking and storage (both of which are only permitted as temporary or conditional use); marinas, yachts and boat clubs; mass transit facilities; and municipal facilities other than recreational facilities. None of these uses are feasible uses for the Property. The existing building and its warehouse use are not permitted, although would be permitted if the Property were zoned ID.

6. Petitioner is hereby requesting an amendment to the Zoning Map, to rezone the Property to ID, consistent with the adjacent lots to the west and previous use of the Property.

PROPOSED USE OF THE PROPERTY

7. Petitioner is currently in discussions with a proposed user for the Property. The intention at this time is for an adaptive re-use of the existing building to install a brewery type restaurant use.

8. We believe the proposed use would be beneficial to the Village and in keeping with the Village's vision for the area as expressed in the Comprehensive Plan. The use will bring people to the area, and be conveniently located for those coming off of the trains.

9. The proposed use is a permitted use in the ID District, in which "Dining, entertainment and bar facilities" are listed as a permitted principal use.

10. Although no plan or agreement can be finalized at this time with the proposed user as the use is not currently permitted, site plan approval from the Planning Board will have to be obtained to finalize the details of the restaurant use.

11. The ID District zoning will be consistent with adjacent lots, and will unify the zoning of Petitioner's properties in this area. It is respectfully submitted that re-zoning to the ID District will bring the Property into greater conformity with the surrounding lots and uses, and represents more appropriate zoning for this lot that is not actually on the Village's waterfront, and allow for a beneficial use of the Property.

WHEREFORE, Petitioners respectfully request that the Village Board of Tarrytown amend the Zoning Map of the Village of Tarrytown as set forth above.

Dated: Tarrytown, New York
May 8, 2019

Respectfully submitted,
McCullough, Goldberger & Staudt, LLP

By: _____

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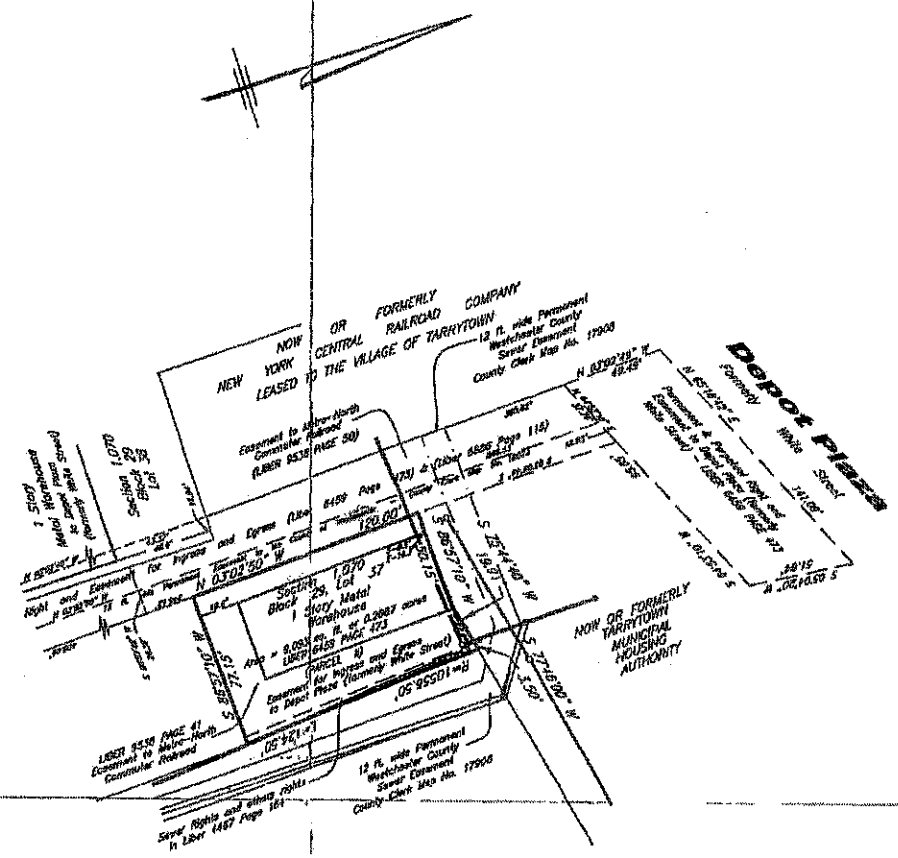
Exhibit A



Survey of Property
prepared for
American Independent Paper Mill Supply Company Inc.
in the Village of
Tarrytown
Town of Greenburgh
Westchester County, N.Y.
Scale 1"=40' Feb. 25, 2014

The premises being Lot 37, Block 29, Section 1.070 as shown on the official Tax Assessment Maps of the Village of Tarrytown, Town of Greenburgh

Subsurface structures and their encroachments, if any exist, are not shown hereon.

Unauthorized alterations or additions to a survey map is a violation of section 7209, sub-division 2, of the New York State Education Law.

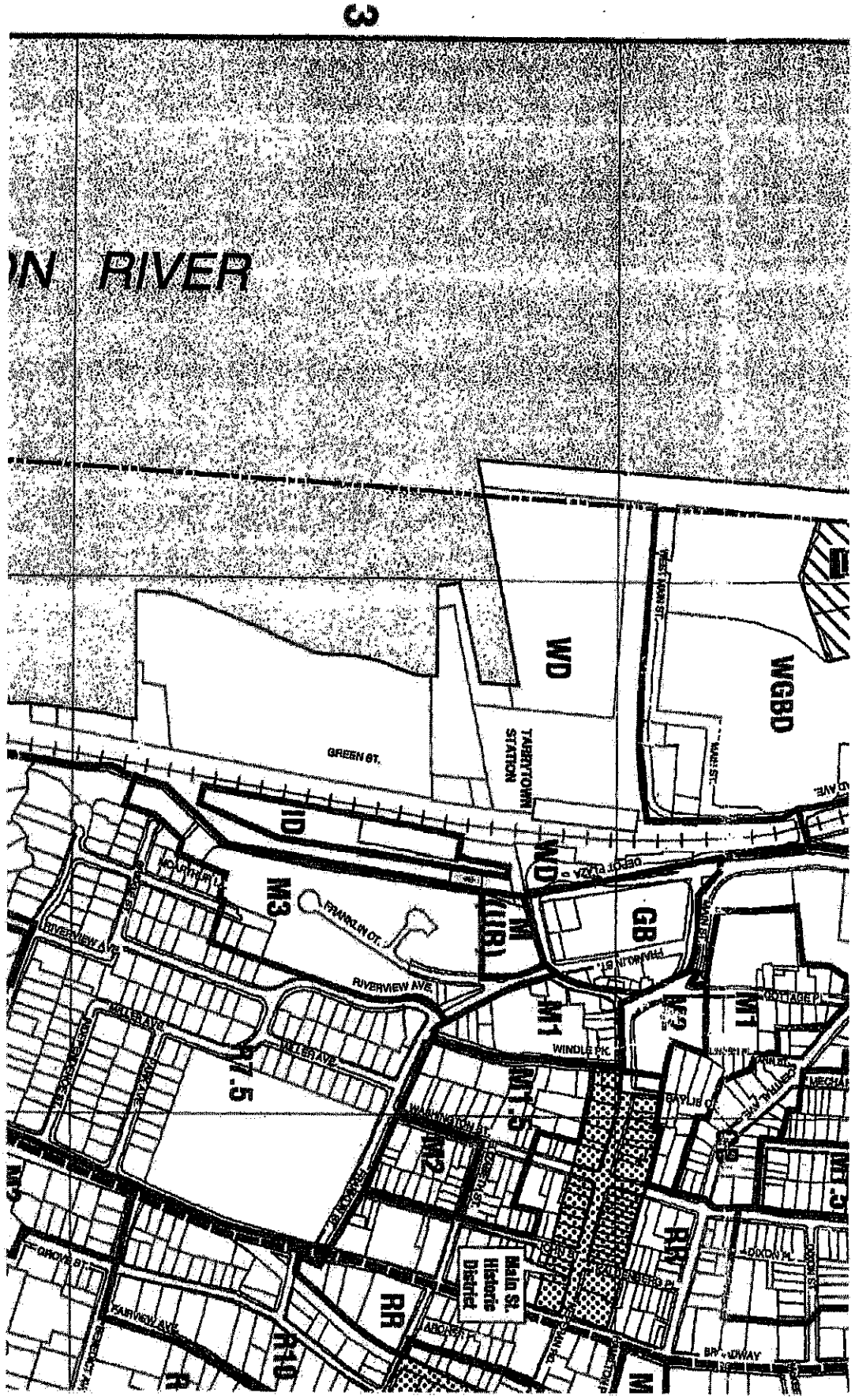
Only copies of the original survey marked with the land surveyor's inked or embossed seal shall be considered a true and valid copy.

Certifications indicated hereon signify that this survey was prepared in accordance with the existing code of practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors. Said certifications shall run to the person for whom the survey is prepared only, and on his behalf to the Title Company, governmental agency and lending institution listed hereon, and to the assignees of the lending institution. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

William H. Ward Jr. Senior V.P.
Ward Carpenter Engineers Inc.
76 Mamaroneck Avenue
White Plains, N.Y. 10601

Job # 50536 File # E:\50450\dwg\Lot37.dwg

Exhibit B


3
N RIVER
WD
WGBD
GREEN ST.
TARRYTOWN STATION
ID
M3
FRANKLIN CT.
RIVERVIEW AVE
M1
GB
M1-5
RR
Main St. Historic District
BROADWAY

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LOCAL LAW ____ - 2019

A local law to amend Chapter 259 of the Code of the Village of Tarrytown entitled Streets and Sidewalks, Article XVI, to regulate the use of bicycles on sidewalks within the Village.

Section 1. Be it enacted by the **Board of Trustees** of the **Village of Tarrytown** as follows (Language in **Bold and Underlined** to be added, language in ~~*Strikethrough and italics*~~ to be deleted):

Section 2. Chapter 259, Sections 51 and 52 shall be amended to read as follows:

§ 259-51. Definitions.

As used in this article, the following terms shall have the meanings indicated:

BICYCLE— Every two or three wheeled device upon which a person or persons may ride, propelled by human power, or with electric or other assisted power, through a belt, a chain or gears, with such wheels in a tandem or tricycle, except that it shall not include such a device having solid tires and intended for use only on a sidewalk by pre-teenage children.

IN-LINE SKATES — Shoes, skates or footwear with a single row of wheels.

ROLLER SKATES — Shoes, skates or footwear with two or more rows of roller wheels.

SKATEBOARD — A narrow board of wood, plastic, fiberglass or similar material with roller-skate or other type of wheels attached to each end and used for gliding or moving on any hard surfaces, without a mechanism or other device for steering while being used, operated or ridden.

§ 259-52. Unlawful activities.

The operation of bicycles on roads is allowed pursuant to New York State Vehicle and Traffic Law. However, no person shall use or operate a **bicycle,** skateboard, in-line skates, **or** roller skates upon any public streets (including the entire paved and improved surfaces thereof, including gutter areas, from curb-to-curb, where curbs exist), ~~*sidewalks*~~ or on any public lands within the Village of Tarrytown **in the following ways:**

A. In a careless manner without due caution and circumspection;
B. While endangering, or in any manner to create a risk or danger to, any person or property; or

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C. In any manner to impede or interfere **intentionally** with pedestrian or vehicular traffic.

§ 259-52.2. Restricted Operation on Sidewalks.

No person shall use or operate a bicycle, skateboard, in-line skates, or roller skates upon any of the below listed public sidewalks within the Village of Tarrytown except minors 12 ~~10~~ years of age or younger or disabled persons who cannot walk, at slow speeds that do not constitute a hazard for pedestrians on the sidewalks, on the following streets:

a. **Altamont Avenue**
b. **Broadway, South- from Franklin Street to Main Street**
c. **Broadway, North- from Main Street to Cobb Lane.**
d. **Franklin Street**
e. **John Street**
f. **Kaldenberg Place**
g. **Main Street, from Broadway to Depot Plaza**
h. **McKeel Avenue**
i. **Neperan Road**
j. **Washington Street, North**
k. **Washington Street, South**
l. **White Street**

Section 3: Supersession of other laws.

All laws, ordinances, rules and regulations of the Village are modified and superseded by this article with respect to their application to parking and enforcement.

Section 4: Severability

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this local law shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this local law.

Section 5: Effective Date

This local law shall take effect immediately upon filing in the office of the New York State Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

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Howard Wessells

From: Carla Iommetti <carla@saniequipcorp.com>
Sent: Friday, May 3, 2019 2:57 PM
To: Howard Wessells; Stephen Cannone
Subject: NJPA quote for garbage truck
Attachments: 20190502113456593.pdf

WITTKE

SANITATION EQUIPMENT CORP.
80 Furler Street
Totowa, NJ 07512
PHONE: 973-837-8915 FAX: 973-837-8919

Dear Howard,
We are pleased to submit our sourcewell (formerly NJPA) coop pricing for (1) Leach High Compaction Heavy Duty model 2RIII 29 cubic yard rearlaoder with Mack granite supplied by Gabrielli as per the attached specifications with the following equipment options

- 2RIII 29 yard leach packer
- Commercial tailgate weldment
  - Includes ½" hopper bottom one piece
  - 2 channel reinforcements on either side of tailgate
  - Large plate reinforcement on upper carrier pin
  - Heavier grade 80 center partition sheet
- Chromium slides in lieu of rollers
- DUAL Leach tipper actuator tuckaway Curbside only (for rollout carts with bars)
- Kickbar with latch and guide plates
- Hot shift PTO with married pump
- 2 LED strobe lights rear upper tailgate lightbar
- 2 LED strobe lights front bulkhead
- 2 LED hopper lights
- 2 LED work lights one on either side of tailgate
- Color 5.6" rear vision camera on tailgate
- Mud flaps front and rear of tandems
- Body side opening curbside for access to hydraulic tank
- Access door with ladder on street-side
- Painted white
- 1 year body warranty
- Bolt on rear steps
- Back up alarm

- Block lettering for body only included
- Chassis supplied by Gabrielli as per attached

NET COST: $246,645.60 each

If acceptable a properly executed PO will be required for order to be placed
There is no winch on this truck just a kickbar
All warranty parts and service for chassis will be responsibility of Gabrielli
All warranty parts and service for body will be responsibility of Sanitation Equipment Corp.

Brochure
http://www.groupelabrie.com/literature/en/Leach%202R-III.pdf

Kind Regards,
Carla Iommetti
Officer
Sanitation Equipment Corp.
80 Furler Street
Totowa, NJ 07512
Phone: 973-837-8915
Fax: 973-837-8919
Email: carla@saniequipcorp.com
Website: www.saniequipcorp.com