



Parking Management Plan

Township of Montclair, New Jersey

Appendix: Projected Conditions



Kimley»Horn

M E M O R A N D U M

To: Janice Talley, Township of Montclair
From: Nelson\Nygaard
Date: April 18, 2016
Subject: Projected Demand and Supply

PROJECTED DEMAND & SUPPLY

INTRODUCTION

To build upon the understanding of background issues and opportunities, and current supply and demand conditions, the following presents an overview of land use development anticipated to increase parking demand, and in some cases parking supply, in the next few years. This overview is organized as follows.

- **New Land Uses:** Measures and types of land uses identified for current, proposed, and expected projects
- **Added Parking Demand:** How much parking demand should be expected to be generated by these new land uses
- **Added Parking Supply:** How much parking supply should be expected to be included at these projects, or added to shared parking resources in coordination with their construction

NEW LAND USES

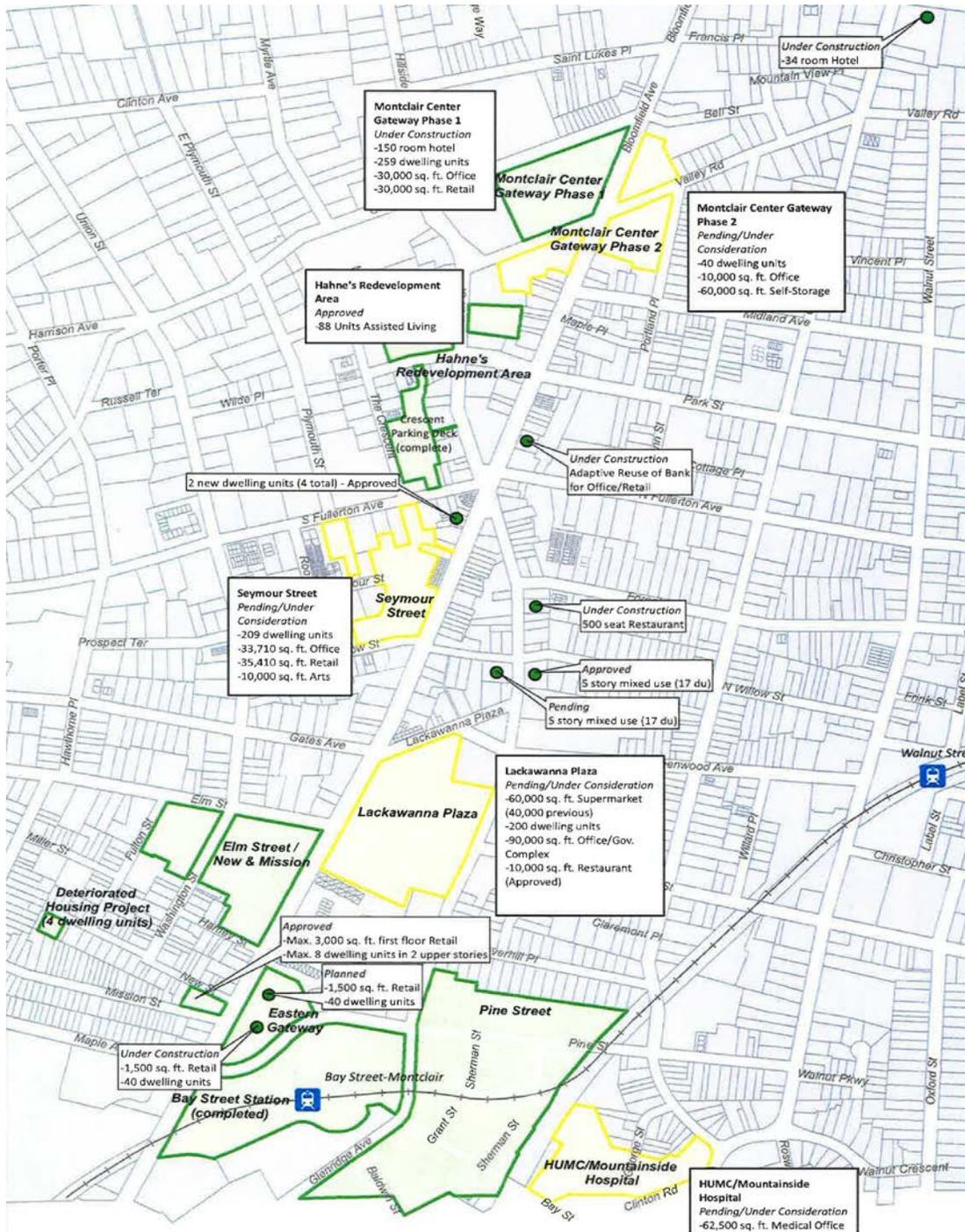
Montclair has attracted significant levels of growth over the last several years. With six NJ Transit stations offering rapid commutes to New York City, several thriving commercial centers, and a wide range of housing options, Montclair offers a unique combination of highly-sought-after amenities to prospective new residents. This growth, combined with the size and stability of the established Montclair population, offers a very attractive environment to new businesses. Most of this growth has been concentrated in Montclair Center, where densities are visibly rising. But, other, equally thriving, walkable commercial centers are also attracting growth, particularly Upper Montclair.

In this context, it is essential to build upon the understanding of existing parking conditions to prepare for expected changes. The following sections present an overview of development projects expected to be constructed over the next few years.

Montclair Center

Several projects have been identified for this area, which is already visibly growing, and transforming into a true, “live, work, play” urban center. The following map identifies the locations and details of projects that have been approved or have been submitted for approval.

Figure 1 Montclair Center Development Map



Map: Montclair Department of Planning & Community Development

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Projected New Land Uses

The following table summarizes the cumulative land use measures among Montclair Center projects.

Figure 2 Cumulative Land Uses for Montclair Center Projects

Land Use	Measure
Dwelling Units	834
Senior/Disabled Housing Units	88
Medical Office Square Footage	62,500
Government Office Square Footage	90,000
General Office Square Footage	73,170
Supermarket Square Footage	60,000
General Retail Square Footage	71,410
Restaurant Square Footage	30,000
Arts Square Footage	10,000
Hotel Rooms	184
Self-Storage Square Footage	60,000

Upper Montclair

By contrast to Montclair Center, just two projects are currently approved for Upper Montclair. The following table summarizes the cumulative land use measures among Upper Montclair projects.

Figure 3 Cumulative Land Uses for Upper Montclair Projects

Land Use	Measure
Dwelling Units	9
Medical Office Square Footage	11,000
General Office Square Footage	8,799
General Retail Square Footage	11,723

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
 Township of Montclair, NJ

Figure 4 Upper Montclair Development Map



Map: Montclair Department of Planning & Community Development

ADDED PARKING DEMAND

Projecting how much parking demand new land uses will generate within urban development environments is not easy. To the extent that driving alternatives are available and viable travel options, conventional approaches, such as using local code requirements or “industry standard” measures, tend to overestimate parking demand. In locations like Montclair Center and Upper Montclair, such methods can reliably produce demand projections on that high end of the range.

Conventional Projection Methods

One common approach to projecting parking demand generation from new land uses is to reference the zoning code to calculate the uses’ minimum parking requirements. This is also a reasonable method for projecting supplies, if not demand, at projects built by developers who choose to provide their own parking, rather than rely upon Township parking resources.

Current Zoning Code

The table below identifies measures of parking that would be required by the current development code in Montclair for the land uses proposed for the projects identified in the previous section.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Figure 5 Minimum Parking Requirements

Land Uses	Requirement Ratios	Montclair Center		Upper Montclair	
		Proposed Measures	Parking Required	Proposed Measures	Parking Required
Multifamily dwelling	1.3 /dwelling unit*	834 Units	1,084	9 Units	12
Senior citizen housing	0.5/ dwelling unit	88 Units	44	—	—
Medical offices	1/150 Gross SF	62,500 GSF	417	11,000 GSF	73
Governmental office	1/250 Gross SF	90,000 GSF	360	—	—
Professional offices	1/ 250 Gross SF	73,170 GSF	293	8,799 GSF	35
Supermarket	1/ 200 Gross SF	60,000 GSF	300	—	—
Retail	1/ 200 Gross SF	71,410 GSF	357	11,723 GSF	59
Restaurants	1/ 3 seats	900 Seats	300	—	—
Arts	1/ 200 Gross SF	10,000 GSF	50	—	—
Hotel, motel	1/ guest room	184 Rooms	184	—	—
Storage establishment	1/ 1,000 Gross SF	60,000 GSF	60	—	—
All		—	3,449	—	179

* http://www.state.nj.us/dca/divisions/codes/codereg/pdf_regs/njac_5_21.pdf (page 50)

As shown, minimum parking requirements would suggest a need for nearly 3,500 new spaces in Montclair Center, and 179 spaces for the Upper Montclair projects.

Standard Parking Generation Rates

Another common method for projecting parking for new land uses is to use demand-generation rates identified by the Institute of Transportation Engineers (ITE) in its manual titled *Parking Generation*. The table below uses these ITE rates, as identified in the 4th edition of *Parking Generation* to project demand and optimal supplies for the projected new land uses.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Figure 6 ITE Parking Generation Projections

Land Uses	Parking Demand Generation Rates (as occupied spaces)	Montclair Center		Upper Montclair	
		Proposed Measures	Projected Demand	Proposed Measures	Projected Demand
Multifamily dwelling	1.2 /dwelling unit	834 Units	1,001	9 Units	11
Senior citizen housing	0.4/ dwelling unit	88 Units	36	—	—
Medical offices	3.2 per 1,000 GSF	62,500 GSF	200	11,000 GSF	35
Governmental office	3.2 per 1,000 GSF	90,000 GSF	288	—	—
Professional offices	2.47 per 1,000 GSF	73,170 GSF	181	8,799 GSF	22
Supermarket	2.27 per 1,000 GSF	60,000 GSF	139	—	—
Retail	2.55 per 1,000 GSF	71,410 GSF	205	11,723 GSF	34
Restaurants	2.55 per 1,000 GSF	900 Seats	159	—	—
Arts	2.22 per 1,000 GSF	10,000 GSF	22	—	—
Hotel, motel	0.64/ guest room	184 Rooms	166	—	—
Storage establishment	0.14/ 1,000 GSF	60,000 GSF	8	—	—
All		Demand	2,405	Demand	102
		Optimal Supply	2,829	Optimal Supply	120

The ITE demand generation rates represent a projection of peak demand within a typical week. As such, they should not be read as a measure of supply need. Optimally, supplies provide a “buffer” above typical peak demand. This allows the built facility to accommodate atypical demand levels, as well as temporary supply reductions.

Using an “industry standard” 15% supply buffer to calculate optimal supply, the optimal supply for the Montclair Center projects would be 2,829 spaces, while the Upper Montclair projects would suggest an optimal supply of 120 spaces. The projected supply need for Montclair Center is roughly 18% lower than the minimum requirement would be. For Upper Montclair, the ITE-based projected supply need is about one-third below the minimum requirement.

Shared Parking Projection Method

To facilitate more accurate parking-demand projections in walkable urban centers like Montclair Center and Upper Montclair, Nelson\Nygaard developed a shared-parking model that factors in parking-efficiency impacts from mixed-use environments. Specifically, it factors in impacts from “captive market” efficiencies, such as when office workers shop, eat, and perhaps gather after work at destinations near work, without moving their cars from where they parked for work, or when one parking space accommodates a trip to the movies, dinner afterwards, and a quick stop at a drug store.

The following table presents the shared-parking model’s projected demand measures for the new uses anticipated in Montclair Center and Upper Montclair.¹

Figure 7 Shared Parking Model Demand Projections

Land Uses	Montclair Center		Upper Montclair	
	Proposed Measures	Projected Shared Parking Demand	Proposed Measures	Projected Shared Parking Demand
Multifamily dwelling	834 Units	951	9 Units	10
Senior citizen housing	88 Units	32	—	—
Medical offices	62,500 GSF	176	11,000 GSF	31
Governmental office	90,000 GSF	254	—	—
Professional offices	73,170 GSF	160	8,799 GSF	19
Supermarket	60,000 GSF	136	—	—
Retail	71,410 GSF	185	11,723 GSF	31
Restaurants	900 Seats	143	—	—
Arts	10,000 GSF	11	—	—
Hotel, motel	184 Rooms	106	—	—
Storage establishment	60,000 GSF	7	—	—
All	Cumulative Demand	2,161	Cumulative Demand	91
	Optimal Shared Supply	2,542	Optimal Shared Supply	108

Comparing Results

Comparing the measures identified above provides a useful range of projections for parking demand expected from the land uses anticipated in Montclair Center and Upper Montclair. The tables below provide a summary of these measures.

¹ Because the efficiencies captured depends upon the mix of uses, demand-generation ratios are not identified for each land use.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Figure 8 Montclair Center Projection Range

Land Uses	Parking Requirement	ITE		Shared Parking Cumulative	
		Projected Demand	Optimal Supply	Projected Demand	Optimal Supply
Multifamily dwelling	1,084	1,001	1,178	951	1,119
Senior citizen housing	44	36	42	32	38
Medical offices	417	200	235	176	207
Governmental office	360	288	339	254	299
Professional offices	293	181	213	160	188
Supermarket	300	139	164	136	160
Retail	357	205	241	185	218
Restaurants	300	159	187	143	168
Arts	50	22	26	11	13
Hotel, motel	184	166	195	106	125
Storage establishment	60	8	9	7	8
All	3,449	2,405	2,829	2,161	2,543

Figure 9 Upper Montclair Projection Range

Land Uses	Parking Requirement	ITE		Shared Parking Cumulative	
		Projected Demand	Optimal Supply	Projected Demand	Optimal Supply
Multifamily dwelling	12	11	13	10	12
Medical offices	73	35	41	31	36
Professional offices	35	22	26	19	22
Retail	59	34	40	31	36
All	179	102	120	91	106

These tables present findings that suggest that current parking requirements would significantly over-require parking for the projects expected in these areas. The ITE rates used for the second set of projections are generally considered to over-project demand in walkable, urban districts with decent-or-better transit. The fact that the code would require far more parking than even these measures suggest underlines a need to adjust parking requirements in these areas of Montclair.

Compared to the ITE-based projections, the shared-parking model numbers are even lower. This is a result of factoring in the efficiencies that are common in mixed-use areas in which residents and employees make use of walkable access to goods, services, dining, and other destinations.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
 Township of Montclair, NJ

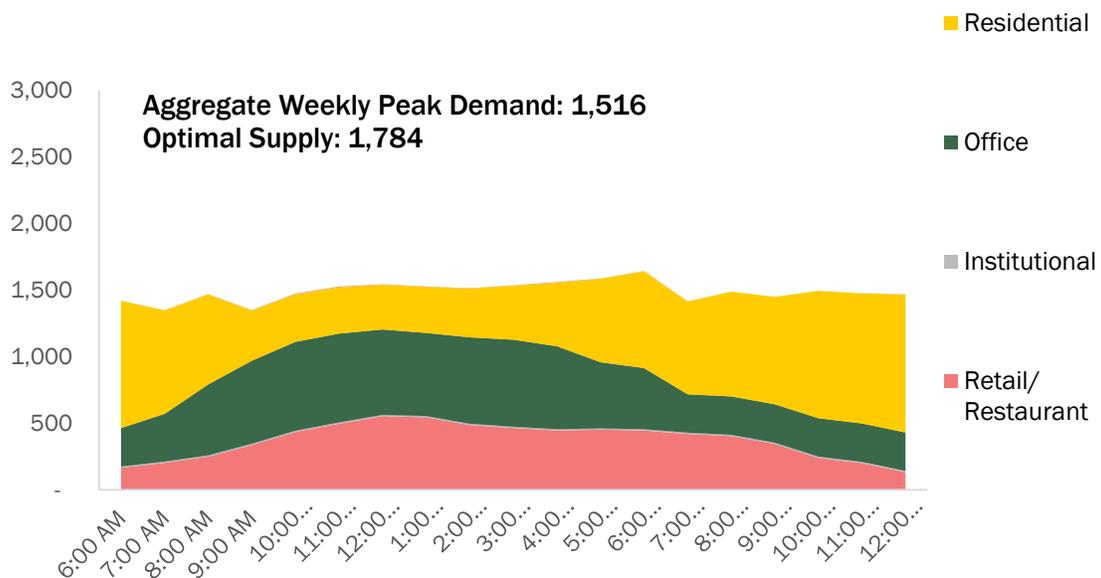
When such areas primarily rely upon a shared pool of parking spaces, even further efficiencies can be realized. This provides visitors as well as residents and employees with “park once” opportunities to leave their cars in place and visit multiple area destinations. It also allows more demand to be accommodated in fewer spaces by taking advantage of offsetting demand patterns among area destinations. For instance, spaces that were filled with bank employees at 4 PM typically empty out by 6PM, and can therefore accommodate movie goers starting to arrive. If both the bank and the movie theater had their own dedicated parking, their combined supply needs would be far greater.

The shared-parking model can project parking demand assuming this sort of district-level shared parking management, such as exists in Montclair Center and Upper Montclair.

Factoring Impact of District-Level Sharing

At the individual use level, the shared-parking model factors in the “captive market” efficiencies of mixed-use districts. When districts such as Montclair Center and Upper Montclair largely rely upon parking supplies that are shared among all area uses/users, significant efficiencies can also be realized through the “offsetting peaks” created by the variety of uses present. This can substantially reduce the aggregate parking supply needed in such areas. The graph below presents model-projections of aggregate demand levels for the new land uses expected in Montclair Center.

Figure 10 Montclair Center Aggregate Demand and Supply

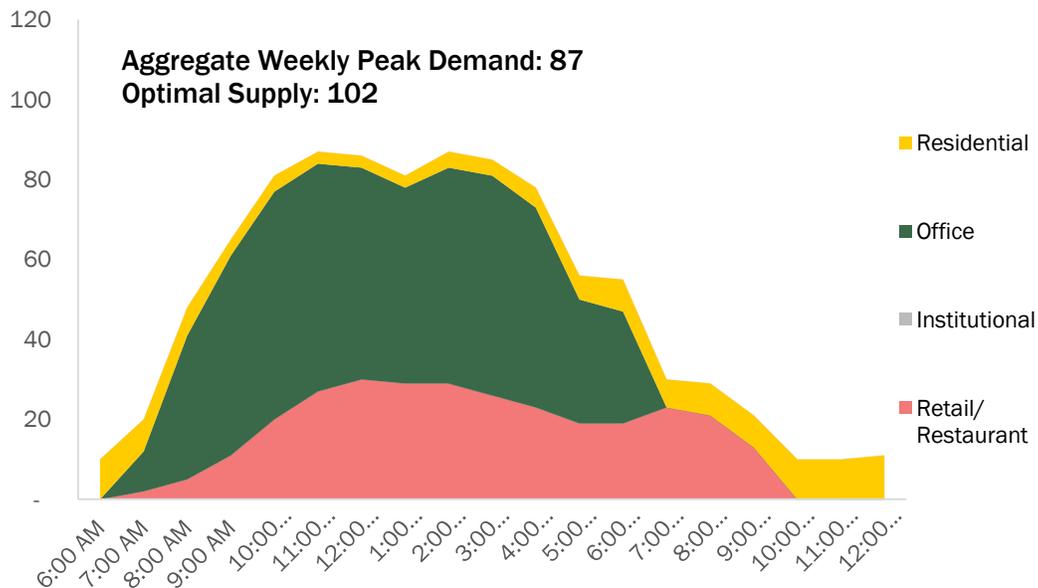


As shown above, the impact on aggregate parking demand is projected to be particularly significant among the land uses projected for Montclair Center development, reducing demand projections by roughly 500 parked cars, and optimal supply measures by roughly 700 spaces. Even at a modest construction-cost estimate of \$15,000 per space, a supply reduction of 700 spaces represents over \$10M in avoided costs. It also represents significant real estate preserved for other uses. This underscores the potential value of strategically-managed, shared parking systems in these kinds of areas.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

As shown below, the impact of the same managed, shared-parking efficiencies would be much more modest in Upper Montclair. This, however, is a result of the more modest measures of new land uses expected in this area, and the less-even balance between residential and non-residential land uses expected.

Figure 11 Upper Montclair Aggregate Demand and Supply



Summary

A range of expected parking needs can be taken from the analysis above, with the level of need largely determined by how much demand is expected to be accommodated via Township-managed, shared parking vs. private parking.

Minimal Shared Parking

If added parking demand will largely be met via on-site, reserved parking at each new project, the ITE-based projections present a conventional calculation of added parking need in each area.

- Montclair Center – Demand: 2,405 Optimal Supply: 2,829
- Upper Montclair – Demand: 102 Optimal Supply: 120

Moderate Shared Parking

If added parking demand will largely be met via on-site parking that is frequently shared among neighboring uses, the shared-parking model projections present a reasonable projection of added parking need in each area.

- Montclair Center – Demand: 2,161 Optimal Supply: 2,543
- Upper Montclair – Demand: 91 Optimal Supply: 106

Mostly Shared Parking

If added parking demand will largely be met via Township-managed, shared parking, the aggregate measures of demand from the shared-parking model will be most apt for anticipating future parking needs.

- Montclair Center – Demand: 1,516 Optimal Supply: 1,784
- Upper Montclair – Demand: 87 Optimal Supply: 102

In both areas, assuming moderate to mostly shared parking seem most appropriate, resulting in the following range of expected added parking supply needs.

Montclair Center: between 1,784 and 2,543 spaces

Upper Montclair: between 102 and 106 spaces

ADDED PARKING SUPPLY

If Built to Meet Minimum Parking Requirements

If all projects meet their minimum parking requirements, 3,449 new spaces would be added in Montclair Center, and another 179 spaces would be built in Upper Montclair. Not only would these be excessive levels of parking, relative to projected need, but these spaces would mostly likely provide no shared benefit for the needs of other area destinations.

As shown in the sections above, this result would represent a significant oversupply of parking for these new land uses. This, in turn, would add major costs to the proposed projects, and dramatically influence the scale, design, and character of the buildings that get built — all at the cost of their compatibility with a walkable-urban context. The best example of what this looks like and how it functions is the section of Upper Montclair along Valley Road south of Cooper Avenue.

Figure 12 Upper Montclair near Cooper Avenue



COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Not only does development oriented toward minimum parking requirements result in a lot more parking, it creates an environment of constant left turns and dramatically reduces the quality of pedestrian mobility.

If Built According to Recent Variance Patterns

To avoid the many, significant downsides of enforcing minimum parking requirements in areas like Montclair Center and Upper Montclair, many projects are granted variances that reduce or waive a project’s parking requirements. Approved waivers have included commitments to lease off-site spaces for valet parking (for a proposed restaurant project) and to secure monthly permits in a nearby MPU parking facility. The following table presents the requirements of several, recent development projects, and the amount of parking that was approved/provided at each.

Figure 13 Required vs. Approved Parking among Recent Projects

Project Name	Location	C-1 Zone	Required Parking	Approved Parking
Essex Restaurant Group	183-191 Glenridge Avenue	Yes	76	76
Glenridge & North Willow	167-167 Glenridge Avenue	Yes	40	29
172 Glenridge Avenue	172 Glenridge Avenue	Yes	42	53
695 Bloomfield Ave	695 Bloomfield Avenue	Yes	15	2
Lane Valley Road	510-515 Valley Road	No	209	15
211 Bellevue Realty, LLC	211 Bellevue Ave	No	14	8
50 Upper Montclair Plaza	50 Upper Montclair Plaza	No	79	0
Montclair Loft Partners, LLC	16 & 18 Label Street	No	10	17
237-239 Lorraine Avenue	237-239 Lorraine Avenue	No	60	60
Georgian Inn	37 N. Mountain Avenue	No	35	51
491 Bloomfield Avenue	491 Bloomfield Avenue	Yes	18	0
440-444 Bloomfield Avenue	440-444 Bloomfield Avenue	Yes	0	0
All			598	311

As shown, the share of required parking that was ultimately approved and built on-site is just over half (52%) of what was originally required. The table below presents what this would amount to, for the two redevelopment centers, compared to the measures of Added Parking Demand identified in the previous section.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Figure 14 Expected Supply Measures and Measures of Need

Area	Parking Requirement	ITE-Suggested Supply	Suggested Supply w/ On-Site Sharing	Suggested Supply w/ District-Level Sharing	Built at Recent Requirement/Built Rate
Montclair Center	3,449	2,829	2,543	1,784	1,793
Upper Montclair	179	120	106	102	93
Combined	3,628	2,949	2,649	1,886	1,887

As indicated, if recent variance patterns hold for the expected development identified in this analysis, the parking supplies included with these projects would be remarkably aligned with expected supply needs, if the majority of supplies were shared at the district level. This is the set of number shaded in green above.

Such supplies, however, would typically be provided as accessory to the land uses included in these projects. This would make the suggested supplies in the orange-shaded column a more apt measure of supply sufficiency. As such, the following conclusions can be made in terms the expected balance between the parking generated by new development, and the supply likely to be provided in conjunction with its approval/realization.

- *If most parking is provided and managed as shared/public parking, the projected supplies should be sufficient to meet expected needs.*
- *If, however, most parking is provided as “accessory” parking, reserved for those living, working in, or visiting destinations at these new land uses, a supply deficit of nearly 800 spaces may be experienced, most of it in Montclair Center.*

EXISTING CAPACITY

Existing supply and demand conditions suggest some level of existing capacity, within Township-managed facilities, to accommodate some of the above-described increase in parking demand. This capacity is assessed separately for Montclair Center and Upper Montclair below.

MONTCLAIR CENTER

There are several, Township-managed parking facilities within Montclair Center that would be within reasonable proximity to the projects identified for this area, as listed below.

- Bay Street Deck
- Bay Street Ext Lot
- Crescent Deck
- Fullerton Deck
- Gates Ave Lot
- Maple Plaza Lot
- Midtown Parking Lot
- Montague Lot
- Plymouth Lot
- Portland Lot
- South Fullerton Lot
- South Willow Lot
- Valley Road Lot

The table below identifies measures of excess capacity for this set of parking facilities, based on occupancy surveys conducted in the fall of 2015.

Figure 15 Excess Capacity at Montclair Center Facilities

Weekdays		Weekends	
Permit	Hourly	Permit	Hourly
129	235	311	90

This would suggest that existing MPU facilities could potentially provide slightly more than 300 spaces toward expected new parking demand within Montclair Center.

UPPER MONTCLAIR

There are five, Township-managed parking facilities within Upper Montclair that would be within reasonable proximity to the projects identified for this area, as listed below.

- Bellevue Erie
- Bellevue Lorraine
- Bellevue Lot
- Lorraine Ext.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

- Upper Montclair Plaza
- The table below identifies measures of excess capacity for this set of parking facilities, based on occupancy surveys conducted in the fall of 2015.

Figure 16 Excess Capacity at Montclair Center Facilities

Weekdays		Weekends	
Permit	Hourly	Permit	Hourly
33	23	81	5

This would suggest that existing MPU facilities could potentially provide slightly more than 50 spaces toward expected new parking demand within Upper Montclair.

ADDRESSING PROJECTED GAPS

The above projections identify a likely supply gap of roughly 800 spaces, concentrated within Montclair Center, should expected development following recent supply patterns, and should most of the supply created be managed as accessory to on-site land uses, and not as public/shared parking. The most efficient way for this parking need to be met would be through some kind of expansion of public, shared parking resources. Within such a system, all area uses benefit from a greater pool of shared resources, extending the value gained from each space added. In fact, should most to all of the expected supply be provided in this most-efficient manner, the projected supply deficit is eliminated, through the combination of captive-market and offsetting-peak efficiencies such parking makes viable.

Pooled parking solutions are also much more appropriate for walkable-urban contexts, less costly, and more flexible in meeting the dynamic and evolving parking needs of Montclair's commercial centers. By focusing on shared solutions, and district-wide benefits, these options help individual destinations by increasing the "overflow" capacity available to all destinations when their demand is highest. They also tend to better support maintaining or improving area walk, bike, and transit mobility, further increasing the amount of growth that can be realized relative to area parking supplies.

The following sections, therefore, identify opportunities to accommodate as much of the projected growth in Montclair Center and Upper Montclair as possible through a combination of Expanding Shared Parking and Reducing Parking Demand through improved non-driving mobility and Transportation Demand Management.

EXPANDING SHARED PARKING

Following is an overview of options available for expanding shared parking capacities to accommodate much (or all) of the growth expected in Montclair Center and Upper Montclair. These are organized into the following, distinct categories of opportunity.

- Expanding Existing Capacities – Strategies increasing the capacity of existing supplies.
- Expanding Supplies – Strategies for cost-effective and context-supportive supply expansions

Expanding Capacities

The following strategies can expand access to existing supplies, either by making more spaces available for public parking, or by extending the "effective capacity" of supplies that are already available as public parking.

Park-and-Ride Valet

The configuration of parking facilities at Walnut Street and Bay Street present opportunities to consider valet parking at these locations.

- At Bay Street, this would potentially allow "tandem" parking arrangements that could extend the capacity of its high-demand garage.
- At Walnut Street, this could make use of the lightly-used, remote lot at this station.

The Walnut Street station offers a distinctly promising configuration for piloting a valet program.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

- A little-used lot that is well located for use as a valet “stacking” lot
- The location of this same lot on the “homebound” side for most station users, which makes it well-suited for drivers to retrieve their own cars upon their return, which should allow a drop-off-only, AM-only valet program to work well here.
 - This should greatly reduce the cost of the valet operation.
 - It also would eliminate the need to designate any curbsides for valet pickup activity in the afternoons/evenings.
- A stretch of 8 metered parking spaces along Depot Square that could be used for a valet drop off until 10AM, well before short-term parking demand is likely to become significant in this area.

Figure 17 Potential Valet Configuration at Walnut Street



On-Street Regulations

Resident Permit Parking

In many areas, Montclair residents lack off-street parking options to meet their parking needs. Overnight parking bans, and time-limited curbside parking in many of these areas means that many of these residents end up parking in MPU-managed parking lots. In the meantime, on-street parking in these areas tends to be significantly underutilized. A more nimble, state-of-the-practice, resident-permit parking program would allow these residents to park on their streets, freeing up spaces in many parking lots.

Daytime Employee Permits

Another means of getting more value out of spaces currently restricted to two-hour parking would be to offer a limited supply of daytime-employee parking permits, restricted to blocks that are currently underutilized during weekdays. Such a program can both reduce employee parking in prime on-street spaces and off-street lots, and generate revenue for making improvements in participating residential areas.

Shared Parking Brokerage

Township-managed parking resources provide the most flexible and largest supply of parking in most of Montclair's commercial centers. Each of these centers, however, also contains multiple privately-managed, off-street parking facilities that are generally reserved for on-site tenants and their visitors.

Figure 18 Private Lot in Montclair Center Area

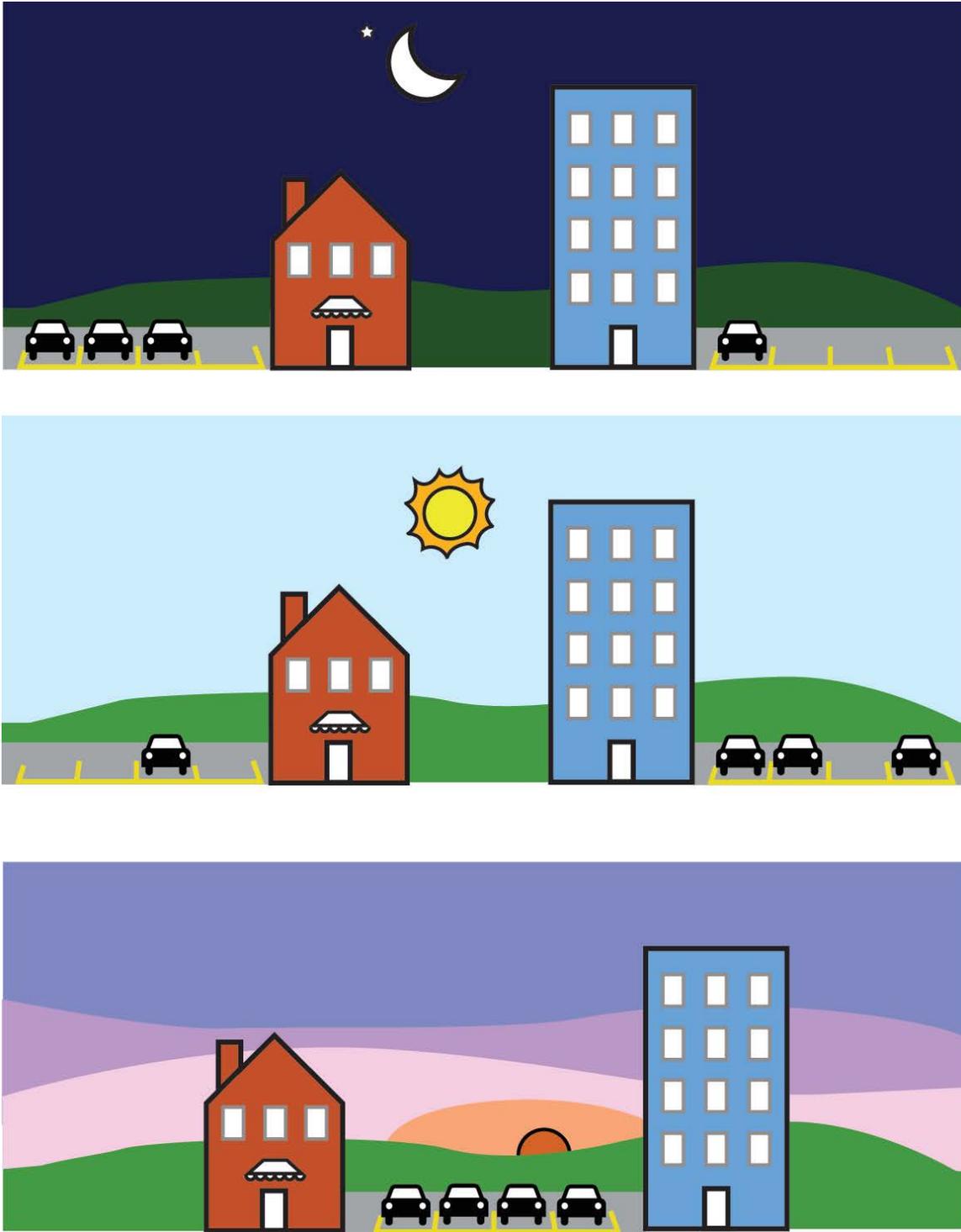


Because these spaces are restricted in this way, they tend to be significantly under-utilized when the land uses they serve are not busy. This provides an opportunity to explore strategic, shared-

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

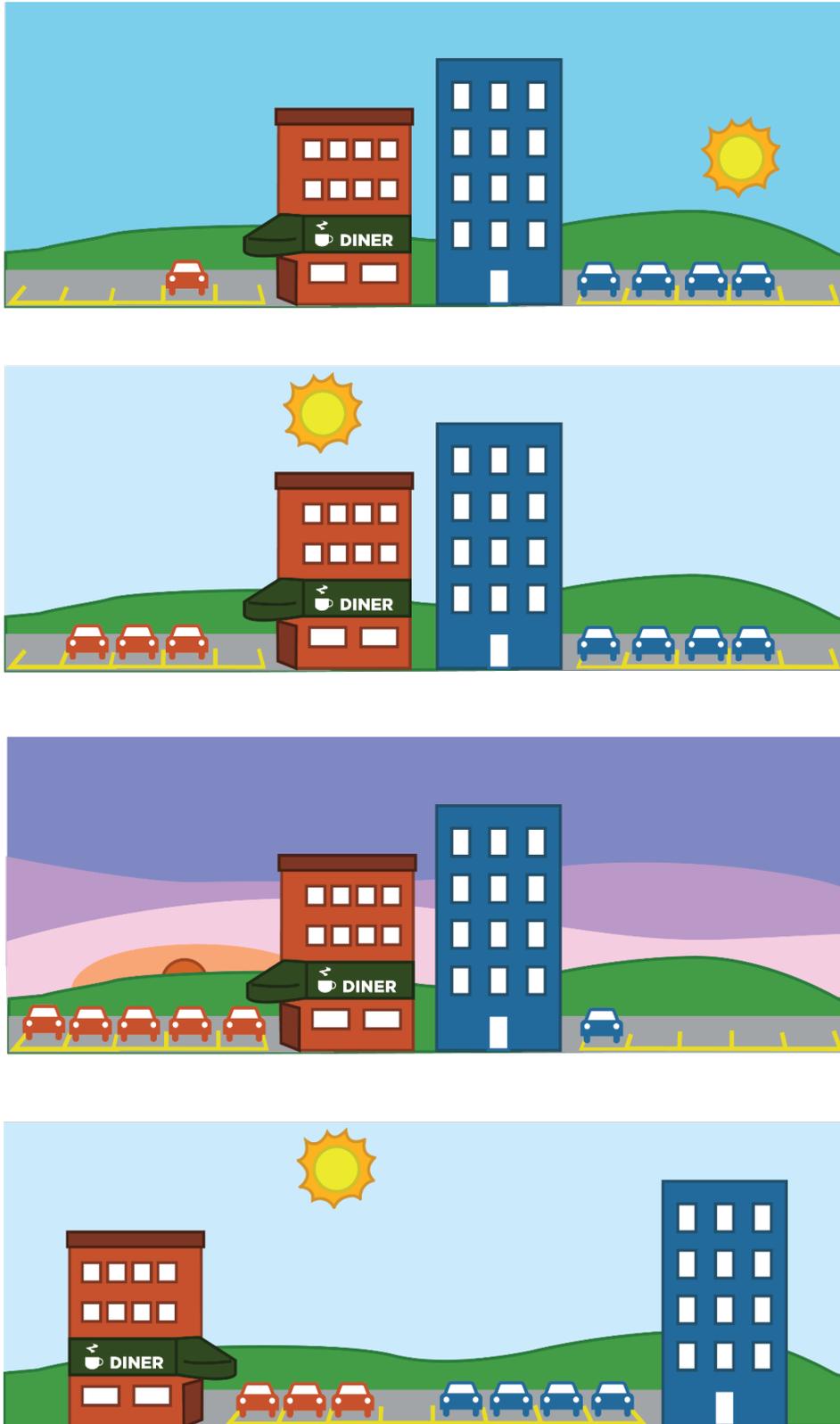
parking arrangements that can make use of this excess capacity to expand the effective supply available to other uses that happen to be busy at these times.

Figure 19 How Shared Parking Reduces Supply Needs: Office and Residential Use Context



COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Figure 20 How Shared Parking Reduces Supply Needs: Office and Commercial Use Context



COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Viable sharing arrangements often fail to materialize due to a lack of initiative among those seeking more capacity, or to liability concerns among those with excess capacity. MPU staff can play a vital role in realizing these potential capacity gains by engaging these parties and actively exploring these options, as follows.

- Liaise between business, property, and lot owners with recognizable opportunities for mutually beneficial arrangements.
- Initiate negotiations by providing an independent perspective on issues and opportunities, identifying shared-benefit opportunities, and helping to address common concerns.
- Negotiate agreements, including identifying strategic agreement components, as necessary, such as;
 - Compensation in the form of increased lot maintenance, lot improvements, added security, etc.;
 - Restricting access to the shared parking, via permits, to area employees to reduce risk and increase accountability;
 - Defining any added security or enforcement measures necessary to ensure that the primary uses of the lot are prioritized.
- Stepping in to remove stubborn barriers to viable arrangement, when feasible.
 - This commonly includes assuming added liability-insurance costs related to the sharing agreements.

The Traffic and Parking Committee (TPAC) endorsed this approach in its December 2015 meeting, suggesting the following approach to expand public parking capacities.

- Seek shared arrangements to use private lots, particularly during events and after hours.
- There are many private spots throughout the town that can be shared on weekends. (office buildings, schools, and houses of worship, etc.).
- Strategies should include options for the Township and Parking Utility to address insurance issues related to the added liability for private lot owners.

Public Valet

Unlike other valet programs that serve only one business, public valets are designed to serve business on a district or sub-district scale. An on-street public valet drop-off/pickup station can greatly expand access to on-street parking during high-demand times. These services provide a high level of parking convenience, make effective use of low-demand off-street locations, and promote park-once by allowing the service to be used as an extension of the Township's parking system.

Figure 21 Signs Noting Evening-Based Public Valet in Cleveland



For customers, these services offer an easy alternative to finding on-street parking, or dealing with off-street facilities, by allowing drivers to drop-off their car at a central location, shop, eat, catch a movie, run errands, etc. and not pick up their car until they are ready to go home. Just as importantly, valet services can facilitate shared parking arrangements, by limiting access to the shared facility to an identifiable service that can assume responsibility for all risk. This can open up access to private parking lots that might otherwise remain significantly underutilized.

A public valet can also help facilitate shared parking arrangements, by limiting access to the shared facility to an identifiable service operated by a party that can assume responsibility for all risk. This can open up access to private parking lots whose owners are resistant to a more open sharing of their spaces.

Expanding Supplies

Many municipalities that have extracted great benefits from providing managed shared parking at some point find themselves faced with limited options for acquiring property to cost-effectively provide new parking facilities to support continued growth. At that point, options for engaging private developers become central to options for creating new public parking facilities. The two most common options are adapting zoning codes to either generate funding for public parking and directly partnering with private developers to incorporate municipal parking within private developments.

These two options are described below as potential options for facilitating tighter coordination between land use development and expansion options for public parking supplies.

Revise Minimum Parking Requirements

There are four primary opportunities that can be created through a revised set of Commercial Center-specific parking requirements.

1. Ensuring that minimum parking requirements are not a barrier to the level of investment and types of projects desired for each area.
2. Discouraging over-supplying on-site parking, which can undermine efforts to promote walkable, transit-friendly land-use densities.
3. Encouraging shared parking provision at larger private developments, which will help promote infill development on smaller parcels.
4. Allowing developers to fund public parking, in lieu of meeting parking demand/requirements on site.

A very basic approach to set a more appropriate schedule of parking standards for Downtown would:

- Halve the current parking requirements;
- Allow all requirements to be met through an In-Lieu Fee, or comparable alternative;
- Convert previous minimum requirements to maximums;
 - Apply maximums only to non-shared parking, allowing excess parking to be provided as long as the excess spaces are made available as a shared resource;
 - Allow developers to pay a fee, similar to the In-Lieu Fee, to provide excess parking that is not shared; and
- Develop incentives to provide multimodal amenities, such as car share, bike parking, streetscape and crosswalk improvements, and transit amenities.

Use Strategic In-Lieu Fee Rate

To make In-Lieu Fee strategies even more effective, the fee rate can be set at a sliding scale in order to encourage larger projects to develop on-site parking, while making the option affordable and attractive to developers of smaller sites. This would incentivize smaller projects to use the fee option, and construct no on-site parking, which should make more such developments feasible and facilitate better design options for what gets built. At the same time, the fee increments would incentivize larger projects, which will tend to have more suitable footprints for efficient, on-site parking, to meet their parking needs on site.

The figure below shows how this might translate for projects of various sizes/ parking requirements, using a base fee of \$5,000, and a fee increment of \$1,000.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

Figure 22 Sample Incremental Fee Table

Number of Spaces	Per Space Fee @ \$5,000 + \$1,000 per required space	Total Fee
1	\$6,000	\$6,000
5	\$10,000	\$50,000
20	\$25,000	\$500,000
35	\$40,000	\$1,400,000
50	\$55,000	\$2,750,000

Joint Development Opportunities

As noted in the Unified Plan, the many surface lots surrounding many of Montclair’s transit stations (particularly those around Walnut Street, Watchung Avenue, and Upper Montclair stations) represent some of the township’s most promising redevelopment sites. Several other surface lots likely present similarly strong market potential for private and/or public-private redevelopment. The planning currently underway for the Lackawanna Station site is an example of public-private partnerships that can yield well-planned solutions, the benefits of which spread well beyond the site level.

This can include partnering with private developers to include public parking in new projects. Such an approach will be essential, in fact, for any redevelopment of train station lots to be realized, as some measure of existing park-and-ride capacities will need to be maintained, and protected from other uses.

Jointly developing parking offers several significant advantages over the Township developing new parking facilities on its own, and over developers providing their own, reserved parking facilities. It allows both parties to build more capacity than either would likely find feasible to fund alone. Essentially, by sharing the facility, each party gains the advantage of someone else paying for their "overflow" capacity. Also, cost-sharing reduces barriers to better facility design, including the incorporation of active land uses along the perimeter.

Successful examples of such projects, including as replacement for dedicated park-and-ride facilities can be found nearby, including an in-construction project in Metuchen, NJ.

REDUCING DEMAND

Parking demand is not a static measurement. Countless contextual factors affect individuals’ decisions regarding trips made or deferred, and whether they can/will walk, bike, take transit, or drive to complete them. To the extent that local populations are dependent upon driving, and driving alone, for their mobility, parking demand will appear to be static, and projections of demand growth will be more reliably accurate. In places like Montclair, and especially in its larger commercial centers, auto dependence is highly variable, and can be influenced by changes to walk, bike, and transit conditions/options.

Options for making use of these opportunities to reduce driving/parking demand for current and future Montclair travel are outlined below, as a complement to the supply strategies outlined above. To the extent that demand reduction options can be effective, they will extend the value and impact of existing and any added supply in accommodating projected growth, all while adding to the walkable-urban appeal of Montclair’s commercial centers.

Provide More Employee-Parking Alternatives

The typical employee requires several hours of parking, several days each week. As such, even modest shifts to drive-alone commute alternatives among this population can regain significant capacity for visitor parking. A combination of information, cost incentives, and improved walking and cycling accommodations can affect such shifts, while also reducing the cost and/or improving the experience of these stakeholders' commutes.

Develop Bus Pass Program

One of the most consistently effective demand-reduction strategies for commercial centers is to provide free bus passes to local employees. This requires coordination with local transit providers, to establish an arrangement for bulk purchasing monthly passes at a steep discount of the retail fare. Such arrangements provide transit agencies with a steady revenue stream, and incentivize transit commuting by making it significantly cheaper than driving and parking. Only a fraction of pass holders tend to become regular bus commuters, which makes the program manageable for the transit agency.

Nonetheless, each time a local employee gets on the bus, rather than in a car, that represents several hours of customer parking regained that day.

Develop a Partnership with EZ Ride²

Long known as Meadowlink, EZ Ride is the oldest Transportation Management Association in the state of New Jersey, and was formed to “improve access, reduce congestion and promote economic growth by working with business and government agencies to address the employee commuting challenges in Northern New Jersey.” Today, EZ Ride manages New Jersey's largest carpool, vanpool, and shuttle services for businesses, colleges, universities and municipalities. They also operate car- and bike-share programs and transportation services for older adults and for people with special needs.³

The primary mission of EZ Ride, however, remains making drive-alone commute alternatives more viable for more Northern New Jersey commuters. Effective engagement typically requires outreach from area businesses and/or government agencies.

Improve Pedestrian and Bike Networks

Making walking and cycling more viable for more Montclair travel can reduce parking demand, and extend the geographical impact of parking spaces in a Park Once environment.

Stakeholder Survey Input

Surveyed stakeholders cited poor pedestrian conditions as a key barrier to walking to transit stations and commercial centers, increasing their use of driving and parking in these locations. Poor lighting, poor sidewalk conditions, and dangerous street crossing conditions were the most commonly-cited conditions. Incomplete, in-road bike networks was also frequently cited by residents, commuters, and employees as a primary factor reducing comfort with, and use of, cycling for local travel.

² ezride.org

³ <http://www.ezride.org/9-0-About.asp>

Unified Plan Recommendations

The Unified Plan identifies the following recommendations for establishing more complete walking and cycling networks.

- A complete network of safe and attractive streetscapes, sidewalks, crosswalks, bikeways, and passageways should include improved lighting of sidewalks and crosswalks.
- Bike routes should encourage users of all experience levels to ride.
- Ample, secure bicycle parking should be available and easy to find.
- Illuminated crosswalk signs at un-signalized crosswalks
- A complete-streets network based on the Township's 2009 Complete Streets Policy, as well as Essex County's 2012 policy, to help balance the needs of all modes of travel.
- A Street Design Manual to define appropriate design standards for streets and sidewalks of various road types.
- A Safe Routes to School program to encourage more walking and biking to Township schools.

Lifelong Montclair Input

Lifelong Montclair's 2014 *Senior Walkability Workshop* report provides several general and specific pedestrian-improvement recommendations, specifically addressing issues affecting walkability for seniors. Using this demographic to "set the standard" for walkability and bike accommodations in Montclair can greatly improve service levels for all pedestrians and cyclists. As such, addressing the improvement needs identified by this group, as compiled in the Background Conditions report, can go a long way in extending the benefits of these non-motorized modes in reducing parking demand throughout Montclair.

Bike & Walk Montclair Input

Bike & Walk Montclair identifies a need to transform the perception of cycling in Montclair, to recognize its significant role in providing an access and mobility option that can reduce traffic and parking demand. The Township is asked to help lead this change in perception by ensuring that common routes to schools, jobs, shops, and recreation offer meaningful inroad cyclist accommodations. This would address many comments regarding a lack of safe route options by stakeholders interested in using bikes for more of their travel in Montclair.

TPAC Recommendations

In December 2015, the Traffic and Parking Committee identified recommendations for multimodal mobility improvements that would support more, better, and safer walking and cycling in Montclair.

- Bicycle Parking should be provided, maintained, and managed by the Montclair Parking Utility.
 - Develop a Bike Parking category (and budget) under the Parking Utility
 - Develop a Procedure to Apply for Bike Racks in business centers or at public buildings
 - Develop Municipal Design Specifications
 - Incorporate Maintenance Procedures

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

- Develop a Bicycle Ordinance to increase availability and quality of bicycle parking including revisions to developer parking requirements.
 - Standards for minimum number and design of bicycle facilities; allows for conversion of existing automobile parking spaces into bicycle spaces.
- Traffic Calming – a critical issue in Montclair is traffic speeds and methods of traffic calming should be implemented that might coordinate with street parking design, bicycle parking and infrastructure,
- SAFE/Complete Streets Capital Improvement Plan – a preliminary engineering plan is in the process of being developed looking at bicycle, pedestrian, motor vehicle and transit circulation and access. *The potential for Complete Streets investments to reduce parking demand, by tapping latent demand for more and safer walking and cycling routes, should be a factor when allocating capital investments.*

Create a Bicycle Master Plan

The Unified Plan recommends the creating of a bike master plan, including the following.

- A comprehensive network of interconnected bicycle routes that traverse the township, including north-south, east-west township-wide movement
- A map depicting the entire network, major destinations, and connections to other bicycle networks
- Bicycle facility classification, to be used within the township (e.g. off-street bicycle path, dedicated on-street bicycle lane, designated shared-use street, etc), to guide design and specify what type of bicycle facility treatment should be used on each route

Create a Bike Parking Program

A single vehicle parking space can accommodate eight or more parked bikes within an on-street, bike “corral”. Businesses in bike-friendly communities are increasingly recognizing the value of increasing person access to their doors by lobbying city DOTs to convert one or more conventional, short-term parking spaces to bike corrals that accommodate 8+ customers.

Bike & Walk Montclair have pointed out several shortcomings in the current provision of bike parking across the township, and recommend the creation of a Township Bike Parking program “for systematically providing bicycle parking... requiring bicycle parking as part of developer approvals... and the maintenance of existing bicycle parking”. One of the key benefits of such a program would be to make clear how to, and to whom one can, make a request for bike parking in a particular location, or identify a maintenance, capacity, or other usability issue.

Improve Local Bus Transit

Many Montclair stakeholders expressed a desire for more and better local transit options through study surveys, many noting this as a missing option that either prevents them from making local trips, or causes them to drive more frequently than they would prefer. The Unified Plan outlines the following recommendations for “upgrading” transit service.

- A comprehensive system of affordable, local bus and jitney shuttle routes that provide consistent and reliable service with clearly marked stops.
- Intra-township transit integrated into the larger commuter/regional bus and rail network

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO Township of Montclair, NJ

- Seamless transfers between different routes and operators
- University-based shuttle service for students and employees to reach the township's commercial centers.
- Shuttle bus service expanded to provide better connections to trains and neighborhoods beyond walking distance of Montclair's train stations.
- Bus service to improve access within the Bloomfield Avenue commercial corridor, complementary to the new circulator shuttle, expanded to include a loop through the South End Business District.

Bus Stop Amenities

Unmarked bus stops, and a general lack knowledge about routes and schedules, were commonly cited barriers to more frequent local transit use by Montclair stakeholders. Bus stops that offer optimal shelters and essential system information can make existing transit options more apparent and broadly appealing. Conversely, bus stops with minimal amenities give a clear impression that connecting bus services are not widely used, and thus likely not very effective for common travel needs.

The Unified Plan identifies the following recommendations for “enhanced bus stops”.

- Major bus stops improved to make the bus system more comfortable and easier to navigate, increasing the viability of buses.
- Improved bus shelters with informational signage that clearly indicates stop location, plus visible route maps and schedules.

Expand Car-Share Access

Ready access to car-share vehicles reduces car ownership among residents, by both attracting one-car and carless households and making it viable for others to reduce car ownership to these levels. A UC Berkeley study of San Francisco’s City CarShare found that when people joined the car-sharing organization, nearly 30% reduced their household vehicle ownership and two-thirds avoided purchasing another car.⁴ Studies show that each car-sharing vehicle takes between 5 and 15 private cars off the road.

Furthermore, research indicates that car-sharing members drive 44% less than they would if using their own car, primarily because a modest cost is directly associated with each trip made.⁵ This can translate to more active neighborhoods, as driving trips to “big box” stores are replaced by walking trips to nearby shops and services. From an economic-development perspective, shared vehicles are an attractive amenity for both residential and commercial customers. By adding an additional transportation option, car-sharing can provide urban properties with increased accessibility, helping to offset the complexities and costs associated with parking private vehicles.⁶

⁴ Robert Cervero and Yu-Hsin Tsai (2003), *San Francisco City CarShare: Travel-Demand Trends and Second-Year Impacts*, Institute of Urban and Regional Development,

<http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1026&context=iurd>

⁵ Shaheen, Susan A., Cohen, Adam, and Martin, Elliot (2010), “Car-sharing Parking Policy: A Review of North American Practices and San Francisco Bay Area Case Study,” *Transportation Research Record*. March 15, 2010.

⁶ Cohen, Adam P., Shaheen, Susan A., and McKenzie, Ryan. “Car-sharing: A Guide for Local Planners,” (2008), Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RP-08-16.

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

The Township recently succeeded in bringing Zipcar to Montclair, with a total of five cars currently available in two Montclair Center locations. Expanding the number of cars and locations should be a central strategy for reducing parking demand among new, and existing residents, as new development is realized. This is particularly relevant for Montclair Center, which is projected to see development of over 800 new dwelling units in the coming years, but will be increasingly relevant across all of Montclair.

Strategies for achieving this include the following.

- Adding incentives, or even requirements, for car-share parking at new projects that provide parking
- Providing on-street locations for car-share parking, including along neighborhood streets with multi-family buildings and/or limited off-street parking
 - *This was identified as a recommendation by the TPAC at its December 2015 meeting*
- Engaging emerging and innovative car-share providers about opportunities to expand into Montclair
 - Maven is a very new service, created by General Motors, which is developing an offshoot that would allow individual residential buildings or communities to set up their own car-share⁷
 - Car2Go is an innovator of “one way” car-sharing, which is quickly gaining market favor where it is available⁸
 - Getaround is a leader in peer-to-peer car-sharing, like AirBnB for car-share⁹

Zoning Strategies for Sustainable Growth

The Unified Plan outlines several strategies for promoting land use patterns that would facilitate walking, cycling, and transit mobility, not limited to the following.

- Creating a form-based code, or similar standards, to promote appropriate levels of density and walkable form to enliven the township’s activity and mobility centers and promote transit use.
- Offering density bonuses for the provision of public amenities, such as:
 - New open space
 - Affordable housing
 - Sidewalk/pedestrian infrastructure upgrades
 - Bicycle parking,
 - Bike-share programs
 - Contributions to planned public transit improvements.
- Reducing minimums relative to access to transit.
- Prohibiting off-street parking from being visible from the street

⁷ <https://plus.mavendrive.com/>

⁸ <https://business.car2go.com/en/newyorkcity/>

⁹ <https://www.getaround.com/tour>

COMPREHENSIVE PARKING STUDY | PROJECTED CONDITIONS MEMO
Township of Montclair, NJ

- Encouraging pedestrian connections from parking to street frontage, via cut-throughs and walkways
- Incentivizing the provision of bike racks, shower facilities, and car-share parking spots.

Additionally, the TPAC recommended the creation of bike parking standards in the zoning code to help improve mobility and reduce car parking demand.

- Develop a Bicycle Ordinance to increase availability and quality of bicycle parking including revisions to developer parking requirements.
- Include standards for a minimum number bicycle facilities, and their design.
- Allow for conversion of existing automobile parking spaces into bicycle spaces, where appropriate.