Mobility Conditions Analysis

Parking & TDM Study

Ann Arbor Downtown Development Authority

October 2015
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OVERVIEW

Having inventoried the primary parking, multimodal, and TDM resources available to the DDA and its interest in maintaining optimal Downtown access and mobility, this report analyzes key conditions within these inventories as we begin to address the central question of this study.

Does Downtown have a parking problem?

Before framing the analysis, it is useful to clarify how a parking problem might best be measured/confirmed. That, perhaps, is best done by defining its contrast.

DEFINING SUCCESS

For decades, the DDA has been at the forefront of developing a parking management approach that is specifically compatible with the nature of downtowns and walkable urban centers. Central to its approach has been a set of management principles that reflect a deep understanding of the strengths and liabilities of managing parking in a flourishing downtown.

1. Availability is the primary measure of management success; spaces are available for all who seek them.
2. Availability is not limited to the least convenient options, but is managed, with the aim to maintain reasonable availability among all options and locations.
3. Because parking consumes land and resources that could otherwise contribute to other downtown benefits, it is critical that the users of parking pay its full costs.
4. Because the price of parking is the most direct and effective means of managing demand, by time and location, all parking options will be priced distinctively, based on their relative market demand.
5. Because parking is priced relative to demand, the success of the parking program, which will invariably increase parking demand, will also generate more revenue to either expand supplies or improve/expand management and demand-reduction efforts.
6. Because parking is not necessary to access or move about Downtown, other means of access and mobility will be supported, both for their own purposes and merits in keeping Downtown vibrant and equitable, and for purposes of reducing parking demand where travel by car can be shifted to travel by other means.
7. As demand for downtown access and mobility grows, options to expand parking and/or improve non-driving access/mobility will be evaluated inclusive of measures of cost, effectiveness, and compatibility with maintaining Downtown’s distinctive market appeal.

Determining the existence and extend of a parking problem should start with assessing the relative success of parking system in achieving these principles.

Availability

Findings from a series of field observations, stakeholder interviews, and analysis of existing data indicate several shortcomings in the measure of availability.

- Availability is generally constrained during the midday period, particularly at DDA structures, and along most commercial streets.
ePark meters are particularly constrained, relative to spaces with conventional meters, while pricing is in effect.

On-street availability is extremely low during evenings, particularly but not limited to Friday and Saturday nights.

Wait list data and stakeholder input speak to chronic lack of access to monthly parking permits, which directly affects the appeal of Downtown employment among those who strongly prefer driving, or have little to no good alternatives.

These constraints, however, are limited to specific types of parking and aspect of availability (on-street, monthly, preferred locations). Findings, in fact, do not confirm a general absence of parking options, even during common periods of elevated demand. In fact, several stakeholders stated flatly that, those who know the system can always find somewhere to park; most notably free parking options in the surrounding residential neighborhoods. Clearly, however, there is room for improvement in terms of both maintaining access to on-street parking during evenings and weekends, and in the capacity to accommodate auto-commuters willing to pay the going rate for a monthly permit.

**Parking Pays for Itself**

Not only does revenue from the DDA parking system fully sustain the system, it helps fund a growing list of mobility improvement programs, which in turn help to moderate parking demand.

**Pricing**

In general, pricing appears to be used to good effect in making parking options available across Downtown at most times. Rates reflect demand patterns and preferences, including variations between on- and off-street parking, and among various off-street options. Keeping rates in line with demand, however, is an ongoing process. And, given some of the availability constraints noted above, some rates appear to have fallen behind demand. The most glaring short-coming in realizing this principle is the lack of pricing during common, peak-demand periods, among high-demand parking assets.

**Revenue**

The DDA approach not only provides precedent for using pricing to manage demand to increase availability where it is currently constrained, it provides a source of revenue for proactively and strategically addressing constraints. Key, strategic rate increases, including the extension of meter hours into evenings and higher rates for parking permits, would not only help bring demand in line with available supplies, it would also provide more revenue to fund potential supply-expansion projects and/or mobility improvements and TDM efforts. This creates a virtuous cycle, in which increased demand generates funding to provide increased accommodation/management.

**Demand Management/Reduction**

Using this revenue to invest in demand-management and demand-reduction strategies (collectively known as Transportation Demand Management, or TDM) allows the DDA to address availability constraints more equitably, while supporting Downtown’s multimodal vitality and preserving Downtown real estate from rash supply expansions. Just as importantly, it allows the
DDA to forestall parking rate increases. The ongoing success and remarkable achievements of the getDowntown program indicate that this aspect of the DDA’s approach continues to excel.

**Evaluating Best Fit Options**

Continuing and expanding upon this TDM success is one of the central aims of this study — to identify demand-management and demand-reduction strategies so that current and future success does not overly depend upon supply expansions and/or rate increases. The fact that this is a central component of the DDA’s parking approach is reflected in the input from Downtown stakeholders. While many stakeholders stated frustration with certain aspects of Downtown parking, there was strong consensus that “being Downtown” was worth it, in large part because businesses can thrive on less parking with the help of the getDowntown program and the value provided by the go!pass. Similarly, developers can provide housing with less parking because people want to live Downtown, and because many of those who want to live Downtown want to do so because it doesn’t require a car.

This is a testament to the success of this aspect of the DDA’s parking approach, one that has allowed Downtown residential and employment growth to significantly outpace expansions of parking supply.

**DOES DOWNTOWN HAVE A PARKING PROBLEM?**

So, the answer to this question has to be a qualified Yes. More accurately, Downtown has a few parking problems. More importantly, it also has an approach to addressing such problems that has proven to be remarkably successful. Essential to this success has been avoiding the typical assumptions about how to make parking problems go away.

Rather, these problems will be addressed by reviewing them in detail (below), then assessing if they are likely to get better or worse in the coming years (the focus of the next study phase), and finally developing “best fit” strategies for addressing them in a new Parking Management Plan.

The following analysis initiates this process by:

- Further defining current parking conditions, including the constraints noted above;
- Identifying conditions within the multimodal network that will affect its capacity to absorb potential shifts of travel demand away from driving and parking;
- Examining the effectiveness of ongoing TDM programs and activities, and their potential to facilitate these shifts;
- Identifying travel patterns, relative to the multimodal network to better measure the population of travelers who might be susceptible to mode shifts away from driving; and
- Assessing current Parking Management practices for change opportunities that could address current and projected constraints.
INTRODUCTION

Figure 1    Bus Shelter Announcements for Expanded Service

The following sections present an overview of key conditions among downtown’s primary parking and mobility resources, as identified in the previous study phase. Despite Downtown’s position as the center of an impressively robust multi-modal network, its parking resources are frequently strained during peak-demand periods. The analysis below is therefore focused on the details of where, when, and to what extent parking supply constraints exist, and what aspects of the multi-modal network may have capacity to provide relief, by accommodating a greater share of future travel demand.
PARKING UTILIZATION

OVERVIEW

Parking occupancy data was collected, through a combination of data from the DDA's real-time availability system and late-September field surveys. Key findings from this data are presented below to assess supply and demand conditions within Downtown, with a particular focus on where and when demand levels constrain available supplies, or demand patterns obscure available parking options.

The maps below present peak-hour conditions across off- and on-street parking resources, to provide an overview of current demand/supply balance and patterns at these times.

Figure 2 Parking Utilization – All Facilities – Weekday, Midday

Data Sources: Field Collection September 2015, DDA, City of Ann Arbor, Washtenaw County GIS
As shown, several, clear points of constraint can be identified during these peak-demand periods.

**Weekdays**

- Availability is generally constrained during the midday period, particularly at all DDA structures, and along most commercial streets.
- This includes hourly-parking off-street facilities, as well as those primarily serving monthly-permit customers.
- On-street constraints follow patterns revealing corridors, and sub-areas, of high demand.
- On-street constraint patterns also likely reflect a strong preference for ePark meters, and their capacity to take credit-card payments, over conventional meters.

**Evenings**

- Availability among on-street spaces is quickly absorbed by demand, once these spaces become free (6PM).
- This is particularly pronounced on Friday evenings, but constrains access to these parking options even on a Monday night.
- The general preference among visitors for on-street parking is particularly pronounced during evenings and weekends.
- This is certainly exacerbated by the fact that most off-street options carry a cost, while on-street parking is free.
- Nonetheless, availability is frequently constrained at several, off-street facilities during evenings, particularly in the southeast section of downtown, an area where several performance-venues and other nightlife destinations are concentrated.

Following is a more detailed review of conditions within key sub-inventories and parking markets.

**DDA STRUCTURES AND LOTS**

**Weekday Peak**

The map below presents utilization conditions across DDA structures and lots during the weekday peak, around the midday lunch hour. This is a critical period of overlapping demand, when commuter parking is at peak levels, while the lunch-hour also generates significant visitor-parking demand. At these times, all parking options are priced, making this a critical period for assessing the effectiveness of current parking rates.

**Figure 4 Off-Street Parking Utilization – Weekdays, Midday**

Data Sources: Field Collection September 2015, DDA, City of Ann Arbor, Washtenaw County GIS
As shown, many off-street facilities are effectively full (91%+ utilization) during the midday and the majority of those that are not, are approaching full. Those that offer significant capacity are generally located along the periphery. These options tend to be particularly less appealing to visitors who intend to spend just an hour or two in downtown, unless they happen to be near their primary destination. Of particular concern is the lack of capacity at commuter-oriented facilities, as this underscores the level of constraints that have led to long wait lists for permits across downtown.

**Commuter Parking Facilities**

One of the conditions that could potentially affect downtown businesses, and business attraction, is the inability to purchase monthly permits, the preferred option among auto commuters to Downtown. The lot at 415 W. Washington provides commuter-parking overflow, with a modest daily rate, but this facility, too has become constrained with demand. Recent interviews with several downtown employers indicate that, even among employee populations that have generally embraced cycling and transit, there remains a need to accommodate those for whom these options do not work.

*Figure 5* Utilization of Commuter Parking Facilities, Weekdays, Midday

The map above, however, confirms that there is little to no capacity to offer more monthly permits. The majority of downtown office employers surveyed indicated that the downtown location was top priority for their business. Parking availability and cost were secondary but still a
significant issue to many, reinforcing the relevance of the lack of monthly permits. Focus group comments suggested that most companies had been able to acquire parking permits or make alternative parking arrangements when it was really critical. However, current waitlist times made them concerned about future permit availability and business expansion. The focus group discussion also suggested that the culture of the organization, the options available to employees, and the offering of parking permits significantly affected an employee’s commute pattern. Employees who received fully subsidized parking drove, while those employees who were more connected to the cost of their commute (i.e. paid for it themselves) explored alternatives. Companies who had access to permits upon first locating downtown were less likely to try alternative options than those who had to wait before obtaining a permit. As a result, some downtown employees did not know about alternative commute options.

**Hourly Facilities**

The DDA also manages several off-street facilities as short-term parking resources, primarily to complement on-street parking. These spaces are slightly cheaper than on-street spaces, and accommodate longer durations. The following table identifies off-street facilities that are managed as hourly parking resources.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Spaces</th>
</tr>
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<tbody>
<tr>
<td>Kerrytown Lot</td>
<td>25</td>
</tr>
<tr>
<td>Farmer’s Market Lot</td>
<td>75</td>
</tr>
<tr>
<td>Fourth and Catherine Lot</td>
<td>49</td>
</tr>
<tr>
<td>Main and Ann Lot</td>
<td>46</td>
</tr>
<tr>
<td>First and Huron Lot</td>
<td>168</td>
</tr>
<tr>
<td>S. Ashley Lot</td>
<td>138</td>
</tr>
<tr>
<td>Main and William Lot</td>
<td>21</td>
</tr>
<tr>
<td>Fourth and Washington Structure</td>
<td>281</td>
</tr>
</tbody>
</table>

Sources: DDA, Republic Parking

The map below presents utilization conditions among these facilities during the weekday, midday period. While some of the smaller lots (e.g. Farmer’s Market Lot and Fourth and Catherine) have available spaces, most are approaching capacity.
Friday Evening

As is typical of most downtowns, evening and weekend demand in Ann Arbor has demonstrated a strong preference for on-street parking. Among off-street options, there has been a strong preference for lots over structures, with the result that the DDA’s structures have tended to retain ample availability at these times. However, as food, drink, and entertainment venues have expanded in number and popularity in recent years, evening parking demand has grown significantly, to the extent that even some large structures have begun to experience availability constraints at night and on weekends.

The map and text below summarize findings from Friday night occupancy surveys, conducted to quantify peak, evening conditions among the DDA’s lots and structures within this context of expanding evening demand.
Parking lots and structures along Main, Ashley, and First streets are effectively full during the Friday evening time period, likely highlighting this area’s concentration of restaurants and bars. Interestingly, several other structures throughout downtown have significant capacity at these times, including several facilities that are primarily commuter facilities during the daytime. The maps below present the contrast in utilization levels between these facilities, and those that are primarily hourly parking during the daytime.
Figure 9  Utilization of Commuter Facilities, Friday Evenings

Data Sources: DDA, City of Ann Arbor, Washtenaw County GIS
These maps indicate a significant turnover among the populations generating parking demand in downtown. As commuter facilities are emptying out, hourly lots appear to attract the early waves of demand, and quickly begin to fill to capacity. Much of this likely reflects the continued preference for surface lots over structures, as well as the “flat rate” fees for evening parking offered at some popular lots. This also parallels a shift in evening activity toward the west, where the concentration of evening-based destinations has created a new locus of parking demand in the after-work hours.

**ON-STREET**

On-street parking is consistently the most strongly-preferred option among drivers seeking short-term parking in any downtown. And downtown Ann Arbor is no exception. As such, utilization measures among on-street supplies, during peak-demand periods, provide the best measure of how accessible downtown is for drivers looking to stay for a few hours or less.

**Weekday Midday**

Field surveys of on-street spaces during the weekday, midday peak reveal high utilization levels along most commercial streets, and availability constraints along many (those streets marked in
red in the map below). Pockets of high-demand/reduced-availability, in fact are apparent within the four traditional downtown sub-districts: Main Street, Kerrytown, State Street, and South University. In the gaps between these areas, several blocks of significantly lower utilization can be found.

Figure 11 On-Street Parking Utilization – Weekday, Midday

While, in aggregate, there are dozens of empty parking spaces available, these clustering patterns of constraint and availability likely make finding a space a frustrating experience. This tends to be particularly true when the price for all spaces is the same, as there is no incentive for drivers to start their parking search on “side” streets like Division or Thompson, or on secondary commercial streets like Washington. Those that are most familiar with downtown are likely to know these options well, but the bulk of drivers are likely to start looking for parking on the street with which they are most familiar, creating congestion and constraint in predictable patterns.

Friday Evening

Ann Arbor has long been a regional destination for evening and weekend activities. And, as the downtown commercial economy continues to increasingly focus on food, drink, and entertainment destinations, parking-demand intensity is growing even stronger at these times. Adding to this demand, specifically for on-street parking, is the fact that meter-enforcement ends at 6PM.
This is precisely when demand at restaurants starts to pick up. As such, restaurant, pub, and club employees tend to start arriving for evening shifts just prior to this, allowing them to pay for an hour of parking, and remain in place for the rest of the night. Given these factors, it is unsurprising to find that Friday night is possibly the worst time to try to find on-street parking, anywhere in downtown.

Figure 12  On-Street Parking Utilization – Friday Evening

The same factors, however, also reduce availability to chronically low levels during other evening periods as well. To quantify this, field surveys were conducted on a Monday evening. As shown below, availability is improved compared to Friday night, but remains elusive throughout much of the downtown core.
The impact of ePark meters on demand patterns is perceptible as one travels around downtown, particularly if looking for an available ePark space. Not only do these spaces tend to be more centrally located within downtown, but they are the only option that most drivers know of to pay for on-street parking with a credit card.\(^1\) To help quantify the impact of these meters on utilization patterns, the table below presents average utilization levels among ePark spaces, compared to the same among conventionally-metered spaces.

<table>
<thead>
<tr>
<th>Meter Type</th>
<th>Weekday, Midday</th>
<th>Friday Evening</th>
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<tbody>
<tr>
<td>ePark</td>
<td>110%</td>
<td>102%</td>
</tr>
<tr>
<td>Conventional</td>
<td>68%</td>
<td>95%</td>
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As shown, daytime utilization measures reify the casually observable disparity between these two on-street meter options, with a 42 percentage-point difference in occupancy. A significant factor

\(^1\) There is a mobile-phone payment option, but it is not widely known or used.
in this is the locational “advantage” of the average ePark space. However, evening surveys indicate that the daytime utilization gap closes significantly, when the locational differences remain the same, but the need to pay for parking has been removed. This indicates that much of the daytime preference for ePark spaces is tied to the option to pay for parking with a credit card, rather than coins.

Revenue

Data on average meter transactions at ePark spaces also reveal a significant impact of this credit card option on parking revenues, and what the average driver is willing to pay for convenient, on-street parking in downtown. Data on average transaction revenue indicate that meter payments made by credit card are nearly twice as large as those made with cash/coins. In July 2015, the revenue/transaction rate among all ePark meters was $1.18, the equivalent of ~45 minutes worth of parking. For the same month, the revenue/transaction rate was $2.34, about 1 ½ hours worth of parking and nearly exactly twice the rate for coin-based transactions. This indicates the impact that the convenience of paying by credit card can have on what drivers are willing to pay for parking.

VISITOR PARKING

Visitor parking options are generally widely available during weekday morning hours. On-street spaces generally have significant availability until midday. And, after 10AM, several spaces become available for hourly parking in each DDA facility. By midday, availability becomes constrained in most lots and garages, and among the most popular on-street blocks. This is likely to create much frustration among visitors, especially those least familiar with the location of alternate parking locations, and those least comfortable with parallel parking.

It is clear, however, that weekday pricing of these spaces does help preserve availability at these times. This is made most clear by just how rare empty on-street spaces become, shortly after 6PM, when meter enforcement ceases. The frustration of this experience is exacerbated by the fact that parking structures, which do offer plenty of availability on most nights, are priced at these times.

Drivers who fail to find a free parking space on-street or in a lot, find that their best option is paying to park in a location they find much less preferable. In this sense, the “good will” gesture of turning meters off at night, helps to make these high-demand spaces much less available to visitors. Ironically, turning the meters off at 6PM makes it easier for Downtown employees to make extended use of these spaces, particularly among employees arriving for evening shifts, just prior to the first rush of evening visitors. For a few quarters, these employees enjoy unlimited use of Downtown’s most valued parking spaces for the night.

COMMUTER PARKING

This is a clear area of constraint within the DDA parking system. However, it is a constraint that is both more complicated and less severe than if might first appear. There are wait lists for permits at all facilities that offer monthly parking. And, several employers and employees noted the lack of access to monthly permits as a significant source of frustration.

2 Sundays are an exception to this, as on-and off-street parking are free.
However, most companies engaged as part of this study acknowledged that they were able to secure sufficient quantities of permits to meet the needs of those commuters who most wanted them. Frequently, the location of the permits offered did not meet the preferences of the commuters seeking them, but most companies have been offered some permit when they needed them. Furthermore, several employees noted that they were able to find alternatives to the DDA parking system, often by making arrangements with owners of private lots.

**Impact of Parking Benefits**

One factor that complicates the effectiveness of pricing to manage permit demand is the still-common practice of employers and building owners/managers covering some or all of their employees’/tenants’ parking costs. These subsidies are essentially provided as an employee benefit offered to attract job applicants, or a housing or office-space amenity meant to attract tenants. The effect of price on demand for monthly permits is skewed by this practice, with increased rates affecting some customers directly, and some not at all.

This reduces the “elasticity” of rate changes, dulling the impact of rate changes on demand. As a result, rate changes must be greater to have the desired impact on demand — reducing peak occupancies enough to begin selling monthly permits, for example — than would be required if all customers paid the full cost of their parking. This puts even more burden on those paying the full cost of their parking, creating a strong sense of inequity, as expressed by many of the stakeholders engaged during this study.

**RESIDENTIAL PARKING**

It has become increasingly common among these projects to provide private, on-site parking, with some offering two spaces per residential unit despite the high construction cost of these spaces. This relieves pressure on the DDA system, particularly as many residents leave their cars parked most of the time, using them mostly during off-peak times. “Around the clock” occupancy is a poor fit for most DDA facilities, which rely upon turnover to accommodate the needs of diverse Downtown stakeholders. In many ways, on-site facilities are a better fit for parking that is more akin to “car storage”.

Better still is for this demand to be accommodated in a “hybrid” facility, such as 1st and Washington, which provides on-site parking for upper-floor residents, and overflow parking that is publicly available. If more such structures can be developed, effective, resident-focused TDM strategies can help increase the level of public parking offered at each. Thus, developer oversupply can be transformed into an asset for meeting the parking needs of visitors and commuters.

**ADDITIONAL SUB-MARKETS**

**Short-Term Parking within Monthly Facilities**

To leave parking spaces available for downtown visitors and customers, the DDA disallows parking on the first few levels of its parking structures until 10AM. This allows these spaces to remain empty until after the morning commuter rush is over. Weekday field observations of these spaces, as well as brief interviews with on-site staff, indicate that, by and large, parking customers respect these restrictions.
Field observations found only about 10 cars in these restricted spaces across the entire downtown. Enforcement officers tend to check these spaces close to 10am, so the potential to “get away with” parking right before 10am is slim. Parking attendants also said that they would warn violators if they were seen parking in the spaces before 10am and the accessibility of the restricted spots make violators’ cars obvious to those doing inspections.

After 10am, the restricted spaces quickly fill up. By 11am, they were observed to be at least 75% full across the downtown. Attendants interviewed confirmed that this was characteristic of these spaces on a typical day. By Noon, these spaces are usually completely full.

**Overnight Permit Parking**

The DDA offers overnight permits to provide a discounted parking option for residents who do not need daytime parking, and for evening/late-night employees. These permits make good use of excess capacity in DDA structures during late-night and overnight periods. The maps below confirm that excess capacity remains at these facilities during the peak use periods for these permits.

**Figure 15 Late-Night Utilization (10PM)**

Data Sources: DDA, City of Ann Arbor, Washtenaw County GIS
While this indicates significant, remaining capacity to accommodate more parking demand during the overnight period, the limitations of the overnight permit restrict its usefulness to a small subset of Downtown employees and residents. Most residents require some form of daytime parking accommodation, which adds to the midday demand peaks on most weekdays.

**Farmers Market**

The Wednesday and Saturday Farmers Markets create intense parking demand conditions within the Kerrytown area of downtown. Visitors, residents, and vendors all converge on the small parking lot at the Kerrytown shops and overwhelm the available parking and loading space. Already a thriving area of shops and restaurants, this has a significant impact on parking availability on the surrounding blocks, and several off-street facilities, including:

- 4\textsuperscript{th} and Catherine Lot;
- Kerrytown Lot;
- Farmers Market Lot;
- Community High School Lot (Saturdays only, except in Summer); and
- Washtenaw County employee parking lots (Free).
These conditions, along with the brick roads surrounding the Market, create particular challenges for those with limited mobility, increasing demand for close-in parking options. Another factor adding to this pressure is the need for many customers to carry large and/or heavy purchases to their vehicles.

Interviews with market managers indicate that they particularly focus on managing the impact of vendor vehicles. These vehicles are, by nature, the first to arrive to the area, and the on-site lot only has enough parking for half of the vehicles brought on a typical day. Market managers urge vendors to park in more remote locations to help preserve convenient, customer-parking options. Nonetheless, there is a sense that this has only been partially successful, and that these vehicles continue to constrain customer access.

Input from the coordinator of a Community Supported Agriculture drop-off that takes place in the Community High School lot on most Saturdays indicates that, on most Saturdays, parking in that lot is plentiful until around 10AM. Soon after this, however, it is completely full most of the time with vehicles circling continually, waiting for a space to open up. On consecutive Saturdays, field observations confirmed this pattern, and the fact that nearly all nearby parking options are at capacity during much of the Market’s operating hours. Some exceptions include the lower level of the County employee lot at Ann Street and 4th Avenue.

**Recent and Upcoming Changes**

Interviews with Kerrytown representatives suggest the conversion to condos of a small privately-owned lot near the market had a large impact by removing a key space for people to load and unload.

There is a plan to expand the Market’s infrastructure to facilitate all-season activity. This is planned for completion in 2016. As currently designed, the project would reduce the on-site lot’s capacity by 10-15 spaces. Additionally, the adjacent blocks of 5th Avenue and Detroit Street are planned to be redesigned in 2018, which will greatly improve pedestrian mobility in this area for Market customers.

**PARK AND RIDE**

There have been several attempts to develop various forms of park-and-ride resources to accommodate Downtown parking demand within facilities located outside Downtown. Common to all have been a combination of free, ample parking combined with high-quality transit service between these lots and Downtown. The primary opportunity markets for this type of remote parking strategy are:

- Commuters who would take transit if it were more accessible
- Commuters who would take transit if it offered a shorter/faster ride
- Commuters who want an alternative to Downtown parking rates

A successful remote parking option attracts users by providing better transit than they can get at home, and cheaper parking than they can find Downtown. The greatest challenge is often minimizing the “dwell time” between parking and catching a bus. If service is insufficiently frequent, a missed bus can result in several minutes added to a driver’s commute. Similarly, the location of a remote lot, relative to drivers’ direct commute route is critical to minimizing the “time cost” of this option. If the remote option requires a driver to significantly divert from this route to access the lot, it is unlikely to be used.
Stakeholder input indicates significant interest in remote parking as a solution to the cost of Downtown parking, or the difficulty in obtaining a DDA permit. Several had tried this option, or seriously considered it, but few found it a viable option. One current permit holder formerly used a park-and-ride service, but found that the location of the lot nearly doubled his commute duration.
MULTIMODAL NETWORK SERVICE LEVELS

OVERVIEW

Following is an overview of utilization and conditions analysis for the downtown Pedestrian, Bicycle, and Transit networks identified previously. These networks provide the core resources for reducing parking demand while maintaining a highly accessible and mobile downtown. The wealth of these resources, in fact, has long been essential to Ann Arbor’s economic success, and downtown’s distinctive appeal.

Metrics that attest to the value that these mobility options provide include the following.

- Mode Share – Less than half of Downtown commuters surveyed primarily drive alone to work (40% in 2013).
- Transit Ridership – AAATA ridership is high, and has been growing steadily each year along with expansions in service.
- Transportation Demand Management (TDM) – More than 15% of 2013 survey participants had reduced their drive-alone commuting in the past year, largely creditable to record-breaking participation levels in the go!pass program which currently makes transit free for 73% of recently-surveyed Downtown employees.

Combined, these and other similar metrics indicate that commuters, residents, and visitors have embraced the wealth and diversity of downtown’s mobility resources. This not only helps keep downtown an especially attractive place to work, live, and visit, it has been essential to allowing downtown’s population and economic growth to outpace the growth of traffic and parking demand.

The following summary presents measures and descriptions of key performance conditions within these networks.

PEDESTRIAN NETWORKS

Downtown has long been known and appreciated as a distinctly walkable, mixed-use district combining a high-quality pedestrian network with a diverse range of destinations and diversions that support both practical and pleasurable walking trips. Beyond making downtown a distinctly appealing destination within a highly auto-dependent region, this walkability directly supports downtown’s “park once” environment, which in turn significantly reduces how many parking spaces are required to support the downtown commercial economy. Additionally, this walkability is a key factor in the dramatic increase in demand for living within or close to downtown, creating a significant opportunity to reduce both auto commuting, by placing residents within walking distance of downtown jobs, and auto-ownership rates as downtown increasingly attracts households that maintain one or fewer cars.

Maintaining this high level of walkability is an ongoing effort, one that has benefitted from strategic investment over the years, including the following.

- Development of an award-winning Downtown Street Design Manual
Implementation of “leading pedestrian intervals” at many intersections, giving crossing pedestrians a few seconds of WALK signal to establish themselves in the crosswalk before turning vehicles receive a GREEN signal

- Installation of a High-Intensity Activated Crosswalk (HAWK) in 2010
- Completion of 15 Rectangular Rapid-Flash Beacons (RRFB’s) to enhance pedestrian safety at crosswalks, including one at South University and Tappan.
- Construction of 33 major and 11 minor mid-block pedestrian crossings between 2007 and 2014, implemented as part of the city’s Nonmotorized Transportation Plan³
- Creation of a nine-member Pedestrian Safety and Access Task Force in November 2013, which is expected to make final recommendations to the City Council by Fall 2015⁴
- Installation of ADA ramps throughout the downtown
- Complete streets improvements, such as the DDA’s 2012 improvements on 5th Avenue and Detroit Street

The capacity of the existing network, including recent and pending improvements, to attract future trips away from driving options will be largely dependent upon two primary factors.

1. Network completeness and safety
2. Access to housing that is walking distance to downtown jobs

**Network Completeness & Safety**

**Completeness**

The map below presents an overview of the downtown pedestrian network, as a cohesive pedestrian network, including seamless connections between downtown and the University of Michigan, while also highlighting minor gaps within this network.

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⁴ Ibid, 8.
At the most northern block of North First Street, the sidewalk ends abruptly on one side of the street. This happens similarly on Third Street between Koch and West Mosley. These blocks are quiet, residential blocks and offer sidewalks on at least one side of the street extending beyond the downtown boundary.

The map also shows two gaps that are more centralized within downtown, but these are minor and largely inconsequential gaps as well. On West Ann Street, the sidewalk ends as the street turns into a parking lot by the train tracks. The sidewalk gap shown at South First Street between West Liberty and West William is more accurately an irregular sidewalk, rather than a gap, where the path follows the train tracks diagonally, which is actually safer for pedestrians as they do not need to cross the tracks.

**Safety**

**High-Crash Locations**

High-priority crash locations identified in the Ann Arbor Transportation Plan\(^5\) include the following downtown intersections.

- Huron Street at Main Street

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\(^5\) Ann Arbor Transportation Master Plan Update, 2009, 70-79.