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<th>Date:</th>
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<td>McNeil Dhadwal, AECOM</td>
<td>March 2, 2018</td>
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**Approvals:**

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1.0 Purpose of this Document

The purpose of this white paper is to provide East-West Gateway (EWG) and City of St. Louis with an assessment of the overall parking conditions along the proposed Northside-Southside alignment, with emphasis at the stations as it relates to existing parking and future development. It includes a brief discussion on the overall existing conditions of the alignment, parking utilization in certain areas and segments, and future utilization measures that need to be gathered, as well as highlighting of existing parking codes/ordinances that apply to parking. This white paper also includes an overview of Transit-Oriented Development (TOD) parking management policies and examples of best management practices from other cities’ parking codes to highlight different ways to address parking and development. Lastly, this white paper includes potential future steps and recommendations for updates and additions to development and regulatory policy (i.e. incentives, zoning, land use, etc.) that should be considered as the Northside-Southside alignment moves forward and we begin implementation of TOD within planned station areas along alignment.

2.0 Overview of Existing Conditions and Parking Codes

Existing Parking Conditions and Impacts along the Alignment

Methodology

The methodology for assessing parking impacts was threefold: assess existing parking in the immediate study corridor, which included on-street parking spaces within one block of the alignment and along the alignment itself, and compare the build condition geometry with that of the existing condition to determine impacts as measured by approximate number of parking spaces. Parking was assessed based on parking type, including metered, unmetered, and special use. The special use parking areas are described in the summary of results and includes taxi-only or police-only parking.

Data Sources

Data sources for parking include Google Earth aerial and Google Street View photography as well as spot field confirmation. Linear measurements of available parking were performed in a GIS format and used to calculate number of spaces based on a local utilized average of 24 feet per space. Metered and special-use spaces were further scrutinized to reflect actual number of spaces. It is important to note that parking utilization was not factored into the analysis at this level of study; only parking availability is quantified.

Summary of Results

The table below provides a comparison by segment of existing parking and amount of parking impacted. Cross street parking is summarized to demonstrate the amount of available on-street parking in the immediate vicinity of the mainline at one block (350 feet from roadway centerline). For the special-use parking, all but four spaces shown are police-only parking.
Exhibit A: Segment Map
Table 1: Parking Impacts by Segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Unmetered Spaces</th>
<th>Unmetered Spaces Impacted</th>
<th>Metered Spaces</th>
<th>Metered Spaces Impacted</th>
<th>Special-Use Spaces</th>
<th>Special-Use Spaces Impacted</th>
<th>Cross-Street Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>310</td>
<td>310</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>117</td>
</tr>
<tr>
<td>2</td>
<td>941</td>
<td>821</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>355</td>
</tr>
<tr>
<td>3: 2008 LPA</td>
<td>590</td>
<td>590</td>
<td>7</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>778</td>
</tr>
<tr>
<td>3: NGA Option 1 (St. Louis Avenue)</td>
<td>605</td>
<td>180</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>682**</td>
</tr>
<tr>
<td>3: NGA Option 2 (Delmar Boulevard)</td>
<td>633</td>
<td>208</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>792**</td>
</tr>
<tr>
<td>4</td>
<td>104</td>
<td>104</td>
<td>176</td>
<td>176</td>
<td>84</td>
<td>84</td>
<td>521</td>
</tr>
<tr>
<td>5</td>
<td>534</td>
<td>534</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>537</td>
</tr>
<tr>
<td>6</td>
<td>63</td>
<td>63</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>114</td>
</tr>
<tr>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Parking along Jefferson/Parnell in NGA Option segments is anticipated to be impacted by the NGA project prior to the transit project. **Cross-street parking within the NGA boundaries was not included.

Parking Impacts

Overall, the 2008 alignment impacts approximately 2,600 on-street parking spaces of which about seven percent are metered and three percent are special use (e.g. police-only or taxi-only). The impacts for optional segments along Jefferson/Parnell, St. Louis Avenue, Cass Avenue and Delmar Boulevard are similar in nature and magnitude.

Existing Parking Requirements in the City of St. Louis Zoning Code

Introduction to the Zoning Code

Parking requirements for new development and redevelopments are regulated through the City of St. Louis Title 26 Zoning Code on a use-by-use basis through a cumulative-structured set of zoning districts ranging from low-intensity (e.g., A: Single-Family Dwelling District) to high-intensity (e.g., K: Unrestricted District). Requirements for the provision of parking are required on a “per-unit” basis for residential project and a “per-square foot” / “per-occupant type” basis for all other uses; with no parking requirements for Downtown St. Louis (generally, I: Central Business District). The following table is a sample of typical parking requirements.
### Table 2: Sample of Parking Provision Requirements within the Title 26: Zoning Code

<table>
<thead>
<tr>
<th>Use-Type</th>
<th>Off-Street Parking Requirement (Minimums)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Residential Dwelling</td>
<td>One space per dwelling unit</td>
</tr>
<tr>
<td>Two-Family Dwelling</td>
<td>One space per dwelling unit</td>
</tr>
<tr>
<td>Multiple Dwelling(s)</td>
<td>One space per dwelling unit</td>
</tr>
<tr>
<td>Retail Stores &gt; 3,000 Square Feet (SF)</td>
<td>One space for each 700 SF of floor area more than 3,000 SF</td>
</tr>
<tr>
<td>Banks / Office Buildings &gt; 7,500 SF</td>
<td>One space for each 1,250 SF of floor area more than 7,500 SF</td>
</tr>
<tr>
<td>Gymnasia(m)s – Without bleachers or fixed seats</td>
<td>One space for every 150 SF of floor area</td>
</tr>
<tr>
<td>Places of Assembly: Church</td>
<td>One space for every four seats (1 seat = 4’ of pew/bench)</td>
</tr>
<tr>
<td>Theaters</td>
<td>One space for every 12 seats</td>
</tr>
<tr>
<td>School (Public or Private)</td>
<td>One space for every classroom, plus one space for every student over 16 years of age</td>
</tr>
<tr>
<td>Bars / Taverns / Exhibition Halls &gt; 1,000 SF</td>
<td>One space for each 200 SF of floor area more than 1,000 SF</td>
</tr>
<tr>
<td>Athletic Field (or Diamond)</td>
<td>10 spaces for every field/diamond, or one space for every seats, whichever is greater</td>
</tr>
<tr>
<td>Hotels</td>
<td>One space per dwelling unit or sleeping room</td>
</tr>
</tbody>
</table>

The Title 26: Zoning Code does not specify the placement or detailed characteristics of parking (e.g., encouraging access from alleys or side streets) but does go into limited detail with regards to off-street parking and loading requirements, particularly the requirements for entrances and exits, and maintenance requirements.

For additional information and requirements in the City of St. Louis Title 26: Zoning Code please visit https://library.municode.com/mo/st._louis/codes/code_of_ordinances?nodeId=TIT26ZO
Special Provisions of the Zoning Code: Special Use Districts and Form-Based Districts

As relatively newer components of the zoning code, these zoning tools allow for the establishment or adjustment of parking requirements on a localized-basis, in addition to other zoning controls. Each of these tools was enabled through a local ordinance which sets the rights and authorities of the established district to modify and expand existing zoning regulations.

Special Use Districts (SUD) offer a variety of flexible adjustments to use requirements and are mostly utilized to prohibit or limit specific uses within an area. And though they can legally be used to modify parking requirements, none currently utilize this authority.

Form-based districts (FBD) are a relatively new tool established through local ordinance in 2013 that allow for a whole range of additional zoning controls, including simplified and modified requirements for parking. The first adopted FBD – the Central West End Form-Based District – simplified the requirements for parking based on a set of succinct use-types; and the more recently adopted Forest Park Southeast Form-Based District applies parking maximums based on a similar set of use types. Both form-based districts apply additional location requirements to parking, as well.

Table 3: Sample of Parking Requirements in Central West End and Forest Park Southeast FBDs

<table>
<thead>
<tr>
<th>Succinct Use-Types</th>
<th>Central West End FBD</th>
<th>Forest Park Southeast FBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Uses</td>
<td>Zero for less than 7,500 SF; and one space / 1,250 SF greater than 7,500 SF</td>
<td>Min. zero and max. one space / 600 SF</td>
</tr>
<tr>
<td>Primary Retail Uses</td>
<td>Zero for less than 3,000 SF; and one space / 700 SF greater than 3,000 SF</td>
<td>Min. zero and max. one space / 300 SF</td>
</tr>
<tr>
<td>Residential Uses</td>
<td>One space per dwelling unit</td>
<td>Min. zero and max. one space / unit</td>
</tr>
<tr>
<td>Secondary Retail Uses</td>
<td>Zero for less than 7,500 SF; and one space / 1,250 SF greater than 7,500 SF</td>
<td>Min. zero and max. one space / 450 SF</td>
</tr>
<tr>
<td>Other Uses</td>
<td>Refer to Title 26: Zoning Code</td>
<td>Refer to Title 26: Zoning Code</td>
</tr>
</tbody>
</table>
3.0 Examples and Best Management Practices for TOD

TOD Parking Policy and Regulations

With respect to parking policy in the context of TOD, collective strategies for parking management and regulation must be flexible and responsive to the unique physical conditions and market realities of each station area. Strategies can entail an entire host of different techniques from the provision of bicycle parking in lieu of vehicular parking to the provision of structured public parking garages and valet parking. Approaches to regulations and policies for TOD should consider all available tools.

It is likely that the existing zoning codes will need to be updated to achieve the type of development that will be supportive of TOD. For example, conventional zoning requirements and development policy – e.g., higher floor-area ratios (FAR) or parking minimums – when considered together are not always conducive to fostering TOD and creating environments with transit-supportive densities. When we increase building and parking density requirements at the same time, this necessitates new development to include on-site structured parking, which is an incredibly costly component of construction and development.

Reducing the parking burden or instituting parking maximums within a station area zone frees the developer from the time, cost, technicalities, and land needed to construct that parking. This incentive allows the project to focus on increasing density, mixing uses, providing amenities, and addressing street infrastructure – all the things that make for great TOD. And when developers intend to provide that maximum parking either through structured or surface parking within a TOD (preferably in a shared-use arrangement), it is very important that TOD policy dictate how and where the parking can be located, and how that parking interfaces with the public realm.
Best Management Practices for TOD Policy, Program and Parking Regulations

There is a litany of best management practices (BMP) for policies, programs, and regulations with respect to parking that should be considered during the implementation of TOD within planned station areas along the Northside-Southside alignment. These practices broadly range from individual requirements on developments to collective actions that can be taken by public-private partnerships. The goal of management is to strike a balance, and each station area will offer different constraints that may help to dictate the appropriate mixture of practices that allow TOD to flourish. The following best management practices for parking may apply.

Bicycle Parking / Storage Strategies:

Bicycle Parking Requirements
Municipal codes within the station areas and economic incentives can be updated – specifically with respect to residential or mixed-use residential building permits for multi-unit developments (10 or more units) – to include (1) minimum requirements for bicycle parking spaces per unit – such as 1:5 to 1:15 ratio – or (2) allow for the provision of bicycle parking spaces instead of vehicular parking spaces – such as 1:1 ratio – which can also be coupled with a maximum substitution – such as 50 percent of total required vehicular parking. Through the inclusion of bicycle parking within new development and redevelopment projects, the City can reduce the demand for parking by encouraging more cycling.

Bicycle Racks and Corrals
Municipal codes within the station areas and economic incentives can be updated – specifically with respect to residential or mixed-use residential building permits/sidewalk permits for multi-unit developments (10 or more units) or municipal street design and construction standards – to include (1) minimum requirements for publicly-accessible bicycle storage racks per unit – such as 1:10 ratio – to be provided on adjacent sidewalks or (2) require the provision of a bicycle corral in lieu of an on-street parking space – such as one corral for 20-40 bicycles in lieu of one on-street parking space. Through the inclusion of bicycle racks or corrals around new development and redevelopment projects, the City can reduce the demand for parking by encouraging more cycling.

CarShare / Rideshare Strategies:

Car Sharing Services and Programs
Transit agencies can partner with municipalities to foster or implement car sharing programs and services – such as zip car or car2go, for example, and in tandem with maximum off street ratios – within station areas to provide alternative methods for residents and employees to access goods, services, and needs beyond the walkshed. This can also be combined with dedicated on-street parking spaces for car sharing programs and additional signage / branding. Through providing more access to car sharing programs and services, the City can encourage more mode-shifting and reduce the demand for parking.
Curbside Management for Rideshare
Related to the previous BMP, municipal codes can be updated or added – specifically with respect to Transportation Network Companies (TNC) or ridesharing companies – that will designate zones – also known as “home sites” – along the curbside within station areas that will be dedicated to short-term passenger pick-up and drop-off. This policy can be also considered in tandem with curbside access agreements and fees for these companies on universal passes that exempt ride-sharing vehicles from meter rates and time limits, while also generating funds to specifically use on future station area improvements. This practice may also reduce localized traffic congestion resulting from TNC circling and double-parking. These zones would serve traditional TNC vehicles in the short-term but may also accommodate autonomous TNC vehicles as that technology matures.

Employee Incentive Strategies:

Employee Subsidized Transit Passes
Commuter Benefit Programs, and Parking Cash Out Programs
Economic development incentives can be updated or added – to include requirements for new developments and redevelopments – specifically with respect to mixed-use commercial or office buildings – that any commercial or office tenant or building owner with over a specified number of employees – such as 20 – provide access to a commuter benefits program (CBP), either in lieu of the provision of vehicular parking or in addition to an allowable reduction in parking ratios, or an employee subsidized transit pass program – such as Metro’s Commuter Advantage Program. These types of programs, when made available by employers, typically provide the employee with a pre-tax payroll deduction for the cost of a pass on a per-employee basis. These strategies can also be combined with cash out programs that require that owners or tenants within the developments provide cash payments to employees equal to the price of their parking spot as an employee incentive to use a different mode to commute to and from work. These programs can manage the demand for parking, encourage mode-shifting, and increase ridership within station areas.

Management / Revenue Strategies:

Demand-Based Metering and Pricing
Municipal codes and physical infrastructure can be updated or added to allow flexible pricing to better manage the parking supply and generate revenues for TOD-related improvements. Rates are typically set on a block-by-block basis, are dependent upon the specific types of uses within the station area, and are structured to reflect “peak” and “off-peak” timeframes (e.g., $8.00 / hour at noon or lunch time, but 50 cents / hour at 10:30 AM). Rates should be calibrated to encourage approximately five to 10 percent availability at peak times. Demand-based metering can manage the demand for parking and provide revenue for station area improvements.

Parking Assessment / Benefit Districts
Municipalities can establish special districts that can collect revenues from parking meters and other fees that can be obligated to a variety of improvements within the station areas, such as structured parking garages, public improvements, beautification, additional parking improvements or upgrades, etc. Residents or businesses within the station areas can typically obtain permits that allow parking as needed for a limited (or at no) cost, thus ensuring that the primary generators of funds are outside interests and visitors to the stations areas. This can be completed on a station area or corridor-wide basis to increase funding of improvements that support walkability and reduce demand for parking.
Residential Permit Parking Districts
Transit agencies can work with municipalities and community groups to administer residential permit parking districts within station areas to better manage the supply of on-street parking. This can be combined with increased meter rates, parking assessment / benefit districts, structured public parking garages, and a variety of other strategies in other locations within the station area to better ensure that local area-residents and their guests have access to parking. By using residential permit parking districts, the City can encourage mode-shifting and reduce the demand for parking, particularly to discourage outside interests and visitors from using residential streets for other purposes.

Municipal District Management Strategies:

Parking Management Plans and Strategies
Transit agencies can work with municipalities to update codes within station areas or require incentive projects to provide or work within an established parking management plan to better ensure TOD’s are not over-parked. These plans and strategies would typically involve a variety of these best management practices applied either corridor-wide or on a per station area basis, and could be tied directly to the funding of a parking benefit district. Through agreement on a parking management plan or strategy, transit agencies can increase the return on investment for the development community and reduce the demand for parking.

Structured, Public Parking Garages
Municipalities can work with special districts and business groups to plan, design, fund, and construct strategically- or centrally-placed public parking garages that will serve the station areas daily and peak parking needs. This can be combined with a parking assessment / benefit districts, demand-based metering and pricing, and other strategies to balance parking needs throughout the district. Through the provision of public parking garages, the City can ensure that station areas are not over-parked, encourage mode shifting, and reduce the demand for parking.

Shared Day/Night Parking Facilities
Municipalities can work with special districts, business groups, and community groups within station areas to implement shared parking agreements – specifically with respect to mixed-use residential, commercial, or office and / or multi-family buildings – that encourages more day / night sharing of off-street surface or structured parking. As an example, an office building may not need parking at night, which can be utilized – through agreements – by a multi-family building or for commercial district parking in the evening. Through sharing of existing and planned parking facilities, the City can better ensure that station areas are not over-parked and reduce the demand for parking.

Valet Parking Services
Municipalities can work with special districts, business groups, and community groups within station areas to implement valet parking services within station areas. This can be combined with a parking assessment / benefit district and tied to shared day / night parking facilities, or paired with remote, off-site surface parking areas outside the district. This strategy could be applied on a district-wide or a business-by-business basis, and either daily, weekly, or for special events. Off-site valet parking zones would serve traditional vehicles in the short-term but may also accommodate autonomous vehicles as that technology matures. Through use of valet parking services, the City can ensure that station areas are not over-parked and reduce the demand for parking.
Zoning / Development Policy Strategies:

**Maximum or Reduced Off-Street Ratios**
Municipal codes within station areas and economic incentives can be updated – specifically with respect to mixed-use residential, commercial, or office building permits – to switch from minimum parking ratios (e.g., minimum of one space per 200 SF of leasable space) – to lower maximum parking ratios (e.g., maximum of one space per 500 SF of leasable space), or reduce minimum parking ratios to meet the goals of TOD. These requirements can be based generally on the types of uses (e.g., commercial, residential, etc.) or types of permits (e.g., single family dwelling unit, two-family, rowhouse, etc.) in specific station areas and combined with location and access requirements so that new developments and redevelopments are not producing an over-supply of parking. This will eventually result in more walkable-character and reduce the demand for parking.

**Unbundle Parking from Leases**
Municipal codes within station areas and economic incentives can be added or updated – specifically with respect to mixed-use residential or multi-family building permits – to require the new developments and redevelopments unbundle the cost of parking associated with the rental of a unit, and offer rental of parking as a separate lease. Not only does this help make TODs more affordable, it can encourage transit ridership and give tenants flexibility. Through the unbundling of parking from leases, the City can ensure that station areas are not over-parked, encourage mode shifting, and reduce the demand for parking.

**Location and Access Requirements**
Municipal codes within station areas and economic incentives can be updated – specifically with respect to mixed-use residential, commercial, or office building permits – to require parking to be located at the rear of the site – such as not within 30 feet from a primary retail street or 20 feet for a side street – and accessed only from alleys or side streets to reduce blank frontage, curb cuts, and the visual impacts of parking. This approach ensures that new development prioritizes street-level activity and uses that will promote lively building facades and character. Better location and access requirements result in more walkable-character, which reduces the demand for parking and creates value.

**Residential Bicycle Sharing Amenities**
Municipal codes within station areas and economic incentives can be added or updated – specifically with respect to mixed-use residential or multi-family building permits – to require that new development and redevelopments provide residents with bicycles for shared-use either through rental fees or free-of-charge. This can be combined with bicycle parking requirements (and on-site bicycle storage), as well as maximum or reduced parking ratios. Through the provision of bicycle sharing amenities for residents, the City can encourage mode-shifting and reduce the demand for parking.
Curbside Drop-Off / Loading Zones
Municipal codes for station areas and economic incentives can be updated – specifically with respect to mixed-use residential, commercial, or office building permits – to include requirements that new developments and redevelopments provide passenger loading only zones – such as five min. to 10 min. maximums – immediately in front of primary entrances, shared entrances, or public entrances to buildings. These zones would need to meet the local ordinances’ dimensional and constructional requirements. The City can reduce the demand for parking by accommodating shared commuting and carpooling, and reduce localized traffic congestion resulting from circling and double-parking. These zones would serve traditional vehicles in the short-term but may also accommodate autonomous vehicles as that technology matures.

Priority or Dedicated Parking for Carpool / Vanpool
Municipal codes within station areas and economic incentives can be updated – specifically with respect to mixed-use commercial or office building permits and in tandem with maximum off street ratios – to require new developments or redevelopments to provide priority parking spaces – such as close or convenient to building entrances – or dedicated parking spaces for groups of employees that participate in carpooling or vanpooling daily. Through encouraging shared commuting, the City can reduce the demand for parking.

Examples / Case Studies of TOD Parking Ordinances / Policies
The following case studies illustrate implementation of many of the BMPs defined in the previous section of this memo, and may provide useful examples to communicate the benefits of developing parking policies in St. Louis to support the Northside-Southside project:
Case Study #1: Modified Parking Requirements District (MPRD)

Basic Details

Location:
Los Angeles, CA

Implementing Agency:
LA County Dept. of Regional Planning

Transit Service Provider:
LA Metro

Type:
Light Rail & Rapid Transit Subway

Link:

Overview

The implementation of the Transit-Oriented District Program by the Department of Regional Planning in Los Angeles County essentially requires that local municipalities prepare TOD specific plans for each station area that includes research and analysis on parking supply and demand; as well as, a mobility strategy that includes a strategy for parking management. To support specific plans, the City of Los Angeles passed an ordinance that establishes Modified Parking Requirement Districts (MPRD) within TODs that allows more flexibility and optional modifications to existing parking requirements, intended to ensure that new development receives an economic advantage and incentive for genuinely transit- and pedestrian-oriented development. These MPRD’s include the following:

- **Change of Use Parking Standards**: Tool allows for increasing the intensity of a proposed use without the requirements to provide any additional parking (i.e. converting retail to a restaurant / bar.)
- **Off-Site Parking**: Tool allows for the provision of off-site parking within 1,500 feet of a proposed use, rather than provision on-site (i.e. a surface parking lot with valet not within the station area).
- **Parking Reduction Permit**: Tool allows for proposed uses that may through their own nature or provision of access to alternative transportation need less parking reduce the required amount of parking.
- **Decreased Parking Requirements**: Tool allows for localized, area-wide reduction in parking requirements where less parking is needed or transit is being encouraged (i.e. TOD areas).
- **Increased Parking Requirements**: Tool allows for localized, area-wide increase in parking requirements where more parking is needed and / or where access to public transportation is limited.
- **Commercial Parking Credits**: Tool allows for the provision of tax credits to property owners and businesses that choose to meet parking requirements for a proposed use through utilization of publicly-available or publicly-owned on-street or off-street parking spaces, lots, and garages.
- **Maximum Parking Requirements**: Tool allows for a maximum limit on the provision of parking for proposed uses that are more in-line with the supply and demand of parking in station areas.
Case Study #2: Off-Street Parking Exemptions & Reductions

Basic Details

Location:
Chicago, IL

Implementing Agency:
City of Chicago

Transit Service Providers:
Chicago Transit Authority / Metra Commuter Rail

Type:
Heavy Rail & Commuter Rail

Link:

Overview

The implementation of the 2015 Transit-Oriented Development Reform Ordinance was structured to expand on the City of Chicago’s 2013 TOD Ordinance by expanding the size of TOD zones, eliminating parking requirements in the TOD areas all together, and adding new incentives for affordable housing. The intention of this ordinance directly accelerates TOD within the City of Chicago near Chicago Transit Authority (CTA) and Metra stations. The ordinance – which was adopted in September of 2015 – was designed to encourage mixed-use residential and commercial use developments, expand access to transit, bring new amenities, and foster economic growth. A primary vehicle for implementation of this ordinance is the City’s zoning code, which included the following general updates relative to the provision of parking within TOD areas:

- **Reduced Minimum Off-Street Automobile Parking Ratios for Residential Uses:** Tool allows for 50 percent reduction in required provision of parking for new construction or rehabilitation or reuse of existing structured located within 1,320 feet of a CTA or Metra rail station entrance or within 2,640 feet of a CTA or Metra station entrance when the subject building is located along a pedestrian street or a pedestrian retail street within specified zoning districts. Minimum parking ratios for residential uses may be further reduced by 100 percent if the project is reviewed and approved as a special use or Planned Unit Development.

- **Reduced Minimum Off-Street Automobile Parking Ratios for Non-Residential Uses:** Similar provisions as listed above for non-residential uses, with exception that any reduction more than 50 percent shall be approved by Administrative Adjustment and through notice to the Alderman of the Ward in which the subject property is located.

- **Required Replacement of Automobile Parking with Bicycle Parking:** Reductions – as shown above – may only be approved when the subject development includes one bicycle parking space per space reduced, and not to exceed 50 total bicycle parking spaces.
Case Study #3: Residential Parking Revisions

Basic Details

Location:
Minneapolis, MN

Implementing Agency:
City of Minneapolis

Transit Service Providers:
Hennepin County / Metro Transit

Type:
Light Rail & Commuter Rail

Link:

Overview

To support the implementation of the Hennepin County Transit-Oriented Development program, the City of Minneapolis updated specific provisions of the City’s zoning code that will allow more flexibility with regards to the number of parking spaces that must be provided for residential uses in areas that are well served by bus and rail transit. The TOD program was developed to enhance transit usage, increase density, reinforce the transit system, exhibit compact development, contain diversity and mix of uses, support pedestrian-friendly design, and increase comfort within walking distance of transit.

The City of Minneapolis zoning amendment was intended to better align housing, transportation, and land use policy in the region with the City and encourage more transit ridership. It included the following provisions to specific residential use permits within station areas:

- **Multi-Family Dwellings:** Tool allows for reduced minimum Off-street parking requirements for multiple-family dwellings within close-proximity to frequent transit service, including a 30 percent reduction from the requirements specified in that areas current overlay district. This portion of the amendment was designed to target residential parking requirements within specific station area overlay districts within the City.

- **Residential Uses:** Tool allows development projects with 10 or more dwelling units or rooming units may not provide more than 1.7 spaces per unit; and developments with fewer than 10 dwelling units may not provide more than two spaces per unit. It also allows that off-site parking up to 500 feet away shall be permitted to meet this requirement. This portion of the amendment was designed to broadly reduce the required provision of parking from the City’s existing standards.

- **All Other Uses:** Tool allows that off-site parking up to 500 feet away shall be permitted to meet this requirement for all other uses within station areas. This portion of the amendment was designed to reduce the need for on-site parking in all uses.
Case Study #4: Updated Motor Vehicle Parking, Bicycle Parking & Loading Ordinance

Basic Details

Location:
Portland, OR

Implementing Agency:
City of Portland

Transit Service Provider:
Metro

Type:
Light Rail & Streetcar

Link:
https://www.portlandoregon.gov/bps/article/53320

Overview
To support the implementation of Metro’s Transit-Oriented Development program, the City of Portland routinely updates and refines the use-based motor vehicle parking and bicycle parking requirements. This ordinance update establishes standards for the amount, location, and development of motor vehicle parking, standards for bicycle parking, and standards for on-site loading areas within station areas, and includes the basic following requirements:

- Minimum Required Parking Spaces: Tool requires the following for Household Living Uses located 1,500 feet or less from a transit station or 500 feet or less from a transit-street with 20-minute peak hour service – (a) no required parking for up to 30 units, (b) 0.20 spaces per unit for 31-40 units, (c) 0.25 spaces per 41-50 units, and (d) 0.33 spaces per unit for more than 51 units.

- Joint-Use Parking Spaces: Tool allows sites where two or more uses on the same or separate sites to share the same parking spaces because their parking demands occur at different times.

- Carpool Parking Spaces: Tool allows office, industrial, and institutional uses with more than 20 parking spaces on-site to reserve five spaces or five percent – whichever is less – for carpool uses before 9:00 AM on weekdays. Carpool reserve spaces are allowed, but not required.

- Affordable Housing Exemptions: Tool allows for a 100 percent exemption from parking requirements for affordable housing projects located 1,500 feet or less from a transit station or 500 feet or less from a transit-street with 20-minute peak hour service.

- Bicycle Parking Allowance: Tool allows for substitution of five bicycle parking spaces that meet short-term or long-term bicycle parking standards for one motor vehicle parking space, up to a maximum of 25 percent of the total required parking spaces.

- Transit-Supportive Plaza Allowance: Tool allows for substitution of 10 percent of the area needed for total required parking with a transit-supportive plaza, amenities, and other features.

- Car-Sharing Allowance: Tool allows for substitution of one car-sharing space for two motor vehicle parking spaces, up to a maximum of 25 percent of the total required parking spaces.
4.0 General Recommendations & Next Steps

To serve as a guide moving forward, this white paper has provided an overview of existing conditions and requirements, and examples and best management practices for parking within TOD areas. The recommendations and next steps are not intended to provide exact recommendations on which of the policies and programs to utilize; but, rather to provide a path forward to investigate, refine, and build support for specific policy and regulatory updates on either a corridor-wide or per-station area basis. City agencies should be engaged in consideration of the following steps forward:

- **Analysis of Supply and Demand:** To ensure that parking needs within Northside-Southside alignment are balanced, further study will be required of the existing supply and demand in each station area. This analysis will help to better understand the existing supply of parking, likely future utilization rates (with consideration for development potential and catalytic projects), and impacts on adjacent neighborhoods and commercial districts. This should also identify the most applicable and supportable best management practices for policy and regulatory updates for incorporation into a city-wide TOD policy and program. The study area may be corridor-wide for all station areas, or priority station areas with high-probability for TOD and/or obvious parking issues and needs.

- **Station Area Planning & Parking Management Plans:** To ensure that updates to parking requirements within existing City ordinances are aligned with physical planning strategies and locally supportable, station area planning activities for priority station areas should include (or build upon independently prepared, i.e. previous step) further study on the existing supply and demand of parking, as well as identify locally-appropriate best management practices for TOD and recommended parking management plans. These detailed planning activities can ensure that parking strategies will support the implementation of the vision for the station areas determined with local stakeholders, and serve (but not overserve) the need for parking.

- **City-Wide TOD Parking Policy:** To ensure that policy and regulatory updates support TOD city and corridor-wide, parking policies should be considered and developed with implementation entities (i.e. incentives, zoning, metering, etc.) and City agencies for incorporation into a city-wide TOD parking requirement and management policy. This may be considered within or independent of a city-wide TOD policy and program that can streamline the development process, grant incentives, and guide TOD projects through City permitting and approvals process.

- **Update to the Strategic Land Use Plan:** To ensure the implementation of policy updates that support TOD, any future station area planning activities and specific recommendations with respect to land use updates (and supportive zoning code updates) will need to be incorporated into the 2005 Strategic Land Use Plan (as amended and updated) by approval of the Planning Commission to justify any updates to the parking requirements (and other changes i.e. density, form, use, etc.) in the City’s zoning code. Station area planning activities and the resulting documents and recommendations will be needed and must be broadly supported by station area stakeholders to justify the land use and zoning updates.

- **Updating Local Zoning Ordinances & Modifying Incentive Policy:** To ensure that parking requirements are supportive of TOD, specific modifications to the City of St. Louis Title 26: Zoning Code will be needed to ensure that review and approvals of building permits (determined to meet the definition established in the authority) meets guidelines for TOD established and codified within a city-wide TOD policy. Additionally, updates to existing or establishment of new incentives for TOD (if specifically related to the provision of parking) must be considered, developed, and legislated through the St. Louis Development Corporation or any new entity, board, or commission established through City-wide policy.