

APPENDIX F: BEST PRACTICE PARKING MANAGEMENT STRATEGIES

Parking Management Strategies Overview

Parking management for the Silver Line's TOD areas will benefit from a variety of strategies rather than a singular fix. The strategies listed in this section were chosen to meet the specific needs and challenges identified in the Silver Line Parking Study as well as from national best practices. It is organized to serve as a guide for the development of innovative parking approaches for both existing and future TODs along the Silver Line corridor. These parking management strategies focus on opportunities to address the most pressing and consistent challenges found along the Silver Line TOD areas including:

- Half of TOD development sites provide more parking than is required by code and over-supply parking by an average of 19%.
- Developers have significantly overparked TOD projects along the Silver Line corridors, with peak-hour occupancy measuring lower than 60% at 4 out of the 7 TODs and an average for all station areas at 69%.
- Incentivizing walkable and vibrant TOD communities by right-sizing the amount of parking in TOD areas with existing and future rail.

Parking Strategy Organization

Strategic Category

For each strategy, the following are identified to note when the strategy is most applicable and who would need to spearhead the effort:

- **Future** – The strategy applies to new development and often a part of the zoning approval process
- **Existing** – The strategy can be applied to existing development
- **Public** – The strategy needs local government to lead implementation
- **Private** – The strategy needs private development owners, property managers, and developers to lead implementation

Description of Strategy

This section includes a brief narrative description of the strategy.

Key Benefits

Outlines key benefits garnered in places the strategy has been applied.

TOD Parking Objectives Supported

Four objectives for Silver Line TOD Parking strategies are described below. The objectives most directly supported by each strategy are noted and given a level of effectiveness rating from 1-3, with 3 designating highly effective and 1 being the least effective.

- **Reduce Demand** – Reduce the generation of parking demand at TODs, to minimize future supply needs, or to free up capacity in existing parking facilities.
- **Increase Efficiency** – Optimize the value of TOD parking infrastructure, by avoiding excess parking at new TODs, and making use of excess capacity at existing TODs.
- **Shared Parking** – Increase the share of TOD parking supplies that are managed as a shared/public resource.
- **Improved Mobility** – Support opportunities to increase use of non-driving mobility options, particularly but not limited to transit.

Implementation Examples

A brief description of implementation examples.

Applicability to Silver Line

Identifies where the strategy might be best applied along the Silver Line corridor.

Implementation Considerations

Outlines key considerations for implementing the strategy.

Eliminate/Reduce Parking Requirements

Strategic Category:

- Future
- Public

Description of Strategy

Minimum parking requirements are ordinances in a municipality's code that mandate developers and property owners build a minimum number of parking spaces, usually determined by a ratio applied to the property's square footage, according to its use. This often forces developers to allocate space and expenses for parking spaces they may not need. Reducing and/or eliminating parking requirements revises the language of the ordinance to change this requirement.

Key Benefits

- Facilitates TOD that optimizes tax-generating land-use densities and benefits from walkable/transit-focused urban design that furthers transit ridership and mode-shift objectives
- Allows developers to build less parking which gives them greater flexibility in designing and programming their projects
- Increases the potential density of mixed-use developments

TOD Parking Objectives Supported

- Reduce demand (3)
- Increase efficiency (3)

Implementation Examples

- [Denton, TX](#)
 - In 2022, Denton City Council updated the city's development code to exempt a few types of developments from parking minimums, including "properties containing less than 5,000 square feet of lot area, except for single-family detached, duplex, and townhome dwelling uses." Additionally, the ordinance places a parking maximum on such developments at "125 percent of the minimum number of off-street parking spaces" as required by the Minimum Required Off-Street Parking table in the development code.

- [Irving, TX](#)
 - Irving’s 2020 Unified Development Code reduced parking requirements for nonresidential uses in the TOD District when located near transit as well as uses in the Urban Business Overlay District.
- [Austin, TX](#)
 - In 2023, Austin became the largest U.S. city to eliminate parking requirements in an effort to lower housing costs and encourage transit-friendly development. The Austin City Council updated the city’s code to effectively eliminate parking requirements for all new developments citywide. This included eliminating parking requirements for single-family homes, apartment buildings, commercial buildings, offices, and shopping malls.

Applicability to Silver Line

- Reducing or removing parking minimums is one strategy recommended across all the Silver Line TOD areas. However, this study found that almost half of TOD sites (18) over-supplied parking by 24%, rendering parking minimums somewhat irrelevant when not implemented with complimentary parking management strategies.
- Reducing or removing parking minimums for TOD sites zoned as office or include office as part of multi-use zoning is highly recommended in tandem with other parking strategies. Parking for TOD sites zoned as office are particularly over-supplied (7%-41%) and underutilized (39%-65%). Given the changing landscape of telecommuting and working in-person due to the COVID-19 pandemic, assessing parking minimums for office is warranted to reduce underutilized parking across the TOD sites.
- Shared parking is a recommended strategy to pair with reduced parking minimum policies across the TOD districts. The study found that TOD sites that under-supplied parking were the sites implementing shared parking. Yet, even with the shared parking models employed, peak utilization remained low ultimately pointing to a need to reduce the minimum parking required. For example, in the Carrollton station area, all sites are under-supplied due to shared parking but the station area has a peak utilization of only 54%.

Implementation Considerations

Reducing parking requirements is one important strategy that will need to be complemented by other parking management strategies that require developers to invest in mobility improvements and/or shared parking. Mobility improvements – such as ones that support people walking, biking, and taking transit – can further reduce parking demand, while shared

parking strategies can ensure adequate parking supplies, even when minimum requirements are eliminated. However, as seen in many TOD developments along the Silver Line corridor, many developers chose to supply more parking than the minimum required.

Eliminating/reducing minimums in an auto-dependent region may not result in less or no parking being built unless cities establish other limits or provide detailed guidance to the private real estate market.

Role of the Public Sector:

Removes or significantly reduces the minimum parking in the zoning code, either within designated TOD districts or for development within a defined distance of fixed-route transit access.

Provide detailed guidance to the private real estate market to show successful examples of development providing less parking than the perceived standard.

Role of Private Sector:

Makes use of findings regarding parking utilization to adjust local understanding of and calculus for determining TOD parking needs.

Parking Maximums

Strategic Category

- Future
- Public

Description of Strategy

Parking maximums establish a maximum number of parking spaces a development is allowed to build on its property. The conditions of these maximums are detailed in a municipality's code of ordinances and can be applied either to select uses or across a station area or municipality.

Key Benefits

- Maximums establish a guardrail against overbuilding parking in a specific area.
- Maximums promote shared parking supplies by restricting the number of spaces at a single development.
- Emphasizes the expectation of reduced parking needs in TOD areas
- Reduces housing costs by capping the potential cost of excess parking, which developers often offset via high housing prices/lease-rates

TOD Parking Objectives Supported

- Reduce demand (3)
- Increase efficiency (3)

Implementation Examples

- [Knoxville, TN](#)
 - In 2018, Knoxville's Code of Ordinances established parking maximums on all uses with exemption from the Department of Engineering. This was accompanied by 20-40% reductions in parking minimums across Knoxville's commercial districts and a 30% reduction in parking minimums in any district if the development located within one-fourth mile of a transit route.
- [Flagstaff, AZ](#)
 - In 2018, Flagstaff established developments over 10,000 square feet in floor area or containing 25 or more residential units that provide parking in surface parking lots shall not exceed the minimum number of parking spaces by more than five percent unless provided in a parking structure.

Applicability to Silver Line

- Given the rampant over-supply and under-utilization of parking across the TOD sites, reducing parking maximums may be an impactful strategy to reducing underutilized parking for future TOD sites.
- Reducing parking maximums for TOD sites zoned as office or include office as part of multi-use zoning is highly recommended. Parking for TOD sites zoned as office are particularly over-supplied (7%-41%) and underutilized (39%-65%). Given the changing landscape of telecommuting and working in-person due to the COVID-19 pandemic, assessing parking maximums for office zoned sites is warranted to reduce underutilized parking across the TOD sites. The City of Addison and Cypress Waters should consider this recommendation given their supply of parking dedicated to office sites and overall low station area parking utilization (under 40%).
- Multifamily parking maximums may also be beneficial to consider. Studied sites zoned exclusively multifamily are over-supplied by 4% and sites zoned multifamily/office are over-supplied by 41%, while sites zoned multifamily across the TOD districts have a parking utilization of 63%. Implementing parking maximums can help reduce the amount of parking supplied for multifamily sites.
- If there's political resistance to fixed parking maximums, zoning codes can instead establish a more flexible maximum, in which one or more options for providing parking above the maximum are available, such as the provision of mobility improvements or travel demand management (TDM) commitments or the provision of shared or public parking which is not counted toward the project's maximum.

Implementation Considerations

Parking maximums can be a valuable tool in TOD districts as they support high-density, mixed-use development and work well in areas with direct access to transit and other multi-modal transportation options. Parking maximums do represent a departure from traditional zoning strategies and may require conversations with the development community and community leaders. These conversations can provide an understanding of their needs, an opportunity to share relevant data-driven information for decision-making, which can lead to developing the appropriate parking maximum. Local data on observed parking utilization should be collected to calibrate appropriate maximum levels for various land use cases. Flexible maximum may help minimize the risk of discouraging development in TOD areas.

Role of Public Sector:

- Collects data on observed parking utilization to calibrate maximums

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- Drafts zoning code language defining maximum parking limits, based on proposed land uses
- Collaborate with decision-makers and developer community

Role of Private Sector:

- May provide data on observed parking in coordination with public to inform recommendations
- Responds to proposed guidelines by providing parking that does not exceed the maximum, or by making excess supply available for shared or public parking, or by paying a fee to fund public demand-management/demand-reduction investments

Shared Parking Agreements

Strategic Category

- Existing
- Future
- Public
- Private

Description of Strategy

A shared parking agreement is an arrangement between two or more parties detailing each party's access to a common parking supply. Shared parking agreements are usually made between entities with parking demands that peak at different times, complimenting each other's lower demand with their own higher demand. Such agreements customarily detail who is involved in the agreement, the length of the agreement, and days and times each party has the right to use the parking supply.

Key Benefits

- The utilization of parking supplies is maximized throughout the day by collocating parking supply for land uses with different demand peaks (e.g., residential and office).
- Developments will not need to shoulder the expenses of a dedicated parking supply, especially if it will be mainly used only part of the day.

TOD Parking Objectives Supported

- Increase efficiency (3)
- Shared parking (3)

Implementation Example

- New Braunfels, TX
 - New Braunfels, TX first enacted shared parking agreements in 2007. The city's efforts to implement these agreements were part of a broader initiative to manage parking in the downtown area, especially as the city experienced growth and redevelopment. Applicants may fill out a [Shared Parking Agreement application](#) for parking within the same parking lot, unless an off-site parking application is approved. Approval by the Planning Director relies on an applicant-submitted parking study showing different peak hours of parking demand across land uses.

Applicability to Silver Line

- Sites zoned for offices are often great candidates for shared parking agreements with other commercial sites that have a higher parking demand in the evenings and weekends.

Implementation Considerations

Shared parking can be a logistical challenge for all parties involved. Shared parking agreements can sometimes be easier to secure if access to the shared parking is restricted to the employees of the other party. This can provide the same level of expanded parking capacity to the owner seeking more parking, while providing more control accountability to moderate the concerns of the owner providing the shared access.

Some private property owners may support sharing all or a portion of their parking, but would prefer to share with other private entities, such as a specific company, and have a third-party operator manage their parking. All parking contracts should incorporate, at a minimum, a 90-day termination clause to allow adequate time to obtain other leasing options, if needed.

Proactively offering ongoing technical assistance will build support for private-to-public or private-to-private agreements such as cost and revenue sharing, payment technology options, and wayfinding/signage standards.

Role of Public Sector:

Legalizes shared parking agreements, which some zoning codes prohibit for spaces provided to meet minimum parking requirements

Brokers shared parking agreements between property owners to share parking resources (as necessary)

Provides technical assistance and shares example agreements to private partners

Role of Private Sector:

Facilitates relationships with neighboring land owners and third parties

Helps public sector confirm key challenges and issues towards a shared agreement

Incentives for Public Parking

Strategic Category

- Future
- Public
- Private

Description of Strategy

The most common form of a shared public parking incentive is to reduce a project's minimum parking requirement if it can demonstrate that diverse land-uses and shared-parking management will provide supply efficiencies. Developers can be incentivized to incorporate public parking into their development with certain allowances on their project, such as increased building density, reduced setbacks, expedited permitting process, and more beyond what is established by code. This encourages developers to provide a public benefit to their project in exchange for added revenue opportunity or procedural convenience. Cities can also use public-private partnerships to implement shared public parking.

Key Benefits

- Prevent oversupply of parking by ensuring that all spaces are able to be used at different times of day
- Ensure that shared parking is provided in all new developments
- Make the best possible use of a limited parking supply
- Work in concert with broader parking maximums to facilitate dense, mixed-use TOD
- Create opportunities for public-private partnerships related to parking

TOD Parking Objectives Supported

- Increase efficiency (1)
- Shared parking (2)

Implementation Example

- [Gunter, TX](#)
 - A small town north of Dallas, Gunter's code included provisions for Tax Abatement as well as use of Type B economic development sales tax funds, general funds from the City's operating budget , and any other resources as

approved by the Council in 2020. Incentives may be considered for both new facilities and improvement or modernizing of facilities, including those of parking.

- [Carrollton, TX](#)
 - Carrollton executed its first public-private partnership to construct the Union at Carrollton Square. The construction of the transit-oriented development has attracted multifamily housing, mixed-use development, and retail to the downtown area and supports the overall revitalization effort of Carrollton along with service from DART's Green Line light rail and construction of the platform for the future Silver Line Regional Rail. The Union at Carrollton Square development is part of the larger public plan to grow Carrollton's community and infrastructure, powered by the funds and expertise of private partners.

Applicability to Silver Line

- Shared public parking should be considered at all Silver Line TOD areas given that they are almost all over supplied and under-utilized. This strategy will help reduce the amount of parking built for new developments, especially in those preparing for a future station.

Implementation Considerations

This form of shared parking is effective in all mixed-use development which contain a variety of uses with complementary activation times. Shared parking can also be used to seek public-private partnerships which allow municipalities to directly manage parking that is built as part of private development. As a baseline, shared parking can be promoted by lowering or eliminating minimum parking requirements when shared public parking is provided.

North Texas cities can also incentivize shared parking through Texas Local Government code Chapter 380 economic development agreements used to support mixed-use development in public private partnerships.

Role of Public Sector:

- Revises codes to incentivize the provision of shared publicly accessible parking
- Initiates outreach to property owners, employers, and parking operators to ensure that incentive parameters are understood
- Monitors implementation to ensure that credited parking is functioning as shared/public parking

Role of Private Sector:

- Considers the option of sharing parking as a means of providing more parking than is allowed to be reserved for the developed land uses

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Parking Management Districts

Strategic Category

- Existing
- Public

Description of Strategy

A parking management district is a defined geographic area that may include a variety of land uses which may require a higher level of management of shared parking facilities and use of parking meters to achieve transportation goals. Often these come in the form of a Parking Benefit District (PBD) where the funds from meters are used to re-invest into improvement projects to manage the district's traffic flow and travel demand. Districts may include uses such as commercial, residential, retail, entertainment, educational, and medical amongst several others.

Key Benefits

- Higher traffic areas can self-fund special improvements they need and other sources are not asked to cover the cost.
- Growth of an area is self-driving, as more use of the district's meters allows for more improvements of the district's features.

TOD Parking Objectives Supported

- Increase efficiency (2)
- Shared parking (2)

Implementation Example

- [Austin, TX](#)
 - Austin established its Parking and Transportation Management District (PTMD) program in 2014 to create and manage its PTMDs and to function alongside its established PBD in West Campus. PTMDs expand beyond the typically offerings of a Parking Management District by allowing parking revenue to go towards transportation improvements.
- [Houston, TX](#)
 - In 2022, the Houston City Council approved the creation of a Parking Benefit District and designated Midtown as a Community Parking Benefit District. The Midtown Parking Benefit District receives 60% of the parking meter revenue for

sessions started after 6pm and the other 40% goes to the ParkHouston special revenue fund. The money the district receives finances improvement that enhance the quality of life, promote walkability, and support alternative methods of transportation. The District's Advisory Committee is comprised of business or commercial property owners in Midtown and Midtown residents and meets quarterly to make recommendations to the City for public improvement projects.

Applicability to Silver Line

- In a parking management district, parking fees are charged to reflect the real cost of parking, discouraging excessive car use. When drivers must pay for parking, they may be more inclined to switch to public transit, particularly if the nearby DART Silver Line station offers convenient, affordable, and high-frequency service.
- Revenue generated from the parking management district can be reinvested in local infrastructure improvements, such as:
 - Better pedestrian and bike connections to the DART Silver Line station.
 - Bus shelters or improved DART Silver Line station facilities.
 - Streetscaping and amenities like lighting, crosswalks, and wayfinding to enhance the walkability and attractiveness of the station area.
- Infrastructure improvements make transit use more appealing while maintaining community support for parking fees by directly benefiting the neighborhood.

Implementation Considerations

There are several organizational/authorization models for establishing a Parking Management District, but typically require authorization of a third party – a municipal department, a private entity such as a business improvement district or development authority, or a hybrid option for creating an authority largely independent of, but authorized and overseen by, a body of elected officials.

Funding options can include any or all of the following:

- Parking revenue
- Development fees
- Property assessments
- Property taxes.

The best-fit approach for organizing and funding districts will vary by location and circumstances, including level of interest, and current involvement in parking management, among potential/viable departments and organizations.

Role of Public Sector:

- Explores options for creating a district parking program, to be maintained/administered by the City or a parking authority, a business improvement district, or other 3rd Party, non-profit entity
- Coordinates with parties who control parking assets not directly controlled by the district administrator
- Works with a parking operator to provide consistent, specialized, and customer-friendly operations across the district
- Oversees policy development and implementation to ensure district assets are managed in service to identified goals and objectives
- Establishes district roles, responsibilities, areas of authority, and funding streams
- Directs investment of district funds, including revenue sharing as applicable
- Monitors program implementation and effectiveness

Role of Private Sector:

- Agrees to allow incorporation of their parking assets into a district parking program, to both increase the efficiency of these assets and to contribute to the economy
- Markets and implements district benefits for development tenants and visitors
- Collaborates with new developments to facilitate potential shared parking agreements and benefits

Crediting Off-Site Parking

Strategic Category

- Future
- Public

Description of Strategy

Crediting off-site parking allows off-site parking spaces to credit towards a development's minimum parking requirements. This can allow more density on a site that would have been difficult to develop if parking was required onsite. Off-site parking usually includes third-party parking garages, surface lots, or on-street parking.

Key Benefits

- Developers will not have to allocate expenses towards building, maintaining, and operating their own parking supply. This can lower the barrier costs for small businesses.
- Prevents oversupply of new parking
- Allows developers to maximize the land-use densities of their sites
- Concentrates area parking supplies in fewer, larger, more efficiently designed and managed facilities

TOD Parking Objectives Supported

- Increase efficiency (3)
- Shared parking (3)

Implementation Example

- Lubbock, TX
 - Enacted in 2018, Lubbock's [Unified Development Code \(UDC\)](#) allows off-site parking spaces to credit towards a development's minimum parking requirements if the off-site parking is located within 300 feet of the new development and the parking lot is wholly within a mixed-use zoning district.

Applicability to Silver Line

- Taking advantage of existing off-site parking allows new developments to meet parking needs while freeing up prime real estate for other uses, such as housing, retail, or community spaces that support transit ridership.

- By locating parking off-site, developments can discourage excessive car traffic near the station itself, reducing congestion and making it safer and more accessible for pedestrians and transit riders.
- Reallocating space that would be used for parking creates opportunities for more active street frontages, plazas, or landscaping. This improves the pedestrian experience, which is crucial for encouraging transit use.

Implementation Considerations

Where off-site credits are common in development approvals, concerns may arise that the same parking spaces are being included in multiple agreements, crediting them with demand-accommodation well beyond their capacity. If off-site parking is leased from a separate owner, shared agreements should specify:

- The use of facilities to be shared (location, times, users, etc.);
- The exclusivity of specific spaces not to be shared;
- The times of day, days of week, or seasons of the year when parking is to be shared;
- Responsibilities for maintaining shared spaces, including striping, signage, repair, cleaning, and improvements;
- Responsibilities for utility bills and tax payments;
- Enforcement staffing and procedures, especially for addressing violations;
- Insurance requirements and payment obligations;
- The term and extension;
- Any additional legal language related to contractual agreements, such as indemnification and termination clauses; and
- Monitoring obligations to ensure availability remains, at peak times, before facilities can be included in further agreements.

Role of Public Sector:

- Defines parameters for crediting off-site parking toward a project's minimum parking requirements, primarily by defining the maximum-allowed distance between the property and the proposed parking
- Defines requirements for shared-use agreements between the developer and the owner of the off-site parking

Role of Private Sector:

- Explores potential partnerships with off-site property owners
- Contracts with partners and provides agreements as part of proposal submission, with specifications on responsibilities, terms, and conditions

Parking Availability Platforms and Guidance Systems

Strategic Category

- Existing
- Future
- Public
- Private

Description of Strategy

Several technology platforms can monitor the occupancy of parking supplies in real time or within an estimated range, allowing property owners to share that information with their tenants and customers. By seeing parking occupancies in real time, users can streamline the parking experience by going directly to a facility where they know a spot to be available. Some platforms provide this information on an even more granular level by sharing occupancy by floor in a facility or by space.

Key Benefits

- Tenants and customers save time while looking for a spot, returning that time to use of the property.
- Service issues are relieved, and property owners reduce the issues they have to address.
- Property owners are given a clearer idea of the utilization of their parking facilities, allowing them to make strategic decisions regarding the parking they provide.

TOD Parking Objectives Supported

- Increase efficiency (3)
- Shared parking (2)

Implementation Example

- [Dallas, TX](#)
 - The Dallas-Fort Worth (DFW) International Airport provides real-time parking availability for drive-up users for each of its terminal, express, remote, and valet parking services. DFW International Airport is the second-largest airport in the United States by land area and can be difficult and time-consuming to navigate

and find a proper parking spot. DFW's parking platform shows percent occupancy, availability of amenities and accessibility features, and current closures on each section of parking on the premises. This allows airport customers to make informed decisions on parking before arriving and helps direct them to an open spot that meets their needs.

- [Arlington, TX](#)
 - In 2023, the University of Texas Arlington launched a parking finding website that makes it easy to view current parking occupancy across campus. The real-time occupancy map provides users the information by parking permit and parking space type and allows users to plan their arrival. At the time of launch, 39% of the parking lots were equipped with parking occupancy sensors and expected to grow to 85% over three years.

Applicability to Silver Line

- Particularly helpful in TOD areas with public parking lots and garages as the guidance helps direct people to where they can park more efficiently.
- As shared public parking becomes implemented, this should be a strategy implemented in tandem.
- Advantageous in TOD areas where circling to park is a known issue, which could help improve pedestrian safety.
- Viable for both established and future TODs

Implementation Considerations

By presenting all public and shared parking options to all area parking customers, information platforms can be a strong complement to other parking management strategies and programs, particularly shared-parking brokerage programs and district parking management. As the Pittsburgh case study makes clear, effective platforms can also be effective independent of these strategies, creating a user experience of a cohesive parking program by ensuring that information, branding, and messaging direct drivers toward right-fit parking opportunities – regardless of who owns, controls, or manages the spaces they end up using. While platforms require significant initiative and follow-through on the part of a third party, the modest cost and staffing-commitments required for success significantly increase the viability and relevance of this management tool.

These platforms will likely be most viable in areas where parking is priced, such as central business districts and highly urban areas. In suburban centers where parking is free, these can still be used but will likely require public funding as a complement to shared parking strategies.

Role of Public Sector:

- Initiates platform development, branding, security, and outreach
- Engages potential participating parking facilities
- Defines information-sharing and fee requirements to ensure platform effectiveness and sustainability

Role of Private Sector:

- Initiates development of a platform, branding, security, and outreach
- Helps fund the program, in return for the benefits of having their parking capacity promoted to drivers
- Installs necessary technology to track and share availability information, and updates the program administrator on hours, fees, and other regulations
- Offers promotions and discounts for platform patrons

Curb Space Management

Strategic Category

- Existing
- Public

Description of Strategy

Managing curb parking is necessary to address numerous parking issues. On-street parking is typically the first choice of those visiting street-level commercial uses -- and the foremost/only supply of public parking in many Silver Line TOD station areas. Where drivers know curbside parking is free and unrestricted, residents and area employees can take over these spaces, leaving visitors to circle in search of spaces and congest traffic. Effective pricing and/or regulation of these spaces incentivizes all long-term parkers to use off-street spaces, freeing up curb spaces for visitors. Having an effective curb space management program in place can bolster developers' confidence that their visitors will have available on-street parking, reducing the need for them to increase on-street parking for these drivers.

As more varied uses for this space – passenger loading, bike/bus lanes, bike parking, shared bike/scooter zones, parklets, and curb extensions – have emerged and gained in popularity, management of this space has become more intentional, active, and innovative – with an increasing focus on optimizing the unique value that these spaces provide in terms of access and mobility.

Key Benefits

- Rules regarding use of the curb are more clearly defined, reducing the number of violations by users
- Buffers pedestrian/sidewalk areas from traffic in adjacent travel lanes
- Extends pedestrian/sidewalk areas, where curb-extensions and parklets are incorporated
- Improves the functionality of transit, cycling, shared-mobility services, and other travel modes that can reduce off-street parking needs and activity area streets, sidewalks, and public spaces

TOD Parking Objectives Supported

- Increase efficiency (3)
- Improved mobility (3)

Implementation Example

- [Dallas, TX](#)
 - In May 2024, Dallas adopted the On-Street Parking and Curb Management Policy to provide guidance to city staff in determining the highest and best uses of curb space based on meeting community and economic needs. The policy establishes recommendations that intend to support business districts by making it easier for customers to find parking spaces, reduces congestion and conflicts in travel lanes by allocating adequate space and time to access the curb, and providing consistency in the application of curb lane management strategies.

Applicability to Silver Line

- Most of the street parking in TOD areas is free. TODs with the highest parking utilization – such as Carrollton – may be great candidates to implement a paid on-street parking program.
- Implementing a on-street parking and curb management program should be considered in tandem with other supporting strategies including shared public parking and parking availability platforms/guidance.
- This strategy is viable for both established and future TODs.

Implementation Considerations

As free curbside parking is highly favored by North Texans, it is important to focus on the long term benefits to the public of managing those spaces in high-demand areas to ensure their functionality. Management of public curbside parking relative to other travel modes can also be a city's first step to catalyzing conversation around other tools in this toolbox.

If streets in walkable mixed-use areas have unmanaged curb parking, cities should consider a community-driven planning process to add phased management of the curb starting with more traditional parking uses and then communicate the economic and mobility benefits of more dynamic use of that space.

Plans defining the relative value and priority of various curbside uses and functions should be developed to provide clarity on regulations, restrictions, and pricing applied to these spaces. Priorities can shift between street types, and across distinct time periods, to seek to accommodate a wide range of uses/functions, while still prioritizing some over others. The same block may be prioritized in favor of commercial loading in the morning, short-term visitor parking during the midday and afternoon, and passenger loading/drop off in the evening.

Role of Public Sector:

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- Ensures that codes encourage the creation of public, on-street parking at TODs
- Develops process for determining and supporting higher and better use of curbside parking spaces
- Actively regulates curbside occupancy to optimize availability for preferred uses, by time of day and day of week
- (Most typically) Establishes restrictions, pricing, and/or time limits for curbside occupancy to maintain space availability for short-term parking needs

Role of Private Sector:

- Coordinates on-site off-street parking management with curbside management to optimize synergies to improve the overall parking and access experience at their property

Fee-in-Lieu of Parking Options

Strategic Category

- Future
- Public

Description of Strategy

A fee-in-lieu of parking is a common development-code strategy to give developers the option to pay a fee, into a fund to be used to develop public parking and/or other mobility investments, rather than providing parking on-site. The fee is typically multiplied by the number of required spaces the developer chooses not to provide. This benefits developers by allowing them to build less parking and make the most of their properties. As such, it can be particularly useful for those developing on infill sites, or any parcel with a small, buildable site. This can facilitate the development of dense, mixed-use environments, in providing developers with an option to maximize the land-use density on their sites, while also creating a funding for the development and maintenance of centralized parking and mobility infrastructure.

Key Benefits

- Space is more efficiently distributed in business districts, where a single shared supply serves the tenants and customers of several developments.
- Developments pay a one-time fee to support the construction of the shared structure, but do not bear the long-term responsibility

TOD Parking Objectives Supported

- Increase efficiency (3)
- Shared parking (2)
- Improved mobility (2)

Implementation Example

- [Scottsdale, AZ](#)
 - In 2019, Scottsdale implemented its in-lieu parking program in the downtown district centering on smaller properties with owners being presented with opportunities to “reinvest, develop, and redevelop to the highest and best use of the property.” Scottsdale views the in-lieu fee policy as an investment for the future, when businesses and populations will increase. A component of the policy

allocates fees towards spaces as downtown parking program as well as the downtown tram service. The City Council determines eligibility and terms and conditions of fees and charges the Zoning Administrator with administering the parking credit system and its credits to property owners who can purchase and/or lease parking spaces with credits. Parking credits are used by City Council to ensure proper allocation of parking spots to each participating property owner.

Applicability to Silver Line

- While this strategy is applicable to all Silver Line TOD areas, it is more likely applicable to where TOD-oriented developers desire to build and have a tolerance for excluding parking.

Implementation Considerations

In-lieu fees are straightforward to implement via development codes. However, fees must be regularly calibrated to ensure that they offer a financial incentive to developers to avoid constructing parking. In some cases, it may be beneficial to set fees on a case-by-case basis depending on the scale and location of a given development. In-lieu fees can also benefit from the presence of a mobility benefit district which may strategically invest revenues gathered from fees into key mobility improvements or centralized municipal parking facilities.

Role of Public Sector:

Establishes in-lieu fee program by code

Sets and adjusts in-lieu fees

Defines how revenues can/cannot be invested, typically toward expanding/improving area parking or mobility conditions

Role of Private Sector:

- Uses fee option to preserve more development area for proposed land uses
- Uses fee option to increase the viability of infill projects or other site-constrained development opportunities that would not be able to provide significant on-site parking
- Advises on strategic use of collected-fee revenues

Unbundled Parking Costs

Strategic Category

- Existing
- Future
- Public
- Private

Description of Strategy

Unbundling parking separates the cost to rent a parking space and the cost to rent for tenants. A common practice for property owners is to bundle the price of parking in a package of fees tenants pay along with their rent. In many cases, tenants pay for parking they are not using but are required to do so as conditioned by their lease. Unbundling parking allows for the cost of parking to be optional and not a requirement of the rental agreement.

Key Benefits

- On-site parking supplies are efficiently provided, with spaces only going to where there is demand.
- Tenants do not pay fees on amenities they do not use.
- Developers attract tenants who do not need parking, thus expanding their customer base and lowering demand for parking they would have to provide.

TOD Parking Objectives Supported

- Reduce demand (1)
- Increase efficiency (3)

Implementation Example

- Austin, TX
 - The City of Austin updated its Transportation Criteria Manual (TCM) in 2022 to allow the unbundling of parking costs from residential and commercial lease costs to credit towards a reduced parking requirement in new developments.

Applicability to Silver Line

- This strategy may be more applicable over time as Silver Line TOD sites' parking supply becomes more efficient as unbundling is not as incentivized where developments are consistently over-supplied with parking.

Implementation Considerations

Unbundling can be required or incentivized through reduced parking requirements or parking-maximum exemptions. To ensure effective compliance, codes can include stipulations regarding the cost charged for unbundled parking – such as requiring that the rate not fall too far below local averages among commercial or public parking facilities.

The effectiveness (and political viability) of an unbundling policy can be supported by implementing paid parking or resident-permit restrictions on nearby streets, to discourage use of these spaces to avoid on-site parking charges. Enhanced walking, cycling, and transit networks and amenities can also expand the benefits of unbundling in shifting more travel activity away from personal-auto use. Additionally, use of concepts in the “Monetizing Excess Capacity” and “Parking Management Districts” tools will be helpful in managing the market for spaces.

Role of Public Sector:

- Provides TOD Guidelines that encourage this practice.
- Codifies unbundling incentives/requirements
- Educate private sector on code changes and the benefits of unbundling

Role of Private Sector:

- Charges tenants for parking, separate from any charges for renting, leasing, or buying building space or units

Improve Mobility to Reduce Parking Demand

Strategic Category

- Existing
- Future
- Public

Description of Strategy

TOD-project tenants are more likely than those farther away from transit to use transit, pedestrian, bicycle, and other non-driving transportation modes. Developments that incorporate facilities and amenities that support biking and walking and highlight the proximity and accessibility of nearby transit services are well positioned to attract tenants while also reducing the demand for parking.

Facilities such as continuous bike lanes and sidewalks on adjacent streets, in-building bicycle parking, lockers and showers for non-resident tenants who bike, and in-unit bike storage options all increase the likelihood that tenants will select non-driving travel modes and increase the value of new developments. Property management approaches can also further enhance TOD connections to transit by promoting access to transit (and the travel benefits it offers) and ensuring that on-site parking amenities do not put transit at a significant cost/convenience disadvantage in the competition for tenants' travel decisions.

Key Benefits

- Increased mobility across modes creates more opportunities for trips for individuals with different transportation needs.
- Improved mobility options makes other non-driving modes more appealing, lightening parking demand and traffic congestion.
- Reduced parking demand lessens the importance of providing parking on-site at a development, allowing for more space for other uses.

TOD Parking Objectives Supported

- Reduce demand (2)
- Improved mobility (3)

Implementation Example

- Denver, CO

- In 2020, Denver [studied the impact of transit access](#) in neighborhoods near light rail stations, and found that residents and workers in areas with easy and direct access to light rail and bus services were much less likely to own cars, and therefore required fewer parking spaces. The study showed that for every 30 residential units, a property within a five minute walk of a transit station provided five fewer parking spaces and its residents use three fewer parking spaces than a comparable station-area property farther away.

Applicability to Silver Line

- NCTCOG's [Silver Line Routes-to-Rail Stations](#) (2024) study proposes sidewalk improvements within one half mile around each rail station that would fill approximately 27 miles of sidewalk gaps. The prioritized improvements would enhance accessibility for people walking/rolling to the rail stations.
- While the Northern Dallas area mode-share leans heavily towards driving, TOD areas are the most applicable place to implement mobility options as they are more compact and connected than other areas
- In TOD areas where parking districts are established, revenues can fund multimodal facilities that support people walking, biking, and taking transit.

Implementation Considerations

Provision of these programs and amenities can be incentivized via Trip Reduction Plans within TOD districts that commit developers to providing a strategic set of programs, policies, and/or investments designed to reduce how much parking the proposed buildings and uses will generate. Another name for these programs, policies, and investments are Travel Demand Management (TDM) strategies. Developers typically work through a provided "menu" of options available to them, or negotiate the plan contents with municipal staff, to best align TDM strategies with the land uses proposed for the site. A typical Trip Reduction Plan will incorporate elements from the following design and policy interventions into a consolidated package that seeks to improve bicycle, pedestrian, and transit accessibility and user experience.

Trip reduction ordinances should set a minimum building size on which to enforce requirements, to both focus on larger-impact developments and avoid creating a burden on smaller developers/property owners. Determining this gross square footage may differ based on land use(s).

To be effective, trip reduction plans and programs must include continual monitoring and benchmarking toward mode share and mode shift goals. If employers or property managers cannot document reduced drive-alone travel by employees, customers, or residents, additional investment or incentives should be triggered. Providing free staff resources to

assist in the administration of required TDM programs can effectively encourage effective participation, leading to better results and less public resistance to TDM requirements.

Design Tools

- Building entrances/exits that minimize walking distance to stations/stops
- Ample sidewalk widths along sections connecting to stations/stops and other nearby activity centers
- Amenities for people walking along sidewalks connecting to stations and stops: benches, shade features, buildings with active frontage, appropriate lighting, etc.
- Dedicated path for people biking between buildings and stations/stops, as well as connections to a broader regional bike network
- Bike parking and maintenance amenities within units, common areas of all buildings, and at station/stop end of bike routes
- Elevators that are large enough to accommodate bicycles
- Public showers and lockers for usage by non-resident bicyclists
- Narrow, traffic-calmed streets between buildings and stations/stops
- Bus waiting area amenities such as premium shelters, network maps and schedules, and seating areas
- Locate bike shops on-site that can provide merchant services as well as training programs

Policy Tools

- Parking cash-out, to offset the trip-generation impact of free or subsidized parking rates
- Guaranteed ride home programs, for those who forgo on-site parking options, providing free rides when occasional circumstances disrupt their primary ride-home arrangements
- Carpool/vanpool incentives, including ride-matching services, priority parking locations, and discounted parking rates
- Install real-time arrival/tracker displays for transit and other available mobility services in building lobbies or similarly prominent locations
- Provide new residents with a year of free transit passes and/or an ongoing discount that makes transit commuting cost-competitive with driving
- Encourage/require employer tenants to offer discounted transit passes to employees

Role of Public Sector:

- Codifies incentives and/or requirements for mobility improvements and/or TDM measures and trip reduction plans

Role of Private Sector:

- Implements and manages approved programs and policies to meet development-approval commitments, and/or for the benefit of site tenants and visitors
- Coordinates shared and scalable programs (such as employer shuttles to/from transit stations) with neighboring developments and employers
- Monitors program/resource utilization and progress towards transportation mode share goals