



To: Members of Dublin City Council

From: Dana McDaniel, City Manager

Date: September 14, 2018

Initiated By: Terry Foegler, Strategic Initiatives Director
Donna Goss, Development Director
Megan O'Callaghan, Public Works Director
Vince Papsidero, FAICP, Planning Director
Devayani Puranik, Senior Planner

Re: Downtown Dublin Parking Management – Action Plan Recommendations

Summary

This memo summarizes the information included in the packet in preparation for the September 17, 2018 work session. This will provide historical context for the Phase II study and Action Plan Recommendations that will be provided and presented at the meeting.

Packet Information

- *Background Memo and attachments:* This information was provided in the August 17, 2018 Council packet as Info Only. The Background Memo summarizes the purpose and recommendations of Phase I of the study. The attachments folder includes the final Phase I- Toolbox, development documents and supporting appendices.
- *Action Plan Recommendations presentation:* This presentation will be discussed on September 17th and provides narrative in support of the Action Plan Recommendations.
- *Financial Model Draft:* This document provides estimated financial implications and potential revenue generation with implementation of the parking management program in the City of Dublin. The model is still a draft based on industry-specific standards and assumptions, and Dublin specific variables.

Recommendation

Information Only


Attachments

1. Background Memo and attachments
2. Action Plan Recommendations presentation
3. Financial Model draft



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Memo

To: Members of Dublin City Council
From: Dana L. McDaniel, City Manager 
Date: August 23, 2018
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Re: Downtown Dublin Parking Management Study Background

Summary

This memo summarizes background information and Phase I of the Downtown Dublin Parking Management Study. This will provide historical context for the Phase II study and findings that will be provided and presented at the City Council work session on Monday, September 17, 2018.

Background

Within urban spaces, the management of on-street parking spaces is critical to the success of restaurants and convenience-oriented retail businesses to ensure frequent turnover that encourages ease of use by customers. Without a management system that includes features like parking fees and enforcement mechanisms, such spaces become occupied for extended periods of time by employees and residents, thereby discouraging the use of these "prime" spaces by customers.

Since this issue has become a growing priority in the district with significant amount of new development, the initial focus of the study has been on-street parking. However, encouraging use of the substantial supply of nearby structured parking coming online in Downtown Dublin (both east and west of the Scioto River) for long-term parking needs is another critical element to achieve a balance of parking availability for residents, businesses, and visitors. In addition, new restaurants, coffee shops and other such uses (and their need for regular deliveries) have also informed other parking and regulatory elements such as loading zones, ride share services, employee parking, event parking, residential permit parking, etc.

In recognition of this need, the City of Dublin initiated this study to recommend a comprehensive parking management system that will address all parking elements holistically within Downtown Dublin (Bridge Park and the Historic District).

Coordination with the Mobility Study

The Parking Study provides an essential complement to the City's ongoing, multi-phased Mobility Study. This study is focused on means by which the City of Dublin can leverage the emerging paradigm shift in urban mobility – in which a sudden expansion of shared-vehicle travel options is transforming long-established connections between vehicle ownership and independent mobility –

to realize fully its potential to remain a top-tier residential, business, and tourist destination in the Columbus region. Parking generally, and parking management in Dublin's walkable-urban centers in particular, are central to these efforts – and a key focus among stakeholders engaged through the Mobility Study outreach efforts. The Parking Study, as a separate but coordinated effort, allows this subject to be studied thoroughly, while also allowing the Mobility Study to focus more closely on improving and expanding means by which all Dubliners get around.

This is a collaborative project with staff representatives from various departments and the engagement of many stakeholders within our downtown. To assist in this effort, the staff engaged national parking and mobility planning experts at Nelson/Nygaard to develop a Parking Management Toolbox (Nelson/Nygaard led the earlier transportation planning for the Bridge Street District and is also assisting the City with our current Mobility Study). The recommended approach will be sufficiently robust to eventually handle the eight parking structures, as well as more immediately address the needs of the existing off-street surface public parking lots, a couple of hundred on-street parking spaces, and new parking demand generators (river parks, library, future private development).

As the first phase of the study, Nelson Nygaard and staff developed a comprehensive toolbox of strategies to address various parking elements, including short-term and long-term recommendations.

Stakeholder Engagement and Input

In addition, staff received input from internal stakeholders from multiple City departments, as well as external stakeholders, including:

- Dublin Visitors and Convention Bureau
- Downtown Dublin Strategic Alliance
- Historic Dublin Business Association
- Crawford Hoying
- Dublin Historical Society
- Dublin Arts Council
- Residents focus group

Phase 1: Downtown Parking Management Study Toolbox summary

Staff presented findings of Phase I of the study at the Council work session on June 6, 2017.

Parking spaces are not all equal. Within any public parking inventory, there tends to be a core subset of spaces (typically well located curbside parking on primary retail streets near frequently visited destinations) that attract far greater demand, far more consistently, than do most other spaces. Managing this disparity in market demand within public parking inventories is essential for ensuring that walkable urban centers like the Historic Dublin area and Bridge Park remain accessible to residents, employees, and customers/visitors while meeting the servicing needs of adjacent uses. By contrast, reflexive assumptions that suggest simply adding "more parking" will solve parking constraints often lead to extremely expensive investments in unnecessary new infrastructure that provides little to no relief in the high-demand core. In fact, the promise of simply adding "more parking" can exacerbate congestion by bringing more drivers to the area; drivers who, like those before them, soon find that the locations where they really want to park

are frequently in places where it is most difficult to find an available space. Effective and comprehensive management of all available parking resources is the only means of providing meaningful improvement to such conditions. Dublin is becoming particularly well situated for such an approach, given that it can manage all on-street parking and owns or can influence substantial amounts of surface and structured parking facilities.

Historically, Dublin has been able to manage parking conditions in its primary historic village center with a thoughtful balance of well-maintained supply, including those made accessible through shared-parking agreements, and strategic regulations to maintain availability. To prepare for the intensity of parking activity and increased demand expected for the new developments in Bridge Park and Historic Dublin, the recommendations include developing a comprehensive set of management tools that can guide management policies and actions as a new paradigm emerges in Downtown Dublin, and as parking and mobility conditions evolve throughout the community. The draft Toolbox defines optimal parking conditions, while outlining a range of policies, strategies and actions to consider for achieving and maintaining such conditions in Bridge Park, Historic Dublin and future growth areas within the Bridge Street District.

Parking Management Toolkit - Strategies

The Toolbox document was developed based on the recommendations from previous studies, field observations, and input received from the focus group interviews with stakeholders. The document was organized into the following areas of parking management.

- **Shift Demand** to distribute parking more evenly across all parking options.
- **Reduce Demand** to minimize future expansions of parking infrastructure and to balance modes of access in favor of vibrant, walkable urban environments.
- **Expand Capacities** to increase the value provided by existing parking supplies.
- **Expand Supplies** as shared parking, rather than private/reserved parking facilities.
- **Manage Event Demand** to ease constraints on “everyday” parking resources during intense-demand conditions.
- **Deploy Technology** for state-of-the-practice efficiencies and customer.
- **Coordinate Management** to optimize system-wide management and synergies.
- **Implementation Guide** listing priority strategies and action items.

This Toolbox is designed to be comprehensive, allowing it to guide parking management in addressing issues and opportunities that are present today, those that are expected in the near future, and those that arise as conditions change over the medium- and long-term.

A set of immediate and short-term strategies that make use of the Toolbox for a prioritized set of actionable improvement opportunities is listed below. Detailed action items and immediate steps for these strategies are listed in the Downtown Dublin Parking Management Toolbox which include:

- Established Performance-Based Management Policy
- Establish Program Funding structure
- Monitor Performance
- Establish pricing for on-street parking in Bridge Park
- Develop Commuter Benefit strategies
- Develop an Events Management toolkit

- Develop flexible curb space programming
- Develop Communications Plan
- Develop a Zoning strategy for Park Once Districts
- Deploy Technologies
- Adopt Ordinances

Phase II - Action Plan

Phase II of the study focuses on the elements of implementation Action Plan. Nelson Nygaard planners are coordinating with Dixon Resources, a well-known parking operations and technology firm, to finalize near-, mid-, and long-term action items. Staff will provide information and recommendations regarding immediate near-term actions that are needed to help facilitate appropriate turnover of on-street parking demand in the portion of Bridge Park where restaurants and other destinations will soon be opening, and where residential tenants and others are quickly creating competing demands for on-street parking resources. The recommendations will also identify an overview of the specific enabling legislation that is needed to implement and enforce the management recommendations, as well as the likely types of resource requirements (including staffing, equipment and third-party service providers) needed to implement the recommendations.

Following Council direction, staff will work with Nelson Nygaard to develop an Implementation Guide for these broader recommendations, including key implementation steps, strategic partners, performance measures, data needs, and cost implications.

If Council members would like to schedule a meeting with staff to gain a better understanding of the background for this project, please contact Devayani Puranik at dpuranik@dublin.oh.us or 614-410-4662.

Recommendation

Information only.

Attachments:

1. Downtown Dublin Parking Management Toolbox and Implementation Guide
2. Downtown Dublin Parking Management Existing Conditions Report
3. Downtown Dublin Parking Management Best Practices
 - a. Appendix- Pay by Phone Shared Parking
 - b. Appendix- Ordinance Benchmarks
 - c. Appendix- Parking Management Org



Parking Management Toolbox

City of Dublin, OH



May 2017

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TOOLBOX OVERVIEW



The Toolbox is organized into the following tool categories.

- Tools to **Shift Demand** for more even distribution among all parking options
- Tools to **Reduce Demand** for parking in order to reduce supply needs and to balance modes of access in favor of vibrant, walkable-urban environments
- Tools to **Expand Capacities** of existing supplies to avoid the cost and physical impact of constructing new supplies
- Tools to **Expand Supplies** of public parking, in lieu of parking reserved for a particular development or set of land uses.
- Tools for **Event Management** to ease constraints on “everyday” parking resources during intense-demand conditions.
- **Technology** Tools to bring state-of-the-practice efficiencies and customer-service to the Dublin parking system.
- Tools for **Coordinated Management**: policies, practices, and operations that optimize system-wide management and synergies with complementary City and non-City programs and activities.

SHIFT DEMAND

Primary Objective: Ensure effective distribution of parking demand to make the most use of available parking capacities, and to maintain consistent space availability across all parking options.

Tool: Performance-based Management

Strategy: Establish a policy of performance-based management for the City's parking resources.

Make clear that the City's parking management programs, strategies, activities, and investments are focused on achieving formal performance goals and objectives. A performance-focused management approach can take many forms, but its central components consist of the following.

- Establishing availability as the Key Performance Indicator for assessing parking management effectiveness.
 - If spaces are consistently available, you can worry less about measures like parking duration and turnover.
- Setting hourly parking rates based directly on demonstrated, geographic and temporal patterns of demand.
 - Highest where and when demand is highest, lowest where and when demand is lowest.
- Adjusting rates periodically to influence these demand patterns in pursuit of a specified curb-availability target (typically around 15%) on each block, at all times.
 - Applying this approach consistently in both directions; raising rates where applicable, as well as lowering them where demand is not where it should be. Changing rates in either direction should not occur too often or by too great of a change each time.
 - Examine and alter rates no more than quarterly to allow people to become familiar with the options and change behavior.
- Investing meter revenue in local improvements, including off-street parking, walking, bicycling, transit, streetscape, and sidewalk improvements.
 - This can reinforce the message that the primary purpose of parking rates is to manage demand and keep spaces available, not to fill budget holes.

Consistent parking availability, and the benefits arising from it, are the central objectives of this approach, and will prove elusive if pricing is not truly responsive to parking behavior. This can be politically challenging if rates continue to rise. Communicating the benefits of this approach, and sticking to it until meaningful improvements in availability are evident, will be critical to success.

Strategy: Define Availability as the Key Performance Indicator for parking management.

The most essential performance indicator for parking management in any downtown is the availability of public parking spaces, near prime destinations and during the busiest times of the week. Without strategic management, parking demand will cluster tightly around these locations, resulting in constrained availability precisely where most drivers would prefer to park. Without management cues toward less-obvious parking options, this pattern typically creates a strong

perception that “there is nowhere to park”, even when ample availability can be found on nearby blocks.

Strategy: Define Key Performance Indicator target/s.

Achieving optimal availability conditions can bring about several parking-management objectives, primarily:

- Improved customer-service, as more parking options are more consistently available, more of the time;
- Reduced traffic and emissions, as finding a space no longer requires extra driving;
- Simplified management, as pricing is refined to the point where few other regulations/restrictions are required to achieve desirable conditions; and
- Rationalized revenue streams, as parking revenues increase with demand, providing resources to invest in management and/or supply strategies to maintain availability.

A standard performance target for on-street availability is 15% of spaces, or about 1-2 spaces, on each block-face. At this level of availability, empty spaces are evident to passing drivers, removing anxiety over finding a space, or having to “circle back” for a space passed up in hopes of better options. Drivers can simply choose where to park, and find a space there, even during the busiest times of the week.

For short-term parking in off-street facilities, availability targets can be set a bit lower, perhaps 10%, depending on the ease of access and the efficiency of circulation in the facility.

For commuter parking in off-street facilities, 10% may be ideal. More importantly, the City should seek to avoid having to maintain a “wait list” for commuter permits.

Strategy: Monitor Performance.

Whatever management strategies are employed to maintain availability, their success is best measured by counting empty parking spaces among Dublin’s best-used parking locations, at the busiest times of the week. Regular counts conducted in high-demand locations at peak-demand times will allow City staff to monitor parking performance and measure the impacts of policy and regulatory changes, including any pricing adjustments.

To measure availability, empty spaces should be counted at peak demand times, along all essential on-street blocks and in key off-street facilities in the area, at least once per month. It is essential that count data be analyzed specific to time of day and at the block-face/facility level. An area-wide measure showing ample availability can obscure chronic constraints at specific locations. Similarly, daily-average measures can obscure prolonged constraints experienced during midday peaks.

Tool: Pricing

Strategy: Establish parking rates as the primary tool for redistributing demand in aid of more consistent availability among all parking options.

Identify parking rates as the primary tool for shifting parking demand away from oversubscribed supplies toward alternative options with excess capacity, in order to improve access to activity-center destinations, simplify the Dublin parking experience, and to avoid perceptions that parking options are undersupplied. While time limits are often perceived as more “customer friendly”

than meters and pricing, there are significant shortcomings in this management tool that can ultimately make commercial centers less accessible to customers.

- Enforcement of time limits is more labor intensive and less effective, generally, than basic payment enforcement.
- Time limit compliance is often lowest among local employees and business owners, who quickly learn enforcement patterns and schedules, tend to arrive when the best parking spaces are widely available, and park for several hours at a time.
- Time limits can be particularly unwelcoming for visitors, creating ticket anxiety and the need to ration and track the time they spend in the area.

Strategy: Introduce priced parking on primary on-street parking blocks.

The most logical place to establish this pricing-first policy is among on-street parking spaces in Dublin's established activity centers. This should include core blocks within Historic Dublin. It should also include primary blocks of parking within Bridge Park, in anticipation of high demand for many of these spaces.

Tool: Tiered Rates

Strategy: Maintain pricing tiers that reflect parking demand patterns.

Pricing is most effective in redistributing demand when parking rates offer a range of cost options. This range in cost is critical to influencing parking-activity patterns, and thus distributing demand/occupancy more evenly across an area's full parking supply. In Dublin, initially, this should take the form of free and paid parking. As demand increases, paid parking should include rate tiers that reflect demand patterns and increase the appeal of less-prominent parking options.

Tool: Incremental Rates

Strategy: Increase the hourly rate for longer stays.

Incremental rates incentivize shorter parking stays in high demand locations, by adjusting hourly rates based on duration. Digital meters can vary parking rates, applying a base rate to short stays, and applying premium rates to longer stays. This allows pricing to reduce demand specifically among drivers whose parking needs are better accommodated off-street, creating more availability at no added cost to most customers.

Tool: Rate Adjustments

Strategy: Increase or decrease rates in response to occupancy/availability measures/patterns.

Parking demand is not a static measure. It is governed by numerous, constantly changing conditions. For rates to be effective in maintaining consistent access to parking options, they must rise and fall in response to demand conditions. Monitoring utilization patterns will be essential for this, to avoid making rate changes based on anecdotal evidence or popular complaint. It will also be important to not change rates too often, to allow the driving public to adjust to the change.

Tool: Pricing Schedules

Strategy: Align pricing and time-limit schedules with demand, not the workweek.

Enforcement of paid parking (and time limits) tends to roughly follow the 9AM to 5PM workweek schedule, sometimes six days a week, but rarely seven. The result is that the most critical parking resources tend to be overpriced in the morning, when demand is modest at best, and underpriced at night and on weekends. This is particularly true where evening-oriented food and beverage businesses dominate area commercial activity.

Shifting enforcement schedules to better correspond to demand peaks can make these areas more accessible when restaurants, coffee bars, and other gathering places are busiest, while providing a few hours of free parking to attract more morning activity. Initially, schedules (for pricing and time limits) should roughly follow a 11AM to 7PM schedule, with adjustments made as demand patterns emerge and evolve.

Tool: Expanding Off-Street Parking Options for Employees

Strategy: Secure shared-parking arrangements for off-hour employee parking in private lots.

Provide a conduit between business, property, and lot owners with recognizable opportunities for mutually beneficial shared-parking arrangements. Initiate negotiations by providing an independent perspective on issues and opportunities, identifying shared-benefit opportunities, and helping to address common concerns. Negotiate agreements, including identifying strategic agreement components, as necessary, such as:

- Restricting access to the shared parking to area employees, perhaps through permits, to reduce risk and increase accountability.
- Compensation in the form of increased lot maintenance, lot improvements, added security, etc.
- Defining any added security or enforcement measures necessary to ensure that the primary uses of the lot are prioritized.

Strategy: Develop a permit program to allow employees to park on underutilized streets.

In many areas of Dublin, residential curbsides go largely unused much of the day, including in areas where nearby employees struggle to find appropriate parking options. Many cities have successfully addressed this set of opportunities and constraints by creating permits for local employees to allow them to park on residential streets. The number of employee permits issued is limited to ensure that local curbsides can accommodate the demand without constraining resident parking access, and permit revenue is generally set aside for improvements in the area where the permits area used.

REDUCE DEMAND

Primary Objective: Reduce parking supply needs, primarily by improving the functionality and cost-effectiveness of non-driving options for accessing Dublin's activity and job centers.

Tool: Bike Parking

Strategy: Provide ample, high-quality bike parking options.

Each downtown trip completed on a bike leaves one parking space open for another trip made in a car. Providing attractive bike parking options can encourage more such trips, at far less cost and in much less space compared to meeting automobile parking needs. A single vehicle parking space can accommodate eight or more parked bikes. Furthermore, studies have shown that, in many cases, bicycle customers frequent neighborhood commercial districts more often compared to driving customers.¹

Strategy: Create a Bike Parking Map.

Include bike parking information in all parking maps, including those created for Dublin's activity centers – see strategy in the Capacity Expansion toolset below.

Tool: Curbside Space allocations.

Strategy: Set aside curbside space to complete/expand multimodal networks.

Curbside space can sometimes provide more mobility and access when set aside to complete or expand multimodal networks. This can include space used to accommodate bus stops, bike corrals, bike-share stations, bus or HOV-only lanes, curb-extensions in support of pedestrian networks, car-share parking, and taxi/lyft-car stands.

Tool: Transit Access

Strategy: Provide high-amenity bus stops within activity centers.

Attractive and accommodating bus stops can raise the perceived appeal of available transit services. Conversely, bus stops with minimal amenities create a perception that local bus services are not widely used, and likely not very effective for common travel needs. Key amenities for improving service to existing customers, and attracting new riders, include the following.

- Sheltered waiting areas with seating and lighting
- Fare and boarding information
- Mapped routes with connecting service information
- Waste bins
- Functional and aesthetic integration into the streetscape

¹ *Bike Lanes, On-Street Parking and Business, Clean Air Partnership, 2009.*
http://www.bikeleague.org/sites/default/files/bikeleague/bikeleague.org/programs/bicyclefriendlyamerica/bicyclefriendlybusiness/pdfs/toronto_study_bike_lanes_parking.pdf

Strategy: Develop local transit service.

The City is exploring several options to establish effective transit service to key parts of Dublin. Such service would provide a very valuable non-driving commute option for local employees, as interest in transit commuting tends to be much higher among service-sector employees than their employers realize. Such an option could significantly reduce employee-parking impacts in activity centers. It would also greatly improve access to Dublin jobs, improving the capacity of local businesses to attract and retain employees.

Tool: Commuter Benefits

Strategy: Provide transit-passes to activity-center employees.

Employee parking can have profoundly negative impacts on an activity center's customer parking capacities. Given that employees tend to arrive well before the first waves of customer demand, the area's most convenient curbside spaces are particularly vulnerable. Pricing and other on-street management strategies, as identified in the Toolbox, can be very effective in managing these impacts. What has proven even more effective in many cities is making transit free for local employees. Ensuring that transit is significantly cheaper than driving has had a profound impact on transit mode shares among participating employees in several cities across the country, including Boulder, Colorado which was an early adopter of this strategy, and Ann Arbor, Michigan, which has achieved similar results from a program based on Boulder's.

Strategy: Promote a guaranteed-ride-home benefit to non-driving activity-center employees.

Such benefits can provide critical support for non-driving commuters, by providing them with free, viable options for incidents such as working late, falling ill, or having to return home or pick up a dependent during the day. This benefit is already available, and administered by MORPC. Promoting its availability, in tandem with more and more-cost-effective transit-commute options, should be marketed to employees and job-seekers among Dublin's expanding and diversifying set of employers.

Strategy: Develop a Live Near Your Work program

Several cities and employers have begun to offer what is often known as "Live Near Your Work" incentive programs, which encourage employees to purchase homes close enough to their place of work to make transit, cycling, or walking commutes viable. Typically, this is done through matching grants or low-interest loans to reduce the upfront home-purchase costs.

EXPAND CAPACITIES

Primary Objective: Increase the capacity of existing parking (and curbside loading) supplies, primarily by making available options more broadly accessible and functionally viable.

Tool: Shared Parking

Strategy: Broker Shared-Parking agreements.

Work with activity-center business owners to inventory private parking capacities, identify demand patterns among them, and try to broker sharing arrangements. Viable sharing arrangements can fail to materialize due to a lack of initiative on those seeking more capacity, or to liability concerns on the part of those with excess capacity. The City can help initiate negotiations, provide an independent perspective on issues and opportunities, identify shared-benefit solutions, and help address common concerns/remove common barriers.

Strategy: Convert private facilities to public facilities

Seek opportunities to convert private lots to public, City-managed resources, in return for improving and maintaining these facilities. Buy-in among lot owners will typically require trust in the “big picture” benefit of supporting a broader range of destinations with their parking resources; that an overall increase in activity and visitors to the area will be good for their “bottom line”. A critical component of this is trust in the City’s capacity to effectively manage parking in the area to ensure that their customers will still have suitable parking options during peak-demand conditions.

Strategy: Continue to develop Valet Parking as a means of expanding shared parking in activity centers.

This tool was established as part of the City’s parking management efforts, with a public valet stand located on Darby Street, just off of West Bridge Street. This service provides high-level convenience to drivers, while making use of spaces that are shared during evenings and weekends, but a bit remote for most visitors to find appealing. This not only expands the effective capacity of the area’s parking resources, it helps reduce demand pressure on other high-convenience parking locations.

Strategy: Use pay-by-phone to encourage off-hour shared parking.

Engage owners of restricted parking facilities about monetizing their parking spaces when they are not in use, by coordinating with the City’s pay-by-phone vendor. The vendor and the facility owner can work out details such as shared-parking schedules and rates. Typically, the vendor will install its standard signage, consistent with what is used for public parking in the district, and distribute revenue to the facility owner in accordance with their agreement.

Tool: Curbside Regulations

Strategy: Prioritize short-term parking over loading/unloading when short-term parking demand is highest.

Strategy: Prioritize curbside loading/unloading at times when short-term parking demand is modest or low.

Loading/unloading and short-term parking tend to be the greatest and most consistent curbside parking needs in activity centers. At peak, either can consume entire block-faces of retail-parking capacity. This makes it essential for curbside regulations to respond to the variations in their demand patterns, using variable programming to give more space to each use when it is most needed.

In most activity centers, this will mean more loading/unloading space in the early mornings, shifting toward more short-term parking toward midday. Distinctly generous, morning-hour loading zones along prime commercial streets will provide incentive for larger delivery vehicles to avoid the midday and evening peak periods, when smaller loading zones should be provided around the corner, on side streets.

Strategy: Expand/eliminate time limits as pricing becomes the primary tool for maintaining availability.

Effective pricing strategies can make time limits unnecessary. Removing them can be particularly supportive of “destination districts”, in which many visitors are drawn by a variety of destinations and do not know how long they will want to stay at the time of parking. By contrast, too-restrictive time limits can render much of an area’s parking supply unsuitable for most customers.

Strategy: Set aside curbside space for higher-capacity parking uses.

Vehicles that require less curbside space for parking can provide more access in less curbside space. This can include bicycle parking, bike-share stations, and motorcycle parking. Seasonal bike corrals, in particular, may be particularly useful in promoting non-driving travel to and around downtown Dublin during activity peaks.

Tool: Curb-Cut Reduction/Elimination

Strategy: Work with property owners to remove redundant and excessive curb-cuts.

Despite the high value and limited quantity of curbside parking spaces in Historic Dublin, unnecessary curb cuts remain common. These are often found among frontage parking lots that are essentially one very wide curb cut. Parking lots with redundant driveways are also common, as are disused curb cuts left over from previous land uses. The City can assist local businesses and property owners to regain curb capacity at these locations.

Strategy: Update development code to minimize/prohibit driveways on pedestrian-priority streets.

Ensure that the development code supports walkable development in Dublin’s activity centers by identifying streets on which driveways/curb-cuts are discouraged or prohibited.

Tool: Information, Signage, Wayfinding, and Branding

Strategy: Reveal Curbside Capacity by striping spaces or parking lanes.

Striping can make unmetered, on-street spaces easier for drivers to identify in neighborhood commercial centers. Drivers who are less familiar with on-street parking may not be adept at identifying spaces if regulation signage is their only marking. Striped curb spaces can even help

signal to drivers that they are approaching a commercial center, and that they should slow down, look around, and consider stopping over for a visit.

Strategy: Resident Parking Benefit Districts

Excess capacity along residential streets can be used to provide employee parking, and shift employee parking impacts away from customer parking locations. Businesses near residential areas can purchase “business vehicle permits”, which are non-transferable, allowing the City to control the number of permits issued in any activity center area, or neighborhood. This also allows the City to connect parked vehicles with specific businesses in order to address any instances of misused permits.

Revenue from permit sales are used to fund neighborhood improvements.

Strategy: Develop a comprehensive communications plan that includes coordinated and unified wayfinding, information, signage, and branding program.

Pricing is most effective in managing demand and maintaining availability when drivers understand their options, clearly and comprehensively, before arriving. Ensure that drivers know their parking options, including their cost, time limits, and any other restrictions.

Wayfinding

Wayfinding is a means of providing intuitive visual cues and information to drivers, upon arrival. The first objective of wayfinding, therefore, should be to reinforce information provided to drivers before they arrived, and direct them to their parking option of preference. At the same time, effective wayfinding can provide visual information that suggests parking opportunities, and guides drivers toward their “right fit” options, even if they knew nothing of these options before arriving. This can include varying meter types or markings that correspond to pricing and/or time limits, and branding off-street locations that accommodate hourly parking.

Information

The three essential pieces of information that must be clear for all parking options are:

- Hourly rates, as well as any variations on these
- Time limits
- Schedule of enforcement

This information should be provided and disseminated via multiple media, with a focus on informing drivers of their options before they arrive in Downtown. This can include information specifically on free parking, where and when it is available, which can both help shift peak demand to off-peak times and locations and reduce frustration among drivers expecting to find free parking where and when it is not an option. This could include private facilities that are available for parking after-hours.

Signage

Clear and concise signage should serve two primary functions. The first is to complement wayfinding, in providing essential details on parking options for drivers arrived with little or no information. By complementing effective wayfinding elements, this information can be visually discrete, and textually concise, while effectively guiding parking searches. The second function is to confirm to each driver that the space she/he has found is indeed priced and regulated as expected. Preferably, this happens without the drivers having to leave their cars.

Branding

Branding is one of the most effective means of identifying parking options that are managed consistent with the City's parking program. This can include branding extended to private facilities that offer a parking experience largely indistinguishable from parking in a City facility. Such branding can assure drivers that a particular parking option has been priced, regulated, and maintained consistent with the City of Dublin's parking program, including enforcement that is user friendly and parking rates that are no higher than what is necessary to keep demand balanced with supplies.

Strategy: Create Activity Center parking maps.

This is a critical component of a comprehensive information campaign. It should include all streets that offer on-street parking, marked according to time restrictions and meter rates. It should also include off-street locations that offer public parking. This can also include facilities that only provide public parking on certain days, or during certain times of day, as these may emerge out of efforts to increase shared parking opportunities. The map should be provided at a single website, which should be referenced on all local business websites.

EXPAND SUPPLIES

Primary Objective: Expand the supply of public parking, while reducing expansions of private/reserved parking.

Tool : Park-Once Zoning codes

Strategy: Establish an In-Lieu Fee option to fund public parking in lieu of private/accessory parking within activity centers.

Strategy: Incentivize the provision of shared/public parking when developments include parking on-site.

Strategy: Require/incentivize multimodal mobility amenities.

Allow all parking requirements to be met through an In Lieu Fee, or comparable alternative. Establish parking maximums for accessory (non-shared) spaces, allowing parking in excess of maximums only if the excess spaces are shared, or via payment of a fee comparable to the In Lieu Fee. Identify complementary requirements and incentives for providing multimodal access amenities, such as bike parking, car-share access, sidewalk enhancements, and transit amenities.

Strategy: Adopt a “progressive” rate structure for the In Lieu Fee.

For an In Lieu Fee option to be successful, it must offer meaningful cost savings compared to meeting minimum requirements via on-site parking. Nonetheless, the fee must be significant enough to provide sufficient revenue for the City to accommodate the parking/travel demand created by the approved development project; whether that accommodation is in the form of added public parking capacity, mobility improvements, or expanded/enhanced parking management programs. Fortunately, City-built parking capacities tend to be much more cost effective than private, on-site parking capacities, providing a significant range within which an In Lieu Fee rate can be effective. This range is even wider if the City has the option to invest in mobility improvement and demand management, as well as public parking.

Strategy: Incentivize/require multimodal amenities and driving alternatives.

Add Bike Parking Requirements

Include distinctions between Class 1 and Class 2 facilities, as noted below.

- Class One facilities are secure, weather-protected facilities intended for use as long-term, overnight, and work-day bicycle storage by dwelling unit residents, non-residential occupants, and employees.
- Class Two facilities are located in a publicly-accessible, highly visible location intended for transient or short-term use by visitors, guests, and patrons to the building or use.

Add a Car-share Parking Requirement

Require that on-site facilities containing at least 50 spaces make a minimum number of spaces availability to any recognized car-share service provider, free of charge, on a “right of first refusal” basis.

Credit Car-Share Parking

Credit each car-share space as equal to 2 required parking spaces for residential uses or 3 required parking spaces for commercial uses.

Credit Unbundled Residential Parking

Reduce parking requirements by half for multifamily uses when spaces are sold or rented separately from the purchase or lease of a residential unit.

Credit Bike-Share Facility

Credit a bike-share facility with a minimum of 10 spaces as equal to 3 vehicle parking spaces.

Credit Changing Facilities

Reduce the required number of vehicle parking spaces by 3 spaces for each changing facility that includes a shower and set of lockers.

Tool: Joint-Development

Strategy: Seek Joint-Development opportunities to spread costs and risks associated with constructing parking facilities, and to ensure public access to parking built to support private projects.

Joint-development has become an increasingly popular strategy for expanding municipal parking supplies. This approach avoids stand-alone parking structures, and ensures public access to parking built to support new development. It also allows developers and cities to focus on what they specialize in, land-use development and parking management, respectively, increasing the end results for both.

Tool: Future-Proofing

Strategy: Deploy Adaptable-Design strategies.

Interest in adaptive-reuse design for garages that can adapt to accommodate non-parking uses has surged recently, as a strategy to prepare for the impact that emerging mobility services and technologies may have on urban parking demand.² Most essential features of the adaptable-design approach, however, add significant costs to facility development. Sloped floors will have to be eliminated, requiring piped drainage systems. Story heights will need to be extended, and floorplates built for greater weight loads. Elevator, stairs, and HVAC systems must anticipate active occupancy of the structure.

In most markets today, the added costs of these investments are much greater than their anticipated return on investment. This is expected to change over the next few years, beginning where land and building-space values are highest. And, cost sharing, via joint development and shared parking strategies, is likely to be essential for implementation when it does.

² https://issuu.com/theparkingprofessional/docs/adaptive_reuse

Strategy: Secure ownership of or access to surface lots on the periphery of activity centers.

Acquiring and improving existing lots for surface parking has also emerged as a low-cost means of hedging parking investments against potential declines in parking demand. This is, essentially, adaptable design “on the cheap”. Not only does it greatly reduce supply-development costs compared to conventional, stand-alone, structured parking development, it builds in a real estate investment that can further area growth and encourage more mixed-use development. Compared to flexibly designed parking structures, this avoids the upfront design/construction cost premiums, as well as the costs of building out the facility for new uses when parking activity declines.

MANAGE EVENT DEMAND

Primary Objective: Increase the capacity and efficiencies of existing parking and mobility resources, beyond what is necessary for day-to-day management success, improve access to events of all sizes throughout Dublin.

Tool: Cross Marketing

Strategy: Cross-market events with local businesses to “flatten” arrival/departure travel peaks.

Cross-market between events and local businesses to encourage event attendees to arrive earlier/stay longer than they otherwise would. This helps to stagger arrival and departure times, reducing the intensity of arrival and departure traffic. Offering a bookstore discount with \$15 in Farmers Market purchase receipts, for example, might extend the trips of many market-goers. Similarly, a small gift certificate to People’s Coop, packaged with commencement tickets, could have similar impacts on trip extension, while expanding viable parking options for those event-goers.

Tool: Transit

Strategy: Develop transit plans, including marketing to event-goers.

Market transit services as part of all large-event promotions. This should include scheduling and fare information, and any event-based changes to either. Ideally, a trip-planner is included on all event web pages, and a URL to same is included in all printed marketing materials.

Tool: Remote Parking

Strategy: Incorporate remote and off-site parking facilities, with shuttle service.

Maintain transit/shuttle service to available parking facilities during large events.

Tool: Technology

Strategy: Offer pre-assigned parking.

Develop an online reservation system to allow attendees to pre-purchase parking in advance of an event. This will simplify parking, particularly for those less familiar with Downtown parking, and help organizers to better plan for capacity needs and changes in traffic flow. Parking options could be matched with arrival and/or departure routes in order to increase driver convenience reduce traffic, and direct congestion away from areas of event congestion.

Tool: Demand Management

Strategy: Offer VIP parking.

Charge a premium rate for the best locations, relative to the specific event, while providing information about lower-cost alternatives. Make use of market mechanisms to distribute demand more evenly across a greater number of parking locations. While increased rates during events can be viewed as "gouging", increased rates for the most convenient parking locations can be a very effective means of reducing congestion at these locations.

Strategy: Offer high-occupancy-vehicle priority parking.

Reduce parking rates and/or reserve premium spaces for high-occupancy vehicles to incentivize ridesharing to large events.

Tool: Valet

Strategy: Develop a Bike Valet program.

Offer bike valet offer the same convenience and capacity-expansion benefits of traditional valet in promoting exceptional levels of bike traffic to large events. Bike valet services provide easy, "front-door", secure bike parking along with personal service, often provide by bike advocacy volunteers. Easing the challenge and uncertainty of finding secure bike parking during events can dramatically increase the bike mode share and reduce pressure on auto-parking resources.

Strategy: Expand public (automobile) valet options

Drivers are typically more willing to consider valet parking during events, particularly if marketed as a means of avoiding unfamiliar parking conditions and complexities. This can be used to squeeze greater capacity out of existing parking facilities, as valet-parked vehicles can be organized into tandem arrangements (bumper to bumper) that can increase capacity by as much as 40%.

Strategy: Event Permit Districts

Event Permit Districts allow for the utilization of residential on-street parking near arenas without inundating neighborhoods with spillover. The University of Oregon, which has pioneered the practice for its new \$227 million basketball arena, sells 500 event-day permits to park in a designated neighborhood near the arena. In addition to this, residents receive two free permits per property in the Event Permit District, and are given the option to buy additional permits at market price. To ensure that regulations are effective, fines are doubled in the district during events. The university uses the revenue from the permits to pay the city for managing the district. By implementing the strategy the university is able to avoid a game-day parking crush without bearing the cost of an expensive parking structure that would be underutilized outside of event hours.³

³ Donald Shoup. The High Cost of Free Parking. American Planning Association, 2011, pp. 693-694.

DEPLOY BEST-PRACTICE TECHNOLOGIES

Primary Objective: Use innovative, state-of-the art technologies to optimize parking management and improve the customer experience.

Tool: Payment Technologies

Strategy: Make it easy to pay for parking.

Invest in technologies that make it easy for drivers to pay for parking. Parking meters are often resented more for their inconvenience than for the modest cost they add to a visit to downtown Dublin. Recent analysis in Ann Arbor, Michigan indicated that offering a credit card payment significantly increased compliance, and doubled the average meter payment (likely a direct result of offering a “maximum time” button for those paying with a credit card).

At a minimum, payment technologies should include accommodation of credit-card payments and seamless coordination with a mobile payment option (pay by phone). Both of these options provide a transformational change in how drivers respond to parking options and their costs. The convenience this offers facilitates greater compliance and reduces resistance to higher parking rates (critical to pricing curbs appropriately to maintain availability in high-demand areas).

Meters

There is, today, a wide range of single-space parking meters and multispace pay-stations/kiosks that facilitate credit-card payment. There would be some value to using the same, or similar, meter type as the City of Columbus – single-space, digital meters. However, pay-by-space and pay-by-plate pay-station options can reduce “visual clutter”, and can facilitate remote-payment options, at any pay station in the system. We do not recommend metering via pay-and-display systems.

Pay by Phone

One of the fastest-growing payment technologies is mobile payments. Almost invariably, this option is a complementary payment option, offered at spaces that can also be paid via a physical meter/pay-station. But, some municipalities have adopted mobile payment systems in lieu of having any physical meters. Drawbacks to such an approach, primarily related to accommodating those who do not own a smartphone, or do not wish to use their phone to pay for parking.

Pay-by-phone can be used to price off-street parking facilities that lack access-control systems. This makes it a crucial tool for incorporating private parking facilities, through shared-parking agreements, as well as public facilities that had been designed for free parking.

Digital Validation

Offering a validation system can ease resistance to pricing, particularly among local business owners. Digital payment systems, including mobile payment, can make validation a seamless experience. This can include a code for free or discounted parking for future parking activity.

Consistency

Work with private parking owners/operators to ensure that the same pay-by-phone vendor can be used for City and private parking options, simplifying the parking experience for all drivers.

Tool: Monitoring Technologies

Strategy: Make performance monitoring easier.

License Plate Recognition

Not only does LPR technology greatly improve the efficacy of parking-regulation enforcement, it greatly facilitates programs to monitor “performance”, including tracking capacity utilization during key times and following changes to parking rates or other regulations. Following an performance-focused enforcement approach, LPR devices will organically be collecting “occupancy” data, via plate “reads” in facilities and on blocks where availability is most likely to be constrained. This provides an invaluable source of data that can be matched to supply in order to track conditions of utilization/availability.

Parking Transaction Software

Explore options for contracting services that track parking transactions in real-time across networked on-street meters and off-street payment systems, and use algorithms to convert this data into estimates of parking utilization/availability. Such services are relatively new, and require “spot checks” of actual utilization/availability counts, via manual surveys or through LPR data, to establish and maintain accuracy. Smarking is currently the industry leader, but competition should be expected to arise over the next few years.

Tool: Controlled-Access Technologies

Strategy: Facilitate Access-Control systems in larger facilities.

Mobile payment and pay-by-space/pay-by-plate technologies are making it easier to price off-street parking in facilities without access controls. And, LPR technology can greatly reduce the labor cost and increase the effectiveness of enforcement in such facilities. However, larger parking facilities should be designed to include access control systems, or to facilitate their eventual installation.

COORDINATE MANAGEMENT

Primary Objective: Ensure streamlined and coordinated management within the City, while maximizing synergistic opportunities related to public and private growth, mobility, and sustainability initiatives.

Tool: Enforcement

Strategy: Establish a performance-based enforcement program.

Parking enforcement should be focused on management objectives, rather than compliance or infraction revenue for their own sake. Enforcement is not only an extension of parking management; it is parking management's most public "face". As such, it can create profound distrust of the management system if it appears that rules and infractions are prioritized as ends in themselves, rather than means of facilitating optimal parking conditions.

Strategy: Use non-police enforcement.

The single most-effective strategy for improving parking enforcement is for it to be managed as part of the overall parking operation, and not as an aspect of law enforcement. Parking pricing and regulation cannot be effective without compliance, making enforcement an essential component of parking management. Parking violations, by contrast, naturally and understandably fall low on the list of most police department priorities. It is recommended, therefore, that the City directly manage parking enforcement.

Strategy: Invest in License Plate Reader technology.

LPR technology, like most digital technologies, is continually evolving, getting smaller, more effective, and generally less expensive in the process. Handheld devices can greatly simplify time limit enforcement, increase its efficacy, and reduce its labor commitments. They can also expand permit-strategy options, such as proving employees with permits for off-hour parking in designated location, by automatically linking license plates to a permit database.

Strategy: Institute incremental fines.

Enforcement is essential to the effective management of public resources — protecting those who play by the rules from those who willfully abuse them. But it is important that penalties for rules violations distinguish between occasional mistakes and intentional flouting of regulations. The primary objective of parking tickets and fines should always be to discourage repeat violations. A warning and a bit of information is all that most drivers will need to avoid repeat violations. In any city, however, there will be those who will continue to disregard rules unless and until the cost of doing so becomes "painful" enough.

A fixed table of fines for parking violations may be expedient for processing violations and payments, but it is ill-suited to serve performance-focused parking management. Each fine under such a system has to be high enough to prevent the abuse of short-term spaces by those willing to pay basic fines for the convenience gained, without being overly punitive of innocent mistakes.

This can be addressed by simply increasing the fine level for repeated violations, so that they quickly become too high to be ignored.

Strategy: Include a “first-time forgiveness” policy.

First-time violations should incur only a "courtesy" ticket (no fine), that includes detailed information on parking options, pricing, and regulations, as well as information on the escalating fine schedule for repeat violations. This emphasizes that parking enforcement is really about managing access to public resources. This also formally adds an information-providing role for Community Standards Officers (CSOs), altering their relationship with the parking public.

Combining this with incremental fines would look something like the following.

- The first ticket in any 12-month period does not incur a fine.
- The violator is provided essential parking information, and directed to the City's parking/mobility websites for more information.
- A second violation within 12 months would be fined at the current level.
- Subsequent violations would go up substantially, perhaps doubling each time.

Strategy: Focus enforcement where it can best improve “performance”.

Enforcement officers should be trained to watch for key parking utilization conditions, which should help them determine where to focus their efforts to best achieve more consistent availability.

- Areas of consistently reduced availability — Areas where available spaces are consistently hard to find should become obvious to CSOs as they become more cognizant of the priority placed on maintaining access to short-term spaces. Once recognized, these areas should receive priority attention throughout the day. The City can assist in identifying target enforcement areas by creating quarterly, parking-utilization reports.
- Areas of reduced availability in the early mornings — This is an indication of business owners and/or employees parking or loading from these spaces, as visitor parking demand is rarely significant before Noon (except outside coffee shops or similar morning-rush oriented businesses). This is not a problem in itself, and none of these vehicles will be in violation until after 10AM. But, if enforcement is lax in these areas, many of these vehicles will begin to overstay time limits, reducing availability for customers. If availability does not improve by 10AM, such blocks should be targeted for time-limit enforcement.
- Areas of ample availability — Likewise, CSO's should become aware of areas where finding a space is rarely a problem, and de-prioritize these areas for enforcement. Consistently issuing tickets in low-demand environments sends the wrong signals about which objectives enforcement is meant to serve. It also misallocates limited enforcement resources away from where they can provide the most benefit. Again, quarterly usage reports can help to inform which areas fall in this category.

Tool: Transportation Demand Management

Strategy: Coordinate with Transportation Demand Management programs.

Transportation Demand Management (TDM) refers to strategies that encourage residents and employees to drive less in favor of transit, carpooling, walking, bicycling, and teleworking. It encompasses financial incentives such as parking charges, parking cash-out, or subsidized transit

passes; Guaranteed Ride Home programs to give employees the security to carpool or ride transit; compressed work schedules; and information and marketing efforts. TDM programs have been shown to reduce commuting by single-occupant vehicle by up to 40%, particularly when financial incentives are provided.

Coordination opportunities include working with the City to establish Gohio-based TDM initiatives among activity-center employers and property owners.

Tool: Funding Synergies

Strategy: Establish a Parking Benefit District.

A Parking Benefit District is an important management strategy for ensuring that parking activity generates funding to support parking maintenance and management. It also provides an opportunity to promote the fact that parking revenue directly funds local area improvements. Spending this revenue on mobility improvements and/or conspicuous enhancements to the public realm is therefore recommended. These can include:

- Traffic-calming to ensure that the area can be safely and effectively accessed via walking, cycling, and transit;
- Streetscape, lighting, and other pedestrian enhancements;
- Bike/scooter parking that can improve active commuting and reduce parking demand;
- Signage, wayfinding, and information investments;
- Etc.

Tool: Residential Parking Permits

Strategy: Address spillover-parking impacts through a comprehensive resident-permit program.

Creating availability within commercial areas can shift demand into surrounding neighborhoods, a phenomenon often called “spillover” parking. Spillover impacts can reduce neighborhood support for key parking management strategies.

Tool: Vertically Integrated Management

Strategy: Consolidate parking management functions within a single City department.

The consolidated or “vertically integrated” city department model is characterized by a department head with complete responsibility for the management of all parking-related program elements. Primary elements include off-street parking facilities, on-street parking resources, overall program financial performance, parking system planning, and enforcement. *A detailed overview of this approach has been developed as an appendix to this document.*

Tool: Shared Parking Brokerage

Strategy: Use Pay-by-Phone to encourage more shared-parking agreements.

Pay-by-phone can be used to price off-street parking facilities that lack access-control systems. This makes it a crucial tool for incorporating private parking facilities, through shared-parking agreements, as it offers an option to gain revenue from the sharing.

Strategy: Coordinate management, technology, branding, wayfinding, and information to provide a consistent user experience.

Public parking that is provided within a privately-owned facility should provide a user experience that is consistent with that offered by City parking facilities.

IMPLEMENTATION GUIDE

Following is an Implementation Guide for a set of short-term recommendations for implementing the Toolbox.

Strategy	Action	First Step	Key Follow Up Steps	Key Strategic Partners
Performance-Based Management Policy	Establish as policy that the primary focus of the City's parking management approach will be maintaining an optimal level of availability among parking spaces.	Clarify that parking management will focus on maintaining consistent availability, and that pricing will be used, in complement to other regulations, to seek optimal availability conditions.	<ul style="list-style-type: none"> Establish performance targets (optimal availability levels) for on-street parking (suggested as one or two empty spaces per "block face"), short-term parking in off-street facilities (roughly 10% of spaces being available), and long-term parking in off-street facilities (this can be much lower, particularly if "real-time" availability technology is utilized). Establish a policy that pricing will be a core parking-management tool for achieving and maintaining these targets. 	City Council – approval of formal policy
Performance-Based Enforcement Approach	<ul style="list-style-type: none"> Begin enforcing time limits in Bridge Park East. Create fine structure that minimizes cost of mistakes, increases cost of repeat violations. 	<ul style="list-style-type: none"> Create First Time Forgiveness citations with information on parking options, repeat-violation fine schedule, and sources of more parking, mobility information. 	<ul style="list-style-type: none"> Develop a performance-focused enforcement approach and culture, which seeks compliance, not tickets/fines, in support of management priorities. 	Police, Public Works, City Council approval of fine schedule.
Establish Program Funding structure	Create an enterprise fund to capture parking revenues for the parking program.	Establish a policy that enterprise funds can only be spent on parking, mobility, or demand-management.	<ul style="list-style-type: none"> Brand the fund a Parking Benefit Fund 	City Council – approval of enterprise fund

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Strategy	Action	First Step	Key Follow Up Steps	Key Strategic Partners
Create a Parking/TDM/Mobility Coordinator Position	One person tasked with monitoring how parking, mobility, and TDM are serving Mobility principles, as well as opportunities for improvement.	Explore cost/benefits for filling this position with existing staff versus hiring new staff.	<ul style="list-style-type: none"> Define position roles/responsibilities Outline coordination strategies for optimizing synergies between City departments/divisions and with outside parties Complement with strategies for optimal parking-management organization. 	City Council – approval of new position and any necessary funding for establishing/maintaining it
Monitor Performance	Track parking utilization patterns among key parking facilities, focused particularly demand peaks like weekday middays and weekend evenings.	Identify protocols for data collection: Who will record occupancy levels, where, when, and how frequently.	<ul style="list-style-type: none"> Analyze data to track locations that are consistently constrained or underutilized during demand peaks Adjust Management strategies (pricing, time limits, other regulations/restrictions) if availability patterns consistently vary from targets. 	Parking Enforcement – particularly if using LPR technology for occupancy counts Public Works or Long Range Planning – potential to provide staff (summer interns) for manual counts
Establish pricing for on-street parking in Bridge Park	Charge for parking on all primary streets within the Bridge Park district.	<ul style="list-style-type: none"> Charge a premium rate on Riverside Drive, with a base rate applied elsewhere. Enforce along a 11AM to 7PM schedule. 	<ul style="list-style-type: none"> Complement with time limits of 2 hours for most spaces. Promote off-street facilities as a free alternative, and the best fit for longer stays. 	City Council – approval of ordinance establishing authority to charge for on-street parking.
	Pilot pricing via a pay-by-phone system, without physical meters	Issue an RFP for establishing pay-by-phone as the primary means of pricing on-street parking.	Ensure that the selected vendor can facilitate off-street pricing, including off-hour pricing of private lots to encourage shared parking, and digital validation.	City Council – approval of ordinance establishing pilot.

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Strategy	Action	First Step	Key Follow Up Steps	Key Strategic Partners
	Expand public valet program to Bridge Park	Identify curbside location for establishing a valet stand to serve area visitors during high-demand conditions.	Identify off-street locations that can accommodate valet-parked vehicles, making use of excess off-street capacities within functional proximity to the valet stand.	Valet service provider, businesses in served area
Seasonal Bike Corrals	Look for opportunities to place seasonal bike corrals within curbside areas.	Identify local businesses who might support having corrals nearby.	Track utilization and impact on nearby businesses.	Local businesses, Public Works
Develop Commuter Benefit strategies	Reduce employee parking demand, and improve employee attraction and retention rates, by making non-driving commutes more viable.	Establish Gohio sub-sites for both Historic Dublin and Bridge Park districts	Engage MORPC and identify sub-site champions (Crawford Hoying, Visitors Bureau, and Chamber of Commerce are viable candidates).	Employers, MORPC, and business organizations
	Develop a bus pass program to provide free transit for downtown employees.	Engage COTA regarding options for establishing a bulk-purchase discount for such a program.	Identify funding sources for the program until parking revenues, channeled through the Parking Benefit Fund, can cover its full cost.	COTA, employers, MORPC, and business organizations
Develop an Events Management toolkit	Increase the capacity and efficiencies of existing parking and mobility resources.	<ul style="list-style-type: none"> ▪ Cross-marketing ▪ Transit coordination ▪ Parking tech, like pre-purchased/assigned parking ▪ Demand-based parking rates ▪ Valet ▪ Bike Valet 	Event Permit Districts – monetize and manage excess parking capacity in key residential areas	Dublin Convention & Visitors Bureau

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Dublin, OH

Strategy	Action	First Step	Key Follow Up Steps	Key Strategic Partners
Flexible curbspace programming	Develop a Parklet program to expand outdoor food and beverage capacity and activate public spaces.	Look for pilot opportunities this summer/fall.	Identify champions – particularly among businesses seeking outdoor space expansions.	City Council – approval of parklet policy, any necessary ordinances authorizing flexible curbside regulations
Communications Plan	Develop a coordinated program for signage, wayfinding, information-design, and branding.	Identify “in house” capacities.	Develop an RFP for consulting services to cover remaining needs.	City Council – funding for engaging consultants
	Develop a Parking Map	Include information on rates, time limits, other regulations.	Include bike parking facilities. Post to City’s website Encourage businesses and key destinations to link to this page.	City GIS staff Businesses and key destinations
	Develop a dedicated Parking/Mobility page	Use the City’s Mobility Study page to launch this.	Include links to Gohio and other complementary information resources.	City Web administrator
Develop a Zoning strategy for Park Once Districts	Strategy should focus on optimizing parking supplies by emphasizing shared management, rather than minimum requirements.	Emphasize an In Lieu Fee option to encourage funding for public parking and mobility investments.	Link In Lieu Fee revenue to the Parking Benefit Fund	City Council – approval of ordinance establishing new development standards for Park Once districts
	Incentivize/require multimodal amenities and driving alternatives.	<ul style="list-style-type: none"> ▪ Add Bike Parking requirements ▪ Credit Car-Share parking ▪ Credit cycling amenities, including showers/locker facilities 	<ul style="list-style-type: none"> ▪ Require unbundling of parking (parking is a separate, optional cost added to rental, lease, purchase agreement). 	

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Strategy	Action	First Step	Key Follow Up Steps	Key Strategic Partners
Technologies	<ul style="list-style-type: none"> ▪ Metering ▪ Enforcement ▪ Performance Monitoring ▪ Controlled-Access Technologies 	Explore short-term viability of tech deployment in these areas, as a new phase of the study	Engage consultant that specializes in operational strategies and technologies.	City Council – approval of funding for engagement
Ordinances	<ul style="list-style-type: none"> ▪ Develop ordinances for curbside regulations 	Include ordinances for signage that establishes regulations.	Include guidance on design, content, and placement	City Council – approval of ordinances



Existing Conditions Report

Dublin Parking Assessment

City of Dublin, Ohio



June 2017

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BACKGROUND DOCUMENTS REVIEW

The following documents were reviewed to gain the benefit of previous planning efforts and parking management analysis/recommendations.

- Bridge Park East and Riverside Road: A Strategic Business Plan for City's Parking Assets, 2016
- Dublin, Ohio Code of Ordinances - Bridge Street District Zoning Districts, 2012
- Historic Dublin Parking Demand Study: Final Report, 2011
- Historic District Parking Demand Study: Findings and Recommendations, 2011
- Bridge Street Corridor Study - Near Term Historic District Parking Strategies, 2010
- Evaluation of Historic District Parking Opportunities Memo, 2009
- City of Dublin Community Plan - Parking Requirements, 2007

Direct quotations from reviewed documents are presented in *italicized text*.

Bridge Park East and Riverside Road: A Strategic Business Plan for the City's Parking Assets (Walker Parking Consultants, 2016)

Recommendations

Charging for Parking

- Implement paid parking system within Bridge Park East and Riverside Road area of the Bridge Street District.
- Encourage turnover and parking supply availability
 - Higher-demand parking spaces should be priced higher than other parking options
 - Higher prices for parking at an on-street meter, lower prices for off-street spaces
 - Continue to limit the time that individuals are allowed to park in high-demand areas.
- Meters:
 - Pay by plate option
 - Include integrated enforcement system, using license-plate reader technology
 - Accommodate payment by credit card, phone, and mobile-device applications
- Rates:
 - \$1.00/hour on-street
 - Escalate to \$3.00/hour for stays over three hours
 - Accommodate validation through merchants
- Schedule:
 - Don't apply the typical workday schedule

- Begin enforcement at 10:00 or 11:00 in the morning
- Enforce to at least 6:00 in the evening.

Create a Comprehensive Parking Program

- Create an auxiliary parking fund that acts as a depository for all City-related parking income and covers operating and capital expenses associated with the City's parking program. Funding sources should include:
 - Monthly permits
 - Meter revenue
 - All other parking-fee revenue sources
 - Violation revenue
- Create a Parking Division within the Public Works Department.
- Create a parking-focused web-page to communicate parking options and alternatives.
 - An interactive parking map to display
 - all public parking locations
 - hours of operation
 - costs to park
 - citation fees
 - occupancy counts/availability (could be accomplished through a 3rd party application)
 - Online citation payment processing
 - Online citation appeal forms and submittals
 - Social media presence to announce events, policy changes, and gather feedback from the public
 - Mobile phone payment instructions and account creation
 - Ability to report broken meters online
- Invest in coordinated wayfinding, signage, and information.
 - Vehicular Directional Signage - wayfinding signage
 - Public Parking Directional Signage – specific to finding public parking
 - Public Parking Arrival Signage – located at the space itself

Innovative Enforcement

- Use an ambassador approach to enforcement, as well as a graduated fine schedule for parking violations, based on the number of violations within a specific time frame, such as:
 - 1st Violation Warning
 - 2nd Violation \$25.00
 - 3rd Violation \$50.00
 - 4th Violation \$100.00 plus vehicle booting or towing
 - A discounted parking fine option if paid early

Bridge Street District Zoning Districts: Zoning Code Sections (City of Dublin, 2012)

These special zoning districts address the unique opportunities presented by distinctive development densities and programming being constructed within the Bridge Street District. As such, it provides a template for how parking requirements might be established for Dublin’s established, emerging, and potential activity centers (walkable, mixed-use districts).

Required Vehicle Parking

The new code outlines minimum parking requirements and maximum parking limits for an expansive range of land uses. These standards are summarized for a short list of common land uses in the table below.

Figure 1 Table 153.065-A: Required Vehicle Parking

Use	Minimum Required	Maximum Permitted	
Townhouses	2 per dwelling unit	2 per dwelling unit	
Dwelling, Live-Work	2 per dwelling unit	3 per dwelling unit	
Dwelling, Multiple-Family	Studio/efficiency, one-bedroom: 1 per dwelling unit	2 per dwelling unit	
	Two bedrooms: 1.5 per dwelling unit		
	Three or more bedrooms: 2 per dwelling unit		
Public School	Per approved parking plan		
Bank	2.5 per 1,000 SF	125% of minimum	
Bed and Breakfast	1 per guest bedroom, plus 1 for operator	150% of minimum	
Conference Center	1 per 6 persons maximum capacity in the largest seating area	125% of minimum	
Eating and Drinking	10 per 1,000 SF	125% of minimum	
Exercise and Fitness	2 per 1,000 SF	150% of minimum	
Hotel	2 per 3 rooms, plus 4 per 1,000 SF accessory use	125% of minimum	
Office, General	Less than 50,000 SF	2.5 per 1,000 SF	125% of minimum
	50,000-150,000 SF	3 per 1,000 SF	
	Greater than 150,000 SF	4 per 1,000 SF	
Office, Medical	2.5 per 1,000 SF	125% of minimum	
Retail, General	3 per 1,000 SF	125% of minimum	

Options for Reducing Off-Street Requirements

On-Street Parking

- On-street parking spaces may be counted toward meeting the minimum parking requirement.

Shared Parking

- Where a mix of land uses creates staggered peak periods of parking, shared parking plans that have the effect of reducing the total amount of needed parking spaces may be approved.

Car-Share Parking

- The required minimum number of off-street parking spaces may be reduced by four spaces for each parking space reserved for car-share parking, not to exceed a 10% reduction.

Transit Proximity

- The required minimum number of off-street parking spaces may be reduced by 10% if more than 50% of the land in a proposed development is located within 1,320 feet of any public transit stop.

Active-Commute Amenities

- The required minimum number of off-street parking spaces for a non-residential development may be reduced by 5% if a development contains shower and clothing locker facilities for bicycle commuting employees or patrons.

Transportation Demand Management

- Off-street parking requirements may be reduced by up to 30% if a Transportation Demand Management (TDM) program, and Parking Demand Study, is submitted to and approved by the Director and the City Engineer.
- The TDM program must include at least two of the following.
 - Carpooling, vanpooling, ridesharing, guaranteed ride home, telecommuting, and/or shuttle service programs
 - Staggered or alternative work scheduling, allowing employees to arrive and depart at different times
 - Dissemination of information to employees, residents, and visitors to the site regarding the TDM plan and alternatives to single-occupancy vehicle travel
 - Provision of annual TDM reports demonstrating effectiveness in reducing parking demand

Bike Parking Requirements

Bicycle parking is required for any development or use with six or more required vehicle parking spaces, as follows.

- Multifamily residential uses: 1 space / 2 dwelling units.

- Up to 50% of required spaces may be provided within garages
- Civic/public/institutional uses: 1 space / 20 required vehicle parking spaces.
- Commercial uses: 1 / 10 required vehicle parking spaces.

Public bicycle parking provided by the City and located within the street right-of-way may be counted toward meeting the minimum bicycle-parking requirement for a parcel provided that the spaces are on the same side of the street and located between the two side lot lines of the parcel. Credit for public bicycle parking spaces shall apply to parking for all uses on the parcel rather than any specific use.

Historic Dublin Parking Demand Study: Final Report – Executive Summary (Rich & Associates, 2011)

This study focused on parking conditions, issues, and opportunities within the City's historic downtown area.

Historic Dublin Overview

Northwest Quadrant

- *The northwest quadrant can be defined by its many restaurants as well as by having a majority of the publicly available parking within the district.*
- *The Darby Street and Indian Run Lots totaling nearly 200 spaces together with the nearby North Lot with its 10 publicly available spaces mean that the northwest quadrant has 70 percent of the districts publicly available parking.*
- *It is also the only quadrant that is likely to experience a parking deficit.*
- *The deficiency could be as many as 65 spaces with the impending full occupancy of the Bri-Hi Square development unless the community can improve the utilization of the available privately controlled parking supply.*

Northeast Quadrant

- *The northeast quadrant is a very narrow collection of several blocks fronting High Street north of Bridge.*
- *It can...be considered one of the two self-sufficient quadrants in the district.*
- *This is due to the fact that the only publicly provided parking is the very limited on-street parking along High Street with no publicly provided off-street parking.*
- *Home to several popular restaurants, one of the restaurants meets its parking needs in the evening hours through agreement with a nearby private landowner.*
- *Other businesses either make do with their limited supply associated with their buildings or depend on the public supply in the northwest quadrant.*

Southwest Quadrant

- *The southwest public supply only represents about 30 percent of the publicly available supply.*
- *With significant competition for relatively few spaces, this quadrant is also one of the more stressed in the district.*

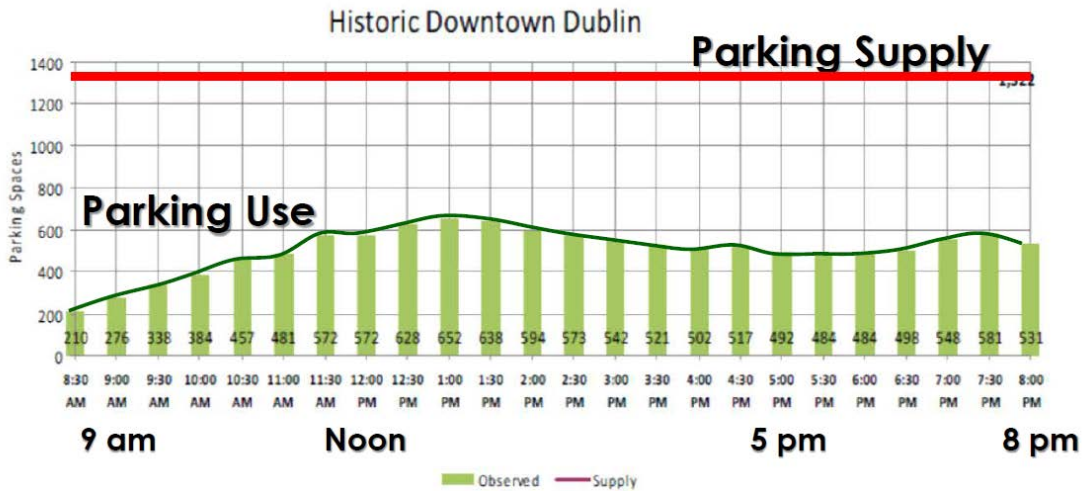
- Because of the relative lack of publicly provided parking, and with most restaurants on the north side of Bridge Street, patrons and employees to and of the southwest quadrant are probably the most impacted by the deficiencies in the pedestrian crossing of Bridge Street.
- This quadrant does...have the potential to relatively easily overcome some of its parking deficiencies if the City can reach an agreement to use at least some of the 121 spaces at the Dublin Community Church. Availability of these spaces for use by employees of some businesses in the quadrant could free up spaces in the stressed Town Center I and Town Center II Lots and make more of these available to customers of the shops and restaurants in the quadrant.

Southeast Quadrant

- The southeast quadrant is another area of the district that is forced to be relatively self sufficient in parking.
- The quadrant has only a very few on-street space on S. High Street. Because of traffic conditions on S. High Street, some of these spaces are restricted from use during the evening hours.
- With no other off-street public parking, the various businesses rely on available parking behind their businesses to meet the needs of their customers and staff. However access to many of the lots is only from Blacksmith Lane in back of the buildings.

Supply & Utilization Conditions (Historic Dublin)

Figure 2 Overview of Capacity and Utilization (on a normative weekday)

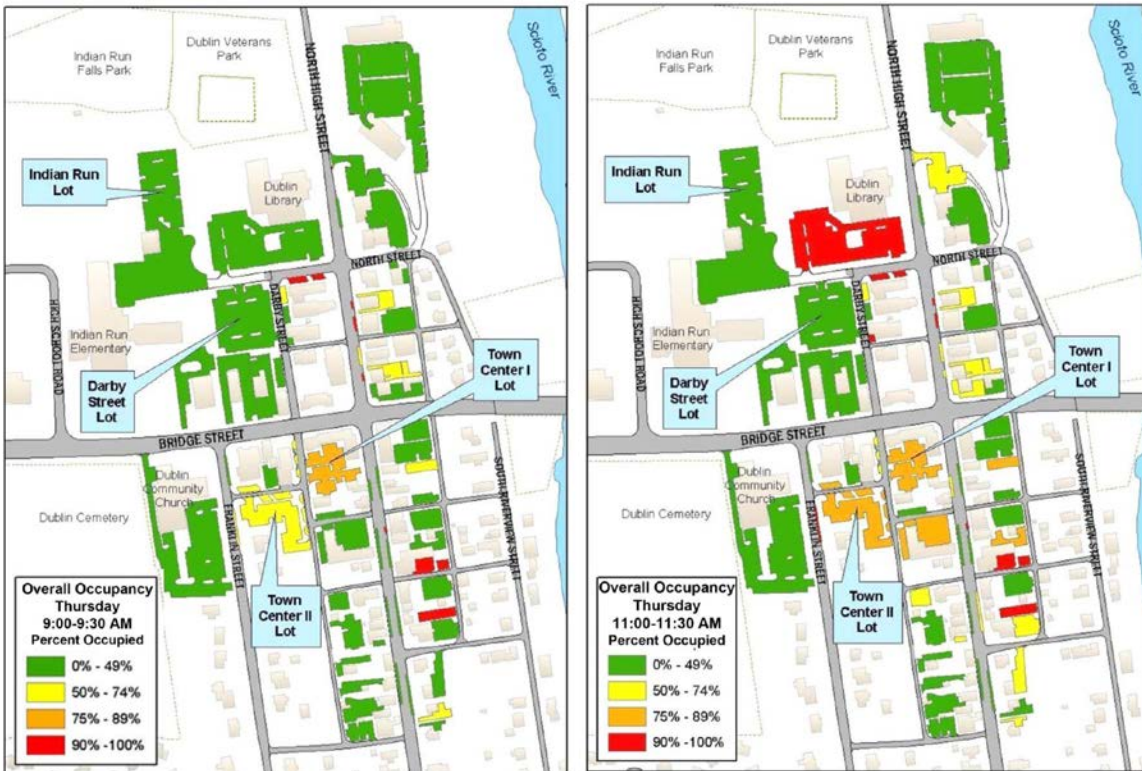


Existing Conditions Report | Dublin Parking Assessment
Dublin, OH

Figure 3 Utilization by Time and Location (Saturday Evening, Friday Evening)



Figure 4 Utilization by Time and Location (Thursday 9AM, 11AM)

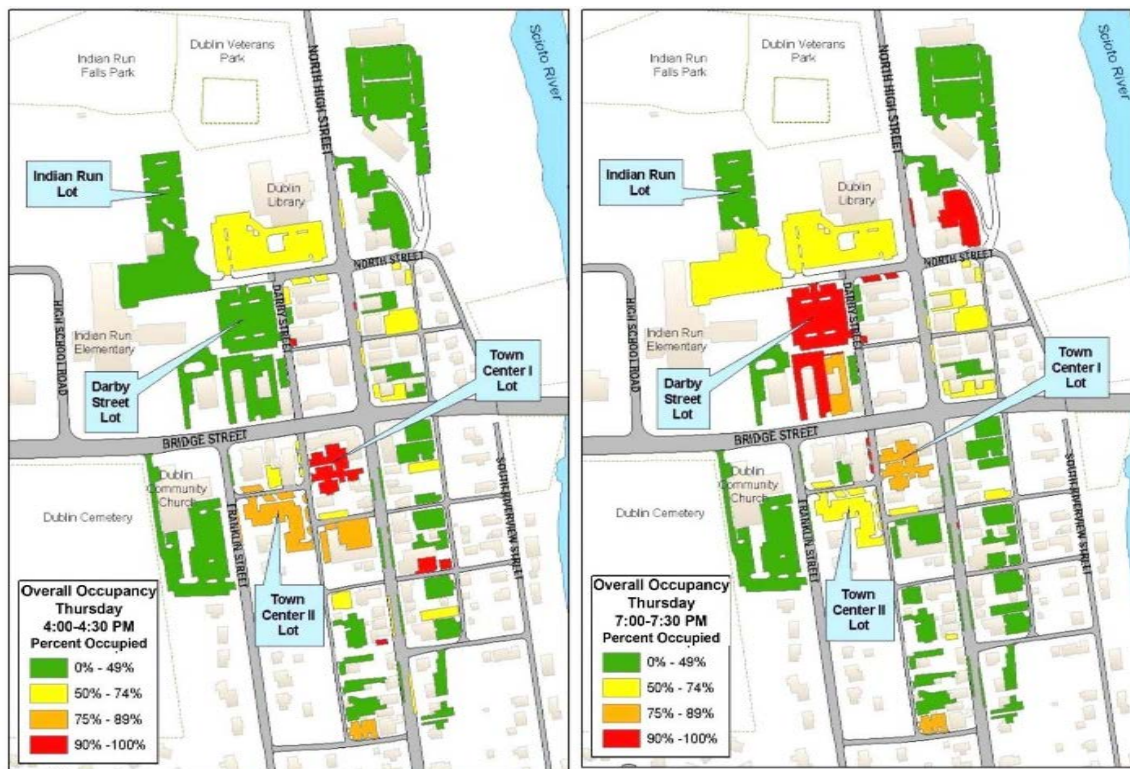


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Dublin, OH

Figure 5 Utilization by Time and Location (Thursday Noon, 2PM)



Figure 6 Utilization by Time and Location (Thursday 4pm, 7PM)



Key Findings

- *The approximately 1,322 parking spaces within the Historic District should be sufficient to accommodate the current parking demand.*
 - However, nearly $\frac{3}{4}$ of this supply is privately controlled, limiting its accessibility to most drivers.
 - Making more of this supply publicly available should be prioritized over increasing raw supplies.
- *More efficient use of the existing available supply should be the first option rather than building new lots.*
- *Improving administrative processes and regulations can modernize the District's parking operations.*
- *A lack of parking should not be an issue in Dublin because the total parking supply clearly should be adequate to support the current business needs.*
- *Nonetheless, there are perceptions and issues by employees in the district and visitors of insufficient parking.*
 - *Much of this is likely due to the high proportion of privately controlled parking which does not make for an efficient parking supply.*
- *Where private businesses have surplus parking capacity, this is often not available to non-customers or staff.*
 - *Additionally, some businesses that have private parking encourage their staff to park in public lots so that their limited supply is available for customers.*
- *With many of the private parking areas particularly in the SE and SW quadrants unimproved gravel or dirt lots behind buildings which may not be easily found by patrons or considered unsafe or unattractive for other reasons, a significant portion of the private parking is going unused.*
- *Only 27 percent of parking in the city is publicly available.*

Recommendations

General Improvements

Best management practices should be tailored to address the needs of Historic Dublin.

- *Improve marketing of available parking systems*
 - *The availability of the Indian Run lot during the day is not well known.*
 - *A primary purpose is to override any negative perceptions of poor parking availability by informing where the parking is available.*
- *Improve management of the parking system*
 - *More efficient use of the existing available supply should be the first option rather than building new lots.*
 - *Improved enforcement methods will effectively increase available supply. Consistency is important.*
- *Provide a balanced supply of public and private parking*

- *For an efficient use of the available supply, a greater proportion of the parking must be publicly available.*
- *Public lot spaces need to be more consistently available to customers and visitors.*
- *Facilitate pedestrian access and mobility*
 - *Bridge Street acts as a barrier to pedestrians. Improved crossings would facilitate 'park-once' behavior by customers and employees.*
 - *Improvements to pedestrian safety and comfort will encourage visitors to park further from destinations.*
- *Implement revised parking requirements more appropriate for an historic downtown*
 - *The existing Code requires more spaces than typical of historic districts*
 - *Shared parking requirements would better reflect actual use patterns*
- *Pricing strategies should be considered to better reflect market demand for parking*
 - *Consider fee-in-lieu program for new development to help fund public parking improvements*
 - *Any paid parking should be strategically located to encourage more efficient use of free parking*

Short-Term Improvements

- *Improve perceived safety of Bridge and Darby Street pedestrian crossing to encourage employee parking District wide at Indian Run (in process)*
- *Stripe parking spaces on North and South High Street on-street spaces*
- *Provide vertical separation (planters, railing, or other appropriate items) to improve separation from sidewalk and street (in process)*
- *Continue to place bike racks in appropriate locations (in process)*
- *Organize valet services to the extent possible; consider signing valet parking locations; increase awareness of valet services (locations, hours of operation, cost)*
- *Increase off-street parking lot time limits from 2 to 3 hour parking*
- *Increase on-street parking time limits from 2 to 3 hour parking*
- *Provide further marketing efforts to advertise available parking, valet availability, off-hour parking locations (Library, private lots) in cooperation with HDBA and other businesses*
- *Approach property owners of private parking areas to make spaces available for public use during off-business hours*
- *Identify resources for more consistent enforcement hours (in process)*
- *Tow vehicles parked in undesignated locations where safety is compromised; write citations for others*
- *Utilize violation tracking equipment to monitor license plate (rather than marking tires) to track actual violations*
- *Development applications should include an approved parking plan*
- *Adjust Zoning Code parking requirements to better accommodate conditions in the District; include shared parking, individual use requirements, parking exceptions, etc. (in process)*

Indian Run Parking Lot Improvements

- *Provide pedestrian path from Indian Run to North High Street*
- *Improve walkway lighting from lot to North Street*
- *Refurbish parking lot striping and improve lighting*
- *Ensure that merchants/employees are aware of Indian Run lot availability; provide mailings to businesses with appropriate maps*
- *Improve wayfinding to Indian Run lot*

Mid-Term Improvements

- *Once Indian Run lot becomes consistently utilized, consider appropriate locations for additions to existing public parking areas*
- *Study reconfiguration of Town Center lots to improve traffic flow and space availability*
- *In lieu of variances, require payment per space for uses that cannot provide required parking – utilize funds for parking and pedestrian improvements*
- *Approach property owners to consolidate and improve parking areas and make available for public use during off-business hours*
- *Investigate appropriate management methods to improve cooperation between District business/building owners (dedicated staffing, funding management, etc.) regarding cooperative parking*

Long Term Improvements

- *Parking garages are not recommended but should be investigated should the school site ever be made available for development*
- *Investigate removal/relocation of alley side obstructions (poles, fences, etc.) to improve circulation between rear parking areas*
- *Investigate potential purchase and removal of smaller accessory structures in various locations for potential parking; design and landscape to fit character of the District*
- *Negotiate off-site parking locations and provide morning and evening peak hour shuttle service*

Memorandum: Bridge Street Corridor Study - Near Term Historic District Parking Strategies (City of Dublin, 2010)

Key Findings

Supply (Historic Dublin)

Figure 7 Historic District Parking Resources & Inventory



Figure 8 Historic District Parking Spaces by Quadrant (Bridge at High is center)

Type	NW	NE	SE	SW	Total
Public	83	0	0	74	157
Time-limited public	117	10	22	68	217
Private	251	317	141	239	948
Total	451	327	163	381	1,322

Utilization (Historic Dublin)

Figure 9 Daytime Average and Peak Demand

Quadrant	Average Day			Peak		
	Demand	Supply	Surplus	Demand	Supply	Surplus
NW	164	451	287	180	451	271
NE	230	327	97	253	327	74
SW	182	381	199	200	381	181
SE	83	163	80	91	163	72

Figure 10 Evening Average and Peak Demand

Quadrant	Average Day			Peak		
	Demand	Supply	Surplus	Demand	Supply	Surplus
NW	173	451	278	191	451	260
NE	167	327	160	184	327	143
SW	168	381	213	185	381	196
SE	56	163	107	61	163	102

Recommendations

- *The provision of non-peak hour on-street parallel parking along Bridge Street and portions of North High Street and North Street, including:*
 - *approximately 45 new on-street spaces on Bridge Street between High School Road and Blacksmith Lane to the east*
 - *4 spaces on the west side of North High Street, adjacent to the Dublin Branch of the Columbus Metropolitan Library*
 - *8 spaces along the north side of North Street, adjacent to the library*
- *A critical element for a successful on-street parking program will be enforcement of the off-peak hour time limitations in the parking zone, including towing, ticketing, and fines*

- *An extensive public education program will be needed for the businesses in the District and the community at large to communicate when and where on-street parking will be permitted*
- *On-street parking, particularly on Bridge Street, will likely only be accommodated during off-peak hours, from 7:00 p.m. on weekday evenings to 6:00 a.m., and a wider range of hours on weekends*

Parking Management

- *Remote Employee Parking*
- *Valet Organization*
- *Joint Use Parking Arrangements*
- *Coordinated Enforcement*
- *Wayfinding Plan*

Evaluation of Historic District Parking Opportunities Memo (City of Dublin, 2009)

Findings & Recommendations

- *Bridge Street could accommodate up to 45 on-street spaces, but should be limited to off-peak hours (evenings, and perhaps weekends).*
 - *Additional analysis is needed to refine potential schedules.*
- *On street parking on North High Street, North Street, and the northern end of Franklin Street could be implemented with few additional physical changes or operational effects.*
- *Reconfiguring, and potentially consolidating, private parking lots behind the South High Street businesses, could increase overall capacities.*
 - *This will require some preliminary design work and initiating discussions with building/business owners.*
 - *Potential capacity gains might be negated if current Code requirements for space sizes and setback are used.*
- *Zoning Code modifications for the Historic District (HB District) should be pursued for calculation of space requirements for new development or modifications to existing buildings and uses.*
- *A parking demand study should be initiated and completed after the Bridge and High Street development has opened (even if all tenant spaces are not occupied).*

CURRENT PARKING CONDITIONS OVERVIEW

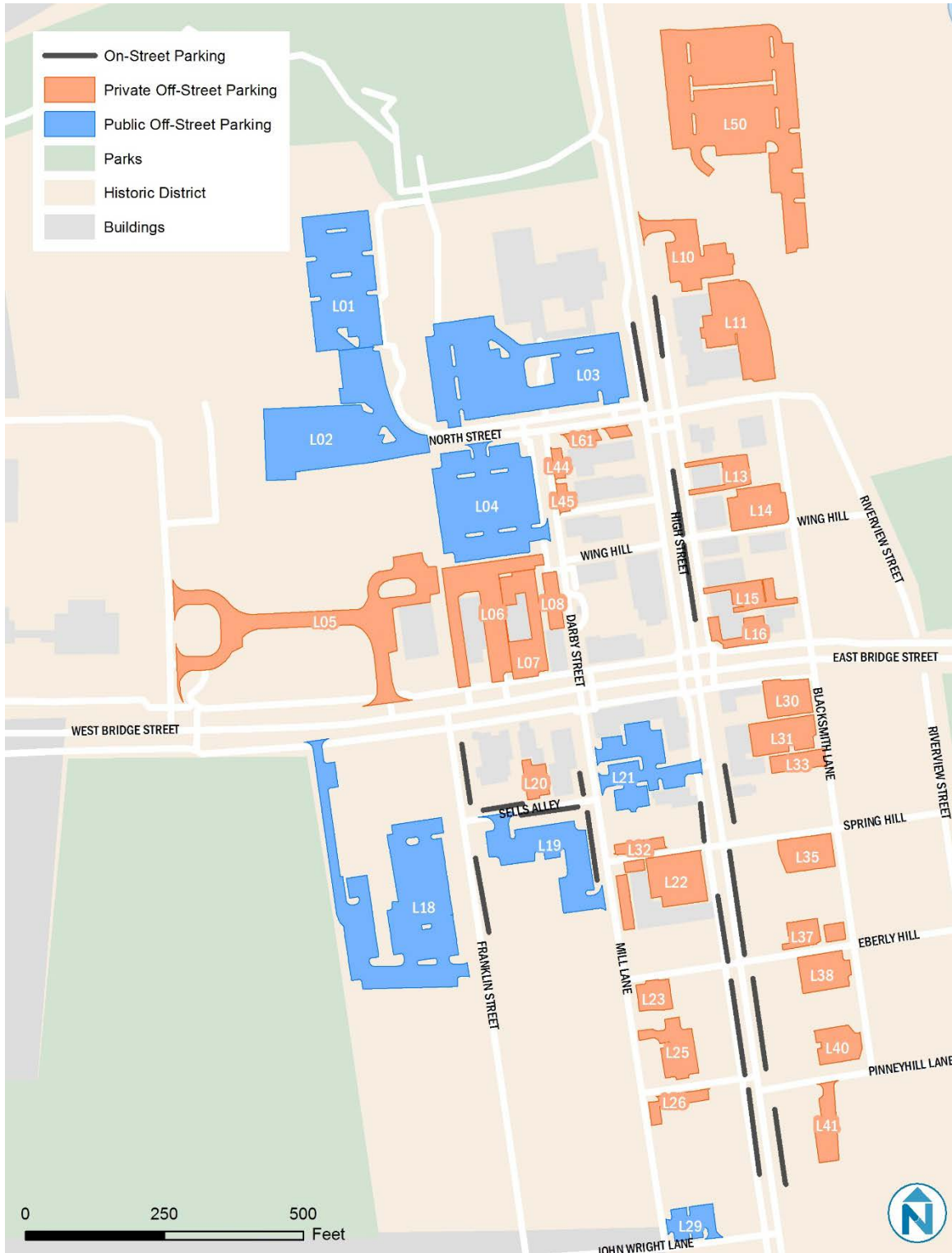
SUPPLY

Figure 11 Public Parking Lot in Historic Dublin



The parking supply within Historic Dublin has changed little since the 2010 Study referenced above. The map below provides a spatial overview of on-street and off-street parking locations in this area, including the identification of private (restricted to tenants and visitors of adjacent buildings) versus public (available to all drivers, managed by the City) off-street facilities.

Figure 12 Current Parking Supply within Historic Dublin



UTILIZATION

To update the utilization data and findings provided by previous studies, occupancy data was collected through field surveys, on weekdays and Friday evening in the spring. Findings are summarized below.

Weekday Midday

Figure 13 On-Street Parking at Midday



As in many towns, midday during the week is a popular time to visit the businesses within the historic downtown. People stop by to eat, run errands, shop, or simply hang out during their lunch breaks. As such, the weekday midday was chosen for field data collection. The following describes occupancies shown in *Figure 15 Weekday Midday 12pm – 1pm Utilization* on page **Error! Bookmark not defined.** Parking activity seems to be concentrated in two locations: around the Town Center Parking Lot behind the shops facing Bridge Street, and along North Street near Darby Street.

On-Street

Problematic occupancies were recorded on on-street blockfaces primarily around the Town Center Lot. Blockfaces on Mill Lane, Sells Alley, and in front of the Dublin Village Tavern had recorded occupancies of over 95% during the midday time period. All other on-street parking segments saw considerably less utilization, between 0 – 85% occupancies, with no segments between 85 – 95% occupied.

Off-Street

While parking management primarily impacts publicly-available parking facilities, the interaction and utilization of privately-owned facilities (e.g. private parking lot for a local store) can have a tremendous effect on the overall parking environment in a place. The following examines occupancy levels for both public and private parking resources in the downtown. Figure 10 on page 19 shows public and private ownership of off-street lots.

Public

Field counts showed off-street parking pressure points centering on two areas of the downtown district.

- The first was around the parking lots behind the shops facing Bridge Street in the southwest quadrant (west of High Street, south of Bridge Street). Here the Town Center Lot (Lot 21) showed a utilization of over 95% while the Franklin Street Lot (Lot L19) showed an 85 – 95% utilization. The Town Center Lot is understandably an appealing parking destination as it is very close to the major intersection of High and Bridge Streets. The dedicated Left Turn signal at this intersection means that drivers have a relatively easy time making the necessary turns to access the lot coming from either direction of Bridge Street. This, in contrast to other public lots that are farther from the primary center intersection or require turns at unsignalized intersections, such as Bridge at Darby. The Town Center Lot's entrance from High Street, the only public off-street lot with such an entrance is a natural choice.
- The second was along North Street in the northwest quadrant of the downtown (west of High Street, north of Bridge Street). The Indian Run Lot (L02) had an occupancy over 95% while the Darby Street Lot showed an 85 – 95% occupancy level. These levels may reflect the shared use of the Indian Run lot and the lack of other public lots north of Bridge that are close to the center of the downtown.

Private

The majority of private lots throughout the downtown had occupancies below 60% during the midday period. The busiest private lots were those located along North Street across from the Dublin library, which was over 95% occupied. In addition, two private lots had occupancies between 60 and 85%: the private lot on Spring Hill between Mill Lane and High Street and the lot behind Dublin Barber Shoppe on Blacksmith Lane (see Figure 15 on page **Error! Bookmark not defined.**).

Friday Evening

Weekend evenings are another period where many downtown and commercial centers experience heightened parking demand. People come downtown for dinner, drinks, and entertainment in the

denser, walkable area. The following describes the parking utilization shown in *Figure 16 Friday Evening 7pm – 8pm Utilization* on page 22.

On-Street

On-street occupancy levels were highest on blocks south of Bridge Street near the City's Town Center Lot. Blockfaces on Mill Lane, Sells Alley, and High Street had over 95% occupancy, while other blockfaces one or two blocks farther from Bridge Street had occupancies less than 60%, highlighting the draw of those parking spaces located right off of the Bridge Street core.

Off-Street

Overall, off-street parking activity on Friday evenings seemed to center in the northern area of downtown, taking advantage of the free parking available at the Library and Indian Run lots after hours. Other private lots in the north were also active in comparison to the southern half of the downtown, which showed relatively little activity with the exception of the Town Center Lot. This may be due to the lack of late night destinations in the southern area of the downtown apart from the Dublin Tavern and Donato's. In contrast, the northern area has many restaurants and bars to act as evening destinations for downtown visitors, perhaps reinforcing the divide that Bridge Street represents through the downtown.

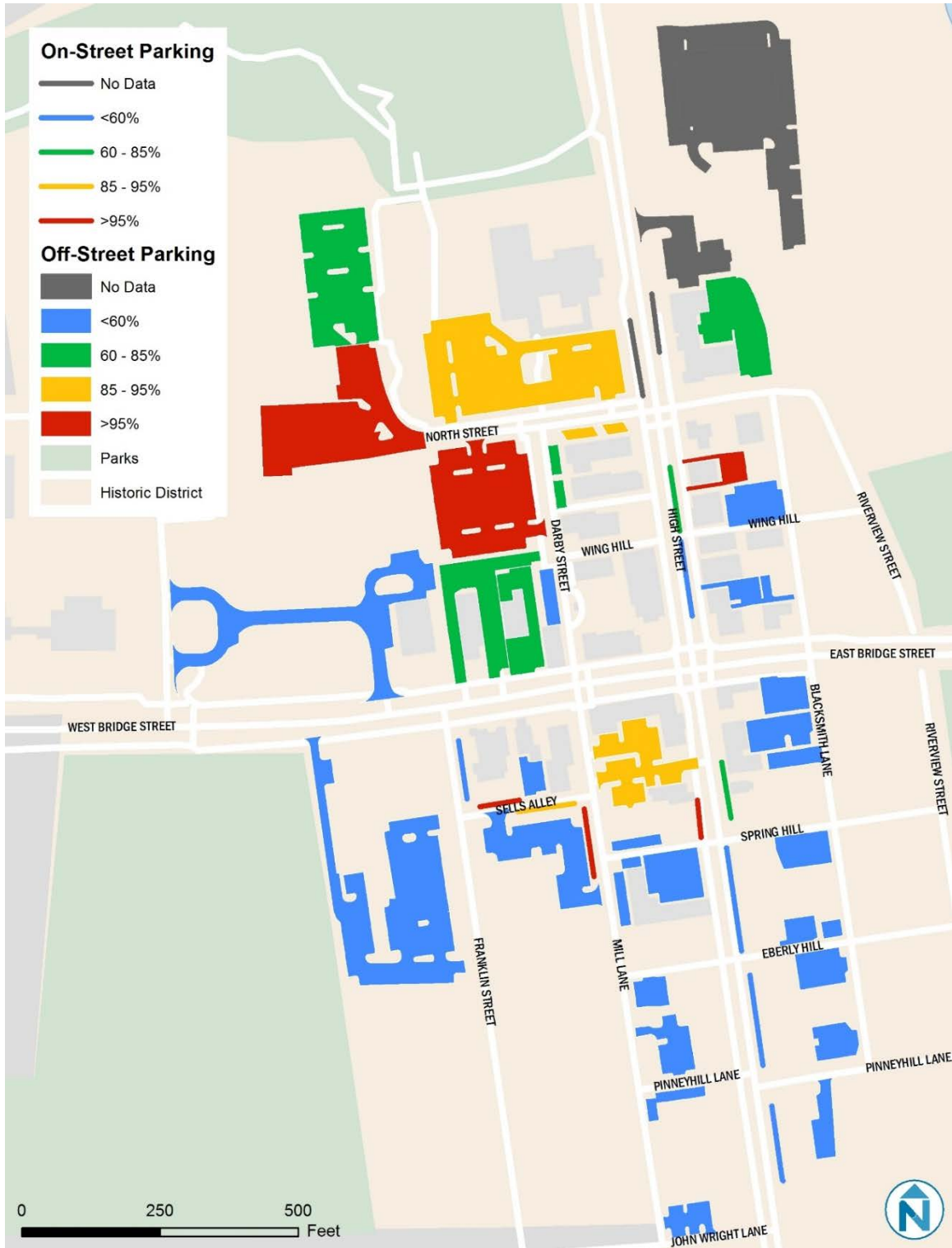
Public

With the exception of the Town Center Lot, every lot public or private south of Bridge Street had under 60% occupancy during the Friday Evening period. The Town Center Lot (Lot L21) in contrast had an occupancy level between 85 and 95%, implying that the lot remained a popular choice for drivers coming to the downtown on a Friday night. North of Bridge Street, utilization was much higher across the available public lots. Both the Indian Run and Darby Street Lots were at the over 95% level, while the library lot across the street was similar with an 85 – 95% occupancy.

Private

Private lots north of Bridge Street were also active. Lot L13 behind the Brazenhead and Salon of Dublin was over 95% occupied and Lot L11 to the north behind Oscar's had occupancy levels between 60 – 85%. To the south near Bridge Street, Lots L06 and L07 surrounding the Dublin Veterinary Clinic and J. Liu were relatively active as well

Figure 15 Friday Evening 7pm – 8pm Utilization



ANTICIPATED CHANGES

HISTORIC DUBLIN

Land Uses

The table below presents a summary of land uses anticipated to be developed over the next two years.

Figure 16 Land Uses in Development

Land Use	Square Footage	Units
Restaurants	18,386	
Office	3,796	
Retail	16,482	
Library	45,560	
Residential		52
Total	84,224	52

Parking

The Library Garage

The parking lot serving the Dublin Branch library on North High Street in Historic Dublin will be replaced by a parking structure. This parking structure will increase the current site's parking capacity by over 400 spaces.

North High Street

This project is planned to include 375 parking spaces, much of which will be made publicly available.

BRIDGE PARK

The previous sections of this report focus on Historic Dublin as the Dublin community's primary activity center (downtown). Bridge Park, however, will soon emerge as a second downtown district, one that is planned to greatly expand the concentration of jobs, housing, and destinations in central Dublin. Below is a summary of the land uses planned for this new district, as well as the parking proposed to support them.



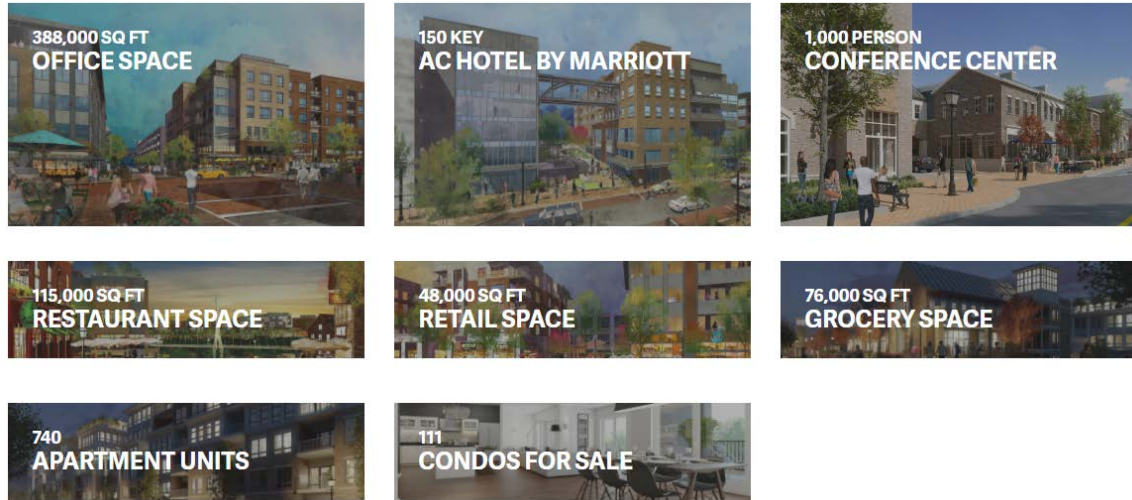
The initial phase of build out for the Bridge Park master-planned district is nearing completion, with an unprecedented concentration of land-uses and structured parking beginning to attract new residents and commercial customers. When fully activated, this new activity center will complement Historic Dublin, which lies directly across the Scioto River, to transform and magnify Dublin’s “downtown” center. A pedestrian bridge is planned to enhance connectivity between the two districts. New investments to enhance the riverfront park that lies between, and planned complete-street designs for East Bridge Street will also help create a sense of a cohesive center for the Dublin community, one that spans these two, distinct districts.

One of the primary opportunities that this presents is for the high-density parking facilities located in Bridge Park to provide access to Historic Dublin. Not only will this provide more options to access the businesses in this area, which has long served as Dublin’s downtown, it will do so in a way that will also help preserve its low-scale built character. For this to succeed, however, parking must be coordinated between the two districts, including management practices, information, wayfinding, and experience.

Land Uses

Bridge Park will become a significant concentration of “live, work, play” opportunities, with hundreds of new housing units, office and retail jobs, and dozens of places to eat, shop, exercise, and play. The design and programming of individual buildings and the collective organization of buildings throughout the district promote “walkable urbanism”, placing housing and jobs near complementary land uses and destinations.

Figure 17 The Bridge Park Website Overview of Planned Homes and Destinations



Parking Demand

This emphasis on walking as the primary mode of mobility for local trips creates a “park once” district, meaning that residents, local employees, and visitors rarely drive within the district, even if they have a car available to them, because trips are short, safe, and pleasant on foot. This should significantly reduce parking demand for the district, compared to a district with the same land uses, but designed around on-site parking lots. The table below identifies how parking demand can be projected as follows.

- For individual land uses – Peak parking demand during a typical week.
- For a collection of individual land uses – The sum of these peak measures across all land uses, using base rates (ITE).
- For a collection of individual land uses within a shared-parking environment – The sum of these peak measures across all land uses, using “shared parking” rates (ULI).
- For a shared-parking district, using measures of peak measures of accumulated demand across all land uses, and across time in a typical week.

Figure 18 Parking Demand Projections

Land Use	Square Footage	Units	ITE Parking-Generation Ratio	Shared Parking Ratio
Restaurants	115,000		1,373	1,236
Office	373,000		1,059	934
Retail	33,000		95	86
Grocery	76,000		176	173
Hotel		150	180	162
Residential		790	1,016	966
Total	597,000	940	3,899	3,557
Peak Accumulated Demand in a Shared Parking District				2,121
Optimal Supply				2,357

Proposed Parking Supply

Current plans for Bridge Park include plans for at least 2,500 parking spaces, and possibly over 3,000 spaces, as follows.

- On-Street parking: 335 spaces
- Off-Street parking: 2,231 (potentially 2,872)

ANTICIPATED IMPACT

The changes outlined above represent, in many ways, a continuation of the conditions affecting parking and access in downtown Dublin, today. In aggregate, parking supplies are more than adequate to meet demand. How the individual facilities are managed, however, will determine the experience of drivers, whether then can find an available space, where and when they want one.

Managed as a coordinated system, and in complement to investments in mobility improvements and other opportunities to reduce auto-dependency, parking supplies will be more than sufficient to meet demand within a thriving downtown Dublin.

SUMMARY

KEY FINDINGS

- There is (and will continue to be) ample aggregate supply to meet demand.
- Yes, the user experience is often on of "scarcity".
- This is not uncommon where most parking is privately controlled.
- Management is the biggest missing piece.
- Mobility Study is rare opportunity to coordinate parking + mobility.

STANDING RECOMMENDATIONS

Many recommendations outlined in previous studies remain worth consideration today. The most significant among these are listed below.

Strategic Business Plan (Walker Parking Consultants, 2016)

Charging for Parking

- Implement paid parking system
 - Higher-demand parking spaces should be priced higher than other parking options
 - Higher prices for parking at an on-street meter, lower prices for off-street spaces
 - Continue to limit the time that individuals are allowed to park in high-demand areas.
 - Accommodate payment by credit card, phone, and mobile-device applications
 - Accommodate validation through merchants
- Schedule
 - Don't apply the typical workday schedule
 - Begin enforcement at 10:00 or 11:00 in the morning
 - Enforce to at least 6:00 in the evening.

Create a Comprehensive Parking Program

- Create an auxiliary parking fund that acts as a depository for all City-related parking income and covers operating and capital expenses associated with the City's parking program. Funding sources should include:
 - Monthly permits
 - Meter revenue
 - All other parking-fee revenue sources
 - Violation revenue
- Create a Parking Division within the Public Works Department.
- Create a parking-focused web-page to communicate parking options and alternatives.
- Invest in coordinated wayfinding, signage, and information.
 - Vehicular Directional Signage - wayfinding signage

- Public Parking Directional Signage – specific to finding public parking
- Public Parking Arrival Signage – located at the space itself

Innovative Enforcement

- Use an ambassador approach to enforcement, as well as a graduated fine schedule for parking violations, based on the number of violations within a specific time frame, such as:
 - 1st Violation Warning
 - 2nd Violation \$25.00
 - 3rd Violation \$50.00
 - 4th Violation \$100.00 plus vehicle booting or towing
 - A discounted parking fine option if paid early

Historic Dublin Parking Demand Study (Rich & Associates, 2011)

- Improve marketing of available parking systems
- Facilitate pedestrian access and mobility to facilitate 'park-once' behavior by customers and employees.
- Pricing strategies should be considered to better reflect market demand for parking
- Consider fee-in-lieu program for new development to help fund public parking improvements
- Continue to place bike racks in appropriate locations (in process)
- Approach property owners of private parking areas to make spaces available for public use during off-business hours
- Utilize violation tracking equipment to monitor license plate (rather than marking tires) to track actual violations
- Approach property owners to consolidate and improve parking areas and make available for public use during off-business hours
- Investigate potential purchase and removal of smaller accessory structures in various locations for potential parking; design and landscape to fit character of the District

Historic District Parking Opportunities (City of Dublin, 2009)

- Bridge Street could accommodate up to 45 on-street spaces, but should be limited to off-peak hours (evenings, and perhaps weekends).
- Reconfiguring, and potentially consolidating, private parking lots behind the South High Street businesses, could increase overall capacities.



Parking Management Best Practices

Dublin Parking Assessment

City of Dublin, OH



February 2017

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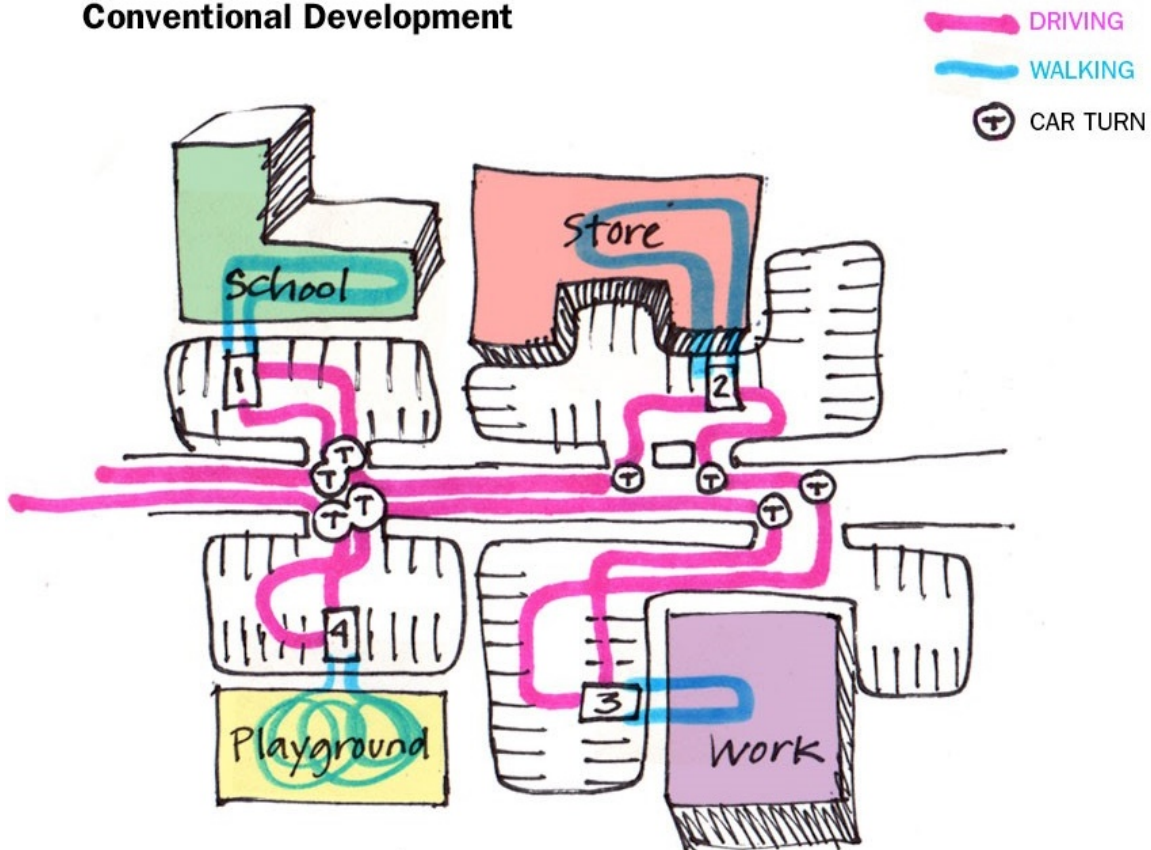


COORDINATED MANAGEMENT

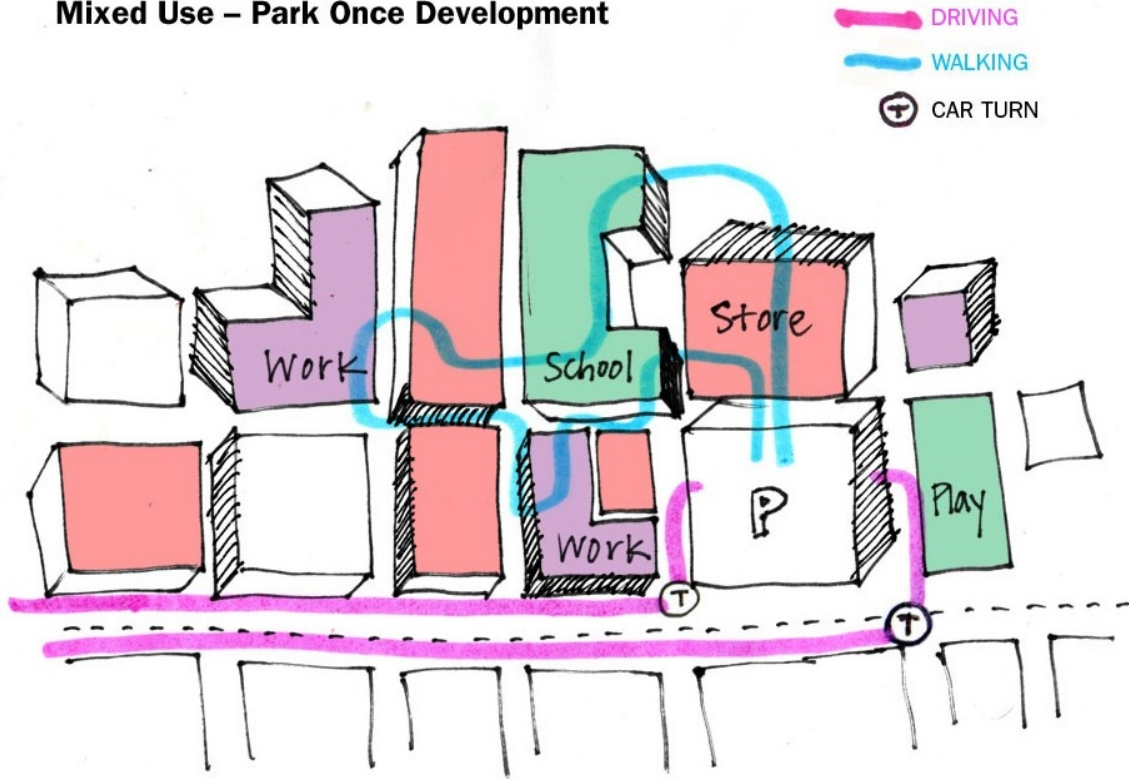
PARK-ONCE MANAGEMENT

- Most parking options are publicly accessible, eliminating the need to drive between local destinations.
- Shared parking is one of the most effective tools for managing urban parking resources.
- The Park Once concept is shared parking applied at the district level.
- Typically built around a municipal parking system that provides a meaningful parking supply.
- A Park Once approach can greatly reduce parking supply needs, as collective efficiency and shared access reduce the need for each destination to meet its own demand peaks.

Conventional Development



Mixed Use – Park Once Development

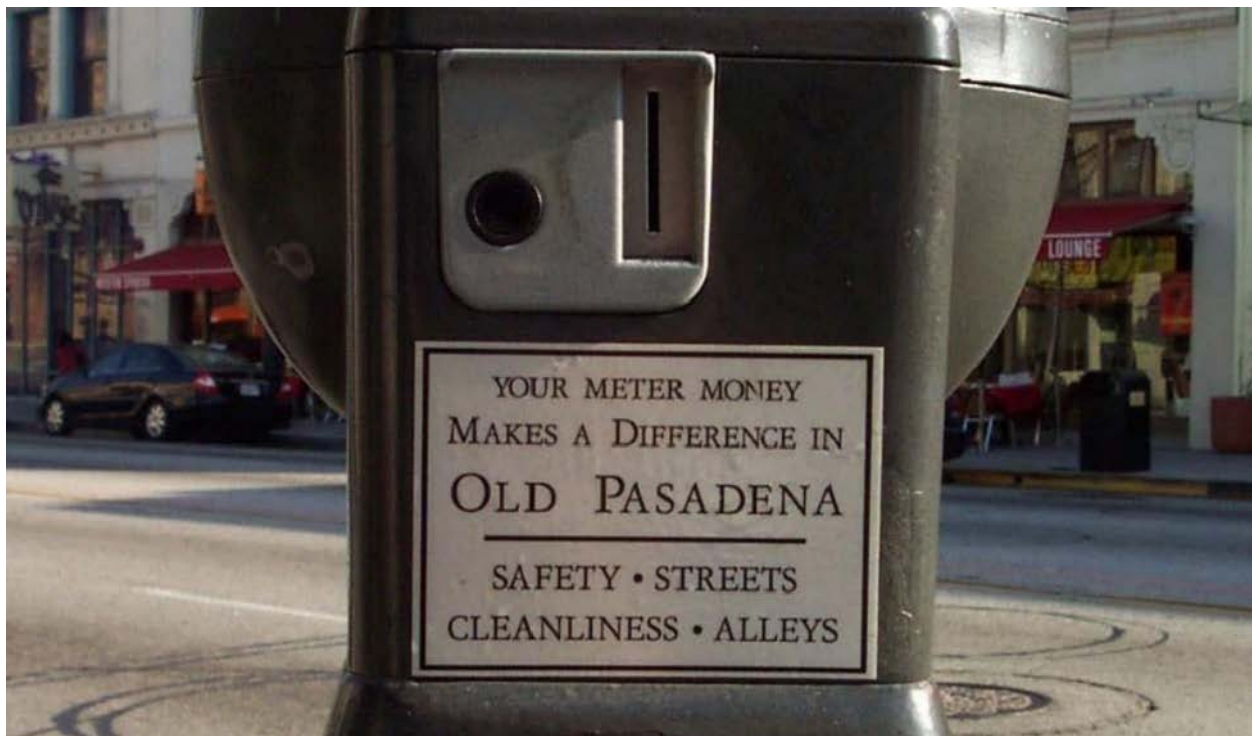


Patrons-Only Parking Reduces Efficiency, Increases Driver Anxiety in Simsbury, CT



PARKING BENEFIT DISTRICTS

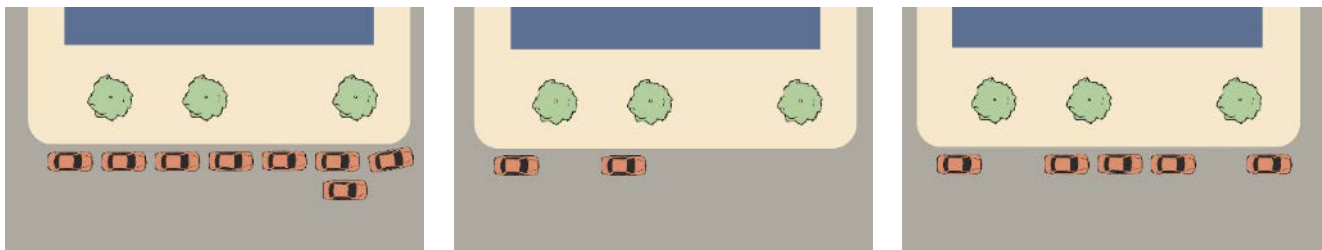
- Formally capturing surplus parking revenues to fund local, public improvements and amenities.
- Creates stakeholders with a stake in well-managed and appropriately priced parking resources.
- Make “performance-based” pricing (see below) policies more transparent, while making the benefits of such policies more conspicuous.
- Use revenue to improve/expand driving alternatives.
- Particularly effective where parking demand is high and growing, especially if this results in increased parking rates.



Parking Revenues Provide Enhanced Downtown Transit in Grand Rapids, MI



PERFORMANCE-BASED PRICING



Too Full

Too Empty

Just Right

- Market-based approach to parking rates that focuses on maintaining targeted “performance”.
- Typically identified as a modest, but consistent level of space.
- This approach is based on two, mutually-affirming propositions:
 - Price is the most effective means of keeping demand in line with a fixed supply of any resource.
 - The right price for parking is the one that achieves optimal supply/demand conditions, as measured by availability.
- Improves access to local land uses and destinations.
- Reduces local traffic congestion and driver frustration by minimizing “search traffic”.
 - Preference for on-street parking can compel drivers to keep driving until a space is found.

- This increases local traffic congestion, as well unpredictability in traffic movements, worsening mobility for pedestrians, cyclists, transit riders, and fellow drivers.

PERFORMANCE-BASED ENFORCEMENT

- Enforcement practices that seek increased compliance and promote parking management objectives.
- Raises the priority level that parking enforcement receives and pivot away from an emphasis on ticketing and generating fine revenue.
- Improves the parking experience by emphasizing information over penalties, making it easier for drivers to avoid infractions
- Realigns enforcement objectives with broader parking management objectives
- Improving the efficacy of parking rates and regulations in maintaining parking availability.
- First-time forgiveness tickets + graduated fine structure for repeat violations.

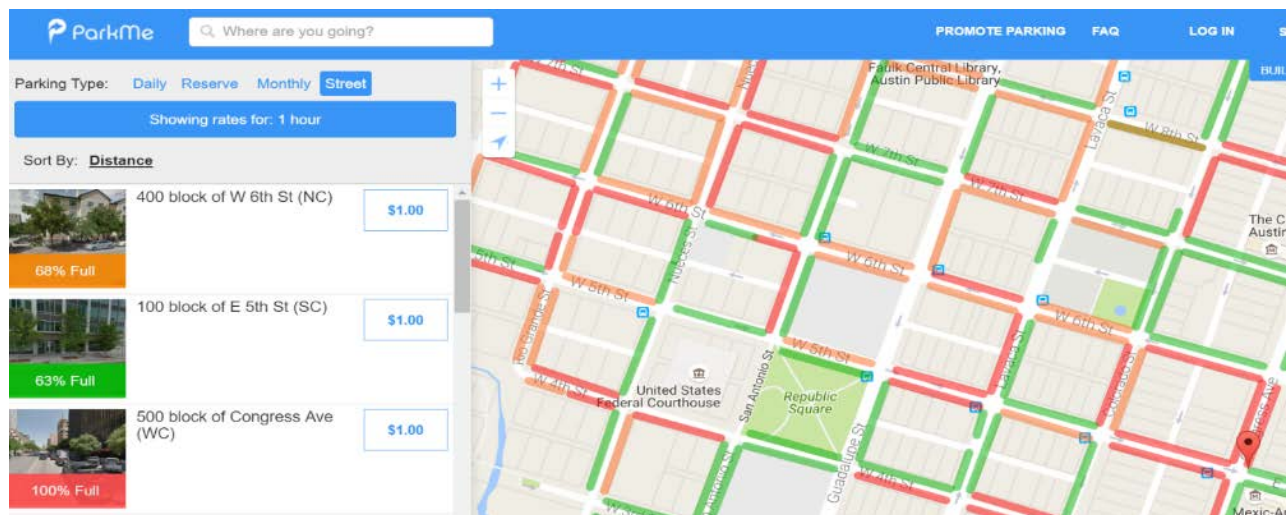
COMPREHENSIVE COMMUNICATIONS PLAN

Real-Time Availability Sign in Milwaukee, WI



- Reduces parking search-related traffic.
- Enhances effects of pricing and other management actions on parking patterns and utilization.
- Improves the customer parking experience, by making all parking options clear.
- Facilitate and promote a Park Once management approach.
- Identify all parking opportunities to address perceived supply constraints, and to help distribute demand more evenly across all options.
- A webpage, with information on rates, time limits, other regulations, by time of day and day of week, to which local businesses, organizations, and other destinations can direct their visitors.
- A comprehensive parking map, with information on rates, time limits, other regulations, by time of day and day of week, as well as bike parking locations and information.
- Pamphlets and other printed materials, especially for events and high-demand seasons.
- Smartphone apps.
- Interactive parking maps displaying real-time availability information.
- **Information**, to allow informed decisions about parking to be made before arriving in the area.
- **Wayfinding**, to guide drivers to parking options, encourage walking between local destinations.
- **Signage**, to mark options, confirming to drivers that they have found what they were seeking.
- **Branding**, to quickly communicate to drivers the location of city parking facilities.

Interactive On-Street Parking Information for Austin, TX at ParkMe.com



COORDINATE PARKING & MOBILITY

- Parking is a means to reaching a destination, not an end in itself.
- Embrace a broader "access management" paradigm.

- Create or support programs to increase the range of mobility options.
- Produce significant co-benefits, while extending the effectiveness of existing parking resources, by facilitating:
 - Greater mobility choice,
 - Reduced commuting costs,
 - More active sidewalks and public spaces, and
 - Expanded access to safe, active-mobility networks.

MOBILITY HUBS

- Accommodate several emerging forms of urban mobility.
- Expand the range of alternatives to personal-auto mobility.
- Physically places parking and non-driving mobility options together, highlighting the synergies between these mobility options
- Potential for repurposing overbuilt/underutilized parking facilities
- One-stop resource for parking and mobility information, transit fare purchases, and mobility service engagement
- Places to purchase transit fare, secure car- and bike-share memberships and reservations, and hire a sourced-ride vehicle (such as Lyft)
- Cash-based payment options for those lacking bank accounts and/or credit cards
- Concierge services for those uncomfortable with digital reservation/payment options
- Can be as simple and unassuming as placing bike racks near bus stops.
- Prominent locations for more complex hubs can increase the visibility and awareness of non-driving mobility networks

Aspen's Downtown Bus Depot offers bike parking, bike-share, wayfinding, and public facilities



ON-STREET STRATEGIES

PUBLIC VALET

- A block, or contiguous stretch of blocks, of curbside parking that is set aside for drop-off/pick-up.
- Nearby off-street facilities to park customer vehicles.
- Designated hours of operation, strategically aligned to peak demand schedules, and off-peak-capacity opportunities.
- Trained operators, either in-house or via contracted service.
- Accommodates public parking demand, not limited to patrons of individual destinations.
- Located to maximize value/appeal within a mixed-used, commercial area.
- Provides drivers with enhanced, curbside parking convenience.
- Expands curbside capacities in critical locations and at critical times.
- Makes better use off-street parking locations unappealing or inaccessible to individual drivers.
- Can include private lots whose owners might be averse to openly sharing their spaces.

Public Valet Supports Emerging Commercial District – Cleveland, OH



CURBSIDE LOADING INNOVATIONS

Variable Regulations

- Expansive loading zones are created on primary commercial blocks during morning periods.
- Converted to short-term parking toward midday.
- Loading zones are shifted to on side streets.
- Makes it more difficult for local employees and merchants to use these spaces for their own parking.

Variable Regulations Expand Loading and Parking Capacities When Each is Most Needed in Santa Cruz, CA



HIGHER-CAPACITY CURB USES

- Reallocating conventional curbside parking spaces to higher-capacity parking functions
- Bike corrals, bike share stations, and/or motorcycle parking
- Dramatically increase the effective capacity of curbside spaces
- Also improves the function of these mobility networks.
 - Expanding car-share parking helps to reduce dependency upon car ownership among local residents and employees, in turn reducing congestion, parking demand, and emissions.

Parking Management Best Practices | Dublin Parking Assessment
Dublin, OH

- Expanding bike-share access not only expands curbside capacities, it can also help reduce auto-dependency rates and improve the functionality of area transit options by closing common “first-mile/last-mile” service gaps.
- Bike corrals not only expand curbside capacities; they can help reclaim sidewalk space for pedestrians by moving bike racks into the street.

Bike Corral, Somerville, MA



Hubway Bike Share, Boston, MA



Motorcycle Parking, Aspen, CO



Car Share Parking, San Francisco, CA



RESIDENT PERMIT PARKING

- Improve on-street parking availability for local residents within a specific neighborhoods/districts.
- Issuing permits to local households and restricting parking for non-permit-holders during selected hours.
- Mitigate impacts from adjacent commercial business districts.
- Successful RPP programs have helped maintain the value of homes by ensuring consistent and convenient parking opportunities.
- **Zones:** Assign permits to appropriately-sized individual neighborhoods.
- **Petition-initiated:** Create new zones when a majority of affected households indicate support.
- **Hardship:** Confirm conditions of reduced resident access to neighborhood street parking before final approval.
- **Fees:** Ensure that these cover the cost of administering the program, if not the cost of maintaining the affected streets. Some cities have adopted more strategic pricing approaches, particularly to address locations where resident permit demand is significantly higher than curbside capacities.
- **Schedule:** Customize enforcement hours to respond to local demand conditions, breaking from the initial tendency to set hours around the workday. This has become a more common practice, and city-center neighborhoods have continued to attract “24/7” activity.
- **Visitor Parking:** Typically accommodated through visitor permits, a small amount of which is commonly provided with a resident permit with the option to purchase more. Some cities have begun to meter high-demand neighborhood blocks, exempting resident-permit holders, as a means of accommodating visitor parking needs without having to administer visitor permits.



OFF-STREET STRATEGIES

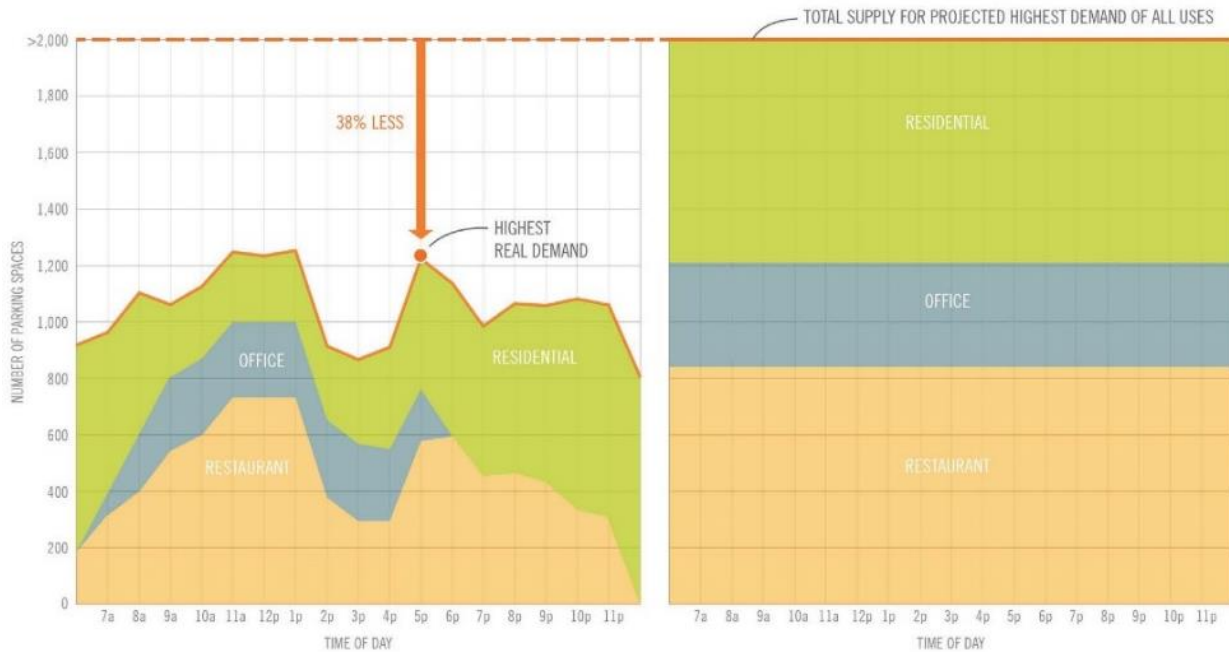
SHARED PARKING



- Co-location of off-street parking in a single location.
- Serves the parking demand for multiple land uses in a mixed-use context.
- Mixed-use environments create cross-supportive opportunities to reduce parking supply needs.
- Maximize value of, and access to, existing parking resources.
- Reduce supply needs.
- Reducing restrictions on parking options, reducing anxiety and confusion among visitors.

- Reduce pressure on on-street parking options by making more off-street options “user friendly”.

How Demand Works vs. How it is Projected Reveals Shared Parking’s Dramatic Efficiency



PARK-ONCE CIRCULATOR

- A circulator to connect visitors to parking resources and popular destinations throughout a district.
- Usually a bus or smaller shuttle, a circulator focuses on moving visitors around a core area
- Can focus on cultural attractions (e.g. sports stadium, theaters, parks), employment centers, or necessary services (e.g. doctor's offices, grocery stores, libraries) but generally connect to parking and transit resources.
- Supports a Park Once environment.
- Can bring exposure to hard-to-find or little known local businesses and attractions.

The C-Bus Circulator Connects Downtown to the Short North



EMPLOYEE PARKING STRATEGIES

- Balancing the needs of an area's employees with those of visitors.
- Without attractive parking alternatives, local employee parking can significantly reduce access to on-street parking spaces.
- Applying strategic regulations to protect prime parking spaces for customer parking.
- Providing, and incentivizing use of, appropriate parking options for employees.
- Discounted employee rates in non-prime parking locations.

PARK-ONCE ZONING

- Enhance and expand Park Once achievements via model for supply expansions.
- Ensure that parking can be expanded, as needed, to support continued growth, with private contributions.
- An alternative to minimum requirements, which can undermine Park Once ambitions.
- Encourage continued growth by offering developers a variety of options.
- Raise the design and functional standards for new parking facilities.

- Generate mobility improvements and demand-reduction programs.
- Incentives to provide shared parking in privately developed parking facilities.
- Limits on private, on-site parking.
- No limits on shared, on-site parking.
- Fee options that fund parking and other public improvements.

JOINT DEVELOPMENT

- Partnership between a parking authority and a private developer to construct a new, privately owned/operated building or complex that incorporates a publicly owned/operated parking facility.
- Has become a particularly favored option in locations where parking construction costs are high.
- Helps avoid “stand alone” parking structures when municipal supplies are expanded.
- Can facilitate greater public support for a development proposal, compared to a stand-alone parking garage, or a private development with minimal/no parking.

Joint Development (Public Parking Under Apartments)– Ann Arbor, MI



Joint Re-development of a Municipal Lot Offers a Direct Regional Bike Trail Connection in Montgomery County, MD



Image: Stonebridge Carras <http://www.flatsatbethesdaavenue.com/gallery/>



MEMORANDUM

To: Devayani Puranik, City of Dublin, OH

From: Nelson\Nygaard Consulting Associates

Date: July 18, 2017

Subject: Toolbox Appendix: Pay by Phone as Shared Parking Resource

PAY-BY-PHONE AS SHARED PARKING BROKER: ASHEVILLE, NC

Drivers in downtown Asheville can pay for the City's on-street parking using the Passport Parking App. Signage denotes the parking zone and provides instructions to pay for parking using a cell phone. If users do not have a smartphone, they can still pay using their phone by calling a number and specifying the zone or by texting a code (after registration).

Recently, private lot owners approached Passport, the third-party provider of Asheville's parking app, to become part of the same payment system. Passport assigns the lot a "Zone," and incorporates the lot into the app with the other Asheville parking resources. The lot owner posts signage describing the rates and regulations for the lot (see Figure 1). Some lots maintain their private parking for periods of the day and convert to public parking in off-hours. Others operate as privately-owned, public parking throughout the entire day. Either way, private lot owners are able to take advantage of the city's easy-to-use parking system without giving up control of the lot itself.

The Asheville example highlights how cities themselves may not need to convince private lot owners once pay-by-cell programs have become established in a city. Sometimes, the ease and simplicity offered by the app is enough of an incentive to motivate lot owners to seek out participation themselves.

Figure 1 Private Lot with Public Payment after 5pm – Asheville, NC

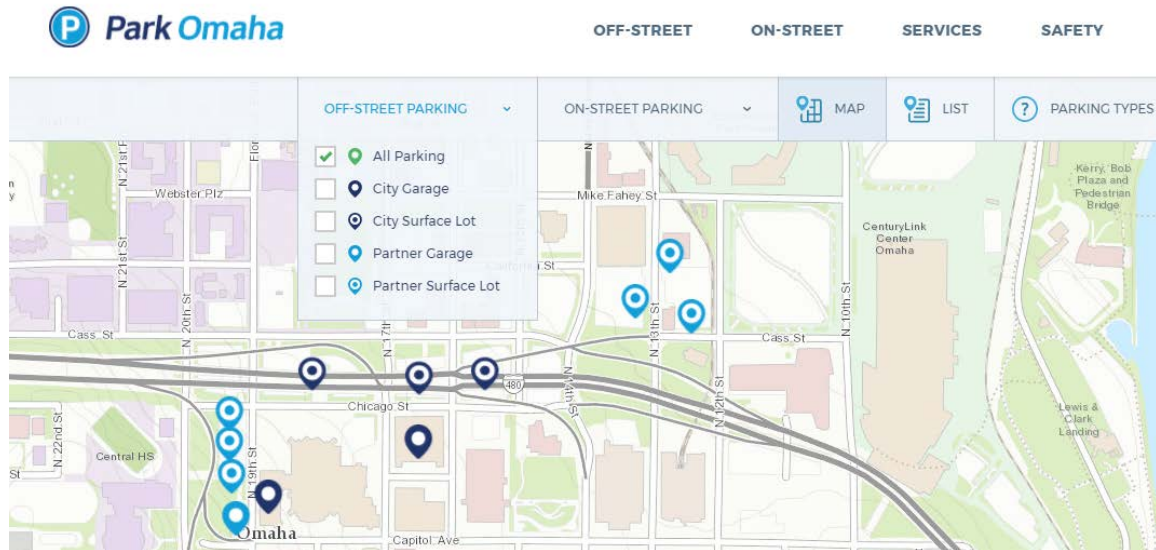


CITY AS SHARED PARKING PARTNER: OMAHA, NE

The City of Omaha recently branded the Parking Division of its Public Works Department as Park Omaha to signal a commitment to provide coordinated and strategic management of its on- and off-street parking resources. A key component of the Park Omaha mission was to set up a system to incorporate private parking facilities as a means to avoid building more City facilities. “We want to maximize efficiency, minimize frustrations and develop an extensive shared parking network.”¹

¹ <https://parkomaha.com/about/>

Figure 2 Park Omaha map showing City & Partner Off-Street Parking



Source: <https://parkomaha.com/map/>

The result of these efforts is the highly successful, Park Omaha Partners program.

Park Omaha Partners

Park Omaha launched the Park Omaha Partners program to “boost the number of public parking spaces and help visitors easily locate them in the popular downtown area”.² The program provides a user-friendly, online process for property owners to offer their unused spaces, at a specified schedule, to the Park Omaha network through a shared parking agreement. The process begins with an online application – see below.

Accepted Partner locations are added to the Park Omaha interactive map. An expanded map view also provides information on rates, hours of operation and payment options. Park Omaha identifies these facilities, as “partner” facilities, and distinguishes them from Park Omaha facilities, in its maps and information materials. As Partner facilities, private lots are given official (copyrighted) signage/iconography with a distinct logo that identifies them as part of the City parking system, while indicating that hours of access, rates, and other regulations may vary from standard Park Omaha facilities. The copyrighted branding helps to prevent unapproved private lots from using the same design and calling themselves Park Omaha Partners.

One of the key tools to make this work has been facilitating payment via the Park Omaha App. Partner facilities are given a unique payment-zone designation to use this mobile-payment system, allowing drivers to pay for parking exactly as they would in a City facility. Payment revenue goes directly to the facility owners, thus allowing private facility owners to monetize their excess parking without having to set up payment systems. This has been a critical component in recruiting new Partners to the program.

² <https://parkomaha.com/about/park-omaha-partners/>

Figure 3 Partners Application Portal

Interested in becoming a Park Omaha Partner?

If your residential or business building has unused parking spaces (for example after 5 p.m. or on weekends) and you would like to be part of the shared Park Omaha Partner program, fill out the form below or call City of Omaha Parking Division at 402-444-PARK to learn more.

NAME OF FACILITY

LOCATION OF FACILITY *

TYPE OF FACILITY *

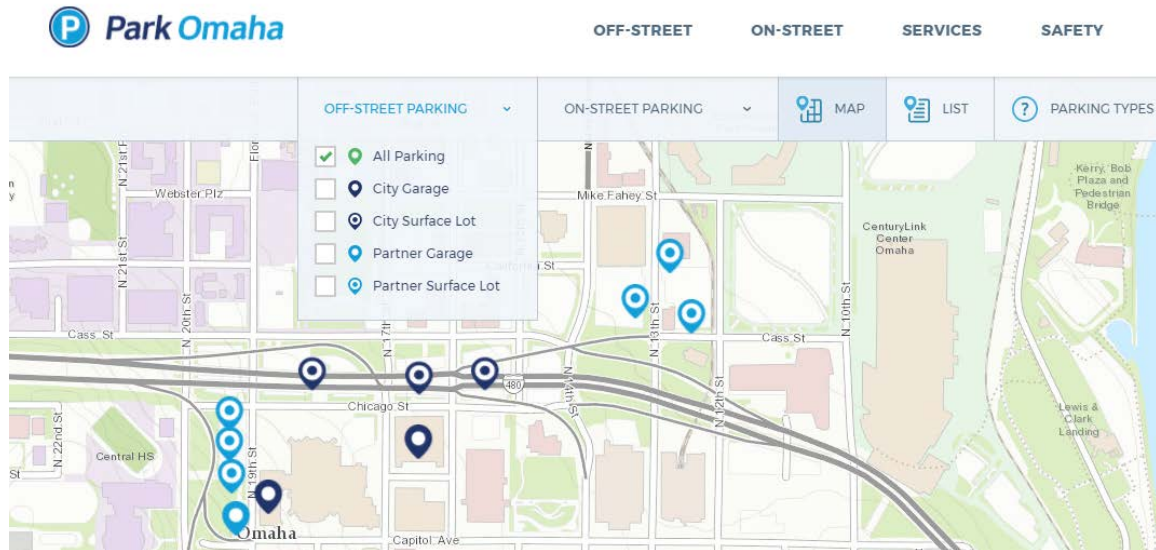
AVAILABILITY *

How many spaces will you have available for public parking?

HOURS/RATES *

Source: <https://parkomaha.com/about/park-omaha-partners/>

Figure 4 Park Omaha map showing City & Partner Off-Street Parking



Source: <https://parkomaha.com/map/>

Program Collaborators

- The City's Planning and Public Works departments partnered with Park Omaha to ensure that parking is part of trailblazing signs that lead visitors to popular downtown venues.
- Park Omaha contracts with a private contractor to operate, administer, and maintain the parking system, including customer service and a Parking Ambassador program.
- A parking advisory committee – representatives from city staff, retailers, developers and business leaders – provides guidance on parking improvements, rates and makes recommendations.

Keys to Success

The City initiated private lot participation in the Partners program by giving presentations to local lot owners and operators. Park Omaha has seen the prospects of the Partners program become increasingly attractive to private facility owners, especially as the approach proves viable and profitable, and the technology has successfully incorporated private facilities to handle demand, even from large events, seamlessly.

Challenges

While the proliferation of smartphones and mobile payments offers distinct benefits for cities that wish to incorporate privately owned parking into their systems, there are challenges to consider associated with this strategy. For one, some private owners may fear the added liability associated with opening up the lot/structure to the public. In addition, incorporating private resources means choosing to standardize or not standardize pricing, hours, and regulations across available parking resources. This could cause confusion or work against shared parking management goals, and should be considered as part of any partnering processes.



MEMORANDUM

To: Devayani Puranik, City of Dublin, OH
From: Nelson\Nygaard Consulting Associates
Date: May 25, 2017
Subject: Toolbox Appendix: Curbside Management Ordinance Survey

CURRENT ORDINANCES

Following is a set of key, curbside parking management ordinances currently in place with the City of Dublin's Code of Ordinances.

SETTING TIME LIMITS

The Manager is hereby empowered to:

Regulate or prohibit the stopping, standing and parking of vehicles on streets, alleys or public property by erecting signs plainly indicating the prohibitions, restrictions or limitations.

TRUCK LOADING ZONES

No person shall stop, stand or park a vehicle for any purpose or length of time other than for the expeditious unloading and delivery or pickup and loading of materials in any place marked as a truck loading zone during hours when the provisions applicable to such zones are in effect. In no case shall the stop for loading and unloading of materials exceed 30 minutes.

BUS STOPS AND TAXICAB STANDS

(A) No person shall stop, stand or park a vehicle other than a bus at a bus stop, or other than a taxicab in a taxicab stand when any such stop or stand has been officially designated and appropriately posted, except that the driver of a passenger vehicle other than a bus or taxicab may temporarily stop at a bus stop or taxicab stand for the purpose of and while actually engaged in loading or unloading passengers provided such stopping does not interfere with any bus or taxicab waiting to enter or about to enter such zone; such stopping does not exceed a period of three minutes; and such stopping is not prohibited by posted signs.

(B) Except in the case of an emergency, the operator of a bus shall not stop, stand or park such vehicle upon any street at any place for the purpose of loading or unloading passengers or their baggage other than at a bus stop so designated and posted as such. Provided, however, the operator of a bus owned and operated by the municipality or a regional transit authority may temporarily stop the bus, in accordance with all other ordinances governing stopping or parking,

at locations other than designated bus stops for the purpose of and while engaged in the expeditious loading or unloading of passengers and their baggage.

(C) When an operator of a bus stops the bus on a street, the right front wheel of the bus shall not be further than 18 inches from the curb and the bus shall be approximately parallel to the curb so as not to unduly impede traffic.

(D) The operator of a taxicab shall not stand or park such vehicle upon any street at any place other than in a taxicab stand so designated and posted as such, except that the operator of a taxicab may temporarily stop the taxicab, in accordance with all other ordinances governing stopping or parking, at locations other than the designated taxicab stands for the purpose of and while actually engaged in the expeditious loading or unloading of passengers.

ENFORCEMENT

City Employee Enforcement

The Dublin Code of Ordinances provides for several means of enforcement. Police officers are vested with the authority to enforce parking regulations, however, using police to issue parking citations may not be the most effective use of the City's resources. In the alternative, Dublin can rely upon other enforcement officials to issue citations and enforce parking regulations in the Bridge Park East and Riverside Drive areas.

Section 32.06 of Dublin's Code provides for the appointment of Community Service Officers (CSOs) by the City Manager. CSOs serve in a volunteer program that enables individuals to assist the Division of Police with crime prevention and law enforcement activities. CSOs serve under the supervision of the Dublin Chief of Police. The Code specifically permits CSOs to "support traffic operations conducted by law enforcement" and "issue parking citations conducted by law enforcement."

The CSO option could potentially be a good alternative for parking enforcement if the City can recruit, or already has, a sufficient number of CSOs. The challenge here may be finding enough individuals who are willing to provide these parking enforcement services without compensation, as required by law, and who are willing to complete the requisite training, which includes the City of Dublin Citizen Police Academy and the City of Dublin Community Service Officer Training Program. The CSO alternative would allow the City to utilize parking enforcement officials without amending the current Code.

As a second option, Section 31.06 of Dublin's Code of Ordinances authorizes the City Manager to commission Code Enforcement Officers. As stated in the Code, Code Enforcement Officers are:

[R]esponsible for the enforcement of the City Codified Ordinances including but not limited to the Zoning Code, Property Maintenance Code, Animal Regulations, Parking Regulations and Health and Safety Regulations. Code Enforcement Officers may issue citations for minor misdemeanor and unclassified minor offenses only.

Code Enforcement Officers currently provide parking enforcement services in Dublin's Historic District. The Code does not limit compensation for these officers and does not require specific training as with CSOs. However, a challenge may arise in solely relying upon Code Enforcement Officers because they can only issue citations for minor misdemeanors and unclassified minor offenses. Although a parking regulation violation under Dublin Code section 76.01 is a minor misdemeanor for the first offense, if, within one year of the offense, the offender previously has

been convicted of or pleaded guilty to one predicate motor vehicle or traffic offense, whoever violates 76.01, is guilty of a misdemeanor of the fourth degree. Additionally, if, within one year of the offense, the offender previously has been convicted of two or more predicate motor vehicle or traffic offenses, whoever violates this section is guilty of a misdemeanor of the third degree. Consequently, a Code Enforcement Officer could not issue citations to everyone, but it would be quite difficult, if not impossible, to determine the level of offense solely by observing a car parked in violation of a sign or parked at an expired meter.

If Dublin wishes to utilize its Code Enforcement Officers, it would need to amend the Code to allow Code Enforcement Officers to issue citations for all levels of offenses in relation to parking regulations. The Code Enforcement Officers could continue to operate under the authority of the Violations Bureau and Dublin Mayor's Court.

Third-Party Enforcement

If Dublin determines that utilizing its own employees for parking enforcement is impractical or not the best use of the City's resources, it can also consider hiring a third-party company to enforce parking regulations. If the City is only contemplating civil penalties, Dublin will have to invest time and resources to develop a parking ticket appeals process since Dublin Mayor's Court only has jurisdiction over traffic/criminal matters (and parking tickets with criminal penalties). A Code amendment would most likely not be necessary, but the City would likely have to hire a hearing officer to conduct administrative hearings. For example, the City of Columbus's Parking Violation Bureau contracts with hearing examiners who conduct hearings to review contested parking citations.

Automated Enforcement

Technological innovations offer the City a third option, automated enforcement. "Smart" meters provide cities with new parking meter services, including some that monitor if a car remains in a parking spot beyond the time a meter expires and take a picture of the license plate so that a fine can be issued and violation automatically recorded. Depending on the exact capabilities of the parking meter, the City must consider a number of future legal implications, specifically related to the ongoing dispute over traffic law photo-monitoring devices following the recent red light camera litigation and legislation.

The current legislation, found in R.C. 4511, sets restrictions on "traffic law photo-monitoring devices" used by local authorities "to detect and enforce traffic law violations." "Traffic law photo-monitoring devices" are defined as an electronic system consisting of a photographic, video, or electronic camera and a means of sensing the presence of a motor vehicle that automatically produces recorded images. A "traffic law violation" means:

- *A violation of section 4511.12 of the Revised Code based on the failure to comply with section 4511.13 of the Revised Code or a substantially equivalent municipal ordinance that occurs at an intersection due to failure to obey a traffic control signal – Essentially a traffic light violation; OR*
- *A violation of section 4511.21 or 4511.211 of the Revised Code or a substantially equivalent municipal ordinance due to failure to observe the applicable speed limit – Essentially a speeding violation.*

Photo-monitoring parking meters would not be governed by the recent legislative amendments since they monitor neither speeding nor traffic signal violations. Thus, Dublin is free to install

such meters without taking the additional statutorily mandated steps, for now. However, the City should be aware that some of the same concerns that arose following the implementation of traffic light/speeding cameras, such as erroneous tickets, may also arise if there is increased use of photo meters. This may prompt the Ohio legislature to draft a law, similar to the law enacted in response to red light cameras, limiting the use of photo-monitoring parking meters.

Current restrictions, found in R.C. 4511.093 - 4511.095, imposed on the use of red light cameras include the requirements that municipalities must:

- Have a law enforcement officer present at all times the device is being operated.
- Erect proper signs.
- Conduct a safety study of intersections or locations under consideration for placement of a traffic camera. The study must include an accounting of incidents that have occurred in the designated area over the previous three-year period and must be made available to the public upon request.
- Conduct a public information campaign to inform drivers about the use of traffic cameras at new system locations prior to their implementation at the new location.
- Publish at least one notice in a local newspaper of general circulation regarding their intent to use traffic cameras at new locations, the locations of the traffic cameras, and the date on which the first traffic camera will become operational.
- Refrain from levying any civil fines on any person found to have committed a traffic law violation based upon evidence gathered by a fixed location traffic law photo-monitoring device until the local authority observes a public awareness warning period of not less than thirty days prior to the first issuance of any ticket based upon images recorded by the device. During the warning period, the local authority must take reasonable measures to inform the public of the location of the device and the date on which tickets will be issued for traffic law violations based upon evidence gathered by the device. A warning notice may be sent to violators during the public awareness warning period.

Dublin Code section 4511.07 indicates that a local authority's ability to regulate the stopping, standing, and parking of vehicles is a police power. Pursuant to the Ohio Constitution and Home Rule Amendment, Dublin possesses broad local government powers, but more limited police powers which cannot conflict with a general state law that promotes statewide uniformity. *Canton v. State*, 95 Ohio St.3d 149, 2002-Ohio-2005, 766 N.E.2d 963, *Dayton v. State*, 2015-Ohio-3160. Thus, if Dublin chooses to pass an ordinance or resolution enabling the City to utilize photo-monitoring meters, it should consider the risk that their use could be substantially restricted in the future if the Ohio legislature enacts a conflicting law. The City will not be able to argue home rule powers to defend against their unlimited use, at least as Ohio case law stands today. See *Dayton v. State*, 2015-Ohio-3160.

BENCHMARK SURVEY

Following is a benchmark survey of key, curbside regulation ordinances to help guide the City of Dublin as it establishes new ordinances in support of a comprehensive parking management program that coordinates on- and off-street parking, loading, and mobility infrastructure.

METERED PARKING

Portland, OR

16.20.401 Purpose.

Parking meters are authorized by the City of Portland as a means to increase vehicle turnover in parking spaces, to encourage short-term parking in the metered area, and to improve safety in the public right-of-way.

16.20.405 Enforcement of Metered Parking Spaces.

1. Parking meters are in effect during all hours indicated on the meter and/or sign.
2. All vehicles must adhere to parking meter regulations while stopped or parked in an officially designated metered parking space unless obeying the direction of an authorized officer or unless authorized for specific actions by a vehicle or general parking permit.
3. Emergency vehicles may stop or park in any metered space at any time while serving an emergency.
4. It is unlawful to store nonvehicular property in a metered parking space. Any nonvehicular property stored in a metered parking space is a nuisance and may be summarily abated.

16.20.410 Administration of Meters, City of Portland Owned and Operated Property.

1. Changes to or establishment of parking meter areas, including but not limited to surface parking lots, parking structures and designated parking areas, is initiated at the sole discretion of the City Traffic Engineer.
2. The City Traffic Engineer is authorized to enter into agreements with City Bureaus or other public bodies in order to operate their surface parking lots, parking structures or designated parking areas within the City of Portland.

16.20.430 Meter Time (on City of Portland Right-of-Way).

3. It is unlawful for any person to park any vehicle in any parking meter space during the hours of operation of the meter without paying the parking meter fee, or to permit any vehicle in their control or custody to remain in any parking meter space longer than the time designated time limit.
4. At short-term meters, it is unlawful to extend the parking time beyond the designated limit for parking in the metered space.

5. Upon expiration of the designated time limit, as indicated by the parking meter, a citation may be issued if a vehicle remains parked or stopped on the same block face unless it has moved 500 or more lineal feet as measured along the curb or edge line.
6. Upon leaving a metered space a vehicle may not return to a parking meter in the same block face for a 3-hour period, unless it is a metered space in the same block face that is more than 500 lineal feet, as measured along the curb or curb line, from the previously used metered space.
7. Upon expiration of the designated time limit indicated by the parking meter, a citation may be issued if a vehicle remains parked or stopped on the same block face unless:
 - a. The vehicle has moved 500 or more lineal feet, measured along the curb or edge line;
 - b. The vehicle has moved to an unregulated parking area in the same block face; or
 - c. The vehicle has vacated the block face for a period of 3 hours.
8. A vehicle may not be parked in any space with a broken or “out of order” meter for a period of time longer than the time limit indicated on the meter. Payment or a valid receipt is required at all spaces regardless of whether the closest device is functioning.

Portsmouth, NH

Section 7.102: PARKING METER ZONES

All of those streets, parts of streets and off-street parking lots, the time for parking upon which is limited by any ordinance of the City of Portsmouth, and any such areas, the time for parking upon which may at any time hereafter be limited by any ordinance of the City or any amendment thereto are designated as parking meter zones. Parking in parking meter zones shall be for a maximum time permitted of parking of three (3) consecutive hours, unless otherwise established by ordinance.

Rates

DOWNTOWN HIGH OCCUPANCY ZONE: Parking shall be at the rate of two dollars (\$2.00) per hour in the following areas.

9. Daniel Street, starting at Chapel Street through to Market Square
10. Bow Street, starting at Chapel Street through to Market Street
11. Congress Street, starting at Market Square through to Chestnut Street
12. Pleasant Street, starting from Court Street through to Market Square
13. Market Street, starting from Moffatt-Ladd House through to Market Square
14. Deer Street, starting at Market Street through to Maplewood Avenue
15. Fleet Street, starting at Hanover Street through to State Street
16. Hanover Lot, at intersection with Market Street
17. Penhallow Street, starting at State Street through to Bow Street
18. Chapel Street, starting at Daniel Street through to State Street

Parking in all other parking meter zones shall be at the rate of one dollar fifty cents (\$1.50) per hour.

Section 7.104: AUTHORITY

The City Manager is hereby vested with the authority to purchase, install and maintain public parking meters and/or any other type of parking regulation equipment or technology necessary to implement any action taken by the City Council or the Parking and Traffic Safety Committee.

Section 7.105: PARKING

- A. When any vehicle shall be parked in a parking meter zone the owner or operator of said vehicle shall park within the area designated by the curb or street marking lines as indicated for parallel or diagonal parking and upon entering said parking space shall immediately deposit in said meter the required meter fee or purchase the time requested through a central meter, in vehicle meter, coupon or other metering device including mobile phone applications, and display proof of purchase on the vehicle's interior dashboard, or other approved means of display, including meter devices defined in Section 7.101. It shall be unlawful for any person parking any vehicle or permitting any vehicle registered in his name to be parked within any designated area where parking meters are installed, to fail or neglect to pay for parking as required. Said parking space may then be used by such vehicle during the legal parking limit provided by the Ordinance of the City and said vehicle shall be considered as unlawfully parking if it remains in said space beyond the legal parking limit and/or when said parking meter displays a signal showing such illegal parking. It shall be unlawful for any person to cause or permit any vehicle registered in his name to be parked unlawfully as set out in this section.
- B. Parking meter fees shall be enforceable Monday through Saturday, from 9:00 a.m. to 8:00 p.m., and Sunday from 12:00 p.m. to 8:00 p.m., holidays excepted.

Section 7.109: ENFORCEMENT

The administration and enforcement of this ordinance by the Portsmouth Police Department, the Department of Public Works, or any other municipal agencies authorized to perform those actions by direction of the City Manager.

DEMAND-BASED PRICING

Seattle, WA

11.16.121 - Director of Transportation—Rate setting for parking payment devices.

- A. Parking rates to be charged at parking payment devices, including parking meters, for parking in city rights-of-way and other city-controlled parking areas under the jurisdiction of Seattle Department of Transportation shall be within rate limits established by this section. Rates may vary according to location, time of day, maximum parking time allowed, the capabilities of available parking payment devices, and any other factors the Director determines are pertinent. In setting rates, the Director is not subject to Chapter 3.02 of the Seattle Municipal Code.
- B. The Director of Transportation is authorized to set parking rates up to \$5.00 per hour ("Maximum Hourly Rate"). When parking rates are in effect, parking rates shall be set no lower than \$0.50 per hour ("Minimum Hourly Rate").
- C. The Director shall establish on-street parking rates and shall adjust parking rates higher (up to the Maximum Hourly Rate) or lower (as low as the Minimum Hourly Rate) in neighborhood

parking areas based on measured occupancy so that approximately one or two open spaces are available on each block face throughout the day in order to:

1. Support neighborhood business districts by making on-street parking available and by encouraging economic development;
2. Maintain adequate turnover of on-street parking spaces and reduce incidents of meter feeding in commercial districts;
3. Encourage an adequate amount of on-street parking availability for a variety of parking users, efficient use of off-street parking facilities, and enhanced use of transit and other transportation alternatives; and,
4. Reduce congestion in travel lanes caused by drivers seeking on-street parking.

(Ord. 125210 , § 1, 2016; Ord. 123462, § 1, 2010; Ord. 122852, § 2, 2008; Ord. 122274, § 1, 2006; Ord. 121420, § 6, 2004; Ord. 121330, § 2, 2003.)

Redwood City, CA

Sec. 20.133. - PERIODIC ADJUSTMENT OF DOWNTOWN METER ZONE METER RATES:

Under the authority of California Vehicle Code section 22508, the following process for adjusting Downtown Meter Zone meter rates from time to time to manage the use and occupancy of the parking spaces for the public benefit in all parking areas within the Downtown Meter Zones is hereby established.

A. To accomplish the goal of managing the supply of parking, including the use and occupancy of parking spaces for the public benefit, and to make it reasonably available when and where needed, a target occupancy rate of eighty-five percent (85%) is hereby established as the goal sought to be achieved with the rate structure for parking meters within the Downtown Meter Zones...

B. At least biennially and not more frequently than quarterly, the City Manager shall survey the average occupancy for each parking area in the Downtown Meter Zone that has parking meters and recalculate the parking rates for parking meters in both Downtown Meter Zones A and B using the criteria and calculations established below:

1. In the Downtown Meter Zone A:

- a. The hourly parking rate in Downtown Meter Zone A shall at all times be between twenty-five cents (\$0.25) per hour and two (\$2.00) dollars per hour.
- b. If the average occupancy within Downtown Meter Zone A between the hours of eleven o'clock (11:00) A.M. and one o'clock (1:00) P.M. on two (2) representative days are over 85%, the then existing hourly meter rate shall be increased by twenty-five cents (\$0.25) provided, however, the hourly parking rate shall in no event exceed the approved maximum rate.
- c. If the average occupancy within Downtown Meter Zone A between the hours of eleven o'clock (11:00) A.M. and one o'clock (1:00) P.M. on two (2) representative days are between seventy percent (70%) and eighty-five percent (85%), the then existing hourly meter rate shall remain the same.

d. If the average occupancy within Downtown Meter Zone A between the hours of eleven o'clock (11:00) A.M. and one o'clock (1:00) P.M. on two (2) representative days are below seventy percent (70%), the then existing hourly meter rate shall be reduced by twenty-five cents (\$0.25), provided, however, the hourly parking rate shall in no event go below the approved minimum rate.

2. In the Downtown Meter Zone B:

a. The hourly parking rate in Downtown Meter Zone B shall at all times be between fifty cents (\$0.50) per hour and three (\$3.00) dollars per hour.

b. If the average occupancy within Downtown Meter Zone B between the hours of eleven o'clock (11:00) A.M. and one o'clock (1:00) P.M. on two (2) representative days are over eighty-five percent (85%), the then existing hourly meter rate shall be increased by fifty cents (\$0.50), provided, however, the hourly parking rate shall in no event exceed the approved maximum rate.

c. If the average occupancy within Downtown Meter Zone B between the hours of eleven o'clock (11:00) A.M. and one o'clock (1:00) P.M. on two (2) representative days (Tuesday, Wednesday, or Thursday) are between seventy percent (70%) and eighty-five percent (85%), the then existing hourly meter rate shall remain the same.

d. If the average occupancy within Downtown Meter Zone B the hours of eleven o'clock (11:00) A.M. and one o'clock (1:00) P.M. on two (2) representative days are below seventy percent (70%), the then existing hourly meter rate shall be reduced by fifty cents (\$0.50), provided, however, the hourly parking rate shall in no event go below the approved minimum rate.

C. The new rates shall become effective upon the programming of the parking meter for that rate. The current schedule of meter rates shall be available at the City Clerk's office.

(Ord. No. 2406, § 4, 6-9-14)

CURBSIDE LOADING

Portland, OR

16.20.220 Truck Loading Zones

- Truck loading zones are established to prevent double parking and other illegal parking by designating a supply of parking spaces dedicated to the delivery of merchandise by trucks to commercial properties.
- Only the following vehicles, while being actively loaded or unloaded, may park in a truck loading zone for no more than 30 minutes:
 - A truck as defined by this Title;
 - A vehicle defined by its Department of Motor Vehicles registration as a truck, van, or pick-up that exhibits the commercial nature of the vehicle;
 - A passenger or other vehicle with an official commercial loading permit as defined in Section 16.20.620 or delivery permit as defined in Section 16.20.630 that exhibits the commercial nature of the vehicle according to paragraph 6;

- Any vehicle with Farm Vehicle registration plates when actively engaged in loading/unloading merchandise; or
- Taxicabs with a current taxicab permit as defined in Section 16.40.220 when actively engaged in loading/unloading passengers or packages, for a period not to exceed 15 minutes.
- Commercial signage required by this section must be:
 - On both sides of the vehicle;
 - Magnetic, static cling vinyl (which may not be used on tinted windows), decals or permanently painted;
 - No smaller than 8 1/2" by 11";
 - In 2-inch or larger lettering;
 - In a color that clearly contrasts with the color on which the lettering is displayed; and
 - In lettering that is clearly visible at a distance of 20 feet.
 - Upon leaving a truck loading zone, a vehicle must vacate the block face of said truck loading zone or move 500 feet as measured along the curb line for a period of 1 hour before returning to a truck loading zone, a time zone, or a metered space, on the same block face.
 - Truck loading zones should not be located within 50 feet of an intersection in order to facilitate traffic safety. This does not apply to the area of the street where the direction of traffic is leaving an intersection on a one-way street.

Riverside, CA

Section 10.52.210 Loading and unloading

Designation of curbside loading zones. The City Traffic Engineer is authorized to determine the location of passenger and freight curb loading zones and shall place and maintain appropriate signs or markings indicating the same and stating the hours during which the provisions of this section are applicable. (Ord. 7182 § 14, 2012)

Section 10.52.220 Curbside passenger loading zones

No person shall stop, stand, or park a vehicle for any purpose or period of time, other than for the expeditious loading or unloading of passengers or for depositing mail in an adjacent mailbox, in any place marked as a curbside passenger loading zone or where there are white curb markings, and then only for a period not to exceed three minutes. Where there are signs posted indicating the hours during which parking is not permitted at the white curb, no vehicle may stop, stand, or park in a curbside passenger loading zone marked by a white curb for longer than three minutes during those posted hours. (Ord. 7182 § 14, 2012)

Section 10.52.230 Curbside freight loading zone

C. No person shall stop, stand, or park a vehicle for any purpose or length of time other than for the expeditious unloading and delivery or pick-up and loading of passengers or materials in any place marked as a freight curb loading zone or where there are yellow curb markings during hours when the provisions applicable to such zones are in effect. The stop for loading

or unloading of materials shall not exceed twenty minutes unless signs are posted to indicate special time limit extensions. Where there are signs posted indicating the hours during which parking is not permitted at the yellow curb, no vehicle may stop, stand, or park in a curbside passenger loading zone marked by a yellow curb for longer than twenty minutes during those posted hours.

- D. The driver of a passenger vehicle may stop temporarily at a place marked as a freight curb loading zone or where there are yellow curb markings for the purpose of and while actually engaged in loading or unloading passengers. (Ord. 7182 § 14, 2012)

Corpus Christi, TX

Sec. 53-160. - Authority to designate curb loading zones.

The city manager, or such officers or employees of the city designated by the city manager, is hereby authorized to determine the location of curb loading zones and shall place and maintain appropriate signs indicating the same and stating the hours during which the provisions of this division are applicable, where, in his opinion, the dimensions of the streets and sidewalks, the flow of traffic and the use of property abutting the streets are such that he finds it to be necessary for the free flow and expeditious handling of traffic and the safety of person and property.

Sec. 53-161. - Permits for loading and unloading at an angle to the curb.

The city manager, or such officers or employees of the city designated by the city manager, is authorized to issue special permits to permit the backing of a vehicle to the curb for the purpose of loading or unloading merchandise or materials subject to the terms and conditions of such permit. Such permits may be issued either to the owner or lessee of real property or to the owner of the vehicle and shall grant to such person the privilege as therein stated and authorized herein, and it shall be unlawful for any permittee or other person to violate any of the special terms or conditions of any such permit.

Sec. 53-162. - Standing in curb loading zones loading or unloading passengers.

No person shall stop, stand or park a vehicle for any purpose or period of time than as provided in [section 53-163](#), except for the expeditious loading or unloading of passengers, in any place marked as a curb loading zone during hours when the regulations applicable to such curb loading zone are effective and then only for a period not to exceed three (3) minutes.

Sec. 53-163. - Standing or parking in commercial loading zones; restrictions.

No person shall stop, stand or park any motor vehicle in any commercial loading zone on any of the streets of the city except as provided below:

19. Commercial vehicles loading, unloading, delivering or picking up freight or parcel materials shall be permitted to park in commercial loading zones for a period not to exceed thirty (30) minutes between the hours of 8:00 a.m. and 6:00 p.m. (except on Sundays), and as specified by appropriate signing indicating the same.
20. At special commercial loading zone locations designated by the city manager, or such officers or employees of the city designated by the city manager, by the placement of specifically worded signing, commercial loading zones may be restricted as follows:

- a. Loading, unloading, delivery or picking up of freight or parcel materials shall be restricted to "commercial-licensed" (i.e., truck licensed) vehicle only. No passenger licensed vehicles or any other vehicle otherwise licensed may use such specially signed commercial loading zones, except than during the hours during when the provisions applicable to such zones are not in effect.
 - b. There shall be unrestricted time use of specific commercial loading zones for loading, unloading, delivery or pickup of freight or parcel materials by commercial vehicles between the hours of 8:00 a.m. to 10:00 a.m. and 4:00 p.m. to 6:00 p.m. where special signing is placed specifying this time restriction. At such commercial loading zones, commercial vehicles shall be permitted to park for periods not to exceed thirty (30) minutes between the hours of 10:00 a.m. and 4:00 p.m.
 - c. Loading, unloading, delivery or pickup of freight or parcel materials shall be restricted to the length of time actually engaged in such activity. All loading and unloading shall be performed in an expeditious manner and no commercial vehicle shall remain in a loading zone for a period of time greater than necessary to expeditiously load or unload, except that a reasonable time shall be allowed to secure a receipt of delivery.
21. Where the construction, remodeling or maintenance of buildings requires rendering the curb space unusable, part of which includes one or more commercial loading zones, the contractor shall be assessed charges as per [section 53-195](#).
 22. Under special circumstances where construction vehicles involved in the building, construction, remodeling or maintenance must be parked in commercial loading zones, city manager, or such officers or employees of the city designated by the city manager, may issue permits for such privilege. A fee of three dollars (\$3.00) per day (excluding Sundays) for each construction vehicle will be charged plus a permit handling fee of twenty-five dollars (\$25.00).
 23. Noncommercial vehicles shall be permitted to park in commercial loading zones on Sundays, holidays, and during the hours when the provisions applicable to such zones are not in effect.

Sec. 53-164. - Authority to establish bus stops, limousine stands, and taxicab stands.

The city manager, or such officers or employees of the city designated by the city manager, is hereby authorized and required to establish bus stops, limousine stands, and taxicab stands on such public streets in such places and in such number as he shall determine to be of the greatest benefit and convenience to the public, and every such bus stop and taxicab stand shall be designated by appropriate signs.

Sec. 53-165. - Parking of buses and taxicabs regulated.

The driver of a bus or taxicab shall not park upon any street in any business district at any place other than at a bus stop, or taxicab stand, respectively, except that this provision shall not prevent the driver of any such vehicle from temporarily stopping in accordance with other stopping or parking regulations at any place for the purpose of and while actually engaged in loading or unloading passengers.

Sec. 53-166. - Restricted use of bus stops, limousine stands, and taxicab stands.

No person shall stop, stand or park a vehicle other than a bus in a bus stop, other than a limousine in a limousine stand, or other than a taxicab in a taxicab stand, when any such stop or stand has been officially designated and appropriately signed, except that the driver of a passenger vehicle may temporarily stop therein for the purpose of and while actually engaged in loading or unloading passengers when such stopping does not interfere with any bus, limousine, or taxicab waiting to enter, entering or attempting to leave such zone.

VALET

Cleveland, OH

§ 451.33. Establishment of Zones for Valet Parking, Limousine, Day Care and Passenger Drop off/Pick up, and Hotel Check In/Check Out; Violations; Fees

- The Director of Public Service is authorized to establish valet zones on public streets to be reserved for persons leaving vehicles with a valet parking attendant.
- On receipt of an application for a permit to establish a valet zone, and payment of a fee of one hundred dollars (\$100.00), the Commissioner of Assessments and Licenses shall transmit the application to the Director of Public Service to determine if the area in question complies with the requirements of this section. The Director of Public Service shall, within sixty (60) days of receipt of the application, notify the Commissioner of Assessments and Licenses whether the area complies with this section. On notification of compliance, the Commissioner of Assessments and Licenses shall issue the permit on a form promulgated by the Commissioner for that purpose.
- The Director of Public Service is also authorized to establish limousine zones for limousines and other vehicles momentarily dropping off or picking up passengers and day care zones on public streets reserved for motorists standing or parking vehicles for the purpose of dropping off or picking up children enrolled at day care centers.
- The Director of Public Service is also authorized to establish hotel check in/check out zones on public streets for motorists standing or parking vehicles for the purpose of checking in or checking out of a hotel.
- Prior to the establishment of any zone, the Commissioner of Traffic Engineering shall conduct a study and report the findings to the Director of Public Service together with recommendations as to the need for and the advisability of creating the zone. The investigation shall consider all relevant traffic engineering considerations, including without limitation the specific considerations identified in this division. Following the investigation, the zone shall not be established if the Director of Public Service determines that any of the following are true:
 - Establishing proposed zone would create or contribute to a traffic flow or traffic congestion problem;
 - The proposed zone is in an area already experiencing traffic congestion, and there are adequate off-street areas for standing or parking vehicles, and the proposed zone cannot be implemented without resolving, accommodating or decreasing said traffic congestion;

- The proposed zone is presently a restricted parking area, unless the investigation of the Commissioner of Traffic Engineering reveals that it is desirable to lift or change the restriction.
- The establishment of a zone under this section shall be effective ten (10) days after publication of a notice in the *City Record* and on the posting of signs sufficient in number and location to apprise the ordinarily observant person of the existence of the zone, and shall have the force and effect of law until rescinded by the Director of Public Service or until disapproved by ordinance of Council.
- The use of any zone established under this section shall be suspended on any street of the City which has been closed under any lawful authority, including without limitation street closings made under Section [133.09](#), [403.05](#) or [411.05](#) of these Codified Ordinances.
- Each zone established under this section shall be for public use and not reserved for any particular business establishment or any particular private user, except that the Director of Public Service may designate that any zone created under this section be restricted to motorists standing or parking vehicles for the purpose of dropping off or picking up children enrolled at a given day care center or centers or for the purpose of checking in or checking out of a hotel. If a zone is so restricted, the signs required by division (f) of this section shall apprise motorists of the restriction.
- No person shall stand or park a vehicle in a zone established for valet parking or passenger drop off/pick up for a period in excess of ten (10) minutes, nor shall any person stand or park a vehicle in any such zone except for the purpose of leaving the vehicle in the possession of a valet parking attendant then on duty, or while actually dropping off or picking up passengers. In the case of zones established in front of business establishments with the capacity to seat more than eight hundred (800) individuals, no person shall stand or park a vehicle in a zone established for valet parking or passenger drop off/pick up for a period in excess of thirty (30) minutes, nor shall any person stand or park a vehicle in any such zone except for the purpose of leaving the vehicle in the possession of a valet parking attendant then on duty, or while actually dropping off or picking up passengers. In the case of zones established for day care drop off/pick up, no person shall stand or park a vehicle in the zone in excess of fifteen (15) minutes, nor shall any person stand or park a vehicle in any zone except for the purpose of dropping off or picking up a child or children enrolled in a day care center.
- No person shall stand or park a vehicle in a zone established for checking in or checking out of a hotel for a period in excess of thirty (30) minutes, nor shall any person stand or park a vehicle in any such zone except for the purpose of checking in or checking out of a hotel.
- No person standing or parking a vehicle in a zone established under this section shall fail to pull the vehicle curbside, right wheels to the curb, nor shall any person stop or park a vehicle alongside any vehicle stopped or parked curbside in such a zone, commonly referred to as “double parking.”
- In valet parking zones, a valet attendant shall remove the vehicle from the city streets as soon as practicable, and under no condition shall the vehicle remain on the street for a period of time in excess of ten (10) minutes.
- The Director of Public Service shall have the authority to promulgate rules and regulations to implement the provisions of this section.

Chicago, IL (Commercial Valet regulations)

4-232-050 Definitions

- For the purpose of this chapter, the following terms shall have the following meanings:
“Valet parking operator” means a person who employs one or more attendants for the purpose of providing a valet parking service or who contracts his own services, but not in the capacity of employee, to any business establishment, for the purpose of providing a valet parking service to such establishment.
“Valet parking service” means a parking service provided to accommodate patrons of any business establishment, which service is incidental to the business of the establishment and by which an attendant on behalf of the establishment takes temporary custody of the patrons' motor vehicle and moves, parks, stores or retrieves the vehicle for the patrons' convenience.
- For the purposes of Sections [4-232-060](#) through [4-232-080](#), “commissioner” means the commissioner of business affairs and consumer protection or his designee.

4-232-060 License – Required – Application – Fee

- No valet parking operator license, or renewal thereof, shall be issued unless the applicant agrees to park all cars entrusted to him in legal off-street or legal on-street sites.
- No valet parking operator license, or renewal thereof, shall be issued unless the applicant provides proof to the commissioner that the applicant or licensee, as applicable, has obtained: (1) commercial general liability insurance covering all locations at which such person operates or seeks to operate, with limits of not less than \$1,000,000.00 per occurrence for bodily injury, personal injury, and property damage, and (2) commercial automobile liability insurance with limits of not less than \$1,000,000.00, combined single limit, per occurrence for bodily injury and property damage and (3) insurance with limits of not less than \$1,000,000.00 per occurrence for garage keepers' legal liability. The City of Chicago shall be named as additional insured on a primary, noncontributory basis from any liability arising directly or indirectly from the licensee's operations. The insurance required under this subsection shall: (1) be in full force and effect throughout the duration of the license period, (2) be issued by an insurer authorized to insure in Illinois, and (3) not be subject to cancellation except upon 30 days' prior notice to the commissioner. Upon termination or lapse of the licensee's insurance coverage, any valet parking operator license issued to such person shall automatically expire.
- The proof of insurance required under this subsection shall be made available by the commissioner to the public for the duration of the license.
- No valet parking operator license, or renewal thereof, shall be issued unless the applicant provides proof to the commissioner that the business establishment for which the valet parking service is to be provided has made available a loading zone at least 25 feet in length immediately adjacent to its premises for the pickup and delivery of the patrons vehicles. Where the loading zone is to be on-street, the business establishment shall have applied to the commissioner of transportation in accordance with title 9 of this Code for the designation of a curb loading zone, and no license shall be issued for the operation of a valet parking service at that establishment unless and until the designation has been approved and the curb loading zone signage has been installed; provided that no license,

or renewal thereof, shall be issued for any location, including any loading zone, designated as a tow zone.

- No valet parking operator license, or renewal thereof, shall be issued unless the applicant provides proof satisfactory to the commissioner that, with respect to each business served, the valet parking operator has available legal off-street parking spaces equal in number to fifteen percent of the occupancy content of that business as determined in accordance with Title 13 of this Code. A space is available if owned or leased by the valet parking operator or if the valet parking operator has a contractual right to place a vehicle in that space.
- The lease of a space by a valet parking operator shall be for a term at least coextensive with the duration of the license and shall not be subject to cancellation except upon 30 days prior notice to the commissioner. Upon termination or lapse of the licensee's lease, any license issued to him shall automatically expire.
- No valet parking operator license, or renewal thereof, shall be issued to any applicant who has been found in violation of any provision of Section [4-232-060](#) or [4-232-080](#) of this chapter two or more times within the 180-day period prior to the date of the application or three or more times within the 365-day period prior to the date of the application.

4-232-070 Issuance conditions

- No valet parking operator license, or renewal thereof, shall be issued unless the applicant agrees to park all cars entrusted to him in legal off-street or legal on-street sites.
- No valet parking operator license, or renewal thereof, shall be issued unless the applicant provides proof to the commissioner that he has obtained commercial general liability insurance covering all locations at which he operates or seeks to operate in the minimum amounts of \$1,000,000.00 per occurrence for liability, \$1,000,000.00 per occurrence for property damage, and \$1,000,000.00 per occurrence for garage keepers' legal liability.

The insurance policy shall be for a term at least coextensive with the duration of the license, shall be issued by an insurer authorized to insure in Illinois and shall not be subject to cancellation except upon 30 days prior notice to the commissioner. Upon termination or lapse of the licensee's insurance coverage, any license issued to him shall automatically expire.

The applicant shall provide proof of insurance to the commissioner. This certificate must be made available, by the commissioner, to the public for the duration of the license.

- No valet parking operator license, or renewal thereof, shall be issued unless the applicant provides proof to the commissioner that the business establishment for which the valet parking service is to be provided has made available a loading zone at least 25 feet in length immediately adjacent to its premises for the pickup and delivery of the patrons vehicles. Where the loading zone is to be on-street, the business establishment shall have applied to the commissioner of transportation in accordance with title 9 of this Code for the designation of a curb loading zone, and no license shall be issued for the operation of a valet parking service at that establishment unless and until the designation has been approved and the curb loading zone signage has been installed; provided that no license, or renewal thereof, shall be issued for any location, including any loading zone, designated as a tow zone.
- No valet parking operator license, or renewal thereof, shall be issued unless the applicant provides proof satisfactory to the commissioner that, with respect to each business

served, the valet parking operator has available legal off-street parking spaces equal in number to fifteen percent of the occupancy content of that business as determined in accordance with Title 13 of this Code. A space is available if owned or leased by the valet parking operator or if the valet parking operator has a contractual right to place a vehicle in that space.

The lease of a space by a valet parking operator shall be for a term at least coextensive with the duration of the license and shall not be subject to cancellation except upon 30 days prior notice to the commissioner. Upon termination or lapse of the licensee's lease, any license issued to him shall automatically expire.

- No valet parking operator license, or renewal thereof, shall be issued to any applicant who has been found in violation of any provision of Section [4-232-060](#) or [4-232-080](#) of this chapter two or more times within the 180-day period prior to the date of the application or three or more times within the 365-day period prior to the date of the application.

4-232-080 Operating procedures

- Every business establishment for which a valet parking license is issued shall, during the hours of service, display an 18-inch by 24-inch valet parking license sign issued by the department of business affairs and consumer protection. The valet parking license sign is to be attached to the existing loading zone pole during the hours of operation. The valet parking license sign shall only be displayed and the zone shall only be in effect during the hours that valet service is provided. A licensee's improper display of or failure to display the valet parking license sign, or use of such sign to restrict or exclude public parking at unauthorized times or locations, shall subject the operator to the penalties set forth in this article and other applicable provisions of this Code. Every licensee providing service must post the name of the operator and rate, if any, onto the valet parking license sign in four inch dark blue lettering. The commissioner of business affairs and consumer protection shall inspect such establishments to determine the name, and rates, if any, are accurately and properly posted, and shall suspend any valet parking operator's license as to any business establishment being served for so long as the licensee fails to post its rates and name as required herein.
- No valet parking operator shall park or suffer its agents to park patrons' vehicles upon the public way except under lawful conditions upon such main thoroughfares of the city as are designated as snow routes pursuant to Title 9 of this Code. In accordance with Section [9-100-150](#) of this Code, the fine for any parking or compliance violations incurred by a vehicle while in the custody of a valet parking operator shall be the sole responsibility of the valet parking operator and shall, upon the occurrence of a final determination of liability, constitute a debt due and owing to the city. The valet parking operator's failure to pay any such fine upon notice by the city shall subject the operator to the penalties set forth in this article and other applicable provisions of this Code. The commissioner of business affairs and consumer protection is authorized to seek restitution with respect to any fine paid by the patron of the valet parking operator.
- Every valet parking operator shall place or cause his agent to place on the dashboard of each patron vehicle a sign or placard of a size no smaller than eight and one-half inches by 11 inches in such a manner so as to be conspicuously visible through the windshield of the patron vehicle. The sign or placard shall contain the following information in red or black letters no less than one inch high: "This Vehicle Parked By (valet parking operator) For Customer Of (business establishment)". In addition, each attendant of valet parking

operator shall, while on duty, wear conspicuously placed on his clothing an insignia which identifies the valet parking operator for whom the attendant is working.

- All valet parking attendants must, upon taking custody of a patron's vehicle, issue a numbered receipt to each customer containing the name, address and telephone number of the company providing the valet service, a statement that the company has liability insurance as required by Section [4-232-070](#)(b) of the Municipal Code of Chicago, the charge for the valet service, the time and date the valet parking operator took custody of the vehicle, and the license plate number of the vehicle. When a valet parking attendant returns custody of the vehicle to the owner, the attendant must time stamp the receipt with the time and date the valet parking operator surrendered custody of the vehicle, and return it to the patron.
- Every valet parking operator or attendant shall carry on his person a valid current driver's license at all times while in control of a patron's vehicle. In addition to the penalties otherwise provided for violation of this section, any person violating this subsection shall be subject to a fine of not less than \$500.00 nor more than \$1,000.00 for each offense. Any penalty for violation of this subsection shall be assessed against, and shall be the responsibility of, the holder of the valet parking operator license.
- No valet parking operator may use residential parking daily permits in the conduct of that operator's valet parking business.

4-232-090 Applicability of provisions – Exceptions

Sections [4-232-060](#) through [4-232-080](#) shall not apply to any business establishment that provides patron parking entirely and solely on its premises or to any hotel that provides parking entirely on its premises for guests or for patrons of business establishments located on the hotel's premises. However, a valet parking operator license shall be required when the vehicle or the keys to the vehicle are given to the valet parking attendant on any part of the public way, even if the actual parking of the vehicle is done entirely and solely on the establishment's premises.

Miami, FL (Public Valet)

<http://www.miamitodaynews.com/2016/04/12/miami-parking-authority-centralize-valets/>



MEMORANDUM

To: Devayani Puranik, City of Dublin, OH

From: Nelson\Nygaard Consulting Associates

Date: June 12, 2017

Subject: Toolbox Appendix: Parking Management Organization Overview

OVERVIEW

Adopting a more proactive parking management approach, coinciding with the significant capital investments the City is making in physical parking infrastructure, provides an opportunity to re-evaluate the organizational relationships among the parties who currently hold key parking management roles and responsibilities. More effective restructuring of, and/or more cohesive relationships among, these parties will, in turn, increase the effectiveness of the management strategies outlined in the Parking Management Toolbox.

Optimizing a strategically managed public parking system requires coordination among an extensive range of management roles and responsibilities. Cities fulfill these responsibilities in a variety of arrangements, some more successful than others. Some have one department managing the entire set of duties while others have duties spread across multiple divisions and departments.

Organizational best practices are many and varied, but center on the concept of “vertical integration” of all parking functions. By default, the many components of parking management tend to emerge and evolve within distinct, municipal departments, agencies, and authorities, in response to micro-level needs and objectives.

VERTICAL INTEGRATION

Vertical integration, by contrast, refocuses attention on macro-level needs and objectives, which are best served by a comprehensive parking management approach. While full integration is rarely feasible, vertical integration should seek to place responsibility for as many of the following elements as possible under one authority.

- Off-street facilities
- On-street resources, including curbside regulations and strategies, citywide
- Overall program financial performance
- Enforcement
- Revenue collection and investment
- System planning
- Coordinated management of multimodal transportation, including demand-management/reduction efforts and programs
- Parking system branding, marketing, and community outreach

- Implementation of new technologies
- Coordination with City land use, growth, and economic-development planners
- Engagement with citywide business community, residential associations, and private parking providers/managers

Vertical integration can be achieved within a municipal department, or within a public authority. In either case, vertical integration can, and often does, include some level of outsourcing. Most commonly, a private parking management firm is hired to handle day-to-day operations and maintenance through a management contract. Through the management contract, the private parking management firm is paid a fixed management fee and/or a percentage of gross revenues and is reimbursed by the owner for all costs incurred in the operation.

Some cities have opted to hire a management firm to assume full responsibility for all aspects of parking management, through a concession agreement. Under such an agreement, the City concedes significant control over curbside management, typically for purposes of more efficiently monetizing its parking resources.

Benefits

Operational Efficiencies and Effectiveness

Centralizing parking management responsibilities in a single division, in contrast to a distributed arrangement, offers greater capacity to create an effective parking system. Having a single party managing all aspects of a parking ecosystem, ideally guided by an established strategic plan, will facilitate much greater adherence to parking goals. Integration is particularly conducive to administrative and operational efficiencies. Other essential benefits include the following.

- Consistent messaging to and communications with parking stakeholders
- Broadly responsive parking policies, strategies, and actions that are informed by relevant conditions and aligned with established goals and objectives
- Adept, timely, and strategically-informed responses to changing conditions
- Consistent and structured coordination with related efforts/organizations

Managing Tradeoffs and Empowering Policy

Centralization also minimizes conflicts of interest that commonly occur when duties are distributed across multiple departments. An illustrative example of this is the conflict of interest that often arises when parking-regulation enforcement is led by a police department. While parking-regulation compliance is critical to effective parking management, it is often far from critical to the public safety mission of a City police department. And, while compliance with regulations is the ultimate parking-management goal for enforcement, success in this area means fewer tickets and reduced fine revenue, both of which are common metrics for police enforcement efforts.

Similarly, building subsidized parking facilities as an economic-development investment can conflict with community traffic and sustainability goals. Centralized management can weigh the costs/benefits of such conflicts and tradeoffs, and deliver decisions and actions that are more fully informed, compared to systems where often “one hand does not know what the other is doing”. Overtime, this can also increase interest in and engagement with policy and strategy development, as confidence increases in their likely influence on actual decision-making.

Structural Options

Vertical integration can be achieved within a municipal department, or within an outside party, such as a public authority or an improvement-district organization. Below is a brief overview of some of the most common approaches.

- **City department**

One City department handles all or most of those responsibilities related to parking, usually located under Public Works, Transportation, or the Planning department. In this arrangement, the department's director is responsible for all aspects of parking management, but also holds authority for its implementation.

Example:

Tacoma, WA – Parking Dept., Public Works

- **Parking authority**

Generally established through a state or city charter with a well-defined mission and goals, parking authorities act as quasi-public entities. A private parking management company runs day-to-day operational duties, while a board representing local parking stakeholders, many times appointees, runs the authority. This board determines policy and other non-day-to-day necessities for the parking system and its diverse makeup of business owners, city staff, and developers allows parking decisions to consider a range of perspectives in an intentional way.

Example:

New Haven, CT – Park New Haven

- **Contract or business district**

Quasi-government entities, such as business improvement districts or downtown development authorities, have assumed responsibility for downtown parking systems to better align parking policy and performance with economic-development goals. Usually defined by an operating agreement, this arrangement allows an organization already in touch with local business owners and associations to direct parking to better serve the area.

Example:

Ann Arbor, MI – Downtown Development Authority

- **Parking district**

A Parking District has a defined set of boundaries wherein a special assessment generates revenue to fund operational and strategic needs in the district. In addition to operational funding, assessment funds could pay for other local improvements such as a parking circulator, a transit-pass program, or multi-modal improvements.

Example:

Boulder, CO – Parking Services

- **Concession Agreement**

Some cities and universities have opted to hire a management firm to assume full responsibility for all aspects of parking management, through a concession agreement.

This is an emerging option within the United States, but one that benefits from a successful model of implementation at the Ohio State University.

Example:

Indianapolis, IN - ParkIndy¹

Case Study: Tacoma, WA²

Tacoma manages its on- and off-street parking resources and parking enforcement through a single entity, the Parking division within its Public Works department. The department is in charge of daily parking operations, communications, and strategic planning for parking throughout the city. On-street, off-street, and enforcement are all under the Parking division's purview. The department follows the strategic guidance of Tacoma's *Downtown Integrated Parking Plan*.

Distinctively, in addition to the municipal parking department, Tacoma utilizes a Parking Technical Advisory Group (PTAG) to pull in representatives of downtown interests. The PTAG regularly assists the Parking Manager in review and implementation of parking programs. The PTAG has 12 appointed members consisting of business and property owners, large parking generators, residents and parkers.

¹ <http://www.parkindy.net/>

² Willson, Richard W. *Parking management for smart growth*. Washington: Island Press, 2015. Print.

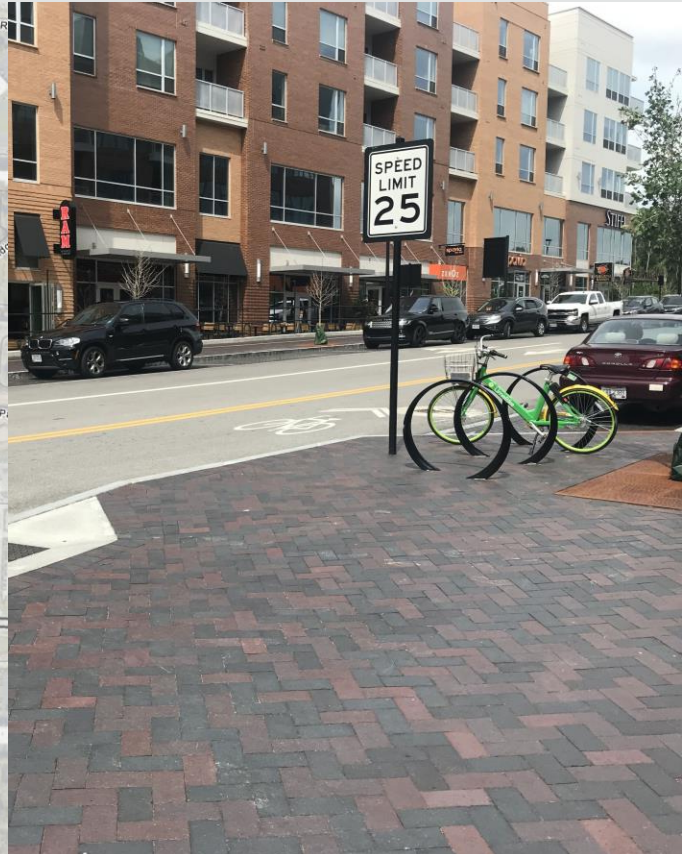
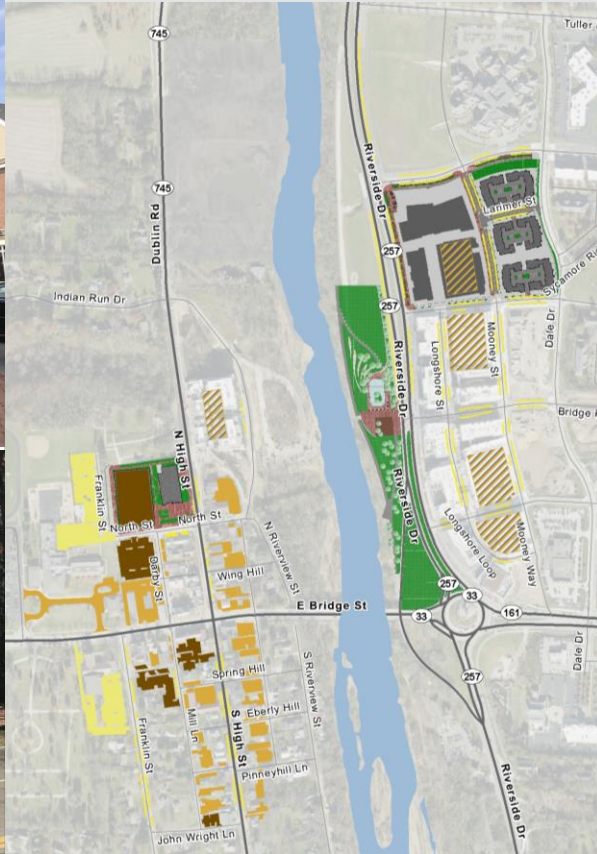
Downtown Dublin Parking Strategy

2018 Action Plan Recommendations

September 17, 2018



Focus Area/s



Presentation Outline

- Background & History
- Completed Work: Toolbox + 2018 Action Plan
- 2018 Action Plan Overview and Progress Report
 - » 2018 Recommendations for Bridge Park
 - » 2018 Recommendations for Historic Dublin
- 2019 Action Plan Priorities Preview
- Questions for Council





Background & History



Previous Studies

Old
Dublin
Parking
Study
(2000)

Additional
Historic
District
Parking
Opportunitie
s (2009)

Historic
Dublin
Wayfinding
(2010)

Bridge
Street
District
Vision
Plan
(2010)

Bridge
Street
District
Community
Plan (2013)

Old Dublin
Area
Enhancemen
t Study
(2001)

Historic
Dublin
Parking
Feasibilit
y (2009)

Near
Term
Historic
Dublin
Parking
Strategies
(2010)

Historic
Dublin
Parking
Demand
Study (2011)

Downtown
Dublin
Parking
Strategy
(2018)



Previous Studies

Building upon past work

- Focused on Historic Dublin
- Fairly typical findings
- No easy solutions

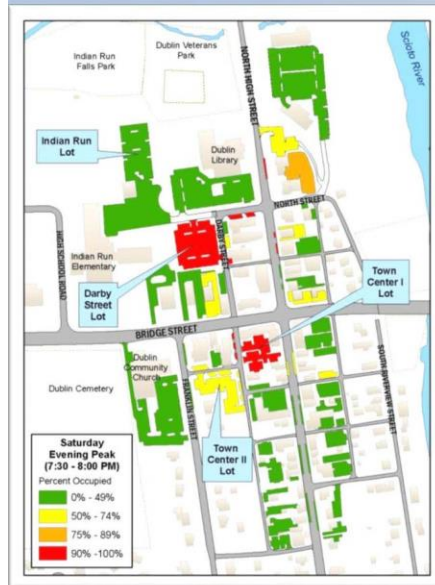


Previous Studies

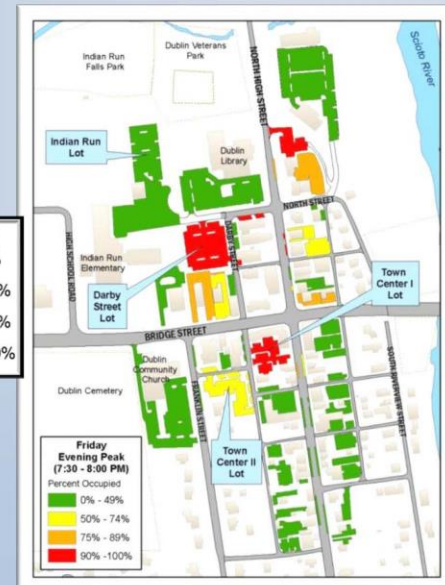
Building upon past work

- Focused on Historic Dublin
- Unsurprising findings
- No easy solutions

Saturday Evening Peak



Friday Evening Peak



Focus of the Parking Strategy

Provide the City with a Management Toolbox

- Updated data in Historic Dublin, confirmed findings largely unchanged
- Prepare the City for supporting Bridge Park as businesses and residents start to move in
- The Toolbox provides the City with critical resources to:
 - Act on the low hanging fruit
 - Guide discussions on specific/vetted options for resolving challenging issues



A New Approach

Vision

Efficient parking management operations that provide a safe and positive parking environment for customers, as well as support and strengthen Economic Development and place-making goals.

Mission

Support growth and development of Downtown Dublin through parking management practices and supportive mobility enhancements that are:

- » Community-focused
- » Welcoming and user-friendly
- » Short-term viable & long-term sustainable
- » Fiscally responsible



Objectives

- » Economic Development
- » Optimal Customer Service
- » Easy to Access & Utilize
- » Context Appropriate
- » Synergized with Mobility Study
- » Synergized with Technology Advancements
- » Responsible Resource Stewardship



Respond to Changes



Respond to Changes



Stakeholder Engagement

Input on issues and opportunities from

- Residents
- Businesses
- Visitors Bureau
- HDBA
- Developers
- City Staff
- Mobility Vision Workshop



Council Engagement

Council Work Session- April 28, 2016

- Initial objectives for on-street parking in Bridge park
- Smart kiosks

Council Work Session- June 19, 2017

- Comprehensive Parking management- Mobility Study
- Tool Box Development



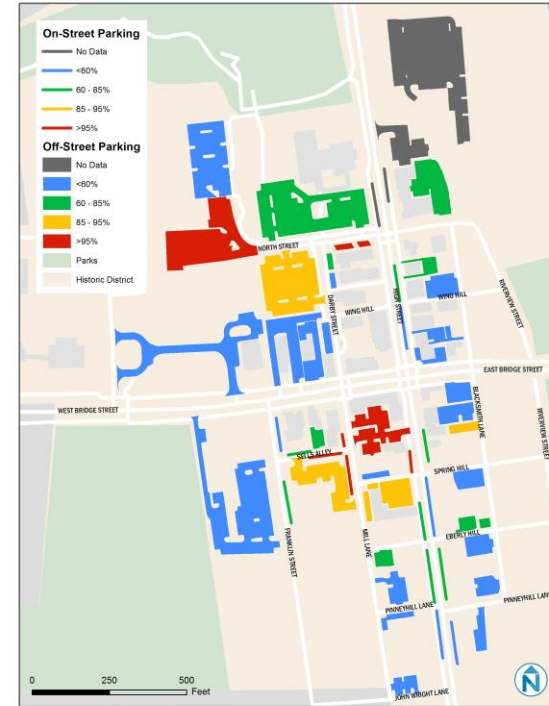


Completed Work: Toolbox + 2018 Action Plan



Key Takeaways

- **There is ample supply** to meet demand.
- **Scarcity & abundance** sit side by side, shaping diverse perceptions.
- **Management** is the big
- **Off-Street abundance** actively manage curbs.
- **Mobility Study** is rare opportunity to coordinate parking + mobility.



Tools Overview

Shift Demand to distribute parking more evenly across all parking options.

Reduce Demand to minimize supply expansions, emphasize walkability.

Expand Capacities to increase the value provided by existing parking supplies.

Expand Supplies as shared/public parking.

Manage Event Demand to ease strain on “everyday” resources.

Optimize Technology for state-of-the-practice efficiencies and customer.

Coordinate Management to ensure consistency and optimize synergies.

+ **Implementation Guide** listing priority strategies and action items.





Toolbox to Action
2018 Action Plan Recommendations
and Progress Report



Focus of 2018 Action Plan

Bridge Park

- Pressing, specific needs even before Phase I ended
- Toolbox provided clear guidance for action
- Specialists added to team to guide signage and ordinance development
- Single, dominant stakeholder shortened path to consensus/action

Historic Dublin

- Long-standing issues with no clear path to concensus/action for most
- Action Plan focused on "low hanging fruit"
- Historic Dublin a likely focus for 2019 Action Plan



2018 Recommendations for Bridge Park

- » On-street time limits
- » Curbside loading strategies
- » Pricing pilot- on-street parking
- » Enforcement



Time Limits Established

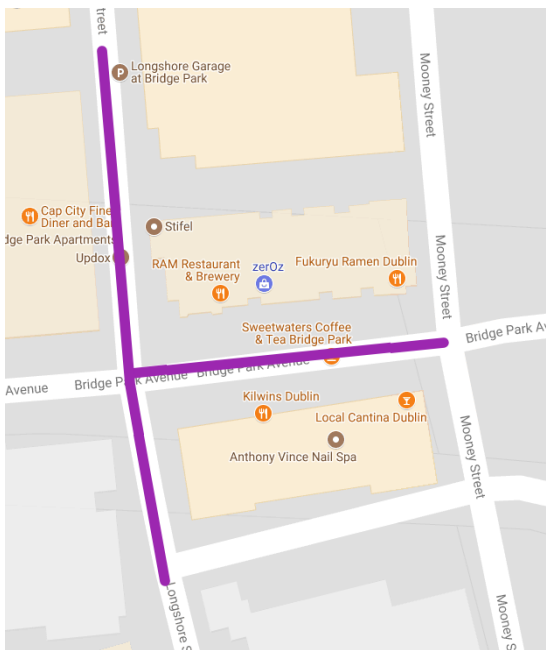


Strategic Placement & Schedules

- » Morning zones on primary commercial blocks
- » All Day zones on secondary streets
- » Emerging Practice: Evening Lyft/Uber Zones



Morning Loading Zones



- » Keeps employee parking off these blocks
- » Spaces open for lunch-hour peak
- » Convenient & Ample zones incentivize morning activity, minimize truck double parking



Paid Parking Pilot

- Demand is ramping up
- Time limits will be insufficient for maintaining availability
- Constituency is still being established
- Primary stakeholder is supportive

Developing RFP for a Pilot

- No cost to City
- Mobile payment, enforcement, customer service are primary requirements



Likley to be Mobile Only

- No capital investment
- No clutter
- No disruption of infrastructure
- Faster start-up
- Simplest route to self-financing parking program
- Fitting with technology context
- Ample off-street parking for those unable/disinclined to pay by phone



Consistent Enforcement

Start now to establish new expectations

- City has increased enforcement
- Emphasizing information through warning tix
- Will help prepare drivers for changes brought by pilot

Compliance-focused approach

- Focus on Customer Service (Downtown Ambassadors)
- Decriminalize parking violations
- Issue “courtesy” informational tickets for initial violations
- Establish a modest fine for 2nd violation
- Complement with a graduated fine structure to deter repeated violations



Toolbox to Action – Bridge Park

Financial Analysis of Management Costs/Options

- Without paid parking, 5-year cost = **~\$500k**
- With paid parking, net 5-year = ~\$500k – \$1m

Mobile Payment option

- No capital costs
- Transaction fees = ~\$130k/year
- Most cities pass the fee onto users, bringing cost to \$0
- Can be a no-cost complement to physical meters

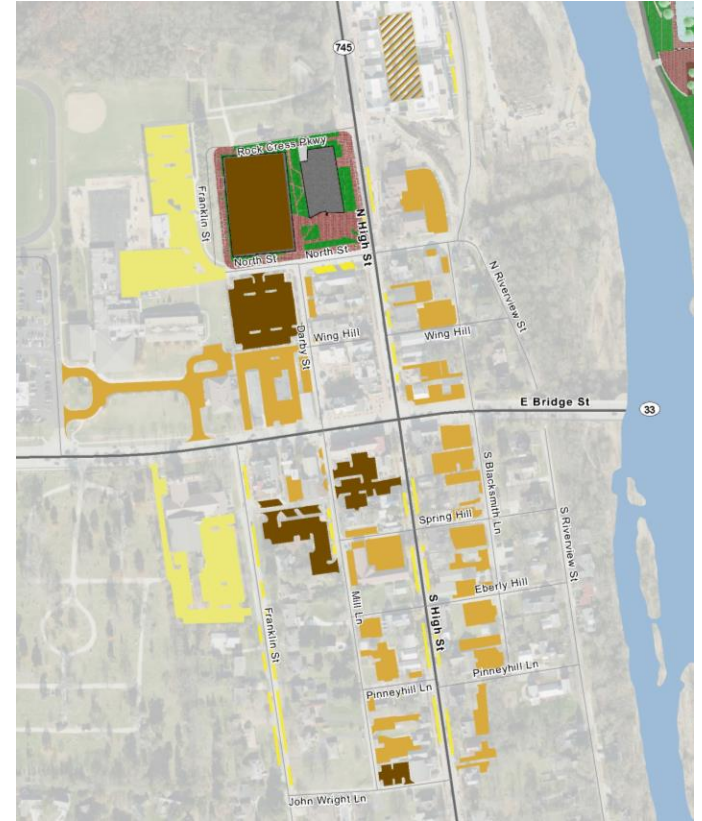
Outsourcing management/enforcement

- Significantly more expensive than hiring in-house staff
- Greater customer service potential
- Allow City to focus on mobility and other positives

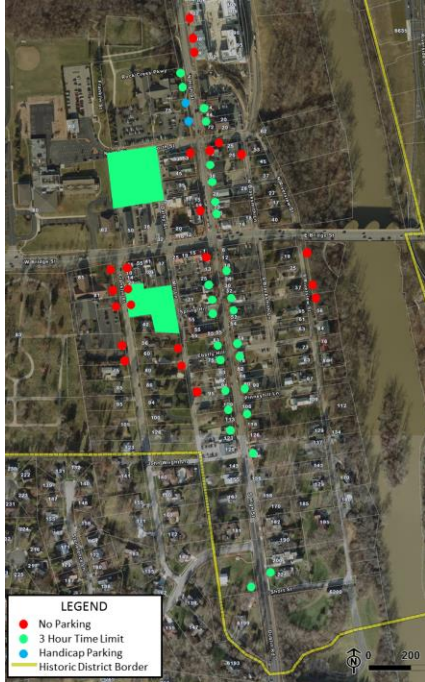


2018 Recommendations for Historic Dublin

- » Updated signage
- » Public parking map
- » Video Analytics tech pilot
- » Renewed enforcement of time limits



Updated Time Limit Signage



Developing Official Parking Map

- » Display all public parking locations
- » Info: regulations, pricing, and schedules
- » Host on the City website
- » Links from area destination and info sites



GREATER DUBLIN AREA

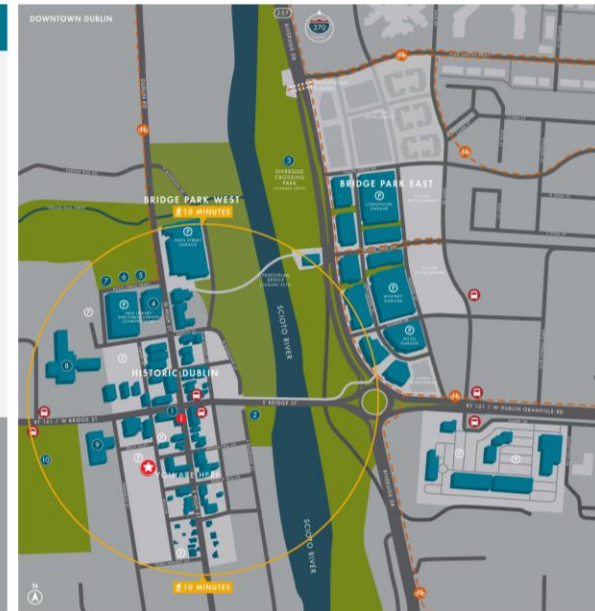
- AREA CENTERS
 - 1 Cullinan Park
 - 2 Dublin Cullinan High School

DOWNTOWN DUBLIN

- WALKWAYS & SERVICES
 - 1 Visitor Information
- AREA CENTERS
 - 1 Dublin Cemetery
 - 2 Dublin Springs Park
 - 3 Indian Run Cemetery
 - 4 Indian Run Falls
 - 5 Riverdale Crossing Park
 - 6 Dublin Community Church
 - 7 Church of Remembrance
 - 8 Indian Run Elementary School
 - 9 Library

LEGEND

- YOU ARE HERE
- PARKING
- BUS/TRANSIT STOP
- LOCATION ID
- VISITOR INFORMATION
- BIKE PATH
- 10 MINUTE WALK AREA



Video Analytics Tech Pilot

- Highlighting Dublin's commitment to be a leader in emerging transportation and information technologies
- Using smart city technologies and initiatives to set a foundation to improve safety, mobility, and sustainability in the identified roadway network.
- Advancing the City's economic development competitiveness
- Being the example to other communities how to implement smart city technologies and how to get meaningful output.



Toolbox to Action: What we need from You

Priority Toolbox Action	Required Council Action
Extend Time Limited parking:	None: Existing Authority is Sufficient
Paid Parking:	Grant CM specific authority
Pay-by-phone fee policy:	Grant CM specific authority
Enforcement Pilot:	Authorize contract, appropriate \$
Violations:	Ordinance update, non-criminal civil parking structure
Decriminalize parking violations:	New chapter ORC 4521, est. parking violations bureau.
Selection/contract with vendors:	Evaluate MOU vs. contractual agreement.





2019 Action Plan Priorities Preview



Focus on Historic Dublin

Toolbox provides resources to guide discussion of

- Issues
- Options
- Tradeoffs
- Preferred Actions

And to move quickly...



Focus on Historic Dublin

Common Challenges, but no easy solutions

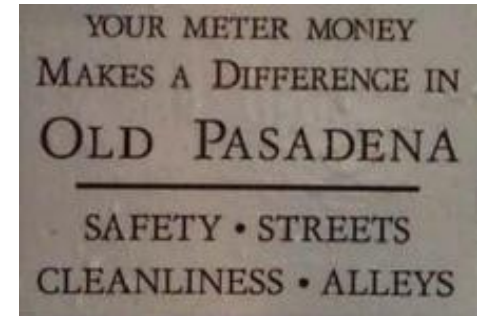
- Stakeholder engagement will be key
- Focus groups and other outreach efforts to go over Toolbox
- Identify preferred tools and implementation options
- Results of Bridge Park pilot will inform discussions

Consensus will be key to success



Enterprise Fund

- » Establish before revenue becomes significant
 - Use parking revenue for public benefits
 - Focus on improvements that improve access and mobility.



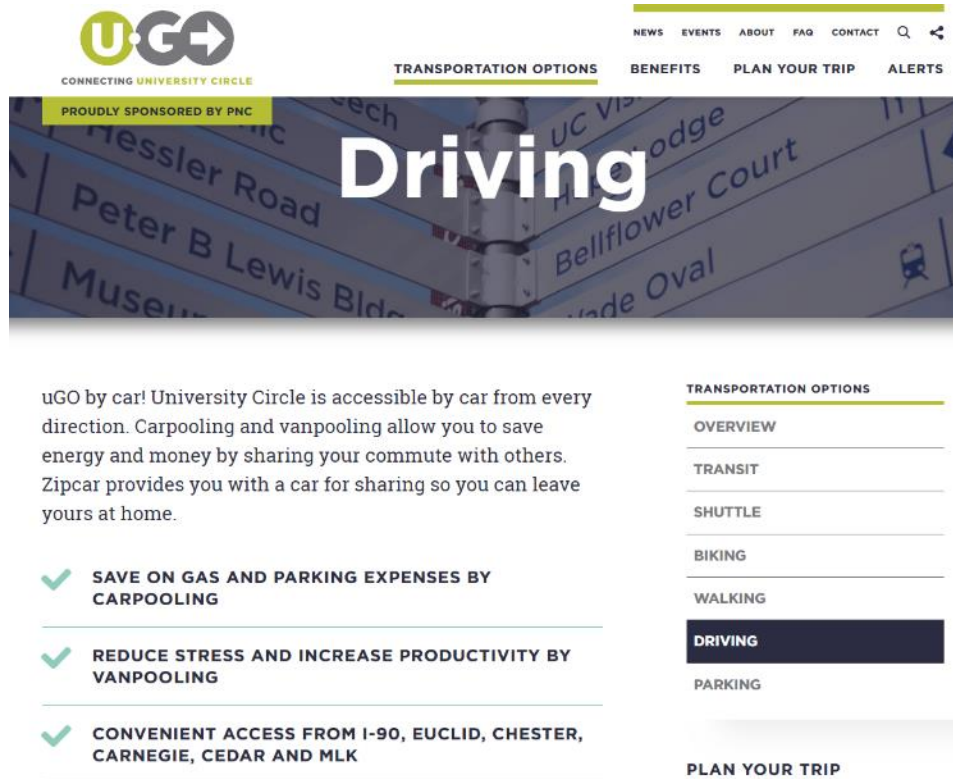
One Stop Shop

Transportation Information

- Driving
- Driving alternatives

Parking Information

- Location
- Restrictions, Regulations, Rates
- Citation Appeal Option



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TRANSPORTATION OPTIONS BENEFITS PLAN YOUR TRIP ALERTS

Driving

uGO by car! University Circle is accessible by car from every direction. Carpooling and vanpooling allow you to save energy and money by sharing your commute with others. Zipcar provides you with a car for sharing so you can leave yours at home.

- ✓ SAVE ON GAS AND PARKING EXPENSES BY CARPOOLING
- ✓ REDUCE STRESS AND INCREASE PRODUCTIVITY BY VANPOOLING
- ✓ CONVENIENT ACCESS FROM I-90, EUCLID, CHESTER, CARNEGIE, CEDAR AND MLK

TRANSPORTATION OPTIONS

- OVERVIEW
- TRANSIT
- SHUTTLE
- BIKING
- WALKING
- DRIVING**
- PARKING

PLAN YOUR TRIP





Questions



Questions

1. Does the recommended approach seem well suited to Dublin, including but not limited to Historic Dublin and Bridge Park?
2. Are tools and/or priority recommendations appropriate?
3. Are there any other issues, concerns or strategies not addressed in the recommendations, particularly as presented in the background documents?
4. Does Council have any other concerns?



Downtown Dublin Parking Management- Financial Modelling

The Financial Model for Downtown Dublin Parking Management was developed to identify and measure the financial implications and revenue projections for implementing parking management programs.

The financial model is divided in seven different tabs for each variable. These tabs are preceded by a sheet of instructions for using the model and assessing its outputs. A summary Financial Dashboard provides a snapshot of key findings to facilitate comparison of primary options.

The model's analysis and outputs are based on several adjustable inputs that directly affect measures of cost and revenue throughout the worksheets and the dashboard. Default inputs are based on typical industry standards and baselines. However, these defaults can be adjusted in the final model, depending on City of Dublin's assumptions and preferences.

Following are the key inputs and variables that can be adjusted, in the final version and beyond, allowing the final model to serve as an ongoing resource to inform continued implementation of paid parking and strategic management:

1. Hourly parking rates – Currently set to \$1 and \$2
2. Number of Spaces - Currently set to 337
3. Annual Revenue Days – Currently set to 365
4. Compliance Rate (% of drivers who will comply with payment) - Currently set to 60%
5. Occupancy Percentage (average, across all annual revenue hours) - Currently set to 50%
6. Paid Parking schedule (days and times when payment is required) - Currently set to 10am – 9pm, seven days
7. Enforcement schedule (days and times of active enforcement) - Currently set to 10am – 9pm, seven days

DUBLIN REVENUE AND ENFORCEMENT COST PROJECTION MODEL - INSTRUCTIONS

This model is a baseline projection and should be used as a tool to estimate potential revenues. The revenue worksheet enables Dublin to adjust their inputs to project several different scenarios. We've included separate worksheets to calculate hourly and time of day revenue scenarios. The functionality to charge a different rate during different times of day has also been built into the revenue by zone worksheet.

This model also includes different options for managing enforcement with costs, including managing the operation in-house, outsourcing to a consultancy specializing in enforcement, or outsourcing a portion of the operation to a third-party such as the City of Columbus.

Most values in the workbook can be adjusted. For example, the cells in white are meant to remain relatively consistent, grey cells may require adjustment, and the blue cells should be reviewed and modified. The variables included and how each of the inputs can be changed is explained below:

Paid Parking Revenue Projections

1. Parking Rate Per Hour

Dublin can adjust the rate per hour as required. We've included a drop-down arrow which allows for the selection of a rate between \$0.00 - \$10.00 in 25-cent increments.

2. Number of Spaces

The Number of spaces included in this model are based on information received from the City and reflects the total number of spaces available in the Bridge Park District. Should the number of spaces in Dublin change over time, these values can be updated as required.

3. Days Per Year

The Days Per Year value represents the number of days in the year when parking rates will be enforced and can be updated as required. The 365 days per year value represents the proposed operating schedule of 7 days per week .

4. Compliance Percentage

The Compliance Percentage value represents the estimated percentage of people who will comply and pay for parking as mandated. We've included a drop-down arrow which allows for adjustment in percentage values.

5. Occupancy Percentage

We have included occupancy percentages. These values can be adjusted as required.

6. Hours of Operation - Paid Parking

The model is based on proposed Dublin operating from the hours of 10:00am-9:00pm Monday - Sunday, but can be adjusted.

7. Hours of Operation - Enforcement

Labor costs included in the Enforcement Cost model are based on proposed enforcement schedule of 87 hours per week.

DRAFT

FINANCIAL DASHBOARD	TIME OF DAY RATE							
	Manage In-house			Outsource Labor		Outsource Full Program		
	Option 1	Option 2A	Option 2B	Option 3A	Option 3B	Option 4	Option 5A	Option 5B
	No paid parking	Implement pay stations	Implement parking meters	Implement pay stations	Implement parking meters	No paid parking	Implement pay stations	Implement parking meters
Annual Pricing	On-Street							
Annual Revenue - Year 1	\$0	\$553,523	\$553,523	\$553,523	\$553,523	\$0	\$553,523	\$553,523
Total Estimated Equipment and Operating Costs - Year 1	\$0	\$362,678	\$394,964	\$362,678	\$394,964	\$0	\$362,678	\$394,964
Estimated Enforcement Cost - Year 1	\$130,055	\$262,145	\$262,145	\$283,145	\$283,145	\$152,000	\$303,000	\$303,000
Net Gain/Loss	(\$130,055)	(\$71,301)	(\$103,587)	(\$92,301)	(\$124,587)	(\$152,000)	(\$112,156)	(\$144,442)
Annual Revenue - Years 1-5	\$0	\$2,767,613	\$2,767,613	\$2,767,613	\$2,767,613	\$0	\$2,767,613	\$2,767,613
Total Estimated Equipment and Operating Costs - Years 1-5	\$0	\$718,590	\$694,220	\$718,590	\$694,220	\$0	\$718,590	\$694,220
Estimated Enforcement Cost - Years 1-5	\$624,275	\$941,525	\$941,525	\$1,046,525	\$1,046,525	\$760,000	\$1,515,000	\$1,515,000
Net Gain/Loss	(\$624,275)	\$1,107,498	\$1,131,868	\$1,002,498	\$1,026,868	(\$760,000)	\$534,023	\$558,393
<i>*Costs associated with Mobile Payment are absorbed by the customer.</i> <i>**Citation revenue is not factored into annual revenue.</i>								

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TIME OF DAY RATE MODEL REVENUE PROJECTIONS*

	On-street**	
Rate Per Hour : 10am-5pm	\$1.00	
Rate Per Hour : 5pm-9pm	\$2.00	
Number of Spaces	337	
Days Per Year	Year-Round 365	
Compliance Percentage	60%	
Occupancy Percentage	10am-5pm	5pm-9pm
	50%	50%
Hours of Operation : Monday - Sunday	10am-5pm	5pm-9pm
	7	4

PROJECTED REVENUE SUMMARY - TIME OF DAY RATE MODEL

	On-street
Annual Revenue - Year 1	\$553,523
Annual Revenue - Years 1&2	\$1,107,045
Annual Revenue - Years 1-3	\$1,660,568
Annual Revenue - Years 1-4	\$2,214,090
Annual Revenue - Years 1-5	\$2,767,613

**Labor cost associated with counting and collections not included in these projections*

***On-street parking reflects number of parking spaces in the Bridge Park District.*

DRAFT

SUMMARY OF ON-STREET COSTS			ALTERNATE OPTION****
	Pay Stations	Single Space Meter	Mobile Only
Quantity of Units*	34	337	NA
Cost of Base Unit	\$8,500.00	\$1,000.00	NA
Meter Warranty (applies starting in Year 2)	\$450.00	\$50.00	NA
Monthly Meter Software Fees - Per Unit	\$55.00	\$6.00	NA
Monthly CC Processing Fees - Per Transaction**	\$0.06	\$0.13	\$0.35
Estimated # of Credit Card Trans Per Unit / Per Day	30	3	1020

PROJECTED COSTS			
	Pay Station	Single Space Meter	Mobile Only
Equipment Cost***	\$289,000	\$337,000	\$0.00
Estimated Software Fees - Year 1	\$22,440	\$24,264	\$0.00
Estimated Credit Card Transaction Fees - Year 1	\$22,338	\$0	\$130,305
Estimated Cost of Additional Spares & Misc - Year 1****	\$28,900	\$33,700	\$0.00
Subtotal Operating Cost	\$73,678	\$57,964	\$130,305
Total	\$362,678	\$394,964	\$130,305
Warranty Cost - Year 2	\$15,300	\$16,850	\$0.00
Warranty Cost - Year 3	\$15,300	\$16,850	\$0.00
Warranty Cost - Year 4	\$15,300	\$16,850	\$0.00
Warranty Cost - Year 5	\$15,300	\$16,850	\$0.00
Total Estimated Equipment and Operating Cost - Year 1	\$362,678	\$394,964	\$130,305
Total Estimated Equipment and Operating Cost - Years 1&2	\$451,656	\$469,778	\$260,610
Total Estimated Equipment and Operating Cost - Years 1-3	\$540,634	\$544,592	\$390,915
Total Estimated Equipment and Operating Cost - Years 1-4	\$629,612	\$619,406	\$521,220
Total Estimated Equipment and Operating Cost - Years 1-5	\$718,590	\$694,220	\$651,525

*Estimated quantities are based on one (1) pay station for every ten (10) on-street parking spaces.

**Not all vendors charge a credit card processing fee per transaction.

***Estimated equipment costs do not include the cost of installation, freight, etc. All workbook pricing has been conservatively estimated by DIXON based upon a variety of recent meter vendor proposals. A quote should be obtained from a qualified Vendor for the most accurate and up to date costs.

****In order to account for some of the unforeseen misc. costs and paper rolls, we have estimated 10% of the initial equipment expense as part of the annual on-going support costs. You will see this value represented in row 18 above.

*****In this scenario the cost of Mobile Payment is absorbed by the City. But, this cost can potentially be offset by the customer, removing all equipment and operating costs to the City.

DRAFT

SUMMARY OF COSTS FOR PARKING ENFORCEMENT MANAGEMENT & OPERATIONS*

	Manage In-house		Outsource Labor	Outsource Full Program		
	No paid parking ¹	Implement paid parking ²	Implement paid parking ³	No paid parking ⁴	Implement paid parking ⁵	
Vehicles ⁶	Enforcement Vehicle					
	Quantity of Units	1	1	1	0	0
	Unit Price	\$4,200	\$30,000	\$30,000	\$0	\$0
	Sub Total Cost	\$4,200	\$30,000	\$30,000	\$0	\$0
	Vehicle Retrofit⁷					
	Quantity of Units	0	1	1	0	0
	Unit Price	\$5,000	\$5,000	\$5,000	\$0	\$0
	Sub Total Cost	\$0	\$5,000	\$5,000	\$0	\$0
	Total Cost	\$4,200	\$35,000	\$35,000	\$0	\$0

Hardware ⁸	Citation Issuance Device					
	Quantity of Units	2	2	2	0	0
	Unit Price	\$700	\$700	\$700	\$0	\$0
	Sub Total Cost	\$1,400	\$1,400	\$1,400	\$0	\$0
	Portable Printer					
	Quantity of Units	2	2	2	0	0
	Unit Price	\$450	\$450	\$450	\$0	\$0
	Sub Total Cost	\$900	\$900	\$900	\$0	\$0
	License Plate Recognition (LPR) Unit					
	Quantity of Units	0	1	1	0	0
Unit Price	\$55,000	\$55,000	\$55,000	\$0	\$0	
Sub Total Cost	\$0	\$55,000	\$55,000	\$0	\$0	
Total Cost	\$2,300	\$57,300	\$57,300	\$0	\$0	

Software ⁹	Citations and Permit Management Software & Annual License per user					
	Quantity of Units	2	2	2	0	0
	Unit Price	\$420	\$420	\$420	\$0	\$0
	Sub Total Cost	\$840	\$840	\$840	\$0	\$0
	Handheld Software License per user					
	Quantity of Units	2	2	2	0	0
	Unit Price	\$420	\$420	\$420	\$0	\$0
	Sub Total Cost	\$840	\$840	\$840	\$0	\$0
Total Cost	\$1,680	\$1,680	\$1,680	\$0	\$0	

Processing Fees	DMV Lookup and Notifications¹⁰					
	Quantity of Units	7,500	7,500	7,500	0	0
	Unit Price	\$1.75	\$1.75	\$1.75	\$0	\$0
	Sub Total Cost	\$13,125	\$13,125	\$13,125	\$0	\$0
	Citation Payment by Mail Processing Fee					
	Quantity of Units	3,500	3,500	3,500	0	0
	Unit Price	\$0.45	\$0.45	\$0.45	\$0	\$0
	Sub Total Cost	\$1,575	\$1,575	\$1,575	\$0	\$0
	Citation Issuance Processing Fee					

Quantity of Units	2	2	2	0	0
Unit Price	\$700	\$700	\$700	\$0	\$0
Sub Total Cost	\$1,400	\$1,400	\$1,400	\$0	\$0
Data Entry¹¹					
Quantity of Units	1,000	1,000	1,000	0	0
Unit Price	\$0.45	\$0.45	\$0.45	\$0	\$0
Sub Total Cost	\$450	\$450	\$450	\$0	\$0
Total Cost	\$16,550	\$16,550	\$16,550	\$0	\$0

Labor	Enforcement Staff¹²					
	Quantity of Units	2	2	2	0	0
	Unit Price	\$50,000	\$55,000	\$66,000	\$0	\$0
	Sub Total Cost	\$100,000	\$110,000	\$132,000	\$0	\$0
	Maintenance and Collections					
	Quantity of Units	0	1	1	0	0
	Unit Price	\$30,000	\$30,000	\$36,000	\$0	\$0
	Sub Total Cost	\$0	\$30,000	\$36,000	\$0	\$0
Total Cost	\$100,000	\$140,000	\$168,000	\$0	\$0	

Additional Operating Expenses¹³	Vehicle and hardware					
	Quantity of Units	1	1	1	0	0
	Unit Price	\$325	\$4,615	\$4,615	\$0	\$0
	Sub Total Cost	\$325	\$4,615	\$4,615	\$0	\$0
	Labor					
	Quantity of Units	1	1	0	0	0
	Unit Price	\$5,000	\$7,000	\$10,000	\$0	\$0
	Sub Total Cost	\$5,000	\$7,000	\$0	\$0	\$0
Total Cost	\$5,325	\$11,615	\$4,615	\$0	\$0	

Third Party	Third Party Annual Fee¹⁴					
	Quantity of Units	0	0	0	1	1
	Unit Price	\$0	\$0	\$0	\$152,000	\$303,000
Total Cost	\$0	\$0	\$0	\$152,000	\$303,000	

Estimated Cost - Year 1	\$130,055	\$262,145	\$283,145	\$152,000	\$303,000
Estimated Cost - Years 1&2	\$253,610	\$431,990	\$473,990	\$304,000	\$606,000
Estimated Cost - Years 1-3	\$377,165	\$601,835	\$664,835	\$456,000	\$909,000
Estimated Cost - Years 1-4	\$500,720	\$771,680	\$855,680	\$608,000	\$1,212,000
Estimated Cost - Years 1-5	\$624,275	\$941,525	\$1,046,525	\$760,000	\$1,515,000

*All workbook pricing has been conservatively estimated by DIXON based upon recent vendor proposals as well as based on industry standards. The City should pursue official vendor quotations for more accurate cost figures.

1. City of Dublin manages and operates all aspects of parking enforcement without implementation of paid parking.

2. City of Dublin manages and operates all aspects of parking enforcement with implementation of paid parking.

3. City of Dublin outsources labor, maintenance and collections to third party. The City owns all enforcement vehicles, hardware, and software. Option includes implementation of paid parking.

4. City of Dublin outsources all parking enforcement management and operations. Option does not include paid parking.

5. City of Dublin outsources all parking enforcement management and operations. Option includes implementation of paid parking.

6. Option 1 estimated vehicle cost reflects leasing of vehicle at \$350 per month. Options 2A-3 estimated vehicle costs reflect full expenditure of vehicle in Year 1, required to install LPR. All workbook pricing has been conservatively estimated by DIXON based upon a variety of recent vehicle vendor proposals.

7. Includes costs associated with retrofitting vehicle to support LPR.

8. Estimated hardware costs do not include training, shipment, etc.

9. Includes software for back-end system (record keeping, citation and permit management), citation issuance devices, DMB lookup, and late payment notification.

10. Includes DMV retrieval and delinquent notification. Conservative estimate based on industry standards.

11. Processing of handwritten citation issuances. Industry standard ratio of 10% of annual citation issuances.

12. Based on City Code Enforcement Officer annual salary. Quantity of units reflects 1 full-time and 2 part-time enforcement staff. Costs associated without paid parking include a 20% allocation for an Area Manager. Costs associated with paid parking include a full-time Area Manager at 100% allocation.

13. In order to account for some of the unforeseen misc. costs such as uniforms, vehicle gasoline, maintenance and insurance, etc., we have estimated 5% of the vehicle, hardware, and labor costs as part of the annual on-going support costs.

14. Annual Third Party fee with paid parking reflect one LPR unit, one retrofitted vehicle, two Enforcement staff, one Meter Technician, one full-time Supervisor, all hardware, software, licensing, insurance, and miscellaneous fees associated with operating a parking enforcement program. Annual Third Party fee without paid parking reflect two Enforcement staff, all hardware, software, licensing, insurance, miscellaneous fees associated with operating a parking enforcement program, and does include LPR.

ON-STREET SPACE INVENTORY BY ZONE

Zone	Type	LOCATION	AVAILABLE SPACES	Total
Bridge Park District	Public	<i>On-street</i>	337	337
		<i>Off-street</i>	2,231	2231

Historic Dublin District	On-street	<i>Northwest Quadrant</i>	23	148
		<i>Northeast Quadrant</i>	22	
		<i>Southeast Quadrant</i>	22	
		<i>Southwest Quadrant</i>	81	
	Off-street	<i>Northwest Quadrant</i>	903	1908
		<i>Northeast Quadrant</i>	498	
		<i>Southeast Quadrant</i>	156	
		<i>Southwest Quadrant</i>	351	

OCCUPANCY DATA		
Zone	On-street	
		Avg Occupancy*
On-street	10am-5pm	50%
	5pm-9pm	50%
Average Occupancy		50%

*Average occupancy rates were included as a placeholder.