ZONING ORDINANCE ADVISORY COMMITTEE **THURSDAY, March 11, 2021**

DALLAS DEVELOPMENT CODE AMENDMENT

FILE NO. DCA 190-002

Parking: Options for Parking Management Tools

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Consideration of amending off-street parking and loading requirements including, but not limited to, hotel, restaurant, multifamily, alcoholic beverage establishment, and public and private school uses in the Dallas Development Code.

BACKGROUND:

On September 5, 2019, City Plan Commission (CPC) authorized a public hearing to consider amending Chapters 51 and 51A of the Dallas Development Code, with consideration to be given to amending off-street parking and loading requirements including, but not limited to, hotel, restaurant, multifamily, and alcoholic beverage establishment uses, and transit-oriented development.

The intent of this code amendment is to review the current parking regulations and based on research, best practices, and other cities approach to parking requirements, determine the need to amend the City Code and make a recommendation and proposal.

Staff will provide reports on the following general research direction to build on information, culminating with recommendations and a proposal:

- Current Parking Regulations _ provided at the June 18, 2020 ZOAC meeting
- City of Dallas Planned Development Districts _ provided at the July 9, 2020 ZOAC meeting
- Index Cities and Other Cities Research _ provided at the August 6, 2020 ZOAC meeting
- Local and National Parking Studies _ provided at the September 3, 2020 ZOAC meeting
- Board of Adjustment parking reductions _ provided at the September 3, 2020 ZOAC meeting
- Citywide Plans – Vision/Goals _ provided at the September 3, 2020 ZOAC meeting
- Public and Interdepartmental Outreach – Input _ provided at the October 15, 2020 ZOAC meeting
- Case studies _ provided at the November 5, 2020 ZOAC meeting
- Discussion with City Departments _ provided at the November 19 and December 3, 2020 meetings
- Parking Regulations Proposal Framework Options _ provided at the January 21, 2021 ZOAC meeting
- Parking Ratios Table Options_ provided at the February 4, 2021 ZOAC meeting
- Parking Ratios Table and Regulations Options – part 2_ provided at the February 18, 2021 ZOAC meeting_ cancelled due to inclement weather
- Parking Ratios Table and Regulations Options – part 2_ provided at the February 25, 2021 ZOAC re-scheduled meeting
- **Options for Parking Management Tools _ provided at the March 11, 2021 ZOAC meeting**

PROJECT WEBPAGE:

http://bit.ly/CityOfDallasParking

RESEARCH AND STAFF ANALYSIS

Scope and methodology

At the January 21, 2021 meeting, staff presented the general framework options for a parking proposal. The framework is proposed to be sustained by five pillars:

1. **Areas with required parking + Exemptions**
2. **Parking ratios table + Regulations**
3. **Parking management tools**
4. **Parking design standards**
5. **Proximity to transit**

The general proposal for the first two pillars for areas with required parking and exceptions, and parking ratios table was generally accepted with potential modification depending on future details and research necessary for the other pillars of the framework.

Summary

1. **Areas with required parking + Exemptions**

Minimum parking requirements for certain uses located in an R, D, and potentially TH zoning districts or within a 330-foot buffer around those districts must be provided according to the parking ratio table.

For all other uses, located outside the 330-foot buffer, no minimum parking spaces are required.

Furthermore, the following exceptions from parking ratio requirements, regardless of use and location, are up for further discussion:

- Properties designated as historic and cultural landmark by the Landmark Preservation Officer or the Landmark Commission, or highly significant endangered, or listed on the National Register of Historic Places are not subject to the required off-street parking requirements set forth in this section.
- Buildings built prior to March 17, 1965, are not subject to the required off-street parking requirements set forth in this section.
- No parking is required for the first 5,000 square feet of each business establishment.

2. **Parking ratios table + Regulations**

Uses	**Proposed ratio**
1. Agricultural Uses	None.
Urban gardens	None. If sales area is provided: ratio per retail uses for the sales portion (1/300sf)
Uses	**Proposed ratio**
2. Commercial and Business Service Uses	None
3. Industrial Uses	None
4. Institutional and Community Service Uses	None
5. Lodging Uses	None For hotel, motel, extended stay hotel or motel - for restaurant, meeting or event space provided above 50sf/room:1/300sf

6. Miscellaneous Uses	None
7. Office Uses	**None** Surgical center: none If office, other than a surgical center, in a *shopping center: 1/300sf
8. Recreation Uses	None
Country club with private membership	None. If in a *shopping center: 1/300sf
Private recreation center, club, or area	None. If in a *shopping center: 1/300sf
9. Residential Uses	**For further discussion, scenarios are currently under consideration**
Single family Duplex Multifamily	1/DU
Residential hotel Retirement housing	None
10. Retail and Personal Service Uses	
Bar, lounge, or tavern and private club-bar Microbrewery, micro-distillery, or winery Business school Commercial amusement (inside) Amusement center Bingo Parlor Bowling alley Children's amusement center Dance hall Motor track Skating rink Other (commercial amusement inside) uses Commercial amusement (outside) Dry cleaning or laundry store General merchandise or food store < 3,500sf General merchandise or food store >3500sf General merchandise or food store > 100,000sf Household equipment and appliance repair Liquor store Paraphernalia Shop Pawn shop Personal service use Restaurant without drive-in or drive-through service Swap or buy shop	**1/300sf**
Ambulance service Auto service center Business school Car wash Commercial motor vehicle parking Commercial parking lot or garage Drive-in theater Liquefied natural gas fueling station	None

Motor vehicle fueling station Outside sales Restaurant with drive-though Surface parking Temporary retail use Taxidermist Temporary retail use Theater Truck stop Vehicle display, sales and services	
Animal Shelter or Clinic (with or without outside runs)	None If in a *shopping center: 1/300sf
Nursery, garden shop, or plant sales Furniture store	**1/1,000sf** If in a *shopping center: 1/300sf
11. Transportation Uses	None
12. Utility and Public Service Uses	None
13. Wholesale, Distribution and Storage Uses	None
14. Accessory Uses	None

Based on the agreed timeline and ZOAC's request from the February 25, 2021 meeting, the next pillar, options for parking management tools, is included in this report.

Purpose statement to be considered for the parking section

The standards are designed to encourage and accommodate a multi modal transportation system. The intent is to reasonably accommodate the parking needs of development, balanced by the needs of pedestrians, bicyclists, and transit users, and by the preservation of community character. The standards intend to incorporate the full range of parking, transportation, and demand management strategies to improve not only access, but to also enhance and promote walkable urban environments.

TRANSPORTATION DEMAND MANAGEMENT - TDM

What is Transportation Demand Management [1]

Transportation Demand Management or *TDM* (also called *Mobility Management*) refers to various strategies that change travel behavior (how, when and where people travel) to increase transport system efficiency and achieve specific planning objectives. TDM is increasingly used to address a variety of problems. (Litman)

A typical person makes more than a dozen trips away from home each week – to work, shopping, errands, social and recreation activities. Many of these trips are flexible in terms of their timing, mode, and destination. For example, many commuters can vary when and how they travel to work or school, at least some days. Similarly, errands can be organized in various ways, such as walking or bicycling to neighborhood shops, driving to a downtown or mall, or making several automobile trips to various destinations dispersed along major highways. Recreational activities can also have various travel options, ranging from a neighborhood stroll, driving across town to exercise at a gym, or cycling for errands and commuting. Many factors affect people's transport decisions including the relative convenience and safety of travel modes (such as whether streets have sidewalks and bike paths, and the quality of transit services available), prices (transit fares and the price of parking at destinations); and land use factors (such as whether or not schools, parks and shops are located close to residential neighborhoods). Even freight transport often has flexibility in how goods are shipped, and deliveries organized. (Litman)

Transportation Demand Management strategies influence these factors to encourage more efficient travel patterns, such as shifts from peak to off-peak periods, from automobile to alternative modes, and from dispersed to closer destinations. (Litman)

There are numerous TDM strategies using various approaches to influence travel decisions. Some improve the transport options available; some provide incentives to change travel mode, time, or destination; others improve land use accessibility; some involve transport policy reforms and new programs that provide a foundation for TDM. (Litman)

Parking Management

Transportation demand management usually includes an array of strategies and tools for parking management, in addition to transportation management, depending on the existing conditions and desired outcomes:

- Integrated or active parking network management
- Shared parking
- Remote parking
- Public parking
- Demand-based paid parking – adaptive metering
- District parking wayfinding and signage
- Real-time parking information
- Capacity monitoring

[1] selected excerpts from Todd Litman, Victoria Transport Policy Institute, TDM Encyclopedia are inserted and marked at the end of the paragraph in parenthesis. Links to the online free resources are: https://www.vtpi.org/tdm/tdm12.htm, https://www.vtpi.org/tdm/tdm72.htm and https://www.vtpi.org/park_man.pdf

- Commuter parking benefits
- Cash or fees-in-lieu
- Mechanized parking
- Shared use mobility
- Technology based efficiency
- Curb management, etc

The case for parking management

Parking management refers to policies and programs that result in more efficient use of parking resources. It represents a *paradigm shift*, that is a change in the way parking problems are defined and potential solutions evaluated.

> *Old paradigm*: motorists should nearly always be able to easily find, convenient, free parking at every destination. Parking planning consists primarily of generous minimum parking requirements, with costs borne indirectly, through taxes and building rents.
>
> *New paradigm*: parking facilities should be used efficiently, so parking lots at a particular destination may often fill (typically more than once a week), provided that alternative options are available nearby, and travelers have information on these options. This means, for example, that parking lots have a sign describing availability that motorists may often have a choice between paid parking nearby, or free parking a few blocks away. It also requires good walking conditions between parking facilities and the destinations they may serve. (Litman)

Parking management benefits

- **Facility cost savings**. Reduces costs to governments, businesses, developers and consumers.
- **Improved quality of service**. Many strategies improve user quality of service by providing better information, increasing consumer options, reducing congestion and creating more attractive facilities.
- **More flexible facility location and design**. Parking management gives architects, designers and planners more ways to address parking requirements.
- **Revenue generation**. Some management strategies generate revenues that can fund parking facilities, transportation improvements, or other important projects.
- **Reduces land consumption**. Parking management can reduce land requirements and so helps to preserve greenspace and other valuable ecological, historic and cultural resources.
- **Supports mobility management**. Parking management is an important component of efforts to encourage more efficient transportation patterns, which helps reduce problems such as traffic congestion, roadway costs, pollution emissions, energy consumption and traffic accidents.
- **Supports Smart Growth**. Parking management helps create more accessible and efficient land use patterns and support other land use planning objectives.
- **Improved walkability**. By allowing more clustered development and buildings located closer to sidewalks and streets, parking management helps create more walkable communities.
- **Supports transit.** Parking management supports transit-oriented development and transit use.
- **Reduced stormwater management costs, water pollution and heat island effects**. Parking management can reduce total pavement area and incorporate design features such as landscaping and shading that reduce stormwater flow, water pollution and solar heat gain.
- **Supports equity objectives**. Management strategies can reduce the need for parking subsidies, improve travel options for non-drivers, provide financial savings to lower-income households, and increase housing affordability.

- **More livable communities**. Parking management can help create more attractive and efficient urban environments by reducing total paved areas, allowing more flexible building design, increasing walkability and improving parking facility design. (Litman)

Table 1 **Old and New Parking Paradigms Compared**

Old Parking Paradigm	New Parking Paradigm
"Parking problem" means inadequate parking supply.	There can be many types of parking problems, including inadequate or excessive supply, too low or high prices, inadequate user information, and inefficient management.
Abundant parking supply is always desirable.	Too much supply is as harmful as too little.
Parking should generally be provided free, funded indirectly, through rents and taxes.	As much as possible, users should pay directly for parking facilities.
Parking should be available on a first-come basis.	Parking should be regulated to favor higher priority uses and encourage efficiency.
Parking requirements should be applied rigidly, without exception or variation.	Parking requirements should reflect each particular situation, and should be applied flexibly.
Innovation faces a high burden of proof and should only be applied if proven and widely accepted.	Innovations should be encouraged, since even unsuccessful experiments often provide useful information.
Parking management is a last resort, to be applied only if increasing supply is infeasible.	Parking management programs should be widely applied to prevent parking problems.
"Transportation" means driving. Land use dispersion (sprawl) is acceptable or even desirable.	Driving is just one type of transport. Dispersed, automobile-dependent land use patterns can be undesirable.

Parking management changes the way parking problems are defined and solutions evaluated.

(https://www.vtpi.org/park_man.pdf page 7)

Parking Management Principles

These ten general principles can help guide planning decision to support parking management.

1. **Consumer choice**. People should have viable parking and travel options.
2. **User information**. Motorists should have information on their parking and travel options.
3. **Sharing.** Parking facilities should serve multiple users and destinations.
4. **Efficient utilization**. Parking facilities should be sized and managed so spaces are frequently occupied.
5. **Flexibility**. Parking plans should accommodate uncertainty and change.
6. **Prioritization**. The most desirable spaces should be managed to favor higher-priority uses.
7. **Pricing**. As much as possible, users should pay directly for the parking facilities they use.
8. **Peak management**. Special efforts should be made to deal with peak-demand.
9. **Quality vs. quantity**. Parking facility quality should be considered as important as quantity, including aesthetics, security, accessibility and user information.
10. **Comprehensive analysis**. All significant costs and benefits should be considered in parking planning. (Litman)

How does it function

Transportation demand management is meant to be a coordinated operational and implementation program that relies heavily on partnerships and shared responsibility to ensure specificity and tailored solutions for each location and supports other city goals.

A general framework for transportation demand management program:

- is approved by City Council based on qualifying criteria,
- covers a specified and well-defined geographical area,
- includes an authority responsible with the implementation and operation, that is a partnership and relies on the City participation,
- functions based on an Integrated Parking/Transportation Plan that is performance based and contains a menu of management tools customized to the area's needs and goals,
- functions on transparency and equity principles of government.

General guidelines to developing an Integrated Parking/Transportation Plan

Below are recommendations for integrated parking planning. This should be adjusted to reflect the needs of a particular situation.

1. **Define Scope**: Define the geographic scope of analysis, such as the site, street, district/neighborhood, and regional scale. It is desirable to plan for a walkable area, such as a business district or neighborhood since this is the functional scale of parking activities.
2. **Define Problems**: Carefully define parking problems. For example, if people complain of inadequate parking it is important to determine where, when and to whom this occurs, and for what types of trips (deliveries, commuting, shoppers, tourists, etc.).
3. **Strategic Planning Context**: Parking planning should be coordinated with a community's overall strategic vision. This helps ensure that individual decisions reflect broader community objectives.
4. **Establish Evaluation Framework**: Develop a comprehensive evaluation framework. This provides the basic structure for analyzing options, ensuring that critical impacts are not overlooked, and different situations are evaluated consistently. A framework identifies:
    - Perspective and scope, the geographic range and timescale of impacts to consider.
    - Goals (desired outcomes to be achieved) and objectives (ways to achieve goals).
    - Evaluation criteria, including costs, benefits and equity impacts to be considered.
    - Evaluation method, how impacts are to be evaluated, such as benefit/cost analysis.
    - Performance indicators, practical ways to measure progress toward objectives.
    - Base Case definition, that is, what would happen without the policy or program.
    - How results are presented, so results of different evaluations can be compared.
5. **Survey Conditions**: Survey parking supply (the number of parking spaces available in an area) and demand (the number of parking spaces occupied during peak periods) in the study area.
6. **Identify and Evaluate Options**: Develop a list of potential solutions using ideas from this report and stakeholder ideas. Evaluate each option with respect to evaluation criteria.
7. **Develop an Implementation Plan**: Once the components of a parking management plan are selected, the next step is to develop an implementation plan. This may include various phases and contingency-based options. For example, some strategies will be implemented the first year, others within three years, and a third set will only be implemented if necessary, based on performance indicators such as excessive parking congestion or spillover problems. (Litman)

Among desired outcomes of transportation demand management programs at city level may be:

- coordination and supervision,
- performance-based approach and focus on quality of services,

- data sharing and assessment that can enable a program to collect information on parking supply, demand, costs and prices, and if possible incorporate it into an online database that integrates with other mapping and planning data systems,
- partnerships for larger impact public benefits.

Cities with various types of transportation demand management frameworks, some as parking reduction tools, some to allow to exceed the required maximum ratios, some for certain districts, downtown being most popular: Atlanta, San Jose, San Diego, Minneapolis, Edmonton, Seattle.

Possible frameworks for management that can be recommended with the parking code amendment:

1. Transportation Management Districts

A framework suitable for larger areas, that are mixed use destinations that attract a large volume of visitors and support long-distance mobility. It involves a more sophisticated mechanism that is intended to address, include, and coordinate all modes of transportation, with heavier reliance on multimodal encouragement, parking being a level of coordination as well.

This framework has the potential to implement citywide goals, thus may need to rely on the coordination with the City and may aim at larger impact or investment and can collect and contribute to larger public benefits: public parking garages, contributions to transit, all types of rideshare programs, piloting new technologies, etc.

General procedure:

- Qualifying criteria that is easily achievable and community friendly; may be initiated by the community.
- Establish a well-defined geographical area.
- The establishment or amendment of a Transportation Management District (TMD) may be considered an overlay and follow the procedures set out in the code, subject to City Council approval.
- For purposes of meeting parking standards, the entire area within the TMD shall be considered one lot.
- Approval based on a Site Plan to identify the area and general accessibility plan for all parcels.
- Approval based on an ***Integrated Transportation Plan*** *(guidelines in the report, see previous page).*
- The creation of an entity responsible for managing the district, that can be the board of a public improvement district (PID), tax increment financing reinvestment zone (TIF), or parking authority, and that will be a partnership with the city, or other governmental entity established under Texas law.

2. Parking Benefit Districts

A simpler and quicker framework that is suited for neighborhoods with adjacency with neighborhood-serving smaller commercial areas. The scope is to mainly manage the metering of on-street parking (either with pay stations on the periphery of the neighborhood or with the traditional parking meters) and reinvest the monies into public improvements to support the micro mobility of such areas (sidewalk and public landscaping maintenance, metering and fee collection, signaling, pavement/curb maintenance, etc).

Tools included in this framework can support and coordinate efficient use of all parking and curb space, allowing the district to act like a small-scale parking authority. The main focus is on curb management in the scope of monetization of curb space and reinvestment in the district.

General procedure

- Qualifying criteria that is easily achievable and community friendly; may be initiated by the community.
- Establish a well-defined geographical area.
- The establishment or amendment of a Parking Benefit District (PBD) may be considered an overlay and follow the procedures set out in the code, subject to City Council approval.
- Based on a study of the area to assess the efficiency, safety, and regulation of the traffic on the public streets.
- Approval based on a scaled-down version of an ***Integrated Parking Plan*** that focuses on curb side management and pricing *(guidelines in the report, see previous page).*
- For purposes of meeting parking standards, the entire area within the TMD shall be considered one lot.
- The creation of an entity responsible for managing the district, that can be a neighborhood association or board, or a parking authority, and that is a partnership with the city, or other governmental entity established under Texas law.

A Recommended Approach to Neighborhood Management: Parking Benefit Districts

Pricing is the most efficacious means of managing on-street parking when occupancy routinely exceeds practical capacity. A *Parking Benefit District* (PBD) program could be made available to neighborhoods facing parking challenges, regardless of whether the neighborhood is currently covered by an RPP. The PBD program would incorporate the following components:

- *Allow neighborhoods to opt-in.* Neighborhoods could elect (through an adopted administrative process) to create a PBD. If the neighborhood is currently covered by an RPP, the PBD would replace the RPP (or applicable portion thereof).
- *Employ price-based regulation and associated elements.* Variable pricing is necessary to effectively manage on-street parking in high-demand neighborhoods. New technology would be deployed to allow for variable pricing, user information, and enhanced enforcement. The hours during which parking is priced would be evaluated and modified as necessary. Conventional strategies, such as provision of loading zones, would be reevaluated and adjusted appropriately.
- *Expand metering to areas with peak parking demands in excess of 85%.* All blocks with practical capacity issues warrant price-based management. Expansion of metering into areas traditionally designated as “residential” could potentially be paired with an exemption for preferential permit holders (priced at higher than current rates, as discussed above) at all or some times of day.

- *Provide parking privileges to preferential permit holders at an appropriate price point.* Residents of the neighborhood would be permitted to purchase monthly permits for on-street parking on residential streets in the neighborhood. Permits should be priced at a high enough level to appropriately value on-street space and reduce demand for on-street parking (by encouraging off-street parking, reduced vehicle ownership, etc.).
- *Invest a portion of net new revenues within the neighborhood and involve the community in prioritizing expenditures.* This is the central element of PBDs. By pairing the PBD concept with price-based regulation there is even greater opportunity for neighborhoods to reap the benefits of pricing—through improved parking reductions and a reduction in traffic volumes, as well as through funding available to invest in local transportation projects.
- *Recognize the limits of fully addressing peak demand in residential areas.* In many neighborhoods, demand for overnight on-street parking is especially high. Overnight parking demand is likely to be managed to some extent by higher preferential permit fees, but even a price-based PBD program must recognize the limits of using price during very late hours when enforcement is more of a challenge. It is important to note that on-street occupancies in excess of 85 percent may be more tolerable during the late-night periods, when traffic volumes are light, and businesses and other activities are less dependent on prioritizing short-term parking and ensuring sufficient availability. (Litman)

These strategies represent a significant change for any neighborhood. As such, neighborhoods should be involved in choosing the amount and type of price-based regulation and supporting strategies that are desired in a given area. Because more aggressive strategies will provide more revenue, higher levels of benefit should be returned to those neighborhoods that are most willing to proactively manage on-street parking through price-based regulation and restructured residential permit parking. (Litman https://www.vtpi.org/tdm/tdm72.htm)

Data collection and assessment tool

By shifting towards transportation demand management approach, the coordination and partnerships with all initiatives under such a program may allow the creation of a centralized data collection and assessment tool that is crucial in understanding travel behaviors and may be able to add different layers to an analysis, like jobs, affordable housing, in addition to the possibility to include all transportation options. Such a tool may be a key to right-sized parking, demand-priced parking, right-sized and priced shared mobility, etc.

Examples:

1.

Seattle's The King County Right Size Parking Calculator – Right Size Parking

https://rightsizeparking.org/

About the Calculator

What does it do?

The King County Right Size Parking Calculator lets users estimate parking use in the context of a specific site, based on a model using current local data of actual parking use correlated with factors related to the building, its occupants, and its surroundings—particularly transit, population and job concentrations. The calculator can help analysts, planners, developers, and community members weigh factors that will affect parking use at multi-family housing sites. It will help them consider how much parking is "just enough" when making economic, regulatory, and community decisions about development.

The calculator's estimates are based on a model developed from field work data on parking utilization collected in 75 building in 2017, in addition to the 208 buildings collected in the winter and spring of 2012 on over 200 developments in urban and suburban localities in King County, Washington (Seattle and its suburbs). The calculator estimates a parking/unit ratio for an average residential building based on the characteristics of each location. A user can create scenarios for a parcel based on seven variables (see Background for more detail).

Why parking matters

The supply and use of parking are influenced by—and have influences on—development practices, local policies, economic impacts on builders and households, and community goals. The supply and price of parking also have direct relationships with travel behavior. Too much parking at residential properties correlates with more automobile ownership, more vehicle miles traveled, more congestion, and higher housing costs. In addition, excess parking presents barriers to smart growth and efficient transit service.

Parking supply and pricing often have a direct impact on the ability to create compact, healthy communities. King County Metro Transit has an interest in encouraging land uses, policies, and development that lead to communities that can be served efficiently and effectively by transit. Locally credible and context-sensitive data on parking use allows jurisdictions in King County to:

- Support economic development by reducing barriers to building multifamily residential developments in urban centers near quality transit infrastructure.
- Reduce housing costs as well as household monthly expenditures, allowing a larger demographic to participate in the urban, infill housing market.
- Encourage transit use, ridesharing, biking, and walking.
- Reduce traffic congestion, vehicle miles traveled, and the amount of greenhouse gases produced.

Who's Involved?

This calculator was developed as a part of King County Metro Transit's Right Size Parking Project, which is funded with a grant from the Federal Highway Administration's Value Pricing Program. Partners include the Center for Neighborhood Technology, who constructed the statistical model and developed the website tool, and the Urban Land Institute, Northwest Chapter, who provided community engagement and outreach support throughout the project. For more information on the project, see the King County Right Size Parking website.

2.
Park Right DC
http://parkrightdc.org/index.php

(same as Seattle's)

Who's Involved?

This calculator was developed jointly by the District Department of Transportation (DDOT) and the District of Columbia Office of Planning (OP) with consultant support from local and national leaders in parking and transportation planning.

The Park Right DC Calculator builds on past efforts such as King County's (Washington) Right Size Parking Calculator developed as part of King County Metro Transit's Right Size Parking Project. For more information on King County's work, see the King County Right Size Parking Calculator website.

3.

Boston Region Metropolitan Planning Organization's Unified Planning Work Program - Perfect Fit Parking Initiative - Perfect Fit Parking

https://perfectfitparking.mapc.org/

The Metropolitan Area Planning Council (MAPC) is the regional planning agency that serves the people who live and work in the 101 cities and towns of Metropolitan Boston.

In coordination with property owners, MAPC collected overnight parking data at nearly 200 sites across the Inner Core subregion, which includes Boston and 20 surrounding cities and towns. They analyzed the data and proposed corrections based on data and research. It is a more sophisticated parking demand analysis, but that includes jobs and affordable housing layers to the analysis.

4.

San Francisco - TransForm's GreenTRIP Parking Database

http://database.greentrip.org/

TransForm's GreenTRIP Parking Database includes data gathered at multi-family residential sites around the San Francisco Bay Area. Data collection began in November 2013, and is ongoing. The data shows parking supplied, and parking used, at each site.

Use the parking database to search for sites similar to a project you have in mind and to see actual parking used for households in a particular location, within a certain type of residence, or at sites with traffic reduction strategies. Reports can be printed and shared with developers and decision-makers.

For more information about the GreenTRIP Parking Database, visit the GreenTRIP website. You can always access the database at database.greentrip.org.

We invite you to learn more about GreenTRIP Connect, a dynamic model that will build on the Parking Database. GreenTRIP Connect will allow anyone to instantly see how much less driving and parking is possible when strategies for reducing traffic and increasing affordability are included in any multi-family housing project. More information on GreenTRIP Connect can be found here.

Appendix 1: ON-LINE FREE RESOURCES – SELECTED LIST

General info

USDOT - Federal Highway Administration
https://www.fhwa.dot.gov/environment/sustainability/energy/publications/reference_sourcebook/page05.cfm#s2

Wikipedia
https://en.wikipedia.org/wiki/Transportation_demand_management

Texas A&M Transportation Institute
https://mobility.tamu.edu/mip/strategies-pdfs/travel-options/technical-summary/Transportation-Management-Associations-4-Pg.pdf

Victoria Transport Policy Institute - Online TDM Encyclopedia
https://www.vtpi.org/tdm/

Transportation Management District examples

Montgomery County Department of Transportation – several Transportation Management Districts
https://www.montgomerycountymd.gov/DOT-DIR/commuter/tmd/index.html

Austin, Tx
http://www.austintexas.gov/edims/document.cfm?id=224965

Houston, Tx - Museum District
https://www.museumparkna.org/Resources/Documents/Parking%20-%20Museum%20District%20Presentation%20-%2007-25-2014.PDF

Arlington, Virginia
https://mobilitylab.org/
(Mobility Lab is a research center and news source for transportation behavior and policy. It is based in Arlington, Virginia – which has one of the largest "transportation demand management" programs in the U.S.)
https://mobilitylab.org/parking/
https://mobilitylab.org/about-us/what-is-tdm/

Tufts University Transportation Demand Management Strategies
https://sustainability.tufts.edu/wp-content/uploads/TDM-Report-April-2015.pdf
(example of Integrated Transportation Plan)

Pasadena, Ca
https://nacto.org/wp-content/uploads/2011/10/Pasadena.pdf

Parking Benefit District examples and information

https://whyy.org/articles/ideas-worth-stealing-parking-benefit-districts/
https://www.metro.net/projects/tod-toolkit/parking-benefit-districts/

Data collection and assessment examples

Metro Boston Perfect Fit Parking Initiative
https://perfectfitparking.mapc.org/

the report can be found here:
https://perfectfitparking.mapc.org/assets/documents/Final%20Perfect%20Fit%20Report.pdf

Seattle, The King County Right Size Parking Calculator
https://rightsizeparking.org/

DC – Park Right DC
http://parkrightdc.org/index.php

Arlington, Virginia: TDM Return on Investment Calculator (TDM ROI), TRIMMS model 4.0 (Trip Reduction Impacts of Mobility Management Strategies)
https://mobilitylab.org/calculators/