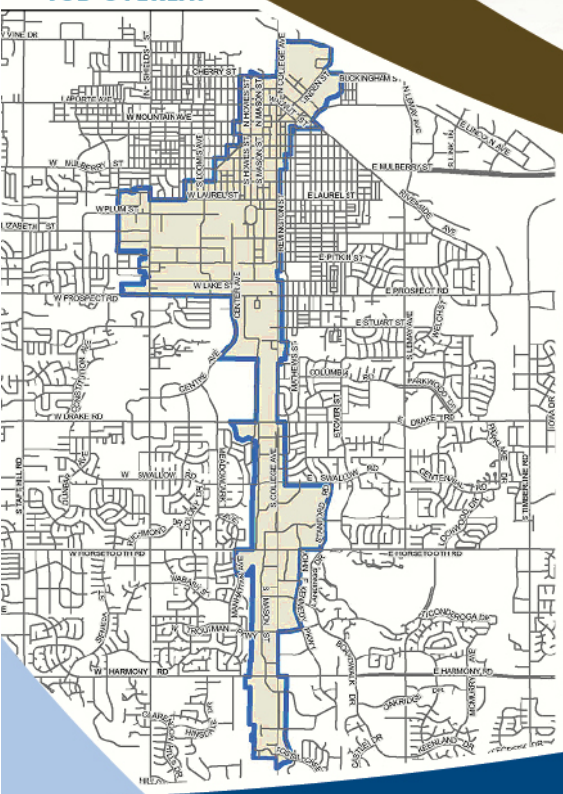
Transit-Oriented DEVELOPMENT

TOD OVERLAY



City of Fort Collins

PARKING STUDY

November 4, 2014

TABLE of CONTENTS

Contents

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Executive Summary

Background:
The purpose of the Transit-Oriented Development (TOD) Overlay Zone is to encourage transit-supported, compact, and walkable infill and redevelopment projects. Adopted in 2006-07, the TOD Overlay Zone standards removed minimum parking requirements for mixed-use and multi-family dwellings. The intent is to incentivize redevelopment on challenging infill sites, and show commitment to the MAX Bus Rapid Transit (BRT) investment.

Problem Statement:
In 2013, as development activity increased in the Transit Oriented Development (TOD) Overlay Zone, the Planning and Zoning Board and the City Council expressed concerns associated with the increasing number of multi-family and mixed-use housing (with a student-oriented housing emphasis) projects. The concerns include a perceived lack of development-provided parking spaces in relation to the parking demand generated, and thus the potential for spill-over parking into adjacent neighborhoods. Concerns have also been expressed about the need for parking structures to accommodate the envisioned density.

Fueled by these concerns, the City Council adopted a "stop-gap" ordinance (Ord. 121, 2013) requiring minimum parking in the TOD Overlay Zone. The temporary minimum requirement is 70% of the existing standard outside the TOD Overlay Zone with an alternative compliance element that permits a parking impact study to show a reduction in parking demand.

Five Recommendations:

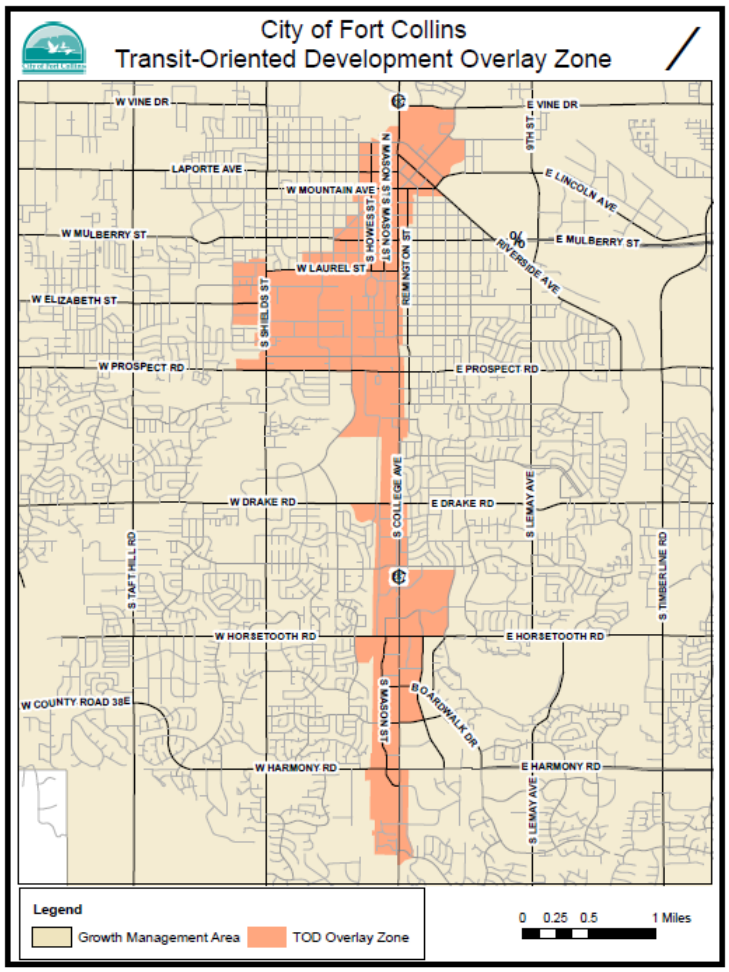
1. Minimum parking requirements for development projects that vary based on land use;
2. Allow for alternative compliance based on parking demand mitigation strategies;
3. On-street paid parking with modern management technology;
4. Public-private partnerships for parking structures; and
5. Monitor effects of MAX Bus Rapid Transit on parking conditions in the long term.

Study Approach and Process:
The Study team evaluated 1) planning context in terms of existing city policies and regulations related to TOD; 2) research of parking literature, best practices, and peer cities; 3) triple-bottom-line analysis; 4) public involvement and stakeholder feedback; 5) parking utilization data collected throughout the Overlay Zone; and 6) review of alternatives.

Introduction and Project Purpose

Background:

The Transit-Oriented Development (TOD) Overlay Zone primarily consists of the commercial districts in the College Avenue and Mason Street Corridors, Downtown and the CSU Campus areas. The purpose of the TOD Overlay Zone is to encourage transit-supported, compact, walkable infill and redevelopment projects. Adopted in 2006-07 the TOD Overlay Zone standards removed minimum parking requirements for mixed-use and multi-family dwellings. The intent was to incentivize redevelopment on challenging infill sites, show commitment to the MAX Bus Rapid Transit (BRT) investment, and to encourage urban densities as a result of the Growth Management Area (GMA). The amount of parking was expected to be driven by market demand, balancing the need to provide adequate parking as an amenity, with the constraints of maximizing development potential on difficult infill sites.



Problem Statement:

In 2013, as development activity increased in the TOD Overlay Zone, the Planning and Zoning Board and the City Council expressed concerns with an increasing number of multi-family and mixed-use housing projects with a student-oriented housing emphasis. The concerns include a perceived lack of development-provided parking spaces in relation to the parking demand they are generating and, in turn, potentially leading to spill-over parking into adjacent neighborhoods. Concerns have also been expressed about the need for parking structures to accommodate the envisioned density in the TOD zone.

The City has the ability to require additional parking as it relates to neighborhood compatibility, however the tools to determine the parking demand are not in place and thus the City does not have an objective measure on which to base such a requirement. Fueled by these concerns, the City Council adopted a "stop-gap" ordinance (Ord. 121, 2013) requiring minimum parking in the TOD Overlay Zone. The new minimum requirement is 70% of the existing non-TOD standard with an alternative compliance element that permits a parking impact study to show a reduction in parking demand. The ordinance will expire on September 13, 2014, during which time the City, with the assistance of an expert consultant, are conducting a TOD Overlay Zone Parking Study (this report) that will result in a plan to implement

permanent comprehensive parking requirements based on an evaluation of parking utilization information and best practices.

Study Objectives:

1. Implement parking standards in the Land Use Code ("LUC" or "Code") for multi-family and mixed-use residential and commercial development in the TOD Overlay Zone.
    a. Ensure parking standards are in conformance with the community vision as outlined in City Plan, the Parking Plan, the Transportation Master Plan and the Mason Corridor Plan, in regards to transit-oriented development and neighborhood compatibility.
    b. Explore a comprehensive approach to TOD Overlay Zone parking requirements.
    c. Base standards on data collected and best practices for a community the size of Fort Collins.
2. Engage community stakeholders, specifically residents and business owners in and adjacent to the TOD Overlay Zone and the Fort Collins Parking Advisory Board, through a thorough outreach process in which issues are discussed, accepted best practices are reviewed and alternatives are presented for feedback.
3. Establish a policy foundation for parking in the TOD Overlay Zone as an amendment to the existing Parking Plan.
4. Evaluate the options of parking impact fees or parking in-lieu fees.

Study Approach and Process:

1) Review Planning Context
    - The Study evaluated major City planning documents that relevant to the planning framework and context for the TOD Overlay Zone: City Plan (2011), Parking Plan (2012), Midtown Plan (2013), and Transportation Master Plan (2011). In summary, these documents encourage mixed-use infill and redevelopment within targeted areas (particularly the TOD Overlay Zone), support more multi-modal transportation options, and acknowledge the need to preservation neighborhood character.

2) Research Best Practices
    - Parking Literature Review: Much of the leading research on parking policy can be summarized with the following quotes, "Too much parking at residential properties correlates with more automobile ownership, more vehicle miles traveled, more congestion, more carbon emissions, and higher housing costs. It also results in lost development opportunity because excess parking area could have been used instead for residential or commercial development or public realm uses such as parks and plazas." (Mark Gander, Director of Urban Mobility and Development at AECOM)
    - Establishing Parking Requirements: According to Todd Litman, author of Parking Management Best Practices, should consider the following in order to create parking requirements tailored to specific development projects:
        - Surrounding land use mix.
        - Availability of transportation choices.
        - Population and development density.
        - Development type and size.
    - Peer Cities Review Related to Zoning Policy and Parking Requirements: A review of best practices and policies from other communities was conducted. Best practices in this area involve providing lower minimum parking

requirements in TOD areas with alternative compliance mechanisms that provide opportunities to reduce parking demand further based on data driven processes incorporating a comprehensive approach that leverages shared public/private facilities and a range of transportation demand management options for private development.

3) Conduct Triple Bottom Line Analysis
   - Consistent with City sustainability policy, a "triple bottom line" analysis was conducted by staff from several City departments using the City's Triple Bottom Line Analysis Map (TBLAM) exercise. This assessment identified potential strengths, limitations, opportunities and threats in the categories of social, economic and environmental impacts related to the reinstatement of minimum parking requirements compared to the previous policy which eliminated minimum parking requirements. In summary, the TBLAM suggests a balance of strengths and limitations in regard to minimum parking requirements, and recommends additional TBLAMs with more information and other stakeholders.

4) Involve Public and Stakeholders
   - An extensive community outreach process provided a wide range of opinions and concerns. Many expressed the opinion that while the vision and goals of the City related to the TOD corridor are commendable, people still have cars and need a place to put them. Accessible, but off-site vehicle storage emerged as a key strategy for evaluation. The concept of pursuing public/private partnerships as a preferred mechanism for developing a variety of shared parking assets as a component of a district specific targeted development strategy (Business Scorecard approach referenced later in this report) emerged as a best practice and study recommendation.
   - Identification of Special Issues: The primary "special issue" identified with this study had to do with the fact that these policy issues were being addressed before the MAX line is up and running. If the MAX line is successful, as anticipated, this may have an impact on a range of issues including parking demand reductions, traffic congestion, increased investment and development, etc. Development of a process for on-going review and assessment was recommended.

5) Collect Parking Utilization Data
   - Parking utilization surveys were conducted around seven recent development projects within the TOD Overlay Zone, including the Summit. The bottom line was that parking utilization rates were within acceptable ranges (i.e., none would have met the minimum standard required to initiate the City's residential parking permit process). While acknowledging that some residents still express concerns regarding parking spillover, the problem, based on the collected data, does not appear to be as bad as initially believed.

6) Identify and Explore Alternatives
   - Each of these alternatives was assessed in this study and this analysis framed and informed the ultimate recommendations. No changes to current requirements
     - Minimum parking requirements with an alternative compliance based on a parking impact study
     - Parking requirements based on a parking impact study, with a development size threshold
     - Use of a parking demand model to determine a dynamic parking requirement that responds to transit and infrastructure build-out
     - Parking impact or In-lieu fees

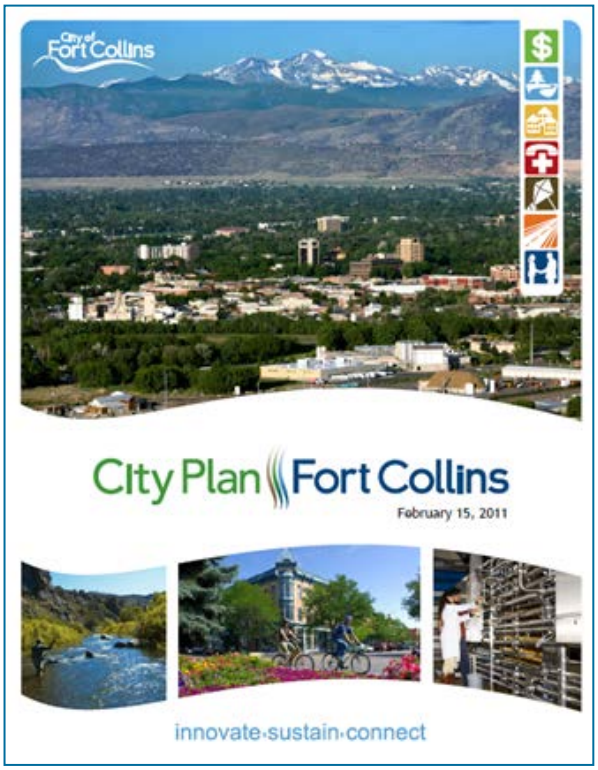
- Strategies for less surface parking and more structured parking
- Other innovations or strategies not mentioned above
- A combination of the above options

Planning Context – Building on Adopted Community Policy

This section of the report is designed to give the reader a summary of the major City planning documents that provide the planning framework and context in which this study is being evaluated. It is important to note that this planning work builds on work that has been previously vetted through significant community discussion and adopted as City policy.

PLAN FORT COLLINS

The name Plan Fort Collins refers to the 2010 process to develop major updates to two key planning documents: City Plan and the Transportation Master Plan.



CITY PLAN

City Plan is the comprehensive plan for the City of Fort Collins, and illustrates the vision for Fort Collins in the next twenty five years and beyond. The initial formulation of City Plan began in 1995 and involved a two-year process working with City Council, an advisory committee, City staff, a consulting team, and the public. The original creation of City Plan included extensive public involvement including the use of a visual preference survey. City Plan was adopted in 1997. Subsequent updates to City Plan were initiated in 2002 and adopted in 2004.

For the City's comprehensive plan to function over time, periodic updates are necessary to respond to significant trends or changes in the economic, physical, social, or political conditions of Fort Collins.

These previous planning efforts focused on identifying the future size and character of Fort Collins, and also included updates to reflect changes to and new trends in the community.

Specific principles and policies related to the Transit-Oriented Development (TOD) Overlay Zone:

Principle LIV 1: City development will be contained by well-defined boundaries that will be managed using various tools including utilization of a Growth Management Area, community coordination, and Intergovernmental Agreements.

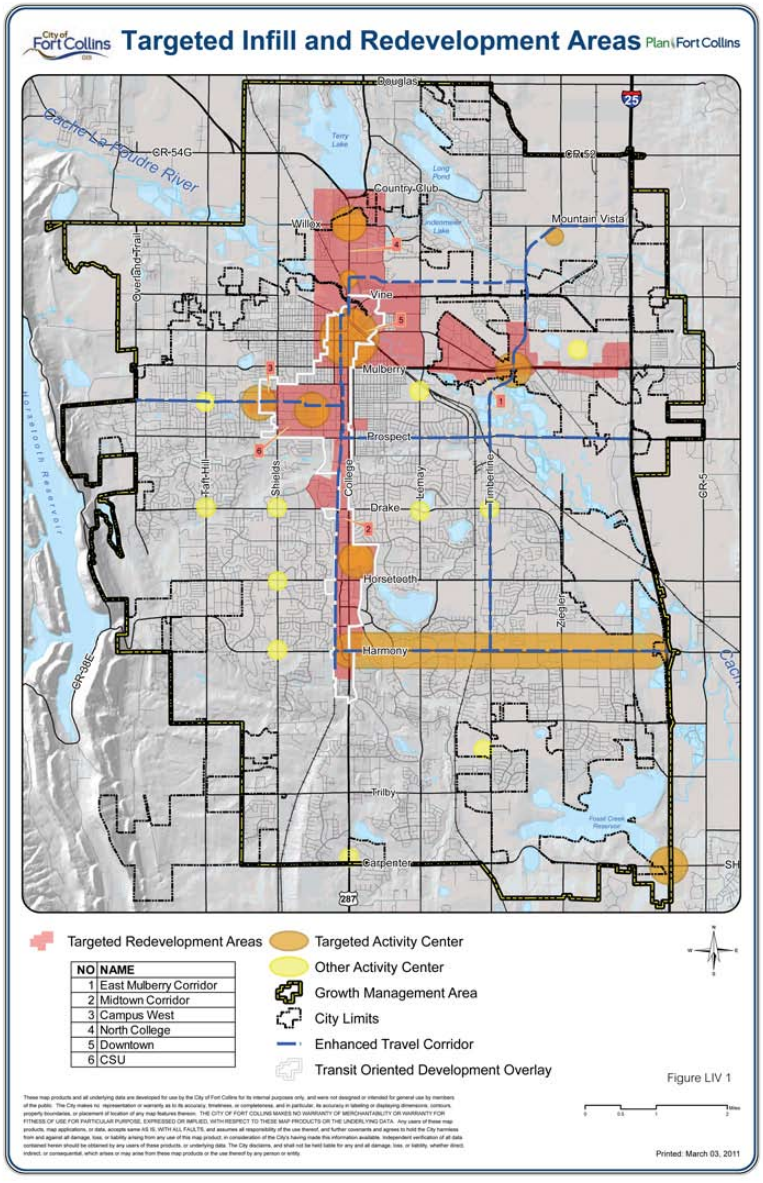
Policy LIV 1.1 – Utilize a Growth Management Area
Collaborate with the County and other jurisdictions in utilizing a Growth Management Area (GMA) surrounding Fort Collins to guide and manage growth outside of the City limits and delineate the extent of urban development in Fort Collins.

Principle LIV 5: The City will promote redevelopment and infill in areas identified on the Targeted Infill and Redevelopment Areas Map.

Policy LIV 5.1 – Encourage Targeted Redevelopment and Infill

Encourage redevelopment and infill in Activity Centers and Targeted Infill and Redevelopment Areas identified on the Targeted Infill and Redevelopment Areas Map (See Figure LIV 1). The purpose of these areas is to:

- Promote the revitalization of existing, underutilized commercial and industrial areas.
- Concentrate higher density housing and mixed-use development in locations that are currently or will be served by high frequency transit in the future and that can support higher levels of activity.
- Channel development where it will be beneficial and can best improve access to jobs, housing, and services with fewer and shorter auto trips.
- Promote reinvestment in areas where infrastructure already exists.
- Increase economic activity in the area to benefit existing residents and businesses and, where necessary, provide the stimulus to redevelop.



Areas identified on the Targeted Infill and Redevelopment Areas Map are parts of the city where general agreement exists that redevelopment and infill would be beneficial. These areas are generally considered a priority for efforts to reduce barriers and concentrate public investment in infrastructure. However, of the areas identified, the

"community spine" (see Policy LIV 5.2) shall be the highest priority location for such efforts. Areas not shown on the Targeted Infill and Redevelopment Areas map are not excluded from redevelopment and infill activity, but are considered to be lower priority or where activity is less likely to occur for other reasons.

Policy LIV 6.2 – Seek Compatibility with Neighborhoods
Encourage design that complements and extends the positive qualities of surrounding development and adjacent buildings in terms of general intensity and use, street pattern, and any identifiable style, proportions, shapes, relationship to the street, pattern of buildings and yards, and patterns created by doors, windows, projections and recesses. Compatibility with these existing elements does not mean uniformity.

Policy LIV 6.3 – Encourage Introduction of Neighborhood-Related, Non-Residential Development
Encourage the addition of new services, conveniences, and/or gathering places in existing neighborhoods that lack such facilities, provided they meet performance and architectural standards respecting the neighborhood's positive characteristics, level of activity, and parking and traffic conditions.

Policy LIV 7.4 – Maximize Land for Residential Development
Permit residential development in most neighborhoods and districts in order to maximize the potential land available for development of housing and thereby positively influence housing affordability.

Policy LIV 7.7 – Accommodate the Student Population
Plan for and incorporate new housing for the student population on campuses and in areas near educational campuses and/or that are well-served by public transportation.

Principle LIV 10: The city's streetscapes will be designed with consideration to the visual character and the experience of users and adjacent properties. Together, the layout of the street network and the streets themselves will contribute to the character, form, and scale of the city.

Policy LIV 10.1 – Design Safe, Functional, and Visually Appealing Streets
Ensure all new public streets are designed in accordance with the City street standards and design all new streets to be functional, safe, and visually appealing, with flexibility to serve the context and purpose of the street corridor. Provide a layout that is simple, interconnected, and direct, avoiding circuitous routes. Include elements such as shade trees, landscaped medians and parkways, public art, lighting, and other amenities in the streetscape. Approve alternative street designs where they are needed to accommodate unique situations, such as "green" stormwater functions, important landscape features, or distinctive characteristics of a neighborhood or district, provided that they meet necessary safety, accessibility, and maintenance requirements.

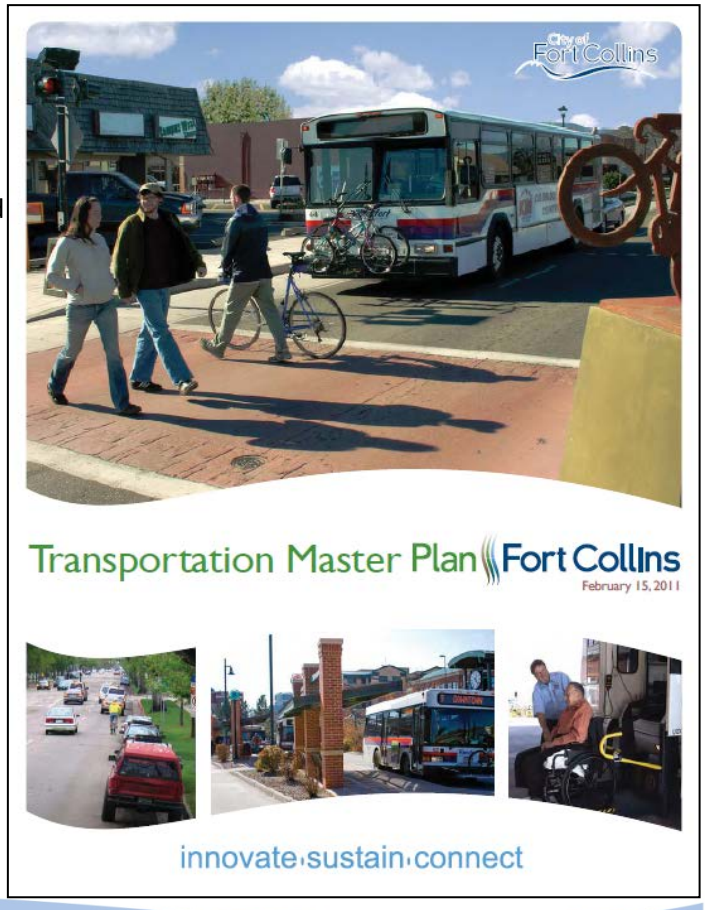
Policy EH 4.2 – Reduce Barriers to Infill Development and Redevelopment
Develop new policies and modify current policies, procedures, and practices to reduce and resolve barriers to Infill development and redevelopment. Emphasize new policies and modifications to existing policies that support a sustainable, flexible, and predictable approach to infill development and redevelopment.
Principle ENV 9: The City will reduce total mobile source emissions by focusing on both technology (e.g., tailpipe emissions) and behavior (e.g., driving patterns).

TRANSPORTATION MASTER PLAN

The Transportation Master Plan (TMP) is a long-term vision document that defines the long-term multimodal transportation system that Fort Collins desires in the future, and also serves as a comprehensive reference guide regarding transportation issues. Both documents provide policy directions for decision-making, and set forth priority actions to make the vision a reality. The TMP serves to document the vision for the long-term multimodal transportation system that will support the Fort Collins community into the future. The City of Fort Collins first developed a TMP in concert with the development of City Plan in 1997. The TMP defined the future of Fort Collins in terms of transportation, providing policy direction for how decisions regarding the implementation of the multi-modal transportation system should occur. It also set priorities for implementing projects to meet short-term deficiencies while working towards the ultimate transportation system the community desires.

The TMP, like City Plan, requires review and update every five years. In 2004 an effort to update the Transportation Master Plan began, but because of significant changes and additions to numerous areas it essentially became a new plan. Many of the goals, principles, and policies that were developed in 1997 remained valid, but the 2004 plan focused more on implementation of those goals, principles, and policies.

The plan provides priority actions and strategies for implementing projects and services to meet short-term needs while working toward the long-range goals for the ultimate transportation system the City and community strive to achieve. Actions are identified that will happen concurrent with the adoption of the plan in the short term (1-2 years) and longer term (3+ years). The Transportation Master Plan process also includes updates to the City's Master Street Plan (MSP), multimodal transportation Capital Improvement Plan (CIP), and the Pedestrian Plan.



Current values and goals are identified and summarized in the Plan Fort Collins Snapshot Report. The 2010 update also folds in and reflects other recent planning efforts and policy documents such as the Economic Action Plan, Climate Action Plan, Water Conservation Plan, Cultural Plan, Parks and Recreation Policy Plan, and many others. Related plans and policies are addressed within each of the seven topic-based chapters in this plan.

Community Vision - Innovate, Sustain, Connect

The City identified in its previous plans the community values and critical issues for building a framework that combines traditional planning principles and land development practices through planning directives and a community vision. A vision represents a desired future as defined by the community. Three major themes of Plan Fort Collins provide direction for the vision for the next 25 years and beyond: *Innovate, Sustain, and Connect*.

Innovate, Sustain, Connect

Innovate

The citizens of Fort Collins wish to advance their future in a positive and vital way, and City government, educational, and other institutions, as well as the private sector, have always been willing to lead and serve as models for other communities. Our vision reflects our desire to remain innovative, world-class leaders.

Sustain

The basic tenets of sustainability serve as the guiding principles for our vision and act as a foundation underpinning all components of each plan.

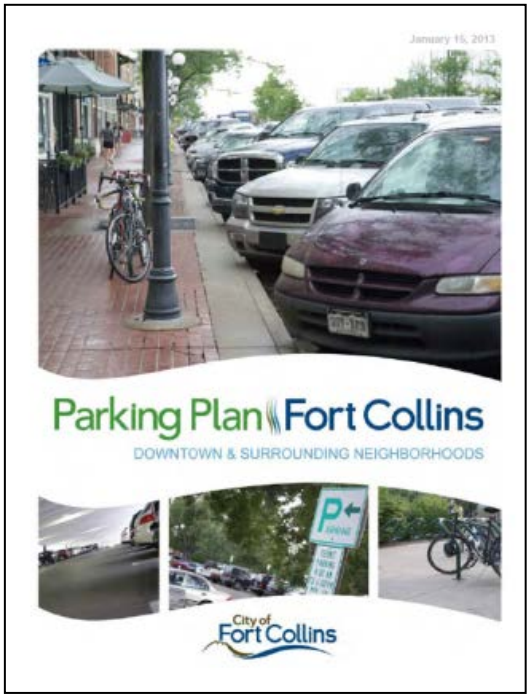
Connect

Being a "connected community" extends beyond the physical connections implied by our transportation system. It encompasses a community that is connected technologically and socially as well.

Our vision embraces a City that provides safe and efficient facilities for all modes of travel. It also encourages expansion of technological infrastructure to serve and connect the community, increasing access to information and fostering better communication between residents, businesses, institutions, and local government.

Finally, our vision promotes social connectivity through ongoing support of community organizations and volunteerism and by encouraging development patterns and creating gathering places that attract people and promote social interaction.

PARKING PLAN: DOWNTOWN & SURROUNDING NEIGHBORHOODS (2013)



The Parking Plan, updated in 2013, addresses a wide range of parking program elements including parking management strategies, organization, planning, operations, communications, technology, and others.
As noted in the Executive Summary of the Parking Plan, "The field of parking management has advanced significantly in recent years with new programmatic approaches, best practices, and technology solutions that can transform and expand the positive role that parking can play in helping communities achieve success."

The primary objective of this planning effort was to align parking system philosophies and programs to be more supportive of the larger community's strategic goals. There are many opportunities for parking to be integrated into larger community and economic development strategies. The development of effective and collaborative relationships between parking management and Downtown stakeholders can transform and greatly enhance the vitality of Downtown environments.

Parking is one of those activities that literally provide millions of "customer touches" each year. Improvements to the ease of use of parking and parking customer service can have a dramatic impact on how a community is perceived and on the success of community businesses and the livability of its neighborhoods.

This strategic approach offers the City an opportunity to expand the way parking is viewed and its important role in creating vibrant, healthy communities and business districts. The Plan promotes the philosophy that parking needs to be focused on overall Downtown access rather than parking in isolation. In other words, parking is integral to a variety of important community access strategies, rather than a discipline in isolation from the larger transportation system. This broader focus on "access management" while keeping a focus on the importance of parking specific issues provides a more balanced and sustainable community transportation system.

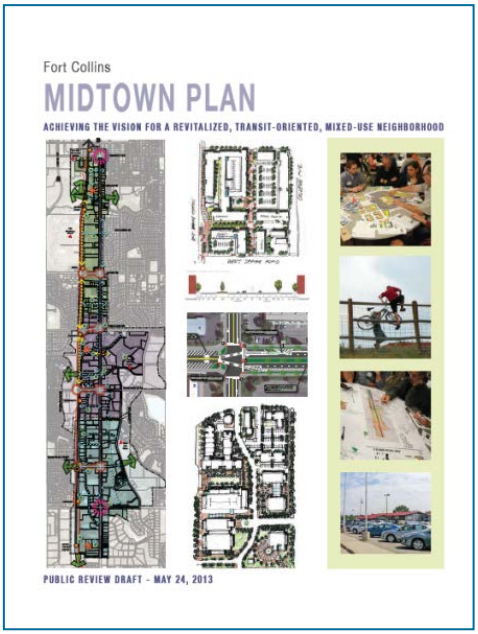
In summary, by evolving the parking program to better support the overall Downtown and community development objectives, the Parking Plan creates opportunities to better align parking and economic development, delivers a more comprehensive and sustainable approach to community access strategies, and establishes more collaborative relationships with related agencies and community partners.

The Downtown Strategic Plan (2004) led to improvements in Downtown parking, but conditions have changed and there are a number of issues yet to be resolved. The Parking Plan developed in 2013 focuses on unsolved problems and high-priority concerns identified by staff, the consultant team, and community stakeholders.

The following list provides some examples of these issues and concerns:

- As housing, jobs, and commercial activity grows in Downtown, what are the best ways to manage the supply and demand for parking?
- Do we need more parking infrastructure? If so, how do we pay for it?
- What is the best way to educate and engage the business community and Downtown management on the range of new parking management options and their benefits as they relate to supporting and enhancing a vibrant Downtown?
- How can the management of parking also support the needs of bicyclists, pedestrians, and bus riders?
- Are the City's parking policies regarding new development adequate to achieve the City's higher-level goals for sustainability, urban design, and overall mobility management?
- How can customer service regarding parking options be improved?
- What new policies are needed to address the impacts of parking in neighborhoods near Downtown and Colorado State University (CSU)?

MIDTOWN PLAN (2013)



The Midtown Plan provides a vision for Midtown as a vital corridor, with a mix of uses and activities that will serve a broad spectrum of the community. It envisions a district with a distinct identity that distinguishes it from other parts of the city, and that will ultimately be a destination in its own right.

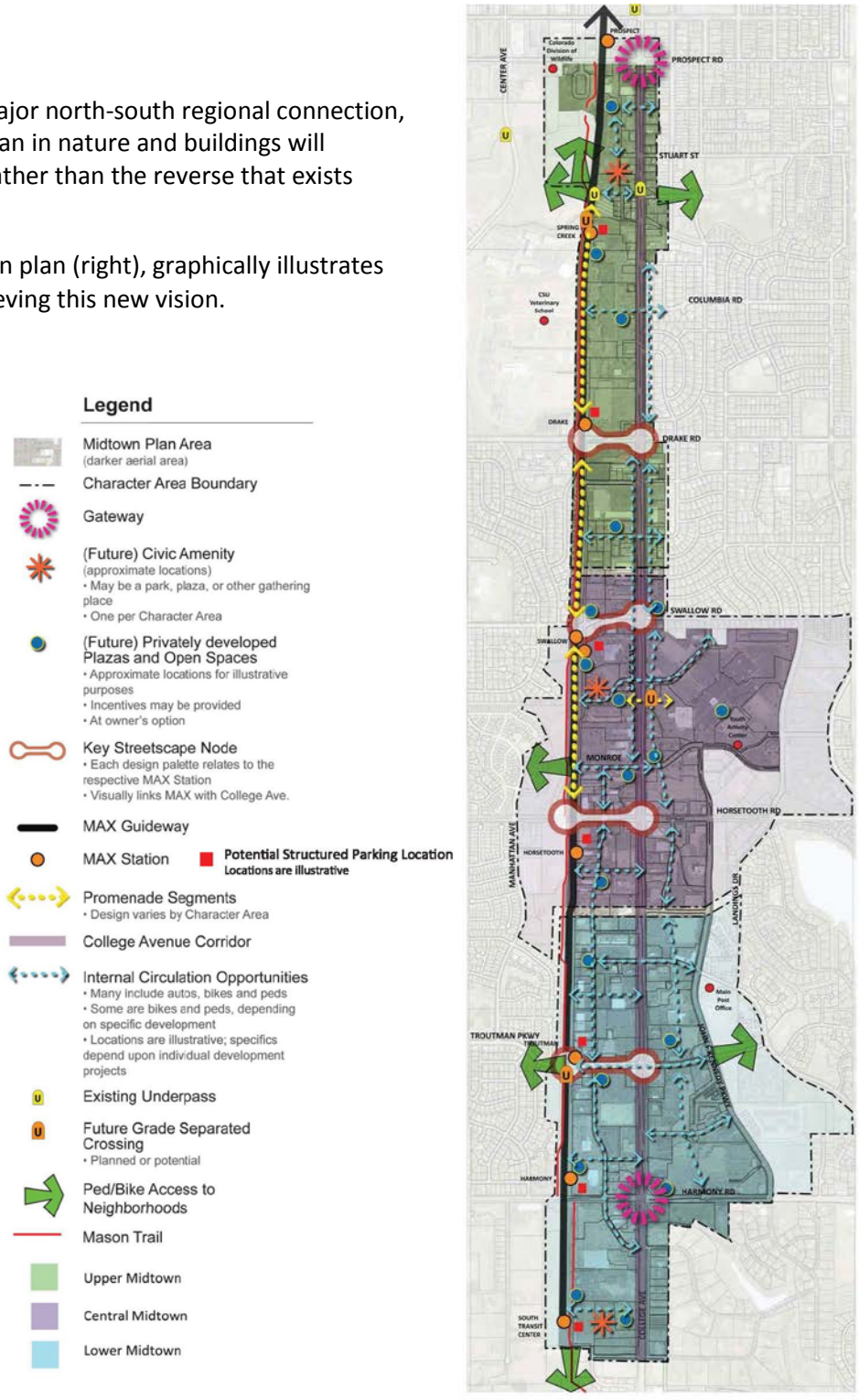
The plan promotes streets that are inviting to pedestrians and bicyclists, with attractive street edges, and active urban plazas and spaces. Signature features, including public art and civic facilities, will be located strategically throughout the area and will serve as identifiers for smaller sub-areas within Midtown and invite year-round use.

The vision for Midtown is that of an urban neighborhood of choice for many residents and an important economic generator for the city. It also should serve abutting residential neighborhoods and be conveniently accessible from them with the improvements of existing and addition of new streets throughout Midtown.

The Midtown Plan incorporates the MAX line as a central transportation spine. New development along this spine will be of high quality, sustainable urban form that supports a pedestrian-first environment and fronts onto MAX instead of turning its back onto it. Key intersections will connect pedestrian, bike and auto traffic, from College Avenue to MAX with identifiable streetscapes, signage and wayfinding.

College Avenue will continue to be a major north-south regional connection, but new development will be more urban in nature and buildings will address College with parking in back, rather than the reverse that exists today.

The Framework Map, from the Midtown plan (right), graphically illustrates the improvements to be made for achieving this new vision.



Background, Historical Context and Existing Conditions Review

Parking, on and off-street, is governed by the provisions of the City's Land Use Code. Specifically, the City regulates parking through Article 3, Section 3.2.2 of the City's adopted code which contains minimum off-street parking requirements for individual sites based on the land uses.

City of Fort Collins Land Use Code, Article 3, General Development Standards - Access, Circulation and Parking

This section sets forth parking requirements in terms of numbers and dimensions of parking stalls, landscaping and shared parking. It also addresses the placement of drive-in facilities and loading zones.

The general standard relative to parking and site circulation is summarized below:

> *"The parking and circulation system within each development shall accommodate the movement of vehicles, bicycles, pedestrians and transit, throughout the proposed development and to and from surrounding areas, safely and conveniently, and shall contribute to the attractiveness of the development. The on-site pedestrian system must provide adequate directness, continuity, street crossings, visible interest and security as defined by the standards in this Section. The on-site bicycle system must connect to the city's on-street bikeway network. Connections to the off-road trail system shall be made, to the extent reasonably feasible."*

The complete Section 3.2.2 (Access, Circulation and Parking) of the current zoning code can be found on the City's website (http://www.fcgov.com/building/pdf/usematrixmarch2012.pdf).

Parking Requirements

Of particular interest to this study is Section 3.2.2 (K). This portion of the Code spells out the required number of off-Street parking spaces by type of use. Sub-division (G) provides for Shared Parking standards. The contents of these sections are summarized below.

> (1) Residential and Institutional Parking Requirements. Residential and institutional uses shall provide a minimum number of parking spaces as defined by the standards below.
>
> > (a) Attached Dwellings: For each two-family and multi-family dwelling there shall be parking spaces provided as indicated by the following table:

Number of Bedrooms/Dwelling Unit	*Parking Spaces Per Dwelling Unit**
One or less	1.5
Two	1.75
Three	2.0
Four and above	3.0

* Spaces that are located in detached residential garages (but not including parking structures) or in attached residential garages, which attached garages do not provide direct entry into an individual dwelling unit, may be credited toward the minimum requirements contained herein only if such spaces are made available to dwelling unit occupants at no additional rental or purchase cost (beyond the dwelling unit rental rate or purchase price).

1. Multi-family dwellings and mixed-use dwellings within the Transit-Oriented Development (TOD) Overlay Zone shall provide a minimum number of parking spaces as shown in the following table (Note: the following standards were adopted as part of the "stop-gap" provisions, Ord. 121, 2013):

Number of Bedrooms/Dwelling Unit	*Parking Spaces Per Dwelling Unit **
One or less	1.1
Two	1.2
Three	1.4
Four and above	2.1

2. Alternative Compliance. Upon written request by the applicant, the decision maker may approve an alternative parking ratio, other than the minimum required in the TOD Overlay Zone per subparagraph 3.2.2(K)(1)(a)(1), that may be substituted in whole or in part for a ratio meeting the standards of this Section.

a. Procedure. Alternative compliance parking ratio plans shall be prepared and submitted in accordance with the submittal requirements for plans as set forth in this Section. The request for alternative compliance must be accompanied by a Parking Analysis.

b. Parking Analysis. A Parking Analysis shall include the following:

1) Data related to expected parking demand based on project size, location, employees, units and/or bedrooms. To the extent reasonably feasible, comparable local and regional parking demand rates for similar uses shall be utilized together with the average demand rates for similar facilities compiled by the Institute of Transportation Engineers (ITE).

2) Data related to estimated non-vehicular mode usage shall be determined based on a Transportation Impact Study analysis.

3) Identification of parking mitigation measures to be utilized (beyond non-vehicular mode usage and support). Specific measures to reduce on-site parking demand may include, but are not limited to:

a) Shared parking

b) Off-site parking

c) Parking pricing

d) Transit pass program

e) Unbundling parking spaces from residential dwelling units

f) Rideshare, guaranteed ride home programs, car sharing, shuttle services

g) Enhancements that encourage bicycle and pedestrian mobility

h) Other verifiable parking demand reduction measures

4) The number and location of parking spaces proposed to be removed as part of the project, if any.

5) Assignment of parking demand to proposed parking locations.

c. Review Criteria. To approve an alternative plan, the decision maker must first find that the proposed alternative plan accomplishes the purposes of this Section and the TOD Overlay Zone (3.10) equally well or better than would a plan which complies with the standards of these sections. In reviewing the request for an alternative parking ratio plan in order to determine whether it accomplishes the purposes of this Section, the decision maker shall take into account the objective and verifiable results of the Parking Analysis together with the proposed plan's compatibility with surrounding neighborhoods in terms of potential spillover parking.

Shared Parking (3.2.2.(G) provides standards for the reduction of required off-street parking for mixed use projects. Specifically, mixed use developments (retail, office, institutional, and entertainment) which create staggered peak parking demand periods may share parking facilities. However, parking requirements for residential uses cannot be shared.

City Council Ordinance 121, 2013

The 2013 city council adopted “stop-gap” ordinance (Ord. 121, 2013) reinstating minimum parking requirements in the TOD Overlay Zone set the new minimum requirement at 70% of the existing non-TOD standard with an alternative compliance element that permits a parking impact study to show a reduction in parking demand.

The parking analysis data developed by the City to inform Ordinance 121,2013 can be found in Appendix A.

Development Review Process

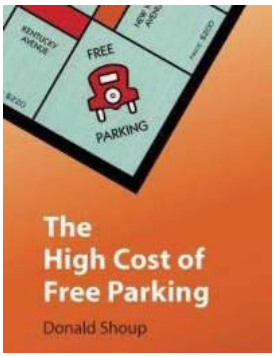
Proposed projects and developments are required to undergo review and approval through the City’s adopted development review process.

Development review exists in part to ensure that each new development or piece of the puzzle is in alignment with our community’s vision for Fort Collins, as stated in City Plan and the Land Use Code (LUC).

In addition, the community has adopted a philosophy that development should “pay its own way.” This means private-sector developers are designing and constructing many improvements which will become a part of the public

infrastructure maintained by the City. So another purpose of development review process is to ensure consistent and good quality public improvements.

Parking Requirements Reform – The Scholarly Debate



This section of the report explores several important topics that are very relevant to this study. There is in fact a serious and significant national discussion occurring related to benefits and problems associated with the ubiquitous use of minimum parking requirements across the US and the world. Professor Donald Shoup, author of the "High Cost of Free Parking" and a Distinguished Professor of Urban Planning at UCLA, has led the charge in this area; promoting how better parking policies can improve cities, the economy, and the environment. Shoup recommends that cities should charge fair market prices for on-street parking, use the meter revenue to finance added public services in the metered neighborhoods, and remove off-street parking requirements.

Recently several other noted academicians and planners have weighed in on the discussion of the importance of parking in general, expanding the research related to minimum parking requirements and proposing new options for how cities should approach these issues. We will focus on three publications in particular. The first is a book entitled "Parking Management" published by Mr. Todd Litman, founder of the Victoria Transport Policy Institute. The second is a recently published book by Richard Willson entitled: "Parking Reform Made Easy". The third is a book by Eran Ben-Joseph entitled: "Re-Thinking A Lot – The Design and Culture of Parking".

However, before we launch into that discussion, there is another key issue worthy of exploration – the surprising importance of parking to Transit Oriented Developments.

Parking and Transit Oriented Developments

The following is an excerpt from an article by Mark Gander, Principal Planner; Director of Urban Mobility and Development at AECOM and a member of the Board of Directors for the Green Parking Council.

> *There are approximately 250 million registered vehicles (2010) in the United States. When these vehicles are not in use, which accounts for more than 90 percent of their time, they must be parked. Because of this, off-street parking space availability is ubiquitous; its footprint is vast in scale. As MIT Professor of Landscape Architecture and Planning Eran Ben-Joseph recently noted, in some U.S. cities, parking lots cover more than a third of the land area, becoming the single most salient landscape feature of our built environment. This ubiquity is further compounded because cities require parking everywhere, yet ironically its absence is noticed most.*
>
> *The ubiquity of parking is not accidental: Parking matters. It plays an important role in the success of cities, communities and places as well as in the development of mixed-use projects and sustainable transportation. Parking supply and pricing often have a direct impact on the ability to create compact, healthy communities. Too much parking at residential properties correlates with more automobile ownership, more vehicle miles traveled, more congestion, more carbon emissions, and higher housing costs. It also results in lost development opportunity because excess parking area could have been used instead for residential or commercial development or public realm uses such as parks and plazas.*

"Parking also has both direct and indirect environmental consequences. Direct environmental impacts include excessive land consumption, increased storm water flows, degraded water quality, and exacerbated heat island effects. Additionally, parking structures themselves use substantial amounts of natural resources and energy to construct and require on-going maintenance to operate. In many cases parking structures are seen as unsightly when they are not internalized in mixed-use buildings or wrapped by liner buildings. Parking also indirectly affects the environment because it influences how and where people choose to travel. Where free and ample parking is provided, people make the rational choice to drive almost everywhere — and these areas register more vehicle miles of travel per capita with resulting increases in greenhouse gases and other pollutants.

Striking a balance between parking supply and development is a crucial challenge in developing the character of transit-oriented development (TOD). Residents in TOD projects are twice as likely not to own a car as other US households. They're also two to five times more likely to commute by transit than others in the region. On the other hand, residents will need access to cars even if not on a daily basis and commercial establishments require some amount of parking to service their non-walking clientele. In many cases, developers will be unable to secure financing unless parking is provided.

Unfortunately, many communities have simply applied conventional parking ratios to TOD projects. Because such standards have a suburban bias and are based largely on low-density single land uses they limit the expected community benefits of TOD, and possibly, lead to project failure.

Transit Oriented Development includes four foundational elements:

- *Development around transit that is dense and compact, at least relative to its surroundings;*
- *A rich mix of land uses—housing, work, and other destinations, creating a lively place and balancing peak transit flows;*
- *A great public realm—sidewalks, plazas, bike paths, a street grid that fits, and buildings that address the street at ground level; and*
- *A new deal on parking—less of it; shared wherever possible; energy efficient and designed properly.*

Right sizing parking for TOD necessitates a multipronged approach to understanding the existing and projected parking utilization and available supply in and around a TOD project area as well as the projected demand for new parking once the project is completed. Conducting a diagnostic parking study that is comprehensive and aligned with mobility choices is essential to this effort. Once the facts about demand, price, utilization, built form/development pattern, and household characteristics are understood, then appropriate strategies can be employed.

Key elements include understanding differences among markets, unbundling or separating the full cost of parking from the associated use, and reducing (or eliminating) minimum parking requirements for certain land uses or certain areas. Understanding the parking uses by market and type then make it possible to look for opportunities for implementation of a wide range of measures from new technology (e.g. smart parking), to specific policies and physical design modification to consolidate and locate parking more efficiently.

To ensure that parking meets the needs of a TOD project, while not impacting TOD's benefits, there are a number of strategies that municipalities can employ working in conjunction with developers to provide the appropriate amount of parking. These strategies can be grouped into several categories, including reduction; demand; design; and pricing. Each of these categories is discussed briefly below.

Reduction

Given the research, along with the information developed by a parking supply and demand study, municipalities should make every effort to reduce the parking requirements for TOD projects. Eliminating parking minimums and instead employing parking maximums for TOD projects will help decrease parking oversupply. Similarly, requiring shared parking where multiple developers combine parking needs into one shared parking lot or structure may also help eliminate an oversupply of parking.

Demand

Reducing the need for car travel is critical to decreasing parking demand. Municipalities or developers should consider establishing car sharing programs where multiple users have access to a fleet of cars when they need them. Similarly, municipalities and transit agencies could increase incentives for using public transportation, including providing subsidized transit passes, establishing residential parking programs for adjacent neighborhoods backed by parking enforcement, and constructing bicycle parking facilities.

Design

Designing for pedestrians is an important element to right-sizing parking. This requires reducing or eliminating design elements that hamper pedestrian use such as the number and size of curb cuts. It also requires adding elements that provide for greater pedestrian safety and aesthetic appeal. These elements might include constructing pedestrian walkways separated from parking and roads, wrapping parking behind existing buildings, designing the first level of parking structures to include other uses such as stores and restaurants, and adding public amenities like art space or public plazas which incorporate green infrastructure.

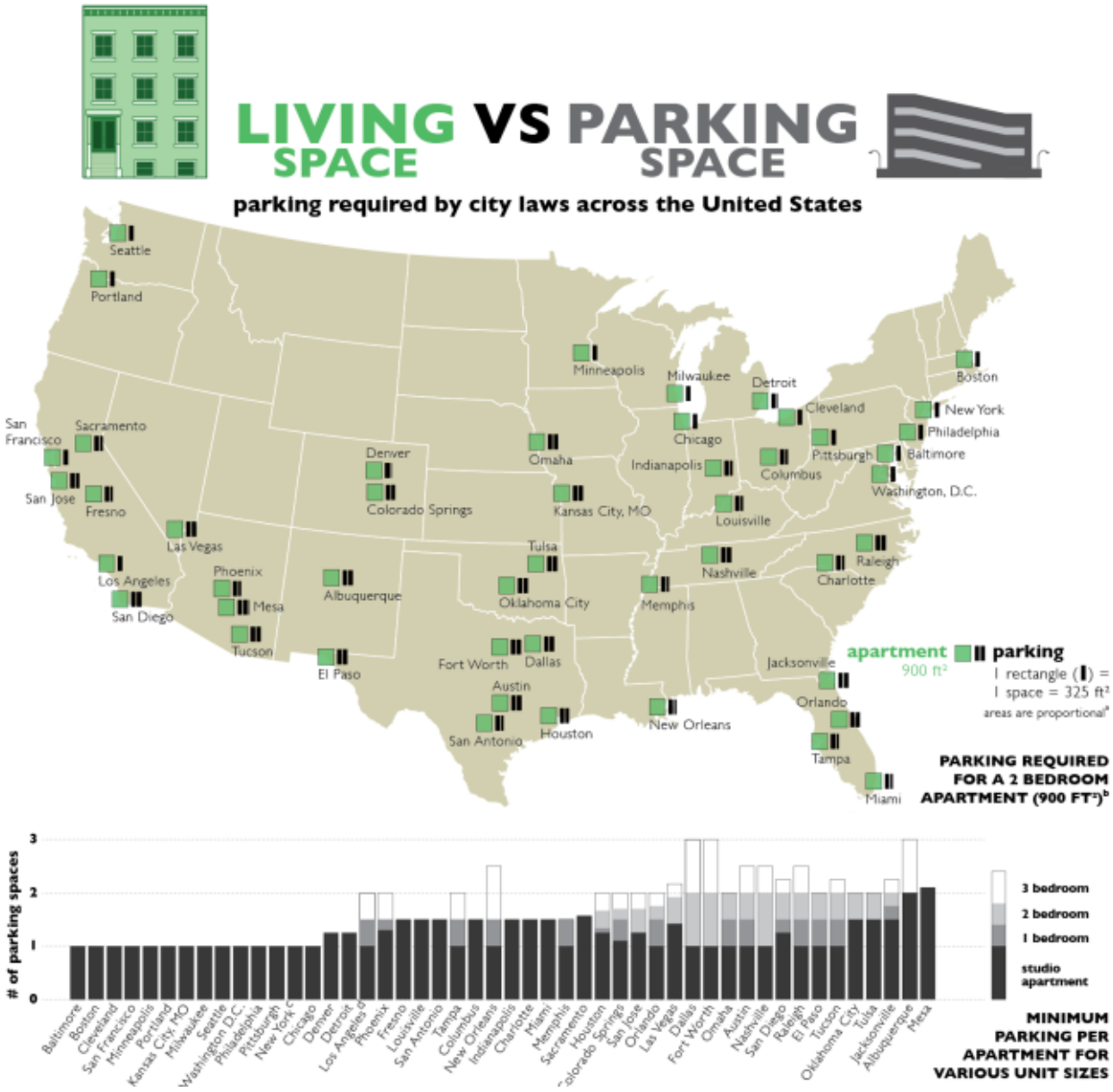
Pricing

Pricing is another strategy that can be used to influence how and where parking is used and located within a transit station area. On-street parking can be priced to encourage availability of on-street spots for preferred populations such as short term customers. In this case, the cost of parking for 15 or 30 minutes near shops located in the transit station area might be minimal while parking prices for more than 30 minutes is set quite high. Another strategy is to price parking to reflect parking desirability, i.e. spaces closest to activity hubs and on-street are priced higher than spaces at the downtown fringe and parking garages.

While increasing transit ridership, walking and biking are essential to establishing sustainable and livable communities, the car will continue as the principle mobility choice for years to come. Given this circumstance, municipalities and developers will have to provide parking for TOD projects and the surrounding area, but should do so in a way that is appropriately sized and located.

A Growing Interest in Parking Requirement Reform

In the graphic below, architect and designer Seth Goodman shows how parking and living spaces compare in major cities across the U.S. A more localized version of this research concentrated on the Northwest US is also available as is research on other land uses compared to parking spaces.



The research that focused on the northwest US challenges the common assumption that smaller cities behave more like suburbs in terms of parking requirements. It's actually a mixed bag. Spokane, Washington and Eugene, Oregon all mimic the requirements of larger cities. Fort Collins is another good example of this. We should not take for granted that a relatively small population (around 200,000 in the city proper) automatically translates to higher parking requirements. These examples demonstrate that cities don't need Manhattan-like conditions to ease up on parking minimums.

In Auckland, New Zealand, their City Council is debating whether to include traditional parking minimum requirements as an element of their Unitary Plan (comparable to City Comprehensive Plans in the US). The ad to the right illustrates how some advocacy groups are trying to influence the debate.

In the following pages we examine the origins of parking requirements, the impediments to change, and how these policies can be reformed.

The Case For and Case against Reforming Parking Requirements

Background on Traditional Minimum Parking Requirements

According to research published by professors Donald Shoup, Richard Willson and others, in many instances, efforts to accommodate parking have overextended actual need. The approach used by many cities to establish minimum parking requirements (typically a generic formula based on satisfying the maximum demand for free parking). Although this practice allows city planners to err on the side of caution, it has some serious drawbacks. In practical terms, this practice increases the cost of development and creates disincentives with respect to smart growth development and redevelopment. In addition, generic parking requirements create excess parking spaces that consume land and resources, encourage automobile use and associated pollution, and degrade water quality. The oversupply of parking is of particular concern for smart growth development in urban areas where the existing parking infrastructure can be better utilized and parking alternatives, such as shared parking and increased use of transit and pedestrian modes, can be more readily implemented.

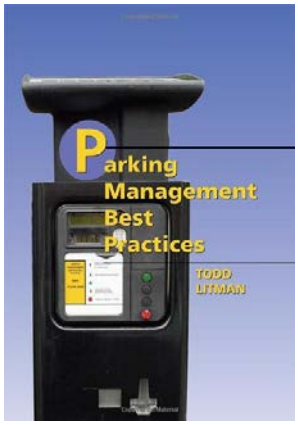
With the shifting trend toward urban revitalization over the past decade, the timing is opportune for instituting changes in parking requirements and transportation behavior. An important way to reduce the demand for parking and the need to supply parking to meet maximum demand is to provide transportation choices. This can be achieved by reducing the supply of parking in areas where transportation choices exist and by providing incentives for making other choices. Such changes will encourage infill redevelopment and reduce vehicle miles traveled, mobile source emissions and congestion. They will also increase ridership for public transit and, in turn, provide the additional revenues needed to support public transit improvements.

There are, of course, potential drawbacks to reducing the supply of parking. Lenders, for example, may be unwilling to approve loans because plans do not meet their minimum parking requirements; developers may be concerned about the long-term marketability of their property; and residents may fear that parking will spill over into surrounding residential neighborhoods. Such concerns can be more readily addressed if:

- The factors that affect parking demand are understood;
- Walkable, pedestrian-oriented development design is implemented; and
- Viable transportation choices exist.

Concerns are also alleviated when developers, employers, and employees are aware of programs that balance the attractiveness of other transportation choices. The Transportation Equity Act for the 21st Century (TEA-21), for example, allows businesses to give their employees up to $100 per month in tax free transit subsidies. TEA-21 also allows employees who commute by public transit or vanpool to deduct the cost of commuting from their taxable income if they do not receive a subsidy.

Establishing Parking Requirements



On the Victoria Transport Policy Institute (VTPI) website and in his book on Parking Management Best Practices, noted planner and transportation consultant Todd Litman does a good job of laying out the traditional approach to establishing parking requirements and makes a strong case for the use of more flexible and localized criteria in creating zoning codes especially as it relates to parking requirements.

In setting parking requirements, planners typically use generic standards that apply to general land use categories (e.g., residential, office, retail). Such standards have been developed and published by professional organizations, including the Institute of Transportation Engineers (ITE), based on experience in many locations. Much of the data on which these standards are based comes from low-density, single-use developments with limited transportation choices. Therefore, the generic parking rates cannot take into account the mix of context-sensitive, community specific variables - density, demographics, availability of transportation choices, or the surrounding land-use mix - all of which influence the demand for parking and should be reflected in parking requirements. Instead, requirements are based on the maximum demand for parking, when parking is provided at no charge to users, and walking, biking, and transit are not available choices. This formula yields a surplus of parking that is costly for developers to provide, and it subsidizes personal automobile use and encourages auto use even in areas where convenient transportation choices exist. Because of the way in which they are typically established, parking requirements are remarkably consistent across different cities, despite varying levels of economic vitality, population size, and development density.

Alternatively, parking requirements can be established using methods that are better tailored to specific development projects. This approach entails careful consideration of the following land use characteristics that relate to parking demand:

- Development type and size.
    - Takes into account the specific characteristics of the project.
    - Parking demand is influenced by the size of the development (typically measured by total building square footage), as well as the type of land use (e.g., retail, industrial). Generic parking formulas address these factors to some extent.
- Population and development density.
    - Considers the density and demographic characteristics of the people using the building, including employees, customers, residents, and visitors. Information on income, car ownership, and age distribution also helps in projecting total parking demand.
- Availability of transportation choices.
    - Takes into account the modes of transportation available to employees, visitors, and residents. Proximity of public transportation to a particular development, for example, will reduce parking demand.
    - Walkable neighborhoods and bicycle amenities will also reduce parking demand.
- Surrounding land use mix.

- Considers the surrounding land uses and density to better understand parking needs, and evaluates whether overall peak demand is lower than the sum of peak demands for different uses. This concept takes the timing of parking demand into account in determining the aggregate demand of multiple uses.
- The type of community in which a development is located will also affect parking demand. For example, if a project is located in a city's central business district, the availability of general use parking will reduce onsite parking demand. On the other hand, if the development is located in a residential area, on-street parking may be unacceptable to local residents, increasing the need for off-street parking at the development.

Land use and demographic information are important tools for establishing project-specific parking requirements that create a better match of supply and demand for parking than do many generic requirements.

Moreover, adjusting parking requirements downward to reflect realistic demand helps reduce the total cost of development, particularly in urban areas. By reducing cost, a potential deterrent to smart growth development and redevelopment can be removed.

The following table from the VTPI website summarizes a wide range of parking management strategies and indicates typical reductions in the amount of parking required at a destination, and whether a strategy helps reduce vehicular traffic, therefore providing congestion, accident and pollution reduction benefits.

Strategy	Description	Typical Reduction	Traffic Reduction
Shared Parking	Parking spaces serve multiple users and destinations.	10-30%	
Parking Regulations	Regulations favor higher-value uses such as service vehicles, deliveries, customers, quick errands, and people with special needs.	10-30%	
More Accurate and Flexible Standards	Adjust parking standards to more accurately reflect demand in a particular situation.	10-30%	
Parking Maximums	Establish maximum parking standards.	10-30%	
Remote Parking	Provide off-site or urban fringe parking facilities.	10-30%	
Smart Growth	Encourage more compact, mixed, multi-modal development to allow more parking sharing and use of alternative modes.	10-30%	X
Walking and Cycling Improvements	Improve walking and cycling conditions to expand the range of destinations serviced by a parking facility.	5-15%	X
Increase Capacity of Existing Facilities	Increase parking supply by using otherwise wasted space, smaller stalls, car stackers and valet parking.	5-15%	X
Mobility Management	Encourage more efficient travel patterns, including changes in mode, timing, destination and vehicle trip frequency.	10-30%	X

Parking Pricing	Charge motorists directly and efficiently for using parking facilities.	10-30%	X
Improve Pricing Methods	Use better charging techniques to make pricing more convenient and cost effective.	Varies	X
Financial Incentives	Provide financial incentives to shift mode, such as cash out.	10-30%	X
Unbundle Parking	Rent or sell parking facilities separately from building space.	10-30%	X
Parking Tax Reform	Change tax policies to support parking management objectives.	5-15%	X
Bicycle Facilities	Provide bicycle storage and changing facilities.	5-15%	X
Improve User Information and Marketing	Provide convenient and accurate information on parking availability and price, using maps, signs, brochures and electronic communication.	5-15%	X
Improve Enforcement	Insure that parking regulation enforcement is efficient, considerate and fair.	Varies	
Transportation Management Associations	Establish member-controlled organizations that provide transport and parking management services in a particular area.	Varies	X
Overflow Parking Plans	Establish plans to manage occasional peak parking demands.	Varies	
Address Spillover Problems	Use management, enforcement and pricing to address spillover problems.	Varies	
Parking Facility Design and Operation	Improve parking facility design and operations to help solve problems and support parking management.	Varies	

Environmental Impacts of Parking

The significant environmental costs associated with parking are not typically factored into development decisions, and only recently have begun to be considered in setting parking requirements. Construction of unnecessary impervious surfaces increases the impacts of storm water runoff, either on the storm sewer system or the surrounding land. Paved surfaces can also result in water pollution and flooding, resulting in a decline in adjacent property values. Heat islands, or areas of artificially raised temperatures, also are exacerbated by unnecessary pavement.

Consuming land for parking also reduces the land available for green space or other, more productive development. Land preserved as part of the green infrastructure allows storm water to percolate into the soil, provides wildlife habitat, provides air quality and noise reduction benefits, and is aesthetically desirable. Land developed for living, working, and shopping rather than just parking provides more intensive use. This lowers the demand to develop other land nearby or elsewhere in the region. Intensifying uses also creates a more supportive environment for transit and walking, and potentially for bicycling as well.

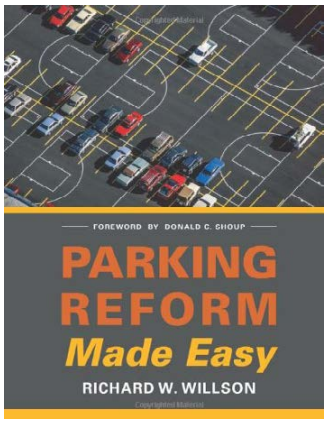
Providing more parking than demanded, and at artificially low prices, contributes to several harmful environmental impacts. First, this subsidy of automobile use leads directly to excess driving. This results in increased auto dependency and air pollution, accidents, and congestion. Second, it indirectly degrades the attractiveness of walking and biking, by increasing distances between activities and creating uninteresting routes.

Third, it indirectly undermines the potential for transit service by decreasing the density potential of development projects.

All of these environmental costs tend to be greater for parking built in green field areas where there is more inexpensive but ecologically-sensitive open space available and where development densities are lower thus requiring more and longer automobile trips. Because these environmental costs are not realized by developers, they do not influence development decisions which are driven primarily by the direct financial costs that are typically lower in green field areas.

Parking Requirement Reform

The following is an excerpt from the book "Parking Reform Made Easy" by Richard Wilson. Richard W. Willson, Ph.D., FAICP, is Professor and Chair in the Department of Urban and Regional Planning at California State Polytechnic University, Pomona.



Parking requirements in zoning ordinances create one of the most wasteful elements of transportation and land use systems: unoccupied parking spaces. Each space requires over 300 square feet of valuable land or building area, yet many sit empty. Minimum parking requirements at shopping malls, for example, often lead to sprawling developments surrounded by large, underused parking lots. Spaces for workplaces may be well-used during the day but remain unoccupied in the evening because they are not shared with other land uses.

Sometimes, the parking required is greater than the amount of parking ever used. Parking is overbuilt and underutilized for two reasons: 1) zoning requires an excessive parking supply, and 2) it prevents efficient sharing of parking among different land uses. Both reasons reflect a legacy of single-use zoning and an automobile-first approach to planning. Minimum parking requirements prevent private developers from responding to market conditions, and lessen developers' interest in sharing parking or developing sites that are accessible without driving. Planners sometimes claim that developers would build the same amount of parking regardless of regulations, but if that's true, then why impose minimum parking requirements in the first place?

Parking requirements should be framed as a means of providing access, not an end. Parking requirements are only one of several ways to ensure storage for private automobiles. Private auto transportation, in turn, is only one of several ways to provide access. To carry out parking reform, we must counteract the decades-old practice of thinking about access in terms of roadways and parking.

Why Parking Requirements?

Early zoning ordinances did not have parking requirements. Zoning sought to manage the external impacts of properties, such as when a new building represented a fire hazard to the structure next door. In the mid-20th century, parking requirements were added to address surface street congestion caused by patrons driving in search of parking. Planners didn't foresee that minimum parking requirements would favor private vehicle travel, lower overall density, and increase traffic.

In surveys conducted in 1995 and again in 2013, local planners in southern California were asked about parking requirements and found a repetitious justification for minimum parking requirements: planners wished to "ensure an adequate number of parking spaces." This response reflects a lack of critical thinking about fundamental public objectives, such as accessibility, economic development, and sustainability. The response also reflects an outdated vision of separated land uses, unrestricted auto-mobility, and plentiful free parking. Thus, many parking requirements are relics that undermine current land use and transportation goals.

The following tables from Richard Willson's book summarize the cases both for and against minimum parking requirements.

The Case FOR Parking Minimum Requirements

- Reduce street congestion around the development site
- Avoid parking spillover
- Create orderly development patterns
- Anticipate possible intensification or changes in the use of a development
- Create a level playing field among developers
- Encourage growth of core areas by increasing parking supply in those areas
- Reduce parking management by making the adjudication of conflicts between property owners unnecessary

The Case AGAINST Parking Minimum Requirements

- Encourages private vehicle usage and lengthens trips
- Adversely impacts transit and alternative modes
- Reduces development density
- Creates inhospitable project design
- Thwarts development and economic activity (little or no direct revenue)
- Makes construction of affordable housing more challenging
- Hampers investment in infill development and adaptive reuse in core areas

Why Change Is Difficult

Some regional and state policymakers recognize that existing parking requirements are excessive, but most have neglected the issue because parking is a responsibility of local governments. Yet parking requirements are crucial to accomplishing federal, state, and regional objectives in transportation, land use, and the environment. There are recent indications that if local governments do not carry out reforms, states may do it for them. In 2012, a proposal in the California legislature (AB 904) sought to override local parking requirements in transit-rich areas. Legislators

subsequently tabled the proposal, however, showing the power of local governments to resist state interference in parking policies.

Many local planners know the parking requirement status quo is wrong. They have observed wasted land, turned away restaurant proposals in historic districts, and seen affordable housing not pencil out. Despite these undesirable outcomes, planners have not made changes. Why? Some may feel powerless to change ossified regulations, sensing weak political support and lacking technical expertise to justify changes. Others may want the negotiating leverage that excessive parking requirements provide to extract public benefits from developers. Furthermore, planners know that parking is a key point in NIMBY (not-in-my-back-yard) resistance to development, so avoiding parking controversy can help ensure economic development. In effect, cities are addicted to parking requirements. The addiction is analogous to smoking, where immediate gratification overwhelms future costs.

Change means freeing ourselves of parking dogma, habits, and golden rules. The old reality dictated fixed parking requirement ratios and exhibited an unwillingness to deviate from standard practice, even when it made sense to do so. This approach emphasized precision and uniformity. It undervalues important considerations of local variability, policy relationships, environmental capacity, and human behavior. All the land-use plans, design reviews, and streetscape renderings in the world will not produce desired outcomes if we do not reform parking requirements.

It is important to note that this reticence to address the negative impacts of minimum parking requirements has not been the issue in the City of Fort Collins, which is known for its progressive planning and sustainability policies. However, the fact that this study was commissioned is a testament to the complexity and sensitivities that these complex and interrelated policy issues generate. In particular, a key issue in this study has to do with timing. With the investment in the Mason Corridor transit planning and the new MAX Bus Rapid Transit line, a Transit Overlay District was created in the City. Zoning codes (including parking requirements) were adjusted to reflect the different transportation dynamics of the corridor as well as a vision for increased development density and enhanced transit neighborhood urban design characteristics. However, these zoning changes preceded the actual implementation of the MAX BRT. As a result, new development projects have proceeded under the revised zoning conditions of the TOD Overlay Zoning district without the benefit of having the transit component in place.

The development of the Summit project in particular (a fairly large student housing development near the CSU campus), which planned to provide 676 bedrooms with only 217 parking spaces (471 spaces would have been required in the development had been outside the TOD Overlay Zone – a difference of -254 spaces or -54% of the standard parking requirement)caused a rethinking of the policy to not to require minimum parking requirements for multi-family development within the TOD Overlay Zone and a temporary reinstatement of minimum parking requirements, on an adjusted basis, while the policy could be further examined. This policy adjustment will sunset in September 2014 when recommendations from this study will be used to reassess both TOD zoning policies and parking policies on a more comprehensive basis.

Why Not Eliminate Parking Requirements?

According to national experts, deregulating off-street parking allows markets to determine parking supply levels and provokes a fresh debate about justifications for public regulations and subsidies for all transportation modes. Currently, minimum requirements compel the provision of access for driving and parking, whereas zoning codes seldom impose

equivalent requirements for bus, bicycle, or pedestrian facilities. When they do, those requirements have been added more recently and are at a lower investment level.

Under minimum requirements, even those who do not drive share in paying the cost of parking. Parking costs are embedded in higher retail prices, lower workplace salaries, higher rents, and the like. In these ways, most minimum requirements tend to prioritize private vehicles. Eliminating minimum requirements would begin to level the playing field for all travel modes.

Cities such as Philadelphia, Portland, and Seattle have recently reformed their parking requirements and adopted limited deregulation. Deregulation shifts the approach from automatically requiring parking to not supplying it until it is economically justified. It is a big change from standard practice and should be coupled with programs for shared parking and advanced parking management. Still, the idea of eliminating minimum parking requirements hasn't gained traction in many places. Local officials are often buffeted by demands from residents, storeowners, and employees for more parking, not less.

City staff researched TOD parking requirements in several other communities including the following:

- Denver Zoning Code: Maximum number of spaces shall not exceed 110% of the minimum parking spaces required by context-specific ratios (Denver's method of calculating parking requirements everywhere). Parking in structures doesn't count toward the maximums.
- Aurora TOD Zoning Sub-District: Minimum 0.5 – 1.0 space per multi-family dwelling unit depending on proximity to a transit station compared to 1.0 – 2.5 spaces per unit depending on number of bedrooms outside TOD.
- Lakewood Transit Mixed Use Zone District: Minimum 1 space per unit, maximum 2 spaces per unit. Parking in structures doesn't count toward the maximums. The parking requirements may be met on-site or off-site at a distance of up to 600 feet from the use.
- Eugene, Oregon: Establishes parking exempt areas not subject to minimums including Downtown and a couple other areas.
- Metro Portland recommends three actions when the parking ratio is below 1.0 space/unit:
    - Charge for all covered parking
    - Add car-share in the area
    - Provide first rate bicycle facilities (lockers, wash areas, secured bike parking, etc.)

Examples of progressive parking requirements from additional communities are reviewed later in this report (See Peer Cities section).

<u>Developers Responses to Different Approaches to Parking Requirements</u>

Approaches to parking reform vary from community to community. Accordingly, the table below shows the range of reform options, including the traditional approach in which the minimum requirements exceed expected use. At the other end of the spectrum is deregulation, with no minimum or maximum parking requirements. In many cities and towns, the best approach is somewhere in between, with deregulation in central business districts and transit-oriented developments, and reduced minimum requirements in other areas.

Developers Response to Parking Requirements

APPROACH	MINIMUM REQUIREMENT	MAXIMUM REQUIREMENT	DEVELOPER RESPONSE
Traditional	> Utilization	None	Rarely builds more than the requirement
Moderate reform	= Utilization	None	Assesses market for project, may exceed the minimum
Big city approach	< Utilization	A fixed ratio or percentage of minimum	Makes market decision whether to supply the minimum or build to the maximum
Partial deregulation	None	A fixed ratio	Makes market decision whether to supply any parking or build to the maximum
Deregulation	None	None	Makes the market decision whether/how much to build

In Praise of Incrementalism

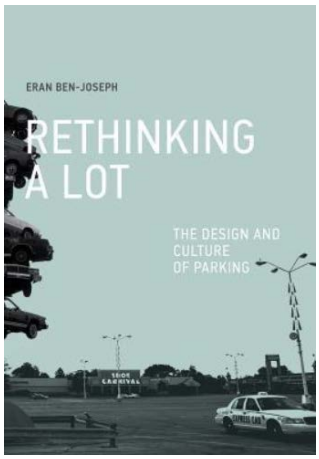
According to Richard Willson, in the past decade, many cities initiated comprehensive zoning code reform, and others are planning such efforts. Comprehensive reform efforts allow planners to rethink parking requirements while they consider the basic organization and functioning of the zoning code. These efforts also allow planners to bypass the complexity of older codes that have undergone countless revisions. Ideally, planners will amass enough political clout and financial resources before undertaking the daunting task of comprehensive zoning code revision.

There are many situations, however, where financial resources and political capital are not sufficient for comprehensive parking reform. In these cases, an incremental approach can produce good results. It makes sense to start where there is support, either from elected officials or from community or district stakeholders. Code reformers can work with these stakeholders and produce parking requirement reforms, parking overlay zones, or partial deregulation without creating opposition that might emerge in a citywide effort.

These early successes often build support for larger, more comprehensive efforts. Rather than viewing pilot projects or experiments as somehow inferior to comprehensive parking reform, we should see them as effective ways of producing valuable information, testing innovative ideas, and ultimately generating change.

Rethinking Parking – Another Perspective on the Potential of Parking Lots

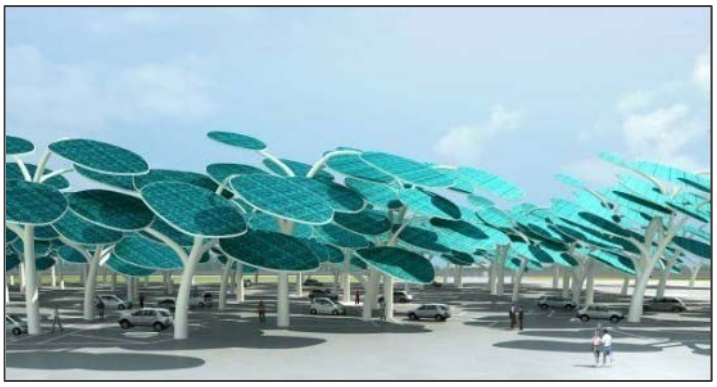
In his 2012 book entitled "Rethinking a Lot: The Design and Culture of Parking", Eran Ben-Joseph, professor of landscape architecture and urban planning at the Massachusetts Institute of Technology, argues that parking lots are so prevalent in our daily life that we should take them more seriously.



There are an estimated 600,000,000 passenger cars in the world, and that number is increasing every day. So too is Earth's supply of parking spaces. In some cities, parking lots cover more than one-third of the metropolitan footprint. It's official: we have paved paradise and put up a parking lot. In ReThinking a Lot, Eran Ben-Joseph shares a different vision for parking's future. Parking lots, he writes, are ripe for transformation. After all, as he points out, their design and function has not been rethought since the 1950s. With this book, Ben-Joseph pushes the parking lot into the twenty-first century.

Can't parking lots be aesthetically pleasing, environmentally and architecturally responsible? Used for something other than car storage? Ben-Joseph shows us that they can. He provides a visual history of this often ignored urban space, introducing us to some of many alternative and non-parking purposes that parking lots have served - from RV campgrounds to stages for "Shakespeare in the Parking Lot." He shows us parking lots that are not concrete wastelands but lushly planted with trees and flowers and beautifully integrated with the rest of the built environment. With purposeful design, Ben-Joseph argues, parking lots could be significant public places, contributing as much to their communities as great boulevards, parks, or plazas. For all the acreage they cover, parking lots have received scant attention. It's time to change that; it's time to rethink the lot.
The parking lot is the antithesis of nature's fields and forests, an ugly reminder of the costs of our automobile-oriented society. But as long as we prefer to get around by car (whether powered by fossil fuel, solar energy or hydrogen), the parking lot is here to stay.
It's hard to imagine an alternative. Or is it? I [Ben-Joseph] believe that the modern surface parking lot is ripe for transformation. Few of us spend much time thinking about parking beyond availability and convenience. But parking lots are, in fact, much more than spots to temporarily store cars: they are public spaces that have major impacts on the design of our cities and suburbs, on the natural environment and on the rhythms of daily life. We need to redefine what we mean by "parking lot" to include something that not only allows a driver to park his car, but also offers a variety of other public uses, mitigates its effect on the environment and gives greater consideration to aesthetics and architectural context.

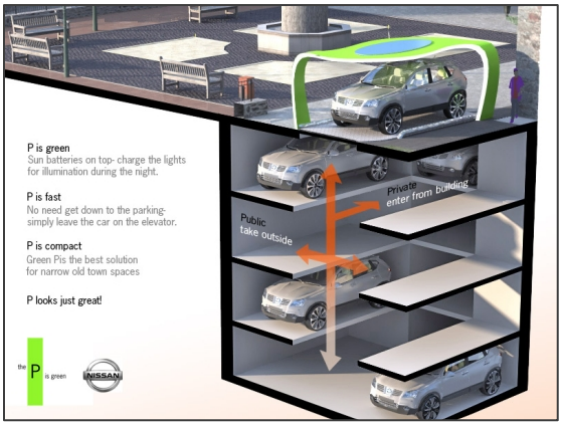
It's estimated that there are three nonresidential parking spaces for every car in the United States. That adds up to almost 800 million parking spaces, covering about 4,360 square miles — an area larger than Puerto Rico. In some cities, like Orlando and Los Angeles, parking lots are estimated to cover at least one-third of the land area, making them one of the most salient landscape features of the built world.



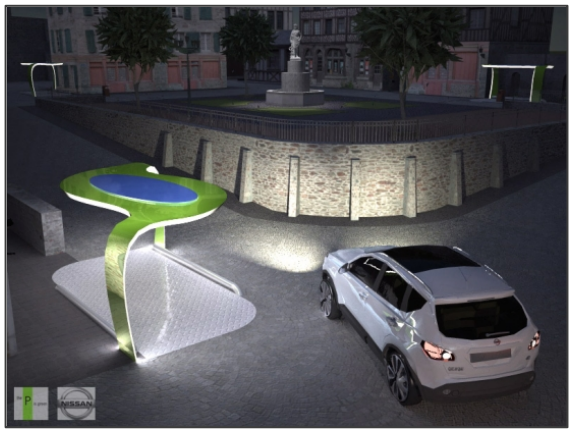
Such coverage comes with environmental costs. The large, impervious surfaces of parking lots increase storm-water runoff, which damages watersheds. The exposed pavement increases the heat-island effect, by which urban regions are made warmer than surrounding rural areas. Since cars are immobile 95 percent of the time, you could plausibly argue that a Prius and a Hummer have much the same environmental impact: both occupy the same 9-by-18-foot rectangle of paved space.
A better parking lot might be covered with solar canopies so that it could produce energy while lowering heat. Or perhaps it would be surfaced with a permeable material like porous asphalt and planted with trees in rows like an apple orchard, so that it could sequester carbon and clean contaminated runoff.

The ubiquity of parking lots has also led to an overlooked social dimension: In the United States, parking lots may be the most regularly used outdoor space. They are public places that people interact with and use on a daily basis, whether working, shopping, running errands, eating, even walking — parking lots are one of the few places where cars and pedestrians coexist.

Better parking lots would embrace and expand this role. Already, many lots provide space for farmers' markets, spontaneous games of street hockey, tailgating, even teenagers' illicit nighttime parties. This range of activities suggests that parking lots are a "found" place: they satisfy needs that are not yet met by our designed surroundings. Planned with greater intent, parking lots could actually become significant public spaces, contributing as much to their communities as great boulevards, parks or plazas. For instance, the Italian architect Renzo Piano, when redesigning the Fiat Lingotto factory in Turin, eliminated the parking lot's islands and curbs and planted rows of trees in a dense grid, creating an open, level space under a soft canopy of foliage that welcomes pedestrians as naturally as it does cars.



The parking lot also has an underutilized architectural function. A parking lot is the first part of a space you visit or live next to. It is typically the gateway through which dwellers, customers, visitors or employees pass before they enter a building. Architects and designers often discuss the importance of "the approach" as establishing the tone for a place, as the setting for the architecture itself. Developers talk about the importance of "first impressions" to the overall atmosphere conveyed to the user.



Yet parking lots are rarely designed with this function in mind. When they are, the effect is stunning. For instance, the parking lot at the Dia art museum in Beacon, N.Y., created by the artist Robert Irwin and the architecture firm OpenOffice, was planned as an integral element of the visitor's arrival experience, with an aesthetically deft progression from the entry road to the parking lot to an allée that leads to the museum's lobby.

For something that occupies such a vast amount of land and is used on a daily basis by so many people, the parking lot should receive more attention than it has. We need to ask: what can a parking lot be?

Summary

The strategies and policy considerations discussed above are alternatives to setting a parking requirement based on a neighboring city's requirement or a national average. Fort Collins has long moved beyond most communities in this regard, however through this study we will be evaluating options to reassess parking requirements based on specific land use categories (for example applying differing standards to "student housing oriented projects" compared to other

multi-family housing developments based on the demonstrated differences in parking demand generated by this specific use). We are also assessing varying requirements based on development size or context features, such as transit accessibility, mixed-land uses, shared parking and overall development density. The use of alternative compliance mechanisms that provide more context specific data from which to make rational and measured adjustments to parking requirements are also being assessed.

Parking reform can also be coordinated with regional planning and modeling activities. For example, in King County, Washington, the Metro Transit's web-based GIS tool provides data on parking utilization for multi-family housing and tests alternative parking ratios in terms of costs and impacts.

Note: More information about King County, Washington's King County Multi-Family Residential Parking Calculator can be found at http://www.rightsizeparking.org/.

In the case of Fort Collins, the use of the "Park+" parking demand modelling software that has been purchased by both the City and CSU could provide a similar analysis tool.

Triple Bottom Line Analysis Map (TBLAM)

TBLAM process was conducted in Collaboration with the City of Fort Collins Planning Services, FC Moves, Parking Services, Accounting, Transfort and Economic Health Departments.

Purpose: To extract key triple bottom line information from a TBLAM, and use that information to offer recommendations on key indicators and suggested action items for the TOD Parking Study, considering both parking minimums and no prescribed requirements for parking.

I. General Observations from TBL Analysis Map (TBLAM):

A. The TOD Parking Study team considered two alternatives: (1) parking minimums, as the current Land Use Code requires, and (2) not having prescriptive parking requirements (as was formerly in place). Thus, two separate maps were developed.
B. Both maps were well balanced across the columns with ample strengths and limitations identified.
C. Several considerations crossed into many columns, and rows.
   1. Crossing columns indicates excellent depth of discussion and debate.
   2. Crossing of rows indicates potential for conflicting values.
D. Data, at the time the TBLAM was conducted, was largely anecdotal. Collecting additional parking-related data became a priority task.
E. Threats should be further explored and contain more information on community and traffic growth.
F. Mason Corridor MAX has a strong presence on the TBLAM.

II. Conclusions Offered:

A. Need to refine TBLAM again in phases:
   1. When a proposed direction is selected, it would be beneficial to re-TBLAM with a larger group that is unfamiliar with the project to ensure all strengths, limitations, opportunities, and threats are identified.
B. A key driver for the mapping exercises was the vision expressed in City Plan, our community's comprehensive plan, which calls for increasing density within the TOD Overlay Zone District.
   1. There was significant discussion regarding whether parking minimums would allow the City to achieve its density vision.
   2. At the same time, staff was very sensitive to the other goals in City Plan regarding neighborhood compatibility and preservation of neighborhood character.
C. The TBL team would recommend including additional stakeholders, such as the project's advisory committee, to include additional viewpoints in the project.

III. Potential Key Indicators Suggested:

A. Re-TBLAM on a phased-schedule basis.
B. Both scenarios have the potential for significant implications to all three areas (economic, environmental, and social) legs of the sustainability stool. Collecting data now and developing scenarios to base decisions on could be critical to ensuring the right decision is made.
C. Post-TBLAM review environmental suggestions warrant detailed meetings and coordination directly with Environmental Services staff.

Triple Bottom Line Analysis Map (TBLAM)

Project or Decision:	TOD Parking Study – Status Quo	Evaluated by:	FC Moves, Planning, TBL Team

City of Fort Collins Utilities

Social	Economic	Environmental
STRENGTHS: • Current system allows flexibility in the number of parking spaces provided so that the market can drive the amount of parking provided • Not having prescriptive parking requirements could allow us to achieve our density vision	**STRENGTHS:** • Allows developer to maximize the use of their property in terms of density • Not having prescriptive parking requirements could allow us to achieve our density vision	**STRENGTHS:** • Encourages the use of transit and other alternative modes of travel • Not having prescriptive parking requirements could allow us to achieve our density vision • Not having parking minimums helps to minimize the heat island effect by having smaller parking lots • Smaller parking lots also allows more area to remain in open land and infiltrate stormwater
LIMITATIONS: • Lack of a prescriptive number of parking spaces lacks predictability for surrounding neighborhoods • Possibility of spillover parking into adjacent neighborhood areas • Allowing parking decisions to be made on a site-by-site basis may not allow us to achieve our overall density vision • Standards are TOD best practices and the transit isn't yet operational •	**LIMITATIONS** • Allowing parking decisions to be made on a site-by-site basis may not allow us to achieve our overall density vision • Making parking decisions on a site-by-site basis may mean that developers are not paying their fair share of the parking amenities required by their development • Some developers may perceive that the current situation as more costly as a parking garage may be required to meet the parking demand	**LIMITATIONS:** • If not enough parking is provided, people will drive further to locate a parking space and ultimately, more emissions will result • Without sufficient or easily locatable parking, people will cruise for a parking space which results in increased emissions
OPPORTUNITIES: • Less parking leads to a more walkable development pattern • Having a less prescriptive requirement allows a more efficient use of space and a greater mix of uses	**OPPORTUNITIES:** • Having a less prescriptive requirement allows a more efficient use of space and a greater mix of uses • Public/private partnerships for parking garages and more strategic parking of cars	**OPPORTUNITIES:** • LID/environmental opportunity with smaller parking lots? (Basil?) •
THREATS: • An underestimation in the level of parking required could affect the surrounding neighborhood and community perception of the goals of the TOD • Underestimations also affect staffing and financial resources for parking management, the City then has to address the externalities created by the underestimation	**THREATS:** • An underestimation in the level of parking required could affect the viability of the project	**THREATS:** • An overestimation in the amount of parking could reduce the amount of open land available for other beneficial uses such as stormwater infiltration

Triple Bottom Line Analysis Map (TBLAM)

Project or Decision:	TOD Parking Study - Minimums	Evaluated by:	FC Moves, Planning, TBL Team

City of Fort Collins Utilities

Social

STRENGTHS:
- Easier to find a parking place
- More predictability for surrounding neighborhoods - Minimums are more palatable and easier to understand
- Less likelihood of spillover parking onto surrounding neighborhoods
-

LIMITATIONS:
- Could result in decreased densities
- Encourages automobile travel over other modes
- Inhibits affordable housing projects
- Projects with more parking are generally less attractive (urban design)
- Lack of flexibility with a prescriptive minimum standards does not allow for a context-based solution
- Historically, parking minimums tend to over park sites

OPPORTUNITIES:
- Could establish a minimum that does not over-park the site
- Sites where we over-parked could serve as a future site for parking sharing or redevelopment
-

THREATS:
- MAX may not be successful because there is not enough ridership (everyone is driving)
- Less efficient land use patterns

Economic

STRENGTHS:
- More predictability for the development community
- Less expensive to build surface parking

LIMITATIONS
- Parking minimums could result in decreased densities
- Minimums may be so high that it discourages development and redevelopment in targeted infill areas
- Inhibits affordable housing projects and
- Makes infill developments on more challenging sites difficult to develop

OPPORTUNITIES:
- Sites where we over-parked could serve as a future site for parking sharing or redevelopment
-

THREATS:
- Makes infill developments on more challenging sites difficult to develop
- MAX may not be successful because there is not enough ridership (everyone is driving)
- Less efficient land use patterns

Environmental

STRENGTHS:
- Having a guaranteed parking space reduces cruising and potential increase of air emissions

LIMITATIONS:
- Having a guaranteed parking space will likely increase automobile use and increase emissions
- Parking minimums could result in decreased densities
- Parking minimums encourages automobile travel over other modes

OPPORTUNITIES:
- Sites where we over-parked could serve as a future site for parking sharing or redevelopment
-

THREATS:
- MAX may not be successful because there is not enough ridership (everyone is driving)
- Less efficient land use patterns

Best Practices Review

This section of the parking study summarizes some of the parking best management practices that are recommended and/or have been successfully implemented in other communities. These practices are tools to address existing parking issues and accommodate future demand. It is important to remember that these strategies are not mutually exclusive and may need to be modified to suit the needs of the City of Fort Collins. Many of these strategies are complementary and are most effective when used in conjunction with one another.

Innovative Alternatives or Supplements to Minimum Parking Requirements

Some local governments have implemented alternatives to generic parking requirements that increase availability from existing supply, reduce the demand for parking, or create more cost-effective and environmentally sensitive parking structures that preserve pervious surfaces. By lowering total development costs, some of these parking alternatives have consequently encouraged smart growth development and redevelopment. This section summarizes proven alternatives and includes discussion of their establishment, advantages, and potential concerns. The alternatives are organized according to their influence on parking supply, parking demand and pricing.

Increasing Availability From Existing Supply Or Limited Expansion

Frequently, the supply of parking in developed areas is sufficient to meet parking demand, but a combination of reasons limit the availability of that supply.

Context-specific Minimum Requirements

As discussed in the Introduction, generic minimum requirements are typically set based on maximum observed demand for free parking in areas with no transportation choices. However, parking demand is determined by a range of factors that lead to significant variations within and across jurisdictions, meaning that a single standard for each land use may not be appropriate. Other factors that are strongly correlated with lower vehicle ownership in urban areas are frequent transit service, small household sizes, low incomes, a high proportion of seniors, and rental housing.

Similarly, at commercial developments, transit access, mix of uses, and density are good predictors of parking demand. Often developers are interested in finding ways to reduce the vehicle trip generation calculations for their expected development, so that they can demonstrate fewer impacts on the surrounding roadway network, while they may not always be so eager to reduce the amount of parking to supply.

A major challenge for cities is how to convert this research and data, together with experience from other settings, into local parking requirements or planning approvals for specific developments. Some of the mechanisms being used are:

- Transit Zoning Overlays
- New Zoning Districts or Specific Plans
- Parking Freezes
- Reductions for Affordable and Senior Housing
- Case-By-Case Evaluation
- Land Banking and Landscape Reserves

Maximum Limits and Transferable Parking Entitlements

In contrast to generic minimum parking requirements, maximum limits restrict the total number of spaces that can be constructed rather than establish a minimum number that must be provided. Planners set maximum limits much like they set minimum requirements. Typically, a maximum number of spaces is based on square footage of a specific land use. For example, the City of Portland, Oregon restricts offices in the central business district to 0.7 parking spaces per 1,000 square feet, and retail to 1.0 space per 1,000 square feet of net building area. Contrary to what might be expected, the maximum limits in Portland have not led to a parking shortage because of the balance of transportation choices available.

Maximum requirements are not ideal for all locations. It is crucial for municipalities that employ maximum requirements to have accompanying accessible and frequent public transportation. It is also important for the area to be sufficiently stable economically to attract tenants without needing to provide a surplus of parking. A number of cities have implemented maximum parking requirements, including San Francisco, California; Portland, Oregon; and Seattle, Washington.

Shared Parking

Different types of land uses attract customers, workers, and visitors during different times of the day. Shared parking is another alternative that city planners can employ when setting parking requirements in mixed-use areas. An office that has peak parking demand during the daytime hours, for example, can share the same pool of parking spaces with a restaurant whose demand peaks in the evening. This alternative also reduces overall development costs.

By allowing for and encouraging shared parking, planners can decrease the total number of spaces required for mixed-use developments or single-use developments in mixed-use areas. Developers benefit, not only from the decreased cost of development, but also from the "captive markets" stemming from mixed-use development. For example, office employees are a captive market for business lunches at restaurants in mixed-use developments.

Shared parking encourages use of large centralized parking facilities and discourages the development of many small facilities. This results in more efficient traffic flow because there are fewer curb cuts, and turning opportunities on main thoroughfares. This has the added benefits of reducing accidents and reducing emissions from idling vehicles stuck in traffic.

Establishing shared parking requirements involves site-specific assessment or use of time-of-day parking utilization curves. Montgomery County, Maryland allows for shared parking to meet minimum parking requirements when any land or building under the same ownership or under a joint use agreement is used for two or more purposes. The county uses the following method to determine shared requirements for mixed-use developments:

- Determine the minimum amount of parking required for each land use as though it were a separate use, by time period, considering proximity to transit.
- Calculate the total parking required across uses for each time period.
- Set the requirement at the maximum total across time periods.

Many available sources document procedures for calculating shared parking requirements, from 1983's "Flexible Parking Requirements" to 2003's SmartCode.

In-Lieu Parking Fees and Centralized Parking

Municipalities establish in-lieu parking fees as an alternative to requiring on-site parking spaces. With in-lieu fees, developers are able to circumvent constructing parking on-site by paying the city a fee. The city, in return, provides centralized, off-site parking that is available for use by the development's tenants and visitors. The fees are determined by the city and are generally based on the cost of providing parking. Cities set fees in one of two ways, either by calculating a flat fee for parking spaces not provided by a developer on-site or by establishing development-specific fees on a case-by-case basis. Shoup reports that in-lieu fees in the United States range from $5,850 to $20,180 per parking space. These fees can be imposed as a property tax surcharge.

In-lieu parking fees provide advantages to both planners and developers. Allowing developers to pay fees in-lieu of constructing parking has the following benefits:

- Overall construction costs may be reduced;
- Construction of awkward, unattractive on-site parking is avoided;
- Redevelopment projects involving historic buildings can avoid constructing parking that would compromise the character of the buildings;
- Planners can ensure that existing parking facilities will be more fully utilized; and
- Planners can encourage better urban design with continuous storefronts that are uninterrupted by parking lots.

In establishing in-lieu parking fees, planners must be cognizant of potential developers' concerns about the impact of a lack of on-site parking on the attractiveness of developments to tenants and visitors. This can be an issue if available public parking is insufficient, inconveniently located, or inefficiently operated. Planners must carefully consider the parking demand for each participating property and provide enough parking to meet this demand in order to avoid creating a perceived or real parking shortage. Planners must also work to ensure that public parking facilities are centrally located and operated efficiently.

Centralized parking facilities can reduce the costs of parking because large facilities are less expensive on a per space basis to build and maintain than small facilities. Centralized parking, as an alternative to on-site parking, also improves urban design and preserves the historic nature of communities. Some cities mandate centralized parking facilities and finance them through development impact fees in lieu parking fees or negotiated contributions established during the environmental review process.

Increasing Availability by Decreasing Demand

Demand reduction can be achieved through a variety of programs and policies that attempt to reduce the automobile transportation demand, and thus reduce the needed supply of parking. While these programs are typically developed by local governments, their success often depends on the commitment of businesses to implement them effectively.

Demand reduction programs include: car sharing, subsidies for transit, transit improvements, pedestrian and bicycle amenities, and vehicle trip reduction programs. When employers allow telecommuting and/or flexible work schedules that reduce commuting, demand is also reduced.

Car Sharing

Car sharing is a neighborhood-based, short-term vehicle rental service that makes cars available to people on a pay-per-use basis. Members have access to a common fleet of vehicles on an as-needed basis, gaining most of the benefits of a private car without the costs and responsibilities of ownership. In programs with the most advanced technology, members simply reserve a car via telephone or the Internet, walk to the nearest lot, access the car using an electronic card, and drive off. They are billed at the end of the month.

In commercial developments, car-sharing can also be a useful tool to reduce parking demand. Employees can use a shared vehicle for errands and meetings during the day, allowing them to take transit, carpool, walk or bicycle to work. Car-sharing works best in compact, mixed-use neighborhoods, where firms with corporate memberships tend to use the vehicles during the day and residents use them in the evenings and on weekends.

As well as reduced parking demand, car-sharing brings a broad range of other benefits, including fewer vehicle trips, and improved mobility for low-income households who may not be able to afford to own a car. Formal car-sharing programs have been established in many cities including Boston, Massachusetts; Washington, DC; San Francisco, California; Oakland, California; Portland, Oregon; Seattle, Washington; and Boulder, Colorado. Many others are in the process of establishing operations. Alternatively, developers can provide shared vehicles themselves, or facilitate informal car-sharing among residents.

Improvements to Transit Service, Pricing, and Information

Transit subsidies can be provided by employers, by cities, or by residential property managers. In the case of employer-paid transit pass schemes, the employer pays the cost of employees' transit, converting the fixed cost for parking spaces into a variable cost for the public transportation subsidy. This fringe benefit for employees reduces the demand for parking at the workplace, which in turn reduces traffic, air pollution, and energy consumption. It also reduces the cost associated with providing parking, as transit subsidies are generally less expensive than providing parking.

Improvements to Pedestrian and Bicycle Service

Demand for parking can be reduced by providing pedestrian and bicycle amenities that make it easier and more pleasant for people to walk or bicycle rather than drive. These amenities and design changes can alleviate traffic congestion. In particular, improving the walkability and pedestrian orientation of employment centers can address the increasingly common "drive to lunch" syndrome. For example, the auto-orientation of Tyson's Corner, Virginia has resulted in terrible traffic at lunch time because people cannot walk to eating establishments or to do errands.

Vehicle Trip Reduction Programs

Another direct form of demand reduction involves instituting vehicle trip reduction programs. Vehicle trip reduction programs combine several types of demand reduction components to meet explicit vehicle trip reduction goals.

Thus, instead of capping the number of parking spaces, local officials limit the number of vehicle miles traveled in a particular region. These types of programs attempt to decrease the number of trips by single occupancy vehicles (SOVs) and increase the use of a variety of commuting alternatives, including transit, carpooling, walking, and bicycling.

To increase the effectiveness of vehicle trip reduction programs, cities or employers can incorporate an assortment of complementary program elements to balance transportation choices. The following are some examples:

- "Guaranteed ride home" services that allow employees who use public transit to get a free ride home (e.g., via taxi) if they miss their bus or if they need to stay at work late.
- Company fleet cars that can be used for running errands during the workday (e.g., doctor appointments).
- Preferential and/or reserved parking for vanpools/carpools.
- Carpooling and/or vanpooling with ride matching service. Ride matching can facilitate the identification of people who live close to one another. This service can be accomplished by providing "ride boards" or by using an employee transportation coordinator.
- Cellular phones for car and vanpooling to facilitate timing of pickups.

There is little incentive for employers to implement vehicle trip reduction programs if they are not granted reductions in minimum parking requirements. They would not be able to realize the potential cost savings from providing less parking, but would simply be faced with a large number of empty spaces. Several cities, such as South San Francisco, have acknowledged this through ordinances that reduce parking requirements for projects that include vehicle trip reduction programs.

Efficient Pricing

Although it is often provided at no charge to the user, parking is never free. Each space in a parking structure can cost upwards of $2,500 per year in maintenance, operations and the amortization of land and construction costs. Even on-street spaces incur maintenance costs and an opportunity cost in foregone land value. The cost of parking is generally subsumed into lease fees or sale prices for the sake of simplicity and because that is the more traditional practice in real estate. However, providing anything for free or at highly subsidized rates encourages overuse and means that more parking spaces have to be provided to achieve the same rate of availability. Charging users for parking is a market-based approach by which the true cost of parking can be passed through to parking users. If the fee charged to users of parking facilities is sufficient to cover construction, operation, and maintenance costs, it will likely cause some users to choose not to park. Even where there are few alternatives to driving, parking pricing can encourage employees to seek out carpooling partners. In addition to reducing the cost of parking provision, pricing strategies bring major environmental and congestion benefits, particularly since they tend to reduce peak-period vehicle trips the most.

Parking charges have been found to reduce employee vehicle trips, and thus daily parking demand, by between 7 percent and 30 percent or more, depending on factors such as the level of charges and the availability of alternatives to driving alone. Parking price elasticities generally range from –0.1 to –0.6, with the most common value being –0.3, meaning that each 1 percent rise in parking fees is accompanied by a 0.3 percent decrease in demand.

Cash-Out Programs

Cash-out programs provide alternatives to directly charging users for parking. Under such programs, employers offer employees the choice of free or subsidized parking, a transit/vanpool subsidy equal to the value of the parking (of which up to $100 is tax-free under current federal law), or a taxable carpool/walk/bike subsidy equal to the value of the parking.

Employees who opt for the non-parking subsidies are not eligible to receive free parking from the employer, and are responsible for their parking charges on days when they drive to work. The cost savings associated with cash-out payments depend on the amount of the payments. If the full cash equivalent is provided, this demand reduction program does not reduce the total costs of providing parking. However, employees may accept cash payments lower than the full equivalent of the parking subsidy. If partial cash payments are used, employers face lower overall transportation subsidy costs and employees still benefit.

Differential Pricing by Trip Type

Parking pricing can be used as a sensitive tool to prioritize some types of trips over others, according to their purpose and duration. It allows managers to cater for desirable trips, such as short-term shoppers, while discouraging undesirable commuter trips, which add to peak-hour congestion and occupy a parking space for an entire day. These pricing strategies allow the overall supply of parking to be minimized, while ensuring spaces are available for critical users. They can also alleviate pressure to provide more parking from retailers and businesses, who may be concerned that poor parking availability discourages shoppers. Examples include:

- Lower or zero rates for short-term parking encourage shopping trips, while proportionally higher rates for long-term parking discourage all-day commuter parking, freeing up spaces for customers. Short-term parking allows many people to use a single space over the course of a day, rather than a single commuter, and generates revenue for businesses and sales tax dollars for cities.
- Parking charges that are levied by the hour or day, with no discounts for monthly parking, remove the financial disincentive to take transit occasionally. There is no perverse incentive to drive every day to “get your money’s worth” from the monthly parking pass.
- Parking charges at transit stations that only apply before a certain time (such as 9 or 10 am) encourage off-peak transit ridership where spare capacity is available, rather than contributing to crowding in the peak.

Residential Parking Pricing

Parking charges can also be introduced at residential developments, through separating or “unbundling” the cost of parking from rents or sale prices. Rather than being provided with a set number of spaces whether they need them or not, residents can choose how many spaces they wish to purchase or rent. An alternative to direct charges is to provide “rent rebates” or discounts to residents who own fewer vehicles and do not use their allocated parking spaces.

Parking Benefit Districts

Parking pricing strategies can also be implemented through Parking Benefit Districts. Under this concept, revenue from meters and residential permits is returned to local neighborhoods. Once administrative costs are covered, all money

goes to transportation and neighborhood improvements such as undergrounding of utility wires. Parking Benefit Districts allow developments to be built with less parking, while addressing potential spillover problems through market pricing of curb parking.

Earmarking revenue to directly benefit the neighborhood or commercial district helps to generate support for charges from local residents and businesses, which might otherwise resist charging for parking that used to be free. Cities such as San Diego and Pasadena, California, have implemented Parking Benefit Districts in their downtown business districts, using parking meter revenue.

Peer City Reviews

In our research related to peer city parking requirements, we applied two primary criteria: communities of similar size or characteristics to Fort Collins or communities with progressive parking planning policies similar in values to Fort Collins. We identified five primary communities that met these criteria. These communities include:

- Ann Arbor, Michigan
- Berkeley, CA
- Portland, OR
- Eugene, OR
- Arlington County, VA

A summary of the key elements of each of these city's policies are provided below. More detailed information for each community is provided in Appendix B. Appendix B contains selected examples of well-developed or progressive zoning codes including some not on the Peer Cities list noted above.

City of Ann Arbor, Michigan

- City's web page: www.a2gov.org
- Downtown Development Authority web page: www.a2dda.org
- Commuting programs and services web page: www.getdowntown.org

Key Policies and Initiatives

- GetDowntown Program – This is a commuter service and assistance program. It offers commuting programs and services to employees and employers in downtown Ann Arbor. Programs and services include the go!pass, Commuter Challenge, Bike Locker Rentals, Zipcars, free commuting assistance, and commuting materials.
- Go! Pass Program – It is an employee benefit which offers unlimited rides on the City buses with in Downtown Development Authority's (DDA) boundaries. Additionally, this program offers discounts for other commuter services and at downtown businesses.
- Commuter Challenge – It offers prizes for trying alternative modes of transportation. The modes include busing, biking, walking, carpooling, and van pooling. The program is offered only for the month of May.
- Bike Locker Rental – Locker rentals are offered at $60/month. The rentals are offered from April 1 to March 31. The fee is prorated if the rental starts after April. Monthly rentals are not available.
- To encourage alternative modes of transportation, the parking demand for office buildings were dropped from 4 to 3 per 1,000sf.
- Maximum parking demand ratio was implemented for many land uses.
- For downtown projects, developers are not required to provide parking for up to 400% of FAR.
- For some mixed-use land uses, 700% of FAR is allowed and parking is required for FAR above 400%.
- Bicycle parking is required for many land uses.
- Outside bicycle parking spaces can be used for meeting "useable open space" requirements.
- Areas for inside bicycle parking spaces are not included in calculating the vehicular parking requirements.

- Up to 30% of parking supply could be designed for compact cars only.

Arlington County, Virginia

- Arlington County web page: www.arlingtonva.us
- Commuter Service web page: www.commuterpage.com
- Mobility Lab: http://mobilitylab.org/

Key Policies and Initiatives

- Office parking requirement is 1 space per 580sf (with associated apartment use), which is significantly less than the national average. Without apartment use, the requirement is 1/530sf.
- Hotel parking requirement is 0.7 per room. Again, significantly less than national average.
- Underground parking is encouraged.
- Parking requirements for Medical Office Buildings could be reduced by 10%.
- Parking requirements are reduced if approved shared parking programs are implemented.
- Parking is not required for the first 5,000sf of development (some land uses are excluded). For grocery stores, first 15,000sf is exempt, if the grocery store is not the principal land use.
- Office parking requirements could be reduced by up to 10%.
- 100% of required parking could be provided up to ¼-mile away.
- Reduced parking demand with approved TDM programs.
- Up to 15% of parking supply could be designed for compact cars only.
- Maximum parking requirements for many land uses.
- Parking near metro stations is not required if the development is located within 1,000 feet (with some exemptions).
- Mobility Lab is one of the most aggressive and successful transportation alternative programs in the country and is a recommended model for Fort Collins to review.

City of Berkeley, California

- City's web page: www.ci.berkeley.ca.us
- Commuter Service web page: www.ci.berkeley.ca.us/commute

Key Policies and Initiatives

- The City offers many commuter programs. These include:
  - The Tax Relief Action to Cut Commuter Carbon (TRACC)
  - Commuter Benefit Services for Employers
  - The City requires that employers with ten or more employees provide a commute program to encourage employees to use public transit, vanpools or bicycles. TRACCC, gives employers several options - businesses can offer their employees commuter tax benefits as a payroll deduction, provide a subsidized benefit, or offer a combination of the two.
- Commute Programs

  - Guaranteed Ride Home Program
  - Ride matching for carpools and vanpools
  - Transportation Programs at UC Berkeley
- Transit Information Services
  - 511 Transit Information
  - Getting There on Transit
  - Clipper, the Bay Area's Smart Card for Transit
- AC Transit Local and Transbay Bus Service
  - Other Bus Services in Berkeley
  - Paratransit Services
  - Rail Service in Berkeley
  - Bay Area Rapid Transit (BART)
  - Capitol Corridor (train service from San Jose to Sacramento)
  - Connecting AMTRAK passenger rail services
- Car Sharing
- Parking can be provided up to 300 feet away from the development.
- Joint-use, off-street parking is allowed if there are no substantial conflicts.
- Transit Service Fee (TSF) is collected to provide paratranist passes and promote ride sharing.
- Parking requirements are reduced if the development is located within 1/3-mile from a BART station.
- Subsidies available for approved TDM programs.

City of Eugene, Oregon

- City's web page: www.eugene-or.gov

Key Policies and Initiatives

- Parking requirements may be reduced (for some land uses) if the developer offers an approved shared parking plan.
- Bicycle parking is required with many land uses.
- Maximum parking ratio is used.
- Maximum parking cannot exceed 125% of minimum parking requirements.
- Parking requirements may be reduced if an approved Transportation Demand Management (TDM) plan is implemented.
- The City offers typical commuter services including bus, car pool, and van pool.

City of Portland, Oregon

- City's web page: www.portlandonline.com
- Commuter Assistance web page: www.portlandoregon.gov/transportation/43820

Key Policies and Initiatives

- Maximum parking for many land uses.
- Parking could be provided up to 500 feet away.
- Stacked parking with valet attendant is allowed.
- Parking requirements could be reduced by 5% for approved carpool programs.
- Parking requirements for residential developments are reduced and completely eliminated for all other land uses, if:
  - The development is located within 1,500 feet from a transit station, or
  - 500 feet from transit street where peak-hour service is provided at 20-minute intervals.
- Bicycle parking is required for many land uses.
- For every five bicycle parking, one vehicle parking could be eliminated.
- Parking requirements could be reduced by 10% if a transit supportive plaza is provided with the development.
- Motor cycle parking could be used to reduce vehicle parking by 5%.
- For every two car sharing parking one vehicle parking could be eliminated.
  "Smart Trip Business" initiative to encourage use of alternate modes of transportation. Some of the programs include:
  - Encourage use of bicycle at work place.
  - Businesses could be certified for as, "Sustainability Work Certified." The certifications include "Certified," Silver," and "Gold."
  - Car sharing programs.
  - Centralized Transportation Resource.
  - Employee education about use of transit.
  - "Commuter Challenge" program to encourage the use of alternate modes of transportation.

The table on the following page provides a comparison of the City of Fort Collins to the selected peer cities regarding key zoning code policies and issues.

PARKING STANDARDS SUMMARY

The following parking standards are provided for comparison purposes based on the Peer City Reviews and current Fort Collins Parking requirements

USE*1	CITY OF FORT COLLINS *(within TOD)*	CITY OF ANN ARBOR, MI	ARLINGTON COUNTY, VA	CITY OF BERKLEY, CA	CITY OF EUGENE, OR	CITY OF PORTLAND, OR
General Practice						
Maximum/Minimum Standards	Yes	Minimum - Yes	Yes	N/A	Yes; cannot exceed 125% of minimum standards	Yes; Maximums apply for certain situations and land use
Parking Reductions	Yes; within TOD Overlay District (currently 70% of min - currently applies to residential uses), alternative compliance measures may be applied	Reduced Office parking standards from 4 to 3 spaces / 1,000' sf	MOB/Office parking can be reduced by 10%; Alternative compliance for mixed use buildings with or without apartments (e.g., 1.0 / 580 sf (w/apt use) - 1.0 / 530 sf (w/o apt use)		Up to 25% reduction from the minimum for shared, off-street parking; District specific standards also apply (e.g., up to 50% in the Nodal Development Overlay Zone)	10% reduction with transit plaza on site; see also Reduction in Parking with TDM
			If within 1,000' of metro station - no parking required (certain, listed uses including retail and service commercial, grocery stores and restaurants	If within 1/3 mile of BART station; 1/4 mile of publicly accessble parking facility; parking survey (500' radius), or provides certain types of uses.		If within 1,500' of transit station or 500' of station with 20 min peak hour intervals - parking may be reduced or eliminated
			First 5K sf of building exempted from parking; grocery store = 15K sf exempt			
Exemptions	N/A	Off-street parking not required in downtown area(s) if project does not exceed maximum FAR	See above Parking Reductions		Within C-1 (Neighborhood Commercial), no parking required to be provided if 8 or less spaces required; 9 or more required parking spaces may be reduced by providing streetscape-type improvements including transit stop can reduce required parking by 4 spaces. Outdoor restaurant may exempt parking requirements for first 20 seats	
Shared Parking	Yes	N/A	Yes	Yes	Yes	Yes
Reduction in Parking with TDM Measures		Yes; each car/van pool space = 4 required spaces	Yes	Yes (subsidies provided by City; transit information provided, etc.)	Yes	Yes (5% reduction with car pool program; 5% reduction if motorcycle parking provided)
Other Standards	Bicycle parking required with many land uses	Bicycle parking required with many land uses		Bicycle parking required with many land uses	Bicycle parking required with many land uses	Bicycle parking required with many land uses; every 5 bicycle spaces reduces total vehicle spaces (required) by 1
		Up to 30% of parking supply can be compact	15% (max) compact car designation			
		City contracted with zipcar (downtown area)				Bike sharing station with 15 docks and 8 shared bicycles reduces vehicle parking by 3 spaces; additional standards may apply
Parking location / distance from site	On-street (alternative compliance/exceptions to general office)	N/A	Parking can be provided up to 600' from site (pedestrian route)	Parking can be provided up to 300' from site	Parking can be provided up to 1/4 mile from site	Parking can be provided up to 500' from site
Commuter parking incentives / programs	TBD	N/A	N/A	Transit information provided	N/A	N/A
		Pool parking provided; transit service (hours) extended)		Commuter programs provided	City offers commuter services (bus, car pool, van pool)	
				10 + employees requires commuter program		20 + parking spaces requires carpool parking (5 spaces or 5% of total)
				Can pay in-lieu of parking fee (where a public parking fund exists)		Stacked Parking (w/ Valet)

Public Involvement

Task Overview

Across the country, cities and transit-supported commercial districts are more thoughtfully examining the role that parking requirements play in shaping the development landscape. This study includes an in-depth examination of key issues, an assessment of the larger national debate regarding parking requirements, a review of best practices from peer communities, but hearing directly from community members is also a critical element of our assessment. Therefore a rigorous public involvement process was conducted from January through April 2014.

Intentional and targeted outreach to community stakeholders helps provide insight into the real and perceived parking and access challenges that residents, property owners, merchants, students and visitors encounter when they visit the districts included in the TOD study area.

The purpose of the public involvement process was to:

- Educate stakeholders and interested members of the general public about the process, goals and desired outcomes of the TOD Parking Study
- Identify and engage key individuals, groups and organizations within the study area that are impacted by both existing parking requirements and future policy decisions
- Provide residents with the opportunity to share their experiences, perceptions, ideas and concerns during the study process so that their feedback can be incorporated into the study recommendations in a meaningful way.

Public Involvement Strategy & Methodology Overview

Due to the complexity and technical nature of the study topic, Kimley-Horn and Associates engaged The Solesbee Group to develop an intensive public involvement strategy specifically for the Fort Collins TOD Project. The outreach strategy was specifically developed to help stakeholders better understand the role that parking requirements play in the City's larger community development and quality of life landscape, and was grounded in the important context of the City's adopted planning efforts – City Plan, Transportation Master Plan, Downtown Parking Strategic Plan and Midtown Plan to name a few.

The public outreach process officially kicked off January 22-23, with a set of meetings conducted by the consulting team. The remainder of the public meetings was conducted by City staff following the format outlined in the initial presentation which included a brief PowerPoint presentation and series of prepared questions (See Appendix C).

The following outline provides an overview of the opportunities that were provided to stakeholder groups, community organizations and the general public to provide feedback throughout the project.

- ***Community Engagement Strategy #1: Focus group presentations to key stakeholders and community groups***
  - Groups Engaged (January – April 2014)
    - UniverCity Connections, Transit and Mobility Taskforce, January 7

- Developers, Jan 22-23
- Commercial property owners, January 22-23
- Design community/planners, January 22-23
- Board of Realtors, February 11, May 13
- Overland Sertoma Club, February 19
- Downtown Business Association, March 20
- Colorado State University/Avery Park Neighborhood, March 27
- North Front Range MPO & Larimer County Mobility Council, April 17
- Chamber of Commerce, April 18
- CREW of Northern Colorado, June 4

- ***Community Engagement Strategy #2: Engage City Boards***
  - Groups Engaged (January – April 2014)
    - Planning and Zoning Board, March 7, April 4, May 8
    - Parking Advisory Board, March 10, May 12
    - Transportation Board, March 19
    - Affordable Housing Board, April 3
    - Economic Advisory Commission, May 21
    - City Council Work Session, May 27

- ***Community Engagement Strategy #3: General Public Involvement & Education***
  - Project Booth at Transportation Open House (Feb 20)
    - Attendees: 150+

  - Online Presence & Social Media (January – April 2014):
    - Project Web page on City Web site
    - City Facebook page
    - Project information distributed through:
      - Mason Corridor Connection E-newsletter
      - Development Review List Serve
        - 328 Subscribers
      - Nextdoor Web Posting
        - 4,174 total members
        - 3,330 households
    - Board of Realtors Survey
      - 400 Responses

  - Targeted Neighborhood Meetings (January – March 2014)
    - Downtown Neighborhoods, March 6
    - Midtown Neighborhoods, March 11
    - Campus Area/Avery Park Neighborhoods, March 27

- Tactic: Engage Media (January – April 2014)
  - Article in *Coloradoan (March 5)*
  - Neighborhood Services E-Newsletter

Additionally, an online questionnaire was included on the project Web site and promoted during public meetings, on Facebook and through existing e-publications like the Mason Corridor Connection E-Newsletter. The questionnaire was provided as alternative option for those who could not attend one of the public meetings to ensure that a variety of opportunities for feedback were provided. 67 people completed the questionnaire and a copy of the questionnaire tool is included in Appendix D.

Community Feedback

Extensive notes were taken at all the public meetings and that feedback, along with the open-ended questionnaire responses, was carefully analyzed to identify key themes and the most frequently mentioned stakeholder concerns. The result of that analysis is detailed in this following section.

Current State of Parking

When asked their opinion about the current state of parking in the TOD study area, stakeholders responded as follows:

- **Downtown** is very busy on-street but there is "plenty of off-street parking except for maybe once or twice a year". Many reported "never having trouble finding parking" in a downtown garage.
- The areas **around CSU** are "always congested"; 62% of Board of Realtor (BOR) survey respondents said there was "not enough parking" around CSU. There were mixed reviews about the Residential Parking Permit Program (RPPP) – not in terms of program management but in terms of the frustration of having students parking in the neighborhoods – and there was strong consensus that CSU should be more actively involved in either providing parking options for students or discouraging students from bringing cars in the first place.
- Largely there is plenty of parking in **Midtown**, except around a few projects like The Summit. 61% of BOR survey respondents said there was the "right amount of parking" around buildings and businesses. However, survey respondents also said that parking was one of the top two obstacles to the Mason Corridor's success (next to building heights).

Another important issue that was raised frequently in conversations about the current state of parking was the safety of pedestrians and bikers. It was mentioned that safety issues already exist in areas where there is a higher density of people and vehicles in the TOD (i.e., around campus and in residential areas surrounding campus), and by actively seeking to increase density with TOD-oriented policies, pedestrian/bicycle/vehicle conflicts will naturally only intensify. The solutions most frequently suggested were: 1) grade separation between bikes, pedestrians and vehicles was suggested, 2) separate paths for bikes and pedestrians and 3) improvement/better maintenance to existing bike paths.

"TOD without the 'T'"

One of the most, if not the most, consistent question heard throughout the stakeholder engagement process was: *Is it was too early to think about policy decisions like appropriate parking minimums/maximums for the TOD when MAX isn't online yet?* Many stakeholders rightly pointed out that while it is important to be aware of current parking issues in the TOD, these issues may not be the same once MAX comes online. This stakeholder feedback was in line with concerns raised by City staff and the consulting team at the beginning of this study. Stakeholders smartly cautioned the study team that any recommendations of the study should be data-driven and allow sufficient flexibility in parking policy decisions once MAX comes online. To begin addressing the "data question", City staff collected baseline parking occupancy data in the neighborhoods surrounding the MAX. Data was collected both during CSU's spring break and while class was in session to provide an accurate picture of occupancy in both scenarios.

"A Tale of Two Cities"

Perhaps the most striking theme identified throughout the public involvement process was the stark divide between respondents who strongly feel that Colorado is part of the "west" and that while using alternative modes is reasonable for "routine trips" (i.e., shopping, meeting friends, traveling to work or school), residents still want access to their cars and a convenient place to park them upon arrival. This sentiment was especially evident in the questionnaire where, in one question, respondents strongly supported the construction of additional structured parking to ensure convenient parking options and help prevent spillover into residential neighborhoods, while commenting that parking structures were "unsightly", "blocked mountain views" and discouraged the use of alternate modes in a following question.

While this "Tale of Two Cities" perspective isn't a new development, it is firmly part of Fort Collins' cultural fabric and it was vitally important for the consulting team to carefully consider both perspectives when creating a balanced set of recommendations for the TOD project. Through investment in the MAX Bus Rapid Transit line, the City of Fort Collins has made a very public commitment to developing policies and programs that support its adopted Triple Bottom Line approach. According to both the public meeting feedback and questionnaire results, a slight majority of residents are cautiously willing to support the City's more progressive approach to parking management – one that creates a reasonable disincentive for people to use single-occupancy vehicles as their main mode of transportation and that doesn't invest in car-oriented urban design. Stakeholders also showed strong support for existing City plans, a sentiment that is reflected a previous section of this report that highlights how the recommendations of this study were grounded in adopted City plans.

Balancing a "Case by Case" Approach

Several stakeholders confirmed one of the core assumptions made by the consulting team at the beginning of this project, which was that the result of this study would not be a "one size fits all" solution but instead would identify a process to guide City staff as they evaluate specific proposed projects. While stakeholders suggested that the City "be creative" and approach proposed developments on a case by case basis, a careful balance must be struck between allowing City staff and the development community enough freedom to come up with creative solutions while also recognizing the negatives associated with inhibiting development with burdensome review processes and/or "cutting things up into pieces" in terms of zoning and sub areas. Other frequently mentioned stakeholder comments included:

- The desire to see more of an incentive model rather than using regulation to enact change.
- The feeling that it is important to differentiate between types of projects, commercial, residential and student residential, in terms of parking impacts.
- The importance of developing a process whereby the City can obligate developers to follow through on the promises that they make to get a plan approved.

Other Frequently Mentioned Issues: On-Street Paid Parking, "PPP's" and Off-Site Car Storage

- **On-Street Paid Parking:** Implementing a paid parking program came up multiple times throughout a variety of different stakeholder groups as a tool that the City should have at its disposal. While on-street paid parking has been under discussion for many years in Fort Collins and many feel strongly that businesses will be adversely impacted by its implementation, the enforcement of time-limited parking has its limitations and free on-street parking seems counterintuitive in a community that actively supports alternative transportation modes and environmental sustainability. Many stakeholders also reported confusion about why they had to pay to use parking garages while on-street parking remains free; as one stakeholder wisely commented "the most convenient parking should be paid parking". If Fort Collins truly wants to achieve its goals of compact walkable development, reducing vehicle miles traveled, and supporting the success of alternative transportation investments, paid parking can be an effective tool and it should be leveraged as a key management strategy.
- **Public Private Partnerships (PPP's):** Public/private partnerships, related to the development of structured parking, should be a key strategy for achieving many of the TOD area's primary goals (i.e., increased development density, limiting the over-supply of parking, promoting shared parking, encouraging the success of the MAX line, etc.). Additional structured parking – which was the option overwhelmingly preferred by stakeholders for the development of future parking assets – is an expensive undertaking but when done well, can be positioned as an incentive that will spur additional TOD development.
- **Off-site Car Storage:** As discussed in the previous "Tale of Two Cities" section above, Colorado is considered part of the west and 93% of Board of Realtor survey respondents said owning a car was "Important" (67% said "Very Important"). The overwhelming majority of stakeholders said that owning a vehicle provides quick access to the mountains, Denver metro area, the Denver International Airport, and is part of the cultural fabric of Colorado. Bottom line: As long as a "convenient" alternative does not exist, people are not giving up their cars – even if they choose to live in a transit oriented corridor.

  One of the ideas shared with stakeholders during this study process was the concept of off-site car storage. The reactions to this suggestion were widely mixed – some thought it was a creative solution that was worth trying (as long as the remote parking was accessible via the MAX line), while others thought that the suggestion was a non-starter. While the consulting team was not aware of other communities where off-site car storage has been implemented effectively, "someone always has to be the first one to try a new idea" and a small study using CSU students and other residents located along the MAX could be a viable pilot study.

"Closing the Communication Loop": How Engagement Informs Policy Recommendations

The City of Fort Collins has one of the most robust public involvement processes of any City of its size across the country, and maybe even one of the most robust for a City of ANY size. What the City rightly realizes is that stakeholder engagement is a vital part of developing a successful access management and parking strategy that supports a community's larger economic development goals. Outreach to Fort Collin's diverse constituencies, while not without its challenges, provides important insight into the real and perceived parking, transportation and access challenges regularly faced by businesses, property owners, students, employees, visitors and members of the Fort Collins community.

However, in many communities that undertake a planning or study process like this one, communication with stakeholders about how their feedback was used to develop study or plan recommendations is often missing. After spending hours of time attending public meetings, taking surveys and engaging in online discussion, stakeholders often feel disenchanted with the process because they can't see their "fingerprints" when it comes time for recommendations on policies and programming to be made. In many communities, engagement grinds to a halt when the study is complete or the consultant leaves town, and stakeholders don't hear from their cities again until it is time for a new round of public meetings.

In cities like Fort Collins – where proactive and authentic public involvement is part of the community culture – it is really important to continue communication and education throughout the policy development and implementation phases, giving the stakeholders and general public an avenue to give feedback that could help refine the implementation process. This process – "Closing the Communication Loop" – also helps build trust and confidence that feedback given during the public involvement process was both heard and incorporated into the final recommendations. It is the hope of the consulting team that stakeholders will see their words and thoughts reflected in this Public Involvement chapter of the Transit-Oriented Parking Study. It is also strongly recommended that this report, along with an Executive Summary which includes specific recommendations, be made available to the general public using a variety of formats, including distribution through existing e-publications (i.e., Mason Corridor Connection), and social media with links to the project Web site.

Data Collection

Data collected by City Staff – March 2014

The following tables and maps summarize the data collection efforts conducted to document current parking inventory and utilization around the new developments within the TOD Overlay Zone.

Parking utilization surveys were conducted around seven recent development projects within the TOD Overlay Zone, including the Summit. Parking utilization surveys were conducted at various times of day including: mid-week early AM counts, mid-week mid-day counts, evening counts and weekend counts. Counts were also taken during the CSU spring break week to provide a snapshot of parking utilization in the absence of normal student activities.

Additional parking utilization data collected as part of the City's new Residential Parking Permit program was also reviewed.

The bottom line was that parking utilization rates were within acceptable ranges (none would have met the minimum standard required to initiate the City's residential parking permit program) and while acknowledging that some residents still express concerns regarding parking spillover, the problem, based on the collected data, does not appear to be as bad as initially thought.

TOD Parking Study
TOD Overlay Zone Development Projects - Parking Utilization Analysis
Mid-Week Parking Counts
Data Collected by City Planning Staff - March 2014

Property Name	Date	Time	Public Occupancy	Private Occupancy	Public Capacity	Private Capacity	Percent Occupied
318 W. Myrtle	4/9/2014	6:20 AM	78	0	135	0	**57.78%**
318 W. Myrtle	4/9/2014	2:15 PM	115	0	135	0	**85.19%**
Flats at the Oval	4/9/2014	6:20 AM	154	41	452	57	**38.31%**
Flats at the Oval	4/9/2014	2:50 PM	345	35	452	57	**74.66%**
Penny Flats	4/9/2014	6:40 AM	95	0	382	0	**24.87%**
Penny Flats	4/9/2014	3:15 PM	214	0	382	0	**56.02%**
Pura Vida	4/9/2014	6:20 AM	216	35	383	49	**58.10%**
Pura Vida	4/9/2014	2:50 PM	293	29	383	49	**74.54%**
Ram's Crossing	4/9/2014	5:40 AM	78	254	137	495	**52.53%**
Ram's Crossing	4/9/2014	2:00 PM	137	269	137	495	**64.24%**
Summit on College	4/9/2014	5:50 AM	176	261	341	834	**37.19%**
Summit on College	4/9/2014	2:25 PM	118	308	341	834	**36.26%**
Willow St. Lofts/Legacy Apartments	4/9/2014	7:00 AM	62	72	411	142	**24.23%**
Willow St. Lofts/Legacy Apartments	4/9/2014	3:15 PM	191	111	411	142	**54.61%**

TOD Parking Study

TOD Overlay Zone Development Projects - Parking Utilization Analysis

Evening Parking Counts

Data Collected by City Planning Staff - March 2014

Property Name	Date	Time	Public Occupancy	Private Occupancy	Public Capacity	Private Capacity	Percent Occupied
318 W. Myrtle	4/4/2014	6:25 AM	80	0	135	0	**59.26%**
318 W. Myrtle	4/4/2014	8:10 PM	93	0	135	0	**68.89%**
Flats at the Oval	4/4/2014	6:25 AM	243	56	452	57	**58.74%**
Flats at the Oval	4/4/2014	8:10 PM	270	42	452	57	**61.30%**
Penny Flats	4/4/2014	6:45 AM	103	0	382	0	**26.96%**
Penny Flats	4/4/2014	8:25 PM	130	0	382	0	**34.03%**
Pura Vida	4/4/2014	6:25 AM	196	42	383	49	**55.09%**
Pura Vida	4/4/2014	8:15 PM	160	28	383	49	**43.52%**
Ram's Crossing	4/4/2014	5:45 AM	75	295	137	495	**58.54%**
Ram's Crossing	4/4/2014	7:10 PM	62	185	137	495	**39.08%**
Summit on College	4/4/2014	5:55 AM	275	276	341	834	**46.89%**
Summit on College	4/4/2014	7:45 PM	138	537	341	834	**57.45%**
Willow St. Lofts/Legacy Apartments	4/4/2014	6:45 AM	78	69	411	142	**26.58%**
Willow St. Lofts/Legacy Apartments	4/4/2014	8:45 PM	295	81	411	142	**67.99%**

TOD Parking Study

TOD Overlay Zone Development Projects - Parking Utilization Analysis

Weekend Parking Counts

Data Collected by City Planning Staff - March 2014

Property Name	Date	Time	Public Occupancy	Private Occupancy	Public Capacity	Private Capacity	Percent Occupied
318 W. Myrtle	4/5/2014	6:15 AM	78	0	135	0	**57.78%**
318 W. Myrtle	4/5/2014	3:00 PM	61	0	135	0	**45.19%**
Flats at the Oval	4/5/2014	6:15 AM	216	43	452	57	**50.88%**
Flats at the Oval	4/5/2014	3:00 PM	206	33	452	57	**46.95%**
Penny Flats	4/5/2014	6:30 AM	108	0	382	0	**28.27%**
Penny Flats	4/5/2014	3:20 PM	125	0	382	0	**32.72%**
Pura Vida	4/5/2014	6:15 AM	190	26	383	49	**50.00%**
Pura Vida	4/5/2014	3:00 PM	143	23	383	49	**38.43%**
Ram's Crossing	4/5/2014	5:40 AM	64	204	137	495	**42.41%**
Ram's Crossing	4/5/2014	2:15 PM	50	157	137	495	**32.75%**
Summit on College	4/5/2014	5:50 AM	166	230	341	834	**33.70%**
Summit on College	4/5/2014	2:30 PM	128	404	341	834	**45.28%**
Willow St. Lofts/Legacy Apartments	4/5/2014	6:45 AM	70	70	411	142	**25.32%**
Willow St. Lofts/Legacy Apartments	4/5/2014	3:25 PM	297	66	411	142	**65.64%**

TOD Parking Study

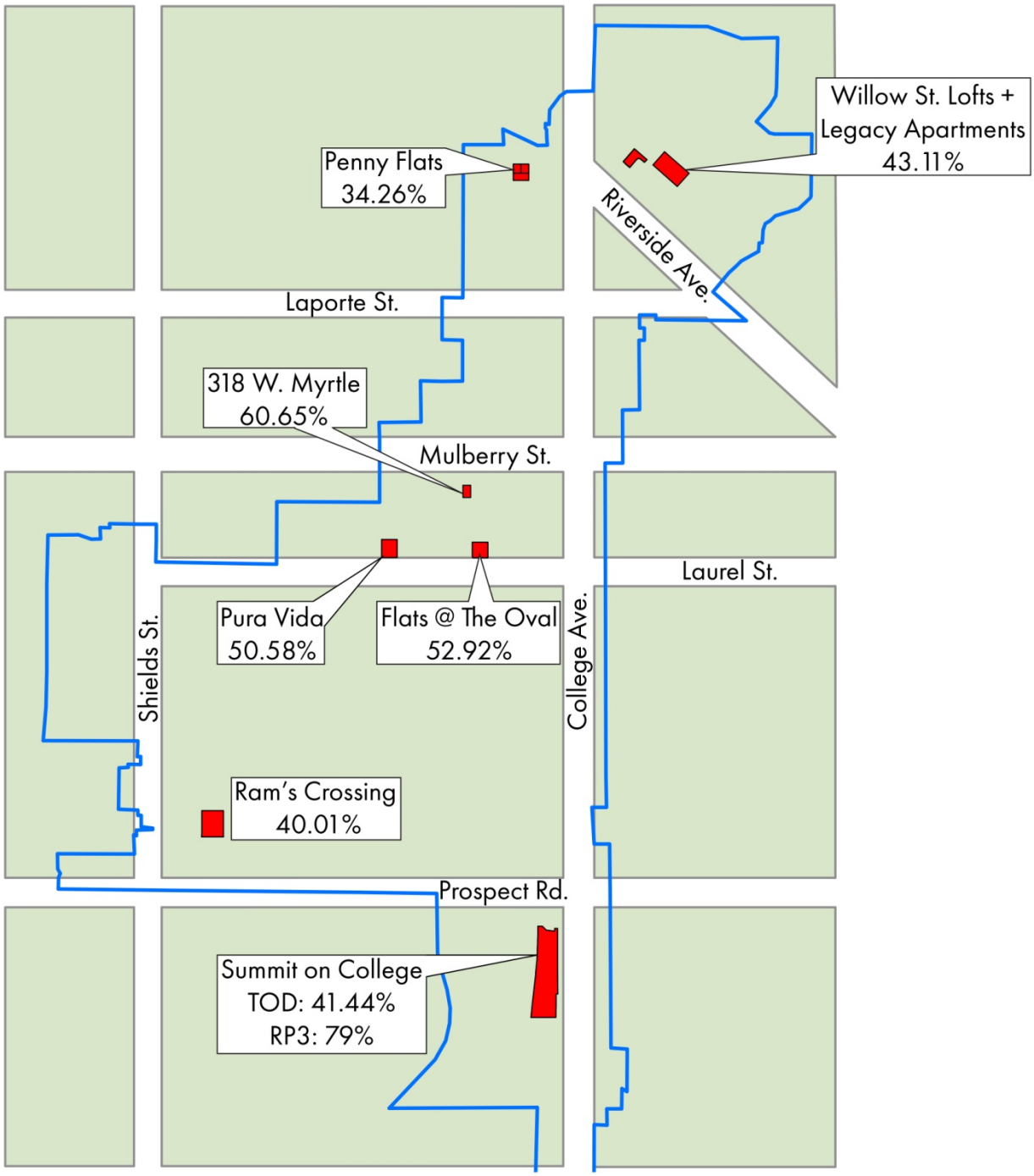
TOD Overlay Zone Development Projects - Parking Utilization Analysis

Spring Break Parking Counts

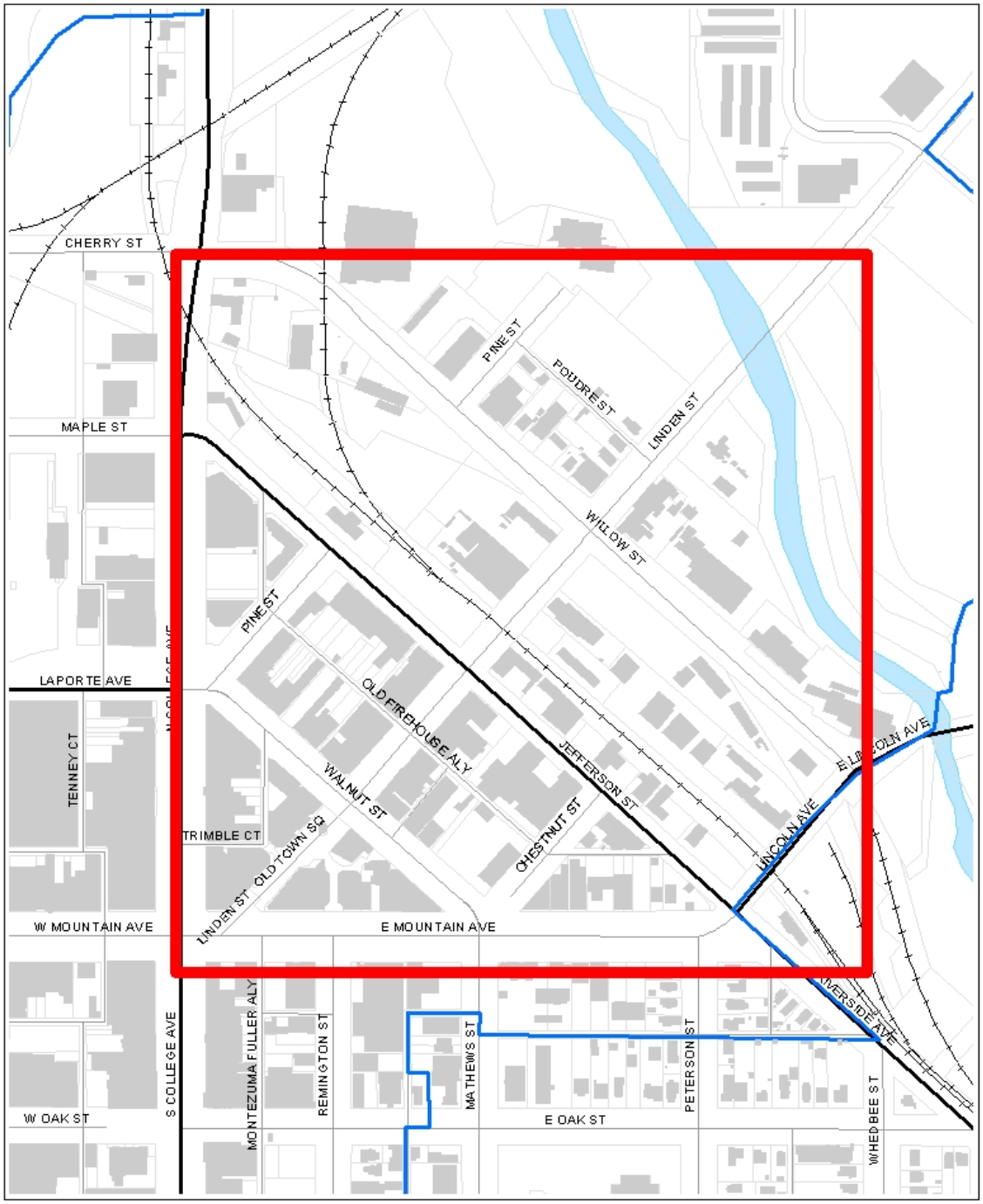
Data Collected by City Planning Staff - March 2014

Property Name	Date	Time	Public Occupancy	Private Occupancy	Public Capacity	Private Capacity	Percent Occupied
318 W. Myrtle	3/20/2014	5:45 AM	46	0	135	0	**34.07%**
318 W. Myrtle	3/20/2014	2:15 PM	104	0	135	0	**77.04%**
Flats at the Oval	3/20/2014	5:45 AM	164	21	452	57	**36.35%**
Flats at the Oval	3/20/2014	2:15 PM	270	16	452	57	**56.19%**
Penny Flats	3/20/2014	6:20 AM	84	0	382	0	**21.99%**
Penny Flats	3/20/2014	3:15 PM	188	0	382	0	**49.21%**
Pura Vida	3/20/2014	5:45 AM	144	23	383	49	**38.66%**
Pura Vida	3/20/2014	2:15 PM	179	21	383	49	**46.30%**
Ram's Crossing	3/19/2014	6:00 AM	31	60	137	495	**14.40%**
Ram's Crossing	3/19/2014	3:00 PM	47	55	137	495	**16.14%**
Summit on College	3/18/2014	6:00 AM	115	121	341	834	**20.09%**
Summit on College	3/18/2014	2:00 PM	85	308	341	834	**33.45%**
Willow St. Lofts/Legacy Apartments	3/20/2014	6:00 AM	45	69	411	142	**20.61%**
Willow St. Lofts/Legacy Apartments	3/20/2014	3:15 PM	236	95	411	142	**59.86%**

Data Collection Sites at Multi-family Developments in the TOD Overlay Zone



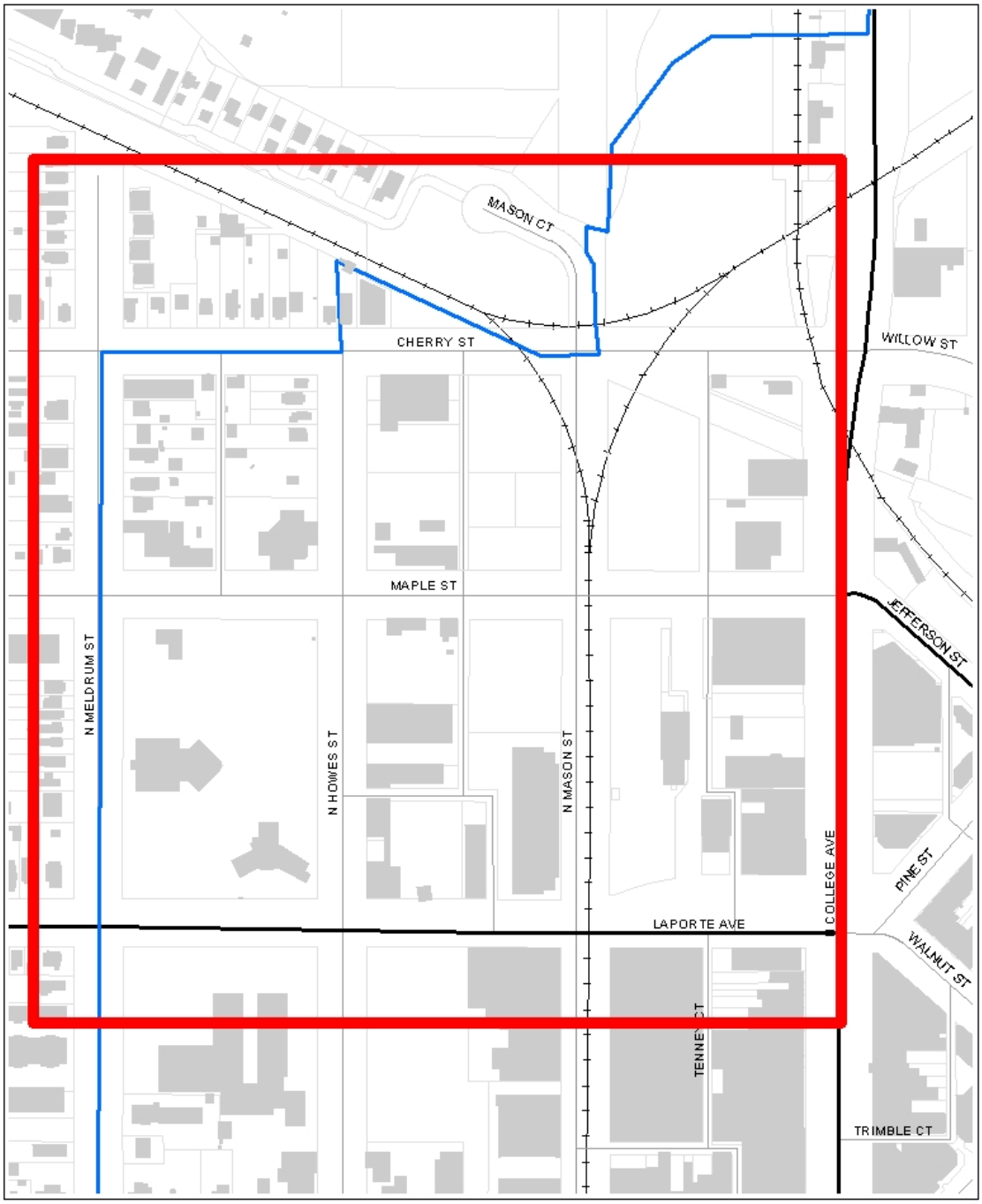
Willow St. Lofts/Legacy Data Collection Area



318 W. Myrtle Data Collection Area

Flats at the Oval Data Collection Area

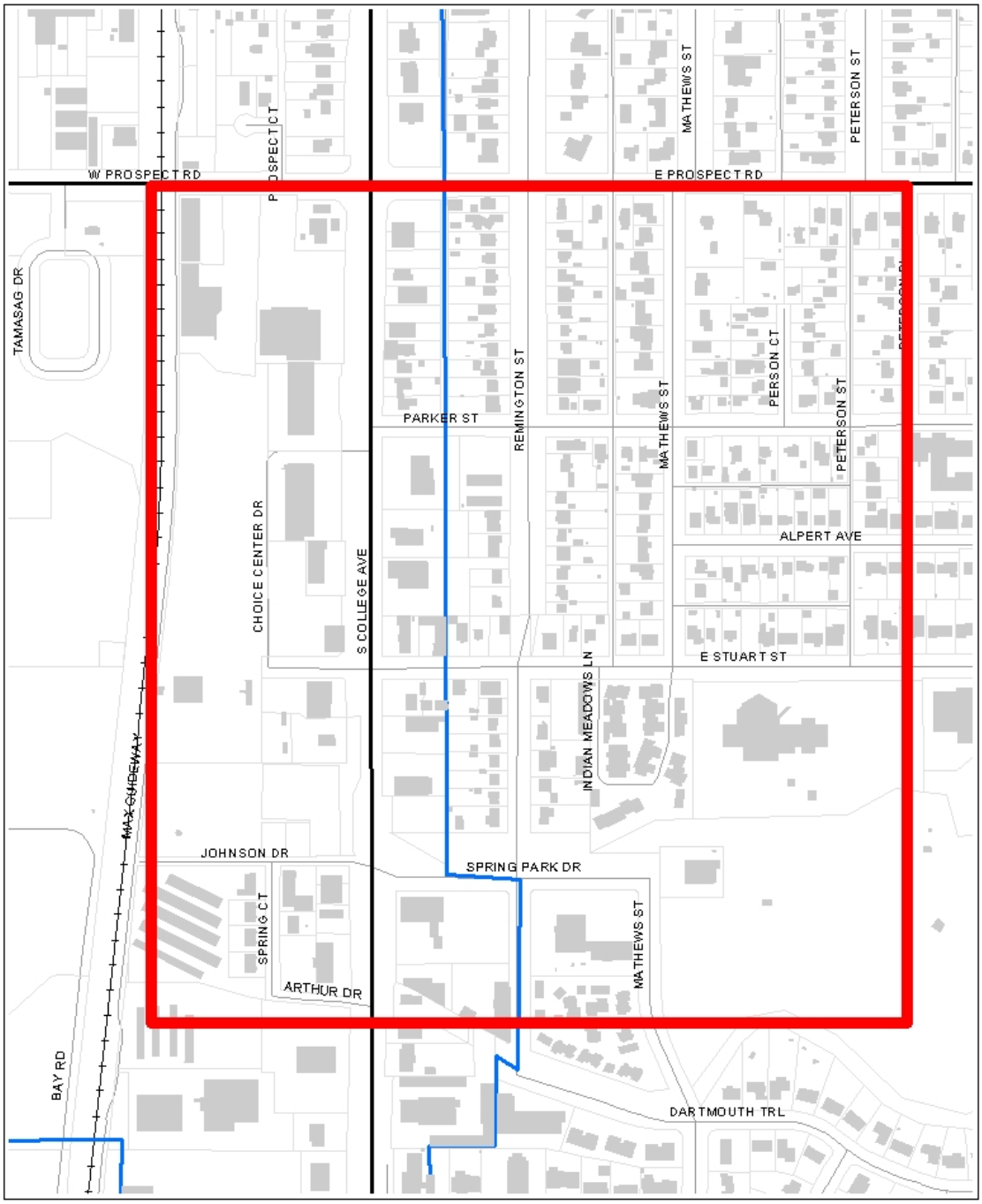
Penny Flats Data Collection Area



Pura Vida Data Collection Area

Ram's Crossing Data Collection Area

Summit on College Data Collection Area



Alternatives Assessment

Introduction

Alternatives Review

The following alternatives were identified in the overview and scope of the project. The following factors were considered in the assessment of each alternative based on our review of best practices and the peer city reviews conducted as part of this study.

Alternative 1: No changes

- Factors considered:
  - It may be premature to evaluate parking standards for the Transit-Oriented Development Overlay Zone prior to an operational transit system (MAX) for which the standards were created to complement.
  - Existing "temporary" standards will limit over-building of parking to some degree, however, costs for parking are high, and particularly so for structured parking where the life-cycle of a parking structure is 50 – 75 years.
  - The original TOD Overlay Zone was developed per Federal Transit Administration (FTA) requirements of New Starts/Small Starts grant funding program for the MAX BRT system. FTA may be opposed to the parking standards being "watered down" – as the focus of the parking management strategy – is to promote use of BRT. The revised parking management strategy was a requirement for City of Fort Collins to receive FTA approval for MAX funding. Could it affect on-going or future FTA funding if the parking requirement changes are made permanent?
  - Does a lack of revisions to our interim parking standards change our decision making going forward?

Alternative 2: Minimum Requirement with Alternative Compliance

- Factors considered:
  - Existing "temporary" standards will limit over-building of parking to some degree.
  - If developers propose alternatives, those options could be vetted through a parking impact study. Defining specific data requirements and parking impact study methodologies as well as standards for applying the results by City staff are being evaluated.
  - Storage parking strategies are being assessed as an alternative compliance option.
  - Regarding student housing issues, leverage the fact that CSU already has a bus pass program with Transfort. The City could monitor increases in transit usage and related traffic and parking

demand impacts on an on-going basis and identify opportunities to collaborate with CSU on common parking goals.

- The City could develop a range of developer and/or employer trip reduction programs.
- Minimum requirements could vary based on land use and/or development size and character.

Alternative 3: Parking Impact Study

- Factors considered:
  - For development projects of a certain size, a required "parking impact study" could provide some protection for adjacent neighborhoods and provide developers with a process for proposing or assessing alternatives.
  - Defining specific data requirements and parking impact study methodologies as well as standards for applying the results by City staff are being evaluated.
  - Shared parking strategies between properties should be encouraged.
  - Inclusion of a parking study as a minimum submittal requirement will add cost and complexity to the development review process.

Alternative 4: Dynamic Parking Requirement

- Factors considered:
  - Consider how parking standards can be tied to trip generation rates. A key goal of the TOD Overlay Zone was not to allow the parking supply to be overbuilt. The fact that the MAX is not yet in place is an issue, however, we should not lose sight of the goal that parking should be sized based on the vision for the future not what is needed today before the Bus Rapid Transit (BRT) opens.
  - The City and CSU both have access to the Park+ parking demand modeling software. This could be expanded and used as an on-going tool in the Development Review Process (as is currently being done in the City of Beverly Hills)
  - As the opportunities for multi-modal transportation options expand, parking requirements could be more dynamic, adapting to specific criteria on an aggregate or area-specific basis.

Alternative 5: Parking Fees

- Factors considered:
  - Fee-in-Lieu programs have been reviewed and have several significant drawbacks.
  - Parking Impact Fees are an option that may offer more benefits and flexibility.
  - Other approaches to parking infrastructure development (to support the larger TOD corridor development goals) are being reviewed. The options that appear most viable include:

- Development or Parking Impact Fees
- Paid on-street parking
  - A paid parking pilot program on Lake Street (adjacent to CSU which already has paid parking) could be a way to introduce paid parking on a limited basis.
  - Paid on-street in the downtown area could generate a significant revenue stream that could be used as the basis for parking infrastructure development going forward.
- A tax measure to underwrite future parking and transportation infrastructure development is another viable alternative (at least from the perspective of generating an adequate revenue stream to fund the needed investments).

Alternative 6: Structured Parking Strategies

- Factors considered:
  - Consider long term "return on investment strategies"; in particular consider data regarding land value and potential tax generation rates for different types of development patterns. Parking investment can be a tool to support and encourage the level of development density in the TOD corridor. It can be viewed as an "investment" as opposed to an incentive. There needs to be a balance between developer-required investment and public investment. A parking investment and infrastructure funding strategy is needed.
  - Consider public/private partnerships for the creation of mixed-use parking structures, on-site and off-site parking for private development, and as an economic development tool:
    - CSU would consider a shared-use garage along the MAX line between Pitkin and Lake Streets
    - An alternative site nearer to Drake may be an option
    - Finding a key location or locations for development along the MAX corridor for a "model" TOD development project (a project that exemplifies the desired type and scale of development that the City wants to encourage)could be developed to "set the standard" for the corridor in terms of development density, design standards, shared parking, support of transportation alternatives, etc. As part of this "idealized development project", a public/private partnership related to the provision of structured parking could be developed as a road map for similar projects to follow.

Alternative 7: Other Strategies

- Factors considered:
  - Focus on "multi-modal strategies". Increase opportunities for improved walkability and urban design, active transportation, and monitor trends in automobile ownership patterns, etc. as a way to improve overall accessibility and to reduce vehicle miles travelled and parking demand.

- One of the goals of the original TOD overlay zone was to incentivize structured parking by allowing more density which, in turn, provides an incentive for more affordable housing. How can new approaches further promote and reinforce these goals?
- Consider the goals and role of neighborhood parking permit programs. This will involve balancing the use of public rights of way, promoting long-term planning goals, being sensitive to the needs of neighborhoods and property owners and sustaining the high quality of life that citizens expect in Fort Collins.
- Consider the data regarding travel trends related to younger and future generations – people of all ages in the future will not be choosing to live or travel the way that we have in the past. How do we best incorporate these trends into our policy recommendations?
- Evaluate strategies such as Parking Districts and/or district management strategies that leverage parking management as a tool to achieve larger district/area development and management goals.
- A central conflict in the parking analysis exists between long-range policies that promote the aggressive land-use, transportation and climate action goals, found in City Plan, and the Transportation Master Plan versus short-term parking needs based on present land use patterns and parking demand. Consider the development of incremental approaches that balance long-term goals with short and mid-term needs.
- The potential for shared-use storage parking at CSU is not being considered by University staff at the present time, but should be revisited on a regular basis as the campus parking and transportation programs change over time.
- The creation of an "Economic Development Oriented Parking Policy" should be considered. Such a policy was developed for the City of Tempe, AZ.
- Actively identify opportunities for public/private partnerships (i.e., shared parking, joint financing of new facilities, etc.). A concept referred to as the "Business Development Score Card Strategy" is recommended.

Recommendations

The following recommendations seek to balance the need for development-provided parking and City policies for infill and redevelopment in the near term. In the long term, these recommendations propose to facilitate a comprehensive approach to parking, transit, and public investment.

Recommendation #1: Minimum Parking Requirements that Vary Based on Land Use

This recommendation is consistent with best practices in terms of lower minimum parking requirements with a maximum requirement within the TOD Overlay Zone and allowances for reductions with demand mitigation strategies.

Multifamily and Mixed-Use Residential Land Uses

- Minimum Parking Requirements – The following minimum parking requirements represent a lower parking requirement than outside the TOD Overlay Zone and differentiates the rent-by-the-bedroom model of leasing that was identified as contributing to the issue of spill-over parking.

  Land Use Code
  Multi-family dwellings and mixed-use dwellings within the Transit-Oriented Development (TOD) Overlay Zone shall provide a minimum number of parking spaces as shown in the following table:

Land Use	*Minimum Parking Requirement**
Rent-by-the-Bedroom Multi-family Dwellings	*Parking spaces Per Bedroom*
All Bedrooms	*0.75*
Multifamily Dwellings Number of Bedrooms Per Dwelling Unit	*Parking Spaces Per Dwelling Unit*
One or less	*0.75*
Two	*1*
Three	*1.25*
Four and above	*1.5*
**Maximum of 115% of minimum requirement unless provided in a structure.*	

The “rent-by-the-bedroom” model of leasing and managing multi-family dwellings has increased greatly in the past decade. The recommendation to require parking provided per-bedroom is because this leasing model creates a greater

occurrence of unrelated adults occupying a dwelling unit, as one must be an adult to sign a lease. Thus, creating a higher incidence of unrelated adults and a higher vehicle ownership rate per dwelling unit.

Nonresidential Land Uses

Currently, the Land Use Code does not have minimum parking requirements for commercial land uses; it only has maximum requirements. The Planning and Zoning Board and City Council requested this study evaluate the implementation of minimum parking requirements for nonresidential land uses.

The recommended minimum parking requirement is approximately 50% of the maximum parking standard. This recommendation includes exemptions for existing buildings and an additional 25% reduction for development within the TOD Overlay Zone.

Recommendation #2: Alternative Compliance Based on Parking Demand Mitigation Strategies

This recommendation provides flexibility for development to adequately provide parking strategies and also efficiently develop property in targeted infill and redevelopment areas.

- Parking Requirement Reductions – The following demand mitigation strategies are demonstrated methods to reduce parking demand and provide options for residents to use alternative modes of transportation.

  Land Use Code
  Multi-family dwellings and mixed-use dwellings within the Transit-Oriented Development (TOD) Overlay Zone may reduce the required minimum number of parking spaces by providing demand mitigation elements as shown in the following table:

*Demand Mitigation Strategy***	*Parking Requirement Reduction****
Affordable Housing Dwelling Unit[1] (< 50% AMI)	*50%[1.]*
Transit Passes for each tenant	*10%[2.]*
Car Share	*5 spaces/1 car share[3]*
Within 1,000 feet walking distance of MAX Station. (Walking distance shall mean an ADA-compliant, contiguous improved walkway measured from the most remote building entrance to the transit station and contained within a public ROW or pedestrian easement.)	*10%*
Shared Parking	*Based on Shared Parking Study Results*
Off-Site Parking	*1:1*
Bicycle & Pedestrian LOS A	*10%[4.]*
Transportation Demand Management (TDM)	*Varies Based on Proposal*
***All demand mitigation strategies shall be recorded on the site plan and subject to audit for the duration of the project.*	
****Maximum of 50% reduction without provision of a Parking Impact Study or Transportation Demand Management.*	

[1]Affordable Housing – Families earning 24% - 36% area median income (AMI) have a 44% lower vehicle ownership rate. (Source: www.nonprofithousing.org)

[2]Transit Passes – The table below illustrates the effects of providing transit passes:

Location:	Drive to Work			Transit to Work		
Introduction of transit passes	Before	After	Difference	Before	After	Difference
Santa Clara, CA	76%	60%	-16%	11%	27%	16%
Bellevue, WA	81%	57%	-24%	13%	18%	6%
Ann Arbor, MI	N/A	-4%	-4%	20%	25%	5%
Boulder, CO	56%	36%	-20%	15%	34%	19%
Average			-16%			12%

Source: Traffic Reduction Strategies Study, City of Pasadena, Nelson Nygaard

[3]Car Share - Existing studies show that carshare members do reduce their car ownership. A study of City Carshare members found that 29% of members either sold vehicles or avoided planned vehicle purchases when the joined the program (Cervero et al., 2007)

In a more recent national survey, carshare members reduced their vehicle ownership from an average of .47 autos per household before joining a carshare program to .24 vehicles after joining (Martin, Shaheen, & Lidicker, 2010).

Notably, most of this reduction was due to one-car households becoming zero-car households, with many fewer two-car households joining and reducing their auto ownership. Over half of carshare members were in zero-car households when they joined, and remain so. Still, enough households shed a vehicle after joining carshare, or avoided purchasing a vehicle, that each carsharing vehicle replaced 9 to 13 private vehicles.

[4]Bike and Pedestrian Level of Service (LOS) A - Victoria Transport Policy Institute - Walking and Cycling Improvements Typical Parking Reduction = 5 - 15%. (See table in draft report page 26.)

- Parking Impact Study - In addition to the predictable allowances provided with the demand mitigation strategies outlined in recommendation one, this recommendation permits a development proposal to provide a comprehensive study of parking conditions on and around their site in order to justify a lower or higher parking ratio than required.

Land Use Code

Sec. 3.2.2(K)(1)(a)(1)(a)(2) Alternative Compliance. Upon written request by the applicant, the decision maker may approve an alternative parking ratio, other than the minimum required in the TOD Overlay Zone per subparagraph 3.2.2(K)(1)(a)(1), that may be substituted in whole or in part for a ratio meeting the standards of this Section.

a. Procedure. Alternative compliance parking ratio plans shall be prepared and submitted in accordance with the submittal requirements for plans as set forth in this Section. The request for alternative compliance must be accompanied by a Parking Impact Study which addresses issues identified in the City's submittal requirements for such study.

Review Criteria. To approve an alternative plan, the decision maker must first find that the proposed alternative plan accomplishes the purposes of this Section and the TOD Overlay Zone (3.10) equally well or better than would a plan which complies with the standards of these Sections. In reviewing the request for an alternative parking ratio plan in order to determine whether it accomplishes the purposes of this Section, the decision maker shall take into account the objective and verifiable results of the Parking Impact Study together with the proposed plan's compatibility with surrounding neighborhoods in terms of potential spillover parking.

- Transportation Demand Management (TDM) – A sample TDM checklist is shown in Appendix F. Implementation of this recommendation is outside the scope of this project, however, FC Moves has a budget offer to create and staff a TDM Program starting in 2015-16. In the interim, the Study proposes adding a definition to the Land Use Code for Transportation Demand Management (TDM) so that a private proposal may utilize this strategy.

Land Use Code
Transportation Demand Management shall mean a comprehensive program utilizing strategies that result in more efficient use of transportation and parking resources that further the City's sustainability, infill, and redevelopment goals. These strategies typically include, but are not limited to, transit subsidies, enhanced bicycle facilities, car/vanpool options, and shared parking.

TDM Discussion
The basic concept is to provide a service to helps private employers access a range of parking and trip reduction tools and programs. Connecting developers to resources that can help them reduce parking demands (and therefore potentially lower the amount of parking they would be required to provide) is win-win scenario. The key is having a well-developed program that offers a range of choices that developers or businesses can choose from depending on the type of business or development they are providing.

In most of the programs researched (Washington DC, Arlington County VA, Boulder CO, Ann Arbor MI), defined packages of TDM strategies are available that employers or developers can sign-up for. There is typically a multi-year commitment required and agreements must be signed to qualify for parking reductions as part of an alternative compliance component of a development review process.

A related trend in the world of urban public transport lies in mobility systems that will provide bicycles, cars and other mobility services on demand. In the future, many mobility assets will be shared instead of owned by users. Convenient and reliable lifestyle services will be offered to "connected" citizens who will be able to easily access these combined mobility services via their smartphones. Integrated mobility services are emerging as a smart alternative to vehicle

ownership in a rapidly urbanizing world. They offer new and easy to access options that can be tailored to better meet customer needs and also address a range of issues related to evolving urban environments.

Combined mobility services take the concept of shared-use to a new level, recognizing that the desires for flexibility and efficiency which are driving consumers to shared-use mobility solutions are further advanced when those solutions can be offered in an integrated platform. For those providers of mobility solutions that make the transition to combined mobility services, these developments offer a real opportunity to deliver sustainable growth over the next decades.

Recommendation #3: On-street Paid Parking

Direction from the Planning and Zoning Board to support on-street paid parking as a primary strategy is also strongly supported by the consultant team. Although implementation of on-street paid parking is outside the scope of this study, it is already being considered for further outreach and implementation by Parking Services through a budget offer for 2015-16. This Study acknowledges that further community dialogue must first take place in regards to where and when this strategy would be applied, and what the pricing and management system would be used.

On-street Paid Parking Discussion

Implementing paid on-street parking in targeted areas and eventually in other areas of the TOD Overlay Zone as the corridor matures has several benefits. Charging for parking is the most direct way to both reduce parking demand and helps ensure the availability and turnover of on-street and improve the utilization of off-street spaces. This strategy also begins to develop an on-going funding mechanism to support parking infrastructure investment. During the study that produced the Downtown Parking Plan the lack of a strategy to fund future parking infrastructure was labeled as a "huge unfunded liability". City parking staff have run several scenarios regarding potential revenue generation and the City finance staff have concluded that on-street paid parking is a viable option that has the capability of generating adequate revenues from which revenue bonds could be issued sufficient to fund multiple parking structures over time.

On-Street parking has other benefits as well. Beyond adding to the overall supply of parking, on-street parking slows traffic, creates better pedestrian environments by buffering sidewalks from moving vehicles, increases the viability of retail shops and services, and contributes to reducing the amount of land used for off-street lots.

There have been many technological advances related to on-street parking technology and related management applications. Appendix F provides a detailed overview of the latest in on-street parking technologies and management strategies.

Implementation of this recommendation is outside the scope of this project, however, Parking Services has a budget offer to create an on-street paid parking pilot program. As part of the proposed project, Parking Services will be further examining all the elements of on-street paid parking, including; where and when it is most appropriate to be administered, how much it will cost and the payment structure, technology, details of management, use of revenue, and further stakeholder outreach.

Recommendation #4: Public/Private Partnerships for Parking Structures

Provision of parking structures through public-private partnerships was strongly supported by stakeholders and noted as a priority by City Council. The MAX Bus Rapid Transit line has many opportune locations for such an investment. Parking structures can provide for off-site parking and serve as an economic development incentive for projects on challenging infill sites with limited space.

Parking Structure Investment Discussion

This recommendation encourages the City to develop a comprehensive approach that emphasizes leveraging parking infrastructure investment as a key element of community and economic development. Parking investments, made as part of an overall TOD business development strategy, should carry an expectation of a 5 to1 return on public funds invested. To achieve this level of return, projects that offer significant shared parking benefits are strongly encouraged.

To promote the effective management of existing and future public parking resources in the TOD Overlay Zone, a parking district approach which can coordinate and management parking and access management related issues should be strongly supported. Parking districts offer a mechanism to invest and manage parking resources within a defined geographic area.

Often times, the overriding goals of a district are actually more akin to a business or general improvement district that also manages parking as a tool for overall district management. As the district matures, and development intensifies, the role of the parking district and the types of management programs offered will evolve. In other communities, parking related revenues are often reinvested within the districts to support other strategic district development goals creating 'balanced and sustainable district access strategy'.

Another strategy would be to adopt the "Business Scorecard Development Approach" for TOD Overlay Zone in conjunction with the development of a parking infrastructure investment strategy that leverages shared parking to the maximum degree.

One approach to developing a downtown or area business strategy is to establish specific targets for housing, office, retail and hotel development within the district. This business strategy would ideally reflect the shared vision for the area and the community at large as defined in a city-wide strategic or master plan. This recommendation may be more appropriate as an element of the City's Urban Redevelopment Authority (URA) given that this agency oversees tax increment financing and related investment funds.

A model business score card can also incorporate several key parking elements. Key elements can include:

Identification of projects that support defined district master plan goals. Targeting specific development projects that move the forward the shared vision of the district is especially important for helping the district achieve its desired goals. In the case of the Fort Collins TOD Overlay Zone stated goals include such elements as: increased development density (mid-rise developments of four to five stories), compact in-fill development, walkability and good urban design, limited sharable parking assets, etc. There are often many potential development projects to consider, but prioritizing those projects that help move the community forward in the desired direction deserve special consideration and can provide justification for providing reasonable incentives.

As part of the parking support policies being proposed, maximizing the benefits of shared parking is an important consideration. Because of the cost of investing in structured parking, it is in the City's interest to get the most benefit from these public fund investments. Consider, for example, the investment in a 600 space public parking facility at $30,000 per space – an $18,000,000 investment. This investment could help support a variety different development projects.

One issue that came up frequently in the public engagement process but that can also be linked with the concept of leveraging public/private partnership was the fact that while many citizens in Fort Collins may use alternative transportation, vehicle ownership is still important to them. Having reasonable access vehicles was considered very important. Therefore a "storage parking" solution that would allow individuals to store their cars remotely, but still access them via the MAX line is a potential solution.

The City could enter into a public-private partnership to provide a certain percentage of parking spaces within a parking facility (surface and/or structured) which would be provided as "storage or remote parking". Funds to support this recommendation could come in the form of TIF revenues generated within the TOD Overlay zone to offset storage parking development costs OR through the provision of development incentives utilizing increases in density and/or floor area ratio (FAR). Funds generated (potentially dedicate a portion/percentage of revenues, dedicated line item, or similar) within the TOD Overlay Zone should be used exclusively for purposes related to the location, design, construction and maintenance of new municipal parking structures to serve the area. If determined that additional parking is not needed at the current time, based on continued growth within the community and this corridor, additional parking facilities will be necessary to minimize impacts on the adjacent neighborhoods; as such, the City should begin to identify those locations now in order to minimize the lag time between planning and development of these sites.

Implementation of this recommendation requires establishment of criteria the City would use when considering proposals for joint public-private parking investments. While this additional work falls outside the scope of the TOD Parking Study, Economic Health staff is already discussing ways to incorporate public-private partnerships for parking structures into its economic strategies.

Recommendation #5: Monitor effectiveness of MAX Bus Rapid Transit on parking conditions in the long term

Consistent feedback from stakeholders was that we have implemented TOD strategies and land use regulations before the MAX Bus Rapid Transit (BRT) was operational. Because these strategies are premised upon a functional high-frequency transit service, it is important to continue monitoring parking conditions in the long term. The MAX began service in May 2014 and therefore the data collected for this study will serve as a baseline condition.

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22 Donald Shoup, "The Trouble with Minimum Parking Requirements," Transportation Research Part A 33 (1999): 549-574. Available as a free download from http://shoup.bol.ucla.edu

Additional Resources

The following documents were provided to City staff on a CD as additional resources.

1. U.S. Parking Policies: An Overview of Management Strategies
2. Residential On-Site Carsharing and Off-Street Parking Policy in the San Francisco Bay Area
3. Alternatives to Minimum Parking Requirements – Forinash
4. City Carshare - Best-Practices
5. Effects of TOD on Housing, Parking and Travel
6. Parking Solutions - Examples and Case Studies
7. Exposed: America's Totally Inconsistent Minimum Parking Requirements
8. FHWA - Parking Pricing Primer
9. Integrating Demand Management into the Transportation Planning Process: A Desk Reference
10. How Flexible Parking Requirements Spur Economic Development: Lessons from Santa Monica
11. Parking Reforms for a Livable City - Centre for Science and Environment - New Delhi, India
12. Parking Guidelines for Downtown Kirkland, WA
13. Parking Mgmt. Strategies for Downtown Kirkland, WA
14. Montgomery County MD Parking Policy Study – Summary
15. Montgomery County Parking Policy Study – Spring 2011 – ZAP Summary
16. The Myth of Free Parking - Transit for Livable Communities
17. New Suburbanism: Reinventing Inner-Ring Suburbs
18. NYC Parking Best Practices
19. Parking Requirement Impacts on Housing Affordability – Litman – VTPI
20. Parking Management Tools - A Discussion of Time-Limits and Pay Parking
21. Westport Parking Study & Commercial Design Guidelines – City Council Presentation
22. Parking Best Practices – A Review of Zoning Policies and Regulations in Select US and International Cities

23. Parking Code Guidance: Case Studies and Model Provisions - MTC Smart Growth Technical Assistance: Parking Reform Campaign

24. Parking Management - Strategies, Evaluation and Planning – Litman – VTPI

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26. Policies for Shareable Cities: Transportation

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APPENDICES

Appendix A – Land Use Code Revision Ordinance

Appendix B – Parking Impact Study Guidelines

Appendix C – Community Engagement Questionnaire Results Summary

Appendix D – On-Street Parking Technology White Paper

Appendix E – Parking as an Economic Development Strategy White Paper

Appendix F – Sample Transportation Demand Management (TDM) Checklist