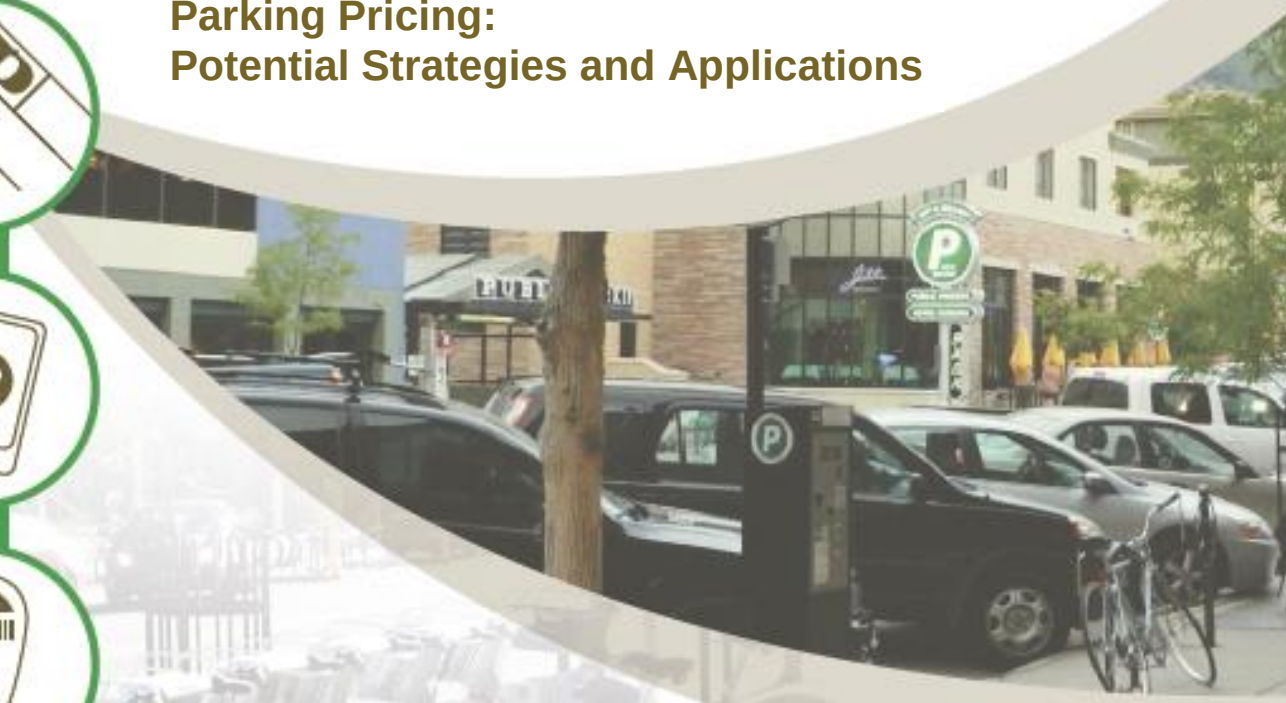
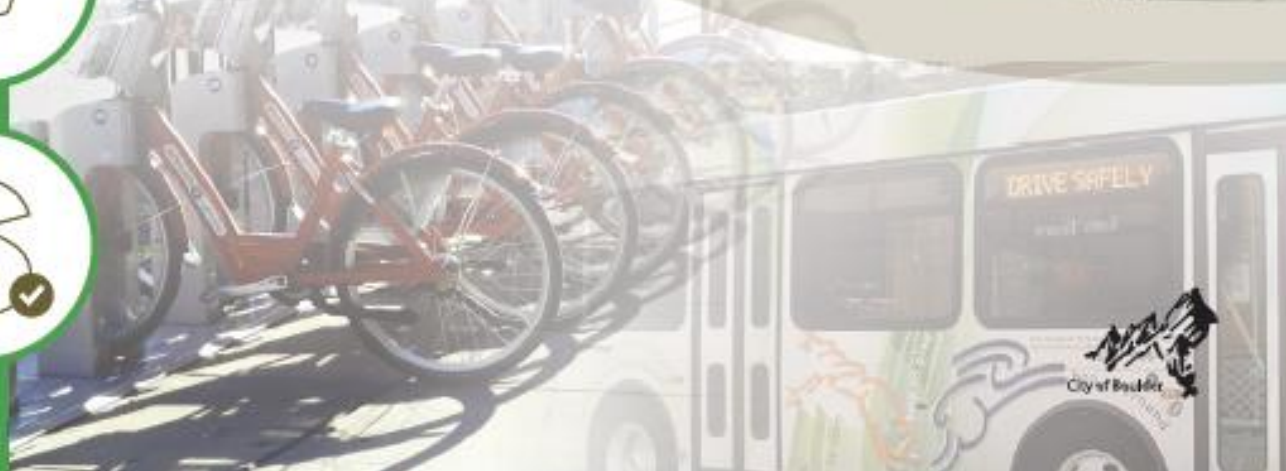
AMPS

CITY OF BOULDER

ACCESS MANAGEMENT & PARKING STRATEGIES

Parking Pricing:
Potential Strategies and Applications





Boulder Access Management and Parking Strategies

Parking Pricing
Potential Strategies and Applications

Kimley»Horn

Parking Pricing

Introduction

As one of the most powerful parking management tools, pricing is an important part of Boulder's larger access management strategy.

Pricing for on- and off-street parking should work together to provide options that incentivize customers to park appropriately and legally.

Any conversation about pricing adjustments needs to be grounded in a clear value proposition for stakeholders and customers.

Key Issues to Address

- Promote on-street turnover in dense, urban districts like Downtown and University Hill
- Create policies that balance the on-street parking needs of businesses, residents and visitors. Currently, it is:
    - Cheaper to park all day on street than it is to park in a garage.
    - Cheaper to pay a ticket than to pay to park legally.
    - The same price if someone gets two tickets or 200.
- Balance current and future parking demand while making progress towards Boulder's economic, social and sustainability goals.
    - Should off-street parking pricing be tiered?
    - Should on-street parking pricing be demand-based?
    - Should there be an escalating scale for fines?
    - How will future investment in parking technology and infrastructure be funded?
    - How can parking pricing be used to incentivize the use of alternate modes?

What Is On The Table?

As part of AMPS, City staff is analyzing parking pricing for the following:

On-Street

- *Meters*
- *Neighborhood Permit Parking Program (NPPP) areas*
- *Fines*

- *Visitors (Daily and Permitted)*
- *Commuter Permits*

Performance or “demand-based” pricing models are also being considered.

Where Are We Starting?

- Current conditions assessment
- Conducting “National Example” research
- Comprehensive evaluation of the inter-relationship of all parking rates and fines
- Exploration of the latest pricing models
- Demand-based pricing for on-street parking
- Progressive on-street parking pricing
- Planning extensive community outreach and engagement

What Are Others Doing Nationally?

Boulder is already a leader among communities its size, so models from larger, progressive metropolitan areas are being considered. Five cities that have shown national leadership in developing and implementing progressive parking pricing policies are being researched as part of this study: These cities include:

- Seattle, WA
- San Francisco, CA
- Albany, NY
- Miami, FL
- Washington, DC

Parking Pricing: Potential Strategies and Applications

The following are six potential parking pricing strategies that the consultant team will be evaluating as part of AMPS Phase II. Additional research and strategies may be added as the parking pricing assessment progresses.

Potential Strategy # 1: Geographic Demand-Based Sub-Areas

Description: Identify sub-areas within overall neighborhood districts that have parking demand in excess of 85% (less than 1 to 2 spaces/block face) or greater than 30% utilization.

Issues	*Applications*
Why Consider this Strategy?	Puts more focus on "the real problem areas". Provides a greater return on investment in terms of achieving performance-based pricing program goals and addressing under-performing areas.
Where & How to Apply?	• Quantify parking demand based on the average of the top three demand hours per day (as determined by supply/demand assessment). • Apply performance pricing in areas with demand in excess of 85%. • Apply other strategies to underperforming areas. • Create a standard rate-setting process for other areas that are operating within acceptable parameters.
Data Requirements	In an environment without wireless sensors, annual data collection for the overall parking system sets the baseline. For areas with high demand (>85%, where rate increases would have been applied) quarterly utilization surveys are recommended to identify and monitor impacts to space availability and the need for additional rate adjustments.

Enabling Technologies	From a technology perspective, automating these data collection efforts would greatly reduce costs, staff time expenditures and overall program efficiency. Options include: upgrading pay stations to provide enhanced transaction data and reporting. • Evaluate using paid occupancy data as a proxy to manual utilization surveys. Evaluate upgrading the mobile license plate recognition system and refine this technology as a more efficient data collection methodology.
Communications Strategies	Pre-launch campaign with messaging focused on providing customers more options. Specially formatted rate displays on multi-space meter, possibly supplemented with additional signage indicating “Performance-Based Pricing Rates In-Effect”. Website with pricing zones and parking rates. Mobile Application for real-time parking pricing information.

Potential Strategy # 2: Time of Day Pricing ("Time Bands")

Description: A time of day approach to parking pricing that identifies peak parking demand patterns by geographic areas and applies variable parking rates based on broad "Time Bands". For example, an area may have relatively low parking demand in morning hours, but demand ramps up in the late morning and afternoons beginning around 11:00 AM and then gradually declining into the evening.

Issues	*Applications*
Why Consider this Strategy?	One of the advantages of this approach is its relative simplicity and ease of communications. There is a little complexity when a parker's stay extends from one time band to another however. Another issue with the example above is that of "adjacency" (frequent parkers that become familiar with the rate schedules and boundaries park a block or two away to take advantage of lower rates).
Where & How to Apply?	• Analyze demand patterns and create time bands based on utilization data. • Identify level of demand by time band. • Apply pricing based on utilization levels and time band.
Data Requirements	Annual or biannual parking utilization studies could inform this strategy. We recommend assessing whether paid parking occupancy from parking pay stations could be used as a proxy for manual parking utilization studies.
Enabling Technologies	Upgrading pay stations to accommodate new pricing structures (especially stays that cross over time bands). Evaluate using paid occupancy data as a proxy to manual utilization surveys. Evaluation of upgraded mobile license plate recognition systems might provide another alternative data collection methodology.

Communications Strategies	Pre-launch campaign with messaging focused on providing customers more options. Specially formatted rate displays on multi-space meter, possibly supplemented with additional signage illustrating the “time bands”. Website with pricing zones and parking rates. Mobile Application for real-time parking pricing information.

Potential Strategy # 3: Day of Week Pricing

Description: Considers the differences in demand patterns between weekdays and weekends and adjusts rates based on parking demand.

Issues	*Applications*
Why Consider this Strategy?	Applies parking pricing based on parking demand. Higher when needed, standard rates otherwise. Acknowledges potentially significantly different demand patterns.
Where & How to Apply?	• Quantify demand based on the average of the top three demand hours on the survey days. • Apply performance pricing in areas with demand in excess of 85%. • Create a standard rate setting process for other areas operating within acceptable parameters.
Data Requirements	Annual parking utilization survey, supplemented with quarterly counts in high demand areas.
Enabling Technologies	Parking Pay Stations
Communications Strategies	Pre-launch campaign with messaging focused on providing customers more options. Rate displays on multi-space meters. Website with pricing zones and parking rates. Mobile Application for real-time parking pricing information.

Potential Strategy # 4: Seasonal Pricing Overlay

Description: Considers seasonal demand patterns and adjusts rates based on these cycles of demand.

Issues	*Applications*
Why Consider this Strategy?	Areas that have lower demands over a significant period of time do not have the same parking management challenges in low demand periods compared to high demand periods.
Where & How to Apply?	• Measure demand regularly to document demand patterns. • Apply lower rates or changes in parking management strategies in low demand periods and increased rates in high demand periods.
Data Requirements	Parking occupancy data is collected on a periodic basis adequate to document seasonal patterns.
Enabling Technologies	Manual parking surveys, aerial photographs or video could be used document demand. Assess whether paid parking occupancy from parking pay stations could be used as a proxy for manual parking utilization studies.
Communications Strategies	Possible changes to signage. Rate displays on multi-space meters. Website with pricing zones and parking rates. Mobile Application for real-time parking pricing information.

Potential Strategy # 4: Progressive On-Street Parking Pricing

Description: Progressive pricing of on-street parking rate is structured to (a) facilitate a desired rate of turnover, (b) keep rates for desired short-term parking lower and (c) allow for longer-term stays on street, but only if the parker is will to pay a premium rate for that privilege.

Issues	*Applications*
Why Consider this Strategy?	Can provide lower initial rates that escalate with time. Can provide parker flexibility regarding time stay duration (if parker is willing to pay a premium).
Where & How to Apply?	This strategy could benefit businesses that need short duration stays (dry cleaners, coffee shops, etc.) as well as business that need longer than the typical 2 hour time limit. This strategy could include lower rates for the first 30 – 60 minutes, standard rates from 1 hour to 2 hours and rates that jump higher for any period over two hours.
Data Requirements	Parking occupancy data and turnover data is collected on a periodic basis adequate to document the extent to which longer duration stays are occurring and the impact to on-street space turnover. Longer duration stays above 15% would be considered detrimental. If longer duration stays exceed the 15% benchmark, pricing would be increased until extended stay durations are in line with the desired percentage.
Enabling Technologies	Parking pay stations that can accepts progressive rate structure programming.

Communications Strategies	Pre-launch campaign with messaging focused on providing customers more options. Rate displays on multi-space meters. Website with pricing zones and parking rates. Mobile Application for real-time parking pricing information.

Potential Strategy # 5: Elimination (or Extension) of Time Limits

Description: The elimination of time limits is, in theory, coupled with increased or possibly progressive rates. The increased or "market-based" rates provide an "economic limiting factor" that produces the desired turnover.

Issues	*Applications*
Why Consider this Strategy?	Removes the artificial anxiety created by time limits and the fear of getting a citation. Provides parkers will longer stay options on-street, but at a premium price.
Where & How to Apply?	This strategy could be used to increase utilization in underperforming areas, by essentially changing the type of parking use permitted. It could also be considered to support a specific business use that requires longer duration stays.
Data Requirements	Knowledge of current parker and business needs.
Enabling Technologies	Parking pay stations that can accepts progressive rate structure programming.
Communications Strategies	Early discussions with merchants and business. Signage. Rate displays on multi-space meters. Website with pricing zones and parking rates. Mobile Application for real-time parking pricing information.

Potential Strategy # 6: Event-Based Pricing Overlay

Description: An event overlay approach would be tailored to specific areas of the downtown impacted by major events.

Issues	*Applications*
Why Consider this Strategy?	Addresses the specific issues associated with large events impacting adjacent neighborhoods or business district. One of the issues with this strategy is the need to "carefully define the strategy goals". For example, one goal of an event based pricing strategy could be to make more parking available for the "event parkers" in the area. This could be a reasonable goal depending on the area and the parking supply. Another goal of an event based pricing strategy could be to "maintain and protect short-term parking in the area for the non-event related businesses" in the area. These very different goals would require very different strategies.
Where & How to Apply?	• Tailor to areas of the downtown impacted by major events. • Carefully define the goals of the event overlay strategy. • Structure parking pricing to achieve the desired goals. • An event overlay could be integrated with other pricing approaches more intended to manage "typical day" demands in a geographic area or district.
Data Requirements	Occupancy data is collected at each event, which is then used to refresh the data pool and to inform event rate setting decisions. If multiple events occur in a defined area, another strategy to consider would be "levels of event planning" based on the intensity of events – a "Level1 Event" would be less complex and would require less coordination than a "Level 4 Event" which would assume multiple event venues in operation simultaneously and therefore would require additional coordination and strategies.

Enabling Technologies	Manual parking surveys, aerial photographs or video could be used document demand.
Communications Strategies	Event/facility utilization data. Rate displays on multi-space meters. Website with pricing zones and parking rates. Mobile Application for real-time parking pricing information. Potentially a structured event management plan.

Next Steps:

The Parking Pricing component of AMPS project is just getting underway. Next steps for this priority area include:

- Finalize Current Conditions Assessment and National Parking Pricing Research
- City Council Study Session in November
- Host "Practitioner Panel" in late November or early December
- Intensive stakeholder engagement through early 2016

Recommendations to Council in 2016 for implementation in 2017.

NOTE:

Molly: We did not include a discussion of "Parking Taxes" in this document. However, it could be added if desired. See below.

Strategy: ***Parking Taxes***

Description:

There are a variety of types of parking taxes. Commercial parking taxes are a special tax on parking rental transactions. Per-space parking levies are a special property tax applied to parking facilities. Commercial parking taxes discourage the pricing of parking and concentrate impacts in a few areas. Per space levies distribute cost burdens more broadly, encourage property owners to manage parking supply more efficiently, and reduce sprawl. Although per-space levies are more challenging to implement they tend to support more strategic planning objectives.

Many experts advocate various types of transportation pricing reforms, including cost-based fees and taxes for the use of roads and parking facilities ("Market Reforms," VTPI,

2005). Such reforms can provide double dividends by raising revenues and helping to achieve other planning objectives such as reducing traffic congestion, air pollution and sprawl.

Vehicle parking is particularly appropriate for reform (Shoup, 2005). Current parking planning practices tend to favor generous parking supply and minimal parking prices, which have unintended and undesirable consequences: they increase development costs, reduce housing affordability, cause dispersed land use patterns (commonly called sprawl), and increase automobile travel which exacerbates various problems including traffic congestion, roadway costs, crashes and pollution emissions. As a result, many professional organizations and planners recommend parking planning and management reforms (Litman, 2006a).

One such reform is to tax parking activities and facilities. Parking taxes can raise funds and help achieve various planning objectives, including more compact development and increased use of alternative modes (Feitelson and Rotem, 2004). Because excessive parking supply has so many negative impacts such taxes can provide significant benefits, particularly in growing urban areas where problems are greatest.

There are also practical reasons to tax parking. Such taxes are an appropriate source of revenue for local governments and public entities such as port districts and business improvement associations; they impose costs on property owners and motorists in specific areas and so can be considered a fair way to finance local transport services.

Types of Parking Taxes:

- Commercial Parking Taxes
    - Many jurisdictions impose a special sales tax on commercial parking transactions, called an ad valorem tax.

- Per Space or Area Levies
    - Some jurisdictions apply special taxes (called a levy) on parking facilities, based either on the number of spaces or their surface area. Such taxes can be structured to support specific planning objectives, such as applying a levy only on unpriced parking, to encourage property owners to price parking.

Action Items for Consideration:

- The tax base should be broad and well defined. A broad tax base spreads the financial burden and does not give certain groups a competitive advantage. For example, it is most equitable to tax publicly owned as well as private parking facilities.
- Before imposing special parking taxes, local governments should increase their own parking prices to market rates. Commercial operators tend to be more accepting of a parking tax if governments are already maximizing income from other parking-related revenue sources, such as meters and enforcement of parking regulations.
- Taxes and fees should be structured to avoid undesirable land use, travel or economic impacts, such as increased sprawl or reduced downtown competitiveness.
- Parking tax reforms should be part of overall parking and mobility management programs and coordinated between jurisdictions in a region.
- Exemptions and discounts should be well defined and audited to insure they apply as intended.

Potential Sub-Strategies for Implementation:

- If possible, require parking suppliers to pass taxes on to motorists, rather than absorb it.

- Enforcement should be fair, friendly and effective.
- Taxes should be structured for efficient compliance and auditing. When implementing a commercial parking tax, operators should be required to use a ticketing system that provides receipts and creates secure transaction records suitable for auditing.
- Establish an evaluation program, with before-and-after analysis, to determine the taxes impacts on parking supply and pricing, economic activity, traffic, and spillover problems.

Documented Results:

- Commercial Parking Taxes
    - The City of San Francisco imposes a 25% tax on all commercial off-street, nonresidential parking transactions ("any rent or charge required to be paid by the user or occupant of a parking space"). Revenues are divided between the city's general revenue, public transportation and senior citizen funds.
    - The City of Pittsburgh imposes a 31% parking tax (increased to 50% in 2005), the highest rate in the U.S. Parking operators indicated that they had been able to pass the majority of the tax onto the users, but had absorbed some of the tax themselves.
- Per Space or Area Levies
    - In Sydney, a Parking Space Levy of AU$800 annual per stall is currently applied to parking in the central business district (CBD), and AU$400 per stall at other business districts. The levy applies to all privately owned, non-residential, off-street parking. It is prorated for parking facilities that are only used occasionally, such as church parking lots; property owners must maintain daily records indicating how often such space is used. The levy raises more than AU$40 million annually, which is dedicated to transportation projects and cannot be used for operating expenses.
    - Vancouver, British Columbia, TransLink, the Vancouver, British Columbia regional transportation authority which builds and operates roads, transit facilities, bicycle facilities and other transport services, implemented a Parking Site Tax in 2006. The initial rate is $1.02 annually per square meter of non-residential parking facility, typically $25-$40 per space. Assessment, collection and enforcement of the tax utilizes the existing property tax framework, operated by BC Assessment, a provincial agency. The agency used aerial photos, digital mapping, municipal records and site visits to develop an inventory of non-residential parking facilities in the region. Exemptions include:
      • On-street parking.
      • Most buildings exempt from general property taxes (schools, churches, synagogues, etc.).
      • Parking facilities used for vehicle retail and rental business inventory storage, impounded vehicles, trailers of tractor-trailer units, vehicle servicing and fueling.
      • Parking facilities owned by TransLink (including Park & Ride lots).
      • Ferry loading queuing

Stakeholder Engagement:

Stakeholders, such as commercial parking operators, should be consulted to insure that regulations, administrative procedures, and enforcement policies are efficient and fair.