City of Bellevue

CURB MANAGEMENT PLAN

2023





ACKNOWLEDGEMENTS



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Note: Source for all uncredited images is the City of Bellevue.

EXECUTIVE SUMMARY

WHAT IS CURB MANAGEMENT?

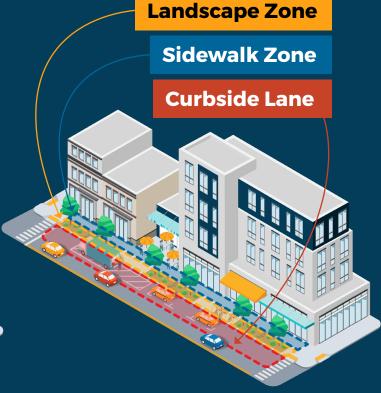
"The curb" is a shorthand planning term that describes a wide range of activities and features that are found along the edge of the public right-of-way. Curb management refers to the policies, systems, services, and strategies that support, regulate, and prioritize all of these activities at the curb.

Curb management is at the intersection of many different travel modes, services, and public spaces. This wide-ranging applicability is indicative of how valuable curb management policies can be for achieving Bellevue's goals, but it can also create confusion about what is and isn't included within the purview of curb management. To help address this confusion, the Curb Management Plan distinguishes between the overall **curbside area** and the its three more specific subareas: landscape zone, sidewalk zone, and curbside lane.

Some elements in the Curb Management Plan apply broadly to the overall curbside area, which includes all of the activities and features found on the sidewalk and in the right-of-way along the edge of the road. The Curb Typology, which is just one part of the Curb Management Plan, applies more narrowly to the curbside lane. The curbside lane does not include the sidewalk or other areas outside the roadway.

Curbside Area





WHY DOES BELLEVUE NEED A **CURB MANAGEMENT PLAN?**

In recent decades, Bellevue has grown dramatically and our transportation network has evolved—especially in the Urban Core. However, our approach to curb management has remained focused on accommodating single-occupancy vehicles.

Meanwhile, increased demand for a large and growing number of curbside uses—including transit, shuttles, delivery services, app-based ridehailing services, biking, and walking—have resulted in increased costs of enforcement, operations, and management, and

increased competition for curb access. To achieve our City's goals and continue to support our growth, Bellevue needs a plan to better manage and prioritize how the curb is used.

Bellevue is Growing

Between 2017 and 2022, Bellevue's population grew by nearly 10%. More people living, working, and visiting Bellevue means demand for space at the curb is increasing.

Bellevue's Transportation Network is Changing

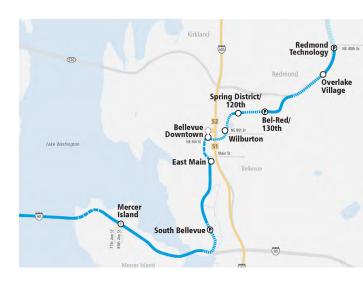
With a scheduled opening in Bellevue in 2024, Link light rail service will fundamentally change Bellevue's transportation network—including the curb. Anticipated impacts in Bellevue that a curb management plan can help address include:

- Increased passenger pick-up/drop-off activity
- Increased bicycle and pedestrian volumes, especially near light rail stations
- Decreased share of people who commute to or from Bellevue by car
- · Changes to when and where demand for on-street parking is highest

Travel Patterns and Behaviors are Shifting

New technologies, demographic trends, and major changes to daily commuting patterns represent major shifts in how, when, and where Bellevue residents travel each day. As these shifts continue to evolve, Bellevue will need a flexible and strategic plan for managing the curb that can readily adapt to change and continue supporting our City's goals well into the future.







carpooled, walked, biked, or took transit in 2019 (28.9%) relative to 2014 (26.6%).

HOW CAN THE CURB MANAGEMENT PLAN HELP ACHIEVE CITY GOALS?

The challenges that Bellevue is facing are not unique—many cities across the country have successfully addressed similar pressures with curb management strategies and policies. The recommendations in the Curb Management Plan will address and improve upon existing challenges seen today:



OPERATIONS

Current managerial practices regarding curbside operations are often handled ad hoc.



PERMITTING AND PRICING

Curbside demand management approaches and associated fee structures are inconsistent and inequitable across use cases.



ROLES AND RESPONSIBILITIES

Dedicated staff and funding sources for curb management are lacking. Currently, duties are shared across many teams and departments.



ENFORCEMENT

Curbside enforcement resources are constrained and limited, with responsibilities divided between contracted services and Bellevue Police Department.



PILOT PROJECTS

Pilot projects have delivered new insights, but practices have not transitioned into permanent operational procedures.



FLEXIBILITY

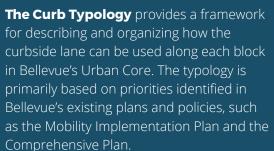
Bellevue has some curb practices in place now, but they are not applied as holistically and flexibly as they ideally could be.

WHAT DOES THE CURB **MANAGEMENT PLAN INCLUDE?**

The Curb Management Plan includes a set of strategies, tools, and recommendations to improve curb management in Bellevue. It consists of four main components:



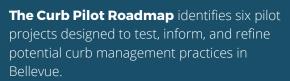
Curb Typolog



Curb Pricing

The Curb Pricing Framework outlines opportunities for using pricing to manage curbside demands, improve compliance and enforcement practices, and deliver financial resources to support a sustainable curb and parking management program.

Curb Pilot







DRAFT DRAFT

WHAT ARE THE CURB PRACTICE RECOMMENDATIONS?

			Near	Medium	Long				
Category	ID	Practice	Term	Term	Term	Cost	Impact	Effort	Departments or Groups
Curb Regulations	RG.1	Streamline and digitize curbside regulations		~		\$\$	High	High	Transportation
	RG.2	Add resources for curbside enforcement and compliance	✓			\$\$	High	High	Transportation, Police
	RG.3	Advance Bellevue's permitting system and procedural processes to optimize curb use		~		\$	Medium	High	Transportation, Dev Services, City Attorney, Finance
	RG.4	Consider changes to language in the Land Use Code to better integrate the built environment with the curbside		✓		\$	Medium	Medium	Transportation, Dev Services, CD
	ST.1	Perform an implementation study for a paid parking program and update on-street parking procedures	~			\$\$	High	High	Transportation, City Attorney, Dev Services, Finance
	ST.2	Refine and scale residential parking programs		✓		\$\$	Medium	Medium	Transportation
Storage	ST.3	★ Build and expand accessible parking (ADA) inventory	✓			\$	Medium	Medium	Transportation
	ST.4	Create Program to allow for Car Sharing		✓		\$\$	Low	Medium	Transportation, Finance
	ST.5	Implement common carrier locker program			~	\$\$\$	Medium	High	Transportation, Dev Services, IT
	AC.1	★ Create more passenger loading zones	✓			\$	High	Low	Transportation, Dev Services
	AC.2	★ Expand and relocate conventional commercial loading zones	✓			\$	High	Medium	Transportation, Dev Services
Curb Access	AC.3	Establish a smart loading zone program			✓	\$\$	Medium	High	Transportation, Finance
Features	AC.4	Manage an expanded employer shuttle loading zone program		✓		\$	Medium	Low	Transportation
	AC.5	★ Improve the bus shelter and shared stop program	✓			\$\$	Medium	Medium	Transportation
	AC.6	Establish formal protocols for curbside transit layover		~		\$	Low	Low	Transportation
Sustainable	SE.1	Deploy public charging infrastructure to promote equitable electric mobility			~	\$\$\$	Low	High	Transportation, Dev Services, CD, IT, Finance
and	SE.2	Develop a mobility hub strategy		✓		\$	Medium	Medium	Transportation, Dev Services, CD
Emerging Mobility	SE.3	Proactively evaluate Bellevue's current and future curb policies and tools to manage automated mobility services			✓	\$	Medium	Low	Transportation, CD, IT
	SE.4	Leverage Bellevue's Transportation Demand Management (TDM) Plan to manage curb demands		~		\$	Medium	Medium	Transportation
	AT.1	★ Expand the Al Fresco on-street dining program	✓			\$	High	Low	Transportation, Dev Services, CD
	AT.2	★ Establish a Parklet Program	✓			\$	Medium	Medium	Transportation, Dev Services, CD
Curbspace Activation	AT.3	★ Formalize a program for food trucks and curbside vendors	✓			\$	Medium	Low	Transportation, CD
	AT.4	Establish guidelines for protecting and expanding green space				\$	Medium	Medium	Transportation, Parks
	AT.5	Consider amending Land Use Code language to better integrate green space with the curb zone				\$	Medium	Medium	Transportation, Parks
Digital Governance and Policy	DG.1	Collect, maintain, and share curb asset information		✓		\$\$	Medium	Medium	Transportation, IT
	DG.2	★ Collect and analyze curb activity data to inform decisions	✓			\$\$	High	Medium	Transportation, IT
	DG.3	Automate enforcement and pricing processes		✓		\$\$	Medium	High	Transportation, Police, IT, Finance
	DG.4	Create and maintain digital policy expressions and management tools		~		\$\$	Medium	Medium	Transportation, Parks

= Priority













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CURB GLOSSARY AND ACRONYMS

Carshare: a short-term car rental model that allows people to rent cars for short periods of time, often by the hour.

Curb: the border area between streets and sidewalk spaces. In Bellevue's CMP, "curbspace" and "curb zones" refer to areas within the public right-of-way closest to the curb line.

Curbside Area: In Bellevue's CMP, this refers to the broad area inclusive of the curbside lane, landscape zone, and sidewalk zone. The curbside lane typically falls under Transportation authority, while the landscape and sidewalk zones can be informed by tools like the Land Use Code.

Curbside Lane: Area of the street right-of-way closest to the curb. Depending on the street, the curbside lane can be used for various purposes, such as a travel lane, bike lane, on-street parking zone, loading zone or on-street dining area.

Curb Data Specification: a set of application programming interfaces (APIs) developed by the Open Mobility Foundation that helps cities standardize digital curb data and dictate their communication, management, and sharing.

Curb Demand: all competing uses of curb space within the transportation system, such as vehicle and transit traffic, on-street parking and bike lanes, rideshare pick-up and drop-off, small freight deliveries, e-scooters, bikeshare and curbside charging stations for electric vehicles.

Curb / Curbside Management: The development, implementation, management, and enforcement of policy, assets, and technology governing the uses that interact with the curb.

Curb Pilot Roadmap: a component within the CMP that identifies potential pilot projects to test new curbside technologies and strategies.

Curb Supply: the inventory of all curb spaces and associated posted regulations for curb space. Specific curb supply is often reflected by posted signage (i.e., 2-hour parking, 15-minute loading, No Parking Anytime).

Curb Typology: a tool and language used to describe the general prioritization of curb spaces block-byblock. The typology is a high-level framework that will help the City and the public understand the longrange curb vision intended for any given block.

Landscape Zone: this area often forms a buffer between the roadway and sidewalk. Common elements include planting strips, trees, lighting, bicycle racks, as well as street furniture such as seating.

Inventory: A catalog of the amount of space dedicated to different uses or regulations along the curb, typically broken down into linear feet.

Micromobility: personal transportation devices such as bikes, e-bikes, and e-scooters.

Occupancy: Number of on-street parking spaces in use along the curb during a specified time period.

Performance-Based / Dynamic Pricing: using occupancy data to determine on-street parking rates that encourage regular turnover with the intent to maintain 1-2 open parking spaces per block.

Sidewalk Zone: also known as the pedestrian zone, this is the area for walking and sometimes includes additional elements to support adjacent building frontages.

Transportation Network Companies (TNCs): also known as ridehailing, TNCs are demand-responsive rideshare services, typically operated through a mobile app that connects riders and drivers.

Urban Core: Urban Core refers to the three densest neighborhoods in Bellevue (Downtown, Wilburton and BelRed) and the future East Main Transit Oriented District, which is located near the southeast corner of Downtown.

Utilization: Percentage of time curb space is occupied, typically broken down by use.



DRAFT DRAFT

INTRODUCTION

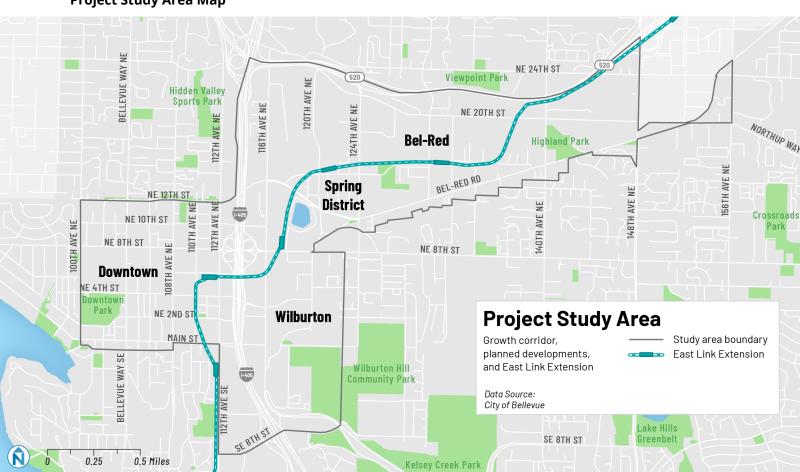
The Curb Management Plan serves as Bellevue's vision for approaching curbside areas within the city's Urban Core neighborhoods. It presents a comprehensive set of recommended strategies and actions that reflect best practices, anticipates emerging opportunities, responds to Bellevue's curb challenges, and advances stakeholder-identified goals and priorities.

As described by the Institute of Transportation Engineers (ITE), "curbside management seeks to inventory, optimize, allocate, and manage the curb space to maximize mobility, safety, and access for the wide variety of curb demands." This Curb Management Plan (CMP) aims to articulate and catalyze a holistic vision for how to optimize the use of the curbside areas within Bellevue's Urban Core Plan for growth in Sidewalk The Curb Zone Bellevue's **Management Plan** Landscape Urban Core is intended to help **Zone Bellevue:** Curbside Lane 2 Address the changing demands of the curbside, balancing legacy curb uses like onstreet parking with Formalize an approach for new mobility uses tracking and organizing curb like ridehailing **useage** within the Urban Core

To accomplish this, the CMP establishes a curbside vision and typology framework for curb uses, identifies direction for curb programs, and provides recommendations for implementation.

The CMP can be used as a primary reference for expanding existing programs, developing new procedures, and coordinating with curb stakeholders. The Curbside Practices Guide section provides recommendations for improved operational and design practices that city staff, developers, and other stakeholders can reference to better achieve overarching curb outcomes. The CMP also includes a Curb Pilot Roadmap with ideas and approaches to use curb areas as a platform for innovation and collaboration.

Project Study Area Map



Note: All images within the Curb Management Plan are for illustrative purposes only.

WHAT IS THE CURB?

The curb, as it is referenced throughout this document, is more than just the raised edge where the sidewalk meets the street. "The curb" is a shorthand planning term that describes a wide range of activities and features that are found along the edge of the public right-of-way.

Curb management refers to the policies, systems, services, and strategies that support, regulate, and prioritize all of these activities at the curb. wideranging applicability is indicative of how valuable curb management policies can be for achieving Bellevue's goals, but it can also create confusion about what is and isn't included within the purview of curb management. To help address this confusion, the Curb Management Plan distinguishes between the **curbside area** and the **curbside lane**.

Some elements in the Curb Management Plan apply broadly to the overall curbside area, which includes all of the activities and features found on the sidewalk and in the right-of-way along the edge of the road. The Curb Typology, which is just one part of the Curb Management Plan, applies more narrowly to the curbside lane. The curbside lane does not include the sidewalk or other areas outside the roadway.

Why manage the curb?

Streets are the single largest share of the public realm in most cities, and Bellevue is no exception. All street users interact with the curb at some point during every trip, whether to park or load goods, get into or out of a vehicle, or cross over as a pedestrian. Curbs serve a myriad of users and functions that change depending on the hour and the day. Competition for use of space along the curb is only increasing as new patterns of consumption, travel behavior, and transportation technologies emerge. Curbs are a public good that Bellevue is responsible for managing to ensure they are being used efficiently and effectively to meet the needs of people and businesses. Curbs should be treated as the versatile resources that they are—places to move, but also places to work, live, and play.





How can curb management center equity?

As defined by Executive Order #13985, the term "equity" means the consistent and systematic treatment of all individuals in a fair, just, and impartial manner, including individuals who belong to communities that often have been denied such treatment.

Because curbs are a public good, they should be treated as community space and managed according to the needs of their users. Historically, curbs have been used for little more than private vehicle storage. This is not only an inefficient use of public assets, but an exclusionary practice that limits their use to car owners who make up a diminishing share of Bellevue's population. Further, Bellevue workers in poverty are more likely to commute via shared or active modes like carpooling (7%), public transit (3.7%), and walking (7.4%) than they are to drive personal vehicles (2.4%).

In the Puget Sound Region in 2022, the average cost of a new car is \$47,000 with an additional average of \$2000 per year in maintenance, insurance, and fuel costs.³ Nationwide, Low-income households already spend a disproportionately large amount of their income on transportation, accounting for up to 26.9% for the lowest earners in 2021.⁴ Private vehicle ownership is simply out of reach for many people who live and work in Bellevue.

Curb management can account for and address historic inequities by ensuring curb space is dynamic and utilized efficiently by many different people using many different modes. Curb management policies and strategies seek to balance legacy uses, like on-street parking, with more diverse uses as identified below.

Flexible curb space supports Bellevue's climate and vehicle miles traveled (VMT) reduction goals by increasing access for sustainable travel modes. Equity is also a core tenant of Bellevue's Mobility Implementation Plan (MIP). Improved curb management can support the polices outlined in the MIP by identifying and addressing the needs of transportation-disadvantaged people and promoting investment in projects that improve curb access for everyone.

Improved curb operations also support regional transportation equity goals outlined in the Puget Sound Regional Council's Vision 2050 document, such as improving access while mitigating negative impacts, ensuring mobility access for vulnerable populations, and supporting the movement of freight and goods delivery. Stronger curb management operation practices is a crucial element in the broader vision of providing a valuable multimodal system for people from all backgrounds and circumstances in Bellevue.



Providing protection and infrastructure for people walking, biking, and rolling



Making space for and improving public transit stops and amenities



businesses by providing space for delivery and outdoor amenities like street cafes



Enabling flexible transportation to work better with pick up drop off, micromobility parking, EV charging, car share and more



Improving the **public realm** with parklets, street trees, and climateresilient urban landscaping

HOW IS THE CURB USED IN BELLEVUE TODAY?



Commercial Loading in Old Bellevue



On-Street Parking in Old Bellevue



Transit Stops in Downtown



Electric Vehicle Charging in Downtown





Food Trucks in BelRed



On-Street Dining in Old Bellevue

SUMMARY OF CURB MANAGEMENT IN BELLEVUE

Why Is Curb Management Important for Bellevue? The curb is a critical public asset that supports a wide range of needs and activities every day. Historically in Bellevue, the curb has been indirectly managed through disparate policies, processes, and initiatives. However, several key factors underscore the need for a new approach.

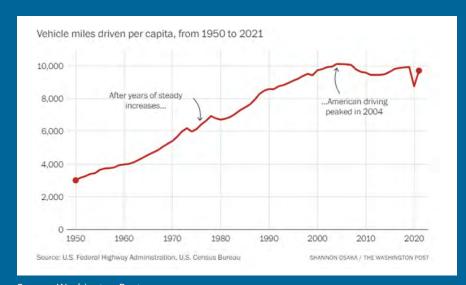
1. Growth in Bellevue

Between 2017 and 2022, Bellevue's population grew by nearly 10%. Bellevue's rapid growth, along with modern mobility trends, is fundamentally changing how people and goods interact with the curb. Demand has increased for new services, including freight, delivery, and app-based ride share services.



YOUNG PEOPLE ARE DRIVING LESS

As of 2020, only 25% of 16 yearolds and 45% of 17 year-olds holds a drivers license, a decline of around 20% for both ages over the past two decades. This trend extends beyond teenage years into young adulthood: as of 2020, only 80% of 20- to 25-year-olds held drivers licenses, compared to 90% in 1997.6 Young people are increasingly likely to rely on public transit, micromobility, or ridehail services to get around than previous generations. Gen-Z cites concerns about safety, environmental impact, and the cost of car ownership as drivers for this trend.



Source: Washington Post



2. Link Light Rail

The public transit network in the Puget Sound region is growing with expanded service as well as new infrastructure. The new 2 Line of Sound Transit's Link light rail service is anticipated to open in 2024. The 2 Line will connect Bellevue to Seattle via Mercer Island as well as employment hubs in Redmond. The light rail service will facilitate travel between regional centers and improve transportation options for residents, employees, and visitors across the City. Once the line opens, curbside demands are expected to change dramatically through increased passenger drop-off activity and potential future micromobility uses. There will likely be reduced demand for parking, as people are able to more easily travel to, from, and within Bellevue without a private vehicle.

7% more Bellevue households do not have a vehicle (7.4% in 2019 up from 6.9% in 2014).





9% more people carpooled, walked, biked, or took transit in 2019 (28.9%) relative to 2014 (26.6%).





Bellevue worker

commute times

increased by 17%

from 2014 to 2019.



Source: Sound Transit

3. Shifting travel patterns

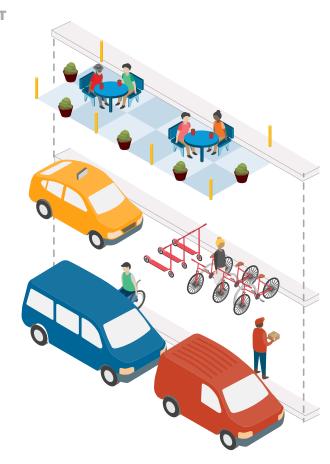
People who work in Bellevue—including 40% of employed Bellevue residents—have experienced an increase in commute times by 17% in the past five years, and the share of households in Bellevue that do not own vehicles has increased from 6.9% to 7.4%. The commute mode share in Bellevue became more diversified during the same period. Before the COVID-19 pandemic, drive-alone rate decreased from 65.6% to 61.3%, and the share of people who carpooled, walked, biked, or took transit to work increased from 26.6% to 28.9%.⁷

Commute travel changed significantly during the COVID-19 pandemic as traditional office workers shifted towards teleworking. Recent observations of rapidly evolving travel behavior means that the needs, pressures, and performance of the curb will also need to change over time. With the widespread adoption of telework, peak travel demand using both transit and personal vehicles has declined. Less space may be needed for parking, and more space may be needed for passenger and commercial loading as carpooling, ridehailing, and parcel delivery continue to grow. Wellmanaged curbs can accommodate changes in the transportation ecosystem—as travel patterns evolve in the post-pandemic world, Bellevue will be able to stay on top of trends and make informed decisions about curb uses.

4. Increasing curb demand

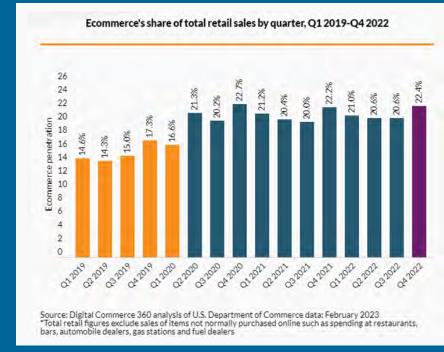
Cities across the country have seen an increased demand for space along the curb over the last decade. The rise of e-commerce, catalyzed by the COVID-19 pandemic, has increased the number of packages, groceries, take-out meals, and other deliveries to individual homes and businesses. As more people transition to car-lite or car-free lifestyles, there is increased use of micro and shared mobility services like bikes, scooters, and ridehailing services. Short-term stops for pick-up, drop-off, and/or delivery do not fit within the context of many curbside areas in Bellevue, and when added together can account for significant dwell time at the curb.

Major regional employers in Bellevue also offer shuttle services for their employees traveling to and from offices. Many of these shuttles need space at the curb for passengers to wait for, board, and alight from vehicles.



E-COMMERCE AND CURB DEMAND ON THE RISE

E-commerce, while a common practice pre-2020, exploded after the onset of COVID-19 stay at home orders prevented consumers from shopping in person. E-commerce has only continued to grow over the past few years; Q4 2022 alone saw a 6.2% increase from the previous quarter and hit the highest level in history at over \$1 trillion. E-commerce as a total of all retail rose from 14% in 2019 to 22% in 2022.8



Source: Digital Commerce 360

Current Approaches

At the beginning of CMP creation, the project team explored existing management practices through interviews with city staff and stakeholders, researched present standard operating procedures and ordinances, and synthesized new curb activity data.

Key takeaways about the current state of the curb and curb management in Bellevue include the six listed below. The full "State of the Curb Report" is available in Appendix D.

Bellevue will rely on insights gathered from these and other projects as the City continues to grow and develop a curb management program.



Current enforcement resources are limited, making it difficult to enforce illegal lane blockages.



OPERATIONS

Current managerial practices regarding curbside operations are often handled ad hoc.



PERMITTING AND PRICING

Curbside demand management approaches and associated fee structures are inconsistent and inequitable across use cases.



ROLES AND RESPONSIBILITIES

Dedicated staff and funding sources for curb management are lacking. Currently, duties are shared across many teams and departments.



ENFORCEMENT

Curbside enforcement resources are constrained and limited, with responsibilities divided between contracted services and Bellevue Police Department.



PILOT PROJECTS

Pilot projects have delivered new insights, but practices have not transitioned into permanent operational procedures.



FLEXIBILITY

Bellevue has some curb practices in place now, but they are not applied as holistically and flexibly as they ideally could be.

Building on Previous Work

Bellevue's past work and current programs provide a strong foundation for the Curb Management Plan and development of a more formal curb management program. In recent years, Bellevue has conducted several short-term curb management pilot projects to gain insight on curb utilization and opportunities for more flexible curb uses. The pilot projects also focused on placemaking by creating safe and accessible outdoor public space.

Bellevue Curb Projects, 2018-2022







Connection to Other Plans and Projects

The Curb Management Plan has been developed by referencing various plans, policies, and other regional projects that have connection to the curbside environment in Bellevue.

CITY PLANS



Smart Mobility Plan, City of Bellevue (2018)

This plan outlined strategies to implement curbside monitoring technology to better inform users of the curb and enhance enforcement capabilities.



Comprehensive Plan, City of Bellevue

This plan provides the broad vision for Bellevue. Curbside strategies and approaches are tied to goals for transportation, land use, livability, and other concepts. In 2022, City Council adopted new policy language in support of curb management, which have been included into the current Comprehensive Plan.



Environmental Stewardship Plan (2020)

This plan includes "Strategy M.2.3", which calls for exploring strategies to effectively manage curbside space for a variety of uses such as ride-share, buses, pedestrians, and other needs.



Mobility Implementation Plan (2021)

This plan establishes an approach to multimodal concurrency, lists the mode-based Layered Network for Bellevue, and outlines an approach to performance tracking and project selection. The Curb Typology within the CMP has been crafted using concepts included in this plan.

REGIONAL EFFORTS



Regional Parking Inventory

This project, led by the Puget Sound Regional Council (PSRC), will consist of data collection around accessible off-street parking in cities across the region, including in Downtown Bellevue's central business district. The inventory will include data on parking capacity, occupancy, rate, and parking type.

23



PUBLIC ENGAGEMENT

The project team conducted a series of public engagement efforts to inform the CMP throughout 2022 and 2023. The team strategically sought engagement from curb management experts, City decision-makers, and a diverse array of community stakeholders who would serve as representatives of the broader Bellevue audience.

Initial Engagement Activities

In early 2022, the project team held several engagement activities, including facilitating focus groups and stakeholder interviews, developing an online questionnaire, and hosting a "Curb Summit" public event. These engagement opportunities provided an initial foundation to develop content and recommendations for the CMP.

Summaries of initial engagment activities can be found in Appendix C: Public Engagement Summary.

Key themes that were heard across all engagement activities include:

- prioritizing pedestrian safety,
- providing better support for freight delivery services
- maintaining a balance between flexibility/ resilience and predictability/legibility
- maximizing the potential of enforcement and pricing,
- utilizing digital tools and technology to improve curb performance.



JAN-APR 2022

STAKEHOLDER INTERVIEWS AND FOCUS GROUPS



MAR 29, 2022

CURB SUMMIT EVENT



Feb-Apr 2022

ENGAGING BELLEVUE ONLINE QUESTIONNAIRE

Other Engagement Activities

Throughout 2022 and 2023, the project team continued to engage with curb stakeholders in various settings. Business organizations such as the Bellevue Downtown Association and Bellevue Chamber of Commerce were regularly briefed on project updates and content. Community organizations such as the volunteer-driven Bellevue Diversity Advisory Network provided feedback on the CMP at critical milestones.

CITY COUNCIL MEETINGS

Launch CMP, adopt curb management policies

TRANSPORTATION COMMISSION MEETINGS

Develop CMP policy and content

5 PLANNING COMMISSION MEETINGS

Develop CMP content

6 BELLEVUE DOWNTOWN ASSOCIATION TRANSPORTATION COMMITTEE MEETINGS

Track CMP progress and collect feedback

BELLEVUE CHAMBER OF COMMERCE TRANSPORTATION COMMITTEE MEETINGS

Track CMP progress and collect feedback

BELLEVUE DIVERSITY ACTION NETWORK

Track CMP progress and collect feedback

OLD BELLEVUE MERCHANTS ASSOCIATION

Track CMP progress and collect feedback



BELLEVUE DIVERSITY ADVISORY NETWORK

Bellevue's Diversity Advisory Network (BDAN) is a diverse group of 21 members who provide counsel to the City on how to better reach, serve, communicate, and collaborate with Bellevue's diverse communities. BDAN meets monthly to learn about and discuss equity implications of ongoing city projects, among other responsibilities.

The BDAN was consulted during the CMP development process. Considerations and feedback from the BDAN on curb management in Bellevue include the following:

- Maintaining unique placemaking aspects of each neighborhood in the study area by protecting and promoting creative and inviting use of curb and sidewalk areas, common spaces, streets, and open spaces, parklets, plazas, planters, and community gathering space.
- Maintaining an adequate level of on- and off-street parking supply even in transitoriented neighborhoods to ensure accessibility to people of all ages, abilities, and familiarity/comfort with transit use.
- Ensuring that limited parking supply does not exacerbate existing cost-of-living disparities or make certain neighborhoods less inviting or accessible for residents and visitors.
- Ensuring curb features are accessible and welcoming to people with disabilities, such as ADA-compliant on-street parking, wider sidewalks, and more open space.
- Prioritizing a walkable and pedestrian friendly atmosphere to increase daytime and nighttime foot traffic, support local businesses, and promote safety.

RAFT

CURB MANAGEMENT PRINCIPLES

Feedback from
stakeholders and
the Transportation
Commission informed curb
management principles
during the early stages
of the project. These
principles will guide
outcomes long-term:



Curb Equity

Provide equitable access to curb space that uplifts vulnerable populations and provides room for a more diverse array of curb uses.



Efficiency and Effectiveness

Use data and long-range visions to inform efficient curbside lane operations and curbside area design decisions.



User-Friendly

Develop curb regulations that are clear, easy to follow, and supportive of user needs.



Decision-Making Clarity

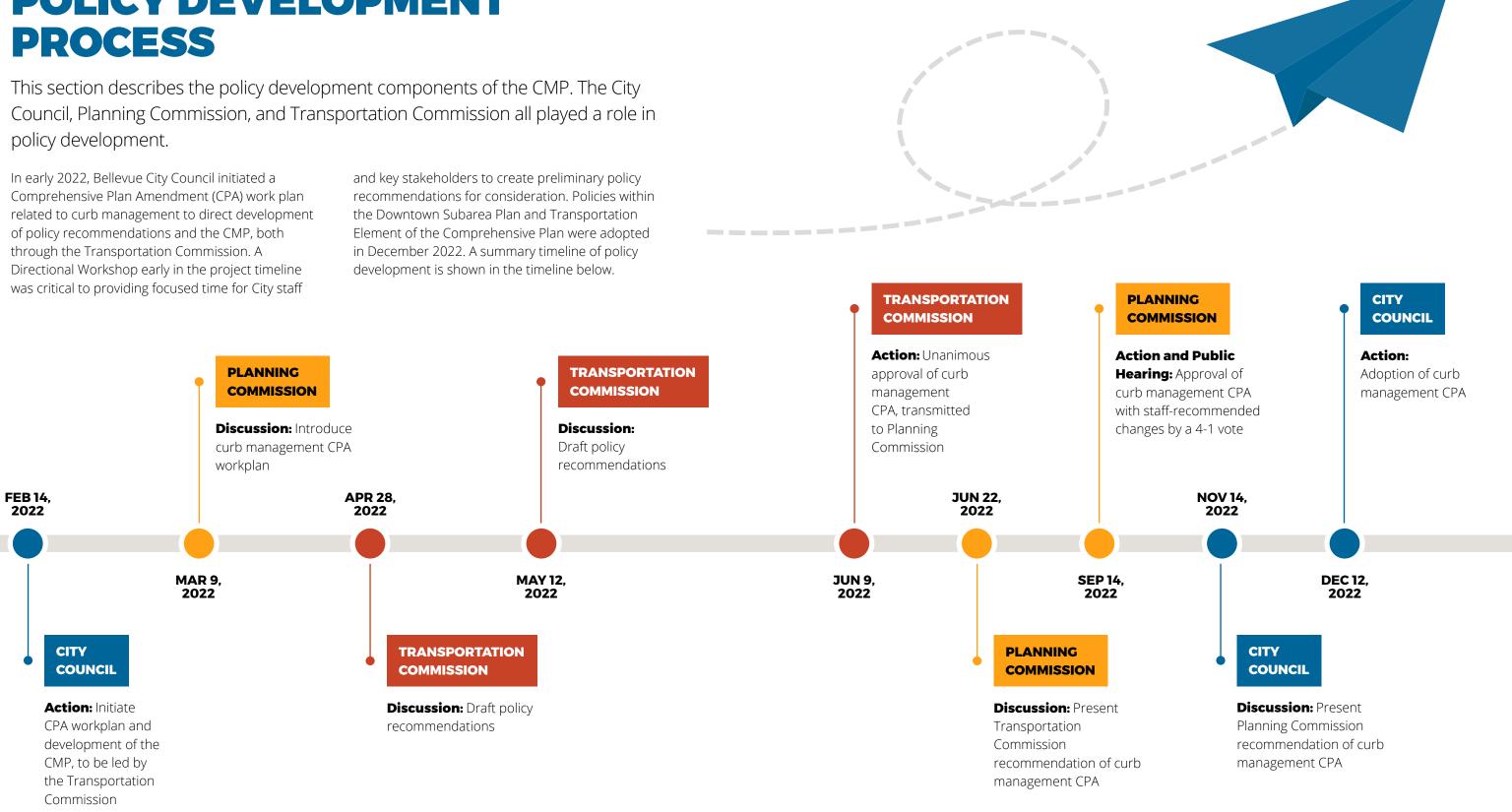
Designate clear lines of decisionmaking authority for curb management and use.



Adaptability and Resilience

Preserve the curb's inherent flexibility and maintain pathways for regulatory change that promote and support changing use patterns.





Bellevue City Council Initiation and Involvement



On November 15, 2021, the City Council approved a consultant contract and scope of work for the Curb Management Plan (CMP).



On February 14, 2022, the City Council provided direction to initiate a 2022 Comprehensive Plan Amendment workplan in support of curb management, and to direct development of the CMP, both through Transportation Commission.



At the November 14, 2022 meeting,

the City Council was provided information about the Planning Commission recommendation.



At the December 12, 2022 meeting,

the City Council adopted Ordinance #6707, which adopted curb management policies into the Transportation Element and Downtown Subarea Plan. The adopted policies are outlined on page 23.

Transportation Commission Involvement

The Transportation Commission developed and recommended policy amendments in support of curb management during several meetings in 2022 as part of the curb management CPA workplan. The Transportation Commission reviewed, discussed, and debated material regarding the 2022 CPA workplan during three study sessions between April and June 2022. At the meeting on June 9, 2022, the Transportation Commission voted unanimously to recommend policies that support curb management in Bellevue. The policies were transmitted to Planning Commission for review and action.

Planning Commission Involvement

The CMP work plan was first introduced to the Planning Commission in March 2022. A meeting in June 2022 conveyed the Transportation Commission recommendation. In September 2022, the Planning Commission held a public hearing for the curb management CPA. Staff presented the Transportation Commission recommendation with minor staff-modified recommendations based on public feedback. The Planning Commission voted 4-1 to advance policy recommendations for Council review and approval.

POLICIES ADOPTED INTO THE TRANSPORTATION ELEMENT FROM ORDINANCE #6707



TR-134: Provide flexible curbside space within public right-of-way to accommodate parcel delivery and passenger loading through development review and curb operation changes.



TR-147: Add electric vehicle charging stations in designated curbside zones as required through development review.



S-DT-157.1: Create curbside zones for on-street parking.



S-DT-157.2: Add on-street parking spaces in travel lanes for use during off-peak hours.



S-DT-157.6: Designate permanent or off-peak curbside queue areas for rideshare vehicles, taxis, and employer shuttles in strategic locations.



TR-36: Designate curb uses, curb typologies, and modal priorities.



TR-37: Consider implementation of a pay-for curb use program.



TR-38: Identify and create regulated passenger loading zones for taxi and rideshare use, primarily within the Type 1 Performance Management Areas as defined in the Mobility Implementation Plan.



TR-39: Promote the use of curb technology solutions that enhance safety and efficiency of the curbside environment.



TR-87: Create mobility hubs in alignment with King County Planning Policy guidance.



TR-40: Consider creating designated curbside zones to allow for vendor and food truck activity.



TR-41: Consider creating activated curbside zones, such as on-street dining areas, parklets, and other placemaking solutions.



TR-42: Develop and implement a Curb Management Plan that designates a curb typology, establishes a pay-for curb use program recommendation, facilitates dynamic curbside management, and accounts for various movement, access, and placemaking functionalities.

CURB MANAGEMENT RECOMMENDATIONS

Curbonomics: Curb Supply & Demand

As Bellevue develops more robust curb management practices, it will be important to contemplate the curbside from an economics point of view for long range planning and budgeting purposes. For this project, "Curbonomics" focuses on the concept of supply and demand for the curb. This section describes curb supply and demand concepts and how they shape the curb management program.

Curb Supply

Today, Bellevue's curbside spaces are primarily centered around automobile movement. According to data collected in 2020, 60% of Downtown Bellevue curb lanes are reserved for through-traffic only, and 30% is occupied by driveways, crosswalks, and other infrastructure designed to facilitate vehicular and pedestrian movement (figure below). Of the remaining curb space, 7% is used for time-limited parking, leaving only 3% of Downtown curbs for commercial loading, passenger pick-up/drop-off, and transit stops.

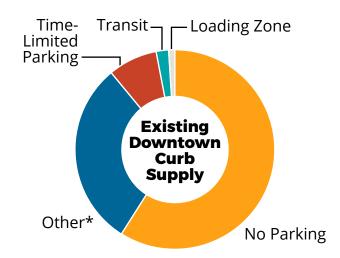
Existing Downtown Curb Supply

Regulated Use (Downtown)	Linear Feet	% of Total Linear Curb
No Parking (Travel Lanes)	61,924	59.3%
Other*	31,693	30.3%
Time-Limited Parking	7,753	7.4%
Transit Stop	1,965	1.9%
15-min Loading Zone	798	0.8%
Bus Layover	242	0.2%
Passenger Pickup/Dropoff	121	0.1%

^{*}Includes driveways, crosswalks, and unassigned regulations

Through the public engagement phase, the project team found that stakeholders are supportive of more diverse curb uses throughout the city. Survey results showed overwhelming support for the conversion of on-street parking in favor of outdoor dining and other curb programming activities. During focus groups, local business representatives as well as taxi and TNC drivers said that creating designated passenger pickup/drop-off zones throughout the city can alleviate some congestion and confusion. Designated zones can also create a safer environment for drivers, pedestrians, and cyclists.

Bellevue has limited curb space within its street network, and the City's transportation system is required to manage a wide range of competing mobility and adjacent land use activities. Within the Urban Core neighborhoods of Bellevue, curb supply is constrained and can practically only grow through development activity or capital improvement, which takes years to realize. Establishing a framework for assessing existing and future curb allowances is a key component of the CMP.



Curb Typology Framework

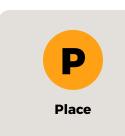
The curb typology is a framework for describing and prioritizing curb use in Bellevue. It provides a language that will help the City address and manage dynamic curb uses, including curb functions that vary by time-of-day. The typology will also help address future changes to the development context, citywide

transportation network, technology options, and community priorities.

The curb typology framework is defined by four different types of curb functions: Movement, Access, Place, and Storage.



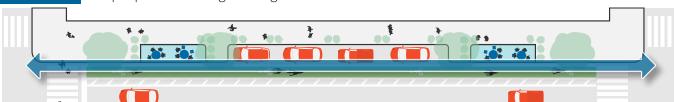




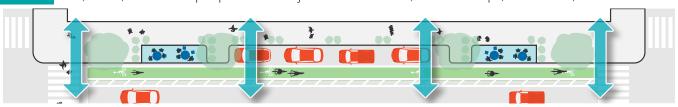


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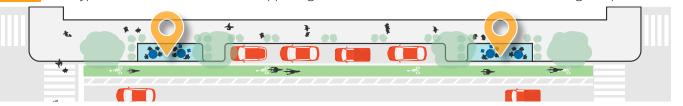
Movement: How people move along the length of the curb



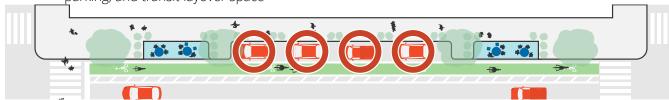
Access: How, when, and where people access adjacent destinations, such as shops, residences, or offices



Place: What types of activities and uses are happening within the curbside area, such as food vending and parklets



Storage: How the curbside area provides space for longer-term vehicle storage (i.e., 2+ hour parking), bicycle parking, and transit layover space



How will curb typology be used in Bellevue?

Until now, Bellevue's curb-related planning information was spread across many different City plans and policies, such as the Mobility Implementation Plan and the Comprehensive Plan. By consolidating all of this vital information into one unified framework, the curb typology provides a unified location for access by city staff, stakeholders and the public. The curb typology can be used to:



IMPROVE THE DEVELOPMENT REVIEW PROCESS

The typology will support a more efficient and coordinated development review process by making it easier for City staff and project applicants to align the design of proposed developments with adopted City plans and policies.



SHARE PUBLIC-FACING INFORMATION

The typology will serve as a public-facing informational resource that helps partners, stakeholders, and members of the public understand Bellevue's curb vision and priorities in the urban core.



HELP CITY STAFF MANAGE DAY TO DAY OPERATIONS

The typology will help City staff make strategic decisions, track changes, and manage day to day operations related to how the curb is used in the downtown core, both today and well into the future.

Curb Types and Uses:

	What uses are allowed in the curbside lane for each curb type?					
	Primary uses	Conditional uses:	Restricted or prohibited uses:			
Movement (Auto)	General purpose lane (personal vehicles, transit vehicles, and bicycles)	Vehicle parking (off-peak)	On-street diningPick-up/drop-off zonesLoading zones			
Movement (Bicycle)	Bicycles Micromobility devices	 With appropriate design, can be implemented alongside: General purpose lane Parking (short- or long-term) Transit priority lane (shared bus/bike lane or parallel dedicated lanes) On-street dining and parklets Access features including pick-up/drop-off zones and transit stops 	All off-peak uses (bicycle facilities should be dedicated 24/7)			
Movement (Transit)	Buses and other transit vehicles	 Bicycles (shared bus/bike lane or parallel dedicated lanes) General-purpose travel during off- peak times 	On-street diningPick-up/drop-off zonesLoading zones			
Access	 Pick-up/drop-off zones Freight loading zones Delivery zones Transit stops and stations Bicycle parking Short-term vehicle parking 	 On-street dining and parklets Bicycle lanes and cycletracks Transit priority lane 	Long-term parkingTransit layoverGeneral-purpose travel lane			
Place	On-street diningParkletsFood trucks/vending	 Pick-up/drop-off zones Delivery zones Transit stops and stations Bicycle parking Parking (short-term) 	Parking (long-term)Transit layoverGeneral-purpose travel laneFreight loading zones			
Storage (Auto)	• Long-term parking	 Transit layover General purpose travel lane (off-peak) Bicycle lane (adjacent) Pick-up/drop-off zones Freight loading zones Delivery zones 	Transit priority lane			
Storage (Transit)	• Transit layover	 Bicycle lane (adjacent) Pick-up/drop-off zones Freight loading zones Delivery zones Parking (short- and long-term) 	General purpose travel lane			

Compatible Curb Types and Flexible Uses

Bellevue envisions a more dynamic and flexible curb environment. This flexibility will help align Bellevue's curb management approach with the practical reality of how people use the curb on any given day. Some types of curb use are in high demand only at certain times—for example, the same block could potentially be used for freight delivery in the morning, auto movement during the day, and long-term parking overnight. Allowing flexible curb uses—and supporting them with robust management and enforcement—can help Bellevue meet the needs of more users within the same limited space.

However, flexible curb use isn't always feasible. Allowing flexible uses on certain curb lengths may create safety risks, present operational challenges, or undermine Bellevue's overall mobility goals. Potential restrictions for each curb type are indicated in the table below. Case-by-case analysis may be needed in order to determine where and when flexible curb uses are desirable in Bellevue's urban core.

Flexible Curb Use Restrictions:

Curb type	Situations where flexible curb uses would be restricted
Movement (Auto)	Truck routesSingle-lane arterials
Movement (Bicycle)	No off-peak uses allowed
Movement (Transit)	 Movement (transit) curbs that support > 4 buses per hour (frequent transit network)
Access	• None
Place	For seasonal or temporary place uses, off-peak use varies by location
Storage (Auto)	• None
Storage (Transit)	• None

EXISTING AND FUTURE CURB TYPES

The curb typology includes both an **existing curb type** and a **future curb type** for each block face within the study area. The existing type is an inventory of how the curb is currently being used. It reflects generalized existing curb regulations, land use adjacencies, and transportation modal networks. The map of existing curb types helps communicate how each public block face is generally used today.

The future type is an indication of how the curb is expected to be used as the City implements plans, policies, and transportation network investments. It references data, policies, and plans such as the Mobility Implementation Plan to inform future intent per block face. The future curb typology does not assign new curb priorities—rather, it provides guidance into potential future utilization of a curbside area with an aim to directly address needs and functions of the surrounding land use and mobility context.

HOW DO WE GET MORE CURB SPACE WITHOUT ADDING MORE ROADS?

The future typology identifies opportunities throughout Bellevue's urban core to meet the needs of more curbside users within the same limited space. While the BelRed streetscape plan does envision adding some new streets near the planned light rail station on Spring Boulevard, most of the gains in curb space are the result of supporting multiple types of use within the same block.

To maximize the benefits of the curb and achieve the complete curb network envisioned in Bellevue's plans and policies, more work lies ahead. Limited right-of-way space will require the City to evaluate trade-offs between competing priority curb uses. Some decisions will require additional data about roadway capacity and travel patterns. Where different City plans and policies prioritize multiple incompatible uses, follow-up planning work may be needed to align those plans and resolve conflicts. The future typology provides a comprehensive roadmap that will allow the City address these challenges with a coordinated curb strategy and vision for the urban core.

To maximize the benefits of the curb and achieve the complete curb network envisioned in Bellevue's plans and policies, more work lies ahead. Limited right-of-way space will require the City to evaluate

Examples: Curbs with Multiple Compatible Curb Types



Source: City of Long Beach



Source: Laura Gilmore via Flickr

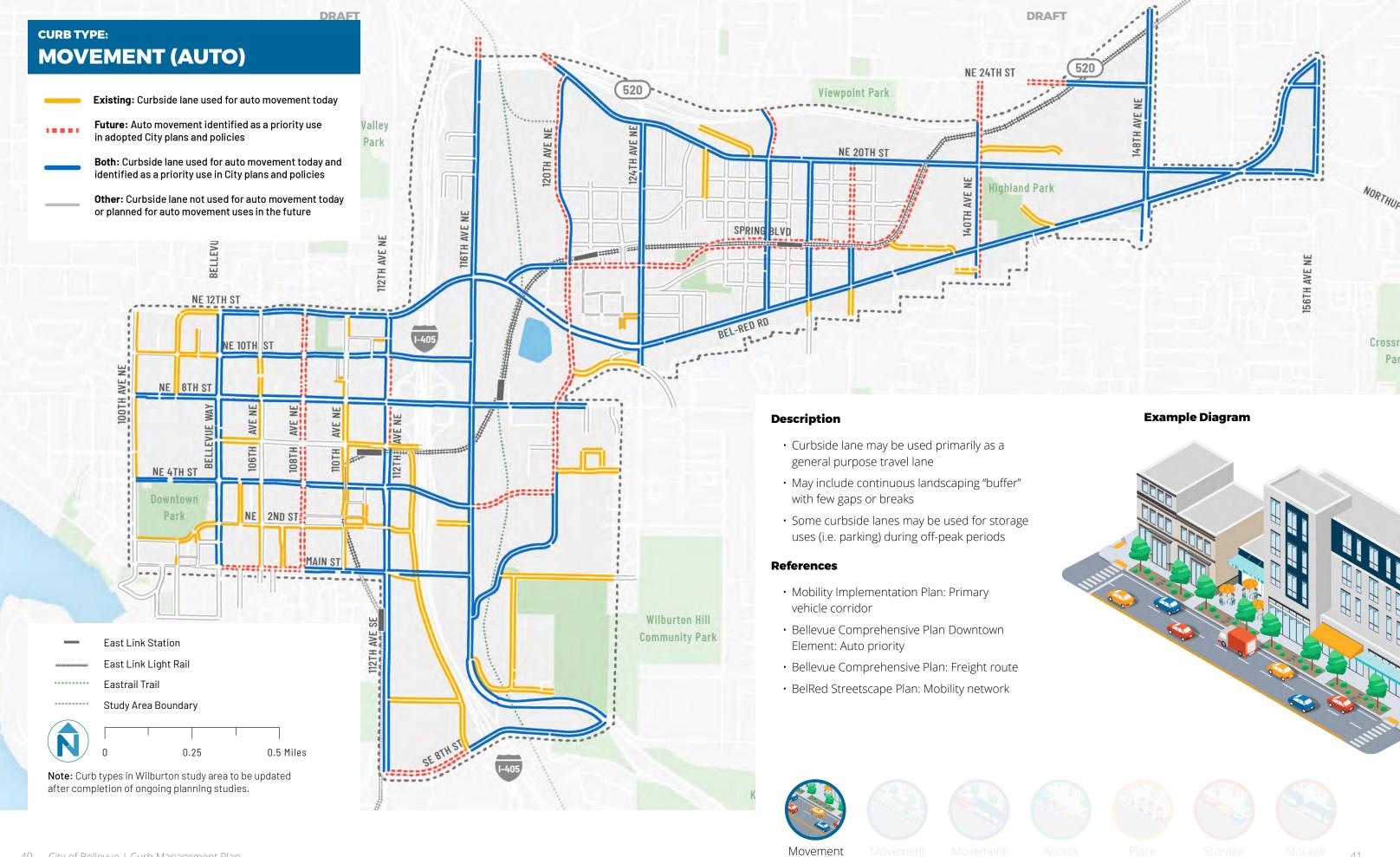


Source: NACTO

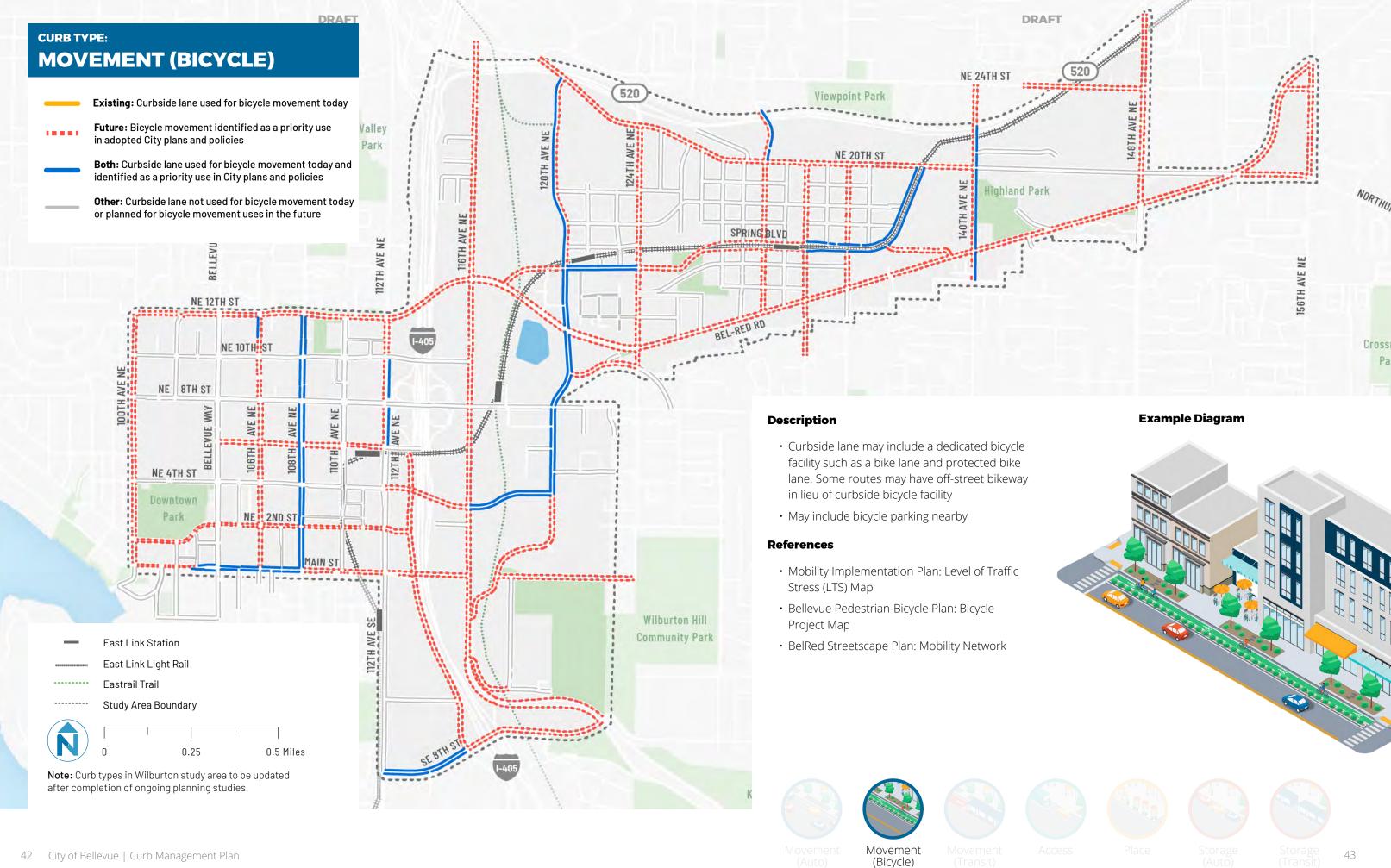


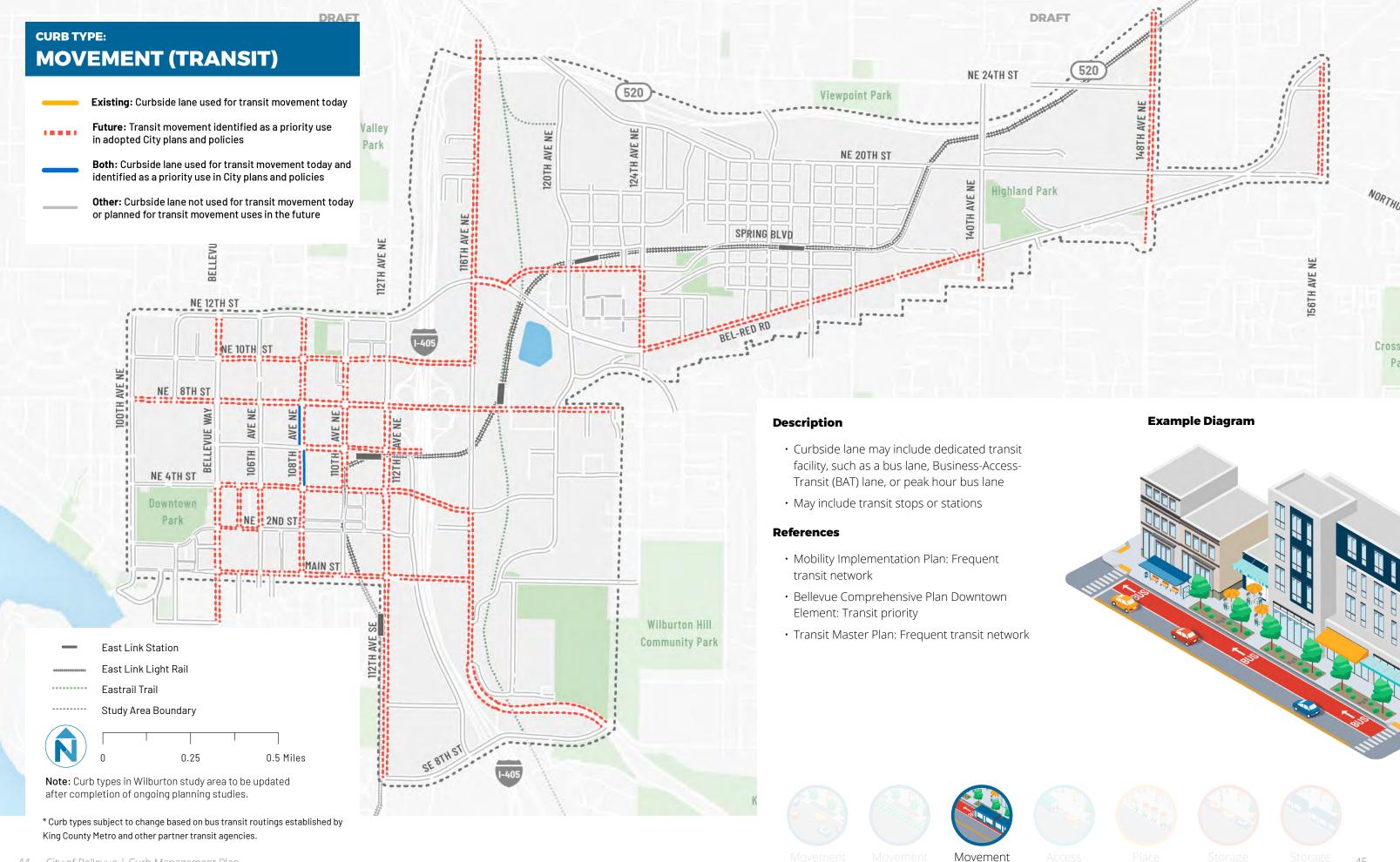
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Source: Kyle Anderson via Greater Greater Washington

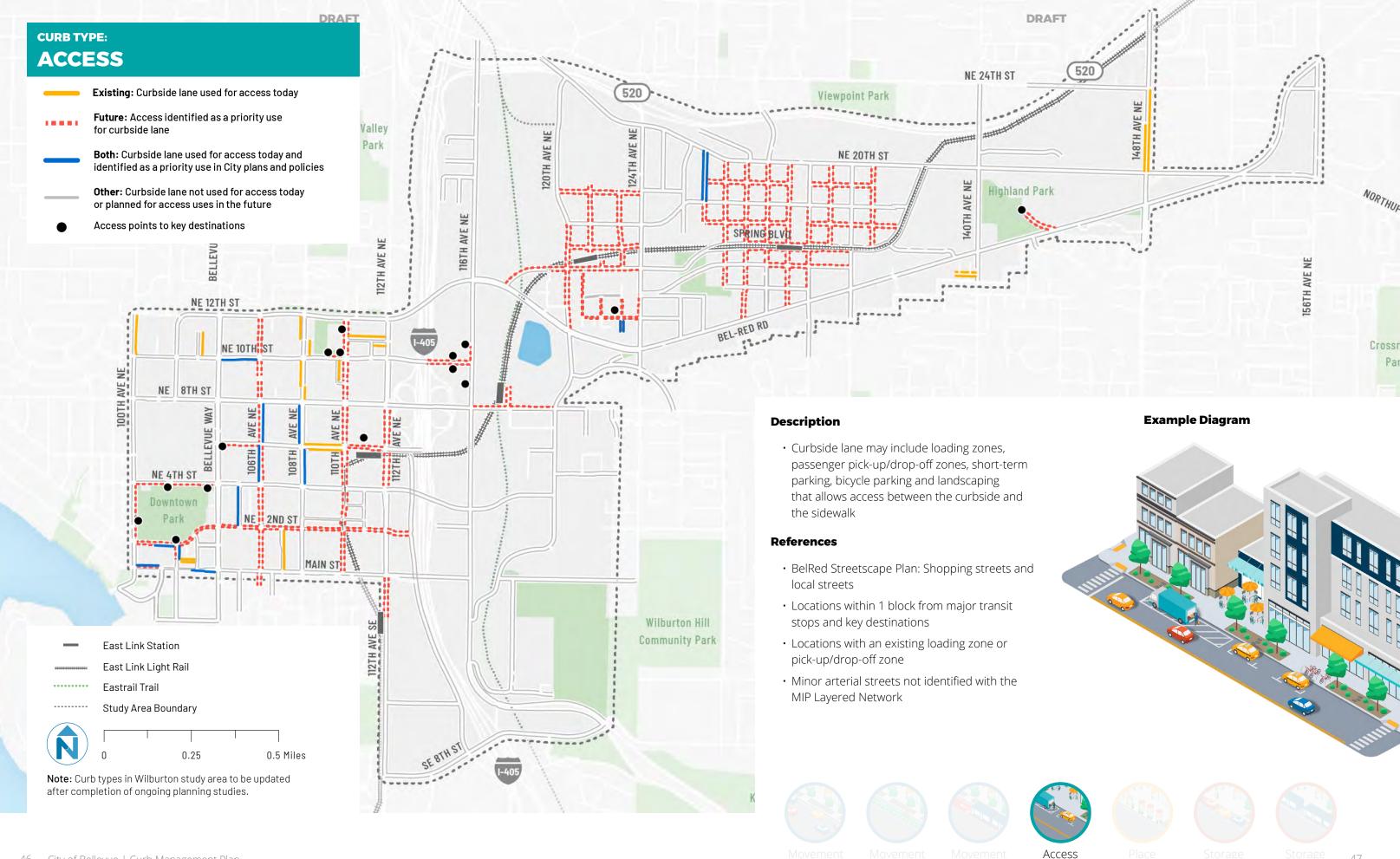


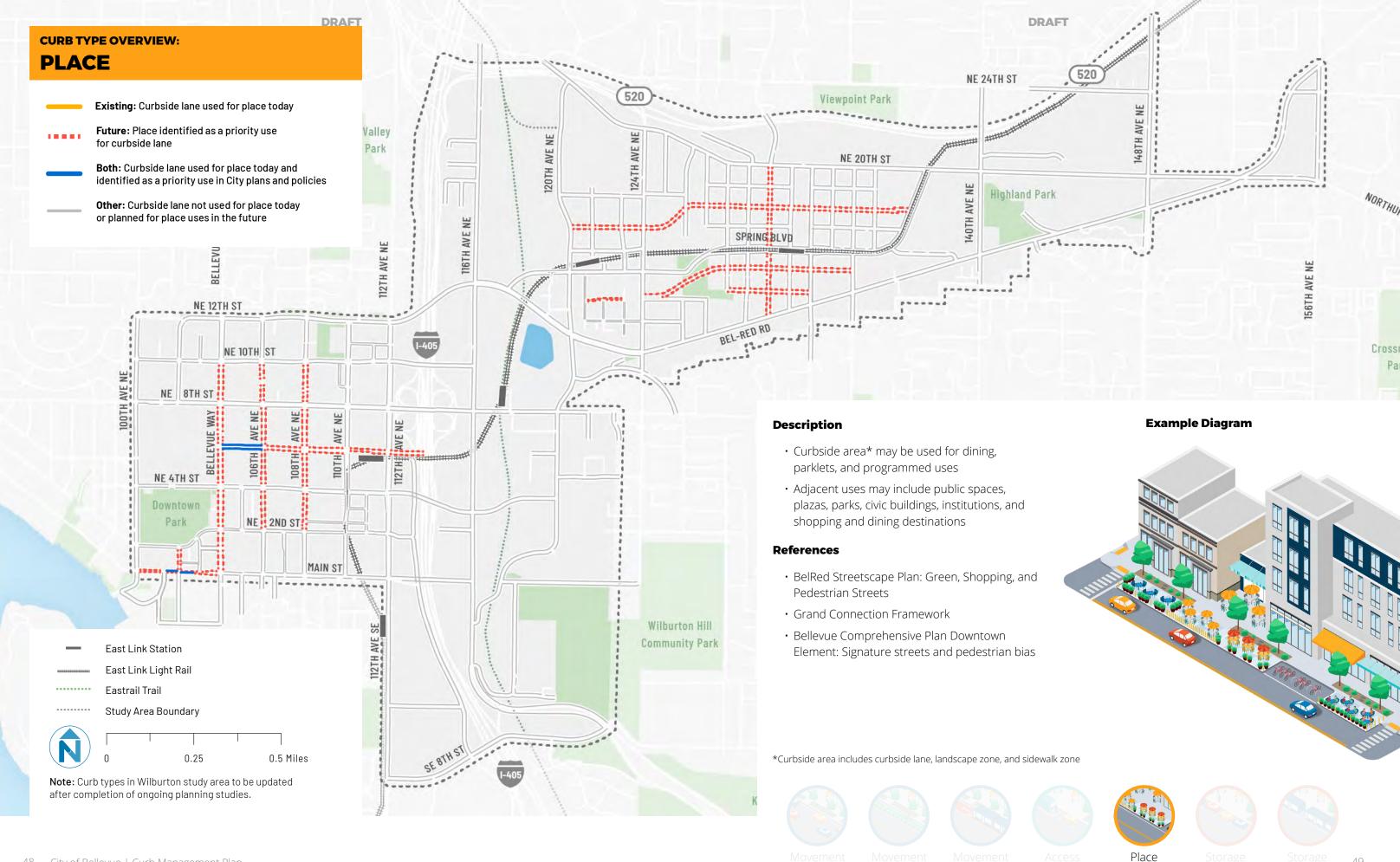
(Auto)

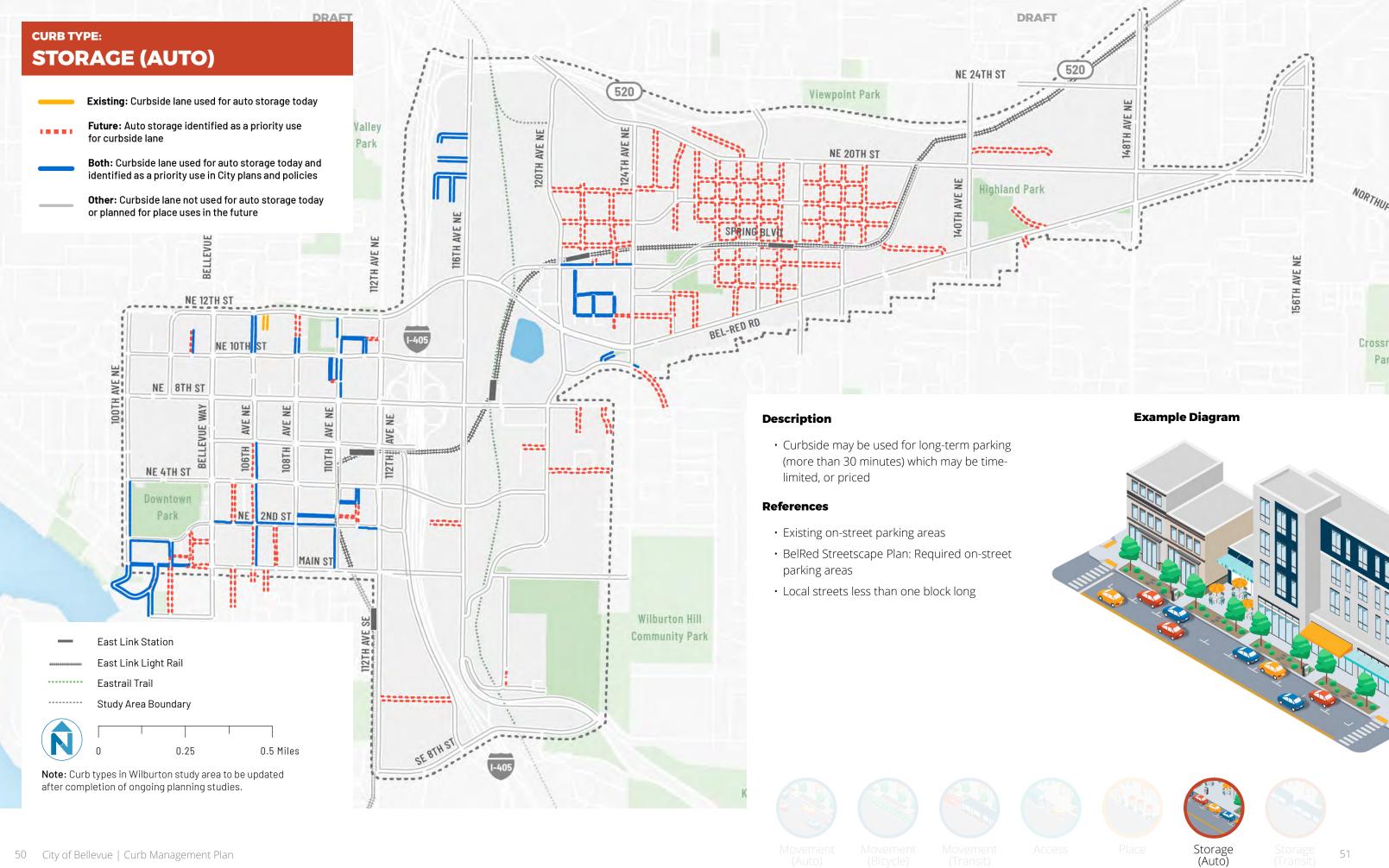


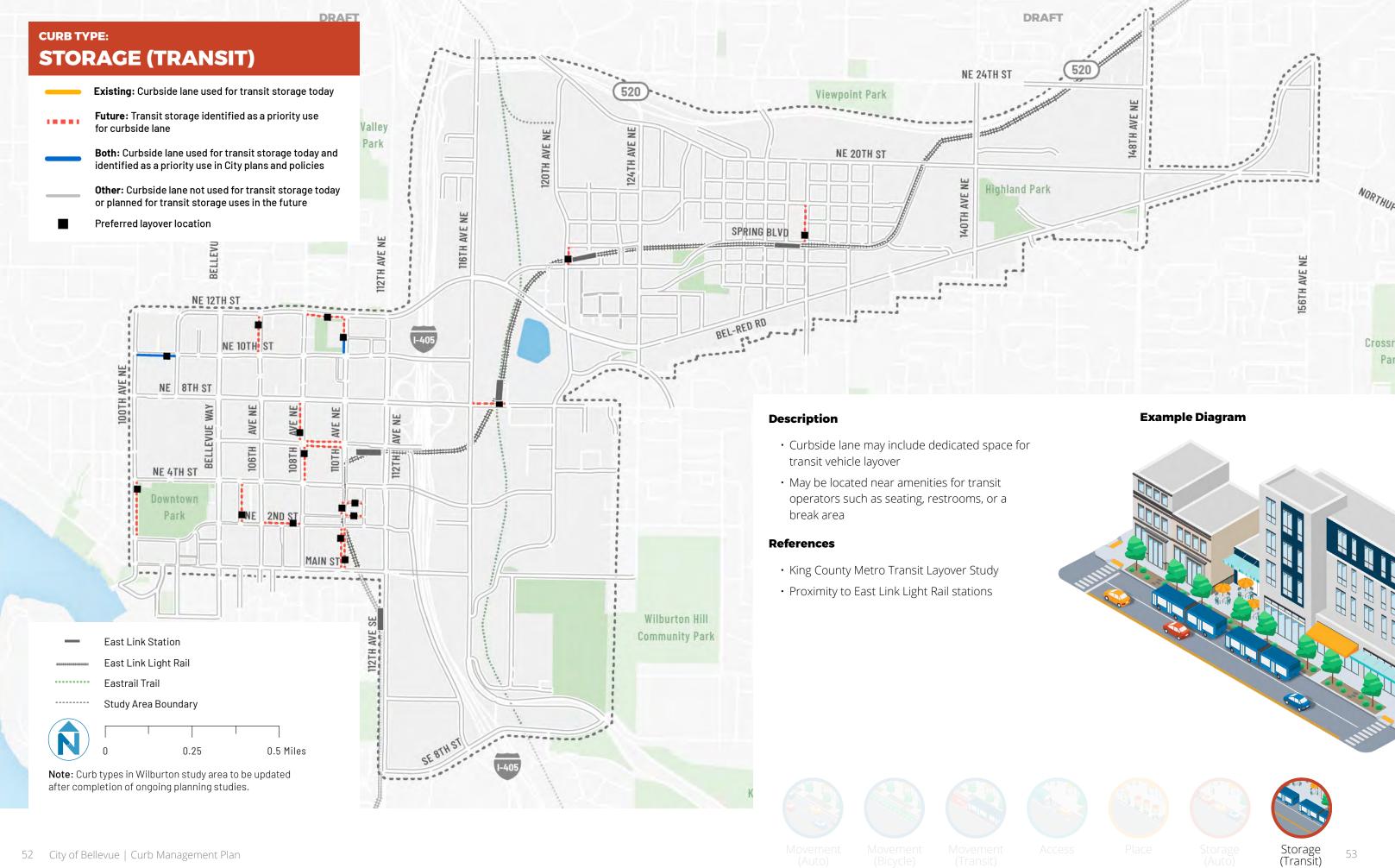


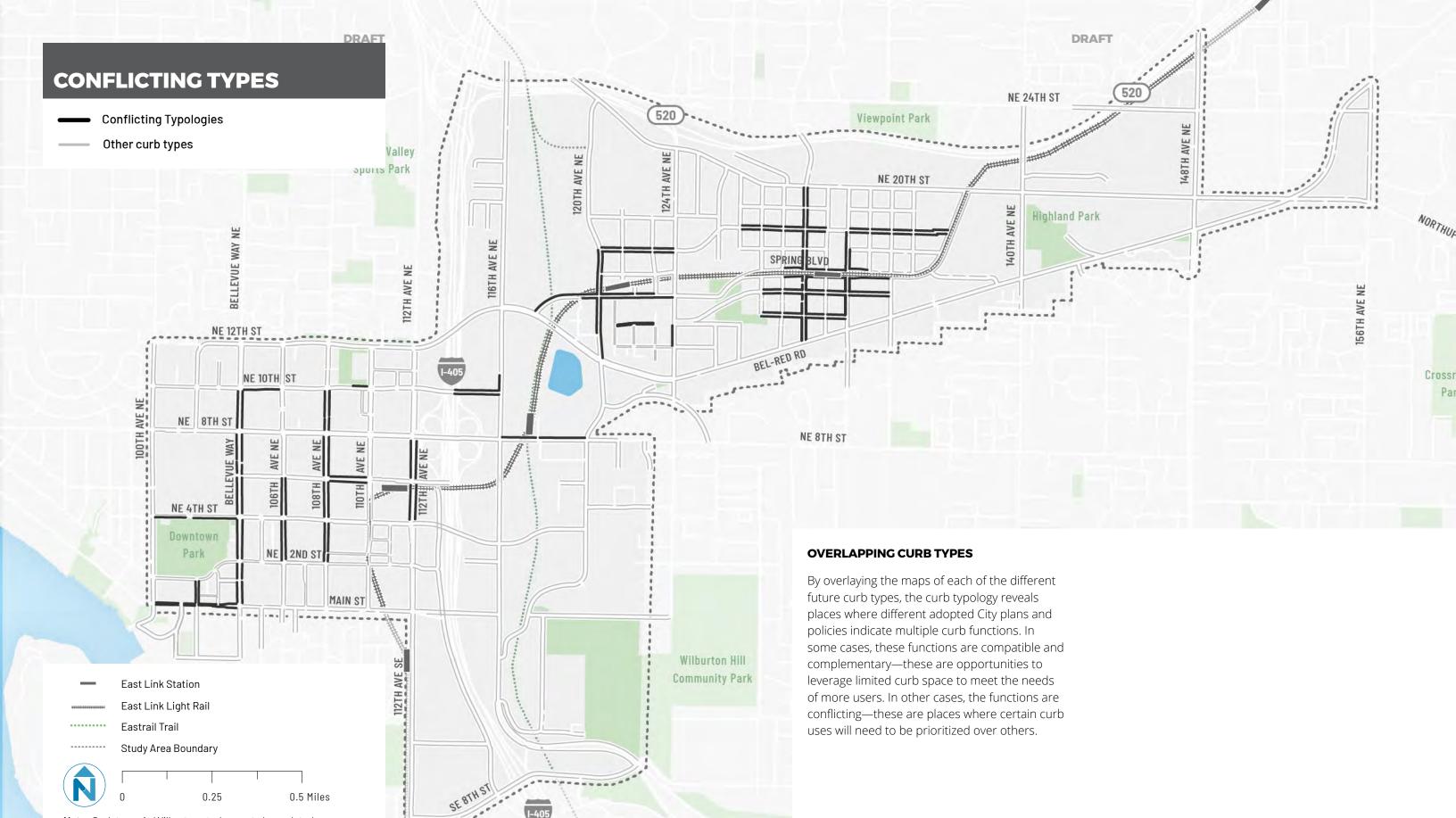
(Transit)















(Bicycle)



(Transit)









Storage (Transit)

after completion of ongoing planning studies.

Note: Curb types in Wilburton study area to be updated

Curb Demand

Demand for valuable curb space can vary widely depending on the type of use, time of the day, and season. Effective curb demand management is a vital tool for achieving long-range goals associated with mobility, land use planning, and urban growth—especially in dense commercial areas. As growth accelerates, curb demands can overrun the finite curb supply if proper management structures and tools are not employed.

Currently, parking is a significant presence on Bellevue streets within the Urban Core. While much of the downtown network reserves the entire on-street lane for traffic movement, parking takes up the biggest share of non-movement curb uses. However, the total number of on-street parking stalls in Downtown reflects less than 1% of available off-street parking in

the same area, indicating the fact that most parking needs are met within building sites and private lots. The data also show that a proportionately small amount of curb space is currently dedicated to goods and passenger loading.

The map on the next page shows parking occupancy on certain blocks of the study area. The map shows the percentage of time between 7 a.m. and 8 p.m. that occupancy was above 80%. Areas with particularly high occupancy were Old Bellevue, Northeast Downtown, and the Spring District & BelRed areas. It is important to note that many of the blocks in the data collection have on-street parking that regularly see occupancy above 80%.

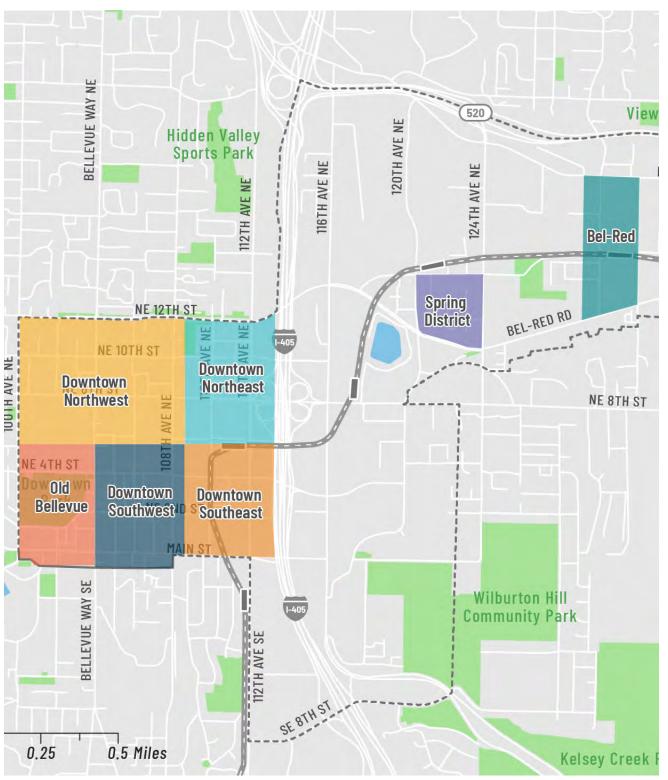
Additional information on curb data can be found in Appendix D: Existing Conditions Report.

Parking Inventory Table and Zones (June 2022)

Zone	Estimated On-Street Parking Spaces	Percent of Total On-Street Spaces	Approximate Off-Street Parking Spaces*
Old Bellevue	156	26%	
Bellevue Downtown: Southwest	64	11%	
Bellevue Downtown: Northwest	55	9%	32,000
Bellevue Downtown: Southeast	82	14%	
Bellevue Downtown: Northeast	82	14%	
Spring District	98	16%	22.000
Greater BelRed	60	10%	23,000

^{*}Source: INRIX

Parking Zones Map



Observed Parking Occupancy, 2022

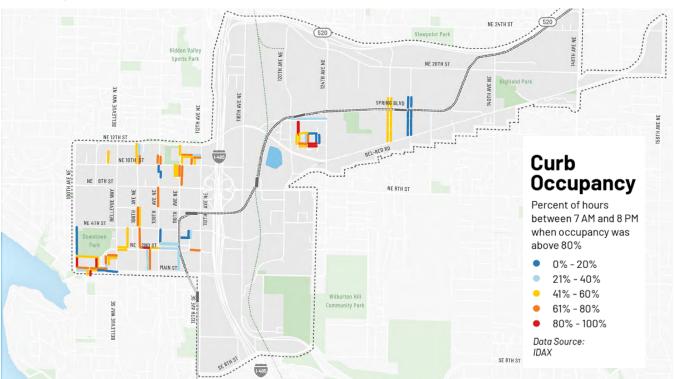
Friday, June 17, 2022



Tuesday, June 21, 2022



Wednesday, December 7, 2022



Sunday, December 11, 2022



Curb Pricing

Curb pricing is one of the most effective demand management tools. As Bellevue's Urban Core densifies, ongoing growth will increase competition for the limited parking supply and intensify pressures along the curb. Revenues from a curb pricing program would help improve curbside enforcement activities and be reinvested into the community, improving mobility operations and livability within Urban Core areas.

As Bellevue explores implementation strategies for curb pricing, it should center the following principles:

- Curb pricing rates should be established to achieve target parking occupancy goals.
- Curb pricing should support efficient enforcement structures, ensure optimized mobility operations, and contribute toward streetside amenities.
- Curb pricing should be easily communicated to and understood by the public.
- Curb permitting structures should be simple and transparent.
- Curb pricing structures should include strategies to ensure equitable outcomes.
- Curb pricing should achieve city goals and policies.

Based on these principles, the City should explore the following curb pricing opportunities:

- Launching a paid on-street parking program, using demand-responsive pricing with a performance target set, to ensure spaces are well-used but that it is easy to find a space.
- Exploring strategies to charge for specific load and unload activities.
- Revisiting existing curb use lease fee permit structures.
- Formalizing micromobility permit structures.
- Creating permanent parklet and street dining permit programs.

WHY PRICING?

Bellevue has a finite supply of curb space in commercial areas. If curb or parking in busy areas are left unmanaged, demand can quickly exceed supply of curb space, making it hard for people to find open or available space and causing inefficiencies in the roadway system. Everyone—drivers, business owners, cyclists, pedestrians—benefits when the curb works better.

There are three strategies or tools to manage demand for curb: time limits, use limits, and pricing. While each strategy has tradeoffs and can be well suited for certain situations, pricing is the most effective tool for managing demand for curb in busy commercial areas, especially for on-street parking and commercial loading.

Pricing is a direct and efficient way to manage demand for a scarce resource. The use of prices is ubiquitous—they are used in almost every aspect of our life to manage demand for finite. Because pricing is so common, this approach is straightforward, easy to communicate, and easy to understand. Pricing is also flexible and precise. Prices are easy to adjust over time as circumstances change, where time limits and permits are relatively blunt and inflexible as tools. Finally, revenues generated from pricing can be reinvested back into the community to advance curb management and broader city goals.

ON-STREET PARKING IN BELLEVUE TODAY



A typical target for parking occupancy is 80-85%. At this level, parking is well-used but people can find an available space without "circling" from block to block. Curbside parking in Old Bellevue regularly exceeds 80% occupancy. 78% of curbs in the study area are 100% full at some point in the day.

Demand Management Strategies

ON-STREET PARKING

In almost every city, much of the curb space in and around commercial areas is allocated to on-street parking to improve access for those visiting or working in the area. Paid on-street parking is perhaps the most common and most well-understood area of curb management, and there is broad consensus that the best practice is to use price to manage parking demand.

Precedent set by peer cities show that dynamically priced paid parking, parking rates that change throughout the day informed by historical demand data, can be an effective curb management tool. A dynamic pricing program would regularly assess parking occupancy and adjust rates to achieve a target occupancy goal per district.

Pricing policy should be guided by clear goals for the desired level of occupancy and turnovers, and directed by data that is regularly collected, updated, and analyzed. Pricing should be used as a tool in areas where it will be most effective in managing demand while still supporting neighboring land uses and businesses and ensuring access for those who need it. General best practice is to set prices at a rate that promotes 80% occupancy, which translates to 1-2 available spaces per block.

In order to maximize effectiveness, parking rates should fluctuate throughout the day in response to demand. In practice, this might mean that rates are lower in the morning when traffic is light and patrons need easy access to business, but then increase in the evenings when demand is higher as more people are out and about. Occupancy data collection at least once per year is required to support this strategy. Additionally, rate adjustments should correlate with data collection as new data provides updated insight into demand patterns at the curb.

BEST PRACTICE CASE STUDY



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Established in 2010, Seattle's Performance-Based Parking Pricing Program is a well-respected example of paid parking done well. The program uses data to set on-street parking rates across 32 paid parking areas

with differing rates for morning, afternoon, and evening. Rates are adjusted three times each year based on fresh occupancy data and set with the goal of maintaining 1-2 available spaces per block at all times. This target allows visitors and customers to easily find a place to park without having to circle in traffic and contribute to congestion.

Source: City of Seattle Department of Transportation



PAID ON-STREET COMMERCIAL VEHICLE LOADING ZONES

Currently, less than 1% of total curb spaces in Downtown are reserved for short-term loading activity. At the same time, commercial vehicle activity has increased over the past decade. This dynamic, coupled with limited information about private loading bays, incentivizes commercial vehicles to block travel lanes or double park in locations to make deliveries. Based on a 2022 curb violation study, observed travel lanes were blocked for an average of 2.5 hours by commercial and passenger vehicle loading activities.

To better capture demands, pricing can be deployed to on-street commercial vehicle loading zones (CVLZs). Curbside CVLZs are particularly important for economic vitality because they provide access to local businesses. When these loading zones do not exist or are not available, many drivers double park or block travel lanes to make deliveries, which can cause congestion and safety issues.

As Bellevue considers this strategy, it should establish guidelines for paid load zone installation and use such as criteria for siting, design, and eligible users. The

city should also augment enforcement along certain corridors where lane blockages cause the most traffic friction, while simultaneously improving physical and digital communication to inform commercial drivers where off-street loading bays are available. To manage demand at commercial loading zones in a way that maximizes access to businesses and the utilization of loading zones, the following best practices are recommended:

- Establish time limits for all zones (e.g., 15-30 minutes)
- Use time limits and time-of-day pricing to manage demand at all zones, which can allow the City to influence when deliveries are made and therefore better distribute demand throughout the day
- Make payment as convenient as possible using the same app as general on-street paid parking. Consider an approach that would automate payments for large fleets to make payment frictionless and automatic for frequent users.

PERMITTED USES FOR CURBSIDE MOBILITY

In the future, Bellevue may allocate curb space to achieve other mobility goals and encourage the shift to more sustainable modes of transportation such as carpooling, bike and scooter sharing, transit, and employer shuttles. In these instances, city-issued permits can be used to enable these travel modes to operate at the curbside as well as the broader public right-of-way. When considering pricing for these kinds of uses of the curb, the following can serve as general guiding principles:

• Establish a baseline value for the curb: The City's curb has value. Before allocating the curb for permitted uses, the first step is for the City to estimate the value of that curb.

- Estimate the cost to permit mobility **services:** Although services like micromobility and carshare are privately owned and operated, City resources are required to review and administer these services appropriately. The cost of staff time should be factored into permit pricing.
- · Set permit rates and conditions to achieve city goals: New mobility programs and options can substantially help the City achieve its broader goals for sustainability and mobility access. Social benefits like economic vitality and quality of life should be considered in setting permit pricing.

Employer shuttle loading zone, Downtown Bellevue

BEST PRACTICE CASE STUDY

The City of Chicago charges for use of commercial loading zones in its central business district. The purpose of the program is to provide access for commercial deliveries, avoid double parking, improve traffic flow, and promote turnover in designated loading zones. Users may purchase time in 15-minute increments at \$3.50 per 15 minutes, or \$14 per hour. Payment is accepted through Chicago's mobile parking app or at parking meters.

Source: City of Chicago



24 HOUR PAID ZONE

PAY AT PAY BOX



PERMITTED USES FOR CURBSIDE PLACEMAKING

Since 2020, several pilot programs have been launched that allow uses like on-street dining and food truck vendors to operate within the curbside lane. These uses have been generally received positively by the public.

In the future, Bellevue may allocate more curb space for uses that help enhance a sense of place, quality of life, and economic vitality. Examples of possible permitted uses include on-street dining areas, parklets, curbside vendors, and food truck zones. In these instances, the price of a permit is not intended to manage demand but rather to allocate curb supply across various permitted uses and, to some extent, cover the costs of administering these programs.

BEST PRACTICES CASE STUDY

San Francisco's Shared Spaces permit program is a multi-agency program that allows merchants and community groups to use the curbside, sidewalk, and other public spaces to conduct local business activities. The program began as a pandemic response and was made permanent in summer 2021 due to its broad popularity and proven success at transforming underutilized public space into central community gathering places. Businesses and community groups must submit a permit application to the city and follow the program's design guidelines.

Source: City of San Francisco



TAXIS AND RIDESHARE

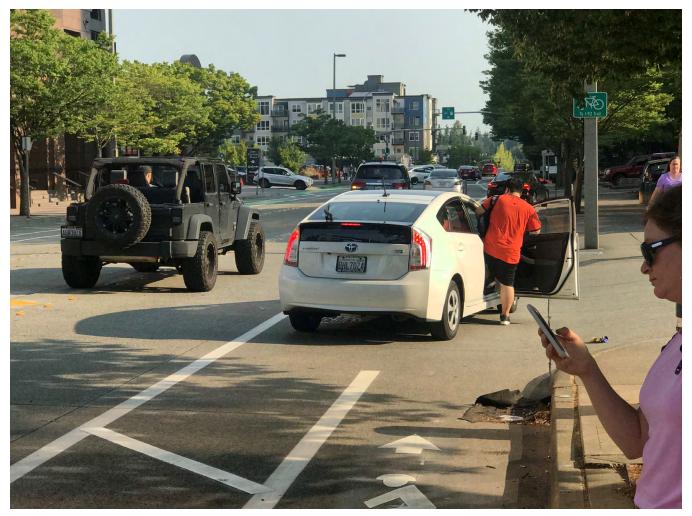
Over the past decade, Transportation Network
Companies (TNCs) such as Lyft and Uber have joined
taxis and other travel modes in using curb space in
Bellevue to conduct their business. In most cities,
TNCs have been observed to operate in the most
congested areas at the most congested times of day.
Although these services provide mobility benefits
and convenience, their use of the curb has significant
impacts and externalities, like blocking general travel
lanes and bicycle lanes.

In the mid- to long-term, Bellevue may consider using pricing to manage taxi and TNC demand more directly by adding a surcharge for all TNC trips beginning or ending in Bellevue's Urban Core during peak periods of the day. Nominal fees could potentially be tied to

reserved or preferred curb access for easier pick-up and drop-off.

In the near-term Bellevue could pursue the following strategies to minimize the negative impact of taxis and TNCs on traffic flow and curb space. These include:

- Increasing the amount of curb space allocated to passenger pick up/drop off activity,
- Requiring a permit for a taxi or TNC vehicle to drop off/pick up,
- Expanding the use of geofencing to define areas where taxis or TNCs may drop off or pick up passengers.



Passengers loading into a TNC vehicle, Downtown Bellevue

RAFT DRAFT

CURBSIDE PRACTICES GUIDE

The Curbside Practices Guide is a resource and primary implementation roadmap that describes foundational practices for supporting the CMP.

The Guide includes a set of implementation actions, curb management tools, and programmatic activities that will support Bellevue's efforts to achieve its vision and outcomes for curbs in the Urban Core. The practices within the Guide are divided into six categories of overarching curb management concepts.

This chapter summarizes the Curbside Practices Guide. Appendix A presents the Guide in full detail, including curb strategy recommendations, common and leading practices, location guidance, and implementation consideration.



CURB REGULATIONS (RG)



STORAGE (ST)



CURB ACCESS FEATURES (AC)



SUSTAINABLE AND EMERGING MOBILITY (SE)



CURBSPACE ACTIVATION (AT)



DIGITAL GOVERNANCE (DG)



Curb Regulations (RG)

Like most cities in the United States, Bellevue has historically utilized a rudimentary set of regulations to dictate how the curb can be used. Practices in this category will allow Bellevue to evolve curbside areas to match a changing development and mobility landscape. . Streamlined and clarified curbside regulations, augmented enforcement practices, updated City code, and modernized permitting systems will unlock opportunities for innovation and streamline positive outcomes in both the right-of-way and the built environment.

PRACTICES

- **RG.1:** Streamline and digitize curbside regulations
- **RG.2:** Add resources for curbside enforcement and compliance
- **RG.3:** Advance Bellevue's permitting system and procedural processes to optimize curb use
- **RG.4:** Consider changes to language in the Land Use Code to better integrate the built environment with the curbside



Storage (ST)

On-street parking plays a vital role in many locations within the study area. Historically, Bellevue's on-street parking supply was created as a simple way to use excess roadway space that wasn't needed for travel lane capacity. As Bellevue's Urban Core has grown, the demand for scarce on-street parking supply has increased. It will be important to modernize the city's existing approaches to parking management and operations, while also accounting for accessibility and new mobility functions.

PRACTICES

- **ST.1:** Perform an implementation study for a paid parking program and update curbside parking procedures and regulations
- **ST.2:** Refine and scale residential parking programs
- **ST.3:** Build and expand accessible parking (ADA) inventory
- **ST.4:** Create Program to allow for car sharing
- **ST.5:** Implement common carrier locker program

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Curb Access Features (AC)

As demands for limited curb space increase, Bellevue currently approaches curb access challenges in an ad hoc manner. Implementing deliberate strategies that account for a wide range of curbside access functions will result in a safer and more efficient mobility environment.

PRACTICES

- **AC.1:** Create more passenger loading zones
- **AC.2:** Expand and relocate conventional commercial loading zones
- **AC.3:** Establish a smart loading zone program
- **AC.4:** Manage an expanded employer shuttle loading zone program
- **AC.5:** Improve the bus shelter and shared stop program
- **AC.6:** Establish formal protocols for curbside transit layover

Sustainable and Emerging Mobility (SE)

Curbside areas within the Urban Core have the potential to rapidly advance goals outlined in Bellevue's Environmental Stewardship Plan and Smart Mobility Plan. These curbside strategies can help further the transition towards sustainable travel patterns, while providing a framework that accounts for future shared and automated mobility uses.

PRACTICES

- **SE.1:** Deploy public charging infrastructure to promote equitable electric mobility
- **SE.2:** Develop a mobility hub strategy
- **SE.3:** Proactively evaluate Bellevue's current and future curb policies and tools to manage automated mobility services
- **SE.4:** Leverage Bellevue's Transportation
 Demand Management (TDM) Plan to
 manage curb demands



Curbspace Activation (AT)

While the curb primarily serves a valuable mobility function, it can also act as a unique public space that enhances livability and expands green space within the built environment. Curbside placemaking pilots have been received favorably by the public in recent years, and these strategies provide basis for expanding and formalizing activation concepts.

Practices

- **AT.1:** Expand the Al Fresco on-street dining program
- AT.2: Establish a Parklet Program
- **AT.3:** Formalize a program for food trucks and curbside vendors
- **AT.4:** Establish guidelines for protecting and expanding curbside green space
- AT.5: Consider amending Land Use Code language to better integrate green space with the curb zone



Digital Governance (DG)

As identified in Bellevue City Council's Vision and Priorities, "Innovation is an integral part to our community". The curbside environment has been and will continue to be a grounds for innovation and digitization. These practices help provide the building blocks for a dedicated curb program and establish a framework that will catalyze new partnerships and technologies.

Practices

- **DG.1:** Collect, maintain, and share curb asset information
- **DG.2:** Collect and analyze curb activity data to inform curb management decisions
- **DG.3:** Automate enforcement and pricing processes
- **DG.4:** Create and maintain digital policy expressions and management tools

Curb Practices Summary

Category	ID	Practice Practice	Near Term	Medium Term	Long Term	Cost	Impact	Effort	Departments or Groups
Category		Streamline and digitize curbside regulations	IGIIII	✓	IGIIII	\$\$	High	High	Transportation
Curb Regulations		★ Add resources for curbside enforcement and compliance	~			\$\$	High	High	Transportation, Police
	RG.3	Advance Bellevue's permitting system and procedural processes to optimize curb use		~		\$	Medium	High	Transportation, Dev Services, City Attorney, Finance
	RG.4	Consider changes to language in the Land Use Code to better integrate the built environment with the curbside		✓		\$	Medium	Medium	Transportation, Dev Services, CD
	ST.1	Perform an implementation study for a paid parking program and update on-street parking procedures	~			\$\$	High	High	Transportation, City Attorney, Dev Services, Finance
.	ST.2	Refine and scale residential parking programs		✓		\$\$	Medium	Medium	Transportation
Storage	ST.3	★ Build and expand accessible parking (ADA) inventory	✓			\$	Medium	Medium	Transportation
	ST.4	Create Program to allow for Car Sharing		~		\$\$	Low	Medium	Transportation, Finance
	ST.5	Implement common carrier locker program			~	\$\$\$	Medium	High	Transportation, Dev Services, IT
	AC.1	★ Create more passenger loading zones	✓			\$	High	Low	Transportation, Dev Services
	AC.2	★ Expand and relocate conventional commercial loading zones	✓			\$	High	Medium	Transportation, Dev Services
Curb Access	AC.3	Establish a smart loading zone program			~	\$\$	Medium	High	Transportation, Finance
Features	AC.4	Manage an expanded employer shuttle loading zone program		~		\$	Medium	Low	Transportation
	AC.5	★ Improve the bus shelter and shared stop program	✓			\$\$	Medium	Medium	Transportation
	AC.6	Establish formal protocols for curbside transit layover		✓		\$	Low	Low	Transportation
Sustainable	SE.1	Deploy public charging infrastructure to promote equitable electric mobility			~	\$\$\$	Low	High	Transportation, Dev Services, CD, IT, Finance
and	SE.2	Develop a mobility hub strategy		✓		\$	Medium	Medium	Transportation, Dev Services, CD
Emerging Mobility	SE.3	Proactively evaluate Bellevue's current and future curb policies and tools to manage automated mobility services			✓	\$	Medium	Low	Transportation, CD, IT
	SE.4	Leverage Bellevue's Transportation Demand Management (TDM) Plan to manage curb demands		✓		\$	Medium	Medium	Transportation
	AT.1	★ Expand the Al Fresco on-street dining program	✓			\$	High	Low	Transportation, Dev Services, CD
	AT.2	★ Establish a Parklet Program	✓			\$	Medium	Medium	Transportation, Dev Services, CD
Curbspace Activation	AT.3	★ Formalize a program for food trucks and curbside vendors	✓			\$	Medium	Low	Transportation, CD
	AT.4	Establish guidelines for protecting and expanding green space				\$	Medium	Medium	Transportation, Parks
	AT.5	Consider amending Land Use Code language to better integrate green space with the curb zone				\$	Medium	Medium	Transportation, Parks
Digital	DG.1	Collect, maintain, and share curb asset information		✓		\$\$	Medium	Medium	Transportation, IT
	DG.2	★ Collect and analyze curb activity data to inform decisions	✓			\$\$	High	Medium	Transportation, IT
Governance and Policy	DG.3	Automate enforcement and pricing processes		✓		\$\$	Medium	High	Transportation, Police, IT, Finance
	DG.4	Create and maintain digital policy expressions and management tools		~		\$\$	Medium	Medium	Transportation, Parks

🚖 = Priority













CURB PILOT ROADMAP

Bellevue's Curb Pilot Roadmap activates the curb as a platform for innovation and cooperation where the City can test and refine new strategies to support the public good. Piloting will help the City rapidly re-envision and operate curbs that are vibrant, safe, inclusive, and responsive to changing demand.

In addition to advancing development of curb management programs and practices, Bellevue also aims to continue leveraging the curb as a platform to test new management, policy, and information sharing strategies.

As behavior within curbside areas evolves, testing through pilots will be vital to trialing solutions that improve user experiences. The Curb Pilot Roadmap identifies six outcome-oriented pilots that test new approaches to curb management in Bellevue.

The pilot concepts are oriented around Bellevue's overarching goals and context, constraints, and prior curb pilot efforts. In October 2022, the City convened a Curb Pilot Workshop with members of several City government teams, partners from the Open Mobility Foundation, the University of Washington's Urban Freight Lab, and King County Metro Transit. The working group aligned on curb-related problem areas to solve for via pilots, brainstorm how to leverage pilots to further the City's curb management goals and begin considering priority pilot concepts.

Appendix B presents the Roadmap in full detail.

Pilot Principles and Practices

The City of Bellevue is committed to delivering curb pilots grounded in core principles and sound practices. Adhering to these principles and practices will ensure consistency and completeness across all curb pilots.

Curb Pilot Principles

Bellevue is committed to pilot design and delivery that are guided by strong principles. The principles that will guide Bellevue's curb pilot work are as follows:



Advance the policy direction and outcomes reflected in the Curb Management Plan



Utilize Bellevue's specific curb typology



Design for inclusion, with a particular emphasis on underrepresented communities



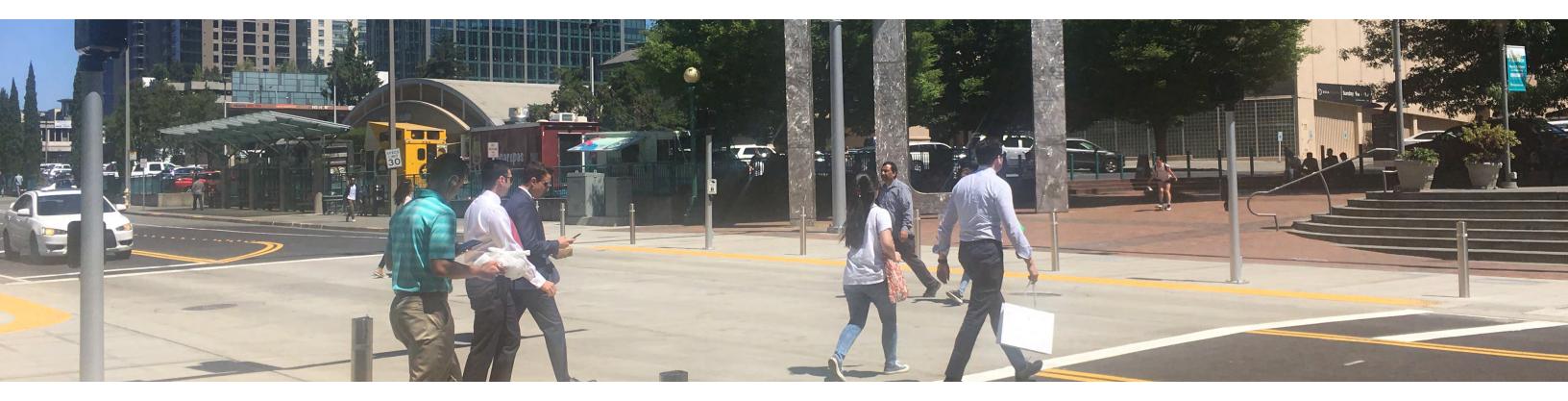
Rigorously evaluate and report progress and findings



Engage and communicate with the public



Build pilots on strong partnerships



Curb Pilot Practices

The following are the most impactful practices for Bellevue to employ in developing curb pilots:



Prioritize equity and inclusion.

Ensure access to technology regardless of banking, credit card, or smartphone access; select vendors and pilot locations using equity criteria; ensure pilot communications and awareness campaigns are context appropriate; and co-design pilot parameters with community members to directly meet their needs.



Confirm regulatory authority. Collaborate with the Development Services Department and the City Attorney's Office to ensure Bellevue's regulatory authority extends to pilot curb uses.



Communicate changes clearly and proactively. Work with representative community groups and key stakeholders to develop multilingual collateral materials and diverse communications pathways to share information (i.e., times of day, media outlets, locations, etc.).



Ensure capacity to manage the pilot.

Dedicate a project manager within the Transportation Department who will be the pilot's point person, a Director-level project sponsor, and a cross-functional team who will support pilot operations, enforcement, safety, permitting, data collection, and evaluation.



Develop expectations and protections for data sharing. Establish

data sharing. Establish data sharing plan and vendor requirements, data ownership, data communications format and standardization of APIs, privacy and accuracy requirements, and regular check-ins with vendors to create effective dashboards.



performance. Work with pilot partners and vendors to confirm that the type and format of data collected directly align with project metrics and overall outcomes for ease of evaluation. Evaluate curb pilots on an ongoing basis and at

the pilot's conclusion.

Evaluate pilot



enforcement tools to drive pilot outcomes. Integrate enforcement tools and clear compliance definitions within the city's legal authority.

Problem Statements

Through a collaborative prioritization process, City and partner representatives identified seven priority problem areas to attempt to solve through pilots. Problem statements fall into three categories:

- Curb Use
- Curb Network and Information
- Curb Processes

Focusing City resources on a set of priority pilots will result in strong pilot delivery and outcomes.

1. Curb Use

Need to eliminate auto/ delivery conflicts with transit, bike, and pedestrian movement at the curb Curbs are generally inflexible and single use (e.g., passenger, freight loading, and parcel delivery are regulated as one category) Not enough passenger and commercial vehicle loading zones due to growing delivery/ridehail demand

2. Curb Network and Information

Imbalance between the curb's throughput, access/delivery, and place functions

Perception of parking difficulty: lack of parking at the curb, parking is hard to find, and/or there is a low awareness of off-street parking options

3. Curb Processes

City lacks a systematic way to collect, update, manage, and communicate curb data

City lacks the ability to effectively enforce curb regulations (such as loading and lane blockages)

Near-Term Pilot Concepts

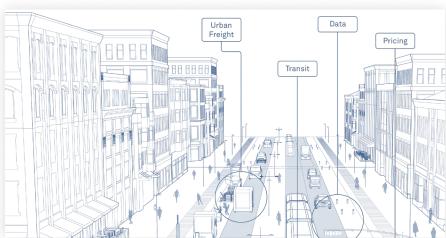
While there are many pilot concepts that will help Bellevue achieve its curb vision and promote broader city-wide goals, each pilot concept below aims to solve at least one problem statement while also fitting within Bellevue's broader curb strategy direction, constraints, and prior efforts. Refer to Appendix B for more detailed guidance on planning, launch, execution, and evaluation.



ZERO EMISSIONS DELIVERY ZONES

Allocate curb space for low/ no emission commercial delivery modes and methods such as e-cargo bikes, electric vans, and common lockers to divert loading to the zones and incentivize operators to more rapidly innovate.

Image: <u>Urban Movement Labs</u>



SHARED AV LOADING AND DIGITAL CURB

Create permitting process that allows shared autonomous mobility operators to digitally map the curb and, in the longer term, test operations to proactively define the future of autonomous mobility in Bellevue.

Image: NACTO



ON-STREET TO OFF-STREET CURB DIVERSION

Divert personal vehicles to off-street parking by displaying garage/lot occupancy and divert commercial vehicles to existing loading bays to create safer and less congested curb ecosystem for desired and shorter term uses.

Image: City of Asheville, NC

LOADING ZONE SUPPLY/ DEMAND ALIGNMENT

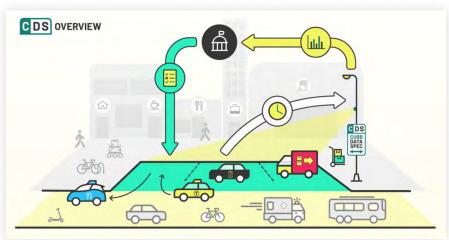
Collect data on loading zone locations, usage, and demand for different types of loading (commercial, passenger, personal) to understand mismatches and rightsize the number and types of loading zones according to current supply and demand.



API STANDARDIZATION VIA CURB DATA SPECIFICATION

Join the CDS working group and standardize data sharing, APIs, and communication requirements with mobility operators.

Image: Open Mobility Foundation



AGILE PROCESSES FOR REAL-TIME WORKFLOW, INFORMATION, AND REGULATION UPDATES

Institute streamlined, agile processes in Bellevue's internal workflow so all City functions use the same processes to update curb asset data and regulations.



LOOKING FORWARD

Implementation of the CMP will require dedicated funding and staffing resources to realize. As Bellevue looks towards implementation of the CMP, the following recommendations can offer broad guidance over time. Action-oriented next steps communicate the recommendations and the factors contributing to the decision-making process and create a foundational body of work to build upon as implementation and monitoring progress.

Equity

All curb management decisions should be centered on equity to ensure all Bellevue residents, workers, and visitors can access the curb space they need. Key considerations and performance indicators to include when evaluating the equity impact of curb management decisions include:

- Study usage demographic of curb-adjacent modes, including transit, single occupancy vehicles, bicycles, and micromobility. Ensure that curb space is equitably distributed across uses based on need and user demographics.
- Once implemented, ensure paid parking rates do not pose an undue burden on low-income populations.
- Ensure businesses without off-street loading alternatives have reasonable access to on-street loading space to receive necessary deliveries.
- Monitor spatial location of curb assets like commercial and passenger load zones, parklets, on-street dining, and micromobility parking corrals to ensure an equitable distribution of infrastructure the Urban Core.
- Maintain open channels of communication with the public and external stakeholders.

Staffing

Staffing needs for curb management vary depending on the number and complexity of curb management programs, policies, and responsibilities. For Bellevue, a core curb management team led by a program manager could take responsibility for overseeing curbside practices and programs while still interfacing and regularly collaborating with subject matter experts in other work groups.

A team of two to three full-time staff could manage a general curb management program. Staff would track and evaluate curb demand and supply over time, while employing curbside practices to help organize and publish information. Program staff would oversee multiple curbside activities, such as on-street parking, loading zones, residential parking program, and on-street dining. For example, the staff member responsible for managing the Al Fresco dining program would oversee communication with participants and coordinate details while working closely with the Right-of-Way permitting and Traffic Engineering staff to ensure on-street dining infrastructure is safe and does not interrupt traffic operations.

Delivering the Curb Pilot Roadmap

City staff will begin organizing and developing partnerships to advance priority curb pilots. Delivering priority pilots signals to the public and daily curb users that the CMP and its component curb management tools are effective. The pilots might also suggest that modifications are needed to achieve envisioned curb outcomes. In a dynamic and constantly changing environment like Bellevue's Urban Core, some level of flexibility is needed to calibrate curb spaces. A firm framework—guided by the curb pilot principles and practices—will gracefully manage change, while advancing pilots from concept and pilot plan to implementation, operation, and evaluation.

Delivering Curbside Practices

Operational practices and improvements identified in the Curbside Practices Guide will be considered within a broad curb management program. Practices will be addressed based on indicated prioritization, level of impact, and cost. After program initiation, data collection will be imperative to track KPIs, travel behaviors, and mobility impacts over time.

ENDNOTES

- 1 City of Bellevue, State of the Curb.
- **2** American Community Survey 5-Year Data (2017-2021).
- **3** Choose Your Way Bellevue, May 2022.
- **4** Bureau of Labor Statistics, <u>Average Spending on Transportation</u>, 2021.
- **5** Puget Sound Regional Council, <u>Vision 2050 Equity-Related Policies and Actions</u>.
- **6** US Federal Highway Administration, US Census Bureau.
- 7 City of Bellevue analysis of US Census data and King County Assessor's Office data.
- **8** Digital Commerce 360.



