



City of Bellevue

Bellevue Smart Transportation Update

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BELLEVUE
SMART



Information

AGENDA: Connectivity Element Update



Smart Cities Background



Smart Mobility Update



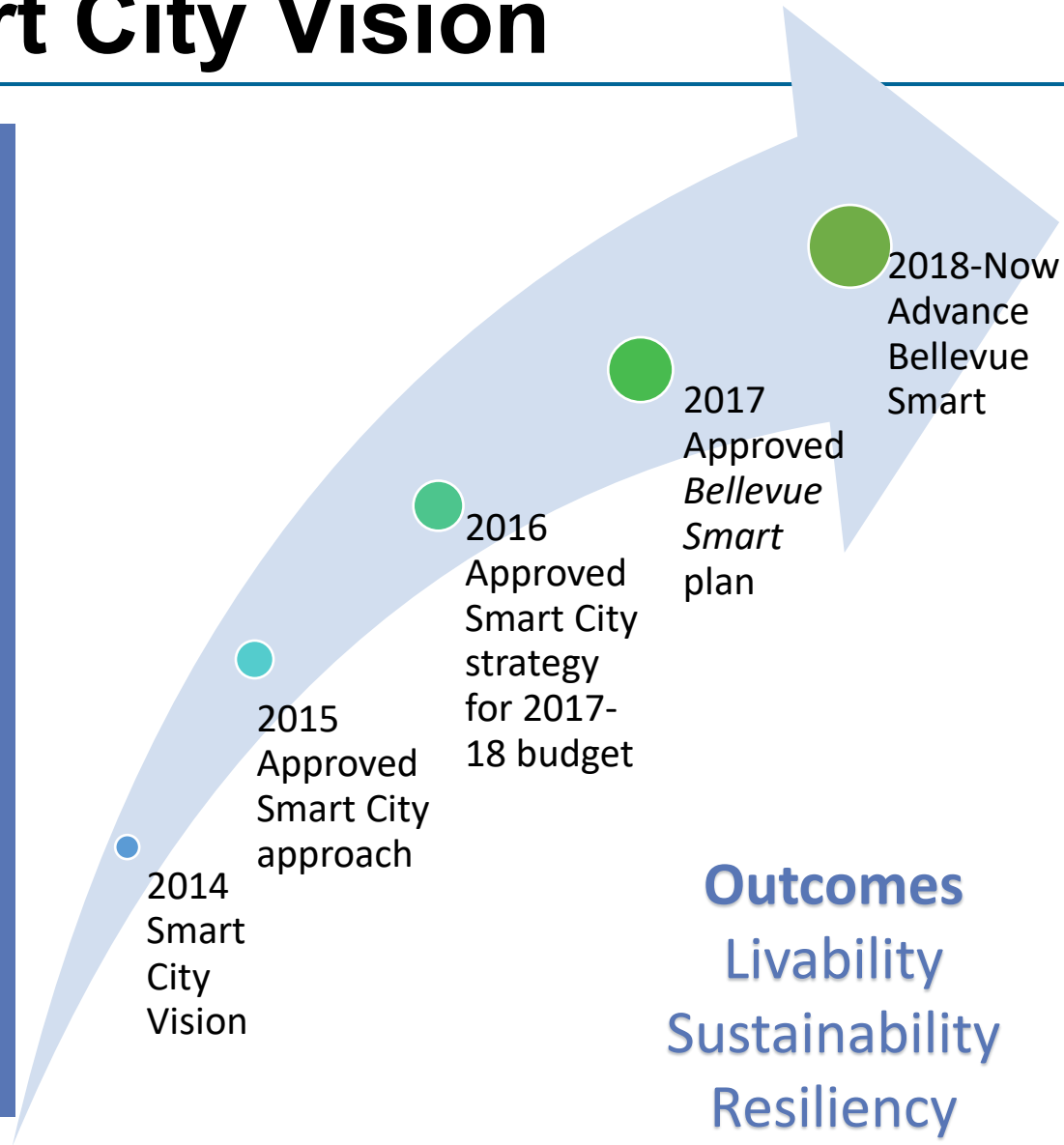
Curbside Pilots and Future Planning



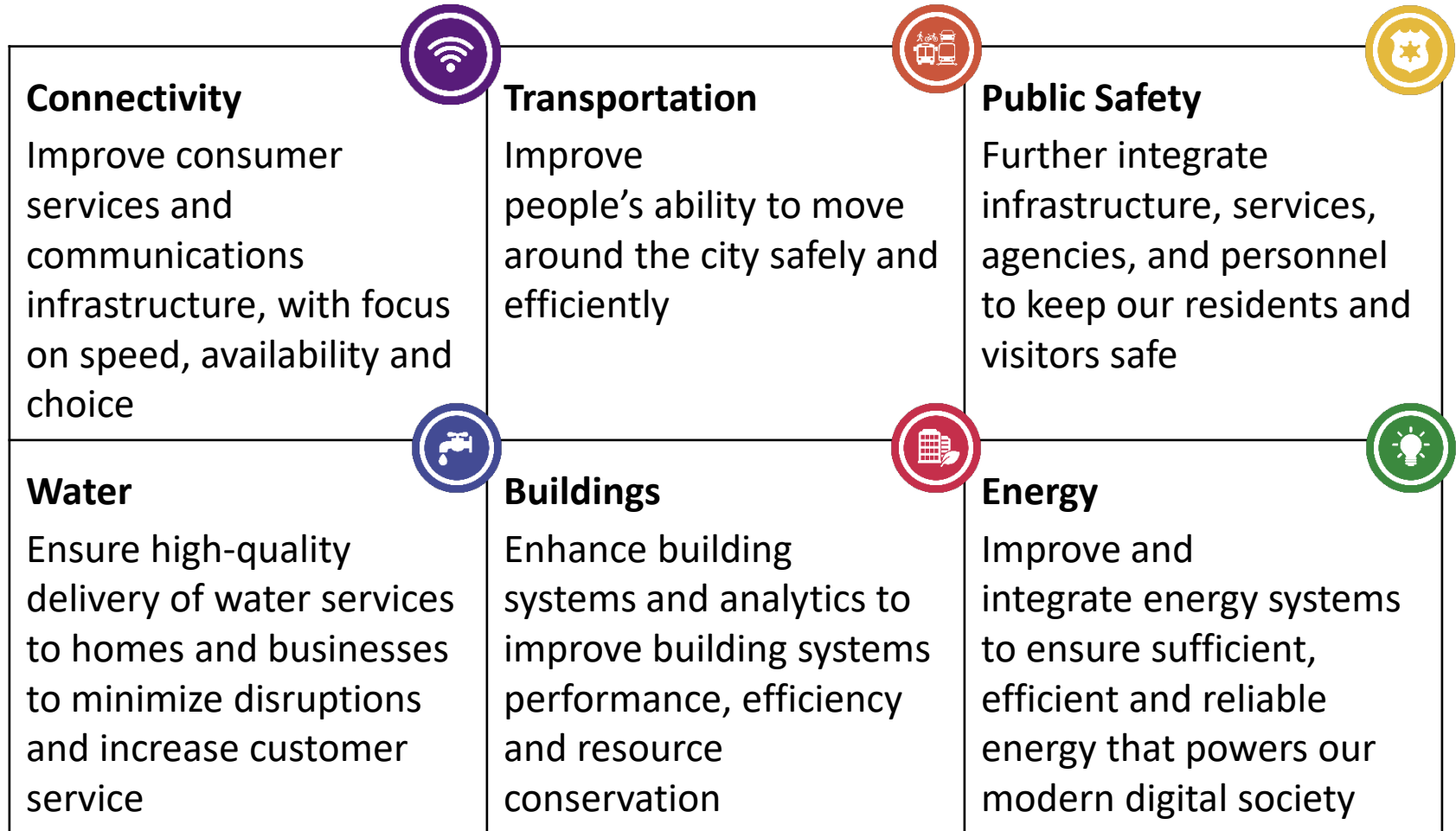
Bellevue Smart City Vision

Council Vision

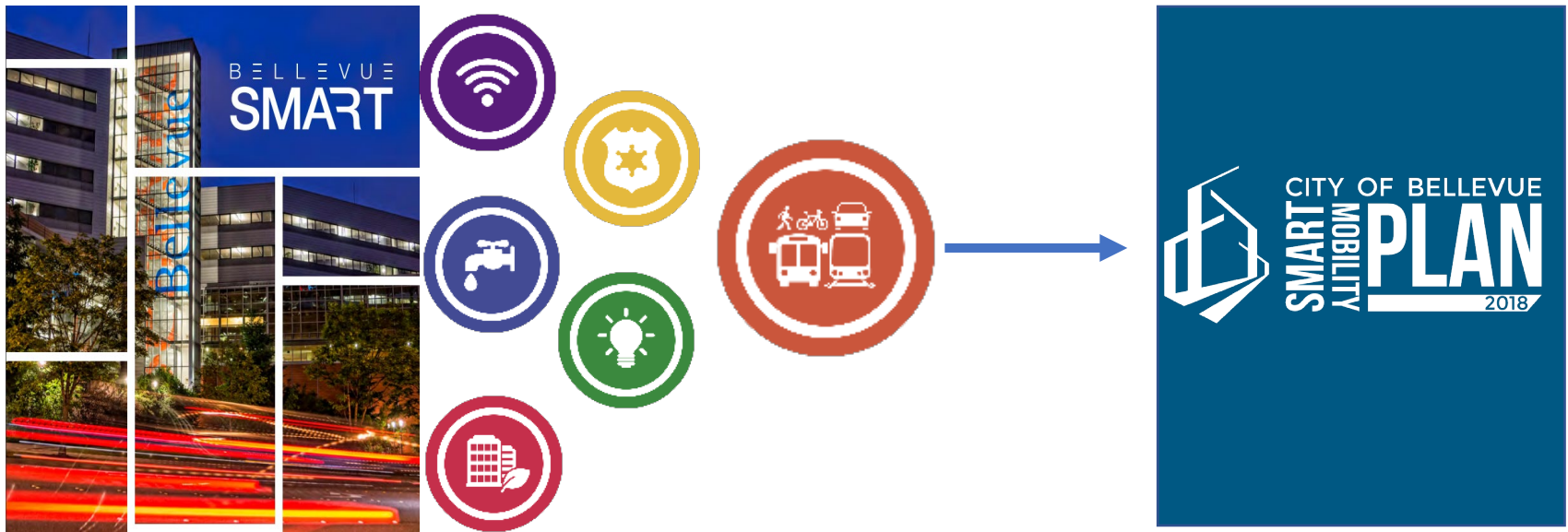
Bellevue is a “smart city” with a clean, high-quality environment and excellent and reliable infrastructure that supports our vibrant and growing city, including high-tech connectivity.



Smart City Elements



Smart Mobility Plan



Smart Cities

**Transportation
element of Bellevue
Smart**



Smart Mobility Plan

Accomplishments and Next Steps

Smart Mobility Plan

Smart Mobility VISION

Use innovation and partnerships to deploy emerging technologies that enhance the safety, sustainability, efficiency, and accessibility of Bellevue's transportation system.

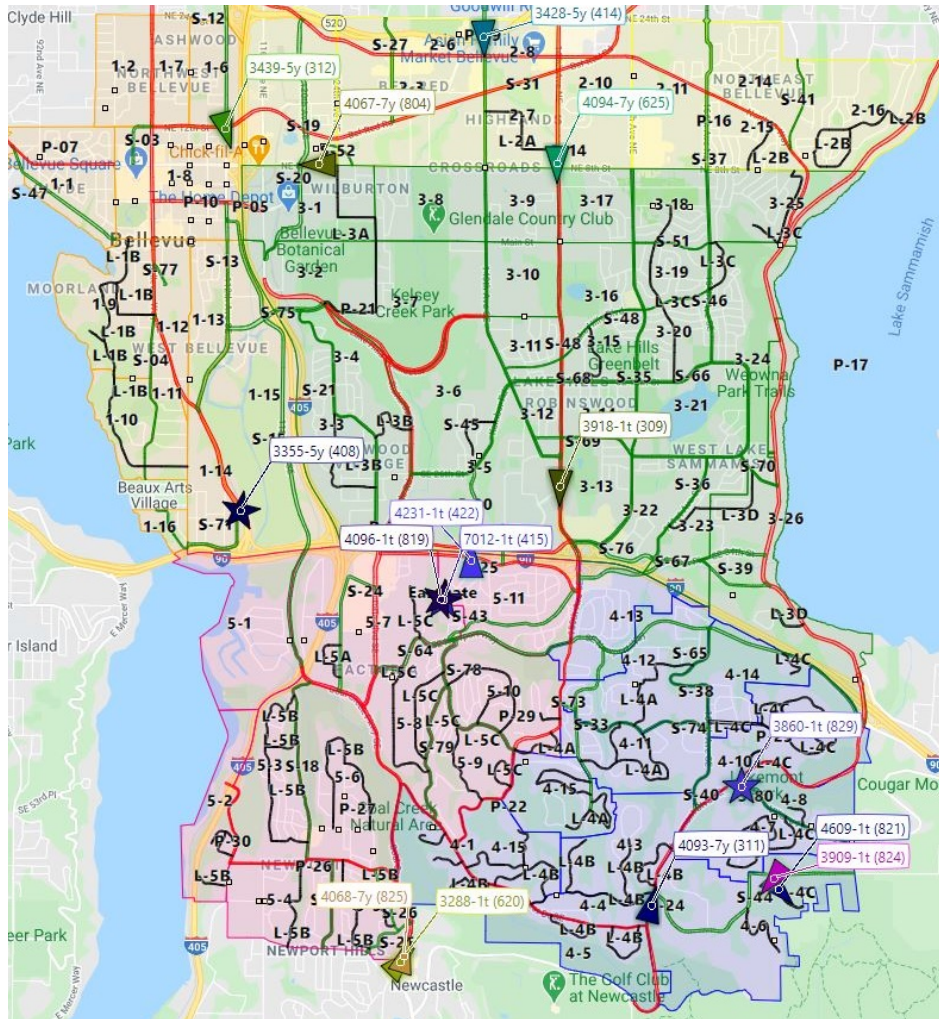


Traffic Camera Expansion



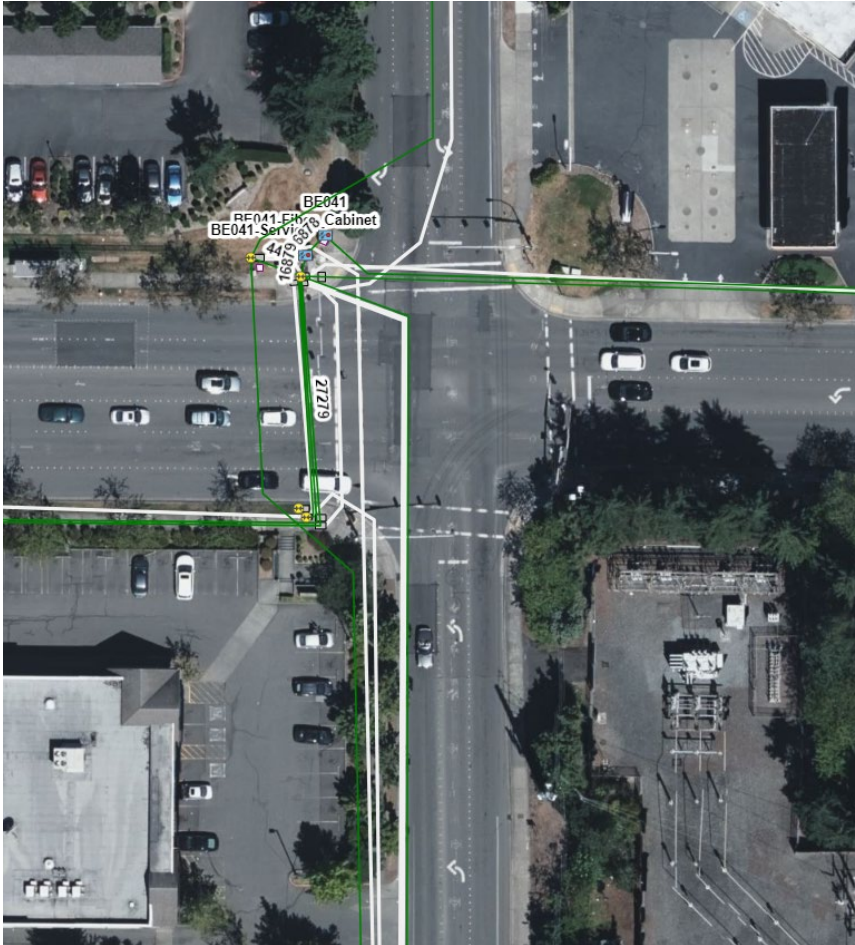
- **Near 100% camera coverage at signalized intersections**
- **Shared resource across multiple departments**

Winter Response Fleet AVL



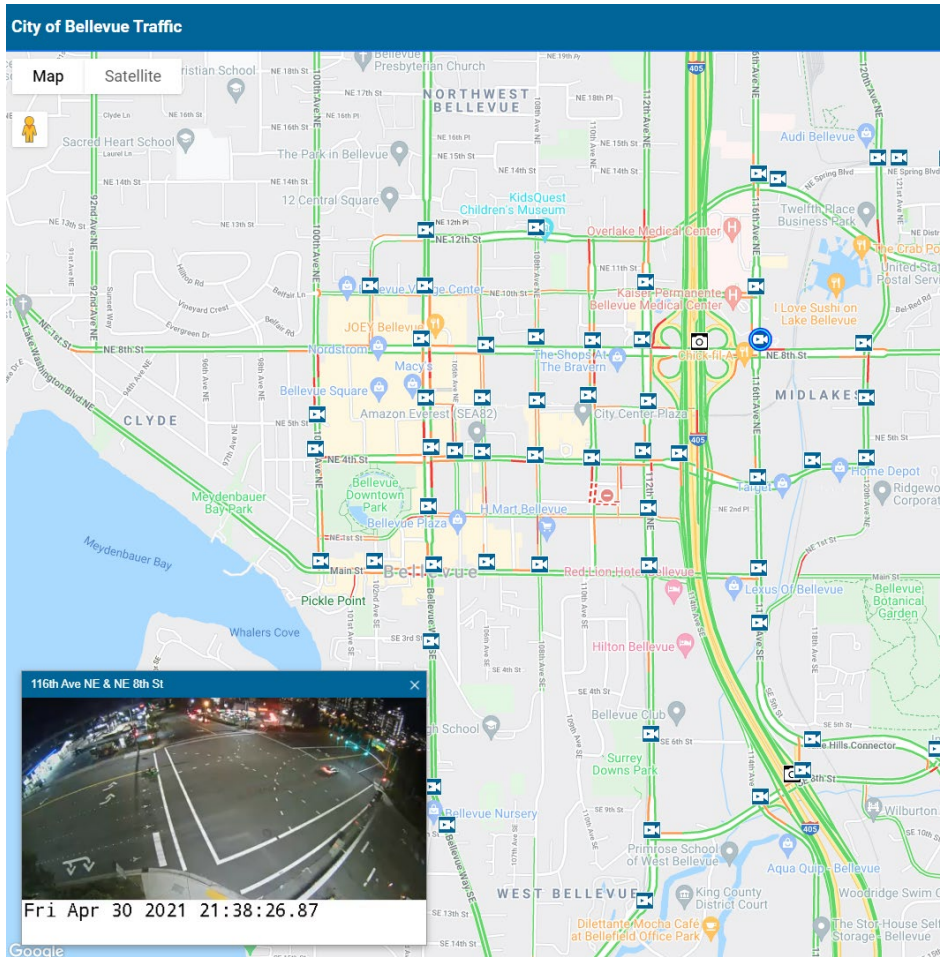
- Real-time location of assets
- Implemented during 2021 snow event
- Increased operational efficiencies
- Improves event response documentation

Fiber Optic Inventory



- Interdepartmental partnership on implementation
- Improved outage response time
- Expands fiber sharing opportunities

Live Video Traffic Map



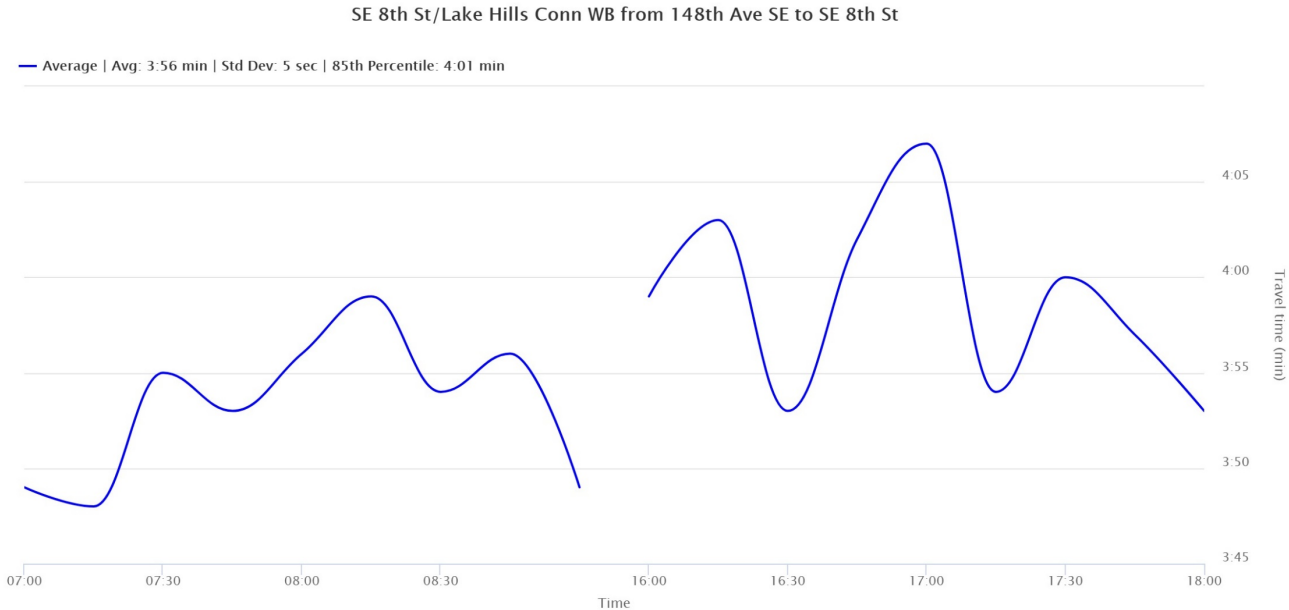
- Launched Fall 2020
- Improves real-time traffic visibility
- Enhanced view of conditions during winter events

Autonomous Vehicle Strategic Vision



- Supported through New Mobility On-Call
- Work begins in Q2 2021
- Evaluate industry and agency AV readiness
- Engagement with local businesses, industry, and regional partners

Travel Time Data Platforms



- **Deployed in Q1 2021 for 80+ road segments**
- **Evaluate adaptive system performance**
- **Track seasonal and annual changes in traffic**

Crossroads Connect



- Implemented in Q3 2020
- On-demand transit option for East Bellevue residents
- Connects to Frequent Transit Network
- ***New*** rides to local vaccination sites





Curbside Management

Recent Pilot Projects and Future Planning

What is Curb Management?

- The nexus of land use and transportation
- “Curb space is where movement meets access” - *ITE Curbside Management Practitioners Guide*
- Rethinking use of the curb for 21st Century



Curb Management Pilot Partnerships

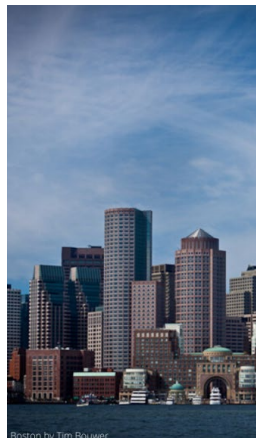
- Department of Energy Grant: January 2019
 - Partners: UW Urban Freight Lab, Bellevue, Seattle, Pacific Northwest National Lab
- Smart Cities Collaborative: December 2019
 - “Bellevue joins Boston and Minneapolis as the three cities selected... to pilot new technology”



URBAN FREIGHT LAB

UNIVERSITY of WASHINGTON

College of Engineering



Boston by Tim Bouwer



Bellevue by Sounder Bruce



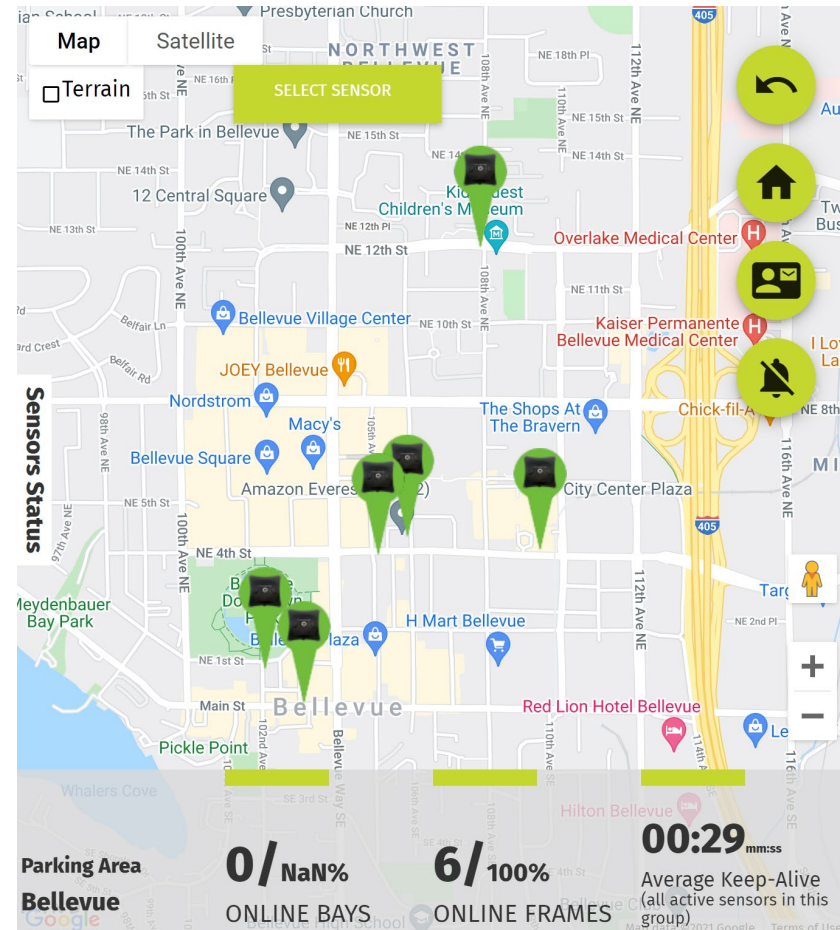
Seattle by Sounder Bruce



Transportation
for America

Department of Energy Grant

- Predict load zone availability
- Reduce parking seeking behavior
- Mobile App developed by Pacific Northwest National Lab



Curbside Performance Assessment

- Ground truthing & data validation exercise
- 5 total vendor systems, 3 assessment periods
- Final report, Summer 2021
- Based on public-private partnerships



Curbside Management Pilot Program



The City of Bellevue is testing new technology on 106th Avenue NE to improve conditions along the curb.

Our goal is to create safer and more predictable traffic conditions in downtown.



Transportation

BellevueWA.gov/curbside-pilot



T4A Outcomes & COVID Response

- Products from Smart Cities Collaborative
 - COVID & The Curb Report
 - Universal Curb Language & Standards Principles
- COVID-19 changed the curbside landscape
 - Food pickup zones, curbside dining
 - Healthy Streets



Upcoming Work

- Curbside Performance Assessment report
 - Summer 2021
- Curb technology pilots
 - Ongoing
- Curb Management Plan
 - Begin late 2021



Next Steps and Discussion

- Smart City updates from other departments
- Light update to Bellevue Smart Plan in 2022



Information