



# SMART MOBILITY PLAN UPDATE

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# PRESENTATION OUTLINE

1

**Smart Mobility Plan  
Vision & Goals**

2

**Smart Mobility  
Initiatives**

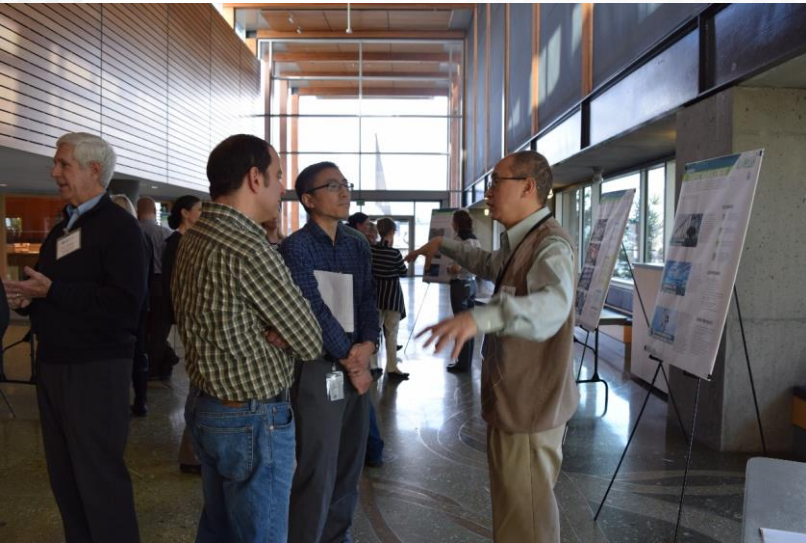
3

**Key  
Projects**

# INTEGRATED PLANS



# OUTREACH EFFORTS



- Stakeholder workshops
- Public focus group meetings
- Internal City of Bellevue Open House

# Smart Mobility **VISION**

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



# Smart Mobility **GOALS**



Safety



Efficiency



Economic  
Growth



Accessibility



Sustainability

# Smart Mobility **INITIATIVES**

1. TRAFFIC MANAGEMENT

2. REAL-TIME TRAVELER INFORMATION

3. DATA MANAGEMENT

4. ELECTRIC VEHICLES

5. AUTONOMOUS & CONNECTED VEHICLES

6. SHARED MOBILITY

# 1. TRAFFIC MANAGEMENT





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## KEY BENEFITS



Improved  
response times



Improves  
operational  
efficiencies



Optimizes available  
transportation  
system capacity



Make data-driven  
decisions

## OTHER PROJECTS

- Weather Information and Pavement Monitoring System
- Internal Data Sharing Platform
- Portable CCTV Camera Systems
- TMC Video Wall Upgrade
- Adaptive Signal System Software Upgrade
- Lighting Control and Management System
- Signal and Arterial Performance Measures System
- Computer Aided Dispatch (CAD)/Automated Vehicle Locator (AVL) and TMC Integration
- Centralized Transit Signal Priority System

## 2. REAL-TIME TRAVELER INFORMATION



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## KEY BENEFITS



Allows for more informed travel decisions



Provides optimized travel plans



Increases awareness of available travel options

## KEY POINTS



Over 70% of people in Bellevue indicate that they use a smartphone application as their primary traveler information source



Travelers in Bellevue value real-time information and travel time predictions as the most useful types of traveler information



Google Maps is the preferred application used by most Bellevue travelers

# 3. DATA MANAGEMENT



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## KEY BENEFITS



Improve operational efficiencies



Protects data integrity and privacy



Enhances data accuracy and reliability

## KEY POINTS



Autonomous vehicles are anticipated to produce more than 1Gb of data per second

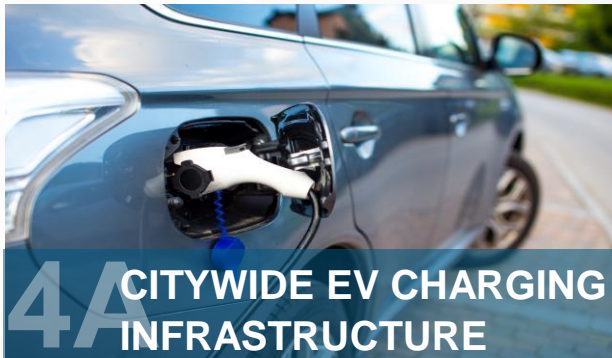


Mobile data traffic is expected to increase sevenfold between 2016 and 2021



The Microsoft-Bellevue video analytics data capture now exceeds 95% accuracy for vehicle detection and will soon expand to pedestrians and cyclists

# 4. ELECTRIC VEHICLES



# 4. ELECTRIC VEHICLES

## KEY BENEFITS



Increases sustainability



Reduced Noise



Reduced operating and maintenance expense

## KEY POINTS



Bellevue has one of the highest adoption rates of electric vehicles per capita in the US



In the first half of 2017, the U.S. experienced a growth of ~40% in EV sales when compared to the previous year



King County Metro's first all-electric bus began operating from Eastgate P&R in 2013

# 5. AUTONOMOUS & CONNECTED VEHICLES





# 5. AUTONOMOUS & CONNECTED VEHICLES

## KEY BENEFITS



Increases roadway safety



Increases traveler productivity



Reduces vehicle emissions



Reduces travel cost

## KEY POINTS



The global AV industry is anticipated to exceed \$125 Billion in market revenue within the next decade



There are currently only limited speed level 4 deployments in the US and no level 5 deployments yet



Human errors contribute to 90% of all crashes, which can be reduced by AVs

# 6. SHARED MOBILITY



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## KEY BENEFITS



Relieves congestion



Improves transportation accessibility



Reduces travel cost



Improve first-and-last-mile connectivity

## KEY POINTS



Since its emergence in 2012, rideshare is now a multi-billion dollar industry



Approximately 60% of travelers in Bellevue indicate that they currently drive alone on their commute



Shared mobility provides a travel alternative that is estimated to be 2 to 10 times more affordable than owning a vehicle in urban centers

# Smart Mobility Plan

## NEXT STEPS



Complete smart mobility plan documentation by summer 2018



Seek and engage in public and private sector partnerships to help execute initiatives



Develop budget and staffing resource plan



Conduct grant research to identify opportunities for project funding



# QUESTIONS

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