Table: Elements of Smart City Strategy

	Future Picture	2017-18 Opportunities for Bellevue
Connectivity	• Increase internet access for all with expanded public Wi-Fi in select low-income housing, parks, and business corridors • Enhance digital economy with high-speed, secure and resilient internet access • Facilitate access to existing City infrastructure to encourage private sector investments and expansion of consumer services • Integrate Smart City communications networks	• Partner with private sector service providers to leverage existing infrastructure to enhance and expand services throughout Bellevue • Expand Wi-Fi amenity where reasonable to enhance gathering places and ensure internet access for students • Expand fiber optic network to enhance connectivity for public institutions • Future-proof infrastructure for smart, resilient systems
Transportation	• Increase safety and efficiency with real-time performance monitoring of signal • Increase energy efficiencies with City-owned LED streetlights managed for dimming, outage alerts and other controls • Monitor performance of traffic signal system • Improved dissemination of traveler information • Integrate next generation transit signal priority technology • Enhance emergency vehicle preemption for faster response • Prepare for a future of connected vehicles and vehicle to infrastructure communications • Real-time monitoring of on-street parking in Downtown •	• Stay current with quickly advancing vehicle technologies (connected vehicles, self-driving) and pursue grants and partnership opportunities to pilot and improve systems • Continue leadership on regional transit projects on the Eastside to achieve multi-modal objectives • Implement multi-national Vision Zero initiative to end traffic fatalities through enhanced monitoring of pedestrian and bike operations • Expand fast-charging station infrastructure for EVs through regional partnerships • Use ITS Master Plan update to develop technology projects that could be packaged for grant funding.
Public Safety	• Optimized response and efficiencies by integrating public safety and emergency response systems • Predictive and preventive analysis to mitigate criminal activity • Dedicated and resilient public safety communications networks • Improved response times, accuracy, and effectiveness through regional partnerships and agreements • Better situation awareness with common operating picture available for incidents and for EOC	• Increase policing effectiveness and lower crime through use of predictive analytics and best practices, such as CompStat • Patient info shared in real-time between EMS responders and hospitals • Improve emergency management using Common Operating Pictures.

Water	• Advanced meters capable of providing customers with real-time water consumption readings and proactive leak detection • SCADA and telemetry system provides real-time info, increased resiliency, and potential for predictive operations • Integrated asset information systems (GIS and Maximo) and customer information systems to promote improved asset management.	• Replace meters with advanced metering infrastructure (AMI) for greater efficiencies, better customer service and better operational insights • Pilot detection of potential pipe breaks using acoustic technologies • Integrate various information systems (GIS, Maximo, CIS) to improve field and emergency response activities • Improve water quality in creeks using predictive operations on stormwater ponds
Buildings	• detect real-time faults that waste energy or cause security issues using building data analytics • Continue partnership with PSE to expand Urban Smart to benchmark commercial buildings energy use and eventually benchmark water use • Integrate building security systems with 911 so responders know exact issue before arrival to the scene • Increase ability for building systems to automatically isolate issue before damage spreads	• Conduct data analytics pilots • Begin engagement on energy benchmarking for commercial buildings • Support data sharing and transparency efforts through energy and greenhouse gas emissions dashboards and open data portal efforts • Research and pilot net zero energy, net zero energy ready, and performance based building policies
Energy	• Smart energy meters provide daily readings for enhanced customer insights and to support conservation • Smart Grid detects and restores faults in the system to enhance reliability • Increase renewables and clean energy opportunities • Monitor demand response programs to lower peak energy curves and balance grid • EV car sharing to solve first-mile, last-mile problem	• Upgrade and expand EV Charging station network • Continue PSE collaboration on electrical reliability • Continue programs and outreach to expand renewable energy • Develop policies and targets for greenhouse gas emissions reductions, renewable energy, and energy efficiency • Foster opportunities for micro-grid and district energy pilots • Reduce barriers to net zero energy and water buildings