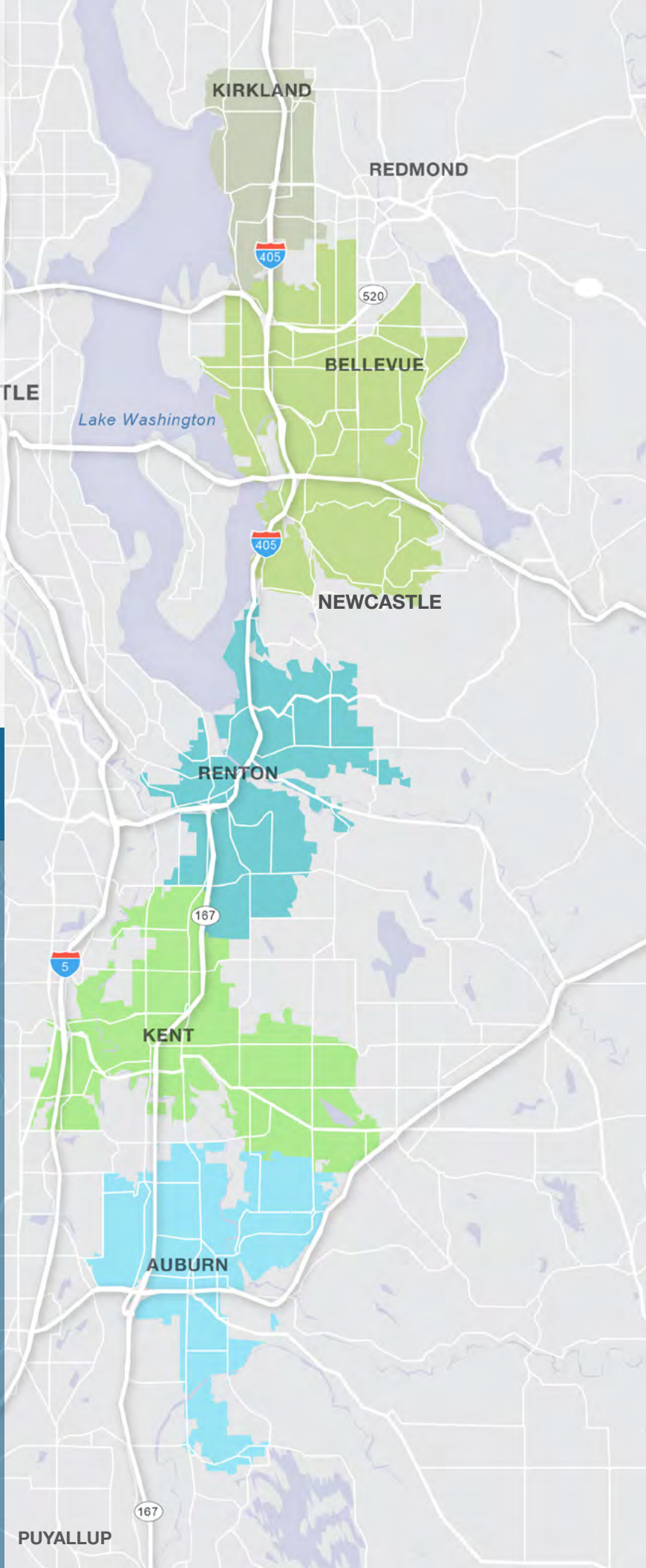
A FLEXIBLE, ELECTRIC, AUTONOMOUS COMMUTEPOOL SYSTEM

THE BELLEVUE-KIRKLAND USDOT GRANT PROPOSAL



CITY OF BELLEVUE WASHINGTON

CITY OF KIRKLAND WASHINGTON

OUR REGION ranks among the worst in the country and 20th in the world for commute traffic based on the 2017 INRIX Global Traffic Scorecard. The 2017 City of Bellevue Business Survey found that "traffic/parking" was the biggest problem facing Bellevue, receiving 3 times more responses than any other problem. The Bellevue Chamber of Commerce Economic Forecast for 2018 identified "Transportation Infrastructure and Congestion" as the top challenge.

Related to traffic is the emerging housing affordability crisis. To find more affordable housing, workers are moving farther and farther away from major employment centers, which in turn makes commuting traffic worse. In a new Puget Sound Regional Council survey, the cost of living and affordable housing were the top concerns. These social equity concerns need to be addressed.

To illustrate the social equity and housing affordability problem, Figure 1 compares housing prices and travel time. The farther you live from downtown Bellevue, home prices fall, but commute times rise.

To help meet these challenges, Bellevue and Kirkland have proposed a Flexible, Electric, Autonomous, Shared Mobility Network ("CommutePool"). It combines the latest in transportation technologies with an innovative private/public business model that will make getting to and from work safer, smarter, cleaner and more affordable--with less wasted time. Figure 2 is a simplified view of how it would operate.

The CommutePool will be:

- **Flexible**, with schedules and locations that meet individual needs of employees and employers.
- **Focused** on serving employees with limited access to traditional transit service.
- **Easy-to-use** with a smartphone app developed by Amazon and Luum.
- **More affordable** than current shared mobility services, with a low-cost per mile and low vehicle emissions through the use of electric, and eventually autonomous vehicles.
- **Faster** by providing more direct service to employment centers from areas with limited transit options.

Figure 1: Home Prices & Proximity to Bellevue

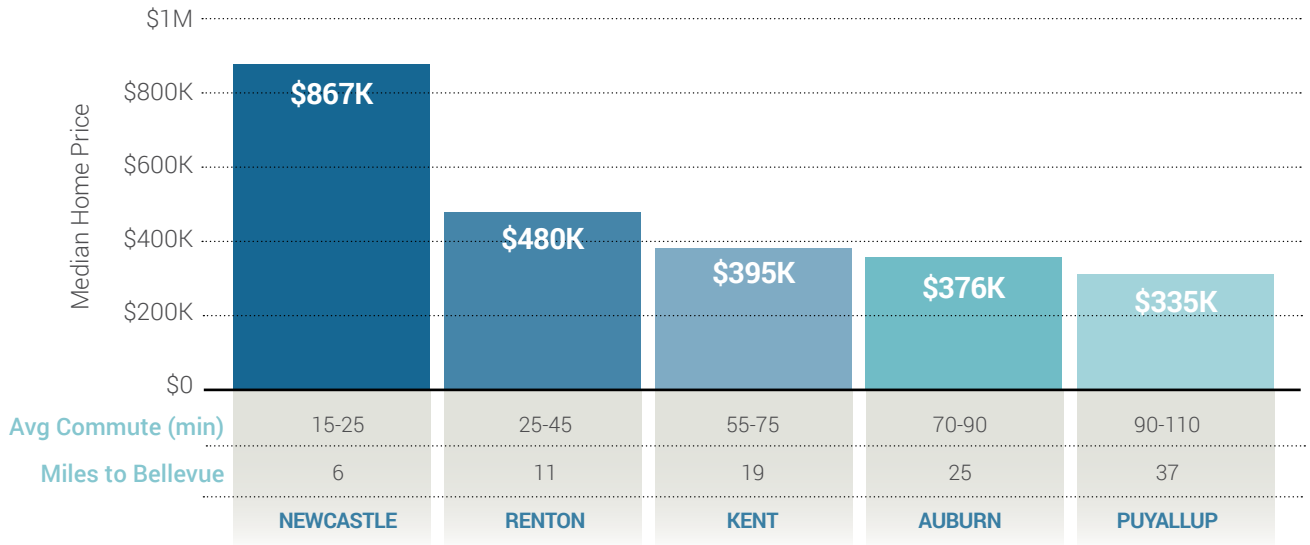


Figure 2: CommutePool Network Illustration

The focus is on a practical, business-oriented service. Bellevue and Kirkland have received an outpouring of support from the business community and other public agencies for this proposed mobility solution.

This CommutePool plan offers an ideal use case for the early phased and careful deployment of autonomous, connected, electric and shared vehicles. The proposal is based on 6 building blocks:

EMPLOYER PARTNERSHIPS

We have partnered with major area employers including Boeing, T-Mobile, PSE, REI, Amazon, PACCAR, INRIX, the Bellevue Collection, the Cities of Kirkland and Bellevue, the Bellevue School District, area medical facilities and others.

SMARTPHONE APPLICATION

An easy-to-use smartphone app, being developed by Amazon and Luum, will connect commuters to a flexible CommutePool system. It will allow commuters to reserve parking at a pick-up location, reserve a CommutePool seat, and select a drop-off/ pick-up location.

COMMUTEPOOL NETWORK ADMINISTRATION

Luum, a firm that specializes in administering commuter programs, will work with our partner employers and their employees to market and help administer CommutePool.

A FLEET OF ELECTRIC, AUTONOMOUS VEHICLES.

We will partner with a company making electric and autonomous vehicles. Possible partners include Google's Waymo, General Motors, Ford and Nissan.

CURB MANAGEMENT

The CommutePool vehicles will take employees direct to corporate campuses or downtown environments, like downtown Bellevue, where curb management will be essential to safe and efficient operations.

EV INFRASTRUCTURE

We will partner with PSE and others to provide fast, easy electric vehicle charging capabilities not only for CommutePool vehicles, but for rideshare vehicles and electric buses.

Bellevue, Kirkland and our partners will develop an educational and outreach program with workshops, demonstration events and conferences to communicate the advantages of the CommutePool Network.

The complete grant application can be found at:

transportation.bellevuewa.gov/safety-and-maintenance/traffic-and-street-lighting-operations/intelligent-transportation-systems/

FOR ADDITIONAL INFORMATION PLEASE CONTACT

STEVE MARSHALL
Transportation Technology Partnership Manager
City of Bellevue
smarshall@bellevuewa.gov
425-452-4221

JIM LOPEZ
Assistant City Manager
City of Kirkland
jlopez@kirklandwa.gov
(425) 587-3212

PARTNERS

Iuum
amazon.com
Seattle Children's HOSPITAL + RESEARCH + FOUNDATION
OVERLAKE MEDICAL CENTER
KAISER PERMANENTE
King County METRO
WSDOT
EvergreenHealth
PSE PUGET SOUND ENERGY
ACES NORTHWEST NETWORK
CITY OF RENTON
KENT WASHINGTON
CITY OF AUBURN WASHINGTON
ASTRONICS CORPORATION
AAA Washington
THE NORTHWEST SEAPORT ALLIANCE
CITY OF SEATAC
INRIX
TALON
VULCAN
BELLEVUE SCHOOL DISTRICT
T-Mobile
BOEING
REI
PACCAR
Bellevue Downtown Association
THE BELLEVUE COLLECTION
BELLEVUE COLLEGE
Bellevue CHAMBER OF COMMERCE THE VOICE OF BUSINESS
Berkeley UNIVERSITY OF CALIFORNIA