Attachment A

Bellevue Smart Mobility Additional Projects

1. **Portable Changeable Message Signs (PCMS)**
   Acquire and deploy additional Portable Changeable Message Signs (PCMS) to support emergency and inclement weather response efforts.

2. **On-Street Parking Guidance System**
   Deploy on-street sensors to monitor parking availability and direct parkers to available on-street parking facilities. This system would also provide City staff with information regarding on-street parking utilization, which will be useful for transportation planning and enforcement purposes.

3. **GPS Signal Pre-emption System Expansion**
   Continue to expand the City's GPS-based signal preemption system to further improve signal system responsiveness in providing priority movement for emergency vehicles.

4. **Transportation Management System Dashboard – Phase 1**
   Develop an internal operations dashboard to enable City staff to monitor and visualize real-time performance of corridor and signal operations relative to key performance indicators. The dashboard will provide an overview of the top trending data points that will help City staff optimize the transportation network.

5. **Transit Signal Priority System Expansion**
   Expand existing Transit Signal Priority (TSP) system in accordance with the future King County Metro RapidRide Routes identified on the METRO CONNECTS Plan, which will create a more efficient bus rapid transit (BRT) system in Bellevue.

6. **Pedestrian and Bicycle Detection Technology**
   Deploy bicycle and pedestrian detection technologies along key bicycle and pedestrian facilities to collect additional data for planning purposes and disseminate information regarding non-motorized facility travel times and conditions.

7. **School Zone Traffic Monitoring System**
   Implement a school zone traffic monitoring system capable of providing traffic-related information in the vicinity of schools and managing the City's inventory of flashing school zone beacons. The system is intended to manage congestion around school pick-up and drop-off times and improve school zone safety.

8. **Third Party Data Integration**
   Integrate transportation data from external third-party sources, including other public agencies and the private sector. Application of external datasets will enhance the available information that is used to support data-driven decisions for traffic operations.

9. **Adaptive Signal System Redundancy**
   Provide additional redundancy and failover capabilities for the City's SCATS adaptive signal control system through the deployment of a backup server and network connection. This deployment will reduce the potential for system downtime during as a result of component failure.

10. **Transportation Management System Dashboard – Phase 2**
    Implement a public-facing transportation system dashboard. Similar to phase 1, project #4, this dashboard will allow the public to visualize real-time performance of corridor and signal operations relative to key performance indicators. Data will be presented in a way that is meaningful to the public.

11. **Remote Device Communication System**
    Deploy network communications to field devices at remote locations, to provide central management, monitoring, and reporting capabilities from the traffic management center.

12. **Wayfinding Informational Systems**
    Expand the deployment of informational systems to provide users with multi-modal traveler information at key transfer points and landmarks. This project will implement a combination of effective systems including physical information kiosks, upgraded webpage, and handheld device applications.

13. **PCMS Remote Management Systems**
    Deploy a central management system to monitor and control the city's inventory of PCMS. This system will enable City staff to provide traveler information that is more relevant and accurate with respect to construction activity, inclement weather conditions and special events.

14. **Social Media Integration**
    Expand the use of social media to obtain and provide more timely, accurate and reliable information regarding traveler information. Social media provides another source of real-time information that is generated by travelers and can often provide more timely alerts on traffic conditions.

15. **Dedicated Short Range Radio Communications (DSRC) System**
    Deploy a 5.9 GHz Dedicated Short Range Communications (DSRC) low-latency communication system that is reserved by the Federal Communications Commission (FCC) to support Connected Vehicle (CV) applications. This project will deploy DSRC communications equipment to encourage CV adoption and allow Bellevue to be CV-ready.