Question #1: Please provide greater detail on the exact scope elements to be funded with this request, and their location. For example, how many and at what locations are the BAT/transit only lanes, queue jumps and channelization components?

Answer #1: The improvements include BAT lanes, queue jumps, and transit signal priority/signalization modifications. Highlights of project elements include:

- Widen westbound S Grady Way to add BAT lane from Talbot Road S to Lake Avenue S.
- Convert eastbound right turn lanes into BAT lane from Lake Avenue S to Talbot Road S. This includes some spot intersection improvements to allow transit through movements.
- Add 175’ transit only channelized right turn lane for eastbound busses at Talbot Road S.
- Widen Talbot Road S to add 600’ northbound BAT lane approaching S. Grady Way
  - Includes signal modifications to allow transit queue jump for northbound to westbound busses
- Widen Talbot Road S and convert existing turn lane to a BAT lane from S Grady Way to S Renton Village Place
  - Includes signal modifications to allow transit queue jump for southbound busses
- Widen S Carr Road to add eastbound BAT lane from 105th Place SE to 108th Avenue SE
- Create a transit-only through movement on 108th Ave SE at northbound left turn pocket leading into Fred Meyer, giving transit a longer northbound left turn pocket at SE Carr Road.
- Widen 108th Avenue SE to add 100’ northbound BAT lane at SE 180th Street
  - Includes signal modifications to allow transit queue jump for northbound busses
- Install, or upgrade existing Transit Signal Priority at 19 signalized intersections throughout the corridor in Renton.

Speed and Reliability improvements in this segment of the corridor will improve travel times for transit vehicles in both peak periods and directions. Corridor wide travel time savings range from 5 to 19 minutes depending on the travel direction and peak period. Improvements in Renton, as detailed here, account for 7 of the expected 19 minutes of travel time savings expected during the 2040 PM peak period for transit vehicles traveling from Renton to Auburn.

In addition to these investments to reduce transit travel times, additional benefits include:

- Pedestrian improvements such as improved crossings, sidewalks, curb ramps, and enhanced transit station areas at all locations of capital elements to align with ADA standards and increasing multimodal connectivity and safety.
- Bicycle infrastructure improvements for a cycle-track on S 2nd Street in partnership with the City of Renton.

Please see the attached map showing improvements planned within the City of Renton.
**Question #2:** The application states that the project will result in a travel time savings between 5-19 minutes per trip and increased transit ridership between 4-6,000. Please explain how these calculations were derived.

**Answer #2:** Travel time savings were calculated using a combination of Synchro and VISSIM traffic analysis software tools. Traffic modeling for an opening year and 2040 condition for both a “No-Build” and “Build” condition were analyzed to determine potential travel time savings for transit operations. Specific speed and reliability improvements were prioritized based on the expected savings relative to costs and other scoring criteria (such as design constraints, ROW impacts, general purpose traffic operational changes, etc.).

The corridor-wide travel time savings varies by time of day and direction. The 2040 PM peak period travel time for coaches traveling from Renton to Auburn will see the largest benefit from the proposed projects (19 minutes), with each peak period/direction seeing a minimum of 5 minutes of savings in the 2040 condition.

Ridership forecasting model (EMME) were used to determine potential changes in ridership. The modeling effort uses background traffic information, origin-destination trip information, transit frequencies, station locations relative to employment/population nodes, and expected transit travel times to model the anticipated demand for transit service. This model used the expected travel time savings and station locations identified in the preferred concept to model the anticipated ridership in the opening year condition (2023) to determine the potential ridership increase of 4,000 to 6,000 riders relative to existing conditions within the corridor.

**Question #3:** Were electric buses considered for this route, and if not, why not?

**Answer #3:** King County Metro is committed to moving to an all-electric fleet. Electrification of the Metro fleet will be rolled out as base capacity can be properly upgraded to include battery electric charging. The current schedule for electrification will not allow for proper infrastructure to be in place for the opening of the RapidRide I Line in 2023 however the service will be upgraded to an all-electric fleet in accordance with the system wide expansion as soon as applicable.
Create two-way cycle track

Widen westbound roadway to add BAT lane
Convert eastbound right turn lanes into BAT lane
Add 175-foot transit-only channelized right turn lane

Widen to add 600-foot northbound TLTC with transit-only signal
Widen and convert to add southbound BAT lane and southbound queue jump

Widen to add eastbound BAT lane
Create transit-only through movement at northbound left turn pocket leading into Fred Meyer
Widen to add 100-foot northbound right/BAT lane and queue jump

Draft May 5, 2020