TO: Clipper® Executive Board   DATE: August 15, 2016

FR: Carol Kuester

RE: Next-Generation One Regional Card for All (ORCA) Request for Information (RFI) Summary

Background

ORCA is the regional contactless smart card fare payment system currently used in the Puget Sound (Seattle) region of Washington State. ORCA was publicly launched in 2009, and is accepted for fare payment on seven agencies and four modes (bus, ferry, rail, train) in the region. ORCA is governed by a Joint Board which is comprised of an executive or designee from each of the ORCA partner agencies, and is bound by an inter-local agreement which defines the structure of ORCA and agency responsibilities.

The seven partner agencies provide about 600,000 transit rides on a typical weekday, two thirds of which are paid for using an ORCA card. The current ORCA regional fare collection system, charges customers by deducting value and verifying pass value from an ORCA card in accordance with fare policies established by each transit operator. The system apportions the associated revenue to each transit operator through an automated financial settlement process. The apportionment happens on a per-trip basis for regional transfers and pass products. To date, more than 2.25 million ORCA cards have been issued. ORCA processes more than 11 million transactions in a typical month; a transaction occurs when a customer pays a fare using an ORCA card or adds value to an ORCA card.

Request for Information

In December 2015, Sound Transit, one of the seven ORCA agencies, released an RFI for a Next-Generation ORCA system (ngORCA) which requested vendor feedback on account or card-based systems, communications, open payments and architecture, amongst many other design, system, and contractual options. Sound Transit received 12 RFI responses, including nine from fare system vendors. Attachment A summarizes the vendor community responses.

The findings from the ORCA RFI responses almost entirely align with our preliminary C2 RFEI findings. In particular, vendor feedback has been consistent in response to several topics, including account-based systems, transition options, communications, open architecture, and system integration. To share their experience and lessons learned with this Board, we have invited Brittany Esdaile, the Regional Program Manager for Next Generation ORCA, here today to present findings from the Next Generation ORCA (ngORCA) RFI process, as well as some of the lessons learned from the RFI responses.

Clipper® program staff will continue to collaborate with our peers at the ORCA Program and monitor other transit fare payment industry updates, and look forward to updating the Executive Board of any new developments.

Carol Kuester

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Attachment:

- Attachment A: Next Generation ORCA RFI Summary

next generation ORCA

RFI Summary

June 13, 2016

We received 12 RFI responses from:

- 7 "full" and 2 "limited" fare system vendors
- 1 distribution, mobile ticketing, payments gateway vendor

Vendor experience delivering systems:

- Account-based - *most*
- Open payment - *half*
- Open architecture - *some*
- Card→Account transition – *a few*
- Multi-agency experience - *half*

- Account-Based: *Nearly all* fare system vendors are offering account-based solutions

- Fare Simplification: *All* fare system vendors recommend fare simplification for saving on cost, timeline, customer complexity, and operational complexity
  - *Most* vendors recommend fare capping in order to simplify products and give customers "best fare"

- Contracts: *Most* vendors offer *both* DBOM and Systems Integrator models; prefer capital cost with annual O&M

- Transition: A variety of transition options were proposed. This helped to lead us to consider a backend-parallel transition strategy.

- Real-Time Communications: *Most* fare system vendors are optimistic, *some* expressed cautions on availability.

- Open Architecture: *Most* fare system vendors are promoting "open" solutions, *but* there are many interpretations. A licensed API model is likely.

- Integration: *Most* have integrated with onboard bus systems (not via open APIs); *A few* have integrated with other 3rd parties (parking, tolling, bike share, etc.)

1. Define a solid customer education/marketing campaign
2. Have well-defined business rules (fares, apport., retail)
3. Have an empowered, dedicated multi-agency team to make decisions
4. Increase customer service resources during transition
5. Issuing open payment media can be costly
6. Factor communications limitations into transactions
7. Obtain access to existing system documentation
8. Leverage retail POS networks instead of retail terminals