

## MEETING MINUTES

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Client: Port of Kingston  
Project: 20190109 – Remote Ferry Holding Lot Feasibility Study  
Date: March 20, 2020  
RE: Partner Meeting #4.1 ATM

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### 1. **Introductions/Attendees –**

**Perteet** – Patty Buchanan, Mike Hendrix, Brent Powell  
WSDOT – Michele Britton  
WSF – Lie Lu  
Kitsap Transit – John Clausen  
POK – Greg Englin, Marc Horton  
Kitsap County – David Forte, Andy Nelson(?)

### 2. **ATM (Active Traffic Management)**

- Graphics from meeting are attached at the end of these notes.
  - Page 1 – Overall schematic of lane and lot use, proposed inground micro-radar pucks, battery powered that communicate with a wireless receiver that is mounted on a pole in the lot. This communicates to the master onsite control and communicates with gates controllers so that the appropriate lane can be assigned at the gate. The pucks allow end of queue detection to alert the gate controls to close and redirect to the next lane. Then this information is connected to the main lot and used to communicate when lanes of lot queue should be released to the dock lot.
  - Page 2 – Remote lot activation. Requires multiple triggers to activate remote lot. The ATM systems using detection, history of traffic. System can be manually activated for special events such as Hood Canal Bridge openings after closures. Once lot is triggered, signage throughout and around Kingston and website and app alerts will be activated to direct users to the remote lot.
  - Page 3 – In lot lane controls using signal heads. Green = proceed to dock. Flashing yellow = prepare to depart. Red = stop/wait.
  - Page 4 – In lot lane control using variable message signs . This system is much more dynamic and can provide more detail to actions, wait times, etc. Also provides the ability to provide additional information in the case of incidents or other special case information, as needed.
  - Page 5 – Controllers and communications throughout town and between lots. Some concerns that roundabouts may negatively impact the platoons from the remote lot to the main dock. But, modeling indicates that the roundabouts may not be that significant based on results from the simulations.
  - Page 6 - Deactivation of remote holding lot system. System includes queue loops to confirm traffic is not queuing at Ohio Street, main lot is below capacity, and regional signage is updated. For vehicles in holding lot, release would trigger to allow transit to main dock with volumes accounted for so that vehicles would get on next/appropriate boat.

- On continuous operations – can lane 1 be modified to be the flow through option so that it's clear to go there and move through? How would you adjust operations to use the lots, but to move through so that lot is used continuously?
- Generally, the Partners like the variable message signs option rather than signal heads for better/clearer information. There is a possibility for blank-out signs that have predetermined messages, rather than fully adjustable. Team will confirm if these are lower cost. WSDOT comments are expected to address either the blank-out sign or variable message sign is preferred.
- Signal head option includes both signal heads and lane control indications which results in a mixed systems. This would result in more equipment and crew training resulting in more complexity for maintenance.
- **General agreement that variable message signs are the preferred system.**
- All concepts are assuming no additional staff. But, the system could be modified to use staff if needed/desired.
- Roundabouts and monitoring throughout town – monitoring should be done through town so that roundabouts are not so busy to prevent side street traffic from entering. Also, ferry unload and remote lot transit to main dock should be timed such that traffic does not enter or travel within the roundabout simultaneously. Main dock does not need to backfill immediately. Roundabouts may affect platoons, but that is not a concern once drivers leave the remote holding lot.
- Kitsap Transit needs to be able to move through town to access ferry. Currently, transit goes down Main Street directly to dock through gate for drop-off. Looking forward to the SR 104 realignment, Kitsap Transit will travel east on Main Street, then west on 1<sup>st</sup> Street. Transit will not need to go through tollbooths. Existing tollbooth space will be used for drop-off location for transit.
- WSDOT traffic group is reviewing the traffic report and operational concepts, but there are no comments yet. Generally, variable message boards are easier for drivers to review and understand.
- WSF will maintain signs up to 20-feet high, higher signs/signals WSDOT regions maintains.
- A data processing graphic would be useful to help illustrate/understand the function of the system on the backside. Need to understand “switches” in data to trigger releasing cars, release rate, etc. Needs to also include data collection for the different locations throughout the system – remote lot, transit between docks and on dock. Other may include – throughput at tollbooths, etc. Needs to understand which type of data is needed at each point, i.e. gross numbers or exact numbers.
- Intermittent use of lot has some challenges. These include activation and deactivation of the lot and how to communicate to drivers when to switch to the remote holding lot.
- An integrated system for the community and understanding that function will be important to the community. One issue of concern is ensuring that the dock lot is maintained to maximum capacity as much as possible.
- Continuous use versus Intermittent use – Intermittent use would require lots of cameras all over the place. Some community interest in cameras for information gathering. *Perteet note: CCTV cameras show the conditions of the area. The License Plate Reader cameras may be a concern to community members due to perception of surveillance. Any system designed will need to ensure that the data is removed after a specific time frame to address privacy concerns.*
- How would backfilling of the main lot proceed? Modeling has determined that a lane could be released every 7 minutes for backfilling of the main lot. The 7-minute target was to manage queue through Ohio Street intersection. Model assumes that all three tollbooths would be open.

Monitoring would modify this release time. The true operations would be dynamic and could be less than 7 minutes per release if volumes progress more quickly through the

- Assumptions and qualitative discussion about what if assumptions are not met in the real world can be added to the report. And, ATM system will be dynamic.

### 3. **Other**

- EFS – electronic fare system
- Gates – are these needed? Could use something like lane metering to slow/control and give the first opportunity to direct vehicle to correct lane.
- May still need gates to close down lot when ferries aren't in operations. Operations are not very concerned about off hours access since no fee or other items are collected.

