MANAGING MEMBERS	**Item No.**	9A
STAFF BRIEFING	**Date of Meeting**	April 5, 2022

DATE: March 18, 2022

TO: Managing Members

FROM: John Wolfe, CEO

Sponsor: Tom Bellerud, COO

Business Stewards: Zack Thomas, Director, Operations Service Center; Alicia Blake, Operations Business Analyst

SUBJECT: **Update to Port Community System Expansion: Appointment System Data**

A. SYNOPSIS

To support the NWSA Strategic Initiative "develop a roadmap to enhance visibility in a sustainable and fiscally responsible manner", staff received authorization on September 8, 2021 to expand the existing Port Community System (PCS), on the NWSA website, through the addition of an Appointment Capacity Dashboard and link to Advent eModal's website.

The enhancement is being completed in phases to test viability and measure value: Proof of Concept (Phase I), Pilot (Phase II), and Data Set Expansion (Phase III). This briefing is to provide an update on the completion of Phase I and discuss the next steps for Phase II.

B. BACKGROUND

As of September 2021, the Operations and IT teams have been working closely with Advent eModal to complete the Proof-of-Concept phase for the Appointment System Data. The next step is to move onto the Pilot. For an overall understanding of the project, reference the table below.

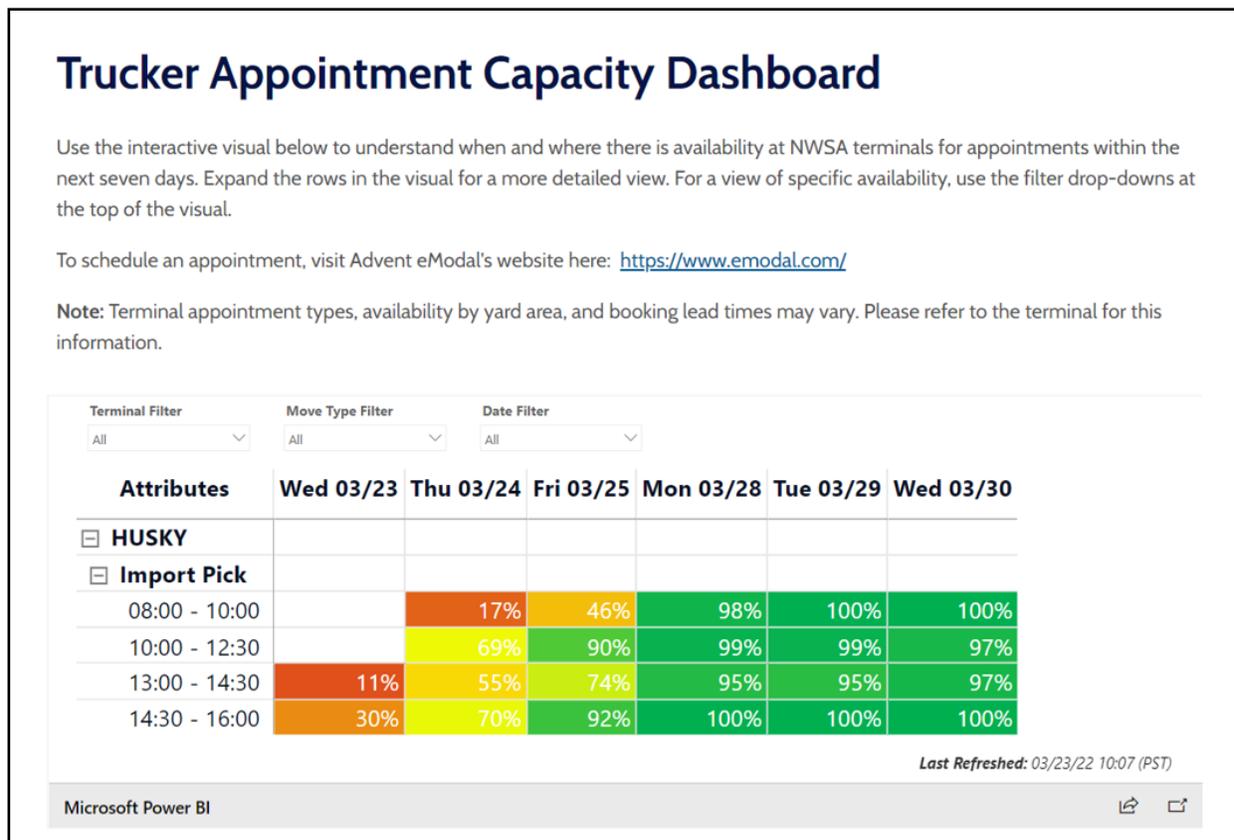| **Proof of Concept (Phase I)** - *COMPLETED*	**Pilot (Phase II)** - *NEXT PHASE*	**Data Set Expansion (Phase III)** - *TBD*
• Create a technical solution providing access to appointment system dataset • Create an aggregated dataset to provide visibility into marine terminal appointment capacity and metrics for **one terminal** in **test environment** • Develop Appointment Capacity Dashboard (business intelligence tool) for one terminal in a test environment • Provide a link to Advent eModal website for one terminal via NWSA website in a test environment	• Expand aggregated dataset to provide visibility into marine terminal appointment capacity and metrics for **all applicable terminals** in our **production environment** • Expand Appointment Capacity Dashboard (business intelligence tool) to all terminals in our production environment • Provide a link to Advent eModal websites for all applicable terminals via NWSA website in our production environment • Investigate additional dataset for future implementation	• Create a technical solution providing access to an additional aggregated and anonymized dataset • Develop a business intelligence tool for data visibility for the gateway • Evaluate benefits to NWSA stakeholders every year to determine feasibility for the cost of continued dataset subscriptions

The Proof-of-Concept included the development of a business intelligence tool for Appointment Capacity using Husky's data for testing. It provides the user with the ability to see when and where there is availability at NWSA terminals within the next seven days. Filters allow the user to specify their insights against terminal, move type (for example, import pickup), or date. Depending on the time slots available at the specific terminal, users will also be able to view this information.

During the month of February, the NWSA and Advent eModal together met with each of the terminal operators (Husky, PCT, WUT, and T18 on behalf of SSA) and the Washington Trucking Associations to review the Appointment Capacity Dashboard on the test website. The discussions provided recommendations for improvement, which led to the prototype of the current business intelligence tool. Specifically, The Washington Trucking Associations expressed that the Appointment Capacity Dashboard will be a key visibility tool in decision making and availability across the gateway.

The Trucker Appointment Capacity Dashboard is currently hosted on our Test Website. Upon completion of the Pilot (Phase II), it will be transitioned to our Production website and available for view and use by the public. This web page will be directly linked on our Cameras & Turn Time page, which is currently our most popular page and sees almost 70% of our total traffic. The figure below provides an example of what the web page might look like in the production environment.

Trucker Appointment Capacity Dashboard

Use the interactive visual below to understand when and where there is availability at NWSA terminals for appointments within the next seven days. Expand the rows in the visual for a more detailed view. For a view of specific availability, use the filter drop-downs at the top of the visual.

To schedule an appointment, visit Advent eModal's website here: https://www.emodal.com/

Note: Terminal appointment types, availability by yard area, and booking lead times may vary. Please refer to the terminal for this information.

Terminal Filter		Move Type Filter		Date Filter	
All	⌄	All	⌄	All	⌄

Attributes	Wed 03/23	Thu 03/24	Fri 03/25	Mon 03/28	Tue 03/29	Wed 03/30
⊟ **HUSKY**						
⊟ **Import Pick**						
08:00 - 10:00		17%	46%	98%	100%	100%
10:00 - 12:30		69%	90%	99%	99%	97%
13:00 - 14:30	11%	55%	74%	95%	95%	97%
14:30 - 16:00	30%	70%	92%	100%	100%	100%

Last Refreshed: 03/23/22 10:07 (PST)

Microsoft Power BI

C. CURRENT STATUS

With the Proof of Concept completed, the next phase of this project is the Pilot (Phase II). During the Pilot phase, we will be working with Advent eModal to expand this functionality to all our international container terminals for display on the NWSA Production website.

During the Proof of Concept, one key risk was identified. For the NWSA to access Appointment Capacity data, it is required that Advent eModal (third-party facilitator) obtain the authorization to share that data from the respective MTO. Meaning, there is a required data-sharing agreement between Advent eModal and the respective MTO. Currently, the NWSA team is working closely with Advent eModal to obtain authorization from all international container terminals to move forward with Phase II.

However, through this process we have learned that data-sharing agreements will continue to be a risk for obtaining access to future datasets and the development of the PCS. In the long-term, we recommend considering lease amendments to address access and authorization to data (via a third-party or directly) from our terminals or other stakeholders.

Upon the completion of the Pilot, we expect the Appointment Capacity Dashboard to provide the following benefits:
- Provide terminal appointment available capacity visibility to truckers and dispatchers so they can use this information to improve efficiency of scheduling their appointments at NWSA international container terminals
- Reduce the volume of duplicate appointments at NWSA international container terminals
- Validate both technical and business approaches for getting information added to our PCS that could be utilized for future data sets.

To measure that these benefits have been met, and that maintenance of this tool continues to provide value, we plan to assess its impact in three ways: surveying our terminal operators and trucking community (truckers and dispatchers) in partnership with the Washington Truckers Association, identifying the appropriate measures with Advent eModal to determine if a reduction in duplicate appointments has been met, and measure the amount of traffic the webpage sees.

Proposed schedule to complete the Pilot (Phase II):

Activity	Timeframe
Implement and test gateway-wide view for Phase II (Pilot)	Apr 2022 – Jun 2022
Go-Live of Appointment Capacity Dashboard Pilot on NWSA Production Website	Jul 2022
Assess benefits and determine operational needs for ongoing Appointment Capacity Dashboard	Jan 2023

D. FINANCIAL IMPLICATIONS

The financial implications of this project have not changed as of September 8, 2021. We are currently on-track and within the proposed budget that is reshared below.

Project Cost Details

	Proof of Concept *(COMPLETED)*	**Pilot** *(NEXT PHASE)*	**Data Set Expansion*** *(TBD)*
Design & Development	$235,000	$30,000	$45,000
Dataset(s) Subscription Fee	$30,000 (1 at $10k/mo. for 3 mo.)	$120,000 (1 at $10k/mo. for 12 mo.)	$240,000 (2 at $20k/mo. for 12 mo.)
TOTAL	**$265,000**	**$150,000**	**$285,000**

*The NWSA has negotiated pricing for future datasets at discounted rates for subscription fees. Beginning with the third dataset, the price will be discounted by 20%, the fourth dataset by 30%, the fifth dataset by 40%, etc. At ten or more datasets, the discount rate is capped by 90%.

Source of Funds

The current Capital Investment Plan (CIP) includes the design and development for the Proof of Concept (Phase I) and the Pilot (Phase II) projects as part of the 2021 and 2022 budgets. The subscription fees have been added as part of the IT department budget update for 2022.

E. ATTACHMENTS TO THIS REQUEST

- Slide presentation.

F. PREVIOUS ACTIONS OR BRIEFINGS

Date	Action	Amount
September 8, 2021	Executive Authorization for Design & Development (PoC and Pilot)	$265,000
TOTAL		**$265,000**