



HAMPTON ROADS TRANSIT

Smart Cities & Innovation Committee

Thursday, October 12, 2023 ♦ 12:30 pm

HRT Board Room, 509 East 18th Street, Norfolk, VA



[Webinar Reminders](#)

- ☑ Mute your phone/computer mic until you are speaking, then state your name before you begin
- ☑ Remember to use your telephone OR computer for audio – not both
- ☑ Use headsets to improve audio clarity
- ☑ Refrain from placing the call “on hold”; instead, turn on “Mute”
- ☑ Be aware that in video-enabled meetings you are always visible to all participants
- ☑ The virtual meetings are recorded by the Host

HRT SCIC MEETING AGENDA

1. Call to Order, Commissioner Andria McClellan
2. Smart City Updates
 - **HRT Electrification Update**
 - *Sibyl Pappas, Chief Engineering & Facilities Officer*
 - **Mobile Fare Update**
 - *Steven Florian, HRT Fare Technology Operations*
3. New Business & Open Discussion
4. Adjournment



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ELECTRIFICATION UPDATE

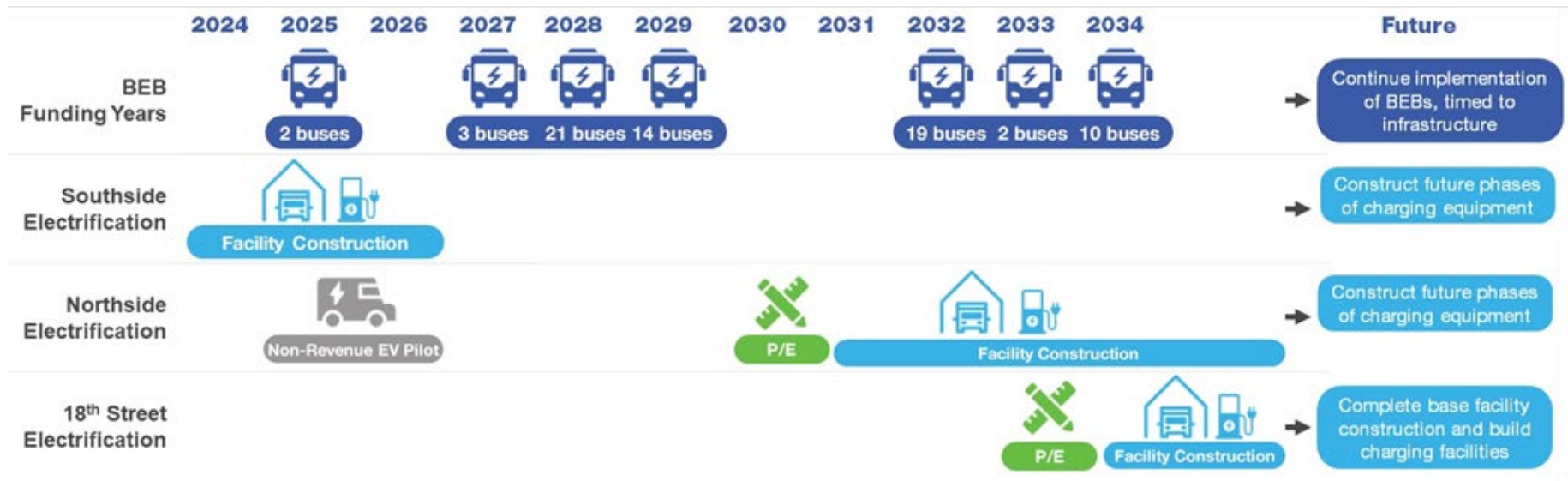
Sibyl Pappas
Chief Engineering and Facilities Officer
Hampton Roads Transit

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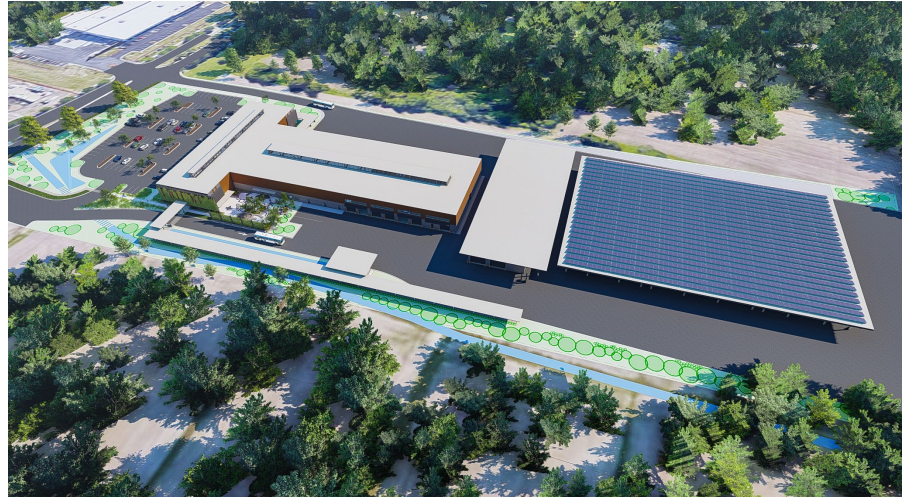
HRT's Transition To Electric Buses



HRT Electrification Plan



Net Zero Energy Ready



Buses Powered By The Wind



Everything Old Is New Again...



Zero Emission HRT, October 1942



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Mobile Fare Collection System SCIC Update

October 12, 2023

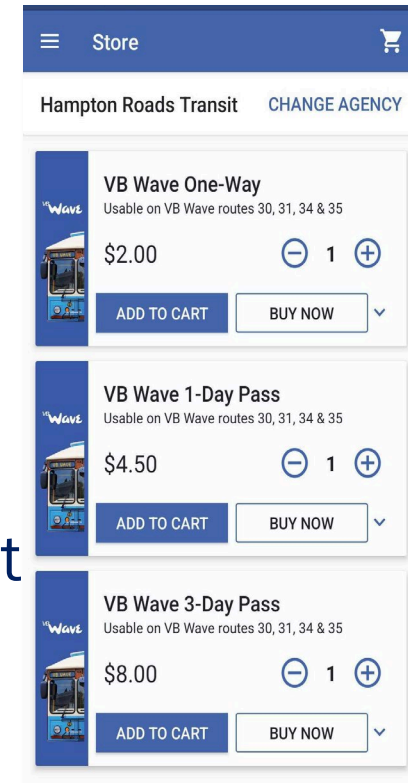
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Agenda

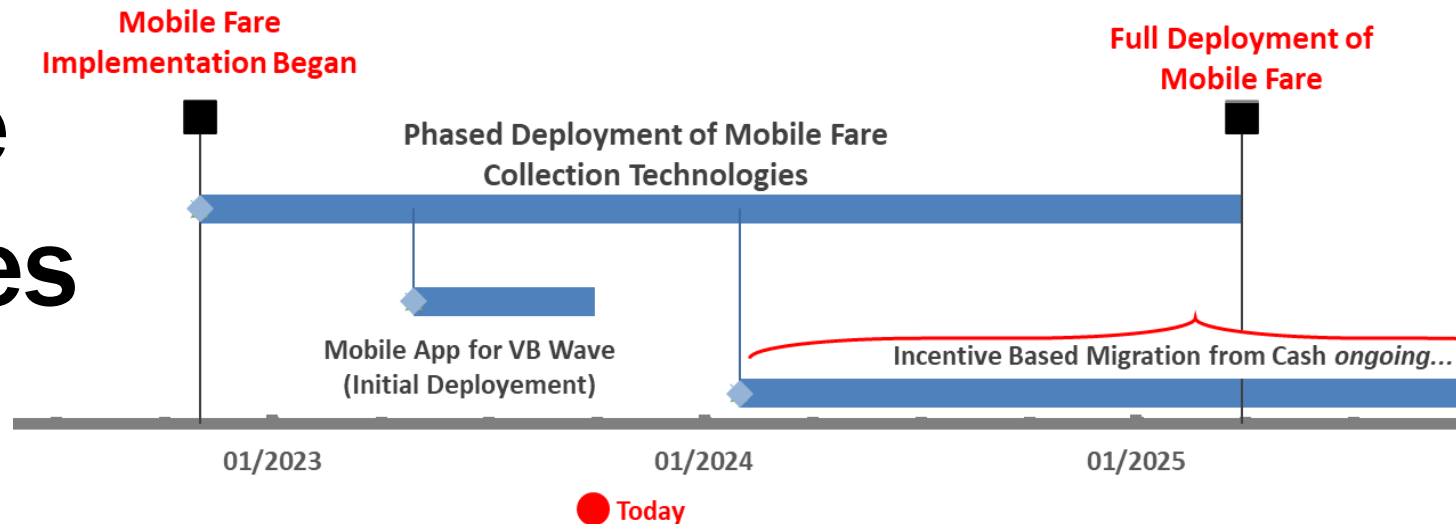
- Accomplishments
- Timeline
- Next Steps
- Questions

Accomplishments

- Successful Mobile Ticketing for VB Wave 2023
 - 1st phase of larger mobile fare deployments
- VB Wave 2023 Mobile Ticketing App Sales
 - Over **3,000 unique customers**
 - **8,000 tickets** and **\$42,000 sales**
- Civil Work, Construction & Engineering Assessment
 - Identify remediations and prep for installations at Light Rail Stations, Ferry Docks and Transit Centers
- System Design & Implementation Plans
 - Developing phased plans to streamline timeline deployments and minimize downtime during installation
- Configuration & Customization
 - Customization and development of testing environment nearly complete
 - Test apps available to HRT next month



Timeline Estimates



- Potential Roadblocks

- Supply Chain/Hardware Delays

- Long lead times on some components, e.g., TVMs
 - To reduce schedule impacts, developed phasing & transition plans

- Full deployment of Mobile Fare Collection technologies still on target

- Monitoring final phase closely (electronic validation on all modes) to prevent delays

Next Steps

- **Design Finalization**
 - Complete design, requirements and system implementation plan, including phasing & transition plans
- **Equipment/Hardware Orders**
 - HRT will place orders after final design approval
- **Software Configuration**
 - Customization, branding/colors of software solutions
 - HRT to receive test environments this quarter
- **Civil Works – Preparation & Remediation**
 - Site prep for Light Rail Stations, Transfer Centers and Ferry Docks



Next Steps ... Continued

- **Marketing** ~ *Ongoing*
 - Create Marketing Plans & Materials
 - Execute Marketing Pre-Launch Campaign(s)
- **Incentive-Based Migration (IBM) Committee** ~ *Ongoing*
 - Develop Customer Migration Strategies
- **Hardware Production** *start ~ Q4 2023*
 - Long lead times on certain components may result in change to the order in which technologies are phased
- **Receive & Install Hardware** ~ *Q2 2024*
 - Received first set of equipment for lab testing
- **Lab & Mini-fleet Testing** ~ *Q2 2024*
 - Hardware/Software User Acceptance Testing





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Questions?

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