



Meeting Minutes of the Smart Cities & Innovation Committee

Thursday, October 10, 2019 ▪ 12:00 PM
2nd Floor Board Room ▪ 509 E. 18th Street, Norfolk, VA

The Smart Cities and Innovations Committee (SCIC) convened at 12:07 pm on Thursday, October 10, 2019.

Commissioners in attendance:

Chairperson, Commissioner Andria McClellan (Norfolk)
Commissioner Keith Parnell (Norfolk)
Commissioner Dr. Patricia Woodbury (Newport News)
Commissioner Jimmy Gray, TDCHR (Hampton)
Alt. Commissioner Carl Jackson, TDCHR (Portsmouth)

Hampton Roads Transit Staff in attendance:

William Harrell, President & Chief Executive Officer
Brian Smith, Chief of Staff
Erin Glenn, Interim Chief Information Officer & Chief Technology Officer
Ray Amoruso, Chief Planning & Development Officer
Kamlesh Chowdhary, Director of Intelligent Transportation Systems (ITS)
Alex Touzov, Director of Technology Services (TIOS)
Steven Florian, Operations Administrator
Jack Sherman, IT Security Administrator
Sheri Dixon, Director of Treasury
Shelia Gulledge, Technology Project Manager, SCIC Secretary

Additional Attendees:

Janice Taylor, PAC
Mecit Cetin, Old Dominion University

The SCIC meeting package contained the Agenda, Action Items and Meeting Minutes from August 8, 2019. It was distributed electronically to all Commissioners in advance of the meeting and posted to Hampton Roads Transit's [SCIC website](#).

AGENDA – October 10, 2019

1. Review and Approval of August 2019 Smart Cities & Innovation Committee Minutes
2. Old Business
 - a. Action Items Review
 - b. Updates on Local Smart Cities Initiatives
 - c. Updates from Working Groups
3. New Business
 - a. SCIC Initiatives and Opportunities Discussion
 - b. Working Group Breakouts
 - [Data & Analytics](#) (Alt. Commissioner Tara Reel, Lead)

- Fare Collection (*Alt. Commissioner Carl Jackson, Lead*)
- First Mile/Last Mile (*Commissioner Aaron Rouse, Lead*)
- AV/EV/Alternative Transportation (*Commissioner Andria McClellan, Lead*)
- Partnerships (*Commissioner Keith Parnell, Lead*)

4. Adjournment

Opening Remarks

Commissioner McClellan convened the meeting with review of the August 2019 Meeting Minutes. Having no changes to the minutes, a motion to approve was offered by Commissioner Woodbury and properly seconded by Commissioner Parnell. The August 2019 Meeting Minutes were subsequently approved by a unanimous vote.

Commissioner McClellan acknowledged the resignation of SCIC Co-chair and HRT Representative, Ms. Alesia Cain, noting that this was her last week with HRT. Mr. Harrell added that a national search for a permanent CIO replacement is underway that will remain open until the position is filled. He also commended the work of the Technology team providing support and introduced Erin Glenn, Director of Enterprise Technology Solutions (ETS), who was named the interim CIO/CTO.

Ms. Glenn briefly summarized her background and expertise in business intelligence and introduced other Technology Leads, in addition to Kamlesh Chowdhary, a current SCIC participant, that were in attendance and available to address issues within their functional area(s):

- *Alex Touzov, Director of Technology Infrastructure & Operations Services.* Responsible for Hybrid Cloud, Datacenter Infrastructure, Client Technology, Networking and Telecommunications for all HRT locations. Provide connectivity and onboard technology infrastructure for existing fleet of revenue vehicles
- *Jack Sherman, IT Security (cybersecurity) Administrator.* Responsible for ensuring network and information system security and compliance
- *Steven Florian, Operations Administrator, Fare Technology.* Administrator for Genfare collection systems (fareboxes and Ticket Vending Machines). Technical lead of mobile ticketing implementation

Old Business

1. Commissioner Woodbury asked for an update on mobile ticketing to which Mr. Harrell advised that there will be an enterprise solution for mobile ticketing funding in the capital budget within the next month and having resources is a key component of that as well.

2. Action Item Updates

- Ridesharing – brief discussion on integrated trip planning for public transit, ridesharing, mobile data under a single payment method. Studies and pilot programs using this approach is underway in various California cities and in San Antonio, TX.
- Ms. Glenn provided an update on the study recently completed on bar code scanners and how they would work with the mobile ticketing scanners on HRT trolleys, noting that they are reviewing other validators that would be a better value (functions well/less costly). Ms. Dixon added that small and less costly validators were demonstrated at the APTA Conference that use Bluetooth and provide a seamless mobile experience, important for a holistic passenger ticketing application that works across all transportation methods.
- In response to Commissioner Woodbury's query on costs to continue this study across all modes (bus, train, trolley), Ms. Glenn advised that transponders would be needed to equip the

entire fleet and that an assessment is being developed to recommend the best path forward for system-wide mobile ticketing. Mr. Florian mentioned that discussions on ferry pilot are underway with the vendor. Mr. Amoruso advised that there are no validators on LRV platforms which would require a capital investment on all 26 platforms.

- Alt. Commissioner Jackson led a discussion on the stored value ferry pilot status and tickets that can integrate with transit applications.
- Ms. Taylor inquired about whether this system will be able to load onto a paratransit card to replace the paper tickets. Ms. Dixon responded that stored value is being reviewed for future implementation.
- Commissioner Gray and Mr. Chowdhary provided an update and addressed questions on the status of the GTFS/real-time data project.
- DRPT – Commissioner McClellan discussed projects that DRPT may support (e.g., journey planning pilot to support T&Cs) and offered to make introductions between Ms. Glenn and Jennifer. Suggestion to invite DRPT rep. (or the Director of Innovation) to brief SCIC.
- Bike/Scooter/Transit Coordination – Mr. Amoruso noted that next month, a report will be provided on how other transit systems are partnering with bike/scooter providers.
 - Commissioner McClellan advised that the VA Municipal meeting in Roanoke presented information on scooters and noted that each VA locality must have their own ordinance requirements by the end of this year or the vendors can make their own rules. She mentioned that this ordinance is on the agenda for the November meeting on permits and how these devices will be handled. She invited Commissioners Parnell and Gray to contact her for VB data, if needed. Alt. Commissioner Jackson added that Portsmouth is starting a pilot program next year.
 - Mr. Amoruso mentioned that current internal HRT policy forbids scooters on buses, ferries and trains because of the safety risks with scooters blocking aisles, their weight and the lithium batteries.
- Electric buses – Select buses piloted sensor technology for three months; incidents trended down. Discussion ensued on whether sensor data for each of the cities also being reviewed and whether these sensors can track bad weather incidents, like hydroplaning, in the future.

3. Local Smart City Initiatives

- “Art in Transit” – Ongoing talks progressing; looking at including some shelter stops as well. Representative planning to attend next SCIC to discuss.

4. SCIC Working Group Updates

Data & Analytics: Alt. Commissioner Reel, Lead

Members: Kevin Curry, Mecit Cetin, Commissioner McClellan, Kamlesh Chowdhary, Ben Schoenfeld

Discussion

- Mr. Chowdhary and Dr. Cetin summarized the recent meeting at ODU and presentation by VTTI on data analytics, video process, traffic and use of data on signals used for predictive analysis and determining risks (crash rates, safety, etc.). This is currently offline data analytics.
- HRT piloting “Mobileye” hardware on 10 buses to identify “hot spots” and collision factors. Dr. Cetin advised that results may include “false alarms” and it would be good to align this with traffic/city data. There are multiple ports of data on crashes and incidents that will help to understand how system is operating on an aggregate.

AV/EV/Alternative Transportation: Commissioner McClellan, Lead
Members: Alt. Commissioner Reel, Ray Amoruso, Sibyl Pappas, Susan Vitale

Discussion

- Mr. Amoruso provided an update from the Autonomous Bus Consortium and led discussion on future signalization and bus interfaces as technology progresses.
- Brief discussion on possibility of dedicated lanes for transit vehicles during peak periods. Norfolk is looking at bike/bus lanes and conducting study for light rail extension.

New Business

1. Mr. Harrell announced that the Operations & Oversight Committee just approved a recommendation to the full Board for a new paratransit contract of which technology is a major feature.
2. Commissioner Parnell advised that the technology platform across the Agency may change substantially over the next few years; will be a topic of SET discussions to ensure IT alignment.
3. Mr. Smith mentioned significant development in the new Strategic Plan that the Board will consider for adoption, quoting the goal to “build a culture for innovation and workforce success to ensure HRT remains relevant to the dynamic need of the region” and outlining objectives.
4. Commissioner Parnell noted that a paratransit vendor will be invited to partner with this committee in upcoming meetings.

Adjournment

The meeting adjourned at 1:15 pm

The next two SCIC meetings will be held on the FIRST Thursday of the month

Thursday, November 7, 2019, 12:00 pm, 3400 Victoria Boulevard, Hampton, VA
Thursday, December 5, 2019, 12:00 pm, 509 East 18th Street, Bldg. 4, Norfolk, VA