

Q'Straint Quantum Pilot

December 2, 2020





Quantum Basics

- Automated securement system
- Customer backs their wheeled device against a head/backrest in the securement area and faces towards the rear end of the bus
- Customer presses a large, lighted button to initiate securement
- Securement arm lowers into place next to wheels of the wheelchair/scooter and grips the wheels
- Securement arm continuously monitors its grip throughout the trip and automatically readjusts to maintain a tight securement
- At the trip conclusion, the customer presses the button to release the securement (it will only release if safety conditions are met)
- Bus Operator is alternatively able to secure/unsecure customer via buttons on their driver control panel









Quantum Demonstration







Traditional Securements vs. Quantum Securement

Traditional

- Customer faces forward
- Bus operator secures customer
- Securement straps attach to rigid frame
- Bus Operator manually places and tightens each securement strap
- Lap and shoulder belt available

Quantum

- Customer faces backward
- Customer can initiate the securement
- Securement arm presses against wheels
- Quantum arm automatically finds the correct location, tightens and adjusts its grip throughout the trip
- Lap and shoulder belt available





Pilot Program

- Quantum securements are currently installed on 10 new buses
 - 1 standard securement area will remain on these buses
- Buses will go into service on 1 route as a pilot
- Feedback will be obtained from:
 - Customers
 - Bus Operators
 - Vehicle Maintenance
- During the pilot we will assess:
 - Customer comfort with the system & ease of use
 - Reliability
 - Speed of securement process





How to Experience & Provide Feedback

- Experience the Quantum on a local bus route
 - Route 111 is currently top choice for pilot. Bus route runs from Haymarket to Everett via Chelsea Square
- Visit a pilot bus during a dedicated open house
 - Tentatively scheduled for spring or summer 2021
- Customer feedback to be submitted primarily through an online survey form
 - Hard copy surveys will be available on pilot buses

