Shelburne – South Burlington NHG SGNL(51)

US Route 7 Traffic Signal Improvements

CCRPC TAC Meeting
February 19, 2020

TAYLOR SISSON, PROJECT MANAGER, VTRANS
KELSI RECORD, DESIGN ENGINEER, VTRANS
Presentation Overview

• History
• AID Grant
• Project Location
• Project Overview – Contract 1
• Project Overview – Contract 2
• Project Benefits
• Questions
History

• Federal AID Grant Awarded – January 2019

• 2 Projects Defined – October 2019
  • Shelburne – South Burlington NHG SGNL(51) Contract 1
  • Shelburne – South Burlington NHG SGNL(51) Contract 2
Accelerated Innovation Deployment (AID) Grant

$996,000 in Federal AID Grant Funds

• 20% State Match

Signal Infrastructure Included

• Establish communications
• Bluetooth equipment (travel time)
• Advance detection equipment
• Cameras
• Updated signal cabinets and controllers
Project Location
US Route 7 Corridor
(17 signals)
Contract 1
Project Location (10 Signals)

Webster Road
Longmeadow Drive
Bay Road
Lakeview Drive
Martindale Road
Pinehaven Shores
Allen Road
Harbor View Road
Green Mountain Drive
IDX Drive
Contract 1 Overview

Additional Signal Needs

- Signal Heads
- Flashing Yellow Arrows
- Stop Bar Detection
- Emergency Pre-emption
- Pedestrian Signal Equipment
- Connected Vehicle Capability
- Updated signal cabinets and controllers

Infrastructure Included by AID Grant

- Establish communications
- Bluetooth equipment (travel time)
- Advance detection equipment
- Cameras
Contract 1
Overview

Cost

• Construction Estimate – $1.90 million
• Apparent Low Bid – $1.94 million

Schedule

• Construction Begins – June 2020
• Contract Completion – October 2020
Contract 2
Project Location
(7 Signals)

McIntosh Avenue
Baldwin Avenue
Laurel Hill Drive
Brewer Parkway
Queen City Park Road
Swift Street
I-189 Off Ramp
Contract 2 Overview

Additional Signal Needs

- Mast Arm Poles
- Signal Heads
- Flashing Yellow Arrows
- Stop Bar Detection
- Emergency Pre-emption
- Pedestrian Signal Equipment
- Connected Vehicle Capability

Infrastructure Included by AID Grant

- Establish communications
- Bluetooth equipment (travel time)
- Advance detection equipment
- Cameras
- Updated signal cabinets and controllers
Modernizing Signal Equipment
Contract 2 Overview

Cost

• Construction Estimate – $2.3 million

Schedule

• Final Plans – April 2020
• Advertise – June 2020
• Active Construction – Summer 2021
Project Benefits

- Ability to monitor traffic and adjust signal timing remotely
- Automated alerts to signal technicians in the event of a system failure
- Automated Traffic Signal Performance Measures (ATSPMs)
- Replaces dated equipment
- Improved signal coordination
- Reduce delay for left turns
Thank you!

Questions?