

Town of Windsor Before &

Todd McIntyre - FRA Cynthia Lee - Volpe

FRA Rail Program Delivery Conference, Washington D.C. October 13-15, 2015

U.S. Department of Transportation Federal Railroad Administration



Great Western Freight TIGER Grant

- □ Grantee: Town of Windsor, CO
- Grant Scope: Add safety measures to 13 public grade crossings in Town of Windsor, CO
- **Funding:** \$3,335,185 from 09/01/2014 to 02/28/2016
- Status: Two contracts have been awarded and crossing improvement work is expected to be complete by Summer 2016

Monitoring Procedure 27

- Monitoring Procedure 27: Requirements for MTAC activities related to Before and After Studies
- □ Before and After Study Scope: Compare cost and performance
- Benefits: Help document the effectiveness of the grant and the widespread future impacts it may have for similar grants



Before and After Study Town of Windsor, CO

- Scope: Assess quantitative and qualitative effects the safety improvements have on the Town of Windsor
 - □ Add entrance/exit gates
 - □ Add islands/medians
 - □ Exit gate loop detectors



- Highlight potential widespread benefits of safety improvements
- Aid in determining applicability to grants to help establish other Quiet Zones



Quantitative

Noise

Exposure

Qualitative

Public

Perception



Before and After Study Quantitative Analysis

 Sound level data collected to quantify noise exposure (August 17, 18, 19)

- 2 crossings
- 2 microphones at each crossing
- 4-6 trains per observation period

Use noise modeling tools to show exposure for various conditions

- Locomotive pass-by with horn sounding
- Locomotive pass-by at crossing with bells (no horn)
- Locomotive pass-by at crossing without bells (no horn)







Before and After Study Qualitative Analysis

Operational Performance

- Traffic waiting time
- Overall safety changes
- Vehicle idling time

Zoning and Land Use

- Real estate development
- Economic development

Community Perception

- Noise complaint call logs
- Land uses and sensitive receptors







Next Steps

- Town of Windsor
 - December 2015 Begin construction on safety improvements
 - Summer 2016 Complete safety improvements
 - Summer 2016 Apply for Quiet Zone status (49 CFR Part 222)





Before and After Study

- October 2015 Analyze acoustic data collected from the two crossings
- October 2015 Analyze town and operational performance data
- December 2015 Draft report of before conditions to FRA



Thank You

Karla Bloch Regional Manager - Southwest FRA-RPD <u>Karla.Bloch@dot.gov</u> (202) 493-6082

FRA Rail Program Delivery Conference, Washington D.C. October 13-15, 2015

U.S. Department of Transportation Federal Railroad Administration

