

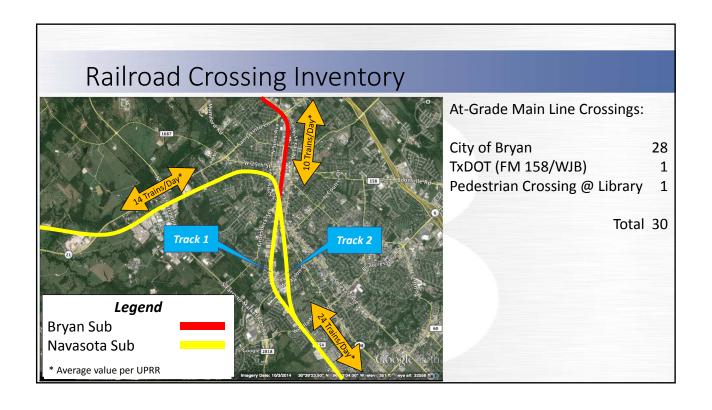
Downtown Quiet Zone for City of Bryan

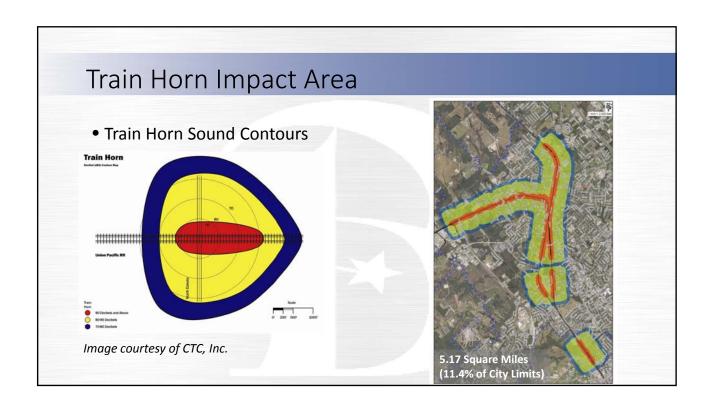
Railroad Quiet Zone Process

- Administered by Federal Railroad Administration (FRA)
 - Use of Locomotive Horns at Highway-Rail Grade Crossings; Final Rule (49 CFR Parts 222 and 229) (aka "Train Horn Rule")
 - All at-grade crossings have risk of crash
 - No train horn risk increases 66.8%
 - Enhance crossing safety to reduce risk
- Required Documents
 - Notice of Intent (NOI)
 - Public Agency Application (PAA)
 - Notice of Establishment (NOE)

History

- 2006 FRA issues "Train Horn Rule"
- Dec 2007 Memo to Council regarding railroad quiet zones
- 2009 Staff training w/ FRA & UPRR for establishing railroad quiet zones
- Feb 2011 Bryan City Council Workshop on railroad quiet zones
- August 2014 Staff meets with UPRR to discuss options
- July 2015 Efforts resume to implement railroad quiet zones
- December 2015 Quiet Zone Advisory Committee formed
- July 2016 Quiet Zone Diagnostic Inspection conducted
- April 2017 Notice of Intent issued

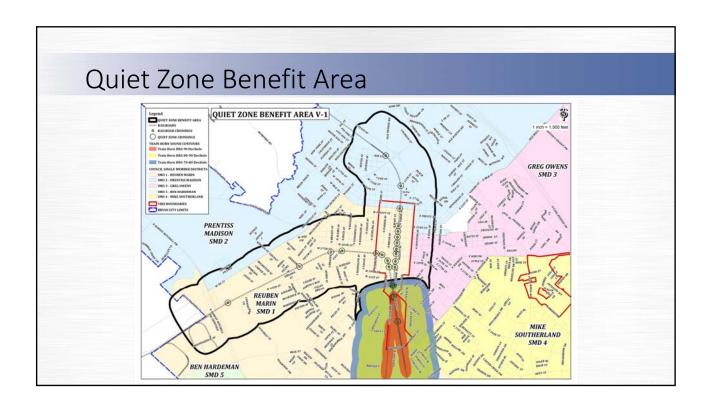




Downtown Quiet Zone

• Proposed Downtown Quiet Zone – 25 Crossings:

Navasota Sub:		Bryan Sub:	
Pease (Trk 2)	S. Parker	S. Main	E. 24th
Groesbeck (Trk 1)	S. Sims	E. 32 nd	E. 23 rd
Groesbeck (Trk 2)	S. Reed	E. 29 th	E. 22 nd
W. 32 nd	Brazos	E. 28 th	E. Martin L. King
W. 29 th	Graham	Library Walkway	E. 15 th
Bryan/W. 28th	W. 28 th	E. 26th	N. Sims
		E. WJB/FM 158	

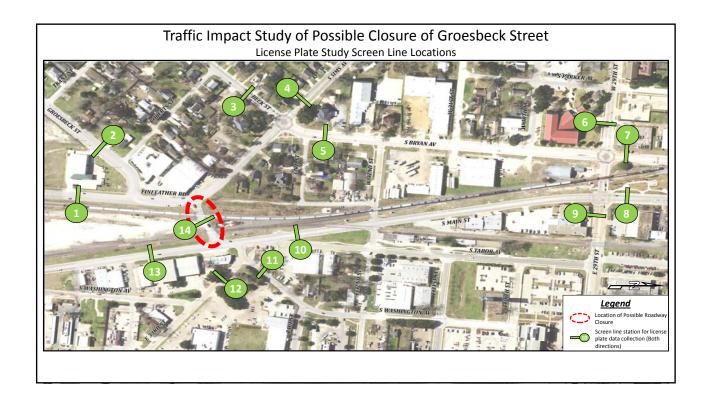


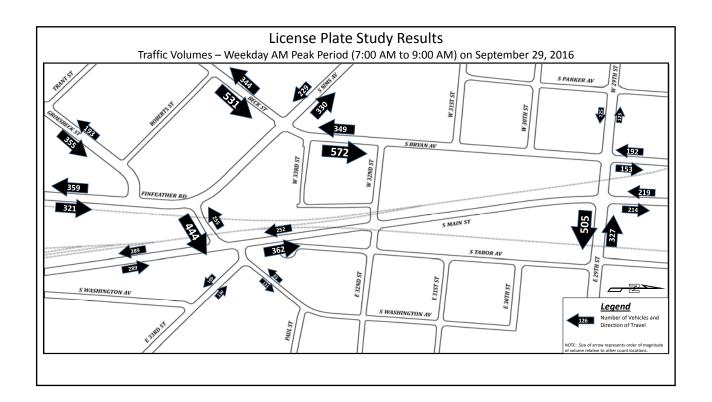
Groesbeck Street Crossings – Issues

- Highest Risk Index of any crossing in Bryan per FRA
 - 2nd Dodge at Finfeather
 - 3rd FM 158/WJB
 - 4th F&B at Wellborn
 - 5th Graham
- 2nd busiest crossing in Bryan 7,700 vehicles per day (vpd)
 - 1st FM 158/WJB, 15,800 vpd
 - 3rd S. Sims at 27th, 6,900 vpd
 - 4th Dodge near S. College, 6,300 vpd
 - 5th Dodge at Finfeather, 6,000 vpd

Groesbeck Street Crossings – Issues

- Remain Open
 - Four Quadrant Gates required for both crossings
 - Traffic signals required to replace Stop signs
 - Reconstructed roadway + traffic signals improves safety and efficiency
 - Increases cost of quiet zone
- Closure
 - Mitigation of shifted traffic impacts to other intersections
 - Community perceptions
 - Financial incentive from UPRR
 - Reduces cost of quiet zone





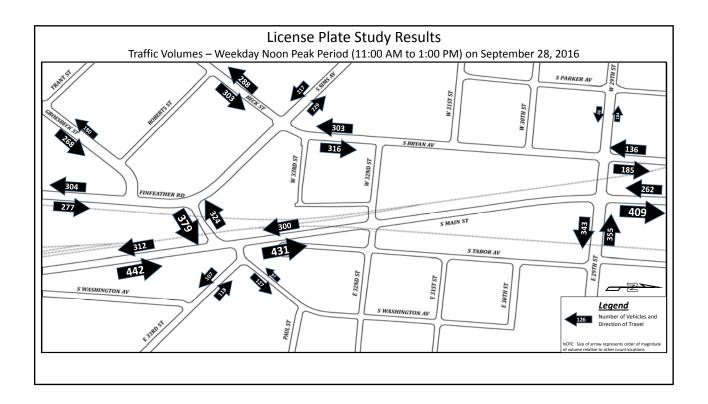
License Plate Study Results

Summary of Analysis – Weekday AM Peak Period (7:00 AM to 9:00 AM)

Top Ten Travel Routes:

1st	NB Groesbeck west of Finfeather (SL 2) to EB E. 29th east of S. Main (SL 9)	8.5%
2nd	NB Beck St. SW of Bryan (SL 3) to SB S. Main south of Groesbeck (SL 13)	8.2%
3rd	NB Groesbeck west of Finfeather (SL 2) to NB S. Washington NE of S. Main (SL 11)	7.3%
4th	NB Finfeather South of Groesbeck (SL 1) to NB S. Washington NE of S. Main (SL 11)	6.4%
5th	SB S. Main north of Groesbeck (SL 10) to NB S. Bryan North of S. Sims (SL 5)	5.4%
6th	NB Groesbeck west of Finfeather (SL 2) to NB S. Main north of 29th (SL 8)	5.2%
7th	NB Groesbeck west of Finfeather (SL 2) to SB S. Main south of Groesbeck (SL 13)	5.1%
7th	NB S. Main south of Groesbeck (SL 13) to SB Beck St. SW of Bryan (SL 3)	5.1%
9th	SB S. Main north of Groesbeck (SL 10) to SB Groesbeck west of Finfeather (SL 2)	4.5%
9th	SB S. Washington NE of S. Main (SL 11) to SB Groesbeck west of Finfeather (SL 2)	4.5%

- About half of NB Finfeather goes to NB S. Main
- About half of NB Groesbeck goes to NB S. Main
- Most of NB Beck goes to SB S. Main
- About half of SB S. Main splits about equally between SB Finfeather and SB Groesbeck
- About half of NB S. Main goes to SB Beck
- Not quite half of NB S. Main makes a U-turn to either SB Finfeather or SB Groesbeck



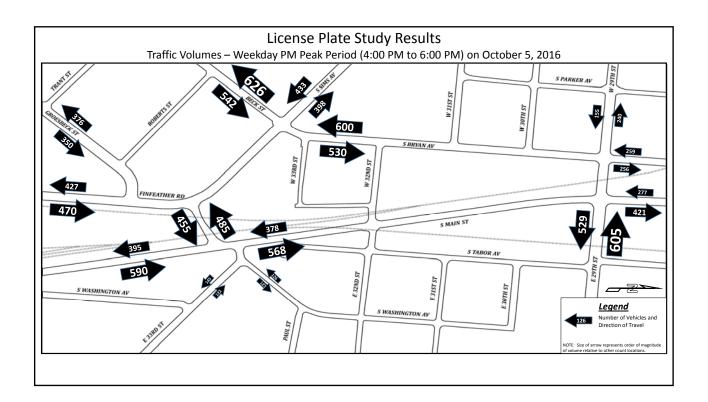
License Plate Study Results

Summary of Analysis – Weekday Noon Peak Period (11:00 AM to 1:00 PM)

Top Ten Travel Routes:

1st	SB S. Main north of Groesbeck (SL 10) to SB Finfeather South of Groesbeck (SL 1)	11.1%
2nd	NB S. Main south of Groesbeck (SL 13) to SB Beck St. SW of Bryan (SL 3)	8.2%
3rd	NB Beck St. SW of Bryan (SL 3) to SB S. Main south of Groesbeck (SL 13)	6.9%
4th	NB Groesbeck west of Finfeather (SL 2) to E. 29 th east of S. Main (SL 9)	5.7%
4th	SB S. Main north of Groesbeck (SL 10) to SB Groesbeck west of Finfeather (SL 2)	5.7%
6th	NB Groesbeck west of Finfeather (SL 2) to SB S. Main south of Groesbeck (SL 13)	5.3%
7th	NB Groesbeck west of Finfeather (SL 2) to NB N.Main north of 29th (SL 8)	5.0%
7th	NB Groesbeck west of Finfeather (SL 2) to NB S. Washington NE of S. Main (SL 11)	5.0%
9th	NB Finfeather south of Groesbeck (SL 1(to NB S. Main north of 29th (SL 8)	4.1%
10th	NB S. Main south of Groesbeck (SL 13) to SB Groesbeck west of Finfeather (SL 2)	4.0%

- About half of NB Finfeather goes to NB S. Main
- About half of NB Groesbeck goes to NB S. Main
- About two thirds of NB Beck goes to SB S. Main
- About half of SB S. Main goes to SB Finfeather
- About a quarter of SB Main goes to SB Groesbeck
- About half of NB S. Main goes to SB Beck
- About a third of NB S. Main makes a U-turn to either SB Finfeather or SB Groesbeck



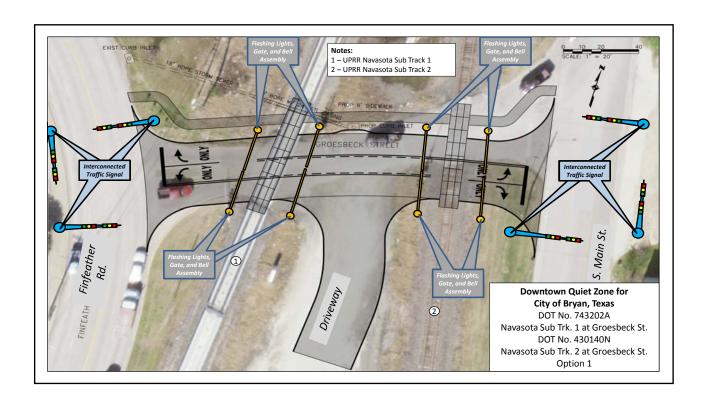
License Plate Study Results

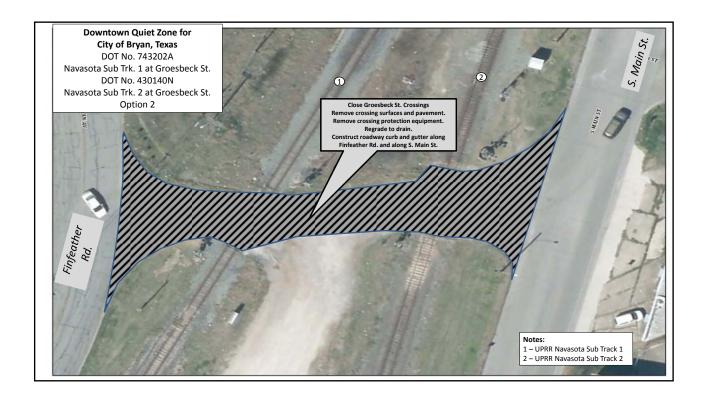
Summary of Analysis – Weekday PM Peak Period (4:00 PM to 6:00 PM)

Top Ten Travel Routes:

1st	NB S. Main south of Groesbeck (SL 13) to SB Beck St. SW of Bryan (SL 3)	12.2%
2nd	SB S. Main north of Groesbeck (SL 10) to SB Groesbeck west of Finfeather (SL 2)	7.2%
3rd	NB Beck St. SW of Bryan (SL 3) to SB S. Main south of Groesbeck (SL 13)	6.5%
4th	SB S. Main north of Groesbeck (SL 10) to SB Finfeather South of Groesbeck (SL 1)	5.5%
5th	SB S. Washington NE of S. Main (SL 11) to SB Groesbeck west of Finfeather (SL 2)	5.4%
6th	NB S. Main south of Groesbeck (SL 13) to WB S. Sims NW of S. Bryan (SL 4)	5.3%
7th	NB Groesbeck west of Finfeather (SL 2) to NB S. Washington NE of S. Main (SL 11)	5.1%
8th	EB S. Sims NW of S. Bryan (SL 4) to SB S. Main south of Groesbeck (SL 13)	4.3%
9th	SB S. Bryan North of S. Sims (SL 5) to NB S. Main north of Groesbeck (SL 10)	3.9%
10th	NB S. Main south of Groesbeck (SL 13) to SB Groesbeck west of Finfeather (SL 2)	3.5%

- About half of NB Finfeather goes to NB S. Main
- About half of NB Groesbeck goes to NB S. Main
- About two thirds of NB Beck goes to SB S. Main
- About half of SB S. Main goes to SB Groesbeck
- About a third of SB S. Main goes to SB Finfeather
- About half of NB S. Main goes to SB Beck
- About a fifth of NB S. Main makes a U-turn to either SB Finfeather or SB Groesbeck





Downtown Quiet Zone Options

Upper Limit Options	
• 12 Crossings – Channelization Only + Ancillary Work	\$465,988
6 Crossings – Channelization + Ancillary Work	
+ Railroad Equipment Upgrades	\$1,172,001
• E. 15 th Street – Full Closure	\$36,124
S. Sims – Channelization + Ancillary Work + Auxiliary Gate	
+ Railroad Equipment Upgrades	\$632,290
S. Reed – Full Closure	\$40,900
Library Walkway – Pedestrian Fencing System	\$314,120
Pease – Wayside Horns + Railroad Equipment Upgrades	\$194,011
Groesbeck – Quad Gates + Two Traffic Signals + Reconstruct Roadway	
+ Railroad Equipment Upgrades	\$2,835,218
Estimated Potential Budget	\$5,690,652

Downtown Quiet Zone Options

Lower Limit Options	
• 13 Crossings - Channelization Only + Ancillary Work	\$177 776

13 Crossings – Channelization Only + Ancillary Work
6 Crossings – Channelization + Ancillary Work

+ Railroad Equipment Upgrades \$1,165,205

• S. Sims – Channelization + Auxiliary Gate + Railroad Equipment Upgrades \$632,290

• S. Reed – Full Closure \$40,900

• Library Walkway – Pedestrian Fencing System \$314,120

• Pease – Wayside Horns + Railroad Equipment Upgrades \$194,011

• Groesbeck – Full Closure + Traffic Impact Mitigation \$1,121,242

• Estimated Potential Budget \$3,945,543

Downtown Quiet Zone Risk Indices

	Bryan Sub		Navasota Sub	
Cost Options	Lower Limit	Upper Limit	Lower Limit	Upper Limit
Risk Index with Horns	11,095.06	11,095.06	14,428.24	14,428.24
Risk Index without Horns	18,042.10	18,042.10	30,956.05	30,956.05
Risk Index without Horns + Mitigation	7,691.69	7,402.48	4,614.19	6,733.05

Nationwide Significant Risk Threshold (as of 11/26/13) = 14,347.00

Next Steps

- Decision process for possible closure of Groesbeck Summer 2017
- Develop and Issue PAA Fall 2017
- *Construct Improvements Summer 2018 to Summer 2019?
- Develop and Issue NOE Fall 2019?

^{*} Dependent on availability of funding

Contact Us

- Project information
 - www.bryantx.gov/whats-the-status-of-a-downtown-bryan-railroad-quiet-zone/
- Share your thoughts
 - https://weblink.bryantx.gov/Forms/uTxLz

