

Train Horn Noise Report

Council Committee Meeting
Tuesday, February 3, 2015



SHAWNEE

Agenda

- Background Information
- Train Horn Mitigation
- Comments from the Public Meeting
- Next Steps

Report Partners

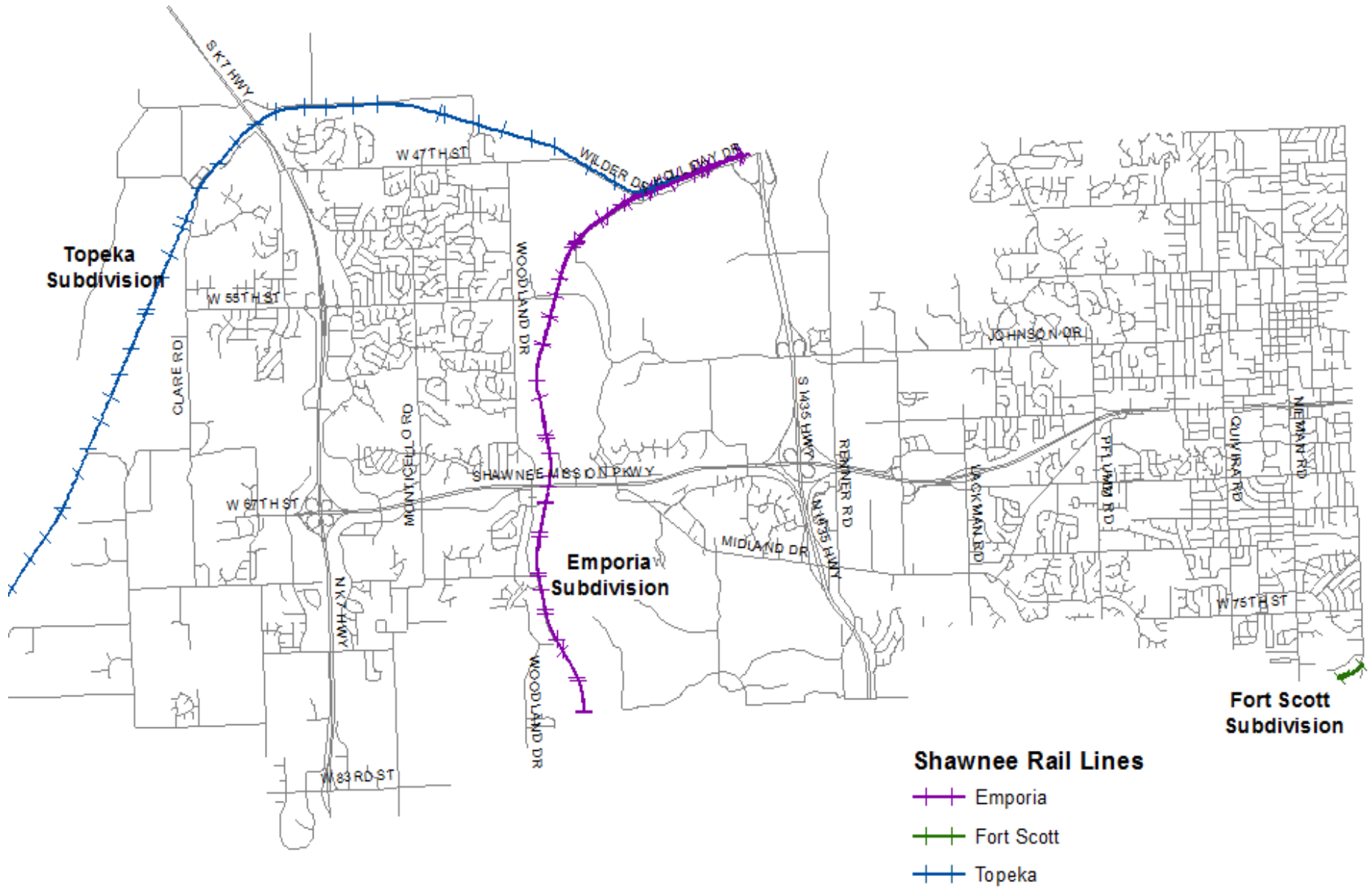
- Burlington Northern Santa Fe Railroad (BNSF)
Jeff Davis
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- State of Kansas Department of Transportation (KDOT)
Mitch Sothers
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- Federal Railway Administration (FRA)
Howard Gillespie
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Rail Lines in Shawnee

BNSF Rail Line	Average Trains/Day	General Location
Topeka Subdivision	7 trains/day	Northern and western border from I-435 to Mize
Emporia Subdivision	89 trains/day	Central Shawnee running north and south just east of Woodland Road
Fort Scott Subdivision	30 trains/day	Diagonal crossing of southeast corner of Shawnee near 79 th Street and Switzer

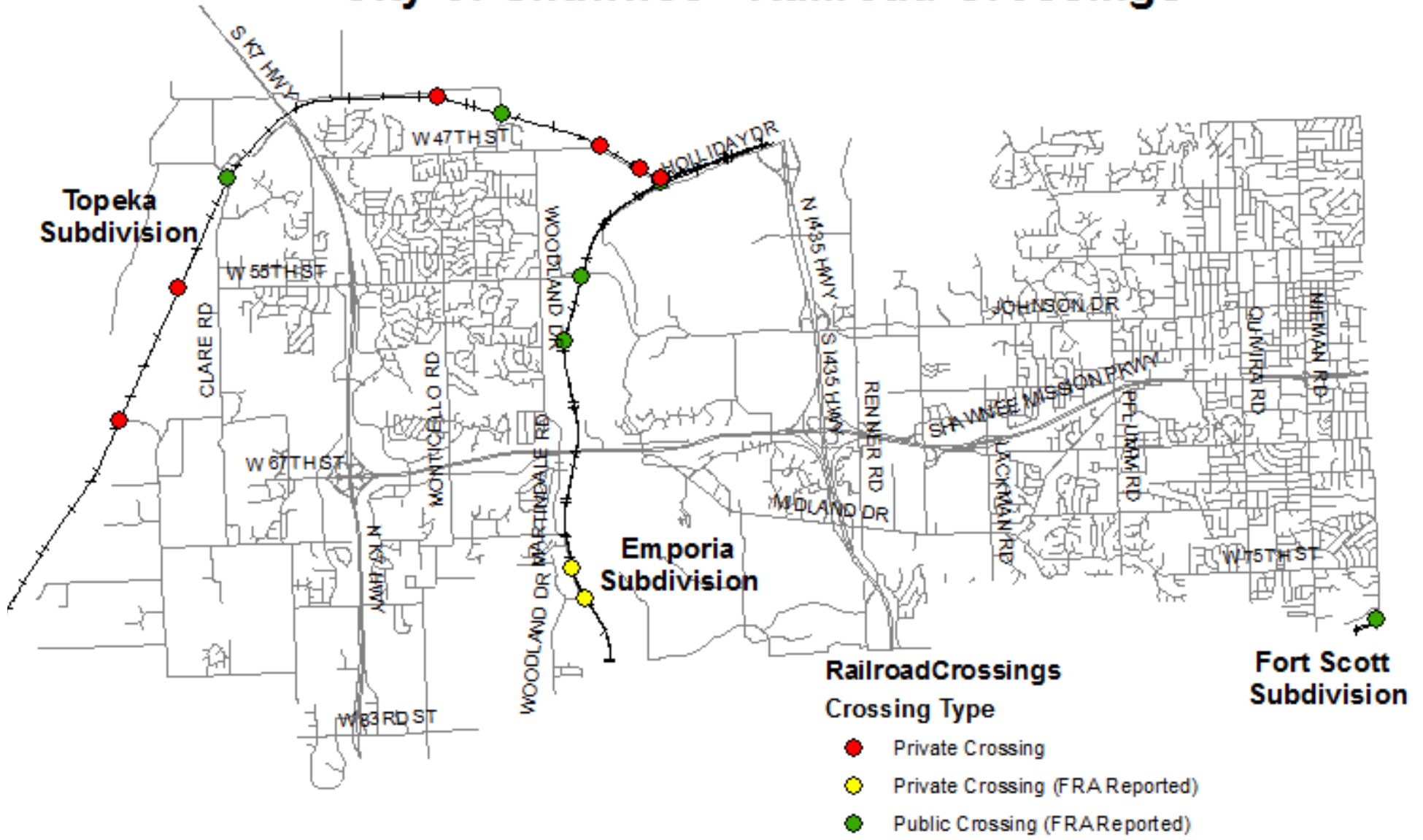
City of Shawnee - Rail Lines



Types of Crossings

- Public Crossing
 - The public has a public right of way crossing the tracks.
- Private Crossing
 - The private land owner has the right to cross the tracks through an agreement with the railroad company.

City of Shawnee - Railroad Crossings





Who has authority over railroad crossings?

- Federal Railroad Administration (FRA) has regulatory authority over railroad operations
- State reviews public crossings for safety concerns
- Railroad companies operate and maintain tracks, including crossings



Why are the horns sounded at crossings?

- Public: In 2005 a federal law was passed that requires horns to be sounded at every public crossing. The law overrides State law and railroad standard operational procedures.
 - Ensure safety for motorists crossing the tracks
- Private: Railroad companies establish their own horn policy and procedures for safety at private crossings.

Quality of Life

- Horns are Loud: the maximum volume level for the train horn is 110 decibels. The minimum sound level is 96 decibels.
- Frequency of Trains: over 120 trains travel through the City each day

How can we mitigate the train horns?

- Public Crossing
 - Cities can eliminate or reduce train horn noise by establishing a quiet zone and mitigate the increased safety risk caused by the absence of a horn with approved supplemental safety measures (SSMs).
- Private Crossing
 - Provide indemnification of railroad company by private owner (property owner accepts liability) and pay costs to install and maintain desired SSMs.
- Public or Private
 - Close crossing when feasible

Types of Public Crossing SSMs

- Four quadrant gates
\$500k - \$600k
- Gates with medians or channelization
\$400k - \$500k
- Wayside horns
\$85k - \$450k (requires gates/lights)



Challenges of Train Horn Mitigation

- City Challenges
 - 14 unique crossings
 - Establish a city-wide program that identifies priorities
 - No designated funding for this activity
- Private Property Ownership Issues
 - Property owner rights
 - Access rights
 - Easements on private property
 - Railroad company policy
 - Indemnification of liability for private crossings
 - Construction and maintenance costs and responsibility

Where Do I Live ?



Comments from Public

- Evaluate wayside horns at private crossings
- Why do they need horns at low traffic volume crossings?
- No consistency in blowing of horns, not following regulations
- Could a development tax pay for crossing improvements?

Comments from Public

- Maintenance of access road at a private crossing
- Would an easement from the private property owner allow the crossing to be converted to a public crossing?
- Current safety of private crossings
- Could noise walls be installed?



Other Cities in the Area

City	# of Public At Grade Crossings	# of Private At Grade Crossings	Crossings Silenced or Eliminated	City Funding	Outside Funding	Cost*
Leawood	.5	0	.5	None	Developer	\$50,000
Overland Park	3.5	0	2.5	None	Private	\$280,000
Lenexa	4	1	1	None	Developer/ BNSF	\$75,000
Olathe	15	0	12	\$2,500,000**	None	\$2,500,000**
Merriam	4	1	2	Construction Labor	Business	\$1,500 + City Labor
Shawnee	7	8	1	None	BNSF	Unknown

*approximate cost

**Emporia Subdivision line only

Council Direction

Council to decide on whether to proceed with developing a policy statement that addresses resident concerns and establishes prioritization considerations for closing or mitigating crossings such as:

- Frequency of trains
- Public vs private crossing
- Population proximity
- Cost to Mitigate
- Funding sources



If directed to develop a policy statement – Next Steps:

- Staff will research and develop a prioritization policy for the 14 crossings
- Review construction alternatives with cost estimates to determine total cost to mitigate the 14 crossings
- Council Committee review and consideration of draft policy statement