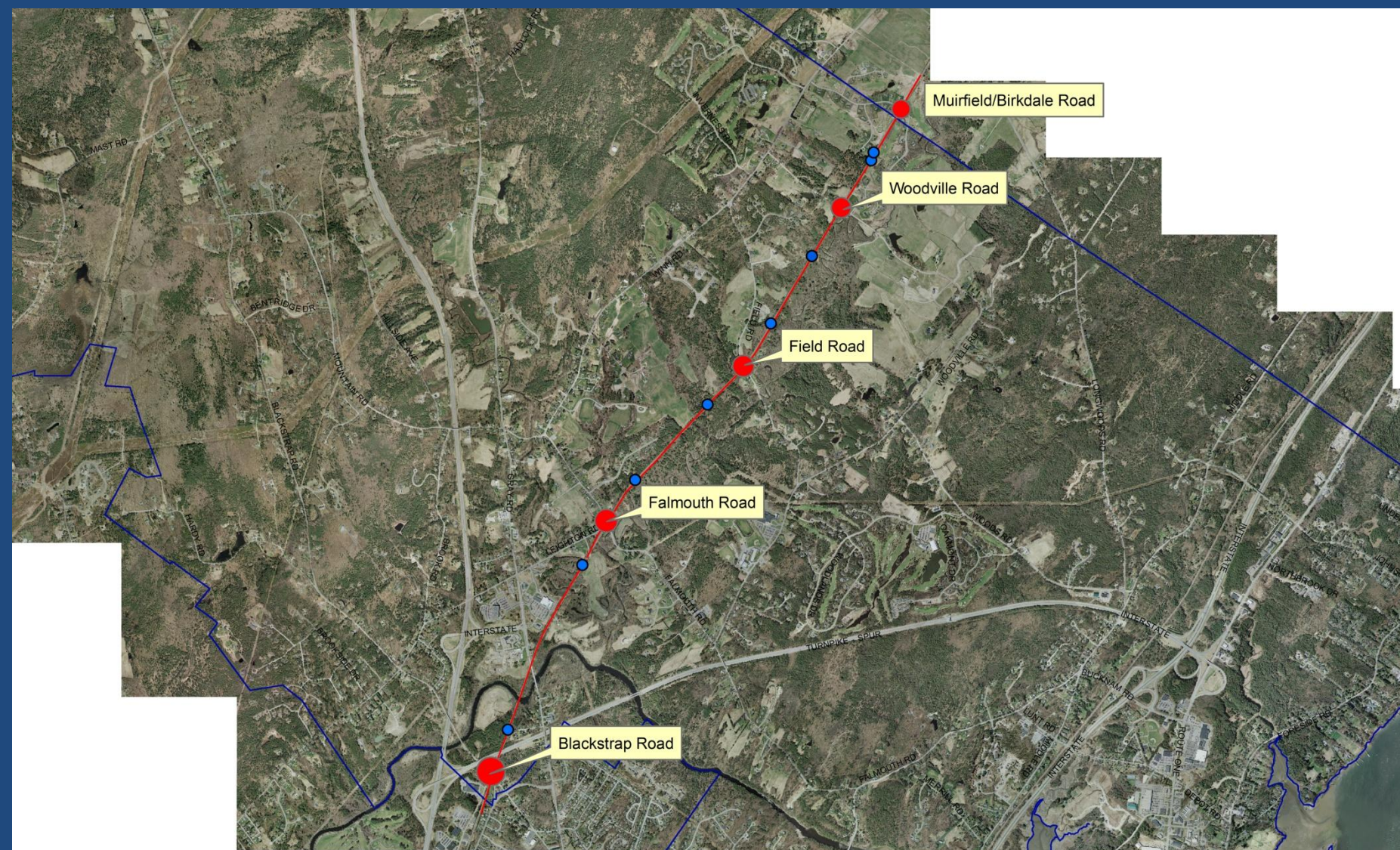


Rail Crossing/Neighborhood Issues along Pan Am Railways line

- Four rail crossings in Falmouth along Pan Am line: Blackstrap, Falmouth, Field, and Woodville Road
- One crossing on private road: Muirfield Road/Birkdale Road (but located in Cumberland)

Note: Preliminary research was conducted by Town staff and has not been reviewed by other parties



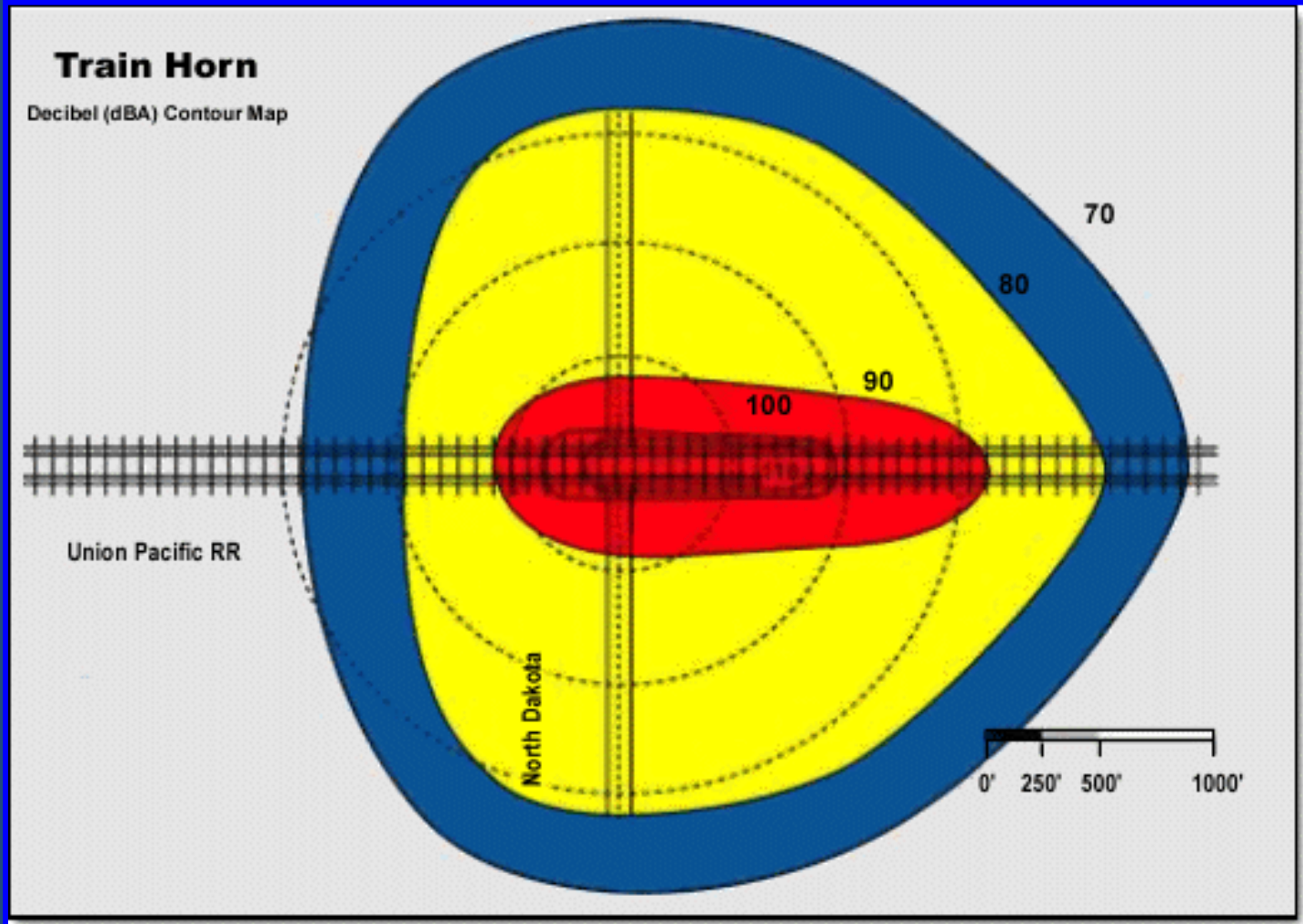
Railroad Crossings in Falmouth

Federal Horn Rule

- Routine sounding of train horn for max. $\frac{1}{4}$ mile or no more than 20 seconds
- Maximum and minimum decibel level set
- No horn is sounded if sufficient safety measures are in place (“Quiet Zone”)
- “44% more accidents at crossings with whistle ban and gates than without one”

(Source: Final Environmental Impact Statement, FRA, page 4-2)

Noise Impact



Decibel contour footprint impact of train horn

“Quiet Zone”

- Blackstrap and Falmouth crossings are currently located in what is called a "Quiet Zone" (QZ) - approved by Federal Railroad Authority (FRA).
- No routine train whistle will sound in this zone.
- QZ is only allowed if there are adequate supplemental safety measures in place that will ensure similar or greater safety related conditions than reliance on a train whistle.
- Emergency sounding of horn is permitted.

Downeaster Impact

- New Downeaster extension of service from Portland to Brunswick will add rail traffic to the crossings.
- Upgrades paid for by the Northern New England Passenger Rail Authority (NNEPRA), operator of the Downeaster.
- Rail upgrade will allow freight trains to travel at higher speeds.

Crossing Upgrades

- NNEPRA-funded crossing upgrades will not be enough to either maintain QZ at Blackstrap and Falmouth Roads or add a new QZ to Field and Woodville Roads.
- There are supplemental safety measures that can be added to these crossings to maintain or add a QZ in Falmouth for the Council to consider.
- Quiet zone measures are typically all Town cost

QZ Safety Improvement Options

- Quad gate system \$\$\$
- Gates with medians or channelization \$
- One way street with gates N/A
- Temporary closures N/A

No QZ, but reduce horn noise:

- Wayside horn \$\$

Quad gate system

- Gates at a crossing sufficient to block traffic from entering crossing when the gates are lowered
- When train approaches, all approach and exit lanes on both sides of crossing are spanned by gates



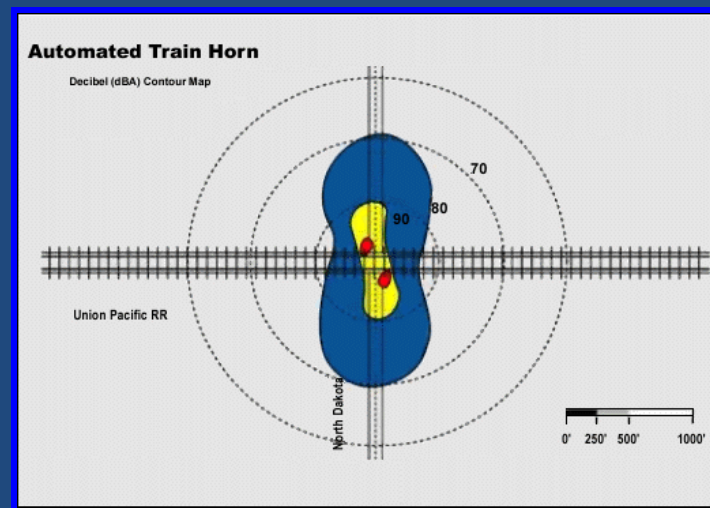
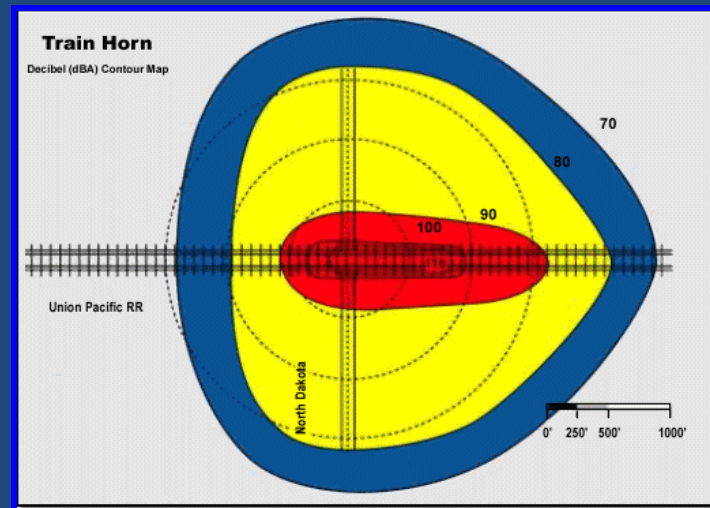
Gates with medians or channelization

- Prevents drivers from circumventing the gates by switching into oncoming traffic lane and driving around the lowered gates to cross the tracks
- Must extend at least 60-100 feet from the gate arm



Wayside horn

- Stationary horn system mounted at crossing rather than at train
- Automatically activated when train approaches
- Sounds like a train horn
- Activated until train reaches crossing
- Sound impact much more limited, but constant



Maintain Existing QZ?

- NNEPRA:
 - Will make min. required crossing improvements
 - Limited to 2 gates at crossings (these already exist at Blackstrap and Falmouth)
 - Supports train horn
 - Environmental Assessment states “no noise impact”
- Whose \$ responsibility is it to maintain existing quiet zone?

Add New QZ?

- Field and Woodville Road improvements are Town responsibility
- Muirfield/Birkdale improvements are private responsibility, but require municipal endorsement

QZ Options

Crossing Location	Option 1	Option 2	Option 3
Blackstrap	Quad gates	Channelization/one-way road (Davis Farm Road)	Wayside Horn
Falmouth	Quad gates	Channelization/road realignment (Leighton Road)	Wayside Horn
Field	Channelization	Wayside Horn	Quad gates
Woodville	Channelization	Wayside Horn	Quad gates
(Muirfield/Birkdale)	Channelization	Wayside Horn	Quad gates



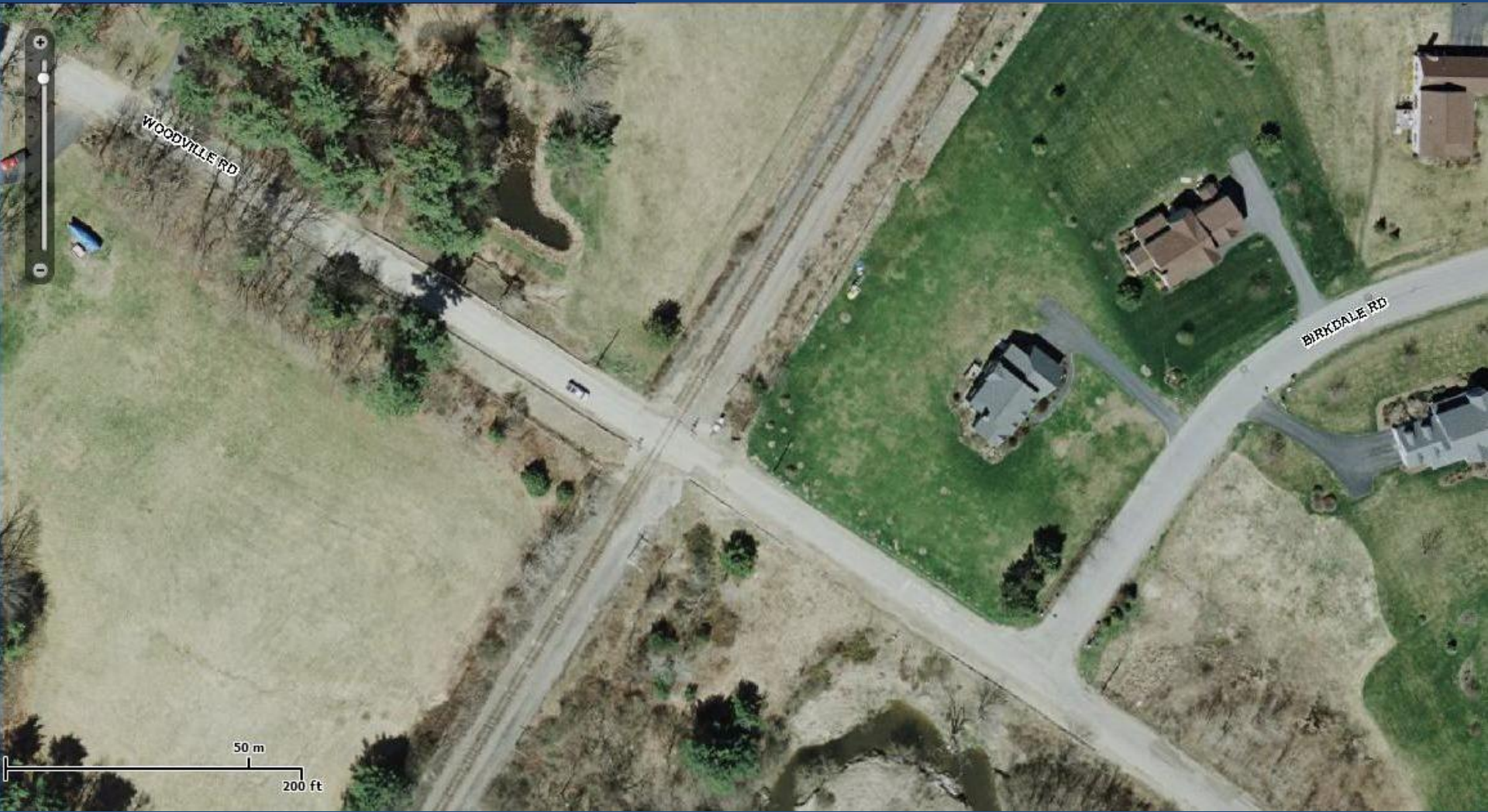
Blackstrap Road : Quad gates



Falmouth Road: Quad gates



Field Road: Channelization



Woodville Road: Channelization



Muirfield Road/Birkdale Road: Channelization

Next Steps

- Informational meeting is being scheduled with FRA officials for September 19th in Cumberland Town Hall (to be confirmed).
- In case QZ is to be pursued:
 - Channelization costs estimates are being investigated by Town staff
 - Discussion should be held with NNEPRA