Challenges of Short Storage Crossings

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Definition of Short Storage:

Short roadway segment of 200 feet or less between the tracks and the adjacent intersection, which creates the potential for traffic stopping at a stop sign or traffic signal to queue across the tracks.
Soooo, what does “Short Storage” actually mean?
Definition of Short Storage:

Impact for trucks per the CFR – “to prohibit a motor vehicle driver from entering onto a highway-rail grade crossing unless there is sufficient space to drive completely through the grade crossing without stopping…”
So what other issues are there with Short Storage Crossings?

- Heavier conflict zones
- Hump crossing
- Driver information overload
- Roundabouts
- Crashes?
So what other issues are there with Short Storage Crossings?

- PER FHWA’S “Roundabouts: An Informational Guide”

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(a) Center Crossing (not desirable)  (b) Approach Crossing
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Just because you can, doesn’t mean you should....
So what other issues are there with Short Storage Crossings?

- Heavier conflict zone
- Hump crossing
- Driver information overload
- Roundabouts
- Crashes?
Ultimately the driver is in control.

- Each driver has complete control (usually) of their vehicle.
- We all have to be trained on safe operation to get a license.
- CDL requires a higher level of understanding.
- Why is so little consideration given to crossing a railroad track?
- The majority of crossing collisions result from the roadway vehicle operator making a poor decision.
Bag of tricks to improve the situation…

• Restrict vehicles?
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- Restrict vehicles?
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- Add more signage?
Bag of tricks to improve the situation…

- Relocate stop line?
Bag of tricks to improve the situation…

• Yield vs. Stop?
Bag of tricks to improve the situation...

- Exit gate detection?
Bag of tricks to improve the situation...

- Preempted traffic signal?
- Simultaneous vs Advanced?
Bag of tricks to improve the situation…

- Preempted traffic signal?
- DC Backup
- Cost
- Timing with other signals
- More to maintain
Bag of tricks to improve the situation...

- Queue cutter?
- Pre signal?

Photo from FHWA.
Bag of tricks to improve the situation…

- Build an escape route?
- Restrict left turns?
Bag of tricks to improve the situation…

- Road realignment?
Bag of tricks to improve the situation...

- Grade separation?
Bag of tricks to improve the situation...

- Closure?
Questions?

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