

Rails-Next-to-Trails

A Methodology for Selecting Appropriate Safety Treatments at Complex Multi-Modal Intersections

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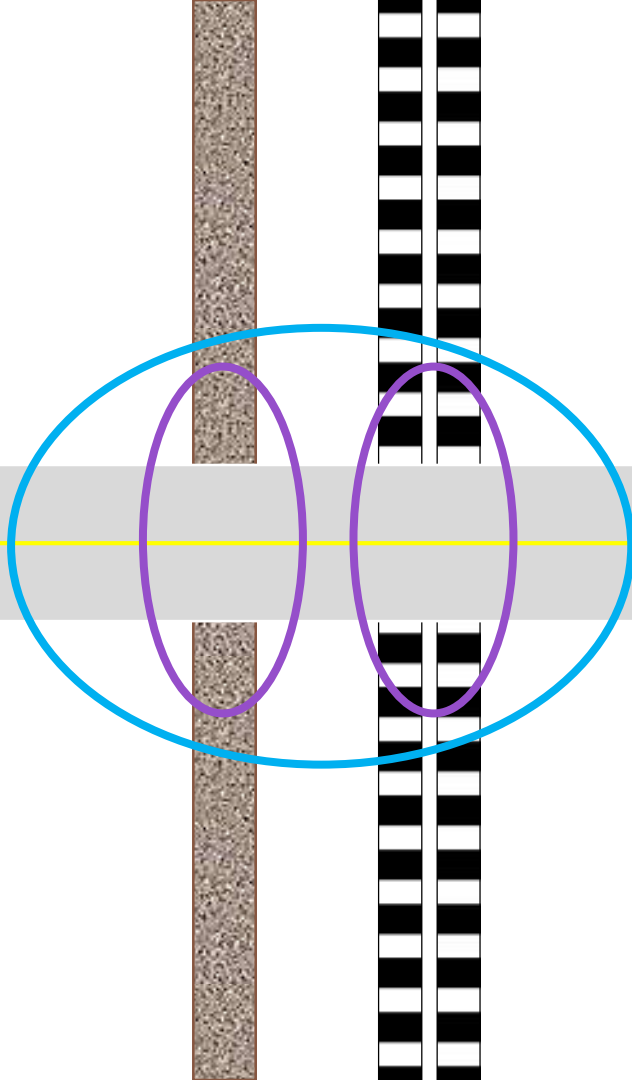
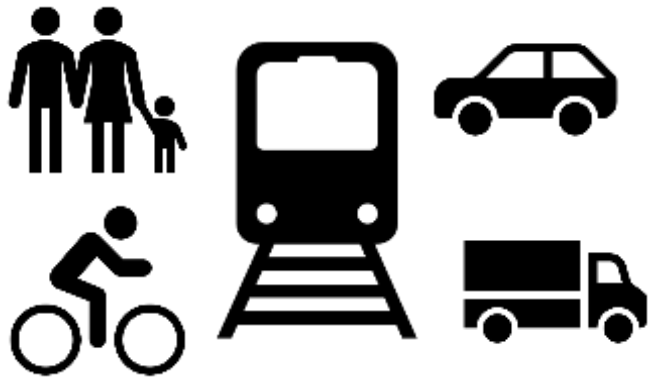
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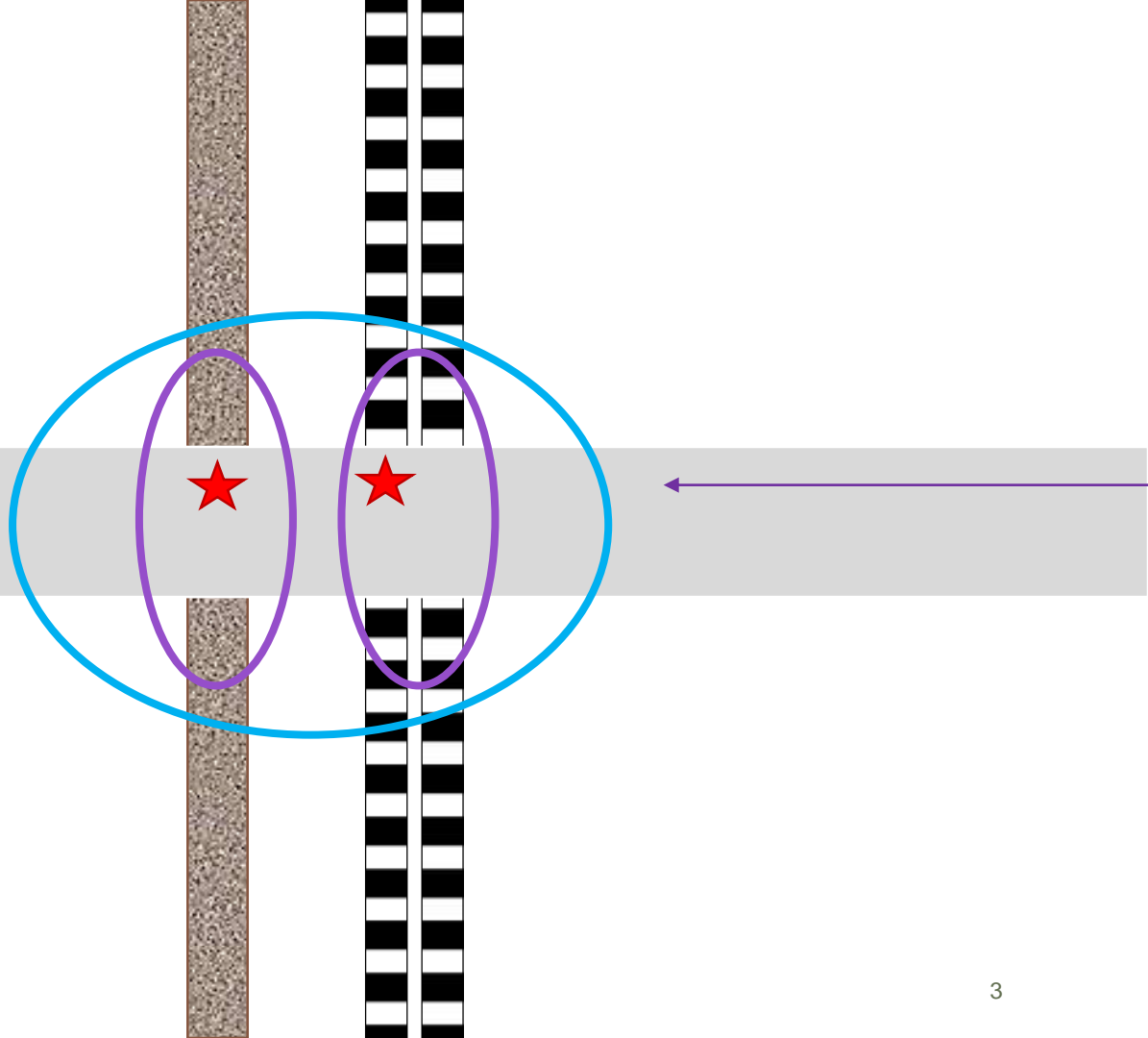
SUPPLY CHAIN TRANSPORTATION & LOGISTICS

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**1. Stop for pedestrian →
Stop on tracks**

**2. Do not stop on tracks
→ Do not stop for
pedestrian**

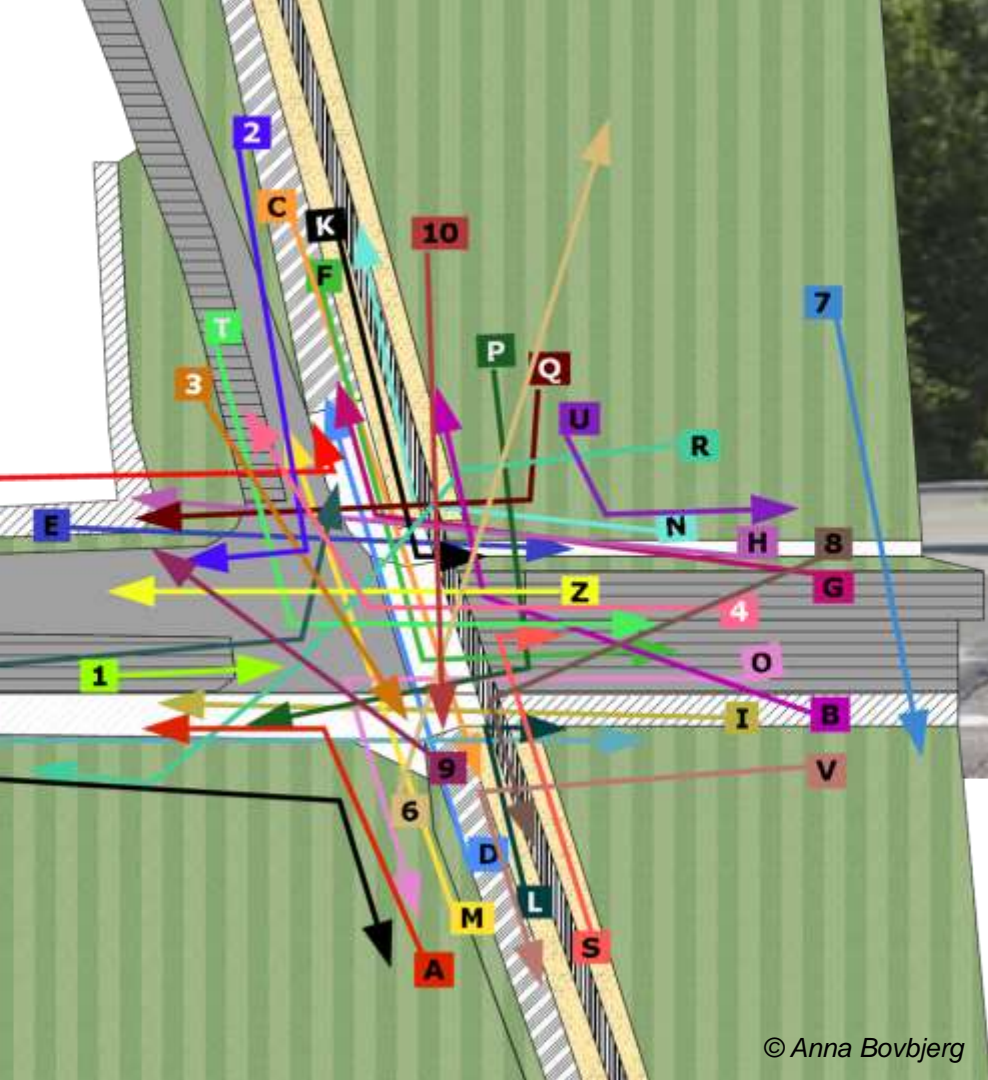


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COUNTcam



How do we create a guidebook to evaluate and improve this type of intersection?



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Field Observations & Video Surveillance

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Evaluation Criteria

- **Unintentional Non-Compliance**
- **Cost**
- **Average Delay**
- **Sight Distance**
- **Illegal Behavior**



Treatment Catalog

**The Built
Environment**

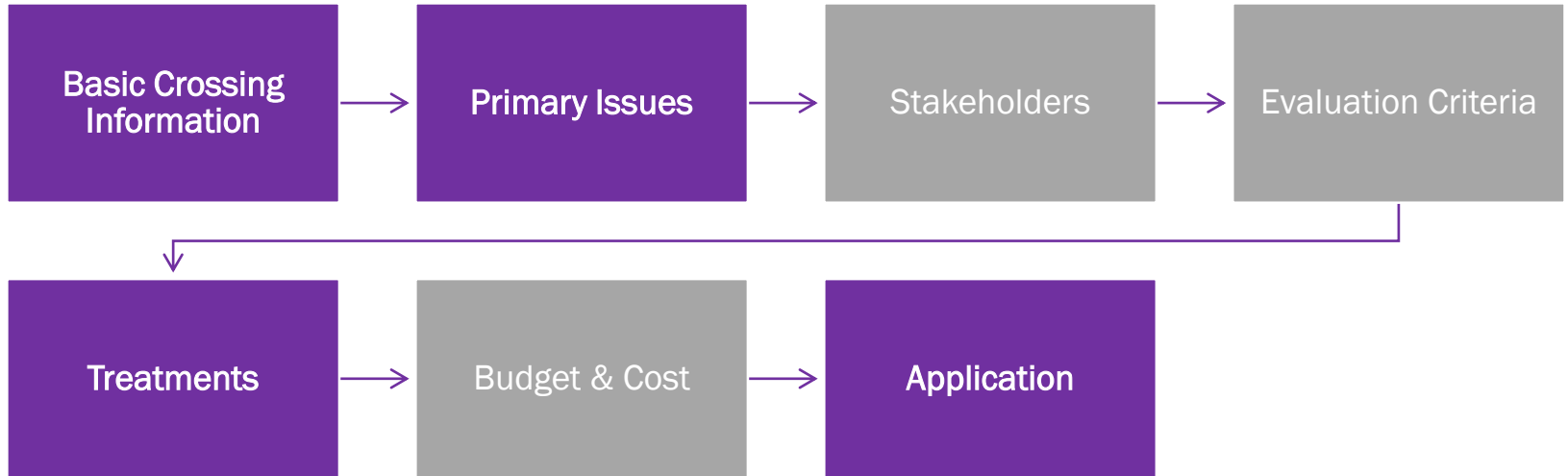
**Lack of Path
User
Information**

**Lack of
Driver
Information**

Identify Primary Issues

The Guidebook

A Pragmatic, User-Friendly
Tool for Selecting Appropriate Treatments



Examine Existing Crossing and Path Data

8.01 - Query by Location

Location

County City

County/City
AUTAUGA
BALDWIN
BARBOUR

Crossing Type Public Only All (Includes Private and Pedestrian)

Crossing Position At-Grade Only All (Includes Grade Separated)

Crossing Status Open All (Includes Closed)

Street

Basic Crossing
Information

Primary
Issues

Stakeholder

Budget

Treatments

Evaluation
Criteria

Application

**The Built
Environment**

**Lack of Driver
Information**

**Lack of Path
User Information**

Basic Crossing
Information

Primary
Issues

Stakeholder

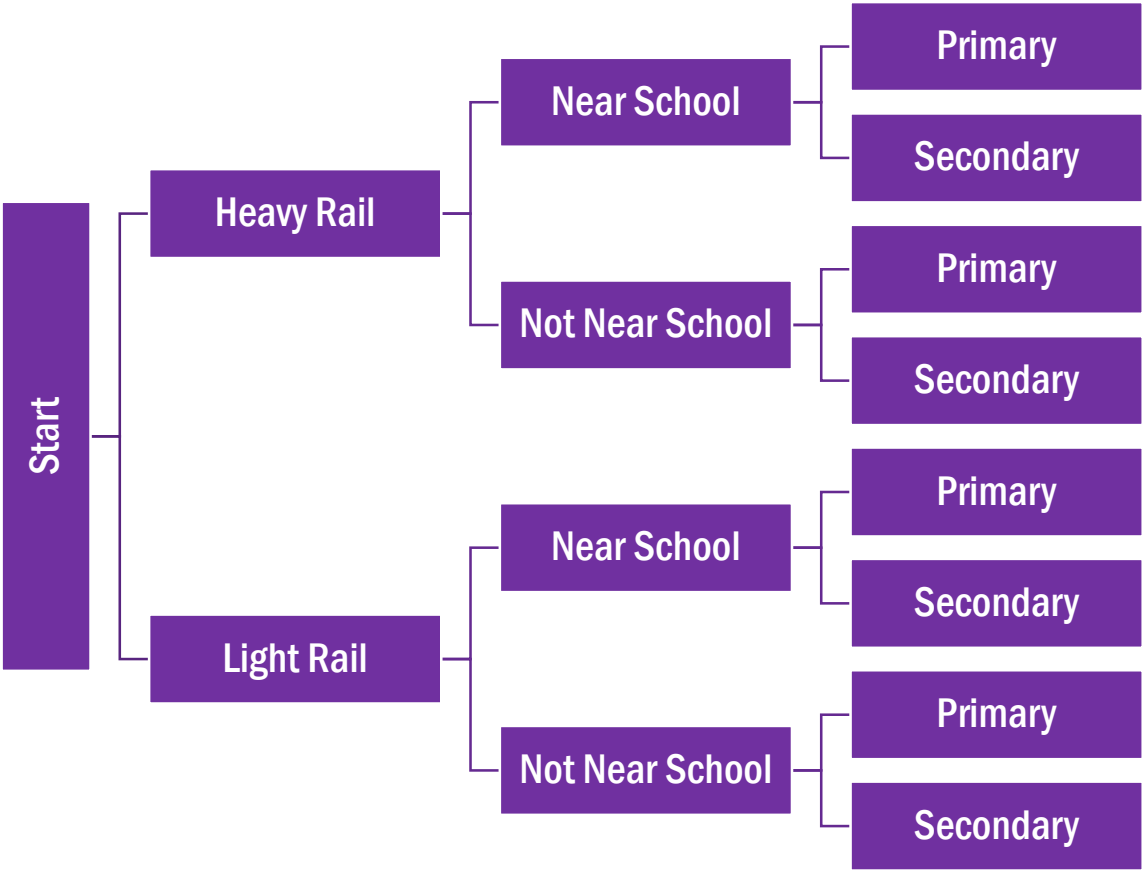
Budget

Treatments

Evaluation
Criteria

Application

Determine Treatments



Basic Crossing Information

Primary Issues

Stakeholder

Budget

Treatments

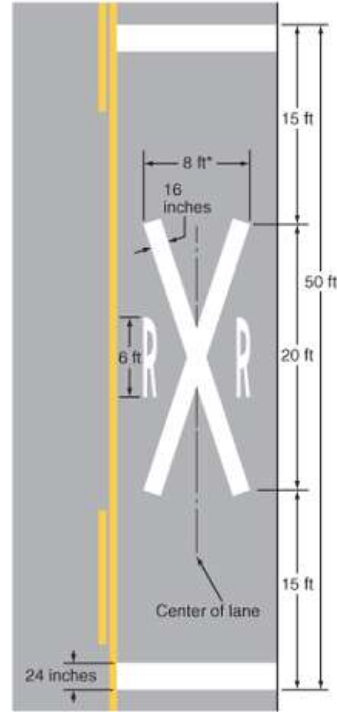
Evaluation Criteria

Application



1
4

Sample Application
SE Spokane St
Portland, OR





	2016/07/07 8am-9am	2016/07/06 5.15pm-6.15pm	2016/07/06 3.23pm-4.38pm
Vehicles	136	281	439
Pedestrians	55	68	54
Bikes	154	305	250
Trains	0	0	0

Identify Primary Issues

1. Location of the Stop Line
2. Path User Speed
3. Non-Compliance
4. Negotiation



CROSSINGS NOT NEAR SCHOOLS

Primary Issue

Primary Recommendation

Secondary Recommendation(s)

The Built Environment

Stop Line

Move Stop Line Closer to Railroad Tracks

Raised Crosswalk

Lack of Path User Information

Speed

Speed Treatment

Add Signage

Non-Compliance

Obstructions

or

Variable Signs

Refer to Insufficient Crossing Infrastructure

Lack of Driver Information

Negotiation

Dynamic Enveloping

and

Conflict Point

Signage

or

Traffic Lights



A photograph of two young women standing at a railroad crossing. They are both wearing bright orange safety vests with reflective yellow-green stripes. The woman on the left is smiling broadly, while the woman on the right has a neutral expression. In the background, there are railroad tracks, a crossing signal, a road, and hills under a cloudy sky.

Questions?

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