

Design Features to Mitigate Trespassing

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Design Features to Mitigate Trespass

- Typical Types of Intrusions in the Right of Way
 - Trespassing persons
 - Autos in the right of way from street running to exclusive right of way
 - Vandals
 - Homeless Camps
 - Thieves

Design Features Mitigation Selection

- Factors that play into selection of proper trespass mitigations:
 - Type of intrusion anticipated
 - Type of operating environment
 - Speed of train
 - Sightlines
 - Operating Rules/Procedures
 - Previous trespassing history

Mitigation Measures

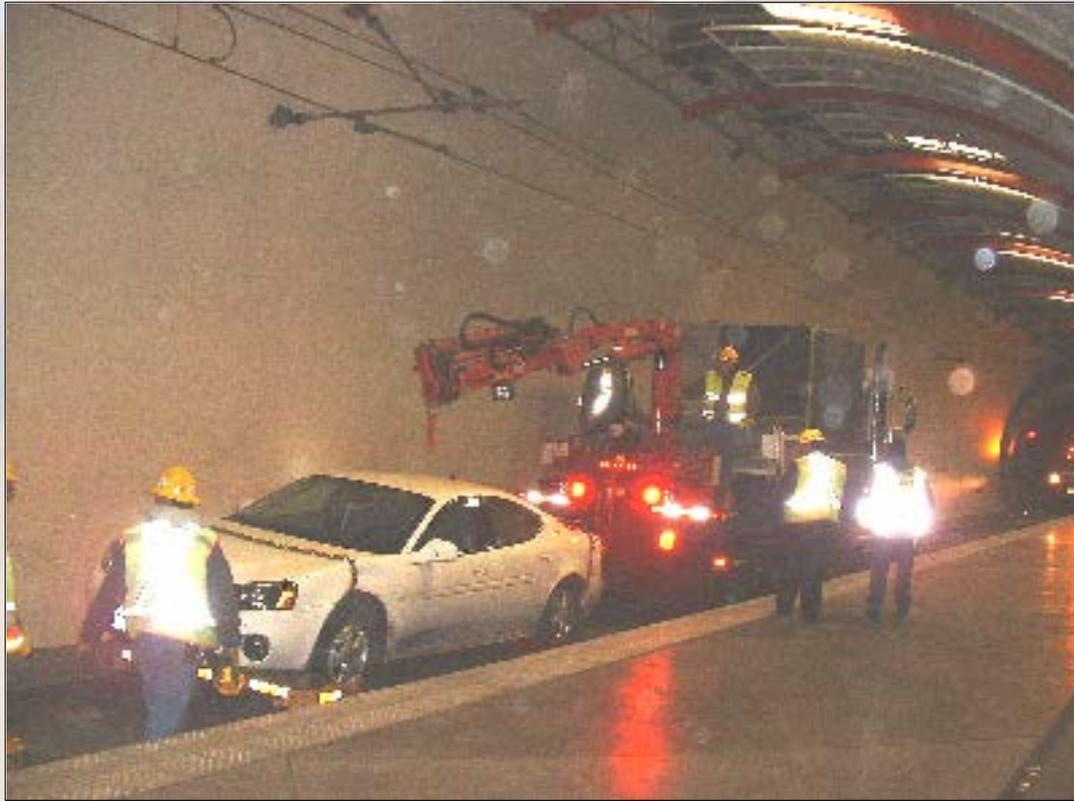
- Active systems:
 - intrusion detection and video analytics
- Passive systems:
 - barriers, signage, channelization, lighting, and designed crossings at desired locations
- Education outreach of the public/groups effected by the rail system
 - Schools, community groups, churches

Auto in Tunnel



Auto in Tunnel

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Auto Trespass Deterrent



Trespass Deterrent



Barrier – In Street Running



Designed Pedestrian Crossing with Passive Treatments



Barrier to Deter Unauthorized Pedestrian Crossing of ROW



Alignment Investigation for Installation of Mitigations



Retrofitted Barriers





Passive and Active Warning Devices Installed at High Speed Crossing



Public Outreach/Education



Learning from Experience

- As your system grows, re-evaluation of the current protective measures needs to take place
- Technological advances in electronic monitoring
 - Intrusion detection and video analytics

Revitalized Station with channeling, active, and passive treatments



Welded Wire Fencing



Video Analytics for Critical Structures



Portland's Most Famous Trespasser!!

