

## Rock Island Rail Trail, Amarillo, TX

### RAIL TRAIL PEDESTRIAN SAFETY PROJECT SUMMARY



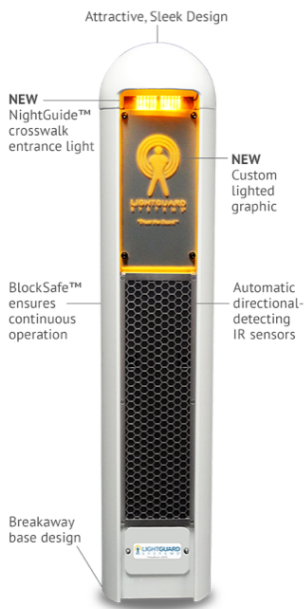
<b>Location:</b> Rock Island Rail Trail, Amarillo TX	<b>Client:</b> City of Amarillo Parks & Rec
<b>Type:</b> Rail Trail Pedestrian Safety	<b>Year Installed:</b> 2017
<b>Project Size:</b> 16 In-Roadway Warning Lights (IRWL); 16 Steel Snow Plow Blade Resistant Base Plates; 4 Sensor Bollards; 2 W-11 Flashing LED Pedestrian Signs; Solar Powered Controller.	

- **Overview:** The City of Amarillo’s 2015 Master Plan included enhanced pedestrian and bicyclist safety at the Georgia Street crossing of the Rock Island Rail Trail. The goal: to expand alternative transportation opportunities and trail usage through improved connectivity and safety.
- **Requirements:** A lighted crosswalk pedestrian safety solution that utilizes high-intensity LED illuminated traffic safety equipment to effectively warn motorists up to 1,000 feet in advance of pedestrians/bicyclists inside a crosswalk. Commuter traffic, low visibility at night, and other visual roadway distractions created the need for in-roadway warning lights (IRWL) and high visibility flashing LED illuminated pedestrian warning signs. The client also required passive-detection sensor bollards, and a solar system powered controller and panel. To protect the IRWL light fixtures against snow plow blades, the use of steel base plates was also required.

## Solution 1:

### 16 In-Roadway Warning Lights (IRWL) with Steel Snow Plow Blade Resistant Base Plates

LightGuard Systems provided 16 IRWLs with high-intensity LEDs. Visible both day and night, they activate via passive detection sensor bollards and flash only when a pedestrian is present. The client selected 14" steel snow plow blade resistant base plates and a solar powered controller. IRWLs are MUTCD compliant and a proven method of increasing driver awareness up to 95%. Highly flexible, IRWLs are an ideal safety solution for use at curved trail crossings, park entrances, and at-grade railroad crosswalks.



## Solution 2:

### 4 T6 Automatic Pedestrian Detection Sensor Bollards

Our Automatic Pedestrian Detection Bollard, a passive activation method, was selected due to its elegant design and directionally sensitive infrared light beam sensors, which activate only as pedestrians enter the crosswalk. Placed at crosswalk entrances in pairs, trail walkers, joggers and cyclists automatically trigger the system's flashing amber IRWLs and amber LED border-enhanced warning signs simply by walking between them—making bollards the safest, most effective activation method. Only LightGuard Systems' sensor bollards contain NightGuide™ crosswalk entrance lighting. Bollards have a range of 40 feet and contain vandal-resistant stainless steel fasteners.

## Solution 3:

### 2 Flashing LED Border-Enhanced Pedestrian Crossing Signs

Our flashing LED border-enhanced pedestrian warning signs were added to the crossing for additional visibility and advanced warning to motorists. MUTCD compliant, only LightGuard Systems' LED illuminated signs contain 8 light bars with 96 high-intensity flashing LEDs – 12X's more LEDs than competitors. Visible from 1,000 feet, LED signs help to increase motorist yielding. Amarillo City's LED signs activate via passive detection sensor bollards and flash only when a pedestrian is present. A solar panel supplies power to the system.

