

**High Speed Intercity Rail Program**

**Chicago to Iowa City**

## **Preliminary System Safety Plan**

**August 6, 2010**

## **PREFACE**

This Preliminary System Safety Plan (PSSP) is an in-process document which conforms to:

1. "High-Speed Passenger Rail Safety Strategy," Version 1, November 2009, Federal Railroad Administration
2. "Highway-Rail Grade Crossing Guidelines for High-Speed Passenger Rail," Version 1, November 2009, Federal Railroad Administration
3. "Requirements for Passenger and Commuter Railroad System Safety Program Plans," American Public Transportation Association (APTA)

The States approach is intended to be flexible and inclusive, which means that the PSSP will be continuously updated and revised as the Chicago-Iowa City High-Speed Intercity Passenger Rail Program nears operation. Many of the significant issues affecting all U.S. High Speed Rail Programs are under development by the Federal Railroad Administration's (FRA) Rail Safety Advisory Committee (RSAC), and as these efforts reach their conclusions, every effort will be made to include them in subsequent versions of the PSSP.

## Preliminary System Safety Plan For the Chicago to Iowa City High-Speed Intercity Passenger Rail (HSIPR) Program

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## **1. Policy Statement and Authority for System Safety Plan**

### **1.1 Introduction**

The states of Illinois and Iowa will implement the Chicago-Iowa City High-Speed Intercity Passenger Rail Program (Program) and are thoroughly committed to providing a safe environment for passengers, employees, and contractors. This Program has been established through efforts of the Iowa Department of Transportation (Iowa DOT) and the Illinois Department of Transportation (Illinois DOT). Both DOTs have established a multidiscipline program team for the design, construction, and operations oversight of the program. Included in this effort, will be the development of the System Safety Plan (SSP) for the Chicago-Iowa City Program.

Day-to-day responsibility and accountability for safety performance, policies, and implementation will reside with the contract service operator and with the host railroads. However, the States as owners of the Program will exercise extensive program oversight and review to ensure that SSP program goals are met.

### **1.2 Authority**

The sponsoring entity is the Program and is authorized by a “Memorandum of Understanding between Illinois Department of Transportation and Iowa Department of Transportation for The Implementation of Rail Passenger Service on Two Corridors Linking Cities in their Respective States” dated July 27, 2009, and signed by the governors of both states.

Letters of support and stakeholder agreements were gathered from impacted parties and jurisdictions impacted by the Program. Final agreements will be developed prior to awarding of project funds.

## **2. Purpose and Scope of the SSP**

The overall purpose of this plan is to coordinate a Safety System Plan for prevention, identification, and management of hazards in an effort to minimize safety risks to passengers, operating and host railroad employees, and contractors’ employees. This plan serves to:

- Document State Agency (Agencies) responsibilities to ensure oversight of both operating and host railroad safety activities;
- Contractor, management, and employee responsibilities and activities;
- Satisfy Iowa, Illinois, and FRA Requirements for Safety;
- Outline programs and activities that support the overall commitment of the Program to safety; and
- Protect the physical plant and equipment in an effort to maintain safe operations for passengers and employees

### **3. Goals for System Safety Program**

The major goal of the Program is to be an injury-free railroad from the initial design and program development phase, through the construction and equipment acquisition phase, and into the actual operating phase, throughout its operating existence. In addition, a secondary goal would be to increase safety awareness, both at home and in the workplace for Iowa and Illinois DOT personnel, contractors, employees, and approved visitors. In an effort to reach these end results, the following interim goals have been established:

- Zero injuries and a FRA injury Frequency Index of 0.0
- Zero Passenger Injuries and a FRA rate of 0.0 customer injuries per million customers
- Development and implementation of a single System Safety Plan through a team approach utilizing consensus decision-making techniques for the operating and host railroads
- Zero contractor injuries during the design and construction phases

### **4. Identifiable and Attainable Safety Objectives**

The primary purpose of the System Safety Plan is to achieve the overall purpose and goals indicated in Sections 2 and 3. To achieve the purpose and goals, the following high level objectives have been established for each entity involved in the process. Clear designation of responsibilities and roles for each state agency, contractor, and provider of services through documentation of internal procedures and adherence to external regulations and requirements, principally the FRA, Federal Transit Administration (FTA), Iowa DOT, Illinois DOT, National Transportation Safety Board (NTSB), and the Occupational Safety and Health Administration (OSHA). See Appendix A.

#### **4.1 Quantifiable Safety Objectives**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

#### **4.2 Methodology for Implementing the Objectives**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

#### **4.3 Accountability for Achieving Objectives**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **5. System Description and Organization Structure**

#### **5.1 System Description**

The Program, a joint undertaking of the Iowa and Illinois DOTs, is defined in FRA publications as an “emerging High-Speed Passenger Rail” program. The Service Development Plan for this effort anticipates a passenger train service that consists of twice-daily, round-trip, maximum 79-



mph trains between Chicago Union Station and Iowa City, Iowa, a distance of 219.5 miles. Each train would have a capacity of 230 coach seats, offer food service, and operate on a 4 hour and 5 minute schedule between end points (Amtrak's initial schedule estimates 4 hours, 58 minutes), for an average speed of approximately 53.5 mph including station stops. Intermediate stations include two Chicago suburban stops, La Grange Road and Naperville; the rural communities of Plano, Mendota, Princeton, and Geneseo, Illinois; and Moline, Illinois, serving the Quad Cities area of Illinois and Iowa. The nominal schedule between Moline and Chicago would be 3 hours, 20 minutes. Passenger rail service is not presently offered to Iowa City, Moline, and Geneseo.

It is anticipated that Amtrak will be the passenger train operator under agreement with Illinois DOT and Iowa DOT. Host railroads are BNSF Railway Company (BNSF) between Chicago and Wyanet, Illinois, 112.0 miles; and Iowa Interstate Railroad (IAIS) between Wyanet and Iowa City, Iowa, 106.2 miles. The service will operate over 0.8 miles of Amtrak-owned trackage at Chicago Union Station. Headquarters and train dispatching function are Fort Worth, Texas, for BNSF and Cedar Rapids, Iowa, for IAIS. BNSF hosts Metra commuter trains on the portion of its route between Chicago and Aurora, Illinois, and Amtrak long-distance trains on the portion of the route between Chicago and Wyanet, Illinois. An estimated 246,800 passengers per year (based on the year 2015) would use the trains, with the preponderance traveling between two station pairs – Chicago and Iowa City, and Chicago and Moline, Illinois. This is an average of 676 passengers per day, or 169 per train.

Furthermore, the Program service would be a component of the Midwest Regional Rail System (MWRRS), a hub-and-spoke system of conventional and high speed rail networks ultimately designed to connect Chicago with cities throughout the Midwest.

The Program will use existing railroads for its service, except for a new connecting track between the BNSF and IAIS at Wyanet. The list below illustrates which railroad owns each segment of the route (shown in bold), which railroads operate on each segment of the route, and what railroad dispatches each section of the route (shown in italics):

Host railroads:

1. **Amtrak** terminal trackage at Chicago Union Station, 0.80 miles
  - a. BNSF, *Amtrak*, Metra
2. **BNSF** Chicago Subdivision, Amtrak CUS terminal trackage connection to Montgomery (Aurora), Illinois, 40.15 miles
  - a. *BNSF*, Amtrak, Metra
3. **BNSF** Mendota Subdivision, Montgomery, Illinois, to East Switch Wyanet Connection, Illinois, 70.96 miles
  - a. *BNSF*, Amtrak
4. New Connection Track, BNSF to IAIS, Wyanet, 0.85 miles
5. Amtrak (dispatching authority has not been established at this time)
6. **IAIS** Subdivision 1, West Switch Wyanet Connection, Illinois to 7th Avenue Connection (Moline), Illinois, 45.15 miles
  - a. *IAIS*

7. **BNSF** Rock Island Spur / BNSF Industrial Track (Barstow Subdivision), 7th Avenue Connection (Moline), Illinois, to 17th Street, Rock Island, Illinois, 5.17 miles
  - a. IAIS, BNSF, Canadian Pacific Railway
8. **IAIS** Subdivision 1, 17th Street, Rock Island, Illinois, to Iowa City, Iowa, 56.3 miles
  - a. IAIS (BNSF and CPR trackage rights to Davenport, Iowa)

Note: IAIS operates over the Mississippi River via a swing bridge called the Government Bridge. The bridge is owned and operated by the U.S. Army Garrison-Rock Island Arsenal (USG-RIA), which is under the authority of the Department of the Army. IAIS operates via a leasehold of the trackage on the bridge. The USG-RIA has agreed in principle to allow passenger trains of the proposed service to operate over the Government Bridge.

## **5.2 Organizational Structure**

The organizational structure of the SSP will be developed with detailed organizational diagrams when position titles are established. This section will include the relationship between the two Illinois and Iowa DOTs, the program operations contractor, and the host railroads.

## **5.3 Relationship and Authority of the Safety Department**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **5.4 Legislative Requirements**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **5.5 Safety Plan and Policy Dissemination**

The Program will ensure that all agencies, companies, operators, and host railroad employees have access to this System Safety Plan.

# **6. System Planning and Integration**

## **6.1 Strategic Program Planning**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **6.2 Administrative Controls**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **6.3 Interdepartmental Coordination**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

#### **6.4 Interagency Coordination**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **7. Safety Contract Requirements**

This component anticipates that contracts and operating agreements will be the main vehicles for managing the railroad. As such, the program anticipates requiring the operator and the host railroads to work together, through consensus decision-making, to develop a single System Safety Plan for the Program prior to institution of service.

#### **7.1 Contracting for Operational Services**

The Program assumes that Amtrak will be the operating services provider. As such, the operating agreement between Iowa and Illinois DOTs and Amtrak will include the provision for a single System Safety Plan, which will be submitted to the FRA for review.

#### **7.2 Contracting for Facilities, Equipment and Materials**

The Program assumes that BNSF and IAIS will be the host railroads. As such, the operating agreement between Iowa and Illinois DOTs and the two host railroads will include the provision for a single System Safety Plan, which will be submitted to the FRA for review.

#### **7.3 Construction Management**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **8. Facilities Maintenance and Inspections**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **9. Vehicle Maintenance Inspection / Repair**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **10. Rules / Procedures Review**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **11. Training and Certification Review**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **12. Emergency Response Planning, Coordination and Training**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **13. Workplace Safety Programs**

### **13.1 Employee Safety Programs**

Iowa DOT's Chicago and Iowa City Program Administrators will ensure that each of the contractors' and host railroads' System Safety Plan section on Employee Safety Programs conforms to requirements by law and regulatory authority, including hazardous materials safety and applicable occupational health and safety requirements.

Amtrak's current "Safe-2-Safer" will be the standard safety program used by all connected to the program unless a host railroad can demonstrate that its current program is as good or better.

Iowa DOT's Chicago-Iowa City Program Chief Safety Officer will chair at a quarterly Senior Safety Steering Committee of all contractors and host railroads involved in the program. An Agenda will be developed for each meeting and will include a case-by-case review of all injuries.

At a minimum, the Chief Safety Officer will ensure that each of the Safety Training Programs from the contractors and host railroads contain the following elements:

- 1) Daily start of shift safety briefings
- 2) Job safety briefings at the start of tasks
- 3) Local safety committees
- 4) Employee safety reviews and a restricted duty program
- 5) A field audit program
- 6) Safety field audit training program

### **13.2 Contractor Safety Coordination**

Employees of contractors do not come under the direct jurisdiction of either Amtrak or the host railroads. When contractors work on high-speed railroads, especially under operating conditions, certain requirements must be applied to all members of the contractor workforce. This is essential for the safety of passengers, Program employees, contract employees, host railroad employees, and the protection of railroad property. All contractors and their employees must be clear that the Program and its host railroads are in charge and that all necessary rules and procedures will be followed without exception, thus ensuring that all contractor personnel (1) are instructed on the procedures, (2) know the procedures, and (3) follow the procedures. Imposed sanctions must be spelled out at the beginning and, to the extent possible, included in the contract.

All contractors' employees who work along the right-of-way will receive both the "Roadway Worker Safety Manual" and the Contractor's Version of the "Roadway Worker Safety Training" and will comply with same before entering the railroad's right-of-way.

Each contractor shall comply with the requirements of all applicable federal, state, and local laws and host railroad rules and regulations to provide a suitable work environment for workmen and for the general public. For instance, FRA's Fall Protection program must be understood by all personnel engaged with the Program. The contractor shall prepare and submit a comprehensive Safety Plan which will:

- 1) Designate company representative(s) who will prepare and implement a safety program for compliance
- 2) Supply personal safety equipment for all workers employed by the contractor or subcontractors and enforce its use by all personnel
- 3) Train all employees and subcontract employees with emphasis on the unusual conditions found in an active railroad environment

### **13.3 Fitness for Duty Programs**

#### **13.3.1 Drug and Alcohol Programs**

The Program administration, which is made up of officials from Iowa and Illinois DOTs, or agents thereof, will ensure that each of the contractors' and host railroads' System Safety Program Plan section on Drug and Alcohol programs contain provisions that all employees are subject, as a condition of employment, to the Federal Drug Free Workplace Act and the operating procedures on substance abuse. Furthermore, the administrators will ensure that each contractor's Alcohol Program is in compliance with 49 CFR 40.

The mission of the Program is to provide safe and efficient rail service to its customers. In observance of this commitment, the Program is mindful of the potential safety threat posed by the use of alcohol and drugs by our employees and our contractors' and host railroads' employees. Inspired by a deep concern for the welfare of customers, employees, and contractors' host railroads' employees hereafter, Employees, and in compliance with applicable laws, safety rules, and Operating Rule G, possession and use of alcohol and controlled substances is prohibited, as are prescription and over-the-counter drugs that alter mood, perception, or the ability to function.

Any employee violating this policy is subject to administrative or disciplinary action up to and including dismissal.

The Program expects that each host railroad's Drug and Alcohol Programs have been filed and approved by the FRA. These programs must contain the following elements at a minimum:

- 1) Substance Abuse Policy includes required compliance elements of DOT Rules 49 CFR Parts 219, 240, and 382
- 2) Random Testing Program

- 3) Annual employee notification of required compliance to the Drug-Free Workplace Act
- 4) Supervisory training programs in substance abuse and post-accident/incident toxicology testing per FRA/Federal Highway Administration requirements
- 5) An in-house Employee Assistance Program Service

### **13.3.2 Fatigue Management Program**

The Program administrators will ensure that each of the contractors' and host railroads' System Safety Program Plan section on Fatigue Management contains acceptable countermeasures to manage the potential risk of passenger rail accidents caused by fatigue. Specific actions will include, but not be limited to:

- Second job policy
- Crew layover accommodations at Iowa City
- Medical evaluations for sleeping disorders
- Fatigue awareness training programs for employees

### **13.3.3 Medical Monitoring Program**

Illinois and Iowa DOT Program administrators will ensure that each of the contractors' and host railroads' System Safety Program Plan section on medical monitoring programs complies with FRA rules and regulations. In addition, they will ensure that appropriate medical standards for safety critical positions exist and that they extend beyond pre-employment examination and take into account the aging process on sensory degradation and its effect upon safety in the high speed passenger rail environment. Medical monitoring programs should be appropriate to the classification of employees, and be such to keep all employees within the medical thresholds established for the safe performance of their duties.

## **14. Passenger and Public Safety Programs**

### **14.1 Passenger Operational Environmental Programs**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **14.2 Public Safety Programs**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **15. Rail Corridor Operational Safety**

### **15.1 Joint Freight Operations**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **15.2 Highway Grade Crossings**

Please see Section 24.3 below.

### **15.3 Trespassing and Intrusion**

In order to maintain security and minimize trespassing in the service area, the Program will work assiduously with state, county, city, and local police and sheriff jurisdictions to implement a thorough trespasser prevention and education program. Included in this effort will be an outreach program to conduct railroad safety programs for public school students.

## **16. Environmental Management Programs**

### **16.1 Hazardous Materials Management**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **16.2 Hazardous Waste Management**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **16.3 Waste Minimization and Pollution Prevention Programs**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **16.4 Environmental Outreach Programs**

(Will be determined in concert with the contract operator and the host railroads, complying with all existent agreements and regulations.)

## **17. Security Programs**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **18. Hazard Management Process**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **19. Accident / Incident Reporting and Investigations**

### **19.1 Criteria and Procedures**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **19.2 Internal and External Notifications**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **19.3 Cause Analysis**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **19.4 Reporting and Follow – Up Documentation**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **20. Safety Data Acquisition and Analysis**

Safety data acquisition and analysis is an important part of the Program hazard's resolution process. The Chief Safety Officer will gather information pertaining to accidents, incidents, and injuries by all personnel, customers, and contractors. Reports will be coded by cause, as mandated by the FRA in compliance with 49 CFR Part 225, and trend analysis will be performed. Printouts of this data and copies of the original investigation material will be used at the Quarterly Safety Review Meetings to highlight areas of concern that may need attention (examples include increase in eye injuries, back strain, use of tools, etc.). As a result of trend analysis, safety programs will be developed and implemented to address areas of concern and to reduce the frequency of injuries. They may include improvements to the physical plant, counseling for injured employees, customer safety updates, and safety bulletins. The analysis will be based on accident/incident type, cause, and cost information.

Amendments and revisions to accident/incident investigations will be implemented on an as-needed basis and by local and state and FRA regulations as mandated.

## **21. Loss Prevention and Control**

### **21.1 Fire Safety Analysis**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

### **21.2 Casualty Management Review**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **22. System Change Management**

### **22.1 Configuration Management**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.



### **22.1.1 Standards / Design Control**

### **22.1.2 System Modification – New Processes/Equipment**

### **22.1.3 Quality Assurance/Quality Control Interface**

### **22.1.4 Safety Certification**

### **22.1.5 Document Control**

## **23. Internal Safety Management Assessment**

### **23.1 Internal Safety Audits**

The Program administrative team, through its Chief Safety Officer, has the responsibility for internal safety auditing as well as the assessment of the success of the SSP. This responsibility relies heavily on the safety compliance measures of the operator and the host railroads.

### **23.2 Security Assessments**

Will be determined in concert with the contract operator and the host railroads, in compliance with all existent agreements and regulations.

## **24. High-Speed Passenger Rail Safety Strategies**

The FRA published two documents in 2009: High-Speed Passenger Rail – “Safety Strategy” and “Highway-Rail Grade Crossing Guidelines for High-Speed Passenger Rail.” Taken together, these documents present guidelines for consideration in the preparation of System Safety Plans. It is anticipated that the Railroad Safety Advisory Committee (RSAC) approach will be used on each topic to develop actual administrative regulations. As these regulations go through the normal approval and publication process, this section will be amended to include more specific requirements.

### **24.1 Vehicle-Track Interaction**

The FRA published “High-Speed Passenger Rail – Safety Strategy” in 2009. In this document, the FRA reinforced the Track Safety Standards (49 CFR Part 213) and the Passenger Equipment Safety Standards (49 CFR Part 238); however, the FRA also indicated that the RSAC is working on developing standards for vehicle-track interaction safety standards. It is anticipated that this new safety standard would set qualifications limits on the following issues:

- Cant deficiency
- Acceleration and wheel force safety limits
- Inspection, monitoring, and maintenance requirements
- Limits for wheel profile and truck equalization
- Track geometry limits

As new standards are set, or old standards revised, they will be included in revised editions of the Program System Safety Plan.

## 24.2 Positive Train Control

The Program will install the BNSF's Electronic Train Management System (ETMS) on its locomotives and controlling units as well as the IAIS locomotives that operate through or in the passenger-rail territory. All passenger and freight trains operating on the host railroads will be equipped with EMTS by December 31, 2015, as stipulated in the Rail Safety Improvement Act of 2008.

FRA approved of BNSF's Product Safety Plan (PSP) on January 8, 2008, to allow BNSF to begin implementing the ETMS on portions of its network.

ETMS was chosen because the BNSF is one of the host railroads. In addition, the FRA has already issued approval for full revenue deployment of EMTS, version 1 on nearly 35 subdivisions, including the Chicago Subdivision. Furthermore, BNSF and the FRA are already testing a second enhanced version of ETMS on 300 miles of high-density signaled territory over which mixed freight and passenger service operate. ETMS is an overlay-type communication-based system that enforces movement authority and speed restrictions for ETMS-equipped trains and proximity warnings of nearby equipped on-track equipment. This system works in conjunction with the existing methods of operation, including using input from the currently installed signal systems, to protect against the consequences of human error.

## 24.3 Grade Crossing Safety

The FRA published "Highway-Rail Grade Crossing Guidelines for High-Speed Passenger Rail" in 2009, a document that clearly details many of the necessary components of an effective grade crossing safety program. As an emerging high speed rail program, the Program will initially operate over the host railroads as described above in Section 5 for speeds up to 79 mph.

The IAIS grade crossings are included in Appendix B. A list of BNSF grade crossing is included in Appendix C; the railroad between Chicago and Wyanet already hosts passenger operations, including about 120 Metra commuter trains between Chicago and Aurora and eight Amtrak long-distance and intercity passenger trains between Chicago and Wyanet.

As indicated in Appendix B, the Program has already evaluated all of the grade crossings that its service will operate over. IAIS and has a plan to improve all of these grade crossings as part of the service plan that it is developing. The majority of grade crossing and all public grade crossings on the IAIS will be protected by automated warning with flashers and gates; the remaining private grade crossings will be protected by crossbucks and stop signs. A similar program will be conducted on the BNSF segment of the corridor. When the Program conducts its grade crossing consolidation and elimination review, they will also examine farm crossings in order to determine if further protection can be afforded by locking the farm gates.

The responsibility for rail grade crossing maintenance lies with host railroads; the responsibility for accident and incident investigation lies jointly with the Program; signal and communication departments at the host railroads; and various state, county, and local police departments.

The host railroad's signal and communication departments inspect grade crossing equipment with automatic protection in compliance with 49 CFR Part 234 of the FRA regulations. These monthly, quarterly, and annual inspections meet and exceed current FRA requirements for checking proper operation and adjustment of each warning device.

The Manual on Uniform Traffic Control Devices recently issued guidelines that required that each at-grade crossing be identified with a toll-free phone number for the host railroad dispatching office responsible for train movement on that line segment. The dispatcher will notify trains in the vicinity of potential and existing hazards and summon emergency response personnel as required. This signage also contains the street name and the DOT crossing number to assure that the correct crossing is identified.

The host railroads will conduct a weed control program along the right-of-way every year. The work will be conducted by contractors certified in the application of approved herbicides.

All grade crossing incidents will be promptly investigated by a team representing the Program, the host railroad's signal and communication departments, and various state, county, and local police departments as required. The host railroad train dispatchers are responsible for notifying the FRA in compliance with 49 CFR Part 225.19.

The Program intends to be an active participant in Operation Lifesaver, a national organization chartered to enhance railroad grade crossing and trespasser safety through the principles of education, enforcement, and engineering. The Program Chief Safety Officer will be a certified Operation Lifesaver presenter and will deliver Operation Lifesaver materials as part of training efforts with emergency response groups.

#### **24.4 Maintenance of Way Safety Management**

Vital components of any SSP include provisions for the protection of workers along the right-of-way. It would ensure that the track is not disturbed ahead of train movements; that heavy on-track maintenance equipment is routed away from and kept clear of live tracks (except when authorized to be there); and that maintenance equipment, such as cranes that have the potential to foul live tracks during maintenance activities, do not do so while trains are passing.

The Program's Roadway Worker Safety program will be developed for the System Safety Plan through a working committee with the two host railroads.

The Program will utilize a "Roadway Worker Safety Manual" and "Roadway Worker Safety Training" for all individuals whose work requires them to be on the right-of-way. While this manual and training program will contain all parts of 49 CFR Part 214, specific attention will be given to Subpart C about roadway worker protection. The Program will ensure that all construction contractors involved in the capital programs necessary to install new track and structures and new signal system components on the IAIS receive both the manual and the training.

At a minimum, "Roadway Worker Safety Manual" will include the following topics:

- Job briefings

- Responsibilities of employees
- Crossing tracks
- Wearing a high visibility vest or garment
- Safety precautions for working on or around self-propelled equipment
- Engine whistle or horn signals and the engine bell
- Good faith challenge and resolution
- Specific Amtrak, BNSF, and IAIS rules affecting roadway workers

One of the reasons that BNSF's ETMS was selected as the PTC system for the Program, is that BNSF is developing a handheld device for the roadway worker in charge of a construction or maintenance gang and for the gang watchman. The device will be integrated with the ETMS to protect work gangs, work gang equipment, and the trains. As this process is developed and refined, it will be included in this section.

The FRA expects to develop guidelines for maintenance-of-way safety management in the future. As these guidelines are established, they will be incorporated into this section of the SSP.

#### **24.5 Right-of-Way Safety**

The Program anticipates developing a "Right-of-Way (ROW) Safety Plan" with its host railroads as part of its team approach to developing and implementing the SSP. This component of the SSP will address the following issues:

- Vandalism
- Launching of objects from overhead structures into the paths of trains
- Prevention of intrusion of vehicles from adjacent rights-of-way.

The host railroads have experience handling these issues. This knowledge will be used to develop specific remedies in traditional problem locations and will be included in the SSP.

The FRA will develop vehicle intrusion standards and standards for sharing rail/rail and highway/rail corridors for incorporation into future regulations. Furthermore, the FRA anticipates detailing additional hazards that must be evaluated and mitigated based on corridor-specific risks. As these standards are published, or risks identified, they will be addressed in future versions of the SSP.

#### **24.6 Real-Time System Monitoring**

As the FRA guidelines for Real-Time System Monitoring become further developed, they will be included in this section of the SSP.

## **Appendix A**

# **CFR Administration Regulations and Publications Relating to Passenger Rail and to High-Speed Passenger Rail**

FRA Publication:	High-Speed Passenger Rail – Safety Strategy,
FRA Publication:	Highway-Rail Grade Crossing Guidelines for High-Speed Passenger Rail
Title CFR 29 All Parts	Occupational Safety and Health Standards
Title CFR 40 All Parts	Environmental Protection
Title CFR 49 Part 213	Track Safety Standards
Title CFR 49 Part 214	Railroad Workplace Safety
Title CFR 49 Part 215	Freight Car Safety Standards
Title CFR 49 Part 216	Emergency Order Procedures
Title CFR 49 Part 217	Railroad Operating Rules
Title CFR 49 Part 218	Railroad Operating Practices
Title CFR 49 Part 219	Control of Alcohol and Drug Use
Title CFR 49 Part 220	Radio Standards and Procedures
Title CFR 49 Part 221	Rear End Marking Devices
Title CFR 49 Part 223	Safety Glazing Standards
Title CFR 49 Part 225	Railroad Accidents/Incidents
Title CFR 49 Part 228	Hours of Service
Title CFR 49 Part 229	Locomotive Safety Standards
Title CFR 49 Part 230	Locomotive Inspections
Title CFR 49 Part 231	Safety Appliance Standards
Title CFR 49 Part 232	Power Brakes and Drawbars
Title CFR 49 Part 233	Signal Systems Reporting Requirements
Title CFR 49 Part 234	Grade Crossing Signal System safety
Title CFR 49 Part 236	Rules, Guidelines and Instructions Governing the Installation, Maintenance, and repair of Signal Systems
Title CFR 49 Part 238	Passenger Equipment Safety Standards Title CFR 49 Part 240
Title CFR 49 Part 239	Passenger Train Emergency Preparedness

Title CFR 49 Part 240	Qualification and Certification of Locomotive Engineers
Title CFR 49 Part 382	Control Substances and Alcohol Use and Testing
FTA Part 405 All Parts	Security
Emergency Order 20	

## **Appendix B**

### **Table of Rail Crossings on Host Railroad IAIS**



M.P.	DOT #	X'ing Type	Existing Warning Devices	Proposed Warning Devices
130.78	863562D	1200 St E	Cross Bucks	CWT Crossing & Two Gates
133.04	863564S	Public Xing	Cross Bucks	CWT Crossing & Two Gates
133.86	863565Y	Public Xing	Flashers w/Gates	CWT System
134.84	863566F	Public Xing	Cross Bucks	CWT Crossing & Two Gates
135.51	863567M	Farm Xing		Cross Bucks w/ Stop Sign
136.34	863568U	Mason St	Flashers w/Cant.	CWT Crossing & Two Gates
136.48	863569B	Main St	Flashers w/Gates	CWT Crossing & Two Gates
136.82	863570V	Reed St	Flashers w/Gates	CWT Crossing & Two Gates
137.32	863572J	Public Xing	Cross Bucks	CWT Crossing & Two Gates
138.42	863575E	Res Xing		Cross Bucks w/ Stop Sign
139.24	863576L	Res Xing		Cross Bucks w/ Stop Sign
139.85	863577T	300 St E		Cross Bucks w/ Stop Sign
140.26	606928J	Public Xing	Cross Bucks	CWT Crossing & Two Gates
140.98	606929R	Public Xing	Cross Bucks	CWT Crossing & Two Gates
141.88	606930K	Lincoln St	Flashers only	CWT Crossing & Two Gates
142	606931S	Center St	Flashers w/Gates	CWT Crossing & Two Gates
142.8	926045S	Patriot Way	New Xing	Extend Crossing Starts
144.6	606936B	Res Xing		Cross Bucks w/ Stop Sign
145.12	606937H	Private		CWT Crossing & Two Gates
145.64	606938P	East St	Flashers & Cant.	CWT Crossing & Two Gates
145.78	606939W	Main St	Flashers w/Gates	CWT Crossing & Two Gates
145.9	606940R	State St	Flashers w/Gates	CWT Crossing & Two Gates
147.22	606942E	Public Xing	Cross Bucks	CWT Crossing & Two Gates
147.7	606943L	Res Xing		Cross Bucks w/ Stop Sign
148.04	606944T	Farm Xing		Cross Bucks w/ Stop Sign
148.28	606945A	Public Xing	Cross Bucks	CWT Crossing & Two Gates
149.3	606947N	Farm Xing		Cross Bucks w/ Stop Sign
149.96	606948V	Industrial Xing		CWT Crossing & Two Gates
151.36	606949C	Spring St	Flashers w/Gates	CWT Device
151.56	606950W	School St	Flashers only	CWT Crossing & Two Gates
151.76	606951D	Church St	Flashers w/Gates	CWT Device
152.94	606952K	Public Xing	Cross Bucks	CWT Crossing & Two Gates
153.75		Farm Xing		Cross Bucks w/ Stop Sign
153.94	606953S	Public Xing	Cross Bucks	CWT Crossing & Two Gates
154.48	606954Y	Public Xing	Cross Bucks	CWT Crossing & Two Gates
155.48	606956M	Public Xing	Flashers w/Gates	Add CWT Device
156.52	606957U	1700 E	Cross Bucks	CWT Crossing & Two Gates
157.02	606958B	1650 E	Cross Bucks	CWT Crossing & Two Gates
157.3	606959H	Industrial Xing	Cross Bucks	Cross Bucks w/ Stop Sign
157.68	606960C	Public Xing	Flashers w/Gates	Add CWT Device
158.62	606962R	Chicago St	Flashers w/Gates & Cant.	Add CWT Device
159.04	606963X	Spring St	Flashers w/Gates	CWT Crossing & Two Gates
159.18	606964E	Oakwood St	Flashers w/Gates	CWT Crossing & Two Gates

159.28	606965L	State St	Flashers w/Gates & Cant.	CWT Crossing & Two Gates
159.36	606966T	Center St	Flashers w/Gates	CWT Crossing & Two Gates
159.68	606968G	Stewart St	Flashers w/Gates	CWT Crossing & Two Gates
160.7	606969N	Public Xing	Cross Bucks	CWT Crossing & Two Gates
161.76	606970H	Hazelwood	Cross Bucks	CWT Crossing & Two Gates
163.34	606971P	Public Xing	Cross Bucks	CWT Crossing & Two Gates
164.8	606972W	Public Xing	Flashers w/Gates	CWT Crossing & Two Gates
167.86	606973D	Res Xing		Cross Bucks w/ Stop Sign
168	606974K	Public Xing	Flashers w/Gates	CWT Crossing & Two Gates
169.72	606976Y	Broadway	Cross Bucks	CWT Crossing & Two Gates
170	606977F	Cleveland	Flashers w/Gates	CWT Crossing & Two Gates
170.08	605945W	Farm Xing		Cross Bucks w/ Stop Sign
171.8	916106D	N First Ave	Flashers w/Gates	CWT Crossing & Two Gates
172.88	605934H	Overpass	Overpass	Cross Bucks w/ Stop Sign
174.32	605942B	19th St	Flashers w/Gates & Cant.	Add CWT Device
174.48	605941Y	17th St	Flashers w/Gates	CWT Crossing & Two Gates
174.74	605940M	13th St	Flashers w/Gates	Add CWT Device
175.04	605939T	10th St	Flashers w/Gates	CWT Crossing & Two Gates
175.16	605938L	9th St	Flashers w/Gates	CWT Crossing & Two Gates
175.34	605937E	7th St	Flashers w/Gates	CWT Crossing & Two Gates
175.76	605935R	3rd St	Flashers w/Gates	CWT Crossing & Two Gates
176.12	605934J	1st St	Flashers w/Gates	CWT Crossing & Two Gates
177.1	605933C	41st St	Flashers w/Gates	CWT Crossing & Two Gates
177.6	605932V	34th St	Flashers w/Gates	CWT Crossing & Two Gates
178.7	605930G	23rd St	Flashers w/Gates	Add CWT Device
178.92	605930G	19th St	Flashers w/Gates	Add CWT Device
178.98	605929M	17th St	Flashers w/Gates	Add CWT Device
179.14	604314S	15th St	Flashers w/Gates	Add CWT Device
179.4	604316F	12th St	Flashers w/Gates	Add CWT Device
179.76	604319B	6th St	Flashers w/Gates	CWT Crossing & Two Gates
180.24	604322J	1st St	Flashers w/Gates	CWT Crossing & Two Gates
180.36	604324X	44th St	Flashers w/Gates	CWT Crossing & Two Gates
183.08	604341N	Western St	Flashers only	CWT Crossing & Two Gates
183.16	604342V	Gaines St	Flashers w/Cant.	CWT Crossing & Two Gates
183.24	604342C	Brown St	Flashers only	CWT Crossing & Two Gates
183.31	604344J	Warren St	Flashers w/Cant.	CWT Crossing & Two Gates
183.57	603892T	Marquette St	Flashers w/Cant.	CWT Crossing & Two Gates
183.65	603893A	Taylor St	Flashers only	CWT Crossing & Two Gates
185.87	606780E	Central Pk	Flashers w/Gates	Add CWT Device
186.5	606781L	Private Res Xing		CWT Crossing & Two Gates
186.93	393008N	Fairmont St	Flashers only	CWT Crossing & Two Gates
187.73	606784G	Farm Xing		Cross Bucks w/ Stop Sign
188.85	606786V	Farm Xing		Cross Bucks w/ Stop Sign
189.18	606787C	Utah Ave	Cross Bucks	CWT Crossing & Two Gates
189.7	606788J	Farm Xing		Cross Bucks w/ Stop Sign
189.98	606790K	Farm Xing		Cross Bucks w/ Stop Sign

190.28	606792Y	110th St	Cross Bucks	CWT Crossing & Two Gates
191.24	606794M	Public Xing	Cross Bucks	CWT Crossing & Two Gates
191.63	606795U	Farm Xing		Cross Bucks w/ Stop Sign
192.33	606797H	Public Xing	Cross Bucks	CWT Crossing & Two Gates
192.65	606798P	Public Xing	Cross Bucks	CWT Crossing & Two Gates
192.68	606799W	Res Xing		Cross Bucks w/ Stop Sign
192.88	606800N	Farm Xing		Cross Bucks w/ Stop Sign
193.13	606801V	Farm Xing		Cross Bucks w/ Stop Sign
193.6	606802C	Farm Xing		Cross Bucks w/ Stop Sign
194.38	606803J	70th St	Flashers w/Gates	Add CWT Device
194.8	606804R	Henry St	Flashers w/Gates	CWT Crossing & Two Gates
194.93	606803Y	Main St	Flashers w/Gates	CWT Crossing & Two Gates
195.88	606806C	Farm Xing		Cross Bucks w/ Stop Sign
196.35	606807L	Public Xing	Cross Bucks	CWT Crossing & Two Gates
199.25	606808T	Iowa St	Flashers w/Gates	CWT Crossing & Two Gates
200.43	606809A	Public Xing	Cross Bucks	CWT Crossing & Two Gates
201.45	606811B	14th Ave	Flashers w/Gates	CWT Crossing & Two Gates
201.88	606812H	8th Ave	Flashers w/Gates	Add CWT Device
202.03	606813P	6th Ave	Flashers w/Gates	Add CWT Device
202.13	606814W	5th Ave	Flashers w/Gates	Add CWT Device
202.6	917612H	Not in Data Base	PTMW6X6&FL	CWT Crossing & Two Gates
203.23	606815D	Industrial Xing	Cross Bucks	CWT Crossing & Two Gates
203.48	606600E	Industrial Xing	Cross Bucks	CWT Crossing & Two Gates
203.93	606817S	Industrial Xing	Cross Bucks	CWT Crossing & Two Gates
204.53	606818Y	Trall Ave	Cross Bucks	CWT Crossing & Two Gates
205.53	606819F	Thayer Ave	Cross Bucks	CWT Crossing & Two Gates
205.93	606820A	Farm Xing		Cross Bucks w/ Stop Sign
206.6	606821G	Public Xing	Flashers only	CWT Crossing & Two Gates
207.35	606822N	Cypress St	Flashers w/Gates	Add CWT Device
207.57	606824C	Chestnut	Flashers w/Gates	CWT Crossing & Two Gates
207.83	606827X	Cherry St	Flashers only	Cross Bucks w/ Stop Sign
208	606828E	Liberty St	Flashers w/Gates	Add CWT Device
208.45	606829L	Farm Xing		Cross Bucks w/ Stop Sign
209.83	606832U	Public Xing	Flashers w/Gates	Two Track CWT Crossing & Two Gates
211	606834H	6th St	Cross Bucks	CWT Crossing & Two Gates
211.15	606835P	4th St		CWT Crossing & Two Gates
212.5	606836W	Public Xing	Cross Bucks	CWT Crossing & Two Gates
212.97	606837D	Farm Xing		Cross Bucks w/ Stop Sign
213.25	606838K	Public Xing	Cross Bucks	CWT Crossing & Two Gates
215.33	606839S	Public Xing	Cross Bucks	CWT Crossing & Two Gates
215.83	606840L	Lundy St	Flashers w/Gates	Add CWT Device
215.87	606841T	Cherry St	Flashers only	CWT Crossing & Two Gates
216.05	606842A	Oak St	Flashers only	CWT Crossing & Two Gates
216.45	606843G	Hwy 6	Flashers w/Cant.	CWT Crossing & Two Gates
217	606844N	Farm Xing		Cross Bucks w/ Stop Sign
217.75	606839S	Iron City Ave	Cross Bucks	CWT Crossing & Two Gates
218.83	606846C	Farm Xing		Cross Bucks w/ Stop Sign

219.48	606848R	Farm Xing		Cross Bucks w/ Stop Sign
219.97	606849X	Green Ave	Cross Bucks	CWT Crossing & Two Gates
220.97	606850S	Columbus St	Flashers only	CWT Crossing & Two Gates
221.02	606851Y	Calhoun St	Flashers only	CWT Crossing & Two Gates
221.25	606852F	Prairie St	Flashers only	CWT Crossing & Two Gates
222.52	606854U	Hwy 6	Flashers w/Cant.	CWT Crossing & Two Gates
223.6	606855B	Farm Xing		Cross Bucks w/ Stop Sign
224.67	606856H	Farm Xing		Cross Bucks w/ Stop Sign
225.42	606858W	Farm Xing		Cross Bucks w/ Stop Sign
226.57	606860X	Baker St	Flashers only	CWT Crossing & Two Gates
226.82	606861E	Adams St	Cross Bucks	CWT Crossing & Two Gates
227.5		Farm Xing		Cross Bucks w/ Stop Sign
228.55	606863T	Oasis Rd	Cross Bucks	CWT Crossing & Two Gates
230.1	606865G	Farm Xing		Cross Bucks w/ Stop Sign
231.55	606866N	Farm Xing		Cross Bucks w/ Stop Sign
232.32	606868C	Farm Xing		Cross Bucks w/ Stop Sign
232.52	606869J	420th St	Flashers only	CWT Crossing & Two Gates
232.75	606870D	Taft Ave	Cross Bucks	CWT Crossing & Two Gates
233.1	606871K	Farm Xing		Cross Bucks w/ Stop Sign
233.9	606872S	Scott Blvd	Flashers w/Gates & Cant.	CWT Crossing & Two Gates
235.07	606873Y	First Ave	Flashers w/Gates	Two Track CWT Crossing & Two Gates
236.82	606878H	Dubuque St	Flashers only	Two Track CWT Crossing & Two Gates
236.92	606879P	Clinton St	Flashers only	Two Track CWT Crossing & Two Gates
237.5	606882X	Greenwood Drive	Flashers w/Gates	No change
235.35	914517C	Finkbine Party Ent	Flashers w/Gates	No change
239.6		Private Crossing		No change
240.7	606887G	22nd Avenue	Flashers w/Gates	No change
241.18	917610U	25th Avenue	Flashers w/Gates	No change
241.53		Private Crossing		No change

## **Appendix C**

### **Table of Rail Crossings on Host Railroad BNSF**

<b>M.P.</b>	<b>DOT #</b>	<b>X'ing Type</b>	<b>Existing Warning Devices</b>	<b>Proposed Warning Devices</b>
000086	079443H	ROOSEVELT RD.	Overhead Structure	No Change
000138	079445W	CANEL ST	Overhead Structure	No Change
000166	079446D	DAN RYAN EXPRE	Overhead Structure	No Change
000168	079447K	UNION AVE		No Change
000178	079448S	HALSTEAD ST.	Undergrade Structure	No Change
000183	079449Y	S NEWBERRY AVE	Undergrade Structure	No Change
000189	079450T	PEORIA ST.	Undergrade Structure	No Change
000194	079451A	SANGAMON ST	Undergrade Structure	No Change
000199	079452G	MORGAN	Undergrade Structure	No Change
000228	079453N	RACINE AVE	Undergrade Structure	No Change
000242	079454V	BLUE ISLAND AVE	Undergrade Structure	No Change
000254	079455C	LOOMIS ST.	Undergrade Structure	No Change
000266	079456J	LAFLIN ST.	Undergrade Structure	No Change
000279	079457R	ASHLAND AVE	Undergrade Structure	No Change
000291	079458X	PAULING ST.	Undergrade Structure	No Change
000304	079459E	WOOD ST.	Undergrade Structure	No Change
000317	079460Y	WALCOTT	Undergrade Structure	No Change
000329	079461F	DAMEN AVE	Undergrade Structure	No Change
000380	079462M	Pedestrian	Undergrade Structure	No Change
000381	079463U	WESTERN AVE	Undergrade Structure	No Change
000421	079464B	WASHTENAW ST	Undergrade Structure	No Change
000435	079465H	CALIFORNIA AVE	Undergrade Structure	No Change
000454	079466P	MARSHALL BLVD	Undergrade Structure	No Change
000474	079467W	ALBANY AVE	Undergrade Structure	No Change
000487	079468D	KEDIZE	Undergrade Structure	No Change
000500	079469K	S SPAULDING AVE	Undergrade Structure	No Change
000518	079470E	CERMAK AVE	Undergrade Structure	No Change
000533	079471L	S DRAKE AVE	Undergrade Structure	No Change
000539	079472T	CENTRAL PARK	Undergrade Structure	No Change
000546	079473A	S MILLARD AVE	Undergrade Structure	No Change
000552	079474G	LAWNDALE AVE	Undergrade Structure	No Change
000559	079475N	RIDGEWAY AVE	Undergrade Structure	No Change
000565	079476V	HAMLIN AVE	Undergrade Structure	No Change
000592	079477C	PULASKI RD	Undergrade Structure	No Change
000609	079478J	KEDVALE AVE	Undergrade Structure	No Change
000618	079479R	KEELER AVE	Undergrade Structure	No Change
000644	079480K	KOSTNER AVE	Undergrade Structure	No Change
000679	079006M	OGDEN AVE	Undergrade Structure	No Change
000685	079481S	Public Xing	Undergrade Structure	No Change
000696	079482Y	CICERO AVE	Undergrade Structure	No Change
000749	079484M	LARAMIE AVE	Undergrade Structure	No Change
000854	079485U	AUSTIN AVE	Undergrade Structure	No Change
000892	079486B	TRUCK XING	Flashers & Gates	No Change
000907	079487H	RIDGELAND AVE	Flashers & Gates	No Change

M.P.	DOT #	X'ing Type	Existing Warning Devices	Proposed Warning Devices
000932	079488P	EAST AVE	Flashers & Gates	No Change
000959	079489W	OAK PARK AVE	Flashers & Gates	No Change
000965	079490R	GROVE AVE	Flashers & Gates	No Change
000985	079491X	HOME AVE	Flashers & Gates	No Change
001003	093681K	HARLEM STATION	Pedestrian	No Change
001013	079493L	HARLEM AVE	Flashers & Gates	No Change
001029	079494T	N DELAPLAINE RD	Flashers & Gates	No Change
001047	079495A	Pedestrian	Pedestrian	No Change
001074	079497N	N COWLEY RD	Flashers & Gates	No Change
001103	079498V	LONGCOMMON	Flashers & Gates	No Change
001105	079499C	Pedestrian	Pedestrian	No Change
001153	079500U	FIRST AVE		No Change
001183	079501B	HOLLYWOOD AVE	Flashers & Gates	No Change
001235	079502H	PRAIRIE AVE	Flashers & Gates	No Change
001273	079503P	MAPLE AVE	Flashers & Gates	No Change
001308	079505D	Pedestrian	Undergrade Structure	No Change
001355	079507S	OGDEN AVE	Undergrade Structure	No Change
001373	079508Y	LA GRANGE RD	Undergrade Structure	No Change
001387	079509F	ASHLAND AVE	Undergrade Structure	No Change
001399	079510A	KENSINGTON AVE	Undergrade Structure	No Change
001420	079511G	STONE AVE	Pedestrian	No Change
001426	079512N	BRAINARD AVE	Flashers & Gates	No Change
001477	079513V	GILBERT AVE	Flashers & Gates	No Change
001529	079514C	WOLF RD	Flashers & Gates	No Change
001539	079515J	LAWN AVE	Flashers & Gates	No Change
001547	079516R	GRAND AVE	Flashers & Gates	No Change
001560	079517X	CENTRAL AVE	Flashers & Gates	No Change
001601	079518E	TOLLWAY	Undergrade Structure	No Change
001637	079519L	HIGHLANDS	Pedestrian	No Change
001644	079520F	OAK ST	Overhead Structure	No Change
001671	079521M	PARK ST	Pedestrian	No Change
001683	079522U	GARFIELD AVE	Flashers & Gates	No Change
001694	079523B	WASHINGTON ST	Flashers & Gates	No Change
001703	079524H	LINCOLN ST	Flashers & Gates	No Change
001719	079525P	VINE ST	Pedestrian	No Change
001747	079526W	MONROE ST	Flashers & Gates	No Change
001780	079527D	STOUGH ST	Flashers & Gates	No Change
001788	079528K	RTE 83	Overhead Structure	No Change
001823	086432M	PROSPECT AV PED	<b>Pedestrian</b>	No Change
001832	079529S	PROSPECT AVE	Flashers & Gates	No Change
001939	079530L	CASS AVE	Flashers & Gates	No Change
001946	079531T	CASS AVE PE XING	Pedestrian	No Change
002039	079532A	FAIRVEW AVE	Flashers & Gates	No Change
002059	079533G	MAPLE AVE	Flashers & Gates	No Change
002103	079534N	WASHINGTON	Flashers & Gates	No Change
002121	079535V	MAIN ST	Flashers & Gates	No Change
002128	079536C	FOREST	Flashers & Gates	No Change

M.P.	DOT #	X'ing Type	Existing Warning Devices	Proposed Warning Devices
002261	079537J	BELMONT RD	Flashers & Gates	No Change
002272	078996B	BELMONT RD PED	Pedestrian	No Change
002359	928129U	I-355 TOLLWAY	Overhead Structure	No Change
002454	079540S	MAIN ST.	Undergrade Structure	No Change
002468	079541Y	LINCOLN AVE	Undergrade Structure	No Change
002541	079542F	YACKLEY	Undergrade Structure	No Change
002681	098019P	NAPER BLVD	Undergrade Structure	No Change
002807	079544U	COLUMBIA ST	Undergrade Structure	No Change
002831	079545B	LOOMIS	Flashers & Gates	No Change
002846	079546H	Pedestrian	Undergrade Structure	No Change
002859	079547P	WASHINGTON ST	Undergrade Structure	No Change
002894	079548W	MILL RD.	Undergrade Structure	No Change
003018	079549D	RIVER RD	Flashers & Gates	No Change
003052	079550X	OGDEN AVE	Undergrade Structure	No Change
003160	079551E	ROUTE 59	Undergrade Structure	No Change
003341	072975M	EOLA RD.	Overhead Structure	No Change
003520	079554A	MCCLURE ST	Flashers & Gates	No Change
003561	079556N	FARNSWORTH A	Overhead Structure	No Change
003609	079557V	OHIO ST	Overhead Structure	No Change
003631	079558C	WOOD ST	Overhead Structure	No Change
003670	079559J	HIGH ST	Overhead Structure	No Change
003730	079560D	SPRING ST	Undergrade Structure	No Change
003738	079561K	NEW YORK ST.	Undergrade Structure	No Change
003748	079562S	GALENA BLVD.	Undergrade Structure	No Change
003756	079563Y	DOWNER PLACE	Undergrade Structure	No Change
003765	079564F	BENTON ST.	Undergrade Structure	No Change
003771	079565M	BROADWAY	Undergrade Structure	No Change
003773	079566U	CLARK ST.	Undergrade Structure	No Change
003780	079567B	Pedestrian	Undergrade Structure	No Change
003804	079568H	NORTH AVE	Undergrade Structure	No Change
004126	079572X	SH IL 31	Overhead Structure	No Change
004239	079574L	LIGHT RD	Cross Bucks	No Change
004282	079575T	PRIVATE		No Change
004314	072965G	ORCHARD RD	Overhead Structure	No Change
004352	079577G	PRIVATE		No Change
004377	079578N	MILL RD	Flashers & Gates	No Change
004452	079579V	KENNEDY	Flashers & Gates	No Change
004569	079580P	CANNONBALL TR	Flashers & Gates	No Change
004665	079581W	SH IL 47	Undergrade Structure	No Change
004809	079584S	W BEECHER	Flashers & Gates	No Change
004896	079586F	ELDAMAIN RD	Flashers & Gates	No Change
005051	079588U	NEEDHAM RD	Flashers & Gates	No Change
005136	079589B	LEW ST	Flashers & Gates	No Change
005149	079590V	HALE ST	Flashers & Gates	No Change
005160	079591C	CENTER ST	Flashers & Gates	No Change
005168	079592J	PEDESTRIAN	Pedestrian	No Change
005171	079593R	WEST ST	Flashers & Gates	No Change



M.P.	DOT #	X'ing Type	Existing Warning Devices	Proposed Warning Devices
005188	079594X	BEN ST	Flashers & Gates	No Change
005280	079595E	LITTLE ROCK RD	Flashers & Gates	No Change
005419	079596L	SANDY BLUFF RD	Flashers & Gates	No Change
005502	079597T	DUVICK AVE	Flashers & Gates	No Change
005564	079598A	LATHAM ST	Flashers & Gates	No Change
005591	079599G	LAFAYETTE ST	Flashers & Gates	No Change
005609	079600Y	EDDY ST	Flashers & Gates	No Change
005615	079601F	MAIN ST	Flashers & Gates	No Change
005628	079603U	GREEN ST	Flashers & Gates	No Change
005704	079604B	GLETTY RD	Flashers & Gates	No Change
005792	079605H	NAT PRSRV XING	Pedestrian	No Change
005873	079606P	SOMONAUK RD	Flashers & Gates	No Change
005925	079607W	SYCAMORE ST	Flashers & Gates	No Change
005931	079608D	GAGE ST	Flashers & Gates	No Change
005948	079609K	GREEN ST	Flashers & Gates	No Change
005990	079610E	PRIVATE		No Change
006053	079611L	N. 48TH.	Flashers & Gates	No Change
006123	079612T	E 2375TH RD	Cross Bucks	No Change
006199	079613A	E 23RD	Cross Bucks	No Change
006303	079614G	SH IL 23	Undergrade Structure	No Change
006405	079616V	E 21ST	Cross Bucks	No Change
006508	079617C	MILL ST	Flashers & Gates	No Change
006560	079619R	MAIN ST	Flashers & Gates	No Change
006660	079620K	E 18TH	Cross Bucks	No Change
006763	079621S	E 17TH	Cross Bucks	No Change
006917	079622Y	E. 1550 TH	Flashers & Gates	No Change
007077	079623F	E 1401 ST	Flashers & Gates	No Change
007135	079624M	PRIVATE		No Change
007166	079625U	PRIVATE		No Change
007208	079626B	EAST ST	Flashers & Gates	No Change
007221	079628P	MAIN ST	Flashers & Gates	No Change
007233	079629W	THIRD ST	Flashers & Gates	No Change
007299	079630R	E. 12TH.	Flashers & Gates	No Change
007402	079631X	E. 11TH	Flashers & Gates	No Change
007505	079632E	E. 10TH	Flashers & Gates	No Change
007608	079633L	E. 9TH	Flashers & Gates	No Change
007736	079634T	PRIVATE		No Change
007812	079635A	E 7TH	Flashers & Gates	No Change
008005	079637N	WELLAND RD (E.5	Flashers & Gates	No Change
008107	079638V	E 4TH ROAD	Flashers & Gates	No Change
008210	079639C	1ST AVE	Flashers & Gates	No Change
008237	079640W	4TH AVE	Undergrade Structure	No Change
008280	079641D	8TH ST	Flashers & Gates	No Change
008281	079642K	PEDESTRIAN	Pedestrian	No Change
008296	079643S	6TH ST	Flashers & Gates	No Change
008305	079645F	5TH ST	Flashers & Gates	No Change
008327	079646M	9TH AVE	Flashers & Gates	No Change

M.P.	DOT #	X'ing Type	Existing Warning Devices	Proposed Warning Devices
008366	079647U	US 52 / IL 251	Undergrade Structure	No Change
008553	079648B	E. 050TH	Cross Bucks	No Change
008618	079649H	E 0000 RD	Flashers & Gates	No Change
008698	079650C	PRIVATE		No Change
008726	079651J	2500N	Cross Bucks	No Change
008785	079652R	CO RD 3420E	Flashers & Gates	No Change
008892	079654E	2400N	Flashers & Gates	No Change
008902	079655L	CO RD 3350E	Cross Bucks	No Change
009014	079657A	PRIVATE		No Change
009056	079658G	2300N	Flashers & Gates	No Change
009136	079659N	CLINTON ST	Flashers & Gates	No Change
009148	079660H	B ST	Flashers & Gates	No Change
009378	079662W	2950E	Flashers & Gates	No Change
009445	079664K	2100N	Cross Bucks	No Change
009551	079665S	2050N	Flashers & Gates	No Change
009608	079667F	2750E	Cross Bucks	No Change
009698	079668M	ANGLING RD	Flashers & Gates	No Change
009723	079669U	PRIVATE		No Change
009837	079670N	EAST ST	Flashers & Gates	No Change
009860	079672C	PEDESTRIAN		No Change
009870	079673J	CHERRY	Flashers & Gates	No Change
009898	079674R	PRIVATE		No Change
009968	079675X	PRIVATE		No Change
010006	079676E	2400E	Flashers & Gates	No Change
010097	079678T	1800N	Flashers & Gates	No Change
010119	079679A	CO RD 2300E	Cross Bucks	No Change
010174	079680U	PRIVATE		No Change
010247	079682H	I-80	Overhead Structure	No Change
010292	079683P	US HWY 34	Overhead Structure	No Change
010342	079684W	N 6TH ST	Overhead Structure	No Change
010398	079685D	EUCLID AVE	Flashers & Gates	No Change
010425	079687S	MAIN ST	Flashers & Gates	No Change
010435	079688Y	PEDESTRIAN	Pedestrian	No Change
010473	079690A	RAILROAD AVE	Flashers & Gates	No Change
010524	079691G	PRIVATE		No Change
010587	079692N	EPPERSON RD	Flashers & Gates	No Change
010731	079693V	PRIVATE		No Change
010750	079694C	PRIVATE		No Change
010851	079695J	1600N	Flashers & Gates	No Change
010897	079696R	1600E	Flashers & Gates	No Change
010951	079697X	PRIVATE		No Change
011026	079698E	CR 1500E	Undergrade Structure	No Change
011081	079699L	MAIN ST	Flashers & Gates	No Change
011098	079700D	LOCUST ST	Flashers & Gates	No Change
011120	079701K	HIGHWAY 8		No Change
011202	079702S	PRIVATE		No Change
011255	079703Y	PRIVATE		No Change

M.P.	DOT #	X'ing Type	Existing Warning Devices	Proposed Warning Devices
011361	079704F	1200E	Flashers & Gates	No Change
011468	079706U	PRIVATE		No Change
011542	079707B	PRIVATE		No Change
011561	079708H	1300N	Overhead Structure	No Change
011665	079709P	MAIN ST	Flashers & Gates	No Change
011692	079710J	WASHINGTON ST	Overhead Structure	No Change
011714	079711R	SH IL 40 & 88	Overhead Structure	No Change
011813	079712X	CO RD 820E	Undergrade Structure	No Change
012000	079713E	650E	Flashers & Gates	No Change
012095	079714L	550E	Cross Bucks	No Change
012196	079715T	440E	Flashers & Gates	No Change
012302	079716A	FIRST ST	Flashers & Gates	No Change
012314	079717G	2ND ST	Flashers & Gates	No Change
012356	079719V	300E	Flashers & Gates	No Change
012412	079720P	PRIVATE		No Change
012438	079721W	PRIVATE		No Change
012475	079722D	200E	Cross Bucks	No Change
012519	079723K	PRIVATE		No Change
012589	079724S	100E	Flashers & Gates	No Change
012701	079725Y	000E	Flashers & Gates	No Change
012740	079726F	PRIVATE		No Change
012842	079727M	2880 E	Flashers & Gates	No Change
012947	079728U	US HWY 34	Undergrade Structure	No Change
013005	079729B	KENT ST	Flashers & Gates	No Change
013039	079730V	EAST	Undergrade Structure	No Change
013095	079731C	MAIN ST	Flashers & Gates	No Change
013104	079732J	TREMONT	Flashers & Gates	No Change
013113	079733R	PEDESTRIAN	Pedestrian	No Change
013129	079734X	PARK ST	Flashers & Gates	No Change
013146	079736L	GROVE	Flashers & Gates	No Change
013160	079737T	BOSS	Flashers & Gates	No Change
013170	079738A	PEDESTRIAN	Pedestrian	No Change
013180	079739G	WEST ST	Flashers & Gates	No Change
013203	079740B	ROSE	Flashers & Gates	No Change
013299	079741H	PAGE ST RD	Flashers & Gates	No Change
013363	079743W	500 N	Flashers & Gates	No Change
013379	079744D	2450 E	Cross Bucks	No Change
013426	079745K	N 450 AVE	Cross Bucks	No Change
013464	079746S	PRIVATE		No Change
013545	079747Y	2350 E	Flashers & Gates	No Change
013615	079748F	300 N	Cross Bucks	No Change
013683	079749M	E 2250 ST	Cross Bucks	No Change
013818	079750G	2150 E	Cross Bucks	No Change
013864	079751N	PRIVATE		No Change
013891	079752V	NE 6TH AVE	Flashers & Gates	No Change
013918	079754J	PEDESTRIAN		No Change
013920	079755R	N E 2ND	Flashers & Gates	No Change

M.P.	DOT #	X'ing Type	Existing Warning Devices	Proposed Warning Devices
013933	079756X	CHESTER ST	Flashers & Gates	No Change
013956	079757E	EXCHANGE ST	Flashers & Gates	No Change
013965	079758L	S W 4TH	Flashers & Gates	No Change
013980	079759T	SW 6TH AVE	Flashers & Gates	No Change
014123	079764P	PRIVATE		No Change
014164	079765W	E 1850 ST	Overhead Structure	No Change
014264	079766D	CO RD 1800E	Cross Bucks	No Change
014360	079768S	CO RD 1700E	Flashers & Gates	No Change
014496	079770T	CO RD 1600E	Flashers & Gates	No Change
014602	079771A	PRIVATE		No Change
014648	079772G	MAIN	Flashers & Gates	No Change
014660	079773N	WALNUT ST	Flashers & Gates	No Change
014676	079774V	DEPOT ST	Flashers & Gates	No Change
014939	079776J	CO RD 1240E	Cross Bucks	No Change
015066	079779E	JOY	Flashers & Gates	No Change
015076	079780Y	PEDESTRIAN	Pedestrian	No Change
015086	079781F	CENTER	Flashers & Gates	No Change
015098	079783U	PEDESTRIAN	Pedestrian	No Change
015187	079785H	PRIVATE		No Change
015273	079787W	Public Xing	Cross Bucks	No Change
015376	079788D	Private		No Change
015467	079789K	Public Xing	Undergrade Structure	No Change
015535	079792T	PEDESTRIAN	Pedestrian	No Change
015538	079793A	WILLARD	Flashers & Gates	No Change
015712	079795N	CO RD 2000N	Flashers & Gates	No Change
015929	079797C	CO RD 9	Flashers & Gates	No Change
015991	079799R	I-74	Overhead Structure	No Change
016089	079800H	FREMONT ST	Undergrade Structure	No Change
016152	079801P	LOSEY ST	Undergrade Structure	No Change
016184	062996D	NORTH ST	Undergrade Structure	No Change
016206	062980G	N PEARL ST	Flashers & Gates	No Change
016216	062981N	MAIN ST	Flashers & Gates	No Change
016232	062982V	MULBERRY	Flashers & Gates	No Change