

Illinois Department of Transportation
Traffic Signal - Railroad Interconnects

Engineering Report:

MPT Table:

<table>
<thead>
<tr>
<th>Time Required</th>
<th>Time Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay¹</td>
<td>1</td>
</tr>
<tr>
<td>Minimum Green (sec)</td>
<td>1</td>
</tr>
<tr>
<td>Yellow Interval² (sec)</td>
<td>4.5</td>
</tr>
<tr>
<td>All-Red Interval³ (sec)</td>
<td>1.5</td>
</tr>
<tr>
<td>Time Before K. K. Receives the Green Interval (sec) (total)</td>
<td>6</td>
</tr>
<tr>
<td>Track Clearance⁴ (sec)</td>
<td>17</td>
</tr>
<tr>
<td>Min. 811 Warning Time Required (sec)</td>
<td>29</td>
</tr>
</tbody>
</table>

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Statewide Interconnect Locations

- State Highway Locations - 215
- Local Road Locations - 39
Traffic Signal Improvements

- New controller cabinets with railroad preempt features
- Track Clearance Green Re-service Feature
- Supervised Interconnect Circuit

March 20, 2001 Purdue University, Indiana
Traffic Signal Improvements

- New controller cabinets with railroad preempt features
- Track Clearance Green Re-service Feature
- Supervised Interconnect Circuit
- Presignals where short storage distance
- Security / Preempt Data Verification
- Remote Monitoring
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Signal Heads on Mast Arms
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Signal Heads on Railroad Cantilever

Measures to Mitigate Higher Warning Times

Median Barriers above 35 sec MPT
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Traffic Signal - Railroad Interconnects

🌟 Measures to Mitigate Higher Warning Times

🌟 Median Barriers above 35 sec MPT

🌟 Grade Crossing Predictors (CWT controllers)

🌟 Studying Advance Preemption

🌟 Video Enforcement

🌟 Flashers on DO NOT STOP ON TRACKS signs

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🌟 Advance Preemption Study

🌟 Participation by Major Railroads

🌟 Minutes of the Meetings Available on Web:

http://cee.ce.uiuc.edu/tol

🌟 Password: palatinestudy

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🌟 Typical Cost of Improvements

🌟 Railroad Crossing Warning Devices Improvements

🌟 $150 K per track (90% IDOT Share)

🌟 Traffic Signal Improvements

🌟 $20 K* (100% IDOT Share)

* Non-Presignal location

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Interconnect Improvements Time Line

Completed Filing Petitions with the ICC

June 30, 1999

ICC Orders / Agreements On File

January 1, 2000

Crossing & Traffic Signal Construction Complete

Dec 31, 2002

March 20, 2001

Purdue University, Indiana
The End