

# Asset Management

## State of Good Repair

# *RAIL INFRASTRUCTURE*

## *Rail Infrastructure Standards*

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*Abstract this document contains information for SGR Inspectors to rate assets in a uniform format.*

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**Intended Audience: SGR Inspectors familiar with Standard for Rail**

**Subject: Rail Infrastructure Standards**




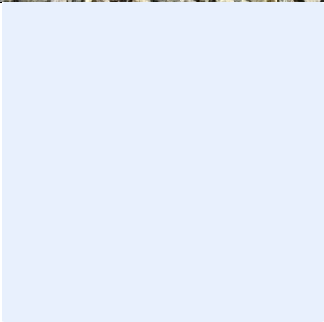
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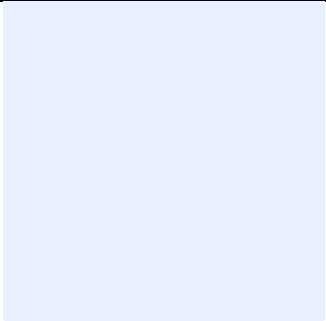
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**Transit Track Inspection and Maintenance, APTA RT-FS-S-002-02.**

**Reference: APTA RT-FS-S-002-02.**

## Rating Area: Wire Segments


5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
4		<p><b>Serviceable, not new.</b></p> <p>Minimal signs of deterioration.</p> <p>Minor deficiencies found. Minor maintenance repairs may be required.</p>
3		<p><b>Serviceable, may need repair.</b></p> <p>Deterioration exists, functioning as designed. Noticeable cracking or corrosion. Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable, needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas degrading the overall system. Numerous deficiencies found. High priority repairs required.</p>



1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>
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**Rating Area: Track Segments**


5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
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4		<p><b>Serviceable, not new.</b></p> <p>Minimal signs of deterioration.</p> <p>Minor deficiencies found. Minor maintenance repairs may be required.</p>
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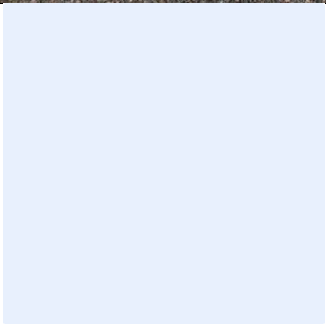
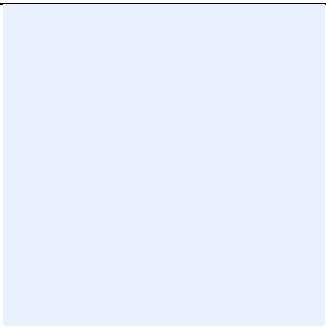

3		<p><b>Serviceable, may need repair.</b></p> <p>Noticeable cracking, settling, rust or shifting. Deterioration exists but functioning as designed. Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
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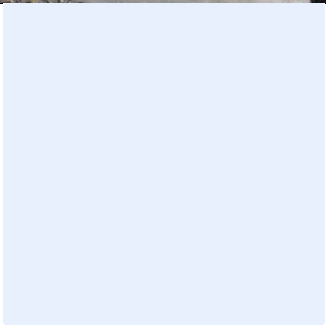

2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas.</p> <p>Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>

**Rating Area: Substations**





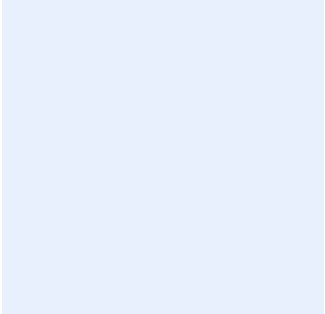
5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
4		<p><b>Serviceable, not new.</b></p> <p>Mechanical/electrical systems may have minor signs of wear. No corrosion or leaks in structure with minimal signs of wear. Primarily cosmetic issues.</p> <p>Minor deficiencies found. Minor maintenance repairs required.</p>



3		<p><b>Serviceable, may need repair.</b></p> <p>Some deterioration exists, but functioning as designed. Noticeable settling, leaking, or corrosion. Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas. Rust perforation in walls/floor/ceiling. Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>
<p><b>Rating Area: Pole disconnect/Bypass switches</b></p>		
5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>





4		<p><b>Serviceable, not new.</b></p> <p>Minimal signs of deterioration. No corrosion.</p> <p>Minor deficiencies found. Minor maintenance repairs may be required.</p>
3		<p><b>Serviceable, may need repair.</b></p> <p>Some deterioration exists, functioning as designed. Surface corrosion only. Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas.</p> <p>Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>

**Rating Area: Track switches**

5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
4		<p><b>Serviceable, not new.</b></p> <p>Minimal signs of deterioration. No corrosion.</p> <p>Minor deficiencies found. Minor maintenance repairs required.</p>
3		<p><b>Serviceable, may need repair.</b></p> <p>Some deterioration exists, functioning as designed. Surface rust only. Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas.</p> <p>Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>



## Rating Area: Relay and Communication Houses/Cases


5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
4		<p><b>Serviceable, not new.</b></p> <p>Mechanical/electrical systems may have minor signs of wear. Structure has no corrosion or leaks; no major problems. Minor deficiencies found. Minor maintenance repairs required.</p>
3		<p><b>Serviceable, may need repair.</b></p> <p>Some deterioration exists, but functioning as designed. Noticeable settling, leaking, or corrosion. Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas.</p> <p>Numerous deficiencies found. High priority repairs required.</p>

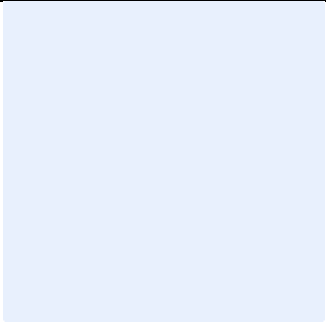
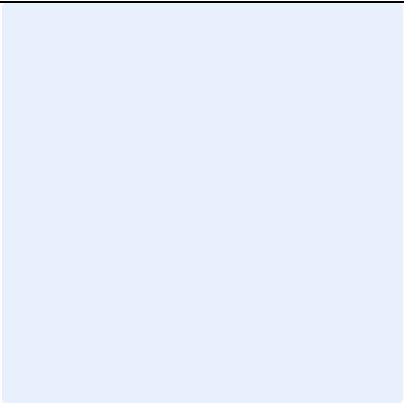
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>
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**Rating Area: Signals**



5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
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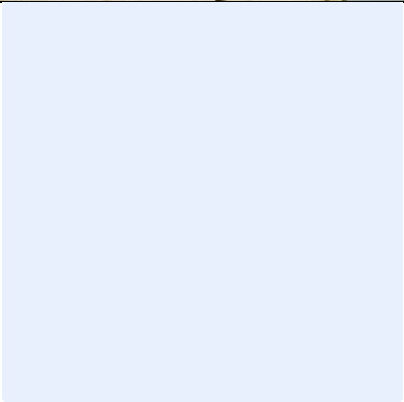


4		<p><b>Serviceable, not new.</b></p> <p>Minimal signs of deterioration. No corrosion.</p> <p>Minor deficiencies found. Minor maintenance repairs required.</p>
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3		<p><b>Serviceable, may need repair.</b></p> <p>Some deterioration exists, but functioning as designed. Surface rust only. Moderate deficiencies found, potential exists for rehabilitation.</p> <p>Lower priority repairs.</p>
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2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas.</p> <p>Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>

**Rating Area: Grade crossing**

5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
4		<p><b>Serviceable, not new.</b></p> <p>Mechanical/electrical systems may have minor signs of wear. Structure has no corrosion or leaks.</p> <p>Minor deficiencies found. Minor maintenance repairs required.</p>





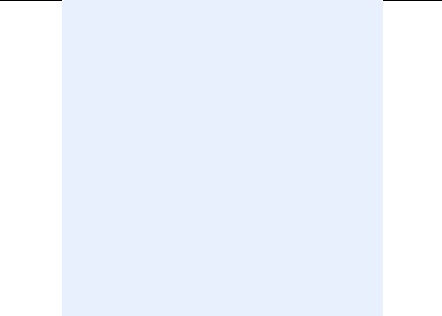
3		<p><b>Serviceable, may need repair.</b></p> <p>Some deterioration exists, but functioning as designed. Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Defects are critical and/or widespread, repairs are necessary in several areas.</p> <p>Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>
<p><b>Rating Area: Retaining walls, barriers, and fences.</b></p>		
5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>



4		<p><b>Serviceable, not new.</b></p> <p>Minor deficiencies found. Minor maintenance repairs may be required.</p>
3		<p><b>Serviceable, may need repair.</b></p> <p>Noticeable cracking, settling or shifting.</p> <p>Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Significant cracking, settling, or shifting.</p> <p>Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>



## Rating Area: Drainage and Culverts

5		<p><b>New construction, no visible defects.</b></p> <p>No deficiencies found. No repair required.</p>
4		<p><b>Serviceable, not new.</b></p> <p>Minor deficiencies found. Minor maintenance repairs may be required.</p>
3		<p><b>Serviceable, may need repair.</b></p> <p>Moderate deficiencies found, potential exists for rehabilitation. Lower priority repairs.</p>
2		<p><b>Serviceable. Needs replaced or extensive repair.</b></p> <p>Uneven ground, poor drainage, standing water.</p> <p>Numerous deficiencies found. High priority repairs required.</p>
1		<p><b>Not Serviceable. Critical defects affecting function, health, or safety.</b></p> <p>Severe deficiencies, highest priority repairs.</p>

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