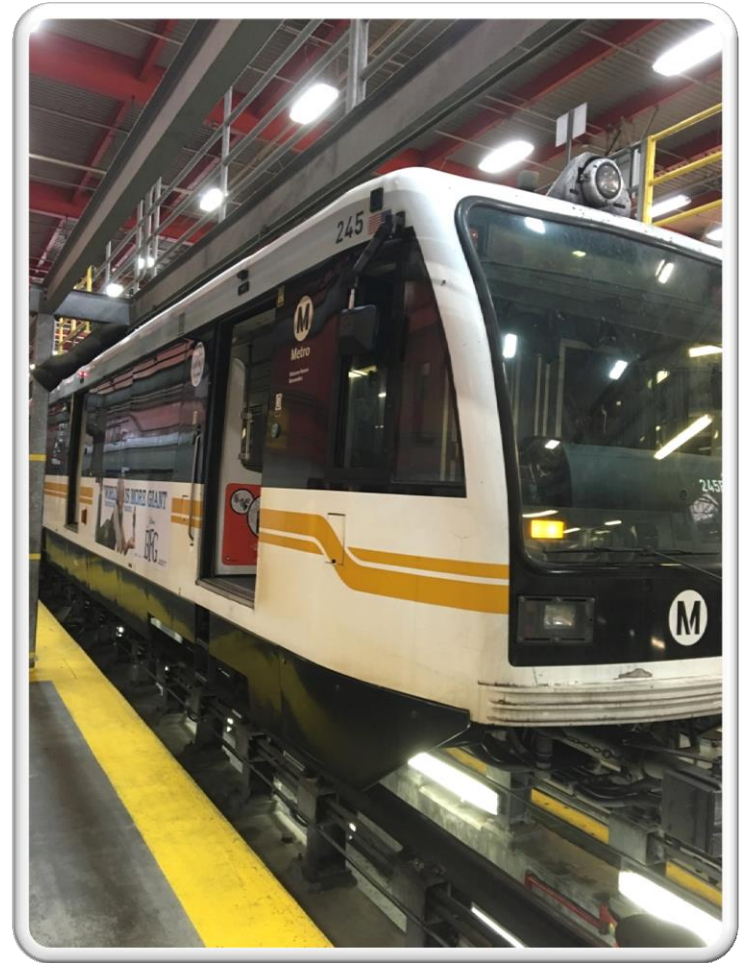


# Blue Line System Disruptions & Investments Update June 16, 2016



**Metro**

# Rail Incident Recap

## During FY15 - FY16:

- 20-26% of systemwide rail incidents were related to electrical issues
- 7-13% of systemwide rail incidents were related to the utility providers (SCE/DWP) experiencing power failures
- 32-40% of Metro Blue Line (MBL) incidents were related to electrical issues

## Rail Incidents Recap

July 1, 2014 - Present

Fiscal Year	System	# of Incidents	% of Total
FY15	Electrical	25	20.7%
	OCS	6	5.0%
	Other	14	11.6%
	Utility	9	7.4%
<b>FY15 Total</b>		<b>54</b>	<b>44.6%</b>
FY16	Electrical	32	26.4%
	Mechanical	1	0.8%
	OCS	7	5.8%
	Other	11	9.1%
	Utility	16	13.2%
<b>FY16 Total</b>		<b>67</b>	<b>55.4%</b>
<b>Grand Total</b>		<b>121</b>	<b>100.0%</b>

## Blue Line Only

Fiscal Year	System	# of Incidents	% of Total
FY15	Electrical	20	32%
	OCS	4	6%
	Other	3	5%
	Utility	1	2%
<b>FY15 Total</b>		<b>28</b>	<b>44%</b>
FY16	Electrical	25	40%
	OCS	4	6%
	Other	3	5%
	Utility	3	5%
<b>FY16 Total</b>		<b>35</b>	<b>56%</b>

# MBL Power Outages



## MBL power outage causes:

1. Manufacturing and calibration issues related to traction power substations
2. Vulnerability of traction power system utility outages
3. State of Good Repair of traction power underground feeders in Downtown L.A. and in Long Beach



# MBL Station Investments

- **Top MBL Electrical Projects:**
  1. **MBL Traction Power Substation (20 substations)**
  2. **MBL Overhead Catenary System Rehabilitation**
  3. **MBL Rail Replacement & Booting**
  4. **MBL Signal System Rehabilitation**
- **MBL FY17 Investment Levels:**
  - Over \$35M
  - Includes State of Good Repair and safety & security projects

