From downtown Minneapolis to downtown St. Paul, Central Corridor Light Rail construction was in full swing along the entire alignment throughout 2012. Roads, bridges, sidewalks, and underground utilities were revamped and light rail tracks and stations that have been in planning for decades were forged.

Though much work still remains prior to the opening day of Central Corridor Light Rail, work completed in 2012 is by far the most visible transformation.

As of the end of December, the Central Corridor Project was at 87% completion. The remaining 13% includes systems work, wrapping up construction on the Operations and Maintenance Facility, and testing.

**General Central Corridor Project Schedule**

<table>
<thead>
<tr>
<th>Civil Construction</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal of existing infrastructure and build out of new roads, sidewalks, utilities, station, and tracks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Systems Work</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct power substations, overhead power system, communications systems, and train control system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Testing</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trains will run along the alignment to test the line prior to opening to the public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Open to the Public</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening date in 2014 to be determined as testing nears completion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A portion of Cedar Street with two large historic buildings and Minnesota Public Radio had track built on a special underground floating slab to minimize vibration. Full construction on this portion of Cedar Street began in January 2012 and the road reopened in its final configuration in December 2012.
Construction started at University Avenue and 29th Avenue in Spring 2012 with crews removing centuries old utilities under the roadway and installing an upgraded system with new water, sanitary sewer, and storm sewer lines.

View of University Avenue near Cleveland Avenue looking east toward Prior Avenue. By fall of 2012, the roadway, guideway, embedded track, and landscaping has been constructed. Part of the systems work for this area was also completed by erecting the large center poles hanging the wires called the overhead catenary system.

Washington Avenue Bridge crossing the Mississippi River completed its structural transformation in Fall 2012.

Prior to Construction Washington Avenue Bridge:
- was fracture critical
- had four girders of support
- stood on three column piers

Upon structural completion in fall 2012:
- bridge now structurally redundant
- eight girders of support
- stands on five column piers

Central Station is located at the center of a block where the vacant Bremer Bank Building once stood. After demolishing the empty building and replacing the skyway in 2011, Central Station was constructed in 2012.
2013 Project Activity Look Ahead

Systems

Work completed through 2012 on the Central Corridor Project may give the illusion that trains are ready to roll, but the system needed to operate trains and make stations operational has just begun. Much like a computer has an operating system and works together with a printer, keyboard, and mouse, systems work will build the operating system and connect all the components needed to operate the light rail.

Power

Some areas of Central Corridor have already seen crews installing portions of the overhead power wires and installing mini power hubs that are about the size of a semi truck. These mini power hubs ensure a consistent flow of electricity is delivered efficiently making the light rail an energy efficient form of transportation.

Signals

The signal system covers everything from switching train tracks where tracks intersect to managing vehicle and pedestrian signals at intersections. The signal system is a complex network that retrieves data for Metro Transit’s Rail Control Center from thousands of data points along the alignment requiring multiple computers so large you can stand in them (see photo left).

Rider Communications

Station platforms have many components that require special installation including ticket machines, public address speakers, Go-To Card readers, and electronic signs that display station names, current time, and messages for customers. All of these systems are remotely controlled and monitored through the Rail Control Center to ensure optimal and secure operations.
New Light Rail Vehicles

In addition to a new light rail line, we are also getting new light rail vehicles. At first glance the vehicles may look similar but there are upgrades both inside and out to ensure a more comfortable and efficient ride. Interior improvements include better heating and cooling to keep riders comfortable, easier to use bicycle racks, and roomier passenger space. The new vehicles also have upgrades making them lighter weight, more energy efficient, and able to stand up to the harsh conditions of Minnesota weather.

Civil construction will end in 2013, including completion of the Operations and Maintenance Facility in downtown St. Paul, the Washington Avenue Transit and Pedestrian Mall on the University of Minnesota campus, and any previous civil work that needs to be reworked.

Later in 2013 and into 2014, testing of the operating system for Central Corridor will take place. During testing, light rail vehicles will run on tracks and test the performance of all elements of the light rail system.

Weighing in at 6,000 pounds lighter, the new Siemens’ light rail vehicles (pictured front) are more energy efficient than the light rail vehicles (pictured back) purchased for Hiawatha LRT.