

## Red and Purple Modernization (RPM) Welcome to the Lawrence to Bryn Mawr Modernization Open House

CTA is announcing the first phase of the Red and Purple Modernization Program.

The purpose of tonight's meeting is to:

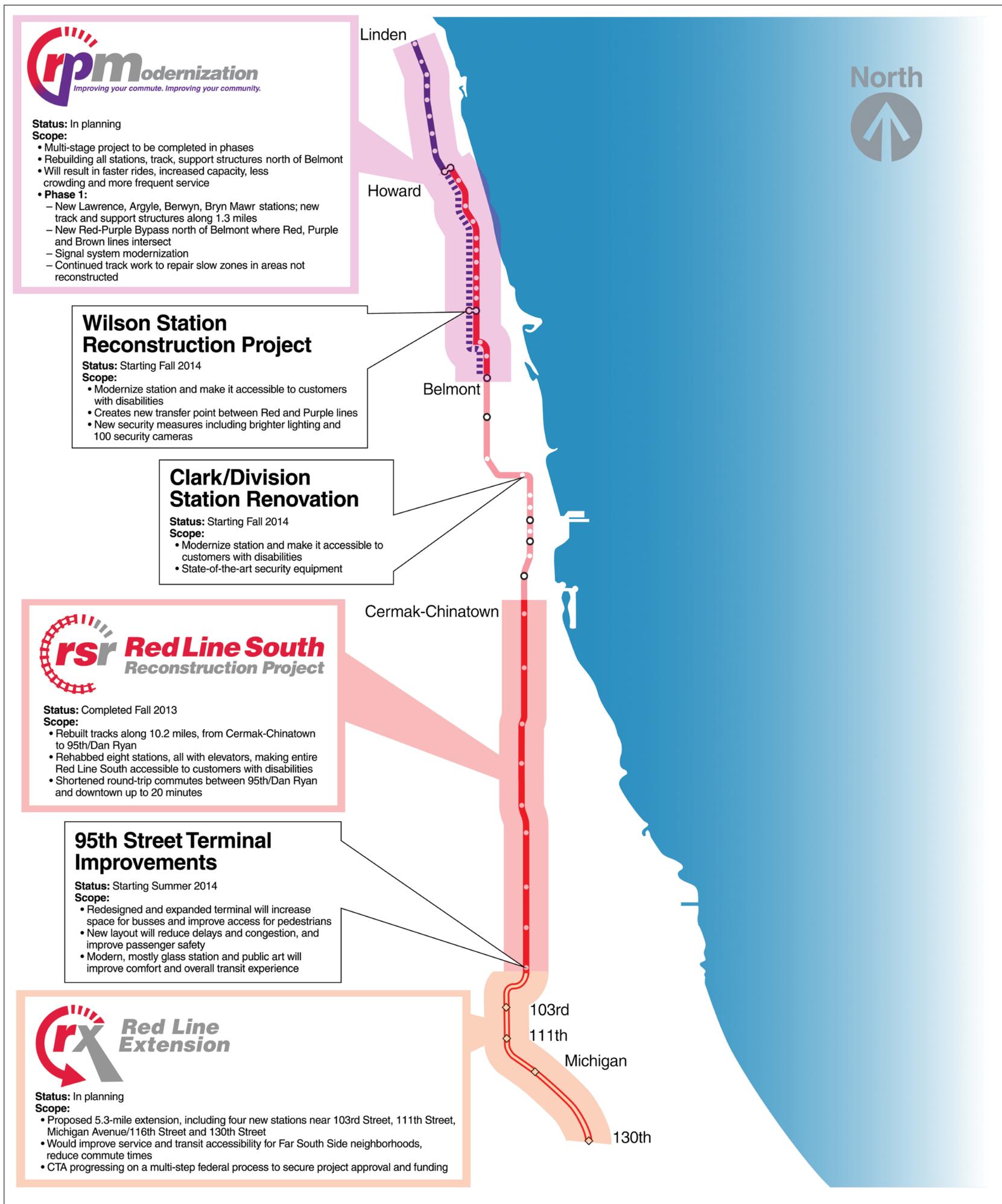
- Share information on the RPM Program and Phase One improvements
- Discuss potential impacts and benefits of the proposed project
- Obtain public feedback on the proposed project to inform the environmental analysis and design

If you have questions, feel free to ask the representatives stationed around the boards.



## The Red Ahead Program

Red Ahead is a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most traveled rail line.



## RPM is needed NOW

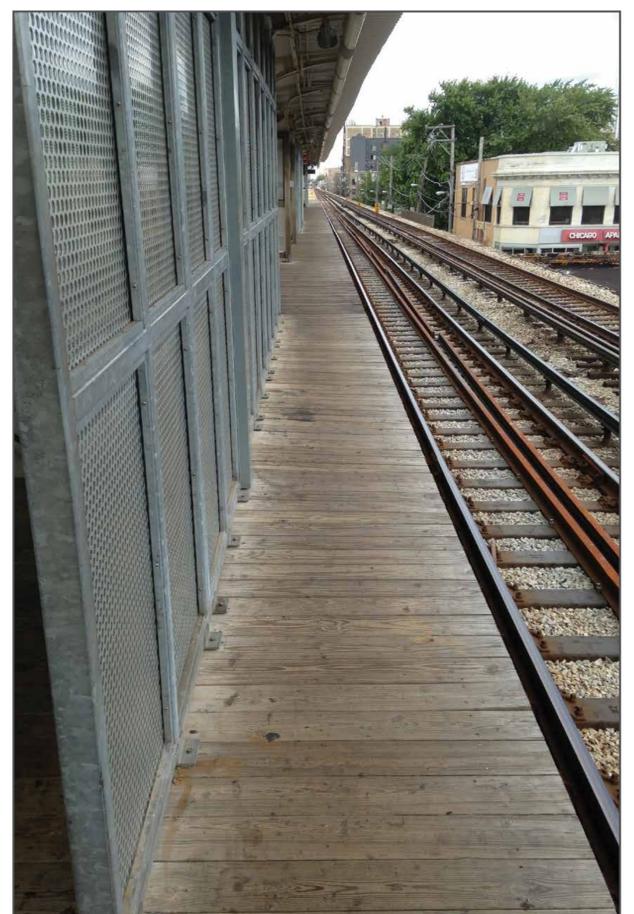
The existing Red and Purple lines:

- Run on structures built more than 90 years ago = higher maintenance cost and slow travel speeds
- Shelter customers in stations built in the 1920's = cramped and not ADA accessible
- Have had a 40% increase in morning and evening ridership over last five years = crowding and less reliability
- Provide 1 out of every 5 CTA train rides = **great potential!**



## RPM Corridor Vision Goals

- Expand capacity
  - More trains with less crowding
- Speed service
  - Fewer curves and better infrastructure
- Improve reliability
  - More trains on-time
- Improve accessibility
  - All stations accessible to people with disabilities
- Build modern facilities
  - New wider stations, more reliable infrastructure for the next 60-80 years
- Support economic development
  - More jobs and new development opportunities
- Improve customer experience
  - Modern, quiet, and smooth ride



## RPM – Phase One

- Build the **Red-Purple Bypass** north of Belmont
- Modernize stations, track, and structure from **Lawrence to Bryn Mawr**
- Track work to repair slow zones along the entire corridor, beyond the Phase One improvements
- Modernize signal system to increase capacity and reliability
- Combined, the Phase One projects are estimated to cost \$1.7 billion at completion

## Why Phase One?

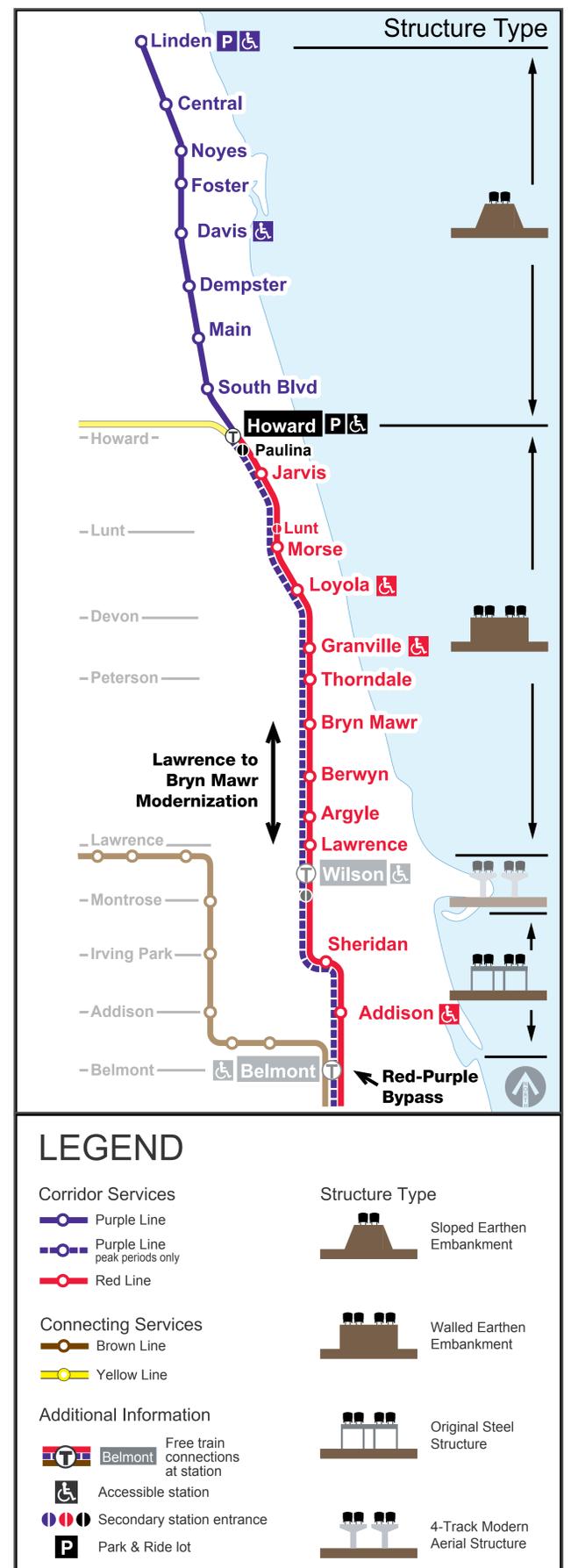
- Benefits **88% of all current RPM trips** 110,000 every weekday
- Improvements would save RPM customers **1 million hours every year**

## Red-Purple Bypass Project

- Single largest capacity expansion and time-saving element of RPM
- **150,000 rides every weekday** on Red, Purple, and Brown line trains have to travel through this intersection and would benefit from improved reliability and reduction in delay

## Lawrence to Bryn Mawr Modernization Project

- Replaces 1+ miles of 90 year old retaining wall embankment – the most difficult RPM structures to maintain
- **28,000 trips** begin or end at the stations being reconstructed
- **45,000 people** live within ½ mile of these stations, twice as dense as the average Chicago neighborhood
- Allows for continuation of modern infrastructure from the adjacent Wilson Station Reconstruction Project **starting this year!**



## Lawrence to Bryn Mawr Modernization Project

### Challenge: Old & Narrow Stations

The **Lawrence, Argyle, Berwyn, and Bryn Mawr** stations are in need of a complete rebuild.

- Platforms are only 12 feet wide, too narrow for elevators
- Support structures are over 90 years old
- Columns in stationhouse limit sightlines
- Few amenities possible in small footprint
- Narrow platforms slow the boarding process

### Proposed Solution: Construct Modern Stations

- More **comfortable** for waiting customers
- More space for **amenities** like benches, wind screens, and real-time information
- **Better sightlines** in stationhouse
- **Faster and easier** boarding



Existing: 12-foot wide platform

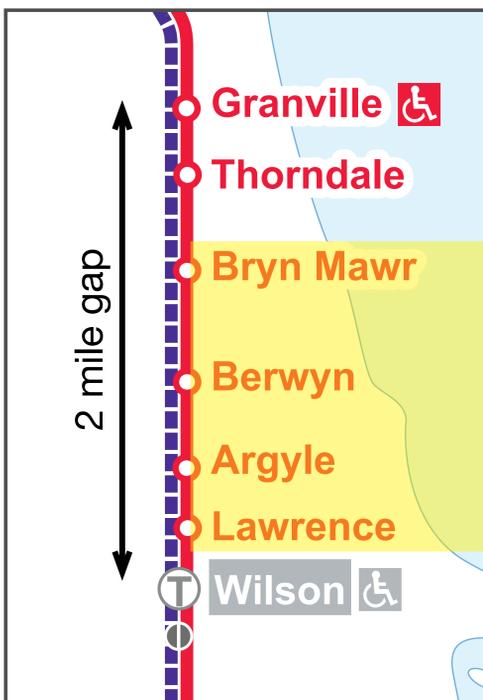


Modern: ~24-foot wide platform



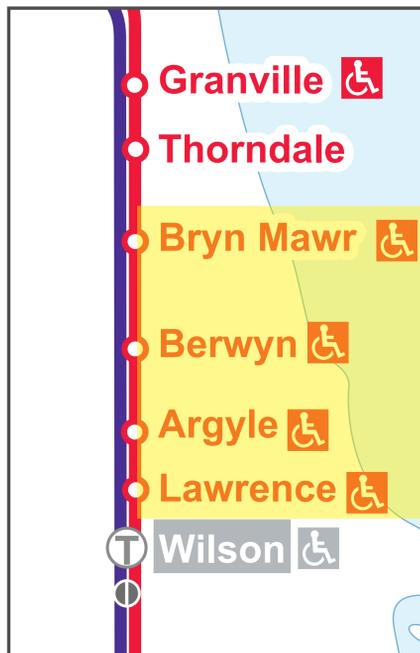
Bryn Mawr station concept rendering

## Lawrence to Bryn Mawr Modernization Project



### Challenge: ADA Accessibility

- **None** of the four Lawrence to Bryn Mawr stations are accessible to people with disabilities
- **Two-mile gap** in accessible stations - even after the Wilson station is reconstructed
- Four highest priority stations for added ADA accessibility in the RPM corridor



### Proposed Solution: Full ADA Access

The **Lawrence, Argyle, Berwyn, and Bryn Mawr** stations will be accessible to individuals with disabilities:

- Conveniently located elevators
- Wider platforms
- Improved communications and signage for visually and hearing impaired individuals

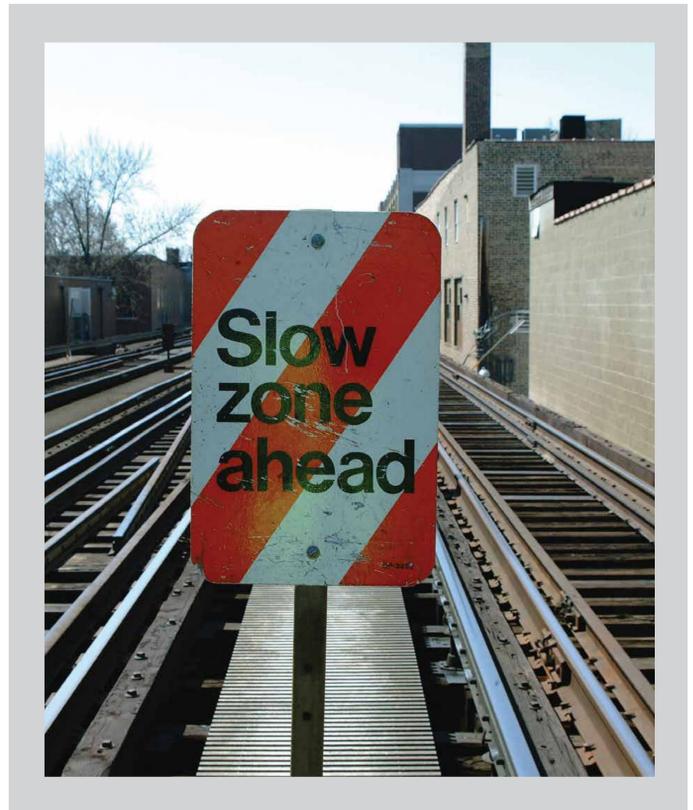


Station interior concept rendering

## Lawrence to Bryn Mawr Modernization Project

### Challenge: Slow Zones

- Old infrastructure requires frequent repairs and restricted speeds to maintain safe travel
- Currently, more than **six miles (18.4%)** of RPM corridor track are under slow zone conditions leading to:
  - Slower travel speed limits of as little as 15mph
  - Increased maintenance costs
  - Increased operating costs to maintain level of service



### Proposed Solution: Track Improvements

- New track will create a smoother, more comfortable ride for customers
- New support structures
- New bridges and viaducts for the Red Line between Lawrence and Bryn Mawr
- Other Phase One improvements in the corridor:
  - New, modern signals
  - Additional track and structure work outside of the Phase One projects to reduce slow zones



Concept for new viaduct with no columns in the street



Alley spanning structural concept

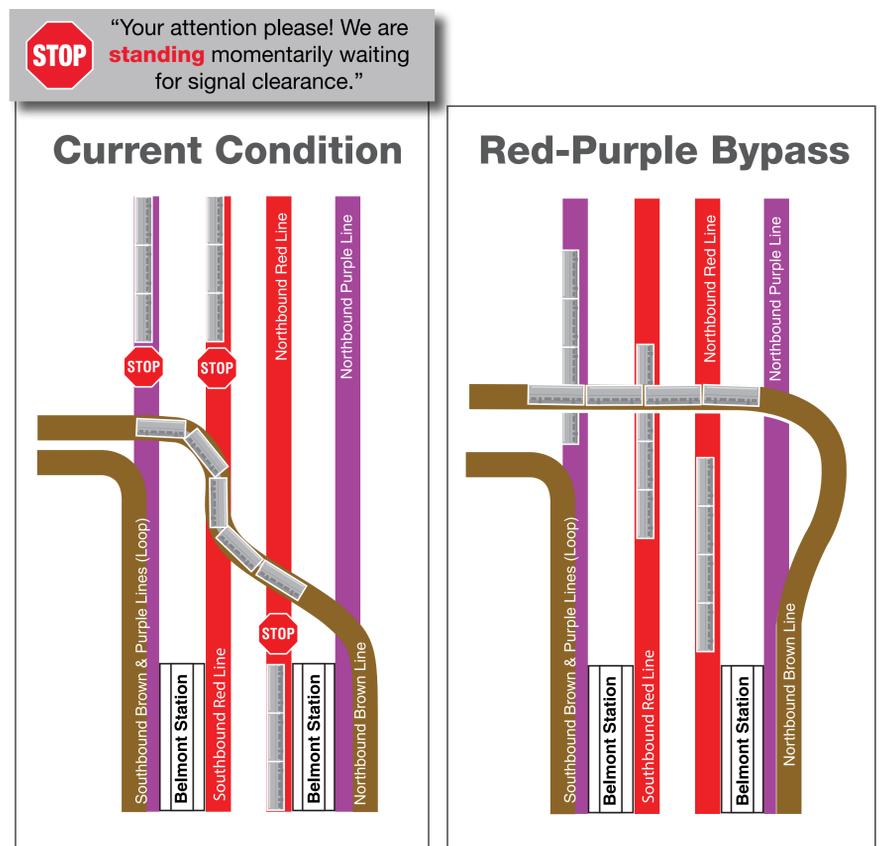
## Red-Purple Bypass Project

### Challenge: Red, Purple, and Brown Line Intersection

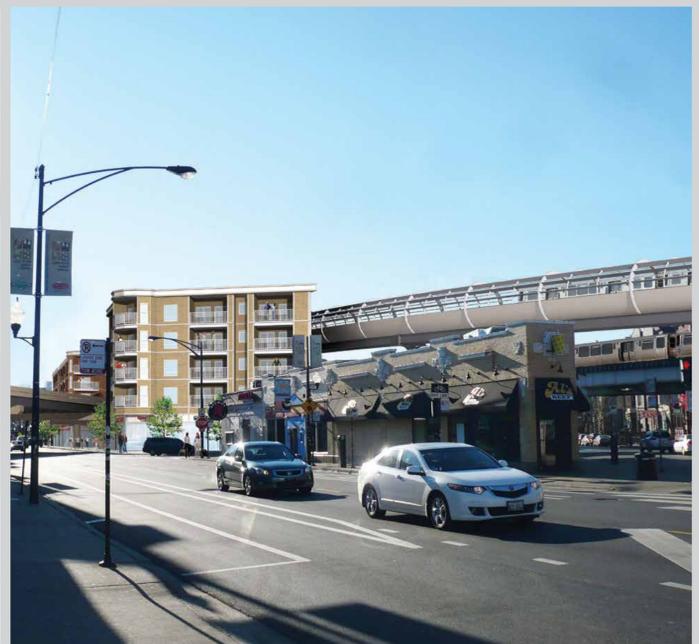
- Up to **150,000 rides** pass through the busy rail intersection near Belmont every weekday
- A single Brown Line train can delay three other trains at a time

With the new bypass, northbound Brown Line trains would proceed along a dedicated rail line without physically crossing Red and Purple line tracks.

- Red and Purple line trains would not need to stop and check or wait for clearance from crossing trains.
- An Environmental Assessment will be conducted for the Red-Purple Bypass Project, analyzing community and environmental impacts



Concept rendering looking north from Belmont platform



Concept rendering with transit oriented development

## Environmental Assessments (EA)

Transportation projects seeking federal funding are required to conduct environmental analysis under the National Environmental Policy Act (NEPA). Two Environmental Assessments will be developed, one for the Bypass and one for the station modernization project.

### The EAs will include:

- A description of the proposed project
- An explanation of the existing environmental and community setting
- An analysis of potential positive and negative impacts of construction and operation of the project
- Proposed ways to reduce or eliminate potential negative impacts

### EA Considerations and Public Outreach Topics



**Construction and operational features** – transportation, property displacements, noise and vibration, hazardous materials, energy, construction impacts



**Community features** – land use and economic development, neighborhood and community impacts, historic resources, visual and aesthetics, environmental justice, safety and security



**Natural features** – air quality, water resources, biological resources, geology and soils

- The majority of these resources are expected to experience benefits or minimal permanent impacts after implementing the proposed mitigation strategies
- We are requesting feedback from the community to inform the environmental analysis and design of the Phase One projects

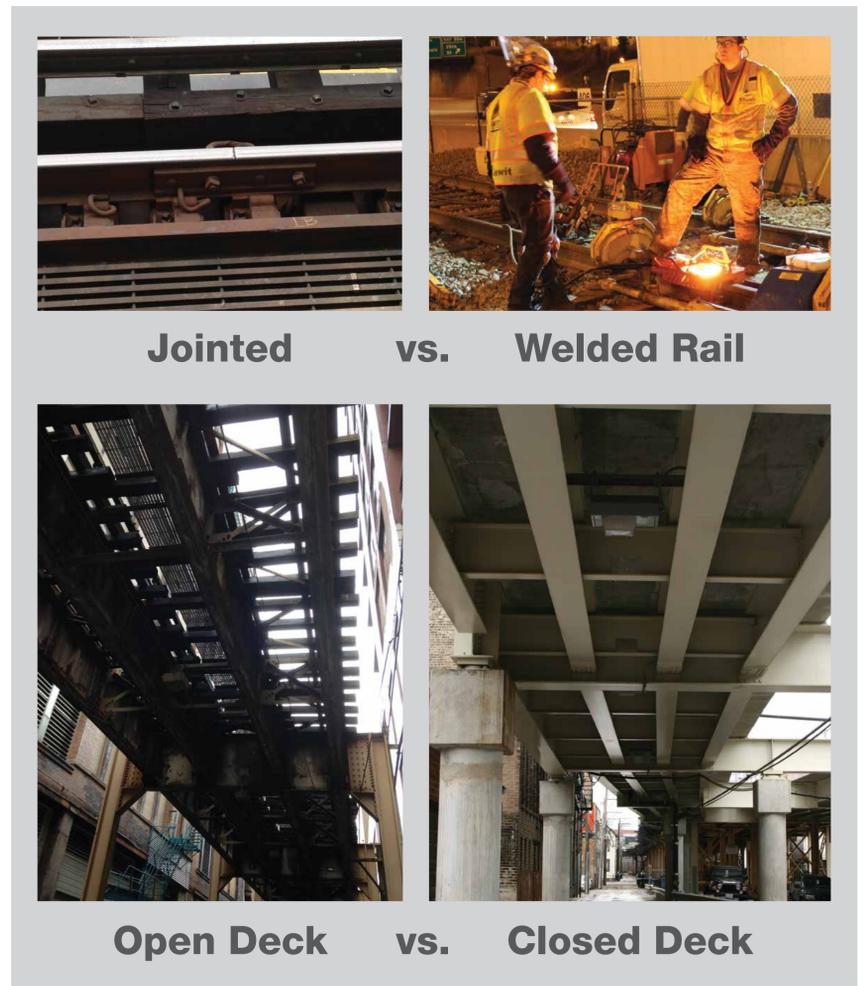
## Noise Reduction Strategies

Among the concerns voiced to date have been the potential noise impacts of running faster, and/or more frequent trains.

CTA is exploring options to allow for noise levels to be similar to today. Some options under consideration include:

- Continuous welded rail
- Closed deck structure
- Noise barriers, where necessary

CTA will be performing noise and vibration analysis as part of our environmental work to determine the most appropriate measures.



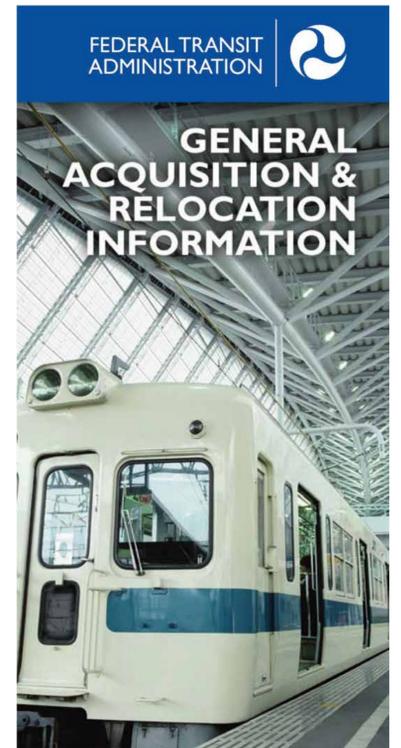
## Visual Environment

- Improving vertical clearances over streets would increase the height of the structure
- Improvements would not change the existing character of communities
- Views from stations would essentially remain unchanged
- Minor impacts to building abutting the existing track could be expected but these would not change the context of residential views
- Alley Spanning
  - Alley spanning is proposed as part of the project
  - Minimizes impacts to existing properties
  - Lighting and other safety features would be installed to ensure safety
  - Structure would not hinder access to alley, garages, or parking lots

## Property Displacements

CTA's RPM Phase One projects would require some existing properties to be acquired to accommodate:

- Expanded station platforms
- Reduction in curves
- The Red-Purple Bypass
- Construction staging areas



### Property Displacements: A Comparison

Project	Red and Purple Modernization - Phase One		Brown Line Capacity Expansion
	Red-Purple Bypass	Lawrence to Bryn Mawr Modernization	2006-2008 For reference
<b>TOTAL Primary Building Displacements</b>	<b>16</b>	<b>3</b>	<b>40</b>

To mitigate the impact of acquisition, property owners are protected by the Federal Uniform Act on relocation assistance and property acquisition.

Property owners:

- Would be paid **not less than fair market value** for their land and buildings
- May be eligible for compensation **equal to the original purchase price** of the property

Property owners and renters:

- Would be **compensated for the cost of relocating** their business or residence

CTA is committed to reducing impacts:

- CTA has already conducted studies to reduce impacts and successfully reduced building impacts to less than half of previous alternatives
- CTA will continue to work with the community and property owners to minimize property impacts.

## Opportunities for Transit Oriented Development

Parcels remaining after construction will be made available for new residential and retail development near:

- Red-Purple bypass
- Lawrence
- Bryn Mawr

Transit Oriented Development will be encouraged after construction in order to:

- Increase economic development
- Reduce visual impacts of bypass
- Increase activity and transit ridership

### Transit Oriented Development (TOD)

Development that is near a train station and oriented to transit riders. TOD often includes a mix of uses, with residential on upper floors and retail on the ground floor. TOD projects are often designed to encourage walking, an active street life, and transit ridership, and can have fewer parking spaces and more residential units.

### TOD Opportunities near the Red-Purple Bypass Mixed Use

Current Condition

Potential Redevelopment



Facing northwest from Belmont Avenue and Wilton Avenue



Facing north from Clark Street and Buckingham Place



Facing south from Sheffield Avenue, Clark Street, and Newport Avenue

### Residential Mid-rise

Current Condition

Potential Redevelopment



Facing southwest from School Street and Wilton Avenue

### Individual Townhomes

Current Condition

Potential Redevelopment



Facing southwest from School Street and Wilton Avenue

### TOD Opportunities along the Lawrence to Bryn Mawr Modernization Project Mixed Use

Current Condition

Potential Redevelopment



Facing southeast from Broadway and Ainslie Street

## Economic Development and The Brown Line Capacity Expansion Project

Recent analysis along the Brown Line Expansion Project corridor has shown:

- Median home values near the Brown Line grew over 40% from 2000 to 2011, **twice** as quickly as the RPM corridor
- Since 2010, 15% of all City of Chicago new construction building permits were issued near Brown Line stations, **three times** as many per square mile as the RPM corridor
- Ridership on the Brown Line grew **50% quicker** than on the Red Line between 2000 and 2011

### About the Brown Line Expansion

Major investments in transit infrastructure can result in proven economic development benefits.

- Constructed from 2006-2009
- \$530 million investment
- Lengthened platforms to accommodate 8-car trains
- Reconstructed 16 stations and added ADA access



**Belmont station under construction in 2007**

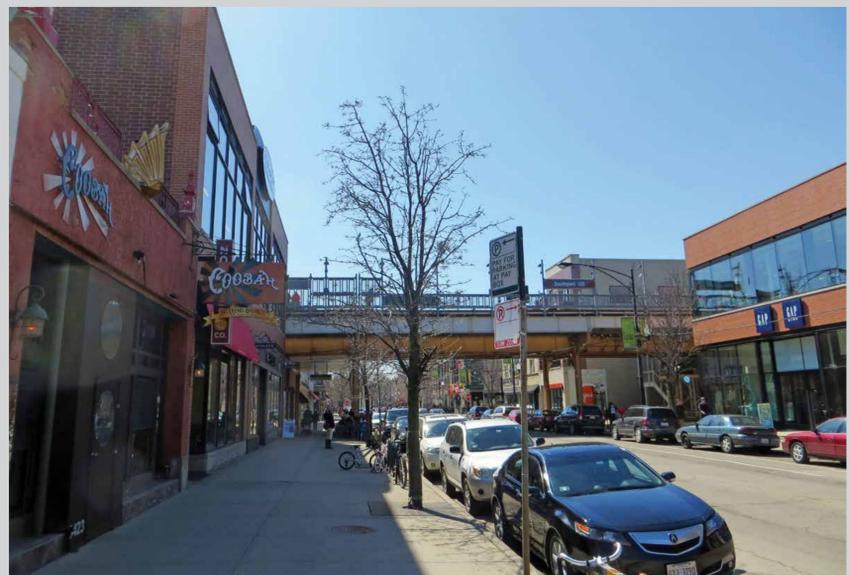
### Economic Development on the Brown Line

**Before (2002)**



**Southport station area**

**Today (2014)**



**Recent development has increased density and activity**

## Construction Impacts\*

### Service impacts

- Temporary station closures during construction
- Partial track closures may delay trains and/or require trains to bypass stations in one direction

### What CTA will do to reduce impacts:

- Complement existing bus routes with bus shuttles, as necessary
- Notify customers of changes in service
- Continue to perform engineering studies with the goal of reducing construction impacts

### Community and business impacts

- Temporary street closures
- Temporary construction noise
- Construction equipment and material storage

### What CTA will do to reduce impacts:

- Road closures will be announced and detours provided
- Notices of noise-generating activities will be posted
- Off-street construction staging areas have been identified to reduce the amount of material and equipment in the neighborhood
- **CTA will continue dialogue with the community**

\* Specifics on construction will be developed through additional engineering and design work.



## Historic Resources

The Lawrence to Bryn Mawr Modernization Project passes through three National Register Historic Districts

- Uptown Square Historic District
- West Argyle Street Historic District
- Bryn Mawr Avenue Historic District



**Uptown Square  
Historic District**



**West Argyle Street  
Historic District**



**Bryn Mawr Avenue  
Historic District**

CTA is committed to working with the public and stakeholders through project development to minimize impacts to historic resources.

Section 106 of the National Historic Preservation Act deals with project effects on historic properties. CTA and FTA are working with the Illinois Historic Preservation Agency and parties interested in historic resources to determine the effects of the Lawrence to Bryn Mawr Modernization Project on historic resources.

If you are interested in historic properties and would like additional information, please see a CTA team member.

## Project Funding for Core Capacity Expansion projects like RPM

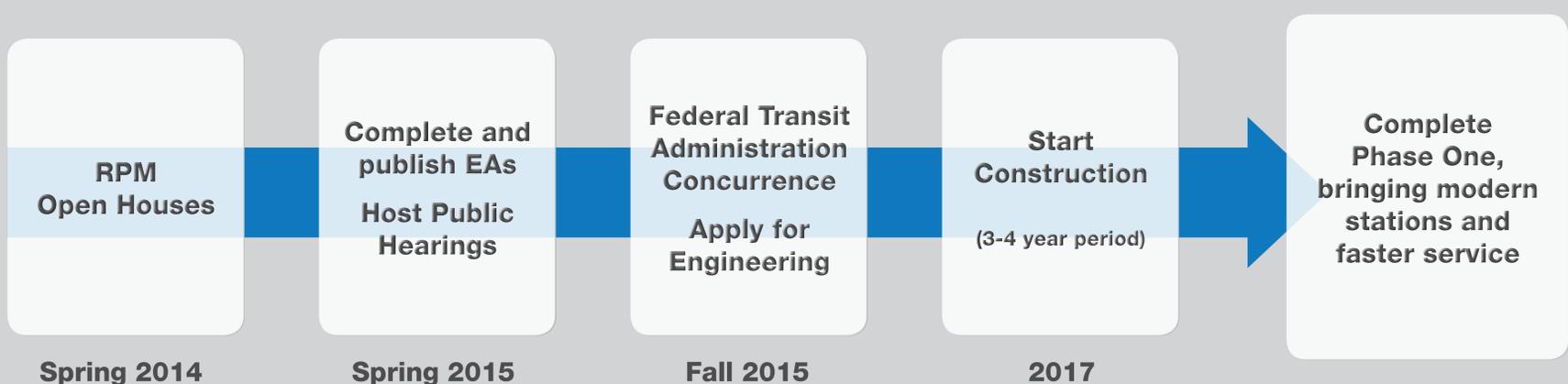
CTA is pursuing a wide range of local, state and federal sources to fund the RPM Phase One projects, estimated at \$1.7 Billion, as well as future phases of the RPM program

Recent changes in federal law provide an opportunity for funding

CTA is looking at cost-saving strategies through alternative construction and financing methods

## Next Steps

### Continuing dialogue with the public



## Thank you for participating! Stay Involved

To provide your input, fill out a comment card and place it in the box provided.

**Join Contact List:** At the sign-in desk



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