Chicago: Hub of the American Rail Network

Chicago’s rail system handles

47% OF INTERMODAL RAIL CONTAINERS
& 28% OF RAIL CARS IN THE U.S.

$641 BILLION WORTH OF GOODS EACH YEAR

Source: Annual Carloads and Value, 2017 STB Confidential Waybill Sample.
North American Rail Trade Depends on Chicago

• 47 percent of all intermodal units in the U.S. move through Chicago

• Between 2005 and 2017, Chicago outperformed the national rail market, particularly due to increasing intermodal traffic

• California, Texas, British Columbia, and Washington are the top origins of rail traffic moving to and through Chicago*

• California, Ontario, Texas, and Pennsylvania are the top destinations of rail traffic moving from and through Chicago*

*Measured by value
Source: Confidential Surface Transportation Board Waybill Data, 2005-2017
Chicago Remains the Largest North American Rail Gateway

- The Chicago region dominates the U.S. rail market in both market share and total volumes moved
  - Chicago handles about 67% of all East-West Gateway Traffic
  - Chicago handles about 85% of intermodal East-West Gateway Traffic
  - Chicago's market share among East-West Gateways is increasing

Source: Confidential Surface Transportation Board Waybill Data, 2005-2017
Top North American Container Ports, 2019

Source: Chicago Metropolitan Agency for Planning Intermodal Facility Lift Counts and Regional TEU Estimate, 2019; American Association of Port Authorities, 2020

*Chicago data is from 2018
Top Global Container Ports, 2019

Source: Chicago Metropolitan Agency for Planning Intermodal Facility Lift Counts and Regional TEU Estimate, 2019; World Shipping Council, July 2019.
Why CREATE is Needed

The Chicago region remains the nation’s premier freight and rail hub

Freight rail trade (by value) within Chicago will more than double between 2012 and 2045

Many of the region’s rail lines are inadequate for current and future freight and passenger needs

Modernizing the rail network is necessary to maintain and improve our region’s economic competitiveness

Source: Chicago Metropolitan Agency for Planning
What is CREATE?

A $4.6 billion Public-Private Partnership (PPP) to improve transportation through the Chicago region by:

- Increasing capacity, speed, and reliability for freight train traffic
- Separating freight and commuter trains at 6 key junctions
- Eliminating 25 road/rail grade crossings through grade separations

CREATE is a cooperative program among:

- US Dept. of Transportation (FHWA & FRA)
- Illinois Dept. of Transportation (IDOT)
- Chicago Dept. of Transportation (CDOT)
- Cook County Dept. of Transportation and Highways (DOTH)
- 6 major North American freight rail carriers and 2 switching railroads
- 2 passenger carriers (Amtrak and Metra)
CREATE Program
70 Projects

- 25 road/rail grade separations
- 6 passenger/freight rail grade separations
- Railroad projects to improve rail infrastructure and upgrade technologies
- Viaduct improvement program
- Grade crossing safety enhancements
- Rail operations and visibility improvements
Four Corridors

- **P**: Passenger Corridors
- **EW**: East-West Corridor
- **B**: Beltway Corridor
- **WA**: Western Avenue Corridor

[Map of CREATE Designated Corridors]
Project Status

- Completed projects: 31
- Projects under construction (Phase III): 4
- Projects in final design (Phase II): 8
- Projects in environmental review (Phase I): 8
- Remaining projects: 19
Project Status Summary
Rail is the Most Sustainable Way to Move People and Freight

- Moving freight by rail is 4x more fuel efficient than by truck
- 1 train can carry the equivalent of hundreds of trucks
- Passenger rail has the lowest impact on climate than other compatible modes
- Railroads help reduce the huge economic and environmental costs associated with highway congestion
- By investing in the rail system, shippers are more likely to choose to move goods by rail

**U.S. railroads, on average, move 1 ton of freight 470+ miles on 1 gallon of fuel**
How CREATE Benefits Communities

Currently, freight and passenger trains, motorists, and pedestrians are delayed at grade crossings.

Communities are impacted by train idling, noise, and restricted access.

Motorists and pedestrians take safety risks going through or around blocked crossings.

CREATE grade separation projects and other infrastructure improvements ameliorate these issues.
Benefits of CREATE

- Passenger train delay reduced by over 1.3 million passenger hours annually.
- 92,000 hours of truck delay and 230,000 hours of motorist and bus passenger delay will be saved.
- 200 vehicle crashes with trains will be avoided.
- 2,800 metric tons/year avoided emissions from idling vehicles.
- Enables extra 50,000 freight trains to travel through the greater Chicago rail network annually.
- 122 million tons of freight per year would travel by rail, avoiding 18,500 truck trips per day on highways.

Benefits generated over 30 years.
Example of Local Grade Crossings

Maple Avenue at BNSF – Brookfield

31st Street at IHB – La Grange Park

Harlem Avenue at BNSF - Berwyn

47th Street at East Ave. – La Grange
Joint evaluation between local and state agencies of the region’s busiest railroad crossings

Identified priority grade separations or crossing improvements

- 47 priority crossing locations selected
- 9 groupings of multiple crossings
- 16 crossings are also part of the CREATE Program
Northeastern Illinois Priority Grade Crossings 2019

Legend
- Railroads
- CREATE Program Crossings
- All Other Crossings

Annual Avg. Daily Traffic (AADT)
- < 3,000 AADT
- 3,001 - 10,000 AADT
- > 10,000 AADT

- Interstate
- Principal Arterial
- County Boundary
- Chicago City Boundary
Projects In Motion
Recent Grant Awards

Argo Connections (B9) and portions of 75th Street Corridor Improvement Project (P3, GS19)
Federal Highway Administration INFRA Grant
$132 Million
June 2018

Dolton Junction Interlocking Upgrade (WA11)
Federal Railroad Administration CRISI Grant
$19 Million
June 2019

95th Street and Union Pacific Grade Separation (GS21a)
Invest in Cook Grant
$500,000
July 2019

Pullman Junction Stage A (EW3a)
Federal Railroad Administration CRISI Grant
$13 Million
March 2020
2018 INFRA Grant Award – 75th St. CIP

75th St. CIP
(design and partial construction)

Argo Connections
(construction)
Argo Connections (B9) Summit

- Improvements benefit Amtrak, BRC, CN, CSX, IHB, Metra railroads
- Constructing a new double track connection and crossovers between the BRC and IHB/CSX line at Archer Avenue and 63rd Street in Summit, IL
- Upgrading mainline crossovers to accommodate higher speeds, from 10 mph to 25 mph
- Improving Argo Yard
- Groundbreaking April 2019
The CREATE partners will seek future funding to undertake construction of P2 and EW2.
Community Mobility Improvements

Education Program
- CREATE in the Classroom
- Grants to science & engineering
- Programs serving the community
75th Street Corridor Improvement Project (CIP)
National Model for Community Partnership

Local Hiring and Workforce Development
DBE and Minority Contracting

“As I keep going to the apprentice school and grow in the company, the tasks get bigger, and they trust me more to do certain things by myself. Everything takes time and you got to build a certain kind of relationship, so in the future, they can trust me with even bigger stuff.”
Roy Barrett, Laborer on Argo Connections (B9)
Cottage Grove Grade Separation (GS23A) Dolton

2019 CMAP STP Grant for Phase I Study - $2 Million
Lead Applicant: Village of Dolton
Partner: Cook County

Cook County is currently conducting a grade-separation study to assist in planning for Phase I

Phase I Preliminary Engineering study will begin in 2023
Cottage Grove Grade Separation (GS23A) – Dolton

• Grade separating Cottage Grove Avenue and the IHB and CSX rail tracks, from 138th Street to 142nd Street
• Eliminate delay to approximately 1,300 vehicles daily, alleviating more than 26,000 annual motorist hours of delay
• Reduce roadway congestion, improve safety, and eliminate the potential for collisions between vehicles and trains
Dolton Junction Interlocking (WA11)
Dolton and Riverdale

Current Conditions:
• 5 major railroads (CN, CSX, IHB, NS, UP) meet at Dolton Junction
• 3 active rail yards feed into the junction
• Outdated signal design and technology cause bottleneck delays

Proposed Improvements
• Upgrade and reconfigure CSX/IHB/UP connections
• Construct a third main line
• Increase freight train speeds on multiple routes from 15 mph to 30 mph
Completed Projects
Canadian Pacific Crossover Upgrades (B1) – Franklin Park

Improvements reduce delays for both Metra and Canadian Pacific

- Installed five crossovers and associated signaling on the Metra tracks serving the Metra Milwaukee District West Line and Canadian Pacific freight routes
- Automated freight train switching for access into and within Bensenville Yard
- Reduced the number of freight trains within Bensenville Yard, cutting delays at nearby at-grade crossings
- Completed December 2020
25th Avenue and Union Pacific (GS6) – Melrose Park

- Created an overpass for vehicles using 25th Avenue
- Alleviated 28,400 annual motorist hours of delay
- Completed 2016
Belmont Road at Metra/BNSF (GS7) – Downers Grove

- Road underpass eliminated the at-grade crossing of the BNSF tracks at Belmont Road
- Metra and Amtrak also operate on these tracks
- A pedestrian tunnel was constructed as part of this improvement
- Completed 2012

Completed grade separation at Belmont Road facing north
BNSF (WA4) – Chicago

- Constructed new track connection between two BNSF Subdivisions
- Reused and reconstructed railroad bridge over the Chicago Sanitary and Ship Canal
- Replaced railroad over roadway viaducts along with sidewalks, roadway, and lighting
- Installed new connections to CN and CSX
- Installed new crossovers to improve connections for 22 freight trains daily
- Improved train travel time between two BNSF yard facilities and reduced idling time
- Completed 2019
71st Street Grade Separation (GS14) – Bridgeview

- Road underpass built to separate 71st Street and the IHB/CSX tracks just west of Harlem Avenue
- Completed 2013
Union Pacific Third Mainline (B2) – Melrose Park

- 60 freight trains and 59 Union Pacific Metra trains affected
- Constructed 3.5-mile third main track on UP
- Constructed railroad bridge over Addison Creek
- Constructed flyover connection from the Indiana Harbor Belt to the UP
- Control points reconfigured
- Upgraded track between UP and IHB
- Metra’s Berkeley and Bellwood passenger stations improved; pedestrian underpasses constructed
- Completed 2013
Englewood Flyover (P1) – South Looking North

- Improvements benefit Metra, NS, and Amtrak
  - Removed conflict point between commuter, passenger, and freight trains
  - Alleviated Amtrak’s most severe delay point in the Midwest
  - Completed 2014
130th Street and Torrence Avenue (GS15a) – Chicago

- Eliminated the at-grade crossings of the two Norfolk Southern main tracks at 130th Street and Torrence Avenue
- Eliminated conflict between railroad and Ford Plant access
- Improved Ford Plant site logistics
- Road underpass constructed
- Completed 2015

Source: BNSF and NS
Viaduct Improvement Program – Chicago

- Locations in the City of Chicago
- Improved roadways, sidewalks, and drainage under railroad viaducts
- Enhanced safety and security for motorists, pedestrians, and bicyclists
- 37 locations completed in 2006
- 14 locations completed in 2012
- 11 completed in 2015–2016
The CREATE Program has received funding commitments totaling $1.6 billion so far, from a variety of public and private sources.

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
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<tr>
<td>Federal:</td>
<td>$647 million*</td>
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<tr>
<td>State:</td>
<td>$461 million**</td>
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<tr>
<td>Railroads:</td>
<td>$375 million***</td>
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<td>Local Governments:</td>
<td>$150 million</td>
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An estimated $3 billion remains needed to complete the full Program of projects.

* Does not reflect the $13 million 2019 CRISI Grant
** Does not reflect the $400 million allocated to the CREATE Program and $118 million for the 63rd Street and Harlem Avenue Grade Separation (GS1) in the 2019 Rebuild Illinois Capital Program
*** Private railroads invest an additional $450 million per year in the Chicago Terminal beyond CREATE Program investments
Bid Advertisements/RFPs

- Signup for bid notices at createprogram.org/bid
- This will send you CREATE Bid Advertisements for each partner
- This list also includes notification of business-to-business networking opportunities
• Continue to leverage all funding opportunities
• Execute 75th St. CIP grant and other grant-funded projects

• Complete:
  • Remaining rail corridor projects
  • Remaining passenger-freight rail flyover projects
  • Remaining grade separation projects