CREATE Program

SHRP2
Railroad-DOT Mitigation Strategies (R16) Peer Exchange

October 4, 2017
The U.S. Rail Network Depends on Chicago

- 25 percent of all U.S. rail traffic touches Chicago
- 44 percent of all intermodal units in the U.S. touch Chicago
- 68 percent of intermodal units to/from the ports of Seattle/Tacoma touch Chicago
- 45 percent of intermodal units to/from Los Angeles/Long Beach touch Chicago

Source: AAR analysis of Railinc data and 2014 STB carload waybill data
CREATE: Keeping the Nation’s Economy Moving

Note: Map not intended to be comprehensive. Only select flows displayed.
East-West Freight Rail Gateways
Ranked by Loaded Railcars per year

1. Chicago
1,467,000 railcars
BNSF, CN, CPRS, CSXT, NS, UP

2. St. Louis
973,000 railcars
BNSF, CSXT, CN, KCS, NS, UP

3. New Orleans
970,000 railcars
BNSF, CN, CSXT, KCS, NS, UP

4. Kansas City
470,000 railcars
BNSF, CPRS, KCS, NS, UP

5. Memphis
229,000 railcars
BNSF, CSXT, CN, NS, UP

Source – U.S. DOT Freight Analysis Framework 4, 2015; includes freight originating and terminating at gateways – does not include through-freight
Top Global Container Ports, 2014

Source: Chicago – Chicago Metropolitan Agency for Planning Freight Snapshot; American Association of Port Authorities, 2014
Top U.S. Container Ports, 2014

Source: Chicago – Chicago Metropolitan Agency for Planning Freight Snapshot; American Association of Port Authorities, 2014
Why CREATE?

- Freight rail trade (by value) within Chicago will more than double from 2012 to 2045*
- Passenger, freight and motorist delays are experienced daily on the current system
- The region must improve freight movement and mitigate negative impacts
- Freight movements in Chicago are a NATIONAL and INTERNATIONAL issue, not just a regional one

“Global trade follows the path of least resistance. It will go where there are the fewest impediments.” -UPS

*U.S. DOT Freight Analysis Framework 4.0
What is CREATE?

A $4.4 billion Public-Private Partnership (PPP) designed to improve transportation flow through Chicago focusing on:

- Increased capacity, speed, reliability for freight train traffic
- Separation of freight & commuter trains at 6 key junctions
- Elimination of 25 road/rail grade crossings (grade separations)

CREATE is a cooperative project involving:

- US Department of Transportation (FHWA & FRA)
- Illinois Department of Transportation (IDOT)
- Chicago Department of Transportation (CDOT)
- Cook County
- 6 major North American freight rail carriers and 2 switching railroads
- 2 passenger carriers (Amtrak and Metra)
CREATE Partners

- Illinois Department of Transportation
- CDOT (Chicago Department of Transportation)
- Metra
- Seal of Cook County, Illinois
- CSX
- Building America
- Norfolk Southern
- Association of American Railroads
- BNSF
- Amtrak
- CN
- CP
- Indiana Harbor Belt
- United States of America
- The Belt Railway Co.

CREATE
Keeping the Go in Chicago
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

- Passenger Corridors
- East-West Corridor
- Beltway Corridor
- Western Ave. Corridor
70 CREATE Projects → 30-Year Benefits of $31.5 Billion

**Rail Benefits**
- **Economic Growth**
  Chicago can accommodate growth in passenger and freight trains
- **Fewer Delays**
  Reduced delay to passenger and freight trains
- **Cost Savings**
  Reduced shipping costs may be passed on to consumers

**Increased Safety**
- Elimination of rail – roadway conflicts at 25 grade crossing sites

**Roadway Benefits**
- **Fewer Delays**
  Reduced delay to vehicles from eliminating 25 grade crossings
- **Sustainability**
  Reduced fuel consumption and emissions
- **Reduced Congestion**
  Fewer trucks on the roadways
CREATE Economic Benefits

- 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
- Enable 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

Source: CREATE economic benefits study conducted by Cambridge Systematics, 2015
CREATE Public Benefits

- Passenger Rail Delay Reduction
  - 10 projects benefit Amtrak
  - 18 projects benefit Metra Commuter Rail
- Auto Delay Reduction
- Safety Improvements
- Air Quality Benefits
- Community Quality of Life
CREATE Organization

- Stakeholders Committee
- Management Committee
  - Advocacy Committee
  - Implementation Team
  - Finance & Budget Committee
CREATE Stakeholders Committee

Composition
- Railroad – AAR represents all Class I railroads, Metra, Amtrak
- Illinois DOT – Secretary of Transportation
- Chicago DOT – Commissioner of Transportation
- Cook County – Superintendent of Transportation and Highways
- USDOT (non-voting)

Responsibilities
- Set policy for CREATE Program
- Resolve all Program issues
- Represent the CREATE partnership
- Seek resources to build the CREATE Program
CREATE Management Committee

Composition
- IDOT, CDOT, Cook County, FHWA (non-voting)
- BNSF, CN, CP, CSX, NS UP, Metra, CTCO, AAR
- Amtrak, BRC, IHB (all non-voting)
- Co-Chairs – Railroad Chicago Planning Group Co-Chairs

Responsibilities
- Review and approve project designs
- Review and approve project cost estimates
- Address program management issues
- Review and recommend program modifications
CREATE Implementation Team

Composition
- IDOT, CDOT, Cook County, FHWA
- BNSF, CN, CP, CSX, NS, UP, Metra, Amtrak, BRC, IHB, CTCO, AAR
- Co-Chairs – Railroad (1) and Public (1)

Roles and Responsibilities
- Review engineering plans
- Recommend scope, schedule, budget changes to the Management Committee
- Provide engineering input to project engineers
- Establish project standards and policies
CREATE Advocacy Committee

Composition
- IDOT, CDOT, Cook County
- BNSF, CN, CP, CSX, NS, UP, Metra, Amtrak, BRC, IHB, CTCO, AAR
- Co-Chairs – Railroad (1) and Public (2)

Responsibilities
- Identify and address community concerns
- Oversight of public outreach
- Develop and execute advocacy plan
CREATE Finance Committee

Composition

- IDOT, CDOT, Cook County
- BNSF, CN, CP, CSX, NS UP, Metra, Amtrak, BRC, IHB, CTCO, AAR
- Co-Chairs – Railroad (1) and Public (1)

Roles and Responsibilities

- Investigate and seek funding opportunities
- Monitor project cost estimates versus actual expenditures
- Track funding sources for each project
Project Stages

1.0 Project Selection

2.0 Environmental Assessment & Preliminary Engineering

3.0 Final Engineering

4.0 Land Acquisition (If applicable)

5.0 Construction

6.0 Program Management

Environmental
- ECAD or EIS (SPEED Process)
  - ESR Limits
  - Special Waste, Noise & Vibration, Other
- Environmental Commitment
- Environmental Approval

Preliminary Engr. (~30%)
- Scope Review
- Preliminary Design of Track, Signal, Civil & Structures Initial Geometrics
- Schematics & Initial Geometrics
- Right of Way & Utility
- Schedule & Budget/Estimate
- Design Approval

Final Engr. (Remaining 70%)
- Scope Review
- State Rail Agreement for Design & Fund Obligation
- RFP & Award Option
- Environmental
  - PS&E & PSI
- Schedule & Budget / Estimate
- Final Geometric
  - Final Design of Track, Signal, Civil & Structures
  - Detail Construction Plans & Specifications
- Soil Analysis
- Segment, Staging, Sequencing and Track Outage Windows
- Rail Agreement for Design & Fund Obligation

Land Acquisition
- State Rail Agreement for Land Acquisition & Fund Obligation
- Uniform Act
- Schedule & Budget / Estimate
- Relocation
- Acquisition

Construction
- State Rail Agreement for Construction & Obligation
- Bids and Award
- Contracts
- Force Account
- Procurement
- Public Information, Permits
- Operations Coordination (CTCO)
- Construction Management
- Civil, Structures, Track and Signal Construction
- Invoicing & De-obligation
- State and Federal Audit
- Construction Audit

7.0 Advocacy Management
Contracting for Professional Right of Way (ROW) Services

RR Professional ROW Services RFP Process Mapping for CREATE Program for Freight Railroads (Single SRA Option)
Contracting Phase III Work with Lowest Qualified Bidder
CREATE Commitments Received To Date

Federal - $435 Million
- TIGER I & TIGER IV Grants
- SAFETEA-LU PNRS Grant
- ARRA High Speed Rail Grant
- Railroad Relocation Grant
- FRA STEP

State - $480 Million
- Illinois DOT (Illinois Jobs Now!, ICC, PNRS/TIGER match, grade separations)

Railroad - $365 Million
- Railroad partners (railroad infrastructure, grade separations)

Local Governments - $136 million
- Chicago DOT, Cook County & other local governments (viaduct improvements, grade separations, land acquisition)
Project Status

Completed Projects  28
Under Construction  6
Final Design        4
Environmental Review 13
Remaining Projects  19

TOTAL  70
CREATE Program, Overall Project Status Summary

Revised 25-Jan-17

- Project Initiation Pending Funding Availability
- Projects in Phase I - Environmental + PE
- Projects in Phase II - Final Design (PS&E)
- Projects in Phase III - Construction
- Projects Completed

Number of Projects

2017 INFRA Grant Opportunity

• CREATE is applying for $160 million 2017 INFRA grant:
  • To design all of 75th Street Corridor Improvement Project
  • To build first half of 75th Street CIP plus Argo Connections project
• INFRA grant will cover only 1/3 of the funding; remaining 2/3 will come from: private freight railroads, IDOT, Cook County, Chicago DOT, Metra, Amtrak
• CREATE team seeks nationwide support for application
  • Various MPOs, State DOTs, rail shippers, ports, etc.
  • Letters of Support are appreciated
75th Street CIP – Existing Conditions

Four Environmentally Linked Projects:

Forest Hill Junction & 71st Street Grade Crossing
  • North-south CSX tracks cross three other east-west tracks and one city street

Belt Junction
  • Five tracks cross paths and converge into two tracks
  • Multiple freight & passenger routes cross paths

80th Street Junction
  • Six tracks cross paths and converge into two tracks

Environmental Impact Statement (EIS) is complete
Benefits

Reduce conflict between trains:

- 30 Metra SouthWest Service trains per day
  - Improve service reliability with dedicated Metra tracks
  - Expand capacity by rerouting from Union Station to LaSalle Street Station

- 2 Amtrak trains per day (to Indianapolis and points East)

- 90 Freight trains per day

Reduce traffic delays and community disruption

Improve safety at 71st/Bell grade crossing
Project Delivery
WA2/WA3 – Subdivision Capacity
CSX/NS – Expansion Chicago

- Crossovers
- Connections
- Signals
- Completed June 2016

Reduce Rail/Rail conflict
WA2 – CSX/NS
Upgrading hand throw switches and adding signals
WA4 – BNSF/CN/NS/CSX
Chicago

- Crossovers
- Connection
- Bridge upgrades
- In progress
- Scheduled to be completed 2017

Reduce rail/rail conflicts
WA4.4 – BNSF New Track and Bridge over 26th Street
149+00 Looking North

Before 2014

In progress 2015
WA4.8 – BNSF Canal Bridge
174+50 Looking South

Before 2014

In progress 2015
Union Pacific Third Mainline (B2)

- Location: Melrose Park, IL
- 60 freight trains & 59 Union Pacific Metra trains affected
- Actions
  - Constructed 3.5-mile third main track on UP Geneva Subdivision
  - Constructed railroad bridge over Addison Creek
  - Constructed flyover connection from the Indiana Harbor Belt to the UP
  - Control points reconfigured
  - Track between the UP and IHB upgraded
  - The Metra Berkeley and Bellwood passenger stations improved; pedestrian underpasses constructed
P1 – Englewood Flyover
METRA/NS/Amtrak – Chicago

• Removes conflict point between commuter, passenger, and freight trains, alleviating delay for commuters and Amtrak’s most severe delay point in the Midwest.

• Completed 2014

Reduce rail/rail conflicts
P1 – Flyover
South Looking North

Before 2011

After 2014
GS6 – 25th Ave
UP-METRA
Melrose Park/Bellwood

- Eliminates grade crossing, reducing congestion and improving safety for 19,000 vehicles daily.
- Completed December 2016

Eliminated road/rail conflict
GS6 – 25th Ave North looking South
Just south of Lake Street

Before 2012

After 2017
GS14 - 71st St
CSX-IHB
Bridgeview

- Grade separation of 71st Street and the IHB/CSX tracks just west of Harlem Avenue
- Road underpass
- Completed November 2013

Eliminated road/rail conflict
GS14 – 71st Street/CSX Grade Separation

Before 2011

After 2013
GS15a – 130th & Torrence NS – Chicago

- Eliminates the at-grade crossings of the two Norfolk Southern main tracks with 130th Street and Torrence Ave.
- Eliminates conflict between railroad and access to Ford Plant
- Road Underpass
- Completed June 2015

Will eliminate road-rail conflicts
GS15a – 130th Street & Torrence Ave. /NS Grade Separation

Before 2011

After 2015
GS16 – Irving Park Road York Road
CP – Chicago/Bensenville

- Just east of York road on Irving Park road
- Road underpass
- In progress
- Scheduled to be completed in October 2017

Eliminated road/rail conflict
GS16 – UPRR Bridge in the background

Before 2013

After 2017
Viaduct Program

- 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 (USDOT TIGER funding, $5 million)
- 11 completed in 2015/2016 (State of Illinois funding)
Viaduct Improvement Program

Example: 1530 S Racine Avenue

Before

After

Example: 1530 S Loomis Street

Before

After
CREATE Next Steps

• Continue to leverage all funding opportunities
• Promote and advocate for 75th Street CIP INFRA application

• Complete:
  ▪ Remaining Rail Corridor Projects
  ▪ Remaining Passenger-Freight Rail Flyover Projects
  ▪ Remaining Grade Separation Projects
Stay in Touch!

E-mail: info@createprogram.org
Website: www.createprogram.org

“Like” Us on Facebook