



# CREATE Program

**SHRP2**

**Railroad-DOT Mitigation Strategies (R16) Peer Exchange**

*October 4, 2017*

# The U.S. Rail Network Depends on Chicago

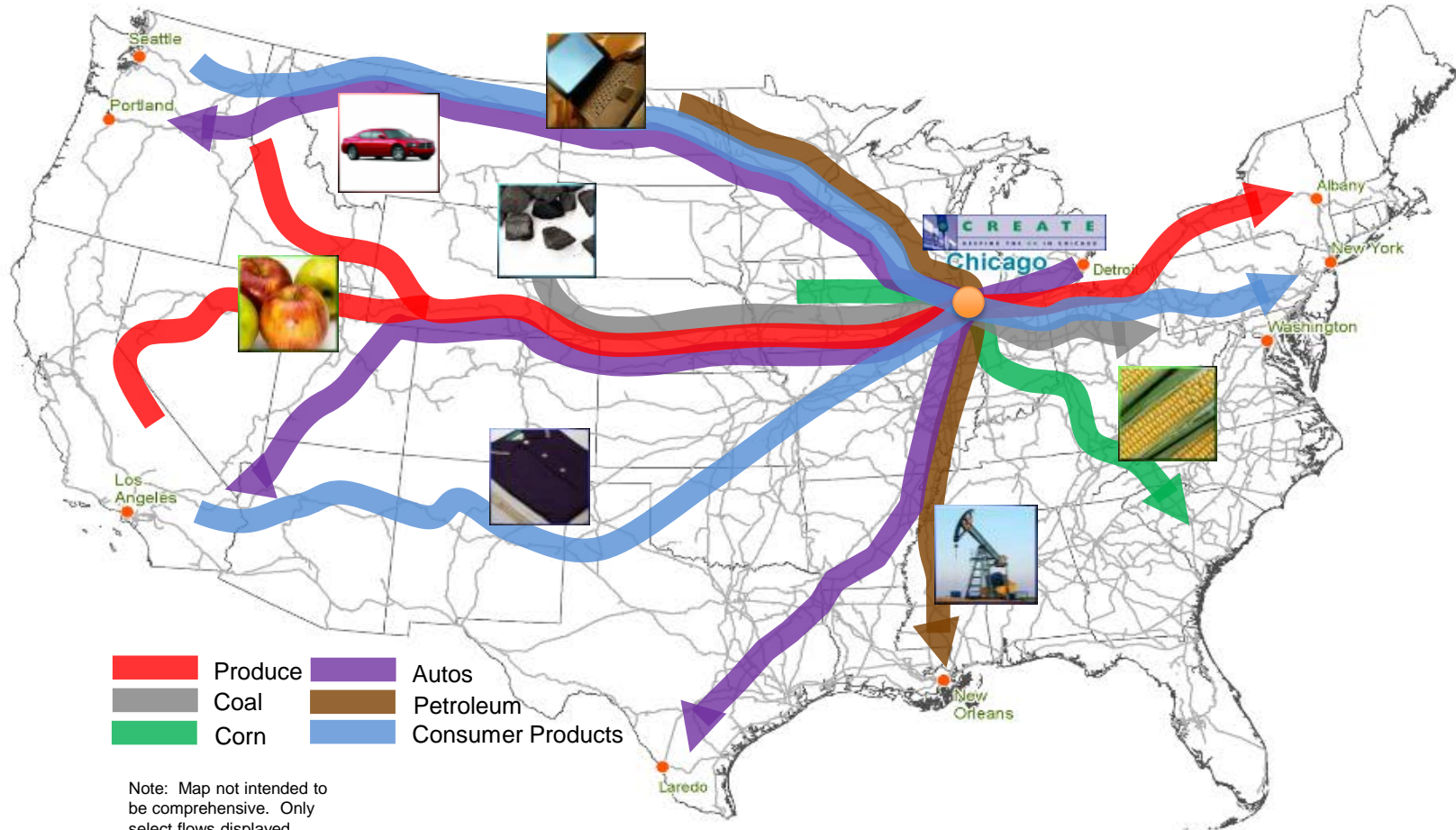
---

- 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



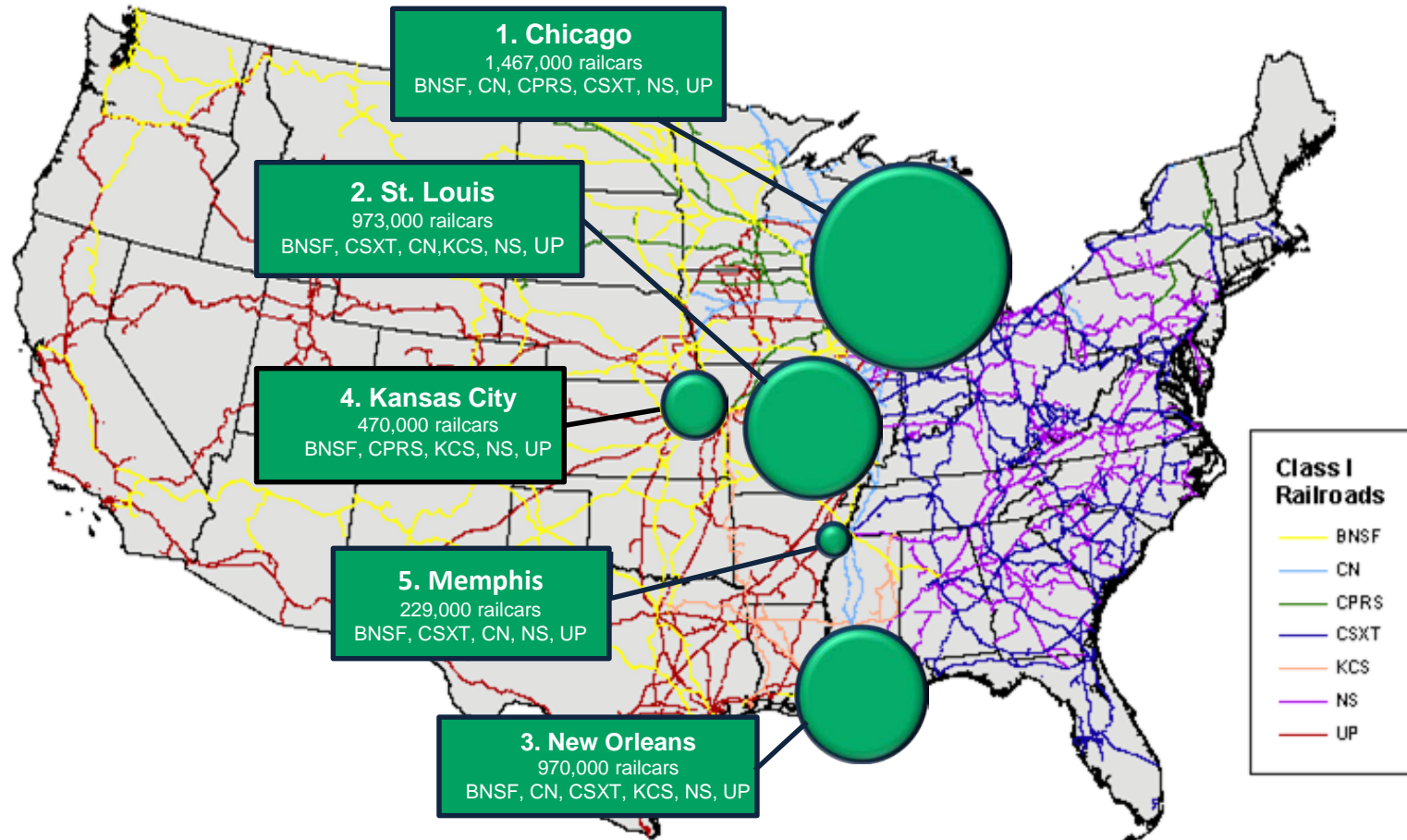
Source: AAR analysis of Railinc data and 2014 STB carload waybill data

# CREATE: Keeping the Nation's Economy Moving



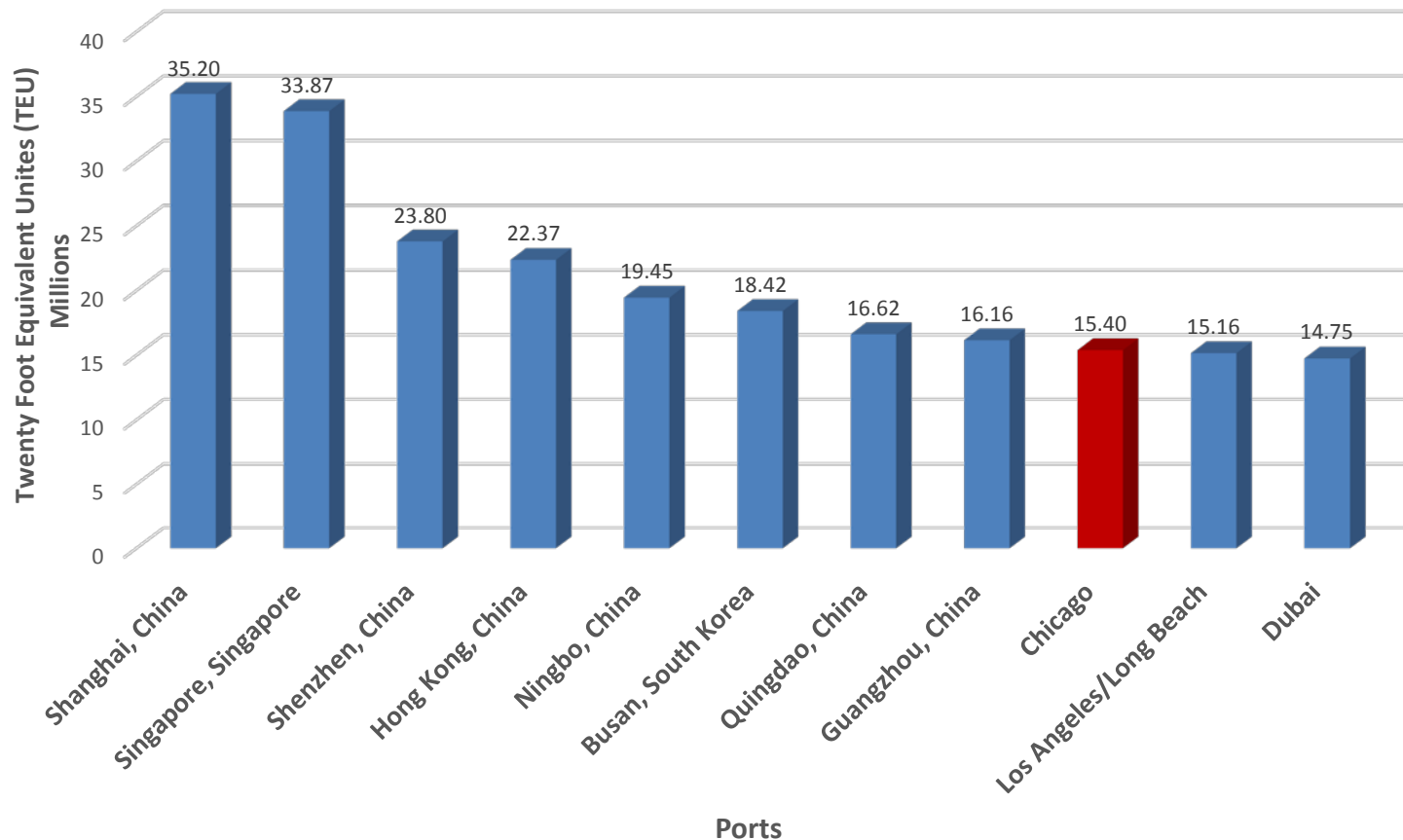
# East-West Freight Rail Gateways

## Ranked by Loaded Railcars per year



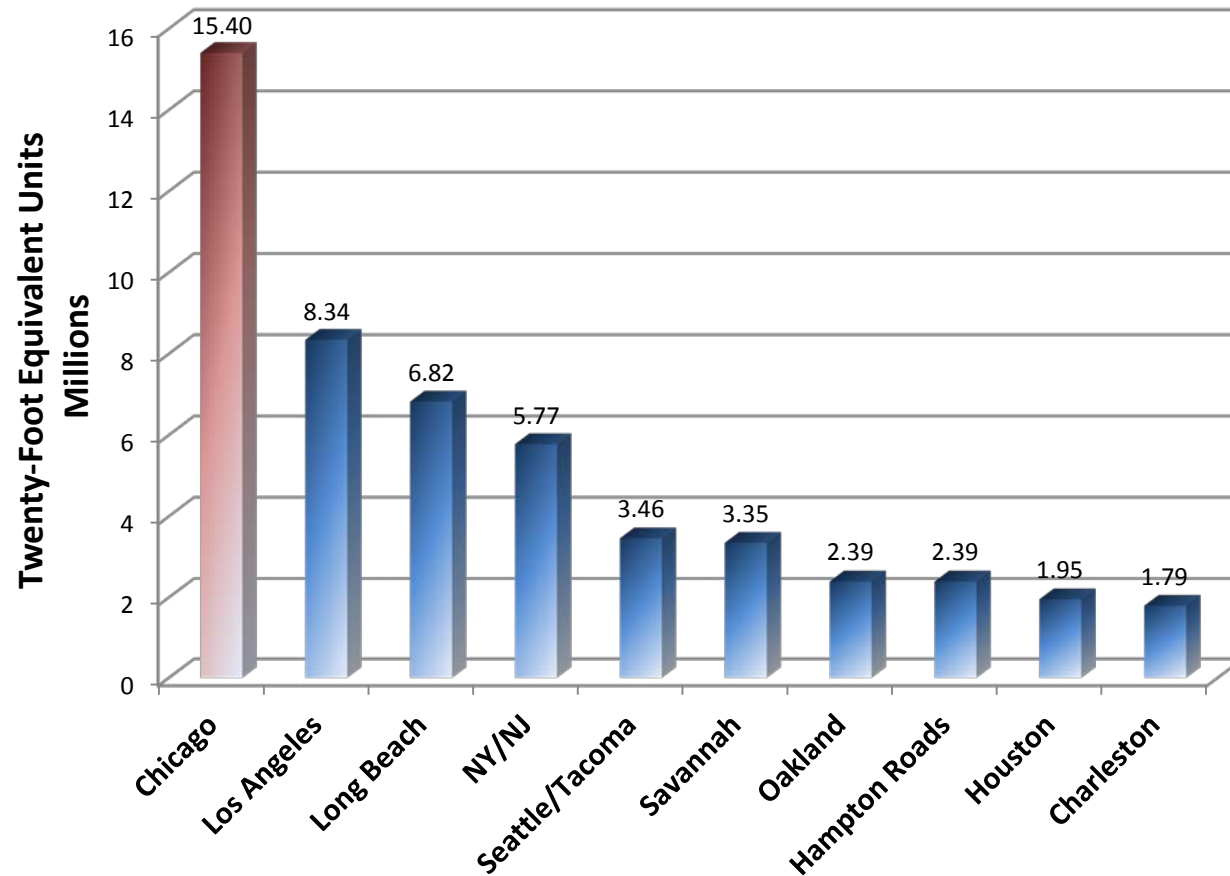
Source – U.S. DOT Freight Analysis Framework 4, 2015; includes freight originating and terminating at gateways – does not include through-freight

# 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



BUILDING AMERICA®



ASSOCIATION OF AMERICAN RAILROADS



# CREATE Program – 70 Projects

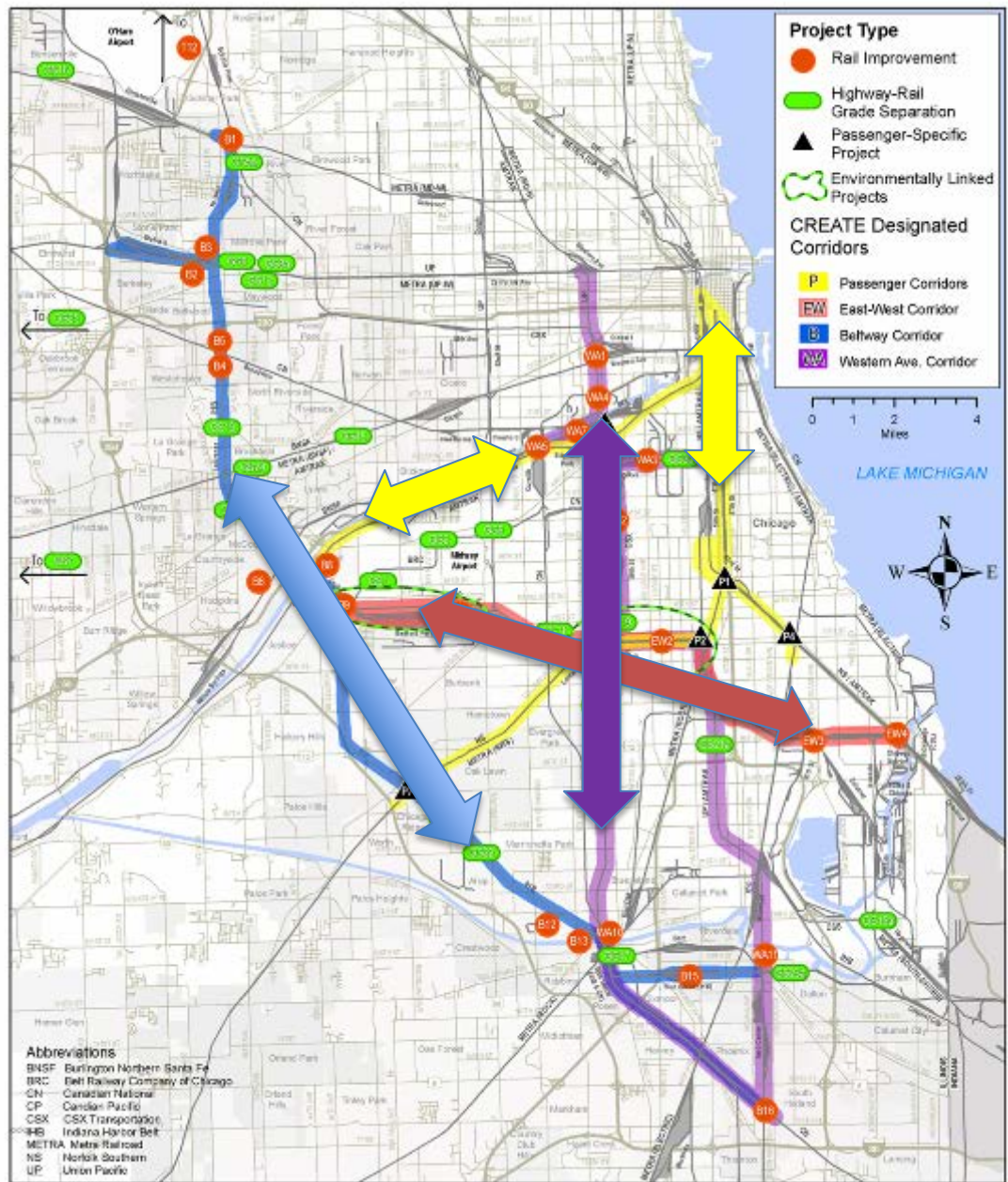
---

- 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

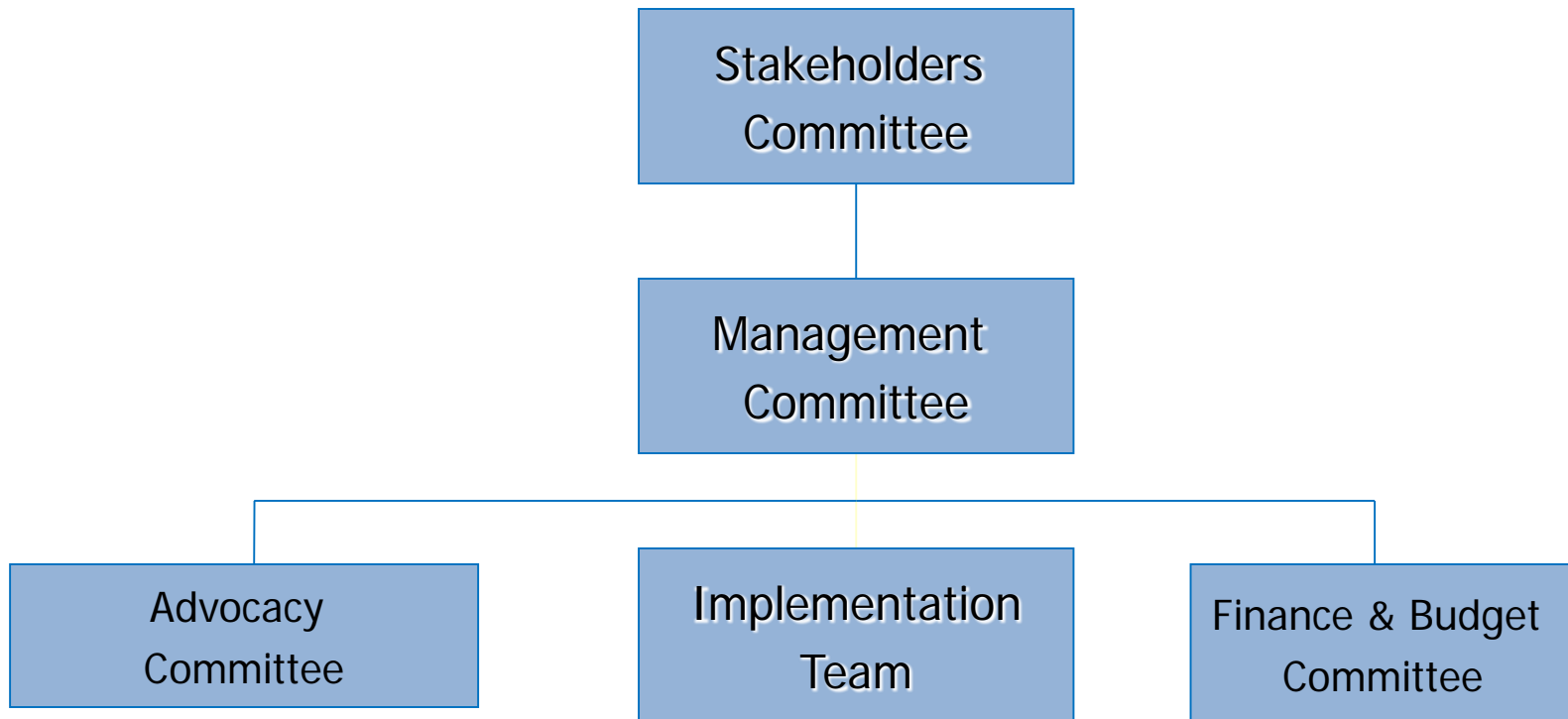
# CREATE Public Benefits

- 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

---



# 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



Moving Forward Together



75 for 75<sup>th</sup>

The 75th Street Corridor Improvement Project (75th St. CIP) is an extremely critical project for the Chicago Region Environmental and Transportation Efficiency (CREATE) Program – a public-private partnership forged to untangle and improve the efficiency of the region's rail infrastructure in order to ensure Chicago's preeminence in the nation's rail system.

The 75<sup>th</sup> St. CIP is the single largest project to be undertaken through CREATE, encompassing roadways and train tracks in the Ashburn, Englewood, Auburn Gresham and West Chatham neighborhoods which today intertwine and intersect creating passenger rail, freight rail and road traffic delays. The goal of the project is the separation of the rail lines from each other and from the roadways they intersect.

**Funding Needed**  
The immediate funding need is for the \$75 million design phase. It is imperative to start the design in order to remain on budget. If construction does **not** start by 2017 costs are expected to increase by \$2.5 Million per month.

**Partners**  
The 75<sup>th</sup> St. CIP Project Team includes the Illinois Department of Transportation (IDOT), the Federal Highway Administration (FHWA), the Chicago Department of Transportation (CDOT) and the Association of American Railroads (AAR) with Amtrak and Metra.

**Project Benefits**

- Decreased train idling and improved air quality in the surrounding neighborhoods
- Replacement or rehabilitation of 36 viaducts serving nearby neighborhoods, improving mobility, safety, and security
- Increased capacity at Union Station by shifting some Metra commuter rail service to another downtown terminal
- Elimination of a rail/roadway grade crossing, reducing congestion and improving safety for motorists and pedestrians
- Removal of conflicts between freight and commuter trains, eliminating 18,500 annual passenger hours of delay and increasing train reliability, speed, and capacity



# CREATE Finance Committee

---

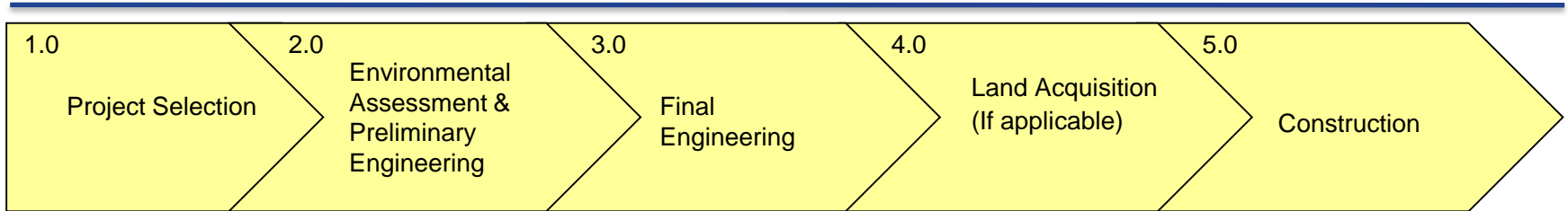
## Composition

- 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



## 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

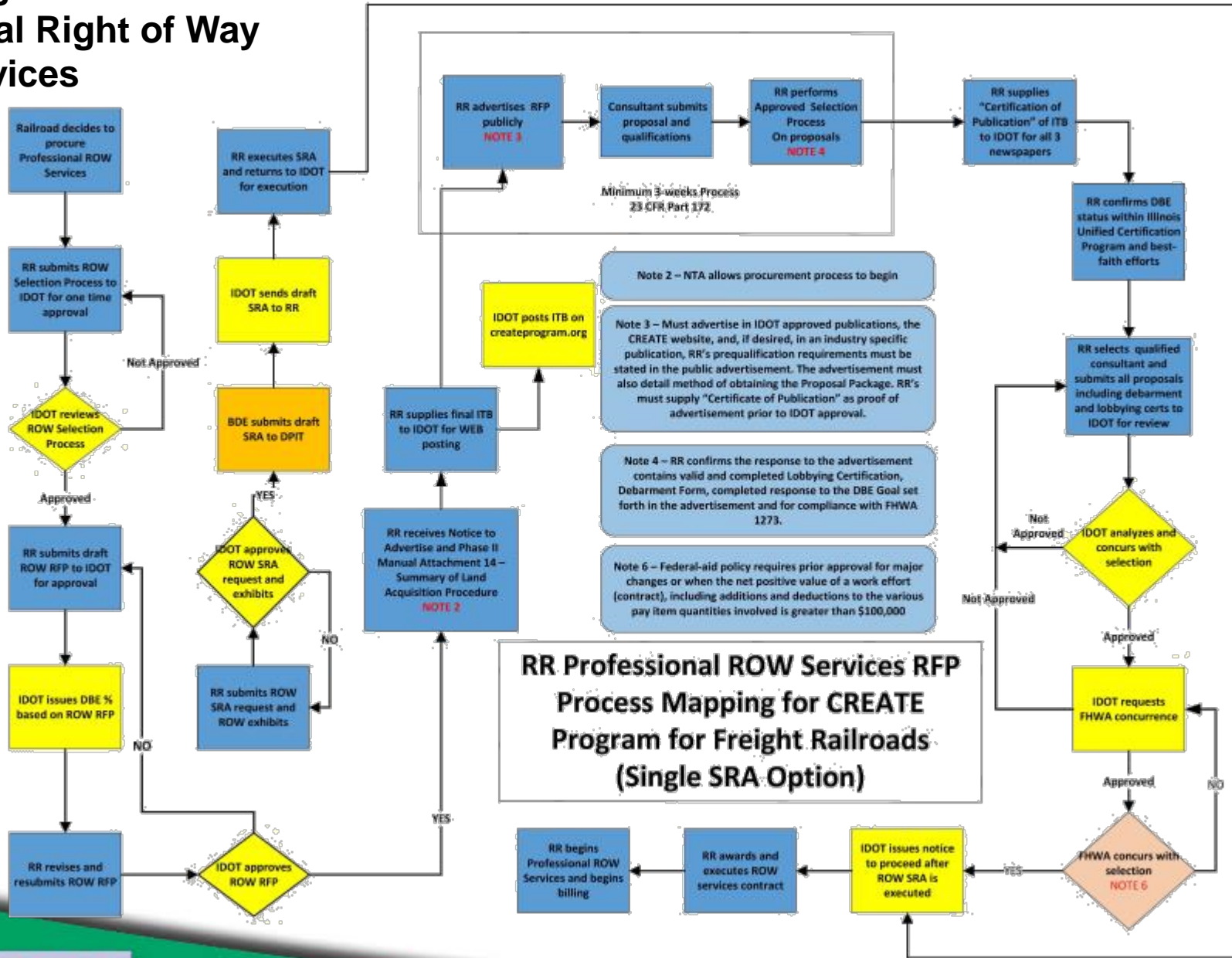
- State Rail Agreement for Land Acquisition & Fund Obligation
- Uniform Act
- Schedule & Budget / Estimate
- Relocation
- Acquisition

### 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

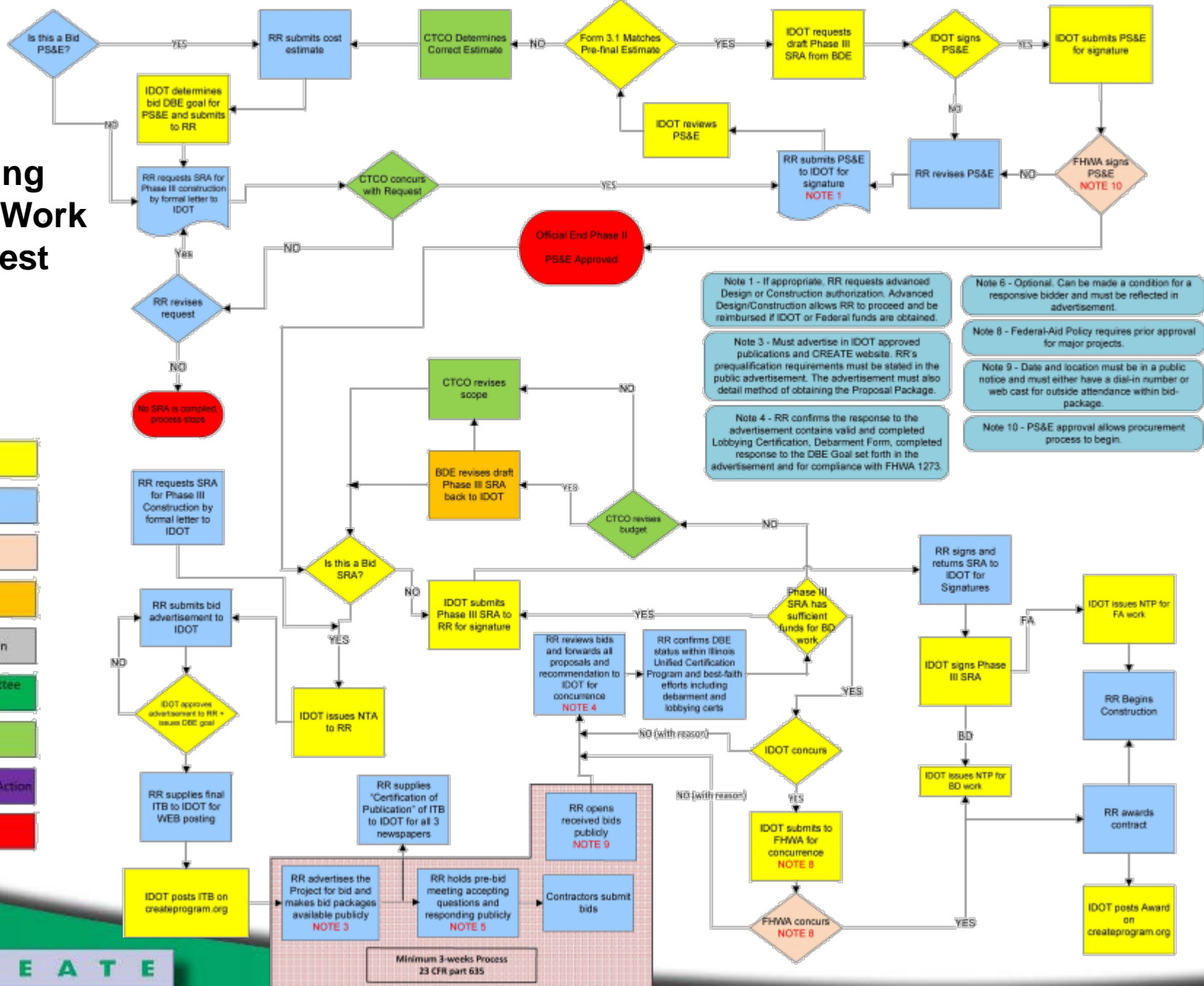
## 7.0 Advocacy Management

# Contracting for Professional Right of Way (ROW) Services



# Contracting Phase III Work with Lowest Qualified Bidder

- IDOT Action
- RR Action
- FHWA Action
- BDE Action
- Utility Company Action
- Implementation Committee Action
- CTCO Action
- Management Committee Action
- End of Phase



- Note 1 - If appropriate, RR requests advanced Design/Construction authorization. Advanced Design/Construction allows RR to proceed and be reimbursed if IDOT or Federal funds are obtained.
- Note 2 - Must advertise in IDOT approved publications and CREATE website. RR's prequalification requirements must be stated in the public advertisement. The advertisement must also detail method of obtaining the Proposal Package.
- Note 3 - Must advertise in IDOT approved publications and CREATE website. RR's prequalification requirements must be stated in the public advertisement. The advertisement must also detail method of obtaining the Proposal Package.
- Note 4 - RR confirms the response to the advertisement contains valid and completed Lobbying Certification, Debarment Form, completed response to the DBE Goal set forth in the advertisement and for compliance with FHWA 1273.
- Note 5 - Optional. Can be made a condition for a responsive bidder and must be reflected in advertisement.
- Note 6 - Optional. Can be made a condition for a responsive bidder and must be reflected in advertisement.
- Note 7 - Federal-Aid Policy requires prior approval for major projects.
- Note 8 - Date and location must be in a public notice and must either have a dial-in number or web cast for outside attendance within bid-package.
- Note 9 - Date and location must be in a public notice and must either have a dial-in number or web cast for outside attendance within bid-package.
- Note 10 - PS&E approval allows procurement process to begin.

Minimum 3-weeks Process  
23 CFR part 635



# 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

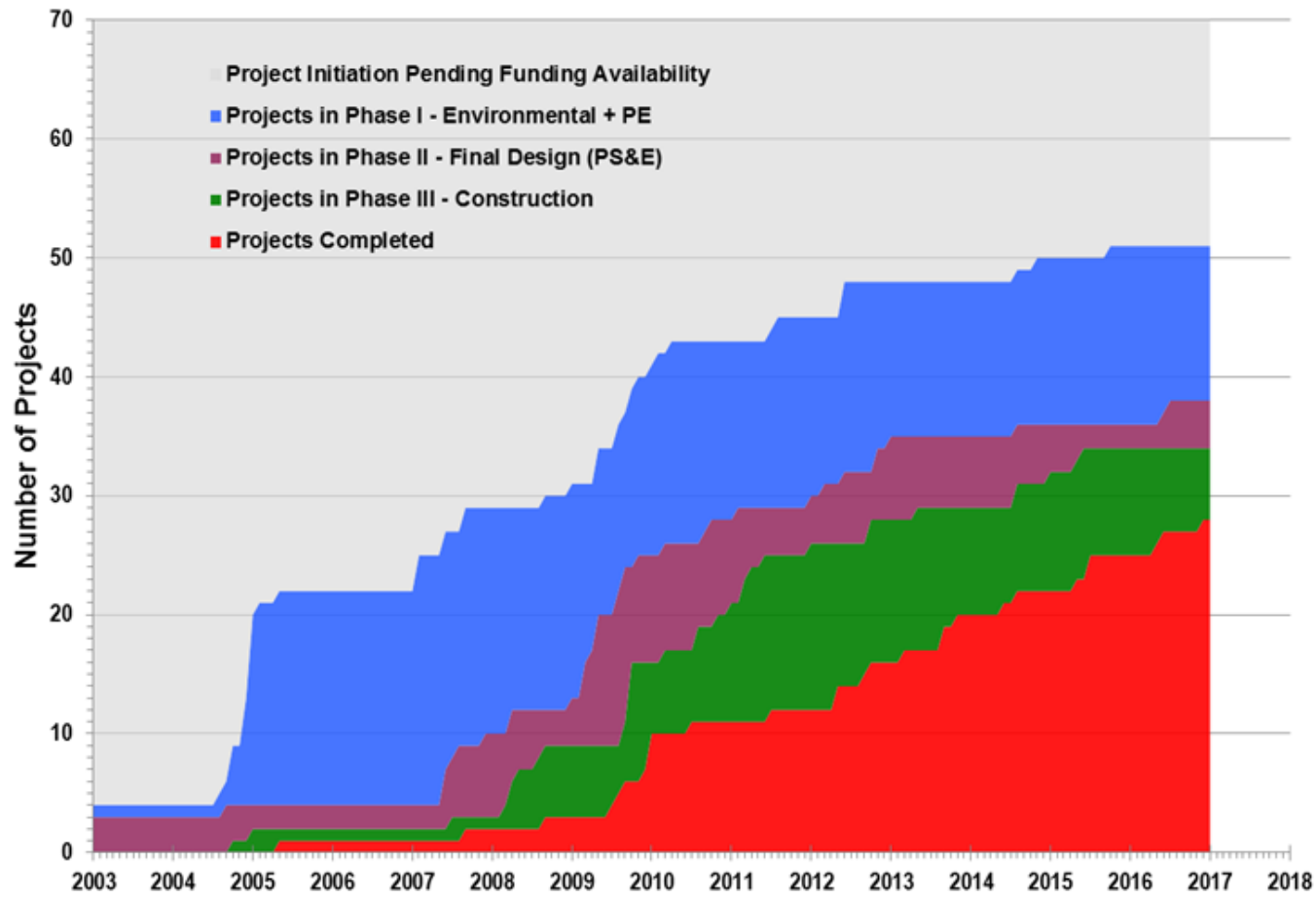
Completed Projects	28
Under Construction	6
Final Design	4
Environmental Review	13
Remaining Projects	19
<b>TOTAL</b>	<b>70</b>



# Project Status Summary

## CREATE Program, Overall Project Status Summary

Revised 25-Jan-17



# 2017 INFRA Grant Opportunity

---

- **CREATE is applying for \$160 million 2017 INFRA grant:**
  - To design all of 75<sup>th</sup> Street Corridor Improvement Project
  - To build first half of 75<sup>th</sup> 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

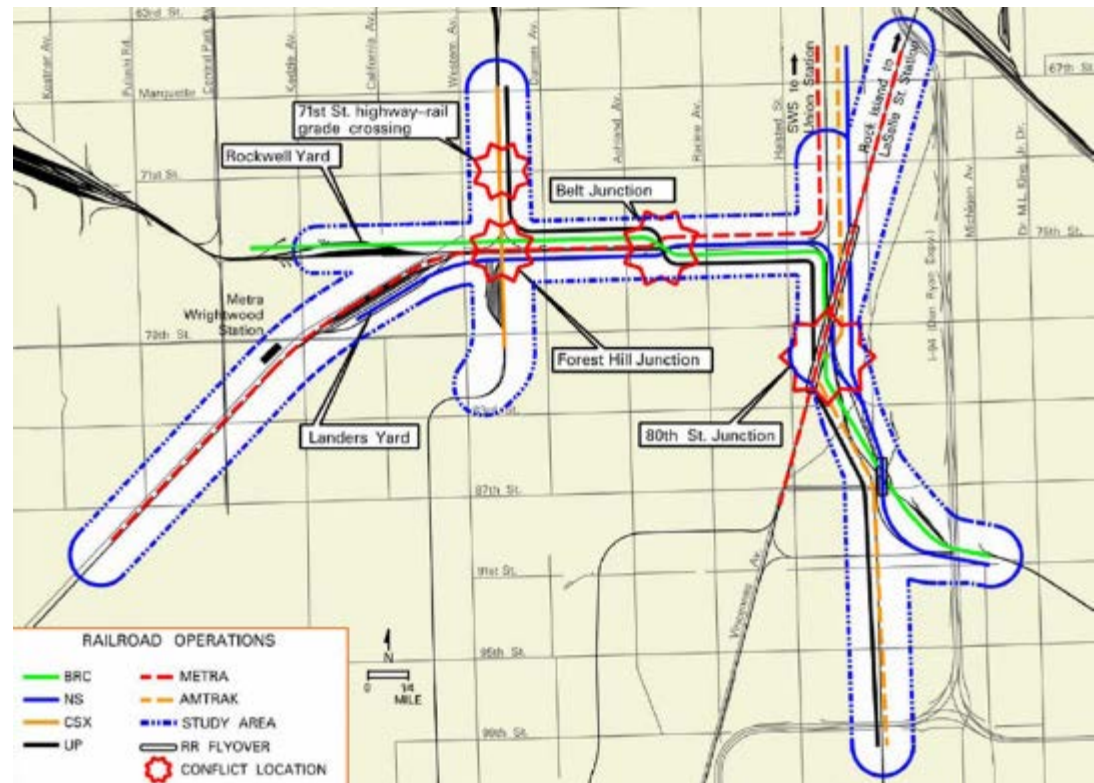
- North-south CSX tracks cross three other east-west tracks and one city street

### 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

# 75th Street CIP - Benefits

## 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 26<sup>th</sup> 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



*Before*



*After*

# 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**



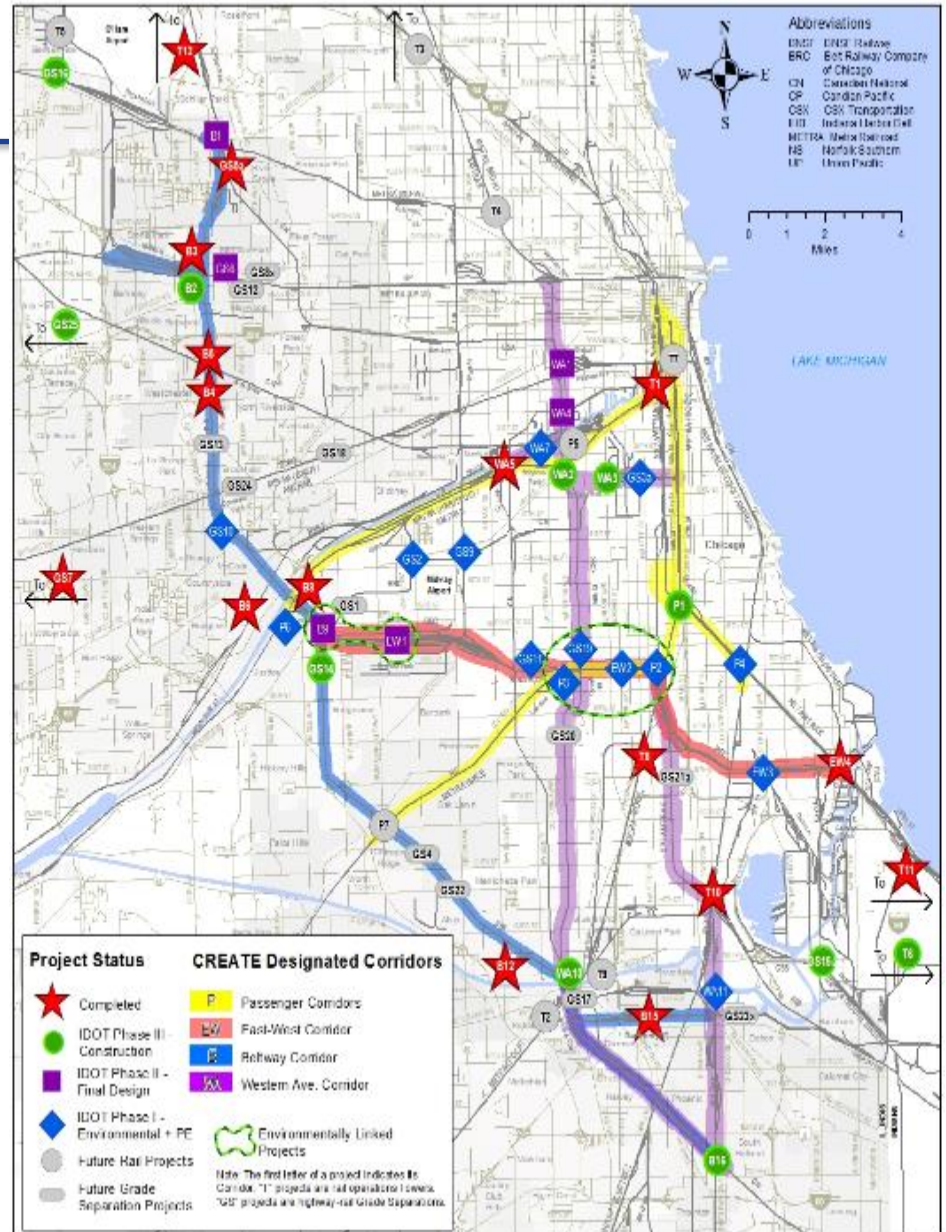
# GS6 - 25<sup>th</sup> Ave

## 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 - 71<sup>st</sup> 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**



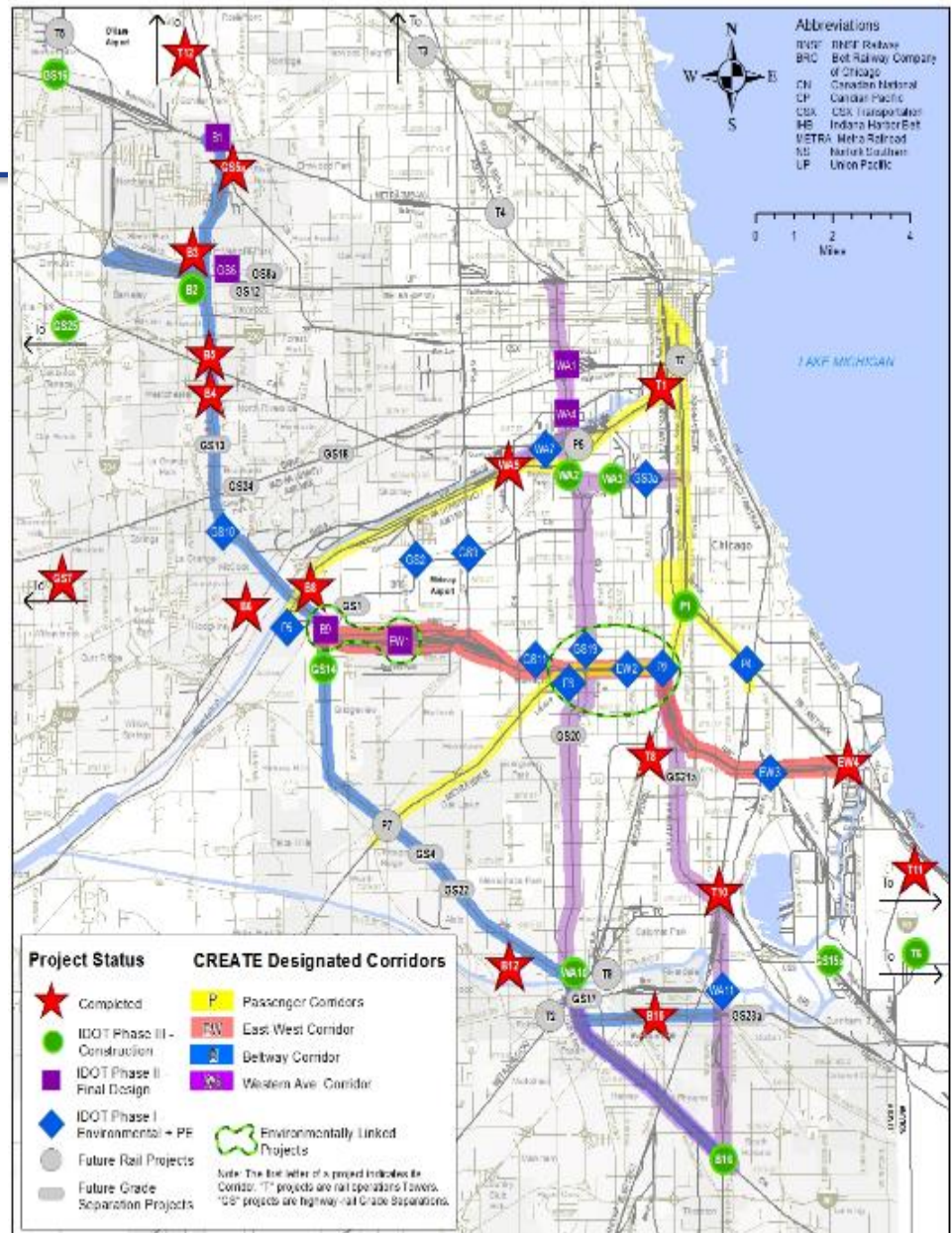
**After 2013**



# GS15a - 130<sup>th</sup> & 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- 130<sup>th</sup> Street & Torrence Ave. /NS Grade Separation

Before 2011



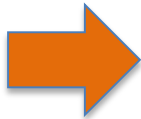
After 2015



# 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**

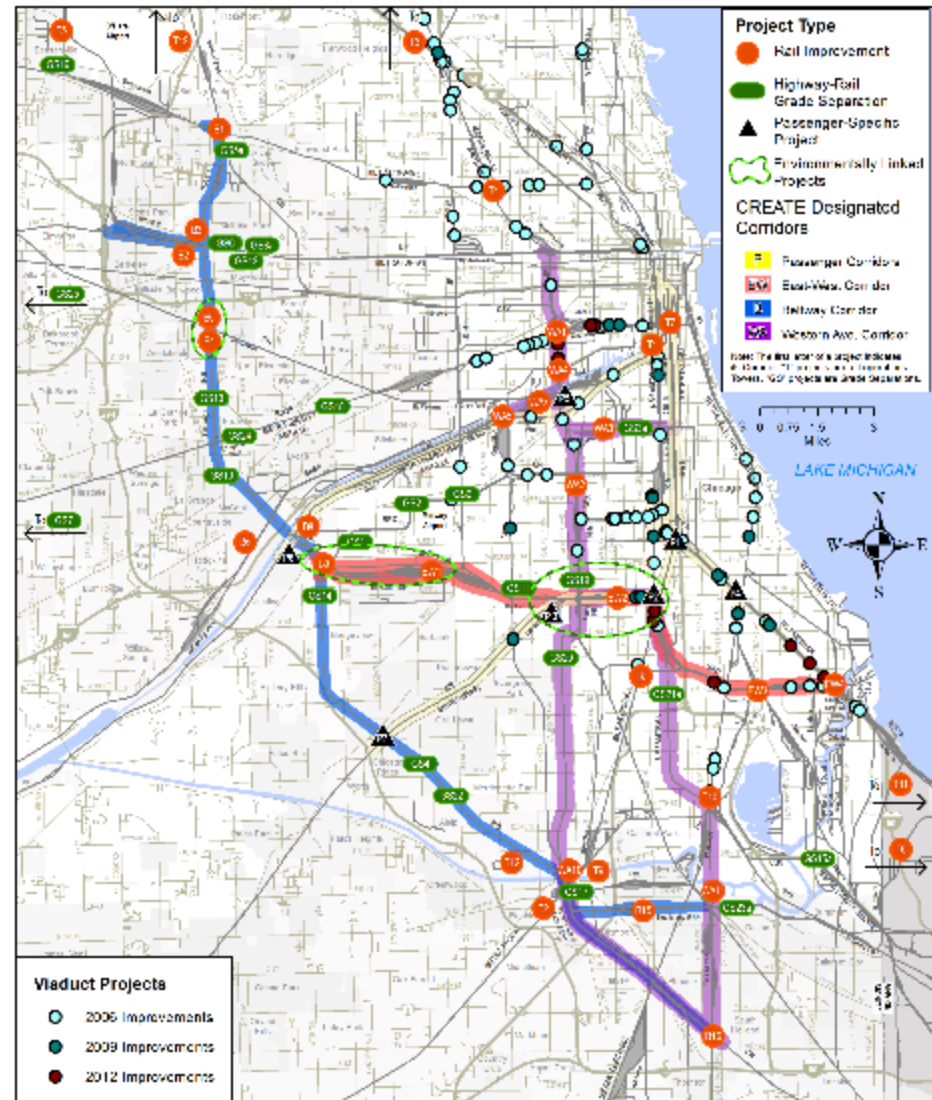


**After 2017**



# 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*



*Example: 1530 S Loomis Street*





# CREATE Next Steps

---

- Continue to leverage all funding opportunities
- Promote and advocate for 75<sup>th</sup> 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](mailto:info@createprogram.org)  
**Website:** [www.createprogram.org](http://www.createprogram.org)

“Like” Us on Facebook

