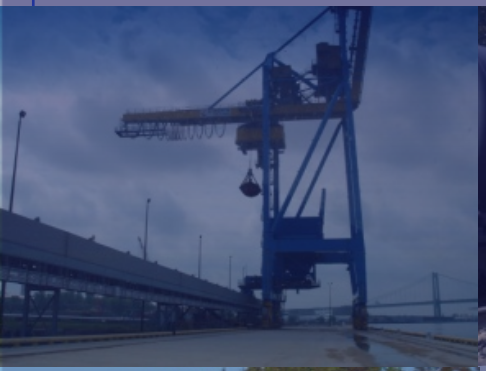
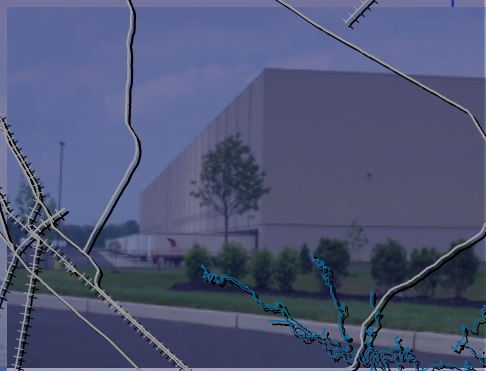
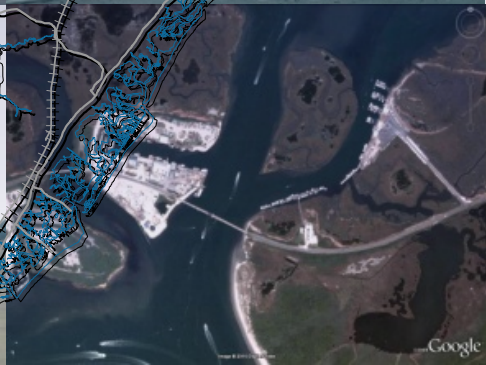
South Jersey Freight Transportation and Economic Development Assessment



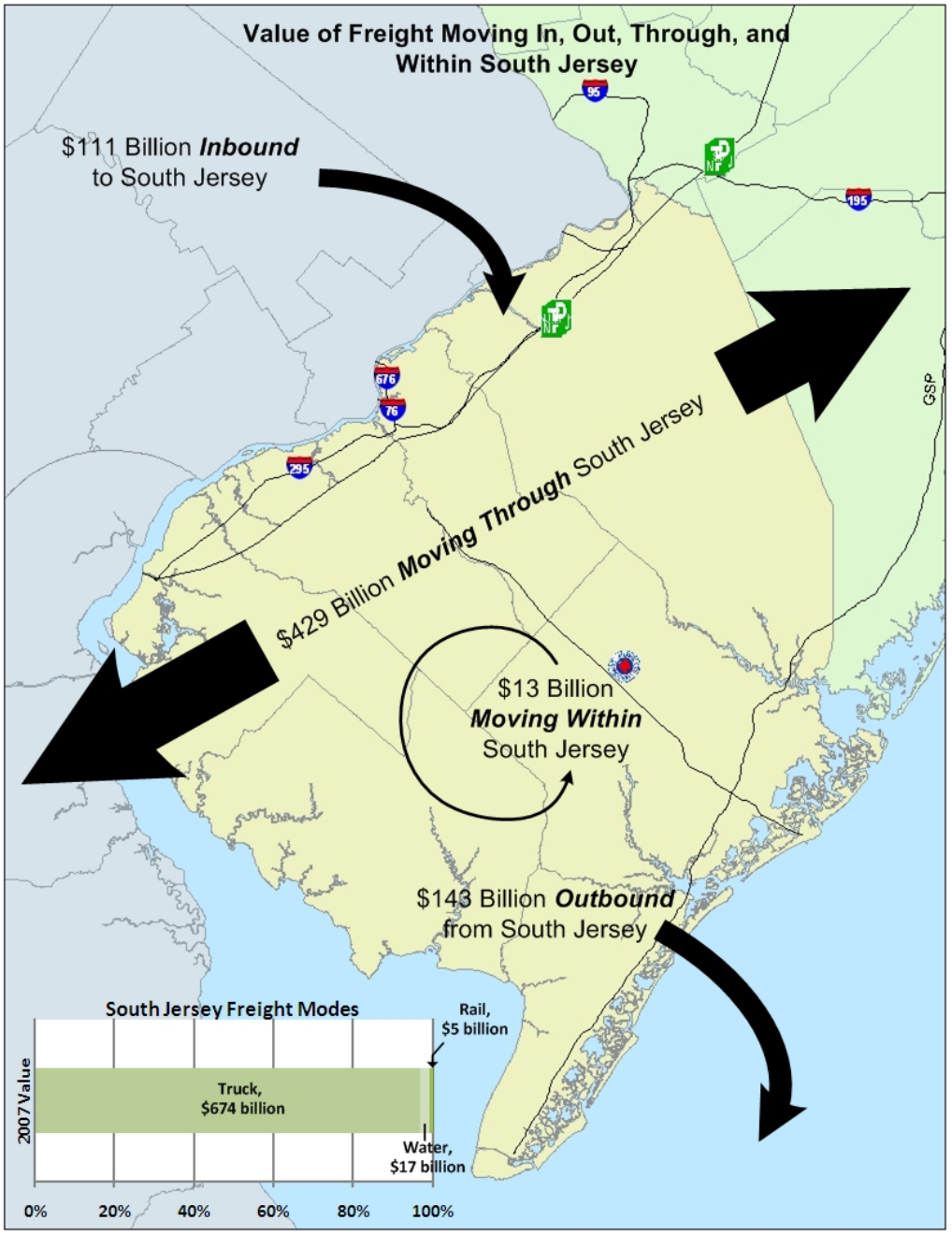




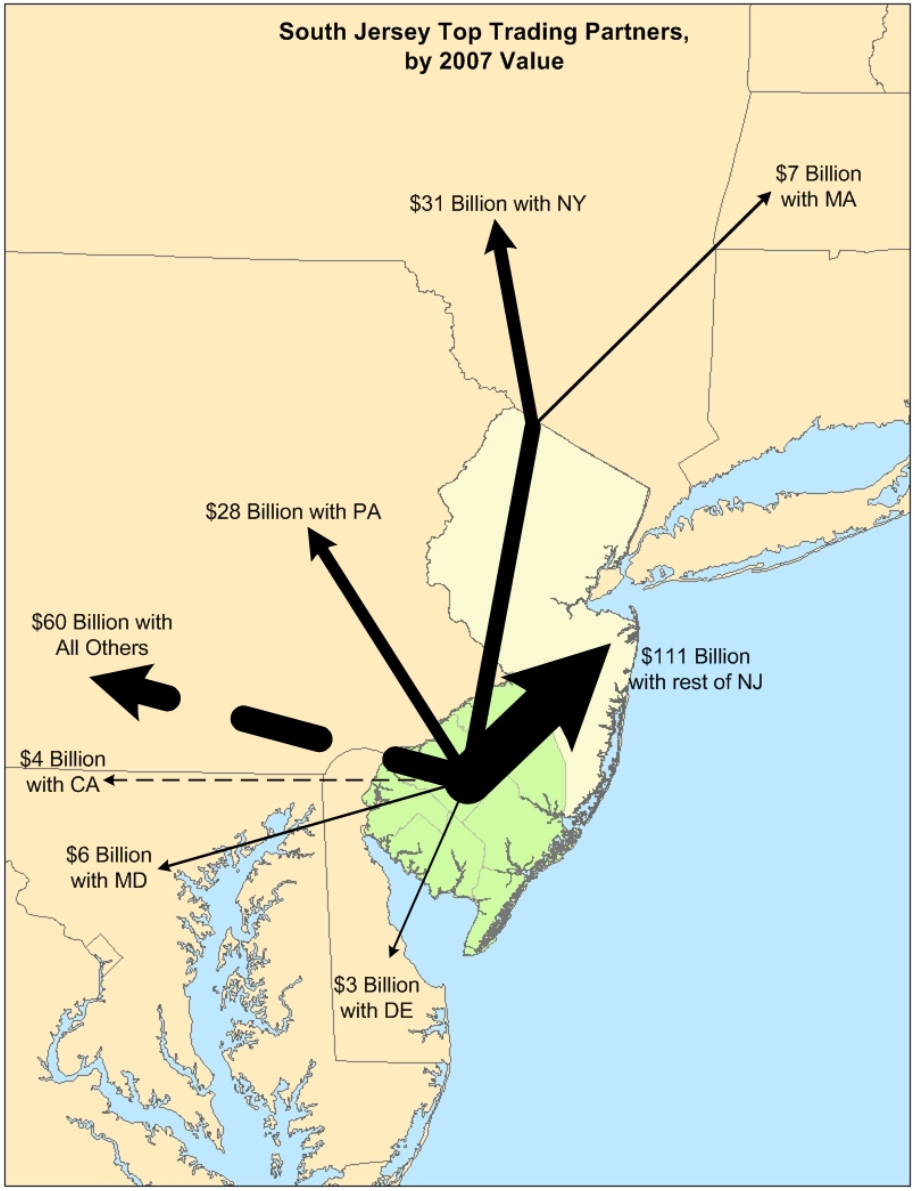
An assessment of freight transport and markets in the South Jersey region

- Goal: Develop a plan that will show how best to enhance the freight and logistics industry in southern New Jersey
- Identify region's strengths and key industry clusters
- Examine key transportation needs and prioritize based on need to maintain, improve or expand key industrial clusters

South Jersey plays an important role in the movement of freight

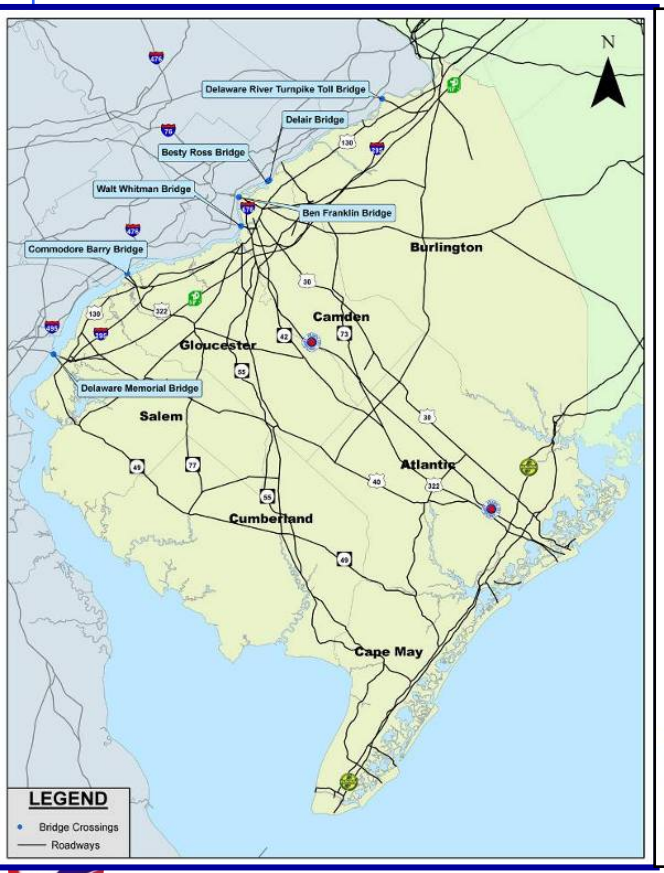


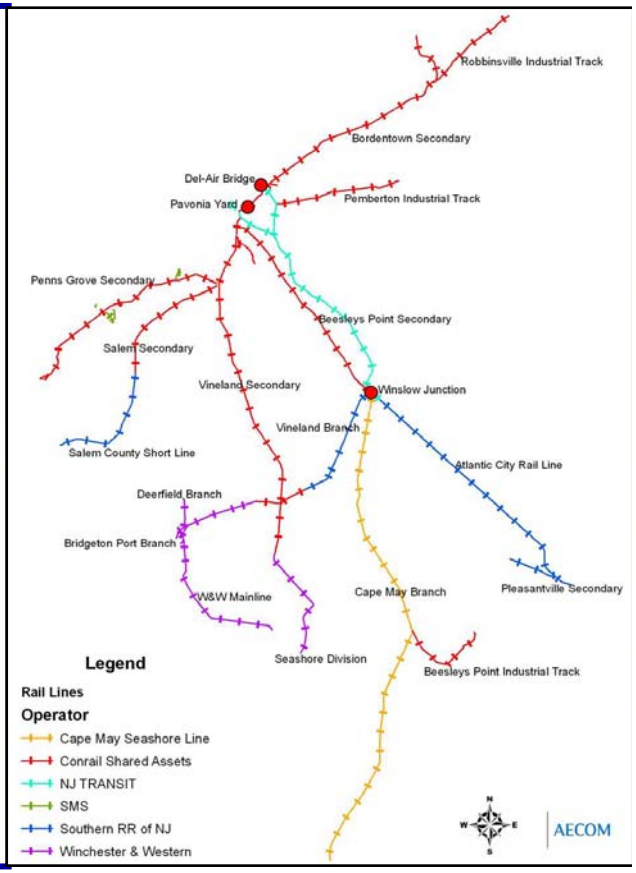
Top Trading Partners

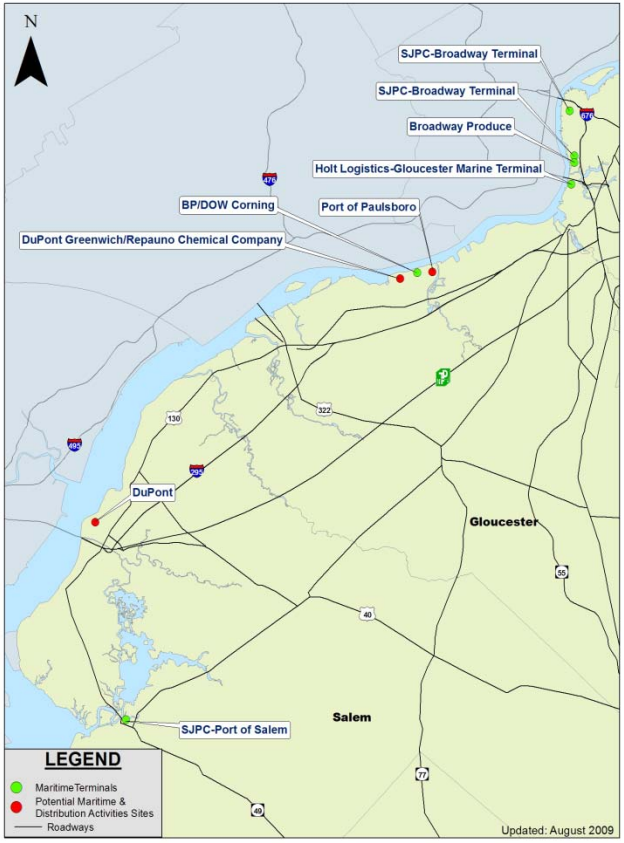


Multi-modal supply chain spine linked to the NE Corridor

- Major Roadways – limited access highways
- Rail – Conrail shared assets and shortlines
- Maritime network, Ports and Distribution centers







Region and Industry are Valuable Assets

- Skilled and available labor pool
- Cost competitive land and leasing rates
- Multi-modal supply chain linked to northeast corridor
- Abundant natural resources
  - Seafood ($600 million)
  - Prime agricultural farmland ($580 million)
  - Construction aggregates ($120 million)
- Proximity to some of largest consumer markets in NJ, NY, and PA

Freight and Logistics Industry Clusters

Supply Chain Corridor

Delaware River Ports

Agriculture

Legacy Industries

Construction Aggregates

Seafood

Transportation Needs by Industry Cluster

- **Supply Chain**
  - Beyond I-295/ NJ Turnpike location advantages dissipate rapidly
  - Expansion constrained by rail condition/connectivity and north-south rail disconnect
- **Delaware River Ports**
  - Camden port facilities have numerous deficiencies and community impacts, need modernization to realize potential
  - Rail access at Port of Salem virtually unusable
- **Legacy Industries**
  - Rail needs upgrading/connectivity improvement to spur reuse
- **Construction Aggregates**
  - North-south rail disconnect a severe constraint
- **Seafood**
  - Middle Thorofare Bridge clearance constrains operations, inhibits expansion
- **Agriculture**
  - Grain export requires bulk terminals for market-to-pier storage

Stage One: Maintain

- Maintain current strengths, capacity, and markets
  - Shore up supply chain corridor with better interchanges
  - Make needed repairs of port facilities
  - Address needed rail repairs at Salem, Camden, Winslow and Delair
- 2 committed capital projects valued at $152 M
  - Route 55 Exit 24 (Route 49) ($21 M)
  - I-295/NJ 42 Missing Moves ($131 M)
- 11 projects valued at $301 million
  - I-295, exits 7,10,40,52 and 57
  - Rt 55, exits 47 and 49
  - Delair and Hospitality Creek bridge rahabs
  - Salem secondary upgrades
  - Port of Camden berth repairs and intraport connectors

Stage Two: Improve

- **Improve efficiency, operations, and cost competitiveness of existing industries**
  - Address long term regional highway capacity and interconnects
  - Upgrade short line system and Port rail access
  - Modernize Camden Port facilities, mitigate community impacts
- **3 committed capital projects valued at $3.86B**
  - I-295/I-76/I-676/NJ 42 “Direct Connection” ($810 M)
  - NJ Turnpike Widening Exit 6-9 ($2.5 B)
  - PA Turnpike & I-95 Interchange ($553 M)
- **16 projects valued at $305 million**

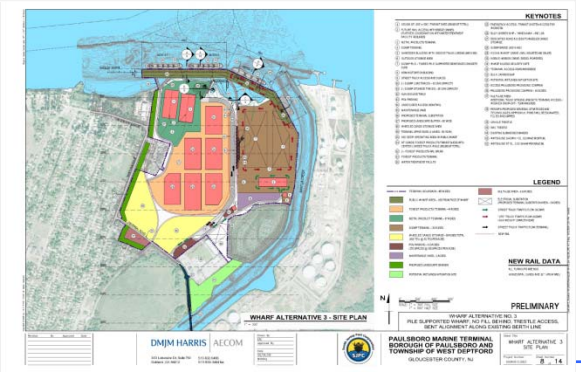
Port of Camden/I-676 Interchange	Penns Grove Secondary	Camden wharves
Salem Dockside Rail Improvements	Increase Pavonia capacity	Camden rail
Route 49 connection to I-295	Robbinsville Industrial	Broadway Pier 1
Bordentown siding/double track	Salem short line rehab	Camden access road
SMS upgrades at Pureland	Beckett Entrance	Salem wharf

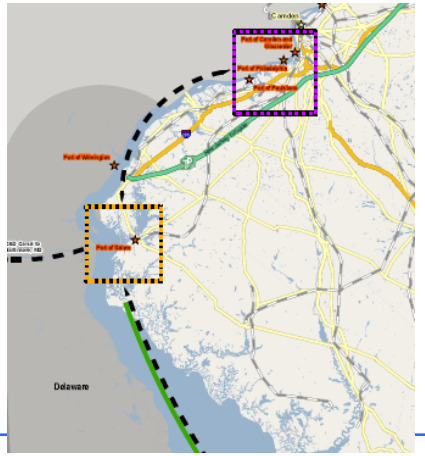
Stage Three: Expand

- Expand into new markets, new products, new capacity, integrate freight modes
  - Improve deep sea access at Cape May
  - Build new multimodal port at Paulsboro
  - Provide capability of receiving double stack trains to expand logistics industry
- 1 committed capital project valued at $274 M
  - New Marine Terminal at Paulsboro
- 4 projects valued at $441 Million
  - Middle Thorofare Bridge/Ocean Drive
  - Roadway connector for Paulsboro and I-295
  - Rail connections for Paulsboro
  - Double stack capacity for Delair Bridge

And Beyond...

- Build <u>new bulk terminals</u> to accommodate anticipated regional growth and increase resource export capacity
- Connect southern NJ to the Port of NY/NJ and Port of Philadelphia to accommodate growth in containerized goods by <u>rebuilding loop rail service</u>
- Expand Port of Salem to be hub for <u>domestic shipping</u> as envisioned in New Jersey Marine Highway plan
- Use all of the above to position southern NJ to be an <u>export platform</u> for implementation of the National Export Initiative





Opportunities for Input

- NJDOT Website
  http://www.state.nj.us/transportation/freight/plan/initiatives.shtm
- DVRPC Website
  http://www.dvrpc.org/Freight/DVGMTF.htm
- Contact Project Team:

  Scott Douglas – NJDOT
  scott.douglas@dot.state.nj.us

  Tony DeJohn – PB dejohn@pbworld.com

Parsons Brinkerhoff AECOM Anne-Strauss Wieder
Jacobs Engineering Cambridge Systematics

Delaware Valley Goods Movement Presentation

Region Projects

2010 to 2012

2010 Construction Projects

- 202-ERP – Chester County
- 476-RDC – Montgomery County
- 202-311 – Chester County
- 202-700 – Bucks and Montgomery County
- 30 th Street – Bridges Philadelphia County
- I-95 – Girard Point Bridge Rehab-Philadelphia
- Gustine Lake Interchange - Philadelphia
- I-95 Micro-surfacing – Bucks County
- I-76 Ramp/Henderson Road

I-476 RDC Blue Route Reconstruction

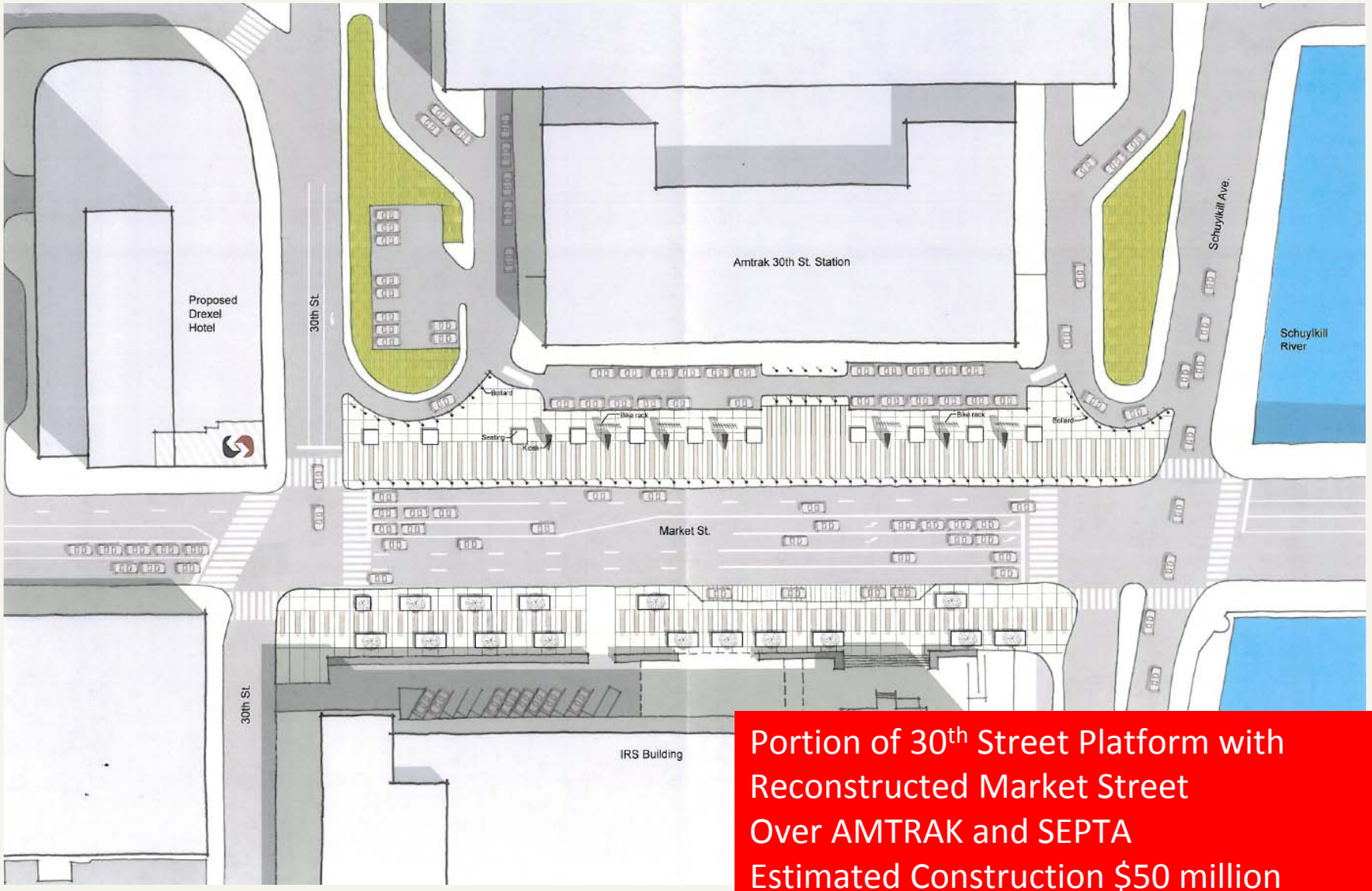
TR 309 Section 101 reconstruction

Girard Point Bridge Project

RT 1 RES Twin Bridges ARRA project

Gustine Lake Interchange ARRA/Region

30th Street Station Structures

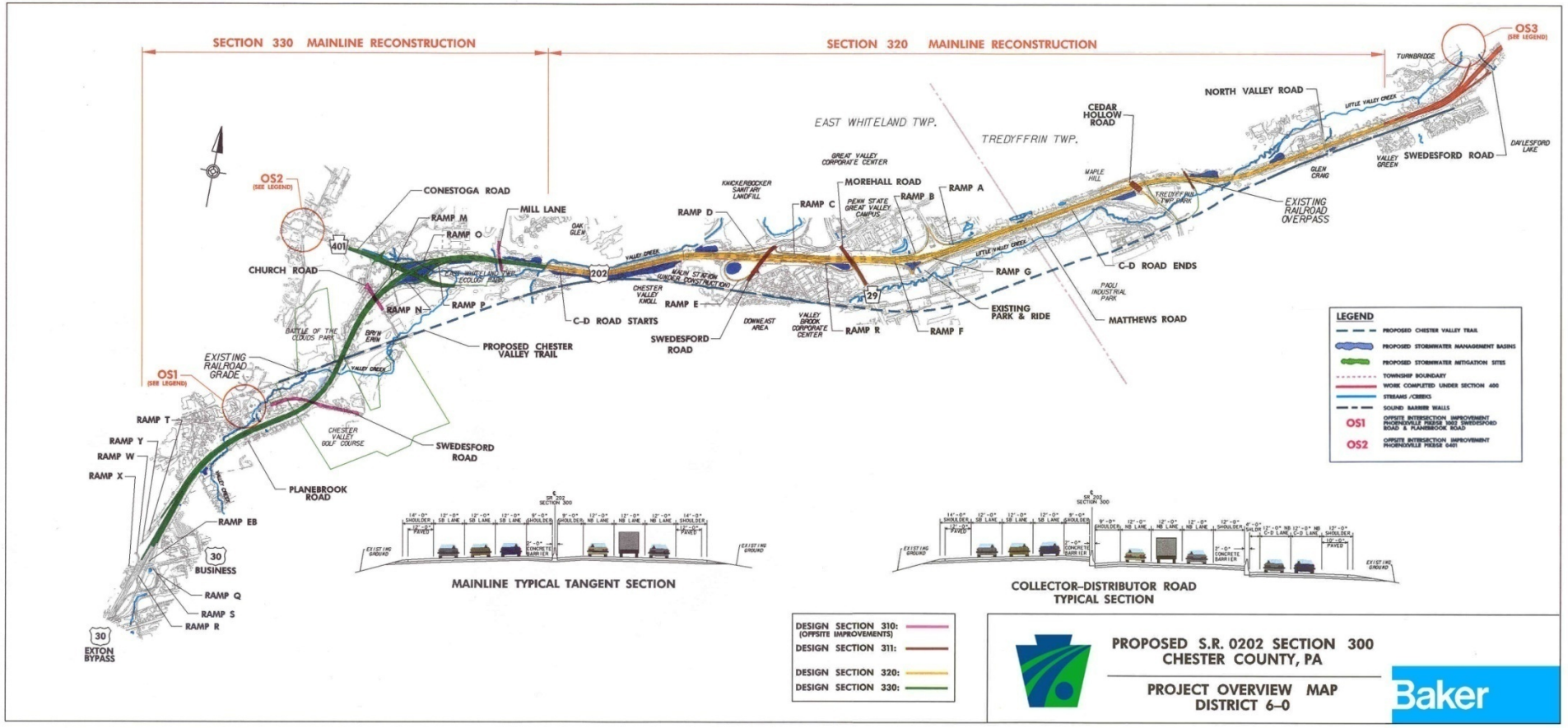


Portion of 30th Street Platform with
Reconstructed Market Street
Over AMTRAK and SEPTA
Estimated Construction $50 million
Scheduled Bid Opening Late 2010

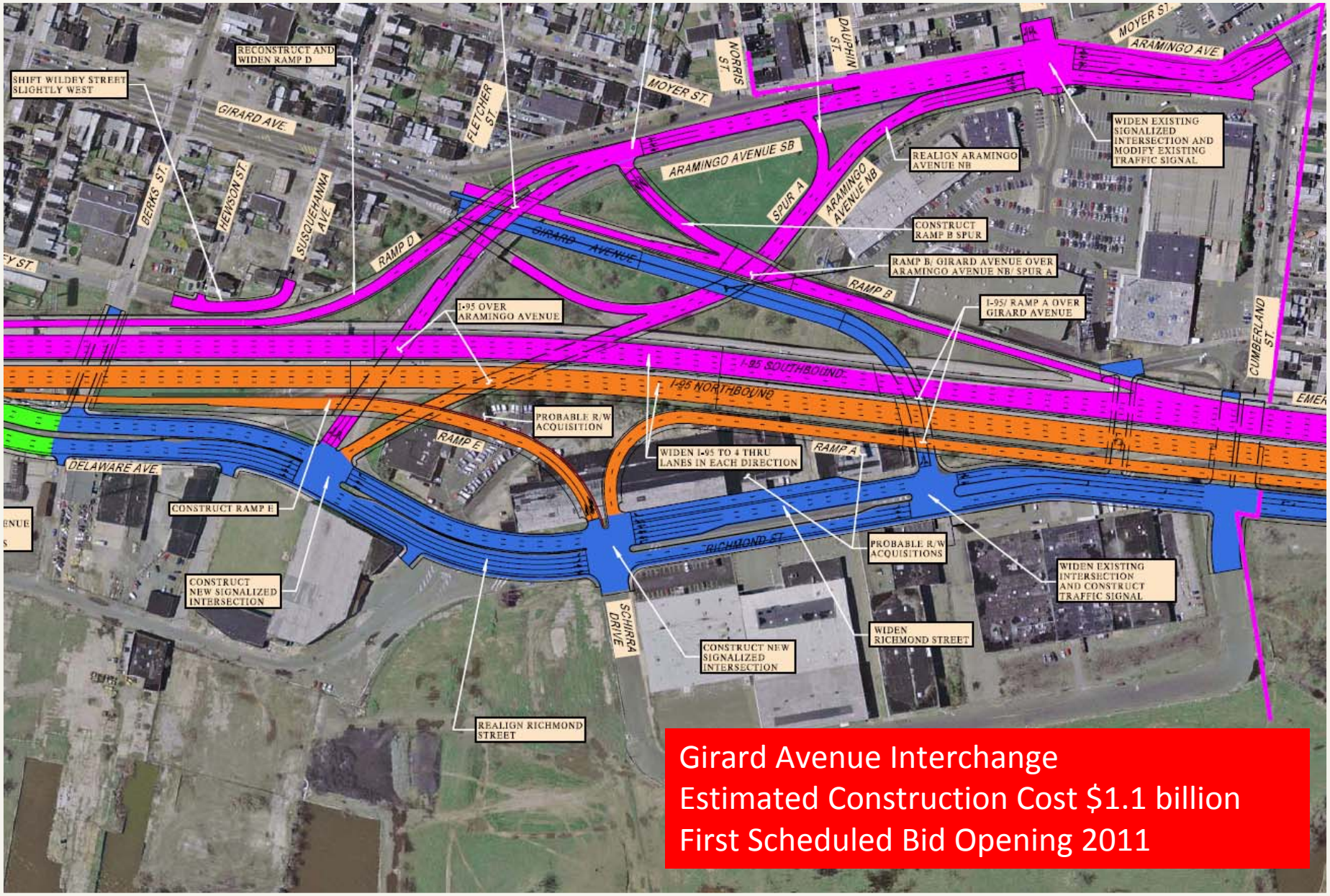
2011 Proposed Projects

- I-95-CP2 Philadelphia County – $195 M
- I-95-GR1 Philadelphia County --$75.3 M
- Platt Brdg Philadelphia County -- $30M
- 413-S46 Bucks County -- $12M
- 100-02L Chester County -- $15.3M
- 202-320 Chester County -- $109M
- 422-M1A Montgomery County $87M

US 202 Section 300
Estimated Construction Cost $ 250 M



I-95 and the Girard Avenue Interchange



I-95 GIR
Estimated Construction Cost - $990 M

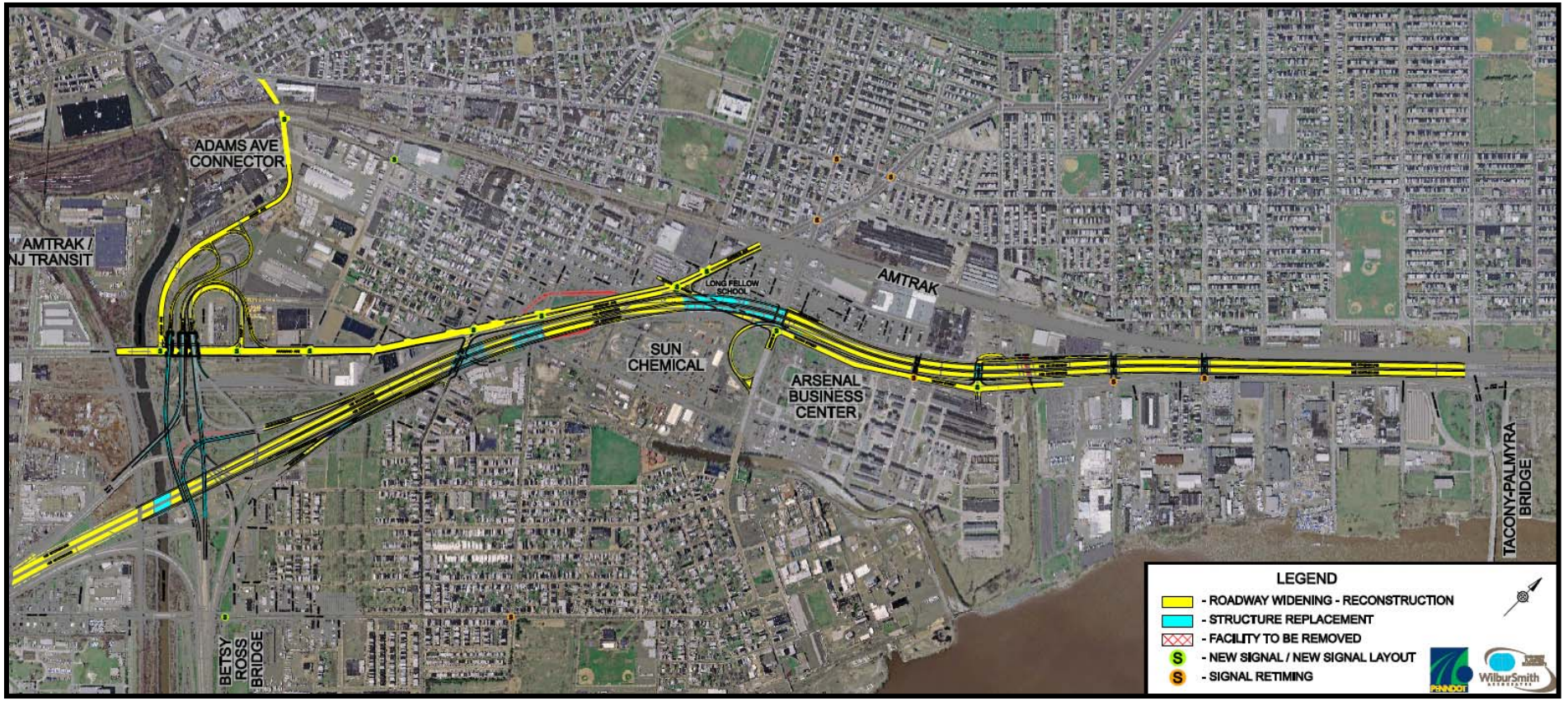
I-95 – CPR
Estimated Construction Cost - $ 238 M

2012 Proposed Projects

- 422-ITR Montgomery County -- $10 M
- 422 M2A Montgomery County -- $32 M
- I-95 GR2 Philadelphia County -- $43 M
- I-95-TWU Delaware County -- $20 M
- 202-330 Chester County – $84M
- TR 13-MO4 Bucks County -- $28M
- TR 23-TCB Montgomery County -- $10M

I-95 Section AFC
Estimated Construction Cost $ 205 M

I-95 Sections BSR & BRI
Estimated Construction Cost-$228M(BSR), $327M(BRI)

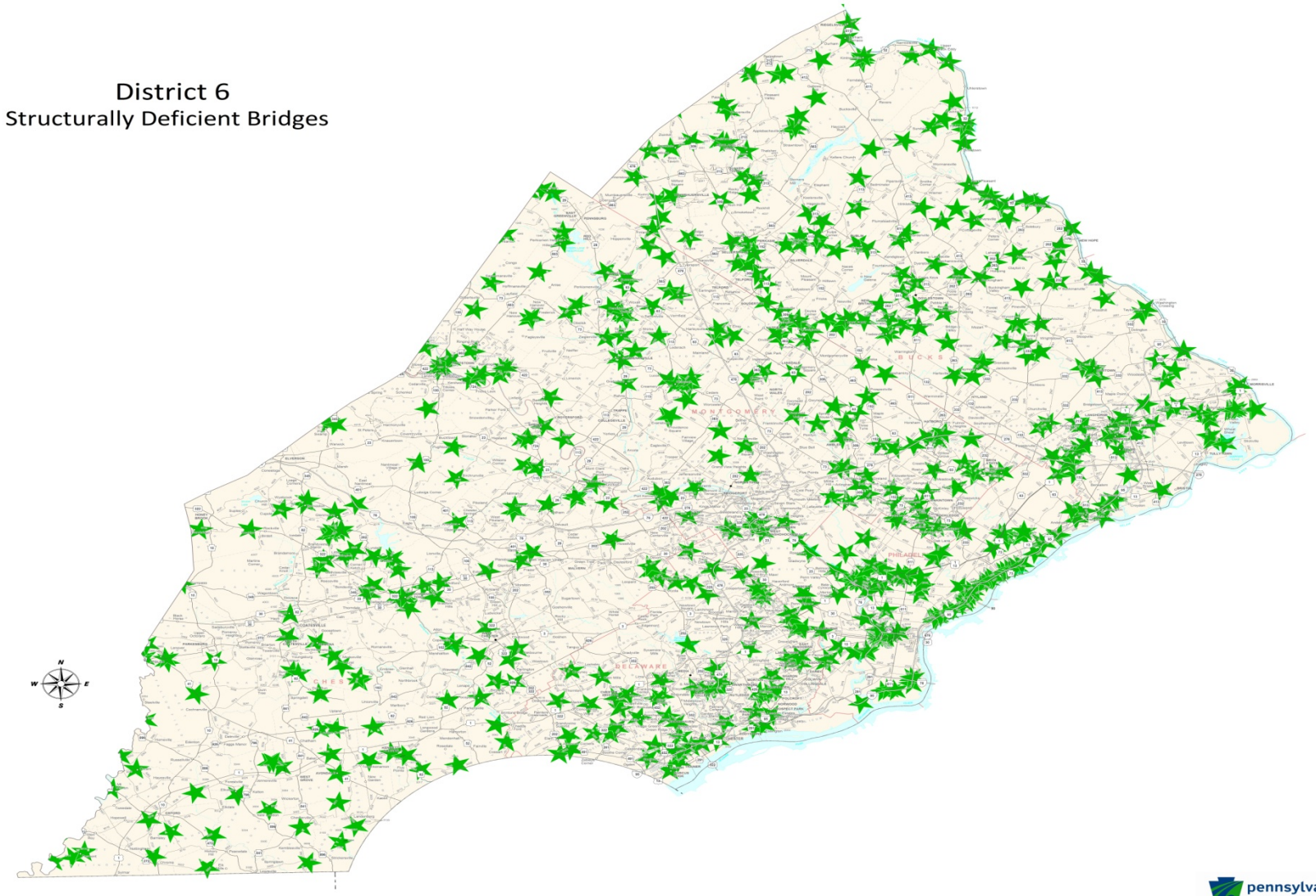


Annual Funding Shortfall

Bridge & Pavement Needs

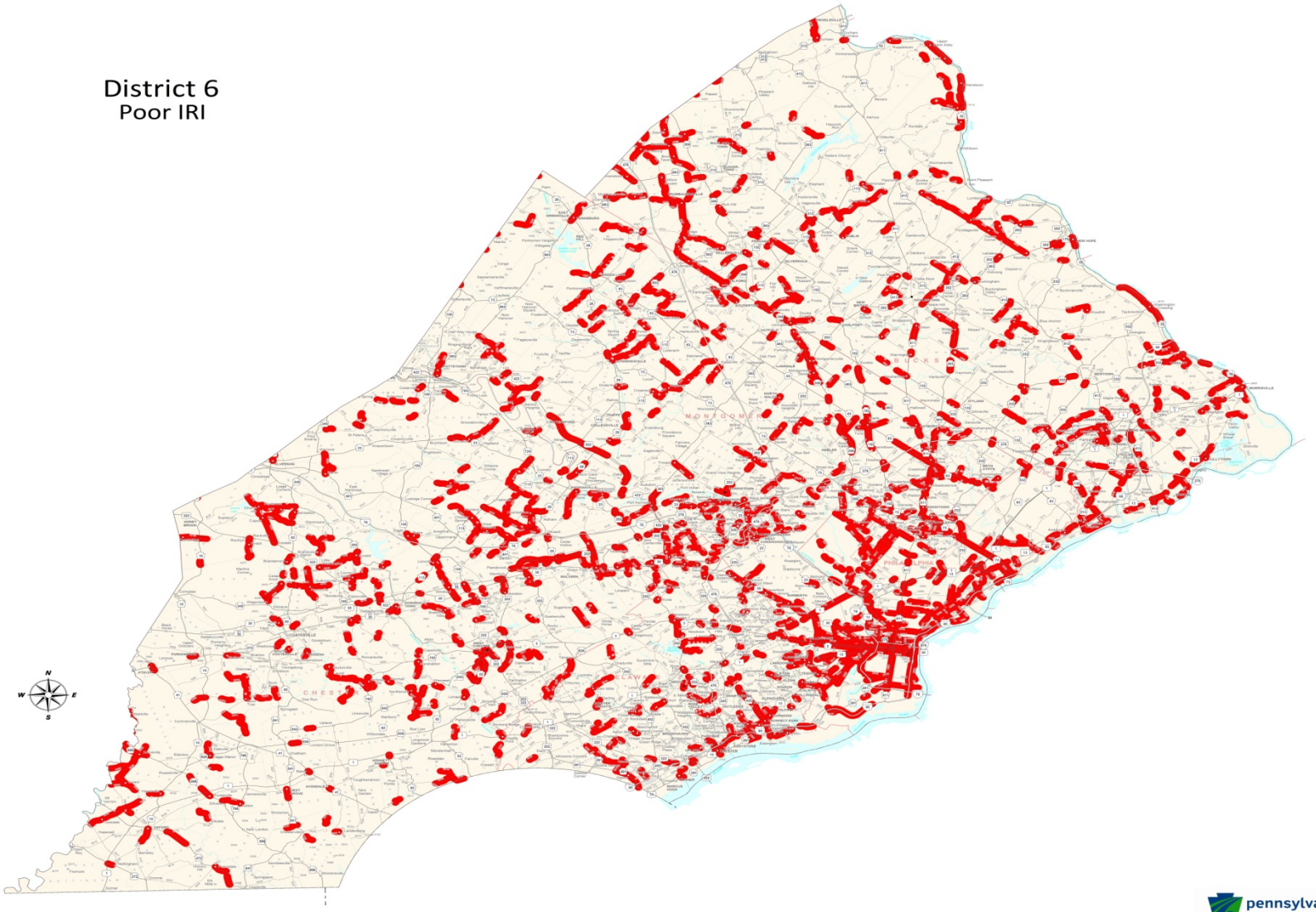
Estimated Regional Need	$829M
Current Funding Level	$474M
Shortfall	$355M

596 Structurally Deficient Bridges



pennsylvania
DEPARTMENT OF TRANSPORTATION

770 miles of poor IRI



pennsylvania
DEPARTMENT OF TRANSPORTATION

PENNSYLVANIA STATE
TRANSPORTATION ADVISORY COMMITTEE

TRANSPORTATION FUNDING STUDY

FINAL REPORT

MAY 2010

Combined Unmet Needs

	2010 Need (Millions)
Highway & Bridge	$2,576
Public Transportation	$484
Local Government	$432
TOTAL	**$3,492**

Source: Transportation Advisory Committee May 2010 Report

Recommendations – Longer-Term Need

- **Establish a new transportation funding framework to ensure sustainable mobility.**
- **Predictable and sustainable**
- **Major elements:**
  - More direct User Pay system – VMT Fee
  - Tolling Options
  - Public-Private Partnerships
  - Strategic Borrowing
  - Local Option Taxes

Passenger and Freight Rail
Together We Stand!

Jim Blair

Sr. Director Host Railroads

Overview

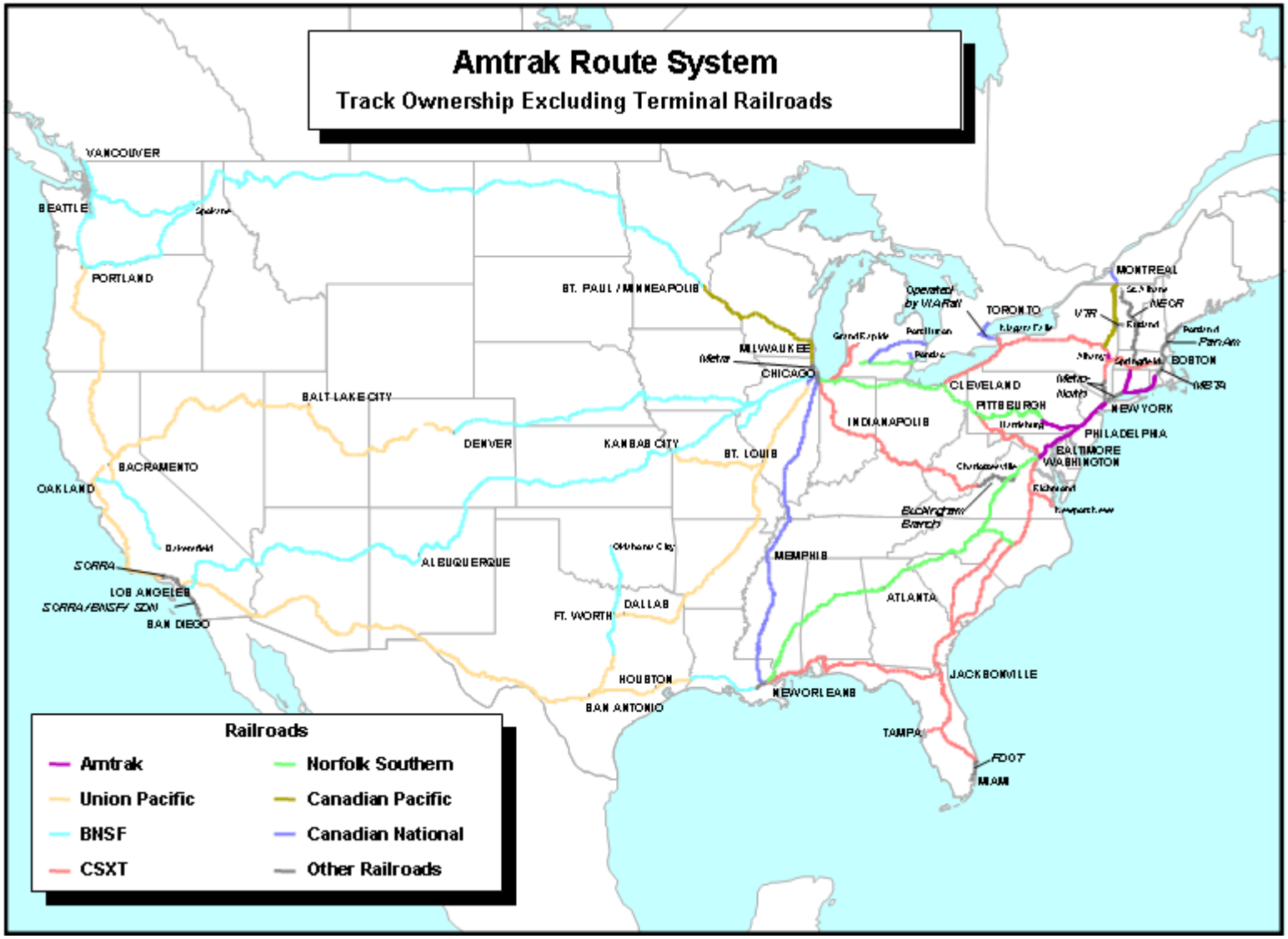
- Background & 2009 Review
- Amtrak-Freight (Host) Railroad relationship
- How PRIIA is changing our world
- High Speed Rail

Background

- Amtrak is the national intercity passenger rail provider
  - Began operation in 1971 to relieve freights of common carrier obligation to provide passenger service
  - Operates a 21,100 mile system, serving 535 stations
  - Carried 27.2 million passengers in FY 2009 (second only to FY 08)
- Services fall into three categories:
  - Northeast Corridor (largely, but not entirely, Amtrak-owned infrastructure)
  - Long distance trains (over 750 miles)
  - Short distance trains (under 750 miles)
- 70% of our train-miles run on railroads other than Amtrak:
  - BNSF Railway (6.69 million train-miles)
  - Union Pacific Railroad (6.09 million train-miles)
  - CSX Transportation (5.85 million train-miles)
  - Norfolk Southern Railway (2.36 million train-miles)
  - Canadian National Railway (1.45 million train-miles)
  - Metro-North Commuter Railroad (1.34 million train-miles)

Top six partners, in terms of annual train mileage

Amtrak pays host companies for incremental cost and incentives – about 110 million dollars in FY09


Amtrak Route System
Track Ownership Excluding Terminal Railroads
VANCOUVER
SEATTLE
PORTLAND
BALT LAKE CITY
SACRAMENTO
OAKLAND
DENVER
KANSAS CITY
ST. LOUIS
ST. PAUL / MINNEAPOLIS
MILWAUKEE
CHICAGO
TORONTO
Operated by VIA Rail
MONTREAL
NEW YORK
BOSTON
CLEVELAND
PITTSBURGH
INDIANAPOLIS
PHILADELPHIA
BALTIMORE
WASHINGTON
ALBUQUERQUE
MEMPHIS
ATLANTA
DALLAS
FT. WORTH
HOUSTON
SAN ANTONIO
NEW ORLEANS
JACKSONVILLE
TAMPA
MIAMI
LOS ANGELES
SAN DIEGO
Railroads
Amtrak
Union Pacific
BNSF
CSXT
Norfolk Southern
Canadian Pacific
Canadian National
Other Railroads

Fiscal Year 2009 Review

- FY09 was not *quite* as strong as FY08
  - Recession has affected our ridership, revenues
  - Still 2nd highest year ever, showing service value
- Tough economic conditions occurring in a favorable policy environment
- Opportunities to invest constrained by need for operating funding

Amtrak – Host Relationship

- In 1970, Congress passed Rail Passenger Service Act
  - Relieved freights of obligation to provide passenger service
  - Placed that obligation on newly-created Amtrak
  - Tradeoffs were:
    - Statutory right of access to all US rail lines
    - Incremental cost
    - Preference over freight trains
- Not a typical arms-length business relationship
- Many dimensions
  - Daily operational details
  - On-time performance focus
  - New / expanded routes

Expectations of Amtrak…and Hosts

- Amtrak service is funded by the federal government and by individual states
- What do they expect in return?
  - Clean, modern trains
  - Reliable service
  - Growth
- Hosts and Amtrak are “in this together”
  - So how do we meet these expectations?


***San Joaquin* near Merced, CA**

On-Time Performance

- Off-NEC OTP has historically been a great challenge for Amtrak
  - Host railroads control right-of-way, dispatching
  - 70% of Amtrak train-miles run on RoW owned by other railroads
- OTP hit bottom in 2006, with some trains' OTP in single digits

Coast Starlight – 3.9% OTP in FY 2006

***California Zephyr* – 6.9% OTP in FY 2006**

Frustration reflected in increased Federal involvement

- FRA began publishing quarterly Amtrak performance report
- DOT IG issued two reports on Amtrak performance
- US DOT challenged hosts to improve performance
- Finally, in late 2008, Congress passed and President Bush signed Passenger Rail Investment and Improvement Act (PRIIA)
  - Contains performance metrics, standards, and provisions for STB investigations and damages

Impact of PRIIA

- Following PRIIA, Amtrak OTP on hosts began to rebound and delays declined
  - Improvements began before freight traffic declines of late 2008
  - Amtrak credits host railroad management focus
  - In several cases, improvements in Amtrak performance began almost overnight

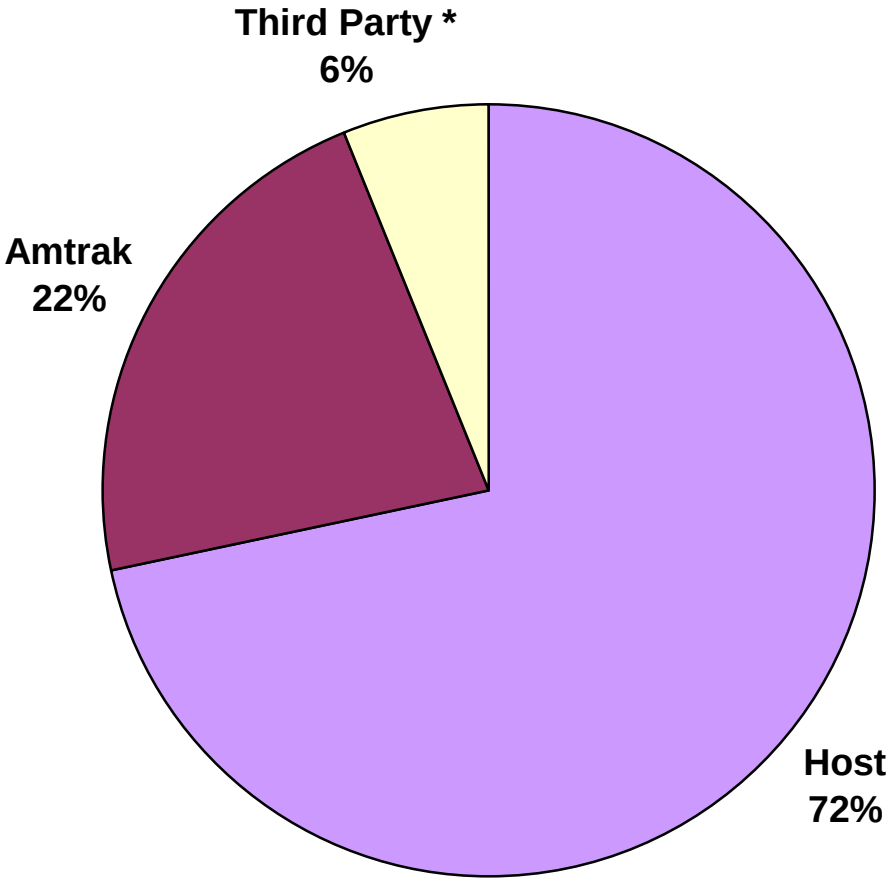
Coast Starlight – 3.9% OTP in FY 2006

82.2% OTP in FY 2009

***California Zephyr* – 6.9% OTP in FY 2006**

59.6% OTP in FY 2009

FY09 Off-NEC Delays By Responsible Party



Primary Amtrak delay categories:

- Passenger-related
- Equipment failure
- Crew & System

Primary host delay categories:

- Slow Orders
- Freight Train Interference
- Passenger Train Interference
- Signals
- Routing
- Maintenance of Way

* Unused Recovery Time Not Included.

PRIIA is a blueprint for fundamental change

- Clear vision for Amtrak and intercity passenger rail within the national transportation scheme
- Establishes a new partnership between Federal government, states, Amtrak, and host railroads:
  - States plan rail service
  - Host railroads access federal capital to accommodate additional service
  - Amtrak operates national network, helps design and operate services
  - US DOT integrates this state planning into a national system
- PRIIA grant programs to support intercity passenger rail have been funded by $8 billion in ARRA stimulus money, and $2.5 billion in additional capital – a total of $10.5 billion!

Key PRIIA requirements that affect freight/Amtrak relations

Sec. 207 - Metrics and Standards: ***Amtrak and FRA must develop or improve metrics and standards to measure train performance and service quality***

Sec. 209 - State-supported routes: ***Amtrak, states, and FRA must develop and implement a single nationwide standardized methodology for establishing and allocating operating and capital costs among the states***

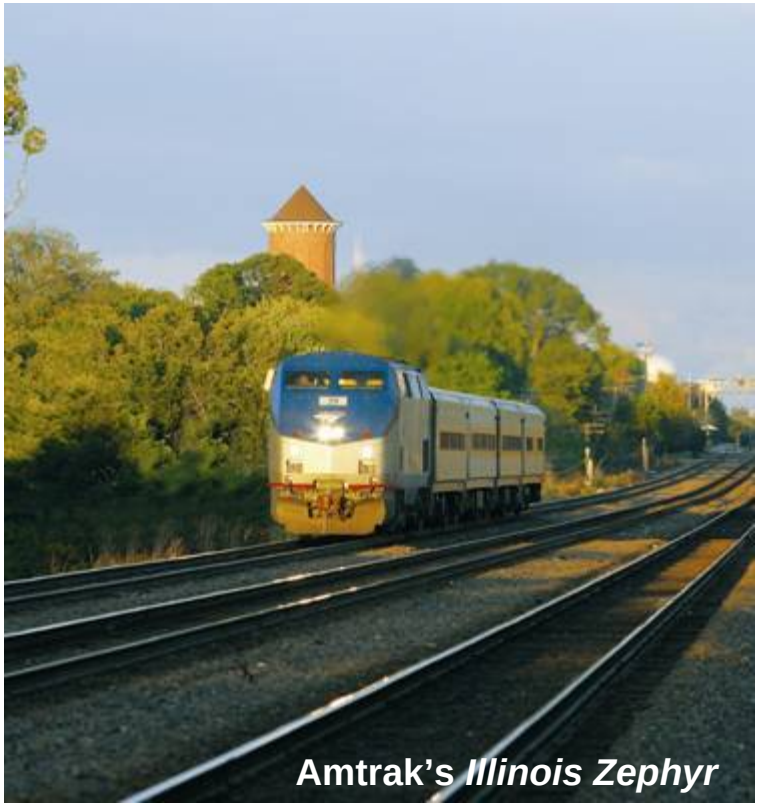
Sec. 303 - State rail plans: ***States must complete state passenger and freight rail plans that are coordinated with other state transportation plans***

Sec. 210 - Long Distance Routes: ***Amtrak, using the metrics and standards, evaluate each long distance route annually, and develop performance improvement plans; implement them over the LD network by thirds, beginning in 2010***

Sec. 213 - Passenger Train Performance: ***Empowers STB to investigate poor OTP and enforce Amtrak preference rights***

Evolving into our New Roles

- States will be lead partners
  - Create rail plans
  - Function as federal grant recipients
  - Provide operating and capital funding for Amtrak services
    - Under PRIIA, Amtrak must treat short distance routes uniformly
    - States who do not fund their routes today must begin to do so by 2013
- FRA leads national policy
  - National rail plan
  - Safety and performance standards
  - Administers grant programs
  - Facilitates among partners – states, Amtrak, freights


Amtrak's *Illinois Zephyr*

Evolving into our New Roles

- Amtrak facilitates intercity rail operations and development
  - Operator of the national network
  - Trusted by hosts to operate safely
  - State services operator
  - Fleet provider
  - HSR operator
  - Contract commuter operator
  - Tactical planner of intercity passenger services
  - Liability coverage provider on hosts (no-fault each-takes-own)
- Amtrak is developing new business processes, resources and policies to become corridor-service focused and more transparent, consistent, and nimble

Amtrak, State, Host Collaboration for New and Expanded Routes

- For new or expanded intercity rail passenger service, Amtrak, state, and host must agree up-front on service outcomes, in particular
  - Trips per day
  - Trip time
  - Maximum delay minutes per trip
- Amtrak, state, and host then design an infrastructure to support these agreed-upon outcomes
  - Without materially lessening the quality of freight service to shippers
  - Practical improvements, not “gold plated”
- Public sector provides funding to “build it right”
- Host railroads make enforceable commitments to “run it right”
- A well-functioning passenger service is good for the rail industry

Successful Collaborations and Potential New Partnerships

Now:

- Washington: Seattle-Vancouver 2nd Frequency
- Virginia: NEC Regional trains to Lynchburg & Richmond
- North Carolina: Additional Piedmont frequency
- Maine: Brunswick extension

Coming Soon:

- Wisconsin: New service to Madison
- Vermont/Massachusetts: Connecticut River reroute

VISION *for* HIGH-SPEED RAIL *in* AMERICA

Different approaches to high speed rail (HSR)

"The Big Bang"

- Substantial trip time improvement
  - May require sustained very high speeds, e.g., 150+ mph
- High capital cost
  - More likely to require dedicated ROW
- Extensive land use issue
- Takes years (sometimes decades) to realize, but builds large market share

"Incremental Improvement"

- Produces a string of small trip time improvements
  - Over time, these accumulate
  - Can begin quickly
  - Build ridership and market share as you go
- Limit capital costs

Amtrak has the expertise to make both approaches work – so let's take a look at them

A quick comparison

Amtrak Keystone Corridor Improvements (2006)

- 104 mile line (Philadelphia-Harrisburg)
- Restored existing electrification, improved track and signals for 110 mph service
- 10 intermediate stops, shared ROW for 110mph service w/ Norfolk Southern freight operations
- Harrisburg-Philly trip cut from 2 hours to 1:45
- Carried 1,183,821 riders in FY 08
- 20.1% ridership growth in FY 07, 19.8% growth in FY 08

Cost: $145 million

Harrisburg station

Segovia-Guiomar station

Madrid-Valladolid High Speed Line (Dec 2007)

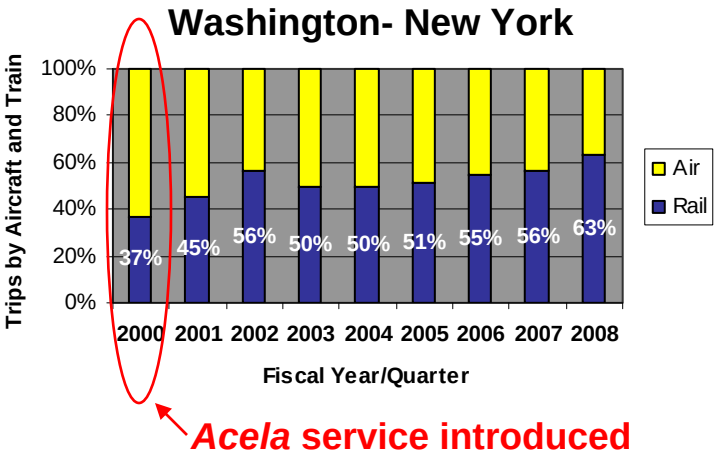
- 111 mile line
- Constructed a dedicated ROW for 186 mph service; included a 28 km tunnel
- 1 intermediate stop
- Time cut from 1:30 to 55 minutes
- Carried 825,043 riders in 2008

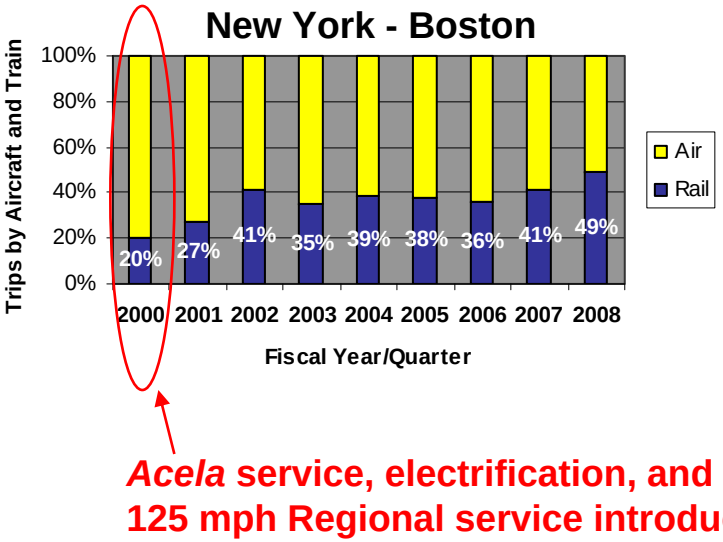
Cost: $5.9 billion

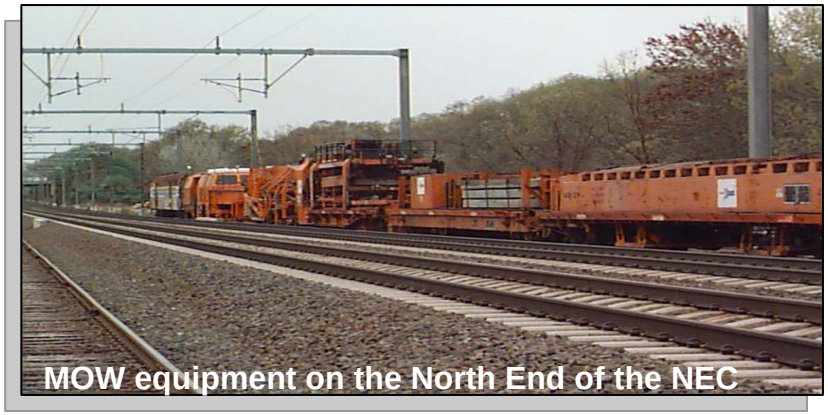
Alberto Saviejo photo

How well does an incremental approach work?

- **Northeast Corridor services are a product of incremental development:**
  - **~100 mph in 1976 (on a good day)**
  - **125 mph in 1980s**
  - **135-150 mph in 2000**
- **Market share is a product of trip time – but also frequency, convenience, comfort and reliability**






MOW equipment on the North End of the NEC

The diminishing marginal returns problem

- Beyond some point, you get less output for each additional unit of capital
  - The real question: where is the sweet spot?
- The South End of the Northeast Corridor (DC-NYC) is a good example:
  - Trimming fifteen minutes off current trip time costs a total of $6.5 billion in infrastructure investment
- These are useful gains, no question – but multiple billions could:
  - Bring the whole Amtrak system in compliance with the ADA (~$1.6 billion)
  - Raise top speed between Chicago and St. Louis to 110 mph (~$2 billion)
  - Build 110 mph dedicated rail line between Raleigh, NC and Petersburg, VA (~$4 billion)
  - Improve Charlotte-Raleigh line to 90 mph (~$1.01 billion)

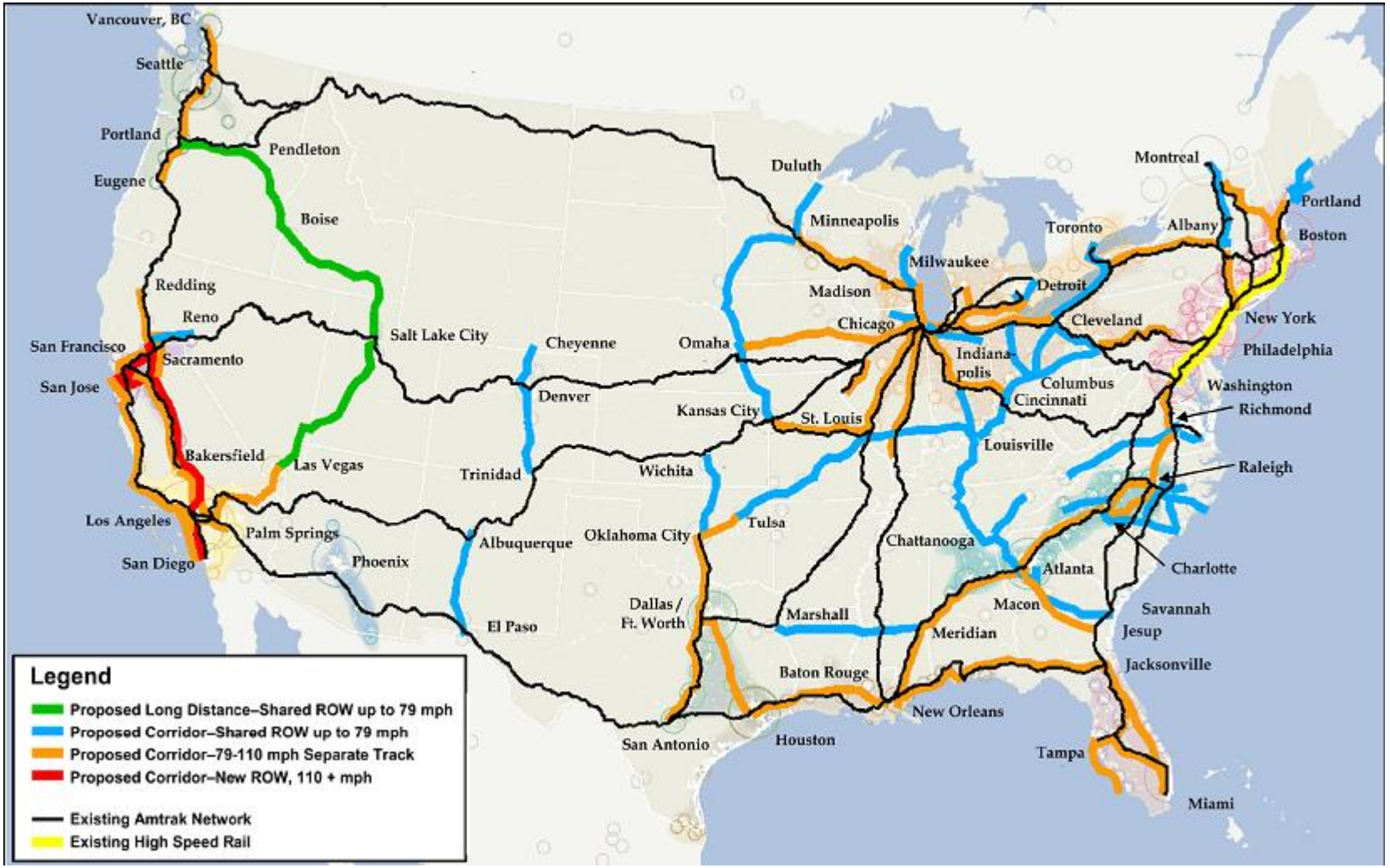
It's not a question of what we *can* do – it's a question of what we can afford to do

The way ahead

- FRA's *Vision for High-Speed Rail* states Administration commitment to a program of incremental development
- PRIIA gives the FRA administrator authority to facilitate the process of coordination
- All involved parties have needs:
  - Hosts need to retain capacity for future expansion
  - Passenger carriers need access, and accommodation of service at higher speeds on existing RoW
  - Public has an interest in seeing returns for investment

Solution has to be coordinated planning, which deconflicts interests and ensures taxpayer's investments produce the promised return

2050 Proposed Intercity Passenger Rail Network



Source: Passenger Rail Working Group proposed 2050 intercity passenger rail network (as modified by states).

Passenger and Freight Rail
Together We Stand!

Jim Blair

Sr. Director Host Railroads

Overview

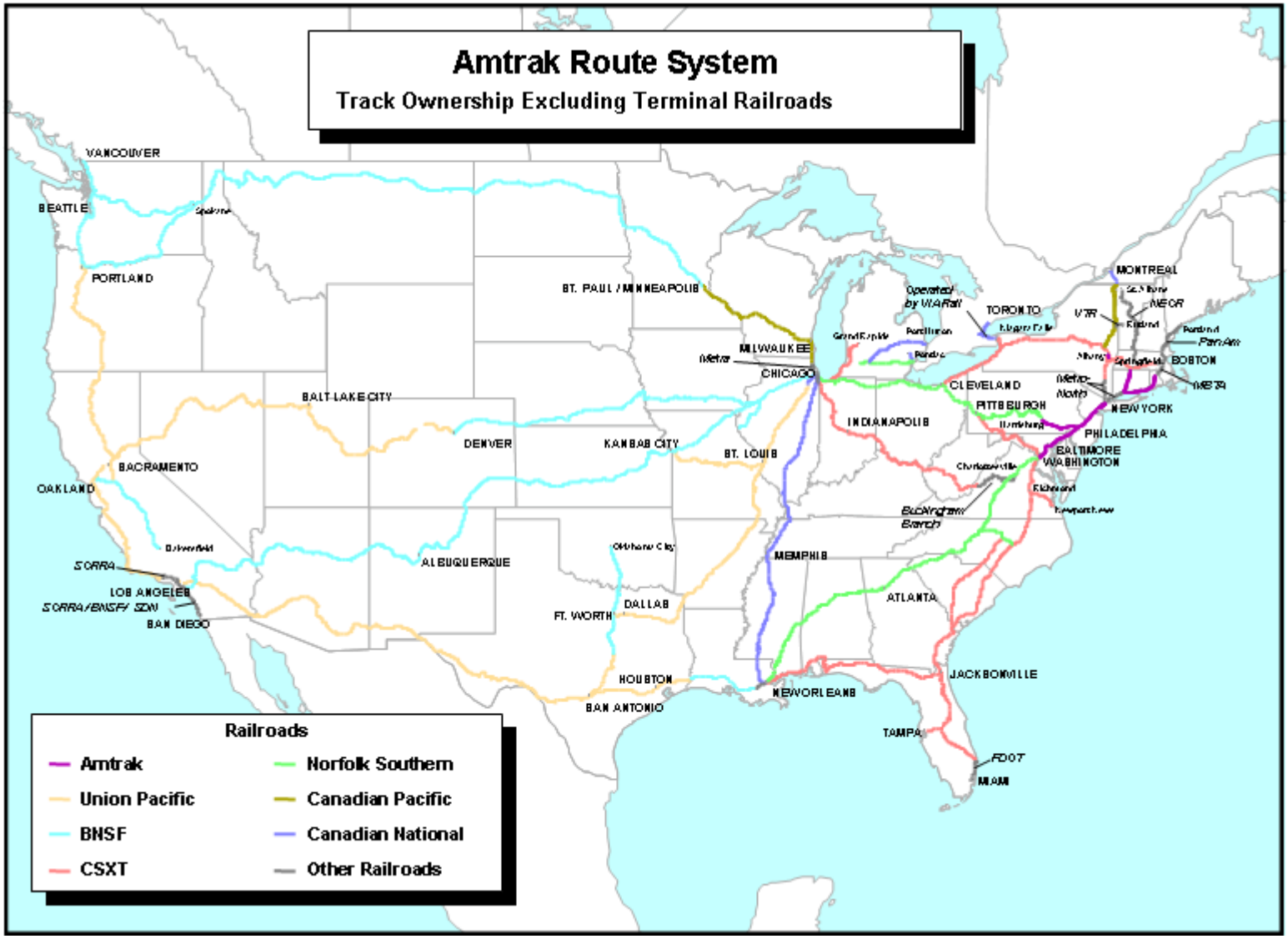
- Background & 2009 Review
- Amtrak-Freight (Host) Railroad relationship
- How PRIIA is changing our world
- High Speed Rail

Background

- Amtrak is the national intercity passenger rail provider
  - Began operation in 1971 to relieve freights of common carrier obligation to provide passenger service
  - Operates a 21,100 mile system, serving 535 stations
  - Carried 27.2 million passengers in FY 2009 (second only to FY 08)
- Services fall into three categories:
  - Northeast Corridor (largely, but not entirely, Amtrak-owned infrastructure)
  - Long distance trains (over 750 miles)
  - Short distance trains (under 750 miles)
- 70% of our train-miles run on railroads other than Amtrak:
  - BNSF Railway (6.69 million train-miles)
  - Union Pacific Railroad (6.09 million train-miles)
  - CSX Transportation (5.85 million train-miles)
  - Norfolk Southern Railway (2.36 million train-miles)
  - Canadian National Railway (1.45 million train-miles)
  - Metro-North Commuter Railroad (1.34 million train-miles)

Top six partners, in terms of annual train mileage

Amtrak pays host companies for incremental cost and incentives – about 110 million dollars in FY09


Amtrak Route System
Track Ownership Excluding Terminal Railroads
VANCOUVER
SEATTLE
PORTLAND
BALT LAKE CITY
SACRAMENTO
OAKLAND
DENVER
KANSAS CITY
ST. LOUIS
ST. PAUL / MINNEAPOLIS
MILWAUKEE
CHICAGO
TORONTO
Operated by VIA Rail
MONTREAL
NEW YORK
BOSTON
CLEVELAND
PITTSBURGH
INDIANAPOLIS
PHILADELPHIA
BALTIMORE
WASHINGTON
ALBUQUERQUE
MEMPHIS
ATLANTA
DALLAS
FT. WORTH
HOUSTON
SAN ANTONIO
NEW ORLEANS
JACKSONVILLE
TAMPA
MIAMI
LOS ANGELES
SAN DIEGO
Railroads
Amtrak
Union Pacific
BNSF
CSXT
Norfolk Southern
Canadian Pacific
Canadian National
Other Railroads

Fiscal Year 2009 Review

- FY09 was not *quite* as strong as FY08
  - Recession has affected our ridership, revenues
  - Still 2nd highest year ever, showing service value
- Tough economic conditions occurring in a favorable policy environment
- Opportunities to invest constrained by need for operating funding

Amtrak – Host Relationship

- In 1970, Congress passed Rail Passenger Service Act
  - Relieved freights of obligation to provide passenger service
  - Placed that obligation on newly-created Amtrak
  - Tradeoffs were:
    - Statutory right of access to all US rail lines
    - Incremental cost
    - Preference over freight trains
- Not a typical arms-length business relationship
- Many dimensions
  - Daily operational details
  - On-time performance focus
  - New / expanded routes

Expectations of Amtrak…and Hosts

- Amtrak service is funded by the federal government and by individual states
- What do they expect in return?
  - Clean, modern trains
  - Reliable service
  - Growth
- Hosts and Amtrak are “in this together”
  - So how do we meet these expectations?


***San Joaquin* near Merced, CA**

On-Time Performance

- Off-NEC OTP has historically been a great challenge for Amtrak
  - Host railroads control right-of-way, dispatching
  - 70% of Amtrak train-miles run on RoW owned by other railroads
- OTP hit bottom in 2006, with some trains' OTP in single digits

Coast Starlight – 3.9% OTP in FY 2006

***California Zephyr* – 6.9% OTP in FY 2006**

Frustration reflected in increased Federal involvement

- FRA began publishing quarterly Amtrak performance report
- DOT IG issued two reports on Amtrak performance
- US DOT challenged hosts to improve performance
- Finally, in late 2008, Congress passed and President Bush signed Passenger Rail Investment and Improvement Act (PRIIA)
  - Contains performance metrics, standards, and provisions for STB investigations and damages

Impact of PRIIA

- Following PRIIA, Amtrak OTP on hosts began to rebound and delays declined
  - Improvements began before freight traffic declines of late 2008
  - Amtrak credits host railroad management focus
  - In several cases, improvements in Amtrak performance began almost overnight

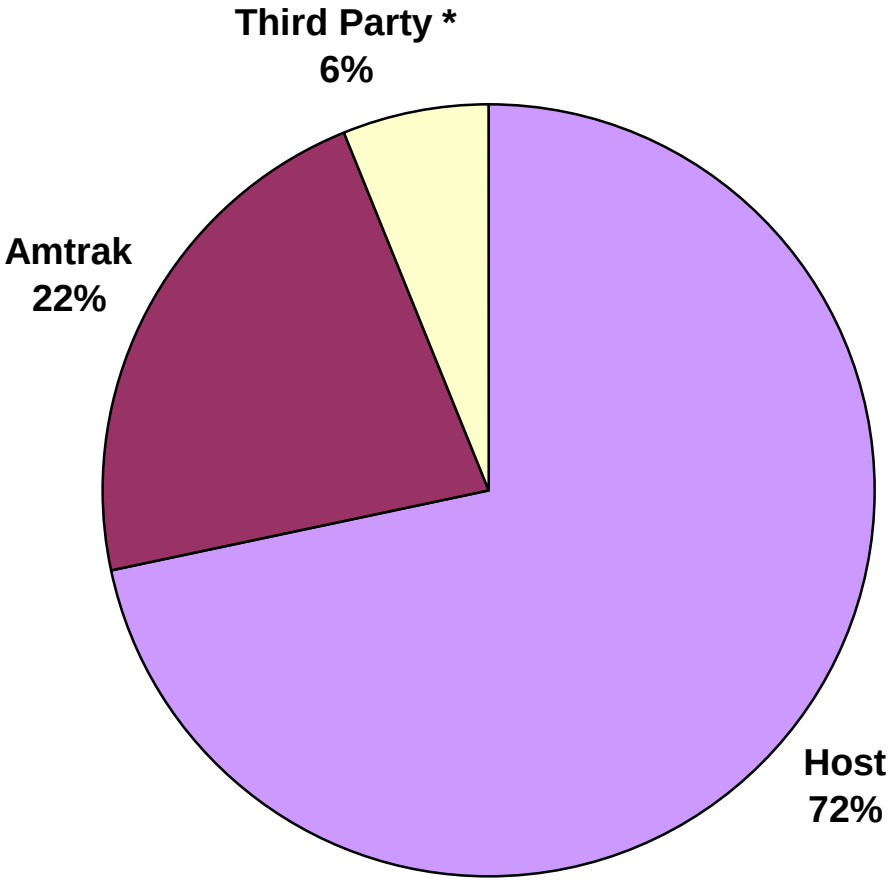
Coast Starlight – 3.9% OTP in FY 2006

82.2% OTP in FY 2009

***California Zephyr* – 6.9% OTP in FY 2006**

59.6% OTP in FY 2009

FY09 Off-NEC Delays By Responsible Party



Primary Amtrak delay categories:

- Passenger-related
- Equipment failure
- Crew & System

Primary host delay categories:

- Slow Orders
- Freight Train Interference
- Passenger Train Interference
- Signals
- Routing
- Maintenance of Way

* Unused Recovery Time Not Included.

PRIIA is a blueprint for fundamental change

- Clear vision for Amtrak and intercity passenger rail within the national transportation scheme
- Establishes a new partnership between Federal government, states, Amtrak, and host railroads:
  - States plan rail service
  - Host railroads access federal capital to accommodate additional service
  - Amtrak operates national network, helps design and operate services
  - US DOT integrates this state planning into a national system
- PRIIA grant programs to support intercity passenger rail have been funded by $8 billion in ARRA stimulus money, and $2.5 billion in additional capital – a total of $10.5 billion!

Key PRIIA requirements that affect freight/Amtrak relations

Sec. 207 - Metrics and Standards: ***Amtrak and FRA must develop or improve metrics and standards to measure train performance and service quality***

Sec. 209 - State-supported routes: ***Amtrak, states, and FRA must develop and implement a single nationwide standardized methodology for establishing and allocating operating and capital costs among the states***

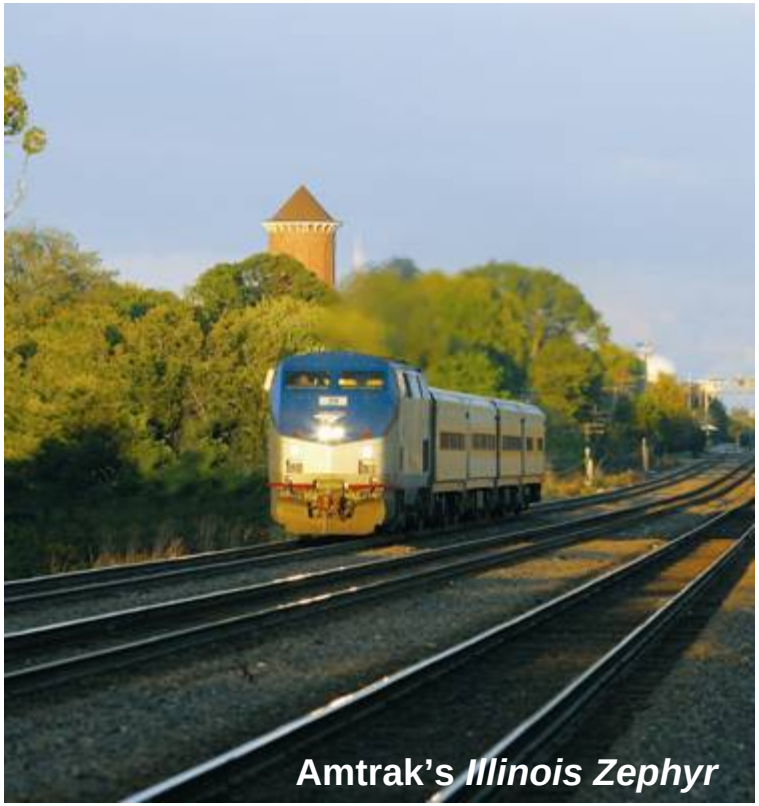
Sec. 303 - State rail plans: ***States must complete state passenger and freight rail plans that are coordinated with other state transportation plans***

Sec. 210 - Long Distance Routes: ***Amtrak, using the metrics and standards, evaluate each long distance route annually, and develop performance improvement plans; implement them over the LD network by thirds, beginning in 2010***

Sec. 213 - Passenger Train Performance: ***Empowers STB to investigate poor OTP and enforce Amtrak preference rights***

Evolving into our New Roles

- States will be lead partners
  - Create rail plans
  - Function as federal grant recipients
  - Provide operating and capital funding for Amtrak services
    - Under PRIIA, Amtrak must treat short distance routes uniformly
    - States who do not fund their routes today must begin to do so by 2013
- FRA leads national policy
  - National rail plan
  - Safety and performance standards
  - Administers grant programs
  - Facilitates among partners – states, Amtrak, freights


Amtrak's *Illinois Zephyr*

Evolving into our New Roles

- Amtrak facilitates intercity rail operations and development
  - Operator of the national network
  - Trusted by hosts to operate safely
  - State services operator
  - Fleet provider
  - HSR operator
  - Contract commuter operator
  - Tactical planner of intercity passenger services
  - Liability coverage provider on hosts (no-fault each-takes-own)
- Amtrak is developing new business processes, resources and policies to become corridor-service focused and more transparent, consistent, and nimble

Amtrak, State, Host Collaboration for New and Expanded Routes

- For new or expanded intercity rail passenger service, Amtrak, state, and host must agree up-front on service outcomes, in particular
  - Trips per day
  - Trip time
  - Maximum delay minutes per trip
- Amtrak, state, and host then design an infrastructure to support these agreed-upon outcomes
  - Without materially lessening the quality of freight service to shippers
  - Practical improvements, not “gold plated”
- Public sector provides funding to “build it right”
- Host railroads make enforceable commitments to “run it right”
- A well-functioning passenger service is good for the rail industry

Successful Collaborations and Potential New Partnerships

Now:

- Washington: Seattle-Vancouver 2nd Frequency
- Virginia: NEC Regional trains to Lynchburg & Richmond
- North Carolina: Additional Piedmont frequency
- Maine: Brunswick extension

Coming Soon:

- Wisconsin: New service to Madison
- Vermont/Massachusetts: Connecticut River reroute

VISION *for* HIGH-SPEED RAIL *in* AMERICA

Different approaches to high speed rail (HSR)

"The Big Bang"

- Substantial trip time improvement
  - May require sustained very high speeds, e.g., 150+ mph
- High capital cost
  - More likely to require dedicated ROW
- Extensive land use issue
- Takes years (sometimes decades) to realize, but builds large market share

"Incremental Improvement"

- Produces a string of small trip time improvements
  - Over time, these accumulate
  - Can begin quickly
  - Build ridership and market share as you go
- Limit capital costs

Amtrak has the expertise to make both approaches work – so let's take a look at them

A quick comparison

Amtrak Keystone Corridor Improvements (2006)

- 104 mile line (Philadelphia-Harrisburg)
- Restored existing electrification, improved track and signals for 110 mph service
- 10 intermediate stops, shared ROW for 110mph service w/ Norfolk Southern freight operations
- Harrisburg-Philly trip cut from 2 hours to 1:45
- Carried 1,183,821 riders in FY 08
- 20.1% ridership growth in FY 07, 19.8% growth in FY 08

Cost: $145 million

Harrisburg station

Segovia-Guiomar station

Madrid-Valladolid High Speed Line (Dec 2007)

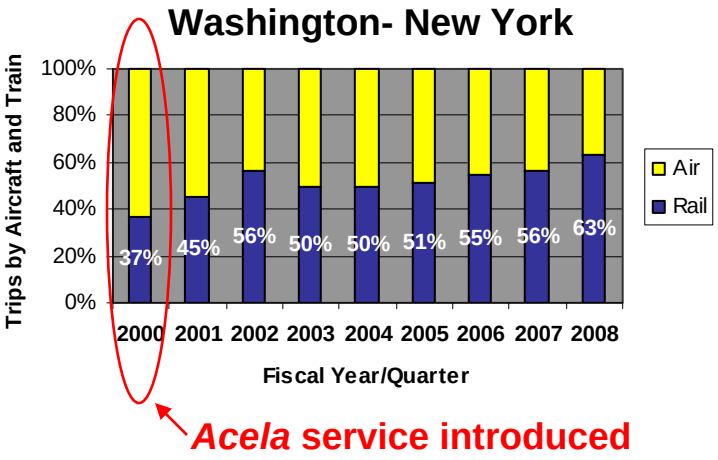
- 111 mile line
- Constructed a dedicated ROW for 186 mph service; included a 28 km tunnel
- 1 intermediate stop
- Time cut from 1:30 to 55 minutes
- Carried 825,043 riders in 2008

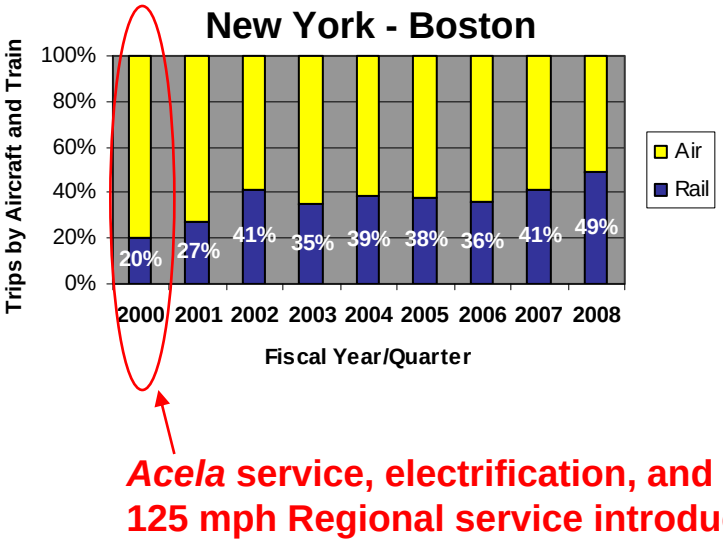
Cost: $5.9 billion

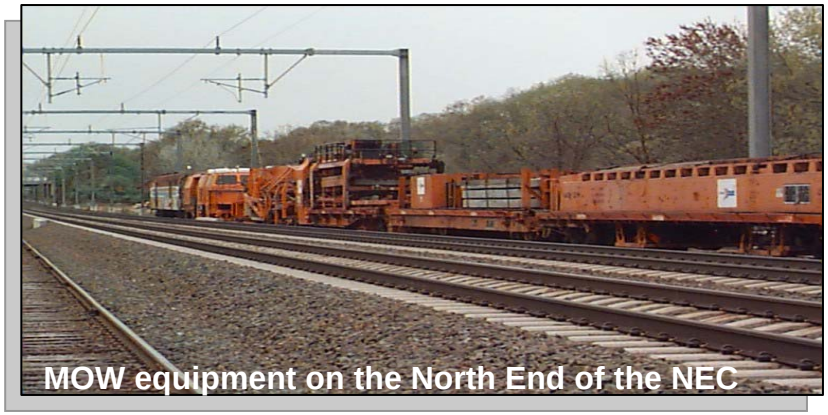
Alberto Saviejo photo

How well does an incremental approach work?

- **Northeast Corridor services are a product of incremental development:**
  - **~100 mph in 1976 (on a good day)**
  - **125 mph in 1980s**
  - **135-150 mph in 2000**
- **Market share is a product of trip time – but also frequency, convenience, comfort and reliability**






MOW equipment on the North End of the NEC

The diminishing marginal returns problem

- Beyond some point, you get less output for each additional unit of capital
  - The real question: where is the sweet spot?
- The South End of the Northeast Corridor (DC-NYC) is a good example:
  - Trimming fifteen minutes off current trip time costs a total of $6.5 billion in infrastructure investment
- These are useful gains, no question – but multiple billions could:
  - Bring the whole Amtrak system in compliance with the ADA (~$1.6 billion)
  - Raise top speed between Chicago and St. Louis to 110 mph (~$2 billion)
  - Build 110 mph dedicated rail line between Raleigh, NC and Petersburg, VA (~$4 billion)
  - Improve Charlotte-Raleigh line to 90 mph (~$1.01 billion)

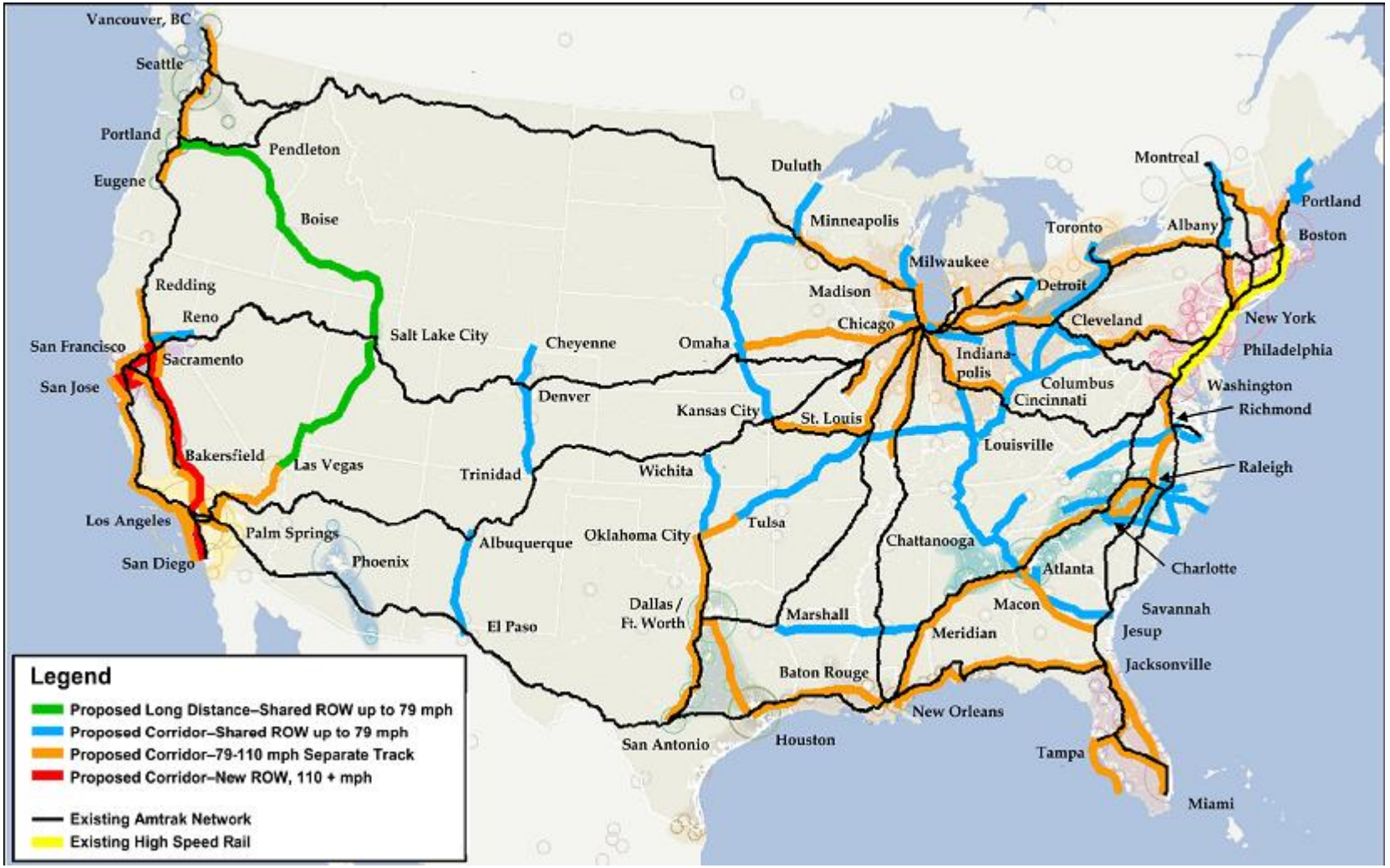
It's not a question of what we *can* do – it's a question of what we can afford to do

The way ahead

- FRA's *Vision for High-Speed Rail* states Administration commitment to a program of incremental development
- PRIIA gives the FRA administrator authority to facilitate the process of coordination
- All involved parties have needs:
  - Hosts need to retain capacity for future expansion
  - Passenger carriers need access, and accommodation of service at higher speeds on existing RoW
  - Public has an interest in seeing returns for investment

Solution has to be coordinated planning, which deconflicts interests and ensures taxpayer's investments produce the promised return

2050 Proposed Intercity Passenger Rail Network



Source: Passenger Rail Working Group proposed 2050 intercity passenger rail network (as modified by states).

Innovative Approaches to Enhancing Goods Movement

DVRPC

Freight Committee

July 14th, 2010

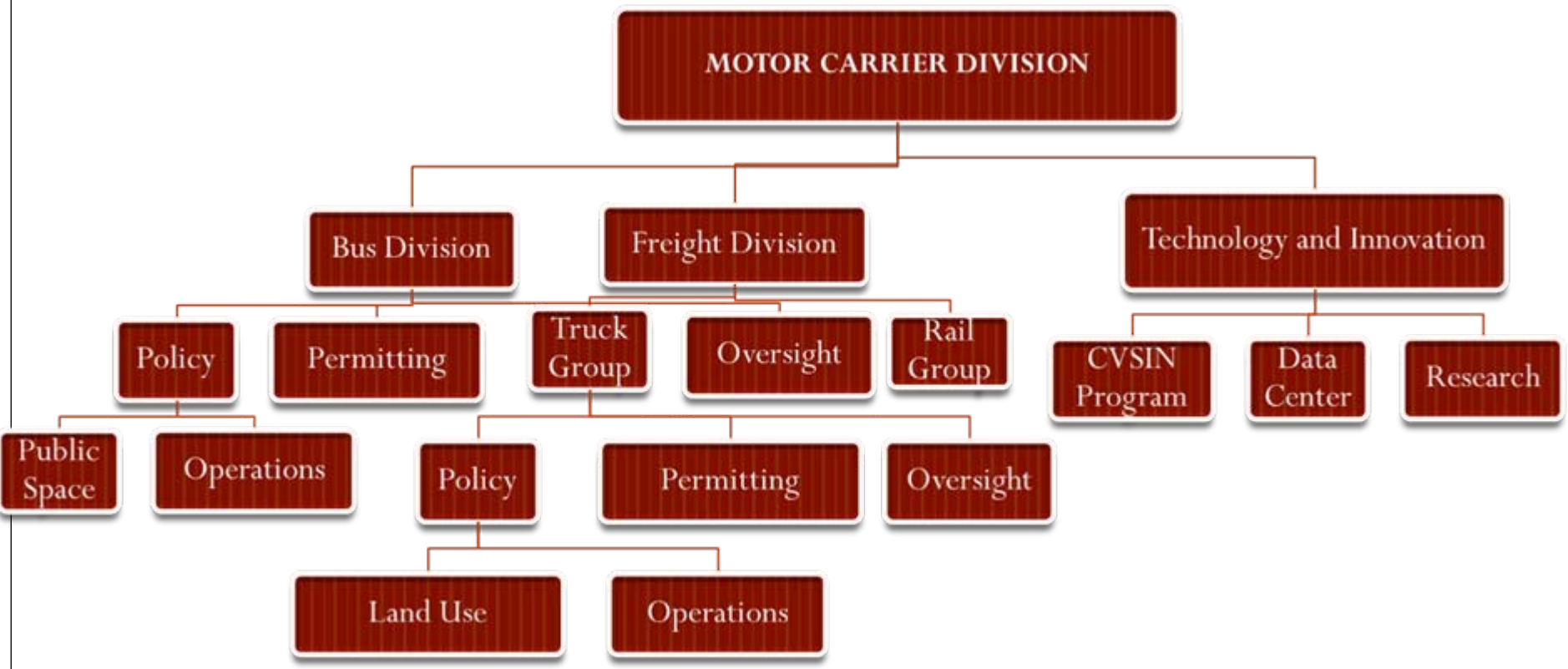
District Department of Transportation

Background

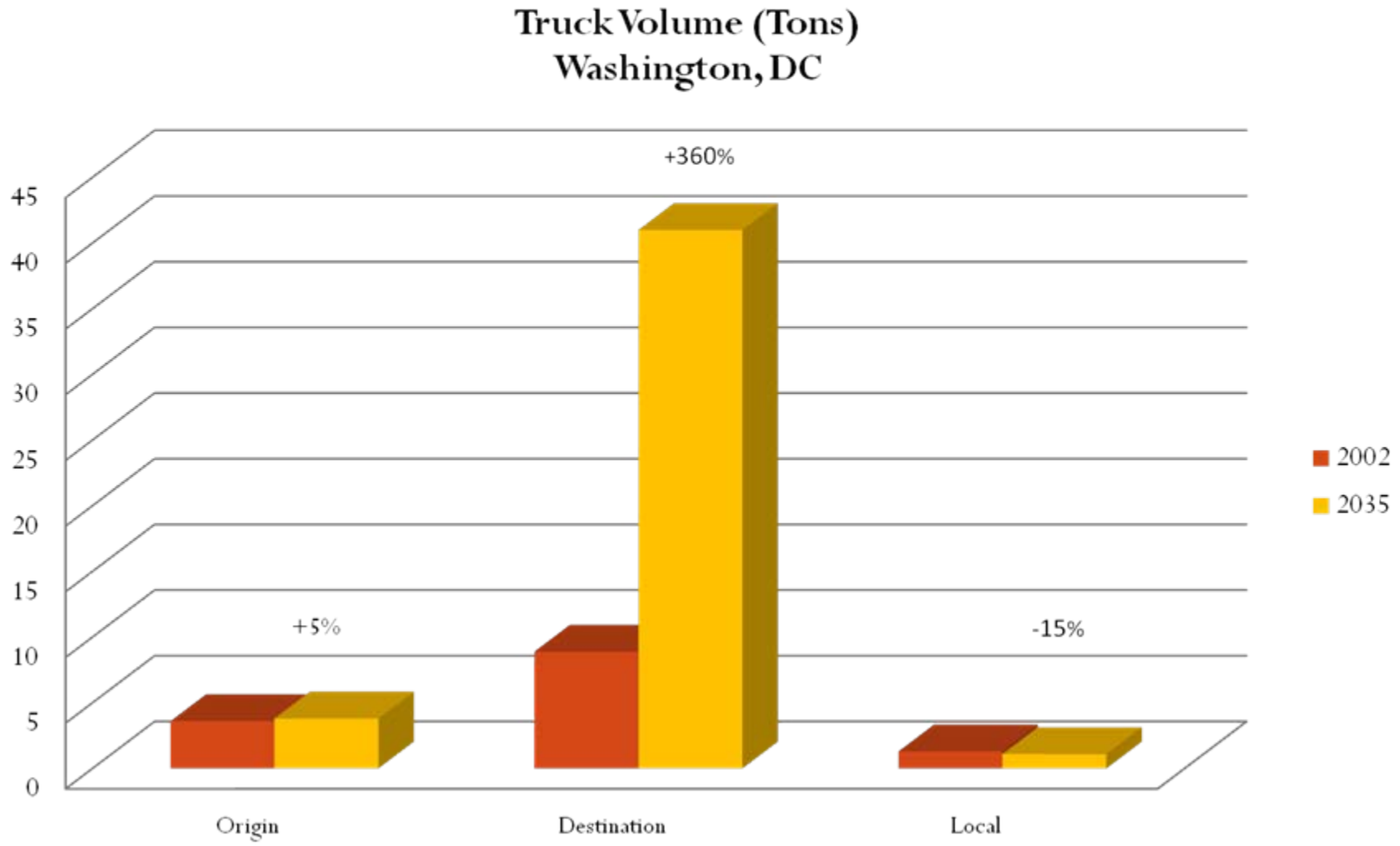
- *Motor Carrier Threat Assessment Study* and *Tour Bus Management Initiative* identified need
- Lack of management has created inefficient business operations and adversely affected communities
- Commodities are ultimately delivered by truck to the District, One Class I railroad- CSX
- Trucks comprise of approximately 6 percent of overall traffic
- The District is impacted by surrounding freight generators

Motor Carrier Division

- The Motor Carrier Division was established to address mobility, safety, security and environmental concerns with regards to freight and bus transportation.

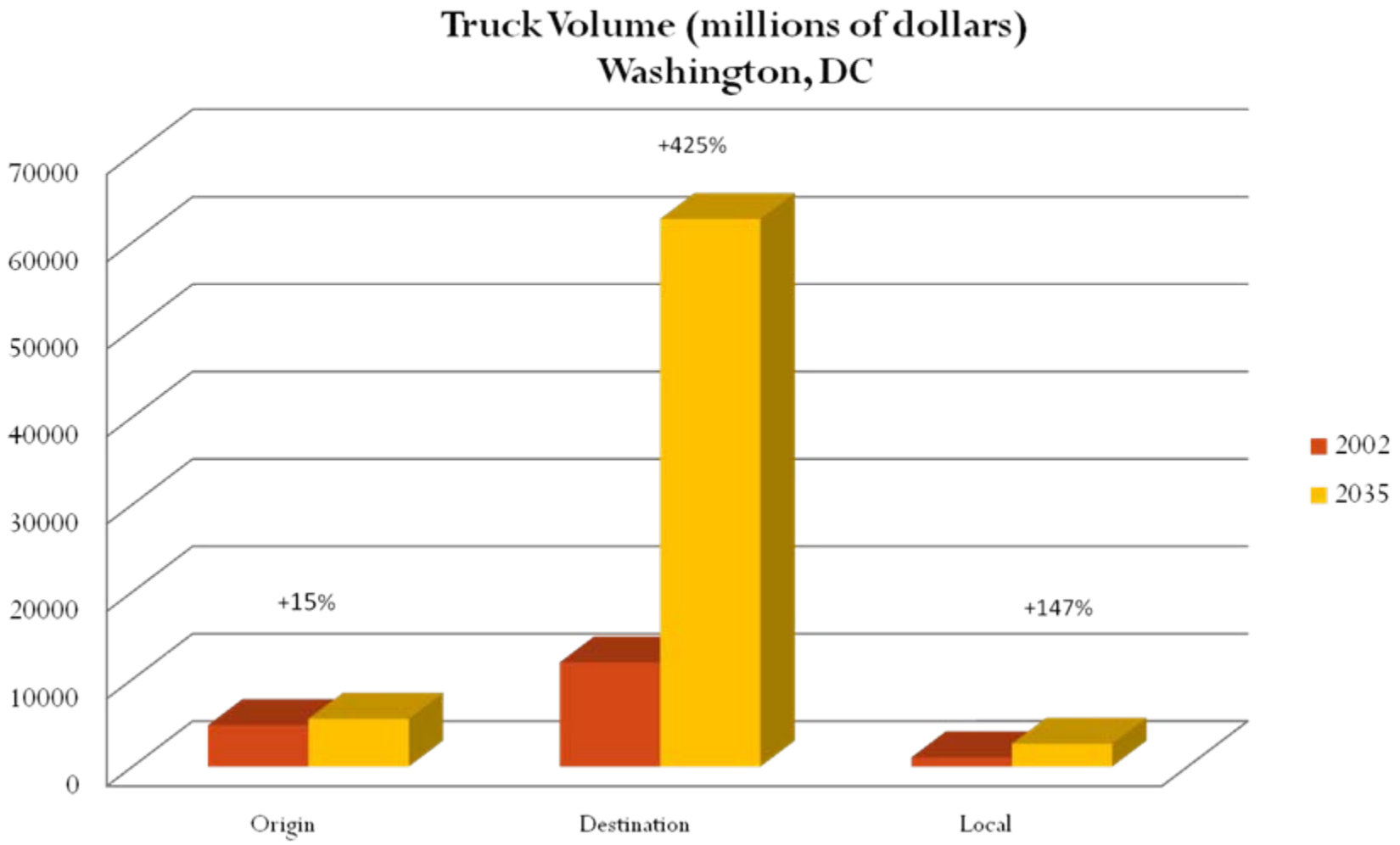


Overview of Freight Movement in District



Top Trading Partners: Indiana, Maryland, Virginia, Pennsylvania

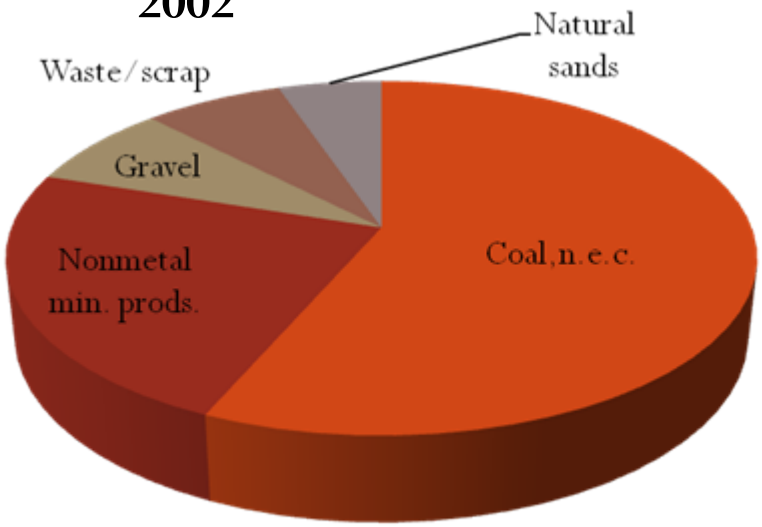
Overview of Freight Movement in District



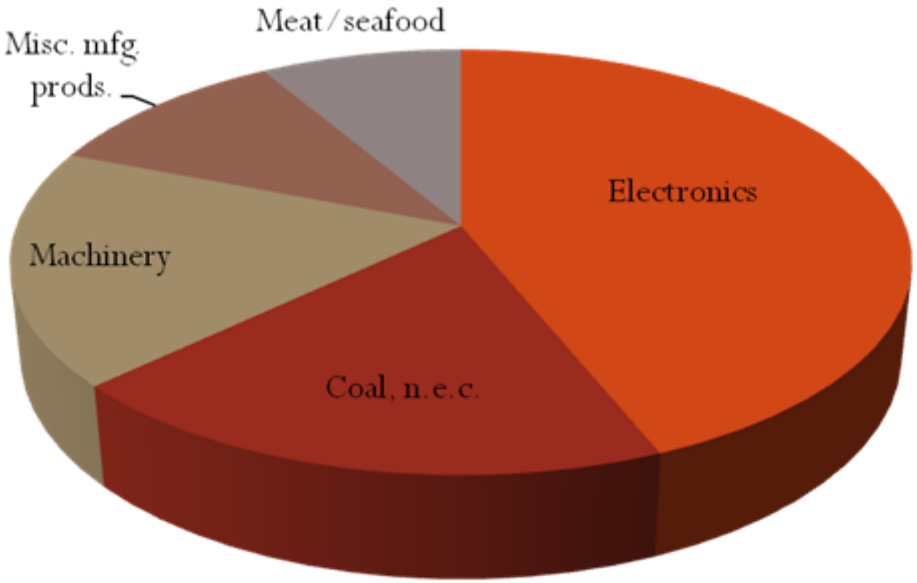
Top Trading Partners: Indiana, Maryland, Virginia, Massachusetts

Top Commodities Terminating in the District

Top Commodities, 2002



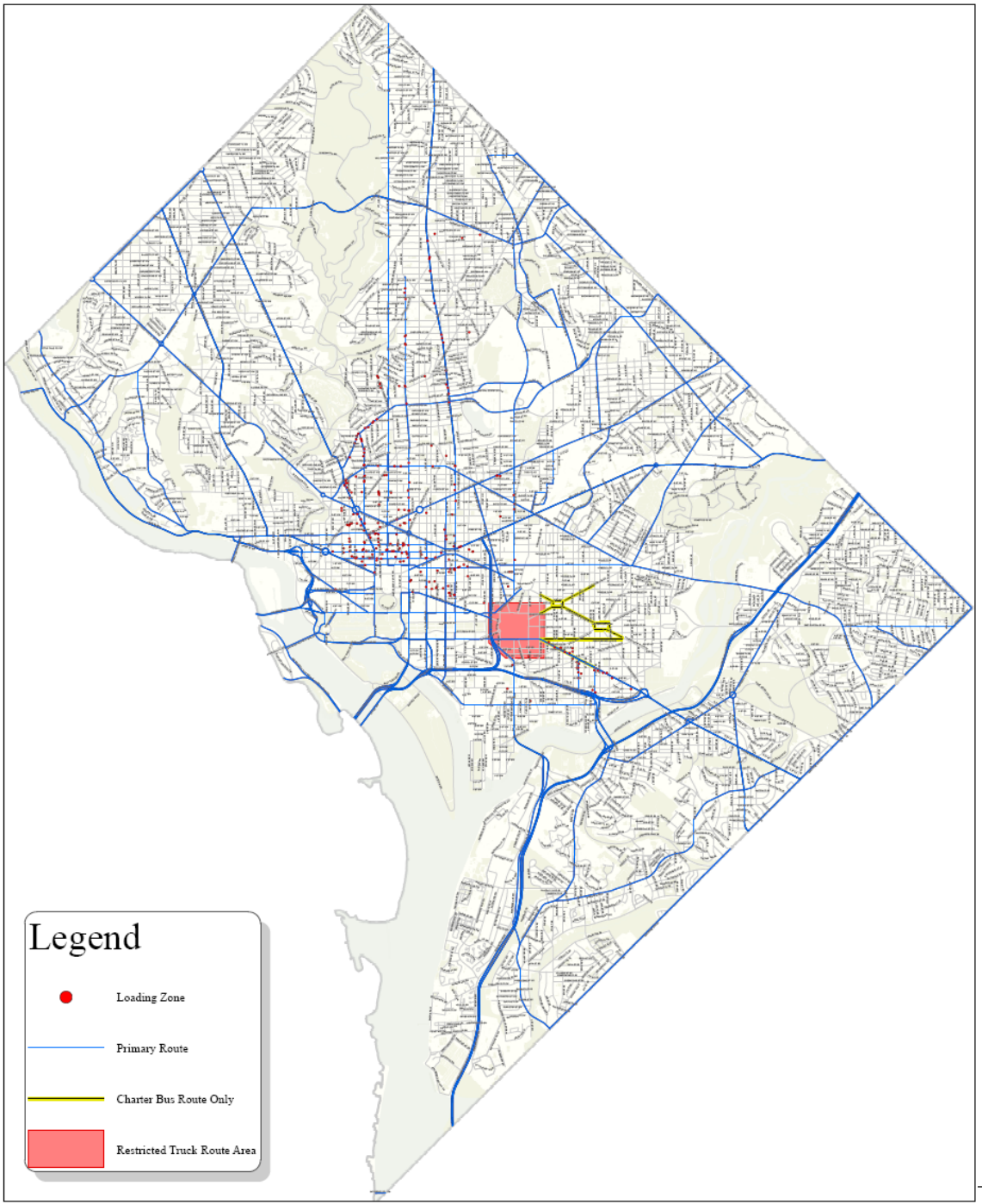
Top Commodities , 2035



Actions

- Improve coordination and communication with industry, agencies and communities
  - Freight stakeholder groups
  - Web identity
- Develop truck and bus route system
- Improve data for planning purposes
- Establish proper policy
  - Freight land use guidelines

Truck and Bus Route System



Commercial Curbside Loading Zone Act

- Bill 18-153 introduced to establish curbside loading zone program. Proposed legislation will:
  - Establish loading zone meter fees
  - Determine space for loading zones
  - Develop a payment process
  - Implement enforcement plan

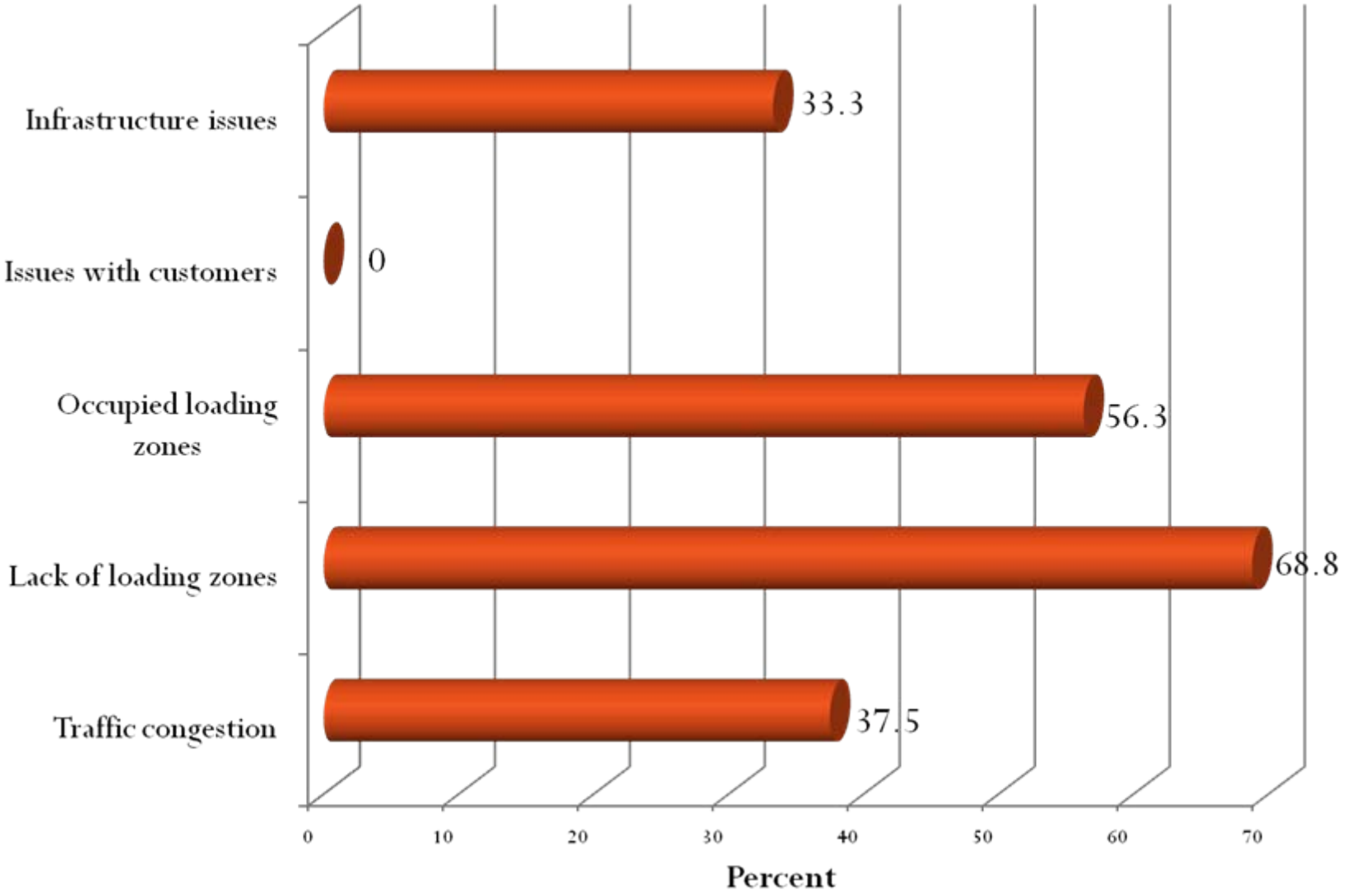
Approach

- Various methods of collecting fees
  - Muti-space meter
  - Pay-by phone
  - Park Magic
  - Additional technology being considered
- Setting meter rates by zones; graduated rates is an option
- Meter all loading zones through phased approach
  - Central Business District
  - Ust Street/Columbia Heights
  - Capitol Hill/SW
- Enforcement plan

Approach (cont'd)

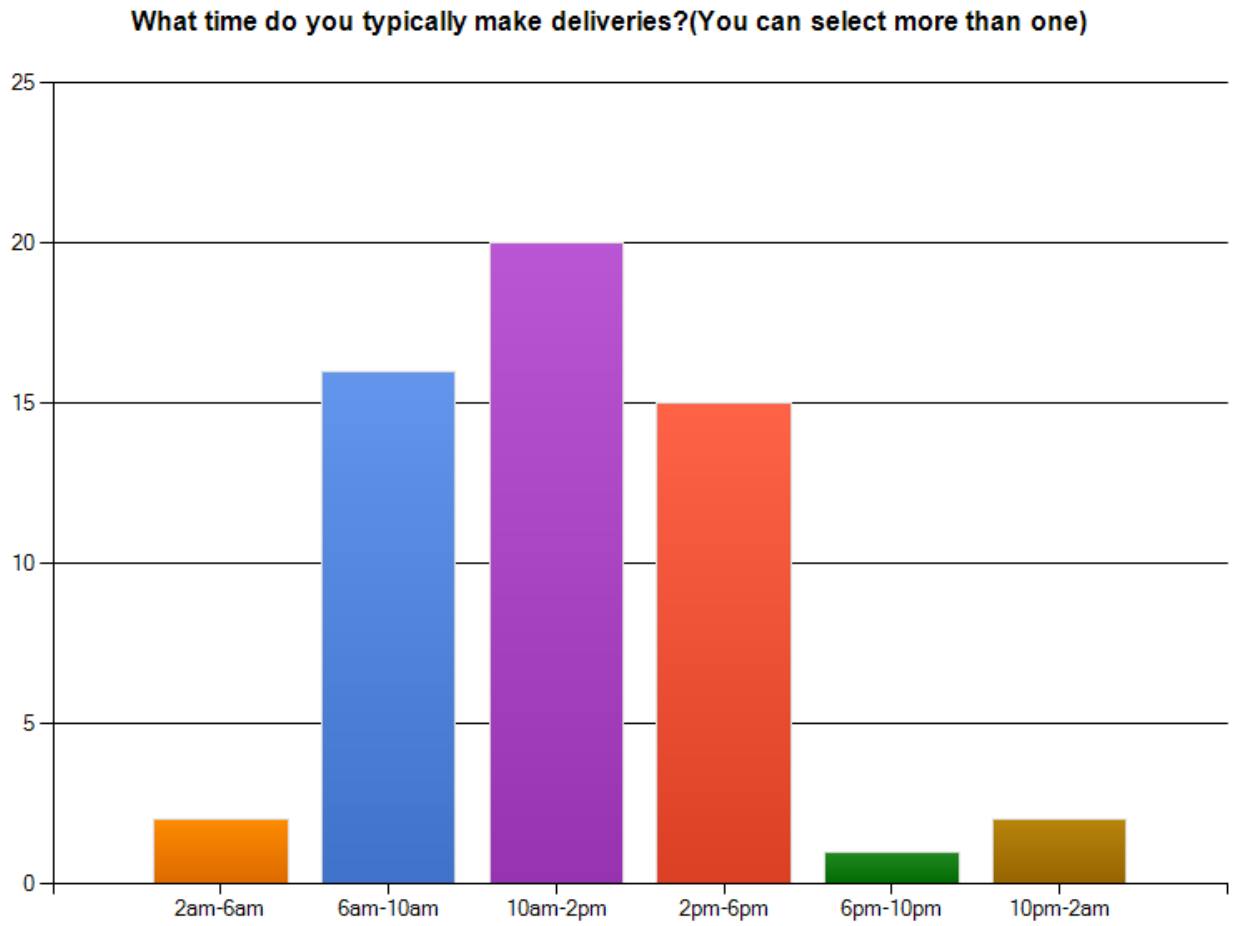
- Incorporating feedback from stakeholders
  - BIDs(Business Improvement Districts)
  - Freight stakeholders
  - Other business interests
- Additional data collection efforts
  - Identification of loading zones in phased areas
  - Freight stakeholder survey
  - Focus Groups (FedEx, UPS, Guernsey Products, Association of Beverage Alcohol Wholesalers, ATA)

Survey Results



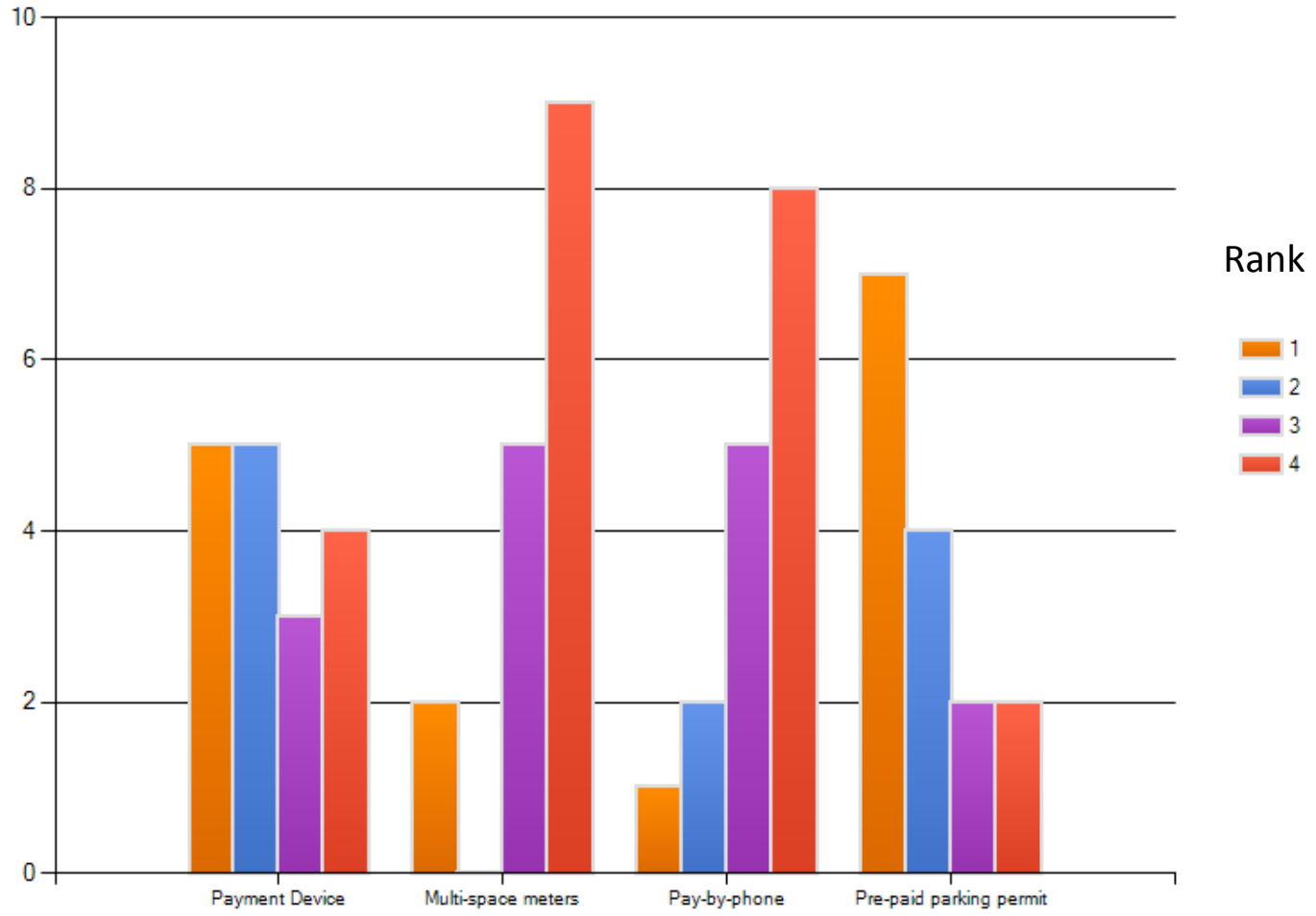
Survey Results (cont'd)

Most deliveries occur from 6:00am-6:00pm



Survey Results (cont'd)

Permit option ranked as the most favorable



Program recommendations

- Increase size of loading zones
- Identify underutilized loading zones and convert to metered parking spaces
- Establish consist time frame fro loading zones
- Establish payment process
  - Multispace meter
  - Permit

Permit option

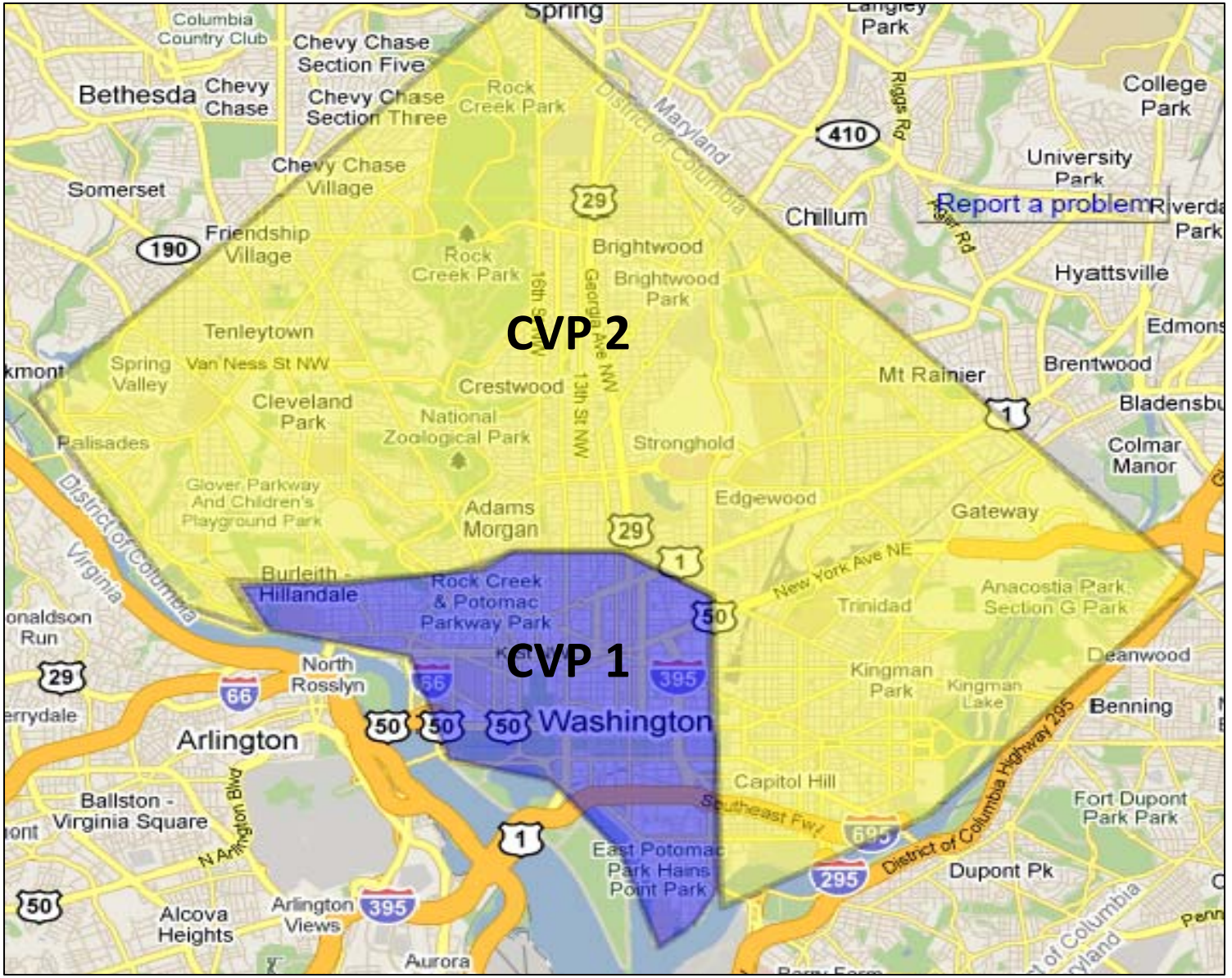
Multispace meter

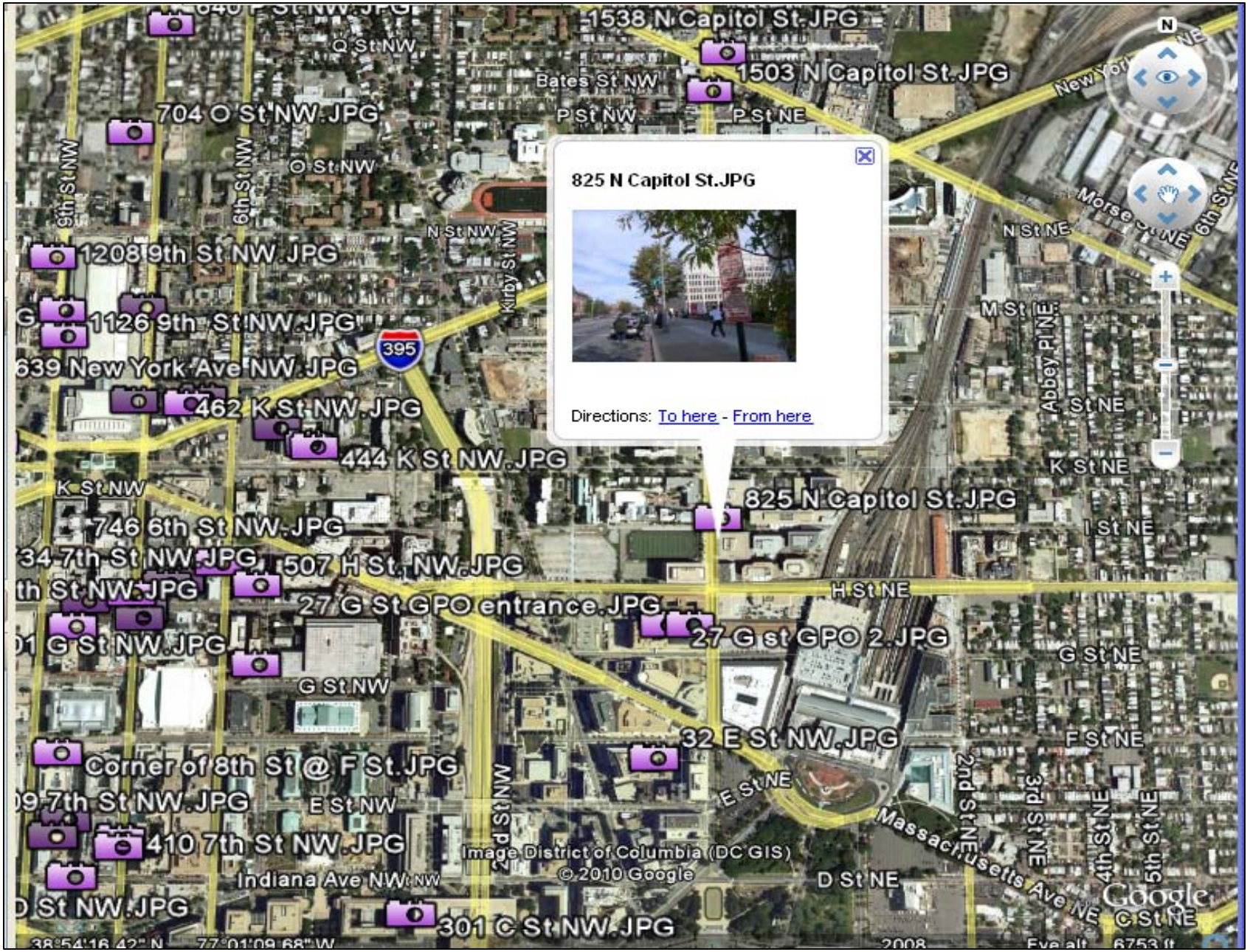
- Carrier will park and pay via a multispace meter when available (similar to current K St. operation)

Permit system

- Class A: A Commercial Vehicle can park for up to 2 hours.
- Class B: A Commercial Vehicle can park for up to 1 hour.
- Class C: A Commercial Vehicle can park for up to 30 minutes.
- Day Pass**:** A Commercial Vehicle can park for up to 2 hours (valid for 1 day; loading zone only)
- Allowance for carriers to park in regular metered parking spaces from 10:00am-2:00pm

Commercial Vehicle Parking Zones



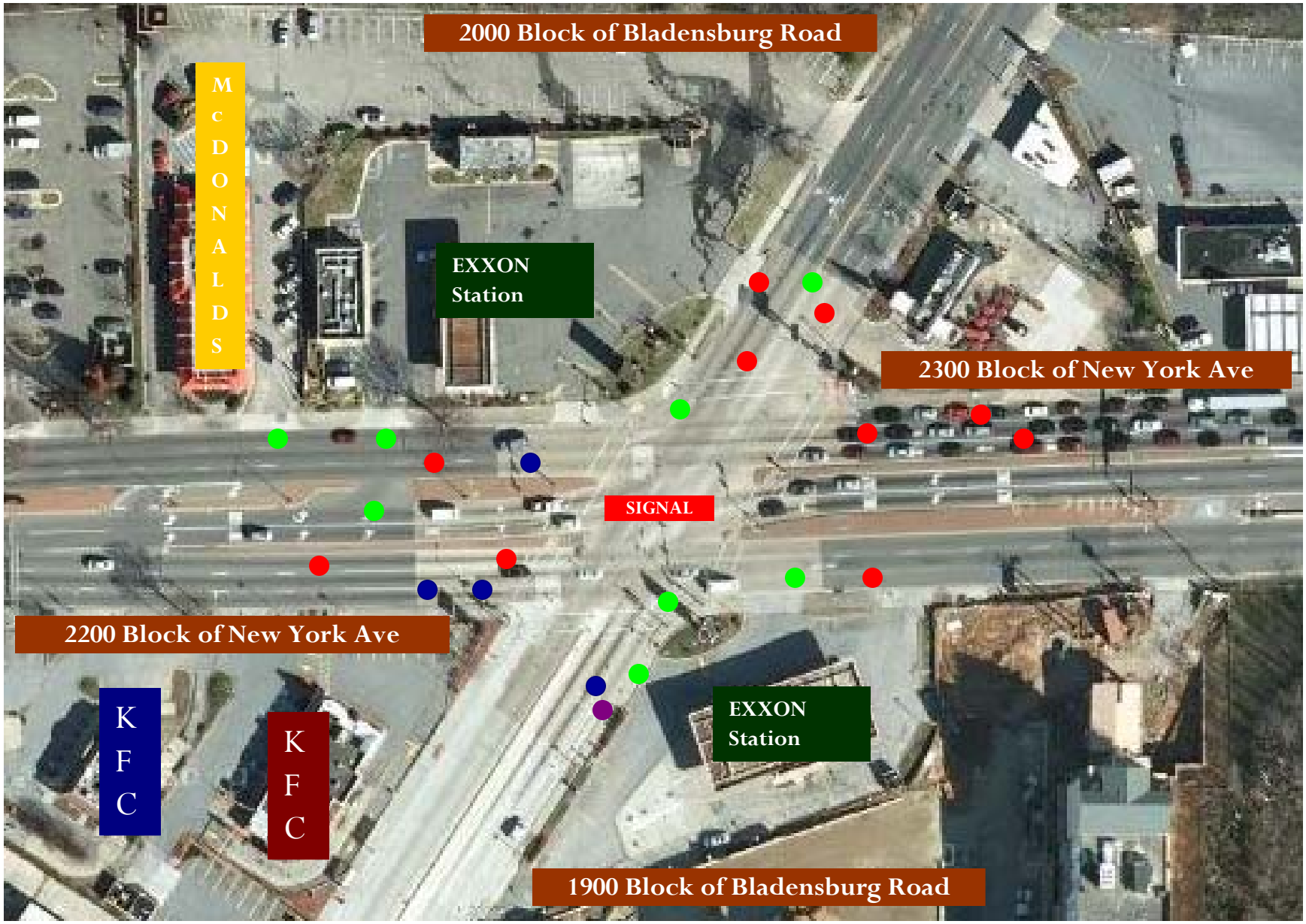

1538 N Capitol St.JPG
1503 N Capitol St.JPG
704 O St NW.JPG
825 N Capitol St.JPG
Directions: To here - From here
1208 9th St NW.JPG
1126 9th St NW.JPG
639 New York Ave NW.JPG
462 K St NW.JPG
444 K St NW.JPG
825 N Capitol St.JPG
746 6th St NW.JPG
507 H St. NW.JPG
27 G St GPO entrance.JPG
27 G st GPO 2.JPG
32 E St NW.JPG
Corner of 8th St @ F St.JPG
410 7th St NW.JPG
301 C St NW.JPG
Image District of Columbia (DC GIS)
© 2010 Google
Google

Implementation plan

- DDOT will begin the management plan on three corridors in 3 areas in the District:
  - Central Business District (I St.)
  - Adams Morgan (Columbia Rd.)
  - Capitol Hill (Pennsylvania Ave.)
- 60 day pilot
- Performance measures
  - Occupancy rate of loading zones
  - Violations for double parking and over staying
  - Amount of time each vehicle uses loading zone
  - Reductions in delivery times for carriers
  - Reduction in travel time along corridor

Truck Safety Enforcement Plan

- Truck Safety analysis – Evaluation of the safety issues regarding truck operations in the District
- Quantify the Effects of Overweight Vehicles and Oversized Vehicles – Quantify the effects and associated costs on the District's road and bridge network
- GAP Analysis – District's needs assessment and future goals (short, mid, and long-term)
- Develop Citywide Truck Safety Enforcement Plan


2000 Block of Bladensburg Road
McDONALDS
EXXON Station
2300 Block of New York Ave
SIGNAL
2200 Block of New York Ave
KFC
KFC
EXXON Station
1900 Block of Bladensburg Road
LEGEND
= SIDESWIPE
= TURNING MOVEMENT
= REAR END
= BACKING

Overweight Vehicle Impacts

- 50-60 % of all bridge related costs are attributed to passenger vehicles
- 15-20 % of all bridge impacts (damage) are attributable to overweight axles, this is 43.5% of all truck related damage
  - Total annual bridge costs attributable to overweight trucks is ~$10.5 million
- ~10% of all sample axles weighed were overweight

- Enforcement
  - An Arizona DOT technical report by ESRA Consulting found that for every dollar invested, there would be about $4.5 in *pavement* damage avoided.
  - An additional $1M in enforcement measures could potentially save the District $3.5M annually in bridge damage due to overweight trucks

Vehicle Class	% Allocation	Annual Bridge Costs	Engr. Fees & Constr. Insp.	Total Annual Bridge Costs
Passenger Cars	59.0	$ 28,197,000	$ 6,485,000	$ 34,682,000
Legal Trucks & Buses	23.2	$ 11,067,000	$ 2,545,000	$ 13,613,000
Overweight Trucks & Buses	17.8	$ 8,525,000	$ 1,961,000	$ 10,486,000
Totals	100.0	$ 47,789,000	$10,991,000	$ 58, 781,000


I-295 SB WIM
IRD iSYNC Series single load cell VWS


Camera


GROVE


FAIRBANKS

Challenges

- Improve coordination with stakeholders on future development
- Adapt current regulations to support current industry needs
- Ensure that transportation infrastructure supports and attracts a variety of industries to the District
- Improve data collection pertaining to freight movement

Questions?

Contact Information

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District Department of Transportation

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