

**CITY OF EL PASO, TEXAS
AGENDA ITEM DEPARTMENT HEAD'S SUMMARY FORM**

DEPARTMENT: International Bridges Department
AGENDA DATE: February 23, 2016
CONTACT PERSON/PHONE: Mathew McElroy, (915) 533-7428,
McElroyMX@elpasotexas.gov
DISTRICT(S) AFFECTED: All Districts

SUBJECT:

Review and discussion on the quarterly report for the reimbursable services agreement authorized under Section 560 which allows the City to pay for Customs and Border Protection overtime in an effort to reduce wait times at City owned ports of entry and staff all lanes during peak hours.

BACKGROUND/DISCUSSION:

City Council, on December 3, 2013, authorized the Section 560 "P3" reimbursable fee agreement and annex allowing the City to reimburse the U.S. Customs and Border Protection (CBP) for overtime provided by CBP officers to reduce wait times at the Paso Del Norte (Santa Fe) and Ysleta (Zaragoza) Bridges during peak times and holidays. This report will provide the City Council with an update on the progress, current impacts, and future application of the P3 program.

PRIOR COUNCIL ACTION:

December 3, 2013 – City Council approval of the Section 560 "P3" reimbursable fee agreement with CBP
September 23, 2014 – City Council approval of the first extension
September 22, 2015 – City Council approval of the second extension

AMOUNT AND SOURCE OF FUNDING:

N/A

*****REQUIRED AUTHORIZATION*****

LEGAL: (if required)

FINANCE: (if required)

DEPARTMENT HEAD: Mathew S. McElroy
International Bridges Department Director

APPROVED FOR AGENDA:

CITY MANAGER: _____

DATE: _____



Section 560 Annex (P3 Program) Progress Report

City of El Paso and U.S. Customs and Border Protection

February 2016

**Strategic Goal # 7- Enhance and Sustain El Paso's
Infrastructure Network**

7.3. Enhance Regional Comprehensive Transportation System



Presentation Outline

- P3 background, funding, expenditures, and coverage
- Databases under development
- Northbound/southbound crossings and revenues and northbound wait times for bridges covered by P3
 - Cargo Trucks
 - Passenger Vehicles
 - Pedestrians
- Lean Six Sigma and Metropia



P3 Program Background

- El Paso one of five cities selected for the 5-year Public-Private-Partnership (P3) Program with CBP
- City pays CBP overtime to staff all lanes during peak hours to help reduce wait times
- Paid for by an increase in tolls starting January 2014 – \$0.50 for autos and \$0.50 per axle for cargo vehicles
- Approved by City Council on 12/03/2013 – Officially began 01/26/2014
- Renewed 9/23/2014 and 9/22/2015



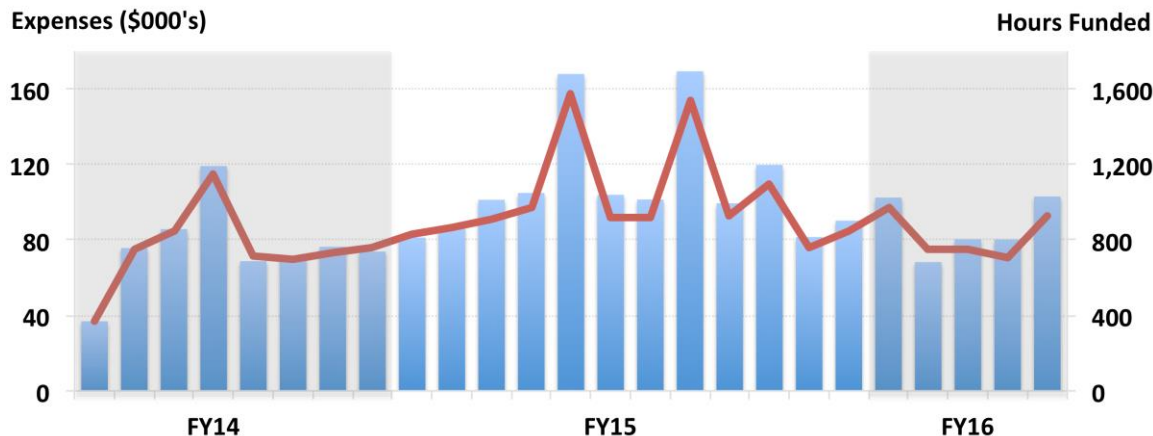
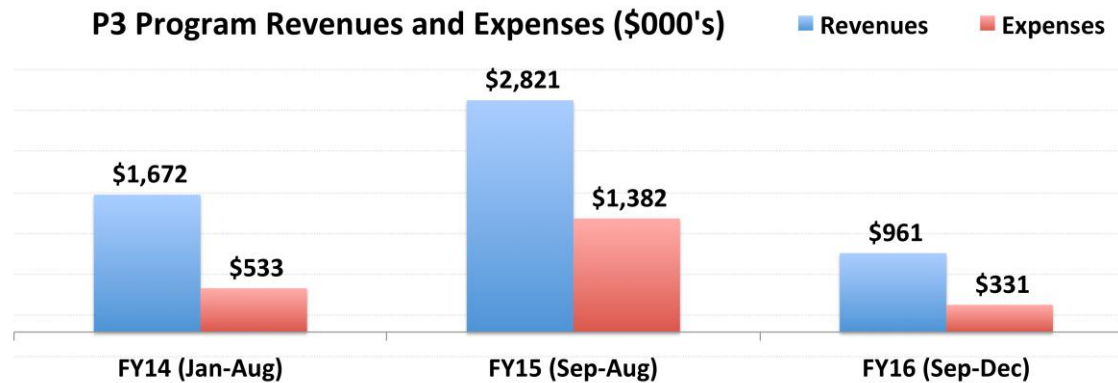
Fares

- Fares are competitive with other Texas ports of entry
- Historically tolls have been inelastic, so price adjustments have not affected crossings volume and, hence, revenues (Fullerton et al. 2009)

Location	Pedestrians	Autos & Pickups	3 Axel Trucks	5 Axel Trucks
Cameron International Bridge System	\$1.00	\$3.25	\$12.50	\$19.50
City of El Paso International Bridges	\$0.50	\$3.00	\$12.00	\$20.00
Del Rio International Bridge	\$0.75	\$3.50	\$15.00	\$25.00
Donna-Rio Bravo International Bridge	\$0.50	\$3.50	\$12.00	\$19.00
Eagle Pass International Bridge System	\$0.50	\$3.00	\$11.25	\$18.75
Laredo International Bridge System	\$0.75	\$3.50	\$12.75	\$21.25
McAllen International Bridge System	\$1.00	\$3.25	\$7.00	-
Pharr-Reynosa International Bridge	-	\$3.25	\$15.25	\$22.25
Starr-Camargo Bridge	\$0.50	\$3.50	\$8.75	\$15.25



P3 Revenues and Expenditures



- Peaks denote higher levels of paid staffing during agreed upon holidays and special events (semana Santa, Christmas, free tax weekend, etc.)



P3 Weekly Coverage

- **Ysleta Cargo**

During Zaragoza construction

- Wednesdays, Thursdays & Fridays 10 am – 2 pm

New days/hours as of Feb. 2016

- Thursdays & Fridays 4 – 10 pm
- Saturdays 10 am – 2 pm

- **Ysleta POV**

- Saturdays 2 – 6 pm
- Sundays 10 pm – 12 am

- **PDN POV**

- Monday 5 – 6 am
- Saturdays 2 – 6 pm
- Sundays 10 pm – 12 am

- **PDN Pedestrians**

- Monday 10 am – 2 pm

- **Holiday and special events varies by POE**



IBD Wait Times Database

- Currently rely on CBP data because they are the most comprehensive – by hour by day by mode by bridge
- FY 2016:Q1 developed historical wait times from start of P3 (01/26/2014) to Sept. 2015
- FY 2016:Q2 extended wait times from 01/01/10 to 12/31/15
 - Can now assess pre/post-P3
 - Bridges – PDN, Ysleta, BOTA, and Stanton
 - Modes – cargo, vehicles and pedestrians (including FAST, Ready and Sentri initiatives)



Other IBD Dbases In-maintenance

- Wait times from IBD in-house data
- Crossings, trade, toll revenues, and P3 expenditures
- Retail sales by SIC/NAICS subsector and zip code
- Various economic indicators for statistical modeling – industrial production, maquila employment, exchange rate, border cycle index, etc.
- Developing (Stata) programming code to facilitate data extraction such as estimating performance measures or to interpolate lower frequency to higher frequency data



Cargo Trucks

Crossings

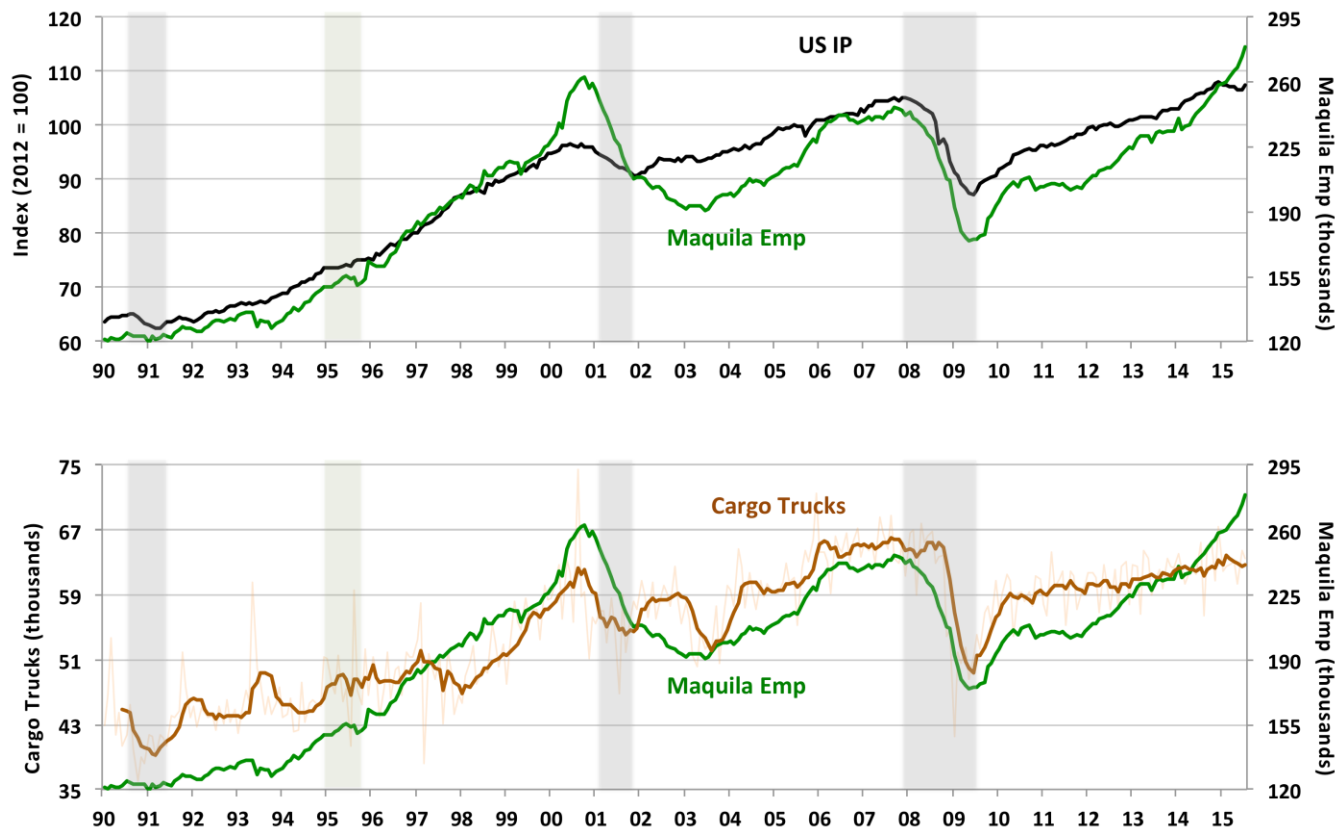
Revenues

Wait Times



Reminder on Predictors

➤ Cargo traffic (at Ysleta and BOTA) driven by Cd. Juarez maquila activities and, hence, US industrial production



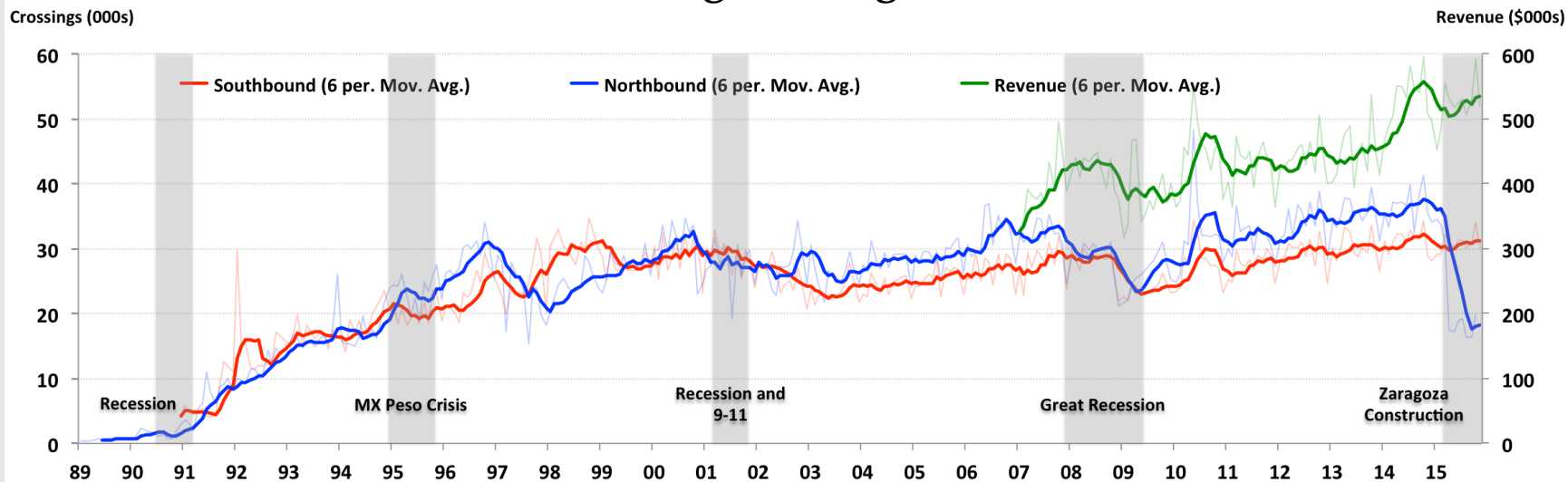
Source: CBP, Fed and INEGI Note: Data seasonally adjusted. Maquila job numbers reflect maquila (1990 to Dec. 2006) estimates extrapolated with nonfarm jobs (Jan. to June 2007) and IMMEX (July 2007 to present) growth rates



Cargo Crossings and Revenues

- Northbound crossings affected by Zaragoza construction
 - Started March 2015 and reopened February 2016
- Upward trend for southbound crossings and revenues since end of Great Recession

Ysleta-Zaragoza Cargo Trucks



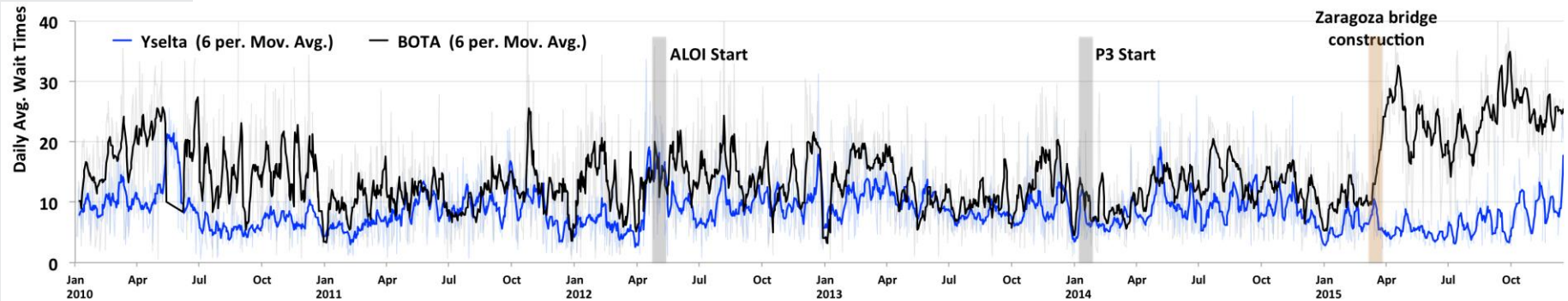


Standard Cargo Daily Wait Times

(northbound in minutes)

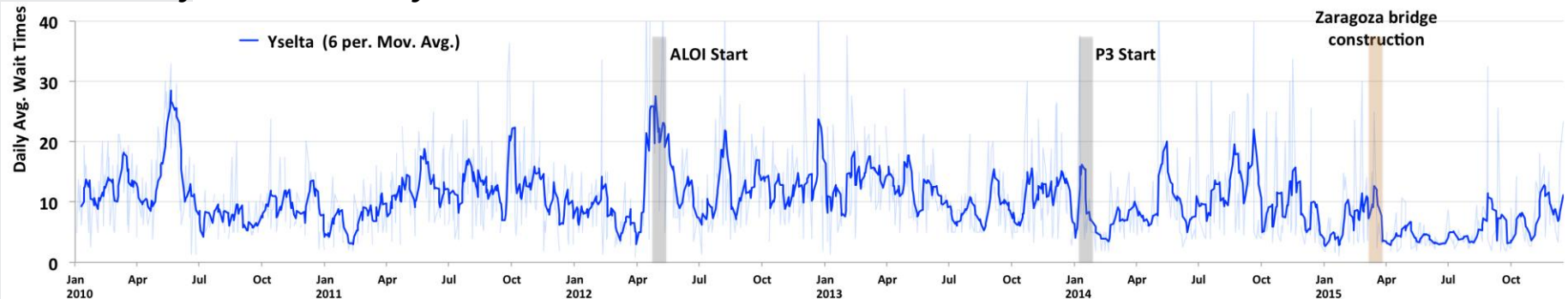
- Volume is demand-based so some variance in times unavoidable

All days/hours of operation



- Trend is shorter wait times on P3 days/hours since Oct. 2014

P3 days/hours only



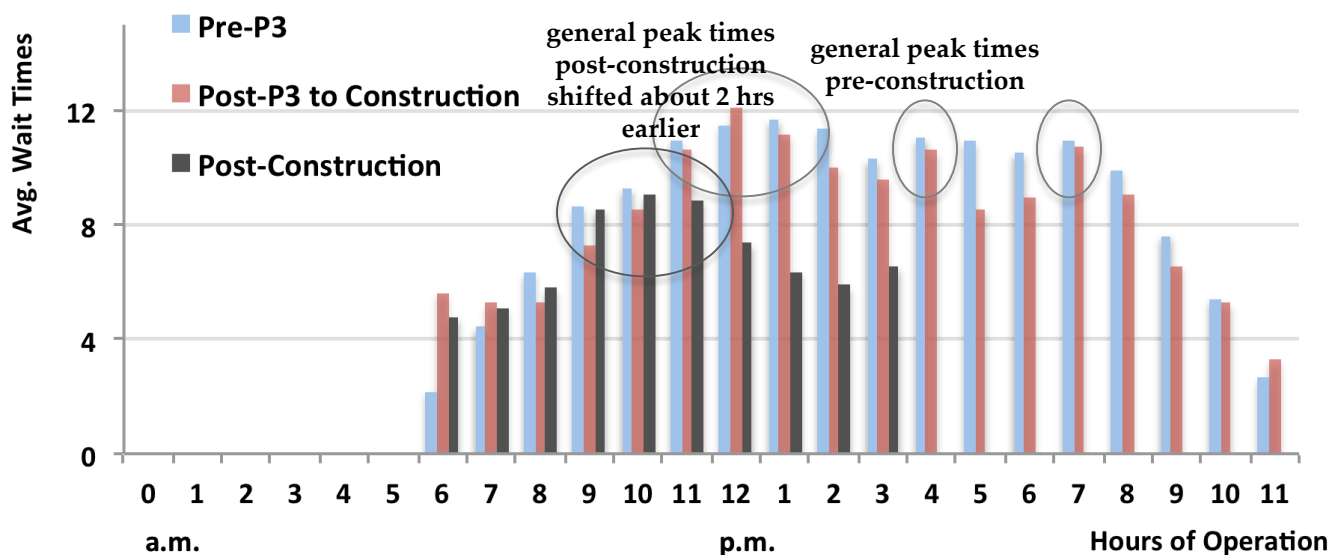


Standard Cargo Hourly Wait Times

(northbound in minutes)

- Working w/ stakeholders so more trucks cross at non-peak hours

Ysleta Mondays thru Saturdays



Source: CBP

Note: Pre-P3 times 01/01/10 to 01/25/14 ; post-P3 to construction times 01/26/14 to 03/22/15 ; post-construction times 03/23/15 to 12/16/15 (Saturdays closed). FAST cargo not shown but has similar trend w/ shorter wait times.

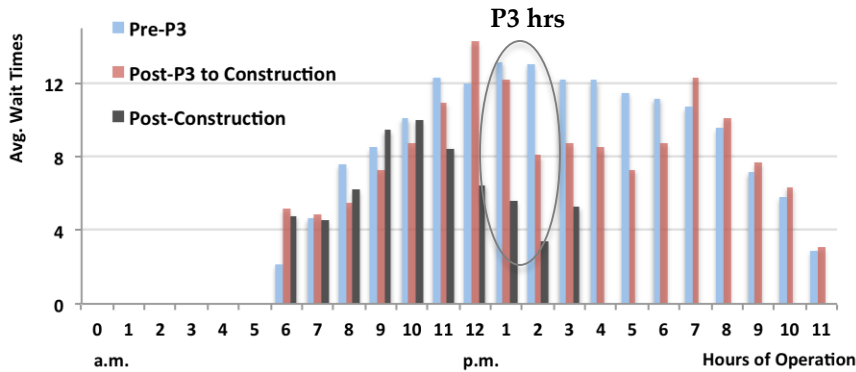


Standard Cargo Hourly Wait Times

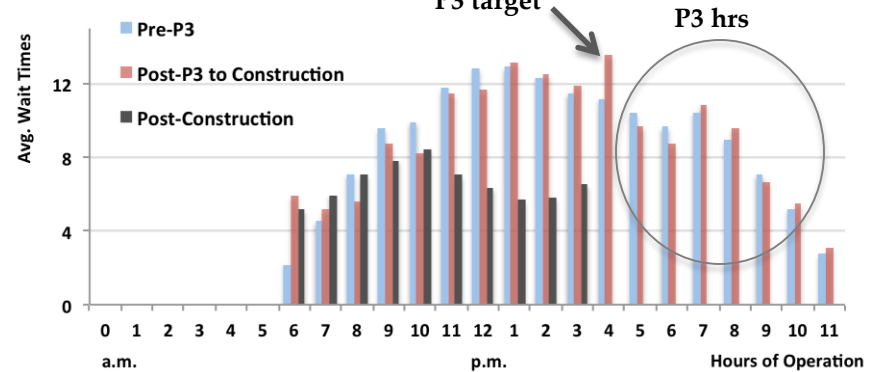
(northbound in minutes)

➤ Lower times for weekdays *before construction* (blue vs. red bars)

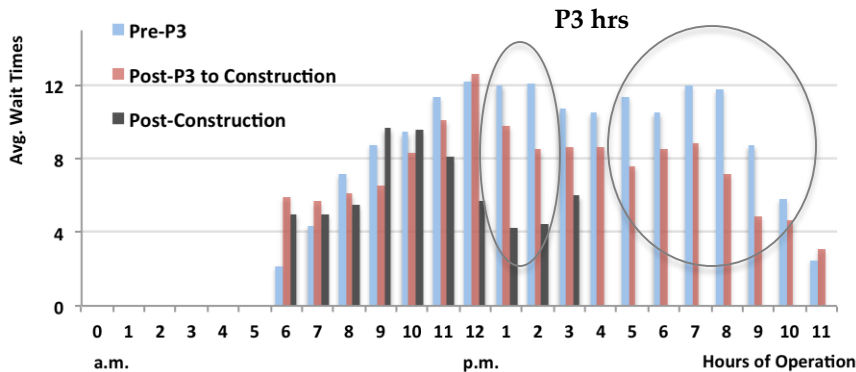
Ysleta Wednesdays



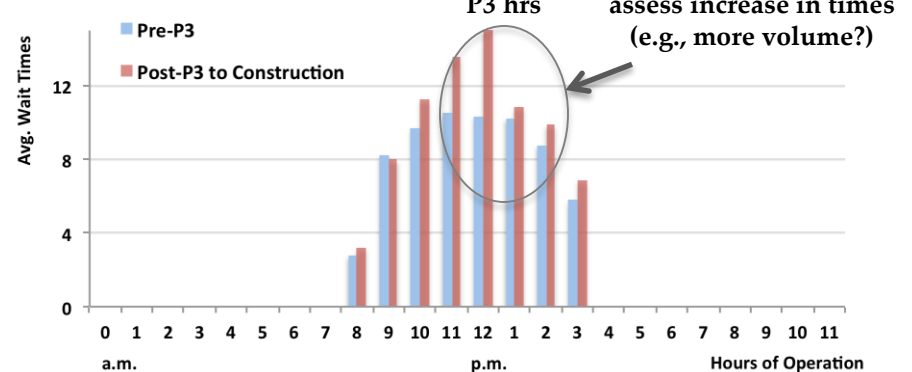
Ysleta Thursdays



Ysleta Fridays



Ysleta Saturdays



Source: CBP

Note: Pre-P3 times 01/01/10 to 01/25/14 ; post-P3 to construction times 01/26/14 to 03/22/15 ; post-construction times 03/23/15 to 12/16/15 (Saturdays closed). FAST cargo not shown but has similar trend w/ shorter wait times.

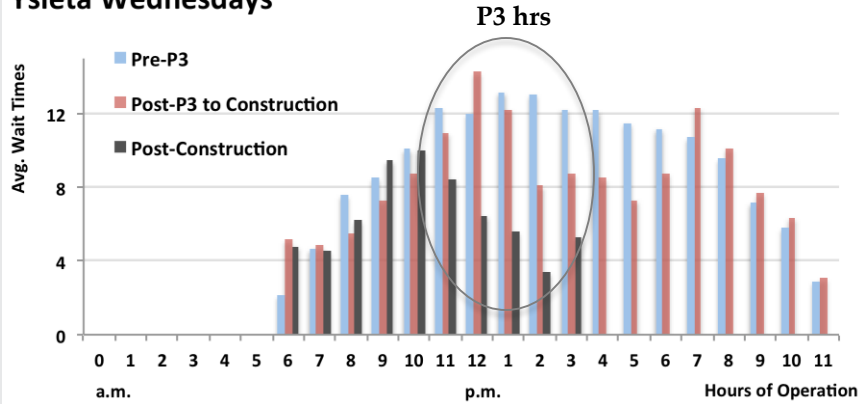


Standard Cargo Hourly Wait Times

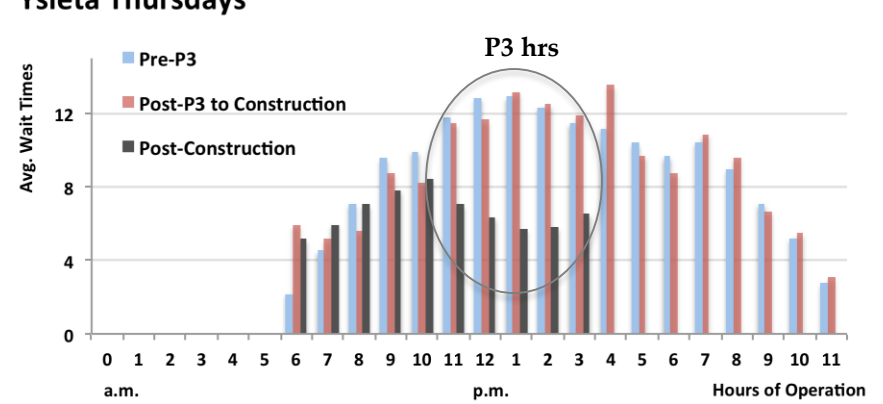
(northbound in minutes)

➤ P3 helped lower times *after construction* (blue vs. black bars)

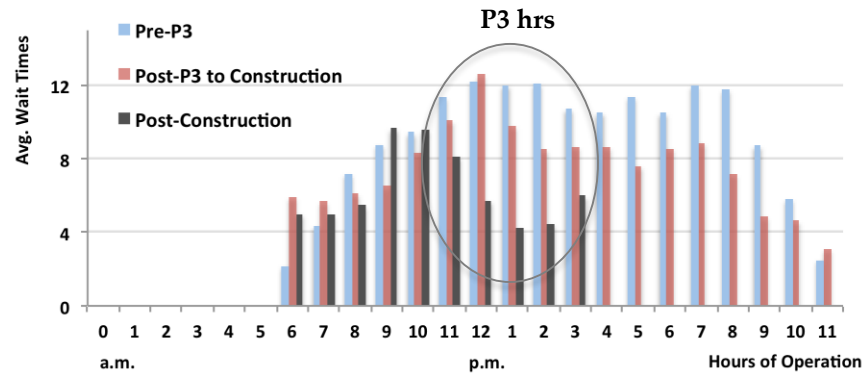
Ysleta Wednesdays



Ysleta Thursdays



Ysleta Fridays



Source: CBP

Note: Pre-P3 times 01/01/10 to 01/25/14 ; post-P3 to construction times 01/26/14 to 03/22/15 ; post-construction times 03/23/15 to 12/16/15 (Saturdays closed). FAST cargo not shown but has similar trend w/ shorter wait times.



Benefits of reduced wait times

Ysleta bridge example for cargo

- Expediting trucks just 6 minutes faster produces *direct* savings to manufacturers and carriers that exceeds P3 expenditures
- If carriers can add round trip deliveries during the day:
 - Manufacturers can increase current production (up to) full capacity
 - Produces spillover effects across the economy (jobs, wages, output, spending, taxes, etc.)
- Transportation efficiencies induce businesses to move/expand operations

Trucks per hour estimate	85
Yearly trucks during P3 hours	69,000
2016 projected P3 expenditures	\$305,000
Hourly cost of truck delay estimate	\$45
Minutes reduction per truck to break even	5.9
Yearly \$ savings for 1 minute per truck reduced	\$52,000
Yearly \$ savings for 10 minutes per truck reduced	\$520,000



Passenger Vehicles

Crossings

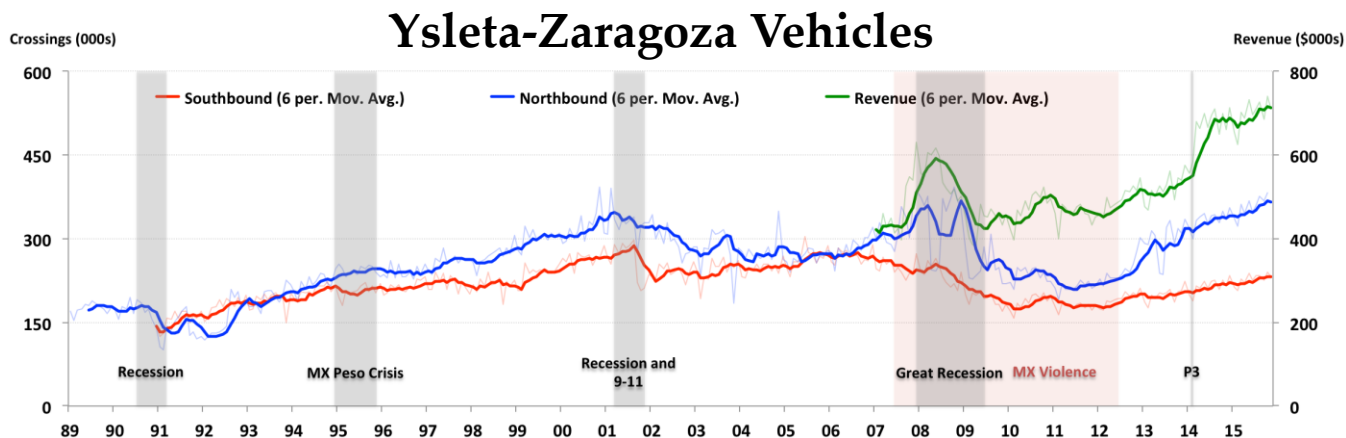
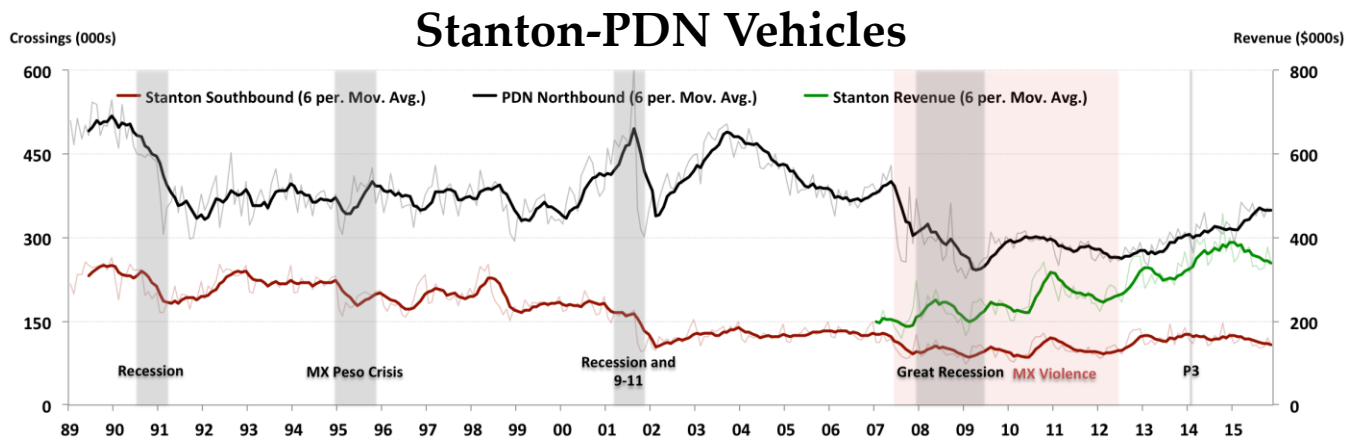
Revenues

Wait Times



Vehicle Crossings and Revenues

- Driven by regional social and economic integration and shocks
- Upward trend for crossings and revenues since drop in violence



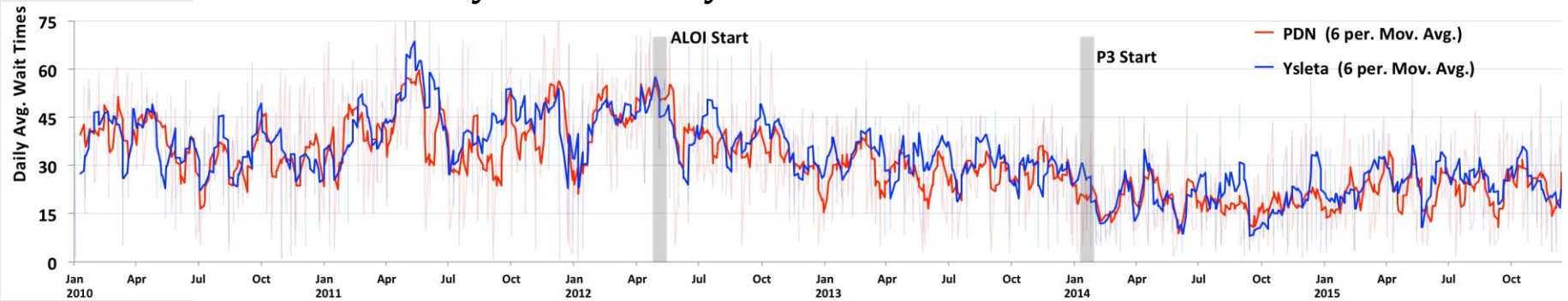


Pass. Vehicle Daily Wait Times

(northbound in minutes)

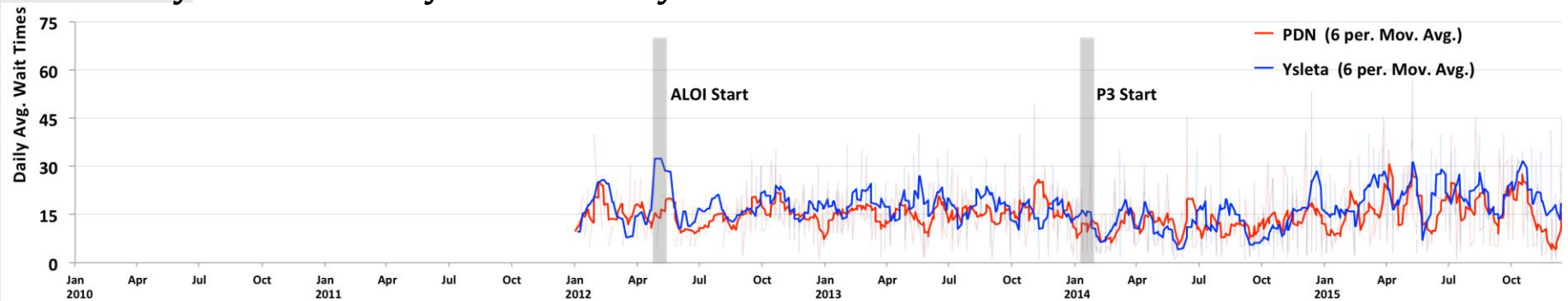
- Times fall and stabilize after ALOI and more so after P3

Standard PVs – P3 days/hours only



- Higher variance corresponds with greater use of Ready lanes

Ready PVs – P3 days/hours only



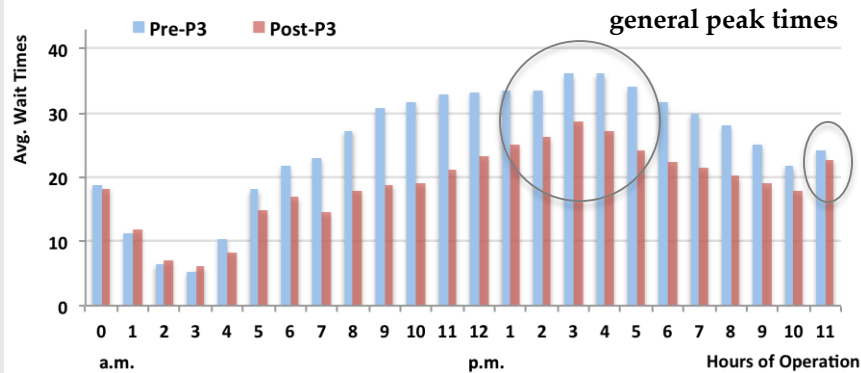


Vehicle Hourly Wait Times

(northbound in minutes)

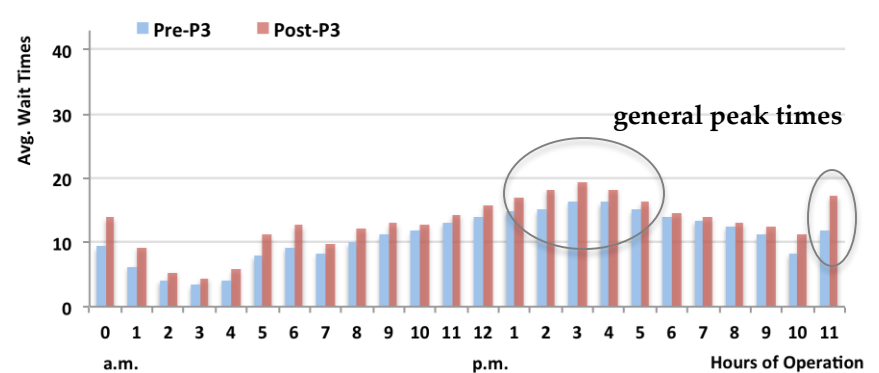
Standard PVs

PDN Mondays thru Sundays

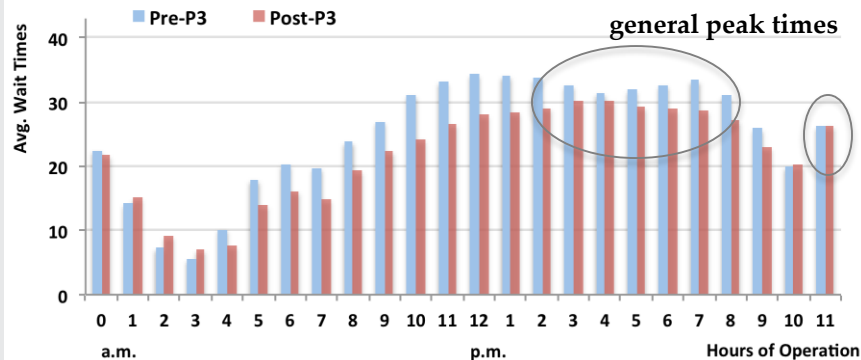


Ready PVs

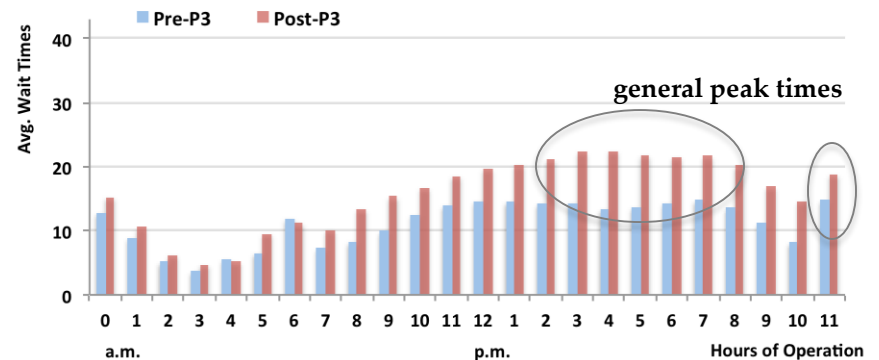
PDN Mondays thru Sundays



Ysleta Mondays thru Sundays



Ysleta Mondays thru Sundays



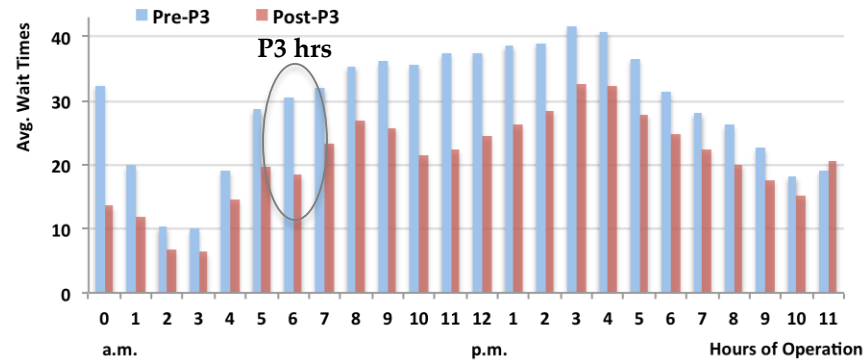


Standard Vehicle Hourly Wait Times

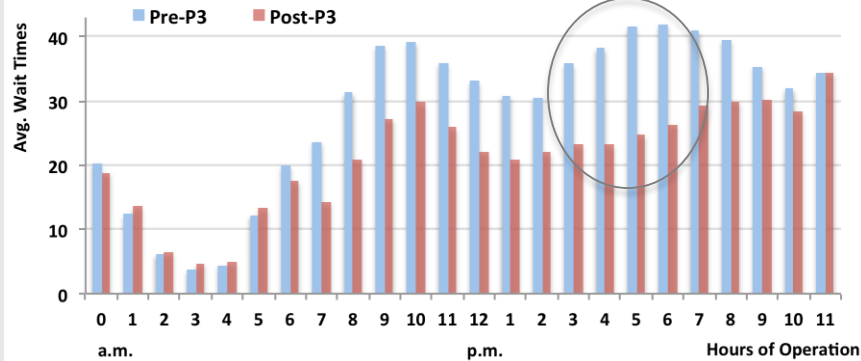
(northbound in minutes)

➤ P3 helped lower wait times for Standard PVs at PDN

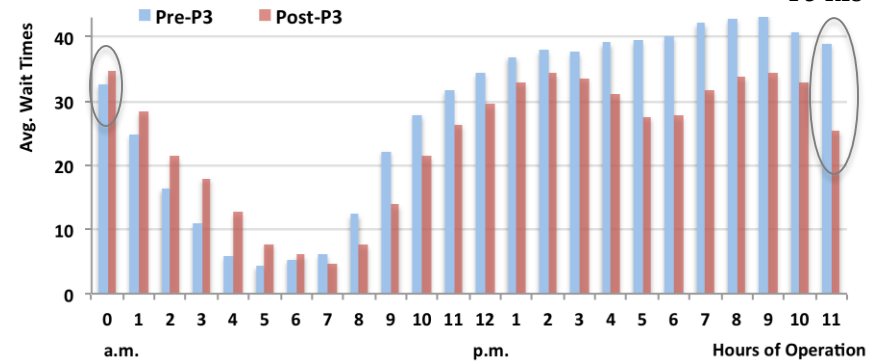
PDN Mondays



PDN Saturdays



PDN Sundays



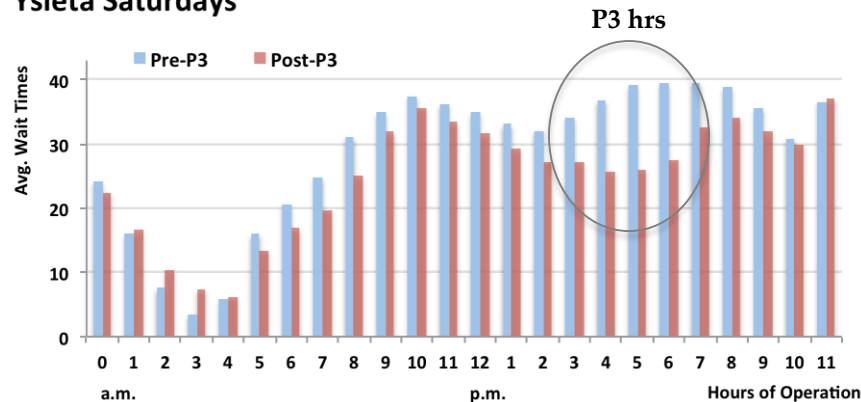


Standard Vehicle Hourly Wait Times

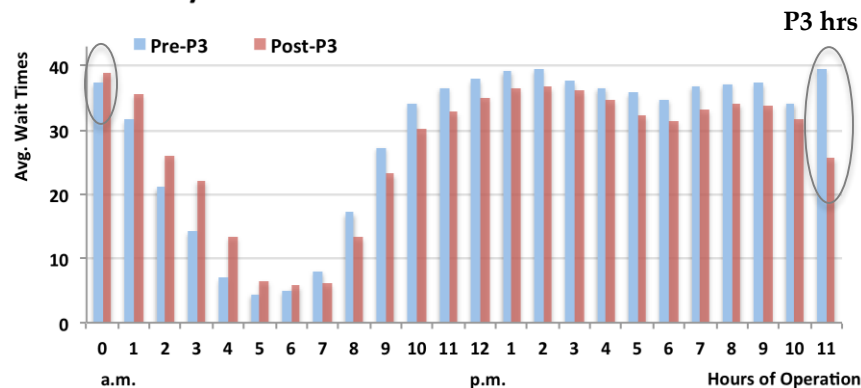
(northbound in minutes)

➤ P3 helped lower wait times for Standard PVs at Ysleta

Ysleta Saturdays



Ysleta Sundays





Pedestrians

Crossings

Revenues

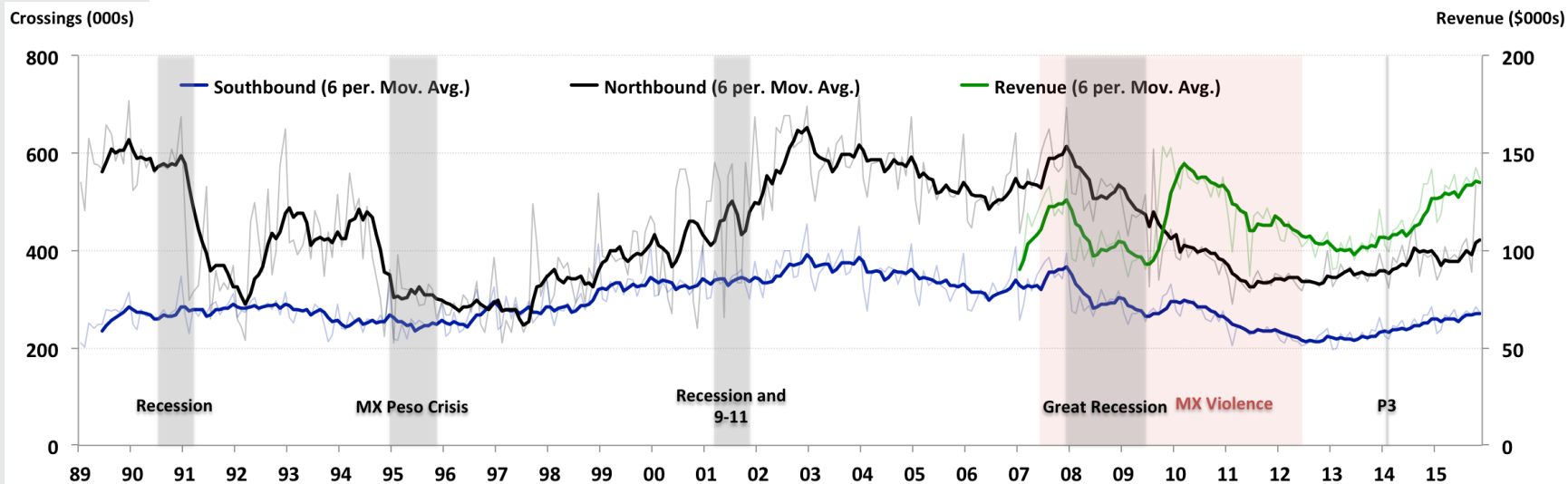
Wait Times



Pedestrian Crossings and Revenues

- Driven by regional social and economic integration and shocks
- PDN accounts for majority of pedestrian traffic
- Upward trend for PDN crossings/revenues since drop in violence

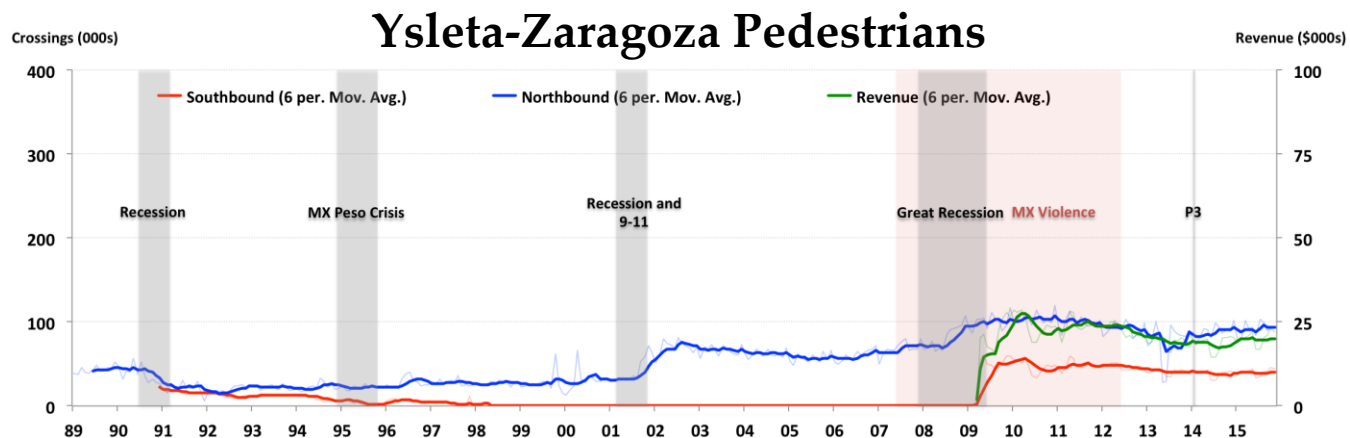
PDN Pedestrians





Pedestrian Crossings and Revenues

- Stanton southbound crossings/revenues have not recovered
- Ysleta crossings/revenues relatively stable



Source: El Paso IBD and CBP

Note: Northbound crossings include standard and Ready pedestrian lanes
No toll collections at Ysleta from Nov. 1998 to Mar. 2009

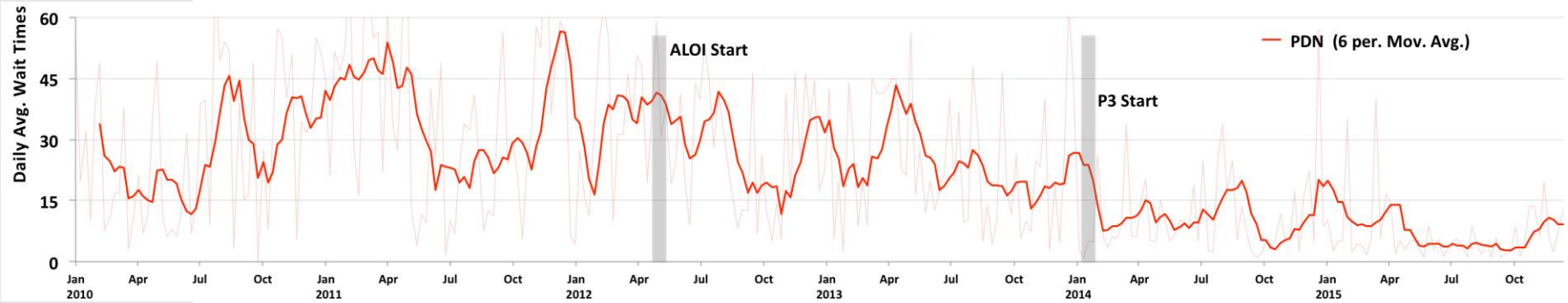


Standard Pedestrian Daily Times

(northbound in minutes)

- Highest wait times at PDN due to volume
- Wait times fall and stabilize after ALOI and more so after P3

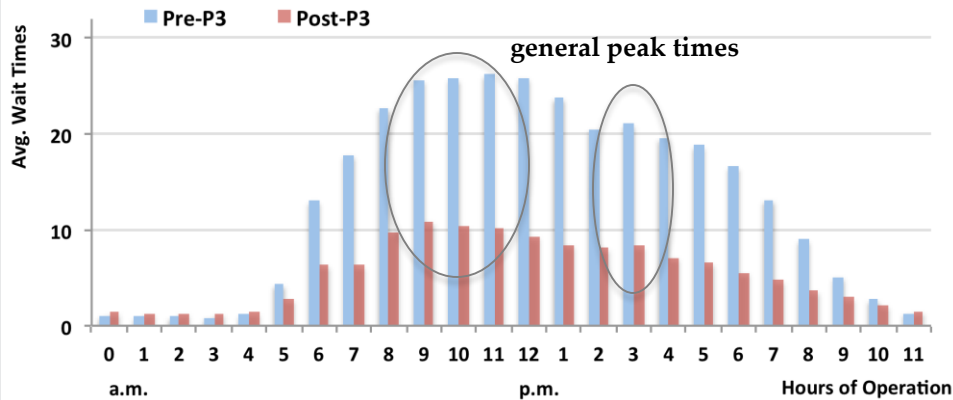
P3 days/hours only





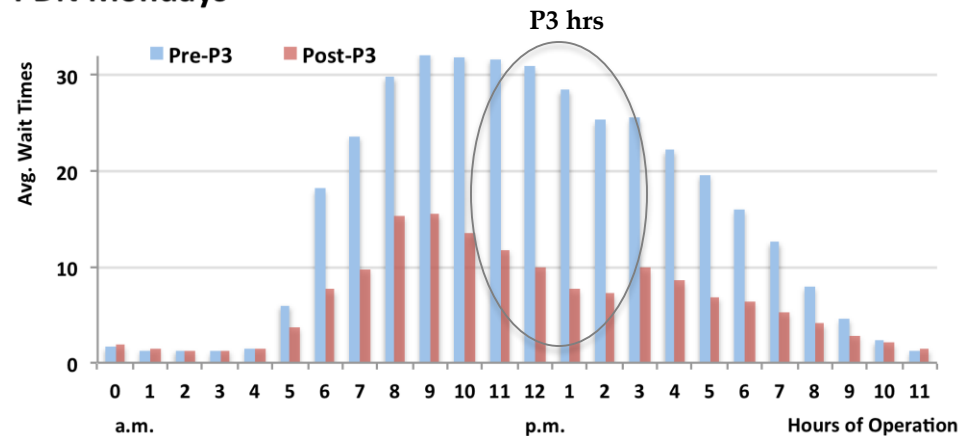
Pedestrian Hourly Wait Times (northbound in minutes)

PDN Mondays thru Sundays



➤ P3 has helped lower pedestrian wait times

PDN Mondays





Summary

- Cargo crossings and revenues have risen since the end of the Great Recession
- Vehicle and pedestrian crossings and revenues have risen since the drop in violence in Mexico
- P3 is helping reduce wait times during critical peak hours, in particular for pedestrian and standard vehicle traffic.

Period	Ysleta Bridge				PDN Bridge			
	Cargo Trucks		Passenger Vehicles		Pedestrians		Passenger Vehicles	
	P3 Hrs Avg Wait Times	Crossings (thousands)	P3 Hrs Avg Wait Times	Crossings (millions)	P3 Hrs Avg Wait Times	Crossings (millions)	P3 Hrs Avg Wait Times	Crossings (millions)
No Overtime 01/26/11 to 01/25/12	10.3	381	44.1	1.88	33.6	4.01	39.7	2.15
Partial ALOI 01/26/12 to 01/25/13	11.4	412	40.2	2.24	30.5	4.09	39.1	2.06
ALOI 01/26/13 to 01/25/14	11.3	426	30.9	2.87	23.3	4.28	27.9	2.35
P3 & ALOI 01/26/14 to 01/25/15	9.3	437	19.7	3.25	11.3	4.61	18.4	2.61



Moving Forward Short Term

- To control for *some* factors and better assess the influence of P3 we have requested from CBP
 - Hourly and daily crossings and number of lanes open from 01/01/10 to present
- Contracted with Secure Origins to, among other things, provide historical and current wait times data
 - Segmented by components of the crossing process – K-9 inspection, aduana queue, aduana exit, aduana inspection, CBP queue, CBP inspection, DPS inspection, etc.
 - For other Texas ports of entry for comparison purposes

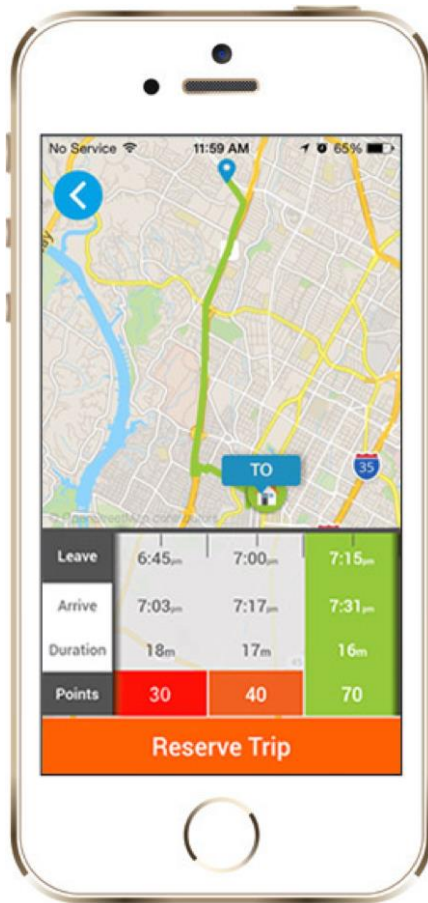


Metropia and Lean Six Sigma



Metropia Mobile[®] App

Demand management and data analytics platform

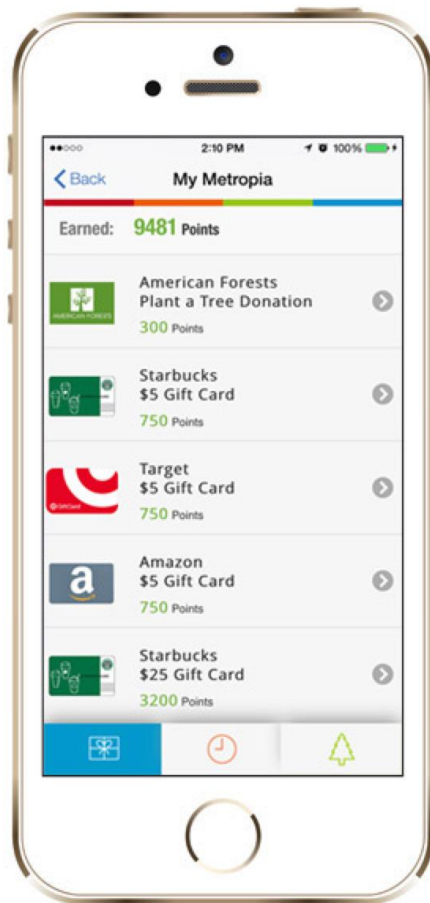


- Enter route and app shows you best times to leave
 - Avoid traffic
 - Spend less time on the road
 - Reduce CO2 emissions
- Real-time flow data and predictive algorithms forecast traffic patterns in 15-minute intervals



Metropia Mobile App

Congestion mitigation via social rewards-based ecosystem



- Choose departure times to avoid congestion and earn points
- Redeem points on Amazon, Starbucks, Target, restaurants, music downloads, etc., even plant trees



Metropia Mobile App

- Border region applications
 - Applies to cargo, vehicle and pedestrian traffic
 - Provides real-time bridge waits, alternative routes and departure times, and user-based incentives
- Timeline and budget
 - 6 months for app development
 - 24 month contract
 - Interlocal agreement with CRRMA
 - Estimated cost \$350,000 - \$400,000



Ysleta-Zaragoza LSS Projects

LSS Steering Committee Participants

Public Sector	Private Sector or Nonprofit
<p>City of El Paso</p> <p>Municipio de Cd. Juarez</p> <p>District 16 Congressional Office</p> <p>U.S. Customs and Border Protection</p> <p>Aduanas Mexico</p> <p>Texas Department of Transportation</p> <p>U.S. Department of Public Safety</p> <p>Metropolitan Planning Organization</p> <p>Instituto Municipal de Investigacion y Planeacion</p>	<p>Transportistas (Sotelo, Tracso)</p> <p>Maquiladoras (MFI, Electrolux, Toro)</p> <p>INDEX (Maquiladoras Associations)</p> <p>Customs Brokers (Pedraza Inc., BAB inc.)</p> <p>Desarrollo Economico de Cd. Juarez</p> <p>Promofront</p>





Ysleta-Zaragoza LSS Projects

Potential Improvement Projects Identified

- 1) Electronic tolling
- 2) Improved signage, lane stripping, traffic signals, visual controls for traffic control
- 3) Install additional lane at the bridge
- 4) Improve the road access into the system from the Mexican side
- 5) Improve the exit on the El Paso side to reduce congestion
- 6) Operate POE during holidays on regular hours / Examine the best hours of operations
- 7) Need to examine how we can ramp up for peak demand at the end of the month
- 8) Dedicated lane for certified shipments Mexico - U.S.
- 9) Improved coordination between DOT and DPS to reduce repeat inspections whenever possible
- 10) Visible access to live conditions at the port
- 11) Prove the tangible benefits of participating in C-TPAT for increased participating rates
- 12) Pre-inspection together with U.S. and Mexican custom
- 13) Integration of decals for trucks
- 14) Technology solutions that provide accurate crossing time data
- 15) Need to reduce the percentage of empty trucks crossing
- 16) Intelligent Transportation Systems signage (with real wait times)
- 17) City of El Paso can serve as a data host for wait time data
- 18) Team put together to work on trusted trade to increase the participation
- 19) Look into the possibility of adding additional CBP primary inspection booth
- 20) Push message system for participating members i.e. text messages
- 21) Off-peak hours truck crossings (pilot program)
- 22) Quantify the economic impact of delayed shipments



Ysleta-Zaragoza LSS Projects

Commercial Wait Time Reduction

- 22 potential improvement projects identified during 3 events
- Two LSS Steering Committee Projects currently underway
 1. Pilot Program, led by maquiladora industry in Cd. Juarez, for scheduling truck arrivals during off peak hours
 2. Multi-Generational Project, led by City of El Paso, for several infrastructure enhancements to help expedite the flow of traffic
 - Intelligent transportation systems signage and traffic control improvements on both sides of the border
 - Expand electronic tolling usage
 - Engineering designs started to make them eligible for state and federal funding



Section 560 Annex (P3 Program) Progress Report

City of El Paso and U.S. Customs and Border Protection

February 2016

**Strategic Goal # 7- Enhance and Sustain El Paso's
Infrastructure Network**

7.3. Enhance Regional Comprehensive Transportation System