

# Regulatory Policy and Sustainable Port Operations: Gate Appointments and Extended Hours

On the Road to Sustainability:  
From Research to Practice  
Berkeley CA

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# Outline

- What is the problem?
- Factors leading up to use of appointments and extended hours in Southern CA
- Implementation and outcomes of two proposed legislative efforts
- Regulatory approach: Implications for other ports

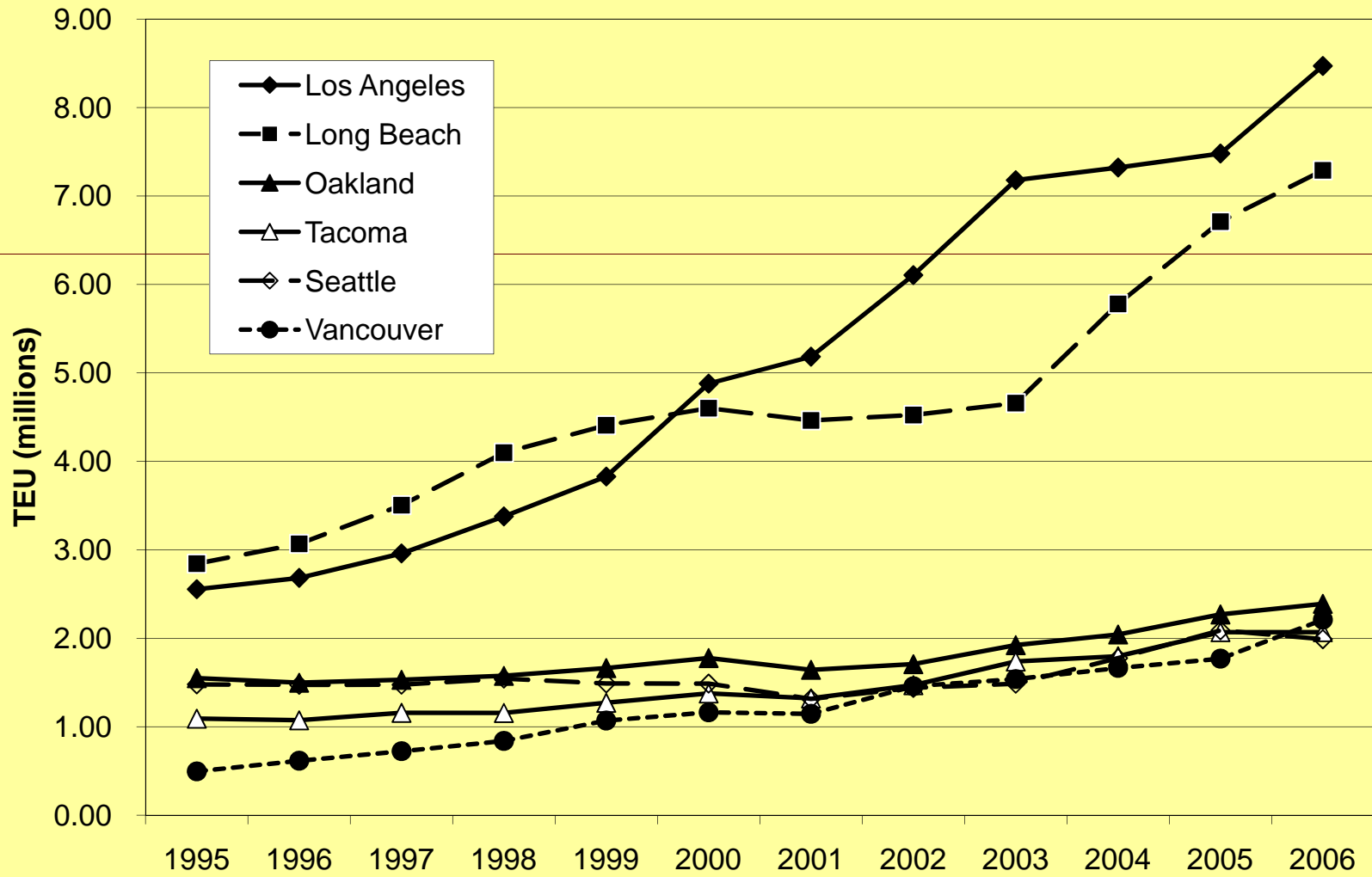


# What is the problem?

- Growing freight volume in metropolitan areas
- Limited supply of highway, rail, air, port capacity
- Congestion, air pollution, neighborhood impacts, safety



## Pacific Coast Port Growth, TEUs



# More congestion LA/OC Urbanized Area

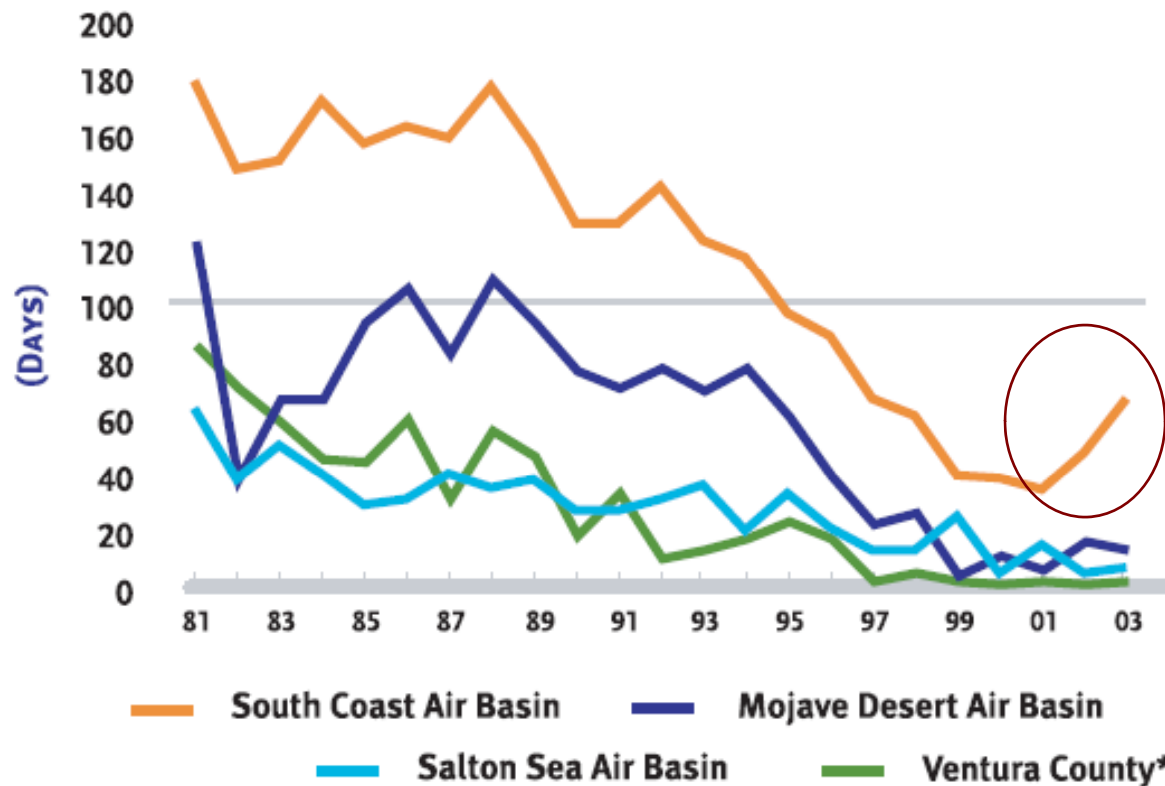
	1982	2005
Total daily VMT	163M	266M
Total road miles	20.7K	26.6K
Total person-hrs delay	178M	491M
Congestion cost	\$1.637B	\$9.325B
Delay/person	45 hrs	72 hrs



*Source: Texas Transportation Institute*

# Air pollution – losing ground

**Ozone Pollution in Non-attainment Air Basins**  
(Number of Days Exceeding Federal One-hour Standard)



\* Ventura County is part of the South Central Coast Air Basin

Source: California Air Resources Board and South Coast Air Quality Management District

*SCAG 2005 State of the Region*

# The gate operations problem

- Drayage trucks pick up and drop off containers, chassis
- Drayage managed and serviced at ports by longshore labor
- High cost, restrictions on longshore labor → restrict truck operations to day shift

*US terminals have traditionally not operated full service extended gate hours, except under special arrangements*

# Increased public awareness

- 2000 MATES II Study
- 2000 NRDC vs China Shipping
- 2001 9/11 attacks
- 2002 Port shutdown
- 2002 Alameda Corridor opening
- 2002 I-710 Study

*Public response: growing resistance to expected trade growth, facility expansion to facilitate growth; political pressure to reduce local external costs*

# AB 2650: Gate appointments

- Goals: Reduce vehicle emissions and extend terminal gate hours in LA/LB and Oakland
- Took effect 7/1/02; in force 7/1/03
- Fined terminal operator \$250 for each truck idling more than 30 minutes while in queue
- Terminals with extended gate hours ( $\geq 70$  hrs/wk) exempt
  - Applies only to queuing to designated gate entry
  - Applies only to idling, not standing with engine off
  - Applies only if truck has appointment
  - Does not apply to standing/idling within terminal
  - Terminals establish own rules re appointments
- Enforced by local air district

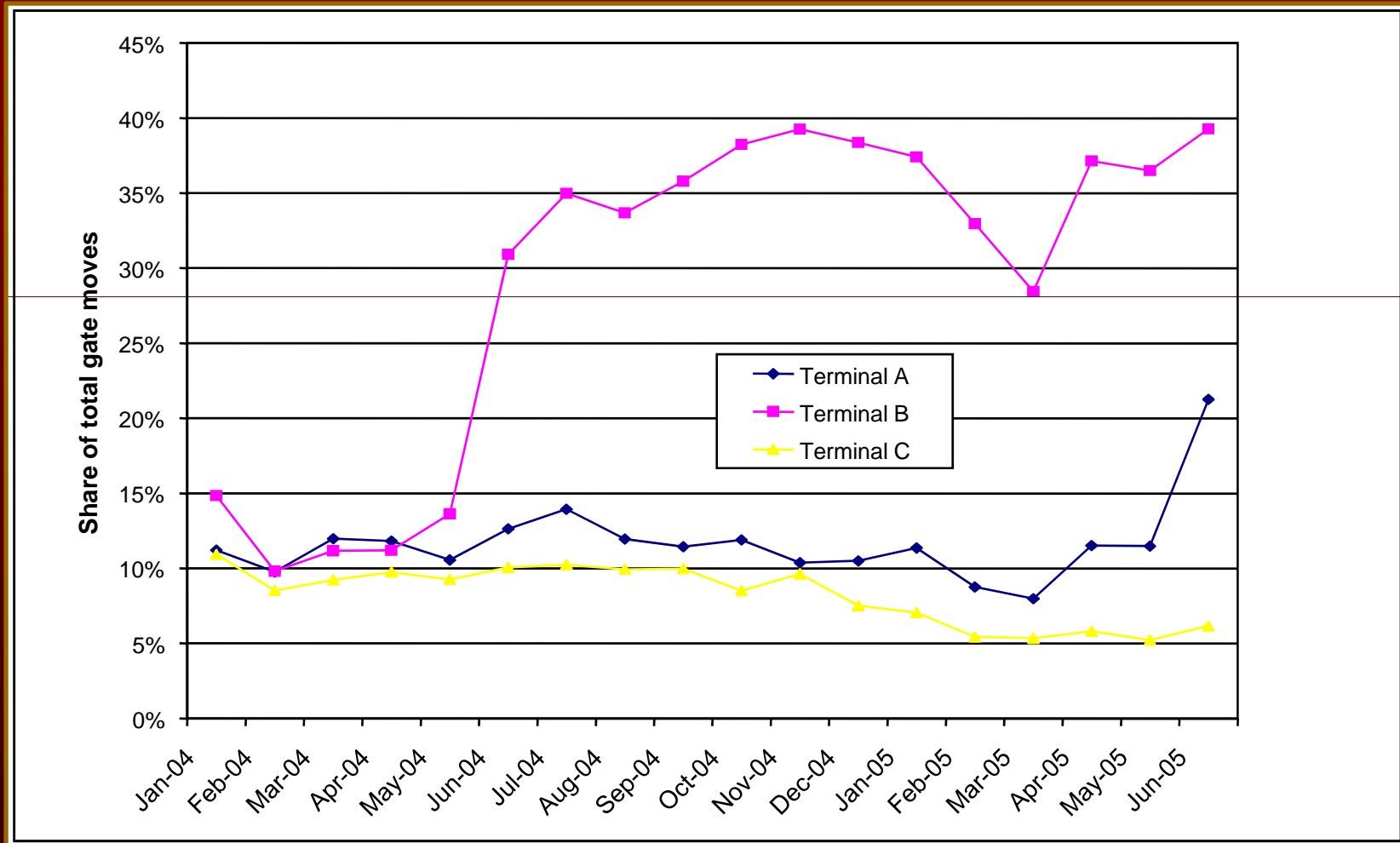
# AB 2650: Results

- Enforcement
  - No citations at LA/LB
- Extended gate hours
  - 3 of 13 terminals in LA/LB: none changed in response to the law
  - Extended hours viewed as too costly; chose appt system instead
- Queues
  - Queues shorter, likely due to OCR implementation, computerization of cargo data

# AB 2650: Results

- Appointments
  - Use varies by terminal, 1% to 30+%
  - Mixed review
    - Did queue shift to inside terminal?
    - Appointment to pick up vs cargo ready for pick up
    - Appointment windows and road congestion
    - Generally no priority at gate
    - Allows allocation of cargo moves
    - Allows truckers to schedule on contingency basis (no penalties for cancellations)
    - Effectiveness of indirect approach?

# Appointments as share of total gate moves



# PierPASS: Extended gate hours

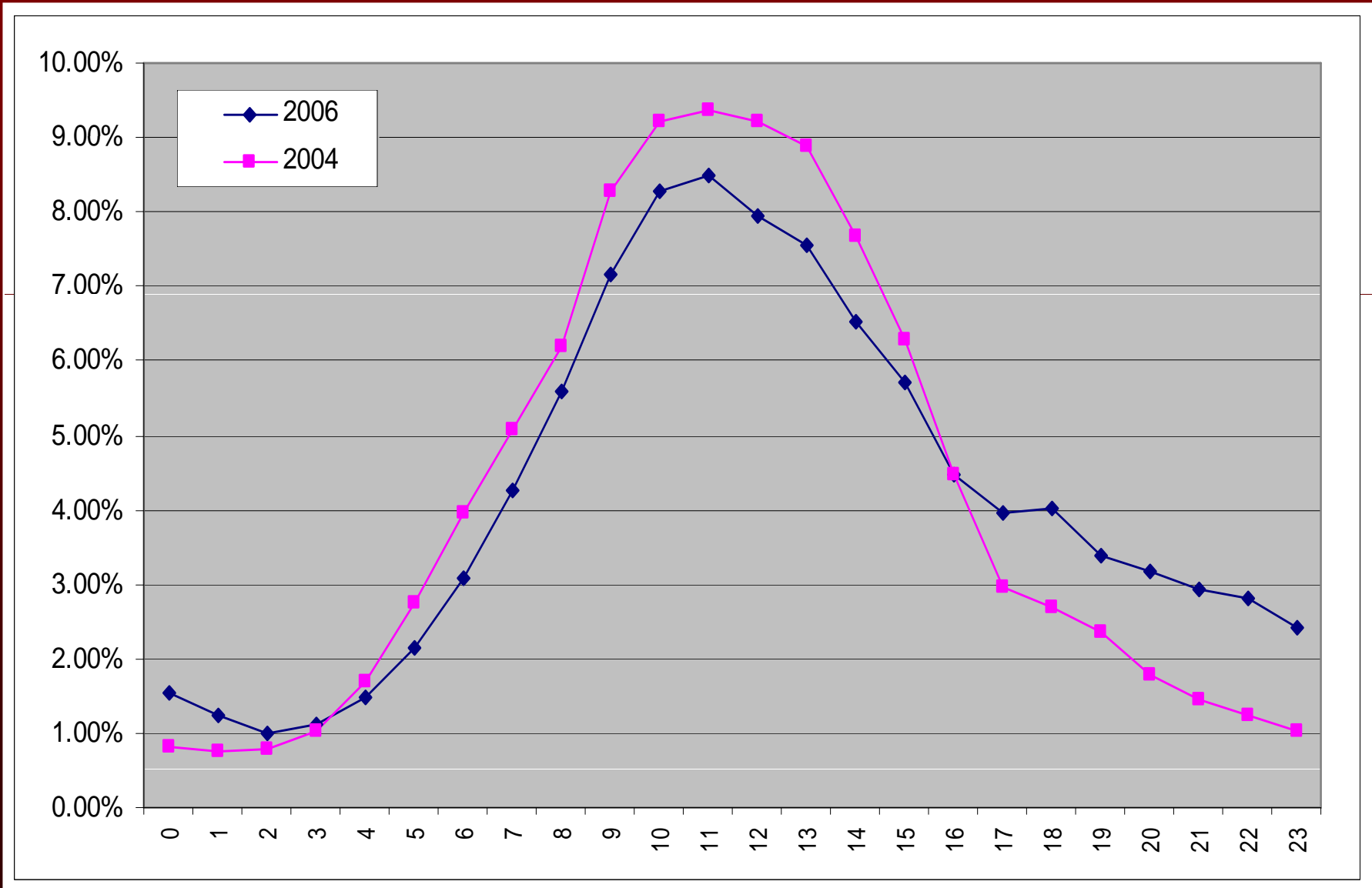
- An industry response to legislative pressure (AB 2041, withdrawn)
- MTOs get anti-trust exemption via FMC discussion agreement to cooperate and set prices
- PierPASS, Inc. non-profit to administer
- Implemented July 2005

# PierPASS: Extended gate hours

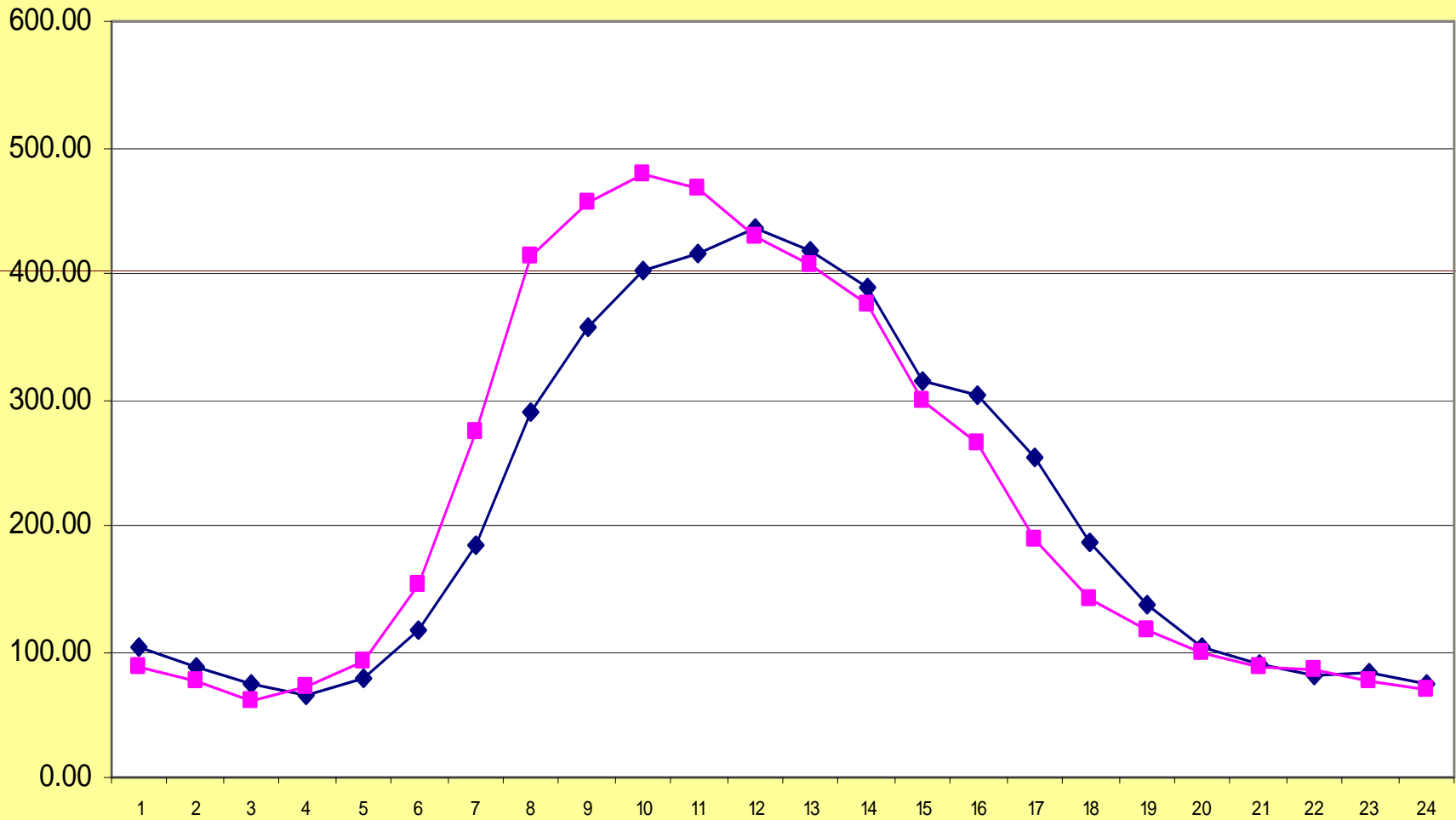
- Provisions
  - Fee of \$40/TEU for road cargo entering/exiting during peak hours (\$50/TEU as of 4/06)
  - Peak hours = M-F 3AM – 6 PM
  - Net revenues allocated to terminals to offset costs
  - Exemptions
    - Empty returns, chassis returns, domestic freight, transshipments, cargo subject to ACTA fee



# 1-710 Hourly Share of Truck Traffic



# Weekend Hourly Truck Volumes N/B I-710



◆ Average before July 2005  
■ Average after July 2005

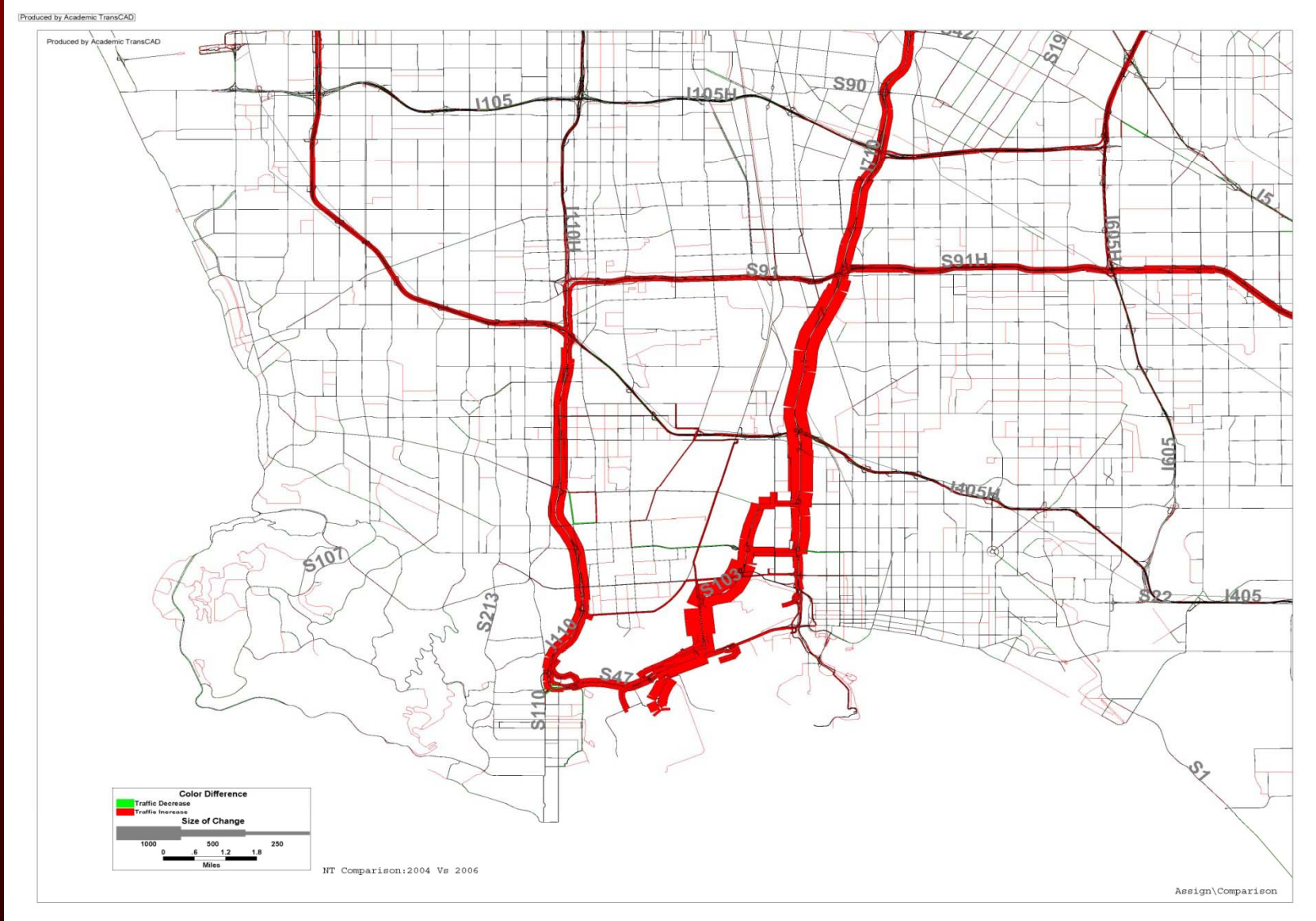
# Estimating PierPASS Impacts on Traffic Congestion

- TransCAD model using 2003 SCAG Regional Travel model as baseline (4,192 TAZs)
- Pooled I-710 and I-110 Caltrans data for “before PierPASS” baseline
- Port sub-area: 2 RSAs, 240 TAZs, 5% of total regional VMT
- HDDT trips adjusted to account for increase in TEU volume
- No adjustment for regional growth → conservative estimates

# Scenario Results

- PierPASS shift offsets some increase in AM and PM peak VMT and VHT
- Midday changes consistent with greater PierPASS midday shift (8%); provides congestion relief
- PierPASS contributes to VMT/VHT at night
- No affect on average speeds
- Shift offsets approximately two years of port growth

# Changes in Night Traffic



# PierPass Outcomes

- Stated diversion targets reached
  - By 2006 PierPass claims 2M truck trips diverted
  - Significant impact on highway system
- Fee and program structure
  - MTO collaboration limits competition
  - Fee based on costs minimizes financial risk
  - Proprietary financial records precludes public scrutiny
  - Establishes model for future fees
- Truckers
  - Work longer hours, some receive premium pay
- Warehouse, distribution centers
  - Adjust and absorb extra costs
- Ports
  - Get credit for being responsive, making changes

# Regulatory Approach

- Some key actors not subject to local or state government authority
- Dynamics and imperatives of international trade, global economy outside local, state or national control
- Trade continues to increase, so limited incentive for changes that would increase costs for industry
  - Ports compete, so no incentive to incur unique local costs
- Regulatory action can encourage industry action but indirect measures are difficult to enforce
- Future use of PierPASS model

*Thank you*

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