

Memorandum



CITY OF DALLAS

DATE August 21, 2009

TO Members of the Transportation and Environment Committee:
Linda L. Koop (Chair), Sheffie Kadane (Vice Chair), Jerry Allen, Carolyn R. Davis, Tennell Atkins, Angela Hunt, Pauline Medrano, Delia Jasso and Ron Natinsky, Vonciel Jones-Hill

SUBJECT Truck Lane Restrictions Pilot Study Briefing

Attached is the "Truck Lane Expansion Study" briefing that will be presented to you August 25, 2009.

Please contact me if you need additional information.

A handwritten signature in black ink, appearing to read "Jill Jordan".

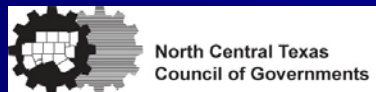
Jill A. Jordan, P.E.
Assistant City Manager

- c: The Honorable Mayor and Members of the City Council
Mary K. Suhm, City Manager
Thomas P. Perkins, Jr., City Attorney
Deborah Watkins, City Secretary
Craig Kinton, City Auditor
Judge C. Victor Lander, Administrative Judge
Ryan S. Evans, First Assistant City Manager
A.C. Gonzalez, Assistant City Manager
Forest Turner, Assistant City Manager
David Cook, Chief Financial Officer
Jeanne Chipperfield, Director, Budget and Management Services
Edward Scott, Director, Controller's Office
Helena Stevens-Thompson, Assistant to the City Manager – Council Office
Rick Galceran, P.E., Director, Public Works and Transportation
Theresa O'Donnell, Director, Development Services

Truck Lane Restriction Expansion

Dallas City Council
Transportation and Environment
Committee

August 25, 2009



North Central Texas Council of Governments
Transportation Department

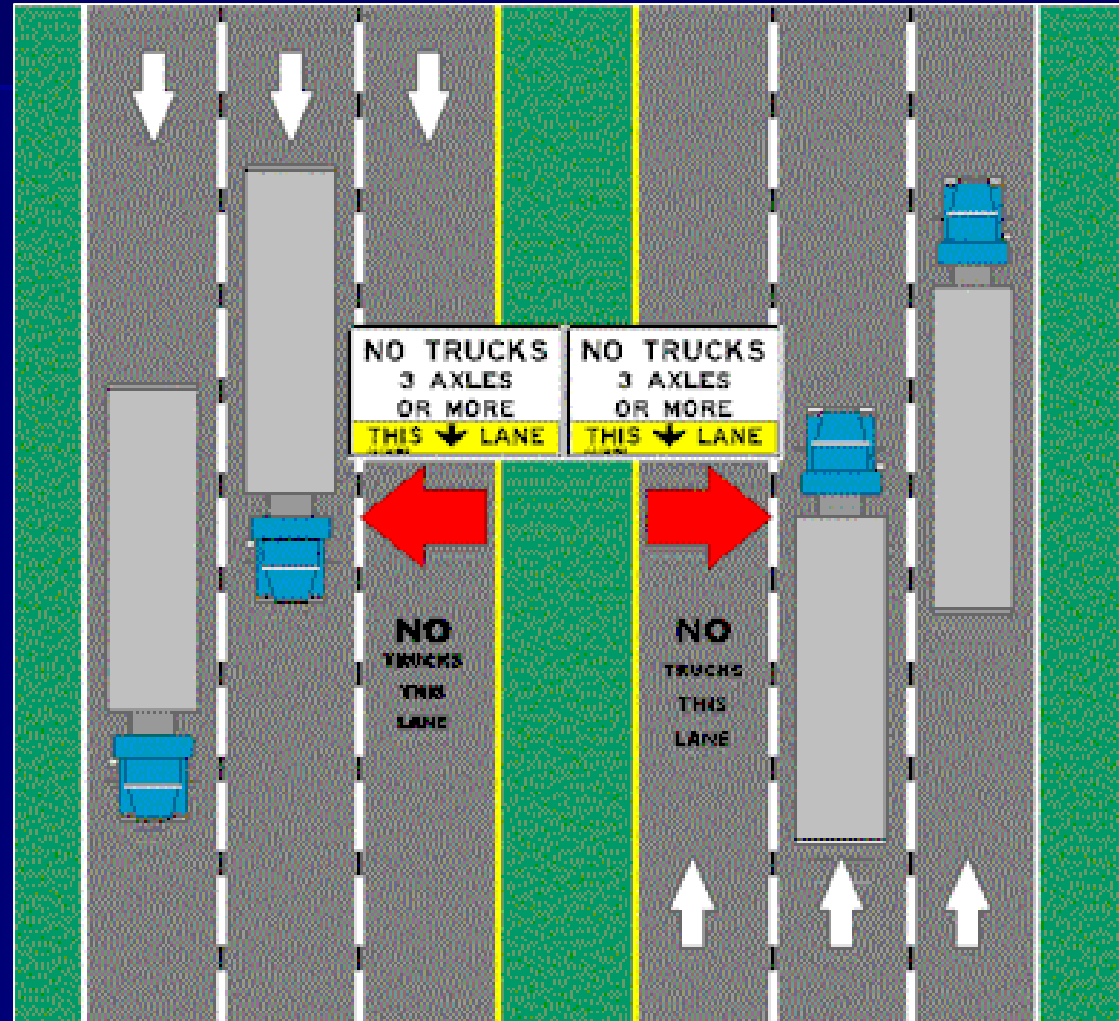
Truck Lane Restrictions in Texas

Background

In 1997, the Texas Legislature passed a law allowing municipalities to request truck lane restrictions.

Updated in 2003, the law allows counties and TxDOT to designate such lane restrictions as well.

Designated lane restrictions are to be coordinated through Metropolitan Planning Organizations and with adjacent jurisdictions.



Is the general public accepting of the truck lane restrictions?

Yes.

80% of the general public supports expanding truck lane restrictions.

However, only 20% of impacted truck drivers support expanding the restrictions.

Did the rate of crashes decrease?

Yes. The number of accidents per 1 million vehicle miles traveled decreased.

Accident Rate Summary for the I.H. 30 Corridor

Phase	Duration	ADT	Number of Accidents	Accidents per Day	Accidents per 100,000 ADT	Accidents per 1,000,000 VMT
<u>Without</u> truck lane restrictions, with standard enforcement	61 days	167,957	102	1.67	0.99	0.55
<u>With</u> truck lane restrictions, with standard enforcement	30 days	166,520	38	1.27	0.76	0.43

Accident Rate Summary for the I.H. 20 Corridor

Phase	Duration	ADT	Number of Accidents	Accidents per Day	Accidents per 100,000 ADT	Accidents per 1,000,000 VMT
<u>Without</u> truck lane restrictions, with standard enforcement	60 days	142,910	19	0.32	0.22	0.18
<u>With</u> truck lane restrictions, with standard enforcement	27 days	152,494	2	0.07	0.05	0.04

Do truck lane restrictions provide an air quality benefit?

Yes.

Trucks move from the left lane to the middle and right lanes.

The estimated NO_x emission reduction on the I.H. 30 test section was 61.24 pounds per day based on increased traffic speeds.

Potential regional benefit of 211 pounds per day reduction in NO_x was estimated per 100 miles of truck lane restrictions.

Do truck lane restrictions have a positive effect on recurring travel speeds?

Yes.

There were small, but measurable improvements in travel speeds by lane. (average of I.H. 20 and I.H. 30)

Average Speed (MPH) of All Vehicles

Lane	<u>Without</u> Truck Lane Restrictions, With Standard Enforcement	<u>With</u> Truck Lane Restrictions, With Standard Enforcement	Change in Average Speed
Left	71.50	72.38	0.88
Middle	65.63	66.19	0.56
Right	60.75	61.25	0.50

Are truck lane restrictions effective without added enforcement?

Yes.

Compliance rates were similar with and without additional enforcement.

Location on I.H. 30	Direction	Phase 3		Phase 4	
		Truck % in Left Lane	Compliance Rate	Truck % in Left Lane	Compliance Rate
Beach Street	EB	5%	95%	3%	97%
	WB	13%	87%	15%	85%
Loop 820	EB	45%	55%	43%	57%
	WB	4%	96%	3%	97%
Morrison	EB	23%	77%	21%	79%
	WB	6%	94%	5%	95%

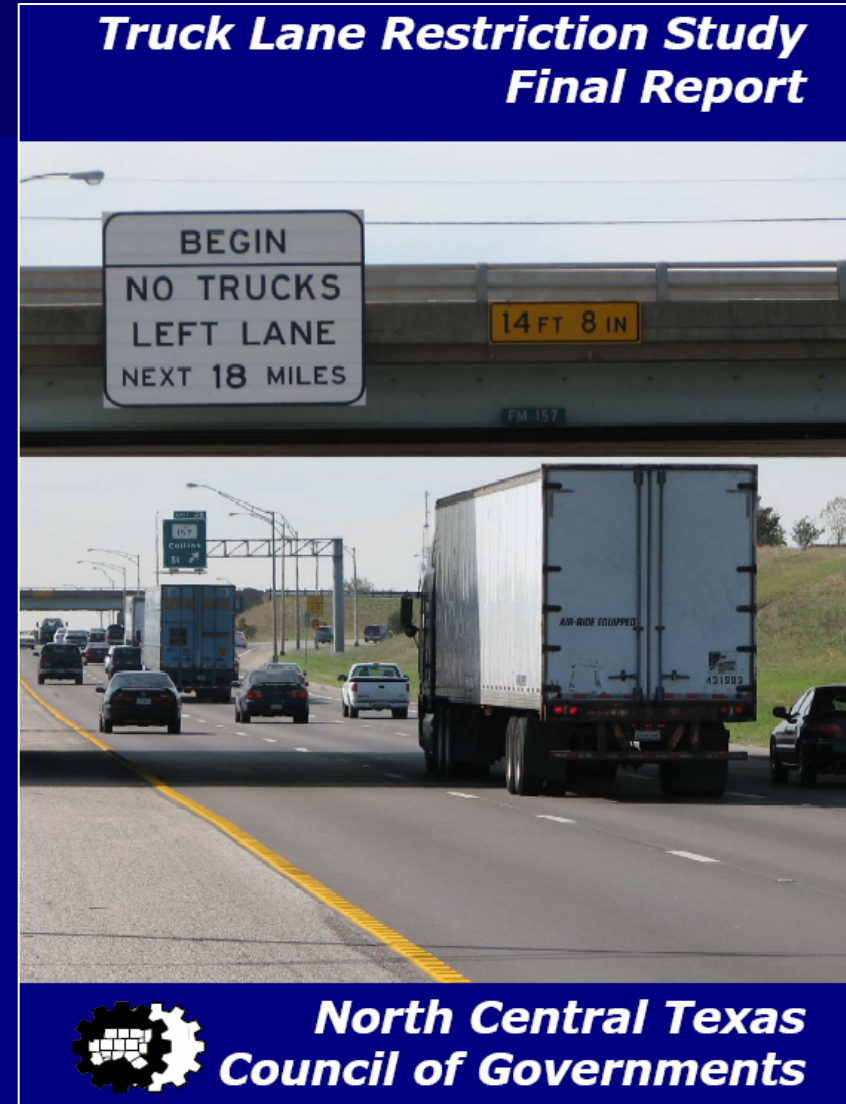
Phase 3 - With Restrictions and *Increased* Enforcement

Phase 4 - With Restrictions and *Standard* Enforcement

Truck Lane Pilot Study

Report Findings

1. Truck Lane Restrictions are accepted by the public.
2. Truck Lane Restrictions have positive impacts on:
 - Crash rates
 - Air quality
 - Travel speed
3. Truck Lane Restrictions are obeyed by a majority of drivers with or without active enforcement.











Truck Lane Pilot Study

Summary of Study Recommendations

- Develop a regional system based on facilities:
 - With three or more lanes
 - With a moderate to high level of truck traffic
 - Without site or corridor specific barriers to implementation
 - That may connect to Statewide lane restrictions
- Work with State and local communities to:
 - Perform operational and site specific analysis on potential locations
 - Implement a complete system of truck lane restrictions
 - Document air quality credit for truck lane restrictions

Truck Lane Recommendations

Legend

-  Recommended Near-term Truck Lane Restrictions
-  Potential Long-term Intercity Truck Lane Restrictions
-  Freeways
-  Major Roadways
-  Regional Arterials
-  County Boundaries
-  Metropolitan Planning Area Boundary
-  Major Lakes

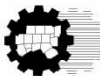
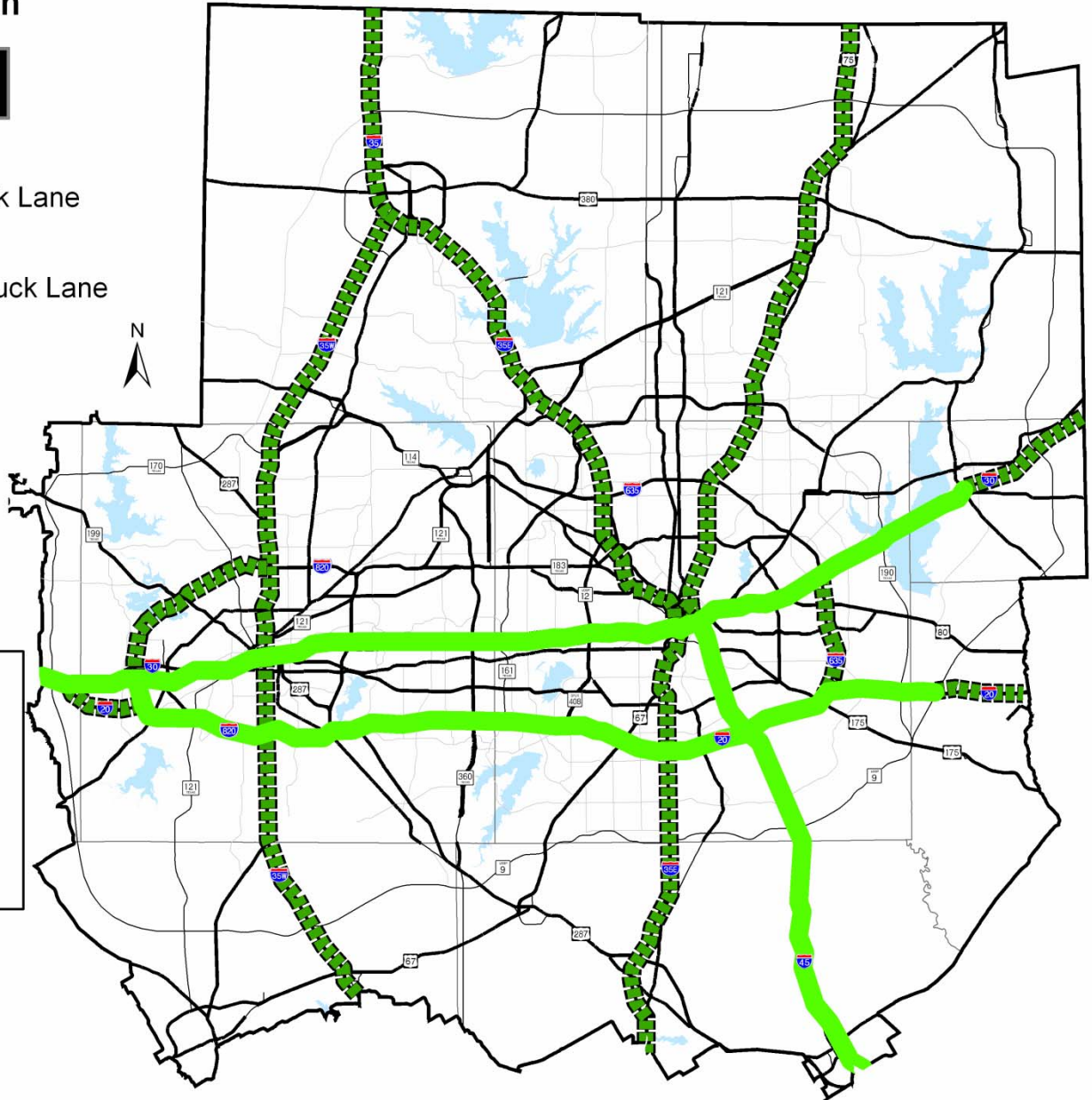
Recommendations Include:

- 3 + lanes
- Moderate to High Truck Volumes
- Continuous system

Further site specific study needed to evaluate:

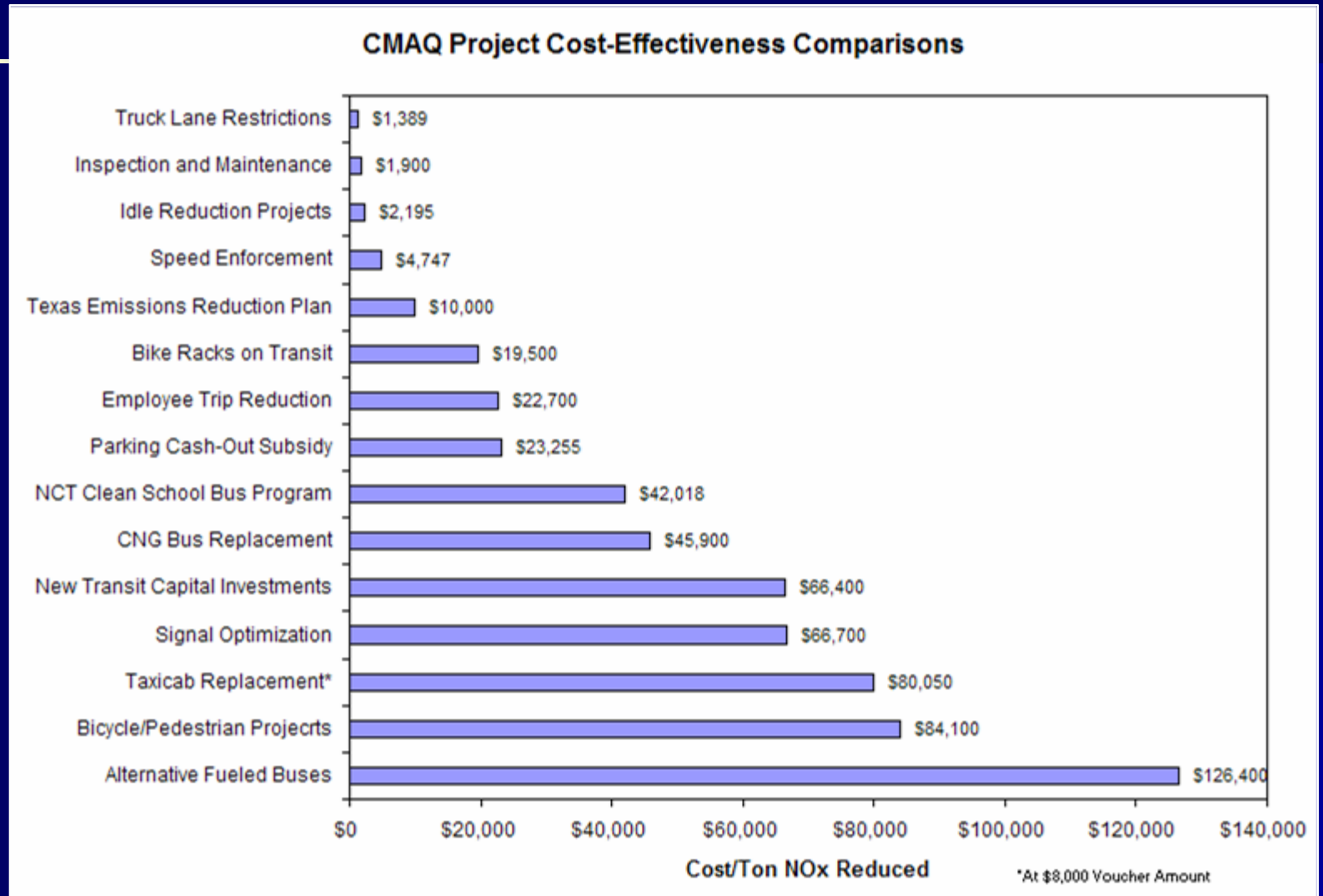
- Segments with geometric constraints
- Current or pending reconstruction
- Capacity and congestion levels
- Public opinion

New facility locations indicate transportation needs and do not represent specific alignments



Truck Lane Restriction Expansion

Air Quality Benefits



Truck Lane Restriction Expansion

Preliminary Timeline

Stakeholder Meeting	→	February 11, 2009
Mobility Plan Adopted by RTC	→	April 9, 2009
Public Hearings		
Ellis County	→	August 10, 2009
Tarrant County	→	August 11, 2009
Dallas County	→	August 12, 2009
TxDOT Review	→	August/September 2009
TxDOT Minute Order & Approval	→	October 2009
Implementation	→	Fall 2009 - Spring 2010
Opening Day	→	Spring 2010 (Ozone Season)

Truck Lane Restriction Expansion

For more information:

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