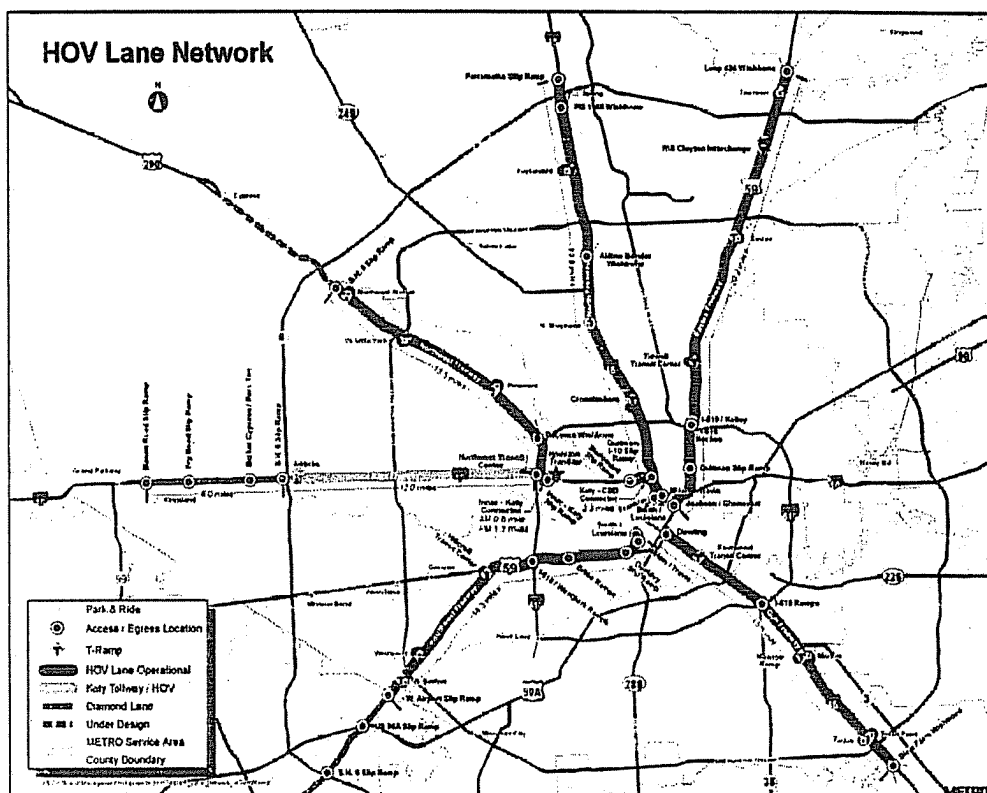


High Occupancy Toll Lanes in the Houston Area

Under agreement with the department, the Metropolitan Transit Authority of Harris County (METRO) currently operates six high occupancy vehicle (HOV) lanes in the Houston area. These traditional HOV lanes expand the ability of these highways to move more people through the corridor by providing dedicated lanes to carpools, vanpools, and transit vehicles. Currently, the HOV lanes in Houston require a minimum of two or three passengers¹ before a vehicle is eligible to use the lane.

METRO has approached the department with a request that METRO be allowed to begin operating five of the HOV facilities as high occupancy toll (HOT) lanes:

- I-45 North Freeway: From downtown Houston to north of FM 1960 (19.9 miles);
- I-45 Gulf Freeway: From downtown Houston to Dixie Farm Road (15.5 miles);
- US 59 Eastex Freeway: From downtown Houston to Loop 494 (20.2 miles);
- US 59 Southwest Freeway: From downtown Houston to West Airport Boulevard (14.3 miles); and
- US 290 Northwest Freeway: From Northwest Transit Center to south of FM 1960 (13.5 miles).



¹ US 290 HOV lane requires 3 or more passenger from 6:45 a.m. to 8:00 a.m. and 2 passengers at all other times; the other HOV lanes require 2 or more passengers at all times.

A HOT lane is an HOV lane that allows vehicles that do not meet HOV occupancy requirements to access the lane by paying a toll as a way to increase the capability of the roadway to carry more people. METRO has requested permission from the department to operate portions of five existing HOV facilities as HOT lanes as a way to increase usage of the existing HOV lanes. The designation to HOT lanes will not sacrifice the existing benefits of the current HOV lanes.

HOT lanes have been successfully implemented in several regions in the country including Denver, Miami, Minneapolis, San Diego and Seattle. The HOT lane concept has been accepted by the USDOT under their Value Pricing Program.

HOT lanes use variable pricing with tolls collected electronically. The application of variable pricing allows the road authority to change the price that a single occupant vehicle pays to use the lane, thereby ensuring that the lane will not become congested. As demand increases and speeds slow, the toll can rise to ensure that traffic can still move freely and that drivers can still realize reduced travel times.

Vehicles meeting the standard HOV occupancy requirement for that HOV lane will still be allowed to use the HOV lane at no charge.

HOT lanes provide a number of significant benefits, both for drivers and road authorities:

- Allow for the most efficient use of HOV lanes by allowing drivers to pay a premium for the unused capacity that exists before and after rush hour;
- Allow road authorities to vary the price to ensure that the lane remains uncongested;
- Allow the corridor to move more people and vehicles without expanding the existing general-purpose lanes;
- Increase fuel conservation and improve air quality by reducing vehicle idling time;
- Allow a driver in a single occupant vehicle to choose whether to pay to use the HOT lane or use the free general-purpose lanes; and
- Allow for the movement of single-occupant vehicles out of the general-purpose lanes to the HOT lanes during peak commuting hours².

METRO will operate the proposed HOT lanes at all times provided that there is sufficient capacity in the lane for traffic to maintain a 50 miles per hour average speed. Single-occupant vehicles would only be allowed to use the lane when the free flow of traffic could be maintained. The toll that a single-occupant driver would pay to use the HOT lane would vary based on the lane's speed and level of congestion.

All toll collection will be handled electronically through the use of a toll tag (TxTAG, EZ TAG, or T Tag).

Drivers would be informed continuously about the availability of the HOT lane and the current price through dynamic message signs posted in advance of the HOV lane entry points. Once a vehicle entered the lane, the price for that vehicle would be locked in at the rate that existed when they entered the lane.

² Estimated at 15,000 vehicles per day in 2007.

METRO currently handles enforcement, incident management, and some maintenance functions on the HOV lanes. If the operation of HOT lanes is approved, the department and METRO intend to enter into a HOT lane agreement, by which METRO would assume greater maintenance role for the HOV lanes including pavements, barriers, signing, litter and sweeping operations. Any revenue generated from the HOT lanes above operating costs would be shared between the department and METRO.

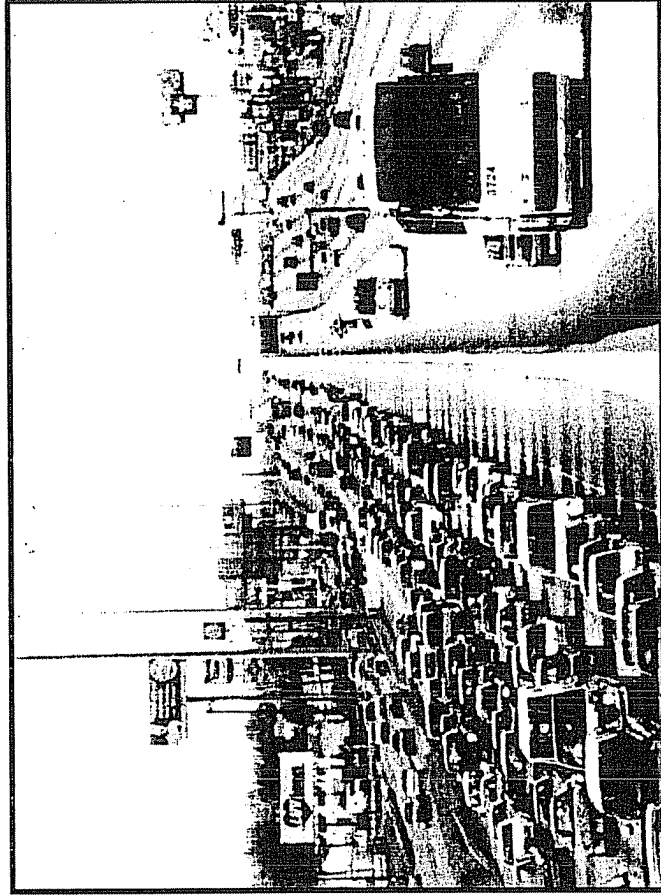
Houston-area High Occupancy Toll (HOT) Lanes



Texas Department of Transportation
and the
Metropolitan Transit Authority of Harris County (METRO)

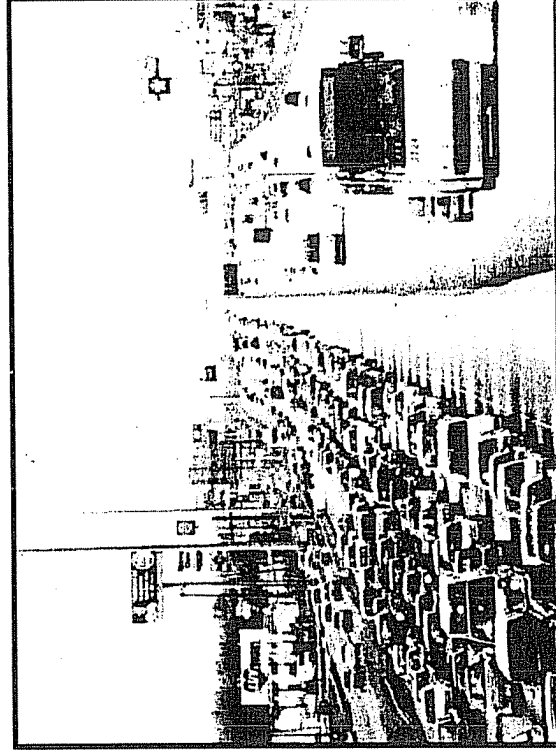
January 26, 2011

What is a HOT Lane?



A High Occupancy Vehicle (HOV) lane with excess capacity that can be used by Single Occupant Vehicles (SOV) for a toll

What are the Benefits of HOT Lanes?

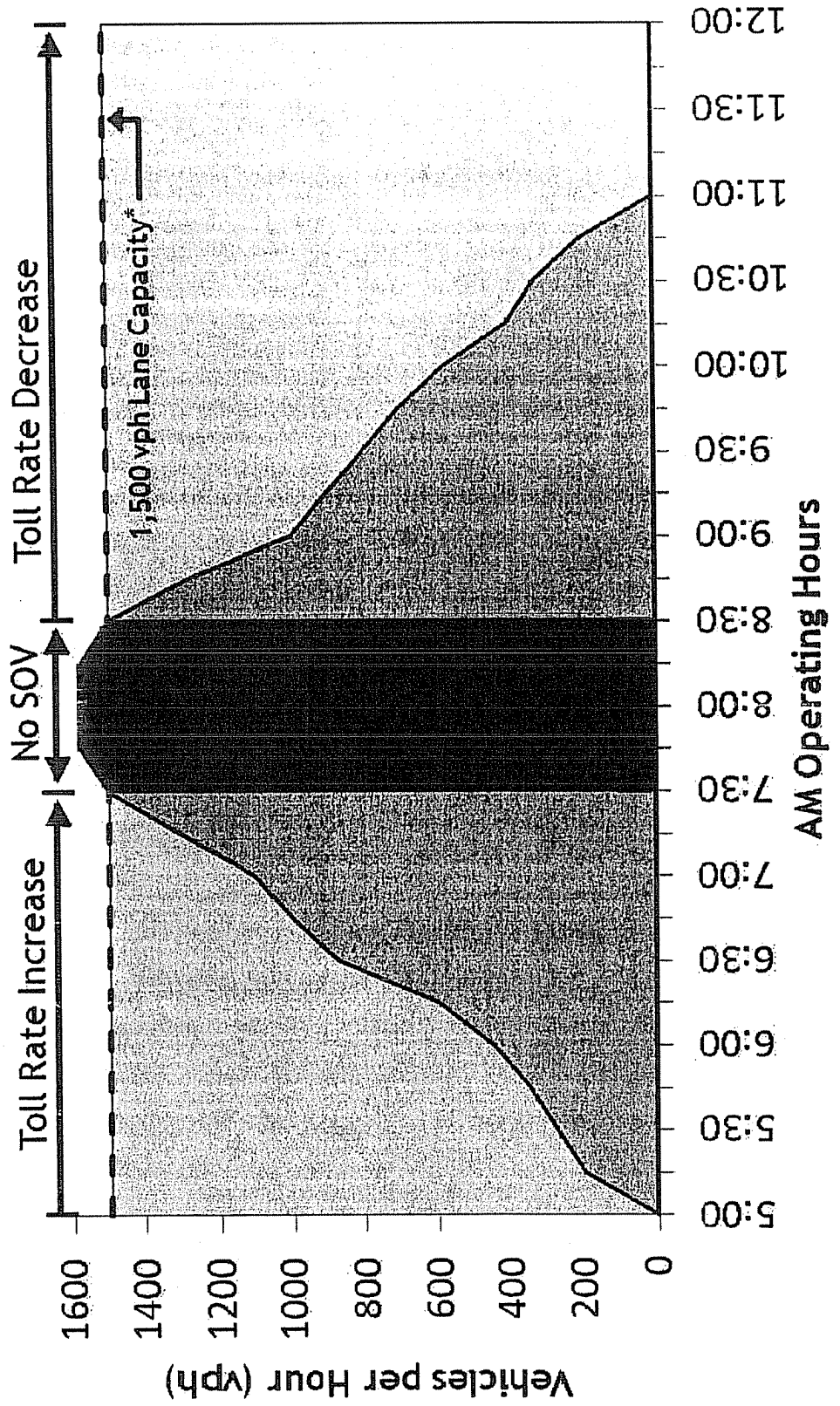


- Improved corridor mobility
- Another option for travelers
- Fuel conservation and improved air quality due to reduced idling
- Better use of under-utilized assets
- Reduced operating costs due to automated access gates

Why HOT Lanes in Houston?

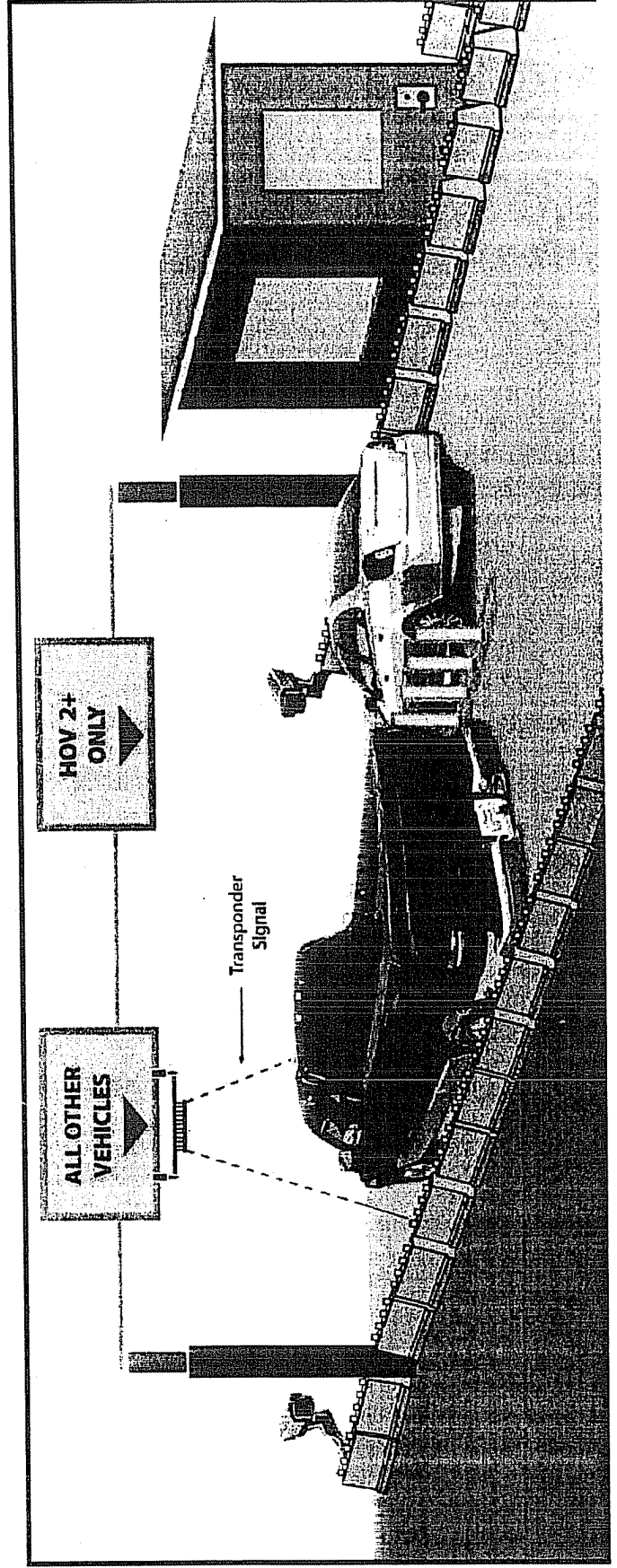
There is available capacity in HOV Lanes

TYPICAL HOV UTILIZATION - TIME DIAGRAM



How will HOT Lanes Work?

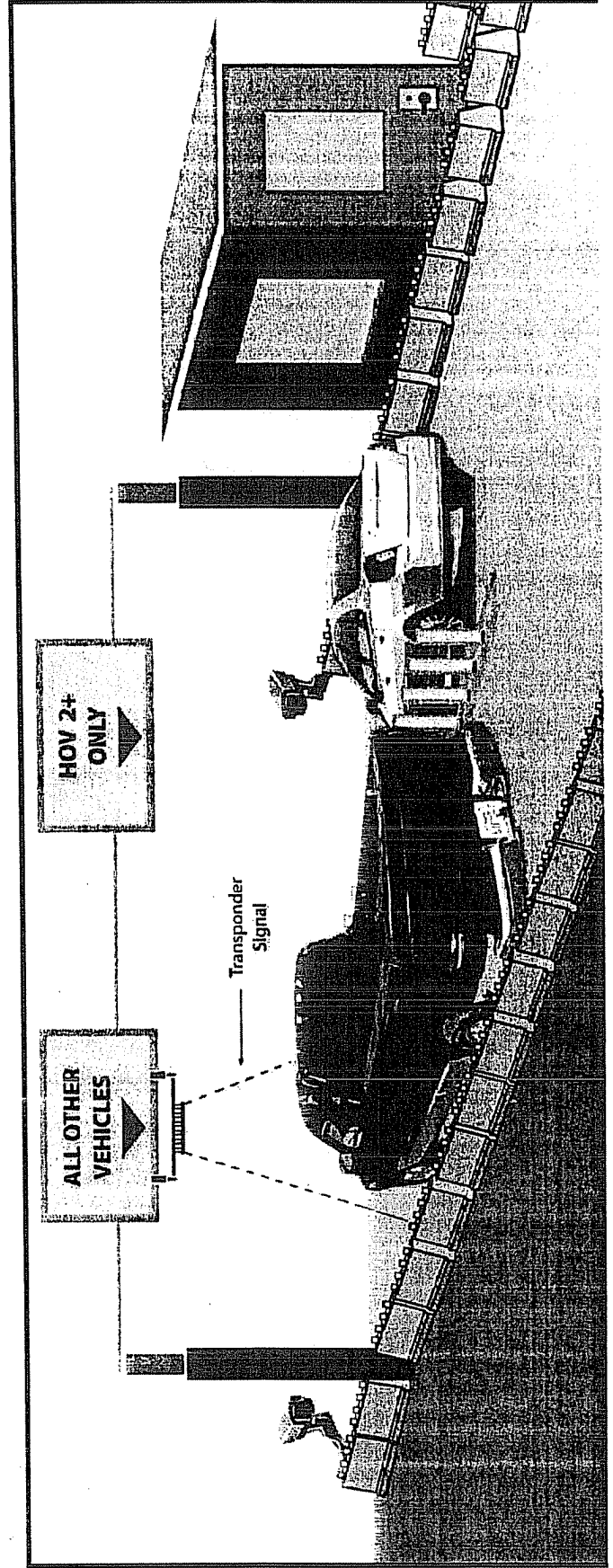
- All Electronic Toll Collection – no cash accepted
- Vehicles must have a TxTAG, EZ Tag or T Tag
- Toll varies based on speed and congestion of HOT lane
- Toll price will be posted in advance of entry points; vehicles lock in price for duration of trip in the HOT Lane



How will HOT Lanes Work?

Enforcement

- Observer in booth identifies suspected violators and notifies METRO Police
- METRO Police stop vehicle and confirm proper occupancy, or issue violation



TEXAS TRANSPORTATION COMMISSION

HARRIS County

MINUTE ORDER

Page 1 of 1

HOUSTON District

The Metropolitan Transit Authority of Harris County (METRO), a metropolitan rapid transit authority created under Transportation Code, Chapter 451, currently operates high occupancy vehicle (HOV) lanes and related facilities on certain highways on the state highway system in Harris County pursuant to an agreement (HOV Agreement) with the Texas Department of Transportation (department). The HOV lanes were open to traffic as HOV lanes prior to May 1, 2005.

To increase mobility on the state highways described in Exhibit A, and to improve the efficiency of the HOV lanes, METRO has expressed a desire to operate the portions of the HOV lanes on the segments of the state highway system generally described in Exhibit A as high occupancy toll (HOT) lanes, which METRO would allow high occupancy vehicles occupied by a specified minimum number of passengers to continue to use free of charge, while charging tolls for use by all other vehicles.

Under Transportation Code, §228.051 and §228.201, the Texas Transportation Commission (commission) may designate the HOT lanes as toll projects, and the department may operate the HOT lanes as toll lanes, if the highway or segment was open to traffic as an HOV lane on May 1, 2005, and if the department or the entity operating the lanes allows vehicles occupied by a specified number of passengers to use the lane without paying a toll.

Pursuant to Transportation Code, §228.007, if the commission authorizes the department to charge a toll for the use of the HOT lanes, the department may enter into an agreement with METRO to design, construct, operate and maintain the HOT lanes, and to charge a toll for the use of the HOT lanes. Under Section 228.007, the commission may authorize METRO to set the amount of the toll charges, which must be imposed in a reasonable and nondiscriminatory manner.

IT IS THEREFORE ORDERED by the commission that the HOT lanes are hereby designated as toll projects.

IT IS FURTHER ORDERED that the department is authorized to charge a toll for the use of the HOT lanes, provided that vehicles occupied by a specified number of passengers may use the HOT lanes without paying a toll.

IT IS FURTHER ORDERED that upon execution of the HOT Lanes Agreement between the department and METRO, METRO may set the amount of toll charges for use of the HOT lanes, which shall be imposed in a reasonable and nondiscriminatory manner and in accordance with the terms of this minute order and the HOT Lanes Agreement.

Submitted and reviewed by:

Cecil J. Faxon, P.E.
Director, Traffic Operations Division

Recommended by:

Amadeo Sosa
Executive Director
112556 JAN 27 11

| Minute Number | Date Passed |
|------------------|----------------|
| | |

EXHIBIT A**HIGH OCCUPANCY TOLL LANES**

I-45 North Freeway: From downtown Houston to north of FM 1960 (approximately 19.9 miles)

I-45 Gulf Freeway: From downtown Houston to Dixie Farm Road (approximately 15.5 miles)

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High Occupancy Toll Lanes in the Houston Area

DESCRIPTION

Communities in the United States use high occupancy toll (HOT) lanes as a way to maximize the capacity of existing high occupancy vehicle (HOV) lanes. The attached paper describes the concepts and benefits of HOT lanes.

ISSUES

The Metropolitan Transit Authority of Harris County (METRO) has approached the department with a request to operate HOT lanes on portions of five existing HOV lanes in the Houston/Harris County area.

REFERENCES

See attached description and background information.

DESIRED ACTIONS

The Commission will be asked to act on a proposed Minute Order authorizing the operation of HOT lanes on approximately 83 miles of existing HOV lanes in Harris County at the January 27th meeting.

OTHER

None.

TEXAS TRANSPORTATION COMMISSION

HARRIS County

MINUTE ORDER

Page 1 of 1

HOUSTON District

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Submitted and reviewed by:

Cecil J. Fournier, P.E.
Director, Traffic Operations Division

Recommended by:

Arnold Gray
Executive Director
112556 JAN 27 11

Minute
NumberDate
Passed

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