



# Southern Nevada HOV Plan

Prepared for:



Nevada Department of Transportation

Prepared by:

**JACOBS**

Jacobs Engineering Group Inc.



July 2015

## Appendix J

### *Summaries of Public Outreach Efforts*

## Memorandum

**TO:** Jeff Lerud, NDOT **DATE:** June 11, 2015

**FROM:** John Karachepone, Jacobs  
Lucie Melchert, Melchert Consulting

**SUBJECT:** Southern Nevada HOV Plan Update – Summary Documentation of all Outreach Activities and Materials

**COPIES:** Julie Maxey, NDOT

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### 1.0. INTRODUCTION

This Memorandum summarizes and presents all of the public outreach activities completed as part of this Southern Nevada HOV Plan Update.

### 2.0. SUMMARY OF OUTREACH ACTIVITIES

A summary of each of the below listed outreach activities along with a copy of the material provided or presented at these meetings is appended in the following pages.

#### 2.1. Department of Transportation Board of Directors

Briefings on the Update were provided to the Board on:

April 14, 2014, and  
June 8, 2015.

#### 2.2. Public Meetings

Information on the Southern Nevada HOV Plan Update was presented to the public at two NDOT Public meetings held for other projects. These meetings were held on:

May 14, 2014; Centennial Hills Active Adult Center Multipurpose Room, 6601 N. Buffalo Drive, Las Vegas, NV: 4 to 7pm in association with the US 95 Phase 3a Public Meeting;

August 27, 2014; The Springs Preserve, 333 S Valley View Blvd., Las Vegas, NV: 4 to 7pm in association with the Project Neon public meeting; and

June 10, 2015; Las Vegas Historic Fifth Street School, 401 S 4th St., Las Vegas, NV: 4 to 7pm in association with the Project Neon Design Build Phases 1-4 public information meeting.

#### 2.3. Agency Outreach

The following meetings were held to brief and obtain direction and information from local Agencies:

City of Henderson: November 4, 2014

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Clark County Public Works: November 4, 2014  
City of North Las Vegas: November 3, 2014  
City of Las Vegas: October 28, 2014

#### 2.4. Boards and Councils

Presentations were made to the following Boards and Councils with opportunity to ask questions and provide comments:

Nevada Resort Association: November 3, 2014

Regional Transportation Commission of Southern Nevada (RTCSNV) Executive  
Advisory Committee; September 25, 2014

RTCSNV Board: October 9, 2014

Clark County Board of County Commissioners: December 16, 2014

City of Henderson December 16, 2014

City of North Las Vegas December 17, 2014

City of Las Vegas January 21, 2015

#### 2.5. Workshops

Two workshops were conducted and following these workshops, selected material was emailed to those attendees that requested specific information.

Technical Workshop February 24, 2015

Stakeholder Workshop February 25, 2015

NDOT Board of Directors Briefing Materials



# Southern Nevada HOV Plan

Transportation Board of Directors' Meeting

April 14, 2014

John M. Terry, P.E.

Assistant Director – Engineering



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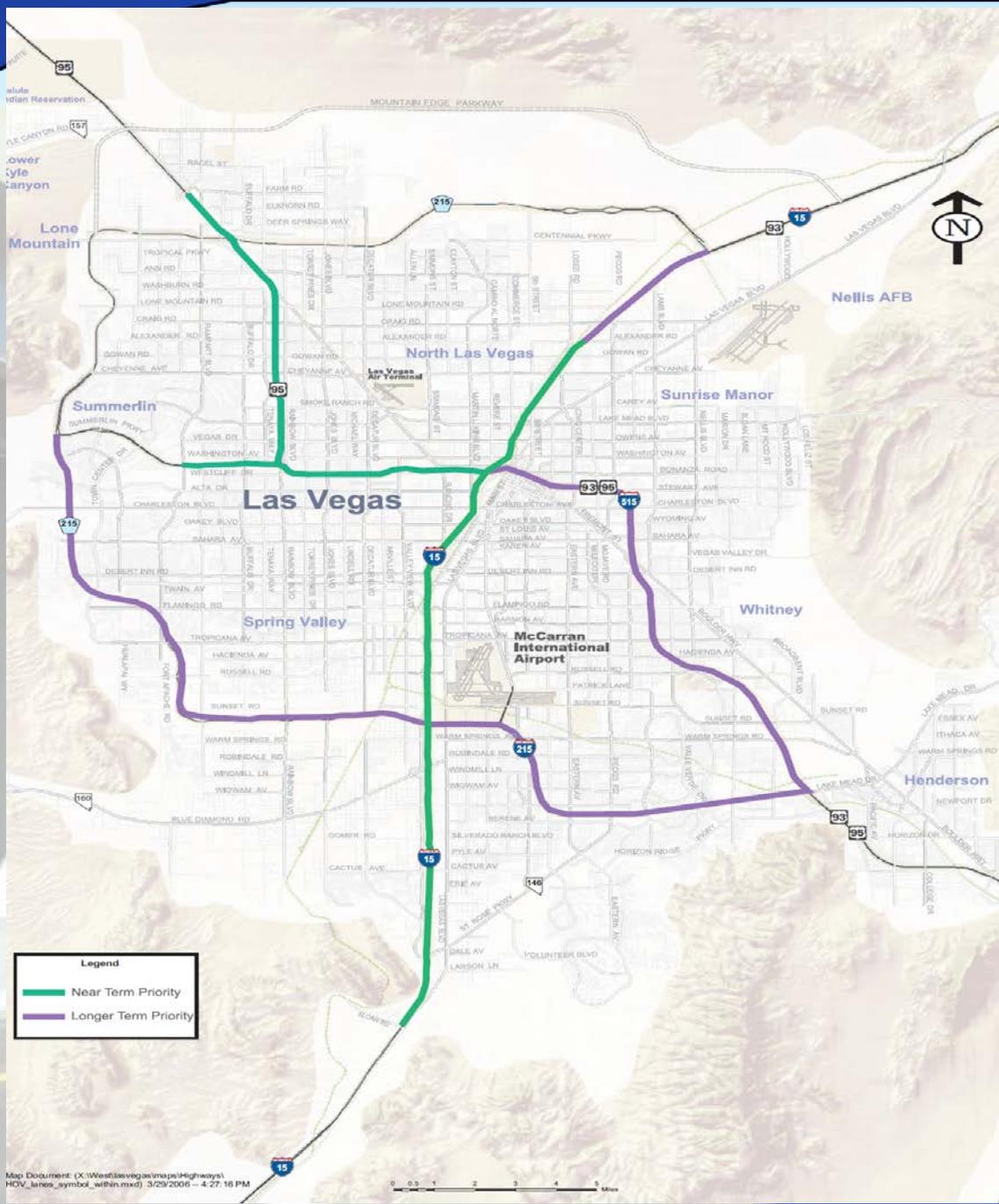
# High-Occupancy Vehicle (HOV) Lanes

- Special lanes dedicated to the exclusive use of high-occupant vehicles
  - Minimum 2 occupants
- Enhanced mobility for travelers willing to carpool and use transit
- Increase person carrying capacity
- Improve travel times



# 2007 Southern Nevada HOV Plan

- Plan for HOV facilities on S. Nevada freeways
- Near and long term HOV priorities
- Near term facilities – US 95 and I-15 connected by direct connector (Project NEON)
- Coordination with RTCSN transit routes



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# Current S. Nevada System

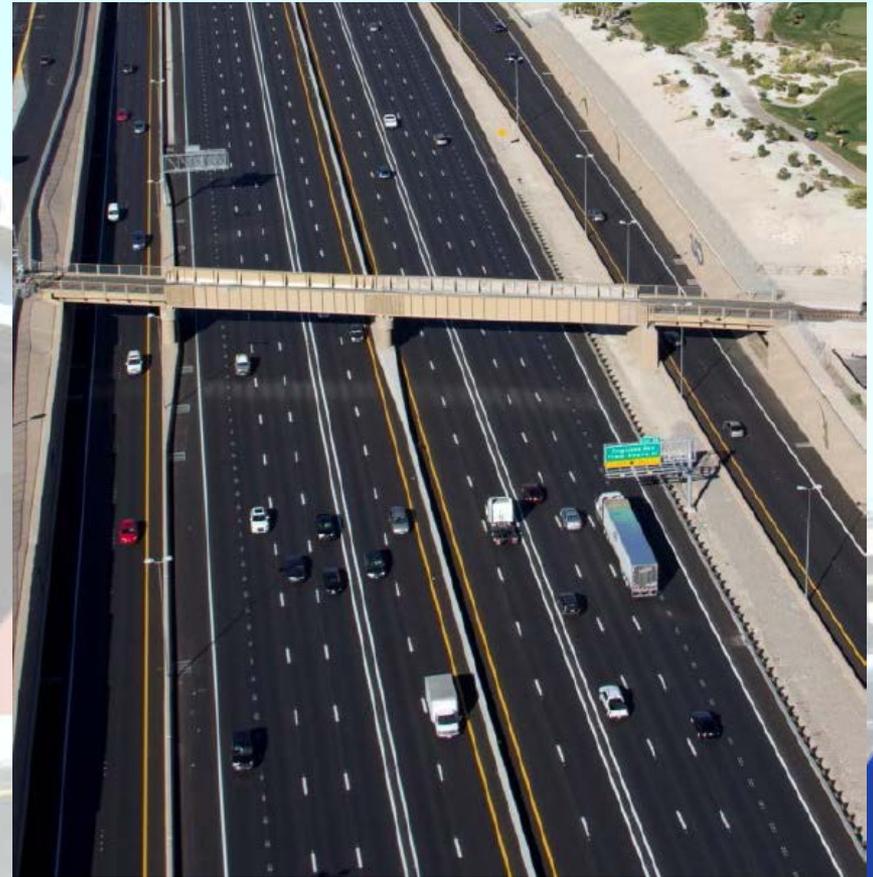
- HOV lanes on US 95  
MLK to Ann Rd. and  
Summerlin Pkwy to  
Rampart Blvd.
  - 2+, motorcycles,  
emergency vehicles (no  
trucks)
  - Peak hour
  - Continuous  
ingress/egress

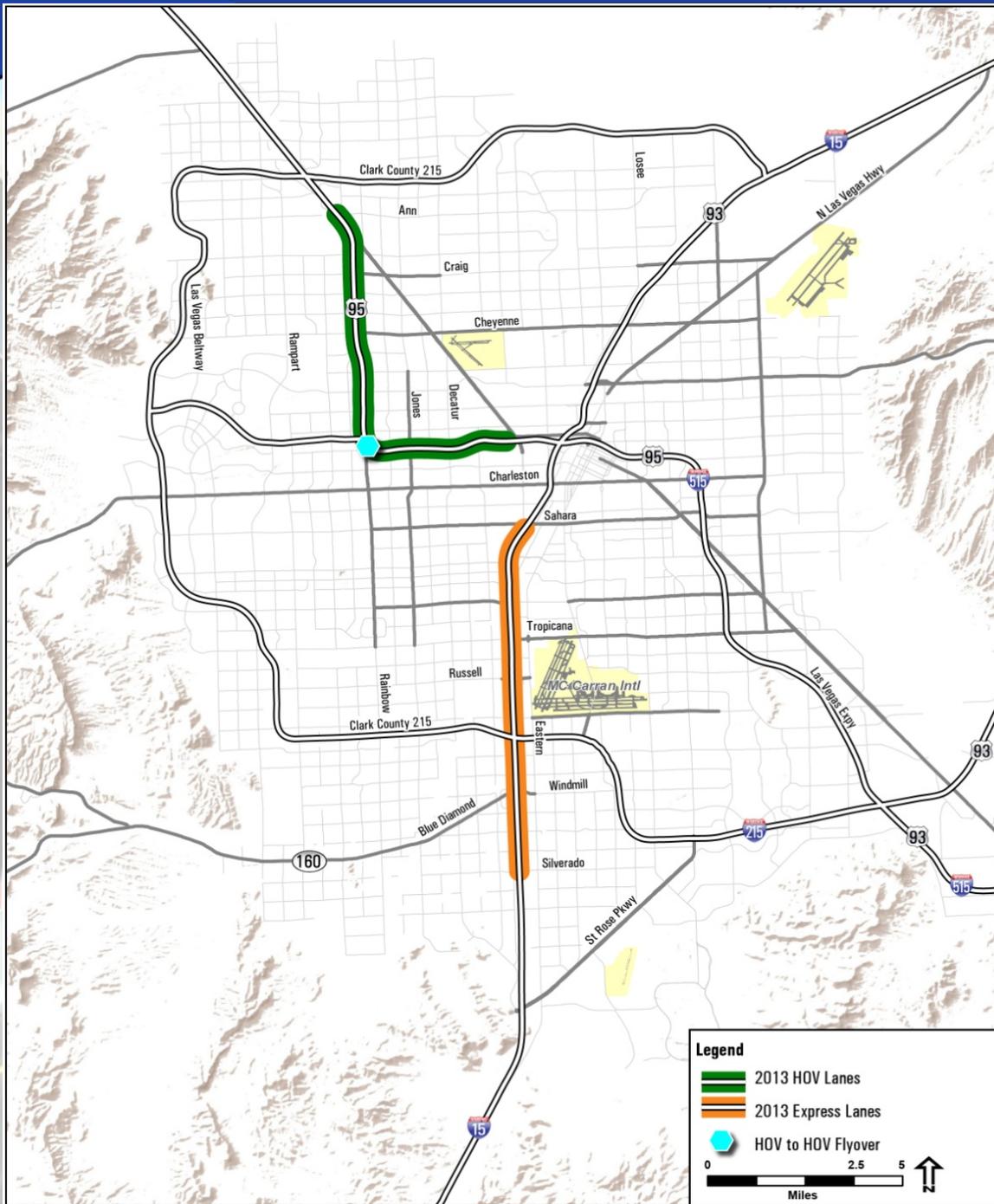




# Current S. Nevada System

- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress





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# I-15/US 95 HOV System

- Project NEON will connect US 95 to I-15 with a direct flyover ramp
- I-15 Express lanes will be converted to HOV lanes and general purpose lanes
- I-15 south of Sahara Ave. one HOV lane each direction (1 HOV, 4+ General Purpose)
- 22 miles of HOV system – Silverado Ranch on I-15 to Ann Rd on US 95
- Most of the near term system from the 2007 HOV Plan



# HOV Plan Update

- 2035 Clark County regional traffic demand model includes mode-choice
- Update both the near and long term HOV systems
- Evaluate direct connector interchange locations
- Make recommendations on operations issues with the HOV system



# HOV Plan Public Involvement Phase

- Initial modeling and analysis nearly complete
- Agency, stakeholder, and public involvement begins with this presentation
- Make recommendations on operations issues with the HOV system
  - Occupancy – two plus occupants
  - Hours of operation – peak hour - 24 hr (recommended)
  - Vehicle eligibility – energy-efficient vehicles (NRS 484A.463) (not recommended); motorcycles, responding emergency vehicles and transit vehicles allowed
  - Ingress/egress – continuous or limited (recommended)



# HOV Direct Access Interchanges

- 2007 HOV Plan studied Harmon-Hacienda for access to the strip
- LV strip due to high volumes and employment center is critical to system
- Direct access from park and ride and transit centers
- Direct access to freeways in the long term plan (I-215)



# Southern Nevada HOV Plan

## Questions



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1263 South Stewart Street  
Carson City, Nevada 89712  
Phone: (775) 888-7440  
Fax: (775) 888-7201

## MEMORANDUM

May 18, 2015

**To:** Department of Transportation Board of Directors  
**From:** Rudy Malfabon, Director  
**Subject:** June 8, 2015 Transportation Board of Directors Meeting  
**Item #:** Receive Briefing on Draft Southern Nevada HOV Plan – *For possible approval.*

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### **Summary:**

The Department of Transportation has updated the 2007 Southern Nevada High Occupancy Vehicle (HOV) Plan. The Update included stakeholder, public outreach and local agency information activities. This Board presentation is the last step in getting the Southern Nevada HOV Plan finalized.

### **Background:**

The HOV system in Southern Nevada began with the HOV (carpool) lanes on US 95 that were included in the US 95 Environmental Impact Statement (EIS) with a Record of Decision (ROD) in year 2000. Nevada's first HOV lanes were constructed as a part of the US 95, Martin Luther King (MLK) Boulevard to Craig Road project. Near the completion of the US 95 HOV lanes, NDOT began work on the 2007 Southern Nevada HOV Plan. In November 2007, the US 95 HOV lanes were opened to service from MLK to Rainbow Boulevard. The HOV lanes were expanded on US 95 north to Ann Road and onto Summerlin Parkway with the construction of a flyover ramp from US 95 to Summerlin Parkway in 2012.

The I-15 express lanes from Russell Road to Sahara Avenue opened in year 2010. The re-evaluation of the I-15 South Environmental Assessment extended the express lanes to Silverado Ranch Road and committed to the conversion to HOV lanes with the completion of the US 95/I-15 HOV connector (Project NEON). The express lanes were extended to Silverado Ranch as a part of the I-15 South Design-Build project. With Project NEON, the US 95/I-15 HOV Connector will be constructed and NDOT will fulfill its commitment to convert the express lanes to HOV lanes.

### **Analysis:**

As the near term priorities of the 2007 Plan have been constructed or is imminent (through Project Neon), NDOT needed to update the Plan to prioritize the next phase of improvements. It was also important to address the details of the conversion of express lanes to HOV lanes. Further, in 2012, a new 2035 Clark County Regional Travel Demand Model, which included improved modeling of HOV lanes, became available.

Apart from traffic modeling and analysis, this Update included agency, stakeholder, and public outreach. The kick-off to the public outreach phase was the April 14 Board meeting, when a presentation and status update was provided to you. Since then, we have completed the Update, presented the Plan to local agencies, the public and the Resort Association.

**Results:**

The Plan recommends that one of the two current express lanes on I-15 be converted to a HOV lane and the second express lane revert to general use. The Plan also includes operational recommendations for the HOV system following this conversion.

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	24-hours, 7 days of the week
Trucks	Vehicles with more than two axles ( or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency vehicles	Those responding to an emergency are eligible
Public transit buses	Eligible (including dead-heading buses)
Single-occupant low-emission and energy-efficient vehicles	To be studied
Access Type	Limited Access

The Plan identifies the near term HOV system and long term (to planning horizon year 2035) prioritized enhancements to the HOV system. Additionally, locations for direct access ramps to the HOV lanes are identified and prioritized. Planning level construction cost estimates for the highest priority direct access ramps are also included to assist the Department in programming them.

**List of Attachments:**

Figures: Proposed Near and Long Term HOV System; April 2015 Southern Nevada HOV Plan

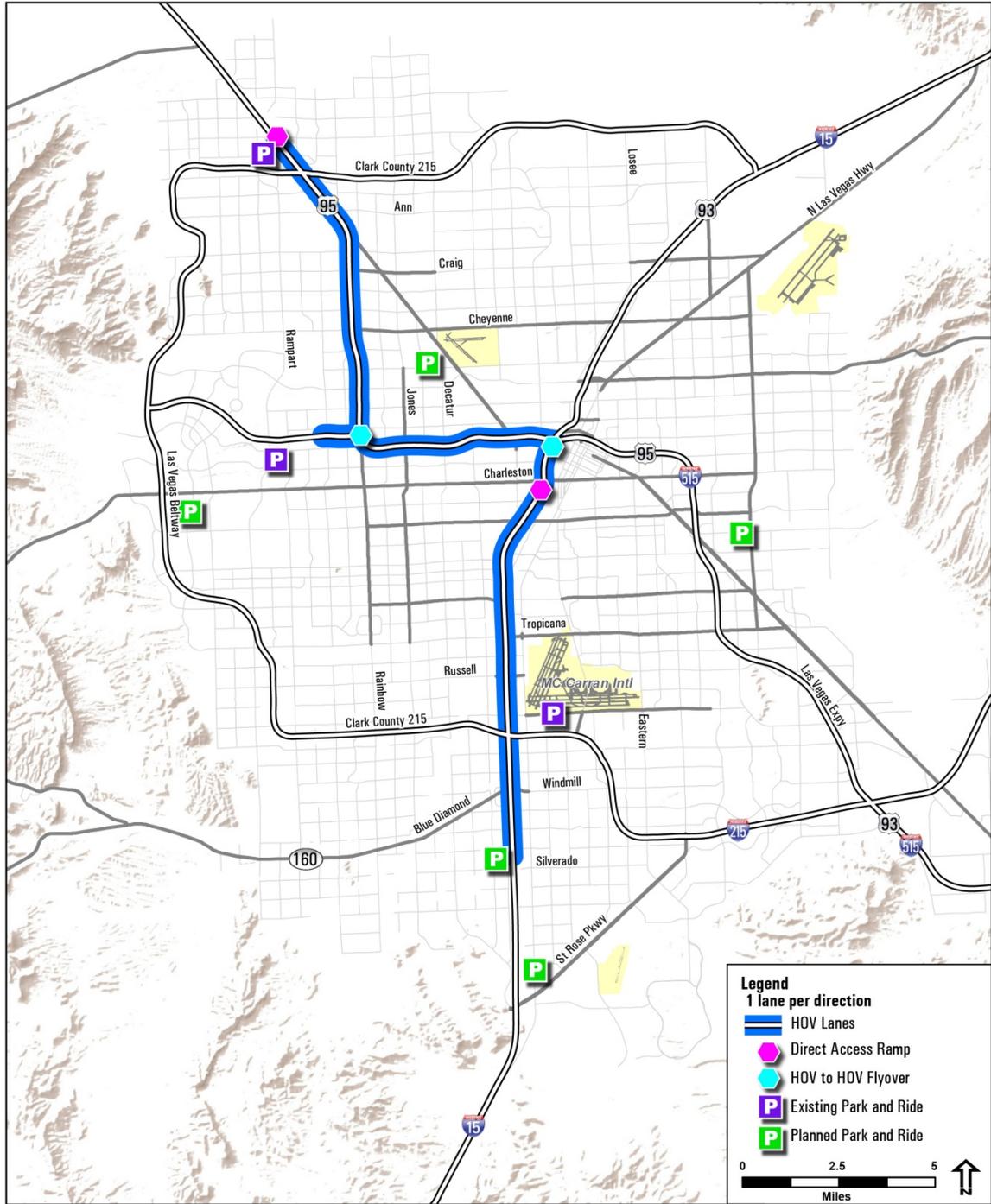
**Recommendation for Board Action:**

Staff recommends acceptance of this updated Plan.

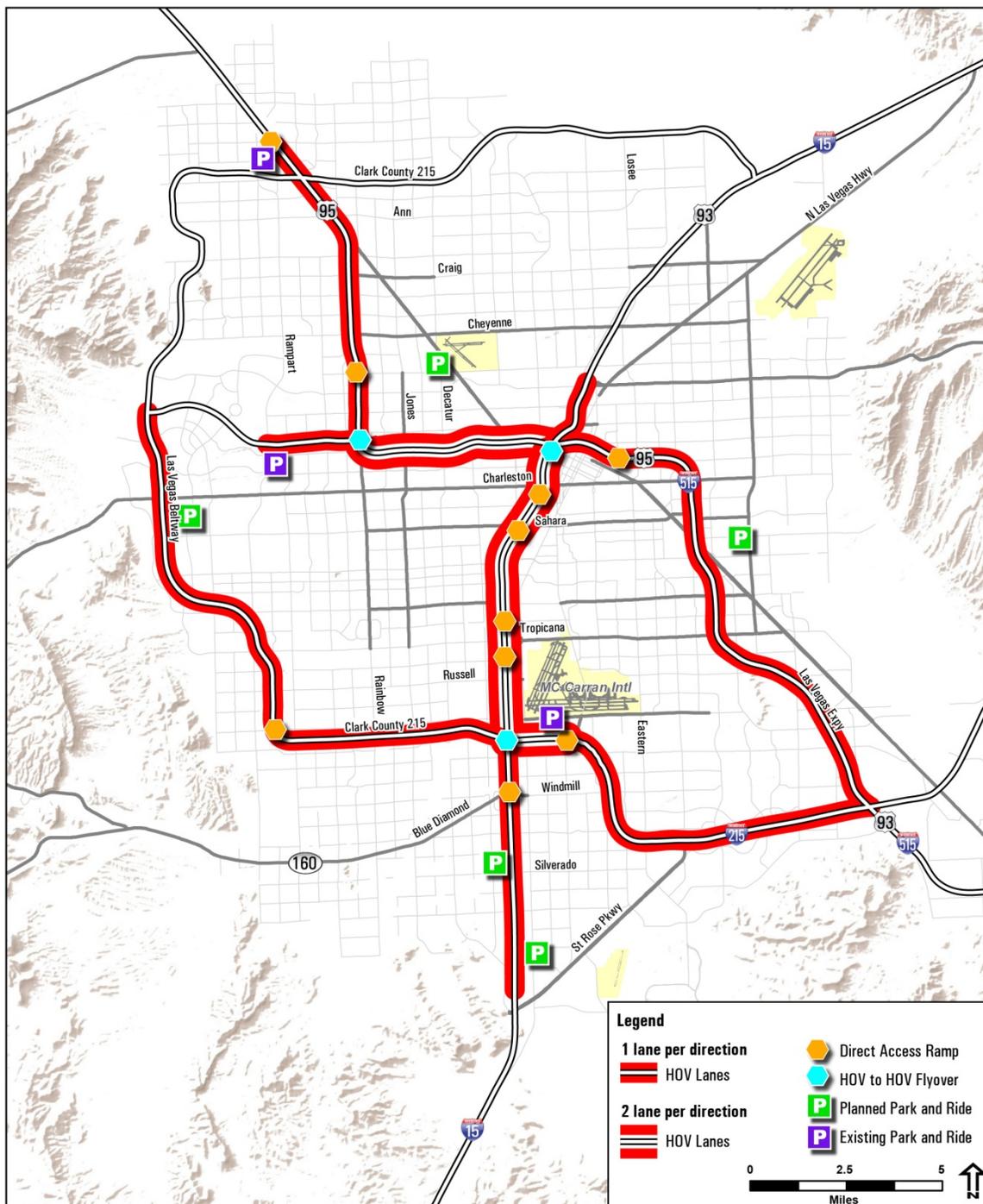
**Prepared by:**

John M. Terry, P.E., Asst. Director – Engineering

# Attachment 1: Proposed Near-Term HOV System



## Attachment 2: Proposed Long-Term HOV System



# Southern Nevada HOV Plan Update

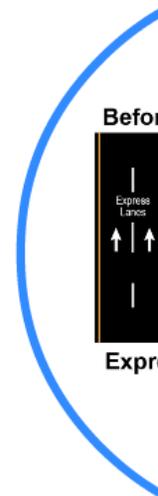
Nevada Department of Transportation  
Board of Directors Meeting

June 8, 2015

Presented By: John M. Terry, P.E. -  
Asst. Director - Engineering

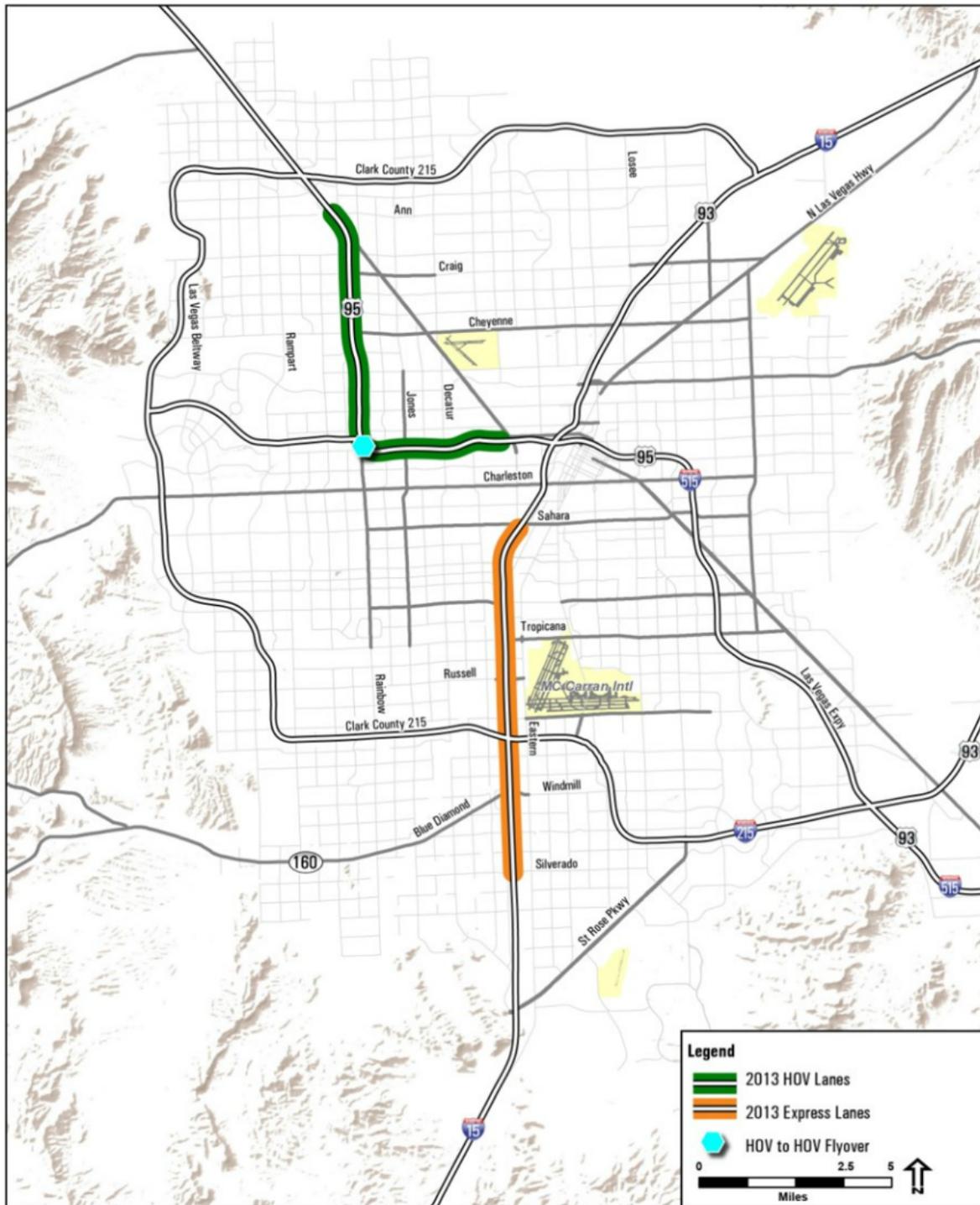
vehicle-
eligible

Update  
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## HOV Plan Update

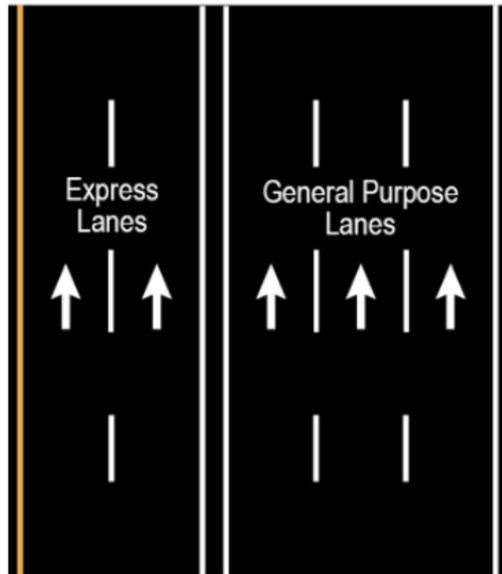
- 2007 Southern Nevada HOV Plan
- Hired Jacobs Eng. to Update Plan
- Presented to this Board in April 2014
- Major elements of update
  - Modeling to 2035 Regional Model
  - Evaluate direct connector locations
  - Operational recommendations



**Current HOV - Express Lane System**

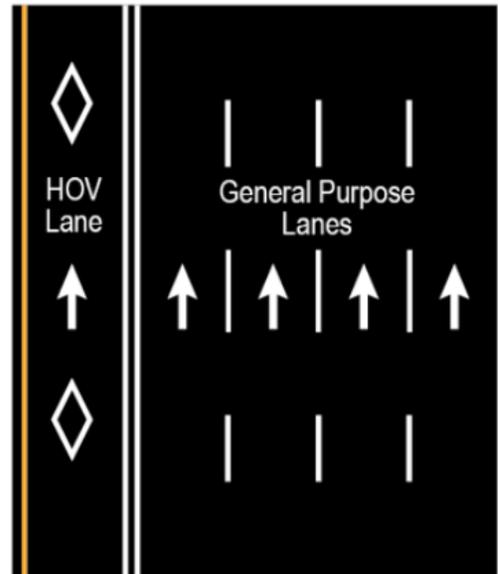
- Current US 95 HOV and I-15 Express Lanes
- With NEON convert two express lanes to one HOV and one General purpose lane
- Near-term HOV system (2018)
  - I-15 South-Silverado Ranch
  - US 95 North-Elkhorn Rd.
  - Summerlin Pkwy West - Buffalo Dr.

**Before:**

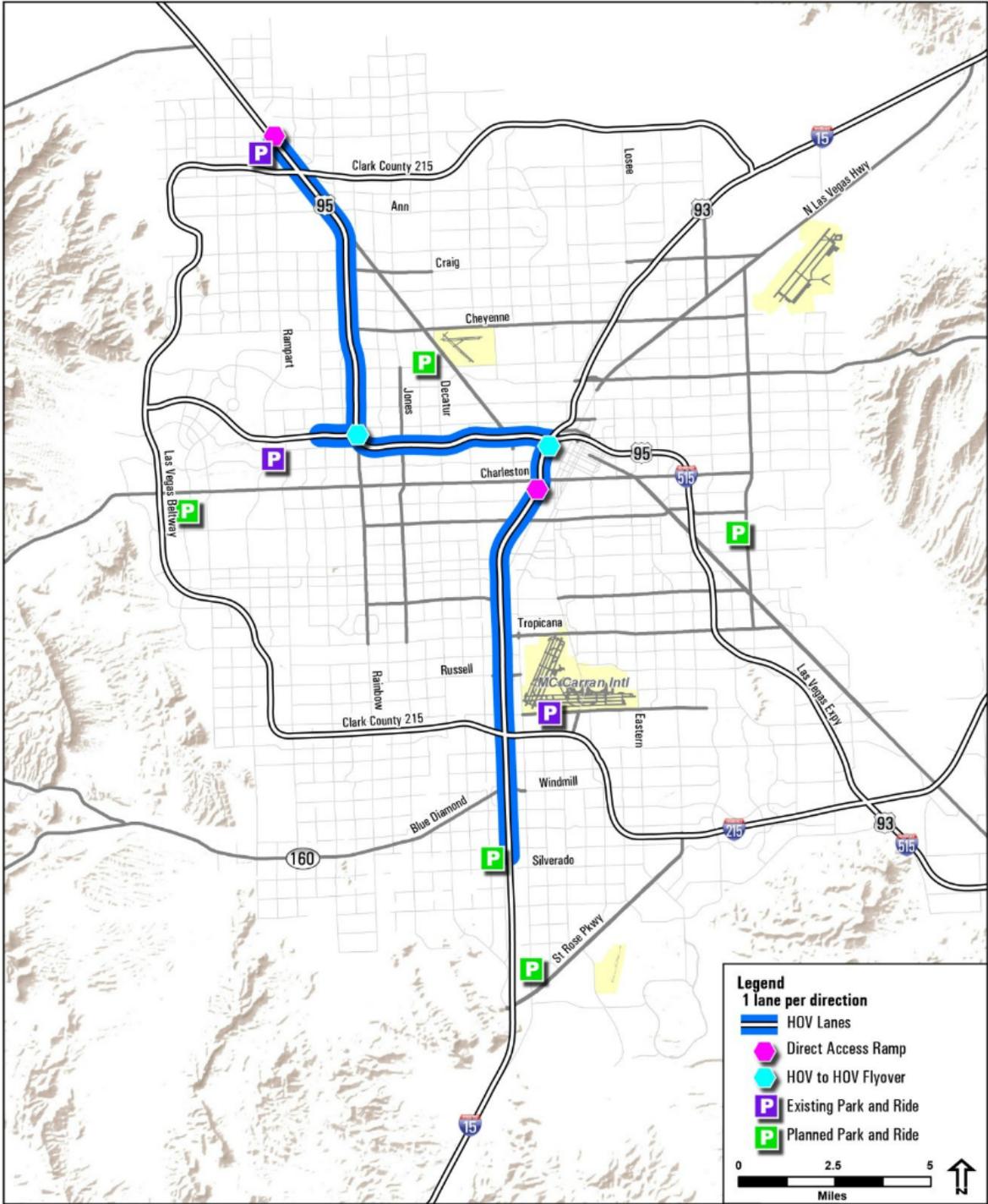


**Express Lanes**

**After:**



**HOV Lane/  
GP Lanes**

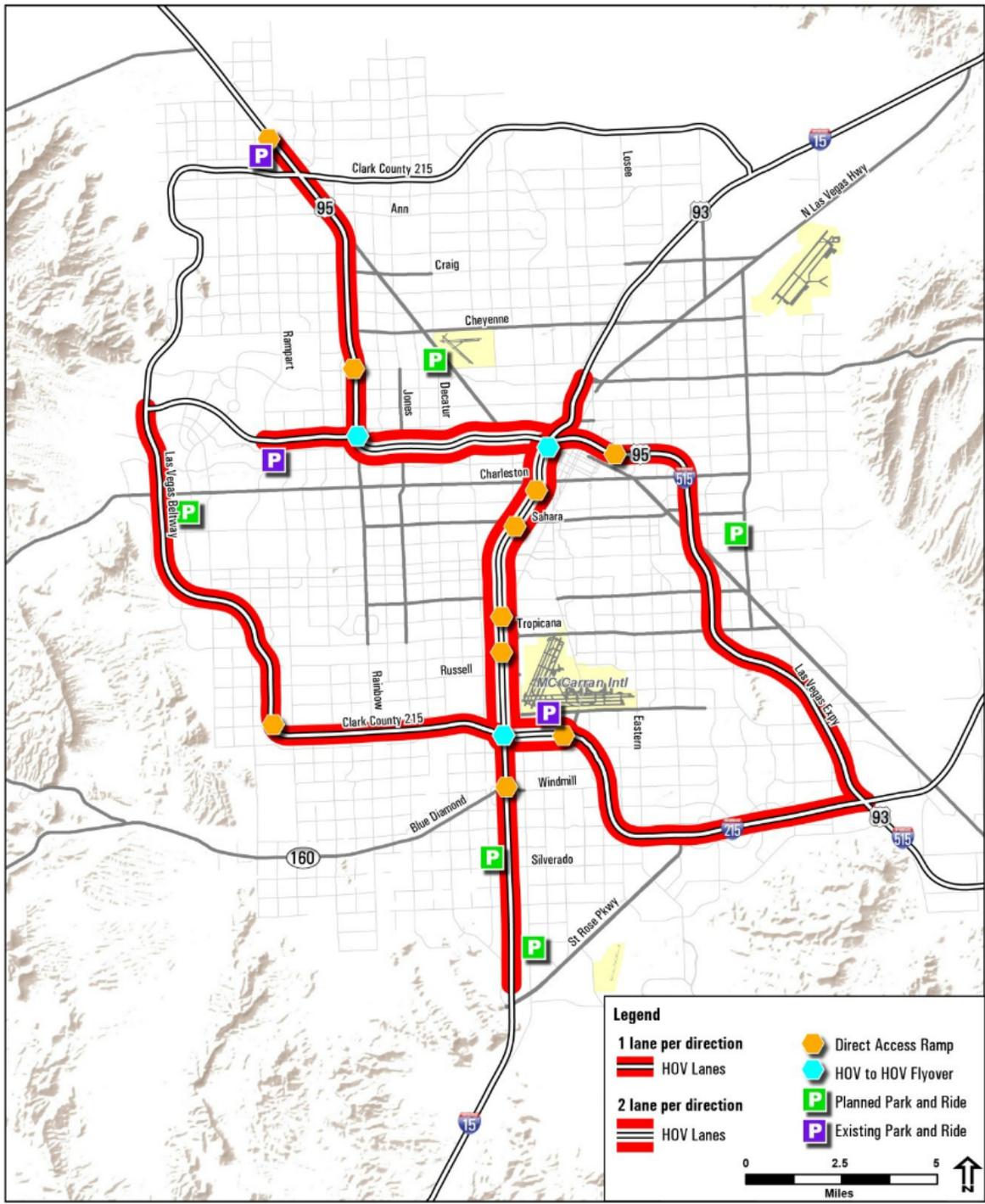


**Proposed Near Term HOV System**



*US 95 - Summerlin  
Pkwy.*

## **HOV Flyovers - System to System**



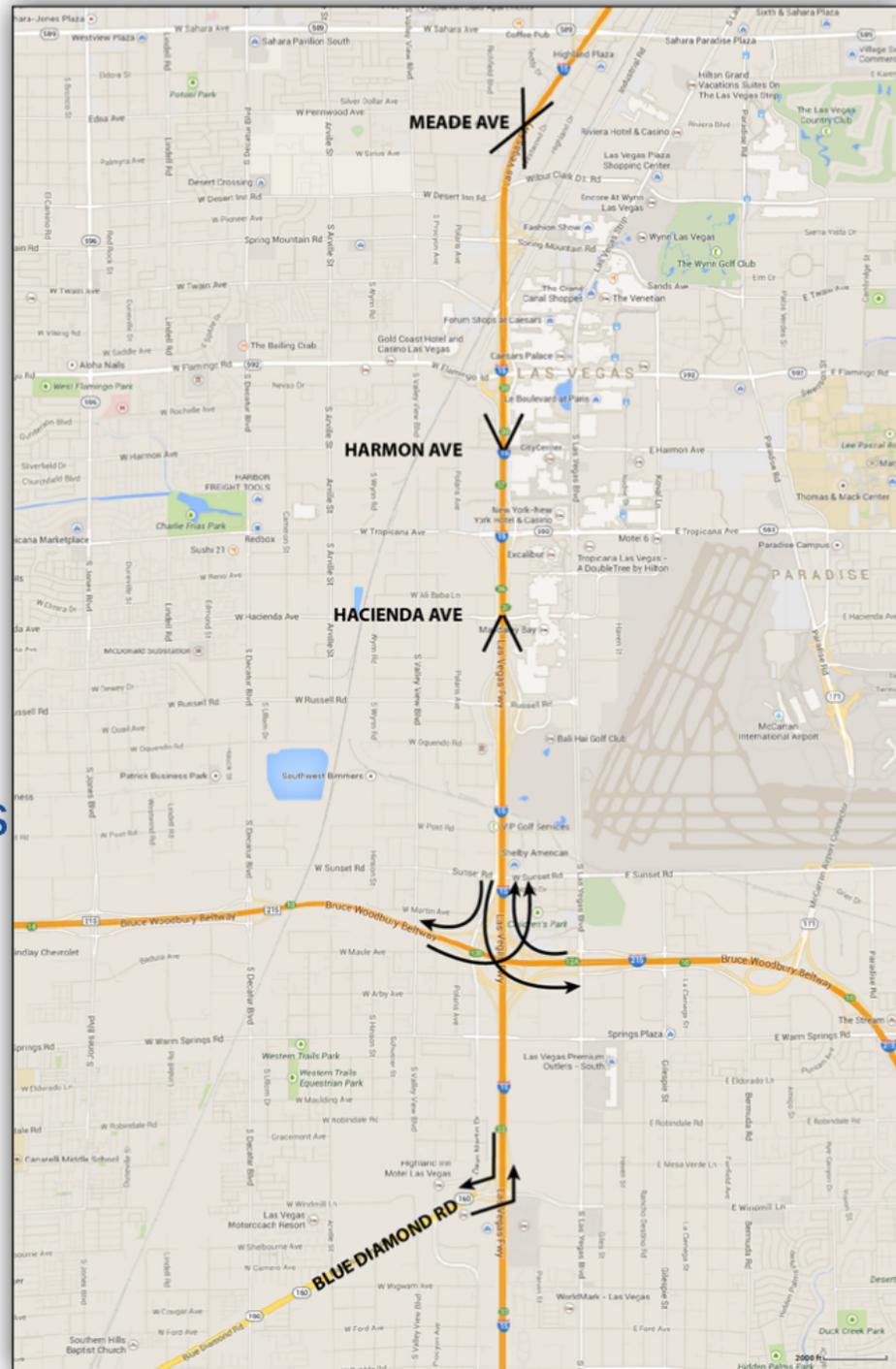
# Proposed Long-Term HOV System

# Proposed I-15 HOV Ramps

- HOV Gateway
- Blue Diamond Rd
- Hacienda Ave.
- Harmon Ave.
- Meade Ave.

## Proposed HOV Flyovers - System to System

- I-15 South - US 95 North
- I-15 N - I-215 East and West



# Proposed HOV Ramps

## US 95

- Maryland Pkwy
- Smoke Ranch Rd.
- Elkhorn Rd.

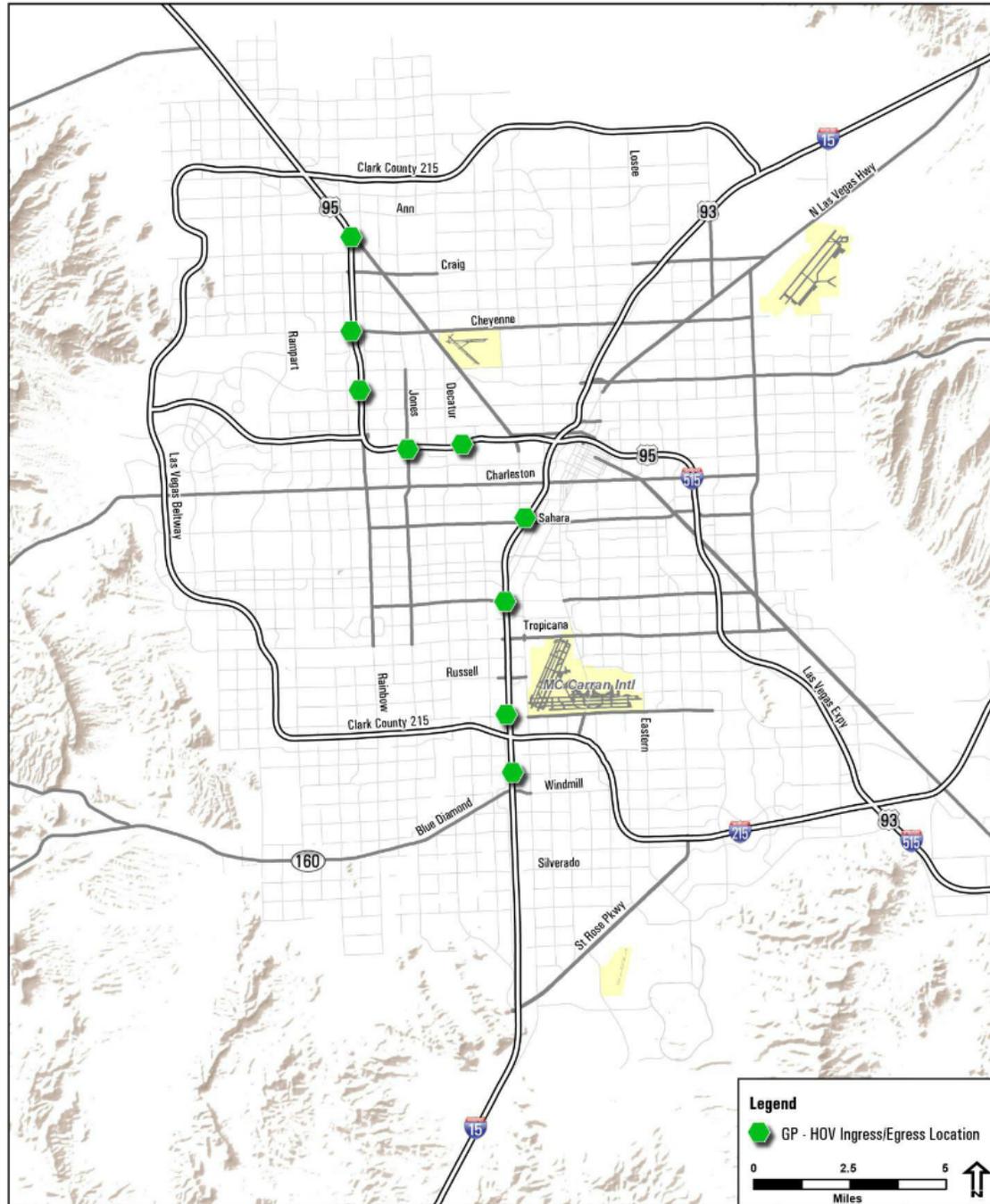


## CC-215/I-215

- Airport Connector
- Sunset Rd..

# HOV Operational Recommendations

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	24-hours, 7 days of the week
Trucks	Vehicles with more than two axles ( or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency vehicles	Those responding to an emergency are eligible
Public transit buses	Eligible (including dead-heading buses)
Single-occupant low-emission and energy-efficient vehicles	To be studied
Access Type	Limited Access



Limited HOV Ingress-Egress Locations

**Table 7-2: Performance Measures for Evaluating the Effectiveness of the Implementation of HOV Facilities**

Goals and Objectives	Performance Measures	Threshold
Goal 1: Optimize the movement of people	Person throughput in the HOV and general-purpose lanes	More person throughput in the HOV lane(s) than adjacent general-purpose lanes
	Average vehicle occupancy rate within the corridor	Higher than "before" condition
	Number of carpools and vanpools within the corridor	Higher than "before" condition
	Number of bus riders on affected routes and services	Higher than "before" condition
Goal 2: Provide travel time savings and a more reliable trip	Peak-period and peak-direction travel time in the HOV lane(s) and in adjacent general-purpose lanes	Faster travel times in the HOV lane(s) than adjacent general-purpose lanes
	Travel time reliability measures for vehicles using HOV lane(s) and adjacent general-purpose lanes	Lower 95 <sup>th</sup> percentile travel time than "before" condition
		Lower 95 <sup>th</sup> percentile travel time than adjacent general-purpose lanes
Goal 3: Increase bus transit efficiency	Vehicle productivity (operating cost per vehicle mile, operating cost per passenger, operating cost per passenger-mile)	Better than "before" condition
	Bus schedule adherence (on-time performance)	Better than "before" condition

# HOV System Next Steps

- Finalize the Southern Nevada HOV Plan Update
- Implement Operational Recommendations
- Project NEON to Complete Near-Term System
- Add Park and Ride Facilities
- Program HOV Projects within STIP towards Long-Term HOV System

Public Meetings Materials



## TRANSPORTATION NOTICE PUBLIC INFORMATION MEETING FOR US 95 Northwest Corridor Improvements Project Phase 3A



**PURPOSE OF MEETING:** The Nevada Department of Transportation (NDOT), in partnership with the City of Las Vegas and Regional Transportation Commission of Southern Nevada (RTCSNV), and in cooperation with the Federal Highway Administration (FHWA), invites you to a public meeting for construction information on Phase 3A of the US 95 Northwest Corridor Improvements Project (US 95 NW). This freeway project will provide immediate operational benefits by building two of the major traffic movements through the US 95 and Clark County 215 (CC 215) Northern Beltway Interchange including the construction of the northbound US 95 to eastbound CC 215 ramp and westbound CC 215 to southbound US 95 ramp. The project will also include construction of landscape and aesthetic enhancements. The project is scheduled to begin construction in spring 2015.

At the meeting, NDOT representatives will also provide a construction update on Phase 2A of the US 95 NW project, which is currently under construction. Phase 2A of this project will address the short- and long-term transportation needs for a portion of the US 95 corridor from Ann Road to Durango Drive. Improvements will include widening US 95 to three general purpose lanes and one High-Occupancy Vehicle (HOV) lane and auxiliary lanes in each direction. In addition, representatives will also be in attendance to provide information on related projects in the area.

**PROJECT BENEFITS:** The US 95 NW project will increase capacity in the corridor to alleviate congestion and also improve freeway connections for regional connectivity.

**WHEN AND WHERE:** **Wednesday, May 14, 2014, from 4–7 p.m. Presentation at 5:30 p.m.,** at the Centennial Hills Active Adult Center Multipurpose Room, 6601 N. Buffalo Drive, Las Vegas, NV.

**HOW TO PARTICIPATE:** You are invited to attend the public information meeting between 4–7 p.m. There will be a brief presentation at 5:30 p.m., followed by a short comment period from the audience. The meeting will be conducted as an open house to provide you with an opportunity to view displays and have your individual questions answered by project representatives.

Your comments on US 95 NW Phase 3A may be submitted for the public record at the meeting either in writing on a comment sheet or verbally to a court reporter, who will be available throughout the meeting. Written or email comments will also be accepted through **5 p.m., Friday, May 30, 2014**. Please email your comments to [info@dot.state.nv.us](mailto:info@dot.state.nv.us) with a reference to US 95 NW Phase 3A in the subject line. You may also mail your written comments to the contact below.

**CONTACT:** For more information on the US 95 NW project, please visit the project website at [www.us95nw.com](http://www.us95nw.com) or contact: Jenica Keller, P.E., NDOT Senior Project Manager, 1263 S. Stewart St., Carson City, NV, 89712, phone: **775-888-7321**, email: [jkeller2@dot.state.nv.us](mailto:jkeller2@dot.state.nv.us).

**NOTE:** Reasonable efforts will be made to assist and accommodate physically handicapped persons desiring to attend the meeting. Requests for auxiliary aids or services to assist individuals with disabilities or limited English proficiency should be made with as much advance notice as possible to Julie Maxey, NDOT Public Hearings Officer, at **775-888-7171** or email [jmaxey@dot.state.nv.us](mailto:jmaxey@dot.state.nv.us).

***Traducción disponible en español.***



# Southern Nevada HOV Plan

# FACT SHEET

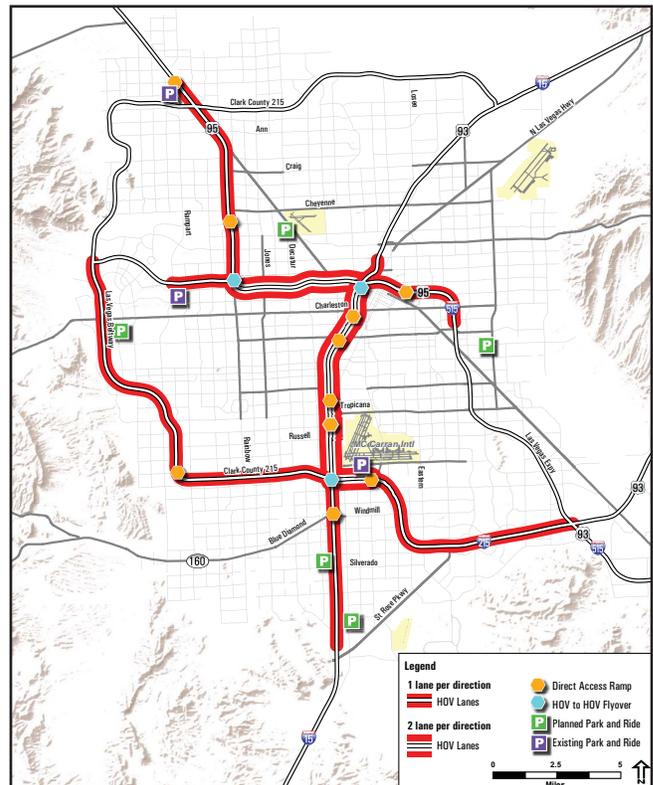
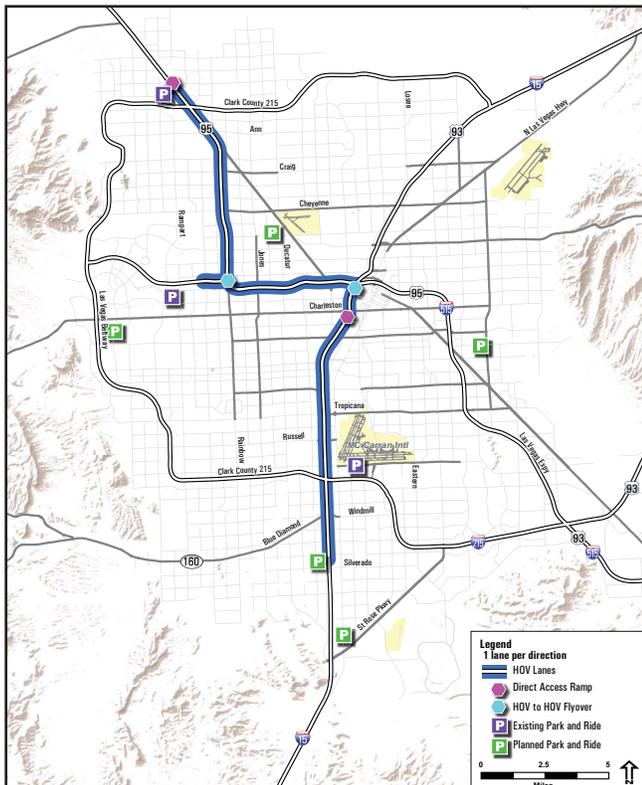
The Nevada Department of Transportation is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. The purpose is to update the previous plan (completed in 2007) based on the current conditions in Southern Nevada, including recently completed projects and Project NEON, and using the most recent analysis tools. Implementation of HOV lanes, or carpool lanes, is one method of maintaining mobility in congested freeway corridors.

The HOV plan update focuses on the near-term HOV system in Southern Nevada, including Project NEON's direct connector between I-15 and US 95 and the conversion of existing I-15 express lanes to one HOV lane and one additional general purpose lane. In addition, evaluations and recommendations for the long-term HOV system, direct access ramp locations, and operations of the HOV system are included. The HOV system is evaluated utilizing the Southern Nevada RTC's 2035 Regional Travel Demand Model with the Mode Choice Element.



## Near-Term HOV System

## Long-Term HOV System



## What is a High Occupancy Vehicle (HOV) lane?

An HOV lane is dedicated to the exclusive use of HOVs including buses, carpools, vanpools, or a combination thereof, for at least a portion of the day. HOV lanes, the most common type of managed lanes, emphasize person movement rather than traditional vehicle movement, which in turn improves the highway's ability to move more people in fewer vehicles. When operated and managed at a high level of service, HOV lanes reduce peak-period travel time compared to the adjacent general-purpose lanes and can move substantially more commuters than general-purpose lanes during peak demand periods when priority must be assigned to the highest and best use.

## What are the benefits to you?

**Save Time:** HOV lane users experience less congestion, arriving at their destinations more quickly than those who do not carpool

**More Reliable Commute:** More consistent commute times

**Save Money:** Costs less to ride a bus or to share a ride than to drive alone every day

**Conserve Fuel:** Consume less fuel by avoiding congestion

**Less stress:** Alternating drivers gives carpoolers a chance to relax on the commute

## What are the benefits to your community?

**Managing Congestion:** An HOV lane can serve more people than a general-purpose lane

**Better Use of Infrastructure:** One highway lane can carry 1,500-2,200 vehicles per hour; HOV lanes move many more people with buses and carpools

**Transit Priority:** Buses and transit riders have priority

**Providing Choices:** HOV lanes make carpooling and public transit more effective and reliable choices

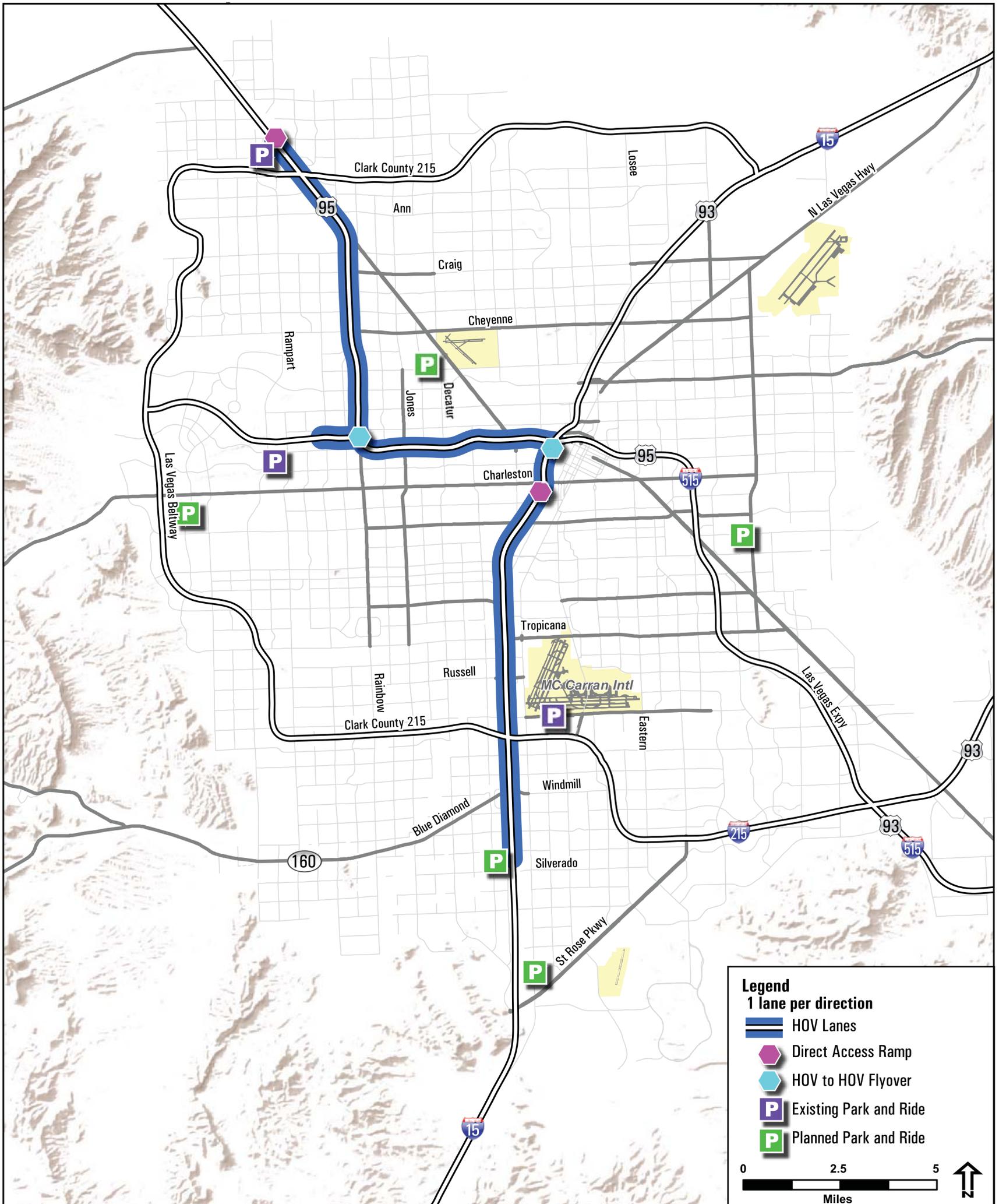
**Supporting mobility:** Taxicabs and airport limousines that use HOV lanes will be able to return to duty faster

## For comments or questions about this project, contact:

Jeff Lerud, PE, Project Manager  
Nevada Department of Transportation  
1263 S. Stewart Street  
Carson City, NV 89712  
Phone: (775) 888-7589  
Email: [jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)

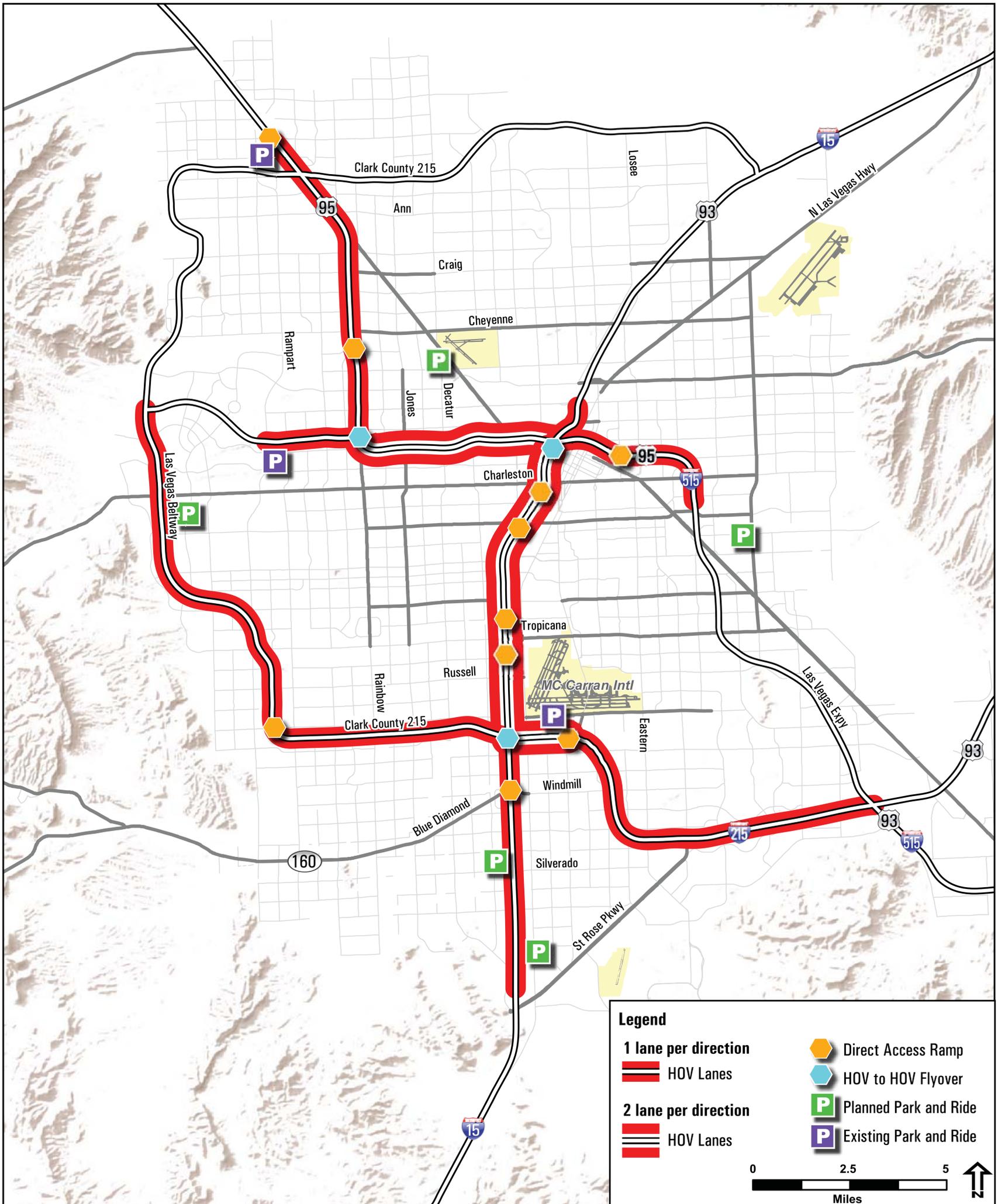


# Near-Term HOV System





# Long-Term HOV System





# Southern Nevada HOV Plan

May 14, 2014

## COMMENT FORM

### HOW CAN WE REACH YOU?

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

### TELL US YOUR VIEWS

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please use the back of this form or you may include your own letter.

1. What is your current usage of managed lanes (HOV or Express) in Clark County?
  - Occasionally
  - 5-10 times a month
  - 5-10 times a week
  - > 10 times a week
2. The long-term HOV plan includes direct access ramps along US 95, I-15, and the Clark County Beltway. What, if any, comments or questions do you have regarding these proposed locations? What additional locations would you recommend?

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3. What additional comments or questions do you have regarding the Southern Nevada HOV Plan Update?

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**Please return this form today, or mail to the following address no later than June 12, 2014:**  
 Jeff Lerud, PE, Project Manager, Nevada Department of Transportation, 1263 S. Stewart Street, Carson City, NV 89712, or email [jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us).



## TRANSPORTATION NOTICE



### PUBLIC INFORMATION MEETING PROJECT NEON PUBLIC-PRIVATE PARTNERSHIP (P3)

**PURPOSE OF MEETING:** The Nevada Department of Transportation (NDOT), in partnership with the City of Las Vegas and in cooperation with the Federal Highway Administration (FHWA), invites you to attend a public information meeting for Project NEON P3. Project NEON is a 3.7-mile transportation improvements project along I-15 from the Sahara Avenue Interchange to the US 95/I-515 Interchange in downtown Las Vegas.

**PROJECT BENEFITS:** The NEON P3 PROJECT will increase capacity in the corridor by alleviating congestion, improve traveler safety while also providing better local access to downtown Las Vegas including the Medical District, Smith Center, Downtown Arts District, Container Park and numerous local businesses.

**WHEN AND WHERE:** Wednesday, August 27, 2014, from 4 to 7 p.m., Las Vegas Springs Preserve, 333 S. Valley View Blvd., Las Vegas, NV 89107. The meeting will be held in the Desert Living Center, upper level conference rooms. Directional signs will be provided.

**WHERE YOU COME IN:** Members of the public are encouraged to attend at their convenience any time during the meeting hours of 4 to 7 p.m. Project representatives will be on hand to discuss and answer your questions. There will be a brief project presentation at 5:30 p.m. followed by a short comment period from the audience. Before and after the presentation, the meeting will be conducted as an open house format to provide attendees with an opportunity to view displays and individually discuss the project with project representatives. Your comments may be submitted for public record in writing at the meeting or verbally to a court reporter, who will be available throughout the meeting. In addition to any comments received at the meeting, written or email comments will be accepted through Friday, September 12, 2014. Please email your comments to: [info@dot.state.nv.us](mailto:info@dot.state.nv.us) with a reference to this project in the subject line. You may also mail your comments to the contact information below.

**IF RIGHT-OF-WAY IS NEEDED:** The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will govern the acquisition of right-of-way that may be necessary for this project. More detailed information regarding right-of-way can be obtained from the NDOT's Right of Way Division, 1263 S. Stewart St., Carson City, NV 89712, or by calling (775) 888-7480.

**CONTACT:** For more information about Project NEON P3:

Website: [www.ndotprojectneon.com](http://www.ndotprojectneon.com)

English Hotline: 702.486.0486

Spanish Hotline: 702.384.1694

Email: [projectteam@ndotprojectneon.com](mailto:projectteam@ndotprojectneon.com)

Mail: Cole Mortensen, P.E, Senior Project Manager, 1263 S. Stewart St., Carson City, NV 89713, phone: 775-888-7742, email: [cmortensen@dot.state.nv.us](mailto:cmortensen@dot.state.nv.us)

**SPECIAL ACCOMMODATION REQUESTS:** Reasonable efforts will be made to assist and accommodate persons with disabilities desiring to attend the meeting. Requests for auxiliary aids or services to assist individuals with disabilities or limited English proficiency should be made with as much advance notice as possible to Julie Maxey, Nevada Department of Transportation, Public Hearings Officer, at 775.888.7171 or via email at [jmaxey@dot.state.nv.us](mailto:jmaxey@dot.state.nv.us).

RTC buses are available for transportation to the meeting. For more information visit:

[www.springspreserve.org/plan/directions\\_public\\_transit.html](http://www.springspreserve.org/plan/directions_public_transit.html)

Also available for your information will be NDOT's Southern Nevada High Occupancy Lane (HOV) project. Project representatives will be available to answer your questions. Information for this project can be found at:

[https://www.nevadadot.com/About\\_NDOT/NDOT\\_Divisions/Planning/Safety\\_Engineering/HOV\\_Lanes.aspx](https://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Safety_Engineering/HOV_Lanes.aspx)



# Southern Nevada HOV Plan

# FACT SHEET

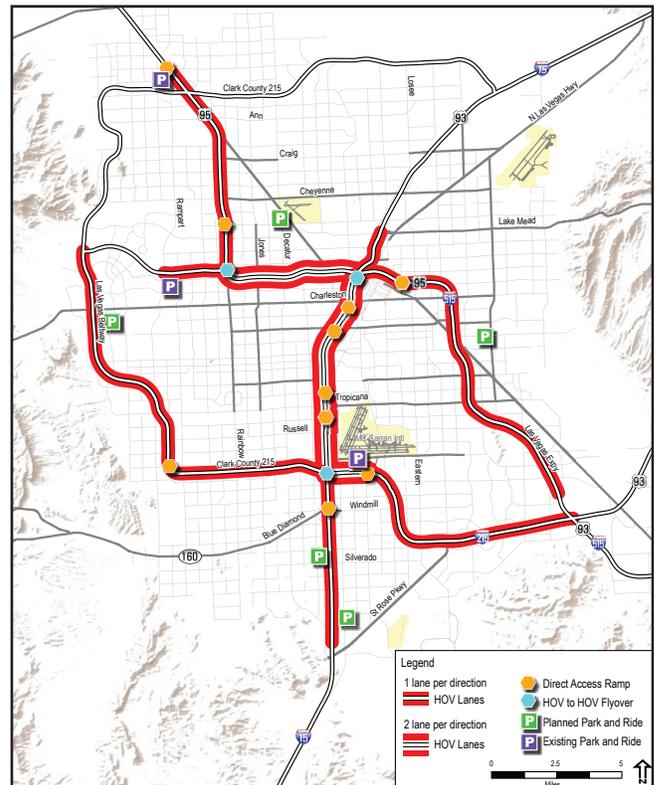
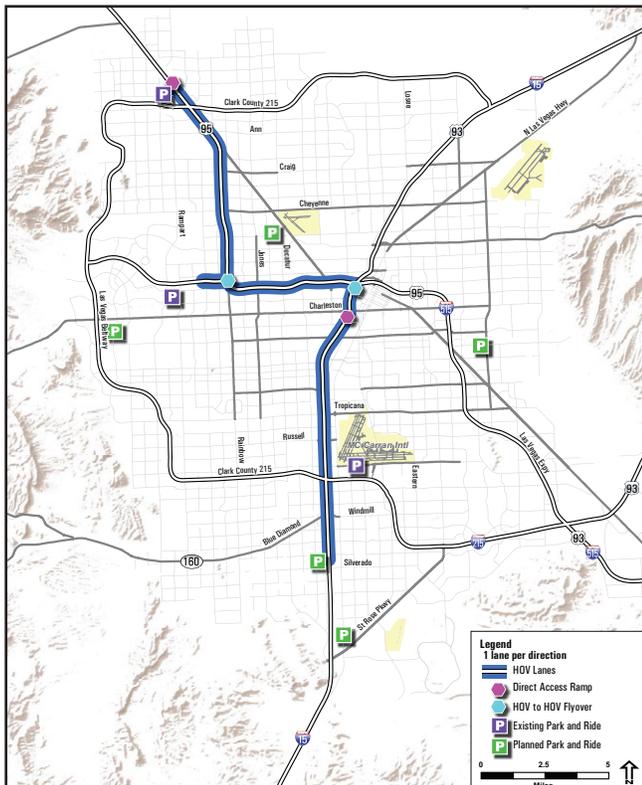
The Nevada Department of Transportation is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. The purpose is to update the previous plan (completed in 2007) based on the current conditions in Southern Nevada, including recently completed projects and Project NEON, and using the most recent analysis tools. Implementation of HOV lanes, or carpool lanes, is one method of maintaining mobility in congested freeway corridors.

The HOV plan update focuses on the near-term HOV system in Southern Nevada, including Project NEON's direct connector between I-15 and US 95 and the conversion of existing I-15 express lanes to one HOV lane and one additional general purpose lane. In addition, evaluations and recommendations for the long-term HOV system, direct access ramp locations, and operations of the HOV system are included. The HOV system is evaluated utilizing the Southern Nevada RTC's 2035 Regional Travel Demand Model with the Mode Choice Element.



## Near-Term HOV System

## Long-Term HOV System



## What is a High Occupancy Vehicle (HOV) lane?

An HOV lane is dedicated to the exclusive use of HOVs including buses, carpools, vanpools, or a combination thereof, for at least a portion of the day. HOV lanes, the most common type of managed lanes, emphasize person movement rather than traditional vehicle movement, which in turn improves the highway's ability to move more people in fewer vehicles. When operated and managed at a high level of service, HOV lanes reduce peak-period travel time compared to the adjacent general-purpose lanes and can move substantially more commuters than general-purpose lanes during peak demand periods when priority must be assigned to the highest and best use.

## What are the benefits to you?

**Save Time:** HOV lane users experience less congestion, arriving at their destinations more quickly than those who do not carpool

**More Reliable Commute:** More consistent commute times

**Save Money:** Costs less to ride a bus or to share a ride than to drive alone every day

**Conserve Fuel:** Consume less fuel by avoiding congestion

**Less stress:** Alternating drivers gives carpoolers a chance to relax on the commute

## What are the benefits to your community?

**Managing Congestion:** An HOV lane can serve more people than a general-purpose lane

**Better Use of Infrastructure:** One highway lane can carry 1,500-2,200 vehicles per hour; HOV lanes move many more people with buses and carpools

**Transit Priority:** Buses and transit riders have priority

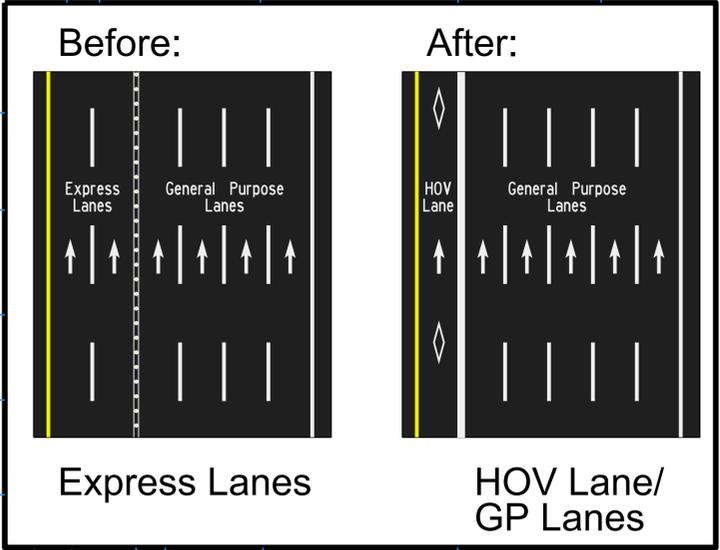
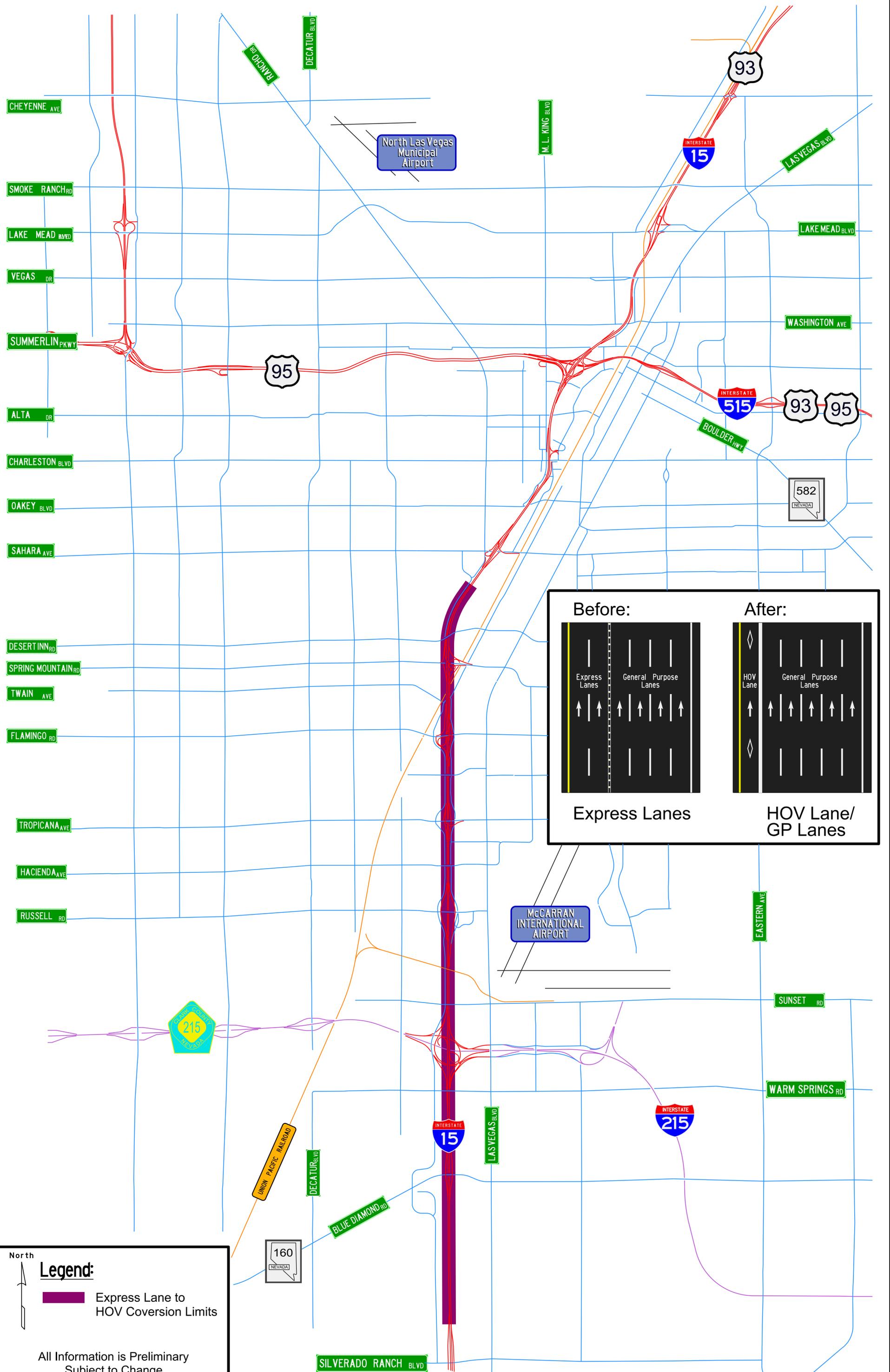
**Providing Choices:** HOV lanes make carpooling and public transit more effective and reliable choices

**Supporting mobility:** Taxicabs and airport limousines that use HOV lanes will be able to return to duty faster

## For comments or questions about this project, contact:

Jeff Lerud, PE, Project Manager  
Nevada Department of Transportation  
1263 S. Stewart Street  
Carson City, NV 89712  
Phone: (775) 888-7589  
Email: [jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)

Rev. 08/20/14



North

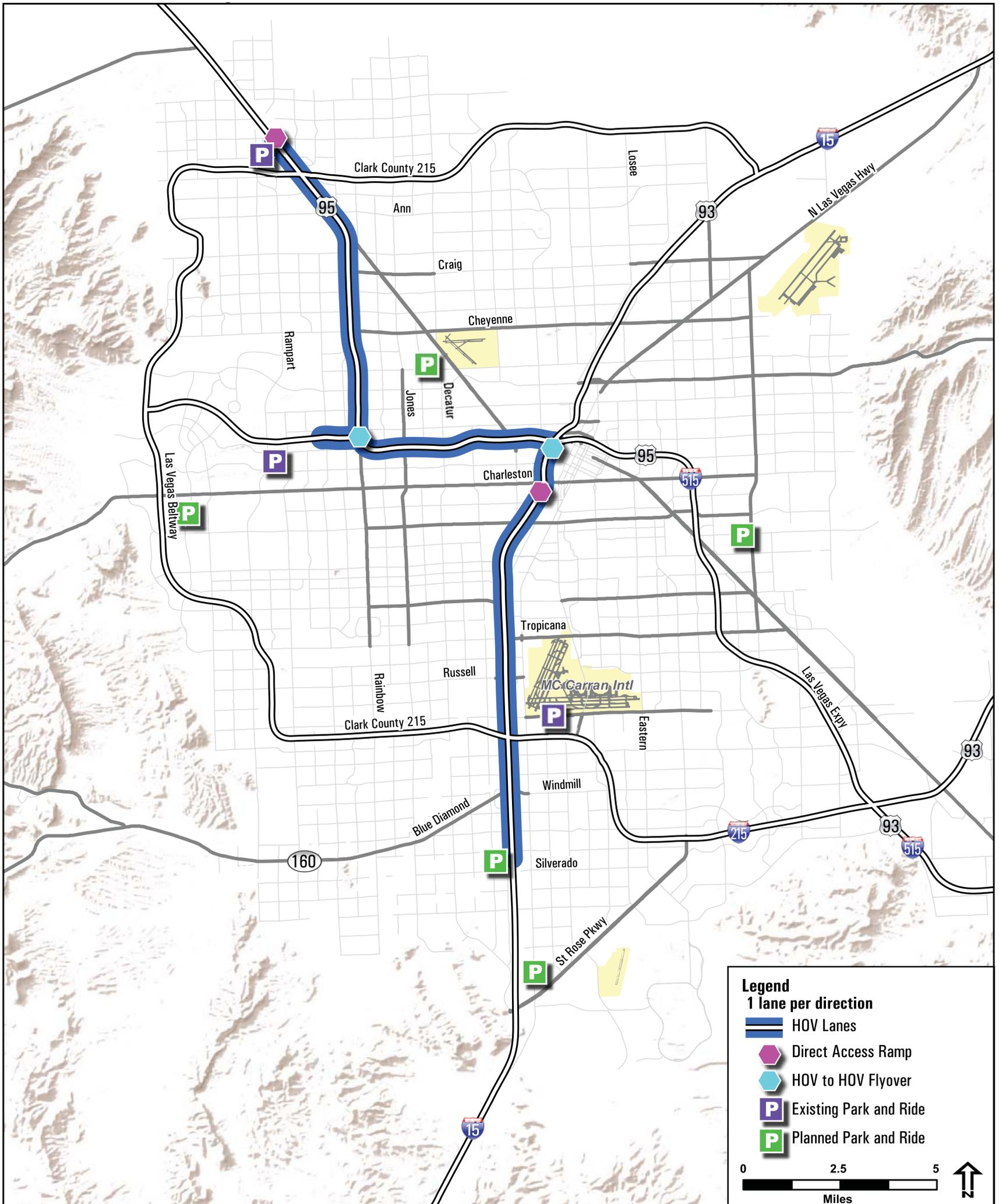
**Legend:**

- Express Lane to HOV Conversion Limits

All Information is Preliminary  
Subject to Change

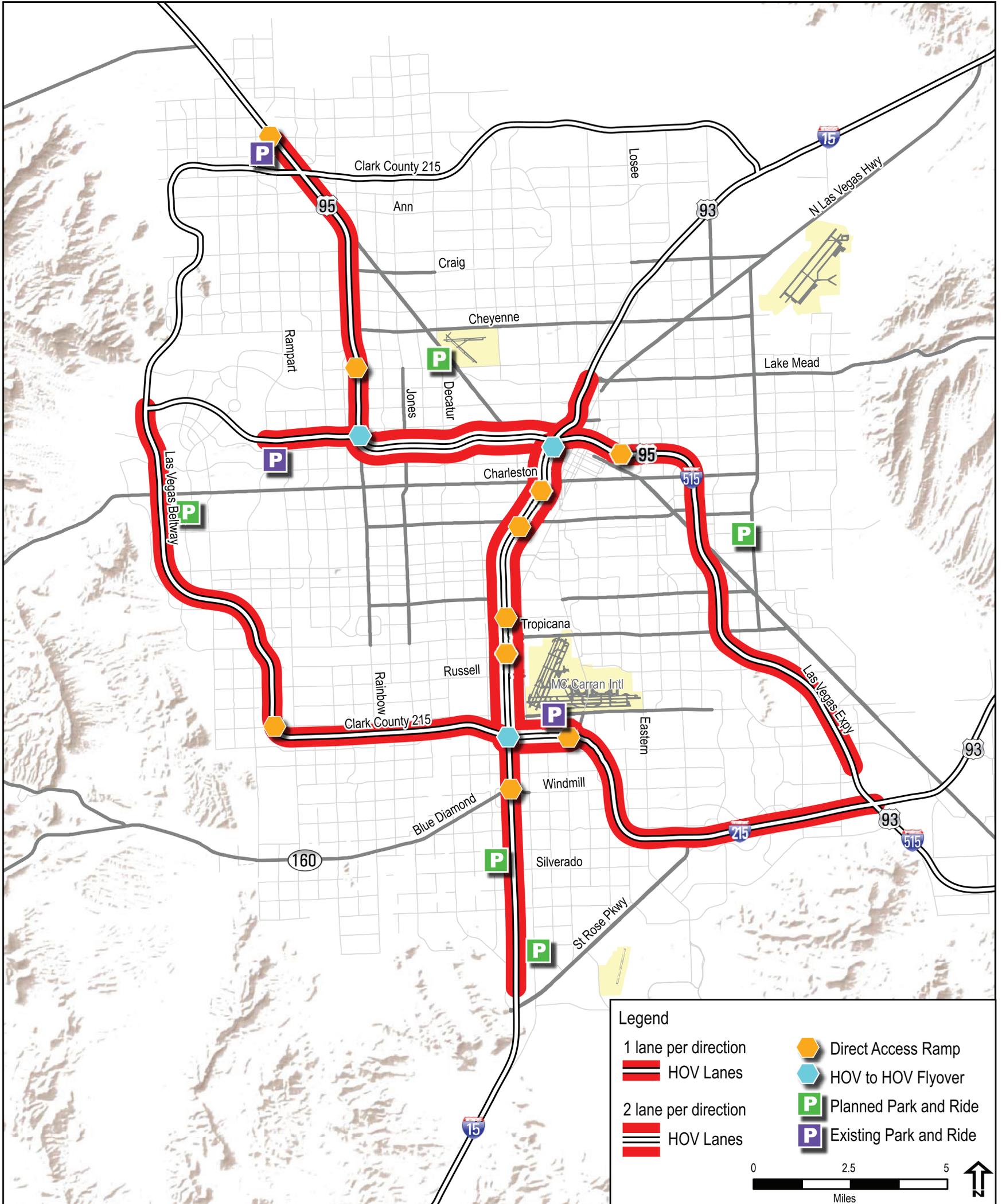


# Near-Term HOV System





# Long-Term HOV System



Date Revised: 08/20/2014



# Southern Nevada HOV Plan

August 27, 2014

## COMMENT FORM

### HOW CAN WE REACH YOU?

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

### TELL US YOUR VIEWS

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please use the back of this form or you may include your own letter.

1. What is your current usage of managed lanes (HOV or Express) in Clark County?
  - Occasionally
  - 5-10 times a month
  - 5-10 times a week
  - > 10 times a week
2. The long-term HOV plan includes direct access ramps along US 95, I-15, and the Clark County Beltway. What, if any, comments or questions do you have regarding these proposed locations? What additional locations would you recommend?

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3. What additional comments or questions do you have regarding the Southern Nevada HOV Plan Update?

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**Please return this form today, or mail to the following address no later than September 10, 2014:**  
 Jeff Lerud, PE, Project Manager, Nevada Department of Transportation, 1263 S. Stewart Street, Carson City, NV 89712, or email [jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us).

# Nevada Department of Transportation

## Public Information Meeting for

# PROJECT NEON

# DESIGN BUILD PHASES 1-4



### Purpose of Meeting

The Nevada Department of Transportation (NDOT), in partnership with the City of Las Vegas and in cooperation with the Federal Highway Administration (FHWA), invites you to attend a public information meeting for Project NEON Design Build Phases 1-4 (DB 1-4). Project NEON DB 1-4 is a 3.7-mile transportation improvements project along I-15 from the Sahara Avenue Interchange to the US 95/I-515 Interchange in downtown Las Vegas.



### Project Benefits

PROJECT NEON DB 1-4 will increase capacity in the corridor by alleviating congestion, improve traveler safety while also providing better local access to downtown Las Vegas including the Medical District, Smith Center, Downtown Arts District, Container Park and numerous local businesses.

### When and Where

Wednesday, June 10, 2015, from 4 to 7 p.m., Las Vegas Historic Fifth Street School, 401 S 4th St., Las Vegas, NV 89101. Free parking will be available at the corner lot located on 4th and E. Stewart Ave.

### Where You Come In

Members of the public are encouraged to attend at their convenience any time during the meeting hours of 4 to 7 p.m. Project representatives will be on hand to discuss and answer your questions. There will be a project presentation at 5:30 p.m. followed by a short comment period from the audience. Before and after the presentation, the meeting will be conducted as an open house format to provide attendees with an opportunity to view displays and individually discuss the project with project representatives.

Your comments may be submitted for public record in writing at the meeting or verbally to a court reporter, who will be available throughout the meeting. In addition to any comments received at the meeting, written or email comments will be accepted through 5 p.m., Friday, June 26, 2015. Please email your comments to: [info@dot.state.nv.us](mailto:info@dot.state.nv.us) with a reference to this project in the subject line. You may also mail your comments to the contact information below.

### Contact

For more information about Project NEON DB 1-4:  
Website: [www.ndotprojectneon.com](http://www.ndotprojectneon.com)  
English Hotline: 702.486.0486  
Spanish Hotline: 702.384.1694  
Email: [projectteam@ndotprojectneon.com](mailto:projectteam@ndotprojectneon.com)  
Mail: Dale Keller, P.E, Senior Project Manager,  
1263 S. Stewart St., Carson City, NV 89713,  
phone: 775-888-7603, email: [dkeller@dot.state.nv.us](mailto:dkeller@dot.state.nv.us)

### If Right-of-Way is Needed

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will govern the acquisition of right-of-way that may be necessary for this project. More detailed information regarding right-of-way can be obtained from the NDOT's Right of Way Division, 1263 S. Stewart St., Carson City, NV 89712, or by calling (775) 888-7480.

Also available for your information will be NDOT's Southern Nevada High Occupancy Lane (HOV) project. Project representatives will be available to answer your questions. Information for this project can be found at: [https://www.nevadadot.com/About\\_NDOT/NDOT\\_Divisions/Planning/Safety\\_Engineering/HOV\\_Lanes.aspx](https://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Safety_Engineering/HOV_Lanes.aspx)

### Special Accommodation Requests

Reasonable efforts will be made to assist and accommodate persons with disabilities desiring to attend the meeting. Requests for auxiliary aids or services to assist individuals with disabilities or limited English proficiency should be made with as much advance notice as possible to Julie Maxey, Nevada Department of Transportation, Public Hearings Officer, at 775.888.7171 or via email at [jmaxey@dot.state.nv.us](mailto:jmaxey@dot.state.nv.us).



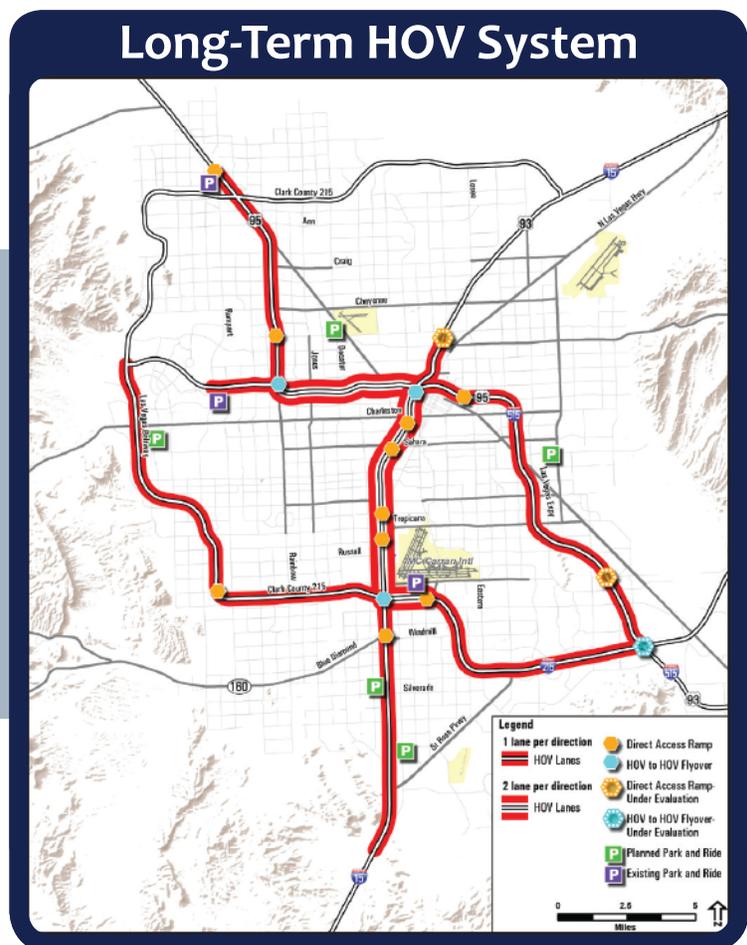
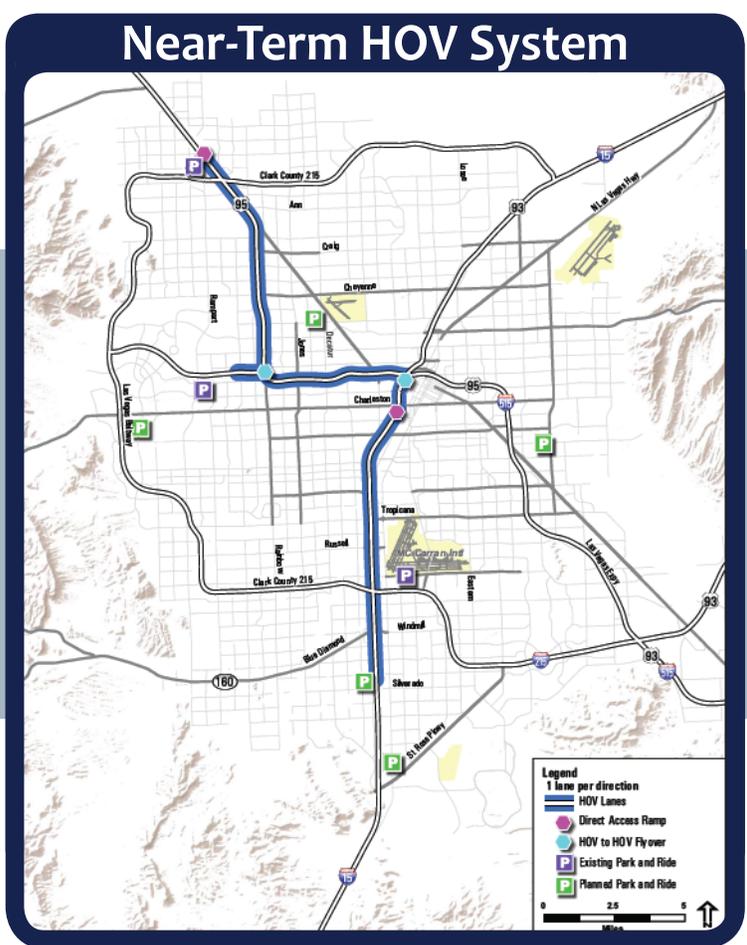
**HOV LANE AHEAD**

**HOV LANE ENDS**

# Fact Sheet

The Nevada Department of Transportation is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. The purpose is to update the previous plan (completed in 2007) based on the current conditions in Southern Nevada, including recently completed projects and Project NEON, and using the most recent analysis tools. Implementation of HOV lanes, or carpool lanes, is one method of maintaining mobility in congested freeway corridors.

The HOV plan update focuses on the near-term HOV system in Southern Nevada, including Project NEON's direct connector between I-15 and US 95 and the conversion of existing I-15 express lanes to one HOV lane and one additional general purpose lane. In addition, evaluations and recommendations for the long-term HOV system, direct access ramp locations, and operations of the HOV system are included. The HOV system is evaluated utilizing the Southern Nevada RTC's 2035 Regional Travel Demand Model with the Mode Choice Element.





### What is a High Occupancy Vehicle (HOV) lane?

An HOV lane is dedicated to the exclusive use of high occupancy vehicles including buses, carpools, vanpools, or a combination thereof, for at least a portion of the day. HOV lanes, the most common type of managed lanes, emphasize person movement rather than traditional vehicle movement. This management improves the highway's ability to move more people in fewer vehicles. HOV lanes reduce peak-period travel time compared to the adjacent general-purpose lanes and can move substantially more commuters than general-purpose lanes during peak demand periods when priority must be assigned to the highest and best use.

#### Benefits to You

- **Save Time.** HOV lane users experience less congestion, arriving at their destinations more quickly and consistently than those who do not carpool.
- **Save Money.** It costs less to ride a bus or to share a ride than to drive alone every day.
- **Save Gas.** Consume less fuel by avoiding congestion.
- **Save Stress.** Alternating drivers gives carpoolers a chance to relax on the commute.

#### Benefits to your Community

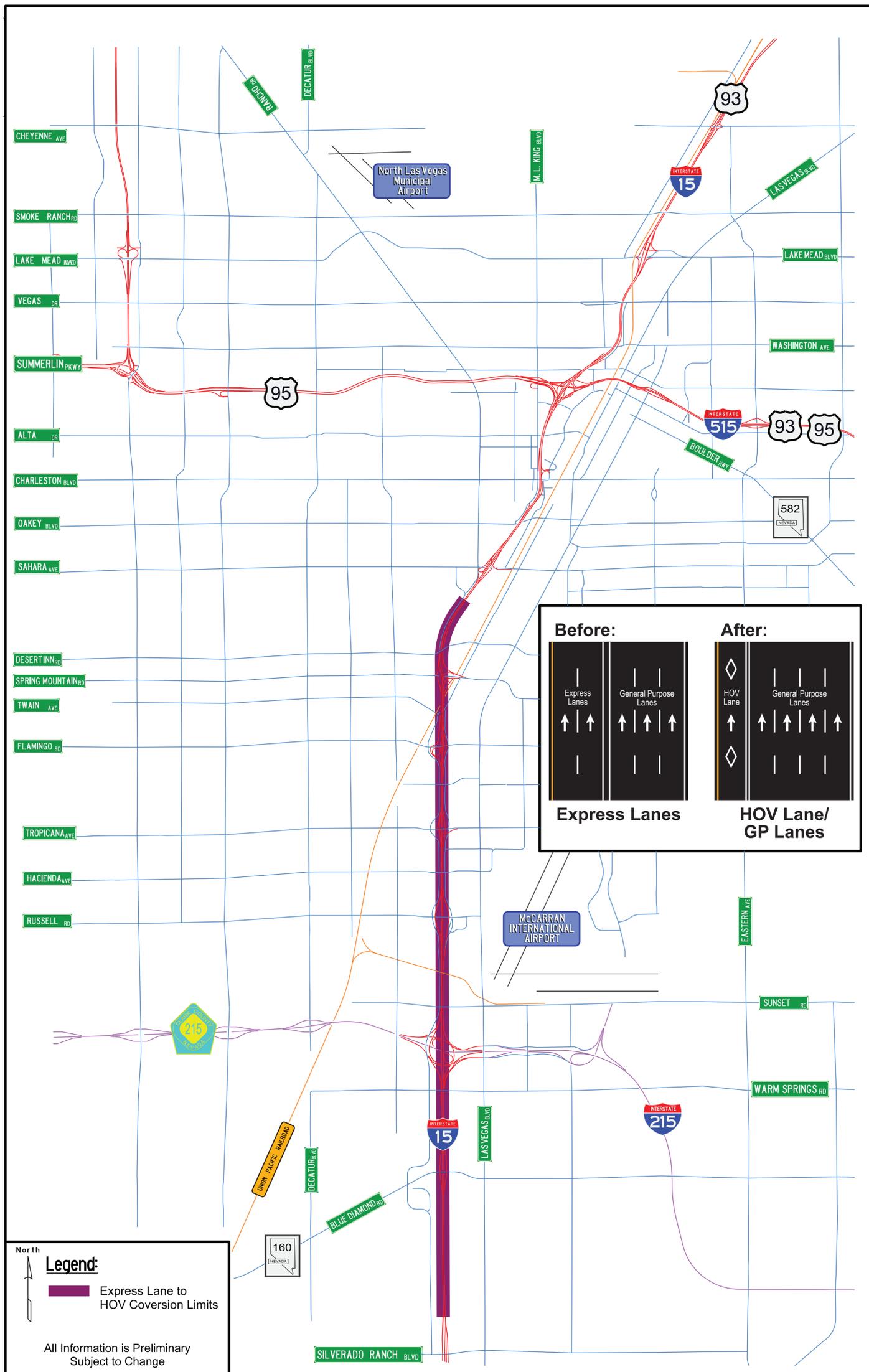
- **Congestion Management.** An HOV lane can serve more people than a general-purpose lane.
- **Better Use of Infrastructure.** One highway lane can carry 1,500-2,200 vehicles per hour. HOV lanes move many more people with buses and carpools.
- **Transit Priority.** Buses and transit riders have priority so more people get to their destinations faster.
- **Choice.** HOV lanes make carpooling and public transit more effective and reliable choices.
- **Mobility Support.** Taxicabs and airport limousines that use HOV lanes will be able to return to duty faster to keep the community moving.

**FOR COMMENTS OR QUESTIONS ABOUT THIS PROJECT, CONTACT:**

**Jeff Lerud, PE, Project Manager**  
Nevada Department of Transportation  
1263 S. Stewart Street  
Carson City, NV 89712  
Phone: (775) 888-7589  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)

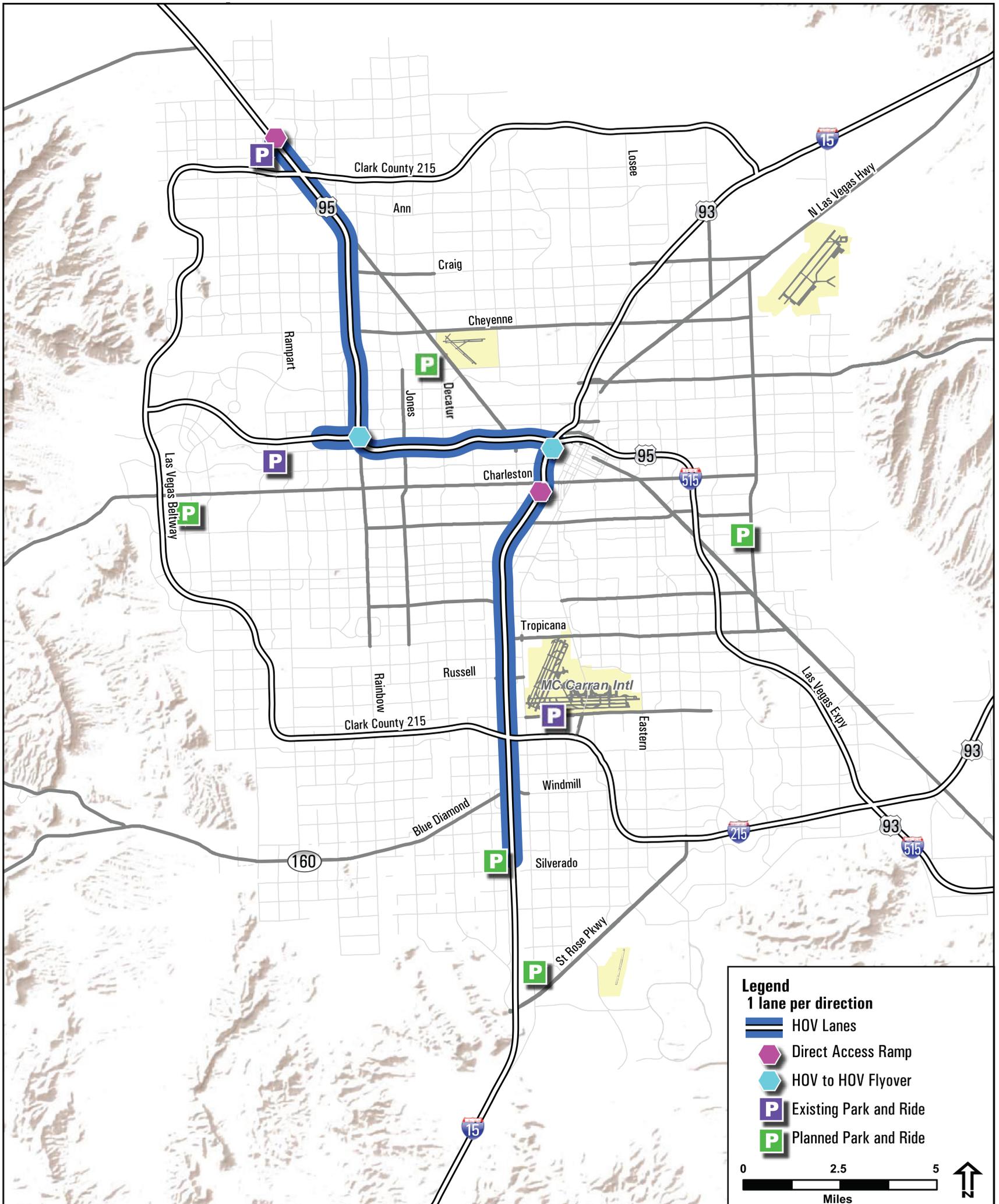


# Express Conversion Limits



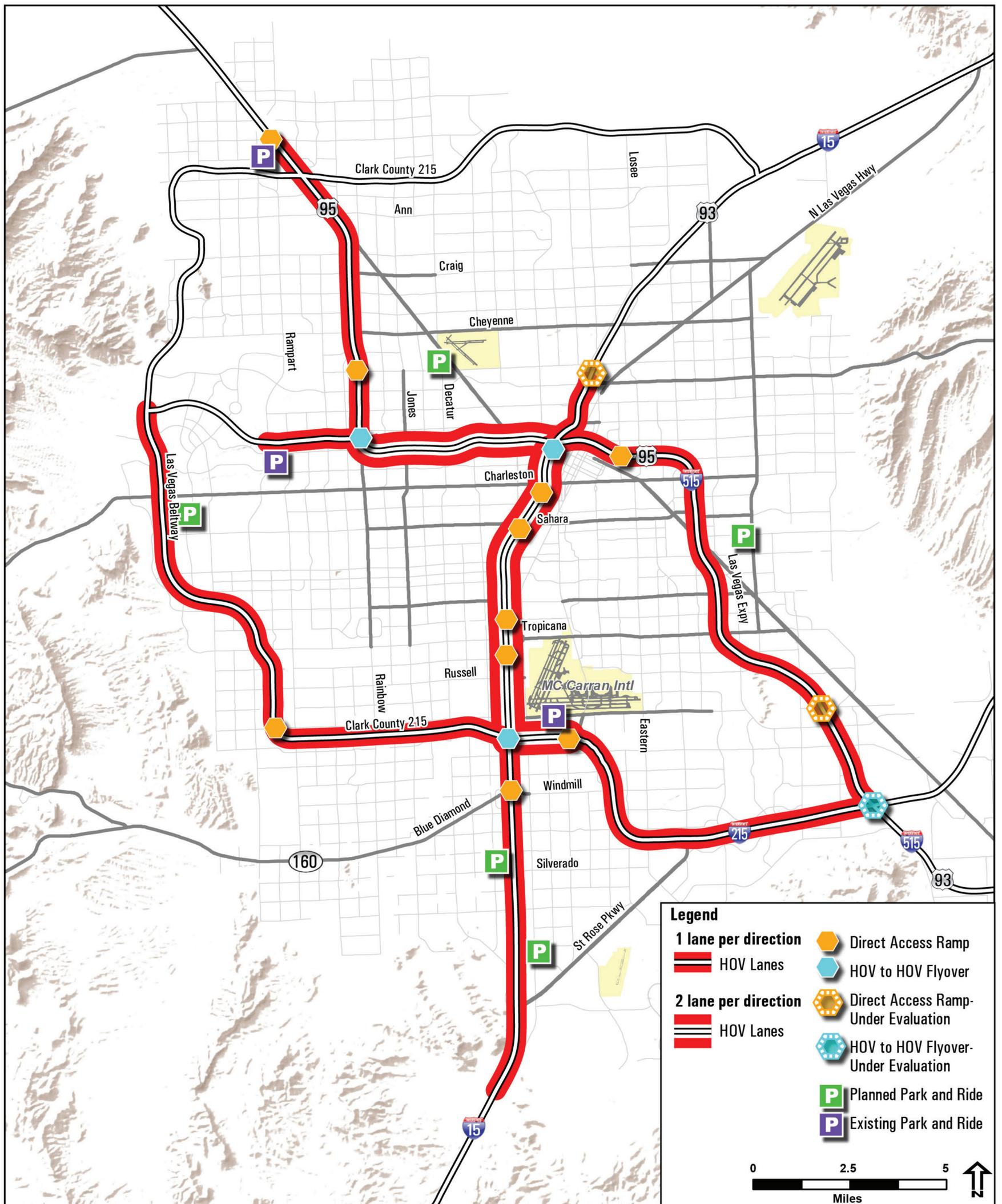


# Near-Term HOV System





# Long-Term HOV System



Agency Outreach Materials



## **Southern Nevada HOV Plan Update**

### **City of Henderson staff Briefing**

**November 04, 2014**

**Foothills Conference Room**

**10:00AM to 11:00AM**

### **AGENDA**

1. Introductions

2. Purpose and objective of Meeting

Status of Plan

Receive Comments

Mayor, Councilwoman and/or Councilman briefings?

Possible Presentation to City Council on December 2nd?

3. Overview of HOV Plan update

PowerPoint Presentation planned for Council meeting

**Southern Nevada HOV Plan Update meeting with City of Henderson Staff**

**Sign-in Sheet**

Name	Agency/Company	Phone Number	E-mail address
JOHN KARACHEPONE	JACOBS	702 938 5508	John.Karachepone@Jacobs.com
Gena Kendall	COH	702-267-3083	gena.kendall@cityofhenderson.com
JOHN PENUELAS	COH	" " 3080	john.penueles@ " " "
Jeff Leme	NDOT	775-888-7589	jleme@dot.state.nv.us.
Sean Roberson	COH	267-1537	Sean.roberson@cityofhenderson.com



# Southern Nevada HOV Plan Update

← City of Henderson

November 4, 2014

Jeff Lerud, Project Manager



Background of HOV Plan

Purpose of Update

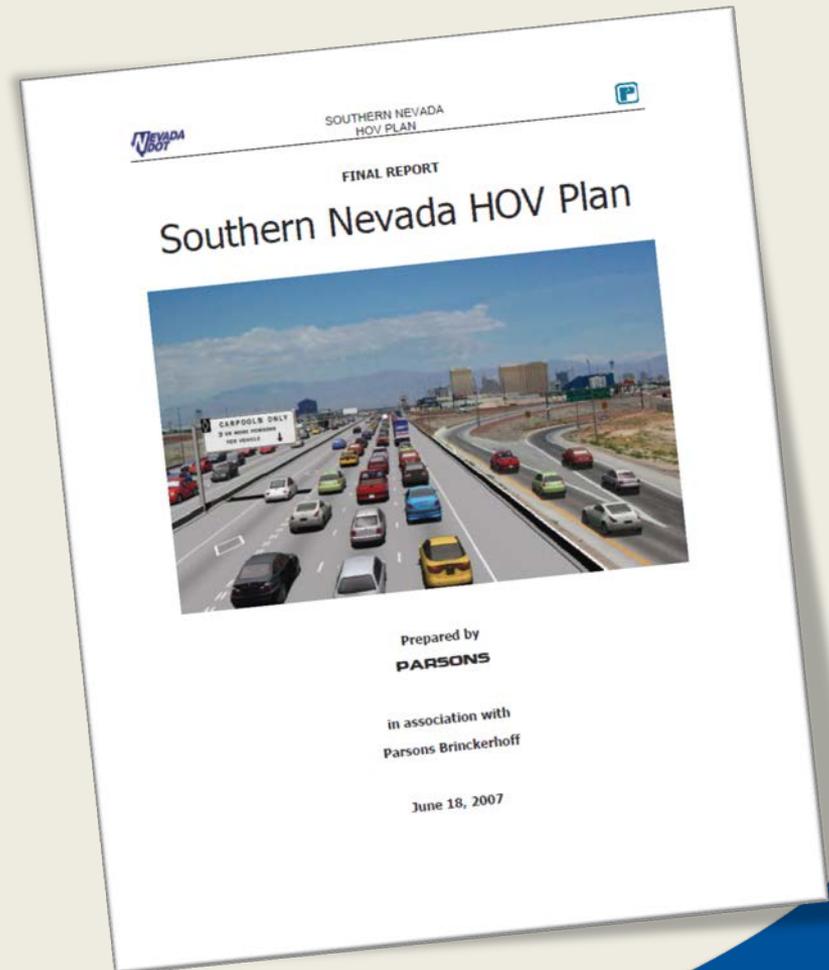
Proposed HOV System

Next Steps

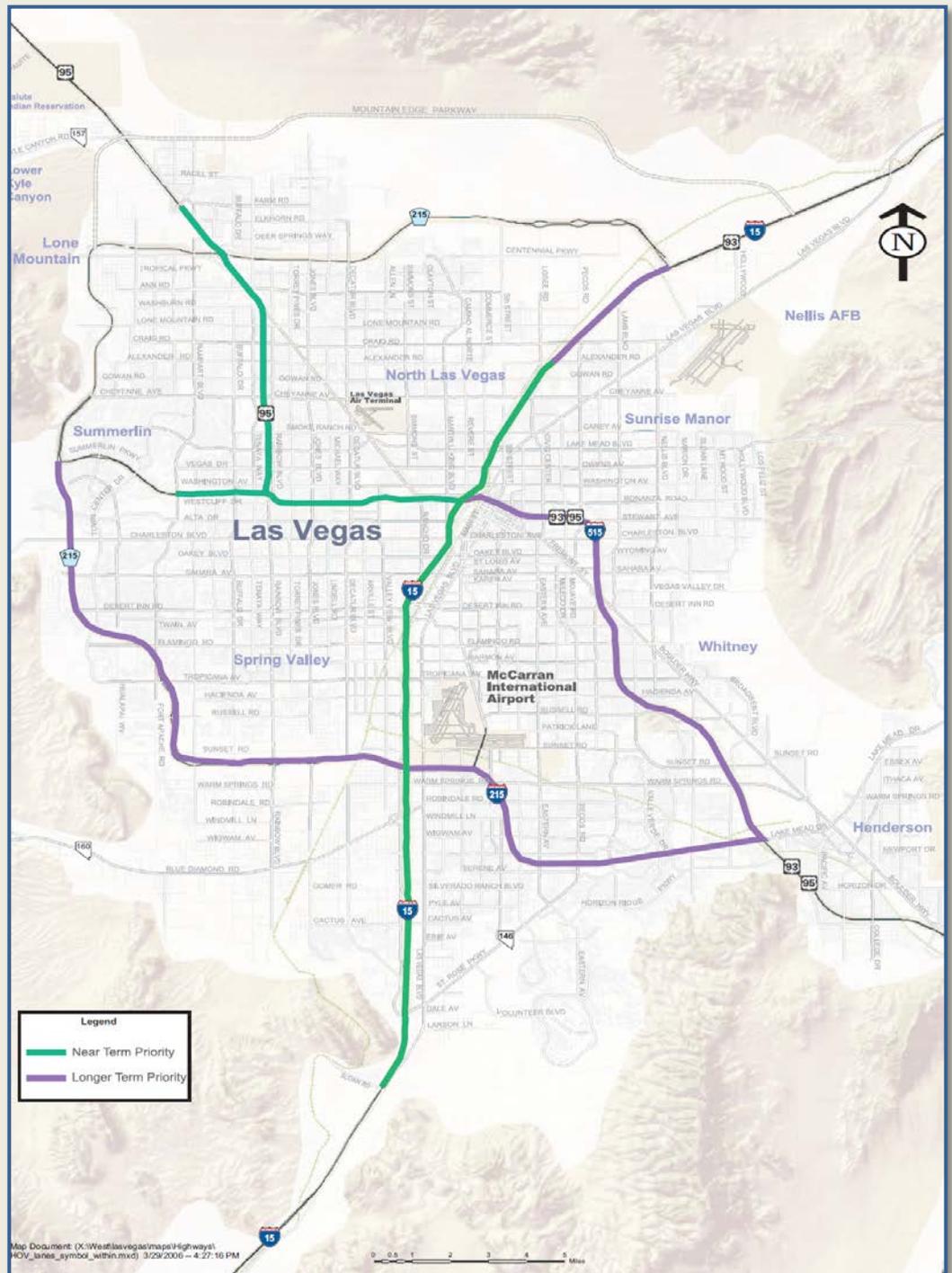


# HOV Plan Background

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities



# 2007 Plan



# 2007 Plan: Priority Ranking





# Current System

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
  - 2+, motorcycles, emergency vehicles (no trucks)
  - Extended peak period (6am - 10am & 2pm - 7pm Weekdays)
  - Continuous ingress/egress
- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress

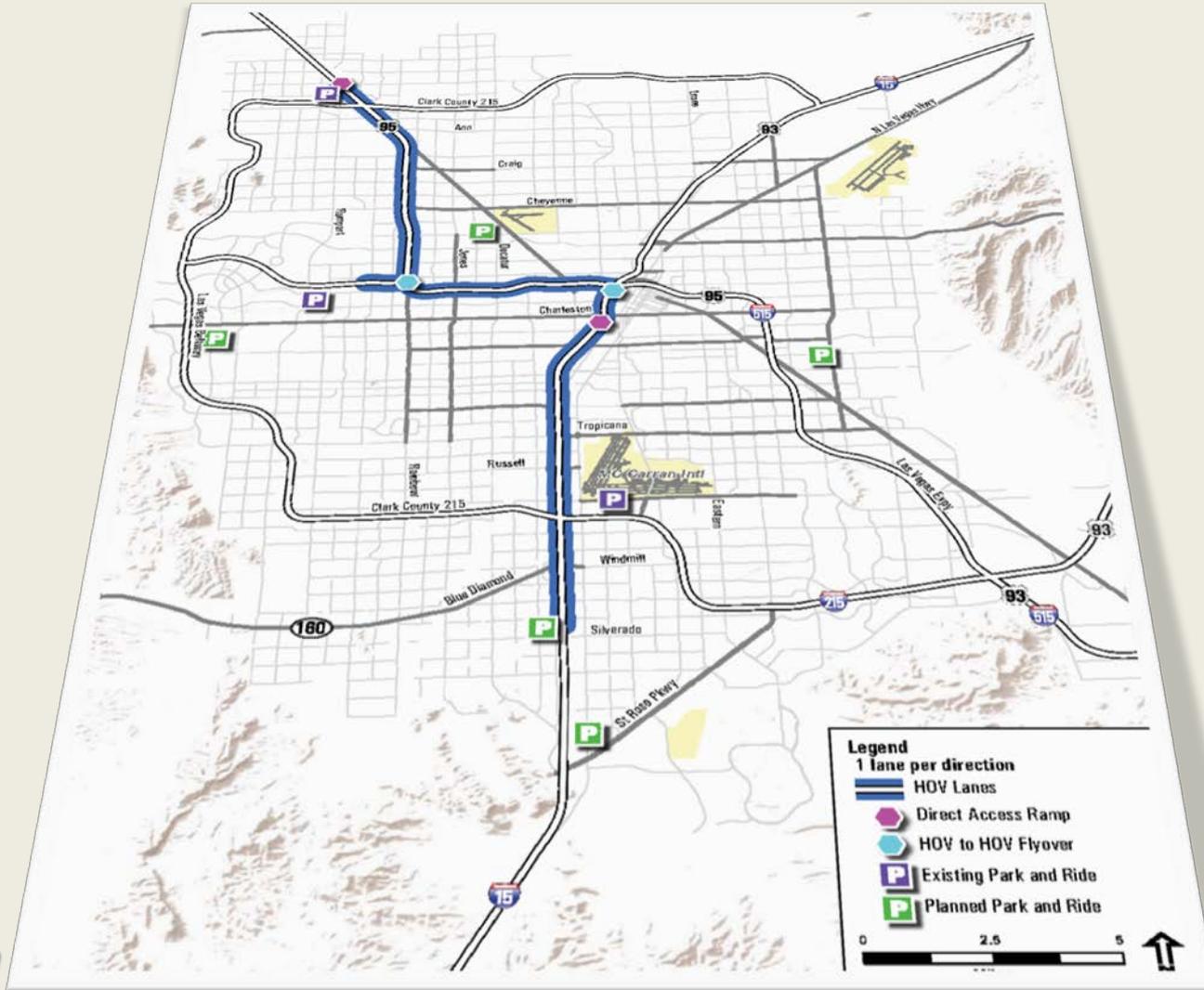


# HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach

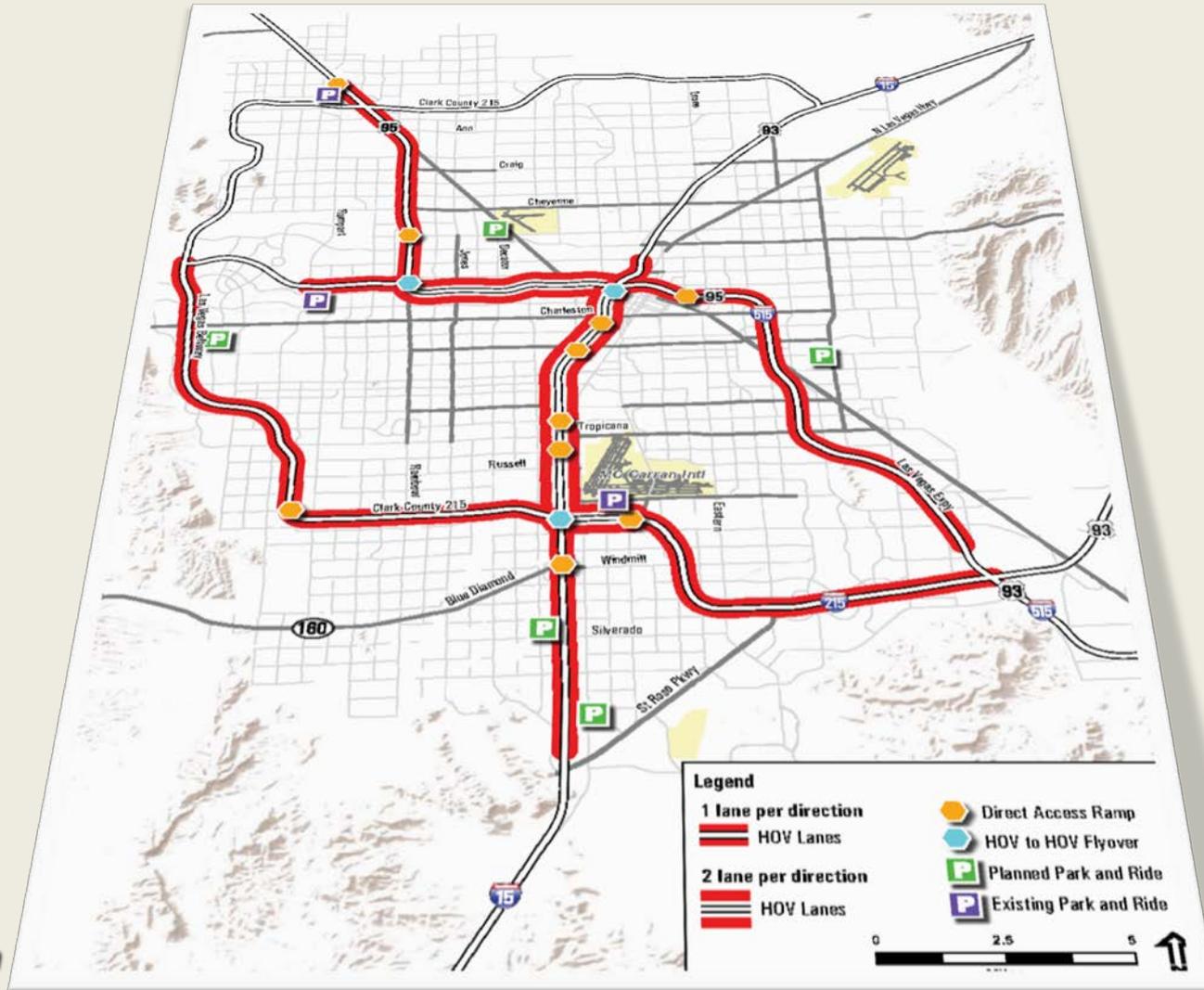


# Near Term HOV System





# Long Term HOV System





# Criteria – Regional HOV System Planning

- Congestion
- Bottlenecks
- Travel Time Savings
- HOV Lane Demand
- Transit Service
- Available Space
- Connectivity / Continuity



# HOV System Proposed Recommendations

## Operational Recommendations (Near-Term)

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	6 AM to 7 PM, Monday through Friday
Trucks	Vehicles with more than two axles ( or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency vehicles	Those responding to an emergency are eligible
Dead-heading public transit buses	Eligible
Single-occupant low-emission and energy-efficient vehicles	Not eligible



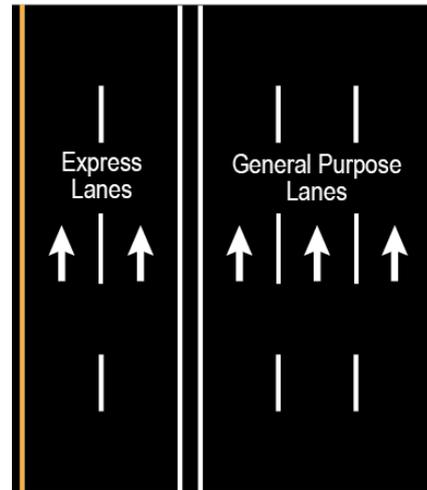
# HOV System Proposed Recommendations

## Express Lane Conversion

- Need HOV connectivity between I-15 and US-95
- Convert Express Lanes to HOV
- 2 Express Lanes become 1 HOV and 1 GP
- Limited access for HOV lane

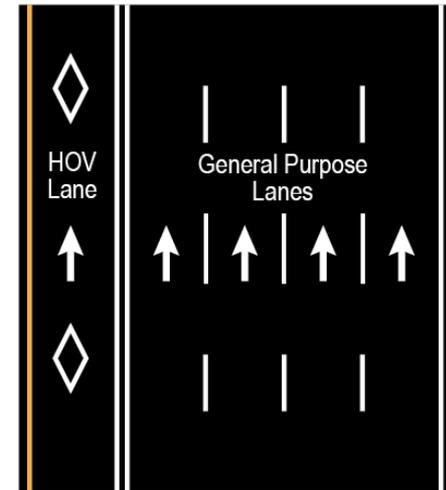
lane

**Before:**



**Express Lanes**

**After:**



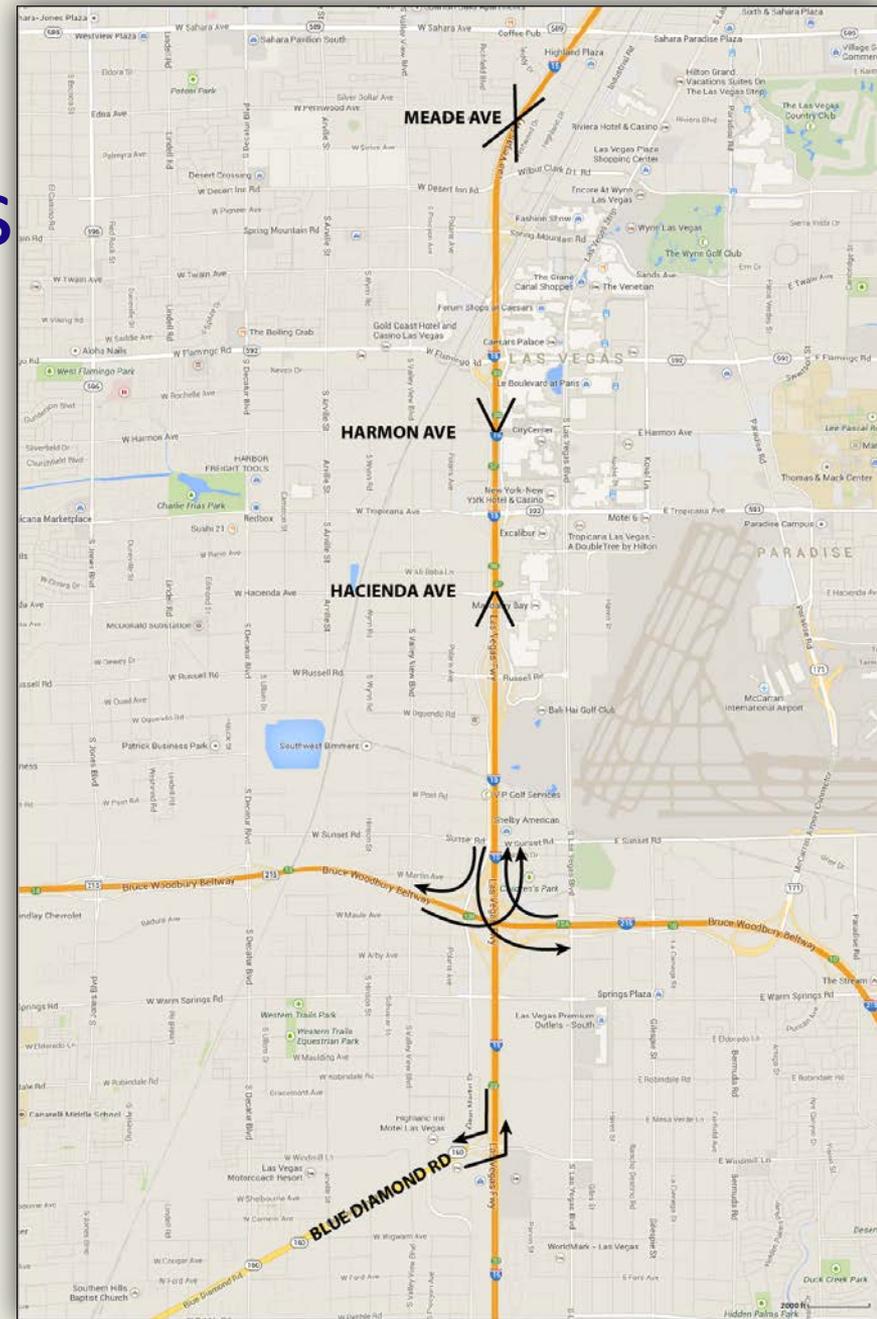
**HOV Lane/  
GP Lanes**



# HOV Proposed Recommendations

## HOV Direct Access Ramps (Between St. Rose/Sahara)

- Direct connects to arterial
  - 7 locations screened: St Rose, Blue Diamond, Warm Springs, Sunset, Hacienda, Harmon, Meade
  - 4 locations proposed: Blue Diamond, Hacienda, Harmon, Meade
- HOV to HOV flyover
  - Propose I-15/I-215 to/from east (Airport) AND to/from the west





# HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak period or 24 hr.
  - Vehicle eligibility
  - Ingress/egress – continuous or limited
  - Direct access connectors and flyover



Thank you!

Questions?

Jeff Lerud, Project Manager

[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



## **Southern Nevada HOV Plan Update**

### **City of Henderson staff Briefing**

**November 04, 2014**

**Foothills Conference Room**

**10:00AM to 11:00AM**

### **Meeting Notes**

1. An Informational Item to the City Council is appropriate: This is to be limited to 10 minutes.

2. Comments and feedback:

I-215 to I-515 (to from the North) is a bottleneck and should be considered for HOV direct connect ramp

Inclusion of Electric and alternate fuel vehicles in HOV lanes should be addressed

Technical heavy slides, such as the one on criteria may not be of much interest to the Council

Any impacts or issues that will have a bearing on local business during construction phase will be of interest. When HOV lanes are constructed on facilities within City's boundaries public outreach will be necessary and the construction impacts on businesses are to be mitigated as possible.

Make it clear that we are not talking about toll roads in the City

Show the airport Connector on the map, this airport connector is of interest to the City.

When will construction of HOV facilities in the City begin? Timelines are of interest to the Council.

New Development called Union Village will include a hospital and residences and the possibility of a direct access ramp to Union Village should be considered. Normally this would connect to the Stephanie Street overpass but this could be problematic due to proximity of the Russell overpass. The City requested that this direct connect HOV ramp from/to north I-515 be considered.

If I-11 comes through I-515 – what will happen? Will complete reconstruction of I-515 be necessary? This will have a significant impact to the City during reconstruction.



## **Southern Nevada HOV Plan Update**

### **Clark County staff briefing**

**Director's Conference Room: 2nd Floor**

**November 4, 2014**

**2:00PM to 3:00PM**

### **AGENDA**

1. Introductions

2. Purpose and objective of Meeting

Status of Plan

Receive Comments

Potential Commissioner briefings?

Clark County Board of Commissioners Presentation on December 2nd?

3. Overview of HOV Plan update

PowerPoint Presentation planned for Council meeting

4. Conceptual Design and Plan

a) Blue Diamond

b) Southern Beltway (CC215 and I-215)

c) Hacienda

d) Harmon

d) Sunset at Southern/Western Beltway





# Southern Nevada HOV Plan Update

← Clark County

November 4, 2014

Jeff Lerud, Project Manager



Background of HOV Plan

Purpose of Update

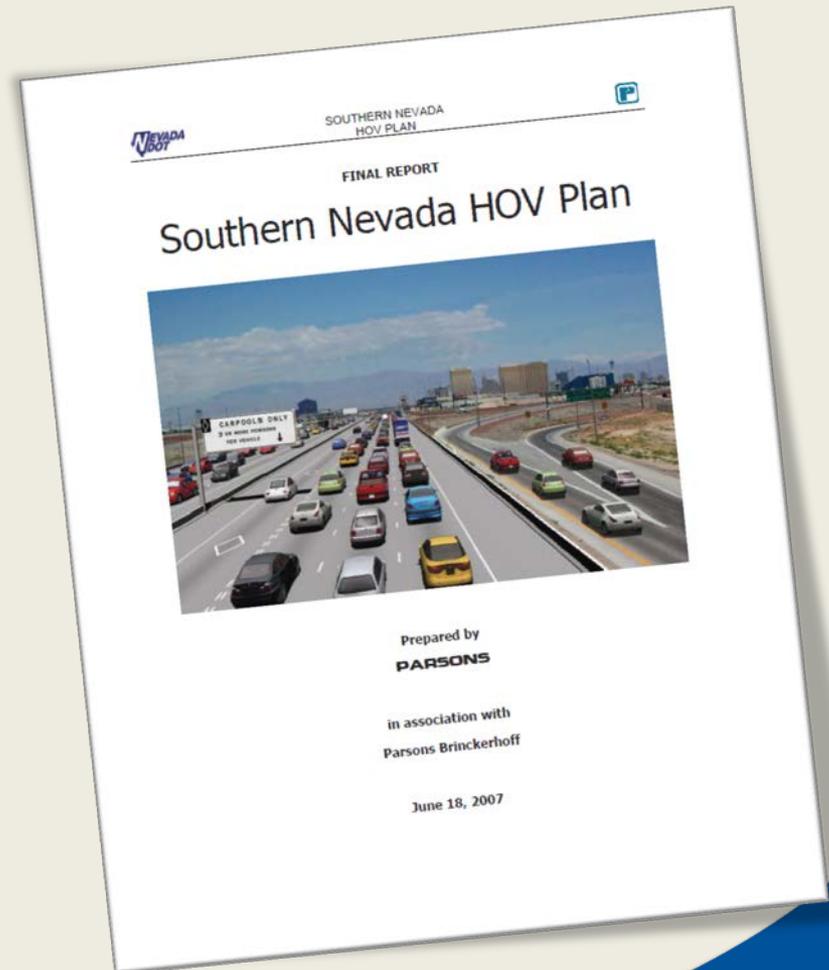
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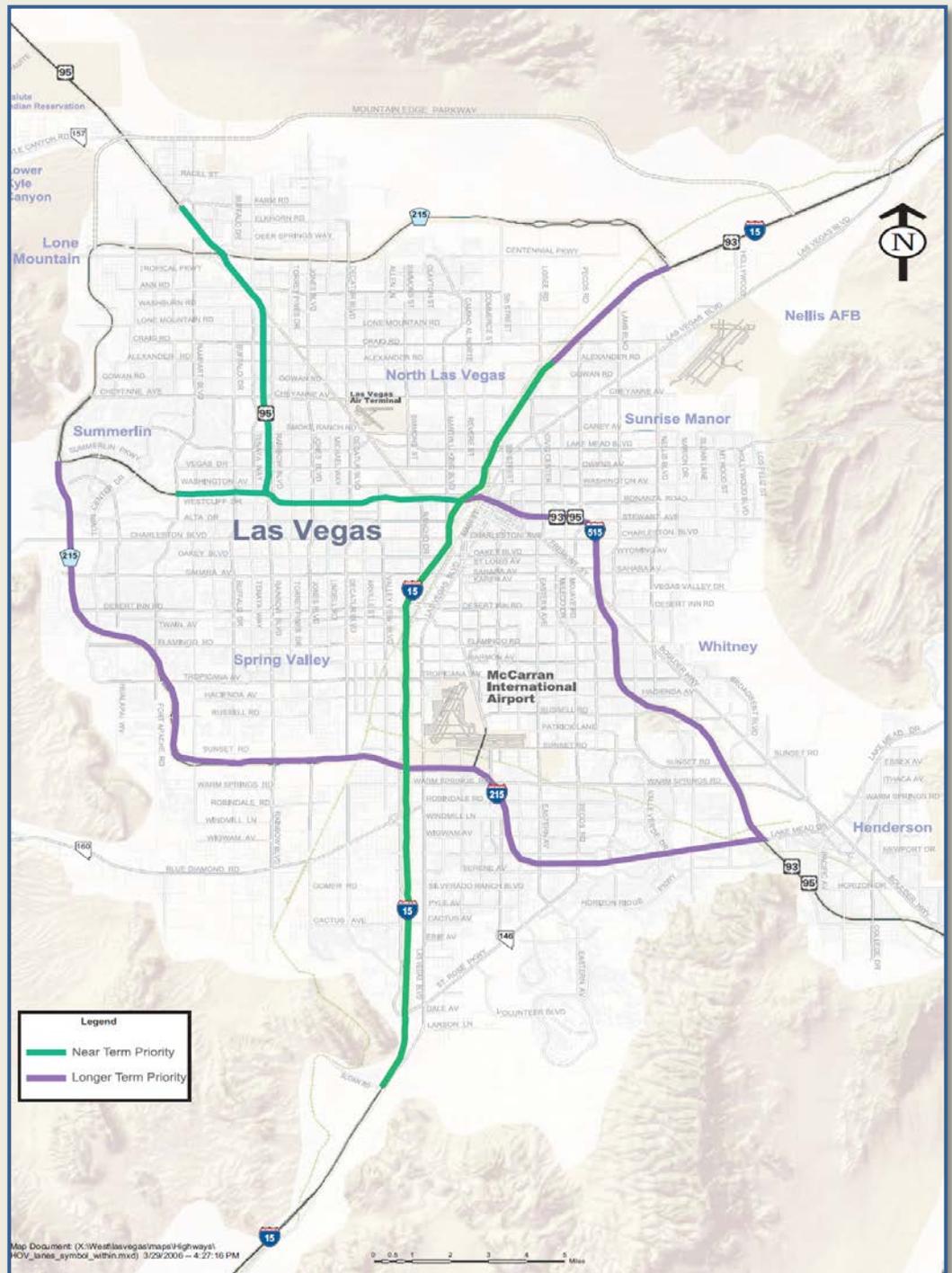


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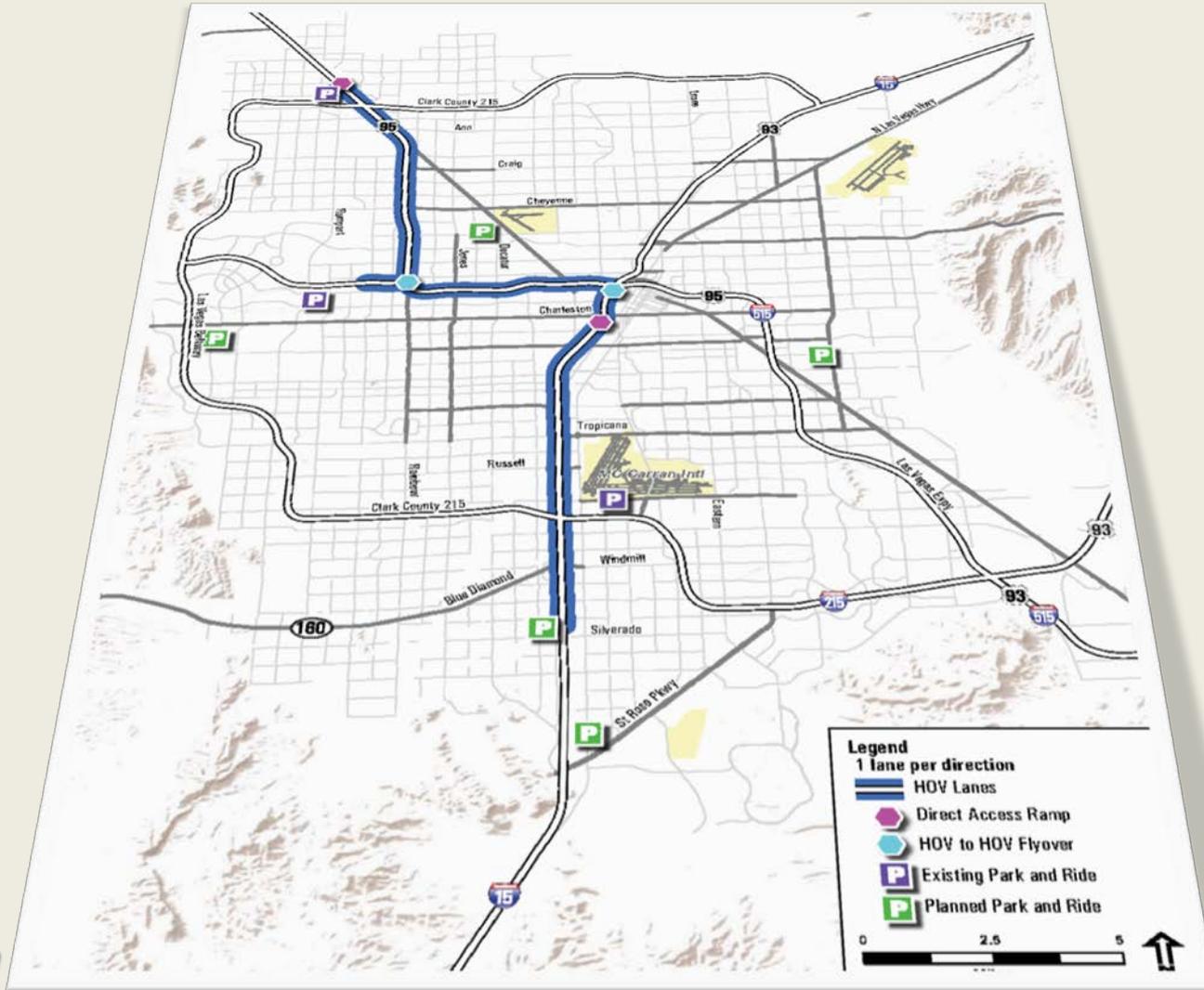


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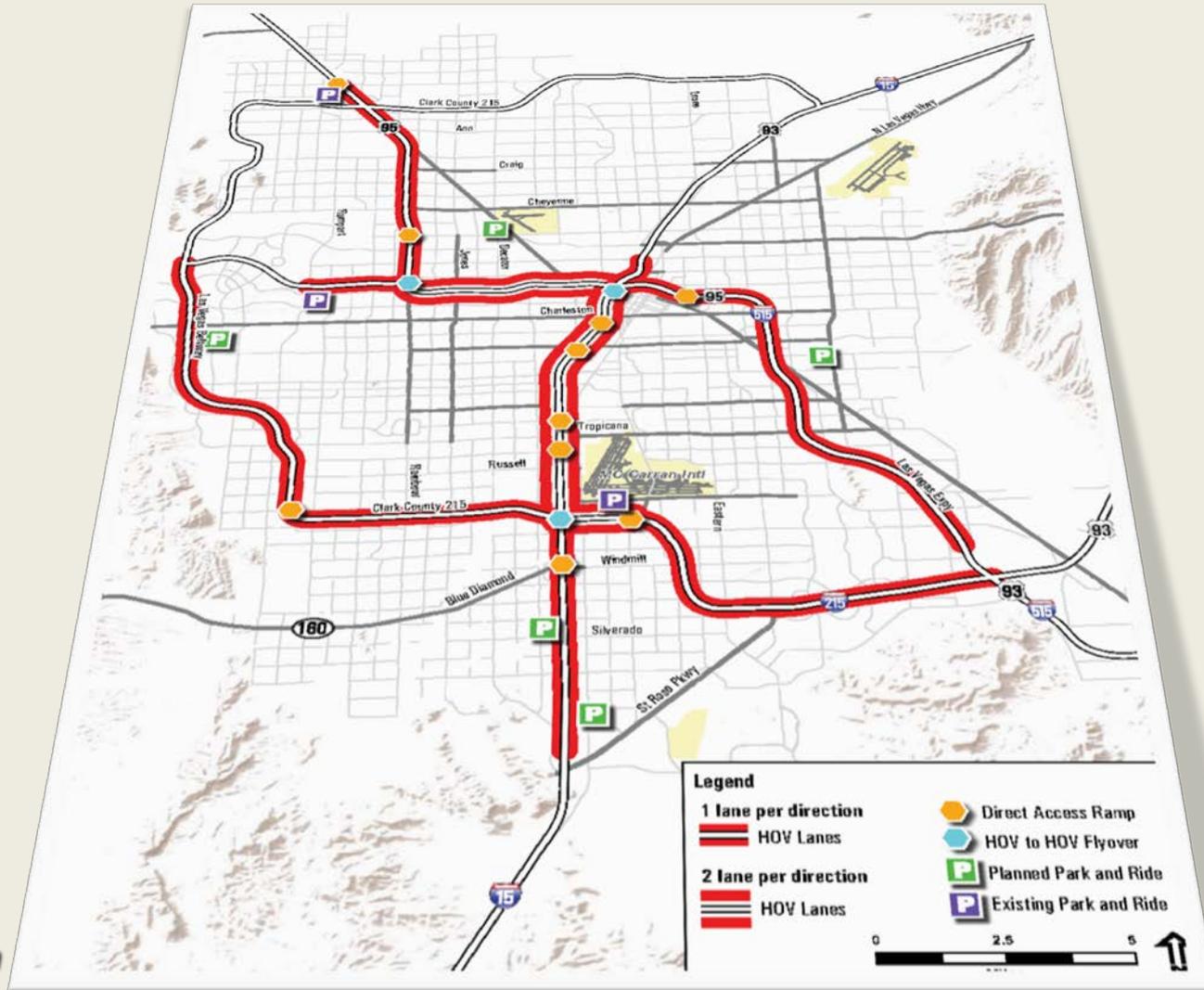


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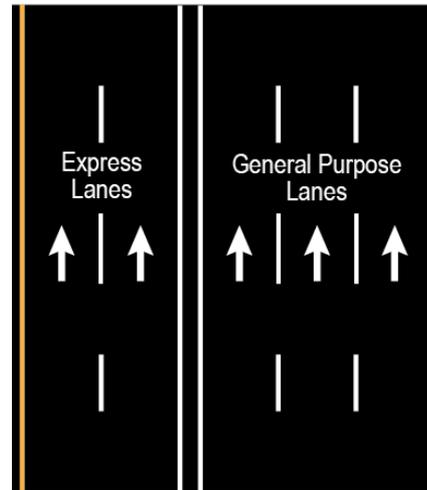


# HOV System Proposed Recommendations

## Express Lane Conversion

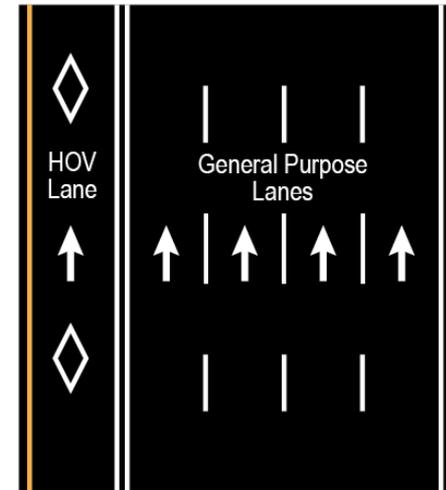
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**Before:**



**Express Lanes**

**After:**



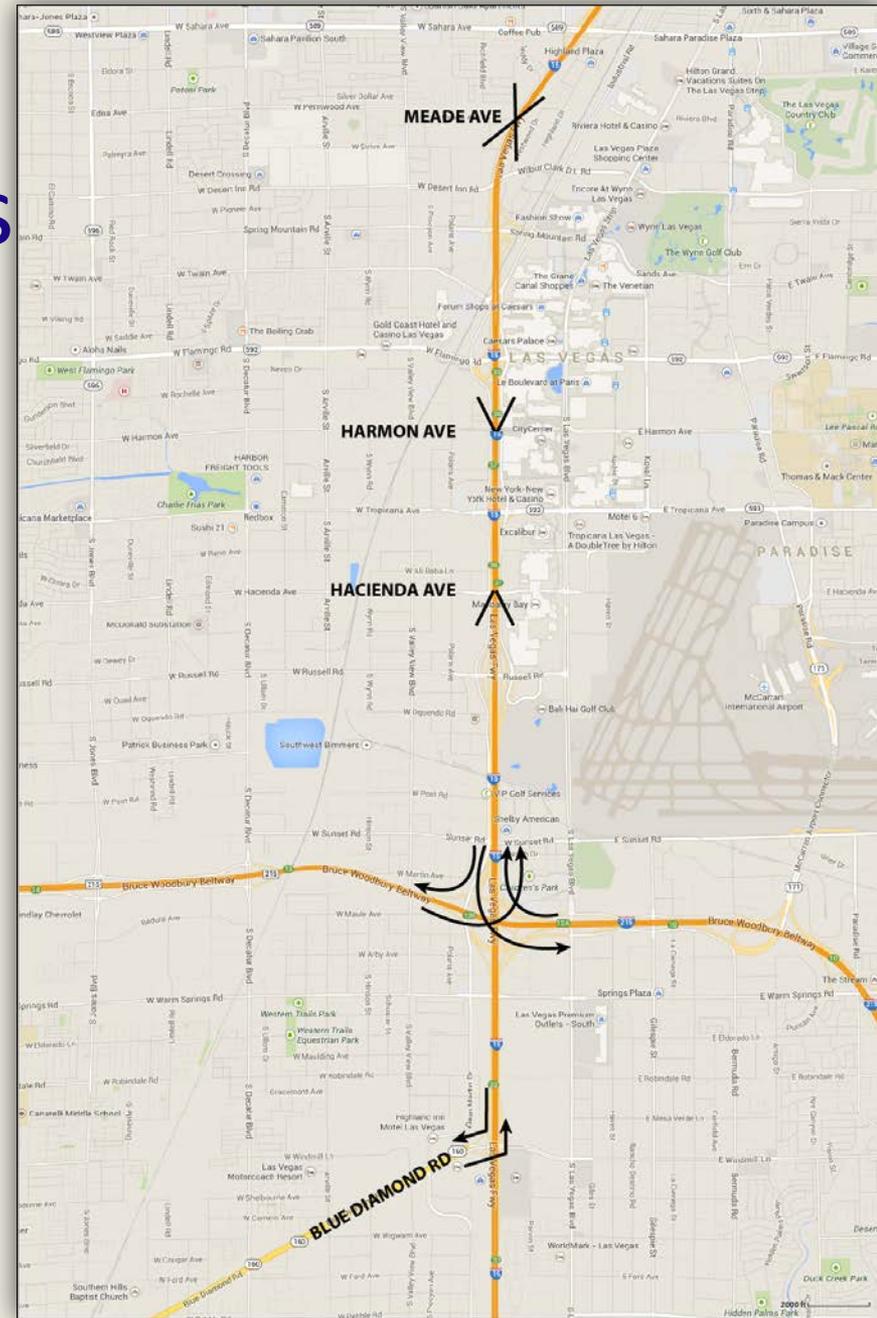
**HOV Lane/  
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Thank you!

Questions?

Jeff Lerud, Project Manager

[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



## **Southern Nevada HOV Plan Update**

### **Clark County staff briefing**

**Director's Conference Room: 2nd Floor**

**November 4, 2014**

**2:00PM to 3:00PM**

### **Meeting Notes**

1. PowerPoint Presentation planned for Commission meeting. Clark County typically does not do informational items to the Board of County Commissioners for these types of projects. Kaizad will discuss with Denis Cederburg.
2. Kaizad Yazdani will share the presentation with other staff at CCPW – PowerPoint Presentation was saved to CCPW server.
3. Clark County would like to see HOV lanes extended to arterial roadways accompanied by appropriate access management. This project is focused on the freeway system and does not address HOV lanes on the arterial system.
4. A timeline for the implementation of HOV lanes on the freeway system should be included in the Plan update.
5. Education and outreach will be needed to ensure that double white line cannot be crossed to access HOV lanes. NDOT should consider a new sign that says “Do Not Cross Double White Line”.
6. What is the design speed on the I-215/CC-215 to I-15 direct connect HOV ramps? 35mph.



## **Southern Nevada HOV Plan Update**

### **City of North Las Vegas staff briefing**

**City Hall Room 201**

**November 03, 2014**

**10:30AM to 11:30AM**

### **AGENDA**

1. Introductions

2. Purpose and objective of Meeting

Status of Plan

Receive Comments

Potential Council member briefings?

City Council meeting Presentation on December 3<sup>rd</sup>?

3. Overview of HOV Plan update

PowerPoint Presentation planned for Council meeting

11/03/2014

CNLV - NDOT - SNUHov PLAN UPDATE  
SIGN-IN SHEET

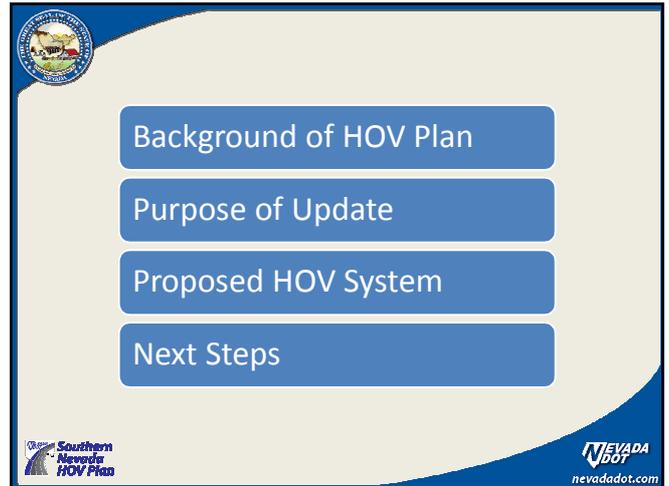
<u>ORG</u>	<u>NAME</u>	<u>PHONE NUMBER</u>	<u>EMAIL</u>
JACOBS	JOHN KARACHEPONE	702 938 5508	John.Karachepone@Jacobs.com
NDOT	JEFF LERUD	775 888 7589	JLerud@dot.state.nv.us
CNLV	Jennifer Doody	702-633-1223	doodyj@cityofnorthlasvegas.com
CNLV	Alyssa Reynolds	702-633-1224	reynoldsa@cityofnorthlasvegas.com
CNLV	Curt Kroeker	702-633-2676	Kroekerc@cityofnorthlasvegas.com
11	DALE DAFFERN	702 633-1325	Daffern 11 21



**Southern Nevada HOV Plan Update**

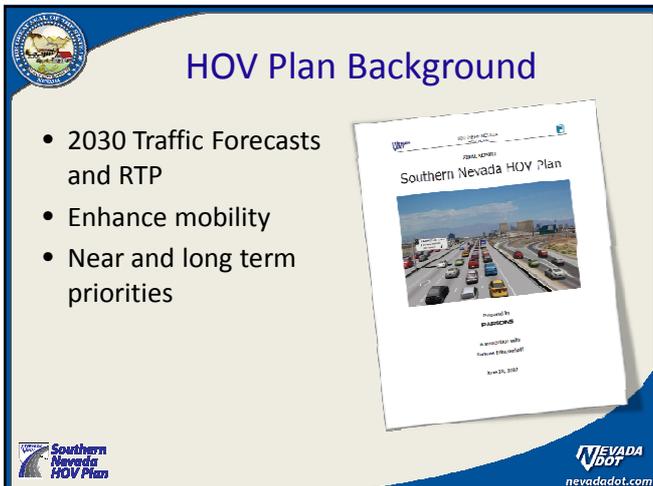
City of North Las Vegas  
November 3, 2014  
Jeff Lerud, Project Manager

**NEVADA DOT**  
nevadadot.com



- Background of HOV Plan
- Purpose of Update
- Proposed HOV System
- Next Steps

**NEVADA DOT**  
nevadadot.com

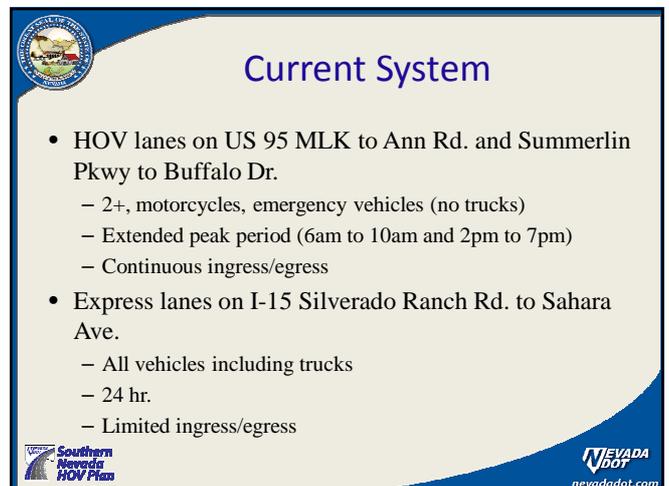


**HOV Plan Background**

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities



**NEVADA DOT**  
nevadadot.com

**Current System**

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
  - 2+, motorcycles, emergency vehicles (no trucks)
  - Extended peak period (6am to 10am and 2pm to 7pm)
  - Continuous ingress/egress
- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress

**NEVADA DOT**  
nevadadot.com





## HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak period or 24 hr.
  - Vehicle eligibility
  - Ingress/egress – continuous or limited
  - Direct access connectors and flyover



nevadadot.com



## Thank you!

## Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



nevadadot.com

## PUBLIC OUTREACH SUMMARY

Date: 11/03/2014	Time: 10:30 to 11:30am
Meeting Title: City of North Las Vegas staff Briefing	
Location: City Hall Room 201, CNLV	
Attendees: Jennifer Doody, Alyssa Reynolds, Curt Kroeke and Dale Daffern of CNLV staff; Jeff Lerud, NDOT Project Manager; and John Karachepone (Jacobs)	
Meeting Summary	
Discussed the recommendations of the SNVHOV Plan Update	
Comments	
	<i>Comment/Response</i>
1. The cut-off date for City Council information will be provided by Jennifer and Alyssa.	
2. The Plan does not show HOV lanes within most parts of the City. Explain why the HOV lane is not triggered along I-15 and Northern Beltway within the City limits.	Three primary reasons: 1. HOV not warranted on most freeways per the criteria established: The GP lanes have capacity to serve the forecasted trips. 2. North 5 <sup>th</sup> Street seems to attract most of the HOV trips and not I-15 due to land use pattern in the City whereby I-15 has light industrial uses along it through the City. 3. HOV lanes are not precluded into the future (beyond the year 2035 planning horizon of this Plan Update).
3. The Park n Ride connections need not be highlighted in the presentation; there is no need to change any of the previously prepared maps and figures.	Acknowledged.
4. Focus on operational changes as that will impact CNLV residents who use the HOV system.	Acknowledged.
5. Why was a direct connector to North 5 <sup>th</sup> Street from I-15 not warranted?	This is a possibility except that there are some geometric challenges in providing such a connection. The proximity of the Carey Avenue overpass and its intersection with North 5 <sup>th</sup> makes the connection very challenging. In this planning stage it was decided that the most practical solution was to end the HOV lane prior to Lake Mead Boulevard and allow HOV vehicles to use lake Mead Boulevard to connect to North 5 <sup>th</sup> Avenue
Actions	
1. Make a presentation on the HOV Plan to City Council.	



## **Southern Nevada HOV Plan Update**

**City of Las Vegas staff briefing**

**Public Works Sandstone Conference Room: 8<sup>th</sup> Floor**

**October 28, 2014**

**4:00PM to 5:00PM**

### **AGENDA**

1. Introductions
2. Purpose and objective of Meeting
  - Status of Plan
  - Receive Comments
  - Potential Councilmember briefings?
  - City Council meeting Presentation on December 3<sup>rd</sup>?
3. Overview of HOV Plan update
  - PowerPoint Presentation planned for Council meeting
4. Conceptual Design and Plan
  - a) I-15 at Meade Avenue Alignment
  - b) I-15 at Neon Gateway (part of project Neon)
  - c) I-515 at Maryland Parkway
  - d) US95 at Smoke Ranch
  - d) US95 at Elkhorn Road

10/28/2014 SNVHOU Plan Update Meeting:

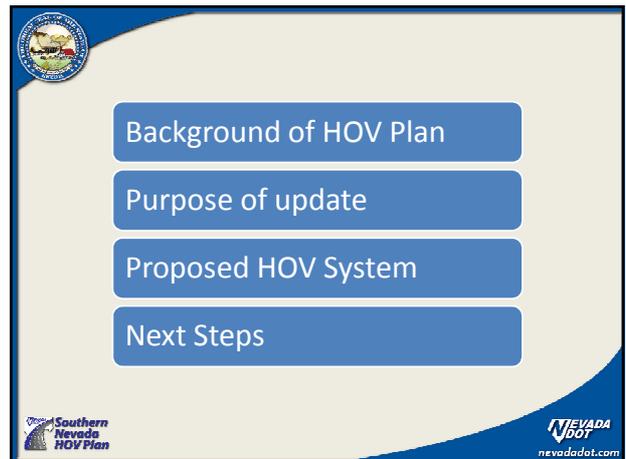
<u>Name</u>	<u>Agency / Department</u>	<u>Phone #</u>
John Karachopoulos	JACOBS	702 938 5508
Jeff Leland	NDOT	(775) 888-7589
JORDANA WAOSWORTH	CLV	702-229-2214
David Barker	CLV	702-229-2324
Lucien Puet	CLV	702-229-6145
O.C. White	CLV	702 229 6902
Greg McDermott	CLV	702 229-2143
Kristina Swallow	CLV	702 229 2194
MIKE JANSSEN	CLV	702 229-4866



**Southern Nevada HOV Plan Update**

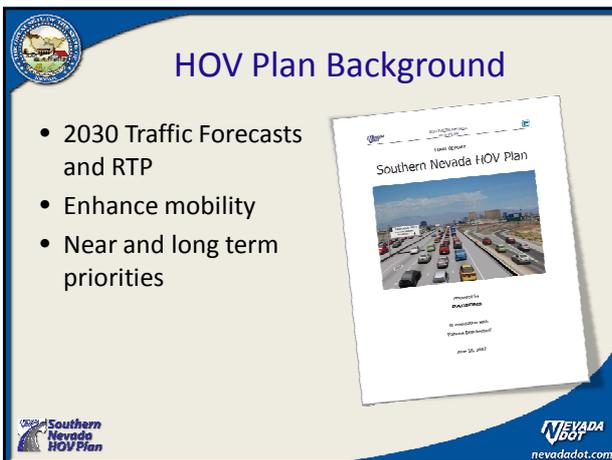
City of Las Vegas  
October 28, 2014  
Jeff Lerud, Project Manager

**Southern Nevada HOV Plan**  
nevadadot.com



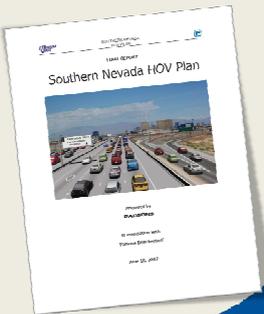
- Background of HOV Plan
- Purpose of update
- Proposed HOV System
- Next Steps

**Southern Nevada HOV Plan**  
nevadadot.com



**HOV Plan Background**

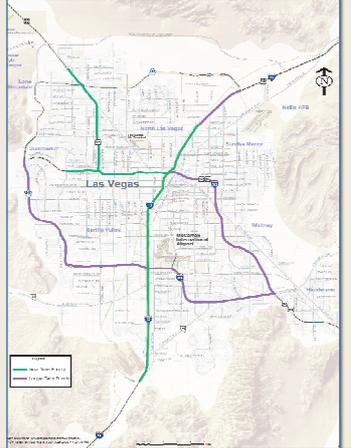
- 2030 Traffic Forecasts and RTP
- Enhance mobility
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**Southern Nevada HOV Plan**  
nevadadot.com



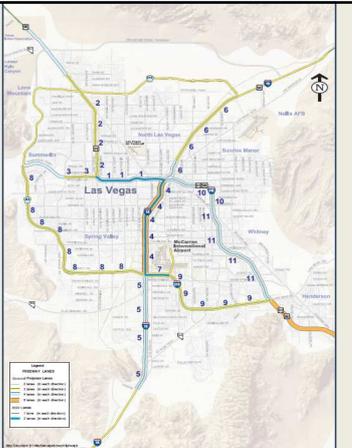
**2007 Plan: Near Term Priority System**



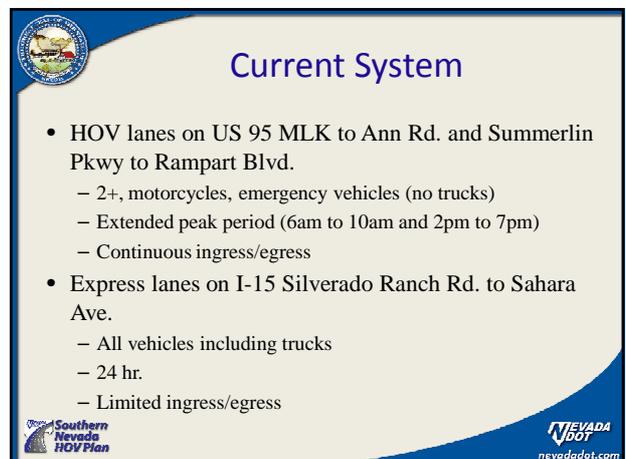
**Southern Nevada HOV Plan**  
nevadadot.com



**2007 Plan: Priority Ranking**



**Southern Nevada HOV Plan**  
nevadadot.com



**Current System**

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- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
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**Southern Nevada HOV Plan**  
nevadadot.com

## HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach




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## Near Term HOV System





nevadadot.com

## Long Term HOV System





nevadadot.com

## HOV System Proposed Recommendations

### Operational Recommendations

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	6 AM to 7 PM
Trucks	Vehicles with more than two axes ( or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency vehicles	Those responding to an emergency are eligible
Dead-heading public transit buses	Eligible
Low-emission and energy-efficient vehicles	Not eligible



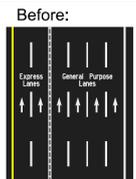

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## HOV System Proposed Recommendations

### Express Lane Conversion

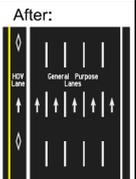
- Need HOV connectivity between I-15 and US-95
- Convert Express Lanes to HOV
- 2 Express Lanes become 1 HOV and 1 GP
- Limited access for HOV lane

Before:



Express Lanes

After:



HOV Lane/  
GP Lanes

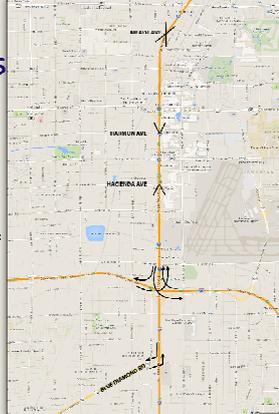



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## HOV Proposed Recommendations

### HOV Direct Access Ramps (Between St. Rose/Sahara)

- Direct connects to arterial
  - 7 locations screened: St Rose, Blue Diamond, Warm Springs, Sunset, Hacienda, Harmon, Meade
  - 4 locations proposed: Blue Diamond, Hacienda, Harmon, Meade
- HOV to HOV flyover
  - Propose I-15/I-215 to/from east (Airport) AND to/from the west





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## HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak hour or 24 hr.(recommended)
  - Vehicle eligibility
  - Ingress/egress – continuous or limited (recommended)
  - Direct access connectors and flyover



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## Thank you!

## Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



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## PUBLIC OUTREACH SUMMARY

Date: October 28, 2014	Time: 4 to 5pm
Meeting Title: Southern Nevada HOV Plan Update CLV staff briefing	
Location: City of Las Vegas Public Works Sandstone Conference Room, 8 <sup>th</sup> Floor	
Attendees: Joanna Wadsworth, David Bowers, Lucien Paet, O C White, Greg McDermott, Kristina Swallow, Mike Janssen (all City of Las Vegas); Jeff Lerud (NDOT Project Manager); John Karachepone	
<b>Meeting Summary</b>	
Discussed the recommendations of the SNVHOV Plan Update; Walked through and discussed PowerPoint presentation	
<b>Comments</b>	
	<i>Comment/Response</i>
1. Why do you want to present to City Council?	The Department would like to keep City Council informed on the HOV Plan and its update including potential changes to the freeway system and its operations.
2. The northern terminus at Elkhorn provides a good location to connect to the Park-n-Ride facility and functions well for carpools.	The proposed direct connects' proximity to several community facilities is also recognized.
3. Staff is concerned about future compatibility with HOV lanes north of Elkhorn – would like to see the HOV lane extent to a future Sheep Mountain Parkway	The direct connect ramp at Elkhorn is to be designed such that the HOV lanes can be extended further north when needed
4. Clarify if the time of HOV lane operations will be limited to weekdays or all 7-days of the week	Depending on the final recommendations (after taking into account all the input we receive from our public outreach efforts), we will make the operational limitations clear.
5. Will energy efficient vehicles be eligible to use the HOV lanes?	They are eligible if there are two or more occupants just like any other vehicle.
6. What is the advantage of direct connect access to the HOV lane?	HOV vehicles do not have to weave through lanes to access the HOV lanes. Additionally, carpool and transit vehicles can reduce their travel time when the direct connect access is to a carpool lot or transit center.
7. The drawing should be larger – maybe on a board; the slide showing number of lanes (express and HOV) should be corrected and the last but one slide seems to contradict the operational recommendations slide (peak hour vs. 24 hr)	The slides will be updated and a Board will be prepared so that the change of express lane to HOV lane is more easily seen.
<b>Actions</b>	
1. Make a presentation on the HOV Plan to City Council.	

Boards and Councils Materials



## **Southern Nevada HOV Plan Update**

### **Nevada Resort Association Briefing**

**November 03, 2014**

**3:30PM to 4:30PM**

#### **AGENDA**

1. Introductions

2. Purpose and objective of Meeting

Status of Plan

Receive Comments

Resorts briefing?

Possible Presentation to NRA Board of Directors?

3. Overview of HOV Plan update

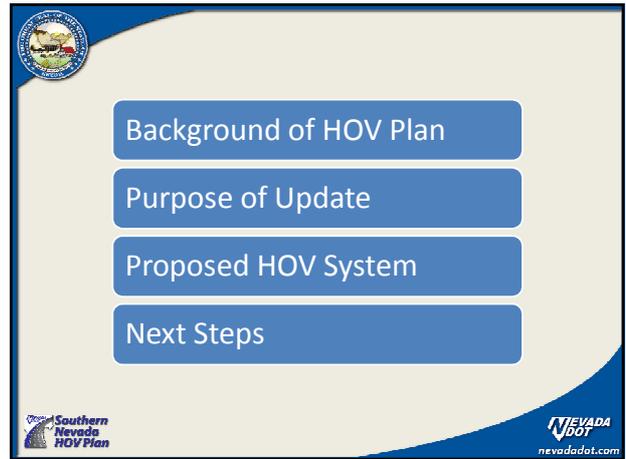
PowerPoint Presentation planned for Board meeting



**Southern Nevada HOV Plan Update**

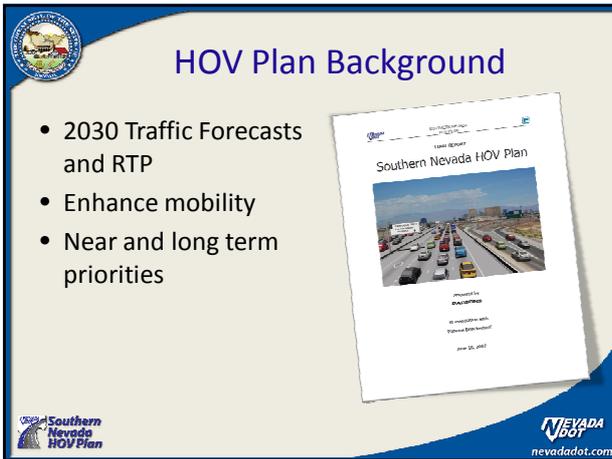
Nevada Resort Association  
November 3, 2014  
Jeff Lerud, Project Manager

**Southern Nevada HOV Plan**  
nevadadot.com



- Background of HOV Plan
- Purpose of Update
- Proposed HOV System
- Next Steps

**Southern Nevada HOV Plan**  
nevadadot.com



**HOV Plan Background**

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities



**Southern Nevada HOV Plan**  
nevadadot.com



**2007 Plan**



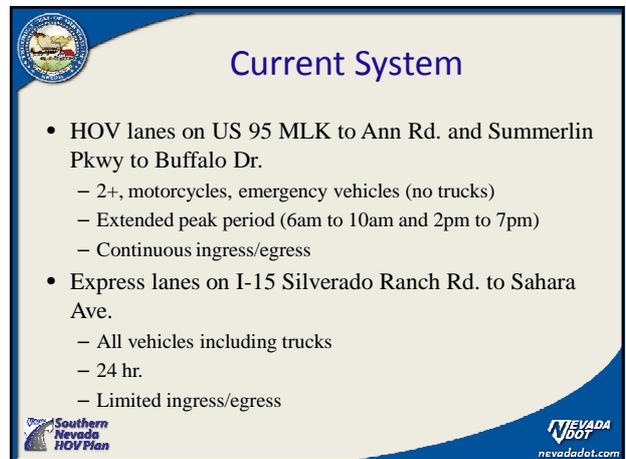
**Southern Nevada HOV Plan**  
nevadadot.com



**2007 Plan: Priority Ranking**



**Southern Nevada HOV Plan**  
nevadadot.com



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  - 24 hr.
  - Limited ingress/egress

**Southern Nevada HOV Plan**  
nevadadot.com

## HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach




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## Near Term HOV System





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## Long Term HOV System





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## HOV System Proposed Recommendations

### Operational Recommendations

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	24-hours, 7 days of the week
Trucks	Vehicles with more than two axles (or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency vehicles	Those responding to an emergency are eligible
Public transit buses	Eligible (including dead-heading buses)
Single-occupant low-emission and energy-efficient vehicles	To be studied
Access Type	Limited Access



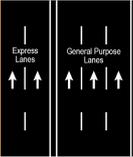

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## HOV System Proposed Recommendations

### Express Lane Conversion

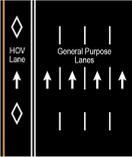
- Need HOV connectivity between I-15 and US-95
- Convert Express Lanes to HOV
- 2 Express Lanes become 1 HOV and 1 GP
- Limited access for HOV

**Before:**



Express Lanes

**After:**



HOV Lane/  
GP Lanes

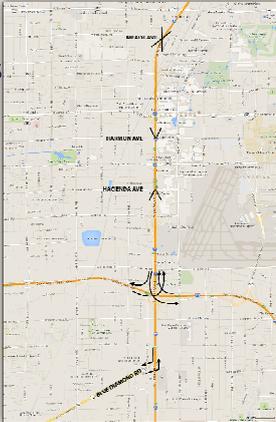



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## HOV Proposed Recommendations

### HOV Direct Access Ramps (Between St. Rose/Sahara)

- Direct connects to arterial
  - 7 locations screened: St Rose, Blue Diamond, Warm Springs, Sunset, Hacienda, Harmon, Meade
  - 4 locations proposed: Blue Diamond, Hacienda, Harmon, Meade
- HOV to HOV flyover
  - Propose I-15/I-215 to/from east (Airport) AND to/from the west





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## HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak period or 24 hr.
  - Vehicle eligibility
  - Ingress/egress – continuous or limited
  - Direct access connectors and flyover



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## Thank you!

## Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



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## PUBLIC OUTREACH SUMMARY

Date: November 3, 2014	Time: 3:30 to 4:30pm
Meeting Title: Southern Nevada HOV Plan Update Briefing	
Location: Nevada Resort Association Conference Room, 900 S Pavilion Center Drive, 89144	
Attendees: Virginia Valentine, Nevada Resort Association Tracy Larkin-Thomason and Jeff Lerud (NDOT), John Karachepone (Jacobs)	
<b>Meeting Summary</b>	
Discussed the recommendations of the SNVHOV Plan Update with specific details on the proposed drop ramps and HOV system along I-15 in the Resort Corridor.	
<b>Comments</b>	
	<i>Comment/Response</i>
1. Summerlin Parkway immediately west of Buffalo Drive where the current HOV lane ends experiences a lot of crashes. HOV lanes and its termini should be first made safer before adding new lanes or expanding the system	This location has a cable stayed barrier rail between the eastbound and westbound lanes. The expansion, termini and locations for entry and exit into the HOV lanes will be subject to a more detailed operational study before they are finalized for the expanded system that is the subject of this HOV Plan Update.
2. Jeff asked if NDOT could make the same presentation to the Resort Association Board	Virginia responded that she would check and get back to Jeff or John if NDOT needed to make a presentation to the Board on the HOV Plan Update or if there was a need to meet with individual resorts who were interested in the topic.
<b>Actions</b>	
1. Virginia Valentine will inform NDOT if any additional meetings or presentations are needed to the NRA Board or to interested individual resorts.	

**REGIONAL TRANSPORTATION COMMISSION  
OF  
SOUTHERN NEVADA**

**AGENDA ITEM**

Metropolitan Planning Organization <input checked="" type="checkbox"/>	Transit <input type="checkbox"/>	Administration and Finance <input type="checkbox"/>
<b>SUBJECT:</b> SOUTHERN NEVADA HIGH-OCCUPANCY VEHICLE PLAN		
<b>PETITIONER:</b> TINA QUIGLEY, GENERAL MANAGER REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA		
<b>RECOMMENDATION BY PETITIONER:</b> THAT THE EXECUTIVE ADVISORY COMMITTEE RECEIVE INFORMATION ON THE NEVADA DEPARTMENT OF TRANSPORTATION UPDATE OF THE SOUTHERN NEVADA HIGH-OCCUPANCY VEHICLE PLAN (FOR POSSIBLE ACTION)		
<b>GOAL:</b> IMPLEMENT TRANSPORTATION SYSTEMS THAT IMPROVE AIR QUALITY IN SOUTHERN NEVADA		

**FISCAL IMPACT:**

None by this action

**BACKGROUND:**

The Nevada Department of Transportation (NDOT) is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. Implementation of HOV or carpool lanes is one method of maintaining mobility in congested freeway corridors. The current HOV Plan was completed in 2007 and the purpose of the update is to bring the document into line with current conditions in Southern Nevada by integrating recently completed projects as well as the anticipated impact of Project NEON on the HOV system.

The HOV Plan update has evaluated the near-term HOV system in Southern Nevada, including the proposed Project NEON's direct connector between I-15 and US 95, and the related conversion of the existing I-15 express lanes to one HOV lane and one additional general purpose lane between Russell Road and Sahara Ave. In addition, evaluations and recommendations for the long-term HOV system, direct access ramp locations, and operation of the HOV system are included. The analysis utilizes the Regional Transportation Commission of Southern Nevada's (RTC) 2035 Regional Travel Demand Model with the Mode Choice Element. The NDOT team is working with RTC staff to develop the Plan.

NDOT staff will make a presentation on the HOV Plan update and will be available to answer questions.

Respectfully submitted,

---

MARTYN JAMES  
Director of Planning Services

mj

Non-Consent



**Southern Nevada HOV Plan Update**

Executive Advisory Committee  
September 25, 2014  
Jeff Lerud, Project Manager

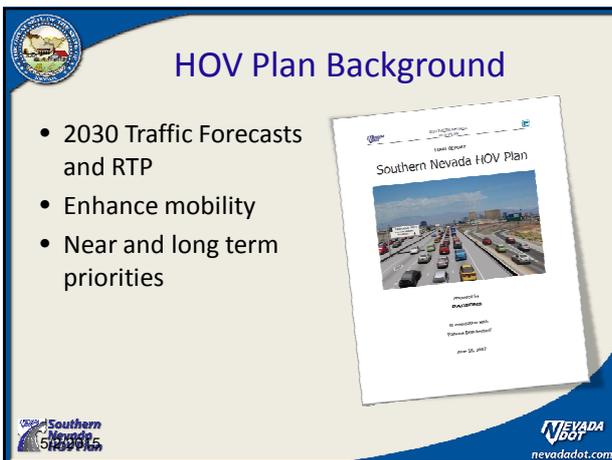
Southern Nevada HOV Plan  
nevadadot.com



**Agenda**

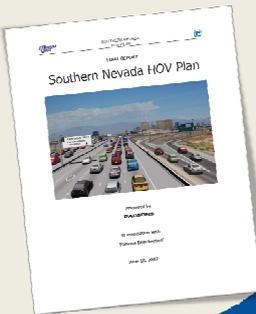
- Background of HOV Plan
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- Next Steps

Southern Nevada HOV Plan  
nevadadot.com



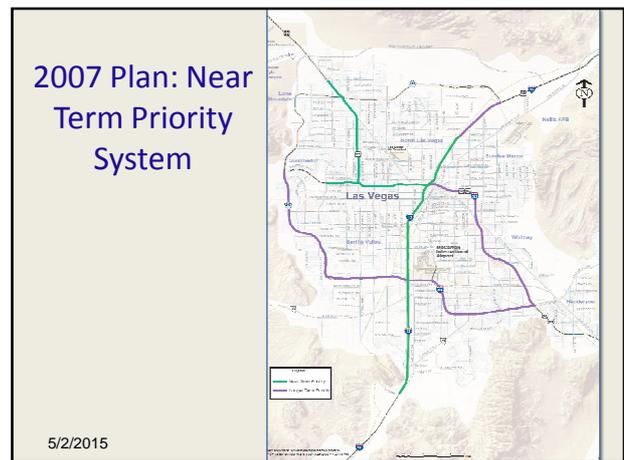
**HOV Plan Background**

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities

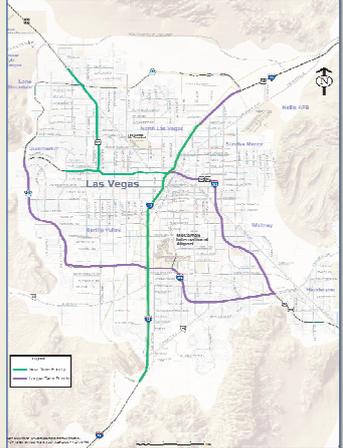


Southern Nevada HOV Plan

Southern Nevada HOV Plan  
nevadadot.com



**2007 Plan: Near Term Priority System**



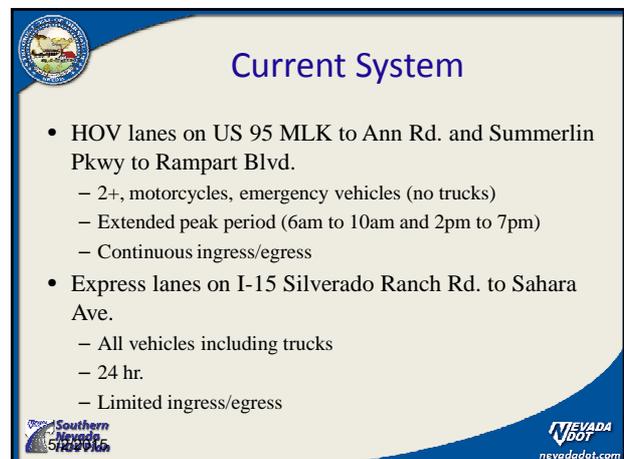
5/2/2015



**2007 Plan: Priority Ranking**



5/2/2015



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Southern Nevada HOV Plan  
nevadadot.com

### HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan
- Workshops and Public Outreach





### HOV Plan Update

- Phase 1 HOV system near term priorities (NEON)
  - Account for the near term constructed/planned projects
  - Identify HOV needs within NEON area
  - HOV Direct Connector from US95 to I-15
  - Express Lane conversion feasibility





### HOV Plan Update

- Phase 1 HOV system near term priorities (I-15)
  - Evaluate the system near term priorities on I-15
  - Limits of Blue Diamond to Sahara
  - Re-evaluate direct access points
  - Preliminary design level line work
  - Preliminary cost estimates





### HOV Plan Update

- Update overall HOV plan
  - Re-evaluation and validation of 2007 HOV Plan
  - Performance Measures for HOV implementation
  - Conceptual design for up to 3 direct access points





### HOV Plan Update

- Workshops and Public Outreach
  - Today
  - Agency and stakeholder workshops
  - Receive input/feedback from stakeholders





### HOV System Proposed Recommendations

2025 Number of HOV Lane Requirements

Location	Required Number of HOV Lanes	
	Northbound	Southbound
HOV flyover	1	1
HOV Gateway	1	1
I-15 south of the HOV flyover	1	1
I-15 south of Sahara Avenue <sup>1</sup>	1	1
US 95 west of flyover ramps <sup>2</sup>	1	1

<sup>1</sup>This is where Project Neon ties into I-15 on the south. This location also represents the volumes for the "Gap".  
<sup>2</sup>This is where Project Neon ties into US 95 on the west.









## HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak hour or 24 hr.(recommended)
  - Vehicle eligibility
  - Ingress/egress – continuous or limited (recommended)
  - Direct access connectors and flyover



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## Thank you!

## Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



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**Item:**

**\*\*29. APPROVE REVISIONS TO THE RTC POLICIES AND PROCEDURES (FOR POSSIBLE ACTION)**

**Comments:**

After distributing a handout [attached], Mr. Paul Judd, Manager of Engineering for the Regional Transportation Commission of Southern Nevada (RTC), stated RTC staff completed policy revisions to meet new Federal requirements.

**Motion:** Mr. Joe Yatson made the motion to accept the recommended changes as presented.

**Vote/Summary:**

9 Ayes. 0 Nays. The motion carried.

**Item:**

**\*\*30. RECEIVE INFORMATION ON THE NEVADA DEPARTMENT OF TRANSPORTATION UPDATE OF THE SOUTHERN NEVADA HIGH-OCCUPANCY VEHICLE PLAN (FOR POSSIBLE ACTION)**

**Comments:**

On behalf of the Nevada Department of Transportation (NDOT), Mr. John Karachepone, Project Manager for JACOBS, provided the Executive Advisory Committee (Committee) with an update on the Southern Nevada High-Occupancy Vehicle (HOV) Plan Update. Mr. Karachepone explained that the Plan's background is based on the regional model and includes short and long-term elements. He then added that he sought the Committee's feedback on the Plan.

The Committee recommended Mr. Karachepone address the following inquiries as part of his efforts:

- Submitted by Ms. Stephanie Garcia-Vause from the City of Henderson: How do you plan to obtain public feedback?

Responded by John John Karachepone from JACOBS: The Department was going to make the same presentation to City Councils and County Boards and obtain feedback from elected public representatives. Additionally, The Department planned to make the presentation to the Resort Association, who are major stakeholders along the resort corridor.

- Submitted by Mr. Joe Yatson from the Clark County Public Works: Have there been any studies on the existing HOV lanes use on US-95?

Responded by John John Karachepone from JACOBS: The HOV Plan update examined current HOV lane usage and used that information as an input in forecasting HOV use into the future. HOV lane use on US 95 was expected to increase by at least 30 percent when the HOV system is extended to I-15 with Project Neon. There have not been any other studies by NDOT that have exclusively examined existing HOV lane use.

- Submitted by Mr. Rob Herr from the City of Henderson: Please address the Beltway, the connection to Summerlin Parkway and its connection to the west; and similarly the connection between I-215 and I-515.

Responded by John John Karachepone from JACOBS: A HOV lane was not justified or warranted at the western end of Summerlin Parkway based on the analysis completed. The project team has worked with the City of Las Vegas in determining the appropriate terminus of the HOV lane on Summerlin Parkway. On I-515 near I-215, our figure shows the start of the

HOV lanes after the ramps to/from Lake Mead join I-515. The actual location of the start/terminus of the HOV system will be based on design considerations.

- Submitted by Ms. Nancy Amundsen from Clark County Comprehensive Planning: What changes can be expected to occur to existing express lanes to provide the HOV lane?

Responded by John John Karachepone from JACOBS: The project team recommendation is to provide 1 HOV lane and 4 regular (GP) lanes in each direction when project Neon opens to traffic. One of the existing express Lanes will revert to a GP lane. The existing express lanes are essentially managed lanes with eligibility for all vehicles including trucks that travel the entire distance of the lanes. When we have HOV lanes, single-occupant vehicles including trucks that currently use the express lanes will not be eligible and will then need to be accommodated in GP lanes, therefore the provision of the fourth GP lane. Conversely, some HOV's now using the GP lanes will move to the HOV lane to take advantage of travel time savings available by using the HOV system.

- Submitted by Mr. Tom Perrigo from the City of Las Vegas: Is there any analysis to evaluate low emission and energy efficient vehicle use of the HOV lanes?

Responded by John John Karachepone from JACOBS: Yes, the team did look into that. The number of low emission and energy efficient vehicles continues to grow rapidly in southern Nevada such that the proposed single HOV lane system would quickly be overwhelmed and thereby, we would lose the travel time advantage that the lane provides. In the near term it is not possible to provide 2 HOV and 4 regular lanes due to several geometric constraints. Therefore the recommendation is that low emission and energy efficient vehicles not be eligible to use the HOV system at this time.

**Motion:** No vote was necessary.

**Vote/Summary:** No vote was taken.

**Item:**

**\*\*31. CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION**

**Comments:**

**Motion:** No motion was necessary

**Vote/Summary:** No vote was taken.

The meeting adjourned at 9:40 a.m.

Respectfully submitted,

DocuSigned by:

*La Shannon Spencer*

037B894AFDB54CB...

Recording Secretary

DocuSigned by:

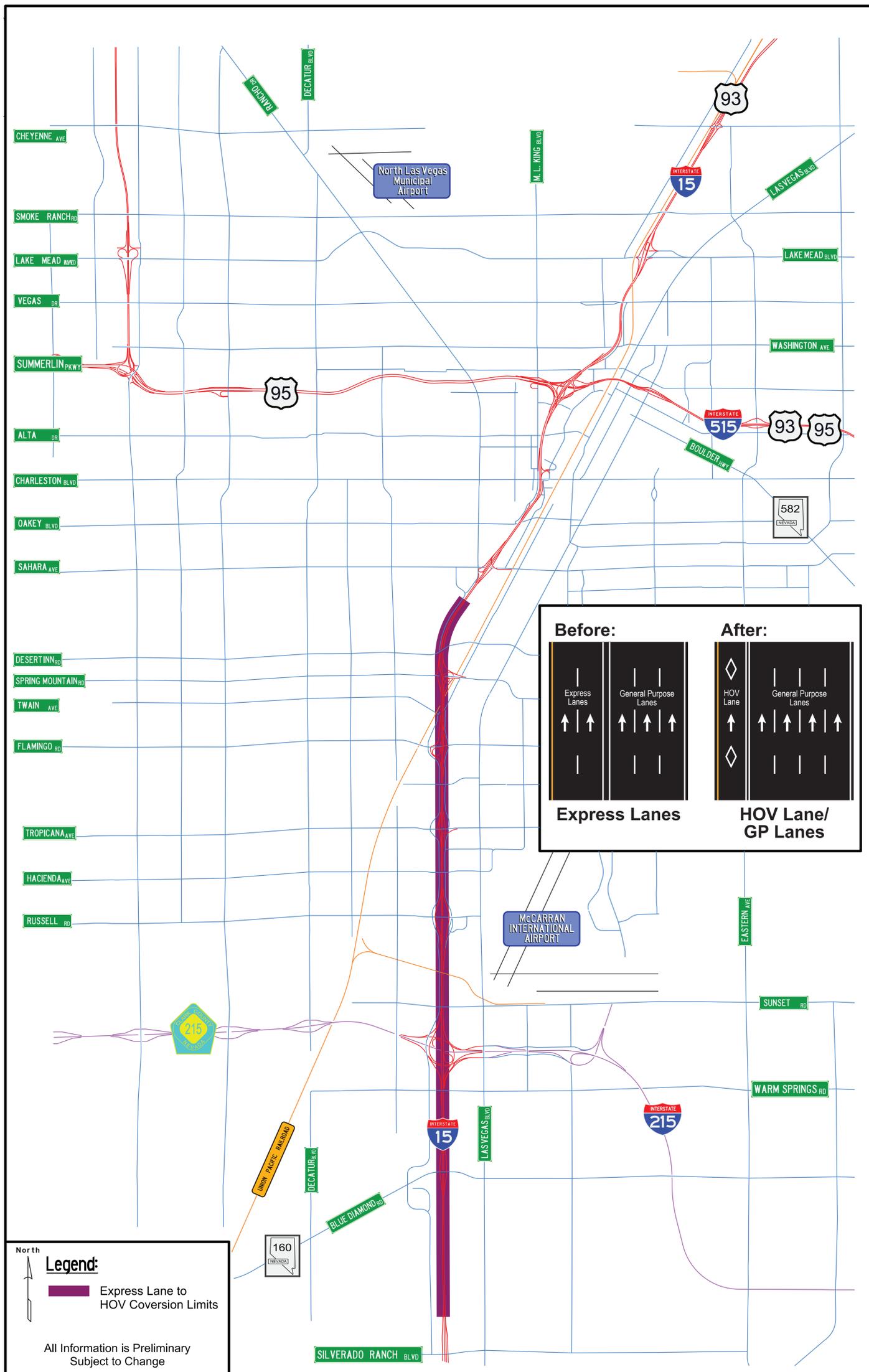
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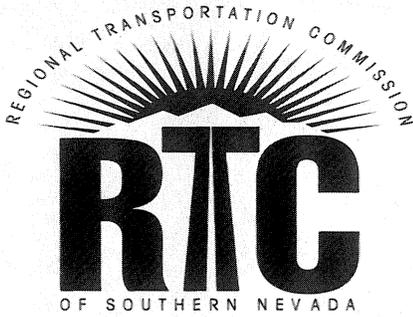
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Description Secretary



# Express Conversion Limits



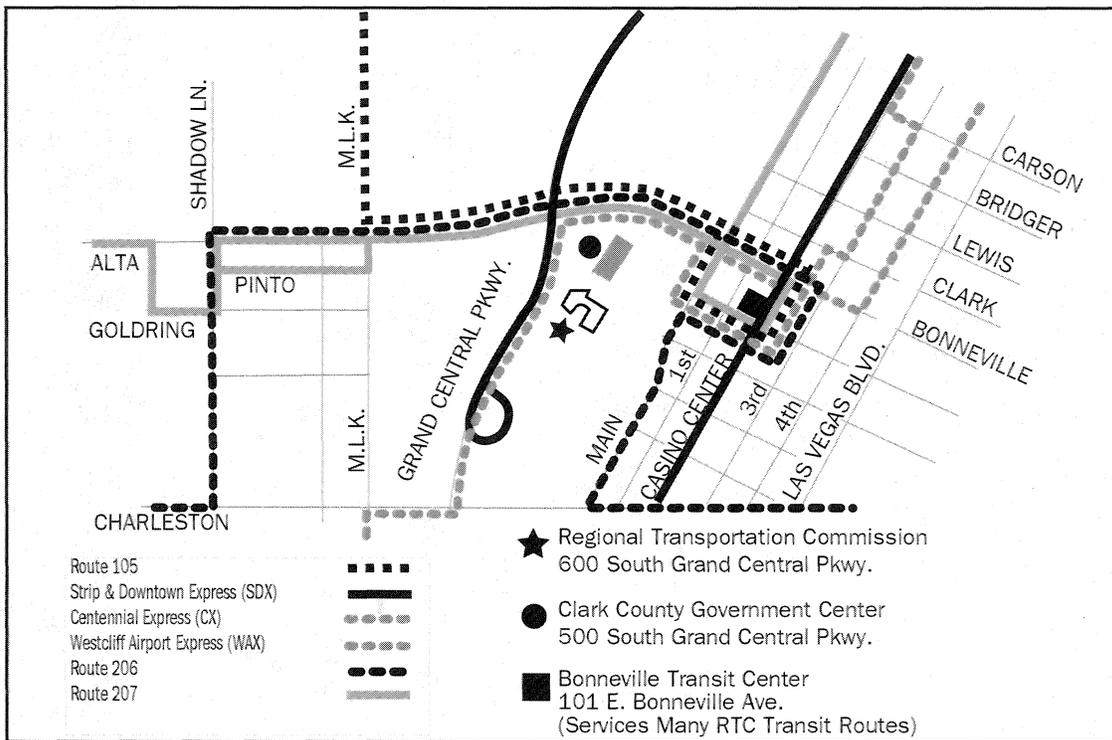


**NOTICE AND AGENDA OF  
PUBLIC MEETING**

**REGIONAL TRANSPORTATION  
COMMISSION  
OF SOUTHERN NEVADA**

**8:45 A.M. OCTOBER 9, 2014**

**CLARK COUNTY COMMISSION CHAMBERS  
500 S. GRAND CENTRAL PARKWAY  
LAS VEGAS, NV 89155  
(702) 676-1500**



*This agenda with full backup is available at the Regional Transportation Commission Administration Building, 600 S. Grand Central Pkwy, Las Vegas, Nevada, the Regional Transportation Commission's website, <http://www.rtcnv.com> or by contacting Marin DuBois at (702) 676-1836.*

**THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED IN THE FOLLOWING LOCATIONS:**

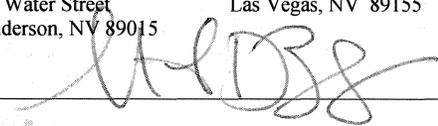
Clark County Government Center  
500 S. Grand Central Pkwy.  
Las Vegas, NV 89155

City of Henderson  
Office of the City Clerk  
240 Water Street  
Henderson, NV 89015

CC Regional Justice Center  
200 Lewis Ave.  
Las Vegas, NV 89155

RTC  
600 S. Grand Central Pkwy.  
Las Vegas, NV 89106

RTC website  
[www.rtcnv.com](http://www.rtcnv.com)

BY: 

If you wish to speak on an item appearing on this agenda, please fill out a CITIZENS PARTICIPATION COMMENT CARD, which is located in front of the Commission Chambers, and submit the comment card to the designated RTC staff member in the Commission Chambers. If you wish to speak to the RTC Board of Commissioners about items within the Board's jurisdiction, but not appearing on the agenda, you must wait until the last CITIZENS PARTICIPATION comment period listed at the end of the agenda. Comments will be limited to three (3) minutes for both CITIZENS PARTICIPATION comment periods. Please step up to the speaker's podium, clearly state your name and please spell your first and last names for the record.

**Items 1 and 5 through 38 are items for possible action. Items 2 through 4, and 39 are discussion items and no action can be taken.** Please be advised that the Regional Transportation Commission of Southern Nevada has the discretion to take items on the agenda out of order, combine two or more agenda items for consideration, remove an item from the agenda or delay discussion relating to an item on the agenda any time.

1. ACTION TO CALL MEETING TO ORDER AND TO APPROVE THE AGENDA (FOR POSSIBLE ACTION)
2. RECEIVE THE GENERAL MANAGER'S REPORT
3. RECEIVE THE NEVADA DEPARTMENT OF TRANSPORTATION DIRECTOR'S REPORT
4. CONDUCT A COMMENT PERIOD FOR CITIZENS PARTICIPATION: No action can be taken on any matter discussed under this item, although the Commission can direct that it be placed on a future agenda.

#### **CONSENT AGENDA (ITEMS 5 THROUGH 37)**

*All items marked with asterisks (\*\*) are considered by the Regional Transportation Commission to be routine and may be acted upon in one motion. However, the Commission may discuss any consent item individually if requested by a Commission member or a citizen when the consent agenda is considered for approval.*

#### **MINUTES**

- \*\*5. APPROVAL OF MINUTES: Meeting of September 11, 2014 (FOR POSSIBLE ACTION)**

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#### **METROPOLITAN PLANNING ORGANIZATION**

##### Streets and Highways

- \*\*6. APPROVE MODIFICATIONS TO SPECIFICATION NO. 101, "DEFINITIONS AND TERMS" OF THE UNIFORM STANDARD SPECIFICATIONS TO MODIFY THE DEFINITION OF MAJOR CONTRACT ITEM AND ADD NEW DEFINITIONS FOR DEWATERING, NOMINAL DIAMETER, AND SERVICE CONNECTION (FOR POSSIBLE ACTION)**



**Southern Nevada HOV Plan Update**  
 Regional Transportation Commission  
 October 9, 2014  
 Jeff Lerud, Project Manager

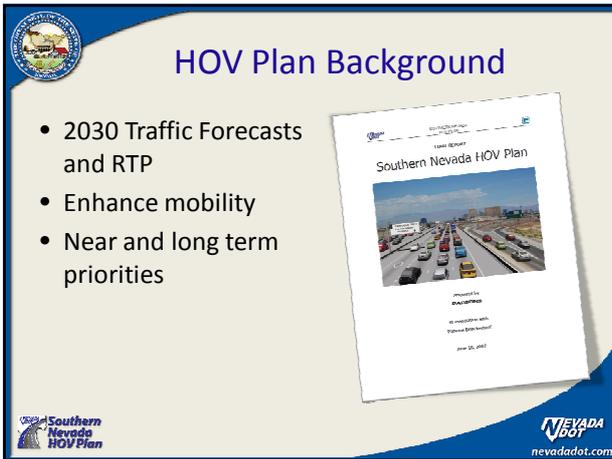
**Southern Nevada HOV Plan**  
 nevadadot.com



**Agenda**

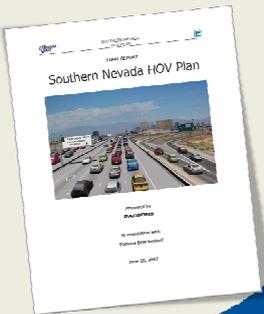
- Background of HOV Plan
- Purpose of update
- Proposed HOV System
- Next Steps

**Southern Nevada HOV Plan**  
 nevadadot.com



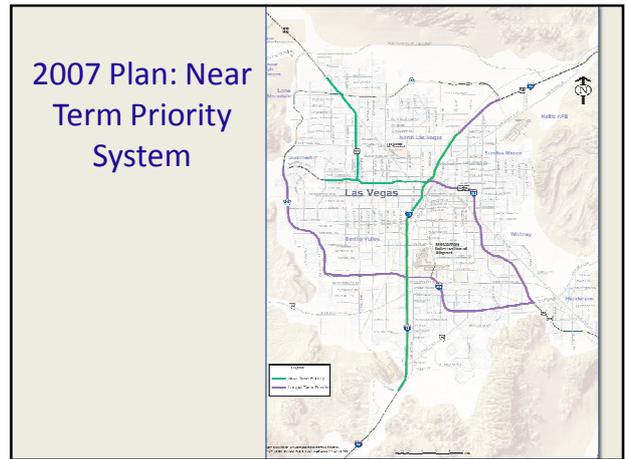
**HOV Plan Background**

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities



**Southern Nevada HOV Plan**  
 Prepared by: TRANSPAC  
 In cooperation with: REGIONAL TRANSPORTATION COMMISSION  
 June 20, 2007

**Southern Nevada HOV Plan**  
 nevadadot.com



**2007 Plan: Near Term Priority System**



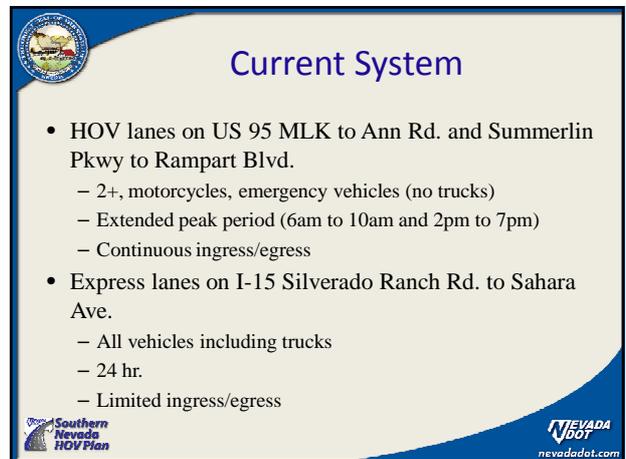
**Southern Nevada HOV Plan**  
 nevadadot.com



**2007 Plan: Priority Ranking**



**Southern Nevada HOV Plan**  
 nevadadot.com



**Current System**

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Rampart Blvd.
  - 2+, motorcycles, emergency vehicles (no trucks)
  - Extended peak period (6am to 10am and 2pm to 7pm)
  - Continuous ingress/egress
- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress

**Southern Nevada HOV Plan**  
 nevadadot.com

### HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan
- Workshops and Public Outreach




nevadadot.com

### HOV Plan Update

- Phase 1 HOV system near term priorities (NEON)
  - Account for the near term constructed/planned projects
  - Identify HOV needs within NEON area
  - HOV Direct Connector from US95 to I-15
  - Express Lane conversion feasibility




nevadadot.com

### HOV Plan Update

- Phase 1 HOV system near term priorities (I-15)
  - Evaluate the system near term priorities on I-15
  - Limits of Blue Diamond to Sahara
  - Re-evaluate direct access points
  - Preliminary design level line work
  - Preliminary cost estimates




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### HOV Plan Update

- Update overall HOV plan
  - Re-evaluation and validation of 2007 HOV Plan
  - Performance Measures for HOV implementation
  - Conceptual design for up to 3 direct access points




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### HOV Plan Update

- Workshops and Public Outreach
  - Today
  - Agency and stakeholder workshops
  - Receive input/feedback from stakeholders




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### HOV System Proposed Recommendations

2025 Number of HOV Lane Requirements

Location	Required Number of HOV Lanes	
	Northbound	Southbound
HOV flyover	1	1
HOV Gateway	1	1
I-15 south of the HOV flyover	1	1
I-15 south of Sahara Avenue <sup>1</sup>	1	1
US 95 west of flyover ramps <sup>2</sup>	1	1

<sup>1</sup>This is where Project Neon ties into I-15 on the south. This location also represents the volumes for the "Gap".  
<sup>2</sup>This is where Project Neon ties into US 95 on the west.




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## HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak hour or 24 hr.(recommended)
  - Vehicle eligibility
  - Ingress/egress – continuous or limited (recommended)
  - Direct access connectors and flyover



nevadadot.com



## Thank you!

## Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



nevadadot.com

**Southern Nevada HOV Plan Update  
Slide Show Commentary/Notes**

1. Thank you for this opportunity – I appreciate your time.
2. Today my intent is to present the status of the Southern Nevada High Occupant Vehicle Update and to receive any comments you may have on our proposed system. As a result, I will focus on the proposed systems rather than the other items on this agenda.
3. The original HOV Plan was developed in 2006 and published in 2007. It used the model associated with the adopted Regional Transportation Plan available at that time. The Department has previously presented and opened for discussion HOV Lanes in Southern Nevada during various public meetings supporting large NDOT planning projects in Las Vegas from 2006 to today.
4. The near-term priority system identified in the 2007 plan is shown here.
5. The 2007 Plan included a priority ranking of projects shown here. I'd like to highlight the fact that the Department has now essentially completed priority ranked projects 1, 2, part of 3, and are now moving towards implementing ranked project 4 and part of 5 through the proposed NEON project.
6. We have had HOV lanes in Southern Nevada for awhile, since 2008, so HOV lanes are not a new type of facility in Southern Nevada. The current system includes HOV lanes on US 95 and express lanes on I-15. The express lanes were introduced as an interim improvement until more permanent improvements could be implemented.
7. Since the near term priority system is almost in place. It was an appropriate time to take another look and update the plan based on current conditions. Further RTC has an updated travel demand model that includes mode-choice and HOV capabilities. We worked extensively with RTC staff in using this new model for our plan update.
8. First within the limit of NEON, we needed to clearly articulate what the HOV system should be on I-15 with the planned HOV connection between US95 and I-15.
9. Next as NEON is built, we wanted to re-evaluate the proposed direct access locations and the rest of the I-15 system; confirm that there are no fatal flaws and develop some preliminary cost estimates for programming purposes.
10. Finally, the overall plan needed to be updated including the most recent economic and resulting land-use and travel pattern changes. As we enter the performance evaluation era, we also wanted to ensure that we identified performance measures for our system.
11. Our outreach activities include this presentation today and other meetings, presentations to agencies and major stakeholders in the Valley.
12. From NEON opening to 2025, the analysis suggest the following system; One HOV lane on the proposed HOV flyover connecting between US 95 and I-15 and 1 HOV lane in each direction on I-15.
13. The HOV system in the near term would be from Silverado Ranch Blvd. on I-15 to north of the Northern Beltway on US 95, creating a system of sufficient length to be effective and attractive: Providing travel time savings for HOV's that use the system.
14. In the long term, the HOV system on I-15 is recommended to be 2-lanes in each direction.
15. This will result in a 2 HOV + 4 general purpose lanes configuration in the central resort corridor portion of I-15. On US 95, the system will include 2 HOV lanes between the Rainbow Curve and I-15.
16. Operational recommendations for the initial system; the one that opens with the completion of NEON will continue to have a 2+ occupancy requirement but the hours of operation recommended changes to 6 AM to 7 PM, all daytime hours.
17. Further the system that is expected to be in operation when NEON is completed will see the conversion of the existing express lanes to one that has 1 HOV +4 general purpose lanes. Additionally, we recommend limited access operations with clearly defined locations to enter and exit the freeway.

18. We examined several locations for direct access ramps to the HOV system, 4 are proposed along with system to system connections to I-215 and CC215. Along with the City of Las Vegas staff and RTC staff we have also identified five additional locations for direct access ramps at other locations in the Valley associated with the long term system. These are at Elkhorn and Smoke Ranch on US 95, Maryland Parkway on I-515 and near Sunset Road along the South-West Beltway and the Airport Connector from I-215.
19. Our initial modeling and analysis is complete. We are soliciting your feedback on the HOV system. We expect to complete the Update soon including finalizing the direct access ramp locations and making recommendations on operational issues with the HOV system.
20. Thank you – I'll be happy to answer your questions.



## PUBLIC OUTREACH SUMMARY

Date: October 9, 2014	Time: 8:45 A.M.
Meeting Title: Southern Nevada HOV Plan Update briefing - RTC Board	
Location: Clark County Commission Chambers 500S. Grand Central Parkway Las Vegas, NV 89155	
Attendees: Larry Brown, Clark County, Chair Debra March, City of Henderson, Vice-Chair Chris Giunchigliani, Clark County Steve Ross, City of Las Vegas Lois Tarkanian, City of Las Vegas Allan Litman, City of Mesquite Rudy Malfabon, Nevada Department of Transportation (Ex-officio)	
Meeting Summary	
<p>Mr. Malfabon noted previous inquires received regarding High Occupancy Vehicle (HOV) lanes along Project Neon and introduced Mr. Jeff Lerud, Senior Project Manager for NDOT, to provide the RTC Board of Commissioners (Board) with details concerning the matter.</p> <p>Mr Lerud gave a detailed PowerPoint presentation. He said the original plan was published in June 2007, which showed heavy congestion in the project area forecasted to 2030. As a result, he said HOV lanes were considered and implemented as part of a short-term and long-term plan. He also said the RTC since the 2007 plan, updated its Travel Demand Model, which now includes mode choice elements and that information provides further analysis on how well HOV lanes work. As a result, he said, NDOT is reevaluating its project based on 2035 travel projections and hosting workshops and public outreach meetings in support of the HOV Plan Update. He solicited comments and questions, and responded.</p>	
Comments	
<i>Name</i>	<i>Comment/Response</i>
Commissioner Chris Giunchigliani	<i>Comment</i> – Asked if NDOT had worked with the DMV or driver training programs regarding driver education for HOV lane use. She noted that she sees drivers who do not use lanes properly.
Jeff Lerud	<i>Response</i> – Admitted it was a good question but was uncertain at this point regarding coordination with the DMV.
Commissioner Steve Ross	<i>Comment</i> – Inquired as to the reason to extend the HOV lane hours of use. Steve Ross said he liked the mid-day open use of the HOV lane and asked how NDOT plans to enforce proper HOV compliance.
Jeff Lerud	<i>Response</i> – Extension of HOV lanes hours of use is due to increased travel demand especially with the increased HOV traffic that is expected to use the system with the connection of US-95 HOV lane to the proposed HOV lane on I-15. NDOT will be working with DMV regarding HOV compliance and enforcement.
Commissioner Steve Ross	<i>Comment</i> – He also wanted to know if there is increasing travel volume in North Las Vegas that would warrant an HOV lane along I-15 in North Las Vegas.



## PUBLIC OUTREACH SUMMARY

Jeff Lerud

*Response* – Truck traffic dilutes HOV use along I-15 in North Las Vegas, and it is not expected that there will be HOV demands in that area due to land use patterns through 2035.

Commissioner Larry Brown

*Comment* – Asked if NDOT has right-of-way for the planned HOV lane expansions separate from Project Neon?

Jeff Lerud

*Response* – When extending to two lanes in some parts of the project, right-of-way will be needed to make expansions. Along US 95 there is generally enough right-of-way. Along I-515 there are several locations where additional right-of-way will be needed.

### Actions

1. NDOT is to work with the Department of Motor Vehicles (DMV) to update the driver handbook and in education and enforcement of the proposed HOV lanes.

**AGENDA**

**JOINT MEETING OF THE  
CLARK COUNTY BOARD OF COMMISSIONERS  
CLARK COUNTY WATER RECLAMATION DISTRICT BOARD OF TRUSTEES  
UNIVERSITY MEDICAL CENTER OF SOUTHERN NEVADA BOARD OF TRUSTEES  
9:00 AM TUESDAY, DECEMBER 16, 2014  
CLARK COUNTY COMMISSION CHAMBERS, GOVERNMENT CENTER  
500 SOUTH GRAND CENTRAL PARKWAY, LAS VEGAS, NEVADA**

**This meeting has been properly noticed and posted  
in the following locations:**

CC Government Center 500 S. Grand Central Pkwy. Las Vegas, NV (Principal Office)	Regional Justice Center 200 Lewis Ave, 1 <sup>st</sup> Fl. Las Vegas, NV
Third Street Building 309 S. Third St. Las Vegas, NV	Paradise Park Pool & Center 4775 McLeod Dr. Las Vegas, NV
Winchester Park & Center 3130 S. McLeod Dr Las Vegas, NV	Desert Breeze Park & Community Ctr 8275 Spring Mtn. Rd Las Vegas, NV

**Agenda Also Available At:**

Clark County Reg. Govt. Center 101 Civic Way Laughlin, NV	City of North Las Vegas 2250 N. Las Vegas Blvd North Las Vegas, NV
City of Henderson 240 Water St. Henderson, NV	City of Boulder City 400 California Ave. Boulder City, NV
City of Mesquite 10 E. Mesquite Blvd. Mesquite, NV	City of Las Vegas 495 S. Main St. Las Vegas, NV

If you wish to speak on an item appearing on this agenda, please fill out a Public Comment Interest Card which is located in front of the Commission Chambers and submit the comment card to staff sitting in the front lobby of the Commission Chambers. If you wish to speak to the Board about items within its jurisdiction but not appearing on this agenda, you must wait until the "Comments by the General Public" period listed at the end of this agenda. Comments will be limited to three minutes. Please step up to the speaker's podium, clearly state your name and address and please **spell** your last name for the record. If any member of the Board wishes to extend the length of a presentation, this will be done by the Chairman, or the Board by majority vote.

- Items on the agenda may be taken out of order.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may combine two or more agenda items for consideration.
- The Board of County Commissioners, Board of Trustees, and Licensing Board may remove an item from the agenda or delay discussion relating to an item at any time.

Contracts, zoning matters, or ordinances that do not comply with the County's disclosure requirement as outlined in Section 10(2) of the County Ethics Policy are subject to being voided.

The main agenda is available on Clark County's website, <http://www.ClarkCountyNV.gov>. For copies of agenda items and supporting backup materials, please contact Maria De Jesus, Agenda Coordinator, at (702) 455-3530. This meeting will be broadcast live in the Las Vegas area on Clark County Television (CCTV) Channel 4 on Cox cable (Channel 89.13 for those without converter boxes), on Channel 4 on CenturyLink, in Laughlin on Channel 14 via CMA Access, and on the County's website at [www.ClarkCountyNV.gov](http://www.ClarkCountyNV.gov). It will be replayed over CCTV on Tuesday, December 16, 2014, at 9:00 p.m. For more information about the program schedule, please refer to [http://www.ClarkCountyNV.gov/Depts/public\\_communications/Pages/C4Schedule.aspx](http://www.ClarkCountyNV.gov/Depts/public_communications/Pages/C4Schedule.aspx) or contact CCTV Channel 4 at (702) 455-6890.

**SEC. 1. OPENING CEREMONIES****CALL TO ORDER****INVOCATION****PLEDGE OF ALLEGIANCE****1. Public Comment**

- on the activities of the various regional boards and commissions; and direct staff accordingly.
61. Allocate funds for the Mt. Charleston License Plate grants; and take any action deemed appropriate. (For possible action)
  62. Consider the Nevada Property 1, LLC property tax refund request; and grant or deny it as appropriate. (For possible action)
  63. Discuss the specialty retail concession plan at McCarran International Airport and provide direction; or take other action as appropriate. (For possible action)
  64. Receive and accept the audited Comprehensive Annual Financial Report for the fiscal year 2014 prepared by the accounting firm of Piercy, Bowler, Taylor and Kern pertaining to the Clark County Water Reclamation District; or take other action as appropriate. (For possible action)
  65. Approve the allocation of \$13,796,750 from the County Capital Projects Fund (4370) to fund countywide capital improvement projects; and authorize transfers in the amounts of \$1,506,757 and \$471,500 from the County Capital Projects Fund (4370) to the Detention Services Fund (2060) and the University Center Medical Fund (5420). (For possible action)
  66. Authorize the Chief Financial Officer or her designee to issue purchase orders to Motorola Solutions, Inc., for CBE No. 602834-12, for Public Safety Communication Equipment and Services; as needs arise, subject to approved budgeted appropriations; or take other action as appropriate. (For possible action)
  67. Discuss a proposed ordinance to allow the operation of off-highway vehicles (OHV) on paved County roads in the community of Moapa Valley, Nevada; and direct staff accordingly. (For possible action)
  68. Receive a presentation on the update to the Southern Nevada High-Occupancy Vehicle Plan; and take any action deemed appropriate. (For possible action)
  69. Appoint a qualified individual to fill a vacancy in Nevada Assembly District 37, to be vacated by Assemblyman Wesley Duncan, for a remainder of a term to expire upon the next regular election. (For possible action)
  70. Appoint nine qualified individuals to serve on the Business Development Advisory Council, for 2-year terms from January 1, 2015 through December 31, 2016; or take other action as appropriate. (For possible action)
  71. Appoint several qualified individuals to serve on the Clark County Department of Juvenile Justice Services Citizen's Advisory Committee, and to remove members that have resigned. (For possible action)
  72. Reappoint eight (8) qualified individuals to serve on the Department of Social Service Citizens Advisory Committee for either a two-year term ending December 31, 2016 or for a three-year term ending December 31, 2017; and appoint Laura Martin to serve a one-year term, ending December 31, 2015. (For possible action)
  73. Go into closed session, pursuant to NRS 241.015(3)(b)(2), to receive information from the District Attorney regarding potential or existing litigation involving a matter over which the Board has supervision, control, jurisdiction or advisory power, and to deliberate toward a decision on the matter, and pursuant to NRS Chapter 288.220, to receive a report on the status of ongoing labor negotiations; and direct staff accordingly. (For possible action)
  74. Set a public hearing on Tuesday, January 20, 2015, at 10:00 a.m. to consider the fiscal effect of a proposed City of Las Vegas Tourism Improvement District under Chapter 271A of Nevada Revised Statutes; and authorize staff to submit comments from the hearing to the City of Las Vegas City Council. (For possible action) **ADDENDUM**
  75. Approve a pre-trial settlement in the matter of United States District Court Case No. 2:14-cv-00493-JAD-NJK, United States vs. Clark County; and authorize the Chief Financial Officer and Clark

**CLARK COUNTY BOARD OF COMMISSIONERS  
AGENDA ITEM**

<b>Issue:</b>	<b>Presentation:</b> Southern Nevada High-Occupancy Vehicle Plan Update	<b>Back-up:</b>
<b>Petitioner:</b>	Denis Cederburg, Director of Public Works	<b>Clerk Ref. #</b>
<b>Recommendation:</b>		
<p><b>That the Board of County Commissioners receive a presentation on the update to the Southern Nevada High-Occupancy Vehicle Plan; and take any action deemed appropriate. (For possible action)</b></p>		

**FISCAL IMPACT:**

Fund #: N/A	Fund Name: N/A
Fund Center: N/A	Funded Pgm/Grant: N/A
Description: N/A	Amount: N/A
Added Comments: N/A	

**BACKGROUND:**

The Nevada Department of Transportation (NDOT) is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. Implementation of HOV or carpool lanes is one method of maintaining mobility in congested freeway corridors. The current HOV Plan was completed in 2007 and the purpose of the developing update is to bring the document into line with current conditions in Southern Nevada by integrating recently completed projects as well as the anticipated impact of Project NEON on the HOV system.

NDOT staff is here to provide an update on the HOV Plan, and to answer any questions of the Board of County Commissioners.

Respectfully submitted,

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DENIS CEDERBURG  
Director of Public Works  
DCGMS\12-16-14

Cleared for Agenda

12/16/2014

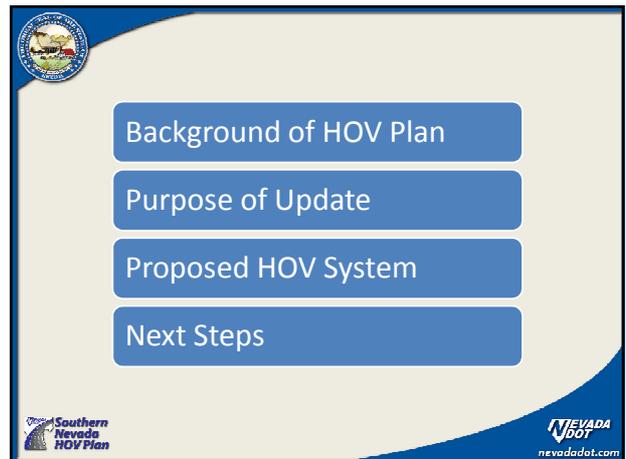
Agenda Item #



**Southern Nevada HOV Plan Update**

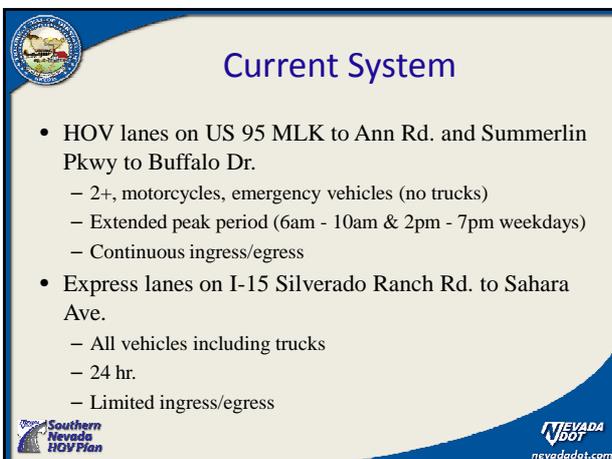
Clark County  
Board of County Commissioners  
December 16, 2014  
Jeff Lerud, Project Manager

**Southern Nevada HOV Plan**  
nevadadot.com



- Background of HOV Plan
- Purpose of Update
- Proposed HOV System
- Next Steps

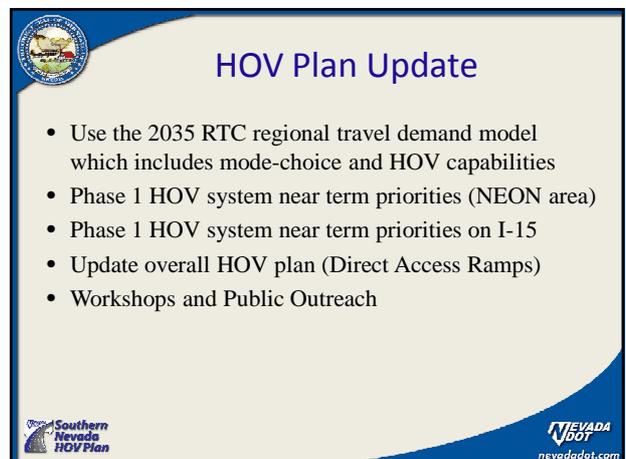
**Southern Nevada HOV Plan**  
nevadadot.com

**Current System**

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
  - 2+, motorcycles, emergency vehicles (no trucks)
  - Extended peak period (6am - 10am & 2pm - 7pm weekdays)
  - Continuous ingress/egress
- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress

**Southern Nevada HOV Plan**  
nevadadot.com

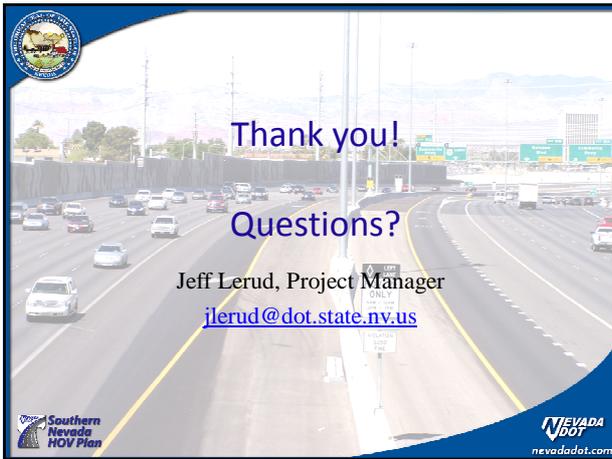


**HOV Plan Update**

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach

**Southern Nevada HOV Plan**  
nevadadot.com





Thank you!

Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)

**Southern Nevada HOV Plan**

**NEVADA DOT**  
nevadadot.com



## PUBLIC OUTREACH SUMMARY

Date: December 16, 2014	Time: 9:00 A.M.
Meeting Title: Board of County Commissioners	
Location: Commission Chambers Government Center Las Vegas, Clark County, Nevada	
Attendees: Steve Sisolak, Susan Brager, Larry Brown, Tom Collins, Chris Giunchigliani, Mary Beth Scow, and Lawrence Weekly – all Clark County Board of County Commissioners Jeff Lerud (NDOT Project Manager), John Karachepone (Jacobs); Numerous staff and public attendees.	
Meeting Summary	
<p><i>Meeting Agenda Item No 68:</i> A presentation on the update to the Southern Nevada High-Occupancy Vehicle (HOV) Plan and any action deemed appropriate.</p> <p>The board received a report from a representative of the Nevada Department of Transportation on the Southern Nevada HOV Plan Update.</p>	
Comments	
<i>Name</i>	<i>Comment/Response</i>
Susan Brager	<i>Comment</i> – Commented on issues including the HOV lanes and reader boards – Who is in charge of operating the HOV lanes? Commented that the HOV lanes on US 95 are empty; they are not being utilized.
Jeff Lerud	<i>Response</i> – FAST operates the HOV lanes jointly with the NDOT. NDOT has responsibility for the freeway system and has jurisdiction over the state highway system. The projections are that the HOV lanes will get much better use with the expansion of the HOV system under Project Neon.
Chris Giunchigliani	<i>Comment</i> – Wanted to know why the conversion of the Express lanes to HOV lanes.
Mary Beth Scow	<i>Comment</i> – Also wanted to know why the express lanes would be converted to HOV lanes.
Jeff Lerud and John Karachepone	<i>Response</i> - Car pooling numbers are expected to increase from 35% to 65%. With the completion of Project Neon, carpoolers would derive travel time benefits by using the HOV lane and therefore usage is projected to increase. As congestion increases, the strategy is to move more people rather than more vehicles due to physical constraints with regards to adding lanes. The express lanes were an interim measure to implementation of the HOV system as approved by FHWA and NDOT through several environmental studies.
Tom Collins	<i>Comment</i> – Which vehicle types are prevented from using the HOV lanes?

## PUBLIC OUTREACH SUMMARY

Jeff Lerud and John Karachepone

*Response* - It is recommended that a vehicle with more than two axles be not allowed in the HOV lane. This means that truck traffic that currently use the Express Lanes will have to move over to the future general purpose lanes. In response to this and the fact that single occupant vehicles will not be able to use the HOV lanes, the number of GP lanes will increase from 3 to 4. One of the current express lanes will revert to a GP lane while the inner most express lane will convert to a HOV lane.

Mary Beth Scow

*Comment* - In case of an accident can the HOV lane be used by single occupant vehicles?

Jeff Lerud

*Response* – An Active Traffic Management (ATM) system is proposed to be implemented as part of Project Neon. With this ATM system in place, such a possibility: single occupant vehicles being allowed to use a HOV lane in response to an accident and as a traffic management measure is possible.

Chris Giunchigliani

*Comment* – Commented on the possibility of improving signage for the HOV lanes.

Larry Brown

*Comment* – Spoke in favor of the Summerlin overpass and HOV lanes. Today there might be limited volumes on the overpass that do not support 24-hour operations. Commended the Department for getting ahead of congestion and planning for the future.

### Actions

1.



**CITY OF HENDERSON  
CITY COUNCIL AGENDA  
REGULAR MEETING**

**Tuesday, December 16, 2014  
6:00 PM  
Meeting Inquiries: (702) 267-1400**

**Council Chambers  
240 Water Street  
Henderson, Nevada 89015**

**NOTICE**

Notice to persons with special needs: For those requiring special assistance or accommodation to attend or participate in this meeting, arrangements for a sign language interpreter or services necessary for effective communication for qualified persons with disabilities should be made as soon as possible, but no later than 72 hours before the scheduled meeting. Listening devices are available for persons with hearing impairments.

Please contact the City Clerk's office at (702) 267-1400 or TTY: 7-1-1, at least 72 hours in advance to request a sign language interpreter. You may also submit your request by using [Contact Henderson](#).

The Mayor reserves the right to hear agenda items out of order, combine two or more agenda items for consideration, remove an item from the agenda, or delay discussion relating to an item on the agenda at any time. All items are action items unless otherwise noted.

Public comment will be taken on each agenda item as it is heard. If you desire to provide public comment on an agenda item, please complete a yellow speaker card and submit it to the City Clerk prior to the item being heard. Individuals speaking on an item will be limited to three (3) minutes and spokespersons for a group will be limited to ten (10) minutes.

Backup materials for agenda items can be found in the Office of the City Clerk or on the City's website at: [http://www.cityofhenderson.com/city\\_clerk/agendas\\_back-up\\_minutes.php](http://www.cityofhenderson.com/city_clerk/agendas_back-up_minutes.php)  
To request backup materials, please contact Sabrina Mercadante at (702) 267-1400.

Agenda Information Line - (702) 267-1440 (No. 3).

**NOTICE**

**Parking for public meetings is located in the side parking lot of City Hall adjacent to Basic Road or in the parking garages located on Water Street or at Basic Road and Lead Street.**

- I. CALL TO ORDER
- II. CONFIRMATION OF POSTING AND ROLL CALL
- III. INVOCATION AND PLEDGE OF ALLEGIANCE
- IV. ACCEPTANCE OF AGENDA (For Possible Action)
- V. PROCLAMATIONS, COMMENDATIONS AND PRESENTATIONS

- 
- PR-1 PRESENTATION**  
NEVADA DEPT. OF TRANSPORTATION  
UPDATE TO THE HIGH OCCUPANCY VEHICLE (HOV) LANE PLAN
- 
- PUBLIC WORKS, PARKS AND RECREATION**
- 

Receive a presentation by Jeff Lerud, Nevada Department of Transportation, on the status of the update to the HOV plan for Southern Nevada.

**VI. CITY MANAGER'S REPORT**

THE CITY MANAGER'S REPORT CANNOT BE ACTED UPON OR DISCUSSED AT THIS MEETING, BUT MAY BE REFERRED BY COUNCIL TO THE NEXT REGULAR MEETING FOR CONSIDERATION.

**VII. CONSENT AGENDA**

UNLESS AN ITEM IS PULLED FOR DISCUSSION, COUNCIL WILL TAKE ACTION ON ALL CONSENT AGENDA ITEMS WITH ONE MOTION, ACCEPTING THE RECOMMENDATIONS AS STATED ON THE AGENDA ITEM.

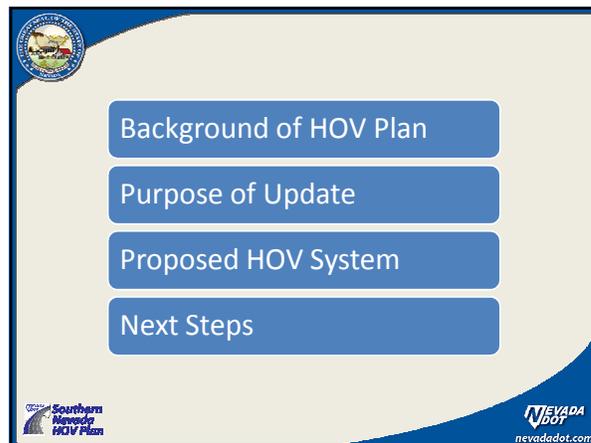
TO PULL AN ITEM FOR DISCUSSION, PLEASE NOTIFY THE CITY CLERK BY PRESENTING A YELLOW SPEAKER CARD BEFORE COUNCIL TAKES ACTION ON THE CONSENT AGENDA. YELLOW SPEAKER CARDS ARE AVAILABLE AT THE ENTRANCE TO THE COUNCIL CHAMBERS AND AT THE PODIUM.



**Southern Nevada HOV Plan Update**

City of Henderson  
December 16, 2014  
Jeff Lerud, Project Manager

**NVADA**  
DOT  
nevadadot.com



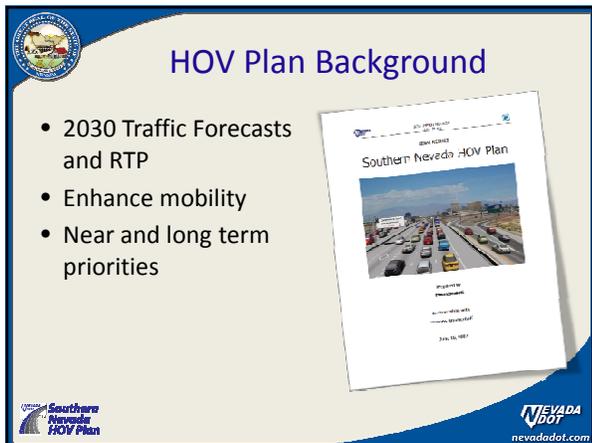
Background of HOV Plan

Purpose of Update

Proposed HOV System

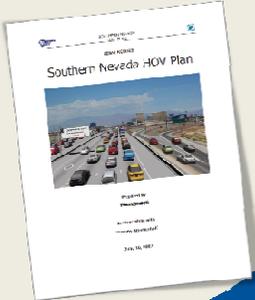
Next Steps

**NVADA**  
DOT  
nevadadot.com



**HOV Plan Background**

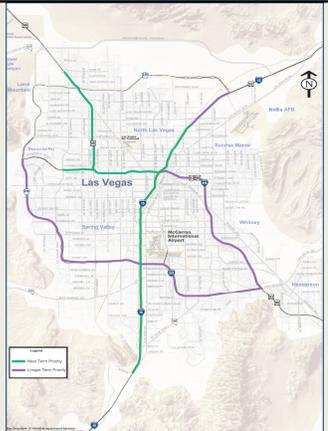
- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities



**NVADA**  
DOT  
nevadadot.com



**2007 Plan**



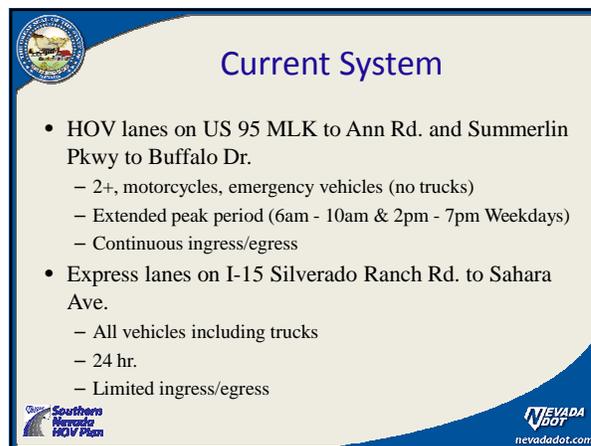
**NVADA**  
DOT  
nevadadot.com



**2007 Plan: Priority Ranking**



**NVADA**  
DOT  
nevadadot.com



**Current System**

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
  - 2+, motorcycles, emergency vehicles (no trucks)
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- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress

**NVADA**  
DOT  
nevadadot.com

## HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach

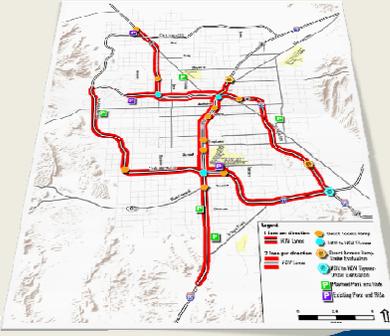



## Near Term HOV System





## Long Term HOV System





## HOV System Proposed Recommendations

### Operational Recommendations (Near-Term)

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	24-hours, 7 days of the week
Trucks	Vehicles with more than two axles (or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency vehicles	Those responding to an emergency are eligible
Public transit buses	Eligible (including dead-heading buses)
Single-occupant low-emission and energy-efficient vehicles	To be studied
Access Type	Limited Access

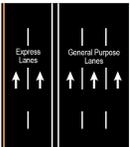



## HOV System Proposed Recommendations

### Express Lane Conversion

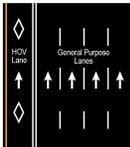
- Need HOV connectivity between I-15 and US-95
- Convert Express Lanes to HOV
- 2 Express Lanes become 1 HOV and 1 GP
- Limited access for HOV lane

**Before:**



Express Lanes

**After:**



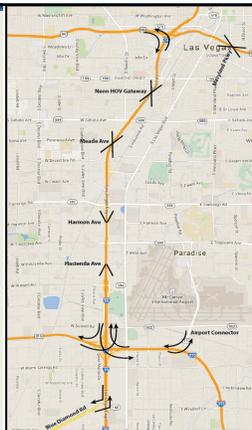
HOV Lane/  
GP Lanes




## HOV Proposed Recommendations

### HOV Direct Access Ramps (Between St. Rose/Sahara)

- Direct connects to arterial
  - 7 locations screened: St Rose, Blue Diamond, Warm Springs, Sunset, Hacienda, Harmon, Meade
  - 4 locations proposed: Blue Diamond, Hacienda, Harmon, Meade
- HOV to HOV flyover
  - Propose I-15/I-215 to/from east (Airport) AND to/from the west



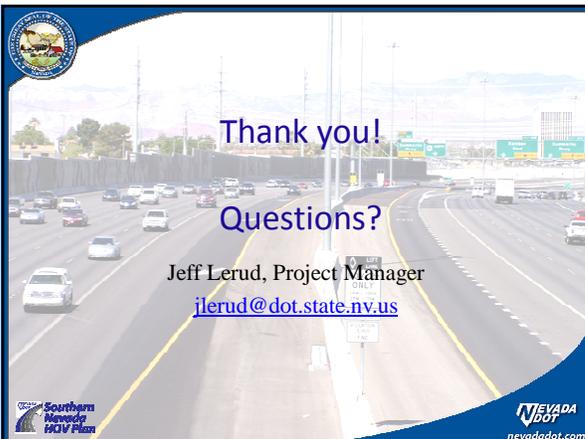



## HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak period or 24 hr.
  - Vehicle eligibility
  - Ingress/egress – continuous or limited
  - Direct access connectors and flyover



nevadadot.com



## Thank you!

## Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



nevadadot.com



## PUBLIC OUTREACH SUMMARY

Date: December 16, 2014	Time: 6:00 P.M.
Meeting Title: City of Henderson City Council Regular Meeting	
Location: Council Chambers 240 Water Street Henderson, Nevada 89015	
Attendees: Andy Hafen, Major Gerri Schroder, Councilwoman John F. Marz, Councilman Debra March, Councilwoman Sam Bateman, Councilman	
Meeting Summary	
<p><i>PR-1 Presentation by Nevada Department of Transportation on Update to the High Occupancy Vehicle (HOV) Lane Plan.</i></p> <p>Jeff Lerud, Project Manager for the Nevada Department of Transportation, presented on the status of the update to the HOV plan for Southern Nevada. Via PowerPoint presentation, he reviewed the following slides: High Occupancy Vehicle (HOV) plan ground, 2007 plan map, current system operation, HOV plan update, long-term HOV system, HOV proposed recommendations, and HOV next steps.</p>	
Comments	
<i>Name</i>	<i>Comment/Response</i>
Debra March	<i>Comment - Asked about public outreach efforts</i>
Jeff Lerud	<i>Response - Will be attending various public meetings, workshops, and meeting with other municipalities in the Valley.</i>
Debra March	<i>Comment - Suggested that staff could post meeting dates and times on the City's website</i>
Jeff Lerud	<i>Response - Agreed that that would be very helpful, and he stated the project does have a website that links through the NDOT website.</i>
Gerri Schroder	<i>Comment - Asked how bottleneck areas will be addressed</i>
Jeff Lerud	<i>Response - Said that the Plan has solutions such as direct connect ramps to address bottleneck areas. He also noted that the workshops will have a schematic showing how the connections will work.</i>
Gerri Schroder	<i>Comment - requested that she be provided with the workshop dates so she can attend</i>
Actions	
1. Provide Councilwoman Gerri Schroder with workshop dates through City staff	

**NOTICE AND AGENDA  
CITY OF NORTH LAS VEGAS  
REGULAR CITY COUNCIL MEETING**

December 17, 2014

Website - <http://www.cityofnorthlasvegas.com>

**CITY COUNCIL MEETING**

-

**CALL TO ORDER**

6:00 p.m., Council Chambers, 2250 Las Vegas Boulevard North,  
North Las Vegas, Nevada

**WELCOME**

The North Las Vegas City Council welcomes each of you to its City Council Meeting. If you wish to speak, please complete one of the blue cards which are located on the table outside the main entrance and at the podium rail. Please give the card to the City Clerk. When the Mayor calls upon you to speak, we request that you limit your comments to no more than three minutes, and that you avoid repetition. **Please keep in mind the rules of decorum by addressing the Council as a whole and not individual members and limiting your comments to issues regarding City government.** As a courtesy to others, we ask that cellular phones and pagers be turned off during the meeting. Please no food or drink inside Council Chambers.

Items on the agenda may be taken out of order. The City Council may combine two or more agenda items for consideration; and may remove an item from the agenda or delay discussions relating to an item on the agenda at any time.

The North Las Vegas City Council Chamber is accessible to all persons. For reasonable accommodations to those with disability impairments, please contact the ADA Coordinator at (702) 633-1501 or TDD (800) 326-6868 at least seventy-two (72) hours in advance of the meeting. For general questions regarding this agenda or for supporting material, please contact Barbara A. Andolina, City Clerk at (702) 633-1030.

These proceedings are being video recorded for future viewings on KCLV, Cable Channel 2. The proceedings will be rebroadcasted on KCLV Channel 2 the Friday after the meeting at 4:00 P.M., the following Tuesday at 12:00 P.M. and Thursday at 6:00 A.M. Customers of CenturyLink can view this program in high definition on Channel 1002 and some customers of Cox Communications who do not have a cable box can view this meeting on digital Channel 89.5. The Council Meeting can be viewed on the City's internet at [www.cityofnorthlasvegas.com](http://www.cityofnorthlasvegas.com).

**VERIFICATION**

Verification that the Agenda and Meeting Notice was properly posted on the bulletin board at City Hall, 2250 Las Vegas Boulevard North, the bulletin board at the Public Safety Building, 1301 E. Lake Mead Boulevard and the bulletin boards at the North Las Vegas Public Library, 2250 Las Vegas Boulevard

North, Suites 133 and 137; Aliante Library, 2400 W. Deer Springs Way; Alexander Library, 1755 W. Alexander Road and on the City's website (including supporting materials) in compliance with NRS 241, "The Open Meeting Law." The agenda and supporting materials are also available in the City Clerk's Office.

### **INVOCATION**

Pastor Jeremy Martin  
Grace Point Church

### **PLEDGE OF ALLEGIANCE**

By Invitation

### **PUBLIC FORUM**

This is the first of two portions of the meeting devoted to the Public. Public comment during this portion of the agenda must be limited to matters on the agenda for action. After completing and submitting a blue card, the Mayor will call upon you to come forward to the podium. Please state your name and address for the record. All other items and/or topics will be recognized at the second Public Forum. Usually items received under this heading will be referred to the City Manager for action at a later date. Items listed on the agenda will be heard after introduction by the City Manager. In consideration of other citizens, we ask that you please limit your comments to three minutes and that repetition be avoided. The Mayor may, at his discretion, hold the cards until the second Public Forum at the end of the meeting.

### **PRESENTATION**

Presentation by City Council to recognize Employee/Team for the 4th Quarter of 2014.

### **AGENDA**

1. Approval of Regular City Council Meeting Agenda of December 17, 2014. (For possible action)

### **SET FUTURE PUBLIC HEARING DATES**

2. Set date on any Appeals filed or required Public Hearings from the City Planning Commission Meetings.

### **PUBLIC HEARINGS - 6:15 P.M.**

3. [AMP-09-14 \(Serenity Circle Apartments\); an application submitted by Coran Lake](http://www.cityofnorthlasvegas.com/SirePub/cache/0/mes4ch45r2yg1eaxrvymhr55/65612122014111009359.htm)

Mead LLC, c/o Filipp Chebotarev, property owner, for an amendment to the Comprehensive Plan, land use element, to change the current designation of Employment to Multi-Family on properties located approximately 650 feet west of Simmons Street and south of Lake Mead Boulevard. (Associated Item No. 4, Ordinance No. 2696) (For possible action)

Ward: 2  
 Sponsor: Community Development and Compliance  
 City's Fiscal Impact: None  
 Recommended Action: Approve

4. Ordinance No. 2696; an ordinance related to zoning; amending Section 010 of Chapter 16 of Title 17 of the City of North Las Vegas Municipal Code by reclassifying approximately 11.18± acres therein from a PUD, Planned Unit Development District to an R-3, Multi-Family Residential District (ZN-13-14, Serenity Circle Apartments), for property located south of Lake Mead Boulevard, approximately 650 feet west of Simmons Street and providing for other matters properly relating thereto. (Associated Item No. 3, AMP-09-14) (For possible action)

Ward: 2  
 Sponsor: Community Development and Compliance  
 City's Fiscal Impact: None  
 Recommended Action: Pass and Adopt

### **CONSENT AGENDA**

*Matters listed on the Consent Agenda are considered routine and may be approved by a single motion. However, any Consent Item may be moved to the Business portion of the agenda for discussion at the request of any Council member.*

5. Application for a Cultivation Facility for Medical Marijuana business license for Helping Hands Wellness Center, Inc., dba Green Heaven Nursery, 13710 Grand View Parkway, North Las Vegas, Nevada, 89124, pending verification of state taxation, required bonds, insurance coverage, all applicable license fees and departmental approvals including, but not limited to, Chapter 5.29 of the North Las Vegas Municipal Code. (For possible action)

Ward: 1  
 Sponsor: Community Development and Compliance  
 City's Fiscal Impact: None  
 Recommended Action: Approve

6. Application for a Production of Edible Marijuana Products or Marijuana-Infused Products establishment business license for Helping Hands Wellness Center, Inc., dba Cannacare, 13710 Grand Valley Parkway, North Las Vegas, Nevada, 89124, pending verification of state taxation, required bonds, insurance coverage, all applicable license fees and departmental approvals including, but not limited to,

[Chapter 5.29 of the North Las Vegas Municipal Code. \(For possible action\)](#)

Ward: 1  
Sponsor: Community Development and Compliance  
City's Fiscal Impact: None  
Recommended Action: Approve

7. [Application for a Cultivation Facility for Medical Marijuana business license for Fidelis Holdings Henderson LLC, dba Greenbox, located at the Northwest corner of Range Road and Tropical Parkway, North Las Vegas, Nevada, 89115, pending verification of required bonds, insurance coverage, all applicable license fees and departmental approvals including, but not limited to, Chapter 5.29 of the North Las Vegas Municipal Code. \(For possible action\)](#)

Ward: 1  
Sponsor: Community Development and Compliance  
City's Fiscal Impact: None  
Recommended Action: Approve

8. [Application for a Cultivation Facility for Medical Marijuana business license for Green Leaf Farms Holdings, Inc. dba Green Leaf Farms, 11245 Apex Great Basin Way, North Las Vegas, Nevada, 89124, pending verification of state taxation, required bonds, insurance coverage, all applicable license fees and departmental approvals including, but not limited to, Chapter 5.29 of the North Las Vegas Municipal Code. \(For possible action\)](#)

Ward: 1  
Sponsor: Community Development and Compliance  
City's Fiscal Impact: None  
Recommended Action: Approve

9. [Application for a Production of Edible Marijuana Products or Marijuana-Infused Products establishment business license for Green Leaf Farms Holdings, Inc. dba Green Leaf Extracts, 11245 Apex Great Basin Way, North Las Vegas, Nevada, 89124, pending verification of state taxation, required bonds, insurance coverage, all applicable license fees and departmental approvals including, but not limited to, Chapter 5.29 of the North Las Vegas Municipal Code. \(For possible action\)](#)

Ward: 1  
Sponsor: Community Development and Compliance  
City's Fiscal Impact: None  
Recommended Action: Approve

10. [Application for a Cultivation Facility for Medical Marijuana business license for Econeveda LLC, APEX – Lot M12D, a portion of Clark County Assessor's Parcel Number 103-16-010-013, North Las Vegas, Nevada, 89124, pending verification of state taxation, required bonds, insurance coverage, all applicable license fees and departmental approvals including, but not limited to, Chapter 5.29 of the North Las Vegas Municipal Code. \(For possible action\)](#)

Ward: 1  
Sponsor: Community Development and Compliance  
City's Fiscal Impact: None  
Recommended Action: Approve

11. [Application for a Production of Edible Marijuana Products or Marijuana-Infused Products establishment business license for Econevada LLC, APEX – Lot M12D, a portion of Clark County Assessor's Parcel Number 103-16-010-013, North Las Vegas, Nevada, 89124, pending verification of state taxation, required bonds, insurance coverage, all applicable license fees and departmental approvals including, but not limited to, Chapter 5.29 of the North Las Vegas Municipal Code. \(For possible action\)](#)

Ward: 1  
Sponsor: Community Development and Compliance  
City's Fiscal Impact: None  
Recommended Action: Approve

12. [Application for Shondell S. Bowman as key employee for the Full Liquor Off-Sale business license for Circle K Stores Inc., dba Circle K Store #756, 2405 Belmont Street, North Las Vegas, Nevada, 89030. \(For possible action\)](#)

Ward: 1  
Sponsor: Community Development and Compliance  
City's Fiscal Impact: None  
Recommended Action: Approve

13. [Allocation of FY 2010/2011 through 2014/2015 Federal Low Income Housing Trust Funds, in the amount not to exceed \\$700,000, for rehabilitation of 115 townhome style units located in North Las Vegas; and authorize the City Manager or her designee to negotiate, execute and amend appropriate agreements for approved program activity as required. \(For possible action\)](#)

Ward: 1  
Sponsor: Neighborhood and Leisure Services  
City's Fiscal Impact: None  
Recommended Action: Approve and Authorize

14. [Allocation of FY 2010/2011 through 2014/2015 Federal Low Income Housing Trust Funds to Nevada HAND, Inc., in the amount not to exceed \\$400,000, for rehabilitation of 58 senior units within the Buena Vista Springs III Senior Apartment community located in North Las Vegas; and authorize the City Manager or her designee to negotiate, execute and amend appropriate agreements for approved program activity as required. \(For possible action\)](#)

Ward: 2  
 Sponsor: Neighborhood and Leisure Services  
 City's Fiscal Impact: None  
 Recommended Action: Approve and Authorize

### **BUSINESS**

15. [Discussion and review of the Amended and Restated Development Agreement \("ARDA"\) between the City of North Las Vegas and Crescent Bay Development Services, LLC; KBS SOR Park Highlands, LLC; KBS SOR Park Highlands II, LLC; Standard Pacific of Las Vegas, Inc.; Highlands Park Holdings, LLC; and Park Highlands Master Association \("Park Highlands East"\), and the Consent and Joinder to the ARDA executed by Insight Park Highlands, LLC. \(Tabled December 3, 2014\)](#)

Ward: Citywide  
 Sponsor: City Manager  
 City's Fiscal Impact: None  
 Recommended Action: Accept

16. [Lease and an addendum to the United States House of Representatives District Office Lease, in the amount of \\$51,660 for Crescent Hardy, a Member-Elect of the United States House of Representatives to use certain portions of City Hall to conduct operations. \(For possible action\)](#)

Ward: 1  
 Sponsor: Business Development  
 City's Fiscal Impact: \$51,660 (revenue)  
 Recommended Action: Approve

17. [Settlement Agreement with 5th & Centennial LLC, et al., in a form approved by the City Attorney's Office, in the total amount of \\$6,300,000, to be paid over time, to resolve any and all issues related to Clark County Eighth Judicial District Court Case Number A-10-609283-C, Nevada Supreme Court Case Number 58530 and United States Supreme Court Number 14-348. \(For possible action\)](#)

Ward: Citywide

Sponsor: City Attorney  
City's Fiscal Impact: \$6,300,000  
Recommended Action: Approve

18. [Renewal of a contract with Safety National Casualty Corporation, in the amount of \\$117,656, for Worker's Compensation Excess Coverage Insurance, for the period of January 1, 2015 through December 31, 2015. \(Associated Item No. 19, Great American Contract\) \(For possible action\)](#)

Ward: Citywide  
Sponsor: Finance  
City's Fiscal Impact: \$117,656  
Recommended Action: Approve

19. [Contract with Great American E & S Insurance Company for Occupational Accident Buffer Layer Insurance Coverage, in the amount of \\$206,248.77, for the period of January 1, 2015 through December 31, 2015. \(Associated Item No. 18, Safety National Casualty Insurance Renewal\) \(For possible action\)](#)

Ward: Citywide  
Sponsor: Finance  
City's Fiscal Impact: \$206,248.77  
Recommended Action: Approve

20. [Renewal of the Stop-Loss Coverage Agreement with Sun Life Assurance Company of Canada, in the amount of \\$433,652.04, for the period of January 1, 2015 through December 31, 2015, for self-funded and fully insured medical, dental and vision coverage for Police, Appointed, Confidential and Elected employees for benefits paid in excess of \\$250,000 deductible. \(For possible action\)](#)

Ward: Citywide  
Sponsor: Finance  
City's Fiscal Impact: \$433,652.04  
Recommended Action: Approve

21. [Interlocal Agreement and authorization for Clark County to administer an Emergency Solutions Grant for FY14/15 under the McKinney-Vento Homeless Assistance Act as amended by the Homeless Emergency Assistance and Rapid](#)

[Transition to Housing Act of 2009, in an amount not to exceed \\$135,823, to provide homelessness services and prevention for North Las Vegas residents. \(For possible action\)](#)

Ward: Citywide  
 Sponsor: Neighborhood and Leisure Services  
 City's Fiscal Impact: None  
 Recommended Action: Approve and Authorize

22. [Ratification of the acceptance of a grant award from the United States Department of Justice, Office of Community Oriented Policing Services, under the FY2014 COPS Community Policing Development Program, in the amount of \\$100,000, to advance Community Policing efforts for the Police Department. \(For possible action\)](#)

Ward: Citywide  
 Sponsor: Police  
 City's Fiscal Impact: None  
 Recommended Action: Ratify

23. [Interlocal Contract with the Regional Transportation Commission of Southern Nevada, in an amount not to exceed \\$1,500,000, funded by the Regional Transportation Commission of Southern Nevada, for the Clayton Street, Centennial Parkway to Hammer Lane Project, CIP Project No. 10398. \(For possible action\).](#)

Ward: 3 and 4  
 Sponsor: Public Works  
 City's Fiscal Impact: None  
 Recommended Action: Approve

24. [Construction Change Order No. 1 with Aggregate Industries, SWR, Inc., for the North 5th Corridor Infill Roadway Project, Bid Number 1442, CIP Project No. 10360, in the amount of \\$70,000 from the Regional Transportation Commission of Southern Nevada Fuel Revenue Indexing Funds, to increase the Construction Conflict Funds to construct a concrete cap above the existing Kern River gas line and perform required survey services needed to construct the project. \(For possible action\)](#)

Ward: 2  
 Sponsor: Public Works  
 City's Fiscal Impact: None  
 Recommended Action: Approve

25. [Resolution No. 2528](#); a resolution of the City Council of North Las Vegas, Nevada consenting to relinquishment of property interest and maintenance responsibilities from Nevada Department of Transportation for Las Vegas Boulevard. **(Associated Item No. 26, Nevada Department of Transportation Cooperative Agreement)** (For possible action)

Ward: 1  
 Sponsor: Public Works  
 City's Fiscal Impact: \$1,316 (estimated)  
 Recommended Action: Pass and Adopt

26. [Cooperative Agreement with the State of Nevada, Department of Transportation and acceptance of funds, in the amount of \\$4,200,000, for the transfer of right-of-way along Las Vegas Boulevard between Tonopah Avenue and Carey Avenue.](#) **(Associated Item No. 25, Resolution No. 2528)** (For possible action)

Ward: 1  
 Sponsor: Public Works  
 City's Fiscal Impact: None  
 Recommended Action: Approve

27. [Resolution No. 2524](#); a resolution permitting the donation of City Owned furniture to the Southern Nevada Senior Law Program. (For possible action)

Ward: Citywide  
 Sponsor: Public Works  
 City's Fiscal Impact: None  
 Recommended Action: Pass and Adopt

### **ORDINANCE INTRODUCTION ONLY**

*There is no public comment for these items and no action will be taken by the Council at this meeting. If you wish to speak on any of these items, please attend the meeting where the Final Action will be determined and submit a blue card to the Clerk.*

28. [Ordinance No. 2697](#); an ordinance of the City Council of North Las Vegas, Nevada, to amend Chapter 13.04.020 of the North Las Vegas Municipal Code to incorporate changes in the Utility Bill format and billing, as recommended by the Utility Advisory Board and providing for other matters properly related thereto. **(Set Final Action for January 7, 2015)**

Ward: Citywide  
 Sponsor: Utilities

City's Fiscal Impact: None  
 Recommended Action: Set Final Action for January 7, 2015

### **ORDINANCE FINAL ACTION**

29. [Ordinance No. 2694; an ordinance related to zoning; amending Ordinance Numbers 1387 and 1770 which reclassified Cheyenne Promenade \(ZN-08-97\) to a Planned Unit Development by adding sixteen conditions and providing for other matters properly relating thereto. \(For possible action\)](#)

Ward: 2  
 Sponsor: Community Development and Compliance  
 City's Fiscal Impact: None  
 Recommended Action: Pass and Adopt

### **APPOINTMENTS**

30. [Appointment by Mayor Lee of a citizen member to the Arts and Culture Advisory Board. \(Tabled December 3, 2014\) \(For possible action\)](#)

Ward: Citywide  
 Sponsor: City Clerk  
 City's Fiscal Impact: None  
 Recommended Action: Appoint

31. [Appointment by Mayor Pro Tempore Wood of a citizen member to the Arts and Culture Advisory Board. \(Tabled December 3, 2014\) \(For possible action\)](#)

Ward: Citywide  
 Sponsor: City Clerk  
 City's Fiscal Impact: None  
 Recommended Action: Appoint

32. [Appointment by Councilwoman Goynes-Brown of a citizen member to the Arts and Culture Advisory Board. \(Tabled December 3, 2014\) \(For possible action\)](#)

Ward: Citywide  
 Sponsor: City Clerk  
 City's Fiscal Impact: None  
 Recommended Action: Appoint

33. [Appointment by Councilman Wagner of a citizen member to the Arts and Culture](#)

[Advisory Board. \(Tabled December 3, 2014\) \(For possible action\)](#)

Ward: Citywide  
Sponsor: City Clerk  
City's Fiscal Impact: None  
Recommended Action: Appoint

34. [Appointment by Councilman Barron of a citizen member to the Arts and Culture Advisory Board. \(Tabled December 3, 2014\) \(For possible action\)](#)

Ward: Citywide  
Sponsor: City Clerk  
City's Fiscal Impact: None  
Recommended Action: Appoint

35. [Appointment of two at-large citizen members to the Arts and Culture Advisory Board. \(Tabled December 3, 2014\) \(For possible action\)](#)

Ward: Citywide  
Sponsor: City Clerk  
City's Fiscal Impact: None  
Recommended Action: Appoint

### **CITY MANAGER'S REPORT**

Update on the Southern Nevada High-Occupancy Vehicle Plan by the Nevada Department of Transportation

### **COUNCIL ITEMS**

### **PUBLIC FORUM**

This is the portion of the meeting devoted to the Public. After completing and submitting a blue card, please come forward upon recognition by the Mayor and feel free to speak on any topic. Usually items received under this heading will be referred to the City Manager for action at a later date. In consideration of other citizens, we ask that you please limit your comments to three minutes and that repetition be avoided.

**ADJOURNMENT**

The City Clerk keeps the official record of all proceedings of the City Council. In order to maintain a complete and accurate record of all proceedings, any photograph, map, chart, or other document used in any presentation to the Council should be submitted to the City Clerk. If materials are to be distributed to members of the City Council, please provide ten copies for distribution to the City Manager, Assistant City Managers, City Attorney, City Clerk, and Staff.

-




## Southern Nevada HOV Plan Update

City of North Las Vegas  
December 17, 2014  
Jeff Lerud, Project Manager




nevadadot.com



- Background of HOV Plan
- Purpose of Update
- Proposed HOV System
- Next Steps

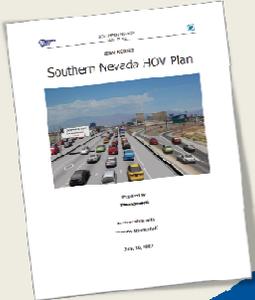



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## HOV Plan Background

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities





nevadadot.com



## Current System

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
  - 2+, motorcycles, emergency vehicles (no trucks)
  - Extended peak period (6am to 10am and 2pm to 7pm)
  - Continuous ingress/egress
- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress




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## HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach




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## Near Term HOV System





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## PUBLIC OUTREACH SUMMARY

Date:	December 17, 2014	Time:	6:00 pm
Meeting Title:	City of North Las Vegas Regular City Council Meeting		
Location:	Council Chambers, 2250 Las Vegas Boulevard North, North Las Vegas, Nevada		
Attendees: Mayor John J Lee, Mayor Pro Tempore Anita G Wood, Councilwoman Pamela A. Goynes-Brown, Councilman Wade W Wagner and Councilman Isaac E Barron Jeff Lerud, NDOT Project Manager and John Karachepone, Jacobs Project Manager			
<b>Meeting Summary</b>			
<p>Jeff Lerud, Project Manager, Nevada Department of Transportation provided an update on the Southern Nevada High Occupancy Vehicle (HOV) Plan. He discussed:</p> <ol style="list-style-type: none"> <li>1. The Background of HOV Plan</li> <li>2. The Purpose of Update</li> <li>3. The Proposed HOV System, and</li> <li>4. Next steps</li> </ol> <p><b>HOV Plan Background:</b></p> <p>Mr. Lerud said the HOV Plan was originally established in 2007. The reason for the plan was the increase in congestion on the local freeways when the Regional Transportation Commission's urban Las Vegas area was at full build-out. Other modes of transportation were reviewed to handle the traffic and HOV lanes was one of the ideas that was committed to as part of the improvements in Southern Nevada.</p> <p>Mr. Lerud reviewed the current system which consisted of:  HOV lanes on US 95: Martin L. King Boulevard to Ann Road and Summerlin Parkway to Buffalo Drive.  Eligibility is 2+ occupants per vehicle, motorcycles, and emergency vehicles (no trucks)  Time of operation is the extended peak period (6 a.m. to 10 a.m. and 2 p.m. to 7 p.m.)  The lanes currently operate with continuous ingress / egress  There are also Express lanes on I-15 from Silverado Ranch Road to Sahara Avenue.  All vehicles including trucks are allowed to use these express lanes  These express lanes operate all 24 hours  Limited ingress / egress, at specified locations, is allowed for these express lanes.</p> <p><b>The HOV Plan Update:</b></p> <p>Uses the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities  It identifies Phase 1 HOV system near term priorities (within the Neon area)  Additional Phase 1 HOV system near term priorities are identified on I-15  It also updates the overall HOV plan (Direct Access Ramps)  And the update is supported by Workshops and Public Outreach activities.</p> <p>Mr. Lerud said the reason for the update was the 2030 Regional Transportation Commission of Southern Nevada Plan became a 2035 Plan with a mode choice element which provided a better idea for HOV volumes that would be seen on the system. Additionally, Project Neon would be implemented.</p> <p>Mr. Lerud reviewed the Near Term (before 2025) results from the study. In the northwest there was one lane in each direction on US 95 coming down onto the Rainbow curve East on the US 95 near the Spaghetti Bowl and then south on I-15 to St. Rose Parkway. Mr. Lerud said at the Spaghetti Bowl there would be direct connection from the median lane of the US 95 to the median lane on I-15. Once in place and the systems were built, there would be 22 miles of continuous HOV lanes.</p>			

## PUBLIC OUTREACH SUMMARY

Mr. Lerud reviewed the Long Term solution of the HOV System. In the northwest, along the US 95 there was one lane in each direction coming down to the Rainbow curve where another lane was picked up from Summerlin Parkway to make it 2-lanes in each direction over to the I-15/US 95 Spaghetti Bowl. Continuing to the east and south on 515 there was one lane in each direction down towards Henderson. On the I-15 there were one lane beginning just north of the Spaghetti Bowl going southbound on I-15 with an additional lane joining in from US 95 (Neon Flyover) to the 215/I-15 Spaghetti Bowl and then one lane in each direction going south to St. Rose Parkway. On the 215 starting to the west in Summerlin, there was one lane in each direction that continued all the way down through the I-15 to the east over to the 515.

Mr. Lerud discussed the following:  
 HOV System Proposed Recommendations:  
 Operational Recommendations:

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	24 hours, 7 days a week
Trucks	Vehicles with more than two axles (or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency Vehicles	Those responding to an emergency are eligible
Public Transit Buses	Eligible (including dead-heading buses)
Single-occupant low-emission and energy-efficient vehicles	To be studied
Access Type	Limited Access

HOV System Proposed Recommendations:  
 Express Lane Conversion:  
 Need HOV connectivity between I-15 and US-95  
 Therefore the plan is to convert Express Lanes to HOV:  
     2 Express Lanes become 1 HOV and 1 General Purpose  
 Limited access will be implemented for the new HOV lane

### HOV Plan Next Steps

The initial modeling and analysis complete  
 We are in the process of obtaining Agency, stakeholder and public feedback  
 We will make recommendations on operations issues regarding the HOV system  
 These operational recommendations will address:  
     Hours of operation - peak period or 24 hour  
     Vehicle eligibility  
     Ingress/egress – continuous or limited  
     Locations of direct access connectors and flyover

Mr. Lerud explained when performing the analysis there were two triggers that needed to be met; congestion and a high number of HOV candidates. There was capacity on the I-15 north of the Spaghetti Bowl following the completion of the I-15 North design-build project. Additionally a lot of the traffic currently was truck traffic and the warrants to trigger an HOV lane were not seen up to the 2035 model.

## PUBLIC OUTREACH SUMMARY

Comments	
<i>Name</i>	<i>Comment/Response</i>
Mayor Pro Tempore Wood	If traffic congestion increased in North Las Vegas would the freeway be considered for HOV lanes?
Jeff Lerud	If traffic congestion increased in North Las Vegas after 2035, there could be a possibility for the HOV lane.
Councilwoman Goynes-Brown	Why there were no breaks in the HOV lane line every several miles as in other cities?
Jeff Lerud	In Nevada, vehicles are permitted to cross the solid white line to access the HOV lanes on US 95. The proposal is for a double solid white line comparable to the express lanes when we need to prohibit vehicles from crossing.
Mayor Lee	Will cameras be installed in the future?
Jeff Lerud	There is currently no legislation to support the use of cameras on the roadway.
Councilman Barron	Are there plans for a truck lane similar to those in California?
Jeff Lerud	We have studied what happens to trucks that currently use the Express Lanes. When converted to an HOV lane the extra Express lane would become a General Purpose lane which would be added to the current three lanes and decrease the congestion on those lanes and accommodate trucks.
Actions	
1.	

**AGENDA SUMMARY PAGE**  
**CITY COUNCIL MEETING OF: JANUARY 21, 2015**

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**DEPARTMENT: CITY MANAGER**

**DIRECTOR: ELIZABETH N. FRETWELL**

Consent  Discussion

**SUBJECT:**

ADMINISTRATIVE:

Report from Jeff Lerud, Senior Project Manager, Nevada Department of Transportation, regarding the Southern Nevada High Occupancy Vehicle (HOV) Master Plan Update - All Wards

**Fiscal Impact**

No Impact

Augmentation Required

Budget Funds Available

**Amount:**

**Funding Source:**

**Dept./Division:**

**PURPOSE/BACKGROUND:**

The Nevada Department of Transportation (NDOT) is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. Implementation of HOV or carpool lanes is one method of maintaining mobility in congested freeway corridors. The current HOV plan was completed in 2007, and the purpose of the update is to bring the document into line with current conditions in Southern Nevada by integrating recently completed projects as well as the anticipated impact of Project NEON on the HOV system. The update includes near-term and long-term HOV system analysis along with identification of desirable system improvements. NDOT staff will make this PowerPoint presentation and provide the Mayor, City Council, and the citizens with the status and time lines of the new HOV plan.

**RECOMMENDATION:**

Report only; no action required

**BACKUP DOCUMENTATION:**

None

**Southern Nevada HOV Plan Update**

City of Las Vegas  
January 21, 2015  
Jeff Lerud, Project Manager

**NVADA DOT**  
nevadadot.com

**Background of HOV Plan**

**Purpose of update**

**Proposed HOV System**

**Next Steps**

**NVADA DOT**  
nevadadot.com

**HOV Plan Background**

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities

**NVADA DOT**  
nevadadot.com

**Current System**

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
  - 2+, motorcycles, emergency vehicles (no trucks)
  - Extended peak period (6am - 10am & 2pm - 7pm weekdays)
  - Continuous ingress/egress
- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
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  - 24 hr.
  - Limited ingress/egress

**NVADA DOT**  
nevadadot.com

**HOV Plan Update**

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach

**NVADA DOT**  
nevadadot.com

**Near Term HOV System**

**NVADA DOT**  
nevadadot.com

## Long Term HOV System

**Southern Nevada HOV Plan**  
nevadadot.com

## HOV System Proposed Recommendations

### Operational Recommendations

Component	Operational Plan
Minimum occupancy	2+
Hours of operation	24-hours, 7 days of the week
Trucks	Vehicles with more than two axles (or vehicle-trailer combinations) are not eligible
Motorcycles	Eligible
Emergency vehicles	Those responding to an emergency are eligible
Public transit buses	Eligible (including dead-heading buses)
Single-occupant low-emission and energy-efficient vehicles	To be studied
Access Type	Limited Access

**Southern Nevada HOV Plan**  
nevadadot.com

## HOV System Proposed Recommendations

### Express Lane Conversion

- Need HOV connectivity between I-15 and US-95
- Convert Express Lanes to HOV
- 2 Express Lanes become 1 HOV and 1 GP
- Limited access for HOV lane

**Before:**

Express Lanes      General Purpose Lanes

**After:**

HOV Lane      General Purpose Lanes

HOV Lane/ GP Lanes

**Southern Nevada HOV Plan**  
nevadadot.com

## HOV Plan Next Steps

- Initial modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak hour or 24 hr.
  - Vehicle eligibility
  - Ingress/egress – continuous or limited
  - Direct access connectors and flyover

**Southern Nevada HOV Plan**  
nevadadot.com

Thank you!

Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)

**Southern Nevada HOV Plan**  
nevadadot.com



## PUBLIC OUTREACH SUMMARY

Date: January 21, 2015	Time: 9:00 A.M.
Meeting Title: City of Las Vegas City Council Meeting	
Location: Council Chambers 495 South Main Street	
Attendees: Carolyn Goodman (Mayor), Stavros S. Anthony (Mayor Pro Tem), Lois Tarkanian, Steven D. Ross, Ricki Y. Barlow, Bob Coffin, Bob Beers, Jeff Lerud (NDOT Project Manager) and John Karachepone (Jacobs)	
Meeting Summary	
<p><i>Agenda Item No. 45</i></p> <p>Jeff Lerud, Senior Project Manager with the Nevada Department of Transportation (NDOT), presented the update on the Southern Nevada HOV Master Plan by providing a PowerPoint Presentation, a copy of which was submitted as backup. Discussed were HOV Plan Background, Information on the Current System, the HOV Plan Update, Near Term HOV System recommendations, the planned Long Term HOV System, and HOV System Proposed Recommendations on Operational Recommendations; Express Lane Recommendations; and proposed locations of Direct Access Ramps and HOV Plan Next Steps.</p>	
Comments	
<i>Name</i>	<i>Comment/Response</i>
Stavros S. Anthony	<i>Comment</i> - Wondered if there was a way of measuring the success of the HOV lanes, pointing out that these lanes could probably be put to better use. He suggested shortening the hours to 4:00-7:00 p.m. He also asked if studies had shown that the number of vehicles in the HOV lanes was increasing.
Jeff Lerud	<i>Response</i> - The objective was to try to enhance mobility by offering the HOV lanes as a alternative.
John Karachepone	<i>Response</i> - Added that the HOV lanes offered a travel advantage and the study showed that about 900 vehicles with at least two passengers were traveling per hour in the HOV lane.
Steven D. Ross	<i>Comment</i> - Stated that from his commute to/from City Hall, he observed that there was a lack of enforcement of the HOV lanes, because he was consistently seeing more one-passenger vehicles in the HOV lanes than two-passenger vehicles. He expressed frustration with government's need to study things repeatedly, particularly when it was evident that growth throughout the Valley would bring more traffic. But he felt that in addition to adding HOV lanes in the Northwest part of town, the studies should include a people mover system.
Jeff Lerud	<i>Response</i> - Explained that studies were necessary to determine necessary highway improvements/expansions and associated necessary funding. He noted that using federal dollars requires conducting studies.
Steven D. Ross	<i>Comment</i> - Reiterated that increased vehicular traffic should be expected; therefore, an HOV lane should be included in all highway expansions to encourage carpooling.
Jeff Lerud	<i>Response</i> - added that the Northwest area was included in the study

## PUBLIC OUTREACH SUMMARY

John Karachepone

*Response* - Commented that the HOV lanes would not be precluded in the Northwest (beyond the currently planned terminus of the HOV lane) in the future.

Bob Beers

*Comment* - Asked if this initiative was driven by the Federal government, because he did not believe carpooling made sense in a city like Las Vegas, where space is not at a premium. It was not apparent to him that drivers' behavior was being changed.

Jeff Lerud

*Response* - Countered that the cost of right-of-way was at a premium in Las Vegas. Given the eventual increase in traffic, NDOT was looking to be pro-active and enhance mobility of those people that would be willing to carpool and relieve traffic congestion.

Bob Beers

*Comment* - Asked if local governments had the authority to suspend HOV lanes.

John Karachepone

*Response* - Remarked that traffic congestion was vital to changing drivers' behavior and NDOT wanted to offer an option for drivers, including expansion of the hours of operation. With limited right-of-way in the Las Vegas Valley, NDOT had to look for options to reduce traffic congestion.

Bob Beers

*Comment* - Asserted that carpooling had fallen short of the model projected ten years ago. Consequently, he wondered if the project could be suspended until congestion increased or Project Neon was completed,

Jeff Lerud

*Response* - replied that he did not believe suspension was possible

Steven D. Ross

*Comment* - Disagreed with Councilman Beers and said that the HOV lanes were changing behavior patterns. He urged expediency on all NDOT traffic improvement projects.

Bob Coffin

*Comment* - Suggested emulating California and allowing electric vehicles in HOV lanes. He asked that his request be taken into consideration.

John Karachepone

*Response* - Commented that the Federal Government defines who could use the HOV lanes, but the Nevada Legislature could ask NDOT to conduct a study on it.

Stavros S. Anthony

*Comment* - Confirmed with Mr. Lerud that he was only providing an update.

Jeff Lerud

*Response* - Added an input workshop was scheduled for February.

Elizabeth Fretwell

*Comment* - Did not think the City could regulate the highway system, but she offered to research it further and make a presentation to the Council.

Stavros S. Anthony

*Comment* - Added that he would like to convert the HOV lanes into express lanes until traffic increased.

Mayor Goodman

*Comment* - commented that enforcement was difficult because there were no cameras or enough police officers

## PUBLIC OUTREACH SUMMARY

### Actions and Post Meeting comment

1. Some concerns were raised post Council meeting about having the HOV lanes operate 24 hours of the day, seven days of the week, since some councilmen believe that HOV-eligible traffic demand will not be adequate in the near-term to warrant this 24/7 HOV operations restriction. It was suggested that some Councilmen would prefer to have a follow-up traffic study to justify this change.

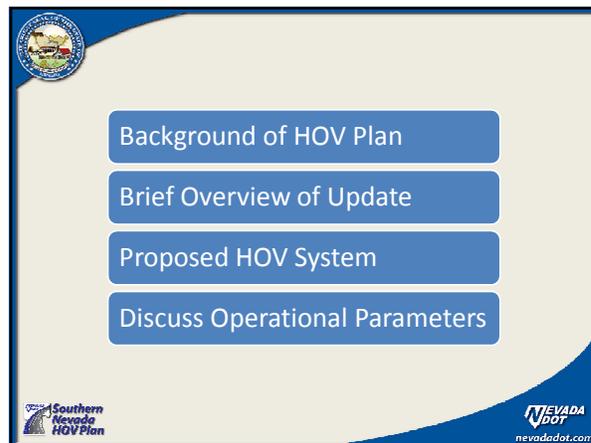
Workshop Materials



**Southern Nevada HOV Plan Update**

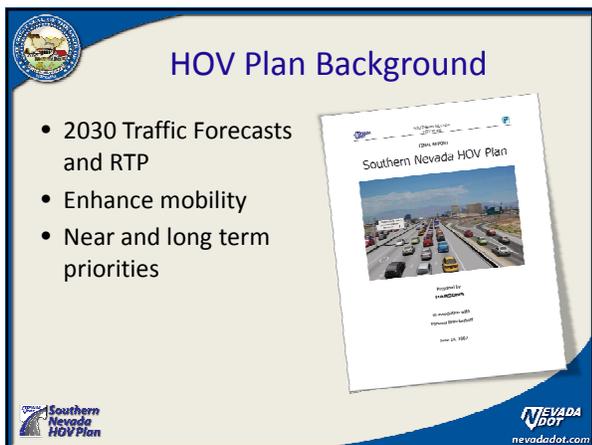
Technical Workshop  
February 24, 2015  
Jeff Lerud, Project Manager

**NV** NEVADA DOT  
nevadadot.com



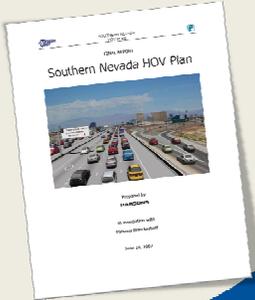
- Background of HOV Plan
- Brief Overview of Update
- Proposed HOV System
- Discuss Operational Parameters

**NV** NEVADA DOT  
nevadadot.com



**HOV Plan Background**

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities



**NV** NEVADA DOT  
nevadadot.com



**HOV Plan Background**

- HOV lanes have been in operation in Las Vegas since 2007
- HOV lanes have been included in approved NEPA studies since 2006
  - I-15 at Starr Interchange
  - I-15 Design Build/Express Lanes South
  - I-15 South Design Build
  - I-15 South Corridor Improvements
  - US 95 HOV Lanes and Southern Nevada HOV Plan
  - I-15 Managed Lanes from I-215 to Sahara Ave

**NV** NEVADA DOT  
nevadadot.com



### Current System

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
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### HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach

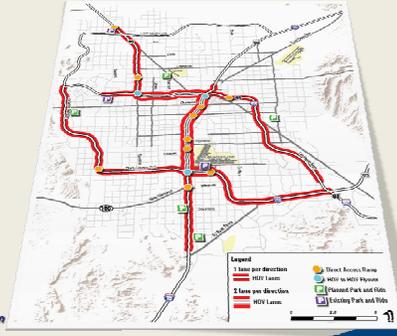



### Near Term HOV System





### Long Term HOV System





### Criteria – Regional HOV System Planning

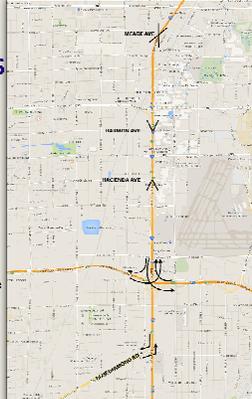
- Congestion
- Bottlenecks
- Travel Time Savings
- HOV Lane Demand
- Transit Service
- Available Space
- Connectivity / Continuity




### HOV Proposed Recommendations

**HOV Direct Access Ramps (Between St. Rose/Sahara)**

- Direct connects to arterial
  - 7 locations screened: St Rose, Blue Diamond, Warm Springs, Sunset, Hacienda, Harmon, Meade
  - 4 locations proposed: Blue Diamond, Hacienda, Harmon, Meade
- HOV to HOV flyover
  - Propose I-15/I-215 to/from east (Airport) AND to/from the west







## Proposed HOV Drop Ramps

- I-15
  - Blue Diamond Road
  - Hacienda Avenue
  - Harmon Avenue
  - Meade Avenue
  - HOV Gateway
- US 95
  - Maryland Parkway
  - Smoke Ranch Road
  - Elkhorn Road
- CC-215
  - Sunset Road



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## HOV Plan Next Steps

- Modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak period or 24 hr.
  - Vehicle eligibility
  - Ingress/egress – continuous or limited
  - Direct access connectors and flyover



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## Thank you!

### Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



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SOUTHERN NEVADA HOV PLAN UPDATE  
TECHNICAL WORKSHOP  
FEBRUARY 24, 2015

Taken at:  
Regional Transportation Commission  
600 Grand Central Parkway  
Las Vegas, Nevada 89106

on Tuesday, February 24, 2015  
2:39 p.m.

REPORTED BY: ANDREA MARTIN, CRR, RPR, CCR NO. 887

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9 ALSO PRESENT:

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11 Kevin M. Futch  
12 Freddie Kirtley  
13 Brian Hoeft  
14 Michael Yates  
15 Sean Robertson  
16 John Terry  
17 Eric Meyer  
18 Julie Maxey  
19 Cole Mortensen  
20 Lynnette Russell  
21 Jack Sjostrom  
22 David Swallow  
23 Dale Keller  
24 Cigdem Mulazimoglu  
25 Andrew Kjellman  
Raymond Hess  
Sonja Ruffin

**Technical Workshop - 2/24/2015  
Southern Nevada HOV Plan Update**

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1 MR. LERUD: Let's get started. I'm about  
2 to give a PowerPoint presentation.

3 Thanks, everybody, for coming today to the  
4 technical workshop regarding the Southern Nevada  
5 update. I was hoping for a little better  
6 attendance, but I think we did really good outreach  
7 over the last couple of months, getting out to all  
8 the staff, so I think everybody is pretty much aware  
9 of what's going on.

10 Before I get into this, I wanted to give  
11 kind of a little icebreaker and talk about HOV lanes  
12 and your personal use with HOV lanes, so I'll start  
13 off.

14 I'm Jeff Lerud, Project Manager, with  
15 NDOT. As far as HOV lanes are concerned, we don't  
16 have any up in northern Nevada, so my biggest  
17 experience with them are down here, in California,  
18 and I'll never forget the first time I was driving  
19 and I took the HOV connector in San Francisco from  
20 I-80 down to where the tolls are, and I saw it  
21 coming up, and I'm looking at it and I'm looking at  
22 it, and I'm like, "Man, that looks like it's going  
23 to go straight through."

24 And we had three people in the car. I  
25 wasn't driving, so I just encouraged the driver to

1 take it. We took that flyover, and, man, we dropped  
2 down right on the toll lanes, and it seemed like we  
3 passed about 15 or 20 minutes of congestion. It was  
4 really cool.

5           Anyway, that's a good experience I've had  
6 with HOV lanes.

7           So I kind of want to go around the room,  
8 introduce yourself, and then maybe your own personal  
9 experience, yeas or nays, maybe some dislikes or  
10 likes of HOV lanes.

11           So, Eric, if you want to start off...

12           MR. MEYER: Yeah. I'm Eric Meyer. I work  
13 for the City of Las Vegas in Traffic Engineering.  
14 And, you know, I've mostly experienced HOV lanes  
15 down like in Southern California, San Diego area,  
16 and they're great when you are traveling with your  
17 family, because you have a car full of people. It  
18 seems to work really well down there.

19           As far as locally, you know, we have very  
20 low usage, is what my observation is, of the HOV  
21 lanes.

22           I really like using the express lanes on  
23 I-15. That's my route to and from home. They're  
24 really good to get past congestion. Also, I like  
25 the HOV lanes on 95 between those hours when they're

1 not in effect, because you get that extra lane, and  
2 traffic seems to move a lot better during those  
3 midday hours.

4 That's about it --

5 MR. LERUD: Thank you.

6 We have someone who is taking notes, so if  
7 you can speak up a little bit and speak slowly, it  
8 might help capture what's said.

9 MR. SJOSTROM: Jack Sjostrom with CA  
10 Group. I actually worked with Jeff and John on some  
11 of the preliminary geometrics that you see on the  
12 wall over there for this project.

13 My experience with HOV is working with  
14 John Terry to implement the first one here, in  
15 Southern Nevada. That was pretty cool, and I used  
16 it on the way over here to get by some traffic.

17 MR. ROBERTSON: Sean Robertson, with the  
18 City of Henderson, Nevada.

19 We have a committee for ones here, but I  
20 grew up in Washington D.C., and I remember it was in  
21 the '70s when they opened the one up inside the  
22 Capital Beltway, I-95 approaching Washington D.C.,  
23 and it was tremendously successful. You hear about  
24 the guys that kept the mannequins in the trunk so  
25 they can put the fourth person in the car and they

1 can get de facto parking rights popping up in gas  
2 stations and schools everywhere.

3           Anyway, that's what I remember.

4           MR. LERUD: Thank you.

5           MS. RUSSELL: I'm Lynette Russell with  
6 NDOT also. I keep a mannequin in my trunk  
7 because --

8           MR. LERUD: -- for tracking HOV lanes.

9           MS. RUSSELL: I like HOV lanes when I have  
10 my mannequin with me.

11           I like the HOV lanes when it's off hours  
12 and I can use them. Generally, I'm coming through  
13 those areas during the peak times and it's me in the  
14 car, so I don't like them as HOV lanes.

15           MR. LERUD: Thank you.

16           MS. MULAZIMOGLU: I'm Cigdem Mulazimoglu,  
17 with Jacobs. I'm happy with the study as well.

18           I don't really have much experience with  
19 HOV lanes. The only times I use them is on the  
20 weekends, which are off hours anyway, and during  
21 those hours, there's not much congestion so I don't  
22 really see any difference.

23           MR. KARACHEPONE: I'm John Karachepone,  
24 with Jacobs Engineering, Consulting Project Manager.

25           I have used the US-95 HOV lanes on several

1 occasions quite a bit, and typically I'm in the  
2 lanes because I have -- there's more than one  
3 occupant. I think it's saved me time. Although,  
4 there are times when I think traffic's going just as  
5 fast alongside me, and that hasn't helped but it's  
6 okay. I still enjoy the fact that the HOV lane was  
7 available to me.

8           Someone cracked me up the other day when  
9 they asked me whether that little buffer between the  
10 express lanes and the GP lanes was actually a  
11 motorcycle lane.

12           MR. SWALLOW: My name is Dave Swallow,  
13 with Region Transportation Commission, Southern  
14 Nevada, and, you know, I appreciate the HOV lanes  
15 more for our transit service and the ability for our  
16 buses to use them, especially during peak  
17 congestion.

18           We have our park-and-ride over at the  
19 Westcliff Transit Center so we use the HOV and the  
20 HOV connector from Summerlin Parkway on the 95.  
21 That's really good for us. We're looking forward to  
22 the HOVs being extended with the connector to I-15.

23           Again, trying to make transit more viable  
24 as a choice and having the HOV lanes available to  
25 our buses on the freeways is a real benefit. It

1 helps with the travel time savings.

2 MR. LERUD: Thanks.

3 MR. HOEFT: Brian Hoeft with RTC FAST.

4 What we're observing -- and this probably  
5 isn't applicable to Southern Nevada right now -- is  
6 a lot of HOV lanes are being converted to some sort  
7 of managed lane or towing lane, so it's something to  
8 at least be aware of, because we kind of caught a  
9 break for the last 5-7 years with the downturn of  
10 the economy, but everything is coming back like  
11 gangbusters now, and we are probably going to  
12 experience more and more severe congestion.

13 We want to have every possible option  
14 available to us, so we want to at least be aware of  
15 opportunities with what else we can do with the HOV  
16 lanes.

17 MR. YATES: Mike Yates. I'm the traffic  
18 engineer for District 1 for DOT.

19 I would say that I use the HOV lanes when  
20 I can use them. For my commute, it's not very  
21 often, but for when I have my family with me, I use  
22 them every chance I can get. I like the Summerlin  
23 flyover because that's on my drive a lot, because I  
24 live in the part of town where we use that, and it  
25 helps me get past some particularly nasty backups on

1 the Rainbow Curve, on the 95, sometimes, but I would  
2 say that's probably the place I use it the most.

3 MR. LERUD: Thanks.

4 MR. TERRY: John Terry, currently the  
5 Assistant Director of Engineering for NDOT, but I  
6 was the project manager on the original HOV study in  
7 Seattle, so I also lived in Seattle, where I both  
8 commuted in the HOV lanes that they have in the  
9 Seattle area, as well as design the freeways with  
10 HOV lanes in Seattle.

11 I also worked on the design of the first  
12 HOV lanes in Utah as part of the design-build  
13 project there, and I was a project manager for US-95  
14 here, so that was all the first HOV lanes we put in,  
15 including the Summerlin flyover.

16 I used the HOV lanes some when I lived in  
17 Las Vegas, but I didn't live in that part of town.

18 MR. MORTENSEN: I'm Cole Mortensen,  
19 Assistant Chief Project Management.

20 I've been managing Project NEON for the  
21 last half a decade, and I get a lot of questions  
22 about the HOV system and what we're doing with NEON,  
23 and I think the most common comment I get is the  
24 system on US-95 is underutilized.

25 The one thing I kind of try to point out

1 to people is if you are going northbound on the I-15  
2 and you get on the U.S. 95, you have got to cross  
3 like six general purpose lanes of traffic to get  
4 into the HOV system, so unless you really want go to  
5 the other end of it, it's typically not worth your  
6 effort to put that kind of weaving into place.

7 I try to point out what we're trying to do  
8 in the future is to add utility to the system to  
9 encourage ridership. That's a lot of what Project  
10 NEON about, is making that connection between US-95  
11 and the I-15, as well as the direct connect  
12 interchange to, basically, the downtown area, you  
13 know, allowing people in the HOV system to get off  
14 to the local streets without having to cross general  
15 purpose lanes.

16 That's kind of been the selling points  
17 that I've been trying to bring people's attention  
18 to.

19 MR. LERUD: Thanks.

20 MR. KELLER: My name is Dale Keller, with  
21 NDOT project management.

22 I just want to add to what Cole is saying.  
23 I think some of these near-term HOV systems -- our  
24 goal is going to change how the valley is going to  
25 commute and their expectations about how to travel

1 around the town.

2 MR. FUTCH: I'm Kevin Futch, City of  
3 Henderson. I grew up in Southern California, so I  
4 have some experience with HOV lanes and some of the,  
5 like Brian mentioned, managed lanes, hot lanes.

6 I can see what Brian kind of brought up is  
7 maybe that's a point -- maybe that's kind of  
8 shadowed a bit. Maybe looking at that in the  
9 future -- is the managed lanes. I think that's a  
10 great opportunity. I have a lot of relatives in  
11 Southern California. That's what they use, and  
12 they're willing to pay the money to save some time.  
13 So just a suggestion.

14 MR. LERUD: Thanks.

15 MS. KIRTLEY: I'm Freddie Kirtley. I work  
16 for McCarran Airport International. I am over the  
17 lane side and all the roads coming to McCarran  
18 airport.

19 So for the HOV, I use it also very seldom  
20 because when I go back and forth to work is when you  
21 need to be more than one in the car, and I'm just  
22 going by myself, so very often I use it -- if I use  
23 it, it is only as an extra lane, not as a time to go  
24 and be able to have someone else with me.

25 MR. LERUD: Okay. Thanks.

1 MR. KJELLMAN: I'm Andrew Kjellman with  
2 the RTC.

3 I was a transit rider on the Westcliff  
4 Airport Express when the Summerlin flyover opened,  
5 and it took so long for the transit drivers to  
6 understand what that facility was. And there was  
7 nothing more frustrating than being stuck in the far  
8 right-hand lane when it was open. But they got  
9 through it. The lane was enough.

10 MR. HESS: Raymond Hess with the RTC.

11 I take the WAX currently, and one of the  
12 things that I will say is a real benefit is, you  
13 know, in order to get people to kind of change their  
14 habits in terms of commuting, you have to make one  
15 mode as attractive or more attractive than another,  
16 and WAX will blow by traffic that's backed up on 95  
17 at Summerlin Parkway, so it becomes a more  
18 attractive option, even for me. I can get home  
19 quicker in the p.m. peak on the bus than I can in a  
20 car, in a single-occupancy vehicle. That's one  
21 thing to know.

22 Also, as an SOV owner who has an electric  
23 plug-in hybrid, I'm always interested to see what  
24 NDOT wants to do with that NRS that allows electric  
25 plug-in hybrids in the HOV, like some of the other

1 states mentioned, like California and Oregon.

2 So, you know, just curious to see if that  
3 will ever been an option. Thank you.

4 MS. RUFFIN: I'm Sonja Ruffin. I'm here  
5 in support of the Jacobs team.

6 And as far as my use of the HOV lanes, not  
7 often enough because, as others have said, I'm often  
8 a single occupant in the vehicle.

9 MS. MOYA: Hi, I'm Lucy Moya. I am also  
10 here as a part of a consultant with Roger  
11 Consulting.

12 I don't actually travel a lot to use HOV  
13 lanes, but when it comes to meetings and things like  
14 that, we do carpool, between consultants and  
15 employees. I think it would be a great idea just to  
16 save on the commute and getting there on time, which  
17 I never am, so...

18 MS. MAXEY: Hi, I'm Julie Maxey. I'm with  
19 NDOT, Public Hearings Officer, and I'm actually from  
20 northern Nevada. I actually live in the very rural  
21 town of Gardnerville, so I don't have too much  
22 experience with this, but I do come down here and  
23 work quite a bit. It would actually improve my  
24 commute when I'm having to get around the city, so I  
25 totally support the project.

1 MR. LERUD: Well, thanks, everybody.

2 I think there were a lot of good  
3 discussion points right there. I just jotted down a  
4 couple things as far as it seems like there's not a  
5 high use in this room of HOV lanes. There's some  
6 concerns about -- or some use of them during  
7 off-peak hours. Transit -- sounds like that's a  
8 good point to make.

9 The direct connector with NEON -- when  
10 Neon comes through that connect, it's going to  
11 connect 22 miles of continuous HOV lanes, so when  
12 that happens, I think that's going to -- in fact,  
13 our study shows it's going to increase like  
14 25-30 percent, according to the model, so hopefully  
15 we see that in reality.

16 And I think, Kevin, you brought up  
17 tolling. We don't have legislature in place yet,  
18 but you never know, especially as congestion keeps  
19 on building.

20 And then -- he left. I was going to talk  
21 about hybrids too.

22 Anyway, thanks for doing that, everybody.  
23 That helps me relax a little bit, so thanks for that  
24 participation.

25 Right now, I'm going to give you a little

1 background of the HOV plan, a brief overview of the  
2 update, discuss our proposed HOV system, and then  
3 discuss the operational parameters, which is --  
4 that's probably one of the biggest things we're here  
5 today to discuss, when everything is said and done,  
6 is talk about hours of operation, the access into  
7 and out of the lane, whether or not hybrids should  
8 be in there, transit, motorcycles, things like that,  
9 so we'll be hitting that up after the presentation,  
10 as John goes around and speaks to these boards.

11 (Presentation given by John Karachepone  
12 not reported as part of record.)

13 MR. SWALLOW: John, I just had a quick  
14 thought.

15 As you're developing a plan, I know you've  
16 coordinated with RTC Transit on the routes that are  
17 taking to and from our main hubs in downtown and  
18 South Strip.

19 MR. KARACHEPONE: Yes.

20 MR. SWALLOW: But I just want to make sure  
21 that those entry points to and from the HOV lanes  
22 enable us to do a future master plan of express  
23 routes that leverage those assets as much as  
24 possible. I mean make sure the entry points don't  
25 interfere or prevent us from using the lanes because

1 of where they're located in proximity to the transit  
2 hubs and the freeway access points.

3 MR. HOEFT: The question is kind of  
4 related to the planning as well, because you  
5 mentioned conformity.

6 How much does the future planning take  
7 into account more electric vehicles, more  
8 fuel-efficient vehicles? Does that get factored  
9 into the ultimate emissions that are occurring? How  
10 is that looked at by you guys, or how is that looked  
11 at by the feds?

12 MR. HESS: As you know, that's Beth's  
13 specialty. I know we're transitioning over to --  
14 EPA has a new air quality model, and so internally  
15 we don't even have the capacity to run that yet.  
16 We've had to contract that out, so I don't know to  
17 the extent that electric or, you know,  
18 fuel-efficient vehicles factor into that.

19 Historically, the other thing -- just to  
20 kind of tack onto what John was saying,  
21 historically, the network was determined the project  
22 sponsor. It wasn't really the RTC saying you are  
23 going to widen 515; you are going to do Project  
24 NEON. It was NDOT saying that.

25 The other thing is that what John was

1 saying, all of the HOV system -- or, actually, I  
2 think you were saying, Mr. Terry, the HOV system is  
3 expansion to the existing network of general purpose  
4 lanes and not taking away a general purpose lane. I  
5 can't see how that would adversely affect the air  
6 quality, because you are not removing a general  
7 purpose lane; you are adding an HOV lane.

8 MR. TERRY: It would help. It's just a  
9 matter of being consistent.

10 MR. HESS: Sure, sure.

11 MR. KARACHEPONE: Anything else?

12 So I'm going to go into the operational  
13 characteristics of the HOV Lane.

14 (Presentation given by John Karachepone  
15 not reported as part of record.)

16 MR. KARACHEPONE: Any comments?

17 MR. HOEFT: Just one.

18 Do you talk about steps that you would  
19 take to go from a two-plus to a three-plus, if you  
20 found it necessary, or do you have thresholds in  
21 place that say if I meet a certain performance or a  
22 certain volume, I need to start implementing  
23 three-plus?

24 MR. KARACHEPONE: I have to check if the  
25 HOV manual itself has those. I don't recall, but,

1 you know, I think what we're suggesting is that we  
2 should set up those performance measures now.  
3 Right?

4 MR. HOEFT: I think so. Because sometimes  
5 you are surprised. I think that there's a decent  
6 chance when you open up the HOV on the I-15 with  
7 NEON, you know, you might be estimating 2,000  
8 vehicles and you might get 3,000, and so we need to  
9 kind of be ready to be nimble, if necessary.

10 MR. KARACHEPONE: Okay.

11 MR. MEYER: When you say "22 continuous  
12 miles," where are you talking from?

13 MR. KARACHEPONE: All the way south from  
14 Silverado, all the way north to essentially Elkhorn.

15 MR. MEYER: From one end to the other, all  
16 the way on I-15?

17 MR. KARACHEPONE: Yes, all the way on  
18 I-15. So it's the NEON trans system all the way up  
19 there. That's 22 miles.

20 MR. MEYER: But do you have like an  
21 estimate of what the average trip length would be,  
22 the distance?

23 MR. KARACHEPONE: I don't have that. I  
24 can check for you.

25 MR. MEYER: I'm just curious, because, you

1 know --

2 MR. KARACHEPONE: I don't have that.

3 MR. MEYER: -- unless you are going from  
4 one end of town to the other --

5 MR. KARACHEPONE: That's right. That's  
6 right.

7 We've known all the while, you know, from  
8 the original plan that as we begin to get -- you  
9 know, the system expands and is a reasonable one,  
10 then we start seeing people more, because for short  
11 trips -- we had an HOV lane for only 6 miles for  
12 several years. Six miles isn't -- you are not going  
13 to save enough time to actually make that move into  
14 an HOV.

15 That changed to 12 miles, and now we are  
16 going 22.

17 When we changed to 12 miles, we saw a  
18 10 percent jump in the HOV lane volume. Now it  
19 goes -- now, when you have that connection at Neon  
20 and all 22 -- again, of course, how many people are  
21 traveling 22 miles? Probably not much. Not many  
22 people are traveling the entire distance.

23 But now it gives -- now you begin to have  
24 those options. You can get on at some point and  
25 travel 11 miles. Somebody else has the option of

1 traveling 16 of them, you know.

2           There's lots more options, and we're  
3 thinking that number, the number of vehicles in  
4 those HOV lanes, are going to go up anything from 35  
5 to maybe 60 percent higher than we have.

6           MS. KIRTLEY: I have a question.

7           In the long-term, how do you envision,  
8 with the express lane that we have on 15 -- and  
9 obviously I'm talking, for example, downtown or  
10 coming in from California.

11           With the airport, we already have the  
12 express lanes, and now you're planning, long-term,  
13 to have HOVs with connection.

14           How would you do the two lanes plus the  
15 normal lanes right there?

16           MR. KARACHEPONE: So we would no longer  
17 have express lanes.

18           With the near-term system, with Project  
19 NEON, with the implement -- I hope I'm -- if I'm  
20 going off on a tangent, let me know. Hopefully I  
21 understood the question correctly.

22           MS. KIRTLEY: Okay.

23           MR. KARACHEPONE: With the near-term  
24 system with Project NEON coming online, the express  
25 lanes will go away. We will no longer have express

1 lanes. All we will have is one HOV lane in each  
2 direction.

3 And since -- in the near-term system, you  
4 know, they will have to exit from the HOV lane at  
5 the appropriate location, would cross to the 215  
6 ramps, and make their way to the airport, just as  
7 any other vehicle would.

8 Under the long-term system, there will  
9 actually be direct-connect ramps from I-15. So if  
10 you wanted go to the airport, on the long-term  
11 system you could stay in your HOV lane, take your  
12 direct-access connection from -- I'm going to go  
13 southbound, so southbound I-15, direct-connect to  
14 eastbound 215, and a direct-connect from 215 into  
15 the airport connector, if that connection comes as  
16 well.

17 So we do have -- and I realize I did not  
18 point that out earlier. We do have, in the  
19 long-term plan -- it was there in the 2007 plan as  
20 well -- a direct HOV connector from 215 to the  
21 airport, and this would be only from the I-15 side,  
22 so eastbound to northbound, so eastbound on 215 to  
23 northbound into the airport, and the reverse  
24 direction.

25 Did I answer your question?

1 MS. KIRTLEY: Um-hmm. Thank you.

2 MR. KARACHEPONE: Any other questions or  
3 comments?

4 Back to the presentation.

5 (Presentation given by John Karachepone  
6 not reported as part of record.)

7 MR. KARACHEPONE: Commends or feedback?  
8 What do you think?

9 MR. HOEFT: I'll make another comment.

10 MR. KARACHEPONE: Sure.

11 MR. HOEFT: Well, you mentioned  
12 enforcement, and since that's where we're located  
13 with highway patrol, enforcement is always something  
14 that they have to consider in their work plans and  
15 their staffing and everything, so maybe not directly  
16 related to two-plus/three-plus, but when doing these  
17 plans, be aware of the people and the entity that  
18 has to do the enforcing and make sure they have a  
19 chance to chime in on things.

20 MR. KARACHEPONE: Oh, they were invited  
21 today, and they're invited tomorrow morning as well.

22 Tomorrow morning, by the way, we are  
23 having another workshop identical to this, but we  
24 are inviting owners and so on, stakeholders. This  
25 was more of a technical group, cities and agencies.

1 Tomorrow we are going to have the Taxi Authority,  
2 folks like that.

3 MR. HOEFT: When and where is that?

4 MR. KARACHEPONE: That is tomorrow  
5 morning, from 9:00 to 11:00.

6 MR. HOEFT: Okay.

7 MR. LERUD: Right here.

8 MR. KARACHEPONE: Right here, this same  
9 room.

10 MR. HOEFT: So I can crash it if I wanted  
11 to?

12 MR. KARACHEPONE: I was hoping that  
13 someone from the electric company would be here  
14 today. I'm not sure that they RSVP'd.

15 MR. SWALLOW: I'll find out tomorrow  
16 morning.

17 MR. KARACHEPONE: That would be great,  
18 because I think it's a question that comes up often  
19 of enforcement of the HOV lanes.

20 MR. SJOSTROM: I'll make a comment.

21 MR. LERUD: Go ahead.

22 MR. SJOSTROM: Given the nature of the  
23 Strip and the HOV drop ramps to Hacienda and  
24 Harmon -- I know you haven't talked about the  
25 location specifically yet, but with the two-plus

1 ridership, you basically said cabs need to have more  
2 than one rider --

3 MR. KARACHEPONE: No. Cabs --

4 MR. SJOSTROM: -- if you go to three-plus.

5 MR. KARACHEPONE: Correct.

6 MR. SJOSTROM: So it will be an  
7 interesting conversation.

8 MR. KARACHEPONE: Correct.

9 So this has been one of the things that  
10 are positive to the HOV lanes. If they're just  
11 two-plus, it benefits both our visitors as well as  
12 our residents, because a lot of our visitors are  
13 using taxis to get to the airport, to the hotels, or  
14 to travel within Las Vegas, and taxis would be able  
15 to use and limousines would be able to use HOV  
16 facilities, so it does help them get around.

17 But I agree that if it's three-plus, if we  
18 eventually go to three-plus, it would impact some of  
19 those riders, yes.

20 MR. TERRY: I have been an advocate for  
21 24 hours, and our system originally opened up at  
22 24 hours, and due to pressure, we went to time of  
23 day, and we said when we did that that it's going  
24 to be hard to go back. And I believe with this  
25 huge extension of the system is the time go back

1 to 24 hours.

2 Far and away the largest HOV system  
3 in the nation is in Southern California. It is  
4 24 hours a day. Our other nearby neighbors, both  
5 Phoenix and Salt Lake City -- they are 24 hours a  
6 day. There is no congestion in the middle of the  
7 night in the other lanes. They're not going to be  
8 gaining anything by going to the HOV system, and  
9 then the other aspect is the nature of our HOV  
10 system.

11 One of the only other places that has  
12 these big flyovers from one freeway to another and  
13 direct access ramps onto them are Southern  
14 California, which has the 24-hour operations.

15 We are now talking about a system where we  
16 have by -- you know, a lot of it's on I-15 -- by  
17 Federal Highways requirements and AASHTO and others,  
18 you only have an interchange every mile or every  
19 2 miles, and you have to analyze where you add extra  
20 interchanges. Well, if you go and add -- and  
21 left-hand interchanges aren't allowed.

22 Now, if you do an HOV system that has  
23 direct access ramps and you have left-hand onramps  
24 from the median and that system is not 24-hour  
25 operations, you're essentially allowing general

1 purpose lane access from the median of the  
2 interstate freeway, which there is none of that in  
3 this country that I'm aware of, that -- I just don't  
4 think -- once you go to our nature of system, I  
5 believe you have to go 24 hours, and that's the  
6 best, and perhaps the only time, to make that  
7 conversion, is with this major addition to the  
8 system.

9 MR. KELLER: Is there a big benefit/cost  
10 difference between the two, compared to -- just  
11 limited operation compared to time?

12 MR. KARACHEPONE: Is there benefits to  
13 cost --

14 MR. KELLER: -- analysis, and is there a  
15 difference between a 24-hour system versus an hour  
16 operation?

17 MR. KARACHEPONE: Oh, we have not done a  
18 benefits cost analysis in our study, and I don't  
19 know if such an analysis has been done for other  
20 systems.

21 MR. SWALLOW: I bet there is. I would be  
22 surprised if there wasn't. Probably something easy  
23 to find.

24 MR. KARACHEPONE: I think, typically, you  
25 know, it's been -- once they decide you are going to

1 have a lot of direct access ramps and flyovers and  
2 so on, it goes straight to a 24-hour operation.

3 MR. SWALLOW: Right.

4 MR. KARACHEPONE: And so it's not -- so  
5 the benefits cost I don't think is coming into play.  
6 It's like, okay, this is what we need because we  
7 have the demand.

8 MR. SWALLOW: Sure.

9 MR. KARACHEPONE: So it's a safety -- we  
10 don't want -- so it's not going to benefit cost.  
11 It's going -- this is how -- for safe operations,  
12 this is what we need.

13 MR. HOEFT: I don't think you can show a  
14 disbenefit, and we have more data to support John in  
15 making this happen this time, so we'll be right  
16 there with you.

17 MR. KARACHEPONE: Continuing on with the  
18 presentation...

19 (Presentation given by John Karachepone  
20 not reported as part of record.)

21 MR. KARACHEPONE: Any comments?

22 MR. SJOSTROM: Why not just make them  
23 ineligible, that being drop ramps, and allow them  
24 to, if they have that number of passengers, still  
25 utilize an HOV lane; just tell them they are not

1 able to --

2 MR. KARACHEPONE: We're going to have an  
3 HOV system that for a lot of that is a single-lane  
4 HOV system, and so if you allow trucks into them,  
5 then you've not taken away the problem of slower  
6 traffic in an HOV lane. The idea of having the HOV  
7 lane is more reliable and better travel speed than  
8 the congested adjacent lane.

9 MR. TERRY: I think it's a non-issue. I  
10 don't think there's trucks allowed in any HOV lane  
11 in the United States.

12 I mean, the detail is -- I guess we have a  
13 gross vehicle weight limit that you have to be  
14 below, and you can't be towing a trailer, so pickup  
15 trucks are allowed. It's, you know --

16 MR. KARACHEPONE: I think it's an  
17 axle-based --

18 MS. MAXEY: Yeah, you have the  
19 axle-base --

20 MR. KARACHEPONE: -- so if it's more than  
21 two axles...

22 MR. TERRY: What do you mean we are? We  
23 aren't going with what we currently have? We're  
24 changing it?

25 MS. KIRTLEY: Currently, it's just trucks.

1 It just says "trucks" on the signs. It just says  
2 trucks are not allowed. HOV manual says trucks with  
3 more than two axles are not allowed.

4 MR. KARACHEPONE: That's with the HOV  
5 access --

6 MR. TERRY: I thought we had, on the sign,  
7 an actual gross vehicle weight.

8 MR. LERUD: That's transit.

9 (Discussion held off the record.)

10 MR. LERUD: You know, one comment that was  
11 made when we were reaching out to everybody was, you  
12 know, you've got the express lanes, and trucks use  
13 them pretty exclusive, and now that the express  
14 lanes are going away, now the trucks are going to be  
15 in the GP mix. And some people raised those  
16 concerns. I don't know what you guys think on that.

17 MR. YATES: Well, what I was going to say  
18 is that on the long-term HOV, where you've got two  
19 lanes in each direction on I-15, then we might be  
20 able to make an argument for allowing trucks, but --  
21 and then you'd sign all of the drop ramps, saying no  
22 trucks on the ramps. But when you've only got one  
23 HOV lane, because of the speed differential between  
24 trucks and the GP vehicles, you don't want trucks in  
25 that one lane.

1           And not only that, but, long-term, I would  
2 like to see a sign to keep trucks out of the far  
3 left GP lane also.

4           MR. KARACHEPONE: Generally, we like to  
5 have --

6           MR. TERRY: I know in some places in  
7 California, they have no trucks in the HOV lane, no  
8 trucks in the lane adjacent to them.

9           MR. SWALLOW: Or they say "Use right two  
10 lanes only," or something.

11           MR. YATES: I would use the GBWR as the  
12 basis for that. I've already done some  
13 conversations with traffic cops about signing the 15  
14 for that, independent from all these discussions.

15           MS. KIRTLEY: You know, I also -- I'm a  
16 little bit perplexed about the removing the express  
17 lane.

18           The express lane versus the HOV lanes --  
19 really different purposes, and removing one to  
20 replace with another one, I -- you know, it's a  
21 little bit, to me -- I mean, going to the express  
22 lane today, you need to go from downtown to --  
23 again, to the south of us versus you are not a  
24 tourist, you need to go to someplace, you are going  
25 into the express lane -- I understand the HOV lane

1 obviously helping transit buses to go, you know,  
2 around the city. The main lanes are more for people  
3 stopping and going back and forth.

4 So removing an express lane to put it with  
5 an HOV, to me, will put back some issue on the main,  
6 you know, streets here.

7 MR. KARACHEPONE: So, today, there are  
8 impact two express lanes.

9 MS. KIRTLEY: I understand that.

10 MR. KARACHEPONE: And only one will go to  
11 HOV. The other one will convert to a GP, so it's  
12 still having -- instead of the three existing GP  
13 lanes, we will have four. There will be an  
14 additional GP lane.

15 MS. KIRTLEY: I understand that. It still  
16 makes a difference. When it's busy during the  
17 evenings, you will see -- you do see a big  
18 difference between people on the express lane versus  
19 the people on the regular lanes.

20 MR. HOEFT: John, could I offer that we  
21 are okay from a transit perspective. Using HOV or  
22 express, we're okay.

23 MS. KIRTLEY: Yeah, and it can be -- it's  
24 just general info.

25 So the standpoint for the airport is the

1 same thing. I'm looking at the flow, you know,  
2 that -- one does not really necessarily replace the  
3 other. There are two different purposes on it.

4 MR. KARACHEPONE: That is exactly correct.  
5 The express lane has a different purpose than an HOV  
6 lane. The HOV lane's purpose is to move more  
7 people.

8 MS. KIRTLEY: Exactly. Exactly.

9 MR. YATES: That is correct.

10 The real issue that we have is there's  
11 going to be two different systems and because  
12 they're not connected, neither one of them sees the  
13 utilization they should be seeing.

14 MS. KIRTLEY: Exactly.

15 MR. YATES: And so in order to connect  
16 them, we would either have to convert our HOV lanes  
17 to express lanes or we'll have to convert our  
18 express lanes to HOV lanes. It's going to have to  
19 be one or the other.

20 MR. KARACHEPONE: Okay. I'm going to move  
21 on to motorcycles, emergency vehicles, and  
22 dead-heading public buses.

23 (Presentation given by John Karachepone  
24 not reported as part of record.)

25 MR. KARACHEPONE: Any discussion?

1 MR. TERRY: We get calls from advocates  
2 for this regularly. I feel that the number --

3 MR. YATES: I get phone calls once a month  
4 on this.

5 MR. TERRY: Our standard pat answer so far  
6 has been yes, we have NRS that would allow us to  
7 allow them in whenever we choose. If the current  
8 system is too short when Neon's done, we'll  
9 reevaluate it. That's basically the stock answer at  
10 this point.

11 I think we've got to very strongly  
12 consider it when we get to that point, and I agree  
13 it's going to be a capacity-based thing, you know,  
14 are they going to break down the lanes.

15 The other issue you get that I've heard  
16 from some places in California is, you know, you let  
17 the Prius drivers in there. They like to sit there  
18 and look at that gauge on their car and see that  
19 they're getting 50 miles to the gallon, and the only  
20 way they do that is they go 55 miles an hour. You  
21 have a one lane HOV system and a Prius driver going  
22 55 miles an hour, you have got a lot of frustrated  
23 drivers behind him, wanting him go faster, you know.

24 And it's not all vehicles. It's not a --  
25 it's not an Escalade that happens to be a hybrid.

1 It's like -- they have to be over 50 miles to the  
2 gallon. It's a pretty high thing, you know, so...

3 MR. KARACHEPONE: There's actually a list  
4 of vehicles that become eligible. California  
5 maintains a similar list. So you can be more strict  
6 than the federal standards. You could select the  
7 list of vehicles that the feds maintain, or you can  
8 go to a stricter standard. And if you decided that  
9 you were going to a stricter standard, then you have  
10 the responsibility of maintaining the list of  
11 vehicles that are eligible to use them.

12 MR. YATES: And you are going to give that  
13 list to every NHP officer?

14 MR. TERRY: I think they might have to get  
15 past -- I think you have to get a certified vehicle  
16 and get a sticker on it. I think we can go to that.  
17 I mean, you can't just -- you have to take your  
18 Prius down to the D.M.V. and get a sticker on it  
19 that you are eligible to be in the lane.

20 I think these issues are a ways down the  
21 road, but they're not going to go away. There's a  
22 pretty strong advocate group for some of these  
23 issues. Fortunately, these are the people who also,  
24 when you take the electronic vehicles, don't pay any  
25 gas taxes, and we'd be giving the advantage to them.

1 You know, it's kind of --

2 MR. HOEFT: I agree.

3 MR. TERRY: But there's the air quality  
4 benefits, if we say we're doing this for air  
5 quality. So I think our best position is to punt  
6 for now.

7 MR. SJOSTROM: California is on, I think,  
8 their third or fourth sticker for which vehicles  
9 that are single occupancy that can use the HOV  
10 lanes.

11 MR. TERRY: I think Washington  
12 D.C./Virginia area has them as well, where they  
13 allow them.

14 MR. SJOSTROM: You are chasing technology  
15 and efficiency as you go, and it will have to be  
16 through the D.M.V. level so that enforcement can  
17 happen appropriately. Otherwise, it doesn't matter.

18 MR. SWALLOW: I like the idea of  
19 encouraging folks buy fuel-efficient vehicles to  
20 offset people like me. That's great.

21 I think as a policy, though, aside from  
22 the air quality benefits, I think what you are  
23 trying to realize with the HOV lanes is mitigating  
24 congestion. And single-occupant vehicles are  
25 single-occupant vehicles, regardless of the

1 powertrain, so I think that's just something that  
2 should be considered.

3 MR. HESS: My comment earlier -- I was  
4 trying to get a ruse out of John Terry by bringing  
5 that up.

6 I'm kind of an HOV purist, but I think  
7 HOVs are meant for high-occupancy vehicles, and you  
8 don't realize any congestion benefit by putting a  
9 single-occupancy vehicle in addition to the other  
10 SOVs that are there now, adding electric.

11 MR. KARACHEPONE: Earlier, when we were  
12 going around, I was expecting that someone would say  
13 something to the tune that "I like HOVs because as  
14 people carpool and use that facility, they leave  
15 more room for me in the general purpose lanes," and  
16 that is, in fact, the case. We can move people  
17 through the same freeways simply because some of  
18 that shift happens.

19 Shall I go onto the last board here?

20 (Presentation given by John Karachepone  
21 not reported as part of record.)

22 MR. KARACHEPONE: Comments?

23 MR. YATES: One of the biggest things we  
24 heard going through the introduction is low usage on  
25 the current HOV lanes. If we go to a limited

1 system, won't that decrease the opportunity to get  
2 in and, therefore, decrease the usage of the HOV  
3 system?

4 MR. KARACHEPONE: We are actually  
5 anticipating, with the lengthening of the system  
6 through the corridor through I-15 and that direct  
7 connection there will be a substantial increase in  
8 the use of the HOV lanes. We're expecting those  
9 volumes to go up substantially. So the -- you know,  
10 we -- we want to do limited access, because now  
11 those connections allow those longer term trips.

12 You know, one of the things that I'm  
13 concerned about is last-minute changes to try and  
14 get out, people trying to push it as far as they can  
15 go before then trying to get out, so I'm not -- I  
16 think we're going to see high enough growth in those  
17 HOV lanes that some of those concerns would sort of  
18 abate a little bit. And, at the same time, I think  
19 we have better control over how much -- how many  
20 vehicles, because we know we can design where those  
21 openings are, depending on where the exits are.

22 MS. RUSSELL: I have a question.

23 As you mentioned, Orange County is going  
24 to some incredible expense to re-stripe their  
25 267 miles of HOV lanes right now to make continuous

1 access.

2 MR. KARACHEPONE: Correct.

3 MS. RUSSELL: They've had an HOV system  
4 obviously quite awhile longer than we have.

5 MR. KARACHEPONE: Yes.

6 MS. RUSSELL: Why are they doing that?

7 MR. KARACHEPONE: Many of the districts in  
8 California, Caltrans in California -- they went back  
9 to look at the operation of their system. They were  
10 concerned. They looked at safety, they looked at  
11 operations, and so on. For the most part, as I  
12 said, the result was statistically inconclusive.

13 So Northern California, for example --  
14 they decided that they were going to stay with their  
15 system. Los Angeles decided that they were going to  
16 stay with limited access, but I think in Orange  
17 county there was enough -- you know, I don't think  
18 it was technically -- because, technically, it was  
19 statistically inconclusive. I think it was  
20 determined by other things.

21 MS. KIRTLEY: I read an article. There  
22 has been a couple of studies in California. There's  
23 a study that compares -- limited, the studies again.  
24 There is no big difference for safety. Safety takes  
25 you for certain locations to continue and say this

1 was better because of the -- you know, the beatings,  
2 but operationally, they didn't really find a big  
3 difference.

4 Then there was a couple of other studies  
5 that kind of said either a slight difference or  
6 limited access being a little better in some  
7 instances, so Orange county just decided to go with  
8 the safety results, I believe, so they just decided  
9 they are going to -- but Los Angeles County seems to  
10 not agree with them, so they're like, no, stay with  
11 our limited, so there's kind of --

12 MS. RUSSELL: Maybe Los Angeles County  
13 cost is still too high.

14 MS. KIRTLEY: -- with the same studies,  
15 but those guys decided like, yeah, continuous is  
16 better based on -- so they need different than  
17 Los Angeles.

18 So there's kind of a dispute going on.  
19 It's definitely not an obvious difference;  
20 otherwise, obviously, everybody would either convert  
21 or stay. So it's kind of an opinion thing at this  
22 point.

23 I'm going to forward that article to you.  
24 It's very interesting. It says why Orange County is  
25 converting but Los Angeles County isn't.

1 MS. RUSSELL: -- how Orange county said  
2 it's a safety measure.

3 MS. KIRTLEY: Yeah, exactly, but why  
4 Los Angeles County thinks that's not the case and  
5 that's why they're going to stay. There's like  
6 reasoning and codes and stuff like that.

7 MR. TERRY: We, when we did the public  
8 meeting years ago, weren't completely decisive, but  
9 we pretty much told the public that we thought we  
10 would go to what we called then "the Southern  
11 California model," which was the limited ingress and  
12 egress model. We didn't say absolutely we would.  
13 We said the reason we didn't.

14 When we started the system, because it was  
15 too short, we only would have had one ingress and  
16 egress point, because it's such a short system. So  
17 we have been telling people.

18 The other thing is I go back to the nature  
19 of our system. Understand there's going to be long  
20 stretches where we're going to have to do something  
21 where we can't allow ingress and egress.

22 You can't have ingress and egress right  
23 before a flyover bridge. You've got to settle  
24 people in their lane. You can't have them switching  
25 in right before there's an impact attenuator ahead.

1 Same thing as when we have -- inside  
2 direct access is going to be at -- what do you call  
3 it? -- the Neon access, the Neon Gateway. Anywhere  
4 near those offramps, you have to have a solid line  
5 and ingress and egress. You can't have somebody  
6 merging in from a ramp at the same time you've got  
7 somebody weaving over from the main line.

8 So we're going to have to have stretches  
9 where you are going to have to have a solid line to  
10 prohibit the ingress and egress because of the  
11 nature of the system.

12 Most of the systems, like in Seattle, that  
13 have continuous ingress and egress don't have direct  
14 connectors in any way. It's just a lane.

15 But this is a -- I don't know if we're  
16 going to decide this one 100 percent until the day  
17 we open it.

18 MR. YATES: So I have a question.

19 Has anybody ever studied a system that has  
20 mixed egress -- ingress and egress; in other words,  
21 part of your system is continuous, and part of it is  
22 limited?

23 MR. KARACHEPONE: Do we have any systems  
24 like that?

25 MR. SWALLOW: I was going to say you've

1 got 95 and I-15 right now, but it's not HOV.

2 MR. YATES: We have sections where we're  
3 not -- there is going to be long pieces where there  
4 are no direct connectors, and then we're going to  
5 have sections where there are several of them, like  
6 on the 15.

7 And so the question is: Does it make more  
8 sense to determine our ingress and egress based on  
9 the actual design of the system in a given location,  
10 instead of just saying our whole system is going to  
11 be one way or the whole system is going to be  
12 another way.

13 MR. MEYER: Is it the timing when the  
14 direct access connections actually get constructed?

15 MR. KARACHEPONE: Well, generally, we want  
16 to have consistency in the regional system, so if we  
17 have -- if we -- you know, the recommendation is "be  
18 consistent."

19 So if you're going to have a limited  
20 access system on I-15 and 95, then I'd say you do  
21 limited access on 215 as well. It's just easier for  
22 folks to, you know -- yeah, people, after some time,  
23 they can understand that this one is so and this one  
24 is so.

25 We have a lot of visitors. We have folks

1 that, you know -- California -- they allow  
2 high-occupant, Orange county, that system, and  
3 Los Angeles is another one, so I guess they're going  
4 to learn as well.

5 But, generally, all of these operational  
6 parameters -- we would like it to be consistent in  
7 the region model and have one type on one freeway  
8 and another type on another freeway.

9 MR. TERRY: Another consideration -- and  
10 we got resoundingly rebutted at the last time we  
11 brought it before the legislature, to allow tolling  
12 for hot lanes, is limited ingress and egress works  
13 for hot lanes. You can't really do a hot lane with  
14 continuous ingress and egress, because you've got to  
15 set up your toll thing somewhere, and people just go  
16 right past them and then peel in.

17 So we don't have legislation that allows  
18 hot lanes, but limited ingress and egress works  
19 better for conversion to hot lanes.

20 MR. SWALLOW: So I was going to make a  
21 comment.

22 When John first told me that he wanted --  
23 or he was recommending limited access, I was -- I  
24 was really adamantly opposed, because I've got this  
25 perception out here that we're not getting enough

1 utilization of the HOV lanes, so if it was  
2 continuous access, we would get better utilization,  
3 and I think when I kind of -- I didn't necessarily  
4 change my mind, but when I kind of conceded, I  
5 guess, to the limited access was when -- well, once  
6 we open it up, if it's continuous access, it's going  
7 to be really hard to make it limited access.

8 But if we open it up and it's limited  
9 access, if we're not getting the ridership that we  
10 need, then we can do continuous access.

11 That was kind of my thought process.

12 MR. YATES: The actual logistics of  
13 switching -- I mean, work to do the striping will be  
14 easier to go from continuous to limited, but getting  
15 drivers to change their behavior, I agree, it would  
16 be more difficult.

17 MR. KARACHEPONE: If you have a limited  
18 access system like I'm recommending, figuring out  
19 where those access locations are and if there's  
20 enough distance to allow that same thing to happen  
21 requires analysis. It's not an easy stretch.  
22 You've got to -- a limited access system requires a  
23 little bit of study to make sure that you've got the  
24 openings at the right place.

25 MR. TERRY: Oh, yeah, you've got to make

1 those accesses so the idiot can't try to get to the  
2 next onramp that's only 100 feet away, across four  
3 lanes of traffic. Yet, you give them enough time to  
4 get to the interchange that he wants to get to.

5 There's a science picking those access  
6 points.

7 MS. KIRTLEY: You have to think about the  
8 taxis. If you go for a limited access, the taxis  
9 are not going to be using the HOV on 15, because the  
10 taxis obviously are going back and forth to serve  
11 the tourists. Many go to The Strip. They don't  
12 drive on The Strip. They drive on the freeway,  
13 going to all the different lanes.

14 So if you're going to limited access now,  
15 something that you want to bring: Taxi driver with  
16 customers with a limited access -- are they going to  
17 be able to access every single major street going to  
18 The Strip --

19 MR. KARACHEPONE: The answer is yes.

20 MS. KIRTLEY: -- on one hand --

21 MR. KARACHEPONE: The answer is yes.

22 Openings are designed in such a way and  
23 they're signed in such a way that you have specific  
24 openings for a specific exit, so, for example, if  
25 there's an opening, it will tell you this exit for

1 Flamingo and Spring Mountain.

2 MS. KIRTLEY: I see.

3 MR. KARACHEPONE: And so that's where you  
4 would have to get off.

5 MR. YATES: And the direct connector will  
6 help with that also. You have the one at  
7 Hacienda --

8 MR. KARACHEPONE: But, remember, the  
9 limited access operation is also for the near-term  
10 system. It's near-term before the direct access  
11 ramps.

12 MR. MEYER: It seems like the proposed  
13 direct-access connection -- they're going to be so  
14 close together that allowing any weaving to occur --  
15 you are not going to be able to find -- I'll give  
16 you an example, you know.

17 I experience I-15 southbound every day. I  
18 use the express lane. Once you get past Tropicana,  
19 you get the broken lines to allow you to get back  
20 into the general purpose lanes, because I'm going to  
21 use 215, and even that's difficult to do during rush  
22 hour.

23 MR. TERRY: Have you ever tried some of  
24 those ones in Southern California? They'll put the  
25 little sign up here, "Exit Here." To get to I-15,

1 you have to be on it. You have to cross five lanes  
2 to get there.

3 MR. YATES: I honestly don't think the  
4 southbound express lanes to get to the 215 to go  
5 west is that bad, and I drive it a lot also.

6 MR. MEYER: You've got to be a little  
7 aggressive.

8 MR. TERRY: Yeah, you've got to be  
9 aggressive.

10 MR. MORTENSEN: Are you in a state rig or  
11 other one? Because that makes a big difference in  
12 my driving.

13 MR. MEYER: You are going to have limited  
14 opportunity once you get those decisions plugged in.  
15 You know, you might end up with something that fits  
16 more like limited access.

17 MR. KARACHEPONE: That's right. I think  
18 the point you make is really good.

19 You know, once you have the long-term  
20 system in place, especially when the central links  
21 occur with all of those direct access ramps, you  
22 know, there's -- it's probably going to look a lot  
23 like a very limited access facility. You can't  
24 allow -- there won't be openings; there won't be  
25 distances that allow those openings.

1 MR. YATES: But the flip side is you won't  
2 need the openings as much because you've got direct  
3 access.

4 MR. MEYER: Right. There's a -- what do  
5 you call it? -- crossover point.

6 MR. KARACHEPONE: Yeah, it's almost like a  
7 facility within the facility, you know. The HOV  
8 facility has its own direct access ramps.

9 MR. MEYER: In consideration of having,  
10 you know, continuous access until you get to a  
11 certain point where it becomes a limited access  
12 facility --

13 MR. KARACHEPONE: Okay.

14 MR. MEYER: -- where that point occurs,  
15 you know --

16 MR. KARACHEPONE: I'd like to ask Jeff if  
17 there's any final comments. I'm done with my  
18 boards.

19 MR. LERUD: We've had you guys here for a  
20 couple hours now. If there's any final comments,  
21 thoughts, questions that we can answer?

22 Right now, our schedule is we're looking  
23 at getting a draft final submittal, like  
24 March 22nd -- end of March, last week of March, with  
25 the intent of having it finalized early April.



1 STATE OF NEVADA )  
COUNTY OF CLARK )

2

3

CERTIFICATE OF REPORTER

4

I, Andrea N. Martin, a duly commissioned and  
5 licensed court reporter, Clark County, State of  
6 Nevada, do hereby certify:

7

That I reported the taking of the  
8 aforementioned proceedings, commencing on Tuesday,  
9 February 24, 2015, at the hour of 2:39 p.m.; that I  
10 thereafter transcribed my said shorthand notes into  
11 typewriting; and that the typewritten transcript of  
12 said deposition is a complete, true, and accurate  
13 transcription of said shorthand notes; that I am not  
14 a relative or employee of any of the parties  
15 involved in said action, nor a relative or employee  
16 of an attorney involved in nor a person financially  
17 interested in said action.

18

IN WITNESS WHEREOF, I have hereunto set my hand  
19 in my office in the County of Clark, State of  
20 Nevada, this 11th day of February, 2015.

21

22

\_\_\_\_\_  
ANDREA N. MARTIN, CRR, CCR NO. 887

23

24

25



## SOUTHERN NEVADA HOV PLAN UPDATE

### STAKEHOLDER WORKSHOP

#### Agenda

---

**Location:** RTC Government Center, Room 127  
600 S. Grand Central Pkwy.  
Las Vegas, NV 89106

**Date:** — 02/25/2015

*2-24-15 and*

**Time:** 9:00 to 11:00am

1. Open Time: Review Boards and engage team members 9:00 to 9:30
2. Introduction and Welcome – NDOT 9:30 to 9:32
3. Brief Presentation - Overview of project 9:32 to 9:40
4. Proposed HOV System 9:40 to 10:10
  - a. Project limits
  - b. Near-Term: With the Opening of Neon through 2025
    - i. Changes with Project NEON
    - ii. System Components
      1. Flyovers
      2. Drop ramps
    - c. Long-term System (Beyond year 2025)
      - i. Expected system expansion
      - ii. System Components
        1. Flyovers
        2. Drop ramps
  5. Operational Parameters 10:10 to 10:50
    - a. Occupancy
    - b. Hours of Operation
    - c. Eligibility
    - d. Access Type and Locations
  6. Summary and Conclusion 10:50 to 11:00

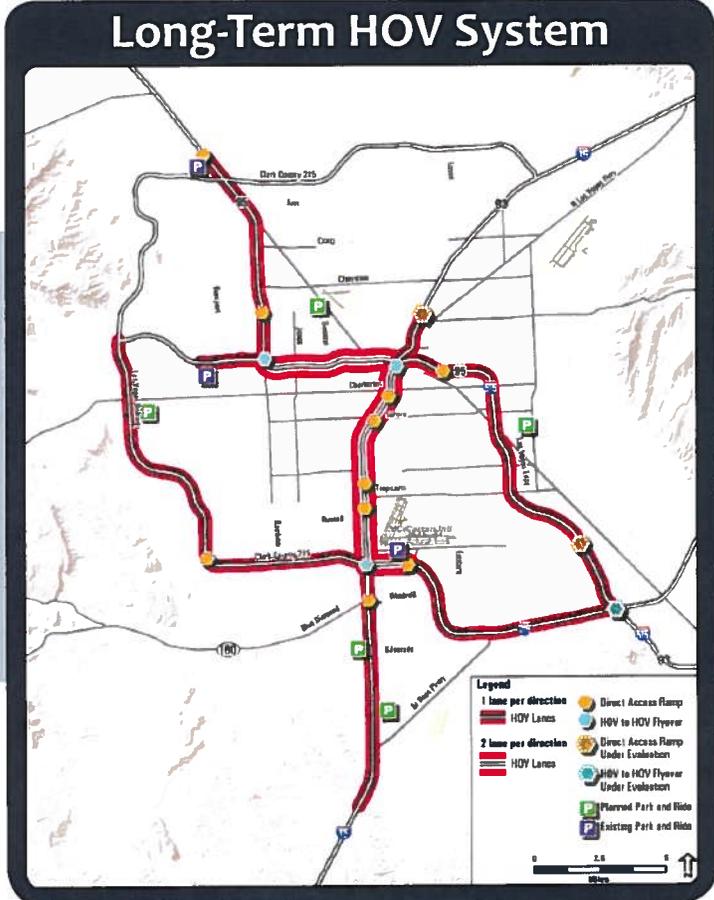
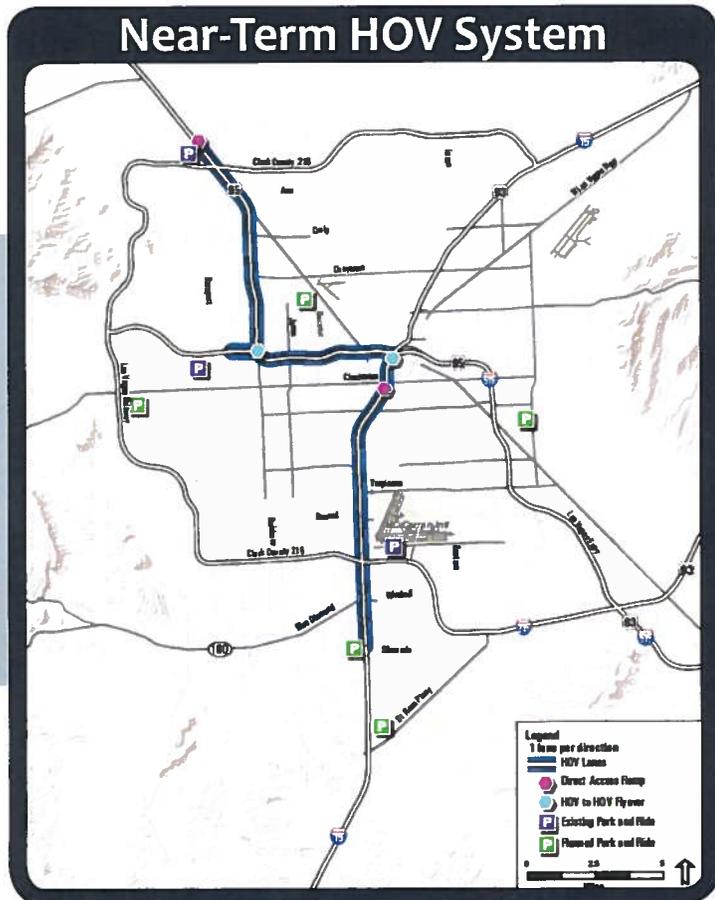


◇ **HOV LANE AHEAD**

◇ **HOV LANE ENDS**

The Nevada Department of Transportation is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. The purpose is to update the previous plan (completed in 2007) based on the current conditions in Southern Nevada, including recently completed projects and Project NEON, and using the most recent analysis tools. Implementation of HOV lanes, or carpool lanes, is one method of maintaining mobility in congested freeway corridors.

The HOV plan update focuses on the near-term HOV system in Southern Nevada, including Project NEON's direct connector between I-15 and US 95 and the conversion of existing I-15 express lanes to one HOV lane and one additional general purpose lane. In addition, evaluations and recommendations for the long-term HOV system, direct access ramp locations, and operations of the HOV system are included. The HOV system is evaluated utilizing the Southern Nevada RTC's 2035 Regional Travel Demand Model with the Mode Choice Element.





# Southern Nevada HOV Plan

February 2015  
COMMENT FORM

### HOW CAN WE REACH YOU?

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

### TELL US YOUR VIEWS

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please use the back of this form or you may include your own letter.

- What is your current usage of managed lanes (HOV or Express) in Clark County?  
 Occasionally       5-10 times a month       5-10 times a week       > 10 times a week
- The long-term HOV plan includes direct access ramps along US 95, I-15, and the Clark County Beltway. What, if any, comments or questions do you have regarding these proposed locations? What additional locations would you recommend?

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- What additional comments or questions do you have regarding the Southern Nevada HOV Plan Update?

---



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Please return this form today, or mail to the following address no later than March 6, 2015.  
Jeff Lerud, PE, Project Manager, Nevada Department of Transportation, 1263 S. Stewart Street, Carson City, NV 89712, or email [jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us).



CONTACT Jeff Lerud, NDOT, (775) 888-7589



# Technical Local Agency Workshop

# SIGN IN SHEET

February 24, 2015

PLEASE PRINT

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# Southern Nevada HOV Plan



## Stakeholder Workshop

February 25, 2015



# SIGN IN SHEET

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# Southern Nevada HOV Plan



## Stakeholder Workshop

February 25, 2015



# SIGN IN SHEET

PLEASE PRINT

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Julie Maxey	NDOT	Carson City HQ	775-888-7171	jmaxey@dot.state.nv.us

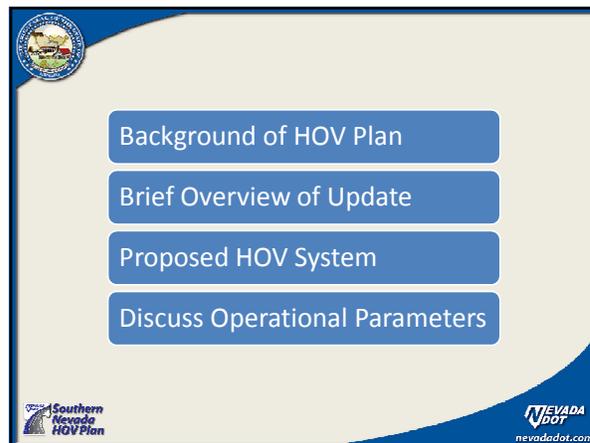




**Southern Nevada HOV Plan Update**

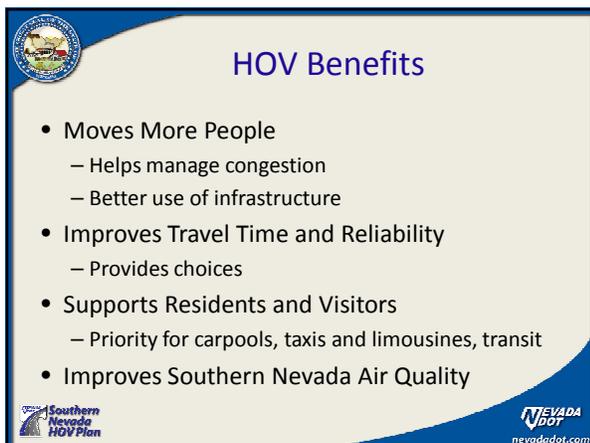
Stakeholders Workshop  
February 25, 2015  
Jeff Lerud, Project Manager

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- Background of HOV Plan
- Brief Overview of Update
- Proposed HOV System
- Discuss Operational Parameters

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**HOV Benefits**

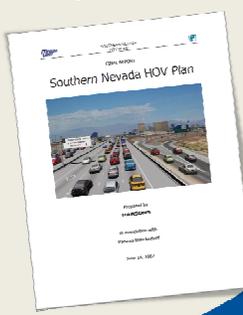
- Moves More People
  - Helps manage congestion
  - Better use of infrastructure
- Improves Travel Time and Reliability
  - Provides choices
- Supports Residents and Visitors
  - Priority for carpools, taxis and limousines, transit
- Improves Southern Nevada Air Quality

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**HOV Plan Background**

- 2030 Traffic Forecasts and RTP
- Enhance mobility
- Near and long term priorities



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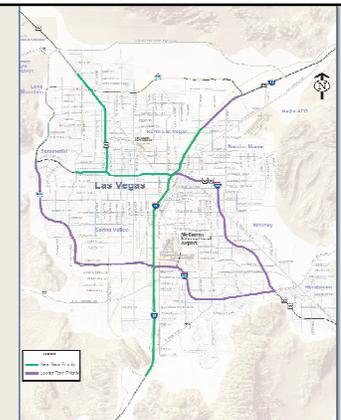
**HOV Plan Background**

- HOV lanes have been in operation in Las Vegas since 2007
- HOV lanes have been included in approved NEPA studies since 2006
  - I-15 at Starr Interchange
  - I-15 Design Build/Express Lanes South
  - I-15 South Design Build
  - I-15 South Corridor Improvements
  - US 95 HOV Lanes and Southern Nevada HOV Plan
  - I-15 Managed Lanes from I-215 to Sahara Ave

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**2007 Plan**



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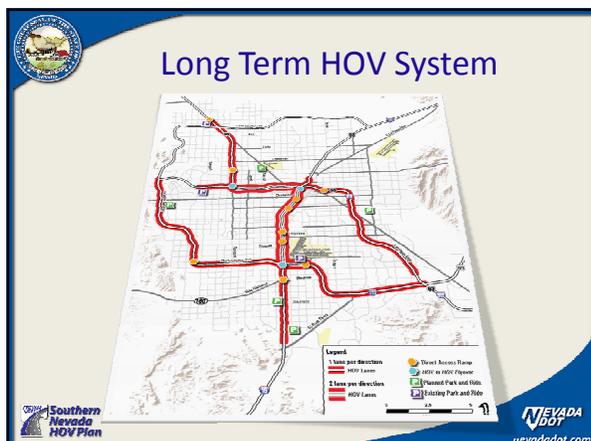
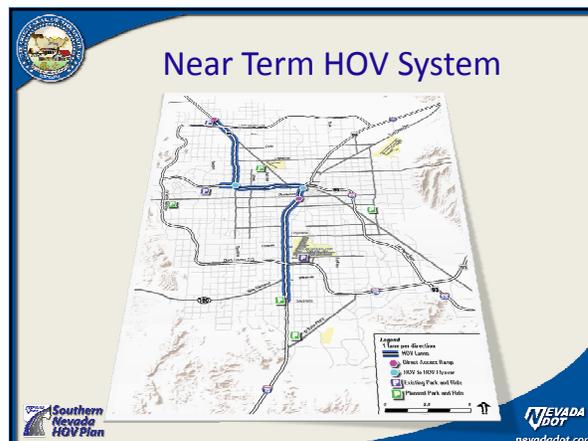


### Current System

- HOV lanes on US 95 MLK to Ann Rd. and Summerlin Pkwy to Buffalo Dr.
  - 2+, motorcycles, emergency vehicles (no trucks)
  - Extended peak period (6am - 10am & 2pm - 7pm weekdays)
  - Continuous ingress/egress
- Express lanes on I-15 Silverado Ranch Rd. to Sahara Ave.
  - All vehicles including trucks
  - 24 hr.
  - Limited ingress/egress

### HOV Plan Update

- Use the 2035 RTC regional travel demand model which includes mode-choice and HOV capabilities
- Phase 1 HOV system near term priorities (NEON area)
- Phase 1 HOV system near term priorities on I-15
- Update overall HOV plan (Direct Access Ramps)
- Workshops and Public Outreach



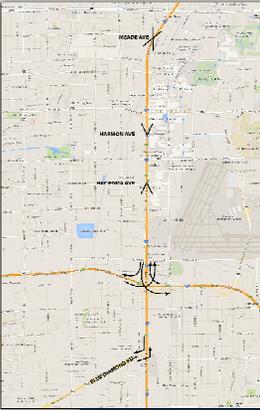
### Criteria – Regional HOV System Planning

- Congestion
- Bottlenecks
- Travel Time Savings
- HOV Lane Demand
- Transit Service
- Available Space
- Connectivity / Continuity

## HOV Proposed Recommendations

**HOV Direct Access Ramps (Between St. Rose/Sahara)**

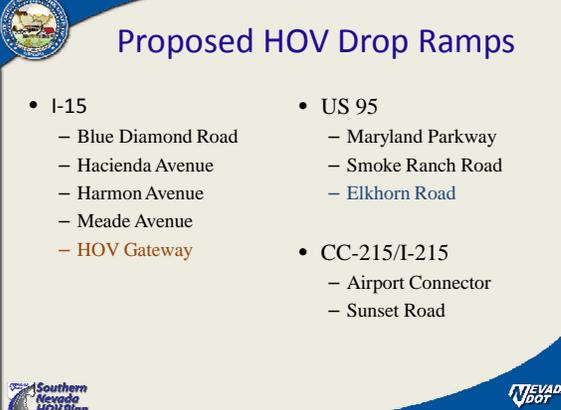
- Direct connects to arterial
  - 7 locations screened: St Rose, Blue Diamond, Warm Springs, Sunset, Hacienda, Harmon, Meade
  - 4 locations proposed: Blue Diamond, Hacienda, Harmon, Meade
- HOV to HOV flyover
  - Propose I-15/I-215 to/from east (Airport) AND to/from the west



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## Proposed HOV Drop Ramps

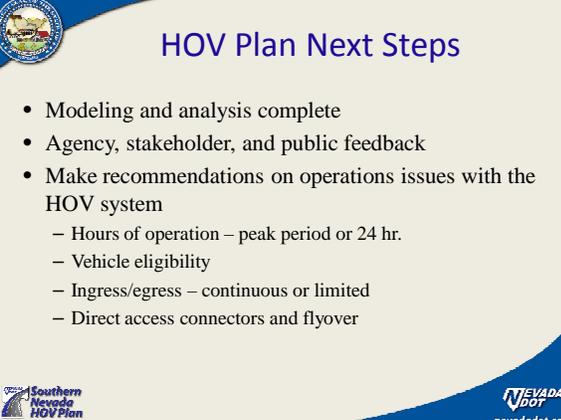
- I-15
  - Blue Diamond Road
  - Hacienda Avenue
  - Harmon Avenue
  - Meade Avenue
  - HOV Gateway
- US 95
  - Maryland Parkway
  - Smoke Ranch Road
  - Elkhorn Road
- CC-215/I-215
  - Airport Connector
  - Sunset Road



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## HOV Plan Next Steps

- Modeling and analysis complete
- Agency, stakeholder, and public feedback
- Make recommendations on operations issues with the HOV system
  - Hours of operation – peak period or 24 hr.
  - Vehicle eligibility
  - Ingress/egress – continuous or limited
  - Direct access connectors and flyover



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## Thank you!

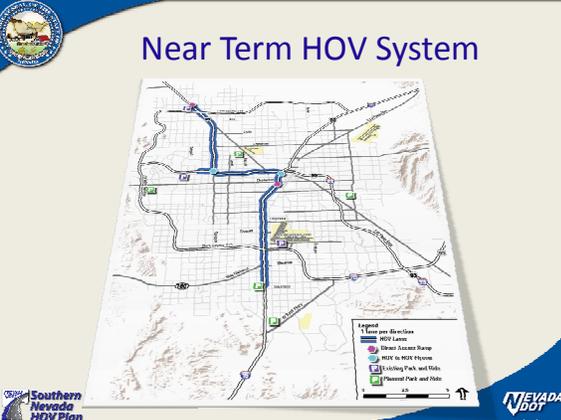
### Questions?

Jeff Lerud, Project Manager  
[jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us)



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## Near Term HOV System

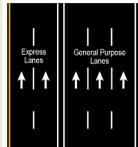


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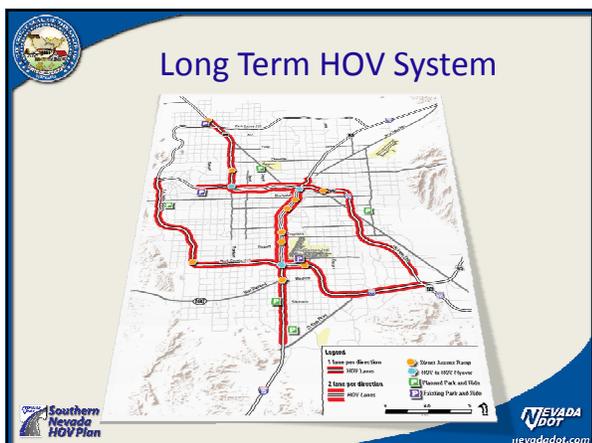
## HOV System Proposed Recommendations

### Express Lane Conversion

- Need HOV connectivity between I-15 and US-95
- Convert Express Lanes to HOV
- 2 Express Lanes become 1 HOV and 1 GP
- Limited access for HOV

Before:	After:
 <p>Express Lanes</p>	 <p>HOV Lane/ GP Lanes</p>

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- ### Proposed HOV Drop Ramps
- I-15
    - Blue Diamond Road
    - Hacienda Avenue
    - Harmon Avenue
    - Meade Avenue
    - HOV Gateway
  - US 95
    - Maryland Parkway
    - Smoke Ranch Road
    - Elkhorn Road
  - CC-215/I-215
    - Airport Connector
    - Sunset Road

### Operational Parameters

#### Minimum Occupancy

**Choices:**  
2+ vs. 3+

**Considerations:**

- 2+ allows the widest rideshare market to benefit from the HOV lanes.
- Traffic forecasts do not indicate sufficient 3+ demand.
- It is difficult to form 3+ carpools compared to 2+.
- If 2+ demand grows beyond the maximum threshold (after the HOV lanes are implemented), 3+ could be considered.

**Recommendation:**  
2+

### Operational Parameters

#### Hours of Operation

**Choices:**  
24-Hours vs. Part Time

**Considerations:**

- Demand analysis supports an operation period that extends well beyond the peak commute periods, continuous from 6 AM to 7 PM.
- Part time operation may cause motorist confusion, and complicates enforcement.
- 24-hour operation is easier to sign, mark, and enforce.
- 24-hour operation may promote wider acceptance of the facility.
- There are often multiple occupants in vehicles for evening/night events in Las Vegas.
- 24-hour operations may create a negative public perception of the HOV lanes due to low use during off-peak hours.
- Opening the HOV facilities to all vehicles during off-peak hours increases choices for traffic to access/egress event facilities in the Resort Corridor and Downtown.

**Recommendation:**  
24-hours, 7 days of the week

### Operational Parameters

#### Trucks

**Choices:**  
Eligible vs. Not Eligible

**Considerations:**

- Allowing trucks impacts speeds, safety, and reliability; and is not consistent with the HOV goal of moving people.
  - Allowing trucks on one-lane facilities (e.g., Neon flyover) would reduce speeds for other users.
- Project Neon and the I-15 South Project do not have an objective related to freight vehicles.
- Analysis indicates that moving the trucks to GP lanes would not significantly impact the operation of the GP lanes.
- Trucks are currently not allowed on existing HOV lanes on US 95.
- Per NDOT's current policy, trucks are not eligible.
- Accommodating trucks requires more expensive design changes.

**Recommendation:**  
Not Eligible

### Operational Parameters

#### Motorcycles, Emergency Vehicles Responding to an Emergency, and Dead Heading Public Buses

**Choices:**  
Eligible vs. Not Eligible

**Considerations:**

- Motorcycle eligibility originates from a federal mandate with the reasoning that it is safer to keep two-wheeled vehicles moving than to have them in stop-and-go traffic conditions.
- Allowing deadheading buses provides operating efficiencies and cost savings to the transit agencies.
- Per NDOT's policy, consistent with the nationwide policies, emergency vehicles responding to an emergency are eligible.

**Recommendation:**  
Eligible

## Operational Parameters

### Single-Occupant Low-Emission and Energy-Efficient Vehicles

**Choices:**  
Eligible vs. Not Eligible

**Considerations:**

- State law (NRS 484A) and federal law (23 U.S.C. 166) give NDOT the authority to allow low-emission and energy-efficient vehicles that meet specific performance requirements on HOV lanes.
- A safety and impact study to assess if these vehicles could be accommodated is needed.
- If allowed, annual review/monitoring is needed to ensure they do not cause the lanes to be degraded.
- If not allowed initially, the volumes may be reevaluated, and then a decision could be made.
- Preservation of good operating conditions in the HOV lanes is the primary requirement.
- There is increasing number of such vehicles, and the numbers are expected to increase.
- HOV lanes could become degraded resulting in HOVs losing travel time and reliability benefits if increasing number of single-occupant vehicles are allowed.

**Recommendation:**  
To be studied

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## Operational Parameters

### Access Type

**Choices:**  
Continuous vs. Limited

**Considerations:**

- Continuous access requires conversion of both express lanes to HOV lanes because continuous access lanes attract more vehicles due to opportunistic use of the lanes. Conversion of both express lanes is not recommended because:
  - GP lanes would be adversely impacted if both existing express lanes are converted.
  - A new GP lane is not feasible in the near term to mitigate the impact to GP lanes.
- Limited access discourages short distance/term use of the HOV lanes.
- With limited access, there is less likelihood of becoming overloaded.
- Occupancy violation rates are lower with limited access, and enforcement is easier.
- Limited access requires additional pavement markings and overhead signing.
- Limited access requires analysis to ensure the best placement of access points.
- Limited access results in more concentrated weaving at access openings.

**Recommendation:**  
Limited

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## Operational Parameters

**PROPOSED HOV ACCESS LOCATIONS**

- Between Ann Road and Rancho Drive
- Near Cheyenne Avenue
- Near Lake Mead Boulevard
- On Jones Boulevard overpass
- Between Valley View Boulevard and Decatur Boulevard
- Near Sahara Avenue
- Near Flamingo Road
- South of Russell Road (existing opening northbound)
- Between Blue Diamond Road and I-215

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## Year 2035 Forecast Vehicle Volumes

Vehicle Volume Thresholds		
Location	HOV Lane	Express Lane
Blue Diamond Road	1,000	1,000
Valley View Blvd	1,000	1,000
Flamingo Road	1,000	1,000
Ann Road	1,000	1,000
Blue Diamond Road	1,000	1,000
Valley View Blvd	1,000	1,000
Flamingo Road	1,000	1,000
Ann Road	1,000	1,000

Source: 2015 Strategic Plan and Early Modeling Report, 2015

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## Year 2035 Forecast Vehicle Volumes

**HOV LANE AHEAD**

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STATE OF NEVADA  
DEPARTMENT OF TRANSPORTATION

REPORTER'S TRANSCRIPT OF  
SOUTHERN NEVADA HOV PLAN UPDATE  
STAKEHOLDER WORKSHOP

Taken at RTC Government Center, Room 127  
600 South Grand Central Parkway  
Las Vegas, Nevada

On Wednesday, February 25, 2015  
At 9:36 a.m.

Reported by: Jane V. Efaw, CCR #601, RPR

1 ATTENDEES :  
2 JEFF LERUD, NDOT  
3 JOHN KARACHEPONE, Jacobs Engineering  
4 AMY MAIER, FFW/RTC  
5 JACK SJOSTROM, CA Group  
6 BONIFACE NJOROGE, NDOT  
7 CIGDEM MULAZIMOGLU, Jacobs Engineering  
8 JOHN TERRY, NDOT  
9 RYAN ARNOLD, ARC/LVCVA  
10 JASON GRAY, MGM Resorts  
11 NOVELT MACK, Nevada Highway Patrol  
12 DALE KELLER, NDOT  
13 COLE MORTENSEN, NDOT  
14 LUCIE MOYA, Melchert Consulting  
15 JULIE ANN MAXEY, NDOT

16  
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1 Wednesday, February 25, 2015; Las Vegas, Nevada

2 P R O C E E D I N G S

3 \* \* \* \* \*

4

5 MR. LERUD: Good morning, everyone. It's  
6 the time of the agenda where I'm going to give a  
7 brief presentation. My name is Jeff Lerud. I'm the  
8 Senior Project Manager with the Nevada Department of  
9 Transportation.

10 Before I get on the PowerPoint here, I want  
11 to go around the room. I don't live in Las Vegas. I  
12 live in Northern Nevada. So I don't use HOV lanes  
13 very often. Only when I'm in California.

14 And my best example when I was in  
15 California, I was going into the Bay Area. And I was  
16 a passenger in the back seat. And I could see this  
17 flyover going from I-80 down to where the tolling is.  
18 And I was looking at it. I was going, "That's kind  
19 of cool.

20 So I encouraged the driver to take the lane  
21 kind of like on a wing and a prayer. So we took it  
22 and flew over the congestion. It was a cool  
23 experience.

24 So with that, I think HOV lanes have a  
25 potential of being good for Southern Nevada and

1 helping with the congestion and carpooling and things  
2 like that.

3 I would like to go around the room. If you  
4 could introduce yourself and share your experience  
5 with HOV lanes.

6 MR. KARACHEPONE: I'm John Karachepone. I'm  
7 with Jacobs Engineering, the consultant on this  
8 project. My experience with HOV lanes in Southern  
9 Nevada has to do with the U.S. 95, the only one we  
10 have today. I have used that in the past. I think  
11 it's great. There hasn't been as much congestion as  
12 we would expect. The lane is not used that much.  
13 Nevertheless, I like the fact that I'm going faster  
14 in that lane than adjacent lanes.

15 I think something else I would like to add  
16 is in the existing express lanes, which I use quite a  
17 bit, somebody cracked me up when they asked if the  
18 space, the bump between the HOV lanes and the normal  
19 lanes, was actually a motorcycle lane. So I thought  
20 that was pretty funny that someone would think that  
21 would be a motorcycle lane.

22 MR. NJOROGE: My name is Boniface Njoroge.  
23 I am with NDOT Traffic Operations. I'm a traffic  
24 analyst with NDOT.

25 Before I came to Nevada, I used to live in

1 Houston, Texas. And they have a very elaborate HOV  
2 system there. What I remember about it is they are  
3 directional. In the morning they head one direction,  
4 and in the afternoon they head the other direction.  
5 It's nice. It's more expensive, but I think it's a  
6 very cool idea to have them.

7 MS. MULAZIMOGLU: My name is Cigdem  
8 Mulazimoglu. I'm a chief engineer with Jacobs  
9 Engineering as well.

10 I don't have much experience using HOV lanes  
11 because the only ones in town right now are kind of  
12 far away from where I live. I use them on the  
13 weekend when they're not in operation. Other than  
14 that, I don't have very much experience using them  
15 during commuting hours.

16 MR. ARNOLD: My name is Ryan Arnold. I'm  
17 representing Las Vegas Convention & Visitors  
18 Authority. With the amount of HOV lanes, I don't  
19 have any experience. I use them when I go to  
20 California. When you are able to go down the 91 past  
21 congestion, it's always a great thing. And I love  
22 the express lanes.

23 MR. TERRY: I'm John Terry, NDOT Assistant  
24 Director for Engineering and the project manager for  
25 the first HOV study for Southern Nevada.

1 I also lived in Seattle for a number of  
2 years and both took HOV lanes to and from work for  
3 years as well as designed HOV lanes in the suburban  
4 Seattle area, designed HOV lanes in Salt Lake City  
5 when I lived there, and have used HOV lanes in  
6 Southern California extensively, as I have a daughter  
7 who lived there.

8 So I've used them a lot, and obviously had a  
9 lot to do with HOV lanes here in Nevada because I was  
10 the project manager for the U.S. 95 projects, which  
11 we built them originally.

12 MR. GRAY: I'm Jason Gray with MGM Resorts  
13 International Government Affairs. I'm able to  
14 accomplish my daily commute gratefully by using  
15 surface streets. I don't use the 95 often.

16 And if I do, it's usually single occupancy.  
17 And I would never use it in congestion. It's against  
18 the law. I think the express lanes are phenomenal.  
19 I use them when I travel on the I-15, but I don't  
20 generally use them on the 95.

21 MR. SJOSTROM: I'm Jack Sjostrom with the CA  
22 Group. I use the 95 express lanes or HOV lanes when  
23 I go to see friends.

24 MR. KELLER: Good morning. My name is Dale  
25 Keller with NDOT. I'm working on Project Neon. It's

1 great using express lanes going to the airport and  
2 downtown. We use them in California. It's great  
3 when you have more than one occupant in the lane, and  
4 it's horrible when you're the only occupant in the  
5 lane.

6 LIEUTENANT MACK: Lieutenant Novelt Mack  
7 with Nevada Highway Patrol.

8 MR. LERUD: How do you like HOV lanes?

9 LIEUTENANT MACK: They work.

10 MR. LERUD: Do you see very many violators  
11 as far as enforcement?

12 LIEUTENANT MACK: I think what we have to do  
13 is look at -- when we look at traffic enforcement, we  
14 look at engineering, education and enforcement. We  
15 can't do anything about the engineering, but  
16 sometimes if we had better education by the public  
17 about HOV and signage.

18 And they don't know about people driving  
19 motorcycles, about law enforcement, about the  
20 exceptions. They don't know whether they can or  
21 can't utilize those lanes. And when we do stop them,  
22 it's often times educating them about the HOV lanes  
23 either verbally or by use of the pen.

24 If you take the time to educate the public  
25 about it, I think you'd be more successful in getting

1 those stragglers to hop in and hop out. "I was  
2 sitting there just for a minute to try to get around  
3 that car." Well, it doesn't matter. I think that's  
4 pretty much our frustration with those onesies and  
5 twosies like that. Otherwise, the traffic does flow  
6 much better.

7 And, quite frankly, when we do have heavy  
8 congestion, it's hard to get over to the HOV lane  
9 because they're furthest over to the left. And by  
10 the time you get over to them, you're creating much  
11 more of a hazard to try to get to them than that  
12 vehicle over there. I can go into more detail as we  
13 go forward.

14 MR. LERUD: Okay. Thank you.

15 MR. MORTENSEN: Good morning. I'm Cole  
16 Mortensen, the Assistant Chief of Project Management.  
17 I've been managing Project Neon for about the last  
18 five years. And Dale may not know it yet, but I'm  
19 just assisting him now.

20 I think rather than sharing my experience,  
21 what I would like to do is maybe talk a little bit  
22 about the public input that I received giving public  
23 meetings for Project Neon.

24 I think one of the most common comments is  
25 that the HOV system that we have is underutilized.

1 When I'm offered that comment, I try to point out  
2 that really they're kind of difficult to get into  
3 right now. If you're going northbound on I-15 onto  
4 U.S. 95, you've got to cross five or six lanes to  
5 actually get in there. So you have to make it worth  
6 your while if you're going to go through that every  
7 time.

8 So one of the things I try to tell people --  
9 and John's going to go over what the future holds  
10 with the HOV system. But one of the things I try to  
11 tell people with Project Neon is we're making a major  
12 connection with the Valley. We're going to the HOV  
13 system on the 95 and make a direction correction to  
14 where the express lanes are on the I-15. It's going  
15 to take those HOV lanes to more places people want to  
16 go.

17 The second thing we're doing is we're  
18 actually doing the first of its kind, direct access  
19 to the HOV, which is going to allow people to exit  
20 from the left median. They'll have access to the  
21 downtown Symphony Park area and the government  
22 offices here.

23 Not only is that going to be beneficial to  
24 the drivers in the HOV lanes, but the bus drivers in  
25 the transit system. We will add utilities to it and

1 make it more attractive. So we are encouraging a  
2 higher ridership in single vehicles and encouraging  
3 the use of the HOV system.

4 MS. MOYA: My name is Lucie Moya. I'm  
5 working with NDOT on the HOV plan. And I've lived  
6 and worked here all my life. So for me, HOV is a  
7 little bit of a godsend for me to get to school and  
8 work a lot quicker.

9 MS. MAIER: My name is Amy Maier. I work at  
10 Faiss Foley Warren. We work with RTC and Community  
11 Outreach. I'm originally from the East Coast. So  
12 I'm familiar with HOV lanes.

13 I think to echo some of the earlier comments  
14 from NHP, a lot has to do with education. I think a  
15 lot of people are confused about the HOV lanes,  
16 whether it's two-person or three-person.

17 Coming from other areas with regards to  
18 rules of HOV, they don't know what it is here in  
19 Southern Nevada. And the signage isn't as prevalent  
20 as it could be to explain that. And no real  
21 education effort has been out there.

22 So as it grows, hopefully that will be part  
23 of the plan in the process. I think it certainly can  
24 be a great addition to the transportation system and  
25 help reduce the single-occupancy trips, which RTC is

1 very supportive of, but I think an education plan to  
2 the public will be real beneficial to the public.

3 MR. LERUD: Thank you, everybody. And to  
4 further expand what you're saying about confusion.  
5 I've got friends who live down here who are afraid to  
6 use the HOV lanes. So there is a lot of outreach  
7 that needs to be done. And we will be doing that.

8 And just a couple other comments as far as  
9 the limited use of the lanes. Like Cole was saying,  
10 with Neon coming onboard, that's going to connect 22  
11 miles of continuous HOV lanes. So that will  
12 encourage ridership or use of that lane. So  
13 hopefully we'll see a really good increase in traffic  
14 in the HOV lane.

15 So I'll continue with the presentation. So  
16 today I'm going to give you a little background of  
17 the original HOV plan, an overview of the update of  
18 our proposed HOV system, and then discuss operational  
19 parameters.

20 As far as the HOV lane is concerned, it  
21 seems like everybody's got a really good idea what it  
22 is. It's a carpool lane of two-plus occupants and  
23 located on the left-hand side of the road.

24 Some of the benefits is it increases the  
25 freeway efficiency by moving more people in less

1 vehicles. It improves the travel time. And it  
2 supports and is good for the Southern Nevada air  
3 quality.

4 The final report was published in 2007.  
5 When we looked at the 2014 forecast and all the  
6 construction, we were still seeing congestion on the  
7 freeway. So we were looking for an alternative way  
8 of moving traffic.

9 HOV lanes have been in operation in  
10 Las Vegas since 2007. And they've been included in  
11 studies since 2006. And here's a list of about six  
12 studies that we've included. And it ranges all along  
13 U.S. 95 and I-15, which are the main limits of our  
14 existing system.

15 In the original plan, we came up with some  
16 near-term and long-term priorities. The green are  
17 the near-term priorities, and the purple are the  
18 long-term priorities. And we ranked these  
19 priorities. If you look closely at the Numbers 1  
20 through 5, we've done a really good job in  
21 implementing these. 2 is out here at Ann Road, and  
22 it will be expanded to Durango this summer.

23 One thing that you'll note is we don't show  
24 the connection in here. And like I said, that's  
25 coming with Project Neon. And that will make the

1 connection to have really good, long, continuous HOV  
2 lanes.

3 So the current system operates like this.  
4 We need at least two occupants in the vehicle.  
5 Motorcycles and emergency vehicles are exempt, and  
6 they can use the lanes. Trucks with more than two  
7 axles are not allowed.

8 The operation is during the extended peak  
9 period from 6:00 a.m. till 10:00 a.m. and 2:00 p.m.  
10 till 7:00 p.m. during the weekdays, and they can be  
11 accessed as continuous.

12 The express lanes on the I-15, all vehicles  
13 including trucks are allowed to use these lanes.  
14 They're operated 24 hours a day, and they have  
15 limited access.

16 So why the update? Since the original  
17 study, the RTC has included the mode-choice element.  
18 And what that does is it gives us a really good idea  
19 of HOV use. And it's a better tool to predict that  
20 use. And they updated that. And with Neon coming  
21 onboard, we thought it was a good idea to update our  
22 plan.

23 We identified the near-term priorities in  
24 the Project Neon area, the near-term priorities from  
25 the I-15 down Sahara to Blue Diamond. We updated the

1 overall plan including more access ramps. These are  
2 the updates.

3 Our original study is out here near Ann and  
4 Durango, comes down the Spaghetti Bowl. The  
5 long-term, which is to 2025 and beyond, these are all  
6 single HOV lanes. In the long-term, we have one lane  
7 in each direction from the northbound I-95. It goes  
8 through the Spaghetti Bowl and one lane continues  
9 down I-15 and 215. On the I-15 itself, we have two  
10 lanes going in each direction.

11 MR. LERUD: We're taking the existing  
12 express lanes, and we're converting one into an HOV  
13 lane.

14 MR. ARNOLD: So in general, the express goes  
15 away completely?

16 MR. GRAY: The trucks can use the express  
17 lane currently?

18 MR. LERUD: Yes.

19 MR. GRAY: And they wouldn't be able to use  
20 them in the HOV?

21 MR. LERUD: Correct.

22 MR. ARNOLD: When we have two lanes in each  
23 direction on the I-15, there would be some winding  
24 involved?

25 MR. LERUD: So this is some of the criteria

1 that was used in the system planning for the HOV  
2 lanes. Congestion, bottle necks, travel time  
3 savings, HOV lane, right-of-way, and, of course,  
4 connectivity.

5 As part of the original study, seven  
6 direct-connect ramps were identified. And our study  
7 was conducted at seven locations at St. Rose, Blue  
8 Diamond, Warm Springs, Sunset, Hacienda, Harmon and  
9 Lake Mead. The ramp accesses from the HOV lane up an  
10 arterial street and connection east and west or  
11 whatever arterial they're on.

12 Four locations were brought forward at Blue  
13 Diamond, Hacienda, Harmon and Lake Mead. With the  
14 new model, we identified there are enough volumes  
15 going to and from the west. So we can have a flyover  
16 on that western lane of 215.

17 So not only were we looking at drop ramps on  
18 the I-15, but also on Maryland Parkway and Smoke  
19 Ranch Road and Elkhorn, and then on the I-15 at  
20 Sunset Road.

21 Now that we've got our modeling and analysis  
22 complete, we're out here reaching out to the  
23 stakeholders and agencies soliciting feedback. And  
24 after my presentation, John is going to take it a  
25 step further and go through the operational

1 parameters that we're going to provide  
2 recommendations for.

3 So if you have any questions regarding the  
4 presentation, I'll be glad to take them now, or we  
5 can have QA.

6 MR. KARACHEPONE: So I'm going to take  
7 you -- first before I start, we are having meeting  
8 minutes. So before a comment or anything you'd like  
9 to say, I'd appreciate it if you could state your  
10 names for the record so we have that captured. And  
11 also speak a little bit slowly so we capture all  
12 those comments.

13 The system itself, our project limits, is,  
14 in fact, the entire freeway system in Southern Nevada  
15 and Las Vegas. And that includes the Beltway all the  
16 way around and I-515 as well as I-15 and U.S. 95.

17 When we looked at all of that in assessing  
18 and using our criteria in determining where the HOV  
19 lanes will go, it starts on the northwest. That is  
20 the Elkhorn drop ramps. And it could further be  
21 expanded. So those lanes end going around those drop  
22 ramps.

23 On the south side, of course, we're going to  
24 come back down to Silverado. So the express lanes do  
25 get converted. They are going to become an HOV lane.

1 One exists at Summerlin, and the other one is the  
2 Neon flyover that makes that critical connection of  
3 the U.S. 95 and I-15, the express lane conversion  
4 itself.

5 Today we have two express lanes that are in  
6 general continuous and at least three general-purpose  
7 lanes. There are additional auxiliary lanes at  
8 certain interchanges.

9 In the future when we convert this with  
10 Project Neon, there will be one HOV lane in each  
11 direction and four general-purpose lanes. So one of  
12 those express lanes is going to revert back to a  
13 general-purpose lane.

14 Before I go to the long-term system, any  
15 questions or any comments? Anything that I can  
16 address?

17 So the long-term system, as Jeff said, it's  
18 an expansion of the system. Now we begin to get a  
19 system that's much larger than 22 miles. We give  
20 options to people that want to travel long distances.

21 And the system in the central area also  
22 becomes two HOV lanes in each direction in the  
23 corridor between the Spaghetti Bowl and I-215 on the  
24 south, as well as from the Summerlin curve, Rainbow  
25 curve, back to the Spaghetti Bowl. All of the others

1 at this point, we see them as one lane.

2 HOV facilities. I've been asked previously  
3 why it didn't qualify for the rest of the beltway.  
4 And for some other sections, the previous plan had  
5 this lane. We had several criteria that we used, and  
6 it didn't meet those criterias.

7 So the long-term system beyond 2025, it  
8 didn't qualify. But sometime in the future, it could  
9 qualify. So this long-term vision does not include  
10 further expansion as required at some other point in  
11 time.

12 We talked about those drop ramps at the  
13 connections. And I'd like to point out we do have  
14 some drawings for the I-15 drop ramps. They're on  
15 the boards on my right side. And we can have those  
16 available if anyone wants to have a closer look at  
17 those boards and how we can conceptualize those.

18 In the near term or by 2025, we anticipate  
19 Elkhorn Road coming online. But Maryland and Smoke  
20 Ranch are much further out. And similarly at 215 on  
21 the southern beltway, Sunset Road comes on at some  
22 point in time. And at this stage I'm going to say in  
23 2035.

24 Before I get into the operational  
25 parameters, I want to ask again, any comments or any

1 questions from anyone on the long-range system?

2 MR. ARNOLD: With the drop ramps, are those  
3 pretty well set as far as the locations that you  
4 identified?

5 MR. KARACHEPONE: Yes. We looked at several  
6 of them. For example, we looked at Blue Diamond,  
7 Warm Springs. We went all the way back down to the  
8 future park-and-ride lot. That's the future  
9 park-and-ride. That does not exist today. That's  
10 something that RTC is going to do.

11 We looked at Sunset, Harmon, Hacienda, and  
12 further up north at Lake Mead Boulevard. And, of  
13 course, we selected the ones that made the most sense  
14 that had the least constraints and attracted the  
15 most.

16 MR. TERRY: I think we need to be careful in  
17 terms of are they set. They're set in terms of this  
18 study is going to conclude with these are the  
19 recommended locations. There has to be environmental  
20 work. There has to be funding. There has to be  
21 things included in the stip.

22 So this study is going to conclude with  
23 that's where we think they should go. That doesn't  
24 mean they're set in stone. There's a lot to be done.

25 MR. ARNOLD: I don't know if engineering

1 will allow for alternatives. That's the only reason  
2 I ask. And I think John's picked up on that.

3 MR. KARACHEPONE: Anything else? So we're  
4 going to talk about some of the operational things  
5 about the system itself.

6 First, of course, is minimum occupancy. I  
7 think this is a pretty simple one. We currently have  
8 a system that's two-plus, and we are recommending  
9 that we continue with the two-plus.

10 And the primary reason we're recommending  
11 that is that two-plus carpools are pretty easy to  
12 form. They actually capture the widest ride-share  
13 market. And it's much more difficult to form  
14 three-plus carpools.

15 So we think as we have a system that's  
16 growing and there's been concern about the use of the  
17 existing system, I think we'll get much better use as  
18 we make this 22-mile-long system. And we'd like to  
19 keep that two-plus.

20 So that's my recommendation at this point,  
21 is to keep it as a two-plus system. Any comments?

22 MR. NJOROGE: Boniface Njoroge with NDOT.  
23 So it's two-plus for the whole system?

24 MR. KARACHEPONE: That's correct. That's  
25 one of the other things we'd like to do, is be

1 consistent for the entire system. At this initial  
2 stage for sure, we wouldn't have one type of  
3 operation for a certain part of the system and  
4 another type for another part of the system. We'd  
5 like to keep it consistent.

6           LIEUTENANT MACK: Novel Mack, Nevada  
7 Highway Patrol. I think that we would support a  
8 two-plus system for the mere fact when you look at  
9 the clientele, your client base, the people that will  
10 be utilizing this system, with the economy the way it  
11 is and the fuel costs, a lot of people are  
12 gravitating toward smaller, more fuel-efficient  
13 vehicles. And if you put them in a three-plus  
14 system, you're probably going to push those smaller  
15 vehicles out that people are buying for the purpose  
16 of saving fuel.

17           MR. GRAY: This is Jason. You went through  
18 a series of plans initially where HOV had been  
19 included in a number of types of analyses,  
20 additionally on the 95. What did the usage look  
21 like?

22           MR. KARACHEPONE: The study anticipates the  
23 usage would increase as the HOV gets built up. A  
24 six-mile segment is not a system that attracts users.  
25 When we went to a 12-mile section, which is what

1 exists today, we saw a 10 percent jump in the use of  
2 those lanes. We are expecting when we make that  
3 connection and now you can get to downtown and a lot  
4 of the other destinations using the HOV lane, we are  
5 expecting that that increase is going to be about 35  
6 to maybe even 65 percent at certain locations.

7 So we are anticipating a big jump in the  
8 use. We saw a 10 percent jump when we went from 6 to  
9 12. And over time what we've seen is a 4 percent  
10 jump in HOV lane use. That's one of the things we  
11 looked at, is what's the growth we can expect. And  
12 it was 4 percent compounded annually. And that was  
13 much higher obviously than what was on the adjacent  
14 general-purpose lane.

15 But then we did go through a recession, and  
16 volumes generally dropped as well. But we did see an  
17 increase of about 4 percent over the last four years.

18 MR. GRAY: So is it consistently today being  
19 used in numbers that you anticipated when it was  
20 initially planned out?

21 The question is on the initial analysis,  
22 where did we think we would be given that it would be  
23 a 6-to-12-mile system and the long-term usage would  
24 increase?

25 MR. KARACHEPONE: The study, when they did

1 the projections, it is not -- we didn't have  
2 projections for every year of use. So we had a  
3 stepped projection. For example, we have a  
4 projection that goes to 2025 and then a projection  
5 that goes to 2035. So it's a step projection. And  
6 it's not necessarily a linear function. Does that  
7 make sense?

8 MR. TERRY: John Terry. We didn't think  
9 that we'd get a lot of usage when it first opened up  
10 for two main reasons. We just widened 95. There  
11 wasn't much congestion in the rest of the lanes.

12 But I would say with the downturn of the  
13 economy, remember, that study was done in 2007. I  
14 think we got even less usage than we thought we would  
15 get. And then we thought we would get more as it  
16 expanded farther north. And we saw that. We fully  
17 expect when it's a more robust system with Project  
18 Neon, the usage will be up again.

19 We actually went out years ago and  
20 counted -- we sent people out on the freeway to watch  
21 cars go by and count how many of them have two or  
22 more occupants in those vehicles and tried to predict  
23 how many of those would use the HOV lanes.

24 We obviously are seeing a huge increase of  
25 people forming carpools after talking with them. The

1 whole freeway has gone up, and not all the ones that  
2 are two-plus use the HOV lanes because they are not  
3 that convenient.

4 But I think you're going to see a lot more  
5 people that are eligible to use and will use them  
6 because they're going to get a time savings once this  
7 system is built.

8 MR. GRAY: So is it your opinion that the  
9 current system is underutilized?

10 MR. KARACHEPONE: The current system,  
11 correct.

12 MR. LERUD: John, what's the projection  
13 increase once the connection through the Spaghetti  
14 Bowl is made? Didn't you have like 20 or 30 percent  
15 or something like that?

16 MR. KARACHEPONE: Yeah. We're expecting 25  
17 percent or greater that will still keep the volumes  
18 on the adjacent GP lanes. Which is why on the  
19 long-term system on I-15 as you go up north towards  
20 the speedway, we're not recommending the HOV lanes  
21 there because we're not anticipating enough  
22 congestion and enough demand for two-plus vehicles to  
23 actually make that HOV system.

24 Hours of operation. Today we have an  
25 extended peak-hour operation. It goes from 6:00 to

1 10:00 and then from 2:00 to 7:00. And the analysis  
2 that we did easily supports the fact that we're going  
3 to have congestion and demand continuously from 6:00  
4 a.m. to 7:00 a.m. as we go into the future.

5 And so suddenly an expansion of that time in  
6 the HOV lane in operation can be expected. We are  
7 recommending 24 hours, seven days a week.

8 And so I'd like to highlight a couple of the  
9 reasons why I'm recommending that. One is, of  
10 course, the 24-hour operation is easier to sign.  
11 It's easier to mark. It's easier to enforce. We do  
12 have a lot of visitors here in the Valley, and it  
13 would be easiest if 24 hours is the HOV system.

14 The second thing I'd like to say is that we  
15 do have events along the Strip and downtown and so on  
16 where we have people coming in the evenings. And a  
17 lot of them are coming in HOVs. There are multiple  
18 occupants in those vehicles. So those folks would  
19 still have that benefit of using these additional  
20 access and egress locations.

21 I want to open it up and ask folks if they  
22 have any opinions or comments on the operations 24  
23 hours.

24 MS. MAIER: This is Amy Maier. What about  
25 other HOV systems across the country? For the most

1 part, what I've found on the East Coast is rush-hour  
2 traffic rather than 24 hours. Is it 24 hours because  
3 of the Las Vegas shift work?

4 MR. KARACHEPONE: Yes. And eventually we're  
5 going to get a lot of direct-access ramps. And shows  
6 tend to have 24-hour operations.

7 MS. MULAZIMOGLU: For example,  
8 Southern California operates 24 hours, seven days a  
9 week. Northern California is limited. Virginia is  
10 part-time. And some of the states like Arizona and a  
11 couple of others are part-time. So it's kind of  
12 50/50. So it's not either way. Cheat a.m.

13 MR. KARACHEPONE: It's depending on the  
14 types of drivers they have.

15 MR. ARNOLD: I guess it's still a bit  
16 confusing to me why we chose 24 hours versus the  
17 part-time.

18 MR. KARACHEPONE: I'm recommending the 24  
19 hours.

20 MR. ARNOLD: As an individual who's commonly  
21 commuting from meeting to meeting all over the Valley  
22 on off hours and off days, it is nice to have that  
23 feature.

24 MR. KARACHEPONE: That is true. We think as  
25 we continue to grow -- and we are going to grow.

1 I've already seen that substantial growth happening  
2 now. Our congestion levels are going to increase.  
3 So we want to continue to have that benefit for  
4 high-occupant vehicles, not just during a certain  
5 time. We want to make that 24 hours and that you get  
6 that option.

7 And also the fact that even during  
8 late-night hours, we do have events that finish up or  
9 that start up at 7:00 p.m. or 8:00 p.m., or they go  
10 to the clubs in the night. A lot of people are  
11 traveling with more than one person in the car. So  
12 we'd like to retain that benefit of 24 hours.

13 And I think it's also -- the other reason  
14 would be we are expecting direct-access ramps to come  
15 onboard. The near-term system only has two of them.  
16 But as we go further, we're expecting more  
17 direct-access ramps to come in.

18 And as that happens, we don't want to change  
19 that at that point. We want to preserve those as 24  
20 hours. We don't want to switch in the middle.

21 MR. TERRY: When John told me his  
22 recommendation, I said we don't need a 24/7. But as  
23 we talked about it, if we open it up as 24/7, it's  
24 easier to change it to peak hours than open it up at  
25 peak hours and change it to 24/7.

1           The largest HOV system is  
2 Southern California, which is 24/7. There's only a  
3 couple of those anywhere else in the nation, where  
4 Southern California has them all over the place and  
5 these direct-access ramps.

6           The other argument is -- and I don't know  
7 how I can explain it. But much of our system is on  
8 Interstate 15. We are limited by federal rules, by  
9 AASHTO rules, by our own policies, that you can only  
10 have an interchange every mile or 2 miles. And  
11 they're on the right side.

12           And we're talking about putting  
13 direct-access ramps on the inside, on the left side,  
14 because you're an HOV. If you go then and make it  
15 most of the day, it's not just HOV. You've  
16 essentially put left-side ramps on the interstate  
17 freeway for anybody to use. And that's not really  
18 the intent of them.

19           Do you see what I'm saying? Most of these  
20 systems that they say at variable times of day,  
21 they're just a lane. There are no access ramps. And  
22 I challenge you to find hardly any that have all  
23 these flyovers all over the place that have variable  
24 times. That's part of the justification. And I  
25 think from law enforcement it's simpler.

1           LIEUTENANT MACK:   Novelt Mack with NHP.  
2   Just to go off your own paper.  When you look at the  
3   why-are-we-here part of this, your paperwork here  
4   says, "What is a high-occupancy vehicle?"  And it  
5   talks about -- the verbiage used over and over is  
6   "peak demand," "peak demand," all through here.  And  
7   during the peak hours, we have it.  That's fine.

8           But when we don't have the peak hours after  
9   7:00 o'clock at night, the traffic dies down.  And  
10  we're still going to limit that one lane, which in  
11  the future will be two lanes, and only have three  
12  lanes of general purpose to the public.

13           Now, what happens traditionally for us on  
14  the enforcement side is we know that on the swing  
15  shift, we break at 2:30 from our break, and we hit  
16  the street.  And we ride into rush-hour traffic  
17  immediately.  And we can't go to lunch or do anything  
18  proactive till about 1900 or 7:00 o'clock at night  
19  when the traffic starts to calm and starts to break.

20           Now, I'm not saying to do it.  But I'm  
21  saying if we had the HOV lanes turned off at that  
22  time, that would then, like a nitro pill to a heart  
23  patient, just open up those arteries and a lot of  
24  that traffic to free-flow and clear the roadway,  
25  which is our primary function, is to make sure the

1 roadway is clear.

2 But if the HOV lanes then are still open and  
3 we have little traffic there because we don't have as  
4 much traffic in the HOV lanes but all the traffic is  
5 still in the general-purpose lanes, are we working  
6 against ourselves?

7 I understand. But it sounds like you're  
8 trying to justify -- to me, it sounds like you're  
9 justifying the use of the HOV lane to have it on I-15  
10 to the left, which is a wonderful benefit. But I  
11 think you're trying to justify having it there  
12 against the need for it.

13 I want to bring up the question what the  
14 intern in the back brought up. What are people doing  
15 in other parts of the country?

16 Between Trop and Sahara and the Charleston  
17 area, there are a lot of accidents, and we spend a  
18 lot of our time there. We see trucks use the express  
19 lanes. And, by the way, we have HOV lanes. Yet I  
20 don't see anybody in this room getting onboard. I  
21 see no mention about educating the public.

22 I think that will go a long way to help  
23 everyone in the room to be more successful. I'm  
24 learning stuff here that I didn't know about. I  
25 think education is going to be the biggest thing to

1 help us be more successful, the biggest thing to get  
2 the counts up in those lanes and the biggest thing to  
3 drive forward with what you're saying about  
4 maintaining our status on the interstate out there.

5 MR. KARACHEPONE: We do have an outreach and  
6 education plan. It's a document that's part of our  
7 study. So that is actually included. So we do have  
8 some recommendations regarding that. Thank you.

9 MR. GRAY: He brought up the trucks. And  
10 I'm trying to anticipate what it might look like when  
11 you convert the existing two express lanes to one HOV  
12 and one general-purpose lane.

13 Since the express lanes have been  
14 implemented, have you seen a meaningful reduction in  
15 the use of general-purpose lanes by heavy-duty  
16 trucks?

17 MR. KARACHEPONE: So we did look at the  
18 issue of trucks and how many trucks were in the  
19 express lanes that would no longer be able to use the  
20 express lanes.

21 So it turns out we have about 6 percent  
22 during our congestive hours. We have about 6 percent  
23 of trucks in that. And of that 6 percent, about 2  
24 percent is now in the express lanes. So that 2  
25 percent will now have to use the GP lanes.

1           And, of course, that was one of the driving  
2 factors in saying, "Okay. The conversion is going to  
3 be from two express lanes to one HOV lane because we  
4 need additional room for those who are now using the  
5 express lanes, including trucks, that would now have  
6 to use the GP lane.

7           So, yes, we did take that into  
8 consideration. And that 2 percent of trucks that  
9 move over, we have an additional lane that more than  
10 accommodates that shift-over.

11           NDOT's current policy is that trucks are not  
12 allowed in the HOV lanes. And our recommendation  
13 continues to be that they not be eligible. We are  
14 going to have some direct-access ramps and flyovers  
15 with some grades.

16           Allowing a truck in those facilities would  
17 mean that they would slow everybody down, especially  
18 in our near-term system where we've got only one lane  
19 in each direction. We didn't want to have trucks in  
20 that lane and then HOVs backed up behind that truck.  
21 Because trucks have different operating speeds.  
22 They're slightly slower. And they have different  
23 axle ratio and diesel ratio.

24           Any comments on trucks being not eligible?  
25 And that is NDOT's policies.

1

2           Okay. Motorcycles, emergency vehicles  
3 responding to an emergency, and dead-heading public  
4 buses. All of these three are eligible. And, in  
5 fact, they're eligible by NDOT's policy, and they're  
6 also eligible by the federal rules.

7           So I just went back to find out, okay, what  
8 were some of the reasons why they're eligible. For  
9 example, motorcycles, it came from a federal mandate.  
10 And that was based on a safety study that determined  
11 that it was safer to keep two-wheel vehicles moving  
12 than to have them in stop-and-go conditions. So that  
13 was that recommendation. And, yes, they would  
14 continue to be eligible.

15           Dead-heading public buses means a driver  
16 that is going back to their starting point on their  
17 route. Any comments or questions on this?

18           LIEUTENANT MACK: I'm just curious. Why is  
19 it "responding to an emergency" versus just  
20 "emergency vehicles"?

21           MR. KARACHEPONE: The NDOT, as well as the  
22 federal policy, is that the HOV lane, unless you're  
23 responding to an emergency, you have to be only HOV  
24 vehicles.

25           MR. TERRY: That was a big push when it

1 first started. I have never understood the whole  
2 controversy how that started. Who was going to pull  
3 over a highway patrolman with only one person in  
4 there?

5

6 LIEUTENANT MACK: That allows us to get  
7 around traffic to see what is going on.

8 MR. TERRY: In 2008 that controversy came  
9 up, and we made emergency vehicles eligible no matter  
10 what.

11 MR. ARNOLD: You just have to turn your  
12 lights on now.

13 LIEUTENANT MACK: I'll remember to do that.

14 MR. ARNOLD: Just make sure I'm behind you.

15 LIEUTENANT MACK: And it's not just us.  
16 We're talking about ambulances and the fire  
17 department as well. What I would recommend are tow  
18 trucks. They're not emergency vehicles. Don't think  
19 they are.

20 MR. KARACHEPONE: I'll double-check.  
21 Anything else?

22 So single-occupant, low-emission, and  
23 energy-efficient vehicles. At this point in time,  
24 they're not eligible. And my recommendation at this  
25 point is that we study this and decide what we're

1 going to do.

2 I think Dale said earlier that Neon would  
3 come online maybe in 2020. And that would be the  
4 time when we'd have to -- by the time we get there,  
5 we will have to decide if they are going to be  
6 eligible or not eligible. So we will study the  
7 implications of allowing them.

8 One of the things that is happening today is  
9 that we do have an increasing number of such  
10 vehicles. And that's expected to increase. We're  
11 going to get more and more of these energy-efficient  
12 vehicles. And allowing those energy-efficient  
13 vehicles into the single occupancy -- they're  
14 eligible today if they have more than one occupant.

15 As a single-occupant, energy-efficient  
16 vehicle, if they get in there, it's not working  
17 towards our goal of moving more people. And if  
18 there's more of them, they might exceed the capacity.  
19 They might cause the breakdown of that HOV lane.

20 In fact, the important thing that the  
21 federal regulations require is that those vehicles  
22 can be safely accommodated without dropping the  
23 operating conditions on the freeway itself of the HOV  
24 lane. Comments?

25 LIEUTENANT MACK: This is what I was

1 alluding to earlier when I spoke about the smart  
2 vehicles and energy-efficient vehicles. I would  
3 recommend that we stick with the two-plus because  
4 what you're basically saying is you're asking us on  
5 the enforcement side to determine whether this is a  
6 high-efficiency vehicle or not. We're counting  
7 heads, not the vehicle type.

8 MR. KARACHEPONE: If we do it, the federal  
9 regulations require us to determine several things.  
10 Like determining who is going to be eligible. We do  
11 it through a sticker system. So similarly NDOT --  
12 the DMV would have to determine which vehicles would  
13 be eligible to use that.

14 LIEUTENANT MACK: So they would have to get  
15 a sticker? It would be easier for us to keep it as a  
16 two-occupancy system.

17 MR. KARACHEPONE: Any other comments? Okay.

18 Access type. There are two access types.  
19 It can be continuous. Today it is continuous access.  
20 There's a single white line that you can cross. The  
21 other type is limited access. The express lanes have  
22 a limited-access system right now. So we are  
23 recommending that the future system, as we transfer  
24 over, is a limited-access facility.

25 One of the advantages of having the limited

1 access facility is that, in fact, it facilitates  
2 longer trips in the corridor. People have trouble  
3 anyway weaving across lanes and getting from an entry  
4 and exit point. If you're already in a GP lane  
5 adjacent, if you have continuous access, then you can  
6 opportunistically get into that lane and get out and  
7 use it wherever you want to. Whereas the limited  
8 access facility, you can get in and out, but where  
9 you exit will be limited by the study.

10 MR. NJOROGE: So is there going to be a  
11 barrier rail?

12 MR. KARACHEPONE: The NTC, which is what the  
13 statute follows, says if it's a double white stripe,  
14 it's illegal to cross there.

15 LIEUTENANT MACK: No candlesticks.

16 MR. NJOROGE: So that is going to be an  
17 enforcement issue?

18 MR. KARACHEPONE: We don't have room on the  
19 freeway to put a barrier in. So it's going to be a  
20 double white stripe that separates the HOV lane from  
21 the GP lane.

22 LIEUTENANT MACK: How about a single stripe?

23 MR. KARACHEPONE: Right now for an HOV lane,  
24 you can cross a single stripe. As part of the  
25 education, I'm anticipating that the Department would

1 coordinate with the DMV to make sure the driver  
2 handbook states it. By 2020, it's going to state the  
3 single white and double white.

4 LIEUTENANT MACK: The only one I know of is  
5 a double yellow.

6 MR. KARACHEPONE: Any other comments on  
7 continued access?

8 MR. GRAY: Would it be possible to get a  
9 copy of the presentation?

10 MR. KARACHEPONE: Absolutely. I can e-mail  
11 it to you. Or if you have a USB stick, I can  
12 download it for you.

13 MR. GRAY: No, I don't.

14 MR. KARACHEPONE: So for the near-term  
15 system, we do have some recommendations in 2020 as  
16 that system opens up. We have some planning-level  
17 recommendations on where those openings would be.

18 This is just an initial planning-related  
19 recommendation. Those locations would actually be  
20 tested to make sure it's safe, that you can actually  
21 exit from there and make it to where you want to go  
22 to.

23 But that's something that the Department  
24 will do over the next few years. That's all I had.  
25 Jeff, if you want to summarize it.

1 MR. LERUD: Sure. We are going to have a  
2 final draft. March 27th I think is the date. End of  
3 March. With the intent of finalizing it in the first  
4 couple weeks of April.

5 As far as the feedback goes today, how do  
6 you feel about the recommendations right now, John?  
7 Are they pretty consistent with what we got?

8 MR. KARACHEPONE: Yes. I believe that would  
9 be pretty consistent.

10 MR. LERUD: And we had similar feedback  
11 yesterday too, where there wasn't anything  
12 supercritical or super-opposing.

13 One thing that I think would be really good  
14 for you guys to have on the PowerPoint are those  
15 direct-connect exhibits.

16 MR. KARACHEPONE: Those drawings?

17 MR. LERUD: Yeah. So we can get that to  
18 you. I don't know if there's any other questions.  
19 Thanks, everybody, for coming.

20 MR. ARNOLD: A timeline again? I'm sure you  
21 mentioned it.

22 MR. LERUD: Draft end of March, finalized by  
23 the middle of April.

24 MR. ARNOLD: Okay.

25 MR. KARACHEPONE: If you have any further

1 comments, we'd like to get those in by March 6th. So  
2 that gives us enough time to fold it into the draft  
3 record.

4 MR. LERUD: Okay. Thank you, everybody.

5 (Thereupon the proceedings were  
6 concluded at 10:42 a.m.)

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1 CERTIFICATE OF REPORTER

2 STATE OF NEVADA )

3 SS:

4 COUNTY OF CLARK. )

5 I, Jane V. Efaw, certified shorthand  
6 reporter, do hereby certify that I took down in  
7 shorthand (Stenotype) all of the proceedings had in  
8 the before-entitled matter at the time and place  
9 indicated; and that thereafter said shorthand notes  
10 were transcribed into typewriting at and under my  
11 direction and supervision and the foregoing  
12 transcript constitutes a full, true and accurate  
13 record of the proceedings had.

14 IN WITNESS WHEREOF, I have hereunto affixed  
15 my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

16

17

18

19 \_\_\_\_\_  
Jane V. Efaw, CCR #601

20

21

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23

24

25



## SOUTHERN NEVADA HOV PLAN UPDATE

### STAKEHOLDER WORKSHOP

#### Agenda

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**Location:** RTC Government Center, Room 127  
600 S. Grand Central Pkwy.  
Las Vegas, NV 89106

**Date:** — 02/25/2015

2-24-15 and

**Time:** 9:00 to 11:00am

1. Open Time: Review Boards and engage team members 9:00 to 9:30
2. Introduction and Welcome – NDOT 9:30 to 9:32
3. Brief Presentation - Overview of project 9:32 to 9:40
4. Proposed HOV System 9:40 to 10:10
  - a. Project limits
  - b. Near-Term: With the Opening of Neon through 2025
    - i. Changes with Project NEON
    - ii. System Components
      1. Flyovers
      2. Drop ramps
  - c. Long-term System (Beyond year 2025)
    - i. Expected system expansion
    - ii. System Components
      1. Flyovers
      2. Drop ramps
5. Operational Parameters 10:10 to 10:50
  - a. Occupancy
  - b. Hours of Operation
  - c. Eligibility
  - d. Access Type and Locations
6. Summary and Conclusion 10:50 to 11:00



◇ **HOV LANE AHEAD**

◇ **HOV LANE ENDS**

The Nevada Department of Transportation is updating the Southern Nevada High-Occupancy Vehicle (HOV) Plan. The purpose is to update the previous plan (completed in 2007) based on the current conditions in Southern Nevada, including recently completed projects and Project NEON, and using the most recent analysis tools. Implementation of HOV lanes, or carpool lanes, is one method of maintaining mobility in congested freeway corridors.

The HOV plan update focuses on the near-term HOV system in Southern Nevada, including Project NEON's direct connector between I-15 and US 95 and the conversion of existing I-15 express lanes to one HOV lane and one additional general purpose lane. In addition, evaluations and recommendations for the long-term HOV system, direct access ramp locations, and operations of the HOV system are included. The HOV system is evaluated utilizing the Southern Nevada RTC's 2035 Regional Travel Demand Model with the Mode Choice Element.





# Southern Nevada HOV Plan

February 2015  
COMMENT FORM

### HOW CAN WE REACH YOU?

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

### TELL US YOUR VIEWS

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please use the back of this form or you may include your own letter.

- What is your current usage of managed lanes (HOV or Express) in Clark County?  
 Occasionally       5-10 times a month       5-10 times a week       > 10 times a week
- The long-term HOV plan includes direct access ramps along US 95, I-15, and the Clark County Beltway. What, if any, comments or questions do you have regarding these proposed locations? What additional locations would you recommend?

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- What additional comments or questions do you have regarding the Southern Nevada HOV Plan Update?

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Please return this form today, or mail to the following address no later than March 6, 2015.  
Jeff Lerud, PE, Project Manager, Nevada Department of Transportation, 1263 S. Stewart Street, Carson City, NV 89712, or email [jlerud@dot.state.nv.us](mailto:jlerud@dot.state.nv.us).



CONTACT Jeff Lerud, NDOT, (775) 888-7589



# Technical Local Agency Workshop

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February 24, 2015

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# Southern Nevada HOV Plan



## Stakeholder Workshop

February 25, 2015



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# Southern Nevada HOV Plan



## Stakeholder Workshop

February 25, 2015



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