

# Regional Transportation Commission of Southern Nevada

April 7, 2009



# RTC Responsibilities



- Mass transit
- Transportation planning & funding
- Freeway & arterial management



# Transit Efficiency

- In 2007, RTC ranked 20<sup>th</sup> in the nation in ridership, using **253** vehicles during peak deployment.
- The 19<sup>th</sup> ranked system, Tri-Met in Portland, used **532** vehicles and carried just 3,000 more passengers.



# Transit Efficiency



- In 2007, every RTC vehicle carried 248,377 passengers.
- That exceeds such agencies as MUNI in San Francisco, MTA in New York City, Metro in Los Angeles and CTA in Chicago.



# Cost Efficiency



**Regional Transportation  
Commission**

**\$1.77**

**NYC Transit**

**\$2.07**

**MUNI**

**\$2.08**

**LACTMA**

**\$2.09**

**SEPTA**

**\$2.23**

**Valley Metro-Phoenix**

**\$2.25**

# Rapid Transit

Buses are good but not  
always fast



# Regional Fixed Guideway

*the future of transportation*



- Stakeholder committee spent nearly two years studying options
  - Light rail
  - Bus rapid transit
- Series of public meetings throughout the process

# Light Rail Pros

- Avoids surface congestion
- Reliability
- Image





# Light Rail Cons



- High capital & operating costs
- Long and difficult construction
- Inflexibility of the network

# Bus Rapid Transit



- Pros
  - Less expensive to build
  - Flexibility
  - Speed
- Cons
  - “Bus” has a negative image

# Similar in Appearance





***Not Similar in Price***





# Cost Comparison

	2005 Dollars	2008 Dollars
GAO Avg. for Light Rail	\$42.4 million /mile	
Los Angeles Red Line	\$415 million / mile	
Valley Metro in Phoenix		\$70 million / mile
ACE Downtown Connector		\$3.7 million / mile



- \$52 million for the ACE Downtown Connector
- \$48 million for ACE Boulder Highway

## Level Platforms



Allows rapid loading and unloading passengers

## Ticket Vending Machines



Simplified, off-board fare collection





## Dedicated Transit Lanes



# New Downtown Transit Hub



# Developing an Effective Strategy

## Strategic Goal

**Significantly increase transit's future mode split relative to the current RTP.**

**Develop a list of projects based on opportunistic availability of right-of-way and/or political will**

**Seizing opportunities is good, but effective *strategy* is always more than just that.**



# Developing an Effective Strategy

## Network Strategy

**What set of *connections* will most drive transit ridership?**

## Infrastructure Strategy

**What's the best way, over time, to support a viable network strategy?**

1. Identify the problem.
2. Solve it, being *mindful* of budgetary, political, and physical limitations, but not yet *constrained* by them.
3. Understand what it is that actually solves the problem.
4. Then, and only then, look at staging, value engineering, and related issues.

Too many organizations and individuals self-censor themselves too early in the planning process—before they know what they could potentially achieve with the right set of circumstances.



# Market Research

## Major Findings

### Bus “Image Issues”

Key elements of the network will need to be designed and perceived as “rapid transit,” not “faster bus.”

### Stop/Station Climate Issues

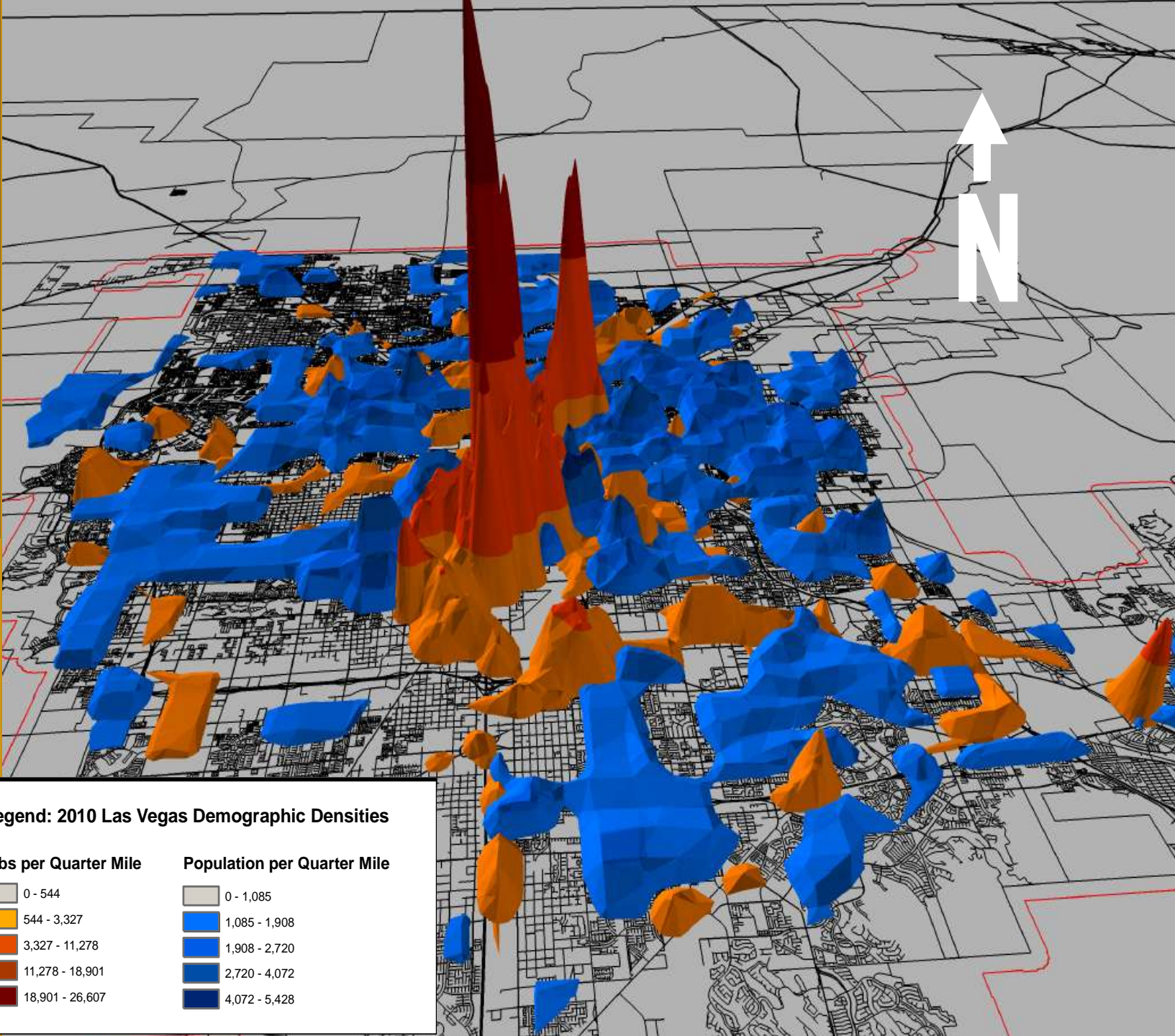
Air-cooling of stations can lead to a significant increase in ridership.

### Travel Time

Travel times must be *significantly* reduced—key finding is “make it *faster*.”

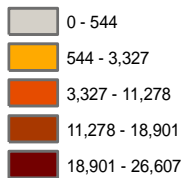
### Strip Story

The Deuce already makes a major and positive impact on the Strip—regardless of initial reaction, we *do* have a story we can sell to the Casinos.

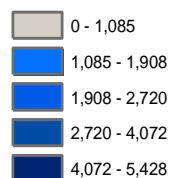


### Legend: 2010 Las Vegas Demographic Densities

#### Jobs per Quarter Mile



#### Population per Quarter Mile







# ACE Downtown Connector









## Travel Time Comparison

Fremont to Convention Center



30 mins. + walking



Las Vegas Blvd. &  
Convention Center Dr.





## Travel Time

Fremont to Convention Center

14 mins. (door-to-door)



Vehicle Every 8 minutes



# Current Fare Collection System





# Off-Board Fare Collection

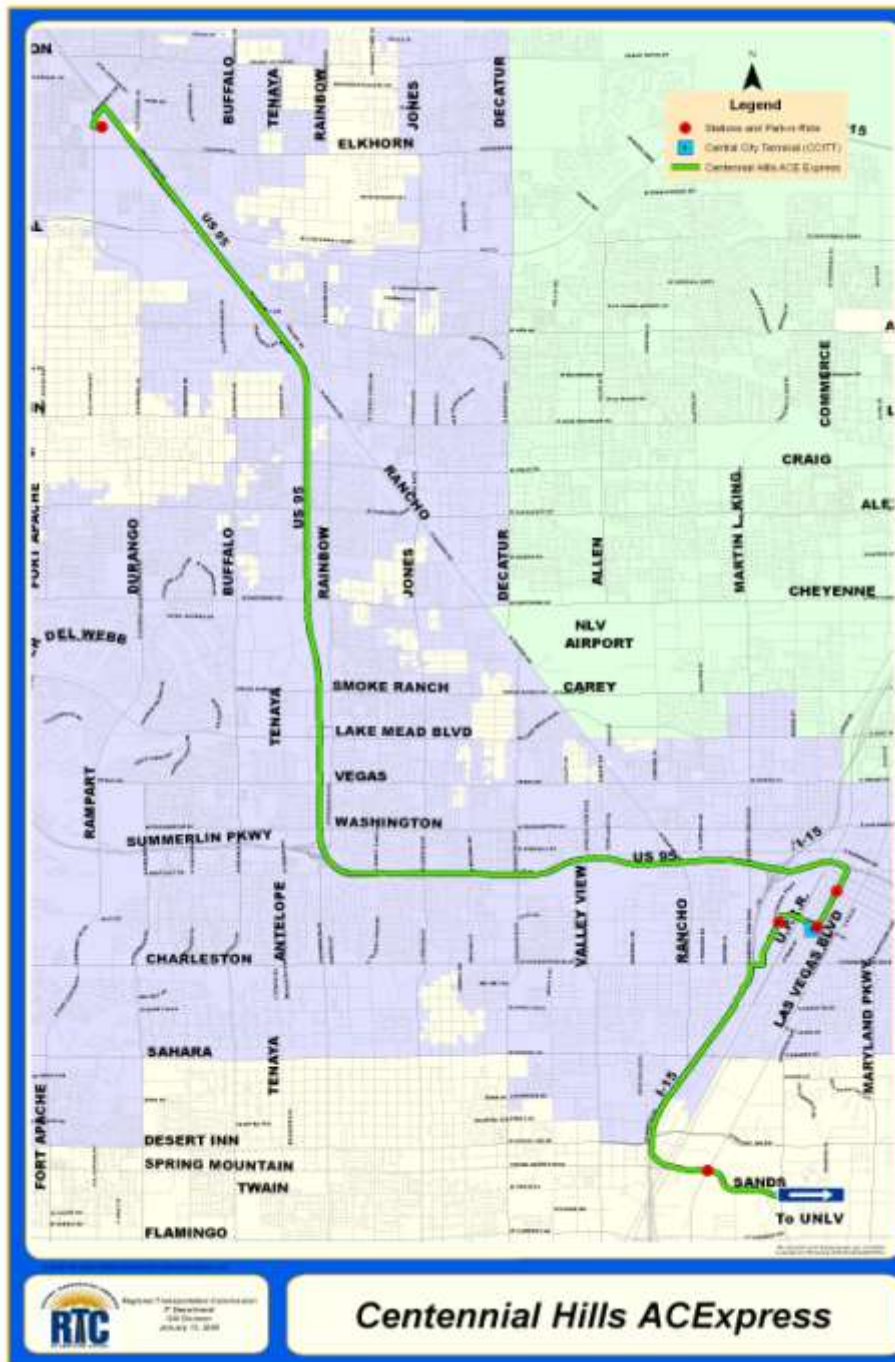
## Mexico City



# Off-Board Fare Collection



- Deuce barrier-free boarding savings assumes that implementation would save *six seconds* for each passenger boarding
- Assume 75% of boarding passengers do not interact with the farebox.





# ACE Express

## Travel Time Comparison

Durango & 95  
Park and Ride



Central City  
Terminal



110 mins.



20 mins







# Questions?

