

### Steering Committee Presentation & Discussion San Diego, CA April 2011



# Familiar Transit in San Diego







#### Local Bus

- Workhorse of transit system
- Short medium distance trips
- Moderate frequency

#### Light Rail (San Diego Trolley)

- Rail backbone of transit system
- Medium long distance trips
- Moderate frequency

#### **Commuter Rail (COASTER)**

- Intra-regional rail system
- Long-distance commute trips
- Low-to-moderate frequency





### Balboa Park, 1923

## **STREETCAR BACKGROUND**





# **U.S. Streetcar Systems**





Memphis



Seattle



San Francisco



Galveston











## **Streetcar Types**

Historic Rebuilds





Heritage Replicas

> Modern Streetcars







## TYPICAL PURPOSE

#### Promote Tourism





Enhance Local Circulation & Reduce Parking Demand

Catalyst for Economic Development







### GOOD FIT IN SOME AREAS

#### **Can share street**





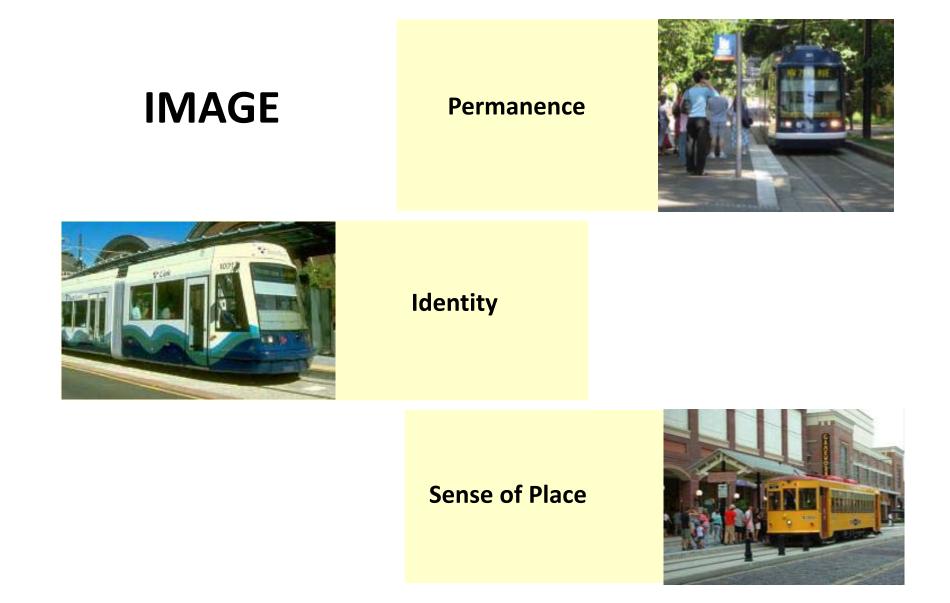
#### **Single vehicles**

Pedestrian enhancer



















- Metropolitan Transit System study
- Grants from CalTrans, SDG&E
- MTS Staff

Sharon Cooney – Chief of Staff
Judy Leitner – Manager of Marketing
Denis Desmond – Senior Planner
Janelle Carey – Associate Planner

Consultant – Parsons Brinckerhoff
 Toni Bates – Assistant Vice President
 Jeff Howard – Senior Planner



# **Study Purpose**

Determine if constructing a streetcar link between City College Trolley Station and Balboa Park is feasible...

- Engineering challenges
- Financial needs
- Operational issues
- Consistency with others' plans
- Consistency with Balboa Park Sustainability Plan
- Historical/parkland considerations

To provide a potential springboard for future projects...

- 2050 Regional Transportation Plan
- Uptown/Hillcrest/North Park streetcar efforts





## Process

#### **Feasibility Planning**



Engineering, Vehicle Options, Finance Options, Operating Costs, Stakeholder Input, other plans – and More!

**Environmental Planning** 

Preliminary Engineering

**Final Design** 

Construction

These steps could begin if a project and funding plan were to be identified.





## **Steering Committee Calendar**

**April 2011:** *Project Introduction* 

June 2011: Feasibility & Alignment

**September 2011:** Alignment Alternatives

**November 2011:** Report Examination & Next Steps



## **Community Consultation Calendar**

May 2011: Introduction & Workshop

### September 2011: Alternatives Presentation & Exercise





# CHARACTERISTICS OF TODAY'S STREETCAR SYSTEMS





## **Passenger Capacity**



**Modern = 100+** 







Heritage/Replica = 50+









### **Right-of-Way Options**





#### **Exclusive Lanes**







## **Lane Sharing Possible**





- Obeys traffic rules
- Slower speeds & traffic delays
- Parking conflicts to resolve
- Can ease implementation and lower cost







## **Integration with Surroundings**



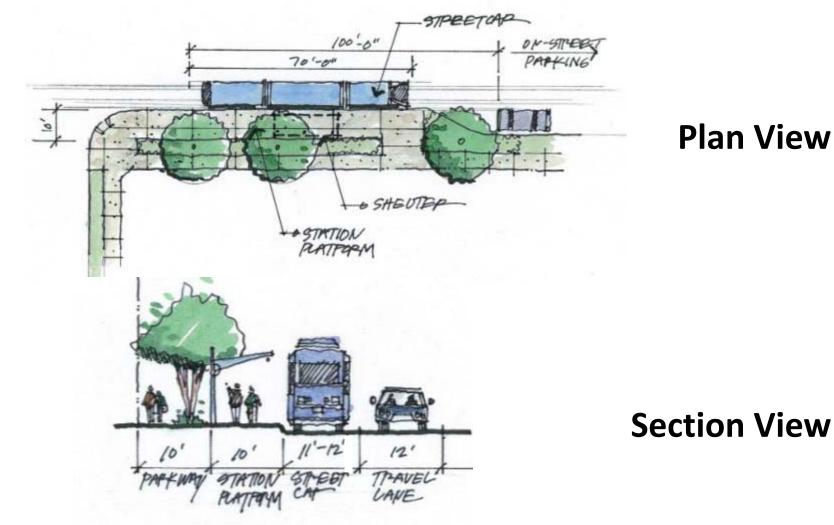








### **Station Requirements**





## **Station Requirements**





#### Station Size: 100'x 10' Station Elements:

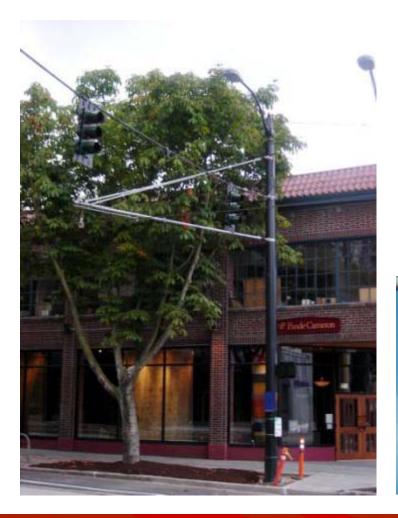
- Shelter
- Ticket vending machines
- Variable message sign w/ real-time schedule
- Alignment and station location map
- Extension of sidewalk bulb-out
- Benches







## **Wiring Requirements**



#### Catenary Type:

- Overhead Contact System (OCS)
- Cantilever Arm Varies from 5-feet to 14-feet
- Single Wire
- 85'-90' between poles







### **Wiring Requirements**











## **Substation Requirements**





Substation Size: 12'x 18' & 15' High Pad Size: 22'x 15' Placement: Within 300-feet of tracks

Needs:

- Minimum 650 Line Voltage
- Two to Three Substations
- Security Fencing
- Maintenance Access





### **Accessibility Options**











# STREETCAR FOR SAN DIEGO?





## **Study Area**

- Corridor: City College Trolley
   Station to San Diego Zoo area
- Alignments: Two separate alignments to be studied
- Focus on Park Blvd. as link for Trolley connection at City College and most direct path to Balboa Park
- Potential future tie-in to other transit projects









## **Engineering Feasibility**

- Grades
- Bridges
- Right-of-way
- Traffic
- Parking
- Electrical
- Maintenance







## **Preliminary Operating Plan**

- Integration with existing transit system
- Ridership estimates
- Schedule and car requirements (demand & capacity)
- Frequency & span-of-service
- Special events
- Cleaning/servicing vehicles, stations, and ROW















## **Financial Feasibility**

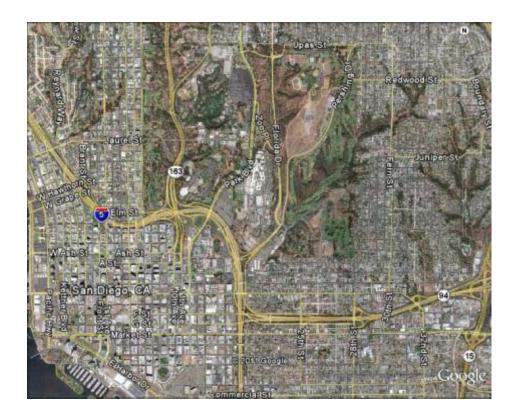
- Streetcar systems currently \$25-50 million per mile
- No existing streetcar funding in San Diego
- Most count on private investment to leverage public funding
- 2050 Regional Transportation Plan (RTP) draft calls for several streetcar lines, all with 90% private financing (recommended hybrid plan)
- Lack of private, developable land in study area
- Consider extensions to include developable area





## **Community & Regulatory Issues**

- Parking, noise, and traffic impacts
- Community plans/ local master plans
- Changes to visual character of area
- Environmental analysis
- Section 4(f) parklands analysis
- Historical resources







## **Post-presentation exercise**

# Jeff Howard, Parsons Brinkerhoff



