Supportive Transit Parking Program Master Plan

Technical Advisory Committee
11.01.2017

Presented by:
Parking Management
Countywide Planning & Development
Los Angeles County Metropolitan Transportation Authority
Supportive Transit Parking Program

- **Program Goal**
  - Develop a parking program that ensures parking resources for transit patrons using a fee based model and innovative solution to control parking demand.

- **Key Objectives**
  - No significant increase in overall commute time to the patron.
  - Ridership must not be negatively impacted.
  - Increase availability of parking spaces for transit users
Who Are Our Parking Customers?

- Approximately 13% of transit users park and ride at Metro parking facilities.

- Preferred alternative modes to access a station are:
  - Drop-off (38%)
  - Bus (37%)
  - Walk (22%).

- Approximately 63% of park and ride patrons live beyond two miles from their preferred station.

- 69% have a household income of $50,000 a year or higher; higher than the countywide average.
Parking Program Development

1. Comprehensive Parking Studies & Recommendations
2. Adopted Ordinance & Policy
3. Management Alternatives
4. Master Plan (Board Direction & Approval)
5. Pilot Program
6. Program Implementation with Innovative Solutions
Parking Management Alternatives

High Demand (Alternative 1)
- Transit rider paid parking
- Identify resources to increase parking inventory
- Work with local jurisdictions to limit spillover

Medium Demand (Alternative 2)
- Transit rider paid parking
- Parking for non-transit, where availability exists
- Work with local jurisdictions to limit spillover

Alternative 3
- Free parking
- Sell parking to adjacent uses where there are opportunities to do so
- Actively market parking availability to increase occupancy
**Master Plan – Implementation Plan**

**10 Year Implementation Plan**

- Transition the pilot program to permanent parking management program.
- Implement the parking management program at 39 stations.
- Utilize recommended technology to operate and enforce parking regulations at all Metro parking facilities.
- Maintain parking facilities in a state of good repair.
- Utilize the Long Term Parking Planning and Design Guidelines for all future transit corridor stations.
Master Plan - Toolkit

Long Range Transportation Planning
- Community inventory and potential shared use opportunity
- Communities vehicle ownership survey
- Surrounding parking program and market
- Neighborhood impact (spillover, permit parking)
- Parking management alternatives
- First and last mile connection
- Ridership vs. Parking Demand Model
- Public and stakeholders input and surveys

System Planning and Design
- Facilities configuration (Structures vs. Lots)
- Potential future conversion (Demand Change)
- Ongoing maintenance needs
- Sustainability elements
- Traffic impact (circulation, concentrated ingress and egress)
- Innovative solutions and equipment

<table>
<thead>
<tr>
<th>Parking Fee</th>
<th>Peak Demand</th>
<th>Riders</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.00</td>
<td>355</td>
<td>430</td>
</tr>
<tr>
<td>$1.00</td>
<td>343</td>
<td>415</td>
</tr>
<tr>
<td>$2.00</td>
<td>332</td>
<td>402</td>
</tr>
<tr>
<td>$3.00</td>
<td>320</td>
<td>387</td>
</tr>
</tbody>
</table>
Ridership versus Parking Demand Model

- Model components
  - Base data
  - Station typology assignment
  - Demand ratios
  - Elasticity curve

- Base data
  - Parking occupancy data
  - Weekday boardings by hour
  - TAP card activity – % first tap of day on rail

- Six station typologies
  - Mid-point
  - Terminus
  - Terminus-urban
  - Terminus-overflow
  - Transfer
  - Transit hub
### Ridership versus Parking Demand Model

- **Demand ratios**
  - Parked cars as % of total weekday boardings
  - Riders who park as percentage of first tap rail riders from opening to 10:00 AM

- **Elasticity curve**
  - Baseline of free parking with reductions in parking demand based on parking rate increments of $1.00 per day, up to a maximum of $30.00 per day
  - Assumes transit parker behavior; does not consider behavior of non-transit parkers

- **Additional assumptions which may be adjusted**
  - Each parking space accommodates 1.1 cars per day on average
  - Transit riders per car of 1.1 on average
Ridership versus Parking Demand Model

- Hypothetical terminus station
  - 1,000 weekday boardings; 350 of which occur between opening and 10:00AM
  - 1.1 turns per parking space
  - 1.1 riders per vehicle

- Results showing parking rates of free to $3.00 per day

<table>
<thead>
<tr>
<th>Parking fee of $0.00/day</th>
<th>Peak Demand</th>
<th>Riders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>313</td>
<td>379</td>
</tr>
<tr>
<td>High</td>
<td>397</td>
<td>480</td>
</tr>
<tr>
<td>Average</td>
<td>355</td>
<td>430</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parking fee of $1.00/day</th>
<th>Peak Demand</th>
<th>Riders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>303</td>
<td>367</td>
</tr>
<tr>
<td>High</td>
<td>384</td>
<td>465</td>
</tr>
<tr>
<td>Average</td>
<td>343</td>
<td>415</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parking fee of $2.00/day</th>
<th>Peak Demand</th>
<th>Riders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>293</td>
<td>355</td>
</tr>
<tr>
<td>High</td>
<td>371</td>
<td>449</td>
</tr>
<tr>
<td>Average</td>
<td>332</td>
<td>402</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parking fee of $3.00/day</th>
<th>Peak Demand</th>
<th>Riders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>282</td>
<td>341</td>
</tr>
<tr>
<td>High</td>
<td>358</td>
<td>433</td>
</tr>
<tr>
<td>Average</td>
<td>320</td>
<td>387</td>
</tr>
</tbody>
</table>
Partnership with Surrounding Communities

• Technical recommendations and assistance exercising their parking policies.

• Notify transit patrons of parking restrictions in area surrounding the transit station(s)

• Potential shared use options for non-peak transit hours for use by surrounding community.

• Promote alternative modes of transportation to access transit station.
Gold Line Foothill Extension 2b

- The project will provide parking for transit use
- The transit parking demand model output is recommending 1,580 spaces
- Consider Claremont station as the terminus station with Metrolink parking demand
- Study identified potentially over 2,900 parking spaces is available offsite
- Even with reduction of 2,130 parking spaces, available parking spaces for all purpose use are far more than proposed reduction.

<table>
<thead>
<tr>
<th>PROPOSED INVENTORY IN EIR</th>
<th>GLENDORA</th>
<th>SAN DIMAS</th>
<th>LOCATION</th>
<th>POMONA</th>
<th>CLAREMONT†</th>
<th>PHASE 2</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>420 SPACES</td>
<td>450 SPACES</td>
<td>600 SPACES</td>
<td>980 SPACES</td>
<td>1,260 SPACES</td>
<td>3,710 SPACES</td>
<td></td>
</tr>
<tr>
<td>PARKING DEMAND MODEL OUTPUT*</td>
<td>286 SPACES</td>
<td>237 SPACES</td>
<td>205 SPACES</td>
<td>315 SPACES</td>
<td>537 SPACES</td>
<td>1,580 SPACES</td>
<td></td>
</tr>
<tr>
<td>DIFFERENCE</td>
<td>134 SPACES</td>
<td>213 SPACES</td>
<td>395 SPACES</td>
<td>665 SPACES</td>
<td>723 SPACES</td>
<td>2,130 SPACES</td>
<td></td>
</tr>
<tr>
<td>TOTAL POTENTIAL OFF-SITE SPACES</td>
<td>501 SPACES</td>
<td>420 SPACES</td>
<td>731 SPACES</td>
<td>893 SPACES</td>
<td>366 SPACES</td>
<td>2,911 SPACES</td>
<td></td>
</tr>
</tbody>
</table>

* Based on average of output at $3.00/day
† Includes Metrolink Parking Demand
Gold Line Foothill Extension 2b

- Estimating over 20 acres of off-street parking spaces that consistently go unused throughout the business weekday during field survey of the study.

- Updated models of parking demand generated by transit riders project significantly lower parking demand than previous estimated.

- Overbuild parking on these sites is likely to attract drivers from cities beyond the immediate community.

- Construction cost for the proposed spaces is nearly $150m. Even consider to reduce by half is $75m.

- The saving on overbuild parking could be used to fund meaningful capital and operational improvement around the station, including first and last mile alternatives infrastructures, bicycle lanes and parking, pedestrian and other Transportation Demand Management improvement desired by the community.