Changing the DNA of your Streets: Pasadena’s Perspective

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Complete Streets Framework

Policy and Tools
• Complete Streets Plan
  > Link to Context and Function
• Performance Metrics
  > Multimodal
  > Sustainable
• Design Guidance
• Management and Operations Strategies

Engaging the Public
• Complete Street Workshops
• Triple Bottom Line Approach to Sustainability
• Full Disclosure
Complete Streets Plan

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- Redefines Function for urban conditions
  - Adds detail necessary for Complete Streets
  - Focuses on City’s travel patterns/modes

- Foundation for
  - Transit Plan
  - Bicycle Plan
  - Pedestrian Plan
Connector (two types)

- **Primary Use**: Trips between Pasadena and the region as well as between parts of Pasadena
  - Access to major destinations
- **City Connectors**
  - 3 to 4 lanes (with provision for up to 6)
  - Primary Use: “Crosstown” trips
  - Mobility Corridors from 2004 General Plan
- **Neighborhood Connectors**
  - 2 to 3 lanes
  - Primary Use: Trips between districts
Access Street (2 lanes)
- Focus on access to parcels
- Majority of streets in Pasadena

Alley
- Primarily access to rear of lots
- Shared as a special category
  - Designed to mix bikes, pedestrians, vehicles across the right-of-way
Service frequency defines street requirements
Design Guidance

- Adds Context as a design factor
  - Context derived from General Plan Land Use
- Design elements matched to form and function and target speed
  - Form-based Code for Streets
Decreasing Emphasis

- Evaluating only street operations and traffic volume changes
  - Individual intersection performance
    - Level of Service
- Mitigating only impacts to auto travel
  - Adding vehicular capacity via street widening

Increasing Emphasis

- Reduce Greenhouse Gas
  - Vehicle Miles of Travel metrics
- Elevating priorities for transit, pedestrian and bicycle travel
  - Enhance conditions for vulnerable users
- Network performance
  - Travel time reliability
  - Speed management
Pasadena’s 2015 Metrics

- Accessibility and environmental performance
  - VMT per capita (service population)
  - Vehicle Trips per capita (service population)

- Measures that promote pedestrian, bicycle, and transit mobility
  - Pedestrian access to destinations
  - Access to Transit routes (by frequency)
  - Access to Bike facilities (by type)
VMT/Service Population

Estimated Vehicle-Miles Traveled by Census Tract

Pasadena Households On the Go

What is VMT per Household (VMT / HH)?
- The total miles travelled by all vehicles operated by a household on a typical day.
- Estimated as an average for households living in Pasadena “zones” (Census Tracts).

What does VMT / HH look like in Pasadena?

Go

Estimated VMT / HH in Pasadena zones
- Low VMT per HH (Less than 30 vehicle-miles per day)
- Medium VMT per HH (30 to 45 vehicle-miles per day)
- High VMT per HH (Greater than 45 vehicle-miles per day)
- Estimated Pasadena Average

Why does VMT matter?
- Lower VMT / HH indicates less vehicle travel which results in...
  - Less congestion
  - Less air pollution
  - Fewer greenhouse gas (GHG) emissions

Sources:
- National Household Travel Survey, 2001
- US Census 2000
- City of Pasadena Parcel Database 2010

November 10, 2010
Pasadena Accessibility Score

PacScore: 1/4 Mile Walk to Work/Play/Shop/Learn

What's “PacScore”?

Measure of 1/4 Mile Walk to Places for Work, Play, Shop, and Learn, such as Grocery stores, Restaurants, Parks, Schools, Shopping, Coffee Shops, Bookshops, Banks and Entertainment venues.

- **Very High** (100): All or most destination types are within a quarter-mile walk from all parcels with very high PacScore.
- **High** (80): Many destination types are within a quarter-mile walk from all parcels with high PacScore.
- **Medium** (57): A variety of destination types are within a quarter-mile walk from all parcels with medium PacScore.
- **Low** (31): A few destination types are within a quarter-mile walk from all parcels with low PacScore.
- **Very Low** (6): One or no destination type is within a quarter-mile walk from all parcels with very low PacScore.

Sources: Google Earth Pro, Los Angeles County GIS Portal, WalkScore.com
Pedestrian Accessibility

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Number of different land uses by TAZ

Height of the polygon indicates the service population, defined as population plus employment.
Transit Access Metric

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Bicycle Access Metric

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Complete Streets Workshops

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• Bridges the gap to the Neighborhood Traffic Management Program
  > Designed for non-local streets

• Expands education element
  > Six-part workshop format
  > Explains Complete Streets
    ▪ Philosophy
    ▪ Goals/Objectives
    ▪ Applications

• Used with staff and neighborhood stakeholders
Washington Boulevard

Typical Cross-Section

**EXISTING**

8' PARKING 10' THRU 10' THRU 10' THRU 10' THRU 8' PARKING

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**CYCLE TRACK**

9' CYCLE TRACK 8' PARKING 11' THRU 11' THRU 8' PARKING 9' CYCLE TRACK

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**BUFFERED BIKE LANES**

6' BIKE BUFFER 10' THRU 10' THRU 10' THRU 10' THRU 6' BIKE BUFFER

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<th>Peak Hour Volume (Veh)</th>
<th>Vehicular Capacity (Veh/Hr)</th>
<th>Traffic Lanes</th>
<th>Daily Hours Over Capacity</th>
<th>Parking</th>
<th>Total Corridor Parking Spaces</th>
<th>Total Corridor Parking Loss</th>
<th>Total Corridor Cost</th>
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*Thru traffic will be blocked by left turns. (No two-way left turn lane)*
**Fred Dock**

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