Introduction to Transit, PAG’s High Capacity Transit Study, and Bus Rapid Transit (BRT)

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Presentation Overview

- Current Transit on Broadway Blvd.
- Potential Options – High Capacity Transit
  - Bus Rapid Transit
- PAG/RTA BRT Implementation Analysis
- Questions And Answers

Current Transit on Broadway

- Two Routes
  - Route 8
  - Route 108 Express

Current Transit on Broadway

- Route 8
  - Runs Broadway Blvd. & South 6th Ave. at 15 min. freq. (trunk); Branches at Broadway & Wilmot at 30 min. freq.
  - Highest ridership route in Sun Tran system
    - 3,182,789 million boardings in FY11-12
    - About 55% (3,733,666) boardings along Broadway Blvd.
    - Broadway segment 2nd highest in Sun Tran system behind Route 16 – 12th Ave/Oracle
    - About 9 % of total Sun Tran ridership

Current Transit on Broadway

- Route 108 Express
  - 3 trips in A.M., 3 trips in P.M.
  - Limited stops
  - 22,596 boardings in FY11-12
  - Performs at average of Sun Express system
  - The only express route with parallel Sun Tran service along entire route

Potential Transit Options

- 2009 High Capacity Transit System Plan
  - High Capacity Transit (HCT)
    - High volume of passengers
    - Fast and convenient service
  - Types
    - Express Bus
    - Modern Streetcar
    - Bus Rapid Transit
    - Light Rail
    - Commuter Rail
Potential Transit Options

• 2009 High Capacity Transit System Plan
  – Sixteen Initial Corridors Identified
  – Eight Selected Corridors for Evaluation:
    • Ridership
    • Right of Way Availability
    • Potential Capital and Operating Costs
  – Two Priority Corridors Identified:
    • Broadway Blvd.
    • 6th Avenue/Nogales Highway

Broadway HCT Options

• Bus Rapid Transit in Near Term, 0-10 years
• Streetcar between Downtown and El Con Mall in Mid Term, 10 to 20 Years
• Light Rail in Long Term > 20 years

BRT Benefits to Passengers

• Reduced transit travel time
• Increased trip reliability
• Improved transit connections and more direct service
• Decreased station stop dwell times and waiting times
• Enhanced system identity
• Increased travel comfort

Bus Rapid Transit

“Bus Rapid Transit can best be described as a combination of facility, systems, and vehicle investments that convert conventional bus services into a fixed-facility transit service, greatly increasing their efficiency and effectiveness to the end user.”


BRT Systems

• Started in Curitiba, Brazil in 1974
• Applied world wide in major urban areas
• 20 systems in U.S.
• 5 systems (Cleveland, Eugene, Los Angeles, Pittsburg and Las Vegas) rated as bronze by Institute of Transportation and Development Policy
BRT Elements

• Running ways
• Stations
• Vehicles
• Fare Collection
• Intelligent Transportation Systems (ITS)
• Service Structure
• Branding

Running Way

• Defines BRT travel parameters
• Most critical component in determining system performance
• Important to public perception and identity
• Characteristics of running ways
  – Running way type
  – Running way markings
  – Running way guidance

Running Way – Mixed Flow

Running Way – On Street Bus Lane

Running Way – At Grade Separated

Running Way – Grade Separated
PAG/RTA Broadway BRT Analysis

- Transit Working Group
- Sketch level Planning
  - Using FTA Guidelines
  - Broadway Corridor – Houghton to Downtown (Euclid)
- Modeling Three Implementation Alternatives
  - At-Grade, Separated Center Lane

PAG/RTA Broadway BRT Analysis

- Modeling Three Implementation Alternatives
  - Outside Lane On-Street/Mixed Traffic
    - On-Street Bus Lane (Existing + Euclid to Country Club)
    - Mixed Traffic (County Club to Columbus & Camino Seco to Houghton)
  - Hybrid
    - Center lane (Euclid to Country Club)
    - Mixed Traffic (County Club to Columbus)
    - Outside On Street Bus Lane (Columbus to Camino Seco)
    - Mixed Traffic (Camino Seco to Houghton)

PAG/RTA Broadway BRT Analysis

- Model outcome – travel time and ridership estimates between alternatives
- Potential Transit Working Group Recommendation on Preferred Running Way and Information to help Broadway Blvd design alternatives and preserve opportunity for BRT and other HCT options

Thank you

Questions?