

# Metro Bus Service Performance Monitoring Process FY2009 Fourth Quarter Results

San Fernando Valley Service Sector  
Council Meeting  
October 7, 2009

# KEY PERFORMANCE INDICATORS

## Availability

- Accessibility
- Connectivity

## Quality

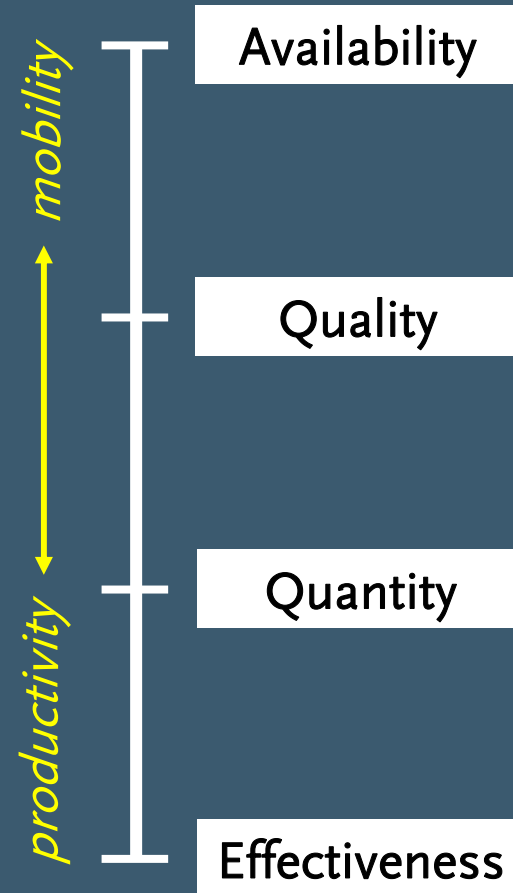
- In-Service On-Time Performance
- Customer Complaints

## Quantity

- Frequency
- Load Factor

## Effectiveness

- Boardings per Service Hour
- Cost per Passenger Mile
- Passenger Miles per Seat Mile
- Route Performance Index



# AVAILABILITY INDICATORS

## Accessibility

### Standard

- Service to be provided to within a quarter mile of all census tracts having at least 3 households per acre and/or 4 jobs per acre

### San Fernando Valley Service

- Meets the standard

### System-Wide Service

- Meets the standard

# AVAILABILITY INDICATORS

## Connectivity

### Standard

- Direct transfers should be available between all Rapid to Rapid and Tier-1 Local to Tier-1 Local connections

### San Fernando Valley Service Not Meeting the Standard

- Missing Rapid to Rapid connections
  - None
- Missing Tier-1 Local to Tier-1 Local connections
  - None

### System-Wide Service Not Meeting the Standard

- 12 Rapid to Rapid connections were missing
- 3 Tier-1 Local to Tier-1 Local connections were missing

# QUALITY INDICATORS

## In Service On Time Performance (ISOTP)

### Standard

- At least 60% of trips in each time period should be no more than one minute early or five minutes late at all non-terminal time points

### San Fernando Valley Service Not Meeting the Standard

- Weekday -
  - Early AM: Line 156
  - AM Peak: None
  - Midday: Lines 152, 158
  - PM Peak: Line 156
  - Early Evening: Line 156
  - Late Evening: Lines 156, 158, 161, 163, 222, 290
  - Owl Period: Lines 156, 245
- Saturday: Lines 156, 164
- Sunday: Line 156

### System-Wide Service Not Meeting the Standard

- Weekday: 51 of 112 measured bus lines
- Saturday: 18 of 109 measured bus lines
- Sunday: 10 of 91 measured bus lines



# QUALITY INDICATORS

## Customer Complaints Per 100,000 Boardings

### Standard

- Complaints per 100,000 boardings should be less than the ratio achieved by the poorest 15% of bus lines in each service type in FY2008

### San Fernando Valley Service Not Meeting the Standard

- 6 of 38 bus lines
  - Lines 96, 155, 156, 161, 169, 761

### System-Wide Service Not Meeting the Standard

- 18 of 158 bus lines

# QUANTITY INDICATORS

## Frequency

### Standard

- Service is operated at least every 60 minutes. Rapid service is operated at least every 20 minutes between 6am – 6pm

### San Fernando Valley Service Not Meeting the Standard

- Weekdays –
  - Early AM: None
  - AM Peak: None
  - Midday: Line 734
  - PM Peak: None
  - Early Evening: None
  - Late Evening: Line 290
  - Owl: None
- Saturday: Line 245
- Sunday: Lines 245, 761

### System-Wide Service Not Meeting the Standard

- 4 of 158 bus lines DX, 12 of 122 lines SA, 16 of 112 SU

# QUANTITY INDICATORS

## Load Factor

### Standard

- The ratio of passengers to seats is below 1.20 during any hour at the peak load point

### San Fernando Valley Service Not Meeting the Standard

- Weekday -
  - Early AM: None
  - AM Peak: Line 169
  - Midday: Line 152
  - PM Peak: Lines 152, 234
  - Early Evening: None
  - Late Evening: Line 234
  - Owl Period: None
- Saturday: Line 224
- Sunday: Line 224

### System-Wide Service Not Meeting the Standard

- 13 of 158 Weekday bus lines
- 9 of 122 Saturday bus lines
- 8 of 112 Sunday bus lines



# EFFECTIVENESS INDICATORS

## Boardings Per Service Hour

### Standard

- At or above the lowest 15% of bus lines in each service period during FY2008

### San Fernando Valley Service Not Meeting the Standard

- Weekday -
  - Early AM: Lines 183, 222, 290, 292, 794
  - AM Peak: Lines 96, 154, 155, 161, 767, 168, 222, 724, 794
  - Midday: Lines 96, 154, 161, 222, 724, 750, 794
  - PM Peak: Lines 96, 154, 161, 168, 222, 724, 750, 794
  - Early Evening: Lines 290, 750, 794
  - Late Evening: Lines 290, 292
  - Owl Period: None
- Saturday: Lines 156, 161, 767, 169, 222, 290
- Sunday: Lines 156, 161, 767, 169, 222, 750

### System-Wide Service Not Meeting the Standard

- 43 of 158 Weekday bus lines
- 16 of 122 Saturday bus lines
- 11 of 112 Sunday bus lines

# EFFECTIVENESS INDICATORS

## Cost per Passenger Mile

### Standard

- At or below the 15% of highest cost bus lines in each service period during FY2008

### San Fernando Valley Service Not Meeting the Standard

- Weekday -
  - Early AM: Lines 96, 183, 222, 290
  - AM Peak: Lines 154, 168, 741
  - Midday: Lines 154, 741
  - PM Peak: None
  - Early Evening: Lines 243, 290, 741
  - Late Evening: Line 290
  - Owl Period: Line 233
- Saturday: Lines 156, 169, 183, 222, 243, 290
- Sunday: Lines 156, 169, 222, 750

### System-Wide Service Not Meeting the Standard

- 42 of 158 Weekday bus lines
- 18 of 122 Saturday bus lines
- 10 of 112 Sunday bus lines

# EFFECTIVENESS INDICATORS

## Passenger Miles per Seat Mile

### Standard

- At or above the lowest 15% of bus lines in each service type during FY2008

### San Fernando Valley Service Not Meeting the Standard

- Weekday -
  - Early AM: Lines 96, 222, 243, 290, 292
  - AM Peak: Lines 154, 167, 168
  - Midday: Lines 154, 243
  - PM Peak: Lines 154, 168
  - Early Evening: Lines 243, 290, 741
  - Late Evening: Lines 245, 290, 292
  - Owl Period: Lines 233
- Saturday: Lines 96, 156, 167, 169, 243, 290, 750
- Sunday: Lines 96, 156, 158, 167, 169, 750

### System-Wide Service Not Meeting the Standard

- 42 of 158 Weekday bus lines
- 23 of 122 Saturday bus lines
- 23 of 112 Sunday bus lines

# EFFECTIVENESS INDICATORS

## Route Performance Index

### Calculation

- Consists of three variables
  - Boardings per Service Hour
  - Passenger Miles per Seat Mile
  - Subsidy per Passenger
- Individual line performance measures are normalized by service type and then averaged together
- Lines scoring less than 0.60 are deemed poor performers

### San Fernando Valley Service

- 13 lines of 38 fell below 0.6
  - Lines 96, 154, 155, 156, 161, 167, 168, 183, 222, 236, 243, 290, 292

### System-Wide

- 41 lines of 158 fell below 0.6

# Discussion