Metro Bus Service Performance Monitoring Process FY2009 Second Quarter Results

Operations Committee March 19, 2009



PERFORMANCE MONITORING

- Provide a comprehensive set of measures to support decision making
- Systematic process for evaluating service from both the network and line perspective
- Balances customer's mobility needs with the need to be efficient
- Identifies specific line characteristics that need improvement



NEW INDICATORS

Availability

- Accessibility
- Connectivity

Quality

- In-Service On-Time Performance
- Headway Variability
- Customer Complaints

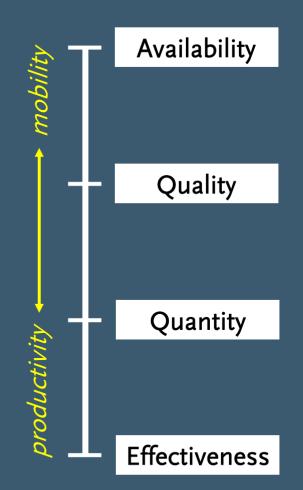
Quantity

- Frequency
- Load Factor

Effectiveness

- Boardings per Service Hour
- Cost per Passenger Mile
- Passenger Miles per Seat Mile
- Service Viability





PERFORMANCE THRESHOLDS

Category	Threshold
Availability	 Maintain service within 1/4 mile of all census tracts having at least 3 persons/acre and/or 4 jobs/acre
	 Maintain direct transfers between Rapid-to-Rapid and Tier 1 Local- to-Tier 1 Local services
Quality	 ISOTP of 60% or better within each time period less than 30% chance of bus bunching on high frequency routes Customer complaints better than bottom 15% by line type
Quantity	 Policy headway of 60 min (20 min for Rapids) Max load of 120% seat capacity during any hour at peak load point
Effectiveness	 Psgr/Rev Hour, Cost/Psgr Mile, Psgr Mile/Seat Mile better than bottom 15% by line type and time period
	 For each time period, service is viable if at least 2 effectiveness indicators are achieved



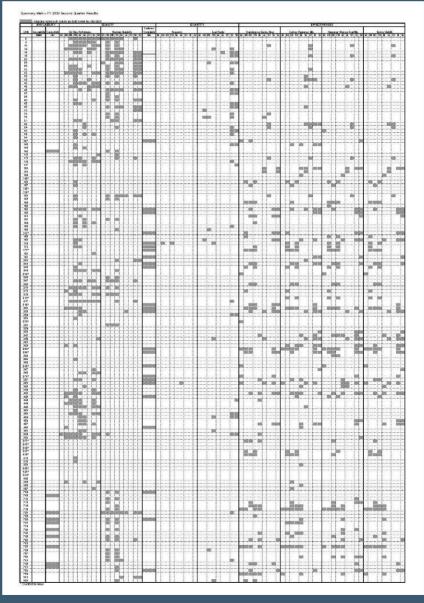
PERFORMANCE SUMMARY

• Indicates lines below threshold for each performance criteria

• Evaluation of line by time period

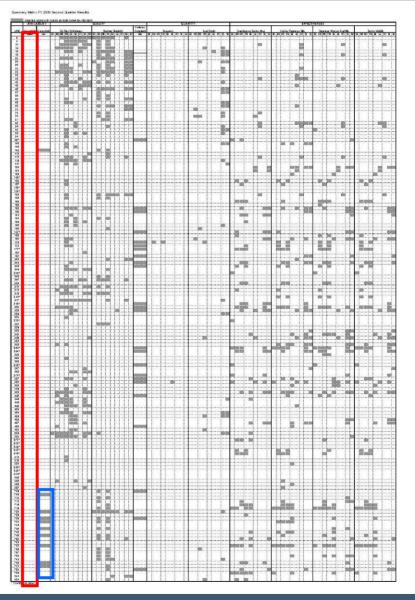
- Weekday
 - Early AM (4a-6a)
 - AM Peak (6a-9a)
 - Mid Day (9a-3p)
 - PM Peak (3p-7p)
 - Early Evening (7p-9p)
 - Late Evening (9p-12a)
 - Owl (12a-4a)
- Saturday
- Sunday





AVAILABILITY

- Accessibility: All applicable census tracts are within ¼ mile of transit
- Connectivity: Virtually all Rapid to Rapid missed connections are in downtown LA except Lines 705 and 762





QUALITY

• On Time Performance:

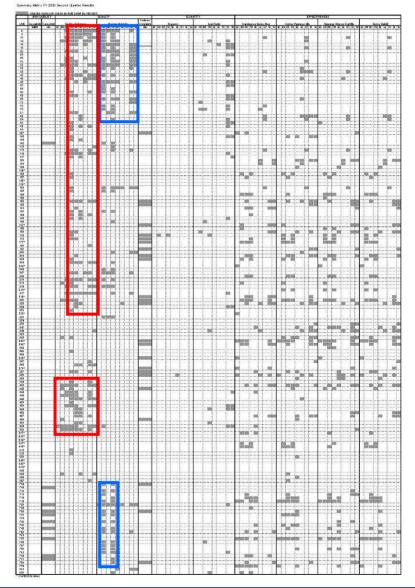
- On time performance is an issue on lines with high ridership and operate in dense urban environments
- Express services have on time performance issues due to local segment and downtown scheduling
- Need to control early departures (12% systemwide)

Headway Variability:

- Downtown LA lines experience bunching in peaks and weekends
- Rapid lines experience bunching during

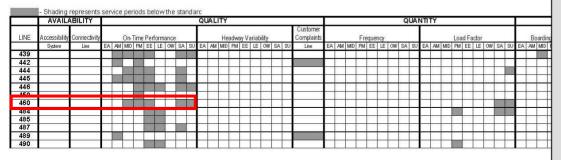


peak hours Metro



IN SERVICE RUN TIME ANALYSIS #1

Summary Matrix FY 2009 Second Quarter Results

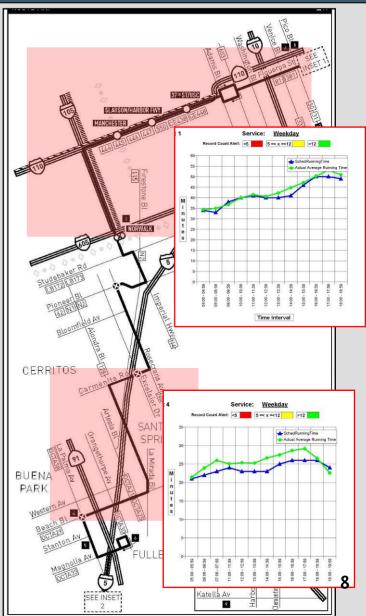


• Line 460

- On Time Performance issues mid day to early evening on weekday
- Southbound from Downtown LA to Norwalk Station shows good scheduled running time
- From Carmenita/Excelsior to Knotts Berry Farm needs additional scheduled running time

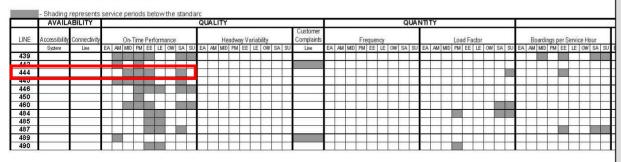


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IN SERVICE RUN TIME ANALYSIS #2

Summary Matrix FY 2009 Second Quarter Results

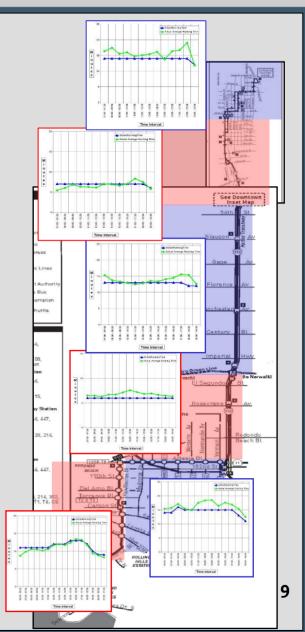


• Line 444

- On Time Performance issues mid day to early evening on weekday
- Run time adjustment needed between
 Hawthorn/Artesia Blvd and Artesia Transit Center
- Run time between Washington and 7th on Figueroa could be redistributed to balance other segments
- Downtown run time scheduled "tight" to eliminate opportunity for buses idling at timepoints – excluded in ISOTP analysis



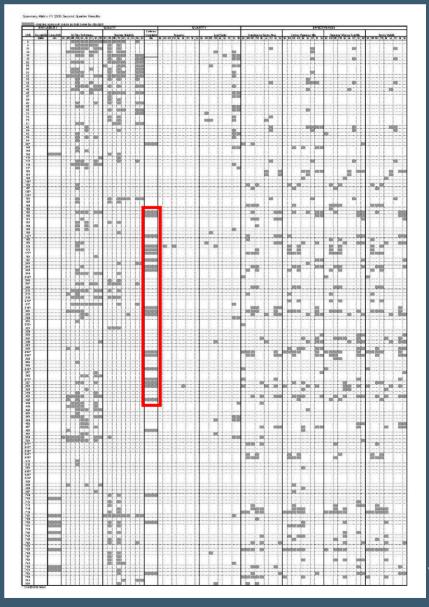
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QUALITY

• Customer Complaints:

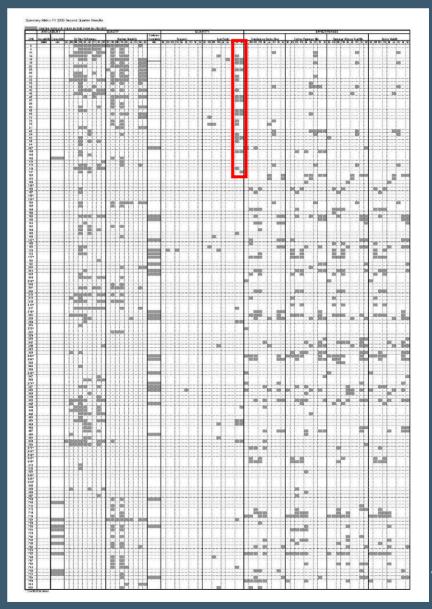
- Majority of high complaint lines operate with less frequent service
- Predominantly operator and schedule related issues
- Indicates that ISOTP is important, particularly on low frequency services





QUANTITY

• Load Factor: Capacity issues on lines serving downtown Los Angeles during weekends





EFFECTIVENESS

- No targeted trends
- Requires continued systematic optimization of lines through trip and segment thinning, route restructure, reallocation of unproductive services

