



Metro

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

42

**OPERATIONS COMMITTEE
OCTOBER 15, 2009**

SUBJECT: FY 2009 4th QTR. PERFORMANCE MONITORING DATA

ACTION: RECEIVE AND FILE

RECOMMENDATION

Receive and file this report on FY 2009 4th Qtr. Performance monitoring data.

ISSUE

Staff analyzes service on a quarterly basis to evaluate performance and this report provides an analysis of the FY 2009 4th Qtr. performance monitoring data.

DISCUSSION

Staff uses ten key performance indicators (KPIs) to balance the productive use of resources with the region's mobility needs and service quality. The KPIs group the evaluation by service type and provide data at the line and line-segment level. The KPIs analyze seven different weekday time periods plus weekend days to better assist staff in identifying areas of improvement.

Following is a discussion of the ten performance indicators grouped by category with observations from the 4th Qtr. FY 09 report. Attachment A is a comparison matrix between the 3rd and 4th Qtrs. and Attachment B defines the performance measure thresholds.

Availability

Two performance indicators measure Availability: Accessibility and Connectivity. The accessibility indicator ensures that 99% of census tracts with three or more households and/or four or more jobs per acre are within a quarter-mile of fixed route transit. Our service exceeds the accessibility indicator standard. All census tracts within our service area are within a quarter-mile of fixed route transit service.

The connectivity indicator states that direct transfers should be available for all Rapid-to-Rapid and Tier 1 Local-to-Tier 1 Local connections. Analysis shows that while most such connections are available in the system, there are a few of these connections, primarily within downtown Los Angeles, not available to our customers. However, given the density of service in downtown Los Angeles, the missed connections are acceptable as other connections are available for passengers.

Quality

Two performance indicators measure Quality: On-Time Performance and Customer Complaints. On-Time Performance (OTP) uses a standard of no more than one-minute early and five-minutes late at least 60% of the time for all timepoints on a line. The analysis shows that on-time performance has improved from the 3rd Qtr. to the 4th Qtr. Generally, lines not meeting the OTP threshold are clustered among east-west and north-south lines operating west of downtown Los Angeles and north of the Santa Monica Fwy., and the Express 400 services. In addition, most occurrences begin in the p.m. peak, and continue on through the early evening and late evening periods. Our lines operate in up to nine time periods, including each weekend day. At the beginning of the fiscal year, 219 "line-time periods" did not meet the OTP standard, but in the 4th Qtr. only 128 line-time periods did not. This is a decrease of over 40%. Beginning with the 1st Qtr. of FY10, our OTP standard will be raised to at least 70.8% of the time.

The Customer Complaint indicator flags those lines that have a greater rate of complaints than other lines in their service type. The report identifies rates of complaints by service type, with the bottom 15% of lines within each service type targeted for improvement. The rate of customer complaints has declined from the beginning of the fiscal year. At that time 24 lines did not meet the threshold, this quarter 18 do not. For all MTA bus service, the rate of complaints was 3.16 per 100,000 boardings at the beginning of the fiscal year, falling to 2.74 in the 4th Qtr. Most complaints are levied on our Express services, with a complaint rate of 9.53 per 100,000 boardings, compared to our Local service that has just 2.6 complaints per 100,000 boardings and our shuttles (600 lines) with just 1.63 per 100K boardings. The most frequent complaint category involves operator-related complaints.

Quantity

Two performance indicators measure Quantity: Frequency and Load Factor. Frequency ensures that the level of service is set to meet the passenger demand in a corridor. The standard for Metro Rapid service is set at a minimum of 20-minute frequency, while all other services have a minimum of 60-minute frequency during any time period in which service operates. (In a separate Board action, staff is proposing that Metro Rapid service be set at a minimum of 15-minute frequency at all time periods in which such services operate. If this standard is adopted, additional Rapid lines would not meet the new standard over and above the current standard.) Only four lines do not meet the frequency standard on weekdays. Minimum frequency standards on weekends are not met by 12 of 122 Saturday lines and 16 of 122 Sunday lines. The greater incidence on

weekends occurs in the early morning and late evening periods, and this has been constant over the course of the fiscal year.

The load factor standard states that the average ratio of passengers to seats should not exceed 1.20 during any hour of operation. As with OTP, there has been significant improvement from the beginning of the fiscal year. At the beginning of the fiscal year, 55 line-time periods did not meet the Load Factor standard, but in the 4th Qtr. only 32 did not. This also is a decrease of over 40%. The biggest improvement has been made on weekends. System-wide in the 4th Qtr., 4 of 159 Weekday lines exceeded the threshold, 9 of 122 Saturday lines, and 8 of 112 Sunday lines.

Effectiveness

Four performance indicators measure Effectiveness: Boardings per Service Hour, Cost per Passenger Mile, Passenger Miles per Seat Mile and the Route Performance Index (RPI). Services not meeting the Boardings per Service Hour threshold are spread out among geographic areas, days of the week, and time periods. The same is true of the Passenger Miles per Seat Mile and Cost per Passenger Mile indicators. MTA shuttle services tend to perform lower in the Effectiveness categories than other MTA services. Those lines and time periods not meeting the Effectiveness thresholds have remained relatively constant over the course of the fiscal year, with no clear trend in either direction.

The RPI is a composite index that includes Boardings per Service Hour, Passenger Miles per Seat Mile and Subsidy per Boarding. Lines are rated within their service type, with a value of 1.0 being average and a value below 0.6 falling below the standard. In the 4th Qtr., 42 lines fell below the standard, representing just over a quarter of all our bus service. These lines tend to be low-frequency, low-ridership lines representing all geographic areas.

NEXT STEPS

Staff is currently presenting the 4th Qtr. results to the Sector Councils. Staff will continue to report service performance results to the Board on a quarterly basis.

ATTACHMENTS

- A. 3rd Qtr. to 4th Qtr. Comparison Matrix
- B. Performance Measure Definitions and Thresholds

Prepared by: Steve Fox, Program Manager, Service Planning
Conan Cheung, Deputy Executive Officer, Service Planning &
Development

Carolyn Flowers

Carolyn Flowers
Chief Operations Officer

Arthur T. Leahy





Arthur T. Leahy
Chief Executive Officer

ATTACHMENT A

LINE	Sector	AVAILABILITY		QUALITY										QUANTITY										EFFECTIVENESS										Route Part. Index										
		Accessibility	Connectivity	On-Time Performance							Customer Complaints	Frequency					Load Factor					Boardings per Service Hour					Cost per Passenger Mile					Passenger Miles per Seat Mile												
				EA	AM	MD	PM	EE	LE	OW		SA	SU	EA	AM	MD	PM	EE	LE	OW	SA	SU	EA	AM	MD	PM	EE	LE	OW	SA	SU	EA	AM		MD	PM	EE	LE	OW	SA	SU	EA	AM	MD
Not Pass Q3 & Q4:		D	10	##							9	34					11					##					##																	

* Contract Services

Service Periods Analyzed	
Early AM (4a-6a)	EA
AM peak (6a-9a)	AM
Mid-Day (9a-3p)	MD
PM Peak (3p-7p)	PM
Early Evening (7p-9p)	EE
Late Evening (9p-12a)	LE
Owl Period (12a-4a)	OW
Saturday	SA
Sunday	SU

Shadow Key:	
	Failed This Quarter & Failed Last Quarter
	Failed This Quarter & Passed Last Quarter
	Passed This Quarter & Failed Last Quarter
	Passed This Quarter & Passed Last Quarter

PERFORMANCE MEASURES	DEFINITIONS & PERFORMANCE THRESHOLDS																																																												
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-- Accessibility	Service is to be provided to within 1/4 mile of all census tracts having at least 3 households/acre and/or 4 jobs/acre																																																												
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-- In Service On-Time Perf. (ISOTP)	[In Service On-Time Performance] 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																																																												
-- Customer Complaints	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 <table border="0"> <tr> <td>Local Service</td> <td>8.70</td> </tr> <tr> <td>Express Service</td> <td>30.00</td> </tr> <tr> <td>Shuttle Service</td> <td>24.00</td> </tr> <tr> <td>Rapid Service</td> <td>4.00</td> </tr> </table>	Local Service	8.70	Express Service	30.00	Shuttle Service	24.00	Rapid Service	4.00																																																				
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