

6 Operating Costs and Rider Impacts for Planned Transit Services

6.1 Operating Budget

Development of the Concept Plan had two elements: baseline improvements that could take place within currently available funding and future improvements that would require additional funding. Metro Transit operating budget for Central-South (Sector 5) is being reduced by 4 percent in 2003 due to reduced state funding. To address this deficit the following changes are being made.

Route/segment eliminated

- Current routes 43, 541 and 547
- Planned routes 6 and 594

Frequency of service reduced on

- Current & planned routes 4, 5, 6, 9 and 28

Span and weekend service reduced on

- Current routes 6, 70 and 540
- Planned routes 53, 134, 542 and 594

Temporary Federal Funding

A federal Congestion Mitigation and Air Quality (CMAQ) grant provides temporary funding of four routes for three years:

- Route 53 Limited-stop on Lake Street and Marshall Avenue
- Route 535 Limited-stop all-day service on I-35W
- Route 540 Crosstown on parallel arterial north of I-494
- Route 542 Crosstown on parallel arterial south of I-494

This same CMAQ grant also funds interim Route 155, operating as a bus bridge between Fort Snelling and Mall of America via the airport from April to December 2004, when the Route 55 Hiawatha LRT line will open to Mall of America.

The routes funded by the CMAQ money are highlighted in yellow in Figure 14.

This reduction in the 2003 budget allows for the operation of the following annual platform (bus operating) hours of service in this study area.

975,340	Base Sector 5 platform hours (September 2003)
69,360	Supplemental CMAQ platform hours
1,044,700	Total annual platform hours available for Sector 5

One route in the plan is to be operated by Southwest Metro Transit, and is not included in the balance of Metro Transit resources: Route 594, providing daily express service along I-494. Figure 14 details the service (revenue) hours requirements by route. Service (revenue) hours are the hours of actual service available to the customer. New or additional service that merits implementation but is beyond our current budget is described in Section 9.

Overall, platform hours would increase by approximately 5 percent, and service (revenue) hours would increase by more than 8 percent due to the availability of CMAQ funding. This increase would come with improved efficiency and effectiveness.

Figure 14 – Summary of Annual Operational Impacts

Route	One-Way Trips				Service Hours			
	Existing	Planned	Change	% Change	Existing	Planned	Change	% Change
2	30,570	42,970	12,400	40.6%	20,012.3	24,037	4,025	20.1%
4	54,038	62,221	8,183	15.1%	35,316.3	53,365	18,049	51.1%
5	91,414	91,414	0	0.0%	52,671.6	52,747	75	0.1%
6	41,687	87,768	46,081	110.5%	36,553.0	65,401	28,848	78.9%
7	42,425	28,661	-13,764	-32.4%	44,745.0	20,413	-24,332	-54.4%
8	25,109	26,570	1,461	5.8%	9,822.0	5,093	-4,729	-48.1%
9	37,841	37,493	-348	-0.9%	16,278.0	16,229	-49	-0.3%
14	40,793	46,926	6,133	15.0%	20,167.2	21,315	1,148	5.7%
18	106,650	109,657	3,007	2.8%	64,072.8	65,434	1,361	2.1%
19	28,895	41,062	12,167	42.1%	30,449.0	33,085	2,636	8.7%
21	91,456	83,690	-7,766	-8.5%	81,520.9	76,107	-5,414	-6.6%
22 (see 14, 27)	39,950	0	-39,950	-100.0%	24,641.0	0	-24,641	-100.0%
23	20,753	42,898	22,145	106.7%	12,005.9	23,706	11,700	97.5%
24 (old 20)	26,257	39,885	13,628	51.9%	14,134.0	22,432	8,298	58.7%
27	0	38,013	38,013	100.0%	0.0	30,615	30,615	100.0%
28	37,214	0	-37,214	-100.0%	31,222.3	0	-31,222	-100.0%
39	4,590	1,785	-2,805	-61.1%	1,097.0	480	-617	-56.2%
43	1,352	0	-1,352	-100.0%	350.0	0	-350	-100.0%
46	0	26,012	26,012	100.0%	0.0	19,917	19,917	100.0%
53	0	18,870	18,870	100.0%	0.0	12,716	12,716	100.0%
54	26,581	48,387	21,806	82.0%	17,092.9	30,257	13,164	77.0%
63	42,282	42,282	0	0.0%	17,583.6	17,584	0	0.0%
64	52,931	0	-52,931	-100.0%	20,172.0	0	-20,172	-100.0%
67	0	0	0	0.0%	0.0	0	0	0.0%
69	40,489	0	-40,489	-100.0%	15,135.9	0	-15,136	-100.0%
70	12,240	12,240	0	0.0%	2,805.0	2,805	0	0.0%
74	0	41,564	41,564	100.0%	0.0	21,565	21,565	100.0%
84	46,521	46,469	-52	-0.1%	31,257.0	27,224	-4,033	-12.9%
87	0	0	0	0.0%	0	0	0	0.0%
121 (old 52A)	1,785	1,530	-255	-14.3%	1,249.5	1,020	-230	-18.4%
122 (old 52B)	2,040	2,040	0	0.0%	1,479.0	1,479	0	0.0%
124	0	5,865	5,865	100.0%	0.0	2,984	2,984	100.0%
126	0	6,375	6,375	100.0%	0.0	2,907	2,907	100.0%
133	0	2,550	2,550	100.0%	0.0	1,760	1,760	100.0%
134	7,395	9,435	2,040	27.6%	4,921.5	4,875	-47	-0.9%
135	2,805	2,805	0	0.0%	1,785.0	1,785	0	0.0%
144	0	2,295	2,295	100.0%	0.0	1,785	1,785	100.0%
146	5,865	5,865	0	0.0%	4,335.0	4,335	0	0.0%
148 (see 133)	2,805	0	-2,805	-100.0%	1,657.5	0	-1,658	-100.0%
156	4,080	4,080	0	0.0%	2,907.0	2,838	-69	-2.4%
180	34,760	0	-34,760	-100.0%	19,401.6	0	-19,402	-100.0%
191 (see 53)	1,785	0	-1,785	-100.0%	1,402.5	0	-1,403	-100.0%
194 (see 144)	2,040	0	-2,040	-100.0%	1,173.0	0	-1,173	-100.0%
515 (old 15)	29,202	43,140	13,938	47.7%	12,993.0	17,218	4,225	32.5%
535	0	18,870	18,870	100.0%	0.0	13,770	13,770	100.0%
538	10,870	20,205	9,335	85.9%	8,163.1	12,983	4,820	59.0%
539	10,870	19,730	8,860	81.5%	8,363.3	14,115	5,752	68.8%

Metro Transit Central-South (Sector 5) Final Plan

Route	One-Way Trips				per	Service Hours			
	Existing	Planned	Change	% Change		Existing	Planned	Change	% Change
540	1,530	26,690	25,160	1644.4%	1,122.0	15,055	13,933	1241.8%	
542, part 566/576	2,040	22,950	20,910	1025.0%	765.0	13,515	12,750	1666.7%	
547	1,020	0	-1,020	-100.0%	892.5	0	-893	-100.0%	
552	1,530	1,530	0	0.0%	1,428.0	1,428	0	0.0%	
553	3,570	3,570	0	0.0%	2,754.0	2,754	0	0.0%	
554 (old 35-LSU)	3,060	2,550	-510	-16.7%	2,371.5	2,040	-332	-14.0%	
556 (see 576), 557	10,200	0	-10,200	-100.0%	9,205.5	0	-9,206	-100.0%	
558 (old 35JK)	4,335	4,845	510	11.8%	2,626.5	3,060	434	16.5%	
M-566 (see 576)	2,550	0	-2,550	-100.0%	1,836.0	0	-1,836	-100.0%	
568	510	510	0	0.0%	510.0	0	-510	-100.0%	
576, 557	1,785	5,100	3,315	185.7%	1,122.0	2,805	1,683	150.0%	
586	2,040	0	-2,040	-100.0%	1,836.0	0	-1,836	-100.0%	
587	2,550	0	-2,550	-100.0%	1,504.5	0	-1,505	-100.0%	
588	1,530	4,080	2,550	166.7%	1,275.0	1,785	510	40.0%	
597	3,825	5,100	1,275	100.0%	3,442.5	3,060	-383	100.0%	
589	0	4,335	4,335	100.0%	0.0	2,933	2,933	100.0%	
52C (see 124)	5,865	0	-5,865	-100.0%	2,983.5	0	-2,984	-100.0%	
52F (see 144)	1,020	0	-1,020	-100.0%	632.4	0	-632	-100.0%	
52LU (see 126)	6,375	0	-6,375	-100.0%	2,907.0	0	-2,907	-100.0%	
Totals	1,113,675	1,242,882	129,207	11.6%	708,150	774,814	66,665	9.4%	
155 Temporary Shuttle**	0	33,877	33,877	100.0%	0.0	8,832	8,832	100.0%	
Services Funded by Others									
594 (SW Metro Transit)#		6,630				2,142			

** Special Note on Route 155: "Annualized" figures reflect assumed operations from Saturday, April 3, 2004 through Friday, December 10, 2004.

Current Route replaced is SW Metro Transit Route 631.

CMAQ funded routes include: 53, 155, 535, 540 and 542

6.2 Efficiency and Effectiveness Elements

A principal objective in developing the plan was to improve the efficiency and effectiveness of transit service to enable the mobility of metro-area residents and visitors. Several elements are significant opportunities for immediate and future benefit in improving efficiency and effectiveness:

Route Coverage Change and Rider Impacts

In restructuring Metro Transit service in the study area, the Metro Transit team worked extensively to refine the proposed plan to minimize significant negative rider impacts while maintaining the proposed efficiency and effectiveness improvements. In the end, fewer than 1 percent of current riders will be significantly impacted as described in the Figure 15 (ridership impact map). Based on 2001 data, fewer than 50 riders per day are estimated to be beyond a ¼ mile walk to a bus stop. Thus, service is retained for more than 99 percent of riders.

Ridership Change

The Metropolitan Council's regional model is used to forecast ridership changes. Ridership growth, measured in "linked trips," is predicted for the entire study area resulting from the planned service changes. Linked trips are those transit trips made by a person regardless of the number of transfers they need to make. Region wide, transit linked trips are predicted to grow by almost 12 percent, (from 239,400 in 2003 to 268,100 in 2005) with the changes planned in Sector 5. Transit trips with origins in Sector 5 are predicted to grow from 115,160 to 132,200 linked trips, a 14.8 percent increase.

The growth forecasted by the model will be somewhat reduced by the service reductions being made in 2003, and a fare increase on August 1, 2003.

Improve Operating Speeds

The attractiveness and efficiency of Metro Transit service will increase with improved operating speeds. Here are strategies toward that end.

- Bus stop spacing – Aggressively implement bus stop spacing in accordance with the current policy (eight stops per mile or one every long city block, or one every two short city blocks).
- Fare collection - The current fare collection system requires riders with pre-paid passes or transfers to insert them into a ticket reader, taking a significant amount of time. The planned 2003 implementation of SmartCards that require no physical contact with a farebox should dramatically improve boarding time.
- Traffic signal coordination - There are opportunities to improve operating speeds through better traffic signal timing and development of transit signal priority.
- Traffic bottlenecks - Just like freeways, arterials experience significant traffic bottlenecks at rush hour times, resulting in the need for added rush hour buses. Metro Transit has had significant success in developing transit advantages such as bus-only freeway shoulders and bus lanes, and should continue to pursue these programs when feasible.

Refocus Commuter Services

The Final Plan focuses on more express service in major commuter corridors – I-35W, Highway 100 and I-494 at large park-and-ride lots. As a result, vehicle utilization will improve.

Restructure Routes and Network

Analysis of existing service identified a number of route segments and network elements that are unproductive and ineffective. While maintaining very good coverage (see Section 4) the route structure was trimmed, with service redeployed in areas or at times that warranted added service.