



7.0 COST ISSUES

7.1 LOCAL COST SHARING

The Task Force requested an overview of local cost sharing in the first meeting of the Phase II study. The material presented is summarized herein.

Capital Costs: Based on the Phase I study, the capital costs can be expected to be generally in the \$200 to \$300 million range. If the project relies primarily on the FTA New Starts funding program and is successful in gaining New Starts funding through all phases of design and construction, the share of these costs might be expected to be distributed as follows:

- FTA New Starts: 50 to 70%
- IDOT: 20 to 30%
- Local Match: 10-15%

Although the 70% value is still official, in recent years as project requests increasingly exceed available funds, the FTA has been more insistent on limiting its participation to 50%. The local match portion would be primarily in the purchase of land and construction of stations and parking lots, but other municipal projects related to the service, such as new or rebuilt underpasses, grade crossings or access roads may also be included.

Operating and Maintenance (O&M) Costs: The Phase I projected annual O&M costs for rail service was \$2½ to 5 million. Revenue for the line will come from fares that are assumed in Phase I to be set by the Metra mileage zone fare structure. The percent of the O&M costs that are projected to be covered by the fares is referred to as the fare box recovery ratio.

Farebox recovery ratios for transit services in the US are generally less than 50%. Metra is an exception and historically has been required to maintain a 55% ratio, which is considered to be very good in the transit industry. Because of a simple system operating diesel multiple units (DMUs) that utilize many highway truck components, and a moderately strong ridership, the Phase I study projected a fare box recovery ratio that was compatible with Metra's. This means that approximately half of the O&M costs will need to be paid for with dedicated public funds. That amounts to approximately \$1¼ to 2½ million per year.



The most common dedicated taxing mechanism used by transit authorities to cover this annual cost is the sales tax. For the KACOT project, sales tax is the most likely taxing mechanism to be discussed because of the existing RTA sales tax for the same purpose over the 6-county Chicago region. Also, in applying for New Starts capital funding from the FTA, projects must show a long term dedicated source of funding to cover the expected O&M deficit. Sales tax is a well proven funding source that would be readily accepted by the FTA in its evaluation of the project.

Decisions on the method of providing local matching capital funds and long term dedicated O&M funding must be completed during the preliminary engineering phase of the New Starts process.

This general level of discussion on funding was sufficient for the Task Force for this feasibility phase of work on the project. No further detailed funding or cost sharing work was performed during the study.

7.2 CAPITAL COST ESTIMATE OF MINIMUM OPERABLE SEGMENT

There have been some significant changes in the KACOT rail system proposed herein compared to the original rail system proposed in Phase I (Reference 39). The most significant changes include the following changes, assumptions or responses to positions taken by others:

- Metra Electric District extended south from University Park to Peotone.
- No KACOT stations required in Monee or Peotone.
- Southern end of line for the MOS in Bradley.
- Purchase right-of-way (ROW) from CN.
- Build totally new railroad.
- Relocated stations at Peotone, Manteno and Bradley.
- Add new central control facility.
- Street running likely south of Bradley.

Some of these would be cost savings while others would be additional costs. Because of the variation in these cost impacts, late in the KACOT-II project Kankakee County asked for a rough capital cost estimate for the new KACOT rail system. A capital cost estimate was assembled which drew heavily not only from the original KACOT Phase I study (Reference 39) but also from similar commuter rail feasibility studies in



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the Kenosha-Racine-Milwaukee and Kendall County corridors (References 38 and 40 respectively). Army Corps of Engineers inflation indices (Reference 37) were used to convert unit costs to current dollars. Because the cost estimate was added late in the project, quantities were estimated from available data from the work on the Independent Rail Alternative without making new field trips. Spread sheets were set up that complied with the Federal Transit Administrations (FTA) Standard Cost Categories, which were only first introduced when the Phase I report was issued. Because of the great uncertainty about the alignment south of Bradley, the cost estimate was performed on the minimum operable segment (MOS). The assumptions and quantity take-off techniques used in making the estimate are documented in Appendix 7. Results of the cost estimate are shown in Table 7-1.

Table 7-1. Commuter Rail MOS Capital Cost Comparison between Phases I and II

Phase II		2007\$
FTA SCCs		
10	Guideway & Track Elements	\$38.7 m
20	Stations, Stops, Terminals, Intermodal	\$12.2 m
30	Support Facilities: Yards, Shops, Admin Bldgs	\$75.6 m
40	Site Work & Special Conditions	\$17.7 m
50	Systems	\$21.3 m
60	ROW, Land, Existing Improvements	\$10.3 m
70	Vehicles	\$35.7 m
80	Professional Services	\$37.6 m
90	Unallocated Contingency	\$49.8 m
100	Finance Charges	\$0.0 m
Total:		\$298.9 m

Phase I (report dated January 2005, but uses FY04 dollars)

	2004\$	2007\$
US Army Corps of Engineers Index (Ref 37)	586.53	673.22
Total MOS System Cost Estimate	\$ 190.30 m	\$ 218.4 m

Sources of Increases:

Purchase ROW from CN and Built New KACOT Railroad:		\$ 47.1 m
Central Control Facility (CCF)	\$ 2.2 m	
Purchase Railroad Right-of-Way (ROW)	\$ 7.2 m	
Miscellaneous New Railroad Costs (fill, bridges, culverts, trackwork, signaling, road xings, etc.)	\$ 37.7 m	
Fixed Percentages:		\$ 33.4 m
Professional Services (12 to 18 %)	\$ 12.2 m	
Contingencies (20 to 30%)	\$ 21.2 m	
		\$ 80.5 m



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In addition to summarizing the results of the estimate, the Table also compares the MOS capital cost estimate for both Phases I and II and gives an accounting for the difference between the two total values.

Overall, from the standpoint of the MOS alignment, the net affect of the 8 bullets above, which summarize the differences between the Phase I and II lines, is to increase the overall cost of the MOS by \$80.5 million in 2007 dollars. The "Sources of Increases" shows that the majority of that increase, \$47.1 million (CCF new ROW and Misc. New Railroad Costs) comes from the CN Railway's requirement that the project purchase its own ROW from the railroad and build its own new railroad parallel to the CN mainlines. The remaining differences arise from increases in the standard allowances that have been adopted for use on other recent projects to meet the FTA's requirements.