



S E A T T L E S T R E E T C A R
Network Development Report
Appendix A

Seattle Department of Transportation
May 2008

METHODOLOGY-PRELIMINARY CAPITAL COST ESTIMATES

The preliminary capital cost estimates for the most promising routes for expansion of the Seattle Streetcar were developed by a project team with extensive experience with both construction of the South Lake Union Line, other streetcar projects, and other infrastructure construction in Seattle. The team included construction management professionals as well as engineers, and the estimates were developed with an emphasis on early review of constructability issues.

Hard construction costs were developed by calculating the length of the proposed routes by street segment and using those quantities to estimate hard costs of project elements such as track and roadway construction, drainage modifications, passenger platforms (with shelters and passenger information systems), utility relocation, structural retrofit or replacement, traffic signals and signage, special track and train control systems, and traction power systems.

Durations were estimated based on route length and experience of construction durations from the South Lake Union Line project.

Soft costs for project management, construction management, mobilization and general conditions, and traffic control were developed based on durations. Design fees were estimated as 12% percent of construction costs.

Route-specific issues related to utility conflicts, traffic and roadway modifications, and constructability issues such as overhead conflicts or night work requirements were incorporated into hard and soft cost projections. Field work was a major component of this route-specific constructability review.

A 20 percent contingency was added to utility cost estimates, and an additional 20% contingency was added to the entire cost estimate. Finally, costs were escalated by 12% to 2010 dollars.