Proposed Evaluation Process and Criteria

Seattle Transit Study for Intermediate Capacity Transit

Submitted to: City of Seattle Strategic Planning Office

Submitted by:

Parsons Brinckerhoff

October 13, 2000

TABLE OF CONTENTS

LIST of TABLES and FIGURES

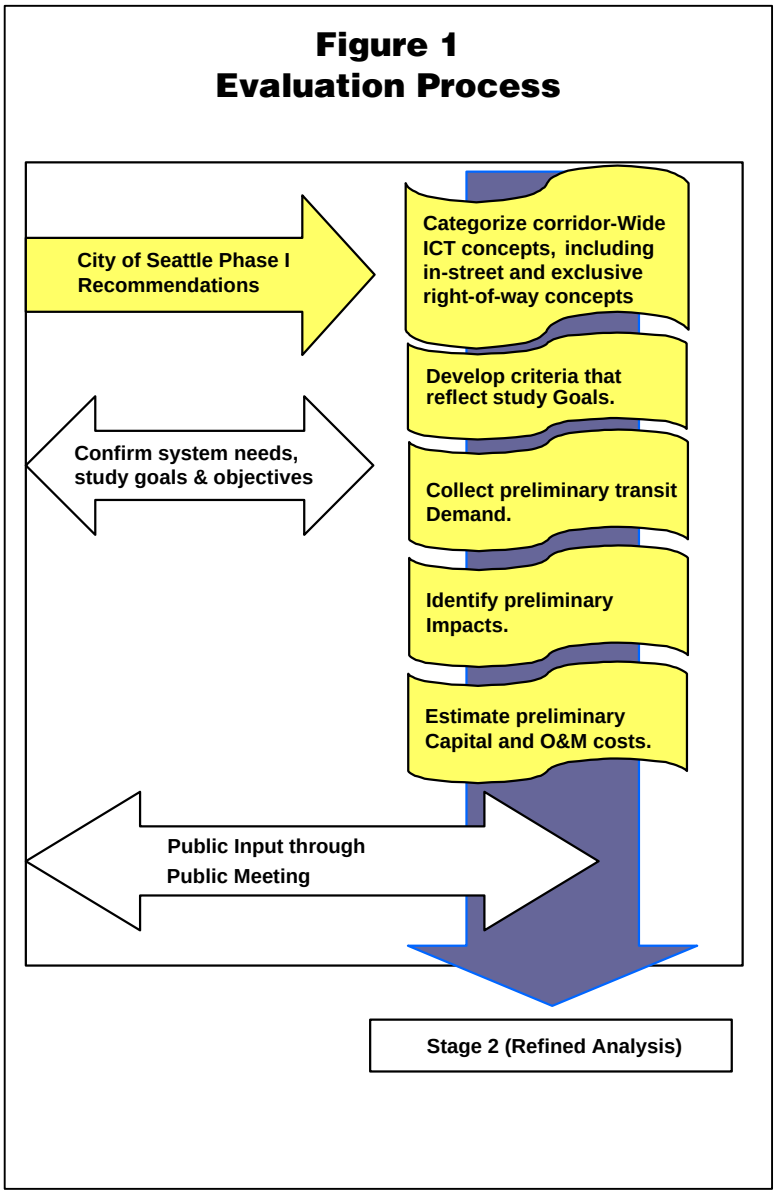
PROPOSED EVALUATION PROCESS AND CRITERIA

PROPOSED EVALUATION PROCESS

A screening and evaluation process (See Figure 1) that is consistent with other local and regional planning efforts is proposed for use as part of the Seattle Intermediate Capacity Transit (ICT) Phase II study. Recommendations from Phase I of the study will be categorized into corridor-wide ICT concepts. Concepts will include sample routing alignments and suggested technologies for evaluation.

Working with the City of Seattle and the participating agencies as a steering committee, the study team will confirm the system-wide needs as well as establish the goals for the study. The study team will develop a series of criteria for screening and evaluation use. These criteria will largely be qualitative in nature, supported by quantitative data when appropriate. These criteria will reflect the preliminary nature of the corridor planning being undertaken. As the study moves into more detailed planning, the criteria proposed for use in the study will be expanded and supplemented with more quantitative criteria. The evaluation process and criteria will be confirmed with the steering committee.

Figure 1
Evaluation Process



Once the screening criteria have been approved by the City of Seattle and participating agencies, the study team will evaluate each corridor. The evaluation process will represent a screening-level analysis. Screening criteria will best be represented as a series of questions intended to highlight the strengths and weaknesses of each corridor proposed for possible ICT implementation. At the conclusion of Stage I of the ICT Study, the study team will recommend

which corridors should proceed to detailed evaluation. As part of Stage II of the ICT Study and based on the established study goals and objectives, the technical team will recommend the most viable technology and routing concept for each corridor. Recommendations will be based on concept performance against the established criteria.

PROPOSED EVALUATION CRITERIA

For purposes of evaluating various intermediate capacity transit (ICT) technologies for implementation within the Seattle study area, it is recommended that evaluation criteria be drawn from previous studies. This will allow maximum use of previous information, essentially resulting in an update of previous analysis results. Additionally, this approach will maintain an historical continuity with earlier work and reduce the potential for conflicting results between corridors.

In addition to previous evaluation criteria, it is appropriate to suggest some additional evaluation criteria that respond to the goals and objectives of the ICT study. Evaluation criteria gleaned from earlier studies, along with new criteria proposed specifically for the ICT evaluation, are provided in Table 1 for consideration.

Table 1
Proposed ICT Evaluation Criteria

	Evaluation Criteria	Evaluation Type	From Previous Study
SYSTEM CRITERIA	Would concept provide balance among modes, corridors, and systems? Would concept fill a system gap? Would it improve overall mobility?	Qualitative	✓
	Does concept provide flexibility to accommodate new ideas and/or technologies in the future?	Qualitative	✓
	Does concept improve integration of urban areas? Would concept provide ability to enhance/foster community inter-relationships?	Qualitative	✓
	Would concept result in a "simple" concept to implement, construct, and operate?	Qualitative	✓

Table 1 (Continued)
Proposed ICT Evaluation Criteria

	Evaluation Criteria	Evaluation Type	From Previous Study
CONCEPT FEASIBILITY	Relative cost effectiveness: Cost per rider. Cost per new rider.	Quantitative	✓
	Cost effectiveness: are projected benefits in line with expected capital and operational costs – i.e., total costs?	Qualitative & Quantitative	✓
	Is concept appropriate for existing/projected population/employment/residential densities – based on industry standards?	Qualitative	
	Would concept generate/serve industry-recognized minimum ridership/user thresholds (i.e., in terms of total corridor riders and riders per mile)?	Qualitative/ Quantitative	
	Would concept negatively impact existing facilities/services in such a way that could not be mitigated? Can existing service facilities and/or investments be reused under the ICT concept?	Qualitative	✓
	Are there existing operational constraints that preclude the introduction of proposed concept (e.g., grades that cannot be negotiated)?	Qualitative (Fatal Flaw Analysis)	✓
SERVICE	Would concept provide adequate corridor capacity?	Qualitative Quantitative	✓
	Does concept increase transit mode share?	Quantitative	
	Does concept improve on-time performance – reliability of service?	Qualitative	✓
	Does concept reduce travel times – improve speeds?	Qualitative	✓

Table 1 (Continued)
Proposed ICT Evaluation Criteria

	Evaluation Criteria	Evaluation Type	From Previous Study
IMPACT CRITERIA	Does concept minimize negative impacts to the natural environment? Are there any identifiable fatal flaws with regards to environmental impacts that would preclude implementation?	Qualitative Qualitative	✓
	Can negative impacts to existing communities be minimized? Does concept negatively affect pedestrian movement? Would concept divide existing neighborhoods?	Qualitative	✓
	Can the need for new right-of-way (ROW) be minimized? Does concept minimize the likelihood that residential and commercial land uses would be displaced?	Qualitative	✓
	Would concept be compatible with existing/planned land use patterns – does concept encourage desired land use patterns? Would concept encourage transit-oriented and/or pedestrian-oriented development in appropriate locations?	Qualitative	
	Would implementation of concept be consistent with Neighborhood Plans and other City plans and policies?	Qualitative	✓
	Does concept cause negative impacts to cultural/historic resources or to recognized public lands?	Qualitative	✓