MTP MODERN TRANSIT Partnership

Corridor Two Regional Rail Feasibility Study and Alignment Alternatives

TECHNICAL MEMORANDUM 2.0

Project Purpose Statement and Evaluation Matrix

December 2009

Gannett Fleming

Technical Memorandum

Lebanon-Hershey-Harrisburg "Corridor Two"
Project Purpose Statement and Evaluation Matrix
February 19, 2008

Background

This Technical Memorandum is one of a series of such memorandums that have been prepared on various topics during the conduct of a preliminary feasibility study for the Harrisburg-Hershey-Lebanon Pennsylvania corridor titled "Corridor Two Regional Rail Feasibility Study and Alignment Alternatives." This Memorandum documents the final Project Purpose Statement and Alternatives Evaluation Criteria as endorsed by the Study Steering Committee.

Project Purpose Statement - Importance and Intended Uses:

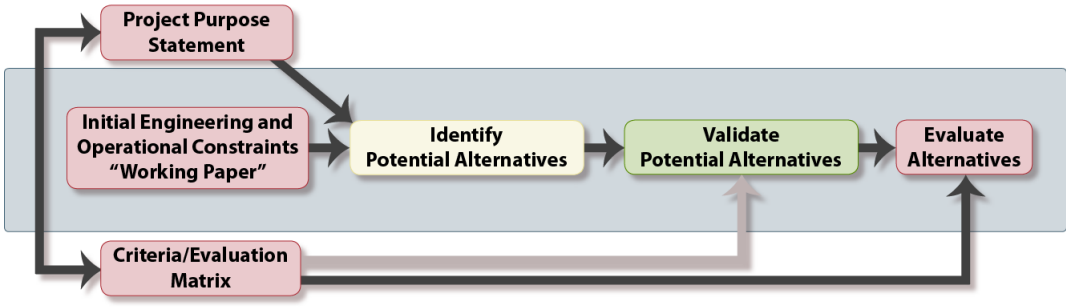
The Project Purpose Statement will provide the framework for:

- initial conceptualization of potential alternatives for Corridor Two
- validation of those alternatives as satisfying the general parameters established by the Modern Transit Partnership (MTP) and endorsed by the Steering Committee
- development of evaluation criteria that will be used to perform comparative evaluations of alternatives after additional details such as the operating plans, and estimated cost and ridership have been prepared.

The document must be broad enough that it allows for vision and innovation in developing alternatives and does not lead to the hasty disqualification of worthy alternatives; but it must also be sufficiently specific that it serves as an effective tool for validating alternatives as meeting the global parameters for this preliminary feasibility study. Figure 1 illustrates the relationship of the Purpose Statement to the identification and evaluation of corridor alternatives.

Figure 1

CORRIDORtwo Alternatives Development Process



Purpose Statement Development Process:

As background for developing the Purpose Statement, an inventory of potential considerations was developed. The next step was to logically organize those individual parameters into categories to facilitate further processing. The results of that categorization process are presented below.

Table 1
Project Purpose Statement
Categories of important Factors

	Parameter	*Importance*
Vision, Innovation, and Leadership	**long-range view**	sustainable plan that emphasizes long-term solutions that address forecast mobility needs and are expandable to address additional growth
	managed risk	achieves a strategic balance between a "play-it-safe" approach, and bolder initiatives that offer the potential for high payback within reasonable risk
	unity/consensus	study process helps progress toward consensus among stakeholders regarding future transportation strategies, products services, and cost sharing
	practical	recommendations are doable within the probable constraints that will govern future transportation investments
	results-oriented	staged improvements that build up to the "complete" solution
	accountability	demonstrates sound choices that will survive and be effective beyond the tenure of current decision makers

	Parameter	*Importance*
Comprehensive		

Planning Perspective	**public/private collaboration**	public and private entities effectively collaborate to demonstrate leadership in achieving the optimum in mutually-beneficial solutions and investment strategies
	land use/transportation compatibility	land use plans do not impose inefficiencies on the transportation system, and transportation investments serve as a tool to help achieve land use objectives
	environmental viability	transportation investments are compatible with and support environmental stewardship objectives
	supports economic development	strategic transportation investment maximizes "desirable" economic development, and approved development plans address transportation infrastructure impacts

	Parameter	***Importance***
Emphasis on System Performance	**modal balance**	modal choices emphasize complimentary investments that yield a balanced system offering mobility options and seamless connections
	effective feeder services	effectively integrates line-haul and feeder services to provide seamless origin-to-destination service
	strategic transit station locations	optimal balance between line speed and convenient access
	congestion relief on overcrowded roadways	sustainable, cost-effective approach to maintaining mobility
	mobility and access for all users	provide travel options for persons with mobility limitations
	serves forecast travel demand at acceptable levels of service	emphasizes lasting solutions rather than short-term fixes
	competitive transit options (safe, convenient, affordable)	the system is sufficiently attractive to make transit the natural choice of more travelers

	Parameter	***Importance***
Feasibility Parameters	**physical feasibility**	real, sustainable solutions with the smallest possible community disruption footprint
	operational feasibility	critical to operational efficiency and providing convenient service
	financial feasibility	recommendations must pass the cost/benefit reasonableness test and acknowledge real-world financial constraints
	institutional feasibility	project(s) will not advance without consensus among key stakeholder and funding partners

The above table is intentionally comprehensive to capture the full breadth of considerations that need to be taken into account. However, a more concise and manageable tool is needed to serve as the Project Purpose Statement. The following represents a synthesis of the above concepts into a set of high-level objectives or "boundaries" for identifying and preliminarily validating alternatives. In the development of the corridor alternatives, the following Project Purpose Statement will serve as the foundation for developing alternatives, a first-cut gauge of the suitability of the alternatives to meet study objectives, and as a guide for developing more specific evaluation criteria for use during the analysis phases of the project.

Final Project Purposes Statement:

The Corridor Two Regional Rail Feasibility Study and Analysis of Alternatives is intended to comprehensively and objectively assess the need for and feasibility of deploying high-capacity public transportation service in the Harrisburg-Hershey-Lebanon corridor, and should satisfy the following objectives:

Vision, Innovation and Leadership – The study should identify alternatives that represent solutions that are capable of addressing longer-term needs along the corridor through incremental investments that are doable within known constraints, and have a reasonable likelihood of attracting broad-based community and funding agency support. The alternative set should encompass a range of modal alternatives that represent varying levels of investment and corresponding return, and reflect a willingness to take managed-risks that have the potential to yield high returns on investment. The alternatives should also have long-term utility from the standpoint of cost-effective expandability as travel demand grows.

Comprehensive Approach – The study should be viewed as one element of a comprehensive approach to identifying and analyzing alternatives, and proposing viable transportation solutions that are compatible with and supportive of the region's transportation, land use, environmental, social and economic development objectives. Extensive Stakeholder engagement will occur throughout the study to ensure that the views and values of the community are given appropriate consideration.

Emphasis on System Performance – The study will strive to identify feasible alternatives that address transportation needs along the Harrisburg-Hershey-Lebanon corridor in a manner that also contributes to the overall efficiency and effectiveness of the entire regional transportation network.

Feasibility – The study is intended to produce practical, doable results. Alternatives will be screened and rated as to physical, operational, financial and institutional feasibility based on known constraints and forecasts of probable future constraints. Alternatives that can be implemented with a lesser degree of community disruption and with fewer irreversible commitments of the region's resources will be favored in the evaluation process. Weights for the various feasibility factors may be necessary to assist in the evaluation and ranking of alternatives. That topic will be further discussed as part of developing a matrix of evaluation criteria.

Project Evaluation Matrix

This Project Evaluation Matrix follows directly the Project Purpose Statement presented above. The evaluation criteria are intended to be used to assist in producing a relative ranking of alternatives. This tool is not intended to be applied literally to arrive at final decisions, but rather to help structure the decision-making process and to assure that the priorities and values expressed in the Project Purpose Statement are consistently applied throughout the course of the study.

The Matrix presented below was reviewed and endorsed by the Project Steering Committee.

Corridor Two Project Evaluation Matrix

	Criteria
Overall Planning Issues	**long-term vision** (sustainable approach, expansion potential, reasonable risks)
	doable/lends itself to incremental improvements
	land use/transportation synergy
	fosters desirable growth and economic development
	modal balance with competitive transit alternatives
	environmental stewardship and quality of life (minimizes community disruption & irreversible commitments of resources, and positively impacts air quality)
Quantifiable Factors and Metrics	**ridership potential** (estimated corridor ridership, which reflects transit's attractiveness)
	capital costs (estimated ROW, engineering, design, and construction costs)
	operating costs (estimated annual operating costs and deficits)
	physical feasibility (ROW availability & suitability, grade crossings, etc)
	addresses major travel markets (retail, employment, tourism, academic, etc.)
	congestion relief for major highways (diversion of auto trips to transit)
Institutional Feasibility	**likelihood of institutional support/consensus**