

PIMA ASSOCIATION OF GOVERNMENTS TRANSPORTATION IMPROVEMENT PROGRAM: PROPOSED ROADWAY PROJECT ASSESSMENT AND PRIORITIZATION PROCEDURE

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INTRODUCTION

This document provides a summary description of the proposed roadway project scoring procedure developed for the Pima Association of Governments Transportation Improvement Program (PAG TIP) project prioritization process. The PAG TIP Subcommittee, consisting of representatives from PAG, the City of Tucson, the City of South Tucson, the Towns of Marana, Oro Valley, and Sahuarita, Pima County, and the Arizona Department of Transportation (ADOT), has been involved in the development of the project prioritization procedure. With the assistance of the consulting firm JHK & Associates and interested members of the public, the Subcommittee selected screening criteria and roadway project evaluation criteria, established criteria weightings, established a project scoring procedure, and developed a cost-effectiveness index for roadway project ranking. The prioritization procedure was developed over the months of May through October 1995, and was tested on two recently-completed local roadway projects used as case studies. The proposed procedure is intended to be flexible and to evolve over time through the aid of public input.

The overall scoring procedure is a three-step process, consisting of 1) evaluation of projects by local jurisdictions against seven initial screening criteria and scoring of projects using criteria contained within 14 separate criteria categories; 2) review of project evaluations by PAG Transportation Planning Division staff and the TIP Subcommittee and evaluation of the cost-effectiveness of the project; and 3) assessment of the overall jurisdictional, geographic, project type, and modal program balance represented by the prioritized projects. This project involved the development of the overall framework for the procedure and the detailed elements of the first two process steps. The third step of the prioritization procedure is under development by PAGTPD staff and the TIP Subcommittee, and is presented in an initial draft form in this document. This third step (Program Balance) will be refined and completed by PAGTPD staff and the TIP Subcommittee at a later date.

PRIORITIZATION PROCESS GOALS AND OBJECTIVES

The TIP Subcommittee developed a list of 17 goals and objectives, 7 of which were agreed upon by the Subcommittee as applying directly to the TIP Project prioritization process. The remaining 10 goals and objectives were considered by the Subcommittee to be more applicable to the development and implementation of the PAG Metropolitan Transportation Plan (MTP).

PROPOSED ROADWAY PROJECT PRIORITIZATION PROCEDURE

The proposed prioritization procedure consists of three steps to be performed in part by local agency staff and by the TIP Subcommittee. These are:

- Step 1—Local agencies screen projects to determine whether or not they are considered eligible for funding under any one of the three identified funding sources and are eligible for inclusion in the TIP. Projects that pass this initial screen advance in the evaluation process. Local agencies will then evaluate and rate each project based on the scoring criteria. These criteria and scoring system serve as a surrogate estimate of overall project benefits.

- Step 2—PAGTPD staff and the TIP Subcommittee review the project evaluations from Step 1 and submit questions to local agencies as well as provide clarification on evaluation issues where necessary. Project evaluations may be revised and resubmitted to the TIP Subcommittee for a second evaluation by the Subcommittee. The TIP Subcommittee then computes the cost-effectiveness index (CEI) for each project, and ranks projects by project type based on the CEI.

- Step 3—The TIP Subcommittee assesses the results of the CEI rankings, the overall geographical and project program balance needs of the region and the level of funds available, and establishes the distribution of funds to the candidate projects.

The project sponsor must provide all documentation required to support the project evaluation in Step 1 and provide the data required to compute the CEI in Step 2. Questions or issues that arise during the Step 2 review process concerning the results of Step 1 will be submitted to the project sponsor by PAGTPD for a response. The details of how this review will be conducted will be developed by the TIP Subcommittee at a later time.

The final step for reviewing the overall project evaluations/rankings (Step 3), which includes consideration of the program balance of the TIP and the distribution of project funds, is currently under development by PAGTPD staff and will be finalized by PAGTPD and the TIP Subcommittee at a later date.

CONCLUSION

The TIP prioritization process will continue to evolve and be refined in response to its use, performance, and changing public values and needs.

One aspect for use in fine-tuning the process will be the results of continued efforts to obtain public input on the weight or importance of the many factors contributing to a desirable project. The ability to respond to changing public perceptions as to what is important about transportation projects will define the projects' benefits and thus, the projects' ultimate scores for ranking purposes.

While the general public perceptions as to the importance of overall factors may vary, the technical experience needed for input into the process will continue to be obtained through participation as part of TIP Subcommittee meetings, which are open to public involvement. Agenda and meeting materials are provided to all TIP Subcommittee members and all interested members of the public upon request. The

TIP Subcommittee mailings are currently distributed to 12 interested parties.

As part of the continued development of the TIP prioritization procedure, methods will be established to help measure how well the procedure is working. Measures of how well the projects are accepted by the public and policy makers, as well as how effectively the projects are implemented, will be important in the refinement of the procedure. A preliminary listing of measures which may be used to estimate the effectiveness of the procedure is provided below.

A variety of questions may be posed to determine how the prioritization process is working. Such questions might include but not be limited to:

1. *Project Acceptability*

- Did the projects selected through this process have public and political support?
- Was there general understanding of how project selections were made?
- Were there any jurisdictional appeals or protests of the selections made?

2. *Project Viability*

- Did funds obligate and/or project start within the year programmed?
- Was the project completed on time?
- Was the project cost at time of bid within 10% of original program estimate?
- Was the project cost at time of completion within 10% of project bid?
- Were there cost savings realized?
- How many change orders were there?
- Was the scope of the project adequate?
- Was additional work required to meet the actual needs?
- Was utilization (person trips, person-miles, or some other measure) included in the project selection criteria?