

TRANSIT
COOPERATIVE
RESEARCH
PROGRAM

Use of Flexible Funds for Transit Under ISTEA and TEA-21

A Synthesis of Transit Practice

Sponsored by the Federal Transit Administration

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TCRP SYNTHESIS 42

Use of Flexible Funds for Transfer Under ISTEA and TEA-21

A Synthesis of Transit Practice

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TRANSIT COOPERATIVE RESEARCH PROGRAM

The nation's growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems. Current systems, some of which are old and in need of upgrading, must expand service area, increase service frequency, and improve efficiency to serve these demands. Research is necessary to solve operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the transit industry. The Transit Cooperative Research Program (TCRP) serves as one of the principal means by which the transit industry can develop innovative near-term solutions to meet demands placed on it.

The need for TCRP was originally identified in *TRB Special Report 213—Research for Public Transit: New Directions*, published in 1987 and based on a study sponsored by the Federal Transit Administration (FTA). A report by the American Public Transportation Association (APTA), *Transportation 2000*, also recognized the need for local, problem-solving research. TCRP, modeled after the longstanding and successful National Cooperative Highway Research Program, undertakes research and other technical activities in response to the needs of transit service providers. The scope of vice configuration, equipment, facilities, operations, human resources, maintenance, policy, and administrative practices.

TCRP was established under FTA sponsorship in July 1992. Proposed by the U.S. Department of Transportation, TCRP was authorized as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). On May 13, 1992, a memorandum agreement outlining TCRP operating procedures was executed by the three cooperating organizations: FTA, the National Academy of Sciences, acting through the Transportation Research Board (TRB), and the Transit Development Corporation, Inc. (TDC), a nonprofit educational and research organization established by APTA. TDC is responsible for forming the independent governing board, designated as the TCRP Oversight and Project Selection (TOPS) Committee.

Research problem statements for TCRP are solicited periodically but may be submitted to TRB by anyone at anytime. It is the responsibility of the TOPS Committee to formulate the research program by identifying the highest priority projects. As part of the evaluation, the TOPS Committee defines funding levels and expected products.

Once selected, each project is assigned to an expert panel, appointed by the Transportation Research Board. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, TCRP project panels serve voluntarily without compensation.

Because research cannot have the desired impact if products fail to reach the intended audience, special emphasis is placed on disseminating TCRP results to the intended end-users of the research: transit agencies, service providers, and suppliers. TRB provides a series of research reports, syntheses of transit practice, and other supporting material developed by TCRP research. APTA will arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by urban and rural transit industry practitioners.

The TCRP provides a forum where transit agencies can cooperatively address common operational problems. TCRP results support and complement other ongoing transit research and training programs.

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The members of the technical advisory panel selected to monitor this project and to review this report were chosen for recognized scholarly competence and with due consideration for the balance of disciplines appropriate to the project. The opinions and conclusions expressed or implied are those of the research agency that performed the research, and while they have been accepted as appropriate by the technical panel, they are not necessarily those of the Transportation Research Board, the Transit Development Corporation, the National Research Council, or the Federal Transit Administration of the U.S. Department of Transportation.

Each report is reviewed and accepted for publication by the technical panel according to procedures established and monitored by the Transportation Research Board Executive Committee and the Governing Board of the National Research Council.

Special Notice

The Transportation Research Board, the Transit Development Corporation, the National Research Council, and the Federal Transit Administration (sponsor of the Transit Cooperative Research Program) do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the clarity and completeness of the project report.

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PREFACE

A vast storehouse of information exists on many subjects of concern to the transit industry. This information has resulted from research and from the successful application of solutions to problems by individuals or organizations. There is a continuing need to provide a systematic means for compiling this information and making it available to the entire transit community in a usable format. The Transit Cooperative Research Program includes a synthesis series designed to search for and synthesize useful knowledge from all available sources and to prepare documented reports on current practices in subject areas of concern to the transit industry.

This synthesis series reports on various practices, making specific recommendations where appropriate but without the detailed directions usually found in handbooks or design manuals. Nonetheless, these documents can serve similar purposes, for each is a compendium of the best knowledge available on those measures found to be successful in resolving specific problems. The extent to which these reports are useful will be tempered by the user's knowledge and experience in the particular problem area.

FOREWORD

By Staff Transportation Research Board This synthesis will be of interest to transit agency professionals and the consultants who work with them in dealing with flexible funding opportunities. The purpose is to provide greater familiarity with emerging techniques in the use of flexible funding, and to point out issues that may need further attention. It is intended to provide a review of how current flexible funding provisions are being used to support transit investment and to examine, through a limited number of specific experiences, lessons that may have the broadest relevance throughout the transit industry. The scope of the synthesis includes references to summary FTA data from FY 1992–2000, spanning the entire life of the ISTEA legislation and the first 3 years of TEA-21.

Administrators, practitioners, and researchers are continually faced with issues or problems on which there is much information, either in the form of reports or in terms of undocumented experience and practice. Unfortunately, this information often is scattered or not readily available in the literature, and, as a consequence, in seeking solutions, full information on what has been learned about an issue or problem is not assembled. Costly research findings may go unused, valuable experience may be overlooked, and full consideration may not be given to the available methods of solving or alleviating the issue or problem. In an effort to correct this situation, the Transit Cooperative Research Program (TCRP) Synthesis Project, carried out by the Transportation Research Board as the research agency, has the objective of reporting on common transit issues and problems and synthesizing available information. The synthesis reports from this endeavor constitute a TCRP publication series in which various forms of relevant information are assembled into single, concise documents pertaining to a specific problem or closely related issues.

This document from the Transportation Research Board integrates information from a literature and database review with survey responses and telephone interview responses of key staff at the U.S. DOT, and a limited sample of state DOTs, regional Metropolitan Planning Organizations, and transit authorities. The survey and telephone responses are intended to provide qualitative information about the process, experience, and barriers encountered in exercising flexible funding provisions that is not obvious in other available data.

To develop this synthesis in a comprehensive manner and to ensure inclusion of significant knowledge, available information was assembled from numerous sources, including a number of public transportation agencies. A topic panel of experts in the subject area was established to guide the researchers in organizing and evaluating the collected data, and to review the final synthesis report

This synthesis is an immediately useful document that records practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As the processes of advancement continue, new knowledge can be expected to be added to that now at hand.

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This study was managed by Donna L. Vlasak, Senior Program Officer, who worked with the consultant, the Topic Panel, and the J-7 project committee in the development and review of the report. Assistance in Topic Panel selection and project scope development was provided by Stephen F. Maher, P.E., Manager, Synthesis Studies. Don Tippman was responsible for editing and production. Cheryl Keith assisted in meeting logistics and distribution of the questionnaire and draft reports.

Christopher W. Jenks, Manager, Transit Cooperative Research Program, assisted TCRP staff in project review.

Information on current practice was provided by many transit agencies. Their cooperation and assistance was most helpful.

USE OF FLEXIBLE FUNDS FOR TRANSIT UNDER ISTEA AND TEA-21

SUMMARY

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and subsequent Transportation Equity Act for the 21st Century (TEA-21) have expanded modal choice in transportation funding by providing the substantial flexibility that allows transfers among program funding categories. The result has been a significant increase in funding available to the nation's transit systems and projects. The importance of the flexible funding provisions can be seen in recipients' abilities to more fully meet overall transit investment needs, increase investment in critical basic services and advanced technologies, and in the more rapid advancement of pipeline projects, as well as projects without alternative sources of funding.

From the onset of ISTEA in 1991 through September 2000, a total of \$6.5 billion, made available through the FHWA has been transferred to the FTA for transit purposes. More than 90 percent of the transfers originated from the Congestion Mitigation and Air Quality Improvement program and the Surface Transportation Program. In the first 3 years of TEA-21, a total \$3 billion in transfers reflected an increase of more than one-third (or 35 percent) of the total \$8.6 billion authorization of the three FTA programs that are eligible to receive those funds: (1) the Urbanized Area Formula Program, (2) the Nonurbanized Area Formula Program, and (3) the Elderly and Persons with Disabilities Program. As a share of FTA authorizations for all transit programs in the same 3-year period, the transfers reflect a 17 percent increase.

In addition to information obtained from the FTA on transfer amounts and flexible funding provisions, the current study has gathered qualitative impressions from telephone interviews and survey respondents that provide a deeper understanding of the process and experience of flexing funds to transit. The main findings of the survey suggest that the flexible funding provisions of ISTEA and TEA-21 remain a key element in increasing transit investment and providing a direct means for local officials to better tailor federal resources to meet local needs. Survey results and seven brief "project profiles" revealed that flexible funds are being constructively employed in a wide variety of projects, and will be counted on to serve identified future needs. Collaborative relationships with external stakeholders and proactive long-range planning were touted as successful strategies to taking advantage of flexible funding provisions, while reported barriers included timeliness in awarding grants, agency attitudes that were perceived to be unfavorable to transit, and variations between the FHWA and FTA procedures for project implementation.

Notwithstanding the well-recognized and articulated value of flexible funding provisions for transit, some continuing signs of resistance, instability, variability, and procedural difficulties in exercising flexible funding provisions point to needed research to more fully examine the factors that foster a positive flexible funding climate across all groups. A stronger

outreach effort, as well as dissemination of promotional materials to increase knowledge and spur success in applying these flexible provisions, may be warranted. Likewise, it may be worthwhile to examine administrative procedures for flexing and to enhance the monitoring of flexible funding flows.

CHAPTER ONE

INTRODUCTION

BACKGROUND

The continuing availability of "flexible" funds within the federal highway and transit programs, and particularly the ability to use funds authorized under Title 23 federal highway programs for transit purposes, has in recent years resulted in substantial increases in federal transit investment. The policies, procedures, and mechanics of flexible funding are often complex, however, and there are indications that the approaches to the use of Title 23 funds for transit purposes have evolved differently in various states and regions of the country. This appears to be largely the result of different policy directions for regional and state plan and Transportation Improvement Program (TIP) development.

Because eligible Title 23 funds used for transit purposes can be administered directly by the FHWA or through formal fund transfers from the FHWA to the FTA, the ability to monitor the nature and scope of projects funded with flexible dollars has become more complex as well. The flexible funding experience, therefore, is highly varied. The current study focuses exclusively on experiences with funding formally transferred from the FHWA to the FTA and, because of resource limitations, does not attempt to assess direct investment in transit projects by state Departments of Transportation (DOTs) or broadened program eligibility using the flexible funding provisions.

As one of several tools first enacted in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and retained in the subsequent Transportation Equity Act for the 21st Century (TEA-21) authorizing legislation, flexible funding provisions have several objectives. Primarily, these provisions support innovative multimodal planning and project development by providing broader project eligibility than traditional federal grant programs. In addition, these provisions delegate authority to states and regions to create their own transportation solutions and funding strategies in reference to local needs. The potential to take advantage of this new flexibility rests largely with the types of planning, programming, and administrative procedures that are developed by regions and states to maximize the use of these funds. The express goal of these procedures vis-à-vis flexible funding is to institutionalize "an inclusive, multimodal planning process" by forging cooperation across different planning jurisdictions; highway, transit, and environmental agencies; and the general public (1).

Although a more comprehensive measure of the success of flexible funding programs should capture the range of outcomes of increased transit investment, the annual fund transfers from highway to transit (in millions of dollars) have served as the most readily available and reported proxy measure of success. Published data from the FTA and, notably, a recent Brookings Institution report on this topic (2) have both focused primarily on the funding transferability issue. The FTA has provided qualitative profiles of select jurisdictions that have adopted planning, programming, and administrative procedures to maximize the potential of these flexible provisions (1).

PURPOSE AND SCOPE

This synthesis is intended to provide a review of how current flexible funding provisions are being used to support transit investment and to examine, through a limited number of specific experiences, lessons that may have the broadest relevance throughout the transit industry. The purpose is to provide decision makers at the local, regional, and state levels greater familiarity with emerging techniques in the use of flexible funding, and to point out issues that may need further attention and examination to assure that optimum use is being made of current flexible funding provisions.

The scope of the synthesis includes references to summary FTA data from FY 1992 to FY 2000, spanning the entire life of the ISTEA legislation and the first 3 years of TEA-21. In addition, the report includes responses to a limited survey on flexible funding procedures and experiences, as well as observations from a small number of individual agencies. Although legal provisions allow these funds to be "flexed" to transit and highway programs, the dominant practice and focus of this synthesis is on the flow of funds to the FTA for transit-related purposes.

APPROACH

The approach used for this synthesis combines a literature and database review with survey and interview methods, including analysis of questionnaire and telephone interview responses of key staff at the U.S. DOT, and a limited sample of state DOTs, regional metropolitan planning organizations (MPOs), and transit authorities (TAs). The

summary statistics for this program are found in several published FTA program summary documents. The survey and telephone interview results are intended to provide qualitative information about the process, experience, and barriers encountered in exercising flexible funding provisions that are not obvious in the available data on annual transfer amounts.

Review of Flexible Funding Provisions

As a first step in the synthesis, an initial review of statutory provisions, flexible funding guidance, and program management procedures was conducted to establish a baseline for assessing the current dynamics of flexible funding. Specifically, federal programs and databases were analyzed with the aid of FTA and FHWA program managers.

Mail Survey

As a second step, a mailing list was developed consisting of all 50 states, as well as 50 geographically distributed and variable-size TAs and 25 MPOs to aid in the distribution of a flexible funding questionnaire to 104 organizations. The questionnaire was constructed to assess: (1) overall levels of awareness, knowledge, and understanding of flexible funding opportunities, processes, and procedures across key participants; (2) the general attitude, perspectives, and relationships of key agencies in the use of flexible funds; (3) the value of flexible funding to local transit programs; (4) specific procedures and provisions adopted to guide project selection and commitment of flexible funds and overall project administration; and (5) the lessons

learned from ongoing experiences, barriers, and administrative models. Because of funding constraints to conduct the survey, a limited sample of respondents was selected. An overall response rate of 31 percent was achieved from the questionnaire.

Project Profiles

Based on the questionnaire results, we identified seven project profile candidates to more deeply examine the process and mechanics whereby flexible funding commitments are secured, and both the positive and negative aspects of this effort.

ORGANIZATION

The remainder of this report consists of four chapters that offer greater detail on flexible funding history, programs, and provisions and requirements that govern the use of these funds. This report also includes recent agency experiences with flexible funding gathered through survey responses and more in-depth treatment through telephone interviews.

Chapter 2 provides an overview of flexible funding history, program structure and administration, and mechanics of the transfer process. In addition, it describes the key flexible programs (including flexibility provisions and project eligibility requirements) and traces the recent history of aggregate funding shifts to transit. Chapter 3 presents a summary of flexible funding experiences based on survey results, chapter 4 provides a closer look at selected agency experiences, and chapter 5 presents the conclusions.

FLEXIBLE FUNDING HISTORY, KEY PROGRAMS, AND TRENDS

OVERVIEW OF FLEXIBLE FUNDING HISTORY AND PROGRAM STRUCTURE

The notion of "flexing," or transferring funds between different modes of transportation, originated with the landmark passage of ISTEA. Flexible funding provisions under ISTEA supported funding shifts in two directions: from Title 23 of the highway program to transit projects, and from transit funds under Title 49 to roadway projects. Before 1991, transportation funds could only be applied narrowly to their federally designated funding categories. The two exceptions to this were the Interstate Transfer and Federal Aid Urban System (FAUS) funds, which were the only resources that afforded a limited degree of flexibility. ISTEA broke new ground in granting state and local transportation planners and decision makers greater latitude in funding a range of modal transportation projects, programs, and initiatives that best met their locally determined goals and objectives for mobility, economic opportunity, and air quality. To that end, ISTEA provided a range of tools-including flexible funding-as well as new programs that also served to increase funding available for transit, such as the flexible Congestion Mitigation and Air Quality Improvement (CMAQ) program and the Surface Transportation Program (STP). CMAQ directs investment in highway and transit projects that improve air quality in non-attainment areas, whereas STP provides for an even wider breadth of highway and transit capital, planning, safety, and "enhancement" activities.

These unprecedented changes in the federal transportation funding landscape were retained under the subsequent authorization bill, TEA-21. The TEA-21 legislation not only preserved the spirit of ISTEA, but it substantially increased program funding to transit and authorized continued access to CMAQ funds in "non-attainment" air quality regions that achieved air quality "maintenance" status. It also altered the budgetary procedure for implementing the transfers of flexible funds, whereby the authority to incur obligations and cash would be transferred directly to the receiving agency (FTA).

Program Structure

The use of FHWA-administered Title 23 funds for transit is accomplished in two ways. First, Title 23 funds from a number of programs can be committed directly to a transit project by the state. Under this arrangement, no actual

"transfer" to an FTA program or account is recorded. Alternatively, Title 23 funds can be formally transferred from the FHWA to the FTA for the purposes of carrying out a specific project. In either case, metropolitan Long-Range Plans are the starting points for achieving interagency consensus on all needed projects, including those that will be implemented with flexed funds. The Long-Range Plans set the policy context for program-level decisions to flex funds within the regional TIPs. All projects using flexible funds must be part of an approved regional TIP and State Transportation Improvement Program (STIP) regardless of which agency provides or administers the funds.

This report only focuses on direct transfers from the FHWA to the FTA. It does not attempt to describe or evaluate the complex funding flows within the various highway programs that precede the ultimate transfer of highway funds for transit purposes. Under both ISTEA and TEA-21, funds appropriated to most of the major highway categorical programs could be transferred to one another with certain restrictions. Table 1 in Appendix C shows transferability provisions for major Title 23 programs. Direct transfers to the FTA, however, primarily involve two programs-CMAQ and STP-that account for approximately 92 percent or \$5.9 billion of the total \$6.5 billion in Title 23 funds flexed to transit from FY 1992 to FY 2000. Although these programs account for the largest direct shift of funds into transit, it should be noted that they are also a byproduct of funds that were transferred from other highway programs, including, for example, National Highway System (NHS) and Highway Bridge Replacement and Rehabilitation Program funds, into the STP program. The remaining 8 percent, or approximately \$550 million in transfers, comes from the Interstate Substitution and FHWA Earmarks/FAUS programs. These programs only have historical significance in reported transfers because they are no longer active.

The CMAQ, STP, or FHWA Earmarks/FAUS funds (also referred to as "Other") can be transferred to one of three main FTA programs. These FTA programs, including their goals, statutory restrictions, Title 23 funds used, and FY 1992–1999 total and flexible obligations are summarized in Table 2 in Appendix C. The main Title 49 FTA programs that receive the transferred funds include

 Urbanized Area Formula Program (Section 5307)— Providing funding for capital, planning, and operating projects for urbanized areas of 50,000 or more inhabitants.

- Nonurbanized Area Formula Program (Section 5311)—Providing funds for capital and operating assistance in rural areas and including the Rural Technical Assistance Program, which provides funds for training, technical assistance, research, and support services.
- Elderly and Persons with Disabilities Program (Section 5310)—Allocating funding to the states for capital projects to meet the special needs of elderly persons or persons with disabilities.

Program Administration

The decision to use flexible funds is an opportunity within the routine project programming process, and program administration aspects of flex funding are largely identical to that of other projects. Flexible funding decisions are part of the Long-Range Plan and regional TIP development process that encourages regional partnerships among MPOs, state DOTs, and transit operators. Flexible funds transferred to the FTA must still demonstrate the nonfederal match requirement of the highway program that is the source of the transfer. Generally, the federal share does not exceed 80 percent, although it can be raised to 95 percent because of the sliding scale adjustment for states with large amounts of federal lands. The mechanics for flexing Title 23 funds are spelled out in the statutory language of each program. The transfer involves a successful grantee application and coordination between the FTA regional office, state DOT, and FHWA division to ensure that funds are available for transfer and that the project clearly satisfies the procedural requirements of the FTA programs. Once transferred, the funds take on all the requirements of the FTA program and are administered through FTA regional offices as FTA funds.

Mechanics of "Flexing" Funds to the Federal Transit Administration

A precondition for requesting a fund transfer is that the flexible funds designated for use in transit projects must result from the metropolitan and state planning and programming process, and must be included in an approved TIP and STIP (3). Once this requirement is satisfied, the grantee initiates the process by submitting a completed application to the FTA regional office and notifying the state DOT that it has submitted an application requiring a transfer of funds. In turn, state DOTs request the transfer of highway funds for a transit project(s) through their FHWA division. The request letter specifies the project, amount to be transferred, apportionment year, state, federal-aid apportionment category (e.g., STP, CMAQ, Interstate Substitution, or Other-Earmarks), and a description of the project as contained in the STIP.

Once the FHWA division receives the state DOT written request, it confirms that the apportionment amount is available to be transferred and concurs in the transfer by letter to the state DOT and the FTA. The FHWA then transfers obligation authority with an equal amount of cash to the FTA. All CMAQ, STP, or Other funds (i.e., earmarks) will be transferred to one of the three FTA programs under Sections 5307, 5310, and 5311.

The FTA obligates funds for projects that, upon review, clearly specify which program (Title 49 U.S. Code section) funds will be used and conform to the requirements and procedures with respect to that program. The transferred funds are treated as FTA formula funds and may be used for any purpose that is eligible under the FTA formula programs. Transferred funds are subject to all FTA requirements and are meant to be combined with regular FTA funds in a single annual grant application.

KEY PROGRAMS: FLEXIBILITY PROVISIONS AND PROJECT ELIGIBILITY REQUIREMENTS

As noted earlier, the key programs responsible for all primary transfers to FTA are the STP, CMAQ, FHWA Earmarks/FAUS, and Interstate Substitution programs. Historically, STP and CMAQ have been the dominant sources of transferred funds, accounting for more than 90 percent of funds flexed between FY 1992 and FY 2000. The latter two sources no longer receive appropriations and are considered "inactive" programs, although unobligated balances of the FHWA Earmarks/FAUS program continue to be flexed (4). The flexibility provisions, eligibility requirements, and restrictions of the STP and CMAQ programs are explained in the following sections.

Surface Transportation Program

The STP program is the largest Title 23 highway program in terms of total funding available. Over the life of TEA-21 (FY 1998–2003), a total of \$33.3 billion has been authorized for STP, in comparison to a \$28.6 billion authorization for the NHS program, a \$23.8 billion authorization for the Interstate Maintenance program, and an \$8.1 billion authorization for the CMAQ program. In addition to having the largest share of budgetary resources, the STP program provides the widest flexibility under the provisions of both ISTEA and TEA-21 for funding highway and transit capital and planning activities. The eligible uses under this program include

- Capital funding
 - Construction/rehabilitation of roads and bridges,
 - Transit capital improvements,
 - Car and vanpool projects,

- Fringe and corridor parking facilities, and
- Bicycle and pedestrian facilities.
- Planning activities
 - Surface transportation planning,
 - Development of management systems,
 - Wetland mitigation,
 - Highway and transit research/development, and
 - Environmental analysis.
- Other eligible projects
 - Highway and transit safety improvements,
 - Capital and operating costs for traffic management and control projects, and
 - Most transportation control measures, as established by the Clean Air Act Amendments of 1990.

STP funds are apportioned to states by formula, with a portion of funds "taken off the top" to support safety measures, enhancements, and, at the state's discretion, rural highways. The remaining STP funds are suballocated to metropolitan areas or retained for statewide purposes.

Funds are to be distributed to the states based on the following formula:

- Twenty-five percent based on total-lane-miles of federal-aid highways (FAH) in the state as a percentage of total FAH lane-miles in all states;
- Forty percent based on total vehicle-miles traveled (VMT) on lanes of FAH in the state as a percentage of total VMT on lanes of FAH in all states; and
- Thirty-five percent based on estimated tax payments attributable to highway users in the state paid into the Highway Account of the Highway Trust Fund in the latest fiscal year for which data are available, as a percentage of total such payments by all states.

State suballocations of state apportionments include

- A 10 percent set-aside for safety improvement projects, including railway–highway crossings.
- A 10 percent set-aside for specific transportation enhancements, which include
 - facilities for pedestrian and bicycle uses;
 - acquisition of scenic easements and scenic or historic sites;
 - scenic or historic highway programs;
 - landscaping and other scenic beautification;
 - historic preservation;
 - rehabilitation and operation of historic transportation facilities, including railroads and canals;
 - preservation of abandoned railroad corridors and their conversion to pedestrian and bicycle trails;
 - control and removal of outdoor advertising;
 - archeological planning and research;
 - mitigation of water pollution because of highway runoff;

- establishment of transportation museums; and
- provision of safety and educational activities for pedestrians and bicyclists.
- A set-aside for urbanized areas with populations of more than 200,000.
- A special rule retained for areas of less than 5,000 population. Up to 15 percent of funds could be reserved for rural areas to be spent on rural minor collectors.

ISTEA authorized \$23.9 billion to be appropriated out of the Highway Trust Fund for the STP between FY 1992 and FY 1997, subject to the obligation limits under the FAH program. Of the \$23.9 billion authorized, \$1.1 billion (or 4.6 percent) was flexed to transit during the 6 years.

In 1998, TEA-21 authorized a total of \$33.3 billion for the program covering FY 1998–2003. In the first three fiscal years (1998–2000), a total of \$15.9 billion was authorized. As of September 30, 2000, approximately \$1.3 billion of that total (or 8.2 percent) had been transferred to FTA. Although the STP provides the largest single source of flexible funds and the widest breadth in eligible projects, the amounts actually transferred for transit projects have been smaller than the CMAQ program.

Congestion Mitigation and Air Quality Improvement Program

The CMAQ program is characterized by its objectives of improving the nation's air quality and managing traffic congestion, rather than simply supporting improvements to modal facilities and services. The program can be used in areas designated by the Environmental Protection Agency as being "non-attainment" for carbon monoxide (CO) and ozone national ambient air quality standards, as well as former non-attainment areas that have been redesignated as "maintenance areas." Eligible activities under this program include

- Transit system capital expansion and improvements that are projected to increase ridership,
- Alternative fuel projects (including vehicle refueling infrastructure),
- Public/private partnerships and initiatives,
- Public education and outreach activities,
- Travel demand strategies and shared ride services,
- Pedestrian and bicycle facilities (includes efforts to encourage bicycle commuting),
- Traffic flow improvements [includes incident management initiatives, ramp metering, timed traffic signalization, and construction and dedication of high-occupancy vehicle (HOV) facilities],
- Other transportation projects with air quality benefits, and
- Automobile inspection and maintenance programs.

State funding apportionments are based on county populations residing within ozone and CO non-attainment

and maintenance areas and the severity of the areas' air quality problems. Extra weighting is given to non-attainment and maintenance areas with both ozone and CO problems. Under TEA-21, CO maintenance and non-attainment areas are also apportioned funding absent ozone problems. On the other hand, states that are in attainment of air quality standards receive 0.5 percent of the national program, to be applied to any project or program eligible for assistance under the STP. The funds may be transferred to other federal-aid programs, but can only be used for projects located within non-attainment and maintenance areas.

TEA-21 also expanded eligibility to include public/private initiatives while allowing states to fund projects that may include privately owned alternative fuel vehicles or vehicle fleets. TEA-21 allows an MPO or state to enter into agreements with public, private, or nonprofit entities to cooperatively implement projects funded by the CMAQ program.

ISTEA authorized \$6 billion for CMAQ between FY 1992 and FY 1997. Of the \$6 billion authorized during those 6 years, \$1.9 billion (or 31.7 percent) was flexed to transit.

In 1998, TEA-21 authorized a total of \$8.1 billion for the program covering FY 1998–2003. *In the 3 fiscal years*

(1998–2000), a total of \$3.9 billion was authorized. As of September 30, 2000, approximately \$1.7 billion of that total (or 43.6 percent) had been transferred to the FTA. From FY 1992 through FY 2000, a total of \$3.5 billion was transferred to transit, about \$1 billion more than transferred under the STP program in the same period.

Impact of Flexible Fund Transfers on Federal Transit Administration Programs and Highway Authorizations

In Table 1, the general trend of funding for transit vis-à-vis highways under TEA-21 shows transit increasing as a percentage of total highway funding. In FY 1998, the total FTA authorization was 19.5 percent of the total FHWA federal-aid highway authorization. In each fiscal year thereafter, the FTA authorization as a percentage of highway funding increased, culminating in 26.8 percent of total highway funding in FY 2003. Transit funding growth rates in each fiscal year are also greater relative to highways, showing an increase in authorized levels of 36.6 percent from FY 1998 to FY 1999, 7.4 percent from FY 1999 to FY 2000, 6.8 percent from FY 2000 to FY 2001, 6.4 percent from FY 2001 to FY 2002, and 5.9 percent from FY 2002 to FY 2003. In comparison, the percent change in authorization levels for highways was 18.4 percent from FY 1998 to FY 1999, 2.5 percent from

TABLE 1 TEA-21 AUTHORIZATIONS TO FTA TITLE 49 PROGRAMS AND TITLE 23 HIGHWAY PROGRAMS (\$ millions)

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Total
Main Title 49 FTA Programs							
Urbanized Area Formula	2,298.9	2,698.2	2,922.9	3,147.3	3,370.6	3,595.9	18,033.8
Nonurbanized Area Formula	134.1	177.9	193.6	209.3	224.9	240.6	1,180.4
Elderly/Persons with Disabilities	62.2	67.0	72.9	78.9	84.7	90.7	456.4
Total Funding	2,495.2	2,943.1	3,189.4	3,435.5	3,680.2	3,927.2	19,670.6
Total Funding All Programs ¹	4,643.7	6,341.0	6,810.0	7,274.0	7,737.0	8,194.0	40,999.7
Percent change in <i>Total Funding <u>All</u></i>							
Programs		36.6	7.4	6.8	6.4	5.9	
Main Title 23 Highway Programs							
Interstate Maintenance	3,427.3	3,957.1	3,994.5	4,073.3	4,139.6	4,217.6	23,809.4
National Highway System	4,112.5	4,748.5	4,793.4	4,888.0	4,967.6	5,061.1	28,571.1
Highway Bridge Replacement	2,941.5	3,395.4	3,427.5	3,495.1	3,552.0	3,619.0	20,430.5
STP	4,797.6	5,539.9	5,592.3	5,702.7	5,795.5	5,904.7	33,332.7
CMAQ	1,192.6	1,345.4	1,358.1	1,384.9	1,407.5	1,434.0	8,122.5
Total Funding	16,471.5	18,986.3	19,165.8	19,544.0	19,862.2	20,236.4	114,266.2
Total Funding All Programs ²	23,800.8	28,173.8	28,892.1	29,469.0	30,047.2	30,617.5	171,000.4
Percent change in <i>Total Funding</i>							
<u>All</u> Programs		18.4	2.5	2.0	2.0	1.9	
Total FTA Funding as a Percent of							
Total Highway Funding	19.5	22.5	23.6	24.7	25.7	26.8	

Source: Financing Federal-Aid Highways, Publication FHWA-PL-99-015, Federal Highway Office of Strategic Planning, U.S. Department of Transportation, August 1999.

Notes: CMAQ = Congestion Mitigation and Air Quality; FHWA = Federal Highway Administration; FTA = Federal Transit Administration; STP = Surface Transportation Program. Authorized levels serve as a measure of funds that are *theoretically available* for highway use and for transfers to the FTA, although it must be noted that obligation limits and other deductions and limitations (including transferability provisions of various highway programs) will decrease the amounts that are *actually available* for flexing.

FTA: All Programs include Capital Program Grants and Loans, Transit Planning, Transit Research, Clean Fuels Formula Grant Program, etc.

²FHWA: All Programs include Recreational Trains Program, High Priority Projects Program, Federal Highway Lands Program, etc.

TABLE 2
ANNUAL SUMMARY OF FLEXIBLE FUNDS USED FOR TRANSIT (\$ millions)

FHWA Transfers to FTA	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000 ¹	Total
CMAQ	177.0	298.4	317.0	484.1	344.6	257.9	223.3	573.0	864.0	3,539.3
STP	25.2	146.9	183.2	200.3	324.2	207.9	243.9	384.4	708.4	2,424.4
Interstate Substitute	100.0	0.1	83.3	83.3	81.0	0.0	0.0	0.0	0.0	347.7
FHWA Earmarks/	1.6	23.8	26.2	34.1	30.3	48.3	0.1	11.8	26.7	202.9
FAUS										
Total Transfers to	303.8	469.2	609.7	801.8	780.1	514.1	467.3	969.2	1,599.1	6,514.3
FTA										
Percent change in total transfer in		54.44	29.94	31.51	-2.71	-34.10	-9.10	107.40	64.99	
each FY										
Percent change in CMAQ transfer		68.59	6.23	52.71	-28.82	-25.16	-13.42	156.61	50.79	
Percent change in STP transfer		482.94	24.71	9.33	61.86	-35.87	17.32	57.61	84.29	

Source: Year by Year Summary of Flexible Funds Used for Transit, FTA Office of Program Management, U.S. Department of Transportation, Washington D.C. Notes: CMAQ = Congestion Mitigation and Air Quality; FAUS = Federal Aid Urban System; FHWA = Federal Highway Administration; FTA = Federal Transit Administration; STP = Surface Transportation Program.

FY 1999 to FY 2000, and 2.0 percent for each succeeding fiscal year.

Flexible funding transfers affect three FTA programs: Urbanized Area Formula Program, Nonurbanized Area Formula Program, and the Elderly and Persons with Disabilities Program, which comprised 53.7 percent of the authorized level of all transit funding in FY 1998, and approximately 47 percent of the authorized levels for the remaining fiscal years under TEA-21. From FY 1998 to FY 2000, the only years for which flexible transfer amounts are available, the total of \$3 billion in transfers represents approximately 35 percent of the total \$8.6 billion authorization for these three programs in the same period. Relative to total funding of all FTA programs for FY 1998–2000 (\$17.8 billion), the transferred funds constitute a 17 percent share.

The impact of flexible fund provisions on the highway program is a \$3 billion transfer from FY 1998 to FY 2000, largely from the STP and CMAQ programs, which received combined authorizations for \$19.8 billion during those years, approximately 15 percent of the authorized levels for those two programs. In FY 1998, \$223.3 million in CMAQ funds of the \$1.2 billion authorized (or 18.7 percent) was transferred. In the same year, \$243.9 million in STP funds of the \$4.8 billion authorized (or 5.1 percent) was transferred. In FY 1999, \$573 million in CMAQ funds of the \$1.3 billion authorized (or 42.6 percent) was transferred. Meanwhile, \$384.4 million in STP funds of the \$5.5 billion authorized (or 6.9 percent) was transferred. As of September 30, 2000, approximately \$864 million in CMAQ funds of the \$1.4 billion authorized (or 61.7 percent) was transferred. In addition, \$708 million

in STP funds of the \$5.6 billion authorized (or 12.6 percent) was transferred.

AGGREGATE FUNDING SHIFTS TO TRANSIT

From FY 1992, the first fiscal year of the ISTEA authorization, to the halfway mark of TEA-21 in FY 2000, a total of \$6.5 billion in FHWA funds were flexed to transit. Over the 6-year life of ISTEA (FY 1992–1997), slightly less than \$3.5 billion was transferred to the FTA. Over the 3 years of TEA-21 (FY 1998–2000), approximately \$3 billion was transferred from the FHWA to transit.

Between FY 1992 and FY 2000, total FHWA transfers to FTA grew from \$303.8 million to \$1.6 billion, reflecting a five-fold increase. The trend in funding shifts from highway to transit modes has not seen a clear pattern of steady increases from year to year, however, as shown in Table 2 and Figure 1 in Appendix C. In contrast, there was a sharp 54 percent increase in total transfers between FY 1992 and FY 1993, followed by more moderate increases of approximately 30 percent and 32 percent for FY 1994 and FY 1995, respectively. During FY 1996-1998, transfer amounts actually dropped by 3 percent, 34 percent, and 9 percent, respectively. Largely because of this short-term decline, FY 1999 reflects the single largest positive percentage change, 107 percent, in money flexed to transit throughout the 9 fiscal years. For FY 2000, flexible funding increased by 65 percent. The reasons for these uneven year-to-year experiences are not examined in this synthesis.

The FY 1999 experience, although not representative of other fiscal years, illustrates the potential of the flexible funding program. In that year

¹As of September 30, 2000.

- \$1.2 billion in flexible funds was made available (\$969.2 million in new transfers and \$245.9 million from prior year carryovers);
- Of the \$969.2 million, 59 percent came from CMAQ (\$573 million), 40 percent from STP (\$384.4 million), and 1 percent from FHWA Earmarks/FAUS (\$11.8 million);
- Thirty-nine states flexed funds for transit;
- Nine states (California, New York, Pennsylvania, Missouri, Virginia, Illinois, Texas, Georgia, and Oregon)

- and Puerto Rico accounted for 80 percent of flexed funds; and
- Ninety-five percent of flexed funds were transferred to the FTA Urbanized Area Formula Program (Section 5307).

In contrast to the magnitude of highway-to-transit shifts, only \$19.7 million was transferred from the FTA to the FHWA for highway uses throughout ISTEA to the midway point of TEA-21.

CHAPTER THREE

RECENT EXPERIENCES: RESULTS OF A SURVEY

SURVEY METHODOLOGY AND OBJECTIVES

The general objective of the survey was to assess the process, experience, and impact of the flexible funding program from an organizational perspective. To guide the survey distribution, a preliminary mailing list was developed in conjunction with TRB staff and the project panel to include all 50 state DOTs, 50 TAs, and 25 MPOs. The selected transit agencies and MPOs varied by geographic location and by size. A "Flexible Funding Questionnaire" consisting of 41 questions was sent to 104 organizations, including 28 TAs, 21 MPOs, and 55 state DOTs. The response rate for the survey was 31 percent. A total of 32 respondents (11 TAs, 4 MPOs, and 17 state DOTs) returned the survey and provided valuable information in issue areas such as

- Availability of information on flexible funding;
- Knowledge and understanding of program policies and procedures;
- Organizational attitudes and general level of support for the program;
- Financial impact of the program in the overall transit investment landscape; and
- Experience with the process, including administration of funds and existing barriers that can compromise the program's success in meeting its objectives.

It must be noted that although 32 respondents returned the questionnaire, not every respondent completed each of the 41 questions. The survey was tabulated almost exclusively by the count of respondents for each available response [typically a five-point scale, although some questions required "list" responses or marking those choice(s) that apply].

FINDINGS BY ISSUE AREA

The results of the survey by TAs, MPOs, and state DOTs are summarized below by issue area.

Issue Area 1: Understanding/Knowledge of Flex Funding Opportunities

This section covers the level of comprehension of the process and procedures for flexing funds to transit on the part of the responding organization and other organizations. It also identifies whether there is local disagreement or contention over aspects of this process.

Major Findings

A majority of respondents believed that their organization had a good understanding of processes and procedures for flexing funds; TAs led the way in high marks on behalf of their agencies. State DOT senior managers, transit managers/staff, and MPO staff received the highest ratings from all respondents in terms of their knowledge and understanding; local officials and transit board members received the lowest marks. Forty-four percent of all respondents acknowledged local disagreement over flex funding processes and procedures. MPOs represented the greatest share of those respondents, followed by state DOTs and TAs. All respondents—and TAs in particular—identified levels of available funding and the project selection process as the two most difficult issues in the flexible funding process.

Supporting Findings

- Three-fourths of all respondents reported that processes and procedures for flexing funds were well understood within their organization. More than 90 percent of TAs, 66 percent of MPOs, and 62 percent of state DOTs felt that they had a good grasp over the process and procedures.
- When asked to comment on how the level of understanding and knowledge of flex funding processes and procedures has affected various groups, all respondents gave the highest average scores (i.e., agencies having "no problem" or "minor problems" in understanding/knowledge) to state DOT senior managers and transit managers/staff, closely followed by MPO staff. In contrast, respondents gave the lowest average marks (i.e., "minor" to "some problems") to local officials followed by transit board members.
- MPOs gave the highest average scores on the level of understanding and knowledge of flex funding processes and procedures to transit managers/staff, followed by their own staff and state DOT staff. They gave the lowest average scores to external groups, of

which citizens formed a large share, and then to transit board members

- TAs rated most groups more favorably on average than MPOs, state DOTs, and all respondents. Their scores mirrored those of all respondents, and were most favorable to their own managers/staff and state DOT senior managers and least favorable to local officials.
- State DOT respondents gave the highest scores to their own senior managers and then to MPO staff.
 The lowest scores went to local officials, who were perceived as exhibiting "minor" to "some problems" regarding their level of understanding and knowledge of flex funding processes.
- Forty-four percent of all respondents acknowledged local disagreement over the processes and procedures for flexing funds to transit. The MPOs were evenly split on this issue. A greater share of state DOTs than TAs claimed that disagreements exist (47 percent to 38 percent).
- Respondents identified levels of available funding and the project selection process as the two most difficult issues in the flexible funding process. Project eligibility, rationales for funding limitations, and the fund administration process were also frequently cited as a concern. The perception of TAs mirrors these responses. State DOTs included rationales for flex funding limitations as the primary issue, whereas levels of available funding were a secondary concern. MPOs cited project eligibility, levels of available funding, the project selection process, and the fund administration process as the most difficult issues in the flexible funding process.

Issue Area 2: Data and Information on Flex Funding

This section covers the relative availability of information based on different components of the funding process and procedures (e.g., project eligibility and levels of funding available) and data availability by agency (e.g., MPO or state DOT).

Major Findings

Although most respondents claimed that, in general, data and information on flex funding was readily available, no single source of information was recommended. Rather, availability varied by type of information, with information on project eligibility characterized as most readily available, and information on flexible funding limitations and the fund administration process as least readily available.

Supporting Findings

- Approximately 70 percent of respondents claimed that data and information on flexible funding provisions, processes, and procedures is "readily available." A greater share of TAs (77 percent) agreed with this perception than did state DOTs (60 percent). Only two MPOs commented on this issue, and the results were split equally between "readily available" and "not readily available."
- Overall, all respondents believed that most data on specific flex funding process/procedures (including project eligibility, levels of funding available, rationales for flex funding limitations, project selection process, etc.) are at least "somewhat available." Information regarding project eligibility was most readily available, whereas information on flexible funding limitations and the fund administration process was least available. No single source of information was cited by all respondents' averaged scores as "readily available." Responses by group (TAs, MPOs, and state DOTs) mirror these results.

Issue Area 3: Organizational Attitudes on Flex Funding

This section encompasses the attitudes of different groups toward flexing funds in general and, more specifically, attitudes to flexing from the individual programs (e.g., the CMAQ or the STP funding categories). It also gauges the changes in organizational attitudes over time.

Major Findings

State DOTs and TAs had mixed experiences with organizational attitudes for flexing funds among various flex programs; for these groups, approximately one-half saw a difference in attitude among various programs and approximately one-half did not. MPOs were united in perceiving a difference in organizational attitudes. For a majority of respondents, flexible funds were not used "as a last resort" mechanism, although a few state DOTs viewed it that way. More TAs as a group saw growing support for flexing funds over time, followed by a smaller share of state DOTs.

Supporting Findings

 More than three-fifths (61 percent) of all respondents viewed a difference in organizational attitudes for flexing funds among various flex programs. Approximately 39 percent did not provide support for this notion. The state DOTs and TAs were about evenly split on this issue, whereas all four MPOs were unanimous in their stance that agency attitude and posture varied among programs.

- Approximately 62 percent of all respondents felt that flexible funding was "infrequently" or "never" viewed "as a last resort." Correspondingly, 16 percent believed it to be "frequently" viewed that way, and 10 percent felt it was "sometimes" viewed that way. Another 13 percent of respondents, primarily state DOTs, felt that flexible funding was "always" viewed as "a last resort."
- Eighty percent of all respondents perceived growing support for flexing funds to transit over time. An even larger share (85 percent) of state DOTs cited growing support, whereas TAs comprised the greatest share (approximately 91 percent).

Issue Area 4: Value of Flex Funding for Transit

This section traces the most important rationales for seeking funds, the importance of the program to overall transit investments, the value of most widely used flexible funding programs in meeting overall transit investment needs, and the identification of future critical needs.

Major Findings

More rapid and earlier project implementation was the most popular rationale for seeking flexed funds, with increased investment in critical basic services and expanded services close behind. More than 70 percent of respondents believed flexible funding to be "somewhat significant" to "very significant," whereas a larger share of TAs than any other group considered it to be "essential." CMAQ was ranked the most crucial program, followed by STP, which was considered only "somewhat significant" or "of limited significance." The NHS program was overwhelmingly considered as "insignificant." MPOs, TAs, and state DOTs named a variety of projects for which flexible funds will be most critical in future years, including Transportation Demand Management (TDM) programs, intermodal facilities, and rolling stock replacement.

Supporting Findings

The most important rationales for seeking flex funding, as identified by all respondents, were, in descending order, the ability to implement projects earlier/faster, the ability to increase the level of investment in critical basic services, and the ability to increase the level of investment to expand services.

- Approximately 22 percent of all respondents perceived flexible funding as an "essential" ingredient of their overall transit investment program, whereas 34 percent believed it to be "very significant." The largest share of respondents, 38 percent, characterized the importance of flexible funding as "somewhat significant." Only two respondents (both state DOTs) cited the program as either "not significant" or "of limited significance." Most state DOTs and MPOs cited the program as being "somewhat significant," whereas the TAs as a group had a more favorable impression, and were split evenly among "very significant" and "essential" ratings. Two MPOs rated the program as "very significant" or "essential."
- Of the three flexible funding programs (CMAQ, STP, and NHS), respondents overwhelmingly placed CMAQ in the "very significant" or "essential" categories in meeting transit investment needs. With respect to the STP program, the most favored category among respondents was "somewhat significant" followed by the "of limited significance" category. The NHS program, in contrast, was overwhelmingly conceived as "not significant."
- Rolling stock replacement, TDM programs, fixed guideway projects, and intermodal facilities were frequently cited across the three groups of respondents as projects needing future flexible funds.
- When asked about the types of projects for which flexible funds will be most critical in future years, responding MPOs listed the following:
 - Park and ride facility expansions and other TDM programs.
 - Fixed guideways on existing rail corridors,
 - Regional planning,
 - Transit-oriented development,
 - Capital rail projects,
 - Bus corridor improvements,
 - Bicycle and pedestrian projects, and
 - HOV expansion.
- Correspondingly, TAs reported the following future projects:
 - Rolling stock replacement (six TAs);
 - Extensions to mass transit, including light rail and bus service (three TAs);
 - Intelligent Transportation Systems (ITS) intermodal projects (three TAs);
 - Bicvcle and pedestrian projects:
 - Capital portion of Elderly and Disabled Persons Program;
 - Congestion management strategies, including TDM (two TAs); and
 - A fixed guideway project.

- In addition, state DOTs cited the following needs:
 - Rolling stock replacement (six state DOTs),
 - Capital and operating costs for bus rapid transit,
 - Vanpool programs,
 - Capital portion of Elderly and Disabled Persons Program,
 - New service starts.
 - Capital acquisition of equipment (two state DOTs),
 - Intermodal transfer facilities (four state DOTs),
 - Fixed guideway "new starts,"
 - Demonstration-type projects,
 - Transit center construction,
 - Van replacement,
 - Service expansion/additional vehicles and start-up costs (two state DOTs),
 - Rideshare projects, and
 - Transit planning studies.

Issue Area 5: Policies and Procedures

This section identifies the major policy players, including those who have authority to set the dollar/obligation limits. In addition, it gauges current support for flexible funding policies and identifies the areas of greatest concern.

Major Findings

TAs and MPOs, in particular, reported dollar/obligation limits on amounts available for flexing. Approximately one-half of all TAs, state DOTs, and MPOs indicated that the state DOTs set these limits, whereas the other half identified collaboration in limit setting. A large share, more than 70 percent, were in general or strong agreement with current flex funding policies and decision-making procedures, whereas a little more than one-fifth cited a lack of agreement or limited agreement.

Supporting Findings

- One-third of all respondents cited dollar/obligation limits set by programs on amounts that may be flexed to transit. Approximately 45 percent of responding TAs, but only 13 percent of state DOTs cited these limits. Of the three MPOs responding, two cited dollar/obligation limits.
- Less than one-half of all survey respondents identified the agency or agencies that set the dollar/obligation limits on the amounts that may be flexed to transit. The TAs, state DOTs, and MPOs, in roughly equal number, reported that the state DOT was the agency responsible for setting limits and that the limits are "set collaboratively."

- Seventy-one percent of all respondents cited a "general agreement" or "strong agreement" with the current flex funding policies and decision-making procedures. Seven percent (consisting of only two TAs) cited a "unanimous agreement" and 21 percent cited either "limited agreement" or "no agreement."
- The responding MPOs reported the following problems:
 - State policy on the use of CMAQ places added constraints on eligibility, and
 - Project selection process.
- The responding TAs cited these difficulties:
 - Project selection criteria (three TAs),
 - Limited funding for transit,
 - Actual transfer of funds,
 - State's fund programming process, and
 - Policies slanted in favor of highways.
- The responding state DOTs reported the following problems:
 - State policies,
 - Project selection process (two state DOTs),
 - Different attitudes toward flexing between transit and highway proponents, and
 - Limited funding and STP's disproportionate allocation to highways.

Issue Area 6: Process and Experience

This section identifies when organizations first began to direct the flexible funding provisions toward transit, the level of funds committed with this program, the breadth of projects financed with flexible funding, the level of consistency and administrative ease of the process, the organizational control over the process, and the most difficult aspects of the process.

Major Findings

The initial flex funding commitments occurred largely between 1991 and 1994, although some occurred between 1995 and 1999 and a few as early as the 1980s. "As a percent of total transit investment," more than 40 percent of responding agencies—particularly TAs—judged their agency's commitment as "significant" or "essential." For approximately 20 percent of the agencies, flexible funds constituted a 10–15 percent share of total transit investment. For another 26 percent, flex funds accounted for a 15–25 percent share. Approximately 32 percent of the agencies—particularly state DOTs—judged their agency's commitment "as a percentage of total transit investment" as "moderately significant." However, if 5–10 percent on

the "share of total transit investment" continuum is viewed as "moderately significant," then only 20 percent of the agencies fit into this category. Although 26 percent of all agencies—especially state DOTs—believed their commitment "as a percentage of transit investment" to be "insignificant," a higher percentage of agencies (33 percent) stated that their flexible funding commitments as a share of total transit investment are less than 5 percent. In addition, "as a percentage of flex funds available," approximately 77 percent of all agencies split evenly between rating their commitments as "significant" to "critical" and "moderately significant." Approximately 34 percent deemed their commitments to be "insignificant." More than 70 percent of all respondents agreed that the flexible funding process is clearly defined and followed consistently. The largest share of all groups of respondents rated the ease of securing flex funding commitments as "variable." The elements of the flexible funding process that posed the most problems for respondents were related to project selection criteria, funding limitations issues, and documentation of CMAQ-related benefits.

Supporting Findings

- The period in which the responding agencies first committed flex funds to transit projects ranges from the early 1980s to 1999. Only 10 percent of all agencies first used flex funds prior to the onset of ISTEA, and these were in the form of FAUS and Interstate Transfer funds. The largest share of respondents, 63 percent, first committed flex funds to transit between 1991 and 1994, whereas the remaining 37 percent first began "flexing" funds between 1995 and 1999.
- When asked about the size of the commitment of flex funds to transit since they were first used "as a percent of total transit investment," 42 percent of respondents judged their agency's commitment as "significant" or "essential." Thirty-two percent of respondents judged their agency's commitment as "moderately significant" and 26 percent judged it as "insignificant." Most state DOTs judged the commitment as either "moderately significant" or "insignificant," whereas most TAs judged their commitment as "significant."
- In response to the size of the flex fund commitments "as a percentage of flexible funds available," approximately one-third (29 percent) of responding agencies remarked that the commitments were "significant" to "critical." Correspondingly, 38 percent of agencies cited the commitments as "moderately significant," and 34 percent cited them as "insignificant."
- Of the agencies that ranked the percentage share of total transit investment due to flexible funds, one-

third rated flex funds as responsible for "less than 5 percent" of total transit investment. One-fifth of all agencies rated the program as responsible for "5 to 10 percent" of total transit investment, and another one-fifth rated flexible funding's share of total transit investment as "10 to 15 percent." Approximately 26 percent of the agencies ranked the share as "15 to 20 percent" or "20 to 25 percent."

- More than 70 percent of responding agencies said that the flexible funding process is clearly defined. Most state DOTs and TAs supported this position, whereas the MPOs were evenly divided.
- Three-fourths of respondents said that the flexible funding process is followed consistently. Once again, most state DOTs and TAs supported this view, whereas the MPO responses were mixed.
- When asked to rate the ease of securing flex funding commitments, 56 percent of respondents rated the process as "variable." Twenty-five percent of respondents rated the process as "somewhat easy" or "extremely easy," whereas 19 percent deemed it "somewhat difficult" or "extremely difficult." The largest share of all three groups of respondents agreed that the process was "variable."
- Sixty percent of responding agencies reported that the state DOT exercised the most control over the flexible funding process in their jurisdictions, whereas 40 percent reported that MPOs exerted the most control over flexible funding in their jurisdictions.
- "Establishing project selection criteria," "resolving funding limitation issues," and "documenting CMAQ-related benefits" topped the list of elements of the flexible funding process that posed the most difficulty. Also cited were "resolving project eligibility issues," "documenting STP-related benefits," and "establishing a funding mix." The greatest number of TAs cited CMAQ documentation, whereas the greatest number of state DOTs cited project selection criteria.

Issue Area 7: Barriers

This section covers the barriers within the respondent's organization and other organizations to the flex funding process, as well as the lack of local funding as a potential barrier.

Major Findings

The most frequently mentioned organizational barriers (inside and outside the respondents' own organizations) in-

clude competition for limited funds for transit purposes, perception of flexible programs as highway programs (particularly the STP), and insufficient funding. The barriers encountered by respondents were attributed to other organizations as well; the number of responses was insufficient to identify organization-specific barriers (i.e., barriers that MPOs, TAs, or state DOTs uniquely experience as distinct groups). For approximately 90 percent of respondents, the availability of a local funding match has not hindered flex projects, although this aspect was identified as a barrier by a small number of state DOTs.

Supporting Findings

- MPOs listed these barriers to making use of flexible funds to transit within their own organizations:
 - Attitude concerning the STP program as "highway money," and
 - Competing funds in other modes.
- Barriers created by other organizations included
 - Competition for funds for non-transit purposes,
 - State DOT attitude on STP funds as highway funds, and
 - Lack of a dedicated local funding source for match and operating costs.
- TAs listed the following barriers to making use of flexible funds for transit within their own organizations:
 - Limited funds,
 - Ensuring that there is an adequate local match,
 - Competition for funds among other regional transit operators,
 - Lack of political experience in dealing with the MPO, and
 - Lack of commitment to high-quality transit.
- Barriers created by other agencies included
 - Lack of public support for using highway funds for transit (four TAs),
 - Insufficient funding,
 - Prohibition on the use of STP for rail infrastructure, and
 - Competition with highways for the same funds.
- State DOTs listed the following organizational barriers to making use of flexible funds to transit:
 - Focus on highways outlook (two state DOTs),
 - Inadequate funding (two state DOTs),
 - Inadequate support for flexing STP funds,
 - Lengthy process for flexing funds,
 - Balancing transit versus non-transit needs,
 - Communication/coordination difficulties across different bureaus of the state DOT.
 - Lack of knowledge about the relationship between obligation authority and the transfer process,

- Questionable project evaluation process for expansions of bus fleets or fixed facilities, and
- Geographic demands on the use of CMAQ funds.
- Barriers cited by other agencies included
 - Inadequate funding (two state DOTs),
 - Attitude that flexible funds are "road dollars" and have always been "road dollars,"
 - "Putting off transfers until end of fiscal year when no highway projects remain to sell; then lapsing funds transferred to transit,"
 - Highway project priorities, and
 - Time required to process FTA grant application/ award.
- Almost 90 percent of all agencies responded that the lack of local match funding has *not* precluded the use of flexible funds for transit. Eleven percent, comprised of state DOTs, found the local match to pose a difficulty.

Issue Area 8: Administration of Flexible Funds

This section covers the methods of fund administration (i.e., through the FHWA or FTA), the respondent's preference for either method, the burden level of flexed projects vis-à-vis regular projects, and the most questionable aspects of grant/project management. The findings were taken from the survey questionnaire section on administration of flexible funds.

Major Findings

Issues were raised about grant/project management concerning timeliness in grant processing and the actual transfer process. Other difficulties included CMAQ documentation difficulties, lengthy administration, and the perceived preference of highway needs over transit. Similar concerns were attributed to both the FTA and the FHWA in terms of flexible fund administration.

Supporting Findings

• Fifteen of the 30 responding agencies had flexible transit funds administered exclusively by fund transfers to the FTA. Fourteen agencies used a mix of fund transfers to the FTA and direct funding of transit projects by the FHWA/state DOT. An almost equal number of state DOTs fell into each of the two categories, whereas almost three times as many TAs had funds administered exclusively by fund transfers to the FTA. Only one MPO administered flexible funds exclusively through direct funding of transit eligible projects by the FHWA/state DOT.

- Three-fourths of the 20 responding agencies stated that they preferred flexible fund administration by the FTA through fund transfers from the FHWA, whereas one-fourth preferred administration by the FHWA/ state DOT without transfers to the FTA. The TAs that replied overwhelmingly preferred FTA administration. Six of 10 state DOTs preferred this option, as did two of the three responding MPOs.
- More than one-half of all respondents, including a
 majority of TAs and state DOTs, felt that the administration of flex funded projects was not more burdensome than the administration of normal projects. Two
 of the three MPOs that voiced an opinion on this
 question believed the opposite.
- A majority of state DOTs (12 of 16) described their experience in administering flex funded projects compared with routine grant/project management as "average." TAs were almost evenly split (six to five) between having an "average" and "somewhat difficult/complicated experience." Only 2 of 30 total respondents (or 7 percent) described the experience as "unnecessarily difficult/complicated."
- In reference to grant/project management on flex projects, the most problems cited across all groups were for issues of timeliness in grant processing and the actual fund transfer. Other concerns included
 - "Process of getting funds flexed,"

- Local cooperation,
- Disposition of balances at closeout,
- "Tracking codes and billing," and
- Documentation of CMAQ benefits.
- MPOs were concerned with the following:
 - Position of state staff regarding transit (i.e., it is not considered a priority in comparison to highways),
 - Timeliness of STIP amendments,
 - Pro-rata restrictions by fund type,
 - CMAQ documentation, and
 - Lengthy review process.
- TAs provided the following list of concerns with project management:
 - Actual fund transfer (three TAs),
 - Lengthy administration, and
 - Inadequate recognition that highway construction involves a different process than that used for transit.
- State DOTs also cited the following concerns with project management:
 - Coordination between the FTA and the FHWA,
 - The FHWA environmental process,
 - Documentation of air quality benefits under CMAQ,
 - Inadequate familiarity with transit systems, and
 - Accommodating the need to transfer funds to the FTA into the routine FHWA obligation authority process.

CHAPTER FOUR

SEVEN PROJECT PROFILES IN FLEXIBLE FUNDING

PROJECT PROFILES METHODOLOGY AND OBJECTIVES

Seven project profile candidates were selected for additional telephone interviews. Four were chosen from among the survey respondents at their suggestion and three were selected from recent FTA data summaries to reflect the variety of activities being undertaken with flexed funds. The project profile objective was not focused on project-level details, but rather on the agency's broader experience with flexible funding programs and processes. Interviews with senior TA officials generally covered several topics.

- Attitudes of partner agencies toward flexing funds,
- Experience with the decision making and administrative process of flexing funds,
- Major rationales for using the program,
- Perceived value of the program,
- Difficult issues (if any) and the methods of resolution, and
- Potential barriers to using flex funding and suggested improvements that would mitigate these problems.

GENERAL FINDINGS

The small sample of TAs and operators interviewed reflects a modest, although instructive, range of experiences, successes, and impediments in using flexed funds for transit. Differences in service area characteristics and the agencies' own budgetary resources resulted in flexed funds being used for a wide range of projects, including

- Alternative fuel projects (engine and transmission rehabilitation program, engine repowering program, and clean fuel buses),
- Alternative and experimental transportation options (reverse commute and guaranteed ride home),
- Electric streetcar,
- · Regional rail,
- · Intermodal center,
- Busway and busway-related service improvements (including bus purchases),
- Neighborhood shuttle initiative,
- Transportation Management Area assistance,
- Commuter rail study,
- TDM program,
- Light rail,
- Park-and-ride lots,
- · Van pool grants, and

• Transportation enhancements.

The mechanisms that contributed to successful leveraging of these funds included

- Strategic partnerships with outside agencies [Tri-County Metropolitan Transportation District of Oregon (Tri-Met)],
- General buy-in from other external stakeholders [New Jersey Transit Corporation, Central Florida Regional Transit Authority (LYNX)], and
- A proactive long-range planning approach to using these funds to satisfy agreed upon and politically supported objectives (Tri-Met, LYNX).

Outside political support was key, and agencies whose officials sat on the boards of regional decision-making bodies had a distinct advantage in the distribution of scarce funding resources. Compromises or tradeoffs with other agencies in order to secure transit funds in the near future were also a common thread among the respondents.

The reported barriers to the implementation of flex funds included

- Annual administrative burdens for multiyear project awards, including turnaround for the grant award;
- Various levels of enthusiasm for the program among external groups;
- Competition for funds and the perception that some other agency had gained more funding than equitable; and
- Impediments at the state level. For example, a state may chose to provide a higher match for highway projects (e.g., 25 percent, with federal funds covering the remaining 75 percent). For a transit project, the state may choose to fund only 10 percent, or one-half of the non-federal share, with local government required to provide the remaining 10 percent, creating a potential disincentive at the local level to pursue the transit project.

Procedural features have also complicated the transfer of funds, particularly the differences between FHWA and FTA fund administration procedures. This issue had especially negative effects on former FHWA-administered projects that were later reclassified as FTA "New Starts." A related issue regarding matching ratios was also voiced, wherein the typical 80 percent federal share gets transferred to

a transit project, whereas the state and local shares remain in the highway program and do not ultimately get transferred. This discourages flexing funds to transit. In addition, the time frame for the obligation of funds, project selection criteria, and eligibility requirements were cited as being concerns. In contrast, none of the respondents viewed the actual FTA administration or the technical transfer process as more burdensome than regular FTA-administered projects.

PROJECT PROFILE: AC TRANSIT

Alameda-Contra Costa Transit District, Oakland, California

The Alameda–Contra Costa Transit District (AC Transit) is the public bus system serving 14 cities and adjacent unincorporated communities over 364 square miles along the eastern shores of San Francisco and San Pablo Bays in Northern California. This area includes the cities of Richmond, San Pablo, El Cerrito, Albany, Berkeley, Emeryville, Oakland, Piedmont, Alameda, San Leandro, Hayward, Fremont, Newark, San Francisco (Transbay Terminal only), and the unincorporated areas of Ashland, Castro Valley, Cherryland, El Sobrante, Kensington, and San Lorenzo.

- AC Transit's total operating budget was approximately \$204.9 million for FY 2000–2001 (including paratransit operations).
- The total bus fleet numbers 800; ridership was close to 68 million in FY 1999–2000.
- Each AC Transit bus travels approximately 50,000 miles per year. Although the buses are scheduled to be in service for 12 years, in most cases, AC Transit has run the buses for 14 years, because of a lack of funds to replace them at the end of the service life.
- AC Transit's sole regular source of funding for buses is FTA Section 5307; flex funds provide the limited funds for other capital projects.
- AC Transit has embarked on an engine and transmission rehabilitation program, which removes a bus engine or transmission on a maintenance schedule and replaces it with an in-stock, rebuilt engine or transmission. The engine or transmission removed from the bus is then rebuilt/remanufactured using in-house manufacturing capability and will be installed in another bus when its engine or transmission is due for replacement service. The cycle continues until the engines and transmissions are no longer usable.
- The total engine and transmission rehabilitation program budget is \$2.4 million per year. For this project,

AC Transit receives \$6.5 million through the California STIP over a 4-year period. The balance is paid with District funds.

- For this STIP-funded project, AC Transit chose to use federal funds (STP funds under STIP). The rationale is that AC Transit is an active FTA grantee and, by using federal funds, AC Transit can add the federally funded STIP projects to its FTA grants and consolidate grant administration functions by dealing with a single funding agency.
- A separate engine repowering program (converting pre-1993 diesel engines to clean fuel diesel engines) is also underway. This program is funded with \$1.8 million of TEA-21 CMAQ funds with a onetime local contribution of approximately \$659,000 from the Port of Oakland, as the Port's effort to mitigate the environmental impact resulting from the use of old diesel engines.
- The Bay Area transit agencies operate in a partnership with the Metropolitan Transportation Commission, which is helpful in eliminating the need to negotiate for federal capital assistance funds.
- The region's flex funds—STP and CMAQ—flow through the transportation management agencies of the counties. In Alameda County, the Congestion Management Agency is the agency responsible for programming of flex funds for transit and local roadway projects.
- The primary barrier to the flow of funds is paperwork. Funds that are committed for multiple-year awards have annual paperwork filing requirements; however, this is a California requirement that is consistent with the state's timely use fund policy. A layer of administration has been added, but it also presents an opportunity to make needs better known.
- The region has approached funding for highway needs first, then transit, on a county-by-county basis, for the first 34 years of AC Transit history. The region's fund programming process for transit discretionary funds has given a priority to rail construction and expansion.
- Thinking varies among the Bay Area counties and agencies regarding flex funds. Some counties appear to prefer that more attention go to local roads rather than transit and, therefore, want protection from what they see as a diversion of funds to transit. However, transit supporters advocate for flex funds.

PROJECT PROFILE: HART

Hillsborough Area Regional Transit Authority, Tampa, Florida

- The Hillsborough Area Regional Transit Authority (HART) serves an area with a population of approximately 900,000, which includes Hillsborough County, the city of Tampa, and the city of Temple Terrace. The HART system carries 7.7 million passengers each year on a fleet of 190 buses, and operates more than 33 local bus routes, 12 express bus routes, and 27 park-and-ride lots. A 2.3-mile electric trolley line will begin operation in 2002.
- Long-range plans include the addition of 30 miles of regional rail service and more than doubling the bus fleet.
- The HART operation is both progressive and innovative and has made recent noteworthy strides in planning for regional rail service and coordination of transit and land use, as well as labor relations.
- The 2000 HART operating budget was \$25 million, and the 5-year capital budget totals \$78 million.
- Support for HART operations comes from

Federal funds 1 percent
State funds 12 percent
Local funds 76 percent (largely from a ½ mil ad valorem tax)

• Support for HART capital investment comes from

Federal funds
State funds
Local funds
5 percent
The single largest revenue source is federal CMAQ funding.)

- There has been a long history of using flexible funds for transit in the Tampa area, dating back to shortly after passage of ISTEA in 1991.
- The key feature in this long-standing commitment has been the adoption of an MPO policy to provide a fixed proportion of the region's annual flexible funding allocations to transit. Over the past 6 years, HART has received 25 percent of the region's flexible funds under this arrangement, meaning that an average of 40 percent of area CMAQ funds have gone to transit.
- This commitment has resulted, in part, from MPO CMAQ criteria that emphasize projects that "reduce vehicle traffic."

- As a result, a significant amount of CMAQ funding has been used to support Tampa's 4-year, \$31 million electric streetcar project. Over 3 years, an additional \$12.3 million is proposed for the regional rail project.
- More recently, the MPO has used a process that "boxes" funds in the TIP for broad categories of use without specifying amounts for individual projects. Flexible funds are programmed for "transit" and "intermodal" use under this arrangement.
- The use of flexible funds for transit has been exclusively through the formal transfer of funds from the FHWA to the FTA.
- Over the last several years, however, several procedural issues have arisen.
 - CMAQ impact analysis, typically done by the MPO after prioritization and programming, triggered analysis by the state, with results sent to the FHWA environmental staff for review before TIP approval. By conducting the analysis before MPO prioritization, the timetable for this can be reduced
 - Although highway and transit non-federal matching ratios may be equal (80 percent in the case of STP funds and transit capital funds), differences in state matching policies can also cause problems for transit projects.
 - The required tie between the region's TIP and the STIP gives the state control over the funding flow.
 - There has been apparent difficulty within the state in administering the flexible fund transfer process, but efforts are underway to remedy the perceived problems.

PROJECT PROFILE: LYNX

Central Florida Regional Transit Authority, Orlando, Florida

- LYNX (officially known as the Central Florida Regional Transit Authority) serves an area with a population of approximately 1.3 million that encompasses Orange, Osceola, and Seminole counties, including the city of Orlando. On an average weekday, the LYNX system carries more than 60,000 passengers on a fleet of 220 buses and 70 vans operating along more than 60 routes.
- In recent years, planning was begun and then suspended on a 26-mile regional rail system in the I-4

corridor that bisects Orlando, north to south. However, light rail and commuter rail remain in the region's 20-year plan.

- In recent years the LYNX operation has been one of the fastest growing services in the country. Since its 1992 reincarnation into a regional authority, LYNX has been able to build on and reinforce the importance of a regional perspective, and has proven to be a credible force in sustaining that perspective.
- The 2001 LYNX operating budget totaled \$69.2 million and the annual capital budget totaled \$21.1 million.
- Support for LYNX operations comes from

Federal fundsState funds13 percent10 percent

Local funds (from annual

appropriations)Operating revenues34 percent

• Support for LYNX capital investment comes from

Federal funds
State funds
Local funds
76 percent
13 percent
11 percent

- Flexible funds are used by LYNX as part of a "strategic approach" to funding transit. The agency has defined its role to be greater than that of a bus operator, which has led to a broader definition of services and products needed to fill regional capacity gaps that, in turn, has led to a broader pursuit of partnerships.
- This strategic approach fostered a policy-based approach to planning and funding rather than "modeling-the-trends" or investment based only on replacing existing assets.
- This strategy, coupled with a well-supported 5-year needs and capital improvement program, triggered a continuing commitment by the MPO of 20 percent of the region's approximately \$13 million in annual STP funds for transit. (The Orlando area does not receive CMAQ funds because by federal standards it is not a non-attainment area.) The commitment of STP funds has grown this year to 28 percent by prior MPO agreement/policy.
- One factor that has helped in sustaining this commitment is the formal representation of LYNX on the MPO policy board.
- The sustained commitment of flexible funds at the policy level helps to minimize project-by-project negotiation over available funds, because the flow of funds is more predictable.

- Two current projects of note are underway, supported in part by flexible funding.
 - A \$29 million Central Business District Intermodal Center using \$5 million in STP funds over 3 years, and
 - A new \$31.7 million operating base using \$3.5 million in STP funds over 3 years.
- Regularly allocated federal funds are used for routine capital investments, including bus purchases and replacement, and capital preventive maintenance activities.
- Despite the policy level commitment of flexible funds through the MPO, the traditional programming process and requirements have posed challenges to flexible funding. An earlier FTA requirement to program in the TIP only projects for which funding was formally committed (a "financially constrained TIP") has remained a procedural reference point, although the current program allows for programming of candidate or contingency projects that can be undertaken if funding becomes available, even though funds are not committed at the time of TIP adoption.
- This allows transit agencies to be more opportunistic (i.e., projects can proceed in a timely way when unexpected funds become available). Although TEA-21 sanctions inclusions of these contingency projects, there are sometimes disagreements locally over whether they can be programmed.
- There is currently no locally dedicated source of funds to support LYNX, nor regional taxing authority.
 LYNX must request funding each year to cover its budget. Local jurisdictions provide funds from gas tax, sales tax, and general revenues.
- With respect to the transfer process itself, no particular problems or difficulties have been experienced.

PROJECT PROFILE: MDTA

Miami-Dade Transit Agency, Miami, Florida

- The Miami-Dade Transit Agency (MDTA) serves a three-county area including Dade, Broward, and Palm Beach counties, as well as the city of Miami. MDTA operates four distinct transit modes, including paratransit:
 - Bus—More than 600 vehicles operating on 75 routes carry more than 200,000 riders per day. The bus system includes the 8.2-mile, 30-station South Miami–Dade Busway built by the Florida DOT, which opened in 1997.

- Rail—More than 130 cars operating on the 21mile system carry more than 46,000 riders per day between 21 stations.
- Metromover—The downtown people mover, operating 29 vehicles over the 4.4-mile system, carries 14,000 riders each day between 21 stations.
- In addition, the Tri-Rail regional commuter rail system serving the three-county area carries 2.5 million riders a year along its 71-mile, 18-station corridor paralleling I-95.
- The MDTA experience with flexible funding is longstanding and broadly based, but not without some difficulties.
 - South Busway—An 11-mile extension of the busway is now being designed at a proposed cost of \$89 million. The state originally planned to build the extension, but decided to turn the project over to the MDTA along with a commitment of \$38.6 million in CMAQ funding. The transfer of this project from an FHWA- to an FTA-administered project caused a number of project delays due to a lack of standardized processes. The MDTA has suggested that much greater consistency, parallelism, or standardization is needed between the agency's processes and definitions for proceeding through the various stages of project development, especially for projects that take on the stature or definition of New Starts.
 - South Busway Service Improvements—At the state's initiative, \$2.7 million in CMAQ funds were granted to MDTA to carry out a \$5.4 million program of service improvements to the Busway, due in large part to its overwhelming success.
 These funds must first meet all requirements for an FTA New Start
 - Palmetto Rail Extension—A 1.1-mile guideway extension and station construction project costing \$88 million is being pursued using approximately \$25 million in CMAQ funds. Originally, the project was conceived and developed as part of a state highway project using FHWA funds directly, but has since been reconceived as an FTA-administered project. This shift has introduced FTA New Start requirements.
- In addition to these major flexibly funded projects, CMAQ funds have also been made available to MDTA for the inspection and repair of elevated guideway structures on the rail and Metromover systems under a unique, one-time arrangement with the state.

PROJECT PROFILE: NFTA

Niagara Frontier Transportation Authority, Buffalo, New York

- The Niagara Frontier Transportation Authority (NFTA) is a public agency that operates the area's two airports, a public bus and rail system, the Port of Buffalo, a Boat Harbor, and transportation centers in downtown Buffalo and Niagara Falls. NFTA serves Erie and Niagara counties, which have a combined population of approximately one million residents.
- The operating budget of the entire agency is approximately \$92 million, of which \$69 million is used to support the metro bus and rail operations. The capital budget for bus and rail is approximately \$23.5 million.
- Of the \$69 million operating budget, \$23 million (or one-third) is financed locally, whereas the remaining \$46 million (or two-thirds) comes from federal, state, and county sources.
- Future plans at the NFTA include an expansion of Buffalo Niagara International Airport, customer service improvements through programs such as the Greenback Plan (which saves riders up to 30 percent in transit costs), and the addition of 21 new state-ofthe-art buses to its fleet.
- Of the available flexible funding programs, NFTA has largely used CMAQ funds for rolling stock (i.e., bus) replacement. The funds have helped the dualcounty jurisdiction purchase approximately 105 new buses (at a cost of about \$320,000 per bus) beginning in 1994.
- Since 1994, and every year thereafter, the agency has received a CMAQ grant that it has used to fund parkand-ride lots, transit planning efforts, and van pool grants, among other projects. Bus replacement ranks highest in terms of overall CMAQ flex funding, reflecting an overall investment of approximately \$21.1 million. At \$492,000, park-and-ride facilities represent the second largest expenditure of CMAQ flex funds. "Customer enhancements" have been identified as the third largest use of flexible funds at \$86,500.
- Both the park-and-ride facilities and the customer enhancements were 100 percent funded by CMAQ, whereas the rolling stock replacement only received partial funding at 58 percent.

- The state DOT had agreed that "closing the budget gap" on the bus purchases was a good use of CMAQ funding and, hence, there has been political support at all levels for these purchases.
- The respondent was most enthusiastic about how this program has helped replace old bus fleets, and has identified rolling stock replacement as a critical issue for which future funding will be sought.
- The most positive facets of the program were increased level of investment in critical basic services, earlier project implementation, and funding that may not otherwise have been obligated.
- Cooperation among the different agencies has been positive.
- The eligibility of projects for funding, the project evaluation and selection criteria, and the length of time between grant application and transfer of funds are areas recommended for improvement.
- The respondent mentioned that his agency was tasked to create a "seamless evaluation," which is used to compare highway and transit investments. The difficulty was in creating a methodology that would treat both transportation modes equally; therefore, a standard common denominator of hydrocarbon reductions per million dollars of expenditures was used.

PROJECT PROFILE: NJ TRANSIT

New Jersey Transit Corporation, Newark, New Jersey

- The New Jersey Transit Corporation (NJ TRANSIT) is New Jersey's statewide operator public transportation corporation. Covering a service area of 5,325 square miles, NJ TRANSIT is the nation's third-largest provider of bus, rail, and light rail transit.
- The agency's fleet of 1,900 buses and 591 trains serves more than 321,000 customers, making more than 632,000 trips daily. On 178 bus routes and 12 rail lines statewide, NJ TRANSIT provides 188 million passenger trips and traverses more than 1 billion miles each year.
- In 2000, NJ TRANSIT's operating budget was approximately \$1.24 billion; the capital program was \$857 million.
- NJ TRANSIT received \$30 million in CMAQ funds, formally transferred and administered by the FTA.

- These funds are used for alternative and experimental transportation, such as reverse commute at peak times, guaranteed ride home, and a series of other small programs. The programs are tested under the flexed CMAQ funding and, if successful, will be incorporated into NJ TRANSIT's regular operating budget.
- The total cost for the alternative and experimental transportation program is \$21 million. The operating cost, \$16.69 million, is covered by CMAQ funds; the \$4.3 million in capital cost is covered by the State Transportation Trust Fund.
- To receive the flexed funds, NJ TRANSIT simultaneously submits a grant application to the FTA and a letter to the U.S. Department of Transportation (U.S. DOT) asking for transfer of funds.
- The FTA provides efficient administration of the grants. The application process is smooth and electronic, and works well in New Jersey.
- NJ TRANSIT is a statewide agency. In New Jersey, the Commissioner of Transportation also serves as Chairman of the Board of NJ TRANSIT; therefore, funding splits are coordinated, all sources of funding are examined for both transit and highways, and highway operations recognizes that, in a state as densely populated as New Jersey, NJ TRANSIT is a necessity and must be funded as such.
- There is an equity in funding allocations; in the last round of flex funding, all funds went to the highway operations enhanced Inspection and Maintenance program, which has a budget of \$65 to \$75 million per year. Transit will receive \$20 million, or approximately 25 to 30 percent of the available funds, for 2001, and \$45 million, or approximately one-half of the available funds, in 2002.

PROJECT PROFILE: TRI-MET

Tri-County Metropolitan Transportation District of Oregon, Portland, Oregon

• The Tri-County Metropolitan Transportation District of Oregon (Tri-Met) is a municipal corporation that provides public transportation for the greater Portland, Oregon, metropolitan area. Tri-Met serves an area with a population of approximately 1.4 million, which includes Multnomah, Clark, and Clackamas counties, including the city of Portland. In FY 2000, the Tri-Met system carried 265,300 passengers on an average weekday. Tri-Met's resources include a fleet of 664 buses covering 102 bus routes, a 50 station light rail system, 17 transit centers, and 10,745 parkand-ride spaces.

- The light rail system, known as "MAX," carries approximately 35 percent of Tri-Met's overall ridership. A 15-mile eastern segment of the system opened in 1986, followed by an 18-mile western segment that opened in 1998. A 5.5-mile airport spur was completed in September 2001. Future plans call for a 5.8-mile connection between north Portland and the Expo Center with downtown Portland. Federal funding for the "Eastside MAX" came largely from flexed funds.
- Tri-Met's public transportation system is the cornerstone of an approach to regional development that has received national acclaim for its transit orientation. This approach calls for encouraging mixed-use transit and pedestrian-oriented development focused around transit stations, rather than encouraging automobile-dependent development on the urban and suburban fringe. To date, development around the stations has been considerable, with nearly \$1.9 billion in development occurring along the Eastside MAX line. The newer west segment has attracted nearly 7,000 housing units since its completion.
- Tri-Met's FY 2000 operating expenses totaled \$222.4 million. The 5-year capital plan totals \$216.5 million.
- Support for Tri-Met operations (FY 2000) comes from

Federal funds
State funds
Local funds
10.5 percent
4.5 percent
85.0 percent

The main revenue source is the employer payroll tax.

• Support for Tri-Met capital investment comes from

Federal funds
State funds
Local funds
20 percent
0 percent
80 percent

The main revenue sources are the employer payroll tax and federal funds.

 There is strong regional support for transit funding. As mentioned above, transit is the centerpiece of the long-range plan and the anchor for focused development within a unique urban growth boundary. All jurisdictions in the region, as well as the state DOT, support this approach to transportation/land-use planning. The Portland Metro MPO heads a regional transit management association, highlighting the critical role of the MPO in regional service provision, landuse planning, and overall guidance.

- Capital investment for supporting transit-oriented development is established through the MPO TIP development process. Tri-Met leads the development of transportation funding priorities through this process. To establish these funding priorities, prospective investments are ranked according to their consistency with goals and objectives established in the longrange plan. The Joint Policy Action Committee, a public body comprised of Tri-Met representatives and other local officials, is responsible for developing these rankings. The committee also developed the ranking criteria.
- The Oregon DOT determines the total amount of flex funds available in any fiscal year.
- In FY 1999, the Portland Metro identified an additional \$10 million of available STP funds for transportation projects beyond what was originally projected in the constrained TIP. Tri-Met suggested, and the committee agreed, that this money should be used to fund the purchase of 30 new "clean diesel" buses.
- Flex funding has made a significant contribution to the region's transit capital program. In addition to a partial funding of the interstate MAX system, flex funds have partially funded a neighborhood shuttle initiative, a Transportation Management Area assistance program, a TDM agency program, bus purchases, a commuter rail study, and ongoing capital support that will allow Tri-Met to increase its bus service. For FY 2000, flexible funds are being used for the Westside MAX light rail program.
- The FTA regional office was credited with efficient processing of grant applications using flexible funds for the bus purchase.
- One major benefit of the flexible funding program is that it has allowed Tri-Met to implement its projects in a timely manner. The agency has positioned itself, through its advanced project development and participation in the regional planning process, to take advantage of regional funds when they unexpectedly become available.
- This same proactive approach in the regional planning process has resulted in a substantial financial commitment to transit from available flexible funds.
 The MPO has committed \$58.5 million of the region's approximately \$127.5 million in flex funds for transit between FY 2000 and FY 2003.

CHAPTER FIVE

CONCLUSIONS

The flexible funding provisions that originated under ISTEA and have been strengthened under TEA-21 have made a significant impact on the funding of transit needs nationwide. Through ISTEA to the midway point of TEA-21, a total of \$6.5 billion in FHWA funds has been flexed to transit, with the most dramatic increases in transfer amounts occurring in FY 1999-2000. Together, the CMAQ and STP programs account for more than 90 percent of all FHWA transfers to FTA from FY 1992-2000. In the first 3 years of TEA-21, a total of \$3 billion in transfers reflects an increase of more than one-third of the total \$8.6 billion authorization of the three FTA programs that are eligible to receive those funds (the Urbanized Area Formula Program, the Nonurbanized Area Formula Program, and the Elderly and Persons with Disabilities Program). The transfers represent approximately 17 percent of total federal transit funding in the same period.

The breadth of rationales for, and application of, flexible funding provisions suggests that states and localities have harnessed this flexibility as Congress intended; namely, by employing the provisions in a manner that best addresses their individual local needs and circumstances. States and localities can be characterized by varied levels of innovation in their approach to transferring funds to transit. Flexed funds have been used for a wide range of projects, from new starts, to vehicle replacement, alternative fuel projects, intermodal centers, and innovative service concepts. Moreover, some agencies were successful in leveraging funds by promoting strategic partnerships with outside agencies and otherwise engaging external stakeholders.

Overall, in spite of some continuing difficulties or administrative issues, survey and interview respondents have positive impressions of these provisions and see them as valuable. Flexible funds were sought in efforts to advance existing transit projects or for funding those that may not have been funded otherwise. In addition, the value of these provisions was also captured by increased investment in critical basic services and expanded services, such as rolling stock replacements, rideshare projects, and mass transit extensions.

Attitudes toward flexible funding continue to vary across regions and among participating agencies within regions. Evidence from surveys and project profiles suggests that state DOTs are more supportive of highway projects.

There continues to be gaps in the knowledge of flexible funding opportunities and procedures. Guidance and procedures did not seem to be uniform throughout the country. Some elements of the flexible funding process are less well understood than others (e.g., flexible funding limitations). These observations tend to suggest that the flexible funding process itself is perhaps somewhat more flexible than intended, providing the ability to manage flexible funding decisions in significantly different ways with significantly different outcomes.

The general willingness to flex funds varies based on the program from which funds are being requested or drawn. Because CMAQ funding, by definition, supports a broader range of investments and has limited highway application, a higher percentage of CMAQ funds are flexed than is the case with other programs.

Disagreements and frustration over policies and procedures for flexing funds were noted in 20 to 30 percent of survey responses. This set of observations may have several roots, including: (1) the naturally shifting dynamics and priorities that occur locally in the planning and programming process; and (2) the difficulty in maintaining procedural consistency.

In isolated cases, strong policy guidance enacted and reinforced through the MPO process has been used to commit a constant share of flexed funds annually to transit. This approach seems to have reduced or minimized the administrative difficulty of the flex funding process. Because this arrangement occurred in only two project profile areas in the same state (Florida), no generalization can be drawn from the experience.

Committing and transferring flexible funds to what FTA considers "New Start" projects appears to be causing the greatest procedural difficulty and frustration. Evidence suggests that state DOT and FHWA project administration is consistent with that of the FTA.

From these observations and conclusions, it appears that further study might be warranted in several areas.

- The knowledge and familiarity of flexing processes and procedures might be examined more thoroughly to better understand the roots of sentiments suggesting that it is incomplete or uneven, and what remedies might be appropriate.
- Given the small sample of MPOs surveyed, it may be worthwhile to conduct a more focused evaluation of MPO roles, responsibilities in flexible funding decisions and tradeoffs, and experiences in fostering a positive climate for flexing funds.

- The content and application of program-wide guidance and the evolution of locally negotiated policies and procedures for flexing funds might be examined and reported more thoroughly to expose general approaches that may be at variance with guidelines and, more importantly, to highlight approaches that may provide models for more effective local exercise of flexing provisions.
- The development of improved and more widely disseminated promotional materials and a "how to" guidebook may be warranted given the reported lack of awareness by some groups.
- The treatment of major capital investments in the flexing process might be reviewed to identify general or specific problems and to reconcile FHWA and FTA processes and timetables.
- In addition to transfers from the FHWA to the FTA, it might be worthwhile to analyze direct investment in transit projects by state DOTs (without formal transfers) to gain a more comprehensive insight into flexible funding activity.

Ø

REFERENCES

- 1. *ISTEA: Flexible Funding Opportunities for Transportation Investments FY'95*, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C.
- 2. Puentes, R., *Flexible Funding for Transit: Who Uses It?* Center on Urban and Metropolitan Policy, The Brookings Institution, Washington, D.C., May 2000.
- 3. "VIII. FHWA Surface Transportation Program and
- Congestion Mitigation and Air Quality Funds Used for Transit Purposes (Title 23, U.S.C.)," *Federal Register*, Vol. 66, No. 12, January 18, 2001.
- 4. A Guide to Federal Aid Programs and Projects, Publication FHWA-IF-99-006, U.S. Department of Transportation, Office of Program Administration, Federal Highway Administration, Washington, D.C., May 1999.

BIBLIOGRAPHY

- "Elderly and Persons with Disabilities Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/policy/prgms/eapwd.html [2001, May 21].
- "FTA Appropriations Fiscal Years 1961–2000," 1999 Statistical Summaries, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/reference/statsum00/t-2.html [2001, May 21].
- "Impact of Federal Funds on Major FTA Programs," 1999 Statistical Summaries, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/reference/statsum00/t-85.html [2001, May 21].
- "Nonurbanized Area Formula Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/policy/prgms/nuafg.html [2001, May 21].
- "Urbanized Area Formula Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/policy/prgms/uafg.html [2001, May 21].
- Year by Year Summary of Flexible Funds Used for Transit, U.S. Department of Transportation, Office of Program Management, Federal Transit Administration, Washington, D.C.

Ø

Y/N

APPENDIX A

Survey Questionnaire

*TCRP Synthesis Project J-7, Topic SH-2*Use of Flexible Funding Under ISTEA and TEA-21

FLEXIBLE FUNDING QUESTIONNAIRE

The questions that follow address several major aspects of the flexible funding process and experience. They have been developed for response by Transit Agencies (TAs), Metropolitan Planning Organizations (MPOs), and State Departments of Transportation (State DOTs). Detailed project-level data are generally not requested because it is contained and summarized in federal program and project databases.

Questions about the survey or the project, as well as completed responses, should be directed to:

Mr. Don Vary, Senior Associate

Cambridge Systematics, Inc.

5225 Wisconsin Avenue, NW

Washington, D.C. 20015

(202) 466-5542

RESPONDENT INFORMATION

	ur Name				THE		
Yo	ur Organization						
Ad	dress						
Telephone]	E-Ma		
UN	DERSTANDING/KNOWLEDGE OF FLEX	FUNDING (OPPO	ORTI	JNIT	ES	
1.	Are the processes and procedures for f	lexing fund	ls to	trans	it we	ell underst	ood in your organization? Y/N
2.	Is <u>lack</u> of understanding and knowledg groups? (<i>Circle one response for each</i>		ndin	g pro	ocess	es and pro	ocedures a problem among the following
	a. Transit managers/staff	1	2	3	4	5	I = No problem
	a. Transit managers/staffb. Transit board members	1		3		5 5	$I = No \ problem$ $2 = Minor \ problems$
		1 1 1	2	3	4	5	2 = Minor problems
	b. Transit board members	1	2 2	3	4 4	5 5	2 = Minor problems 3 = Some problems
	b. Transit board membersc. MPO staffd. MPO board members	1 1	2 2 2	3 3 3	4 4 4	5 5 5	2 = Minor problems
	b. Transit board membersc. MPO staffd. MPO board memberse. Local officials	1 1 1	2 2 2 2	3 3 3 3	4 4 4 4	5 5 5 5	 2 = Minor problems 3 = Some problems 4 = Significant problems
	b. Transit board membersc. MPO staffd. MPO board memberse. Local officialsf. State DOT staff	1 1 1 1	2 2 2 2 2	3 3 3 3	4 4 4 4	5 5 5 5 5	 2 = Minor problems 3 = Some problems 4 = Significant problems
	b. Transit board membersc. MPO staffd. MPO board memberse. Local officials	1 1 1 1 1	2 2 2 2 2	3 3 3 3 3	4 4 4 4 4	5 5 5 5 5 5	 2 = Minor problems 3 = Some problems 4 = Significant problems

3. Is there any disagreement locally over the processes and procedures for flexing funds to transit?

4.	Which aspects of the process are most in	contenti	ons?	(Ch	eck i	all a _l	pplic	able)	
	a Eligibility of projects								
	b. Levels of funding available								
	c Mix of funds to be committed								
	d Rationales for flex funding lin	nitations							
	e Project evaluation/selection cr	riteria							
	f. Project selection process								
	g Fund administration processes	5							
	h. Other (specify):								
					-				
DA	TA AND INFORMATION ON FLEX FUNDING	3							
5.	Is all the necessary data and information a	about fle	ex fui	ndin	g pro	visio	ons,	proces	sses, and procedures readily available? Y/N
6.	What is the general availability of data an (Circle one response for each)	nd inform	natio	n on	key	flex	func	ling p	rocesses and procedures noted below?
	a Eliaihility of projects			1	2	2	1	5	I = Not at all
	a. Eligibility of projects			1 1	2	3	4	5	1 = Not at all 2 = Limited
	b. Levels of funding available			1	2	2	4	5	2 = Limited
	c. Rationales for flex funding limitationsd. Project evaluation/selection criteria	•		1	2	3	4	5	3 = Somewhat available 4 = Readily available
	e. Project evaluation/selection criteria			1	2	3	4	5	5 = Not sure
	f. Fund administration processes			1	2	3	4	5	3 – Not sure
	g. Other:			1	2	3	4	5	
	g. Other.			1	2	3	4	J	
7.	From what sources are data and information and information and information and information are detailed as a supplicable. TA	ion most		icult Γ <u>γ</u> ρε	<u>2</u>				
	bMPO		-						
	cState DOT		-						
	d FTA (Regional/HQ) e FHWA (District/HQ)		-						
	ciiiwi (Bisaletti Q)		-						
OR	GANIZATIONAL POSTURE ON FLEX FUND	ING							
8.	How would you characterize the general particle one response for each group)	posture (of the	e foll	owii	ng gr	oups	s on fl	exing available funds to transit?
	a. Transit managers/staff	1	2	3	4	5			1 = Never supportive
	b. Transit board members	1	2	3	4	5			1 - Never supportive $2 = Seldom supportive$
	c. MPO staff	1	2	3	4	5			3 = Occasionally supportive
	d. MPO board members	1	2	3	4	5			4 = Usually supportive
	e. Local officials	1	2	3	4	5			5 = Always supportive
			2	3	4	5			5 – Aiways supportive
		1	2						
	g. State DOT senior managers	1		3	4	5			
	h. Others:	1	2	3	4	5			

9. Does the posture on flexing funds to transit vary from one program to another?

10.	To what degree is flex As a ready source for a (Circle one response for	ny/all eligible t	ransit projects?	last resort?	,,				1 1	2 2	3	4	5 5	
	1 = Always $2 = Free$		= Sometimes	4 = Infre	quent	tly	5 = .	Never						
11.	What is the posture of in each cell) 1 = Never support 4 = Usually suppo	ive $2 = Si$		g 3 =		_		e progr		? (Pl	'eas	e pla	ce an e	entry
		TA	MPO	State I	ОТ									
	CMAQ													
	STP													
	NHS													
12.	Have key organizations	s demonstrated	more support for	r flexing fu	nds t	o tra	nsit o	ver tim	ne?					
													Y/N	
VAL	UE OF FLEX FUNDING F	OR TRANSIT												
13.	What are the most im	portant rational	es for seeking fle	ex funds for	r tran	sit i	n you	r area?						
	(Check 3)													
	Increases the le	evel of investme	ent in critical bas	sic services										
			ent to expand ser											
			services, technolo											
			ne use of local fur											
		-	ate and local fun- ented earlier/faste	_										
			hat might not oth		oblig	ated	l.							
	"Sources of las	st resort"												
	Others (<i>List</i>) _													
14.	In the years since flex funding to the overall			ransit, how	wou	ld y	ou cha	aracter	ize tl		ipor 3		e of fle	xible
	1 = Not significant	2 = Of limited	significance 3	= Somewh	iat siį	gnifi	cant	$4 = V_0$	ery s	ignif	ìcar	ıt 5	= Ess	entia
15.	How valuable have earesponse for each pro	•	flex funding pro	ograms bee	n in 1	neet	ing tr	ansit ir	ivest	ment	t ne	eds?	(Circi	'e one
	CMAQ			1	2	3	4	5						
	STP			1	2	3	4 4	5						
	NHS			1	2	3	4	5						

 $1 = Not \ significant$ $2 = Of \ limited \ significance$ $3 = Somewhat \ significant$ $4 = Very \ significant$ 5 = Essential

16.	For what types of projects will flexible funds be most critical in future years? (List)										
POLI	CIES AND PROCEDURES										
7.	Who sets current policy direction in mak (Enter no more than 2 responses for each		xible	func	ding	commitr	nents?				
	Project eligibility						ral law/regulation				
	Flex funding levels				law/regulation						
	Mix of funds						policy/procedure				
	Rationales for flex funding limitati) policy/procedure				
	Project evaluation/selection crite	ria					olicy/procedure				
	Projection selection process				(6 = Joini	t policy/procedure				
	Fund administration processes										
	Other (specify):										
8.	Are dollar/obligation limits set by progra	m on t	he aı	nour	nts th	at may b	be flexed to transit? Y/N				
9.	Who sets these limits? (Check one) State DOT MPO	7	ГΑ			Set coll	aboratively				
20.	Is there agreement with the current flex f	unding	g poli	icies	and		-making procedures? 1 2 3 4 5				
	1 = No $2 = Limited agreement 3 = G$	eneral	agre	eeme	nt	4 = Stroi	ng agreement 5 = Unanimous agreemen				
21.	Do any particular organizations or interests policies?						or in opposition to current flex funding Y/N				
	Which and to what degree? (Circle one	respon	se fo	r eac	ch gr	oup)					
	a. TA	1	2	3	4	5	$1 = Total \ opposition$				
	b. MPO	1	2	3	4	5	2 = Major opposition				
	c. State DOT	1	2	3	4	5	3 = Limited opposition				
	d. Small urban/	•	_		•	-	$4 = No \ opposition$				
	rural agencies/communities	1	2	3	4	5	5 = Not certain				
	e. Suburban communities	1	2	3	4	5	1100 00.0000				
	f. Center city communities	1	2	3	4	5					
	g. Business organizations	1	2	3	4	5					
	h. Environmental groups	1	2	3	4	5 5 5 5					
	i. Others:	1	2	3	4	5					
	i. Ouicis.	1	4)	4	J					

22.	What policies and procedures create the greatest problems? (List/describe)
PRC	OCESS AND EXPERIENCE
23.	What year were flex funds first committed to transit project(s)?
24.	How large has been the commitment of flex funds to transit since they were first used (Circle one response for each)
	as a percentage of total transit investment? 1 2 3 4 5 as a percentage of flexible funds available? 1 2 3 4 5
	1 = Insignificant 2 = Moderately significant 3 = Significant 4 = Highly significant 5 = Critical
25.	What percentage of total transit investment have flexible funds accounted for since first used? (Check one)
	Less than 5% 5–10% 10–15% 15–20% 20–25%
26.	For what types of projects have flexible funds been most heavily used? (List three largest)
	Project Type Source(s) Amounts(s) Approximate % of Project Cost
27.	Is the flexible funding process clearly defined? $\label{eq:YN} Y/N$
28.	Is the flexible funding process followed consistently? $\label{eq:YN} Y/N$
29.	Has the process of securing flex funding commitments for transit been easy or difficult? 1 2 3 4 5
	1 = Extremely difficult 2 = Somewhat difficult 3 = Variable 4 = Somewhat easy 5 = Extremely easy
30.	What agency or organization exercises the most control over the flexible funding process? (Check one)
	TA MPO State DOT Other (specify)

31.	What elements of the process have posed the most difficulty? (Check all that approximately approxima	ly)			
	Resolving project eligibility issues? Documenting CMAQ related benefits? Documenting STP related benefits? Establishing project selection criteria?				
	Establishing a funding mix? Resolving funding limitations issue? CMAQ STP Other (Specify)	NHS		_	
BAR	RIERS				
32.	What barriers exist to making use of flexible funding for transit? (List) Your organization			-	
	Other organizations			-	
33.	Has the lack of local match funding even precluded use of flexible funds for trans			-	Y/N
ADN	MINISTRATION OF FLEXIBLE FUNDS				
34.	How have flexible transit funds been administered? (Circle one)	2	3		
	 1 = Exclusively by fund transfers to FTA 2 = Mix of fund transfers to FTA and direct funding of transit projects by FHWA 3 = Exclusively through direct funding of transit eligible projects by FHWA/State 		OT		
35.	If you have had projects with funding administered both ways, which procedure	do you p	refer?	(Chea	ck one)
	Administration by FTA through fund transfers from FHWA Administration by FHWA/State DOT without transfers to FTA				
36.	Is the administration of flex funded projects more burdensome than normal projects	cts?			Y/N
37.	How would you assess your experience in administering flex funded projects thre FTA grant/project management? (Circle one)		A in co	_	ison to routine
	1 = Unnecessarily difficult/complicated2 = Somewhat difficult/complicated4 = Somewhat less difficult/complicated5 = Much less difficult/complicated	$3 = A_1$	verage		

nent is/are most problematic? (List) n fund/project administration process v	would you
Depends on Project	vould you
Depends on Project	would you
Depends on Project	would you
Depends on Project	would you
	No
Type	Preference
1980	TOTOTOMOC
	
	-
de a good example for other areas?	
Flex Fund Amounts:	
STP	
CMAQ	
NHS	
1 PH 1 PHHILLION - D.C.	Y/N
nin. Through FHWA/State DOT	
	Flex Fund Amounts: STP CMAQ

PLEASE COMPLETE BY JUNE 26, 2000, AND RETURN TO MR. DON VARY; CAMBRIDGE SYSTEMATICS, INC.; 5225 WISCONSIN AVENUE, NW; WASHINGTON, D.C. 20015

APPENDIX B

Respondent List

The respondent list includes those agencies that returned completed surveys and/or were interviewed as project profiles.

Alaska

Alaska Department of Transportation and Public Facilities

Arkansas

Arkansas State Highway and Transportation Department

California

Alameda–Contra Costa Transit District (AC Transit) Riverside Transit Agency

Connecticut

Connecticut Department of Transportation

Florida

Hillsborough Area Regional Transit Authority (HART) Hillsborough County Metropolitan Planning Organization LYNX (Central Florida Regional Transit Authority) Miami–Dade Transit Agency (MDTA)

Idaho

Community Planning Association Idaho Transportation Department

Illinois

Illinois Department of Transportation

Iowa

Iowa Department of Transportation

Kentucky

Kentucky Transportation Department

Louisiana

Louisiana Department of Transportation and Development

Michigan

Grand Rapids Area Transit Authority Michigan Department of Transportation

New Hampshire

New Hampshire Department of Transportation

New Jersey

New Jersey Transit Corporation (NJ TRANSIT)

New Mexico

New Mexico State Highway and Transportation Department

New York

Capital District Transportation Authority Niagara Frontier Transportation Authority (NFTA)

Ohio

Central Ohio Transit Authority Ohio Department of Transportation

Oregon

METRO

Tri-County Metropolitan Transportation District of Oregon (Tri-Met)

Pennsylvania

Lehigh and Northampton Transportation Authority Pennsylvania Department of Transportation Southeastern Pennsylvania Transportation Authority

Puerto Rico

Puerto Rico Highway and Transportation Authority

Rhode Island

Rhode Island Department of Transportation

Texas

Fort Worth Transportation Authority North Central Texas Council of Governments

Utah

Utah Department of Transportation

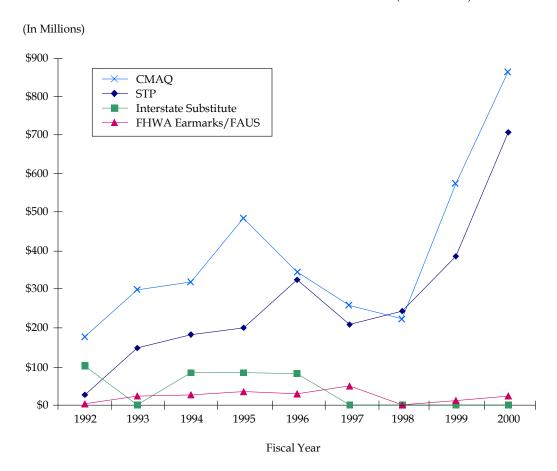
Vermont

Vermont Agency of Transportation

APPENDIX C

Supplementary Tables and Figure

FIGURE C-1
ANNUAL FUNDS FLEXED TO TRANSIT BY PROGRAM (\$ MILLIONS)



Source: Year by Year Summary of Flexible Funds Used for Transit, FTA Office of Program Management, U.S. Department of Transportation.

Notes: CMAQ = Congestion Mitigation and Air Quality; FAUS = Federal Aid Urban System; FHWA = Federal Highway Administration; FTA = Federal Transit Administration; STP = Surface Transportation Program.

TABLE C-1 TRANSFERABILITY PROVISIONS OF SELECT TITLE 23 HIGHWAY PROGRAMS

Program	Transferability Provisions							
Interstate Maintenance (IM) Program	 A state may transfer up to 50 percent of its IM apportionment to its NHS, STP, CMAQ, HBRRP, and/or Recreational Trails apportionments. State may transfer IM apportionment that is in excess of its needs to its NHS or STP apportionments with the approval of the Secretary. Transfers to the STP are not subject to the STP earmarking and subdivision requirements. 							
National Highway System (NHS)	 Up to 50 percent of a state's NHS apportionment may be transferred to its STP, IM, CMAQ, HBRRP, and/or Recreational Trails apportionment. Up to 100 percent may be transferred to the STP if approved by the Secretary (sufficient notice and opportunity for public comment must be given). Transfers to the STP are not subject to the STP earmarking and subdivision requirements. 							
Surface Transportation Program (STP) Transportation enhancements set-aside	 Up to 25 percent of the difference between the amount set aside for Transportation Enhancements for the fiscal year and the amount set aside for Transportation Enhancements for FY 1997 may be transferred to the IM, CMAQ, NHS, HBRRP, and/or Recreational Trails apportionment. 							
Safety set-aside	 Safety set-aside funds equivalent to the funds made available for FY 1991 for the Hazard Elimination and Railway–Highway Crossing may not be transferred. Up to 25 percent of the difference between the remainder of the safety set-aside for the fiscal year (the "optional safety funds") and the comparable amount for FY 1997 may be transferred to the IM, CMAQ, NHS, HBRRP, and/or Recreational Trails apportionment. 							
Suballocation to areas	• STP funds allocated to sub-state areas (areas with population of 200,000 or fewer, urbanized areas with population of more than 200,000) may not be transferred.							
Highway Bridge Replacement and Rehabilitation Program (HBRRP)	 A state may transfer up to 50 percent of its HBRRP apportionment to its IM, NHS, STP, CMAQ, and/or Recreational Trails apportionments. Funds set aside for off-system bridges may not be transferred unless a determination is made that the state has inadequate needs to justify the expenditure of the full amount of the set-aside funds. Transfers to the STP are not subject to the STP earmarking and subdivision requirements. 							
Congestion Mitigation and Air Quality (CMAQ) Program	 A state may transfer up to 50 percent of the amount by which the apportionment for the fiscal year exceeds the amount the state would have been apportioned if the program had been funded at \$1.35 billion annually to its STP, NHS, IM, HBRRP, and/or Recreational Trails apportionments, although transferred funds may only be used in non-attainment and maintenance areas. Transfers to the STP are not subject to the STP earmarking and subdivision requirements. 							

Source: Financing Federal-Aid Highways, Publication FHWA-PL-99-015, Federal Highway Administration Office of Legislation and Strategic Planning, U.S. Department of Transportation, August 1999.

Note: CMAQ = Congestion Mitigation and Air Quality; HBRRP = Highway Bridge Replacement and Rehabilitation Program; IM = Interstate Maintenance; NHS = National Highway System; STP = Surface Transportation Program.

TABLE C-2 FTA PROGRAMS RECEIVING FLEXED TITLE 23 FUNDS

	Flexible FHWA	FY 1992–1999		
FTA Program	Goals	Restrictions	Funds Used	Obligations
Urbanized Area Formula Program— Section 5307	To provide capital, operating, and planning assistance for mass transportation for urbanized areas.	Apportioned by formula based on population, population density, and other factors associated with transit service and ridership. For urbanized areas with populations of more than 200,000, funds go directly to recipient. For areas with fewer than 200,000, funds are apportioned to the governor of each state for distribution. Since FY 1998, one percent of set-aside requirement for transit enhancement projects that physically or functionally enhance transit service or use. Since FY 1998, preventive maintenance has been eligible (at an 80 percent federal share). Operating assistance is available only to urbanized areas with populations of fewer than 200,000.	CMAQ, STP, and Earmarks	Total = \$20 billion Flexed funds only = \$3.8 billion
Nonurbanized Formula Program— Section 5311	To enhance access of non- urbanized area residents to health care, employment, public services, and other amenities; to assist in the maintenance, development, improvement, and use of public transportation in rural and small urban areas; to coordinate programs and services; to assist in development and support for intercity bus transportation; to involve private providers in rural transportation.	Apportioned by formula based solely on the nonurbanized population of the states. Program funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies, and nonprofit organizations, and operators of public transportation services. No limitation on operating assistance. State must use 15 percent of apportionment to support intercity bus service. No more than 15 percent of apportionment may be used for state administration, planning, and technical assistance activities. Separate annual allocation to the state under Section 5311(h), the Rural Transit Assistance Program (RTAP), may be used only for training, technical assistance, research, and related support activities. Maximum federal share for capital and project administration is 80 percent (except for Americans with Disabilities Act, Clean Air Act, or bicycle access projects). The maximum FTA share for operating assistance is 50 percent of net operating costs.	CMAQ and STP	Total = \$1.2 billion Flexed funds only = \$131.3 million

TABLE C-2 (Continued)

FTA Program	Goals	Restrictions	Flexible FHWA Funds Used	FY 1992–1999 Obligations
Elderly and Persons with Disabilities Program— Section 5310	To assist private, nonprofit organizations in purchase of vehicles and related equipment to provide services to meet special needs of elderly and disabled persons.	Apportioned by formula based on the number of elderly persons and persons with disabilities in each state. Capital assistance provided on an 80 percent federal/20 percent local matching basis, except vehicle-related equipment needed to meet Americans with Disabilities Act and Clean Air Act Amendment requirements, which is fundable on a 90 percent federal/10 percent local matching basis. Those eligible to receive Section 5310 funding include private, nonprofit agencies; public bodies approved by the state to coordinate services for elderly persons and persons with disabilities; or public bodies that certify to the governor that no nonprofit corporations or associations are readily available in an area to provide the service.	STP	Total = \$478.6 million Flexed funds only = \$36.7 million

Sources: "Elderly and Persons with Disabilities Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/policy/prgms/eapwd.html [2001, May 21]. "Non-Urbanized Formula Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001

Notes: CMAQ = Congestion Mitigation and Air Quality; FHWA = Federal Highway Administration; FTA = Federal Transit Administration; STP = Surface Transportation Program.

[&]quot;Non-Urbanized Formula Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/policy/prgms/nuafg.html [2001, May 21].
"Urbanized Area Formula Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001

[&]quot;Urbanized Area Formula Grants," FTA Program Fact Sheets, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/policy/prgms/uafg.html [2001, May 21]. "Impact of Federal Funds on Major FTA Programs," 1999 Statistical Summaries, Federal Transit Administration, U.S. Department of Transportation, Washington,

[&]quot;Impact of Federal Funds on Major FTA Programs," 1999 Statistical Summaries, Federal Transit Administration, U.S. Department of Transportation, Washington, D.C., 2001 [Online]. Available: http://www.fta.dot.gov/library/reference/statsum00/t-85.html [2001, May 21].

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