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PUBLIC TRANSPORTATION IN THE U.S.: HISTORY AND CURRENT STATUS

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PUBLIC TRANSPORTATION IN THE U.S.: HISTORY AND CURRENT STATUS

Background

Development of mass transportation in the United States can be traced back as far as 1630 with the inception of chartered ferry and horse cart services in Boston, MA. In the early 1800s, urban stagecoaches were developed in New York City, Boston, Chicago and a number of other larger U.S. cities. Later in the 19th century rail-based, horse or cable drawn systems appeared in many cities. Early in the 20th century, modern subways began to appear, along with motor-powered buses. Also beginning toward the end of the 19th century, the private railroads operated intercity passenger trains and short-haul, suburban passenger services. In almost all cases, these urban transit systems were built and operated by private companies, sometimes under local public charter, and often in conjunction with real estate development objectives. In many cases, the suburban rail passenger services were adjuncts to private railroads that provided freight and intercity passenger services.

For the most part the early passenger systems were focused in the larger urban areas, as the process of urbanization had not yet begun. This began to change rapidly in the 20th century, as Figure One shows. Between 1900 and 1940, the percent of the population in urban areas rose from under 40 percent to nearly 57 percent. During the period prior to WWII, however, private automobile ownership was confined to the relatively wealthy, and the highway system was underdeveloped. Intercity air travel was essentially non-existent, as Table One shows. Although the financial health of the private mass transit systems was slowly eroding, the slow pace of development of competitors permitted the private systems to survive until the end of World War II.¹

The end of World War II saw the unleashing of a number of powerful forces. First, as Figure One shows, the pace of urbanization continued, with the urban population rising from 64 percent in 1950 to over 80 percent today. Second, the end of wartime rationing meant that people could buy gasoline and, more important, automobiles. This, in combination with the inception of a major highway building program (particularly the Interstate Highway program in 1957), launched the American “love affair” with the automobile, with major implications for urban design and population density as well as the use of buses and railways for passenger transport.² Third, the advent of a major federal airport and airway building program in parallel with the introduction of highly efficient jet aircraft (the Boeing 707 followed by the 727 and later models) had the effect of shifting most long haul intercity passenger transport to airlines from rail and bus. Finally, the rapid growth in personal income (U.S. GDP/Capita increased by an average of over 6%

¹ In fact, the rationing imposed during World War II severely limited the use of private automobiles and air transport, which had the effect of strengthening public transport during the war: but, it also created a pent-up demand that exploded after the war.

² This note will not discuss the equally significant impact of the highway program on highway and rail **freight** transport.

annually in nominal terms from 1960 to 2005) further accelerated the shift toward personal automobile transport or to higher speed air transport.

In broad terms, the decades after World War II saw an undermining of the old model whereby the private sector was able to provide mass public transport without significant public support. The change in urban structures where most of the urbanization was taking place strongly favored the automobile rather than bus, tram or rail, as did the rapid growth in automobile ownership and the low price of gasoline. The rapid weakening of the rail share in intercity passenger transport (combined with a weakening of the railway share in freight) undermined the ability of the private railways to provide suburban passenger transport. The net result was the collapse of the old model of private ownership and operation of urban systems to be replaced by much greater involvement of the public sector in planning, management and financing.

It will be important in understanding U.S. policy today to keep this history in mind. The “love affair” with the automobile is even now not yet over, and most Americans have not really given up the idea of owning a house in the suburbs while driving large automobiles using cheap gasoline. Moreover, while the overall population of the U.S. is ever more urbanized, most “urban” residents actually live and work in suburbs, and political power in the U.S. Senate is still heavily influenced by rural states: half the votes in the Senate are controlled by the 20 percent of the population that lives in relatively rural states, so there is a tension between those in the urban areas that might favor mass transport, and political power in the Senate that does not feel the same pressures. In fact, the public transport system in the U.S. only carries about 3 percent of passenger travel, rising perhaps to 5 percent of travel is restricted to urban areas. Of course, the public transport share in large urban cores can be as high as 40 percent or more in Central Business Districts (CBD) such as New York, Chicago, San Francisco, Boston, Seattle, Washington, D.C., and Philadelphia.

A Physical Description of the U.S. Mass Transportation System

The U.S. currently has a population of around 300 million people, distributed over 50 states and the District of Columbia. There are slightly over 375 metropolitan areas with more than 50,000 people, and over 50 metropolitan areas with more than 1,000,000 people. As of 2006, there were 1,500 mass transit agencies operating buses, 22 operating commuter rail services, 5,960 operating “demand response” or paratransit services, 15 heavy rail (subway) systems, and 29 agencies operating light rail systems (trams and trolleys). In addition there is also a diverse set of other services, including aerial tramways, cable cars, inclined plane, monorails, etc. In total, there are 6,429 agencies employing over 366,000 people, mostly in bus operations.³

Tables Two, Three and Four provide a physical and financial profile of the transit systems in the U.S. Table Two focuses on a long period history of passengers and passenger-miles during the 20th century. Table Two is also displayed in Figure Two to show the large-scale eras in the development of mass transit in the U.S. The periods discussed above show clearly in the passenger totals during the century. Taken together, Table One and Figure Two , highlight the early development of mass transport, followed by near-collapse after World War II, and then the ensuing gradual recovery after public policy began to adapt to the need for public involvement. In accord with industry definitions, transit operations are broken down by “mode,” where the

³ See APTA 2007 for an excellent compendium of information on mass transit facts in the U.S.

modes include bus, commuter rail, paratransit (sometimes called “demand response” denoting services where the service is provided in response to request, usually for handicapped or elderly users), heavy rail (subways), light rail (trams and rail trolleys), trolley bus, and “other.”

Table Three provides a picture of the operating employment and labor cost (wages plus benefits) for the segments of the industry from 1970 (in some cases 1984) until 2005 in order to show the development of the industry. Table Four provides operational and some financial information for the largest agencies in each of the modal areas.⁴

There are a number of observations that can be made from these industry profiles. First, as Figure Three shows, buses dominate the passenger (59.6%) and passenger-mile outputs (43.9%), followed by heavy rail (28.6% of passengers and 29% of passenger-miles). Commuter rail is in third place: it carries only 4.3% of passengers, but over much longer distances, so its share of passenger-miles is 19.1 percent. All of the other modes taken together amount to only 7.5% of passengers and 7.9% of passenger-miles. Second, as Table Four shows, the major transit agencies tend to cover only a limited percentage of their operating costs from passenger fares: the averages are 28.4% for buses, 47.2% for commuter rail, 58.4% for heavy rail, and 25.4% for light rail. If capital costs are included, the percentages would be significantly lower.⁵ The need for public support (at least at current operating cost and fare structures) is starkly clear, highlighting the reason why purely private provision failed rapidly after World War II as competition from automobiles emerged.

Evolution of the Public Role

As Figure 2 shows, public passenger transit in the U.S. began a long but rapid slide after the war years. From the all-time peak in 1946 (23.4 billion passengers), ridership had fallen by almost two-thirds in 1963 (to 8.4 billion). This trend showed that the post-war policy of allowing the local authorities to deal with what was then seen as a local problem – the collapse of the formerly private operators and the need for public involvement – was not working. After considerable debate, the U.S. Congress first acted in 1961, with the passage of the “Housing Act of 1961,” which provided minor amounts of funding, including loans, for public transport demonstrations. It is worthwhile mentioning that at this point the program had emerged as a **housing** program, as there was no mechanism to manage it as a broader urban development issue or as a transportation issue.

In 1964, the “Urban Mass Transportation Act of 1964” established a broader transit aid program within the Housing and Home Finance Agency. Though the funding was minimal, the legislation did establish a nascent program of loans and grants for capital projects as well as protections for affected transit employees. The legislative findings included a statement that “the welfare and vitality of urban areas, the satisfactory movement of people and goods within such areas, and the effectiveness of housing, urban renewal, highway, and other federally aided programs

⁴ Paratransit is not profiled because the wide variety of services provided makes the numbers essential non-comparable.

⁵ Capital costs are variable from year-to-year, so no useful inferences can be drawn from a single year’s data. The averages for all agencies in 2005 might furnish a more useful indication of typical experience. The average ratio of capital expense to operating expense in 2005 was: buses 19.4%; commuter rail 67.9%; heavy rail 54.5%; and, light rail 177%.

were being jeopardized by the deterioration or inadequate provision of urban transportation facilities and services...”⁶ By this finding, the Congress had explicitly (albeit belatedly) established that individual urban transport problems, though not in themselves national problems, were, when taken together, a threat to national economic and social development. To this was added the conclusion that urban transport failures could threaten the success of well-established federal programs such as highway planning and construction. On this base – that urban transport issues are, when taken together, a **national** issue – the Government has slowly built all that has followed.

The full legislative history of urban transport in the U.S. is complex, and the details are not significant for the purposes of this paper. A short listing of highlights is provided below to show the stages of development of policy and funding, and to establish the basis for the legislative names and acronyms that are so important in understanding the terminology of American discussions of urban transport.

- In 1965, the Department of Housing and Urban Development (HUD) was formed, including the existing urban transport programs and in 1966, funding authority was increased.
- In 1968, the transit programs of HUD were transferred to the newly formed Department of Transportation (DOT). In order to manage these programs, the Urban Mass Transit Administration (UMTA) was formed. This is the point at which urban transport began to be seen primarily as a transportation problem though, of course, urban development implications were not ignored.
- In 1969 and again in 1970, authorized funding levels were increased. In addition, urban transit projects were subjected to the same environmental requirements as other federal programs.
- In 1973, the “Federal-Aid Highway Act of 1973” increased the federally funded portion of capital projects from two-thirds to 80%, and authorized the use of federal highway funds for qualifying public transportation projects.
- In 1974, authorizations for discretionary (that is, program decisions were made under the authority of the UMTA Administrator) capital spending were increased, and a formula program was created to allocate some spending directly to urban areas.
- In 1975, elderly and handicapped persons were given the same rights as all other persons to utilize mass transportation facilities. This had an extremely significant impact on design of urban transport facilities, requiring expensive elevators and escalators, and establishing the basis for paratransit programs. This requirement was strengthened in 1990 when the access requirements were made mandatory for all facilities, and not just for newly designed facilities.
- In 1978, the formula grant program was divided into a number of categories including: capital grants for bus purchase; new starts (which includes both entirely new capital programs and significant expansions in existing systems); and, fixed guideway modernization. A formula program was also added to fund rural passenger transport outside the urbanized areas.
- In 1982, a 5 cent/gallon increase in the motor fuel tax was implemented, of which one cent was placed into a Mass Transit Account for capital projects. In addition, the share of

⁶ See APTA, 2007, pg 1 for the source of the quotation. This discussion of legislative history is the basis for the discussion below as well.

spending by formula (as opposed to discretionary) spending was increased and requirements to collect and report public transport data were added.

- In 1984, employers were allowed to pay up to \$15.00/month to employees tax-free to encourage use of public transit. This was subsequently increased to \$60.00/ month in 1992. In 1998, employers were given the right to purchase public transportation passes with pre-tax dollars and give them to employees as tax free benefits
- In 1987, the one-cent per gallon tax contributed to the Mass Transit Account in the Highway Trust Fund was increased to 1.5 cents. This contribution was subsequently increased to 2 cents in 1993 and to 2.86 cents in 1997. In rough terms, each one cent per gallon tax on motor fuels generates about US\$1.5 billion. The funding developed by these taxes provides almost all of the support for the federal role.
- The “Intermodal Surface Transportation Efficiency Act of 1991,” was enacted. This Act, called ISTEA (often pronounced “Ice Tea”) made a number of changes in transportation law. On the urban side, it increased authorization amounts, changed UMTA’s name to the “Federal Transit Administration” (FTA), and further extended the application of capital funds by formula rather than discretion. The Act also made the use of certain Highway Trust Fund accounts more flexible as between public transportation and highway projects.
- The “Transportation Equity Act for the 21st Century” (TEA 21) was passed in 1998. TEA 21 increased public transport funding by 70% (to \$41 billion over the 6 year period 1998-2004) and expanded the flexibility of use of funds.
- The “Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users” (SAFETEA-LU) was enacted in 2005. This Act provided for \$52.6 billion over the 6 year period 2004 through 2009. In addition, it added some new program definitions and (Small Transit Intensive Cities), and created a number of new programs, including: transit on Indian reservations; expanded transport for persons with disabilities; a Small Starts program for smaller projects that might be neglected within the overall funding program; additional analysis of alternatives; and programs for transportation within Public Lands and National Parks. In addition, expenses for intercity bus and rail stations, crime prevention and mobility management were made eligible for funding.

The overall development of the federal role, though complex in its details, is clear. First, from the inception of urban transport programs, funding levels have been continually increased as the importance of urban transport as a national priority has been accepted. Second, the interchangeability of public transport and highways for urban passenger transport has slowly been accepted, leading to a certain degree of funding flexibility within the Highway Trust Fund. This was not achieved easily, since highway interests zealously guarded “their” trust fund and did their best to repel other users. Resistance continues, partly because of the traditional competition between public transport and automobile transport, and (probably more important) partly because political tax aversion in the U.S. has frozen motor fuel taxes at levels that are clearly inadequate to take care of highway maintenance and construction, much less finance growing urban transport projects. Third, as the federal role has grown, it has expanded into a number of purposes that were not foreseen at the beginning. Today, essentially every aspect of urban transport is an eligible part of the programs, and nearly every funding requirement of an urban operator – capital as well as maintenance and planning expenses -- can be met at least to some degree. Moreover, programs focus not just on the average urban user, but also attempt to make the systems fully accessible and useable by persons with physical disabilities and by the elderly.

With this acknowledged, the development of the program has been, and remains, subject to a number of conflicting forces. As discussed, the “love affair” with the automobile has not really abated. Rising fuel prices may eventually encourage the use of smaller automobiles; but, federal programs that attempted to mandate better fuel economy (the CAFE standards) have not been successful because of resistance from the automobile companies who have created a market for SUVs and high performance autos. Rising fuel prices may also cause people to drive less, especially if programs to reduce CO2 emissions are implemented (but the Bush Administration has resisted such programs). Differences between urban and rural priorities will continue to shape, and limit, the ability of the Federal Government to finance urban transport and, of course, budget deficits and tax aversion will ultimately limit the ability of governments at all levels to finance any transport investment or operating support in the face of higher political priorities.

As suggested, the initial urban transport program has morphed into a complex set of programs that are difficult to simplify. Tables 5 and 6 summarize the ten funding categories that exist as of today, along with a description of the recipients, eligible expenditures, apportionment methods and the matching ratios as between federal and non-federal agencies. In looking at the program structure, it would be a mistake to analyze the funding and allocation formulae under the assumption that there is a precise or scientific rationale. The use of population, area, route miles, and passengers, among others, does provide some basis for allocating funding: at the same time, it is important to recognize that the formulae reflect a lot of political tugging and hauling between urban and rural states, and between and among states that are growing versus those that have large, but stable urban populations. As a result, the formulae are at least as much a result of political compromise as they are a scientific basis for putting funding where it is really needed.

Table Seven provides a complete history of UMTA/FTA funding by program area and Figure Four displays the trend in total funding over time. Table Seven includes the current programs as well as a number of programs that have been superseded. A total of \$157.9 billion has been spent on urban programs since the inception of the program in 1964. Of this, about 79 percent has been spent in the Capital and Urban Area Formula (UAF) programs. Capital and UAF programs now consume 83.6% of the current annual program. As will be discussed in more detail later, FTA spends about \$189.8 million annually on research and planning, of which \$163.5 million are spent on planning organizations, data connection and reporting and research: an additional \$26.1 million is spent on clean fuel and over-the-road bus research.

The upward trend in the program, at least over the last 20 years, is striking, with compound annual growth in total funding since 1990 of 6.6%. Over the same period, funding for capital has increased by 8.4% compounded annually, UAF spending has increased at 4.8% and the non-urban area formula (though much smaller than the UAF) has been growing at 10.8% annually.

Navigating the Process

It is important to emphasize that the mass transit program in the U.S. is a partnership among the Federal Government, 50 state, and hundreds of local agencies. One facet of the nature of this partnership appears in Table Eight , which shows the funding provided at the federal, state and local levels for transit, highways and air transport. The relative levels of spending and of the balance among the partners can be seen more clearly in Figures Five and Six , showing first

that spending on highways dominates other modes (no surprise). What may be surprising is also shown in Figure Six : that the relative balance among the sources of funding is different, with state funding dominating in highways, and local funding dominating in transit and air (because of airport construction and maintenance). In fact, the federal role is not dominant in any of the modes, and is one-third or less in transit and highways. The Federal Government does play a leader's role in policy formulation and system planning, but it is only one of the players in detailed planning and in construction and operation.

The eight basic federal objectives in supporting transit are to:

- support the economic vitality of metropolitan areas;
- increase safety;
- increase security;
- increase accessibility for people and freight through the metropolitan area;
- protect and enhance the environment;
- promote energy conservation;
- improve quality of life and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- enhance the integration and connectivity of the transportation system; promote efficient system management and operation; and,
- emphasize the preservation of the existing transportation system.

In broad terms, the U.S. Department has a matrix organization. At the top of the DOT is the Secretary of Transportation. There are a series of staff Assistant Secretaries (General Counsel, Policy Development, Aviation and International Affairs, Budget and Programs, Governmental Affairs, Administration, and Inspector General). The operating arms of the DOT are the Administrations, which include: Federal Aviation Administration (FAA); Federal Highway Administration (FHWA); Federal Railroad Administration (FRA); National Highway Traffic Safety Administration (NHTSA); Federal Transit Administration (FTA); St Lawrence Seaway Development Corporation (SLSDC); Maritime Administration (MARAD); Research and Innovative Technology Administration (RITA); Pipeline and Hazardous Materials Safety Administration; and, Federal Motor Carrier Safety Administration. Of these, the FTA has direct responsibility for transit, although there are many areas in which the FTA and the FHWA work closely together.

The FTA currently has a total staff of about 500 people at its headquarters in Washington and in its 10 regional program offices. Along with its core office at the U.S. Department of Transportation headquarters, FTA has 10 Regional Offices and five metropolitan offices to provide additional support in the five largest metro areas (New York City, Philadelphia, Washington, DC, Chicago, and Los Angeles). In addition, there is a Lower Manhattan Recovery Office specifically aimed at working with local officials in repairing the damage from the attacks on 9/11/2001.

FTA currently has an Administrator who reports directly to the Secretary of Transportation. The Administrator has a Deputy and a Chief Counsel, and has Associate Administrators for Communications and Congressional Affairs, Administration, Budget and Policy, Planning and Environment, Program Management, and Research.

The organizations that deal with FTA are extremely diverse. Essentially all state governments have formed state Departments of Transportation (usually based on the prior highway agencies): the state Secretary of Transportation reports directly to the Governor of the state. For those programs in which FTA deals with the state government (see Table Five under “Methods of Apportionment”), the state DOT is usually the point of contact. But, as Figure Six showed, the largest part of the transit program is actually funded by local governments and not by state governments. As a result, FTA also deals directly with the governing agencies of a large number of city or metropolitan level agencies.

It deserves emphasis also that essentially the entire burden for implementation of programs (construction and operation) falls to the local or state agency. FTA has quite detailed oversight and ex-post requirements to ensure that federal money is spent for the purposes intended; but, FTA’s role in the actual **management of implementation** is very limited.

Planning

The basis for the interface between FTA and the myriad of state and local agencies is the development of transport plans mandated as a condition for the receipt of federal funds. Each state is responsible for the planning process within its jurisdiction. The planning process produces two plans – a 20-year statewide transportation plan that covers the future vision for mobility in reaching the eight objectives enumerated above, while the four-year statewide transportation improvement program (STIP) is a shorter term document that lists the projects to be advanced by the state over the next four years with federal support. Only projects listed in the STIPs that are consistent with the 20-year plan may receive federal funding. STIPs apply to programs that are administered at the state level.

In parallel with state level planning are the Metropolitan Planning Organizations (MPO). The structure of the MPO is under the control of state and local officials in each metropolitan area. Members of an MPO typically include mayors, state representatives, regional officials and citizens groups, with a specific balance appropriate to the area’s needs. MPOs are necessarily diverse because of the great variation in local needs, from the full panoply of bus applications in communities of 50,000 - 200,000 people, to bus plus commuter rail, heavy rail and light rail in the very large cities such as Boston or New York City. The MPO in each urbanized area with population over 50,000 is required to develop a long range (20 year) transportation plan for their area supported by a shorter term (4 year) transportation improvement program (TIP). Projects must be included in the TIP and must be consistent with the long range plan to be eligible for federal funding.

More and more emphasis has been placed on planning as Table Seven shows. In FY 2007, over \$153 million of federal funding went to support the various local planning organizations, accompanied by about \$10.5 million to support research and collection of data. This constitutes a very deliberate federal effort to create a planning and analytical capability at the state and local levels because of the realization that the best place to deal with localized problems is at the level where they occur. There is, to be sure, a significant federal role in planning and in defending the interests of transit in competition with other federal priorities. Moreover, FTA makes a major effort to work with the MPOs, partly to provide ideas and expertise, and partly to coordinate local efforts with national and state policies and priorities. Organization at the regional level, along with the Metropolitan Offices makes direct communication with MPOs more

effective (and, as discussed later, it facilitates FTA oversight over construction and operation of the local systems).

From another perspective, planning at the local level is the essential counterpart of allocation by formula as is now the case with much of FTA funding. Formula allocation requires that local authorities be well prepared to use the money they receive, since instructions or controls at the federal level are much reduced: it is also possible that the federal authorities, and the Congress, would be reluctant to release funding without confidence that state and local authorities were prepared to use it well.

An equally important objective for the detailed planning process is FTA's desire not to be involved in the analysis of individual, detailed projects. The planning process is the basis for identifying general objectives and the STIPs and TIPs define the particular projects needed to meet those objectives. In the process of developing the STIPs and TIPs, the local and state authorities are responsible for ensuring that the specific projects are acceptable in advancing the long range plans. FTA generally looks to the local and state agencies to present only projects that meet the analytical standards. As discussed above, the analyses may meet up to eight different objectives, many of which cannot be objectively quantified, so a significant amount of judgment is always required.

Making a request for funds

FTA has made an effort to streamline the application process. Today, most applications are made on-line using FTA's **T**ransportation **E**lectronic **A**ward **M**anagement (TEAM) system. This is a password (available on request from FTA) protected website that uses a standardized format for grant requests. Applications can also be made on paper to FTA's Regional offices or to headquarters using a format provided by FTA. Requests must also be made for funding available at FTA's discretion (New Starts and Bus Capital – see Table Five) .

In general, applications must contain a detailed description of proposed projects in physical and operational terms along with a well-supported budget and implementation schedule. Because of past experience with project over-runs in budgets and schedules, and under-runs in projected demand, FTA's requirements for analytical documentation have been increasingly detailed and specific over time. Beyond this level, grant applications are usually quite voluminous because of the variation in FTA programs and as a result of generalized federal regulations dealing with documenting the applicant's conformance with: limitations on use of funds for lobbying; cash management procedures; labor protections and fair labor standards; civil rights; removal of architectural barriers to access by all; restrictions on partisan political activity; acquisition of property and relocation of inhabitants; energy conservation; safety and security; research safety protections; procurement procedures; domestic preferences; property ownership and management; and, oversight and audit. Each transit program has a specific Circular that provides details on how to meet program requirements,⁷ and there are also Circulars for the broader federal reporting requirements. The process is sufficiently complex that many agencies train employees in the information and techniques needed to meet application requirements.

⁷ The FTA website at <http://fta.dot.gov> provides a detailed listing of the Circulars by program. The FTA website is an excellent source of information about FTA and how to deal with its requirements.

Conditions for financing and Guidelines for project preparation and analysis

The overall conditions for obtaining financing for the various FTA programs are shown in Tables Five and Six . In many cases, especially in the formula programs, the financing process is relatively simple. The process for awarding the discretionary funding is a better example of a planning and evaluation process in which the FTA has a strong role.

The “New Starts” program is a good example. As discussed in Figure Five, the New Starts program is intended to fund new projects aimed at either creating new fixed guideway⁸ systems or aimed at adding significant capacity to an existing system. As such, a new start is almost certain to involve a significant impact on the local transportation system and is certain to be costly. Also, new starts programs are not awarded by formula, but are instead awarded at the discretion of FTA or the Congress.⁹

In the case of a new start project, for which the local agency wishes to obtain a “Full Funding Grant Agreement” (FFGA)¹⁰ the first step is to ensure that the 20-year long range plan calls for the new system or for the added capacity. Next, the project should be in the STIP, consistent with the long-range plan. At this point, a detailed planning and analysis process for the new start is triggered, as shown in Figure Seven , and proceeds through a number of steps:

- The System Planning and Alternatives Analysis stage refines the proposed project and define the alternatives to meet the goals of the long range plan.
- The MPO and local authorities select their “Locally Preferred Alternative” and develop their justification criteria and an initial Project Management Plan. At this point, FTA review and evaluation are requested.
- FTA then reviews the application and decides whether the project appears sufficiently promising to proceed to preliminary engineering in which more definitive project costs are developed, financial plans¹¹ are refined, and the requirements of the National Environmental Policy Act (NEPA) are met.
- Assuming the outcome of the preliminary engineering are reasonable and the financial plans are developed and NEPA requirements are met, FTA then decides whether to allow the project to proceed to final design. During final design non-federal funding has to be assured, construction plans developed, right of way acquired, and a data plan implemented for collecting before and after data (to analyze performance).
- If the project remains promising, FTA and the local agency enter negotiations for an FFGA and, if this is agreed, construction can proceed and can receive federal funding.

⁸ A “fixed guideway” can include a rail system, but can also include exclusive busways.

⁹ The process whereby the Congress designates a specific project for funding is called “earmarking.” Earmarking can cover a wide range of activities, from small, purely local investments in almost any area of investment (this is often called “Pork Barrel” or just “Pork”) to very large projects that are the subject of intense discussion and negotiation with the Executive Branch and within the Congress. In the case of FTA, most “discretionary” programs are in fact heavily earmarked; but, in the FTA area, Congress is usually (but not always) heavily influenced by FTA and MPO analysis in deciding what to earmark.

¹⁰ The FFGA is the instrument whereby FTA accepts the project and commits itself to providing the federal share over the life of the development of the project.

¹¹ See, for example, FTA June 2000 for detailed definition of the required financial plans.

The process of FTA evaluation is shown in Figure Eight . FTA looks at two overall questions: first, is the local financial and managerial commitment credible and within a reasonable share of the overall non-new starts funding; and, second is the project justifiable within the overall federal objectives for transit projects. In the past, the FTA used a three point rating scale: “low”, “medium” and “high.” In general (unless instructed otherwise by Congress), FTA did not accept projects rated “low” and accepted “medium” projects only after all “high” projects had been funded. Congress has recently (in SAFETEA-LU) instructed FTA to adopt a five-point rating scale: “low;” “medium low;” “medium;” “medium-high;” and “high.” The new rating should be in operation by the FY 2010 budget cycle. Given the inherent impact on the evaluation process of qualitative in addition to quantitative measures, it is not clear what added benefit the five-step process will bring.

FTA assembles the FFGA’s it has reviewed into an annual report to Congress on the proposed allocation of its discretionary funds for the next Fiscal Year. This report contains the FTA evaluation of proposed projects along with its recommendations as to those to be funded (and not funded). Congress then decides which programs to fund. The net result is a blend of economic, policy and political considerations. FTA believes that Congress assigns considerable weight to the FTA recommendations.

Ex-post reviews (and project histories)

FTA has had a long history of projects that exceeded their budget, cost more to operate than expected, or yielded less demand than projected (or, usually, all three). FTA conducted a number of more comprehensive analyses of this experience, beginning in 1990 (see Pickrell 1990), with a broader effort in 2003 (FTA September 2003) and continuing through its Contractor Performance Assessment Report (FTA September 2007). The conclusions of the Pickrell report – not surprising to those with experience in public projects – were not encouraging. Pickrell found, for example, that actual riders on the 10 projects he surveyed, were only 42% of the levels forecast when the project was accepted for funding. Pickrell also found that actual capital costs were consistently above original estimates and that operating costs were almost always optimistic. The reason for this result was simply that project proponents had strong incentives to make favorable projections and very few incentives to be honest or pessimistic.

Partly as a result of Pickrell’s results, FTA gradually attempted to strengthen its oversight of project forecasts at the outset and of performance during the project. The 2003 study concluded that capital costs were still being exceeded by an average of 20%. On the other hand, Operating and Maintenance Costs (O&M) were not being badly underestimated, though the exact comparison is difficult because of reductions in project scope during construction. Passenger ridership forecasts remain optimistic though only 15% or so below forecast levels.

Despite the improvements in project forecasting, Congress added a requirement in SAFETEA-LU that any future FFGAs would: provide detailed demand and cost forecasts; evaluate the consistency of the predicted and actual project characteristics and performance; and, identify the sources of differences between predicted and actual outcomes. This requirement is being

met by two annual reports to Congress: “Contractor¹² Performance Assessment Report” and “Before and After Studies of New Starts Projects” (both reports are FTA September 2007). Significantly, the collection and reporting of the data required for project performance analysis is now a basic requirement of the FFGA.

Problems and Future Directions of the FTA programs

The U.S. population continues to grow, and the process of urbanization continues. Construction of new highway capacity has slowed since the completion of the Interstate Highway program (roughly 1985). Airline traffic has recently begun to run into capacity constraints, both at airports and in the air traffic system. As a result, congestion on the U.S. roads and highways has continued to worsen, to the point that the average large urban area is losing an increasing amount of human productivity, and there is no prospect that new and major projects will alleviate the situation. Clearly the need for transit in urbanized areas of all sizes will continue to grow.

The future success of the FTA programs is likely to be dependent on three issues:

- The overall federal funding environment and the ability of transport (and transit) programs to compete for a share. The current outlook, as discussed above, is at best unclear, and may well be negative. The ordinary American has become increasingly opposed to taxes of any form, including (possibly especially) the fuel taxes that have formed the back bone of the federal and state transport funds generation for transport. Given the large U.S. federal deficit, either total funding will have to go down or taxes will have to go up or transit will have to acquire a priority higher than its competition if the needs for expanded transit are to be met, and all of these are problematic.
- The formula allocation programs are gradually gathering an increasing share of FTA funding. Given the emphasis on planning and on acquiring expertise at the local level, this is probably a positive development and should continue. For the most part, the formula programs meet a justifiable local need and the local authorities plan and administer them with reasonable effectiveness. In addition, local authorities are more directly accountable if either plans or implementation fails, and the need for a local share ensures local justification and focus.
- The “discretionary” programs, such as New Starts, may be more problematic, partly because such programs are inherently difficult to evaluate in a defensible and quantitative way, and a five point rating scheme is unlikely to resolve this problem. In addition, though, the U.S. Congress has shown an increasing tendency in all areas to engage in earmarking, bypassing the evaluation process and subjecting project choices to political tugging and hauling. Essentially all of FTA’s “discretionary” money is in fact earmarked (though, as discussed, the earmarking process may itself be influenced by FTA’s ratings and recommendations). To the extent that the earmarking process increasingly deviates from FTA recommendations and evaluations, the value and credibility of the discretionary programs will be decreased (though the funding might not).

¹² In this case, “contractor” refers to the local implementing agency, and not necessarily to a contractor doing work for the local agency.

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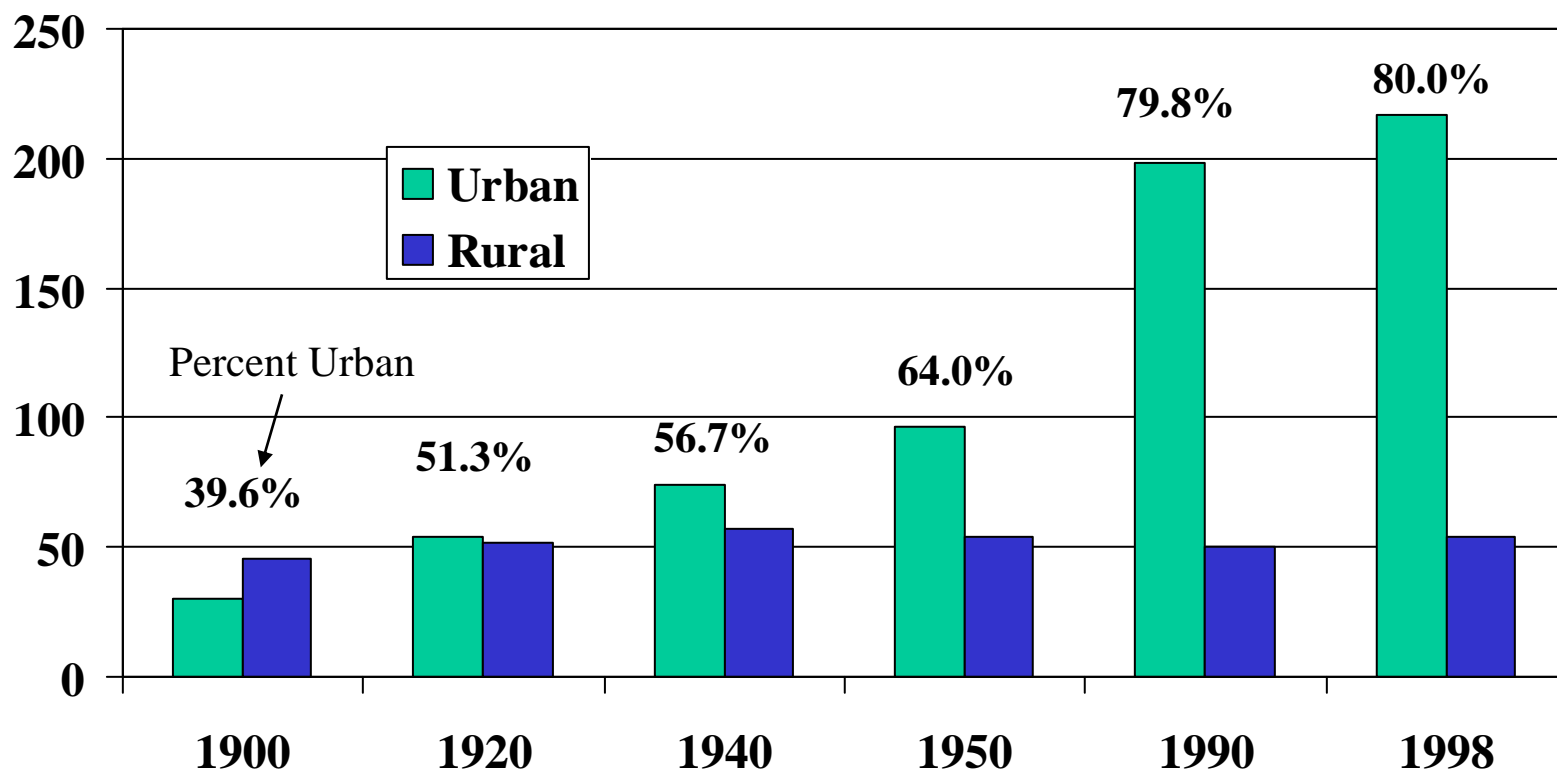
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Figure One

Urbanization in the U.S.

(population in millions)

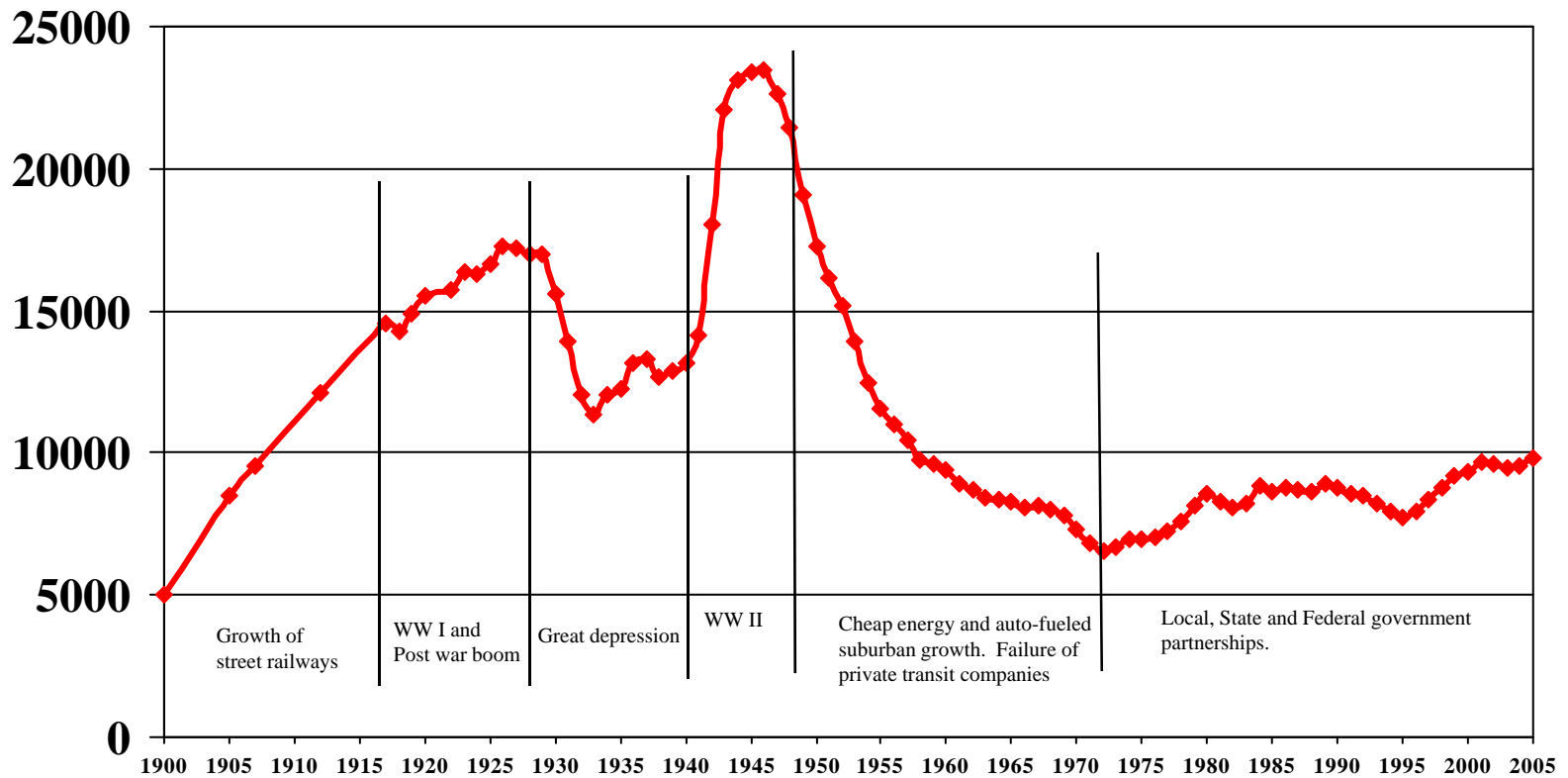


Sources: US Dept of Commerce, "Historical Statistics of the US: Colonial Times to 1957," Washington, DC, 1960
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Figure Two

Transit passengers in the U.S.

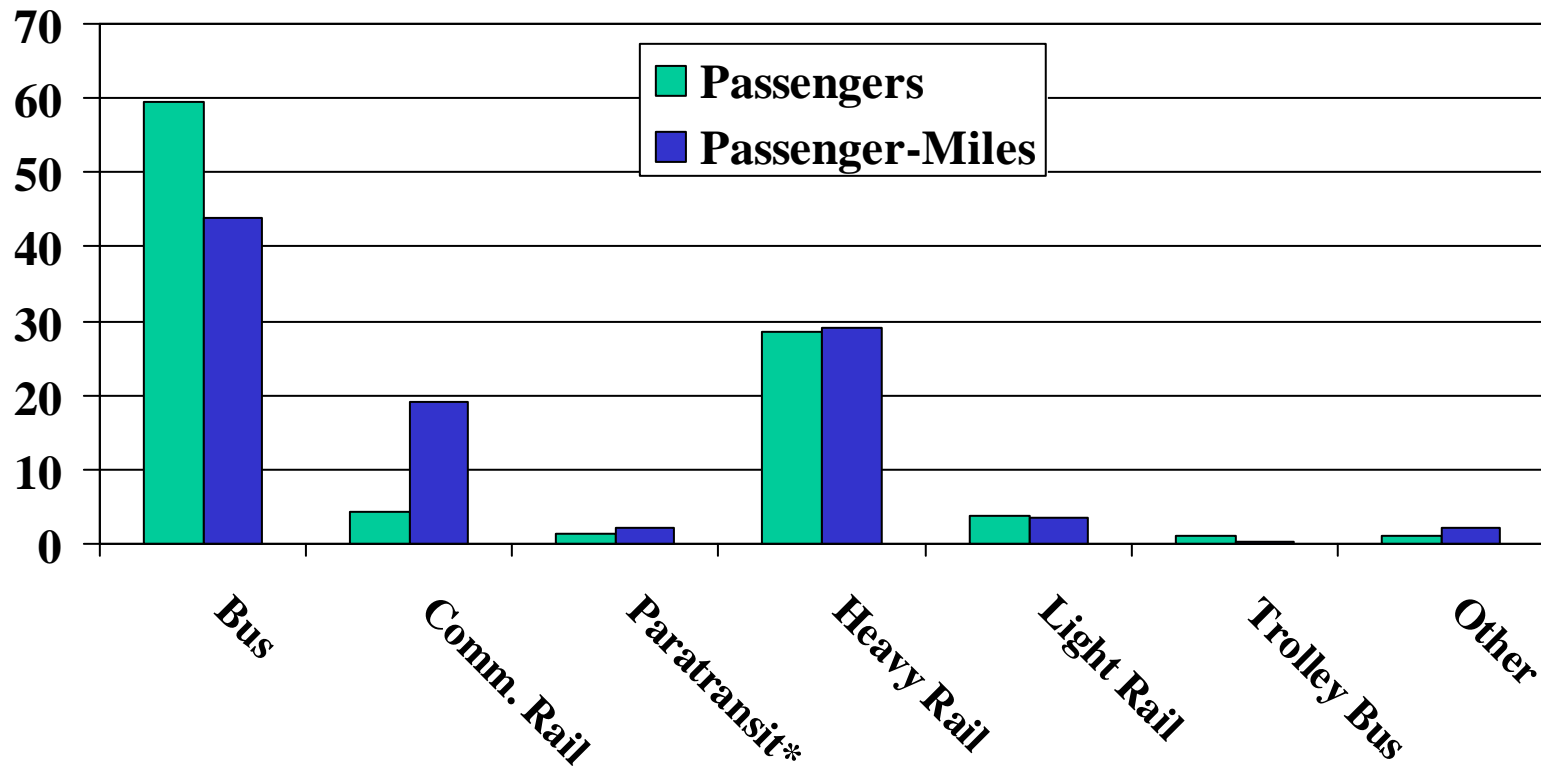
(000,000 passengers)



Source: Table Two and APTA 1997, pg 65

Figure Three

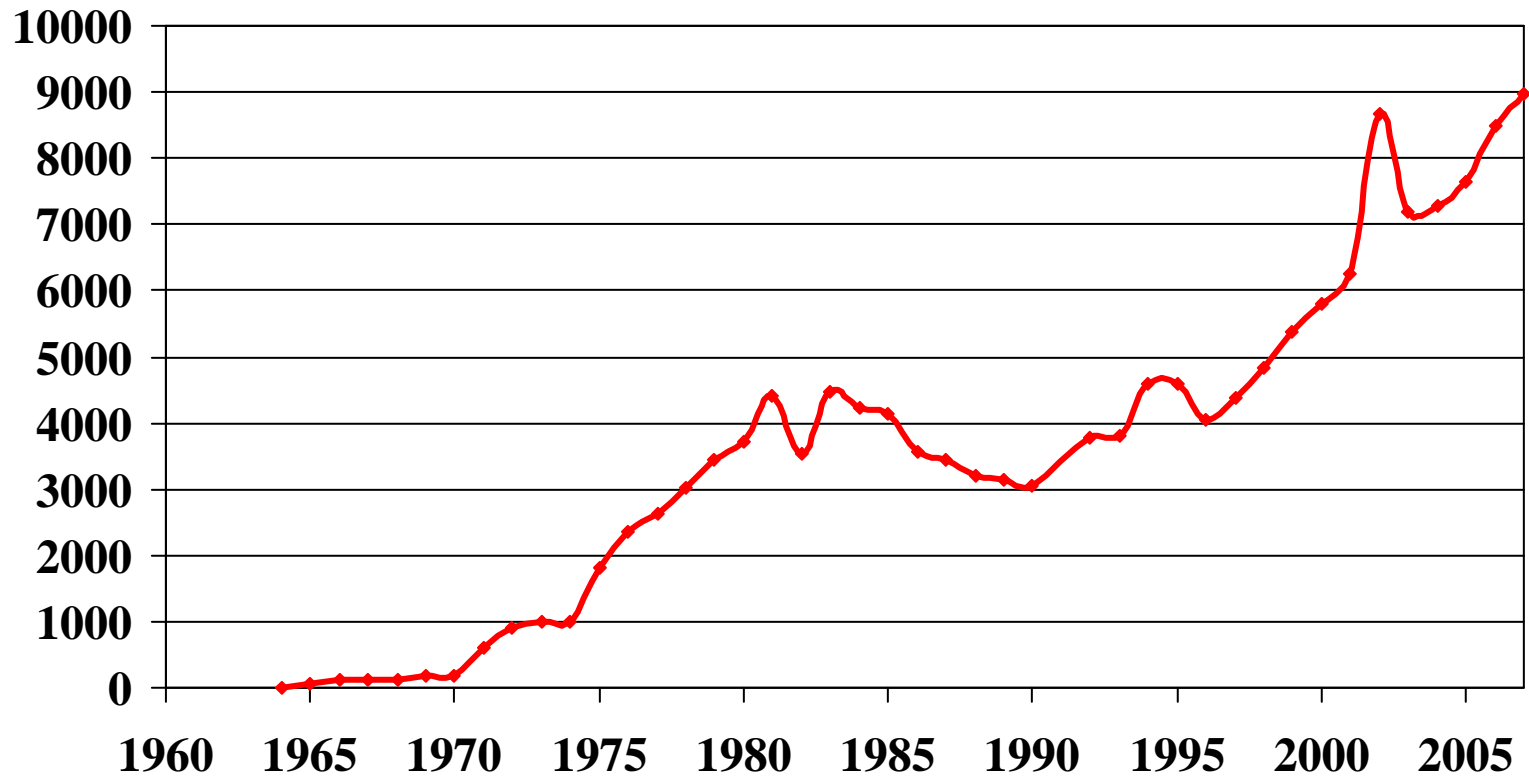
Percent of Passengers and Passenger-Miles in U.S. Transit By Mode (2005)



Source: Table Two

Figure Four

Trends in UMTA and FTA Appropriations (\$ millions)



Source: Table Seven

Figure Five

Transportation Spending in the U.S. in 2001 by Mode and Source

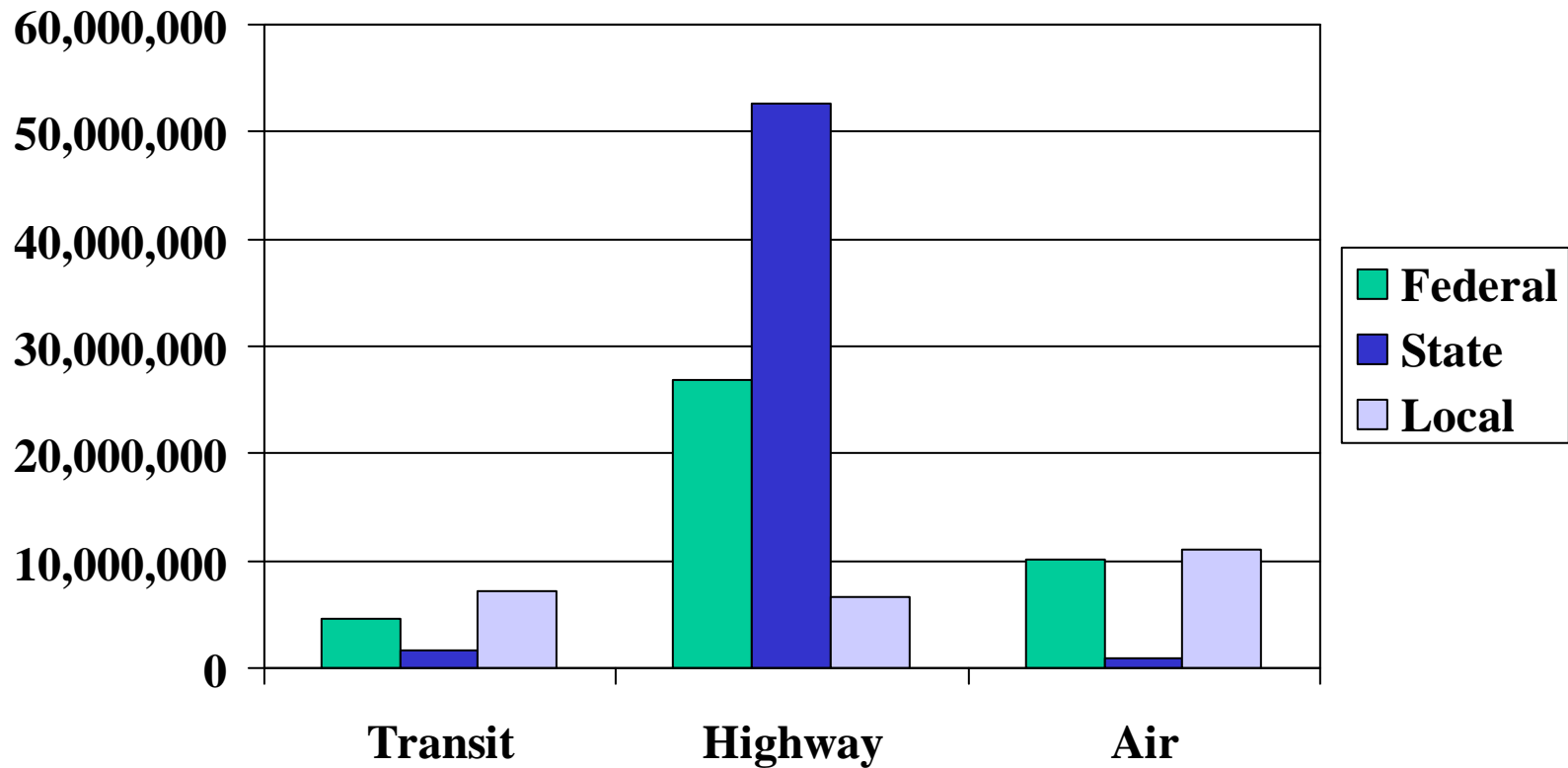
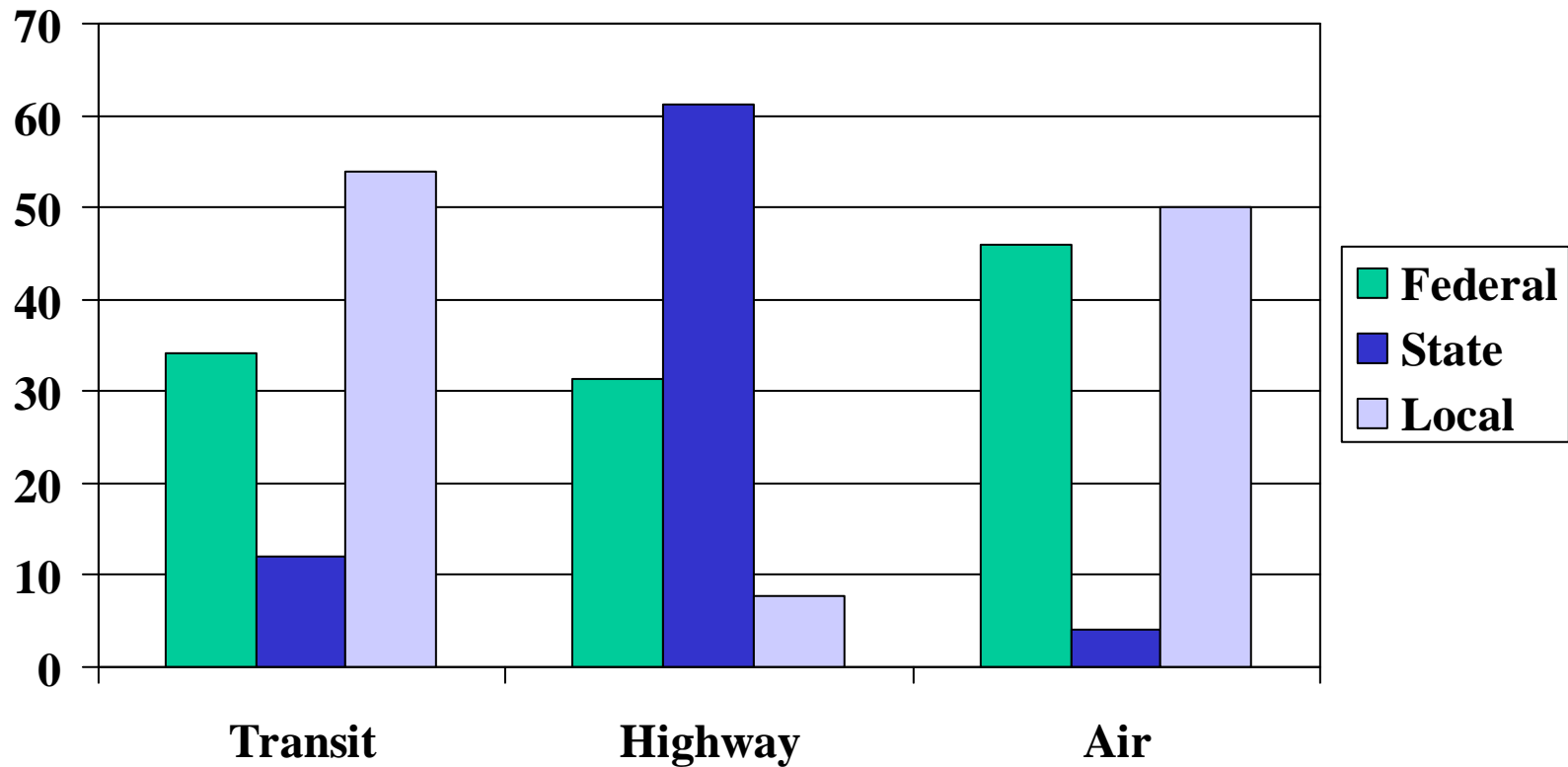


Figure Six

Federal, State and Local Shares (%) in Transport Finance

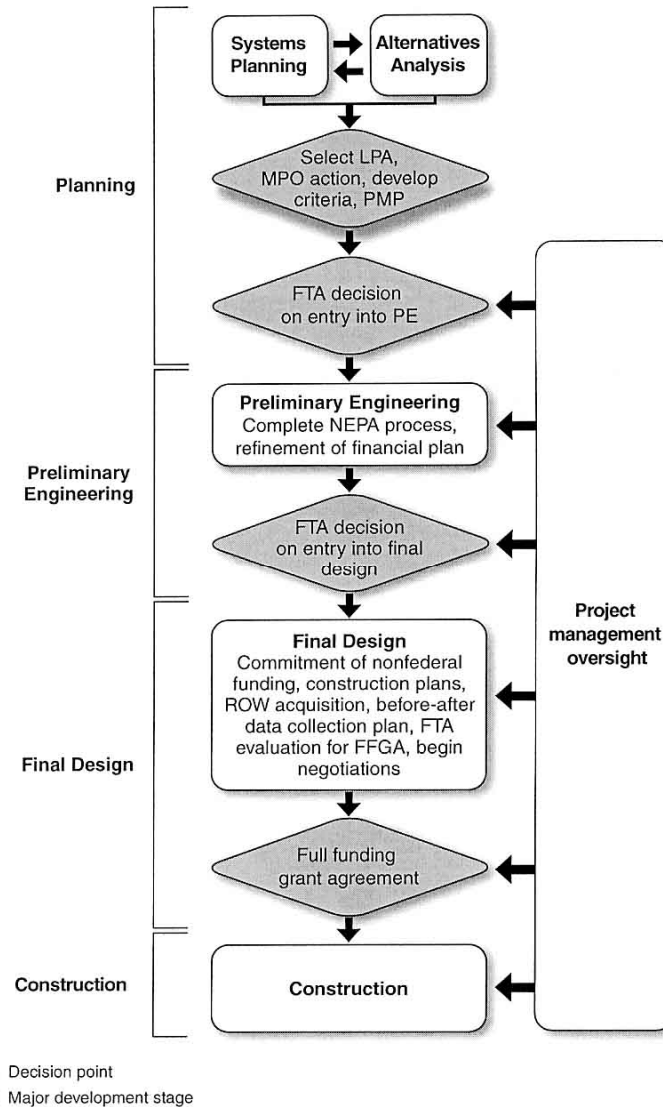


Source: Bureau of Transportation Statistics. Data are for 2001

Figure Seven

The FTA New Starts Process

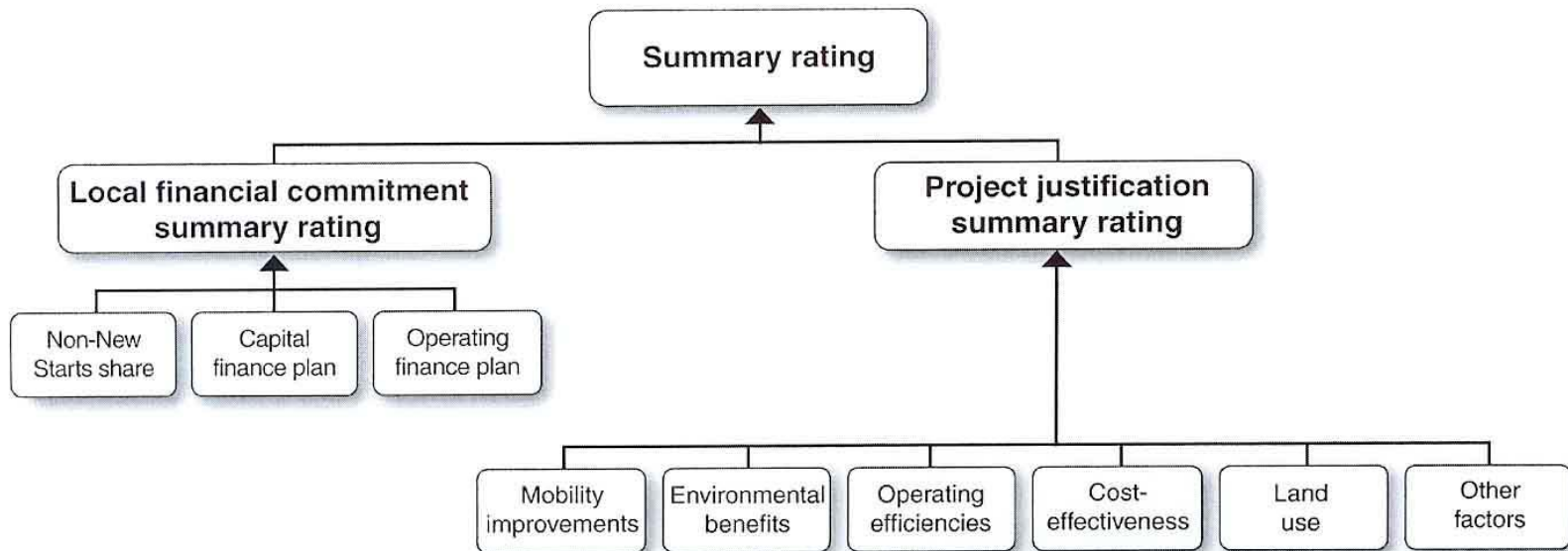
LPA=Locally Preferred alternative
 MPO=Metropolitan Planning Organization
 NEPA=National Environmental Policy Act
 PE=Preliminary Engineering
 PMP=Project Management Plans
 ROW=Right of Way
 FFGA=Full Funding Grant Agreement



Source: GAO, 2006, pg 7

Figure Eight

The FTA New Starts Evaluation Process



Source: GAO, 2006, pg 9

Table One

U.S. Passenger-Miles (Millions)

	1929	1939	1944	1950	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005
Air, total		683	2,178	10,072	33,399	57,626	117,542	147,400	219,068	290,136	358,873	414,688	531,329	583,689
Air carrier, cert., domestic, all		683	2,177	8,773	31,099	53,226	108,442	136,000	204,368	277,836	345,873	403,888	516,129	583,689
General aviation			1	1,299	2,300	4,400	9,100	11,400	14,700	12,300	13,000	10,800	15,200	U
Highway, total					1,291,405	1,555,237	2,067,302	2,404,954	2,680,910	3,012,953	3,561,209	3,868,070	4,390,076	4,884,557
Passenger car	275,000				1,144,673	1,394,803	1,750,897	1,954,166	2,011,989	2,094,621	2,281,391	2,286,887	2,544,457	2,670,145
Motorcycle							3,277	6,192	12,257	11,812	12,424	10,777	11,516	13,677
Other 2-axle 4-tire vehicle							225,613	363,267	520,774	688,091	999,754	1,256,146	1,467,664	1,836,988
Truck, single-unit 2-axle >=6-tire					98,551	128,769	27,081	34,606	39,813	45,441	51,901	62,705	70,500	79,174
Truck, combination					28,854	31,665	35,134	46,724	68,678	78,063	94,341	115,451	135,020	143,662
Bus	6,800	9,100	26,920	26,436	19,327	N	25,300	N	27,400	94,925	121,398	136,104	160,919	140,910
Transit, total					N	N	N	N	39,854	39,581	41,143	39,808	47,666	49,680
Motor bus					N	N	N	N	21,790	21,161	20,981	18,818	21,241	21,825
Light rail					N	N	N	N	381	350	571	860	1,356	1,700
Heavy rail					N	N	N	N	10,558	10,427	11,475	10,559	13,844	14,418
Trolley bus					N	N	N	N	219	306	193	187	192	173
Commuter rail					4,197	4,128	4,592	4,513	6,516	6,534	7,082	8,244	9,402	9,473
Paratransit (Demand resp.)					N	N	N	N	N	364	431	607	839	1,058
Ferry boat					N	N	N	N	i	i	286	260	330	394
Other					N	N	N	N	390	439	124	273	462	639
Rail														
Intercity / Amtrak	33,965	23,669	97,705	32,481	17,064	13,260	6,179	3,931	4,503	4,825	6,057	5,545	5,498	5,381

Source: U.S. Bureau of Transportation Statistics

N=no data

U=unavailable

Table Two

	Riders (000,000)							Passenger-Mi (000,000)								
	Bus	Commuter Rail	Paratransit*	Heavy Rail	Light Rail	Trolley Bus	Other	Total	Bus	Commuter Rail	Paratransit	Heavy Rail	Light Rail	Trolley Bus	Other	Total
1907		na		675	8,868			9,543								
1912		na		1,041	11,109			12,150								
1917		na		1,332	13,193			14,525								
1918		na		1,385	12,876			14,261								
1919		na		1,505	13,430			14,935								
1920		na		1,792	13,770			15,562								
1922	404	na		1,942	13,413			15,759								
1923	661	na		2,081	13,593			16,335								
1924	989	na		2,207	13,130			16,326								
1925	1,484	na		2,264	12,924			16,672								
1926	2,009	na		2,350	12,895			17,254								
1927	2,301	na		2,451	12,469			17,221								
1928	2,470	na		2,492	12,044	3		17,009								
1929	2,623	na		2,571	11,804	5		17,003								
1930	2,481	na		2,559	10,530	16		15,586								
1931	2,315	na		2,408	9,191	28		13,942								
1932	2,138	na		2,204	7,662	37		12,041								
1933	2,077	na		2,133	7,086	45		11,341								
1934	2,376	na		2,206	7,404	68		12,054								
1935	2,625	na		2,236	7,286	96		12,243								
1936	3,188	na		2,323	7,512	143		13,166								
1937	3,500	na		2,307	7,174	289		13,270								
1938	3,488	na		2,236	6,552	395		12,671								
1939	3,866	na		2,368	6,178	452		12,864								
1940	4,255	na		2,382	5,951	542		13,130								
1941	4,948	na		2,421	6,085	669		14,123								
1942	7,264	na		2,566	7,290	918		18,038								
1943	9,070	na		2,656	9,150	1,220		22,096								
1944	9,713	na		2,621	9,516	1,292		23,142								
1945	9,946	na		2,698	9,426	1,298		23,368								
1946	10,247	na		2,835	9,027	1,354		23,463								
1947	10,374	na		2,756	8,096	1,398		22,624								
1948	10,759	na		2,606	6,596	1,558		21,429								
1949	10,193	na		2,346	4,839	1,691		19,069								
1950	9,447	na		2,264	3,904	1,686		17,301								
1951	9,227	na		2,189	3,101	1,658		16,175								
1952	8,901	na		2,124	2,477	1,666		15,168								
1953	8,280	na		2,040	2,036	1,587		13,943								
1954	7,643	na		1,912	1,489	1,387		12,431								
1955	7,269	na		1,870	1,207	1,223		11,569								
1956	7,062	na		1,880	876	1,163		10,981								
1957	6,903	na		1,843	679	1,003		10,428								
1958	6,540	na		1,815	572	843		9,770								
1959	6,498	na		1,828	521	749		9,596								
1960	6,425	na		1,850	463	657		9,395								
1961	5,993	na		1,855	434	601		8,883								
1962	5,865	na		1,890	393	547		8,695								
1963	5,822	na		1,836	329	413		8,400								
1964	5,813	na		1,877	289	349		8,328								
1965	5,814	na		1,858	276	305		8,253								
1966	5,764	na		1,753	282	284		8,083								
1967	5,723	na		1,938	263	248		8,172								
1968	5,610	na		1,928	253	228		8,019								
1969	5,375	na		1,980	249	199		7,803								
1970	5,034	na		1,881	235	182		7,332								
1971	4,699	na		1,778	222	148		6,847								
1972	4,495	na		1,731	211	130		6,567								
1973	4,642	na		1,714	207	97		6,660								
1974	4,976	na		1,726	150	83		6,935								
1975	5,084	na		1,673	124	78		6,959								
1976	5,247	na		1,632	112	75		7,066								
1977	4,949	na		2,149	103	70		7,271								
1978	5,142	na		2,285	104	70		7,601								
1979	5,552	na		2,381	107	75		8,115								
1980	5,837	280		2,108	133	142	67	8,567								
1981	5,594	268		2,094	123	138	67	8,284								
1982	5,324	259		2,115	136	151	67	8,052								
1983	5,422	262		2,167	137	160	55	8,203								
1984	5,908	267	62	2,231	135	165	61	8,829								
1985	5,675	275	59	2,290	132	142	63	8,636								
1986	5,753	306	63	2,333	130	139	53	8,777								
1987	5,614	311	64	2,402	133	141	70	8,735								
1988	5,590	325	73	2,308	154	136	80	8,666								
1989	5,620	330	70	2,542	162	130	77	8,931								
1990	5,677	328	68	2,346	175	126	79	8,799								
1991	5,624	318	71	2,172	184	125	81	8,575								
1992	5,517	314	72	2,207	188	126	77	8,501								
1993	5,381	322	81	2,046	188	121	78	8,217								
1994	4,871	339	88	2,169	284	118	80	7,949								
1995	4,848	344	88	2,033	251	119	80	7,763								
1996	4,887	352	93	2,157	261	117	81	7,948								
1997	5,013	357	99	2,430	262	121	92	8,374								
1998	5,399	381	95	2,393	276	117	89	8,750								
1999	5,648	396	100	2,521	292	120	91	9,168								
2000	5,678	413	105	2,632	320	122	93	9,363								
2001	5,849	419	105	2,728	336	119	97	9,653								
2002	5,868	414	103	2,688	337	116	97	9,623								
2003	5,692	410	111	2,667	338	109	109	9,436								
2004	5,731	414	114	2,748	350	106	112	9,575								
2005	5,855	423	125	2,808	381	107	117	9,816								
	59.6	4.3	1.3	28.6	3.9	1.1	1.2	100.0								
									43.9	19.1	2.1	29.0	3.4	0.3	2.1	100.0

Slight definitional change in ridership numbers

20,708	6,213		10,330	392	234	390	38,267
21,393	6,492		10,760	407	204	390	39,646
21,790	6,516		10,558	381	219	390	39,854
21,012	6,236		10,244	346	254	390	38,482
19,987	6,027		10,049	379	295	387	37,124
20,047	6,097		10,350	391	325	392	37,602
21,595	6,207	349	10,111	416	364	382	39,424
21,161	6,534	364	10,427	350	306	439	39,581
21,395	6,723	402	10,649	361	305	369	40,204
20,970	6,818	374	11,198	405	223	360	40,348
20,753	6,964	441	11,300	477	211	434	40,580
20,768	7,211	428	12,030	509	199	458	41,603
20,981	7,082	431	11,475	571	193	410	41,143
21,090	7,344	454	10,528	662	195	430	40,703
20,336	7,320	495	10,737	701	199	453	40,241
20,247	6,940	562	10,231	705	188	511	39,384
18,832	7,996	577	10,668	833	187	492	39,585
18,818	8,244	607	10,559	860	187	533	39,808
19,096	8,351	656	11,530	957	184	604	41,378
19,604	8,038	754	12,056	1,035	189	663	42,339
20,360	8,704	735	12,284	1,128	182	735	44,128
21,205	8,766	813	12,902	1,206	186	779	45,857
21,241	9,402	839	13,844	1,356	192	792	47,666
22,022	9,548	855	14,178	1,437	187	843	49,070
21,841	9,504	853	13,663	1,432	188	843	48,324

Table Three

	Employment									Revenue Vehicles							
	Bus	Commuter Rail	Paratransit	Heavy Rail	Light Rail	Trolley Bus	Other	Non-operating	Total Empl.	Total Empl. Comp. (\$ millions)	Bus	Commuter Rail	Paratransit	Heavy Rail	Light Rail	Trolley Bus	Other
1970									138,040		49,700			9,286	1,262	1,050	
1975									159,800	2,849.3	50,811			9,556	1,061	703	
1976									162,950	3,085.4	52,382	4,490		9,662	963	685	
1977									162,510	3,360.3	51,968	4,392		9,587	992	645	
1978									165,400	3,704.6	52,866	4,525		9,515	944	593	
1979									177,900	4,115.4	54,490	4,402		9,470	959	725	
1980									187,000	4,634.0	59,411	4,500		9,641	1,013	823	
1981									191,600	5,142.6	60,393	4,465		9,749	1,075	751	
1982									193,500	5,487.9	62,114	4,497		9,815	1,016	763	
1983									194,960	5,898.6	62,093	4,423		9,891	1,013	686	
1984	154,326	21,884	23,798	47,047	3,242	2,012	3,100	7,788	263,197	8,204.5	67,294	4,075	14,164	9,083	733	664	888
1985	157,581	22,929	23,767	49,670	2,980	1,893	3,217	7,983	270,020	8,711.4	64,258	4,035	14,490	9,326	717	676	867
1986	165,839	22,414	20,664	51,028	3,511	2,140	3,512	7,502	276,610	9,591.0	66,218	4,440	15,346	10,386	697	680	942
1987	165,176	23,270	19,068	51,333	3,806	2,090	3,340	9,771	277,854	9,245.1	63,017	4,686	15,944	10,168	766	671	875
1988	165,407	23,188	21,391	46,212	3,922	2,039	3,323	10,101	275,583	10,203.9	62,572	4,649	16,815	10,539	831	710	1,096
1989	162,990	22,215	21,453	46,690	3,952	2,013	3,604	9,570	272,487	10,635.0	58,919	4,472	16,856	10,506	755	725	1,060
1990	162,189	21,443	22,740	46,102	4,066	1,925	3,711	10,663	272,839	11,212.3	58,714	4,415	16,471	10,419	913	832	1,197
1991	163,555	21,083	24,196	47,423	4,175	1,826	3,599	10,288	276,145	11,392.9	60,377	4,959	17,879	10,331	1,095	752	1,595
1992	163,387	21,151	25,863	47,493	3,849	1,691	3,668	11,893	278,995	11,989.1	63,080	5,008	20,685	10,245	1,058	907	1,853
1993	177,167	20,634	30,021	52,433	3,920	1,944	3,400	9,665	299,184	12,332.4	64,850	5,100	23,527	10,261	1,025	851	2,308
1994	174,373	22,596	36,450	51,062	5,140	1,848	3,618	9,207	304,294	12,675.5	68,123	5,126	28,729	10,138	1,054	877	2,505
1995	181,973	22,320	39,822	45,644	4,935	1,871	3,866	10,755	311,186	12,697.1	67,107	5,164	29,352	10,166	1,046	695	2,809
1996	191,152	22,604	44,667	45,793	5,728	2,084	3,916	10,682	326,626	12,839.0	71,678	5,240	30,804	10,243	1,114	675	2,996
1997	196,861	21,621	44,029	45,935	5,940	2,037	4,306	13,111	333,840	13,275.4	72,770	5,426	32,509	10,228	1,078	655	3,807
1998	198,644	22,488	48,406	45,163	6,024	2,053	4,974	10,963	338,715	14,054.8	72,142	5,536	29,646	10,296	1,076	646	4,706
1999	204,179	22,896	51,186	46,311	6,058	2,140	5,115	11,938	349,823	14,547.4	74,228	5,550	31,884	10,362	1,180	657	5,076
2000	211,095	23,518	52,021	47,087	6,572	2,223	5,325	11,753	359,594	15,813.1	75,013	5,498	33,080	10,311	1,327	652	5,360
2001	214,674	23,851	55,846	47,865	7,021	2,008	6,001	13,490	370,756	16,332.5	76,075	5,572	34,661	10,718	1,371	600	5,792
2002	214,825	24,391	56,746	48,464	7,598	2,027	6,671	13,048	373,770	17,444.3	76,190	5,724	34,699	10,849	1,448	616	5,581
2003	205,478	24,813	42,935	48,327	7,619	1,964	6,848	13,003	350,987	18,547.4	77,328	5,959	35,954	10,754	1,482	672	6,141
2004	212,122	25,296	43,642	47,211	8,184	1,928	7,488	12,774	358,645	20,659.4	81,033	6,228	37,078	10,858	1,622	597	6,406
2005	217,332	25,321	46,624	47,806	8,181	1,942	7,253	12,343	366,802	20,269.9	82,027	6,392	41,958	11,110	1,645	615	7,080

Source: APTA Transit Factbooks, various years

**Table Four
Largest Bus and Trolleybus Agencies in 2005**

Agency	Passengers (000)	Passenger-Miles (000)	Buses	Capital Expense (000)	Fare Revenue (000)	Operating Costs (000)	Avg. Fare	Ratio: Fare Revenue to Operating Costs
MTA NY City	952,418.0	1,951,117	4,512	215,902	761,838	1,798,313	0.39	0.424
Los Angeles County	377,268.4	1,407,304	2,673	299,940	233,028	775,904	0.17	0.300
Chicago CTA	303,244.2	781,978	2,041	76,814	247,646	724,054	0.32	0.342
Southeastern PA (SEPTA)	187,960.3	553,229	1,387	61,579	147,355	432,282	0.27	0.341
San Francisco MUNI*	163,149.5	300,419	836	22,814	80,805	305,782	0.27	0.264
New Jersey Transit	156,146.6	987,770	2,316	62,275	249,869	626,331	0.25	0.399
Washington DC WMATA	153,392.0	453,290	1,441	22,929	101,691	420,249	0.22	0.242
Boston MBTA*	138,556.8	270,504	1,146	160,648	61,156	282,881	0.23	0.216
King County (Seattle)*	94,608.4	458,626	1,336	65,326	75,144	344,646	0.16	0.218
Houston	81,546.9	474,575	1,400	143,087	47,137	263,411	0.10	0.179
Maryland MTA Baltimore	77,805.8	337,009	935	59,062	68,173	228,464	0.20	0.298
Miami-Dade	76,753.0	324,237	981	47,738	73,220	260,757	0.23	0.281
Denver	76,982.8	376,454	1,254	40,147	49,106	239,333	0.13	0.205
Atlanta (MARTA)	71,065.8	231,031	556	53,208	50,605	165,284	0.22	0.306
Tri-County Portland	68,764.8	245,065	656	3,428	37,559	200,999	0.15	0.187
Honolulu	67,406.8	291,110	525	8,925	39,925	127,069	0.14	0.314
Orange County CA (OCTA)	67,304.1	282,654	659	27,702	43,028	180,560	0.15	0.238
GTJC (NY City)	65,485.7		677		59,926	185,580		0.323
Alameda-Contra Costa CA	64,600.7	200,106	626	32,544	43,535	230,137	0.22	0.189
Minneapolis Metro	31,797.1	255,949	820	24,748	57,316	200,781	0.22	0.285
National Total (1500 agencies)	5,854,576.0	21,824,943.0	82,027	3,252,363.0	4,763,986.0	16,786,842.0	0.22	0.284

Note: there are four agencies operating trolley buses, three of which are starred above 0.193744779

221000 route miles total

Major Commuter Rail Agencies in 2005

Agency	Passengers (000)	Passenger-Miles	Vehicles	Capital Expense (000)	Fare Revenue (000)	Operating Costs (000)	Route Miles	Average Fare	Ratio: Fare Revenue to Operating Costs
Maryland Transit Admin.	6,884.1	209,155.1	153	22,062.6	28,949.5	68,203.4	400	0.138	0.424
Boston MBTA	367,890.2	755,587.5	460	105,169.4	98,790.0	219,670.1	702	0.131	0.450
Chicago Metra	68,591.0	1,548,276.6	1,172	343,240.1	198,493.9	477,855.0	940	0.128	0.415
Chicago NICTD	3,802.4	106,356.4	68	29,656.6	15,739.8	31,343.1	180	0.148	0.502
Dallas DART	1,324.7	15,343.7	36	5,009.3	1,036.1	18,990.1	29	0.068	0.055
Los Angeles SCRTD	10,693.3	359,938.2	188	34,945.9	47,807.9	110,729.2	778	0.133	0.432
Miami Tri-rail	2,800.4	84,532.2	30	110,301.8	6,089.4	31,002.8	142	0.072	0.196
New York Metro North	74,267.2	1,551,190.5	1,078	455,310.6	437,673.6	711,795.9	546	0.282	0.615
New York LIRR	95,519.0	1,925,735.6	1,158	710,829.0	442,300.3	944,483.7	638	0.230	0.468
New Jersey Transit	72,613.8	1,982,312.5	1,141	282,628.2	297,650.7	660,791.3	1,113	0.150	0.450
Philadelphia SEPTA	31,680.0	456,445.5	357	76,673.2	90,814.7	193,977.7	447	0.199	0.468
San Diego NCTD	1,432.5	40,139.5	35	4,393.6	5,774.1	15,441.9	82	0.144	0.374
San Francisco PCJPB	8,120.9	202,708.4	153	65,393.0	21,968.3	67,276.9	154	0.108	0.327
Seattle PGSRTA	1,268.0	31,876.8	69	70,727.3	3,052.9	20,983.1	147	0.096	0.145
Washington DC VRE	3,654.3	109,255.8	86	11,344.6	19,439.5	40,071.5	162	0.178	0.485
Total of all Commuter Rail (22 agencies)	423,061.0	9,472,946.0	6,392	2,488,261.0	1,727,941.0	3,663,176.0	na	0.182	0.472

Heavy Rail Agencies in 2005

Agency	Passengers (000)	Passenger-Miles	Vehicles	Capital Expense (000)	Fare Revenue (000)	Operating Costs (000)	Route Miles	Average Fare	Ratio: Fare Revenue to Operating Costs
Atlanta MARTA	70,984.1	481,149.5	336	120,851.0	42,744.9	132,993.2	96.1	0.089	0.321
Baltimore MTA	12,863.4	73,439.3	100	76,273.1	12,496.2	40,440.1	29.4	0.170	0.309
Boston MBTA	141,994.8	503,458.2	408	177,207.5	106,478.5	229,069.1	76.3	0.211	0.465
Chicago CTA	186,759.5	1,136,464.6	1,190	287,092.8	168,117.5	435,480.0	206.3	0.148	0.386
Cleveland GCRTA	7,472.9	49,849.2	60	9,601.3	4,389.3	23,186.8	38.1	0.088	0.189
Los Angeles LACMTA	36,272.6	173,934.8	104	29,911.9	16,298.5	76,372.9	31.9	0.094	0.213
Miami MDT	17,034.5	134,854.5	136	31,175.5	11,432.8	71,834.4	45.0	0.085	0.159
New York City NYCT	1,804,034.3	8,402,147.3	6202	1,896,497.4	1,856,977.9	2,717,451.1	493.8	0.221	0.683
New York City PATH	69,168.8	301,282.5	327	206,208.8	84,767.3	188,453.2	28.6	0.281	0.450
New York City SIRTOA	3,482.4	21,280.9	64	1,194.8	4,592.4	27,335.7	28.6	0.216	0.168
Philadelphia PATCO	9,362.8	80,676.9	121	6,178.1	19,092.8	35,695.0	31.5	0.237	0.535
Philadelphia SEPTA	88,045.7	391,912.2	369	148,292.7	72,423.8	138,855.4	74.9	0.185	0.522
San Francisco BART	99,296.0	1,255,541.0	669	114,511.5	233,110.1	411,858.1	209.0	0.186	0.566
San Juan Puerto Rico	2,182.7	10,602.8	74		599.1	42,856.0	20.6	0.057	0.014
Washington DC WMATA	259,430.1	1,401,105.2	950	210,820.9	373,329.8	572,873.4	211.8	0.266	0.652
Total of All Heavy Rail (15 agencies)	2,808,384.6	14,417,698.9	11,110	3,315,817.3	3,006,850.9	5,144,754.4	1,621.9	0.209	0.584

Major Light Rail Agencies in 2005

Agency	Passengers (000)	Passenger-Miles	Vehicles	Capital Expense (000)	Fare Revenue (000)	Operating Costs (000)	Route Miles	Average Fare	Ratio: Fare Revenue to Operating Costs
Baltimore MTA	5,195.7	28,740.5	53	62,385.6	4,743.5	36,314.1	57.6	0.165	0.131
Boston MBTA	73,792.6	180,581.3	186	63,145.6	53,622.5	113,530.4	51	0.297	0.472
Buffalo NY NFTA Metro	5,373.3	13,151.0	27	6,068.6	4,188.9	19,485.8	12.4	0.319	0.215
Dallas DART	17,487.1	128,323.3	95	116,729.2	8,433.9	69,275.6	87.7	0.066	0.122
Denver RTD	10,449.6	47,134.5	60	227,664.4	8,187.4	26,834.6	31.6	0.174	0.305
Houston Metro	10,233.6	25,566.0	18	33,303.1	1,962.2	14,101.7	14.8	0.077	0.139
Los Angeles LACMTA	37,790.3	268,981.3	121	237,004.3	19,912.8	126,122.8	109.7	0.074	0.158
Minneapolis Metro	7,901.7	53,728.6	23	3,007.5	7,060.7	16,664.3	24.4	0.131	0.424
NJ Transit	13,701.6	62,780.8	64	285,991.6	11,760.7	67,373.7	106.8	0.187	0.175
Philadelphia SEPTA	25,206.4	63,781.2	141	24,510.9	14,943.6	47,721.2	66.2	0.234	0.313
Pittsburgh Port Authority	7,047.1	29,585.5	68	92,654.3	6,108.0	39,492.0	47.4	0.206	0.155
Portland TriMet	34,755.1	178,499.1	115	35,931.7	23,249.4	67,590.4	94.1	0.130	0.344
Sacramento RT	12,008.6	60,682.4	76	60,412.7	8,656.1	40,840.9	58.4	0.143	0.212
Salt Lake City UTA	14,323.8	76,561.5	51	9,915.7	6,669.3	20,703.1	37.3	0.087	0.322
San Diego	29,334.4	187,988.0	95		25,855.2	47,960.1	96.6	0.138	0.539
San Francisco MUNI	46,803.2	121,027.9	181	99,623.6	23,180.8	108,118.2	72.9	0.192	0.214
San Jose VTA	6,780.4	32,289.8	100	106,713.9	5,863.1	47,899.0	70.8	0.182	0.122
St Louis METRO	15,648.2	117,724.6	71	204,211.0	10,955.1	42,173.7	75.8	0.093	0.260
National Totals (29 agencies)	380,535.2	1,699,583.8	1,645	1,729,759.3	248,673.7	978,074.9	1,188.1	0.146	0.254

Source: APTA Transit Factbooks, various years

**Table Five
Funding Provisions of the Federal Transit Act**

Provision	Recipients of Funds	Eligible Expenditures	Method of Apportionment	Matching Ratio*
Capital Investment, 49 USC 5309:				
"New Starts" (new fixed guideway systems of expansion of existing systems)	State or local public bodies and agencies	Capital projects only	At discretion of Congress or FTA if Congress does not specify	Maximum 80% Federal
"Rail Modernization" (modernization of existing rail systems)	State or local public bodies and agencies	Capital projects only	Formula basis to fixed guideway systems in operation for at least 7 years	Maximum 80% Federal
"Bus capital" (major bus construction or acquisition projects)	State or local public bodies and agencies	Capital projects only	At discretion of Congress or FTA if Congress does not specify	Maximum 80% Federal
Urbanized Area Formula (UAF) 49 USC 5307 and 5336				
Apportions operating and capital assistance on the basis of a number of formulas to urbanized areas.	Directly to urbanized area of > 200,000 population and through State Governors to urbanized areas of <200,000.	If >200,000 population: vehicle purchase, construction of facilities, rehabilitation of vehicles, preventative maintenance, some paratransit. If <200,000, can also cover operating expenses.	See Table Six for the 7 apportionment formulae.	Maximum 50% Federal for operating assistance, maximum 80% Federal for capital assistance
Elderly and Disabled Persons 49USC 5310				
Funding for access for elderly and disabled persons	Private, non-profit corporations and associations providing transport, or for public bodies coordinating such service	Capital equipment and cost of leased or contracted services	By formula to States based on percentage of elderly and disabled population	Maximum 80% Federal
Rural Area Formula (RAF)				
Funding for mass transport in rural areas	Mass transport providers outside urban areas	Operations and capital projects	Provided through State Governor. Formula based 80% on non-urbanized area population of each state and 20% on non-urbanized land area of each state.	Maximum 50% Federal for operating assistance, maximum 80% Federal for capital assistance
Growing States and High Density States Formula Program 49 USC 5340				
Apportions additional funds to the UAF and RAF formula programs	Distributed as an integral part of the UAF and RAF programs	Operations or capital projects in urbanized or rural areas	Growing states funds based on 15 year population projections of each state: within state, based on population of urbanized and rural areas. High Density states distributed by formula among states with density > 370/sq. mi. Within state distributed according to urbanized area population.	See UAF and RAF
Job Access and Reverse Commute Program (section 3037 of TEA 21)				
Funding to improve job access for current and former welfare recipients and eligible low income individuals	Local government authorities by MPOs in areas >200,000 population, and by Governor of State where <200,000 population	Capital and operation costs of improving access by the poor, promoting use of public transport, promoting use of vouchers, promoting reverse commuting	Based on number of eligible low-income persons and welfare recipients, with 60% of funds to urbanized areas of >200,000 population, 20% to urbanized areas of <200,000 population, and 20% to rural areas	Maximum 50% Federal
Rural Transit Assistance Program 49 USC 5311				
Research and Technical Assistance, and training grants, to non-urbanized areas.			Discretionary	None
New Freedom Program 49 USC 5317				
To provide funding for persons with disabilities	State or local public bodies or agencies and non-profit organization	New transportation services and alternatives beyond those required by ADA to assist disabled persons.	Based on number of disabled persons in a state, with 60% of funds to urbanized areas of >200,000 population, 20% to urbanized areas of <200,000 population, and 20% to rural areas	Maximum 50% Federal for operating assistance, maximum 80% Federal for capital assistance
Alternative Transportation in Parks and Public Lands 49 USC 5320				
To improve transportation in National Parks and Public Lands	Department of the Interior (parks) and Department of Agriculture (National Forests)	Capital and Planning	Discretionary: developed jointly by FTA and Department of the Interior	None
Alternatives Analysis				
Provides funding for alternatives analysis of new fixed guideway projects	State or local public bodies and agencies	Planning and analysis of new capital projects	At discretion of Congress or FTA if Congress does not specify	Maximum 80% Federal

* In certain circumstances -- projects to meet American's with Disabilities Act (AD) requirements, or Clean Air Act of bicycle access projects, the Federal share can be up to 90%.

Source: FTA

Table Six

Apportionment Formulae for the Urbanized Area Formula (UAF)	
Bus operations in urbanized areas of >1,000,000 population	Receive 39.1% of UAF. Formula is based 50% on bus revenue vehicle miles operated, 25% on urbanized area population, and 25% on urbanized area population density weighted by population
Bus operations in urbanized areas from 200,000 to 999,999 population	Receive 14.47% of UAF. Formula is based 50% on bus revenue vehicle miles operated, 25% on urbanized area population, and 25% on urbanized area population density weighted by population
Bus operations in urbanized areas of at least 200,000 population	Incentive formula of 5.51% of UAF. Formula based on number of bus passenger miles traveled multiplied by the number of bus passenger miles traveled per \$ of operating cost
Mass transportation operations in urbanized areas of <200,000 population	Receive 9.23% of UAF. Formula based 50% on urbanized area population and 50% on urbanized area density weighted by population.
Fixed guideway operations in urbanized areas of at least 200,000 population.	Receive 28.57% of UAF. Formula is 60% based on fixed guideway revenue vehicle miles, and 40% on fixed guideway route miles. Urbanized areas of >750,000 population must receive at least 0.75% of this formula
Fixed guideway operations in urbanized areas of at least 200,000 population.	Receive 1.31% of UAF. Formula based on the number of fixed guideway passenger miles traveled multiplied by the number of fixed guideway passenger miles traveled per \$ of operating cost. Urbanized areas of >750,000 population must receive at least 0.75% of this formula
Mass transportation operations in urbanized areas under 200,000 population with Small Transit Intensive Cities	Receive 1% of UAF. Formula based on 6 different measures where a small urbanized area has values in excess of the average value for all urbanized areas from 200,000 to 999,000 population.

Source: FTA

Table Seven
 UMTA and FTA Appropriations (including loan authority, unrestricted authority, and contract authority)

FY	Current Funding Programs										Current Research and Planning Programs							Programs No Longer In Force					TOTALS		
	Capital	Urbanized Area Formula	Elderly and Persons with Disabilities	Non-urban Area Formula	Growing States and Density States Formula	Job Access and Reverse Commute	New Freedom Program	Transp. for Parks and Public Lands Research	Over the Road Bus access asst.	Alts Analysis	Metro. Planning	Nat. Transit Planning and Research	State Planning and Research	Nat. Trans. Database	University Transp. Centers	Clean Fuels	Innov. Techn.	Sec. 17	Sec. 5	Interstate Substitute	Wash. DC Metro	Emerg. Supp.	Total	UMTA or FTA Admin.	Grand Total
1964	3,000	0	0	0	0	0	0	0	0	0	4,805	0	0	0	0	0	0	0	0	0	0	7,805	195	8,000	
1965	65,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65,000	300	65,300	
1966	135,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	135,000	455	135,455	
1967	130,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130,000	735	130,735	
1968	125,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125,000	690	125,690	
1969	169,147	0	0	0	0	0	0	0	0	5,000	0	0	0	0	0	0	0	0	0	0	0	174,147	853	175,000	
1970	137,000	0	0	0	0	0	0	0	0	8,000	30,000	0	0	0	0	0	0	0	0	0	0	175,000	1,600	176,600	
1971	555,675	0	0	0	0	0	0	0	0	15,000	26,000	0	0	0	0	0	0	0	0	0	0	596,675	3,325	600,000	
1972	803,700	0	0	0	0	0	0	0	0	25,000	65,000	0	0	0	0	0	0	0	0	0	0	893,700	6,300	900,000	
1973	863,708	0	0	0	0	0	0	0	0	33,500	96,250	0	0	0	0	0	0	0	0	0	0	993,458	6,542	1,000,000	
1974	872,000	0	0	0	0	0	0	0	0	37,600	35,050	0	0	0	0	0	0	0	61,000	0	0	1,005,650	5,000	1,010,650	
1975	1,330,110	0	19,900	0	0	0	0	0	0	36,610	45,050	0	0	0	0	0	0	0	300,000	65,700	0	1,797,370	5,960	1,803,330	
1976	1,078,000	0	22,000	0	0	0	0	0	0	38,700	54,000	0	0	0	0	0	25,000	500,000	632,000	0	0	2,349,700	10,300	2,360,000	
TC	246,500	0	0	0	0	0	0	0	0	9,200	11,500	0	0	0	0	0	0	0	125,000	0	0	392,200	2,900	395,100	
1977	1,228,000	0	22,000	0	0	0	0	0	0	43,200	61,200	0	0	0	0	0	55,000	650,000	570,072	0	0	2,629,472	12,600	2,642,072	
1978	1,375,000	0	25,000	0	0	0	0	0	0	55,000	70,000	0	0	0	0	0	45,000	775,000	662,760	0	0	3,007,760	20,000	3,027,760	
1979	1,175,000	0	20,000	76,500	0	0	0	0	0	55,000	68,500	0	0	0	0	0	0	1,403,500	623,765	0	0	3,422,265	16,849	3,439,114	
1980	1,625,075	0	20,000	85,000	0	0	0	0	0	55,000	70,300	0	0	0	0	0	0	1,405,000	425,000	0	0	3,685,375	17,884	3,703,259	
1981	2,095,000	0	25,000	72,500	0	0	0	0	0	45,000	56,840	0	0	0	0	25,000	0	1,455,000	615,032	0	0	4,389,372	22,200	4,411,572	
1982	1,377,500	0	25,000	68,500	0	0	0	0	0	55,000	49,600	0	0	0	0	7,000	0	1,365,250	560,000	0	0	3,507,850	24,388	3,532,238	
1983	1,606,650	756,175	25,000	91,325	0	0	0	0	0	50,000	58,250	0	0	0	0	10,000	0	1,200,000	412,000	240,000	0	4,449,400	28,407	4,477,807	
1984	1,138,900	2,318,606	26,100	69,986	0	0	0	0	0	50,000	54,800	0	0	0	0	10,000	0	0	295,400	250,000	0	4,213,792	29,400	4,243,192	
1985	1,018,800	2,377,730	26,200	71,770	0	0	0	0	0	50,000	51,000	0	0	0	0	5,000	0	250,000	250,000	0	0	4,100,500	31,000	4,131,500	
1986	970,565	1,997,264	29,500	60,286	0	0	0	0	0	47,850	16,652	0	0	0	0	4,785	0	191,400	217,239	0	0	3,535,541	28,710	3,564,251	
1987	915,000	1,924,995	35,000	75,005	0	0	0	0	0	45,000	17,400	0	0	0	0	7,500	0	200,000	201,120	0	0	3,421,020	31,000	3,452,020	
1988	980,250	1,732,314	35,000	69,389	0	0	0	0	0	45,000	12,217	0	0	5,000	0	0	0	123,500	180,500	0	0	3,183,170	31,882	3,215,052	
1989	985,000	1,603,596	35,000	71,404	0	0	0	0	0	45,000	10,000	0	0	5,000	0	0	0	200,000	168,000	0	0	3,123,000	31,882	3,154,882	
1990	982,045	1,624,380	34,510	70,520	0	0	0	0	0	44,370	9,970	0	0	4,930	0	0	0	159,520	84,745	0	0	3,014,990	31,809	3,046,799	
1991	1,114,982	1,734,620	35,000	70,359	0	0	0	0	0	45,000	8,000	0	0	5,000	0	0	0	148,998	64,099	0	0	3,226,058	32,583	3,258,641	
1992	1,356,167	1,822,762	54,884	106,087	0	0	0	0	0	43,688	60,427	0	0	6,985	0	0	0	160,000	124,000	0	0	3,735,000	37,000	3,772,000	
1993	1,725,000	1,560,539	48,636	95,075	0	0	0	0	0	38,250	42,500	0	0	6,000	0	0	0	75,000	170,000	0	0	3,761,000	38,245	3,799,245	
1994	1,785,000	2,226,553	58,726	129,588	0	0	0	0	0	41,513	47,428	0	0	6,000	0	0	0	45,000	200,000	0	0	4,539,808	39,457	4,579,265	
1995	1,724,904	2,299,836	59,152	137,536	0	0	0	0	0	41,513	46,953	0	0	6,000	0	0	0	48,000	200,000	0	0	4,563,924	42,316	4,606,240	
1996	1,665,000	1,890,147	51,609	114,572	0	0	0	0	0	39,500	41,500	0	0	6,000	0	0	0	0	200,000	0	0	4,008,328	40,722	4,049,050	
1997	1,900,000	1,978,021	56,041	119,623	0	0	0	0	0	39,500	41,500	0	0	6,000	0	0	0	0	200,000	0	0	4,340,685	41,826	4,382,511	
1998	2,000,000	2,303,703	62,219	138,578	0	0	0	0	0	39,499	48,001	0	0	6,000	0	0	0	0	200,000	0	0	4,798,000	45,614	4,843,614	
1999	2,307,000	2,552,241	67,036	183,174	0	75,000	0	2,000	0	43,842	48,908	0	0	6,000	0	0	0	0	50,000	0	0	5,335,201	53,338	5,388,539	
2000	2,492,144	2,777,740	72,947	196,863	0	75,000	0	3,700	0	49,632	54,327	0	0	6,000	0	0	0	0	0	0	0	5,730,353	59,562	5,789,915	
2001	2,694,560	2,999,814	77,240	210,247	0	99,780	0	4,690	0	51,999	52,520	0	0	5,987	0	0	0	0	0	0	0	6,196,837	63,859	6,260,696	
2002	2,891,000	3,225,797	84,605	229,805	0	125,000	0	6,950	0	55,422	55,328	0	0	6,000	0	0	0	0	0	1,923,500	0	8,603,407	67,000	8,670,407	
2003	3,111,664	3,428,359	90,064	244,260	0	104,318	0	6,905	0	59,993	55,997	0	0	5,961	0	0	0	0	0	0	0	7,107,521	72,526	7,180,047	
2004	3,188,576	3,430,430	90,118	244,407	0	104,381	0	6,909	0	60,029	60,007	0	0	5,965	0	0	0	0	0	0	0	7,190,822	75,055	7,265,877	
2005	3,361,714	3,593,195	94,527	256,098	0	124,000	0	6,894	0	59,093	61,865	0	0	5,952	0	0	0	0	0	0	0	7,564,148	76,423	7,640,571	
2006	3,656,762	3,432,014	110,880	384,120	384,120	136,620	77,220	21,780	7,425	24,750	77,798	67,518	16,251	3,465	6,930	17,607	0	0	0	0	0	8,425,260	79,200	8,504,460	
2007	3,895,779	3,606,175	117,000	404,000	404,000	144,000	81,000	23,000	7,600	25,000	81,893	54,000	17,107	3,500	7,000	18,721	0	0	0	0	0	8,889,775	85,000	8,974,775	
TOTAL	\$64,856,877	\$59,197,006	\$1,655,894	\$4,148,577	\$788,120	\$988,099	\$158,220	\$44,780	\$53,073	\$49,750	\$1,763,004	\$1,821,163	\$33,358	\$6,965	\$118,710	\$36,328	\$69,285	\$125,000	\$9,178,750	\$6,524,177	\$2,999,703	\$1,923,500	\$156,540,339	\$1,352,892	\$157,893,231

1.084435438 1.048030854 1.074460963 1.108134045

1.036707678 1.104482251

1.0208359

1.065611282

Source: FTA

Table Eight
U.S. Funding for Transport by Source

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
Federal: Highway Trust Fund- Mass Transit Acc ^c	0	1,419,966	1,976,570	3,149,278	1,815,883	2,734,688	2,691,356	2,812,639	3,281,809	3,995,741	4,326,034	5,477,921	4,625,401	4,553,110	34.2
State	362,274	847,336	1,074,060	1,123,090	1,125,794	1,145,107	1,217,763	1,256,639	1,307,809	1,339,293	1,384,264	1,404,208	1,523,933	1,594,724	12.0
Local	2,034,903	3,369,117	4,142,057	4,505,749	4,540,151	4,690,112	5,038,574	5,282,932	5,581,436	6,082,204	6,161,514	6,303,533	6,524,684	7,168,778	53.8
Transit, total	2,397,177	5,636,419	7,192,687	8,778,117	7,481,828	8,569,907	8,947,693	9,352,210	10,171,054	11,417,238	11,871,812	13,185,662	12,674,018	13,316,612	100.0
Federal: Highway Trust Fund-Highway Acc ^d	7,647,308	12,906,445	13,453,149	15,303,483	16,572,033	16,863,817	17,004,864	19,376,619	22,691,739	21,314,072	24,306,632	33,823,213	30,347,117	26,916,516	31.3
State	16,287,330	22,959,772	32,643,939	34,461,943	36,915,640	39,148,793	40,557,018	42,414,837	43,353,468	45,034,347	47,213,860	48,784,164	51,072,899	52,579,520	61.1
Local	1,333,740	2,299,852	3,847,657	4,072,728	4,292,358	4,452,588	4,753,859	4,951,945	5,133,388	5,465,727	5,778,694	6,061,035	6,379,661	6,593,816	7.7
Highway, total	25,268,378	38,166,069	49,944,745	53,838,154	57,780,031	60,465,198	62,315,741	66,743,401	71,178,595	71,814,146	77,299,186	88,668,412	87,799,677	86,089,852	100.0
Federal: Airport and Airways Trust Fund ^e	2,273,769	3,593,159	4,945,186	6,206,259	5,918,368	6,096,070	6,026,548	6,291,000	3,128,000	4,488,000	8,653,600	11,089,000	10,543,600	10,073,000	45.9
State	189,624	299,465	556,371	617,655	650,319	725,824	651,734	694,994	704,545	764,522	768,199	744,398	852,161	907,704	4.1
Local	1,636,125	2,818,174	4,617,105	5,100,585	5,303,591	5,922,274	6,422,373	6,968,067	7,465,224	8,291,133	8,754,281	9,246,030	10,231,181	10,975,380	50.0
Air, total	4,099,518	6,710,798	10,118,662	11,924,499	11,872,278	12,744,168	13,100,655	13,954,061	11,297,769	13,543,655	18,176,080	21,079,428	21,626,942	21,956,084	100.0
Federal	10,311,636	18,404,356	21,384,300	25,975,610	25,867,113	27,373,243	27,205,532	30,166,258	30,741,548	31,439,813	38,934,266	51,996,134	46,791,118	42,653,626	34.1
State	17,088,167	24,441,637	34,629,238	36,585,023	39,085,156	41,428,987	42,860,930	44,845,546	45,965,845	47,728,571	50,008,875	51,583,863	54,142,346	55,804,364	44.6
Local	5,576,712	9,293,758	13,739,564	14,831,530	15,373,285	16,394,335	17,565,582	18,647,100	19,711,191	21,347,912	22,291,250	23,314,511	24,948,864	26,722,863	21.3
TOTAL, all modes	32,976,515	52,139,751	69,753,102	77,392,163	80,325,554	85,196,565	87,632,044	93,658,904	96,418,584	100,516,296	111,234,391	126,894,508	125,882,328	125,180,853	100.0

Note: Total for all modes includes spending on smaller modes, such as water transport, that do not appear above.
Source: U.S. Bureau of Transportation Statistics