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of Transportation
**Federal Transit
Administration**

The Urbanized Area Formula Program and the Needs of Small Transit Intensive Cities

Report to Congress

September 2000

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16. Abstract

This report is provided to the United States Congress in accordance with Section 3033 of the Transportation Equity Act for the 21st Century (TEA-21). Section 3033 requires the Secretary of Transportation to conduct a study of the Urbanized Area Formula Program administered by FTA, focusing on the needs of small urbanized areas with unusually high levels of transit service and report the results to the United States Congress. Since the formula apportionments for small urbanized areas do not depend on service levels, such small transit intensive cities receive smaller apportionments of funds than they would if service levels were incorporated into the formula. This study aims to determine whether the formula for apportioning funds to urbanized areas under section 5336 of title 49, U.S. Code, accurately reflects the transit needs of urbanized areas and, if not, whether changes should be made to reflect that fact. This report outlines the formula grant programs administered by FTA, discusses existing and potential transit needs of American cities, and how the current formula factors relate to their needs. The third section of this report characterizes small transit intensive cities--the main focus of this study along with funding issues. The study concludes that sufficient issues exist to merit consideration of changes to the existing Urbanized Area Formula Grants Program as part of the FY 2004 and beyond reauthorization cycle. However, the formula apportionments should continue to reflect underlying transit needs.

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U.S. Department
of Transportation
**Federal Transit
Administration**

Deputy Administrator

400 Seventh St., S.W.
Washington, D.C. 20590

September 29, 2000

Dear Colleague:

I am pleased to provide you with a copy of the Federal Transit Administration's (FTA) report on *The Urbanized Area Formula Program and the Needs of Small Transit Intensive Cities*, which we have prepared in accordance with Section 3033 of the Transportation Equity Act for the 21st Century (TEA-21). This report was approved by Secretary of Transportation Rodney E. Slater on September 29, 2000.

As required under TEA-21, this report is the product of a study to determine whether the needs of small urbanized areas with unusually high levels of transit service are reflected in the Urbanized Area Formula Program established by 49 USC §5307. The study concludes that sufficient issues exist to suggest that changes to the FTA formula program should be considered as part of the next reauthorization cycle; however, the basic formula apportionments should continue to reflect underlying transit needs.

If you have any questions regarding the content of this report, please do not hesitate to contact me.

Sincerely,

Nuria I. Fernandez
Acting Administrator

The Urbanized Area Formula Program and the Needs of Small Transit Intensive Cities

Report to Congress

September 2000

Report Number FTA-TBP10-00-04

Prepared by:
Federal Transit Administration

Pursuant to:
Public Law 105-178, §3033

Cover photo courtesy of Santa Fe Trails Transit (FTA Public Transit Image Gallery)

THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

SEP 29 2000

The Honorable Phil Gramm
Chairman, Committee on Banking,
Housing, and Urban Affairs
U.S. Senate
Washington, D.C. 20510-6075

Dear Mr. Chairman:

The enclosed report, "The Urbanized Area Formula Program and the Needs of Small Transit Intensive Cities" completed through the Cooperative Research Program of the Transportation Research Board, is provided in accordance with Section 3033 of the Transportation Equity Act for the 21st Century. Section 3033 requires the Secretary to conduct a study of the Urbanized Area Formula Program established under Section 5307 of title 49, United States Code and the needs of small urbanized areas with unusually high levels of transit service.

The study concludes that sufficient issues exist suggesting that changes to the existing Urbanized Area Formula Grants Program should be considered as part of the FY 2004 and beyond reauthorization cycle. However, the formula apportionments should continue to reflect underlying transit needs.

Please call either me or Michael Frazier, Assistant Secretary for Governmental Affairs, at (202) 366-4573, if you have any questions. Identical letters are being sent to the Ranking Minority Member of the Senate Committee on Banking, Housing, and Urban Affairs, and the Chairman and Ranking Minority Member of the House Committee on Transportation and Infrastructure.

Sincerely,

Rodney E. Slater

Enclosure

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THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

SEP 29 2000

The Honorable Paul S. Sarbanes
Ranking Minority Member
Committee on Banking,
Housing, and Urban Affairs
U.S. Senate
Washington, D.C. 20510-6075

Dear Senator Sarbanes:

The enclosed report, "The Urbanized Area Formula Program and the Needs of Small Transit Intensive Cities" completed through the Cooperative Research Program of the Transportation Research Board, is provided in accordance with Section 3033 of the Transportation Equity Act for the 21st Century. Section 3033 requires the Secretary to conduct a study of the Urbanized Area Formula Program established under Section 5307 of title 49, United States Code and the needs of small urbanized areas with unusually high levels of transit service and report the results to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate by December 31, 1999.

The study concludes that sufficient issues exist suggesting that changes to the existing Urbanized Area Formula Grants Program should be considered as part of the FY 2004 and beyond reauthorization cycle. However, the formula apportionments should continue to reflect underlying transit needs.

Please call either me or Michael Frazier, Assistant Secretary for Governmental Affairs, at (202) 366-4573, if you have any questions. Identical letters are being sent to the Chairman of the Senate Committee on Banking, Housing, and Urban Affairs, and the Chairman and Ranking Minority Member of the House Committee on Transportation and Infrastructure.

Sincerely,

Rodney E. Slater

Enclosure

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THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

SEP 29 2000

The Honorable Bud Shuster
Chairman, Committee on
Transportation and Infrastructure
U.S. House of Representatives
Washington, D.C. 20515-6256

Dear Mr. Chairman:

The enclosed report, "The Urbanized Area Formula Program and the Needs of Small Transit Intensive Cities" completed through the Cooperative Research Program of the Transportation Research Board, is provided in accordance with Section 3033 of the Transportation Equity Act for the 21st Century. Section 3033 requires the Secretary to conduct a study of the Urbanized Area Formula Program established under Section 5307 of title 49, United States Code and the needs of small urbanized areas with unusually high levels of transit service and report the results to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate by December 31, 1999.

The study concludes that sufficient issues exist suggesting that changes to the existing Urbanized Area Formula Grants Program should be considered as part of the FY 2004 and beyond reauthorization cycle. However, the formula apportionments should continue to reflect underlying transit needs.

Please call either me or Michael Frazier, Assistant Secretary for Governmental Affairs, at (202) 366-4573, if you have any questions. Identical letters are being sent to the Chairman and Ranking Minority Member of the Senate Committee on Banking, Housing, and Urban Affairs, and the Ranking Minority Member of the House Committee on Transportation and Infrastructure.

Sincerely,

Rodney E. Slater

Enclosure

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THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

SEP 29 2000

The Honorable James L. Oberstar
Ranking Minority Member
Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, D.C. 20515-6256

Dear Congressman Oberstar:

The enclosed report, "The Urbanized Area Formula Program and the Needs of Small Transit Intensive Cities" completed through the Cooperative Research Program of the Transportation Research Board, is provided in accordance with Section 3033 of the Transportation Equity Act for the 21st Century. Section 3033 requires the Secretary to conduct a study of the Urbanized Area Formula Program established under Section 5307 of title 49, United States Code and the needs of small urbanized areas with unusually high levels of transit service and report the results to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate by December 31, 1999.

The study concludes that sufficient issues exist suggesting that changes to the existing Urbanized Area Formula Grants Program should be considered as part of the FY 2004 and beyond reauthorization cycle. However, the formula apportionments should continue to reflect underlying transit needs.

Please call either me or Michael Frazier, Assistant Secretary for Governmental Affairs, at (202) 366-4573, if you have any questions. Identical letters are being sent to the Chairman and Ranking Minority Member of the Senate Committee on Banking, Housing, and Urban Affairs, and the Chairman of the House Committee on Transportation and Infrastructure.

Sincerely,

Rodney E. Slater

Enclosure

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Foreword

Section 3033 of the Transportation Equity Act for the 21st Century (TEA-21) calls for a study of the Urbanized Area Formula Program administered by the Federal Transit Administration (FTA), focusing on the needs of small urbanized areas that provide unusually high levels of transit service. This Report to Congress fulfills that requirement.

The Urbanized Area Formula Program, authorized in Section 5307 of U.S.C. 49, allocates funding for mass transit through a statutory formula, which is comprised of multiple tiers. For small urbanized areas (under 200,000 in population), funds are apportioned based on potential needs (population and population density). For large urbanized areas (over 200,000 in population), funds are apportioned based on both potential needs and existing needs (current transit service levels).

While transit service in most small urbanized areas is minimal compared to larger cities, there are some "small transit intensive cities" where this is not the case. Since the formula apportionments for small urbanized areas do not depend on service levels, such cities receive smaller apportionments than they would if service levels were incorporated into the formula.

Two hypothetical changes to the urbanized area formula were analyzed, both of which involved applying service factors in calculating small urbanized area formula apportionments. In the first case, small urbanized areas remained a distinct tier (as in the current formula), while in the second case bus formula funds were allocated to all urbanized areas in a single tier. As is the case with any such formula-based allocation program, there would be a significant redistribution of formula apportionments, with transit intensive cities gaining significantly. Additionally, some small urbanized areas would gain even were they forced to compete with much larger urbanized areas in the same tier.

The study also analyzes a potential Federal transit funding change involving the Section 5309 Capital Investment Grants program. Other issues noted in the study include: the role of state governments, the 2000 Census of Population, and reporting requirements.

The study concludes that sufficient issues exist suggesting that changes to the existing Urbanized Area Formula Grants Program should be considered as part of the FY 2004 and beyond reauthorization cycle. However, the formula apportionments should continue to reflect underlying transit needs.

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1 Introduction

This Report to Congress fulfills the requirements of Section 3033 of the Transportation Equity Act for the 21st Century (TEA-21), which called for a study of the Urbanized Area Formula Program administered by the Federal Transit Administration (FTA), focusing on the needs of small urbanized areas that provide unusually intensive transit service. Specifically, Section 3033 directs the Secretary of Transportation to "conduct a study to determine whether the formula for apportioning funds to urbanized areas under section 5336 of title 49, United States Code, accurately reflects the transit needs of the urbanized areas and, if not, whether any changes should be made either to the formula or through some other mechanism to reflect the fact that some urbanized areas with a population between 50,000 and 200,000 have transit systems that carry more passengers per mile or hour than the average of those transit systems in urbanized areas with a population over 200,000."

A Federal Register Notice announcing the study, along with a request for comments on its design, was published on July 9, 1999. Outreach sessions were held in Sacramento, CA, and Washington, DC, during that same month. Many helpful written and oral comments, received from parties interested in the study, have been incorporated into this report.

The first section of this report outlines the formula grant programs administered by the Federal Transit Administration. It is followed by a discussion of the existing and potential transit needs that cities have, and how the formula factors used relate to these needs. The third section characterizes small, transit intensive cities, which are the focus of the study, and some of the funding issues that they face.

The next two sections involve data analysis. The first disaggregates recent federal transit funding by urbanized area size, showing the differences among size categories in funding relative to population and service levels. The second analyzes potential changes to the formula and other funding alternatives that would result in small transit intensive cities receiving a greater share of federal funding.

The study also includes a discussion of other issues related to the urbanized area formula program, many of which were raised by commenters on the study. The report concludes with the findings and recommendations of FTA regarding the Urbanized Area Formula Program.

2 The Formula Grant Programs of the Federal Transit Administration

Formula Grant Programs comprise the largest assistance program administered by FTA, totaling $3.0 billion in FY 2000. The programs provide assistance to local governments and transit operators for both operating and capital expenditures. The three formula

programs are authorized in Sections 5307, 5310, and 5311 of 49 U.S.C., which can be briefly summarized as follows:

2.1 Nonurbanized Area Formula Program (Section 5311)

The Nonurbanized Area Formula Program allocates funding to states to be used to support the operations and capital needs of transit operators serving residents outside of urbanized areas. The formula allocates funds to states based solely on their nonurbanized area population, using Census data. The Section 5311 program receives 6.37 percent of the funds available for formula programs.

2.2 Elderly and Persons with Disabilities Formula Program (Section 5310)

The Elderly and Persons with Disabilities Formula Program allocates funding to states to be used to provide capital assistance (including purchase of service arrangements) to providers of specialized transit services for the elderly and disabled. The funds are allocated based on each state's population of elderly persons and persons with disabilities. The Section 5310 program receives 2.4 percent of the funds available for formula programs.

2.3 Urbanized Area Formula Program (Section 5307)

The vast majority of funding for the formula programs, 91.23 percent, is dedicated for use in urbanized areas. The Urbanized Area Formula Grants Program, Section 5307 of Title 49 of the United States Code, allocates funds to urbanized areas for capital and planning costs associated with mass transit. Operating assistance is also available for urbanized areas under 200,000 in population. The actual apportionment formula for the program is found in 49 U.S.C. 5336. The formula allocates section 5307 funds through a series of hierarchical tiers. The first division establishes two separate tiers of urbanized areas:

1) 9.32% is allocated to small urbanized areas (population 50,000 to 199,999)
2) 90.68% is allocated to large urbanized areas (population 200,000 and above).

For small urbanized areas, the formula apportionments are based solely on two factors:

1) population
2) population times population density

For large urbanized areas, however, the formula is applied through multiple tiers:

A) The Fixed Guideway Tiers (33.29%)
   1) Fixed Guideway Incentive Tier (4.39%). Allocated based on:
      a) fixed guideway passenger miles weighted by passenger-miles per dollar of operating cost
   2) Fixed Guideway Non-incentive Tier (95.61%). Allocated based on:
      a) fixed guideway route miles
      b) fixed guideway vehicle revenue miles

B) The Bus Tiers (66.71%).

1) Bus Incentive Tier (9.2%). Allocated based on:
    a) bus passenger miles weighted by passenger-miles per dollar of operating cost
2) Bus Non-incentive Tier (90.8). This portion of the bus tier is segmented between urbanized areas above and below 1 million in population. Allocated based on:
    a) population
    b) population times population density
    c) bus vehicle revenue miles

In sum, funding is allocated to urbanized areas under 200,000 solely on the basis of population and population density, while funding for areas over 200,000 includes factors related to the level of transit service provided.

There are two other important distinctions between small and large urbanized areas in the formula program. The first lies in the method of apportioning funds to the urbanized areas. In large urbanized areas, formula funds are apportioned directly to the urbanized area, through a designated recipient agency within the urbanized area. In small urbanized areas that are not in a transportation management area, however, formula funds attributable to the area are apportioned to the governor, who acts as the designated recipient for all of the small urbanized areas within the state. The governor may allocate these funds without FTA input or involvement. The second distinction between large and small urbanized areas is that formula funds for small urbanized areas may be used for operating costs, while this option is no longer available to larger urbanized areas since the passage of TEA-21.

3 Federal Formula Grant Assistance and Local Transit Funding Needs

The purpose of using a formula to allocate federal assistance for transit is to ensure that such funds are distributed in a fair, objective, and equitable manner. Fundamentally, this means that the formula should allocate more funds to areas that have proportionally greater transit needs. The factors used in the formula are intended to reflect these underlying needs while retaining some degree of simplicity and ease of measurement and reporting.[1] The formula is also intended to encourage cost effectiveness in the provision of transit services. In understanding how the formula reflects these needs, it is important to understand the difference between two kinds of need: potential need and existing need.

3.1 Existing Need

Urbanized areas within the United States vary considerably in their levels of mass transit service provision and usage, ranging from large systems utilizing multiple rail and non-rail modes, to simple bus and/or demand response systems, to no public transit service

[1] It should be noted that no explicit needs assessment is made in allocating formula funding among urbanized areas. Instead, the formula factors used can be viewed as surrogates for the basic transit needs of local communities.

whatsoever. Areas that provide a high level of transit service will naturally have greater needs for both operating assistance (to make up for the gap between passenger fares and operating costs) and capital funding (to replace and rehabilitate vehicles, guideways, and support structures which deteriorate from use). Areas with high levels of vehicle utilization by transit passengers will have needs to expand their systems to relieve crowding and excessive wear and tear on their transit vehicles. High levels of existing transit service also typically reflect a local commitment to transit through both funding and land use planning, as well as local geographic and demographic factors. Federal assistance in this case can be seen as reinforcing such local commitment. Formula factors intended to reflect existing needs include route mileage and vehicle revenue miles (service provision) and passenger miles (service consumption).[2]

3.2 Potential Need

Urbanized areas also vary widely in their potential for mass transit usage. Larger cities tend to have more urban travel, some of which could be best served by mass transit. Cities with more compact land use have greater potential for effective and efficient public transit service as residential and activity locations are more concentrated, making mass transit an effective alternative to the private automobile. Federal assistance in such instances can be seen as helping local governments to tap into such potential needs. Many urbanized areas, particularly those that have grown rapidly in recent decades, lack a strong post-war local tradition of transit service. Federal assistance helps such areas to build and sustain a minimal transit service level, enabling them to build local support of and for mass transit to achieve the potential transit service that could be sustained in such areas. Many local governments also find that local funding sources for transit are limited by constitutional or legal factors, thereby increasing their reliance on federal assistance. Such potential transit needs are reflected in the formula by population and population density factors.

[2] One frequently expressed concern regarding needs-based federal subsidy programs is that they may encourage inefficiency in the provision of local public services. For example, it has often been argued that the inclusion of service provision factors in the formula encourages local transit operators to inefficiently run transit vehicles regardless of ridership. There are several ways in which this issue can be addressed. First, under TEA-21, operators in large urbanized areas (whose formula allocations are based in part on service levels) are no longer eligible for federal operating assistance, which had been declining in real terms for several years. Since the funds can only be used for capital and preventive maintenance expenditures, their effect on operations is limited. Second, the formula includes a so-called incentive tier, in which transit service consumption (passenger miles) is weighted by the average operating cost per passenger mile. This provides an incentive for efficient service provision, since an operator that provides service at a lower average operating cost can receive more federal capital assistance. Finally, it can be argued that a high level of transit service provision is a worthy public policy goal in its own right. High-frequency service, even in off-peak hours, provides a significant quality of life benefit to those who are dependent on public transit for their mobility needs. High frequency, reliable transit service also provides an incentive for efficient, transit-supportive land use. For these reasons, the socially optimal level of transit service provision may be higher than would be dictated by a strict economic efficiency calculation, and this is reflected in the formula's use of service level factors.

4 Small Transit Intensive Cities

The typical transit system serving a small urbanized area generally has somewhat different characteristics from those serving larger urbanized areas. In small cities, the focus is generally on providing basic mobility for residents, especially those whose access to auto transportation is limited by age, income, or disability. Modes provided are limited to bus and/or demand response services operating at relatively low frequency. Such low volume systems often have a significant need for operating assistance to pay for the costs of running the system. By contrast, mass transit in large cities will often play additional roles in providing relief from traffic congestion and encouraging efficient land use patterns. Schedule frequencies are high, and bus systems may be supplemented by high capacity, high-speed rail systems. The greatest funding needs are generally on the capital side, as transit systems need to replace large, heavily utilized vehicle fleets and fund service expansions as the urbanized area grows.

As with any such generalization, however, there are some small cities that differ significantly from such norms. Such cities provide a level of transit service far greater than their size and density characteristics would typically suggest. In fact, some of these so-called "small transit intensive cities" operate more vehicles and carry more riders than do other cities with much larger populations. These cities generally share one or both of the following characteristics:

- Special Populations. Many small transit intensive cities have special characteristics that encourage high transit usage. One example is college and university towns. The campus provides a high volume activity center for the community, and nearby parking may be limited. College students generally have below-average auto ownership and tend to live in high density housing. Such factors contribute to a higher level of transit usage than would be typically seen in a community of its size. Similar factors contribute to high transit usage in other small cities with special populations, such as resort destinations.

- High Levels of State and Local Transit Funding. States and local governments vary widely in their commitments to providing public funding for mass transit. In areas where mass transit is seen as a priority, capital and operating assistance from state and local governments may allow a transit operator to provide much more service than is typically provided in other small urbanized areas without such funding.

4.1 Measures of Transit Intensity

The language of Section 3033 of TEA-21 and the discussion above imply that small transit intensive cities should have certain measurable transit system characteristics. In order to understand just how extensive the issue of small transit intensive cities is, measures of transit service intensity were computed for transit operators in urbanized areas for the period 1996-98. The computed measures of transit service intensity can be grouped into four categories:

1) Vehicle Utilization

   Transit intensive cities have transit systems with vehicles that are heavily utilized by the public. Measures of vehicle utilization include passenger miles per vehicle revenue mile and passenger miles per vehicle revenue hour. These measures are noted in the language of Section 3033 of TEA-21, which also makes reference to transit vehicle utilization levels in small urbanized areas that exceed the averages for such use by urbanized areas over 200,000 in population.

2) Service Provision

   Transit intensive cities provide a high level of transit service to their citizenry. This can be measured by vehicle revenue miles per capita or vehicle revenue hours per capita. There are several small cities that can be classified as transit intensive by these measures.

3) Service Consumption

   Transit intensive cities have a high rate of service consumption by their populations. This can be measured by passenger miles traveled per capita or unlinked passenger trips per capita.

4) Statistical Outliers

   Transit intensive cities have service levels that are significantly greater than would be predicted given the urbanized area's population and population density. In the language of statistical modeling, such cities would be called "outliers." In the context of the above discussion of need, these are cities whose existing needs (reflected by service levels) are not captured by their potential needs (reflected by population and population density).

For purposes of measurement, small transit intensive cities were defined as small urbanized areas whose intensity measure exceed the average for larger urbanized areas (population between 200,000 and 1,000,000). Such a definition is in keeping with the language of Section 3033. Statistical outliers were defined as small urbanized areas with substantially greater service provision (vehicle revenue miles) and service consumption (passenger miles) than would be expected given their size and density, as determined by a regression analysis. Exhibit 1 lists the small urbanized areas that can be classified as transit intensive by one or more of the above criteria.

Exhibit 1
Small Transit Intensive Cities
Small Urbanized Areas Exceeding Large Urbanized Area Averages and Statistical Outliers

Urbanized Area	PMT per VRM	PMT per VRH	VRM per Capita	VRH Per Capita	PMT per Capita	PAX per Capita	Statistical Outlier: VRM	Statistical Outlier: PMT
Bremerton, WA	x	x	x	x	x	x	x	x
Eugene-Springfield, OR	x	x	x	x	x	x	x	x
Richland-Kennewick-Pasco, WA	x	x	x	x	x	x	x	x
Santa Cruz, CA	x	x	x	x	x	x	x	x
Champaign-Urbana, IL	x	x	x	x	x	x		x
Santa Barbara, CA	x	x	x	x	x	x		x
Seaside-Monterey, CA		x	x	x	x	x	x	x
Brockton, MA	x	x	x	x	x	x		
Laredo, TX	x	x	x	x	x	x		
Olympia, WA			x	x	x	x	x	x
Bellingham, WA			x	x	x	x	x	
Boulder, CO	x		x		x		x	x
Davis, CA	x	x		x	x	x		
Florence, SC			x	x	x		x	x
Palm Springs, CA		x	x	x	x	x		
Santa Rosa, CA	x	x	x	x	x			
Winston-Salem, NC		x	x	x	x	x		
Iowa City, IA			x	x	x	x		
Ithaca, NY			x	x	x	x		
New Bedford, MA			x	x	x	x		
Binghamton, NY			x	x		x		
Brownsville, TX	x	x			x			
Duluth, MN-WI			x	x		x		
Fayetteville-Springdale, AR			x	x		x		
Fitchburg-Leominster, MA			x	x	x			
Gainesville, FL			x	x		x		
Galveston, TX			x	x		x		
Hyannis, MA			x	x			x	
Lancaster-Palmdale, CA	x	x			x			
Lubbock, TX	x	x				x		

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Exhibit 1
Small Transit Intensive Cities
Small Urbanized Areas Exceeding Large Urbanized Area Averages and Statistical Outliers

Urbanized Area	PMT per VRM	PMT per VRH	VRM per Capita	VRH Per Capita	PMT per Capita	PAX per Capita	Statistical Outlier: VRM	Statistical Outlier: PMT
Monessen, PA	x	x			x			
Oshkosh, WI			x	x		x		
Port Huron, MI			x	x		x		
Salem, OR			x	x		x		
Santa Fe, NM			x	x			x	
Savannah, GA			x	x		x		
St. Cloud, MN			x	x		x		
State College, PA			x	x		x		
Tallahassee, FL			x	x		x		
Taunton, MA	x		x		x			
Bay City, MI			x	x				
Beaumont, TX	x	x						
Burlington, VT				x		x		
Charleston, WV			x	x				
Elmira, NY			x	x				
Erie, PA			x	x				
Jackson, MI			x	x				
Johnstown, PA				x		x		
Lafayette, LA	x	x						
Lafayette-West Lafayette, IN			x	x				
Lancaster, PA			x	x				
Monroe, LA	x	x						
Muncie, IN			x	x				
Myrtle Beach, SC			x	x				
Newark, OH			x	x				
Newport, RI			x		x			
Pittsfield, MA			x	x				
Racine, WI			x	x				
Redding, CA			x	x				
Sheboygan, WI			x	x				

Exhibit 1
Small Transit Intensive Cities
Small Urbanized Areas Exceeding Large Urbanized Area Averages and Statistical Outliers

Urbanized Area	PMT per VRM	PMT per VRH	VRM per Capita	VRH Per Capita	PMT per Capita	PAX per Capita	Statistical Outlier: VRM	Statistical Outlier: PMT
Stamford, CT-NY	x	x						
Sumter, SC			x	x				
Vero Beach, FL			x	x				
Charlottesville, VA				x				
Deltona, FL			x					
Dover, DE			x					
Eau Claire, WI				x				
Kailua, HI	x							
La Crosse, WI-MN				x				
Logan, UT						x		
New London-Norwich, CT	x							
Norwalk, CT				x				
Portland, ME				x				
Poughkeepsie, NY		x						
Springfield, IL				x				
Williamsport, PA						x		
York, PA				x				

Note: urbanized areas are sorted by the number of categories in which they qualify as transit intensive

PMT: passenger miles traveled

VRM: vehicle revenue miles

VRH: vehicle revenue hours

PAX: unlinked passenger trips

There are several important caveats in interpreting these measures. The most important concerns the area served by the transit operators based in each small city. Many transit operators in small urbanized areas also serve populations outside the primary urbanized area, either in other urbanized areas or in nonurbanized areas. Unlike transit operators serving large urbanized areas (over 200,000 in population), however, these transit operators are not required to break out their formula-related operating statistics (passenger miles and vehicle revenue miles) by urbanized area. Population figures, however, are for the primary urbanized area alone. Thus, the per capita intensity measures may be slightly inflated by service provided outside of the primary urbanized area. See Appendix A for more detail on the data and methodology used in these calculations.

4.2 Funding Issues

As currently constituted, the urbanized area formula for small urbanized areas includes demographic factors (population and population density) but not service factors (vehicle revenue miles, passenger miles, operating costs), as does the bus formula for large urbanized areas. In the context of the earlier discussion on needs, this means that the funding formula for small urbanized areas reflects potential needs but not existing needs. Small transit intensive cities, however, are precisely those that do offer high levels of transit service relative to their size. Thus, transit systems in such cities receive less federal formula funding than they would if the formula also used service levels.

According to commenters on this study, however, such systems were in the past often able to make use of other sources of federal transit funding whose availability has diminished in recent years. Among these sources were:

1) Discretionary Capital Grants

   Because of their nature and the issues facing them, small transit intensive cities were often strong candidates for receiving discretionary funds through the Section 5309 Capital Investment Grants program. Increased congressional earmarking of these funds in recent years, however, has substantially reduced the availability of these funds on a discretionary basis.

2) Unused Governor's Apportionment

   In some states, transit operators in small transit intensive cities were able to make use of portions of the Section 5307 Governor's Apportionment that would otherwise be unused. The two sources of this unused portion were the operating assistance cap and cities without transit service.

   a) The operating assistance cap

      Prior to TEA-21, urbanized area formula funds could be used for either operating or capital expenditures, subject to a cap on the amount that could be used for

operating assistance in each urbanized area.[3] Many transit operators, especially in small cities, had funding needs that were primarily on the operations side, rather than capital needs. As a result, they were unable to use the full amount of the formula funding attributable to their particular area, and the "excess" was made available for reallocation to transit operators in other areas with capital needs. Many small transit intensive cities were able to obtain additional capital funding in this way. TEA-21, however, gave full flexibility to small urbanized areas on how formula funds could be allocated to capital or operating use. As a result, small urbanized areas with operating assistance needs are able to devote their full allocation to operations, and the excess is no longer available for redistribution.

b) Unserved urbanized areas

In some large states, there are small urbanized areas which do not have any transit service that is eligible for Section 5307 funding. Such states are able to redistribute the portion of the Governor's Apportionment attributable to such areas among cities that do have transit service. As more small urbanized areas initiate service, however, these unallocated funds are reduced.[4]

The result of these reductions in available funding sources has left operators in small transit intensive cities with more limited resources for capital needs even as they face pressures from their communities and customers to expand and improve existing service.

5 Federal Transit Assistance for Large, Small, and Nonurbanized Areas

The Urbanized Area Formula Program, with its multiple tiers and formula factors, does not allocate funds on a strict per capita basis. The allocations are also targeted to urbanized areas, though the states do play a role in the allocations to urbanized areas under 200,000, as discussed above. This often raises questions about the shares of federal funding received by urbanized areas of different sizes. As discussed in the previous section, small transit intensive cities receive less formula funding relative to their service levels than do other small urbanized areas. More generally, however, how does funding for small urbanized areas compare to funding for large urbanized areas and to nonurbanized areas?

Exhibit 2 shows total FTA formula apportionments by urbanized area size for 1998-2000, including both the Section 5307 (Urbanized) and 5311 (Nonurbanized) programs. The majority of FTA formula funding is clearly targeted to transit operators in major urbanized areas (population over 1 million), who receive approximately two-thirds of

[3] While the operating assistance cap was only phased out under TEA-21, it had been raised in the years just prior such that the cap was rarely binding for small urbanized areas. Thus, this avenue of additional funding was primarily available in the more distant past (ca. 1995 and earlier).

[4] Between 1996 and 1998, the number of small urbanized areas with a transit system reporting operational data increased from 196 to 206 (out of 281 total urbanized areas between 50,000 and 200,000 in population).

total formula funds. Other large urbanized areas (200,000-1 million), small urbanized areas (50,000-200,000), and nonurbanized areas (under 50,000) receive decreasingly smaller shares by population size.

Exhibit 2 also compares these funding levels relative to population and transit service levels.[5] In FY 2000, major urbanized areas received $21.27 per person in formula assistance, while small urbanized areas received $9.95 per person and nonurbanized areas just $2.09 per person. This great disparity in per capita funding, however, reflects the substantially greater transit service provision and usage in larger cities. On a service level basis, larger urbanized areas receive relatively less funding than do small urbanized areas.

Exhibit 2
FTA Formula Apportionments by Urbanized Area Size 1998-2000

		Section 5307			Section 5311	
	Fiscal Year	Over 1 million	200,000-1 million	50,000-200,000	Under 50,000	Total
Number of urbanized areas		34	91	281	n/a	406
Total Apportionments (millions of $)	1998	1,692	386	226	135	2,438
	1999	1,869	428	244	178	2,718
	2000	2,026	469	268	193	2,956
Dollars Per						
Capita (1990 Census)	1998	17.76	10.10	8.37	1.46	9.65
	1999	19.62	11.19	9.05	1.93	10.76
	2000	21.27	12.28	9.95	2.09	11.71
Passenger Mile	1998	0.048	0.152	0.233		0.059
	1999	0.051	0.152	0.244		0.063
	2000	0.054	0.161	0.268		0.066
Unlinked Passenger Trip	1998	0.253	0.603	0.957		0.305
	1999	0.266	0.625	1.018		0.342
	2000	0.282	0.676	1.081	1.039	0.364
Vehicle Revenue Mile	1998	0.774	1.010	1.239		0.886
	1999	0.832	1.029	1.277		0.953
	2000	0.875	1.050	1.295		0.995

Major urbanized area apportionments in 2000 amounted to 87.5 cents per vehicle revenue mile, 28.2 cents per passenger trip, and 5.4 cents per passenger mile, while small urbanized area apportionments were $1.30 per vehicle revenue mile, $1.08 per passenger trip, and 26.8 cents per passenger mile. Nonurbanized areas received slightly less per passenger ($1.04) than do small urbanized areas. For each size category, however, formula funding increased between 1998 and 2000, both in absolute dollar amounts and relative to population and service levels.

[5] The service level data used in each fiscal year's formula apportionments are derived from data in the reporting year two years prior. The funding ratios reported in Exhibit 2 are calculated in the same way. Thus, FY 2000 apportionments use 1998 data, FY 1999 uses 1997 data, and so on.

5.1 Small Transit Intensive Cities

Small urbanized areas as a group, then, receive a relatively large share of federal transit funding compared to their service levels, but do relatively poorly on a per capita basis. The issue for small transit intensive cities, however, is that they are not like other small cities, as they provide more transit service and carry more passengers than even much larger cities. How well do these cities do relative to other small urbanized areas and to urbanized areas in general in the distribution of federal funding?

In order to examine this issue, it is useful to look at funding from both the Section 5307 program and the Section 5309 Capital Program. The latter program is another significant source of federal transit funding. For example, in FY 2000, funding for Section 5307 programs totaled $2.77 billion, while Section 5309 funding totaled $2.50 billion. While most of these funds are designated for fixed guideway system modernization and expansion, a significant portion[6] is available for bus capital needs. Section 5309 Bus program funds are available for use in both urbanized and nonurbanized areas. Could this be an additional source of funding for small transit intensive cities?[7]

Exhibit 3 compares data for 20 small transit intensive cities to totals for small urbanized areas and for all urbanized areas based on population and density levels, transit service levels, and Federal Formula and Capital funding levels.[8] Small urbanized areas as a group were also compared to urbanized areas as a whole on the same basis. Section 5309 data were tabulated using program obligations for the period 1995-99.[9]

Exhibit 3
Small Transit Intensive Cities
Shares of Transit Service, Population, and Federal Funding

	20 Small Transit Intensive Cities		Small Urbanized Areas
	Share among small urbanized areas	Share among all urbanized areas	Share among all urbanized areas
Population	9.0%	1.5%	16.8%
Population x Density	11.4%	1.2%	10.5%
Bus Vehicle Revenue Miles 1996-98	26.5%	2.7%	10.3%
Bus Passenger Miles 1996-98	39.3%	2.3%	5.8%
Section 5307 Urbanized Area Formula Program Bus Apportionments	10.2%	1.2%	12.3%
Section 5309 Bus Program Obligations 1995-99	23.6%	4.2%	17.7%

[6] In FY 2000, funds for the Section 5309 Bus program totaled $540 million. Section 5307 funding allocated to small urbanized areas and through the bus tiers totaled $1.93 billion.

[7] One of the comments submitted to this study, as noted above, was that increased earmarking of the Capital Program has reduced the availability of these funds to systems in small transit intensive cities.

[8] The 20 cities examined were those that could be classified as transit intensive by at least 4 of the 8 criteria presented in Exhibit 1.

9 These tabulations used data from the annual Statistical Summaries of FTA's Grant Assistance Programs. Since appropriations under the Section 5309 program are generally less frequent and consistent than are formula program appropriations, a longer time frame was used in looking at capital program funding. Also note that obligations were used, rather than apportionments as in Exhibit 2. This is the only level at which capital program funding can be linked to particular urbanized areas.

The 20 small transit intensive cities represented 9 percent of the total population in small urbanized areas. Their share of the *population x density* factor used in the urbanized area formula is slightly higher, reflecting the greater average density of these cities. The net effect is that these 20 cities received 10.2 percent of Section 5307 funding for small urbanized areas in recent years.[10] Such cities have a much larger share of transit service in small urbanized areas, however, befitting their designation as transit intensive. The 20 cities had some 27 percent of vehicle revenue miles and 39 percent of passenger miles in small urbanized areas in 1996-98. The small transit intensive cities received just under 24 percent of capital program funding in 1995-99. Thus, the 20 cities' share of capital funding is much closer to their share of transit service supply and consumption, though it is still slightly lower.

When compared to all urbanized areas, however, the small transit intensive cities do relatively well in receiving capital program funds. Their 4.2 percent share of capital program funding is well above both their population share (1.5 percent) and vehicle revenue mile and passenger mile shares (2.7 percent and 2.3 percent, respectively). This is due to the relative funding levels of small urbanized areas in general, whose share of capital program funding was close to their population share but well above their service level shares. This naturally raises the next question: what would be the result if formula funding for small urbanized areas were to be allocated in the same way as funding for large urbanized areas?

6 Analysis of Funding Alternatives

This section addresses the mandate in Section 3033 of TEA-21 to examine the effects of changes in the Section 5336 funding formulas or other funding mechanisms that would assist small transit intensive cities. Two categories of funding changes are addressed. The first illustrates how formula funding for each small urbanized area would be altered if the formula included service factors for small urbanized areas as well as large urbanized areas. The second, originating from members of the transit industry, briefly describes how the Section 5309 Bus program could be used to steer more funding toward small transit intensive cities

6.1 Applying Service Factors to Small Urbanized Area Formula Apportionments

In order to assess the effects of applying service factors to formula apportionments for small urbanized areas, two alternative scenarios for the FY 2000 apportionments were generated. In the first scenario, service factors were applied to small urbanized areas as a separate tier (9.32 percent of the total for Section 5307 funds). In the second, all urbanized areas were grouped together in a single Bus tier, and the formula was applied across the board. The service factors used were those from the current Bus incentive and Bus non-incentive tiers used in the large urbanized area apportionments.

[10] Funding shares for the formula program, based on decennial census data, do not change year-to-year, nor does the small urbanized area share of the overall program, which is fixed in statute.

The same data caveats discussed above in the section on Small Transit Intensive Cities apply here. The data reported by operators in small urbanized areas may include service provided in nonurbanized areas and/or in other urbanized areas, thereby inflating the formula apportionments attributed to that urbanized area relative to what they would actually receive if the data were reported in the same way as it is for large urbanized areas. See Appendix A for more detail on the data and methodology used in this section.

6.1.1 Applying Service Factors to Small Urbanized Areas as a Group

Exhibit 4 shows the net effect on each small urbanized area's FY 2000 formula apportionment of applying service factors to small urbanized areas in their own tier. The urbanized areas are grouped and their apportionments totaled by state, as in FTA's annual funding notice.[11] As expected, urbanized areas with very high transit service levels would gain considerably under such an approach, while densely populated small urbanized areas with no currently reported transit service would see large decreases in Section 5307 funding. The 20 small transit intensive cities identified in the previous section would see their combined share of formula funding double, from $26.2 million to $52.4 million, and their share of formula funding among all small urbanized areas would rise from 10.17 percent to 20.34 percent.

6.1.2 Applying the Bus Formula to All Urbanized Areas in a Single Tier

Exhibit 5 shows what the effect on small urbanized areas would be if the current bus formula were applied to all urbanized areas as a single tier. As a group, small urbanized areas would receive $33.5 million less in formula funding under this scenario than they actually did.[12] However, most small transit intensive cities would still gain, even when competing in the same pool as larger urbanized areas. Of the 20 small transit intensive cities, 17 would increase their funding levels, and their combined total would rise from $26.2 million to $41.1 million. Their overall share of bus formula money would rise from 1.4 percent to 2.1 percent.

[11] The state totals are the actual apportionments made by FTA to the governors. The actual formula funding allocated to each small urbanized area may or may not equal the totals listed here. Any minor differences between the amounts calculated here and those reported in the apportionments notice are due to rounding.

[12] Major urbanized areas over 1 million would gain $74.8 million, while urbanized areas between 200,000 and 1 million in population would lose $41.4 million. Incidentally, every major urbanized area would gain, while every other large urbanized area would lose. This is due to the current two-tier structure in the Bus Non-Incentive tier.

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
NATIONAL TOTAL	**257,568,903**	**257,568,903**	**0**
ALABAMA	**3,354,691**	**4,985,155**	**(1,630,464)**
Anniston, AL	218,307	480,853	(262,546)
Auburn-Opelika, AL	291,347	385,788	(94,441)
Decatur, AL	199,897	440,303	(240,405)
Dothan, AL	167,898	369,820	(201,922)
Florence, AL	494,014	515,217	(21,202)
Gadsden, AL	206,736	455,365	(248,629)
Huntsville, AL	1,169,629	1,445,530	(275,900)
Tuscaloosa, AL	606,861	892,280	(285,419)
ARIZONA	**592,422**	**1,304,894**	**(712,472)**
Flagstaff, AZ	233,060	513,348	(280,288)
Yuma, AZ-CA	359,362	791,546	(432,184)
ARKANSAS	**1,604,002**	**1,904,687**	**(300,685)**
Fayetteville-Springdale, AR	848,732	525,660	323,072
Fort Smith, AR-OK	324,867	715,567	(390,700)
Pine Bluff, AR	348,730	483,565	(134,835)
Texarkana, TX-AR	81,672	179,895	(98,223)
CALIFORNIA	**31,281,969**	**29,175,483**	**2,106,486**
Antioch-Pittsburg, CA	1,856,434	1,649,944	206,491
Chico, CA	625,881	720,399	(94,519)
Davis, CA	830,122	874,519	(44,397)
Fairfield, CA	1,046,979	1,062,135	(15,156)
Hemet-San Jacinto, CA	684,022	886,135	(202,113)
Hesperia-Apple Valley-Victorville, CA	1,385,386	1,130,450	254,937
Indio-Coachella, CA	243,263	535,822	(292,559)
Lancaster-Palmdale, CA	2,636,271	1,901,446	734,825
Lodi, CA	587,388	744,407	(157,019)
Lompoc, CA	352,387	457,181	(104,794)
Merced, CA	924,025	812,779	111,246
Napa, CA	859,999	849,265	10,734
Palm Springs, CA	1,707,974	1,058,042	649,931
Redding, CA	805,995	611,778	194,217
Salinas, CA	730,898	1,609,906	(879,009)
San Luis Obispo, CA	346,127	762,395	(416,267)
Santa Barbara, CA	2,955,688	2,490,601	465,087
Santa Cruz, CA	3,047,659	1,287,861	1,759,797
Santa Maria, CA	767,764	1,171,709	(403,945)
Santa Rosa, CA	2,860,126	2,271,814	588,312
Seaside-Monterey, CA	2,746,924	1,526,612	1,220,312
Simi Valley, CA	908,637	1,445,047	(536,410)
Vacaville, CA	398,271	877,250	(478,978)
Visalia, CA	999,547	1,002,011	(2,464)
Watsonville, CA	250,620	552,025	(301,406)
Yuba City, CA	722,159	880,815	(158,656)
Yuma, AZ-CA	1,424	3,136	(1,712)
COLORADO	**5,863,988**	**5,375,868**	**488,119**

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Boulder, CO	2,370,193	1,196,211	1,173,982
Fort Collins, CO	1,074,973	996,330	78,643
Grand Junction, CO	334,554	567,271	(232,717)
Greeley, CO	644,783	796,881	(152,098)
Longmont, CO	565,624	726,189	(160,565)
Pueblo, CO	873,861	1,092,986	(219,125)
CONNECTICUT	**8,007,269**	**9,503,988**	**(1,496,719)**
Bristol, CT	384,683	847,319	(462,636)
Danbury, CT-NY	1,068,398	920,575	147,823
New Britain, CT	1,171,424	1,586,597	(415,173)
New London-Norwich, CT	952,359	1,276,746	(324,387)
Norwalk, CT	1,214,664	1,094,124	120,540
Stamford, CT-NY	1,818,012	1,946,476	(128,464)
Waterbury, CT	1,397,729	1,832,150	(434,421)
DELAWARE	**1,407,634**	**405,570**	**1,002,064**
Dover, DE	1,407,634	405,570	1,002,064
FLORIDA	**11,562,698**	**12,360,873**	**(798,174)**
Deltona, FL	802,387	410,994	391,392
Fort Pierce, FL	851,569	984,528	(132,959)
Fort Walton Beach, FL	743,596	954,371	(210,775)
Gainesville, FL	1,583,890	1,223,088	360,803
Kissimmee, FL	258,633	569,676	(311,043)
Lakeland, FL	1,426,388	1,250,368	176,021
Naples, FL	373,602	822,912	(449,310)
Ocala, FL	250,966	552,788	(301,822)
Panama City, FL	818,009	829,583	(11,575)
Punta Gorda, FL	246,294	542,498	(296,204)
Spring Hill, FL	188,279	414,710	(226,432)
Stuart, FL	485,708	723,599	(237,892)
Tallahassee, FL	1,822,037	1,394,259	427,779
Titusville, FL	699,885	399,118	300,768
Vero Beach, FL	656,013	505,468	150,545
Winter Haven, FL	355,442	782,912	(427,470)
GEORGIA	**5,179,441**	**5,411,902**	**(232,461)**
Albany, GA	665,701	670,332	(4,631)
Athens, GA	659,845	642,694	17,151
Brunswick, GA	167,911	369,849	(201,937)
Macon, GA	545,466	1,201,466	(656,000)
Rome, GA	469,321	377,040	92,281
Savannah, GA	2,408,544	1,571,991	836,553
Warner Robins, GA	262,653	578,530	(315,878)
HAWAII	**877,059**	**1,438,341**	**(561,282)**
Kailua, HI	877,059	1,438,341	(561,282)
IDAHO	**2,393,797**	**2,846,734**	**(452,937)**
Boise City, ID	1,419,704	1,741,957	(322,253)
Idaho Falls, ID	518,536	624,457	(105,922)
Pocatello, ID	455,557	480,320	(24,763)

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
ILLINOIS	**12,104,205**	**13,039,476**	**(935,271)**
Alton, IL	585,451	704,693	(119,241)
Aurora, IL	1,533,358	1,973,637	(440,279)
Beloit, WI-IL	31,794	90,065	(58,271)
Bloomington-Normal, IL	944,290	1,135,262	(190,971)
Champaign-Urbana, IL	2,653,060	1,602,075	1,050,985
Crystal Lake, IL	560,415	643,251	(82,837)
Decatur, IL	911,724	901,814	9,911
Dubuque, IA-IL	7,348	21,007	(13,659)
Elgin, IL	1,329,144	1,423,686	(94,542)
Joliet, IL	1,507,617	1,646,194	(138,576)
Kankakee, IL	293,322	646,084	(352,762)
Round Lake Beach-McHenry, IL-WI	433,832	937,528	(503,697)
Springfield, IL	1,312,849	1,314,182	(1,333)
INDIANA	**6,643,730**	**7,605,189**	**(961,458)**
Anderson, IN	529,543	614,716	(85,172)
Bloomington, IN	837,852	917,307	(79,455)
Elkhart-Goshen, IN	632,459	919,374	(286,915)
Evansville, IN-KY	1,455,235	1,703,133	(247,897)
Kokomo, IN	416,787	619,041	(202,253)
Lafayette-West Lafayette, IN	1,324,812	1,230,688	94,124
Muncie, IN	990,064	904,711	85,353
Terre Haute, IN	456,977	696,219	(239,242)
IOWA	**4,519,207**	**4,140,176**	**379,031**
Cedar Rapids, IA	1,282,505	1,286,628	(4,124)
Dubuque, IA-IL	491,323	626,250	(134,927)
Iowa City, IA	1,154,257	741,322	412,935
Sioux City, IA-NE-SD	780,937	684,686	96,251
Waterloo-Cedar Falls, IA	810,185	801,290	8,895
KANSAS	**1,579,657**	**2,010,184**	**(430,527)**
Lawrence, KS	345,592	761,215	(415,623)
St. Joseph, MO-KS	2,932	6,283	(3,352)
Topeka, KS	1,231,134	1,242,686	(11,552)
KENTUCKY	**644,639**	**1,584,354**	**(939,714)**
Clarksville, TN-KY	82,047	193,324	(111,277)
Evansville, IN-KY	85,578	237,396	(151,819)
Huntington-Ashland, WV-KY-OH	168,193	473,409	(305,216)
Owensboro, KY	308,822	680,224	(371,402)
LOUISIANA	**3,276,131**	**4,692,211**	**(1,416,080)**
Alexandria, LA	310,866	684,727	(373,861)
Houma, LA	349,357	481,636	(132,279)
Lafayette, LA	1,022,620	1,184,744	(162,124)
Lake Charles, LA	432,065	951,685	(519,620)
Monroe, LA	941,254	904,907	36,348
Slidell, LA	219,969	484,512	(264,544)
MAINE	**2,073,569**	**2,042,135**	**31,434**
Bangor, ME	467,074	419,625	47,449

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Lewiston-Auburn, ME	519,615	487,597	32,018
Portland, ME	1,044,968	1,042,595	2,373
Portsmouth-Dover-Rochester, NH-ME	41,913	92,319	(50,406)
MARYLAND	**1,934,727**	**2,270,953**	**(336,226)**
Annapolis, MD	644,025	739,653	(95,627)
Cumberland, MD-WV	178,598	393,388	(214,790)
Frederick, MD	603,453	533,696	69,757
Hagerstown, MD-PA-WV	508,650	604,217	(95,566)
MASSACHUSETTS	**11,403,157**	**8,994,013**	**2,409,144**
Brockton, MA	2,301,973	1,642,939	659,034
Fall River, MA-RI	727,489	1,602,399	(874,910)
Fitchburg-Leominster, MA	1,483,937	649,363	834,574
Hyannis, MA	1,454,279	463,715	990,564
Lowell, MA-NH	1,610,026	2,033,701	(423,674)
New Bedford, MA	2,225,034	1,762,301	462,733
Pittsfield, MA	648,106	419,770	228,337
Taunton, MA	952,312	419,826	532,486
MICHIGAN	**8,149,957**	**7,675,132**	**474,825**
Battle Creek, MI	642,104	641,018	1,086
Bay City, MI	1,017,267	716,120	301,147
Benton Harbor, MI	442,267	517,989	(75,721)
Holland, MI	434,467	581,348	(146,881)
Jackson, MI	852,131	715,727	136,404
Kalamazoo, MI	1,585,035	1,545,579	39,456
Muskegon, MI	783,814	942,740	(158,925)
Port Huron, MI	1,167,648	620,436	547,213
Saginaw, MI	1,225,223	1,394,176	(168,954)
MINNESOTA	**3,723,057**	**2,735,192**	**987,865**
Duluth, MN-WI	1,445,535	665,591	779,944
Fargo-Moorhead, ND-MN	379,042	384,849	(5,807)
Grand Forks, ND-MN	32,014	84,346	(52,332)
La Crosse, WI-MN	20,122	41,318	(21,196)
Rochester, MN	818,168	750,719	67,449
St. Cloud, MN	1,028,176	808,369	219,807
MISSISSIPPI	**1,880,791**	**2,348,218**	**(467,427)**
Biloxi-Gulfport, MS	1,474,748	1,453,849	20,898
Hattiesburg, MS	205,717	453,122	(247,405)
Pascagoula, MS	200,326	441,246	(240,921)
MISSOURI	**2,828,404**	**3,235,877**	**(407,472)**
Columbia, MO	636,218	638,845	(2,627)
Joplin, MO	203,685	448,646	(244,961)
Springfield, MO	1,325,931	1,507,106	(181,175)
St. Joseph, MO-KS	662,571	641,280	21,291
MONTANA	**2,021,774**	**2,154,127**	**(132,353)**
Billings, MT	835,475	830,760	4,715
Great Falls, MT	608,975	774,700	(165,725)
Missoula, MT	577,324	548,667	28,657

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
NEBRASKA	**2,057,165**	**2,394,728**	**(337,563)**
Lincoln, NE	2,008,105	2,291,136	(283,031)
Sioux City, IA-NE-SD	49,060	103,592	(54,532)
NEW HAMPSHIRE	**1,828,101**	**2,908,063**	**(1,079,962)**
Lowell, MA-NH	2,136	5,952	(3,816)
Manchester, NH	825,478	1,219,106	(393,628)
Nashua, NH	678,999	974,879	(295,881)
Portsmouth-Dover-Rochester, NH-ME	321,489	708,126	(386,637)
NEW JERSEY	**1,234,989**	**2,203,395**	**(968,406)**
Atlantic City, NJ	721,016	1,588,141	(867,125)
Vineland-Millville, NJ	513,973	615,253	(101,281)
NEW MEXICO	**1,978,437**	**1,199,868**	**778,569**
Las Cruces, NM	604,795	666,532	(61,737)
Santa Fe, NM	1,373,642	533,336	840,306
NEW YORK	**7,901,715**	**6,657,248**	**1,244,467**
Binghamton, NY	2,078,234	1,670,995	407,240
Danbury, CT-NY	11,776	22,649	(10,873)
Elmira, NY	1,069,007	686,164	382,844
Glens Falls, NY	394,749	471,864	(77,115)
Ithaca, NY	937,735	476,242	461,493
Newburgh, NY	280,760	618,415	(337,654)
Poughkeepsie, NY	1,778,461	1,299,062	479,398
Stamford, CT-NY	65	154	(88)
Utica-Rome, NY	1,350,928	1,411,704	(60,776)
NORTH CAROLINA	**8,278,666**	**10,807,410**	**(2,528,744)**
Asheville, NC	820,315	834,195	(13,880)
Burlington, NC	274,732	605,137	(330,405)
Gastonia, NC	402,274	886,065	(483,792)
Goldsboro, NC	208,910	460,155	(251,245)
Greensboro, NC	1,626,658	1,905,751	(279,093)
Greenville, NC	240,538	529,819	(289,281)
Hickory, NC	229,407	505,301	(275,895)
High Point, NC	718,025	852,125	(134,100)
Jacksonville, NC	373,503	822,694	(449,191)
Kannapolis, NC	269,637	593,914	(324,277)
Rocky Mount, NC	215,542	474,762	(259,220)
Wilmington, NC	661,649	776,539	(114,890)
Winston-Salem, NC	2,237,474	1,560,950	676,524
NORTH DAKOTA	**1,918,091**	**2,099,862**	**(181,771)**
Bismarck, ND	614,104	605,512	8,592
Fargo-Moorhead, ND-MN	748,295	875,725	(127,430)
Grand Forks, ND-MN	555,693	618,625	(62,933)
OHIO	**3,782,328**	**5,773,647**	**(1,991,319)**
Hamilton, OH	541,786	1,193,362	(651,576)
Huntington-Ashland, WV-KY-OH	107,968	303,894	(195,926)
Lima, OH	296,103	652,210	(356,107)
Mansfield, OH	454,936	629,684	(174,748)

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Middletown, OH	502,173	820,501	(318,328)
Newark, OH	930,126	499,922	430,205
Parkersburg, WV-OH	33,608	74,027	(40,419)
Sharon, PA-OH	22,162	48,815	(26,653)
Springfield, OH	625,315	949,098	(323,782)
Steubenville-Weirton, OH-WV-PA	155,018	341,450	(186,432)
Wheeling, WV-OH	113,131	260,685	(147,553)
OKLAHOMA	**407,981**	**898,637**	**(490,656)**
Fort Smith, AR-OK	7,157	15,765	(8,608)
Lawton, OK	400,824	882,872	(482,048)
OREGON	**8,637,188**	**4,686,368**	**3,950,820**
Eugene-Springfield, OR	3,876,315	2,205,976	1,670,339
Longview, WA-OR	6,157	14,671	(8,513)
Medford, OR	752,181	681,748	70,432
Salem, OR	4,002,535	1,783,973	2,218,562
PENNSYLVANIA	**12,080,092**	**12,250,999**	**(170,907)**
Altoona, PA	732,346	836,913	(104,567)
Erie, PA	2,217,067	2,152,942	64,126
Hagerstown, MD-PA-WV	2,789	7,375	(4,586)
Johnstown, PA	833,239	771,765	61,474
Lancaster, PA	2,424,434	1,946,538	477,896
Monessen, PA	556,968	529,730	27,238
Pottstown, PA	228,219	502,685	(274,466)
Reading, PA	1,987,855	2,272,243	(284,388)
Sharon, PA-OH	159,775	351,927	(192,152)
State College, PA	807,264	732,444	74,821
Steubenville-Weirton, OH-WV-PA	1,161	2,558	(1,397)
Williamsport, PA	653,053	613,984	39,068
York, PA	1,475,921	1,529,894	(53,973)
PUERTO RICO	**5,138,068**	**11,317,331**	**(6,179,263)**
Aguadilla, PR	449,512	990,114	(540,602)
Arecibo, PR	420,013	925,138	(505,125)
Caguas, PR	1,099,953	2,422,805	(1,322,851)
Cayey, PR	325,215	716,333	(391,118)
Humacao, PR	281,468	619,973	(338,505)
Mayaguez, PR	604,733	1,332,011	(727,278)
Ponce, PR	1,345,712	2,964,123	(1,618,411)
Vega Baja-Manati, PR	611,463	1,346,835	(735,372)
RHODE ISLAND	**1,091,321**	**720,380**	**370,941**
Fall River, MA-RI	74,974	165,142	(90,167)
Newport, RI	1,016,347	555,238	461,108
SOUTH CAROLINA	**8,699,091**	**3,050,730**	**5,648,360**
Anderson, SC	186,276	410,299	(224,023)
Florence, SC	5,146,960	422,024	4,724,936
Myrtle Beach, SC	897,760	442,572	455,189
Rock Hill, SC	213,342	469,916	(256,574)
Spartanburg, SC	976,122	819,167	156,955

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Sumter, SC	1,278,631	486,753	791,878
SOUTH DAKOTA	**1,431,949**	**1,514,777**	**(82,828)**
Rapid City, SD	409,742	482,434	(72,692)
Sioux City, IA-NE-SD	6,406	13,526	(7,120)
Sioux Falls, SD	1,015,801	1,018,817	(3,016)
TENNESSEE	**2,054,001**	**2,344,390**	**(290,389)**
Bristol, TN-VA	99,485	219,130	(119,645)
Clarksville, TN-KY	598,115	534,276	63,839
Jackson, TN	502,278	404,396	97,882
Johnson City, TN	486,941	616,431	(129,490)
Kingsport, TN-VA	367,182	570,156	(202,974)
TEXAS	**17,578,506**	**21,706,887**	**(4,128,381)**
Abilene, TX	721,458	770,125	(48,668)
Amarillo, TX	1,171,848	1,428,410	(256,562)
Beaumont, TX	899,448	982,435	(82,988)
Brownsville, TX	1,719,833	1,427,936	291,897
Bryan-College Station, TX	795,863	956,487	(160,624)
Denton, TX	419,047	516,668	(97,621)
Galveston, TX	1,274,300	548,067	726,233
Harlingen, TX	318,614	701,792	(383,178)
Killeen, TX	609,420	1,342,335	(732,915)
Laredo, TX	2,035,609	1,695,320	340,289
Lewisville, TX	270,788	596,449	(325,661)
Longview, TX	266,421	586,831	(320,410)
Lubbock, TX	2,188,053	1,671,261	516,792
Midland, TX	332,447	732,263	(399,816)
Odessa, TX	368,805	812,346	(443,541)
Port Arthur, TX	576,470	886,146	(309,676)
San Angelo, TX	578,940	761,463	(182,523)
Sherman-Denison, TX	396,590	381,161	15,428
Temple, TX	230,790	432,724	(201,934)
Texarkana, TX-AR	158,525	349,174	(190,649)
Texas City, TX	421,389	928,170	(506,781)
Tyler, TX	329,514	725,803	(396,288)
Victoria, TX	228,427	503,143	(274,716)
Waco, TX	868,991	1,096,112	(227,122)
Wichita Falls, TX	396,917	874,266	(477,349)
UTAH	**451,290**	**433,852**	**17,437**
Logan, UT	451,290	433,852	17,437
VERMONT	**901,040**	**761,283**	**139,757**
Burlington, VT	901,040	761,283	139,757
VIRGINIA	**4,693,084**	**5,053,356**	**(360,272)**
Bristol, TN-VA	70,826	156,005	(85,179)
Charlottesville, VA	793,373	726,621	66,751
Danville, VA	352,849	412,634	(59,785)
Fredericksburg, VA	219,937	484,443	(264,506)
Kingsport, TN-VA	8,375	29,453	(21,078)

Exhibit 4
Net Effect of Applying Service Factors to the Formula Apportionments to Small Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Lynchburg, VA	956,042	691,272	264,770
Petersburg, VA	615,938	876,343	(260,405)
Roanoke, VA	1,675,744	1,676,586	(841)
WASHINGTON	**14,574,520**	**4,775,509**	**9,799,011**
Bellingham, WA	1,455,456	562,649	892,807
Bremerton, WA	3,812,767	1,089,956	2,722,811
Longview, WA-OR	447,525	476,091	(28,567)
Olympia, WA	2,901,230	847,994	2,053,236
Richland-Kennewick-Pasco, WA	5,136,908	884,646	4,252,262
Yakima, WA	820,636	914,174	(93,538)
WEST VIRGINIA	**4,307,496**	**3,670,219**	**637,276**
Charleston, WV	2,280,135	1,476,469	803,667
Cumberland, MD-WV	8,017	17,659	(9,642)
Hagerstown, MD-PA-WV	1,686	4,460	(2,773)
Huntington-Ashland, WV-KY-OH	980,822	828,947	151,875
Parkersburg, WV-OH	242,036	533,119	(291,083)
Steubenville-Weirton, OH-WV-PA	104,135	229,371	(125,237)
Wheeling, WV-OH	690,664	580,194	110,470
WISCONSIN	**10,949,318**	**10,047,371**	**901,947**
Appleton-Neenah, WI	1,790,317	1,839,851	(49,534)
Beloit, WI-IL	344,889	394,376	(49,487)
Duluth, MN-WI	149,187	172,747	(23,560)
Eau Claire, WI	912,945	720,646	192,299
Green Bay, WI	1,556,183	1,397,379	158,804
Janesville, WI	488,892	530,354	(41,462)
Kenosha, WI	1,081,177	965,672	115,505
La Crosse, WI-MN	846,549	766,631	79,918
Oshkosh, WI	824,996	669,054	155,942
Racine, WI	1,636,895	1,491,481	145,414
Round Lake Beach-McHenry, IL-WI	117	559	(442)
Sheboygan, WI	720,394	630,370	90,024
Wausau, WI	596,777	468,252	128,525
WYOMING	**686,493**	**1,051,862**	**(365,369)**
Casper, WY	219,062	482,515	(263,453)
Cheyenne, WY	467,431	569,347	(101,915)

Exhibit 5
Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
NATIONAL TOTAL	**224,094,365**	**257,568,903**	**(33,474,539)**
ALABAMA	**3,302,676**	**4,985,155**	**(1,682,479)**
Anniston, AL	241,872	480,853	(238,980)
Auburn-Opelika, AL	287,779	385,788	(98,009)
Decatur, AL	222,634	440,303	(217,668)
Dothan, AL	192,653	369,820	(177,167)
Florence, AL	445,640	515,217	(69,576)
Gadsden, AL	236,274	455,365	(219,091)
Huntsville, AL	1,094,397	1,445,530	(351,133)
Tuscaloosa, AL	581,425	892,280	(310,854)
ARIZONA	**594,348**	**1,304,894**	**(710,546)**
Flagstaff, AZ	238,462	513,348	(274,885)
Yuma, AZ-CA	355,885	791,546	(435,661)
ARKANSAS	**1,489,233**	**1,904,687**	**(415,454)**
Fayetteville-Springdale, AR	713,758	525,660	188,098
Fort Smith, AR-OK	350,805	715,567	(364,762)
Pine Bluff, AR	337,608	483,565	(145,958)
Texarkana, TX-AR	87,061	179,895	(92,833)
CALIFORNIA	**26,236,874**	**29,175,483**	**(2,938,609)**
Antioch-Pittsburg, CA	1,595,060	1,649,944	(54,884)
Chico, CA	548,297	720,399	(172,102)
Davis, CA	670,923	874,519	(203,596)
Fairfield, CA	910,179	1,062,135	(151,956)
Hemet-San Jacinto, CA	623,549	886,135	(262,586)
Hesperia-Apple Valley-Victorville, CA	1,235,915	1,130,450	105,466
Indio-Coachella, CA	249,255	535,822	(286,566)
Lancaster-Palmdale, CA	1,956,797	1,901,446	55,351
Lodi, CA	518,960	744,407	(225,447)
Lompoc, CA	332,185	457,181	(124,996)
Merced, CA	792,845	812,779	(19,933)
Napa, CA	737,573	849,265	(111,692)
Palm Springs, CA	1,483,252	1,058,042	425,210
Redding, CA	717,720	611,778	105,942
Salinas, CA	701,913	1,609,906	(907,993)
San Luis Obispo, CA	324,686	762,395	(437,708)
Santa Barbara, CA	2,320,887	2,490,601	(169,714)
Santa Cruz, CA	2,368,295	1,287,861	1,080,434
Santa Maria, CA	697,134	1,171,709	(474,575)
Santa Rosa, CA	2,313,565	2,271,814	41,751
Seaside-Monterey, CA	2,168,202	1,526,612	641,590
Simi Valley, CA	848,836	1,445,047	(596,211)
Vacaville, CA	387,502	877,250	(489,748)
Visalia, CA	837,610	1,002,011	(164,401)
Watsonville, CA	250,322	552,025	(301,703)
Yuba City, CA	644,000	880,815	(236,814)
Yuma, AZ-CA	1,410	3,136	(1,726)
COLORADO	**5,003,870**	**5,375,868**	**(371,998)**

Exhibit 5

Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas

Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Boulder, CO	1,866,909	1,196,211	670,697
Fort Collins, CO	934,816	996,330	(61,514)
Grand Junction, CO	336,943	567,271	(230,328)
Greeley, CO	578,978	796,881	(217,903)
Longmont, CO	498,862	726,189	(227,327)
Pueblo, CO	787,362	1,092,986	(305,624)
CONNECTICUT	**7,071,024**	**9,503,988**	**(2,432,964)**
Bristol, CT	398,031	847,319	(449,288)
Danbury, CT-NY	952,666	920,575	32,091
New Britain, CT	1,043,615	1,586,597	(542,983)
New London-Norwich, CT	832,067	1,276,746	(444,679)
Norwalk, CT	1,056,926	1,094,124	(37,198)
Stamford, CT-NY	1,524,242	1,946,476	(422,234)
Waterbury, CT	1,263,476	1,832,150	(568,674)
DELAWARE	**1,161,619**	**405,570**	**756,050**
Dover, DE	1,161,619	405,570	756,050
FLORIDA	**10,435,544**	**12,360,873**	**(1,925,329)**
Deltona, FL	670,407	410,994	259,412
Fort Pierce, FL	801,261	984,528	(183,267)
Fort Walton Beach, FL	700,344	954,371	(254,027)
Gainesville, FL	1,352,780	1,223,088	129,692
Kissimmee, FL	260,768	569,676	(308,908)
Lakeland, FL	1,248,331	1,250,368	(2,037)
Naples, FL	391,238	822,912	(431,674)
Ocala, FL	267,526	552,788	(285,262)
Panama City, FL	751,046	829,583	(78,537)
Punta Gorda, FL	262,846	542,498	(279,651)
Spring Hill, FL	201,760	414,710	(212,951)
Stuart, FL	465,273	723,599	(258,326)
Tallahassee, FL	1,556,908	1,394,259	162,650
Titusville, FL	552,244	399,118	153,126
Vero Beach, FL	583,983	505,468	78,515
Winter Haven, FL	368,829	782,912	(414,084)
GEORGIA	**4,669,895**	**5,411,902**	**(742,007)**
Albany, GA	606,942	670,332	(63,391)
Athens, GA	589,112	642,694	(53,582)
Brunswick, GA	183,642	369,849	(186,207)
Macon, GA	562,815	1,201,466	(638,651)
Rome, GA	407,355	377,040	30,315
Savannah, GA	2,050,426	1,571,991	478,435
Warner Robins, GA	269,603	578,530	(308,928)
HAWAII	**781,977**	**1,438,341**	**(656,363)**
Kailua, HI	781,977	1,438,341	(656,363)
IDAHO	**2,137,971**	**2,846,734**	**(708,763)**
Boise City, ID	1,271,620	1,741,957	(470,336)
Idaho Falls, ID	466,709	624,457	(157,749)
Pocatello, ID	399,642	480,320	(80,678)

Exhibit 5
Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
ILLINOIS	**10,536,649**	**13,039,476**	**(2,502,827)**
Alton, IL	540,425	704,693	(164,268)
Aurora, IL	1,375,048	1,973,637	(598,589)
Beloit, WI-IL	29,668	90,065	(60,398)
Bloomington-Normal, IL	832,715	1,135,262	(302,547)
Champaign-Urbana, IL	2,046,267	1,602,075	444,193
Crystal Lake, IL	514,791	643,251	(128,460)
Decatur, IL	803,172	901,814	(98,642)
Dubuque, IA-IL	6,686	21,007	(14,321)
Elgin, IL	1,135,785	1,423,686	(287,901)
Joliet, IL	1,348,649	1,646,194	(297,544)
Kankakee, IL	292,529	646,084	(353,555)
Round Lake Beach-McHenry, IL-WI	457,458	937,528	(480,071)
Springfield, IL	1,153,457	1,314,182	(160,724)
INDIANA	**5,928,933**	**7,605,189**	**(1,676,256)**
Anderson, IN	493,486	614,716	(121,229)
Bloomington, IN	722,107	917,307	(195,200)
Elkhart-Goshen, IN	600,053	919,374	(319,321)
Evansville, IN-KY	1,314,484	1,703,133	(388,649)
Kokomo, IN	387,437	619,041	(231,604)
Lafayette-West Lafayette, IN	1,109,569	1,230,688	(121,120)
Muncie, IN	862,306	904,711	(42,405)
Terre Haute, IN	439,491	696,219	(256,728)
IOWA	**3,957,922**	**4,140,176**	**(182,255)**
Cedar Rapids, IA	1,130,674	1,286,628	(155,954)
Dubuque, IA-IL	447,073	626,250	(179,177)
Iowa City, IA	958,584	741,322	217,262
Sioux City, IA-NE-SD	681,425	684,686	(3,261)
Waterloo-Cedar Falls, IA	740,165	801,290	(61,125)
KANSAS	**1,430,882**	**2,010,184**	**(579,302)**
Lawrence, KS	339,996	761,215	(421,219)
St. Joseph, MO-KS	2,639	6,283	(3,644)
Topeka, KS	1,088,248	1,242,686	(154,438)
KENTUCKY	**612,210**	**1,584,354**	**(972,143)**
Clarksville, TN-KY	74,908	193,324	(118,416)
Evansville, IN-KY	77,300	237,396	(160,096)
Huntington-Ashland, WV-KY-OH	154,260	473,409	(319,149)
Owensboro, KY	305,742	680,224	(374,482)
LOUISIANA	**3,074,657**	**4,692,211**	**(1,617,554)**
Alexandria, LA	333,177	684,727	(351,550)
Houma, LA	339,755	481,636	(141,881)
Lafayette, LA	900,453	1,184,744	(284,291)
Lake Charles, LA	462,602	951,685	(489,082)
Monroe, LA	809,808	904,907	(95,098)
Slidell, LA	228,862	484,512	(255,650)
MAINE	**1,896,483**	**2,042,135**	**(145,652)**
Bangor, ME	419,897	419,625	273

Exhibit 5
Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Lewiston-Auburn, ME	482,392	487,597	(5,206)
Portland, ME	947,579	1,042,595	(95,015)
Portsmouth-Dover-Rochester, NH-ME	46,615	92,319	(45,704)
MARYLAND	**1,770,380**	**2,270,953**	**(500,573)**
Annapolis, MD	575,526	739,653	(164,127)
Cumberland, MD-WV	194,367	393,388	(199,021)
Frederick, MD	530,708	533,696	(2,988)
Hagerstown, MD-PA-WV	469,779	604,217	(134,438)
MASSACHUSETTS	**9,564,431**	**8,994,013**	**570,418**
Brockton, MA	1,868,264	1,642,939	225,325
Fall River, MA-RI	708,024	1,602,399	(894,375)
Fitchburg-Leominster, MA	1,188,633	649,363	539,270
Hyannis, MA	1,208,581	463,715	744,867
Lowell, MA-NH	1,447,875	2,033,701	(585,826)
New Bedford, MA	1,846,068	1,762,301	83,767
Pittsfield, MA	561,566	419,770	141,796
Taunton, MA	735,420	419,826	315,594
MICHIGAN	**7,222,306**	**7,675,132**	**(452,826)**
Battle Creek, MI	577,897	641,018	(63,122)
Bay City, MI	875,082	716,120	158,961
Benton Harbor, MI	407,579	517,989	(110,410)
Holland, MI	406,809	581,348	(174,538)
Jackson, MI	748,770	715,727	33,044
Kalamazoo, MI	1,401,875	1,545,579	(143,704)
Muskegon, MI	721,859	942,740	(220,881)
Port Huron, MI	981,502	620,436	361,067
Saginaw, MI	1,100,933	1,394,176	(293,243)
MINNESOTA	**3,177,205**	**2,735,192**	**442,013**
Duluth, MN-WI	1,229,893	665,591	564,302
Fargo-Moorhead, ND-MN	339,619	384,849	(45,230)
Grand Forks, ND-MN	27,975	84,346	(56,371)
La Crosse, WI-MN	17,559	41,318	(23,758)
Rochester, MN	699,425	750,719	(51,294)
St. Cloud, MN	862,733	808,369	54,364
MISSISSIPPI	**1,773,300**	**2,348,218**	**(574,918)**
Biloxi-Gulfport, MS	1,331,179	1,453,849	(122,670)
Hattiesburg, MS	223,379	453,122	(229,743)
Pascagoula, MS	218,742	441,246	(222,505)
MISSOURI	**2,588,766**	**3,235,877**	**(647,110)**
Columbia, MO	571,535	638,845	(67,310)
Joplin, MO	222,233	448,646	(226,413)
Springfield, MO	1,198,588	1,507,106	(308,518)
St. Joseph, MO-KS	596,410	641,280	(44,869)
MONTANA	**1,801,671**	**2,154,127**	**(352,456)**
Billings, MT	741,591	830,760	(89,169)
Great Falls, MT	544,972	774,700	(229,728)
Missoula, MT	515,107	548,667	(33,559)

Exhibit 5
Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
NEBRASKA	**1,789,391**	**2,394,728**	**(605,337)**
Lincoln, NE	1,746,583	2,291,136	(544,553)
Sioux City, IA-NE-SD	42,809	103,592	(60,784)
NEW HAMPSHIRE	**1,750,025**	**2,908,063**	**(1,158,038)**
Lowell, MA-NH	1,921	5,952	(4,031)
Manchester, NH	761,294	1,219,106	(457,812)
Nashua, NH	629,253	974,879	(345,626)
Portsmouth-Dover-Rochester, NH-ME	357,557	708,126	(350,568)
NEW JERSEY	**1,243,427**	**2,203,395**	**(959,968)**
Atlantic City, NJ	742,749	1,588,141	(845,393)
Vineland-Millville, NJ	500,678	615,253	(114,575)
NEW MEXICO	**1,697,177**	**1,199,868**	**497,309**
Las Cruces, NM	551,022	666,532	(115,510)
Santa Fe, NM	1,146,155	533,336	612,818
NEW YORK	**6,752,114**	**6,657,248**	**94,867**
Binghamton, NY	1,761,932	1,670,995	90,937
Danbury, CT-NY	10,500	22,649	(12,149)
Elmira, NY	902,639	686,164	216,476
Glens Falls, NY	362,575	471,864	(109,289)
Ithaca, NY	770,414	476,242	294,172
Newburgh, NY	294,711	618,415	(323,704)
Poughkeepsie, NY	1,444,411	1,299,062	145,348
Stamford, CT-NY	55	154	(99)
Utica-Rome, NY	1,204,877	1,411,704	(206,826)
NORTH CAROLINA	**7,695,187**	**10,807,410**	**(3,112,222)**
Asheville, NC	738,390	834,195	(95,805)
Burlington, NC	292,463	605,137	(312,674)
Gastonia, NC	433,536	886,065	(452,529)
Goldsboro, NC	226,384	460,155	(233,771)
Greensboro, NC	1,471,609	1,905,751	(434,143)
Greenville, NC	246,945	529,819	(282,873)
Hickory, NC	252,438	505,301	(252,863)
High Point, NC	663,196	852,125	(188,930)
Jacksonville, NC	398,240	822,694	(424,454)
Kannapolis, NC	292,637	593,914	(301,278)
Rocky Mount, NC	222,092	474,762	(252,671)
Wilmington, NC	610,595	776,539	(165,944)
Winston-Salem, NC	1,846,663	1,560,950	285,713
NORTH DAKOTA	**1,708,434**	**2,099,862**	**(391,428)**
Bismarck, ND	552,387	605,512	(53,125)
Fargo-Moorhead, ND-MN	670,467	875,725	(205,258)
Grand Forks, ND-MN	485,580	618,625	(133,046)
OHIO	**3,565,567**	**5,773,647**	**(2,208,080)**
Hamilton, OH	548,523	1,193,362	(644,839)
Huntington-Ashland, WV-KY-OH	99,023	303,894	(204,870)
Lima, OH	303,816	652,210	(348,394)
Mansfield, OH	434,539	629,684	(195,144)

Exhibit 5
Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Middletown, OH	492,519	820,501	(327,982)
Newark, OH	783,166	499,922	283,244
Parkersburg, WV-OH	33,838	74,027	(40,189)
Sharon, PA-OH	24,061	48,815	(24,755)
Springfield, OH	580,361	949,098	(368,736)
Steubenville-Weirton, OH-WV-PA	164,387	341,450	(177,063)
Wheeling, WV-OH	101,333	260,685	(159,352)
OKLAHOMA	**418,732**	**898,637**	**(479,905)**
Fort Smith, AR-OK	7,729	15,765	(8,036)
Lawton, OK	411,004	882,872	(471,869)
OREGON	**6,413,731**	**4,686,368**	**1,727,363**
Eugene-Springfield, OR	3,064,163	2,205,976	858,188
Longview, WA-OR	5,538	14,671	(9,133)
Medford, OR	662,366	681,748	(19,382)
Salem, OR	2,681,663	1,783,973	897,690
PENNSYLVANIA	**10,466,545**	**12,250,999**	**(1,784,454)**
Altoona, PA	647,789	836,913	(189,125)
Erie, PA	1,899,904	2,152,942	(253,038)
Hagerstown, MD-PA-WV	2,576	7,375	(4,800)
Johnstown, PA	733,811	771,765	(37,954)
Lancaster, PA	2,050,373	1,946,538	103,836
Monessen, PA	443,076	529,730	(86,655)
Pottstown, PA	234,654	502,685	(268,031)
Reading, PA	1,738,763	2,272,243	(533,480)
Sharon, PA-OH	173,462	351,927	(178,464)
State College, PA	684,901	732,444	(47,543)
Steubenville-Weirton, OH-WV-PA	1,232	2,558	(1,327)
Williamsport, PA	556,904	613,984	(57,080)
York, PA	1,299,100	1,529,894	(230,794)
PUERTO RICO	**4,980,089**	**11,317,331**	**(6,337,242)**
Aguadilla, PR	456,905	990,114	(533,209)
Arecibo, PR	422,429	925,138	(502,708)
Caguas, PR	1,063,443	2,422,805	(1,359,361)
Cayey, PR	311,871	716,333	(404,462)
Humacao, PR	280,566	619,973	(339,407)
Mayaguez, PR	590,708	1,332,011	(741,303)
Ponce, PR	1,256,749	2,964,123	(1,707,375)
Vega Baja-Manati, PR	597,418	1,346,835	(749,417)
RHODE ISLAND	**906,375**	**720,380**	**185,995**
Fall River, MA-RI	72,968	165,142	(92,173)
Newport, RI	833,407	555,238	278,169
SOUTH CAROLINA	**6,858,771**	**3,050,730**	**3,808,041**
Anderson, SC	200,621	410,299	(209,678)
Florence, SC	3,777,982	422,024	3,355,958
Myrtle Beach, SC	762,364	442,572	319,792
Rock Hill, SC	228,385	469,916	(241,531)
Spartanburg, SC	838,823	819,167	19,656

Exhibit 5
Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Sumter, SC	1,050,596	486,753	563,843
SOUTH DAKOTA	**1,287,869**	**1,514,777**	**(226,908)**
Rapid City, SD	382,833	482,434	(99,601)
Sioux City, IA-NE-SD	5,590	13,526	(7,937)
Sioux Falls, SD	899,447	1,018,817	(119,370)
TENNESSEE	**1,933,398**	**2,344,390**	**(410,992)**
Bristol, TN-VA	109,865	219,130	(109,265)
Clarksville, TN-KY	546,075	534,276	11,799
Jackson, TN	433,820	404,396	29,423
Johnson City, TN	466,541	616,431	(149,890)
Kingsport, TN-VA	377,098	570,156	(193,059)
TEXAS	**15,829,515**	**21,706,887**	**(5,877,372)**
Abilene, TX	668,644	770,125	(101,481)
Amarillo, TX	1,068,776	1,428,410	(359,634)
Beaumont, TX	806,323	982,435	(176,113)
Brownsville, TX	1,267,628	1,427,936	(160,307)
Bryan-College Station, TX	736,736	956,487	(219,751)
Denton, TX	394,886	516,668	(121,782)
Galveston, TX	1,043,675	548,067	495,608
Harlingen, TX	332,484	701,792	(369,308)
Killeen, TX	621,876	1,342,335	(720,458)
Laredo, TX	1,608,028	1,695,320	(87,292)
Lewisville, TX	294,825	596,449	(301,624)
Longview, TX	288,316	586,831	(298,515)
Lubbock, TX	1,775,529	1,671,261	104,268
Midland, TX	356,335	732,263	(375,928)
Odessa, TX	407,130	812,346	(405,216)
Port Arthur, TX	563,896	886,146	(322,249)
San Angelo, TX	540,909	761,463	(220,554)
Sherman-Denison, TX	365,882	381,161	(15,279)
Temple, TX	242,139	432,724	(190,585)
Texarkana, TX-AR	168,985	349,174	(180,188)
Texas City, TX	463,479	928,170	(464,691)
Tyler, TX	341,497	725,803	(384,306)
Victoria, TX	236,601	503,143	(266,541)
Waco, TX	822,417	1,096,112	(273,695)
Wichita Falls, TX	412,516	874,266	(461,750)
UTAH	**395,733**	**433,852**	**(38,120)**
Logan, UT	395,733	433,852	(38,120)
VERMONT	**772,354**	**761,283**	**11,071**
Burlington, VT	772,354	761,283	11,071
VIRGINIA	**4,200,348**	**5,053,356**	**(853,008)**
Bristol, TN-VA	78,216	156,005	(77,789)
Charlottesville, VA	687,986	726,621	(38,635)
Danville, VA	334,089	412,634	(78,545)
Fredericksburg, VA	231,519	484,443	(252,924)
Kingsport, TN-VA	8,601	29,453	(20,852)

Exhibit 5
Net Effect on the Formula Apportionments to Small Urbanized Areas of Applying the Bus Formula Uniformly to All Urbanized Areas
Fiscal Year 2000

Urbanized Area/State	Hypothetical Apportionment	Actual Apportionment	Net Change
Lynchburg, VA	810,248	691,272	118,976
Petersburg, VA	586,038	876,343	(290,305)
Roanoke, VA	1,463,651	1,676,586	(212,935)
WASHINGTON	**11,221,115**	**4,775,509**	**6,445,605**
Bellingham, WA	1,179,683	562,649	617,034
Bremerton, WA	2,919,290	1,089,956	1,829,334
Longview, WA-OR	402,520	476,091	(73,571)
Olympia, WA	2,326,804	847,994	1,478,810
Richland-Kennewick-Pasco, WA	3,657,357	884,646	2,772,711
Yakima, WA	735,461	914,174	(178,713)
WEST VIRGINIA	**3,803,412**	**3,670,219**	**133,193**
Charleston, WV	1,920,805	1,476,469	444,336
Cumberland, MD-WV	8,725	17,659	(8,934)
Hagerstown, MD-PA-WV	1,558	4,460	(2,902)
Huntington-Ashland, WV-KY-OH	899,569	828,947	70,622
Parkersburg, WV-OH	243,694	533,119	(289,426)
Steubenville-Weirton, OH-WV-PA	110,428	229,371	(118,943)
Wheeling, WV-OH	618,634	580,194	38,440
WISCONSIN	**9,525,971**	**10,047,371**	**(521,400)**
Appleton-Neenah, WI	1,557,842	1,839,851	(282,009)
Beloit, WI-IL	321,820	394,376	(72,556)
Duluth, MN-WI	126,932	172,747	(45,815)
Eau Claire, WI	784,179	720,646	63,533
Green Bay, WI	1,384,368	1,397,379	(13,011)
Janesville, WI	435,425	530,354	(94,929)
Kenosha, WI	927,590	965,672	(38,082)
La Crosse, WI-MN	738,754	766,631	(27,877)
Oshkosh, WI	701,164	669,054	32,110
Racine, WI	1,405,684	1,491,481	(85,797)
Round Lake Beach-McHenry, IL-WI	124	559	(435)
Sheboygan, WI	626,345	630,370	(4,025)
Wausau, WI	515,745	468,252	47,493
WYOMING	**658,257**	**1,051,862**	**(393,605)**
Casper, WY	226,276	482,515	(256,239)
Cheyenne, WY	431,981	569,347	(137,365)

6.2 Alternative Proposal: Targeting Section 5309 Bus Program Funding to Small Transit Intensive Cities

An alternative mechanism to changing the Section 5336 formula, suggested by commenters on this study, involves a takedown from the Section 5309 Bus Program. Such an approach would be consistent with the stated concerns of operators in small transit intensive cities that their needs are primarily on the capital side, rather than on the operating side. It would also have the advantage of only imposing new data reporting requirements on operators that would apply for the funding, rather than subjecting operators in all small urbanized areas to the same requirements faced by transit operators in large urbanized areas.

Some broad outlines for how such a program could be structured were suggested. First, funding would come from a takedown from the total amount available for the bus portion of Section 5309, which would be reserved exclusively for use in small urbanized areas. Two options for distributing this funding were suggested. In one, a formula, similar in spirit to the Fixed Guideway Modernization Program of Section 5309, would be applied to all small urbanized areas. The formula might include the service factor components of the Section 5336 formula, or something relating to vehicle utilization rates. Small transit intensive cities would obviously be the prime beneficiaries of such a formula. Another option for distributing the takedown funds would be through discretionary grants to a criteria-limited applicant pool. Such criteria might include minimum vehicle utilization or service intensity rates. Other criteria, such as the creation of a Transportation Management Area in the small urbanized area or minimum uses of flexible funding[13] for mass transit (where applicable) might also be applied.

7 Other Issues

7.1 The Role of the States

State governments play a key role in providing public funding for mass transit, both in the administration of the Federal formula programs for small and nonurbanized areas and through their own transit assistance programs. The role played by the states has several features that are relevant to the discussion of the formula program.

7.1.1 The Governor's Apportionment

As noted in the description of the formula programs, one important difference between large urbanized areas (those over 200,000 in population) and small urbanized areas is that large urbanized areas receive their formula allocations directly, while the formula allocations attributable to small urbanized areas are apportioned to the Governor of the respective state. The exception for small urbanized areas occurs when they are part of a

[13] Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Program (CMAQ) funds.

designated Transportation Management Area. In this case, formula funds attributed to the area must be obligated within the small urbanized area. In practice, many states do simply "pass through" the formula allocations to the small urbanized areas, in part because the amounts attributable to each small urbanized area are published annually in the Federal Register. However, this is not required, and some states do allocate the Section 5307 Governor's Apportionment at least in part according to their own discretion or formulas. As a result, some commenters raised the possibility that any formula change increasing the allocations attributable to small transit intensive cities would not necessarily flow through to the targeted area, but could instead be used by the state in other areas. An obvious solution to this possibility would be for the small urbanized area to create a Transportation Management Area.

7.1.2 The Nonurbanized Area Formula Program and State Transit Assistance

As noted above, states also receive federal formula funding under Section 5311 based on their nonurbanized area population. Since these funds are not attributable to any specific sub-state region, states must develop their own mechanisms for transferring them to local operators. Many states also have their own transit assistance programs, focusing on both capital and operating needs. Such state programs are generally available for both urbanized and nonurbanized areas.

These state-administered transit assistance programs (both Section 5311 and state programs) allocate funds on either a discretionary or formula basis. Under discretionary programs, transit operators are invited to compete for the available pool of funds by submitting proposals to a selection committee, which awards funds based on a variety of factors, including outstanding needs. State funding formulas show enormous variety in their scope and complexity, but typically include some measures of existing service levels and/or financial conditions. In either case, whether discretionary or formula-based, state allocations are based on factors in addition to population and population density. Examples of three formula-based state transit funding programs and state administration of Section 5307 and 5311 programs are found in Appendix B.

7.2 The 2000 Census

The population figures used in the Section 5307 and 5311 formula programs are drawn strictly from the decennial census figures. Urbanized areas are also defined by the Census Bureau based on the decennial census population counts. As a result, the population and population density figures used in the formula, as well as the location and number of urbanized areas eligible for Section 5307 funding, are updated only once every 10 years, and the resulting changes have a significant effect on the formula programs.

It is expected that population figures from the 2000 Census will be incorporated into the formula apportionments beginning in FY 2002. Relative changes in population and density among urbanized areas will cause significant changes in the shares of formula funds received by each urbanized area. Some urbanized areas which are now classified as small urbanized areas will have grown to exceed the 200,000 population threshold, and

will thus be subject to the formula provisions applied to large urbanized areas. Some of these will likely be areas that are now considered small transit intensive cities; the new census counts will push them into the higher category, allowing their formula apportionments to reflect the high levels of service that they provide. New urbanized areas will be created, increasing the number of potential recipients of Section 5307 funds and increasing the competition for those funds. At the same time, population growth may lead to some urbanized areas being combined together. This is particularly likely for small urbanized areas adjacent to major urbanized areas. Such combinations will create an entirely new structure for the way in which transit operators in these (currently) small urbanized areas receive and spend their formula allocations.[14,15]

7.3 Reporting Requirements

The Federal Transit Administration is concerned about the reporting requirements that it imposes upon the recipients of federal transit assistance as the agency attempts to collect data to support the policy formation and decision-making process. Indeed, a review of the National Transit Database program is currently underway to determine what changes might be made to the information that local operators and agencies are required to report, with an eye toward limiting this burden. Any increase in the number of factors considered in the formula for small urbanized areas would lead to some additional reporting requirements that are not currently faced by operators in small urbanized areas, particularly small operators. This concern was raised by a number of commenters to the study. One advantage of using discretionary program funds to assist small transit intensive cities is that only the applicants for such funds would bear additional reporting requirements.

7.4 Small Operators in Large Urbanized Areas

One commenter on the study noted that small transit operators in large urbanized areas have issues that are in some ways the reverse of those faced by small transit intensive cities. These small operators are frequently located in smaller population clusters near large cities that have grown together with the larger urbanized area. As noted above, recent urban growth patterns are likely to result in some currently small urbanized areas

[14] A search of the Catalog of Domestic Federal Assistance found that the Section 5307 program is the only federal grant program apportioning funds to specific urbanized areas. Formula funding programs in other agencies, such as the Federal Highway Administration, Environmental Protection Agency, and the Department of Health and Human Services, allocate funds to states based on their urbanized area populations.

[15] While FTA uses the urbanized area definitions created by the Census Bureau, it is not strictly bound to do so. In 49 U.S.C. 5302(a)(17), an urbanized area is defined as "(A) encompassing *at least* an urbanized area within a State that the Secretary of Commerce designates; and (B) designated as an urbanized area within boundaries fixed by State and local officials and approved by the Secretary [of Transportation]." Thus, for purposes of the formula programs, an urbanized area could be defined to encompass a larger area (and thus more population, but a lower overall population density) than the corresponding Census-defined urbanized area (but not a smaller area, per the statute). Such adjustments in urbanized area definitions are in fact made by the Federal Highway Administration, which uses its own "Federal Aid Urbanized Area" definitions rather than those designated by the Census Bureau.

becoming part of larger urbanized areas once 2000 Census figures have been incorporated into the formula apportionments.

The issue faced by many such operators is that their system and operating characteristics are more similar to those of small urbanized areas than they are to those of large urbanized areas. The formula apportionments that they receive, however, are based on and follow the restrictions of the large urbanized area formula program (e.g., the prohibition on using formula funds for operations). These small operators may also be disadvantaged by their size relative to other operators in the urbanized area when local decisions are made on the disbursement and uses of urbanized area formula funds. It should be noted, however, that the local decision-making process is strictly the province of state and local governments.

7.5 Large Operators in Nonurbanized areas

The issues faced by small transit intensive cities may also apply to some systems in non-urbanized areas. Such systems are typically found in resort areas with small year-round populations but substantial seasonal populations and transit usage. Such systems carry far more passengers and provide much more service than is typical for nonurbanized areas, but this is not captured by the strictly population-based allocation of Section 5311 funds. The seasonal population variation also means that potential needs for such areas might not be well captured by census population statistics alone.

8 Conclusion

Sufficient issues exist to suggest that changes to the existing Urbanized Area Formula Grants Program should be considered in 2002-2003 as part of the FY 2004 and beyond reauthorization cycle, when population data from the 2000 Census and the resulting urbanized area redefinitions will be available.

The Section 5307, 5310, and 5311 formula apportionments should continue to reflect transit needs. Unlike many other interjurisdictional assistance programs of the federal government, existing and potential mass transit needs are not distributed evenly across the states, but instead tend to be much more concentrated. Any movement toward allocating federal transit formula funds on a basis unrelated to need would run counter to the purpose of the program.

As currently constituted, the Section 5307 formula program as applied to small urbanized areas reflects potential need but does not explicitly reflect existing need. This is in contrast to large urbanized areas--where existing needs are captured by the use of service level factors in the formula, and nonurbanized areas--where states allocate their apportionments on a discretionary or formula basis that does take account of existing need. This latter fact runs counter to the argument that only large cities (which generally have higher transit service levels) should have service factors applied in determining their allocations. The end result of the existing formula structure is that small transit intensive cities, which have above-average existing needs relative to their size, receive less formula funding than they would if the formula included service level factors.

The 2000 Census of Population will have a significant impact on the formula apportionments in both the urbanized and nonurbanized formula grants programs. These changes, likely effective in FY 2002, will lead into the discussion and debate surrounding the reauthorization of the federal transit program following the expiration of TEA-21 in 2003. FTA does not support reopening the current authorization and addressing formula program issues before then.

Some possible changes to federal transit assistance programs have been raised and analyzed in this report. The Federal Transit Administration views these proposals as a starting point for discussions of how to maintain a federal transit assistance program that continues to reflect and meet the needs of our Nation's mass transit systems. We welcome comments on this study and look forward to a continuing dialogue with Congress, the public transit industry, and the general public.

Appendix A
Data and Methodology

Operating data used in this report were drawn from the National Transit Database (NTD) for 1996-98. This data is required to be reported by all operators in urbanized areas with more than nine vehicles. Some of the measures used, such as unlinked passenger trips and vehicle revenue hours, are only available at the operator/mode level. In linking such data to particular urbanized areas, only the primary urbanized area served by the transit operator was used. Transit operators in large urbanized areas are further required to disaggregate data used for formula apportionment purposes, including passenger miles, vehicle revenue miles, and operating costs, by the urbanized area that is served, including both large urbanized areas and small urbanized areas.[1] Thus, the exact area to which the data applies may vary depending on which measure is being tabulated.

Data on formula funding levels were drawn from FTA statistics. Aggregate amounts by urbanized area size are based on the primary urbanized area served by the operator, as was the operating data used in the comparisons in Exhibit 2. Passenger data for nonurbanized areas were drawn from a recent FTA-commissioned survey.

The statistical outliers were identified by the use of multiple regression analysis. Linear regressions of passenger miles and vehicle revenue miles on urbanized area population and population density were performed using data for all small urbanized areas. The outliers were identified by examining the standardized residuals for each urbanized area from the regression; areas with a standardized residual greater than two were deemed outliers. While there are some technical statistical issues associated with this approach, it does help identify cities that have substantially greater transit service than would be predicted based on their population and density characteristics alone.

In tabulating the alternative formula funding levels for FY 2000, only bus, demand response, and vanpool operating statistics were used. All such data were classified as non-fixed guideway data for formula purposes. Were the formula to actually be applied in this way, however, it is possible that some of the fixed route bus miles for operations on HOV lanes would be attributed as fixed guideway operations, as is done in large urbanized areas. This would be particularly likely for small urbanized areas adjacent to large cities.

[1] For example, the Denver Regional Transit District serves the urbanized areas of Denver (large) and Boulder and Longmont (small).

The actual service level measures used to identify small transit intensive cities in Exhibit 1 are shown in the following tables:

Exhibit A-1
Small Transit Intensive Cities
Vehicle Utilization
Average Annual Passenger Miles Per Vehicle Revenue Mile and Per Vehicle Revenue Hour 1996-98

Passenger Miles Per Vehicle Revenue Mile	
Average for urbanized areas 200,000-1 million	**7.29**
Brownsville, TX	22.73
Monessen, PA	17.05
Lancaster-Palmdale, CA	12.84
Kailua, HI	12.82
Laredo, TX	11.55
Santa Barbara, CA	10.73
Champaign-Urbana, IL	10.52
Santa Cruz, CA	10.43
Lubbock, TX	9.42
Richland-Kennewick-Pasco, WA	9.20
Davis, CA	9.13
Boulder, CO	8.65
Stamford, CT-NY	8.61
Lafayette, LA	8.50
Santa Rosa, CA	8.42
Eugene-Springfield, OR	8.30
Taunton, MA	8.12
Bremerton, WA	8.10
Brockton, MA	8.07
New London-Norwich, CT	8.00
Monroe, LA	7.92
Beaumont, TX	7.62

Passenger Miles Per Vehicle Revenue Hour	
Average for urbanized areas 200,000-1 million	**95.54**
Lancaster-Palmdale, CA	346.53
Brownsville, TX	256.61
Monessen, PA	242.50
Richland-Kennewick-Pasco, WA	182.13
Bremerton, WA	159.96
Santa Cruz, CA	147.72
Poughkeepsie, NY	141.72
Santa Barbara, CA	140.57
Lubbock, TX	131.84
Champaign-Urbana, IL	127.47
Santa Rosa, CA	122.70
Laredo, TX	118.51
Eugene-Springfield, OR	115.58
Monroe, LA	111.98
Seaside-Monterey, CA	110.59
Brockton, MA	106.21
Winston-Salem, NC	104.78
Palm Springs, CA	102.88
Lafayette, LA	100.62
Stamford, CT-NY	100.16
Davis, CA	97.64
Beaumont, TX	96.90

Exhibit A-2
Small Transit Intensive Cities
Transit Service Provision
Average Annual Vehicle Revenue Miles Per Capita 1996-98

Average for urbanized areas 200,000-1 million				**11.13**
Florence, SC	87.97		Dover, DE	16.39
Richland-Kennewick-Pasco, WA	46.23		Pittsfield, MA	15.72
Bremerton, WA	44.20		Oshkosh, WI	15.33
Olympia, WA	44.07		Port Huron, MI	15.32
Bellingham, WA	33.39		Redding, CA	15.28
Hyannis, MA	31.95		Taunton, MA	14.26
Santa Fe, NM	31.38		St. Cloud, MN	14.25
Boulder, CO	25.90		Racine, WI	14.09
Ithaca, NY	23.65		Savannah, GA	13.91
Sumter, SC	22.53		Brockton, MA	13.67
Santa Cruz, CA	22.23		Sheboygan, WI	13.35
Newark, OH	21.81		Fayetteville-Springdale, AR	13.35
Eugene-Springfield, OR	21.32		Gainesville, FL	13.09
Newport, RI	20.85		Santa Rosa, CA	12.89
Champaign-Urbana, IL	20.83		Tallahassee, FL	12.72
Fitchburg-Leominster, MA	20.65		Binghamton, NY	12.56
Seaside-Monterey, CA	20.63		Laredo, TX	12.19
Elmira, NY	20.38		Winston-Salem, NC	12.16
Myrtle Beach, SC	19.78		Santa Barbara, CA	12.14
Iowa City, IA	19.71		Erie, PA	12.04
Deltona, FL	17.84		Lancaster, PA	11.87
Duluth, MN-WI	16.90		Salem, OR	11.70
Bay City, MI	16.80		Vero Beach, FL	11.64
Charleston, WV	16.69		Jackson, MI	11.63
Galveston, TX	16.55		State College, PA	11.62
Palm Springs, CA	16.55		Muncie, IN	11.39
New Bedford, MA	16.48		Lafayette-West Lafayette, IN	11.28

Exhibit A-3
Small Transit Intensive Cities
Transit Service Provision
Average Annual Vehicle Revenue Hours Per Capita 1996-98

Average for urbanized areas 200,000-1 million			0.770
Florence, SC	3.793	Charleston, WV	1.021
Olympia, WA	2.860	New Bedford, MA	1.003
Bellingham, WA	2.407	Palm Springs, CA	1.001
Richland-Kennewick-Pasco, WA	2.335	Redding, CA	0.987
Bremerton, WA	2.239	Davis, CA	0.956
Santa Fe, NM	1.948	Sumter, SC	0.939
Iowa City, IA	1.794	Vero Beach, FL	0.929
Champaign-Urbana, IL	1.719	Santa Barbara, CA	0.926
Hyannis, MA	1.614	Fayetteville-Springdale, AR	0.919
Santa Cruz, CA	1.569	Myrtle Beach, SC	0.906
Eugene-Springfield, OR	1.531	Lafayette-West Lafayette, IN	0.902
Newark, OH	1.480	Springfield, IL	0.892
Fitchburg-Leominster, MA	1.444	Muncie, IN	0.888
Ithaca, NY	1.389	Santa Rosa, CA	0.885
Seaside-Monterey, CA	1.313	Johnstown, PA	0.865
Duluth, MN-WI	1.295	Burlington, VT	0.865
Port Huron, MI	1.230	Erie, PA	0.864
Galveston, TX	1.201	Lancaster, PA	0.854
Laredo, TX	1.187	Norwalk, CT	0.848
Elmira, NY	1.171	Winston-Salem, NC	0.845
Oshkosh, WI	1.125	Portland, ME	0.824
Sheboygan, WI	1.124	Pittsfield, MA	0.821
State College, PA	1.094	Salem, OR	0.812
Racine, WI	1.089	Binghamton, NY	0.810
Bay City, MI	1.083	Eau Claire, WI	0.804
Tallahassee, FL	1.078	Jackson, MI	0.803
St. Cloud, MN	1.057	York, PA	0.803
Savannah, GA	1.046	Charlottesville, VA	0.780
Brockton, MA	1.038	La Crosse, WI-MN	0.772
Gainesville, FL	1.030		

Exhibit A-4
Small Transit Intensive Cities
Transit Service Consumption
Average Annual Passenger Miles and Unlinked Passenger Trips Per Capita 1996-98

Passenger Miles Per Capita	
Average for urbanized areas 200,000-1 million	**81.14**
Richland-Kennewick-Pasco, WA	425.36
Bremerton, WA	358.20
Florence, SC	307.27
Santa Cruz, CA	231.84
Boulder, CO	223.92
Champaign-Urbana, IL	219.16
Olympia, WA	189.60
Eugene-Springfield, OR	176.96
Bellingham, WA	164.19
Newport, RI	150.21
Seaside-Monterey, CA	145.22
Laredo, TX	140.71
Brownsville, TX	140.08
Monessen, PA	139.24
Santa Barbara, CA	130.20
Taunton, MA	115.71
New Bedford, MA	115.19
Brockton, MA	110.27
Santa Rosa, CA	108.54
Fitchburg-Leominster, MA	105.06
Palm Springs, CA	102.99
Ithaca, NY	101.97
Davis, CA	93.31
Iowa City, IA	91.70
Winston-Salem, NC	88.56
Lancaster-Palmdale, CA	86.83

Unlinked Passenger Trips Per Capita	
Average for urbanized areas 200,000-1 million	**17.97**
Champaign-Urbana, IL	77.94
Iowa City, IA	70.64
Bellingham, WA	49.52
Bremerton, WA	47.99
Santa Cruz, CA	43.21
Eugene-Springfield, OR	41.02
Davis, CA	40.00
Olympia, WA	39.91
Richland-Kennewick-Pasco, WA	39.59
State College, PA	38.81
Santa Barbara, CA	37.05
Laredo, TX	36.23
Seaside-Monterey, CA	29.08
Duluth, MN-WI	25.66
Tallahassee, FL	24.79
Ithaca, NY	24.74
New Bedford, MA	24.68
Galveston, TX	24.67
Palm Springs, CA	24.25
Brockton, MA	22.77
Port Huron, MI	22.61
St. Cloud, MN	22.49
Salem, OR	22.21
Williamsport, PA	21.34
Fayetteville-Springdale, AR	21.14
Gainesville, FL	20.04
Logan, UT	19.87
Binghamton, NY	19.76
Lubbock, TX	19.00
Oshkosh, WI	18.87
Burlington, VT	18.53
Johnstown, PA	18.21
Winston-Salem, NC	18.12
Savannah, GA	18.00

Appendix B
Examples of Formula-Based State Transit Funding Programs

Ohio

The State of Ohio assists local transit operators through the Ohio Public Transportation Grant Program. The program provides assistance to local transit operators to meet the local match requirements of Federal Transit Administration grants under the Section 5307, 5311, and 5309 programs. Funding for the program totaled $38 million in FY2000, of which $25.5 million was allocated on a formula basis, with the remainder allocated for discretionary capital grants.

Formula funds are first distributed by fixed percentages to five categories of transit systems: Large Rail/Bus, Large Bus Only, Intermediate Bus, Small Bus, and Non-urbanized Bus. Within each category, funds are allocated on a formula using 3 factors:

Ridership	50%
Revenue Service Miles	25%
Local Financial Support	25%

Within the Small Bus Systems category, there is significant diversity between fixed route bus and demand response systems. To account for this, ridership levels and revenue service miles for demand response systems are multiplied by 2.8 and 0.83, respectively. These ratios are based on historic state data on relative costs per rider and per revenue mile between demand response and fixed route bus service.

Iowa

The state of Iowa provides capital and operating assistance to local transit operators through its State Transit Assistance (STA) Program. STA provides assistance through both a formula and a discretionary special projects program. The formula program has separate tiers for regional (rural, multi-county) systems and urban systems (cities over 20,000 in population, which includes both urbanized areas and nonurbanized areas). Program funds are first divided between regional and urban systems on the basis of revenue miles. Within each group, funds are then allocated according to three formula factors:

Revenue miles per dollar of operating cost	25%
Ridership per dollar of operating cost	25%
Locally determined income	50%

The state also uses a formula to distribute the Governor's Apportionment for Section 5310 and Section 5311 funds. The Governor's Apportionment is first divided between regional and urban systems on the basis of the systems' total "Net Public Deficit." Funds

are then allocated according to ridership and revenue miles. The factor weights are different for rural and urban systems:

Regional		Urban	
Revenue miles	60%	Revenue miles	50%
Ridership	40%	Ridership	50%

Section 5307 funds for small urbanized areas are allocated on both a formula and discretionary basis. Eighty percent of the funds are allocated based on the federal formula apportionments for each small urbanized area, while the remaining 20 percent are allocated based on peer pool recommendations and on scoring through the state's Public Transportation Management System (PTMS).

New York

The State of New York provides operating assistance to local transit operators through the State Mass Transportation Operating Assistance (STOA) Program. STOA funds are allocated both to "Specified" systems (large systems whose funding is a specific line item in the state budget) and "Formula" systems (other, smaller systems receiving funding on the basis of a formula). The formula program has separate tiers for Downstate (New York City metropolitan region) and Upstate systems. Formula funding is based on a fixed amount per vehicle revenue mile and per passenger, and is adjusted quarterly. For the quarter from July-September 1999, the rates were $0.405 per passenger and $0.69 per vehicle mile. The formula also has components for costs related to the implementation of the Americans with Disabilities Act of 1990 (ADA) (based on passengers and population) and for bus systems that interline passengers with commuter rail operations (50 percent of the lost revenue due to free rail/bus transfers). New York State also provides capital assistance for local transit operators. Capital assistance for non-Metropolitan Transit Authority operators has two components. The first provides 50 percent of the local match for FTA-funded capital projects, while the second provides additional capital assistance to local operators based on a state assessment of transit capital needs.