Innovative Strategies for Managing the Increasing Costs of Paratransit Operations Under the Americans with Disabilities Act

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UNDER THE AMERICANS WITH DISABILITIES ACT

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ABSTRACT

When the Americans with Disabilities Act (ADA) was passed in 1990, transit agencies saw a fundamental shift in the requirements of service for the disabled. Among other obligations, they were required to provide door-to-door service (paratransit) for those unable to use fixed route services. The disabled community viewed this as a basic entitlement. Public transit saw this as another responsibility. A decade later, transit agencies are struggling to provide the service to a growing number of users under greater financial pressures and the disabled community is still awaiting a basic level of mobility.

This thesis reviews how mobility and accessibility came to be viewed as a right by summarizing US legislation since 1964 with regards to transportation and disabilities; examines the current state of paratransit and its funding levels; identifies and evaluates paratransit’s costs throughout the US and their implications; and proposes a three pronged approach of institutional, financial and internal strategies that transit agencies can invoke to manage the delivery and finances of paratransit.

There is no single strategy that can completely alleviate the financial pressures of paratransit services and provide improved services. First and foremost, with the reauthorization of TEA-21 approaching, transit agencies and disabled advocates should mobilize a coalition of paratransit stakeholders to approach the federal government and make a case for federal funding of paratransit services. By acknowledging that paratransit is a fundamental part of the surface transportation system and funding it as such, this would effectively spread its responsibilities over the entire transportation system, instead of only public transit. This could be funded, in part, by modifying the federal gasoline tax or other inputs to the Highway Trust Fund. Additionally, from a regional or state perspective, gas and parking taxes can be modified to help fund paratransit services.

Thus, in order to provide the level of mobility that was promised to the millions of disabled citizens in the ADA, the federal government must step in and assist transit agencies in operating the service. Without this support, transit agencies will continue to provide low quality paratransit services under immense financial stress and the disabled community’s mobility needs will constantly be placed on a second tier when compared to that of nondisabled citizens.
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# TABLE OF CONTENTS

## Chapter 1 – An Overview

1.0 Importance of Mobility and Accessibility ................................................. 10
1.1 Demographics of the Elderly and Disabled .............................................. 12
1.2 Methodology ............................................................................................. 17

## Chapter 2 – An American Legislative History of Transportation and the Disabled

2.0 The 1960s ................................................................................................. 22
  2.0.1 Urban Mass Transportation Act of 1964 ........................................... 22
  2.0.2 Architectural Barriers Act – 1968 .................................................... 22
2.1 The 1970s ................................................................................................. 23
  2.1.1 Urban Mass Transportation Assistance Act of 1970.......................... 23
  2.1.2 Federal-Aid Highway Act – 1973 ..................................................... 24
  2.1.3 Rehabilitation Act – 1973 ............................................................... 24
  2.1.4 National Mass Transportation Assistance Act – 1974 ................... 25
2.2 The 1980s ................................................................................................. 26
  2.2.1 APTA v. Lewis – 1981 ..................................................................... 27
  2.2.2 Federal Public Transportation Act – 1982 ........................................ 28
  2.2.3 Federal Mass Transportation Act – 1987 .......................................... 28
2.3 The 1990s through the present ................................................................. 28
  2.3.1 Omnibus Budget Reconciliation Act of 1990 and 1993 ..................... 29
  2.3.2 Intermodal Surface Transportation Equity Act – 1991 ..................... 29
  2.3.3 Transportation Equity Act of the 21st Century – 1998 ..................... 30
  2.3.4 New Freedom Initiative – 2001 ....................................................... 30
2.4 The Americans with Disabilities Act ......................................................... 31
  2.4.1 Vehicles for Fixed Route Service .................................................... 35
  2.4.2 Complementary Paratransit Services ............................................. 35
  2.4.3 Facilities ......................................................................................... 38
  2.4.4 Private Transportation Providers .................................................... 39
2.5 How has the ADA affected transit agencies and the disabled? ............... 39
2.6 Current State of Paratransit ..................................................................... 40
2.7 Why is this an issue? ................................................................................ 41
  2.7.1 Demand ......................................................................................... 41
  2.7.2 Service Area .................................................................................. 42
  2.7.3 Facility Compliance ........................................................................ 44
  2.7.4 Efficiency and Expense .................................................................. 44
2.8 How did we get here? .............................................................................. 45
2.9 Analysis of Federal Legislation ............................................................... 47

## Chapter 3 – Paratransit Costs and Their Implications

3.0 What cost elements are involved? ............................................................ 49
3.1 Paratransit Costs for Transit Agencies ....................................................... 50
  3.1.1 Largest 32 Metropolitan Area Transit Agencies ............................... 50
  3.1.2 Chicago Transit Authority (CTA) .................................................... 55
  3.1.3 Metropolitan Bus Authority, San Juan .......................................... 62
3.2 Future Demand ...................................................................................... 66
3.3 Paratransit Costs and Total Transit Costs ................................................. 67
3.4 What do the results say about the current state of paratransit in transit agencies? ............................................................... 71
Chapter 4 – Stakeholder Analysis

4.0 Transit Users

4.0.1 Disabled Users

4.0.2 Non Disabled Mainline Transit Users

4.1 Human Service Agencies

4.1.1 Department of Health and Human Services

4.1.2 Human Service Agencies

4.2 Advocates for the Elderly and Disabled

4.2.1 American Association of People with Disabilities

4.2.2 American Association of Retired Persons

4.2.3 Easter Seals – Project ACTION

4.4 Advocates for Improved Mobility

4.4.1 Community Transportation Association of America

4.4.2 Surface Transportation Policy Project

4.4.3 American Public Transportation Association

4.5 Federal, State and Local Government

4.5.1 Federal Transit Agency

4.5.2 State Departments of Transportation

4.5.3 National Council on Disability

4.5.4 United States Conference of Mayors

4.6 Providers of Paratransit Services

4.6.1 Large Providers

4.6.2 Small Providers

4.7 The Survey Results

4.7.1 Question 1

4.7.2 Question 2

4.7.3 Question 3

4.7.4 Question 4

4.7.5 Question 5

4.7.6 Question 6

4.7.7 Question 7

4.7.8 Question 8

4.7.9 Question 9

4.7.10 Question 10

4.8 The Emerging Coalition

Chapter 5 – Strategies for Managing the Increasing Costs of Paratransit

5.0 Institutional and Policy Strategies

5.0.1 Federal Level

5.0.2 Regional Level

5.1 Financial Strategies

5.1.1 Federal Level

5.1.2 State Level

5.1.3 Local or Regional Level

5.2 Internal Agency Strategies

5.2.1 Full Accessibility of Main Line Transit Vehicles

5.2.2 Training of Main Line Usage

5.2.3 Free Fixed Route Service for the Disabled
Index of Figures

Figure 1.1 – Disabilities in Total US Population Over 5 Years of Age ................................................. 13
Figure 1.2 - US Population Over 5, by Age Group, 2000 ................................................................. 14
Figure 1.3 - Percentage Increase in 65+ Age Group, 1990-2000 ..................................................... 15
Figure 1.4 - Projected Percentage Increase in 65+ Age Group, 2000-2025 ....................................... 16
Figure 1.5 - Disability Prevalence by Age, 1997 .............................................................................. 17
Figure 2.6 - ADA Regulations ........................................................................................................ 34
Figure 2.7 – Elderly Census Figures, Census 2000 ......................................................................... 41
Figure 2.8 – Gender, Age Group and Disability Status, 2000 ............................................................ 42
Figure 3.9 - Average Cost Per Trip for Paratransit Services for 32 Largest US Metropolitan Areas .... 52
Figure 3.10 – Average Fare for Paratransit Services for 32 Largest US Metropolitan Areas ....... 53
Figure 3.11 - Paratransit Riders per Weekday for 32 Largest US Metropolitan Areas .......... 54
Figure 3.12 - CTA Paratransit Operations, 1990-2002 .................................................................. 56
Figure 3.13 – CTA Paratransit Trips, 1990-2002 ......................................................................... 57
Figure 3.14 – CTA Average Cost per Paratransit Trip, 1990-2002 ................................................. 57
Figure 3.15 – Percentage of Unconditional CTA Paratransit Riders versus Other Classifications .... 59
Figure 3.16 – Modes of Transport Used by CTA Paratransit Users .............................................. 61
Figure 3.17 – AMA Paratransit Budget ....................................................................................... 63
Figure 3.18 – AMA Paratransit Trips, 1997-2001 .......................................................................... 64
Figure 3.19 – AMA Average Cost per Trip, 1997-2001 ................................................................. 64
Figure 3.20 – AMA Ridership per Weekday, 1997-2001 ............................................................... 65
Figure 3.21 Paratransit Operating Costs versus Total Transit Budget for 32 Largest US Metropolitan Areas................................................................................................................. 69
Figure 4.22 – Results of Survey: Question 1 ................................................................................. 95
Figure 4.23 - Results of Survey: Question 2 ................................................................................. 96
Figure 4.24 - Results of Survey: Question 3 ................................................................................. 97
Figure 4.25 - Results of Survey: Question 4 ............................................................................... 98
Figure 4.26 - Results of Survey: Question 5 ............................................................................... 99
Figure 4.27 - Results of Survey: Question 6 .............................................................................. 100
Figure 4.28 - Results of Survey: Question 7 .............................................................................. 102
Figure 4.29 - Results of Survey: Question 8 ............................................................................... 103
Figure 4.30 - Results of Survey: Question 9 ............................................................................... 104
Figure 4.31 - Results of Survey: Question 10 ............................................................................. 105
Figure 5.32 – Recommendations from the National Conference on Aging and Mobility ............. 114
Figure 5.33 – Highway Trust Fund Composition ........................................................................ 118
Figure 5.34 – Highway Account Income, FY 1997 .................................................................. 118
Figure 5.35 – Potential Revenues for the Mass Transit Account by Raising the Federal Gas Tax .... 120
Figure 5.36 - Percentage Change in Gasoline Price versus Consumer Price Index from 1993-2002 ......................................................................................................................................................... 121
Figure 5.37 – Possible Revenues for Mass Transit Account by Pegging Federal Gas Tax to Inflation, 1993-2002 .......................................................................................................................... 121
Figure 5.38 – Range of Additional Revenues for Highway Trust Fund, 2004-2014 ................. 122
Figure 5.39 – Possible Redistribution of Highway Account Revenues ......................................... 123
Figure 5.40 – Chicago Area Inflation Rate and Percentage Increase in Regular Gasoline Prices, 1993-2002 ......................................................................................................................... 126
Figure 5.41 – Potential Revenues from Pegging Illinois Gas Tax to Inflation, 1993-2002 ....... 127
Figure 5.42 – Possible Future Revenues for Paratransit by Pegging Illinois Gas Tax to Inflation at 1.5%........................................................................................................................................ 128
Figure 5.43 - Possible Future Revenues for Paratransit by Pegging Illinois Gas Tax to Inflation at 4%........................................................................................................................................ 128
Figure 5.44 – Range of Possible Additional Revenues from Pegging Illinois Gas Excise Tax to Inflation................................................................................................................................... 129
Figure 5.45 – Illinois State Gas Tax Outlays ................................................................................................................................. 130
Figure 5.46 – Potential Local Government Gains with Redistribution of Illinois Gas Tax Revenues ........................................................................................................................................ 131
Figure 5.47 – Average Parking Rates, Inclusive of Taxes, in the City of Chicago ...................... 134
Figure 5.48 – Potential Parking Tax Revenues for the Central Area of Chicago ....................... 135
Chapter 1 – An Overview

When the Americans with Disabilities Act (ADA) was passed in 1990, transit agency requirements for providing service to people with disabilities were modified. The legislation required that mainline service, such as fixed route bus and rail, be upgraded to meet accessibility standards for all persons with disabilities. This translated to fundamental infrastructure and vehicle improvements throughout most systems. In addition, transit agencies were required to provide paratransit services, which is a demand responsive non-fixed route service that provides comparable levels of service and response time to mainline service. This marked a fundamental shift in requirements of public transportation agencies. Previously, accessibility requirements were attached to the receipt of federal funds for transit capital grants, and federal operating assistance. ADA expanded the disabled accessibility responsibility of public transportation agencies, without any inherent connection to federal funds. When federal operating assistance was eliminated in 1997, the public transportation agencies were left with expanded federal mandates without federal operating financial support.

From the viewpoint of transit agencies, the major problems can be reduced to a financial position – how to manage the increasing costs associated with paratransit operations. Growth in costs and demand are not abating or even stabilizing. Projections show an imminent sharp rise in costs and demand due to the influx of elderly, and potentially disabled, to the system. From the disabled community's viewpoint, the service itself is not fulfilling basic minimum requirements for mobility of the disabled and in some cases, is not meeting the requirements of the legislation passed in 1990. The end result is that neither major constituency is satisfied with the situation and an increasingly adversarial situation can be anticipated as a need for service grows in the face of limited local operating funds.

1.0 Importance of Mobility and Accessibility

Our ability to take part in activities, participate in educational opportunities and obtain health care, as well as access our social circles, is dependent on easy, safe and convenient transportation. In the US, the two main components of transportation, mobility and accessibility, have become synonymous with the personal automobile. For those who are unable to purchase or use such a vehicle, such as the 8.4 million senior citizens age 65 years and older who choose not to drive, the 25-30 million people with severe disabilities who are unable to drive, the 10.7 million persons living in households with incomes below $15,000 per year and do not have the financial ability to
own a car and the 56 million school age but not yet driving age children, the alternatives are limited.¹ They are left with the “second best alternative,” transit, to solve their transport needs and because of transit’s inability to adequately satisfy them, are often faced with “isolation and cultural impoverishment.”² On the other hand, those who can afford a personal automobile, which account for the majority of Americans, are able to enjoy high levels of mobility, which translates to “high levels of access, choice, and opportunity, which can lead to self-fulfillment and enrichment.”

In our society, which takes both access and mobility for granted, the two terms are often used interchangeably, although in actuality, they are quite different. Mobility is the ability to move about freely and participate in the activities that one deems necessary.³ This is synonymous with “getting out and about.” Accessibility is the ability to move about without barriers or impediments, such as high curbs or stairs.⁴ Providing both in as many transportation alternatives as possible is necessary to society in general, but is of paramount importance to both those who truly need the alternatives.

Without proper mobility or an accessible mode of transport, the elderly and disabled’s personal independence and their participation in society is negatively impacted. Much research has proven that “mobility is critical to well being and that ready access to family, friends, social activities health care and other social outlets are vital to one’s full participation in life.”⁵ Those without viable transportation alternatives often must resort to asking relatives or friends for assistance. Being tied to other people for mobility often results in negative impacts on one’s sense of worth and personal identity. Unlike most Americans, those without ready access to an automobile must undertake significant planning in order to have a lifestyle even remotely similar to that of the automobile-using public. If they want to take public transit, they must adhere to a specific schedule for travel and they only have access to the limited part of the

² Ibid.
³ Mobility is the ability to move freely among origins and destinations.
⁴ Accessibility has two distinct definitions. The first is traditionally used from the disability perspective and is the ability to reach an origin or destination without barriers. The second can be used for either group and means the opportunities around a person’s locale, i.e. how many jobs are accessible within a 20 minute radius of one’s home. Throughout the remainder of this thesis, I will be using the former definition.
metropolitan area that is served by fixed route transit. Given the increasing rates of
suburbanization and disaggregation of employment, this is increasingly limiting. During
peak travel periods, public transit is quite frequent but during off peak periods such as
nights, weekends and holidays, many are left with little or no service. If they are
fortunate enough to live within an area that has paratransit services, then they are
usually required to call at least one day in advance to reserve the service. If they have
relatives or friends who are willing to provide them with transportation, then they must
ask the person well ahead of time. The end result is that for any of these individuals
there is little room for the spontaneity or impulsiveness that most nondisabled people
take for granted.

As one walks city streets and drives a car on the highways, it seems as though
the number of people who fall into the non-driving category is quite small. However, as
indicated from the numbers above, that is far from the case. This is especially true for
the elderly and disabled, who account for the largest portion of this category and whose
increased need for better mobility options are the focus of this thesis. Additionally,
rectifying the mobility and accessibility needs of these groups will benefit society in
general as most people will achieve elderly status and may one day have a disability.

1.1 Demographics of the Elderly and Disabled

When attempts were made in the 1960s to begin to aid the accessibility and
mobility needs of the elderly and disabled, these groups were largely combined into one
cluster and their needs were assumed to be largely similar. In the 1970s and 1980s, the
elderly waged a campaign to separate themselves from the handicapped in the public
eye and from a policy point of view. The title of 'handicapped', as the disabled were then
referred, applied only to a subset of the elderly and did not sufficiently cover all of their
needs. However, at a high level, with regards to transportation issues, it seems as if
decision makers continue to view all people with mobility challenges through the same
glass, as opposed to disparate groups with different needs. Unfortunately for those
involved, when discussing mobility and accessibility needs, there are significant needs
among these groups that continue to be unmet.

To get a firm understanding of these needs and the subsequent concerns of
transit agencies and the transportation system as a whole, the demographics of the
elderly and disabled must be explored. Based on the 2000 Census, of the 254 million
people in the United States over age 5, almost 40 million are described as disabled,\textsuperscript{6} which accounts for approximately 16\% of the US population.\textsuperscript{7}

**Figure 1.1 – Disabilities in Total US Population Over 5 Years of Age**

Disabilities in Total US Population over age 5

\begin{center}
\begin{tikzpicture}
\begin{axis}[
    ybar stacked,
    bar width=40pt,
    legend style={at={(0.5,-0.2)},anchor=north},
]
\addplot [fill=red!50] coordinates { (16,1) (74,0) } node [anchor=north west] {Disabled 16\%};
\addplot [fill=green!50] coordinates { (84,0) (16,0) } node [anchor=north west] {Non Disabled 84\%};
\end{axis}
\end{tikzpicture}
\end{center}

In addition, there are 33 million adults in US aged 65 and over, which accounts for 13\% of the population over 5 years of age.\textsuperscript{8} Of those 33 million adults over the age of 65, 41\%, or approximately 13.5 million, are considered by the 2000 Census to be disabled.\textsuperscript{9}

\textsuperscript{6} The United States Bureau of the Census provides data on disability based on three primary sources: the Survey of Income and Program Participation (SIPP), the decennial census of population, and the Current Population Survey (CPS). For person 15 years old and over, the SIPP disability questions cover limitations in functional activities (seeing, hearing, speaking, lifting and carrying, using stairs, and walking), in activities of daily living (ADL) or in activities of daily living (getting around inside the home, getting in or out of a bed or chair, bathing, dressing, eating, and toileting), and in instrumental activities of daily living (IADL) or in instrumental activities of daily living (going outside the home, keeping track of money or bills, preparing meals, doing light housework, and using the telephone). The SIPP also obtains information on the use of wheelchairs and crutches, canes, or walkers; the presence of certain conditions related to mental functioning, the presence of a work disability, and the disability status of children. In contrast to the comprehensive data available from the SIPP, the decennial census provides data on only a few dimensions of disability, and the CPS data concern only work disability.


\textsuperscript{7} United States Department of Commerce. United States Census Bureau, Census 2000, “Sex By Age By Disability Status By Employment Status for the Civilian Noninstitutional Population 5 Years and Over - Universe: Civilian noninstitutionalized population 5 years and over,” Data Set: Census 2000 Supplementary Survey Summary Tables.

\textsuperscript{8} Ibid.

\textsuperscript{9} Ibid.
Therefore, based on these Census figures, approximately 34% of the disabled population is over 65. Of the remaining disabled Americans over the age of 5, 56% are between the ages of 21 and 64 and 11% are between the ages of 5 and 20. Because the elderly do not consist of the majority of disabled Americans, grouping them together may overlook the transportation needs of both the non-elderly disabled and the non-disabled elderly.

Most people are not born with a disability and instead, are afflicted with a variety of disabilities as they age. This is especially apparent as individuals reach age 65 or older. Therefore, the growth projections for the over-65 age bracket are essential for understanding why the issue of mobility and accessibility of the disabled requires more attention. It is evident that the current transport system was not created with an aging or disabled population in mind. With the bulge of the babyboomers gradually moving toward the over-65 age group and the subsequent chance of increased disabilities, many transportation professionals must begin to rethink how transportation can be best offered to all citizens.

Since 1990, the 65 and over age group has grown at a faster rate than that of the overall US population. Although the difference in rates is not tremendous, 12% vs. 10%, respectively, when the 65 and older cohort is divided into smaller age ranges, there is cause for much greater concern and the difference in rates is quite obvious.

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10 "13,541,339 over 65 with a disability + 39,992,633 with a disability = 33.86%. Ibid.
According to Census 2000, between 1990 and 2000, the 65-74 age bracket showed a 1.6% increase\textsuperscript{12}, the 75-84 age bracket jumped by 22.9\%\textsuperscript{13}, the 85-94 age bracket soared by 37.9\%\textsuperscript{14} and lastly, the over 95 age group increased by 34.7\%.\textsuperscript{15}

Figure 1.3 - Percentage Increase in 65+ Age Group, 1990-2000

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.3.png}
\caption{Percentage Increase in 65+ Age Groups from 1990 - 2000}
\end{figure}

Projections from the Statistical Abstract of the United States for the next 25 years show an even greater increase. As a baseline, the overall US population is expected to increase by 22\% between 2000 and 2025. During the same time period, the 65-74 age range is projected to almost double, the 75-84 age range should grow by $\frac{1}{2}$, and the over 85 age group is expected to grow by 65\%. Overall, the 65+ cohort is projected to grow by 78\% between 2000 and 2025, which accounts for an additional 27 million people over age 65.\textsuperscript{16} Assuming that disability rates remain fairly consistent at 41\% for those 65 and over, the growth of elderly would create an influx of approximately 11 million more disabled Americans by 2025.

The following chart separates the 25-year growth projections into smaller segments and ultimately demonstrates that these issues cannot be postponed any longer.

\begin{itemize}
\item \textsuperscript{12}From 18.1 million to 18.4 million persons. Ibid.
\item \textsuperscript{13}From 10.0 million to 12.9 million persons. Ibid.
\item \textsuperscript{14}From 2.8 million to 3.9 million persons. Ibid.
\item \textsuperscript{15}From 250,000 to 340,000 persons. Ibid.
\end{itemize}
Between 2000 and 2005, the 65-74, 75-84, and the 85+ age groups are projected to increase by 1.28%, 4.73%, and 15.03% respectively. Between 2005 and 2010, the three age groups are projected to increase by 14.63%, -1.69%, and 15.76% respectively. Lastly, between 2010 and 2025, they are projected to increase by 68.23%, 53.64%, and 24.25% respectively as the end of the babyboomer generation reaches the 65 and over age group.\(^7\)

The rate of disabilities appears to have increased slightly, but negligibly, since 1990. In 1990, there were an estimated 36.1 million disabled Americans, which accounts for approximately 14.5% of the population.\(^8\) In 2000, the Census counted approximately 41 million disabled Americans, which is approximately 16% of the population, as stated above.\(^9\) This shows a 12% increase in disabled Americans since 1990, which is in line with the overall growth of the US population since 1990.\(^20\) Of those, the prevalence of disabilities in 1997 among the different age ranges is broken out as shown below. 75% of Americans over age 80 have some type of disability and almost 60% of them identified with having a severe disability.

\(^7\) Ibid.
\(^8\) LaPlante, Michael, A. *How many Americans have a disability?* San Francisco, National Institute on Disability and Rehabilitation Research, Disability Statistical Abstract 5.
\(^20\) Ibid.
As these projections indicate, disabled persons as a proportion of the population and elderly both appear to show extensive growth. The absolute numbers of disabled show signs of tremendous growth because the segment of the population that is expected to grow the most also has the highest rate of disabilities. As previously calculated, the growth in elderly alone should increase the ranks of the disabled by approximately 11 million by 2025. Combining all estimates, calculations estimate that the number of disabled Americans will grow to almost 55 million by 2025, which is an increase in excess of 57%.

These demographics and projections highlight an impending crisis. That is, the looming influx of disabled citizens who expect reliable transportation services to maintain their quality of life will have a tremendous impact on transportation services nationwide. This is especially pertinent for the public transportation agencies that provide the majority of paratransit services, even as their costs are already higher than anticipated and service capacity is stretched to a maximum.

1.2 Methodology

Now that the demographics have been summarized and the issues have been highlighted, a review will be conducted of federal legislation from the early 1960s through the Americans with Disabilities Act, which brought about the mandatory

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paratransit services, to the present. This will give a context to better understand how various pieces of legislation fit together and will highlight how paratransit for mobility and accessibility have come to be viewed as a right in our society, as opposed to an interim service to complement inaccessible mainline public transport. Specifically, the requirements of paratransit under the ADA will be summarized so as to better understand the obligations of transit agencies with respect to the disabled community. In addition, a summary of current federal funding levels for disabled transportation services will be assessed. This section will also include a summary of the current state of paratransit services in the US and will emphasize why this is an issue that needs to be addressed in the very near term.

In addition to demographics, the increasing costs of operating paratransit services are a sizable portion of the issue. If paratransit services were relatively inexpensive to provide, then agencies would not be showing such a level of concern. However, because of the increasing costs, transit agencies are making many short and long-term decisions regarding their transport service portfolio based on their obligations to the disabled community. The results of those decisions do not only affect the disabled community, but trickle down to include all transit users. Two case studies will be undertaken to further demonstrate the issues. Chicago Transit Authority (CTA) and San Juan’s Metropolitan Bus Authority (AMA) costs and services will be reviewed in order to accurately portray the costs and issues within transit agencies.

Because modifying the approach that transit agencies take in providing paratransit services cannot be undertaken in a vacuum, especially if agencies hope to acquire outside funding for the service, they need to approach other stakeholders. This group extends far beyond the local disabled community, and transit agencies must approach these groups to form a coalition, with which they can formally approach external funding sources or institutional bodies such as the state or federal government. A summary of each of the stakeholders, along with their goals and objectives with regard to the ADA will be completed. Coalitions, with whom transit agencies can partner, will be formulated, in order to get a broader scope for approaching external funding or institutional organizations.

Lastly, various strategies for managing the costs of paratransit operations will be discussed in order to provide avenues that transit agencies can pursue. One of the main strategies is obtaining federal funding. However, because federal funding will require Congressional action, which would occur at the earliest in 2004, other strategies for
alleviating the pressures of paratransit operations are necessary. These include institutional, supplementary funding and internal agency strategies. For each of the approaches, levels of responsibility, as well as the beneficiaries and losers and each strategy's pros and cons will be highlighted.
Chapter 2 – An American Legislative History of Transportation and the Disabled

Due to increased dependence on the automobile and the continuing sprawl of urban America since the 1950s, mobility for the elderly and disabled\textsuperscript{22} became much more of a challenge. However, disabled transportation needs were not on the policymaking radar screen before the 1960s. It took decades of interest group advocacy, shifting of cultural values, research and professional advice to formally shape the issues surrounding disabled transportation.\textsuperscript{23}

Beginning in the 1960s, many pieces of US legislation attempted to integrate transportation and accessibility standards for the disabled. Through legislative statutes and various departmental regulations, Congress attempted to improve mobility for a segment of the population that had often been overlooked in the transportation agenda. This section will provide a historical overview of United States legislation focused both on public transportation and the disabled. Following is a timeline that highlights each piece that will be discussed as well as the linear relationship among them. It begins with the Urban Mass Transportation Act of 1964 and culminates with the recent passage of the New Freedom Initiative in 2001. It will review the various pieces of legislation, some of which are geared toward the disabled community, mostly with respect to accessibility and transportation and highlight the continuum of legislation to help give a context to the ADA and the issues of the disabled community. It also helps to sequence how mobility and accessibility have come to be viewed as a right, as opposed to one of many public services rationed by the budget process. Second, the requirements and goals of the ADA with regards to transportation will be summarized. Third, the existing state of ADA paratransit will be discussed and various issues with its current condition will be brought to light. Lastly, a review of current Federal funding levels from both the Federal Transit Administration (FTA) and the Department of Health and Human Services (HHS) will be assessed.

\textsuperscript{22} Originally, much of the legislation focused on elderly and handicapped, as though they had equal needs with regards to accessibility. Throughout many documents from the 60’s and 70’s, the industry jargon for the group was E&H. However, the elderly fought to separate themselves from the handicapped, as this title applies only to a subset of the elderly and does not sufficiently cover all of their needs. The 1970’s and early 1980’s subsequently referred to subjects as handicapped. From the late 1980’s onward, the term handicapped was redefined as disabled, in order to include both mentally and physically disabled Americans.

United States Transportation and Accessibility for Disabled Legislative Timeline

Urban Mass Transportation Act of 1964 1964

Urban Mass Transportation Assistance 1970
Act of 1970

National Mass Transportation Assistance Act 1974

Federal Public Transportation Act 1982
Surface Transportation Assistance Act

Federal Mass Transportation Act 1987

ISTEA Title I Surface Transportation Amendments 1991
ISTEA Title III Federal Transit Act

ISTEA extended through 1998 1997

New Freedom Initiative 2001

1968 Architectural Barriers Act

1973 Federal-Aid Highway Act
Rehabilitation Act Section 504

1981 APTA v. Lewis

1986 DOT/HHS Council on Human Services
Transportation Formed

1990 Omnibus Budget Reconciliation Act
Americans with Disabilities Act

1993 Omnibus Budget Reconciliation Act

1998 TEA-21 Title III Federal Transit Act

Legislation in italics relates to accessibility for the disabled.
2.0 The 1960s

The 1960s started a period of addressing the civil rights of minorities in the United States, be it African Americans, the disabled, or the poor. These groups were viewed as having been discriminated against and had not been accorded the same rights as other groups of Americans. In the 1960s, it was mainly African Americans who emphasized their plight, which helped to “push their issues to the front burners of policy making.”

By the end of the decade, the lack of action of previous US policymaking was recognized as discriminatory towards the disabled and the initial push for recognition of equal accessibility and mobility as a civil right began.

2.0.1 Urban Mass Transportation Act of 1964

The provisions of this legislation did not specifically target the disabled or elderly communities. Instead, it gave a substantial boost to what is now commonly referred to as mass transportation, as it was one of the first pieces of legislation to specifically fund it. $375 million of Federal funding was allotted to provide capital assistance to develop mass transportation systems in urban areas.

2.0.2 Architectural Barriers Act – 1968

Studies and public discussion started as early as the 1950s in an attempt to mitigate the existence of physical barriers, which, even today, are one of the main impediments to full participation in society by the disabled population. This legislation mainly focused on the architectural modification of public buildings so that the disabled community could access them.

“If the handicapped cannot enter and use public buildings, they cannot easily vote, obtain government services, conduct business or become independent and self-supporting. Efforts to enhance talents and market job skills become meaningless when the job site and the usual place of business are inaccessible.”

Prior to this act, there was no federal mandate requiring right of access to federally funded properties. The Architectural Barriers Act changed that and required that any building “designed, built, altered or leased with Federal funds” had to be accessible to all members of the community. After much Congressional debate, ‘building’ was defined as any building or facility designed for public use, except privately

24 Ibid., 3.
owned residential structures not leased by the government for subsidized housing
programs\(^{28}\) and military facilities design for use by “able-bodied men.”\(^{29}\) The passage of
this act provided some of the greatest buoyancy to the disabled cause as it forced public
organizations to provide access to all community members.

2.1 The 1970s

Advocates for the disabled continued the push for equal mobility and accessibility
during the 1970s and it was partially achieved by the Rehabilitation Act of 1973. It was
during this decade that many of the disabled veterans from Vietnam began to take the
stage to advocate for improved access and mobility. Because of a sense of duty to this
group, the public’s perception of the disabled cause was modified and the issue became
legitimized. However, the fuel crisis of 1970’s effectively shifted the focus and
broadened the agenda to concentrate on improving mobility for all through more fuel-
efficient and cost effective modes like public transit.

2.1.1 Urban Mass Transportation Assistance Act of 1970

The Urban Mass Transportation Assistance Act of 1970 amended the Urban
Mass Transportation Act of 1964 to include a section that stated that the elderly and
handicapped had the same rights as the nondisabled community to use public
transportation and that “special efforts shall be made in the planning and design of mass
transportation facilities and services.”\(^{30}\) Although the bill asserted that accessibility
should be a national policy, it stopped short of using any formal language to require
enforcing accessibility compliance by agencies that received federal funding.\(^{31}\)

Grants and loans were made accessible to states and local public agencies,
which helped to facilitate the provision of these services. Section 16, which was
changed to Section 5310 in the Surface Transportation Assistance Act of 1982,\(^{32}\) was
developed to specifically address the needs of the elderly and disabled segment. The
governor of each state distributed funding for capital expenditures and state
administrative costs. Capital expenses included buses, vans, communication
equipment, vehicle maintenance, rehabilitation and overhaul, equipment leases and

\(^{28}\) Ibid.
\(^{29}\) Percy, Stephen L., 52.
\(^{30}\) King, Linda, A Comprehensive Transportation Plan for the Elderly and Handicapped, Prepared
for the City of Tacoma, Washington, NTIS, 1977, 12.
\(^{31}\) Percy, Stephen L., 132.
\(^{32}\) United States Department of Transportation. Federal Transit Administration. General Overview
of FTA C 9030.1B, Urbanized Area Formula Program: Grant Application Instructions, 10 October
1996.
acquisition of transportation services under a contract or lease.\textsuperscript{33} Unfortunately, the result of focusing on funding capital expenses was the implementation of many capital-intensive projects, as opposed to projects that may have required less capital, but greater operating or coordinating expenses. However, not all providers of specialized transportation services were eligible for Section 5310 funding. Those that qualified were private nonprofit organizations who provided transportation services for the elderly and disabled, state-approved public bodies who coordinated services for the elderly and disabled, or public bodies who certified that no non-profit was able to provide such services in the area.\textsuperscript{34} Large urban transport agencies were left out of the equation.

2.1.2 Federal-Aid Highway Act – 1973

The majority of the Federal Highway Act did not pertain directly to the disabled; however, it did present financial progress for public transportation in general. The legislation had two main features with regards to public transportation, (1) the federally funded portion of public transportation capital projects increased from 66.6% to 80% and (2) both the Federal-Aid Highway Systems highway funds and the Interstate Highway transfers were made available for public transportation projects. These changes and increased financial assets ultimately led to improvements for public transportation, which includes services for the disabled.\textsuperscript{35}

As part of the legislation, funds were provided for the design and construction of Metro, Washington DC’s subway, specifically to enhance accessibility and mobility for the disabled. Lastly, provisions were made for non-profit organizations to receive grant or loan money to provide paratransit services to the elderly and handicapped.\textsuperscript{36}

2.1.3 Rehabilitation Act – 1973

The Rehabilitation Act of 1973 reauthorized the vocational rehabilitation programs that helped to educate and improve the employable status of disabled individuals. In retrospect, the most important portion of the statute, Section 504, was added as a small piece of the legislation after attempts to modify the Civil Rights Act of 1964 failed. It was added almost as an afterthought, so that those individuals who participated in the Rehabilitation Act programs could transcend the traditional biases of

\textsuperscript{33} United States Department of Transportation. Federal Transit Administration. \textit{Section 5310 Program Circular, Chapter II}, October 22, 1997, 2-3.
\textsuperscript{34} United States Congress. Congressional Research Service. \textit{Federal Transit Administration’s Section 5310 Elderly and Disabled Program: Fact Sheet}, October 28, 1999, 1.
\textsuperscript{36} Percy, Stephen L., 132.
the business community and find employment. Section 504 duplicated language found in the Civil Rights Act of 1964 and prohibited discrimination against all disabled individuals by any project that received Federal funding. This included, but was not limited to employment, education, architectural accessibility, health, welfare and social services.\textsuperscript{37} In this case, disabled individuals were defined as anyone who “has a physical or mental impairment that substantially limits one or more major life activities; has a record of such an impairment; or is regarded as having such an impairment.”\textsuperscript{38}

This legislation only focused on those projects or agencies that received federal funding, but did not help to alleviate the biases that were pervasive in the general business community. However, it was hoped that by establishing the rights of this population within the Federal government, the business community would be persuaded to follow suit. The disabled community was left to wait until the passage of the Americans with Disabilities Act in 1990 for all discrimination to be prohibited.

In addition to Section 504, the Rehabilitation Act provided other avenues for assisting the disabled. Section 501 required that Federal agencies undertake affirmative action when hiring individuals with disabilities. Section 502 formed the Architectural and Transportation Barriers Compliance Board whose purpose was to oversee compliance with the 1968 act. Lastly, Section 503 encouraged affirmative action with regards to employing disabled contractors on Federal jobs.\textsuperscript{39}

2.1.4 National Mass Transportation Assistance Act – 1974

The National Mass Transportation Assistance Act of 1974 was created as an amendment to the Urban Mass Transportation Act of 1964 and was the first piece of legislation to provide operating subsidies for both public and private transportation providers.\textsuperscript{40} The act was designed to entice communities to revisit their list of priorities to try to encompass the needs of the entire community, be it mainline service or supplemental services, such as demand-responsive transportation, jitneys or service for the elderly, disabled and generally transit disadvantaged.\textsuperscript{41}

In addition, Section 9, subsequently changed to Section 5307 in the Surface Transportation Act of 1982, was created to target urban areas through a formula

\begin{itemize}
\item \textsuperscript{38} Percy, Stephen L., 54.
\item \textsuperscript{39} Ibid.
\item \textsuperscript{41} Prepared for the City of Tacoma. 13.
program. It provided funding to urban areas, with populations exceeding 50,000, for capital and operating assistance.\textsuperscript{42} Although many stipulations apply to the recipients of this funding, it can be used for capital, operating or planning expenses.\textsuperscript{43} Funding from Section 5307 is typically provided for a broader array of projects that can assist a greater segment of the population, although it was modified in TEA-21\textsuperscript{44} in 1998 to allow for 10\% of funding to be used for elderly and disabled paratransit services. In addition to basic capital and operating assistance, 5307 also provides for a half transit fare subsidy for the elderly (65+), individuals presenting a Medicare card and disabled during non-peak periods. This subsidy applies to "any fixed route service that operates in both the peak period and the off-peak period using or involving facilities and equipment financed with Section 5307 funds, whether provided by the grantee or by another entity that leases facilities and/or equipment from the grantee."\textsuperscript{45}

2.2 The 1980s

For the most part, the legislation of the 1980s did not focus directly on the issues of the disabled. Instead, it broadened the opportunities for public transportation to receive federal money through fuel taxes and other appropriations. However, out of the limelight, Congressional hearings and debates continued regarding the issues of the disabled population. The difference was that the issue had been redefined to look at sociopolitical issues. Disabled groups recognized that in order to achieve their goals, they needed to expand the cause and attract new participants to support their efforts.\textsuperscript{46}

Prior to the late 1970s, disability policymaking focused on medical or economic definitions. The new definition was sociopolitical in nature and emphasized that "disability stems from the failure of a structured social environment to adjust to the needs and aspirations of disabled citizens rather than from the inability of a disabled individual to adapt to the demands of society." In other words, the disabled were no different than

\begin{footnotesize}
\begin{itemize}
\item[43] US Department of Transportation. Federal Transit Administration. Urbanized Area Formula Program: Grant Application Instructions.
\item[44] It is also worthwhile to note that TEA-21 was also the federal legislation that withdrew all operating subsidies for transit.
\item[46] Rochefort and Cobb. 5.
\end{itemize}
\end{footnotesize}
someone of a different gender or skin color.\textsuperscript{47} The redefinition allowed the stage to be set for a piece of legislation geared toward the disabled that used the Civil Rights Act as a foundation.

\textbf{2.2.1 APTA v. Lewis – 1981}

In 1979, the Department of Transportation disseminated its regulations for compliance with Section 504 of the Rehabilitation Act, which required that all transportation facilities and vehicles were to be made accessible to the disabled. They were created in conjunction with those from the Department of Health, Education and Welfare\textsuperscript{48} and required all recipients of federal funding to make public transportation “readily accessible to and usable by handicapped persons.”\textsuperscript{49} These guidelines started the conflict between public transport and the disabled community. The American Public Transit Association (APTA) brought about a lawsuit against the Secretary of Transportation, Andrew Lewis.\textsuperscript{50} The litigation challenged the position of the DOT, who sided with the disabled groups and ultimately demanded full accessibility by public transportation systems. The reasoning was based on the verbiage of Section 504, which was the main reason for claiming full accessibility for transit agencies. In 1981, the U.S. Circuit Court of Appeals for the District of Columbia handed down a ruling which sided with APTA and indicated that the DOT’s rules were too stringent, imposed significant burdens on local transit properties and exceeded the requirements of the statute. After reworking the guidelines, the DOT issued amendments that compelled local properties to “provide special services” for the disabled, but left the door open for how to actually implement these guidelines.\textsuperscript{51}

In the final opinion of the court, the ruling stated that the regulations “required extensive modifications of existing systems and imposed extremely heavy financial burdens on local transit authorities.”\textsuperscript{52} This ruling significantly altered the atmosphere for


\textsuperscript{48} Now the Department of Health and Human Services (HHS).


\textsuperscript{50} Brock Adams was President Jimmy Carter’s DOT Secretary; Andrew Lewis was Ronald Reagan’s appointment. Secretary Adams actually passed the regulations on full accessibility and was a strong proponent of such regulations, but was out of office by the time the lawsuit came to pass. Lewis, on the other hand, given the philosophy of the Reagan administration, was more likely to scrap the regulations. (Katzmann, Robert A. \textit{Institutional Disability: The Saga of Transportation Policy for the Disabled.} Washington DC, Brookings Institution, 1986 175-6.)

\textsuperscript{51} Percy, Stephen L. 94, 144.

\textsuperscript{52} Katzmann, Robert A., 174.
the disabled community who believed that full accessibility was a right. The fragile
disability coalition splintered and was forced to look for other avenues to obtain funding
for disability rights. Without the constant lobbying, the federal government did not push
full accessibility on transit properties. Without full accessibility, disabled citizens were
left without mobility options. Ultimately, this lack of forced accessibility led to the
creation and enforcement of alternative paratransit services, which was viewed by the
transit agencies as a special service that provided effective mobility for the disabled.
Comparable paratransit was later mandated in the Americans with Disabilities Act, not
as a substitute, but as a supplement to fixed route services.

2.2.2 Federal Public Transportation Act – 1982

The Federal Public Transportation Act of 1982 (Section III of the Surface
Transportation Act of 1982) was the first piece of legislation to dedicate any money from
the federal motor fuel tax to public transportation. The law set aside $.01 of a
$.05/gallon increase in the Highway Trust Fund tax to be placed in a new Mass Transit
Account for use on capital projects.\textsuperscript{53} In addition, $3.13 billion was authorized for the
mass transit program for each of the subsequent fiscal years (1983-1985) and to
establish a new block grant program to replace current formula grants to public
transportation organizations.\textsuperscript{54}

2.2.3 Federal Mass Transportation Act – 1987

The Federal Mass Transportation Act was Title III of the Surface Transportation
and Uniform Relocation Assistance Act of 1987, which affected not only mass
transportation but also federal highways and safety. Although the majority of Title III was
focused on fixed route public transit, it did assist the disabled community and transit
properties by increasing the Federal share for projects that improve elderly and
handicapped accessibility to 95%.\textsuperscript{55}

2.3 The 1990s through the present

The effort to put the disabled on equal footing with other Americans peaked at
the beginning of the 1990s with the passage of the Americans with Disabilities Act,
which completely outlawed any discrimination towards the disabled. The political

\textsuperscript{53} American Public Transportation Association (APTA). \textit{History and Provisions of the Federal
Transit Act And Other Major Laws Affecting Public Transportation},

\textsuperscript{54} US Congress. Senate. \textit{Senate Record Vote Analysis on Gas Tax Passage}. Report prepared
by staff on the Republican Policy Committee, 97\textsuperscript{th} Congress, Second Session. December 21,
1982.

\textsuperscript{55} US Department of Transportation. Urban Mass Transportation Administration. \textit{Implementation
willingness to undertake this commitment to the disabled was “generally conditioned by societal perceptions of the people who were going to benefit.” Congress had passed other legislation in previous decades that put most other minorities on equal footing and the view of the American people was that it was time to do the same for the disabled. Other legislation later in the decade built upon the constructs of the ADA.

2.3.1 Omnibus Budget Reconciliation Act of 1990 and 1993

These acts did not pertain directly to the disabled community. Instead, they assisted overall public transportation projects by adding a $.015 and $.02 per gallon, respectively, to the fraction of the Highway Trust Fund available for the Mass Transit Account. This provided an overall increase in funding available to mass transportation properties.

2.3.2 Intermodal Surface Transportation Equity Act – 1991

The overarching purpose of the Intermodal Surface Transportation Equity Act (ISTEA) was to “develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy efficient manner.” Therefore, unlike previous legislation that focused the majority of time and money on highway projects, ISTEA expanded the focus to all modes of surface transportation. In an effort to allow individuals states to make decisions about future transportation spending, the concept of flexible funding was introduced. Previously, legislation identified pools of funding for specific projects, be it highway, transit or trails. Instead, ISTEA allowed the pool of funding to be linked together and utilized for any type of project at the discretion of the local Metropolitan Planning Organizations (MPO), which increased the amount of funding that could be used for transit projects.

With regards to the elderly and disabled, ISTEA continued to allot funds to Section 5310, modified from Section 16(b)(2) from the Urban Mass Transportation Act of 1970. For the 6-year duration of ISTEA, $428 million was reserved for specialized services for this constituency and it was left up to the each state for dispersal for capital costs or capital costs of contracting services. Only non-profits or coordinating public bodies were eligible for this money. In addition, to assist in complying with the ADA’s required capital improvements for accessibility, ISTEA’s Section 3, Discretionary and

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56 Rochefort and Cobb., 23.
58 Ibid., 22.
Formula Capital Program, allowed the use of its substantial funding of $12.4 billion over 6 years.  

2.3.3 Transportation Equity Act of the 21st Century – 1998

The Transportation Equity Act of the 21st Century (TEA-21) used ISTEA as a building block. TEA-21 expanded on many of the appropriations started in the earlier half of the decade by ISTEA, including the transportation planning process and flexible funding. One of the main highlights of the new legislation is the assignment of guaranteed multi-year levels of spending for highway and transit projects by Congress through FY 2003. The total that was guaranteed for the 6-year legislation was $198 billion, which this was a spending floor. The actual authorization was for $218 billion of spending for various highway, transit, safety and other surface transportation projects. 60

The distribution of funds for Section 5310 that pertains to transportation for the elderly and disabled was revised. In particular, the characterization of appropriate uses of Urbanized Area Formula capital funds was expanded to include preventive maintenance and ADA related expenditures for all urbanized areas. 61 In addition, recipients of the Urbanized Area Formula Program (Section 5307) and the Nonurbanized Area Formula Program (Section 5311) can use up to ten percent of their annual apportionment to finance ADA paratransit operations as long as both fixed route and non fixed route services have been certified as ADA compliant by the Federal Transit Administration (FTA). 62 These changes provided an opportunity for Congress to cut the direct transit operating subsidies, some of which were used by large metropolitan transit agencies for paratransit operations. From this point forward, transit agencies have been forced to supplement meager paratransit revenues from their own available operating funds, thus reducing their financial capacity to provide fixed route service.

2.3.4 New Freedom Initiative – 2001

As is evident from the summaries above, there has not been a major piece of legislation geared toward the disabled community since the ADA was passed in 1991. The New Freedom Initiative was created under the realization that there are still significant daily challenges faced by the disabled community. This piece of legislation’s

59 Ibid.
purpose is to increase the disabled community's access to assistive technologies, expand educational opportunities, and increase disabled Americans' integration in the workforce and other facets of daily life. Although this is a broad piece of legislation targeting most aspects of the disabled community, it specifically set aside $145 million for two transportation programs geared toward the disabled. $45 million was granted for funding of 10 pilot programs in urban or rural areas to help promote innovative approaches to transportation issues of the disabled community. $100 million was made available as a dollar-for-dollar matching grant program to community-based organizations that provide alternative transportation for the disabled population. However, the caveat of these funds is that they can only be used for the purchase and operation of specialty vans, assistance with costs associated with accessible vehicles and maintenance to extend existing transportation resources. Again, there is no funding specifically for operations costs associated with specialized transport, nor are the large transit organizations able to qualify for the funding.

2.4 The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) was passed on July 26, 1990 as an edict to completely eliminate any discrimination toward members of the disabled community. It went a step beyond Section 504 of the Rehabilitation Act in that it barred any discrimination by any organization, private or public, regardless of funding source and it required specific and detailed courses of action for compliance. Fundamentally, the ADA is based on the "civil rights/minority rights" model, which portrays the disabled community as an oppressed group whose "disadvantaged position in American society is based primarily on unfair discrimination." Its language and rationale is even quite similar to that of the Civil Rights Act – to prohibit discrimination and extend comprehensive civil rights to individuals with disabilities. The main difference stems from changes that are not only philosophical, but also physical and service oriented.

It is these physical upgrades and increased service that have led to great concern throughout the public transportation sector. Since Congress likened the

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64 Ibid.
rationale of the ADA to the Civil Rights Act, it chose not to directly fund the ADA. Therefore, the ADA is often perceived to be an unfunded federal mandate, when viewed as a standalone piece of legislation. In a comparison of the Civil Rights Act of 1964 and the ADA, Senator Tom Harkin (D-IA), one of the chief sponsors of the ADA, indicated, “before the 1964 act if you were black, you couldn’t sit at the lunch table, or you had to sit at the back of the bus. All businesses had to do to accommodate was to let them sit wherever they wanted. But disabled people can’t even get on the bus, ... so over time, the impact is greater.” In the year following the ADA’s passage, ISTEA was passed, both continuing and expanding federal funding for physical infrastructure enhancements or upgrades. At that point, operations and maintenance funding was also being provided that could be used to alleviate the cost of paratransit operations. In 1998, the federal operating subsidies fell by the wayside, but the requirement to continue providing door-to-door paratransit services for the disabled remained and the costs continued to rise. Hence, with this in mind, transit agencies often consider the ADA as an unfunded federal mandate with regard to paratransit operations.

The ADA is divided into five sections: Title I addresses employment discrimination; Title II addresses discrimination in public services or private entities under contract to public entities; Title III addresses public accommodations and services provided by private entities; Title IV provides for telecommunications access for all disabled; and Title V lists administrative and miscellaneous provisions. The definition of disabled in the ADA is similar to the one used previously in Section 504 of the Rehabilitation Act of 1973, although it was expanded to include persons with cognitive disabilities and those with contagious and noncontagious diseases, such as tuberculosis and HIV. The definition of disabled does not include the elderly as an entire cohort. Instead, only those elderly who have a specific disability that qualifies them as ADA eligible qualify for any of the benefits of the law. Public entities are defined as any State or local government, any department, agency, special purpose district or any other instrumentality of a State or States or local government, AMTRAK, or any commuter authority under the Rail Passenger Service Act. Lastly, accessibility is defined as (1) physical access to vehicles and facilities, (2) hardware that enables use of facilities or

vehicles, (3) proper training of personnel, and (4) operation and maintenance policies that enable disabled access.\textsuperscript{69}

As this thesis was created to focus on mobility issues with regards to the ADA, only the passages that refer to transportation will be reviewed. Title II’s main purpose was to ensure that “no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs or activities of a public entity, or be subjected to discrimination by any such entity.”\textsuperscript{70} A large portion of this section was dedicated to the accessibility of public transportation. Title III expanded upon the regulations to include compliance by the private sector. It focused mainly on accessibility to accommodations and facilities, but also included transportation provided by private entities. Below is a table that summarizes each section with respect to transportation regulations, the type of organization that must comply and the specific requirements for those entities that provide transportation.

\begin{itemize}
\item \textsuperscript{69} Ibid., 1.7 – 1.8.
\item \textsuperscript{70} United States Congress. House. 1990. \textit{The Americans with Disabilities Act (Title II and Title III)}. 101\textsuperscript{st} Congress, Second Session, Washington DC: GPO, 1990.
\end{itemize}
<table>
<thead>
<tr>
<th>Title and Section</th>
<th>Type of Entity Providing the Service</th>
<th>ADA Requirements</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>II, 222</td>
<td>Public</td>
<td>All purchased or leased (new or used) vehicles used in fixed route service must be accessible</td>
<td>Effective: August 25, 1990</td>
</tr>
<tr>
<td>II, 222</td>
<td>Public</td>
<td>Any refurbished vehicles must include accessibility features</td>
<td>Effective: August 25, 1990</td>
</tr>
<tr>
<td>II, 223</td>
<td>Public</td>
<td>Comparable paratransit must be provided by any public entity providing fixed route service if a user cannot use accessible fixed route transit</td>
<td>Implementation Plan submitted to Sec. DOT by January 1, 1992</td>
</tr>
<tr>
<td>II, 224</td>
<td>Public</td>
<td>New or used vehicles for demand responsive services must be accessible, unless equivalent service is provided to the disabled</td>
<td>Effective: August 25, 1990</td>
</tr>
<tr>
<td>II, 226</td>
<td>Public</td>
<td>All new facilities must be accessible</td>
<td>Effective: January 1, 1992</td>
</tr>
<tr>
<td>II, 227</td>
<td>Public</td>
<td>All current transit facilities must be altered to make them accessible</td>
<td>Based on plan submitted to and approved by Sec. DOT</td>
</tr>
<tr>
<td>II, 227</td>
<td>Public</td>
<td>Each transit agency must identify critical rail stations and make them accessible</td>
<td>Deadline: July 26, 1993 (can be extended by 30 years for expensive structural changes)</td>
</tr>
<tr>
<td>II, 228</td>
<td>Public</td>
<td>At least one car per train for both heavy and light rail must be made accessible</td>
<td>Deadline: July 26, 1995</td>
</tr>
<tr>
<td>III, 302</td>
<td>Private (demand responsive not subject to following 2 requirements)</td>
<td>The system, when viewed in its entirety, must ensure a level of service to individuals with disabilities, including those in wheelchairs, equivalent to the level of service provided to individuals without disabilities.</td>
<td>Effective: January 1, 1992</td>
</tr>
<tr>
<td>III, 304</td>
<td>Private (transportation as primary service)</td>
<td>All purchased or leased vehicles that are used on fixed routes and seat &gt; 8 passengers (including driver) must be accessible. If vehicles seat 8 or less or are solely used in a demand responsive system, they must be accessible unless equivalent service for the disabled is demonstrated.</td>
<td>Effective: August 25, 1990</td>
</tr>
<tr>
<td>III, 304</td>
<td>Private (transportation as secondary service)</td>
<td>All purchased or leased vehicles that are used on fixed routes and seat &gt; 16 passengers (including driver) must be accessible. If vehicles seat 16 or less (including driver), they must be accessible unless equivalent service for the disabled is demonstrated.</td>
<td>Effective: August 25, 1990</td>
</tr>
</tbody>
</table>
2.4.1 Vehicles for Fixed Route Service

In reference to fixed route service, ADA requirements refer to any new or leased vehicle that will be operated on fixed routes, such as buses, rapid rail vehicles, light rail vehicles, or any other type of vehicle that will be used on such a system. Public school transportation, aircrafts, intercity and commuter rail transportation is specifically excluded from this portion of Title II. Public entities are able to purchase used vehicles for use on fixed route systems if they can prove that they have made “good faith efforts” to purchase an accessible vehicle. Remanufactured vehicles, new, leased or refurbished in house, must also be made to be accessible “to the maximum extent possible.” Public entities that operate historic vehicles for places listed on the National Register of Historic Places need only make alterations that are required of remanufactured vehicles, as long as these modifications do not significantly alter the historic character of the vehicle.\(^7^2\) Lastly, in order to accelerate accessibility of public transportation for the disabled, public entities were required to have at least one accessible car on each heavy or light rail train by July 26, 1995.\(^7^3\) This enabled the disabled community to begin using public transportation as soon as possible.

2.4.2 Complementary Paratransit Services

Unmandated paratransit services existed long before the creation of the ADA. When the ADA was written, complementary paratransit was added because legislators realized that the timeframe necessary to implement fully accessible systems was lengthy. Therefore, paratransit was added as a stopgap measure to provide mobility during the years of physical infrastructure modifications. However, there was also a minority of people who believed that, even with full system accessibility, not all disabled users would be able to use fixed route services. Therefore, all public entities that provide fixed route service, except for commuter bus, commuter rail, intercity rail systems, and systems not open to the general public, must provide paratransit service that is comparable, in both level of service and response time, to service available to non-disabled customers.\(^7^4\) As these vehicles are designated primarily for the transportation of the disabled community, all vehicles, new or leased, must be made accessible unless the system, when viewed as a whole, provides options for all disabled users. For example, if a sufficient amount of taxicabs are accessible, then, because of

\(^7^2\) Ibid. Title II, Section 222.

\(^7^3\) Ibid. Title II, Section 228.

\(^7^4\) US Department of Transportation. Urban Mass Transportation Administration. 2.1-2.2.
the flexibility of taxicab service, the entire service is considered accessible even though each taxi in its own right is not accessible.

Six separate service criteria were identified to fully define “comparable” paratransit service.

1. **Service area** – Any origin or destination within $\frac{3}{4}$ of a mile on each side of any fixed bus route, $\frac{3}{4}$ of a mile on each side of corridors of a fixed route system that merge together, or within a $\frac{3}{4}$ mile radius of any heavy or light rail station. Diagrams of these service areas can be found in Appendix 1.

2. **Response Time** – The time between a request for service and pick-up of the passenger must be accommodated if requested the previous day. However, users of the system may request trips 14 days in advance. Pick up times are negotiable within reason and taxis may be used to increase flexibility for users.

3. **Fares** – Fares for complementary paratransit cannot exceed twice what is paid for non-disabled fixed route service. Zone or length fares are acceptable, if they exist on fixed route service. Transfer fees and premium fixed route fares are permitted as well. Personal care attendants cannot be charged for rides.

4. **Trip Purpose** – All trips must be accommodated. Prioritizing trips is not permitted.

5. **Hours and Days of Service** – This must match the hours and days of service of fixed route service. If multiple fixed route services are in operation (i.e. bus and rail), paratransit service must match the hours of the later system in those service areas that are served by it.

6. **Capacity Constraints** – Available complementary paratransit service cannot be limited by public entities. This includes caps on the number of trips provided or waiting lists for trips that cannot be accommodated. However, trips can be denied due to an *unanticipated* rise in demand. 75 A summary of capacity constraint indicators can be found in Appendix 2.

In order to ride complementary paratransit, riders must be certified as eligible. There are various levels of eligibility – unconditional, conditional, and transitional. Chicago’s Regional Transportation Authority’s formal definitions are included in Appendix 3. The first category, unconditional eligibility, is for those who cannot board, ride or disembark from an accessible vehicle on fixed route service without the assistance of another individual. Persons with an inability to recognize destinations or

75 Ibid. 5.1-5.9.
understand and complete transfers are included in the unconditional category. The second category, transitional eligibility, is for those users who can utilize mainline service if the vehicles are accessible. Therefore, until the vehicles and routes are made accessible, those who qualify are able to continue to use paratransit. The third category, conditional eligibility, is directed to those users who have a specific impairment that prevents them from traveling to a fixed route station. This category is the most vague. Difficulty getting to or from fixed route stops does not qualify; instead, the condition must prevent access to the stop. In addition, physical barriers outside of the public entity’s control (i.e. lack of curb-cuts) or environmental barriers (i.e. weather or terrain) alone do not constitute conditional eligibility. It is only when these barriers are combined with an impairment that a person can be considered conditionally eligible.

In addition, to assist public transit agencies with the scope of paratransit services and containment of costs associated with such services, the following parameters were also included.

- Other service providers who supply ADA paratransit services to eligible persons can be used toward the region’s total effort
- The service area need not exceed fixed route corridors
- Only those who cannot use fixed route service are eligible
- Buses on fixed routes are accessible if reservations can be made in advance for lift-equipped buses

The first parameter provides incentives for transit agencies to work with human service agencies or other organizations that provide transportation services. This could increase efficiency for the agencies and improve transportation services for the disabled community. Providing parameters for the paratransit service area helps transit agencies contain the scope of their services and minimize costs. However, this restriction limits the mobility of the disabled to the areas where transit currently exists, which was not the underlying purpose of the ADA. Effectively, the ADA is providing accessibility to vehicles on an existing service, but is not providing accessibility to the region for people who are disabled. The eligibility parameter is intended to ensure that capacity on paratransit services is readily available for those in need and is not overcommitted to persons who are able to use mainline transit even if they were non-disabled or transit was 100% accessible. Lastly, the ability to reserve a lift-equipped bus on a route should reduce the costs for transit agencies, as that bus can be used for a multitude of purposes and

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76 Ibid. 2.6-2.7.
provides the disabled community with a substitute for paratransit services. One negative for this parameter is that it is only useful for those who can easily access the bus stop.

The ADA allows public entities to submit a waiver if they feel that complying with the aforementioned six service criteria will impose an undue financial burden on the organization. Waivers, however, are not granted indefinitely, nor do they permit the organization to not implement the necessary services. Instead, the waiver increases the implementation period for complementary paratransit services and allows the organization to spread the costs over a greater period of time. 77

2.4.3 Facilities

As with vehicles, any new public transportation facility that is constructed after 1990 is required to be accessible to all disabled persons, including those in wheelchairs. 78 One of the most capital-intensive aspects to this act is that all existing facilities must be upgraded to meet new accessibility standards. These alterations include, but are not limited to, elevators, escalators and street side ramps. In addition, amenities within the facilities, such as bathrooms, telephones, and water fountains, must be made accessible, as long as these modifications are not "disproportionate to the overall alternations in terms of cost and scope." In other words, these public use facilities need not be added if they were not present prior to 1990, but if these facilities are added, they must be accessible.

In recognition that this mandate could be financially crippling to many public entities with large heavy or light rail systems that had many stations in need of upgrades, such as New York (490 stations) 79 , Boston (131 stations) 80 and Chicago (143 stations) 81 , the ADA proposed that each organization identify key stations within the system. These key stations, usually large transfer points or stations that served heavily traveled areas, were required to be accessible within three years of the ADA's passage. The focus on key stations allowed public entities to quickly achieve some regional accessibility to defer the modifications of other, supposedly less important stations, and stretch the large capital costs of facility upgrades over long periods of time. 82 In addition to facilities

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77 Ibid. 2.1-2.7.
78 United States Congress. The Americans with Disabilities Act (Title II, Section 226).
82 United States. Congress. The Americans with Disabilities Act (Title II, Section 227).
designated for use of public transportation, all programs or activities undertaken by public entities, such as meetings or educational classes, must occur within accessible facilities.

2.4.4 Private Transportation Providers

Title III of the ADA pertains only to private enterprises, which is defined as any organization that was not previously defined as a public entity. This includes private companies and non-profit organizations. To further differentiate between these entities with regards to transportation services, the ADA identifies private entities that provide transportation as their primary responsibility and those who provide it as secondary to their primary business, such as health centers. In the case of private entities that provide fixed route or demand responsive transportation services as a primary service, all vehicles, new or leased, that seat more than 8 passengers, including the driver must be accessible, unless the entity as a whole provides a level of service for the disabled that is equivalent to that provided to the non-disabled. The same requirements apply to those entities that provide transportation services as a secondary service, except that the seating capacity of the vehicle is reduced to more than 16 persons, including the driver.

All in all, the ADA finally forced society to put the disabled population on par with the non-disabled community for access to the fixed route service area, but not to the region in its entirety. However, in the decade since its passage, there have been many debates over costs and responsibilities for its implementation with regards to transportation services.

2.5 How has the ADA affected transit agencies and the disabled?

Requirements of the ADA can be divided into 2 categories: physical infrastructure improvements and complementary paratransit services. As discussed above, much of the legislation pre and post-ADA has been focused, both legislatively and monetarily, on capital expenditures. Before TEA-21, operating funding existed for public transit agencies, although it did not sufficiently cover paratransit costs and other mainline operating costs. Since the elimination of operating subsidies in TEA-21, the minimal appropriations for operations that exist have been reserved for private non-profit organizations. Little has been provided for large public transportation organizations, which provide the lion’s share of the specialized paratransit services in most urbanized areas.
In addition, most transit agencies are close to completing the necessary physical infrastructure enhancements. However, based on queries of many large transit agencies, the accessibility of fixed route services will have a limited affect on the demand for paratransit services as most users’ disabilities preclude them from ever using fixed route service. Although most fixed route systems fail to serve much of the metropolitan area and paratransit services are not legally required to go beyond the fixed route service area, many transit agencies have expanded the paratransit service area to include the city limits, which further erodes the service quality, given the limited funding. Transit agencies have also been relegated to managing a service that is quite different from their traditional role. In order to reduce costs, most transit agencies have contracted their paratransit services to third party carriers, which has led to another level of skill necessary to provide quality level of service. For these three reasons, the remainder of this thesis will focus on paratransit services for the disabled, as opposed to physical accessibility needs for the community.

Although the ADA required paratransit, the concept was not new to transportation providers. It had been on the radar screen previously, both locally and nationally, as an opportunity to supply transportation to those segments of the population that were underserved, specifically the elderly, disabled and poor. In addition, it was viewed as a potential competitor with the automobile as it could easily serve low-density, dispersed travel patterns. It presented a viable opportunity for private operators to enter the public transit market, which presented the opening the federal government needed to avoid direct funding of the service.

2.6 Current State of Paratransit

ADA paratransit was intended to give a comparable level of service to that of a nondisabled transit rider. However, as is evident in the level of service, transit riders in the US are billed as second-class citizens when compared with the level of service provided by the automobile. Given that the American society is designed and built with the automobile at the forefront, the ADA does not provide anything like equivalent access to society. Nowhere in the ADA legislation does it require that mobility for the disabled be put on par with mobility for the majority of nondisabled Americans who use the automobile with immense regularity.83

Concerns over the current state and future direction of paratransit services for the disabled have been increasing over the past decade. Public transportation

83 Lewyn, Michael. 1085.
agencies, federal human service and transportation departments, social agencies for the
disabled and elderly, local officials, elderly and disabled advocates and the communities
themselves have been vocalizing their dissatisfaction with the current state of
paratransit. Federal agencies, public transportation agencies and local officials are
concerned with the ever-growing bottom line of providing such services. Social service
agencies, advocates for the elderly and disabled and the actual communities are
becoming increasingly concerned with the inadequate level of service and continued
limited mobility for the disabled communities.

2.7 Why is this an issue?

2.7.1 Demand

According to Census 2000, the population of Americans over the age of 65 has
grown by 12% since 1990 and as the elderly census figures table84 demonstrates, the

Figure 2.7 – Elderly Census Figures, Census 2000

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<tr>
<td>Age</td>
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*all populations in millions

numbers show no signs of abating. The 75-84 cohort has increased by almost
23%, and both the 85-94 cohort and 95+ cohort have increased even more
dramatically, at 37.9% and 34.7% respectively. Between 2000 and 2025,
the Census projects that the 65+ cohort will increase by 75% as the babyboomers
reach this age group.85 These increases can be primarily attributed to improvements in
technology and medicine that allow people to live longer and healthier lives. A need for
mobility goes hand and hand with living longer.

Although being older than 65 does not automatically make a person eligible for
paratransit services under the ADA, there is a strong correlation between age and the
onset of a disability(s), even with the broad definition of disabled used by the Census
Bureau.

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84 US Department of Commerce. US Census Bureau.
85 Ibid.
Based on these figures, approximately a third of people between 65-74 have a disability and close to 50% of those 75 or older have a disability. Therefore, the conclusion can be drawn that although the elderly are not always disabled, they comprise a sizable subset of the disabled population and are often grouped together with the disabled when discussing paratransit operations. The expected growth of this part of the paratransit population will only increase the requests for services in the future, which in turn will increase the costs of paratransit services. In addition, since many of these people are currently nondisabled and are most likely quite familiar with the convenience of the private automobile or mainline public transportation, their expectations regarding mobility and accessibility will be much different than those who have been disabled since birth. This presents not only a financial and policy problem, but also a political problem, as they will most likely demand better service.

2.7.2 Service Area

The second issue with the current paratransit system and ADA regulations is the lack of options for the majority of disabled persons who reside outside of the boundaries defined by the ADA. According to the ADA, only disabled persons within a ¼ corridor on either side of a fixed route bus service or within a ¾ radius of a rail station are eligible for paratransit service. In addition, businesses are locating far outside of public transit...
service areas, which mean that the jobs and resources that go along with these organizations are out of the reach of the paratransit dependent population. Therefore, the limited spatial definition of paratransit forces the vast majority of disabled who do not qualify for ADA paratransit to look for other means for mobility or suffer the realities of limited social interaction.

To compensate for the lack of public paratransit service, many disabled rely on human service agencies, religious organizations or family members. Social services and religious organizations have their own fiscal realities that force them to apply their own restrictions for providing paratransit services. These restrictions usually do not incorporate routine needs such as shopping or socializing, which are as critical to the physical and mental well being of a person as basic medical care. Continuously asking family members for transportation needs often feels degrading to the person in need, and is a tremendous burden on the family member as well, as they are often unable to respond to the constant and varied needs of the disabled.

The ADA does not incorporate the non-disabled elderly population, even though they must contend with many of the same issues as the disabled. These include inability to walk long distances, stand for long periods to wait for bus or rail service or stand during transit. Prior to the passage of the ADA, many paratransit systems incorporated transportation needs for both the elderly and disabled. But with the high costs of providing paratransit to the disabled and incorporating the other requirements of the ADA, many public entities have chosen to eliminate the non-disabled elderly from paratransit services. Although these services for the elderly make sense and could potentially enhance the efficiency of paratransit services, transit agencies are hesitant to eliminate traditional services in favor of more efficient, but more costly, services that may serve a larger population and provide an overall improvement of mobility needs, especially to the elderly.

Current levels of service for ADA paratransit are lacking in their ability to adequately provide quality transportation service to the disabled even within the limited service area. One of the concepts behind paratransit is that it should be “demand-responsive”, akin to a taxi service. However, the current paratransit system is quite the opposite. Users are required to call at least one day in advance to request a ride and need to begin calling the service at 6 a.m. or 7 a.m. Even with an early start, users are

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87 Ibid 114.
often placed on hold for minutes, only to find out that capacity has been exceeded for the day and they must find alternative transportation. Once a ride is scheduled, the service is often late for a pick-up, if it arrives at all. In the vehicle, users are subjected to lengthy travel times because agencies try to optimize the routes for a wide variety of users in an attempt to improve efficiency. This service provides quite the opposite of what was intended by the ADA with respect to level of service and response time that occurs in fixed route transportation. Not only is this structure expensive and inefficient for the paratransit provider, but also it is a detriment to the mobility and accessibility of the disabled and negatively affects their roles and interactions with society.

2.7.3 Facility Compliance

According to most transit agencies, facilities and vehicles are close to being considered fully ADA accessible. In the decade since the ADA's passage, most transit agencies have rehabilitated their vehicle fleet and added low floored or lift-equipped buses. In compliance with the ADA, transit agencies have modified key stations and plans have been created for compliance of the secondary stations. The question remains, once these agencies complete the mandatory physical enhancements, what can be done regarding the provision of paratransit services? Based on surveys and eligibility information, paratransit demand will most likely not be dampened upon complete accessibility of a transit system. In Chicago, 82.33% of ADA eligible paratransit riders are unconditionally qualified. That is, regardless of accessibility of fixed route transit, they will still continue to use paratransit on a regular basis because their needs preclude the use of fixed route transit. Therefore, to consider paratransit as a stopgap measure necessary only until fixed routes are 100% accessible is a fallacy. The current alternative is the status quo, a continuation of high cost, low quality paratransit for a limited disabled community.

2.7.4 Efficiency and Expense

Providing paratransit services is not a simple or inexpensive undertaking for public transit agencies. Specialized transportation service is not the core competency of an organization whose principle goal is to directly provide fast, efficient service on primary trunk routes for a multitude of people. Door-to-door service in its current form for a small subset of the general population requires an additional set of management skills, usually including managing private contracts to provide the service. By continuing

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88 LeFevre, Anne to author, Data from Chicago Regional Transportation Authority (RTA), regarding ADA eligible riders on CTA during 2001. March 13, 2002.
to provide such a system, year after year, transit agencies are faced with increases in demand and costs, both of which are unsustainable for the future.

Many public transit agencies are required to meet a fare recovery ratio, which is the percentage of operating costs that are recovered by receipts from the fare box. The ratio is usually set slightly above 50%, which most transportation providers often struggle to meet. Included in the calculations not only are fixed route service operations and administrative costs, but also paratransit operations. Higher revenue services can show returns in excess of 80%, but paratransit services barely recover much of anything. This ultimately forces those higher revenue-generating (less costly) routes to cross-subsidize those routes that are more costly. In Chicago, for example, the overall fare recovery ratio was approximately 52% and the fare recovery ratio for paratransit in 2001 was a meager 6%. Because paratransit is mandatory and operating subsidies were cut in the late 1990's, other routes that are equally as important, such as weekend or evening service or service to low income or low-density areas have been eliminated or severely cut to meet the terms of the fare recovery ratio. Therefore, because of the limited funding available, other transportation disadvantaged individuals are often shortchanged.

Nowhere within the ADA is it mandated that public transportation systems must provide service to an area. Instead, it dictates that wherever and whenever fixed route service exists, complementary paratransit must exist as well. In theory, systems are able to reduce paratransit costs by reducing overall public transit, either by completely eliminating routes or reducing service hours. Although it seems a bit extreme, this measure can be undertaken in lower density areas and areas with limited community participation. Not only does this severely undermine the purpose of the ADA, but also it negatively impacts other non-disabled customers who rely on public transportation for mobility purposes.

2.8 How did we get here?

The ADA was passed in the name of civil rights for the disabled community. The main issue with advancing the legislation from that philosophical approach is that Congress adamantly refuses to fund civil rights legislation. This was overshadowed by the existence of federal operating subsidies that could cover a good portion of paratransit operating costs. Unfortunately, they were eliminated in 1998 with TEA-21.

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There has been a continuation of capital funding and redefinition of deferred maintenance as a capital expense, which allows for some capital and maintenance expenses related to ADA compliance to be covered by federal funding. But these funds are generally not adequate to cover fixed route services and have not been increased to assist in the additional needs of paratransit services. Additionally, caveats and strict regulations have been attached to most of those funding advancements. For example, the fiscal year 1999 FTA Apportionments expanded the annual formula apportionment to allow 10% of Urbanized and Nonurbanized Funds to be used for ADA complementary paratransit operations through 2003. Any agency receiving this funding must be completely compliant with ADA regulations for both fixed route and paratransit services. However, since regular operating subsidies were eliminated in 1998 and transit agencies were left with no assistance in paying for operations, they've had a difficult time creating ADA compliant services.

In fiscal year 2002, approximately $6.7 billion was appropriated for all of the FTA grant programs. Of this, $84.9 million (~1%) was appropriated for Section 5310, the Elderly and Persons with Disabilities Formula Program, and an additional $32 million from the Urbanized Area Formula Program was dedicated to transit enhancements, which can be used for improving access for the elderly and disabled. In addition, the 10% provision of the Urbanized and Nonurbanized Funds discussed above can contribute another $320.7 million and $22.6 million, respectively, to ADA paratransit operations at the discretion of each state's governor or local MPO. Section 5310 funding can be used only for capital expenses or transportation services acquired by contract. Only private non-profits or public bodies who coordinate these services or who can certify that they are there are no non-profits in the area providing this service qualifies for Section 5310 funding. Transit enhancements include improved access for persons with disabilities, but also can be used for modifications including public art, pedestrian walkways, bus shelters, and historic preservation.

The US Department of Health and Human Services (HHS) also contributes funding to the transportation needs of the elderly and disabled in addition to other

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90 US President. Federal Register 63, 5.
92 Ibid.
93 Ibid.
94 Ibid.
95 Ibid. 3, 7, 9.
individuals who are transportation disadvantaged. The Administration on Aging (AoA) has set aside $357 million for supportive services some of which can be used for transportation services. The AoA estimates that it will provide 51 million rides for older Americans, some of who are considered eligible for ADA paratransit. The Centers for Medicare and Medicaid Services (CMS) also provides funding for transportation services. This funding is available only when an eligible Medicaid recipient travels for non-emergency, non-ambulance transported medical services. Lastly, HHS has set aside a pool of funding that is to be used for supportive services, that is services that help support the primary mission of the organization, but do not receive funding specifically identified for its purpose. Because this funding can be used for a variety of tasks, there is no definitive documentation kept for transportation services. HHS has estimated that about 5% of support services funding, or $2.7 billion, is used for transportation services.

2.9 Analysis of Federal Legislation

Since the Interstate Highway Act of 1956, legislation for highway funding has typically received a relatively easy passage through Congress for a variety of reasons. First, every Congressman and Senator can easily relate to the need for highway funding and can make a strong case for it in his/her home district. Second, the constituencies that feel strongly about the funding are very powerful on Capitol Hill, such as the construction, automotive, and trucking industries. Third, many in Congress believe that continued highway spending is crucial to our country’s economic vitality.

The economic assistance for transit funding is not as well regarded since transit is typically only used by a minority of the population and is usually only identified with large urban areas. Because of its difficulty in standing alone, transit has had to tie itself to highway legislation in order to obtain its share of federal money. To a large extent, this has been fairly successful. Not only was the Highway Trust Fund expanded to include a Mass Transit Account, but also the previous legislative focus on transportation has been expanded from a single focus on highways to include all forms of surface transportation. This flexibility to use federal funding to meet either highway or transit needs has provided many MPOs with the ability to increase transit funding through


flexible funding. Similarly, the elderly and disabled constituencies saw immense benefits in tying their needs for improved mobility and accessibility to the coattails of the transit lobby. This too was successful, as can be seen by the achievements of the ADA.

With regards to creating a fully accessible fixed route transit system, federal funding through capital expenditures has helped make great strides for the disabled community within urban areas served by transit, which can be directly tied to requirements by the ADA. Although most large rail systems are not yet fully accessible, there are plans and funding allocated to complete the task and it is clear how and when the system will be fully accessible. In addition, within fixed route service areas, paratransit is being provided at greater levels than ever before, even taking into account its less than adequate level of service.

Although paratransit has led to strides in mobility and accessibility, based on current legislation and available federal money, it is lagging in its quest to provide full scale and equal mobility options for the disabled community. Its level of service is far from what was expected by the ADA. Furthermore, it does not provide equal service to what the majority of nondisabled Americans use for their mobility in society: the automobile. With the current lack of funding for paratransit operations, the disabled community will constantly be placed on a second tier as compared with nondisabled citizens, in urban, suburban or rural settings. In addition, because of federal requirements and limited money, transit providers will consistently have to choose service for the disabled over increased service for the poor, non-disabled elderly or other transportation disadvantaged groups.

We are moving towards a crossroads with regards to mobility and accessibility for the disabled. The modifications of physical infrastructure are close to completion and the demands on paratransit services show no signs of abating, therefore the level of service will inevitably continue to decline. Instead of continuing in our current direction, shouldn't we stop to look at our predicament from the point of view of those constituencies who are truly affected by the future of mobility for the disabled, the disabled community and the transit providers? In addition, shouldn't the overall goal of mobility for the disabled be what is beyond the bus not just the ability to get on the vehicle? Society is what the disabled need to access, regardless of their mode of travel or their destination.
Chapter 3 – Paratransit Costs and Their Implications

The process of calculating costs for the provision of ADA paratransit services varies significantly across transit agencies. Some agencies contract out services, others keep the service in-house and still others combine ADA paratransit with other specialized services for the elderly or other groups. The diversity in service structure is one of the reasons why it is so difficult to truly estimate the total nationwide costs for supplying ADA paratransit services. For this chapter, in addition to surveying Chicago and San Juan, the other 32 largest US metropolitan areas were examined to determine the costs and ridership levels for ADA paratransit. These areas account for approximately 50% of the US population, according to Census 2000, and therefore, can effectively provide an accurate view of the challenges of providing ADA paratransit services in large metropolitan areas. Metropolitan areas were chosen because paratransit services often extend beyond city boundaries.

3.0 What cost elements are involved?

In order to estimate the average per trip cost of providing paratransit service to the disabled, transit organizations have incorporated a host of cost elements into the equation. Because of the diverse nature of service provision, the cost elements included vary across agencies. Even among those who contract services to other providers, the cost elements that are included in computing the average cost diverge.

Labor, including benefits, is one of the largest costs for transit agencies, be it mainline service or paratransit service. Drivers for specialized services must be knowledgeable about the area, as there are an infinite number of origin-destination pairs. They also must be skillful drivers and be able to assist users in accessing the vehicle. In addition, skilled labor is necessary to maintain the vehicles and ancillary equipment, such as wheelchair lifts and movable seats, which are necessary to comply with ADA regulations.

Administrative staff also comprises a portion of the labor costs. Depending on the design of the system, one or more call centers plus the toll free number(s) to access them are necessary to handle the ride requests. Often times, paratransit service call centers are separate from other centers in the agency. In addition, if agencies contract out paratransit services, each contractor may have its own call center. Once the request has been received, schedulers and dispatchers are used to make the most effective use of the vehicles. Sometimes scheduling rides is automated, but for many of the agencies,
scheduling rides is a manual process. In addition, there are various overhead positions to ensure that ADA regulations are met, as well as to operate the paratransit system.

Upkeep and maintenance of the vehicles, without taking into account labor, is also a high cost for transit agencies. Wheelchair lifts, which are common on most paratransit vehicles, require a high degree of maintenance. In addition, the weight of the lifts adds a significant strain to the axles, engine and transmission of each vehicle. This leads to a greater need for constant maintenance and potential repair.

Lastly, fuel prices fluctuate depending on the cost of oil nationwide. Combined with the increase in consumption that has been experienced across paratransit services, fuel costs have been steadily increasing. Insurance, both for the driver and the automobile are also part of the cost calculation.

3.1 Paratransit Costs for Transit Agencies

3.1.1 Largest 32 Metropolitan Area Transit Agencies

In order to obtain a broader view of paratransit costs throughout the United States, the largest metropolitan areas in the US were identified and contacted. These areas comprise 50% of the US population, which provides a comprehensive view of paratransit costs of large transit agencies across the United States. Through conversations with other paratransit providers, information was gathered about the average total cost per trip, the average fare per trip, the estimated rides per weekday, the paratransit budget for the current fiscal year and the total transit budget for the fiscal year. By gathering estimates on the first three data elements, both the subsidy for paratransit and the cost per day to provide paratransit services could be calculated. In addition, the latter two pieces of data provided an insight as to the percentage of the total transit budget that was allotted to paratransit services. Every effort was made to ensure the validity of the information contained below, but in certain cases some information was not available. In most areas, online documentation did not provide sufficient information and telephone interviews were necessary to better understand the costs associated with paratransit in each region.

Appendix 4 provides the reported costs and rides for each metropolitan area included in the survey. San Francisco, St. Louis, Sacramento, Orlando and Hampton Roads/Virginia Beach did not respond. Most of the metropolitan areas, such as Milwaukee, New York, Washington DC and San Antonio, contract their services to outside vendors. Others, such as Atlanta and St. Louis, provide paratransit services in house. In addition, other agencies, such as Cleveland, Pittsburgh and Cincinnati,
combine ADA paratransit services with services for the elderly or other transportation disadvantaged groups.

Overall, the average cost for providing paratransit services across the metropolitan areas surveyed was $26.61 per trip and the weighted average, which takes into account rides per day, was calculated to be $26.05 per trip. New York City Transit (MTA) responded with the highest cost per trip, $50.33, which includes labor, carrier, service, vehicular, and administrative costs. This amount was computed for a completed trip. Scheduled trips were slightly less expensive at $45.08, as the number of scheduled trips is greater than completed trips. The most inexpensive cost of paratransit was found in Milwaukee. The average cost was $13.27, which was calculated as a weighted average among the five paratransit vendors that provide services to the Milwaukee area. Figure 3.1 displays each of the metropolitan areas and their respective average costs for providing paratransit services.

The average fare for all of the metropolitan areas is $1.98. As specified in the ADA, the fare cannot be greater than twice the fare of fixed route transit. However, if fixed route transit operates on a zone system, or does not utilize free transfers, paratransit providers may modify the fares to replicate these variations in the fare structure. The highest flat fare of $4.00 was seen in San Diego. The lowest can be seen in Seattle at $0.75. For a variety of reasons, many transit agencies, such as New York City and Chicago, have priced paratransit at the same fare as fixed route transit. Figure 3.2 displays each of the metropolitan areas and their respective average fares on their paratransit services.

Average rides per weekday were found to be 2,289. New York City Transit provides the most rides per weekday at 5663 and HART-Plus, the ADA paratransit service in Tampa-St. Petersburg, provides the least at 180 riders per weekday. Figure 3.3 displays each of the metropolitan areas and their average paratransit rides per weekday.
Figure 3.9 - Average Cost Per Trip for Paratransit Services for 32 Largest US Metropolitan Areas

Average Cost/Trip for Paratransit Services

- $60.00
- $50.00
- $40.00
- $30.00
- $20.00
- $10.00
- $0.00

Figure 3.10 – Average Fare for Paratransit Services for 32 Largest US Metropolitan Areas

Average Fare for Paratransit Services
Figure 3.11 - Paratransit Rides per Weekday for 32 Largest US Metropolitan Areas
Given these estimates, it can be observed that the majority of the transit agencies are placing a substantial amount of money into providing paratransit services for the disabled. After farebox receipts, New York City, for example, is spending approximately $277,000 per weekday to provide paratransit services. Likewise, Chicago spends slightly over $96,000 per weekday. On average, after removing the revenues from the farebox, each of the surveyed agencies spends $55,000 per weekday to provide paratransit services that comply with the ADA. Since operating subsidies have fallen by the wayside, all of the operating costs are provided by the transit agencies themselves, which presents an unsustainable method of financing mobility for the disabled.

3.1.2 Chicago Transit Authority (CTA)

The CTA has budgeted $34.8 million for transporting ADA qualified customers in 2002. CTA outsources its traditional ADA paratransit services (Special Services) to three providers, Art’s Transportation, Cook DuPage Transportation and SCR Transportation in addition to providing service through the Taxi Assistance Program (TAP).Internally, CTA will use $1.26 million (3.6%) for labor and materials. The additional $33.5 million (96.2%) of the budget will be used for the purchase of paratransit services from these contractors. $31.7 million (91.1%) of which will go towards traditional services for the provision of 1.255 million rides at $25.23 per ride and $1.9 million (5.5%) will be used for TAP for .14 million rides at $13.46 per ride. The CTA charges $1.50 across the board for both services and therefore, they anticipate that they will earn $2.10 million (6.0%) from the farebox. The remaining $32.7 million (94%) must be covered by the CTA.

Because the services are outsourced, the majority of the cost elements discussed in the previous section have been shifted to the contractor. Each vendor has negotiated a 5-year contract, all of which are set to expire at the end of 2004. Labor, including drivers and maintenance employees, plus back office personnel, such as schedulers, call center operators, and administrative employees are the responsibility of the contractors. Maintenance, upkeep and any improvements also come under the specifics of the contract. Additionally, the contractors provide fuel and insurance. Each

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99 The Taxi Assistance Program (TAP) provides certified paratransit customers reduced rate taxi rides for trips that originate within the City of Chicago. Customers pay $1.50 (the same as regular paratransit) for up to a $12.00 taxi ride.


carrier has a voice and TTY number as well for those patrons who want to call a specific carrier directly; otherwise, CTA provides a toll free number to contact the carriers. The only other aspect of the paratransit service that the CTA provides is administrative oversight to ensure that ADA policies and practices are properly implemented and adhered to.

Since 1990, overall costs for paratransit services, both TAP and Special Services, have grown at a much faster rate than the costs for fixed route service. Below are three charts; the first indicates the growth of the expenses associated with the purchase of paratransit services, the second shows the growth of paratransit trips, and the third indicates the average cost of paratransit services over the same period. All three charts incorporate Special Services, as well as TAP. In 1990, paratransit expenses were $13.8 million serving 838.4 thousand trips at a cost of $16.46 per trip and culminated in 2002 at $33.6 million for 1.398 million trips at a cost of $24.04 per trip.\textsuperscript{103} This represents a 143.48\% increase in paratransit expenses, a 66.7\% increase in trips, and a 46\% increase in average cost per trip between 1990 and 2002.

\textbf{Figure 3.12 – CTA Paratransit Operations, 1990-2002}\textsuperscript{104}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{CTA Paratransit Operations}
\end{figure}

\begin{footnotes}
\textsuperscript{103} Ibid.
\textsuperscript{104} Annosike, Dennis. Interview.
\end{footnotes}
According to the CTA’s financial projections, paratransit expenses are expected to grow 3.5% per annum, due to inflation, during fiscal years 2003 and 2004.\textsuperscript{107} This does not incorporate any increases in demand, which based on historical information, has the potential to be considerable. These cost projections also do not include any additional costs that are necessary to meet other FTA requirements. These requirements have the potential to lead to a conversion of latent demand and actual

\textsuperscript{105} Ibid.
\textsuperscript{106} Ibid.
\textsuperscript{107} Chicago Transit Authority. 2002 Budget Summary, 41.
ridership because of better service. Because of the increase in paratransit costs, there has been much effort within the CTA to find alternative means of transporting disabled customers. They have budgeted that 119 of the 134 bus routes (89%) will have lift service and 64 of the 143 rail stations (45%) will be ADA accessible by the end of 2002. 108 Although this does comply with the ADA requirements, it also helps to foster the belief that upon mainline transit compliance, all paratransit users will be able to be transitioned from special services to fixed route transit. However, this theory is not corroborated by the eligibility characteristics and the ridership information provided by CTA and their parent organization, the Regional Transportation Authority (RTA).

CTA provided the sum of trips for each ADA paratransit rider for each month during the calendar year 2001. RTA provided data for all eligible users of CTA ADA paratransit during the calendar year 2001. Their data consisted of each qualified rider, his/her eligibility category(s) and date of birth. 109 Based on this data, there were 38,451 RTA-certified eligible riders, 15,844 of which had been qualified or re-qualified since September 1999. 10,877 qualified riders (28.3%) actually used CTA paratransit during the calendar year 2001. As demonstrated in the graph below, of those who actually rode CTA paratransit services in 2001, 9106 (83.72%) had an eligibility category of ‘1’, which stands for unconditionally qualified and allows them to use ADA paratransit at all times for any trip.

108 Ibid., 78.
109 During the eligibility process, RTA often provides more than 1 eligibility category for each rider. Also, RTA only started collecting age information in September 1999, so only those individuals who have been initially qualified or have been re-qualified since then have birth dates on file.
This strongly correlates to RTA’s data, which lists all ADA qualified riders in CTA’s service area. 82.33% of this group is unconditionally qualified. Additionally, of those riders who actually rode CTA paratransit in 2001, only 374 (4.45%) were certified as transitional. That is, a passenger can be certified as transitional if the mainline bus or train route that he/she would use is not currently accessible.\textsuperscript{110} Similarly, 3.4% of all ADA paratransit eligible riders in the CTA service area are qualified as transitional. Therefore, based on this data, there does not seem to be much difference between those riders who are qualified to ride CTA paratransit services and those who actually use the service. More importantly, the theory that creating an accessible mainline system should significantly reduce the quantity of ADA paratransit services that are needed in the Chicago area does not seem to hold true, as only 3-4% apply. If some current CTA paratransit users transition to mainline transit, there will be more capacity for unconditional paratransit users and some latent demand to request service, thereby not changing demand for service.

In an attempt to reduce the high costs of paratransit, CTA has started to heavily promote their Taxi Assistance Program (TAP). TAP provides a similar service to traditional paratransit in the disabled community, but gives a higher level of service because users are able to call the day of to request service and they are not required to share rides with other paratransit users. Through a citywide ordinance that required all

\textsuperscript{110} Chicago Transit Authority. “ADA Paratransit Certification Program: Paratransit Eligibility Categories.” 1.
18 taxicab companies assist in transporting the disabled, the number of accessible taxicabs was expanded and the costs of medallions necessary to operate in the city was reduced for those who purchased an accessible vehicle. TAP rides cost CTA $13.46 per trip, which is approximately 50% less than traditional paratransit services. In 2002, there are expected to be approximately 142,000 TAP rides as substitutes for traditional paratransit services.

The goal at CTA is to transition 40% of the current paratransit rides from traditional paratransit to TAP, most of which will be CTA’s “frequent flyers.” These individuals ride traditional paratransit services frequently and are estimated to represent 34.5% of all paratransit trips made by CTA. Traditional paratransit services would then be used only for the neediest cases as a primary service and for others in extenuating circumstances. One of the main issues with this objective, however, is that the individuals who can suitably use TAP are only the conditional paratransit users. Transitionally qualified users are prohibited from using TAP and those who need extra assistance in embarking or disembarking from a vehicle are unable to use TAP. As stated before, conditional riders accounted for less than 12% of the entire CTA ridership during 2001 and they took less than 15% of the rides in 2001.

As another incentive to ride mainline transit and ultimately reduce CTA’s costs, CTA has contemplated offering free or deeply discounted service to persons who currently use paratransit services. Although still in the strategy phase, this approach would reduce the subsidy from $22.54, the average cost of paratransit after revenues from the farebox, to a maximum of $1.50, the maximum fare per ride on CTA. According to surveys results from paratransit users, it may also actually influence their choice of transit. Like most other incentives, this would only apply to the conditional and transitional paratransit users.

From the CTA’s perspective, there appears to be positive movement with regards to alternative choices of transportation for the disabled community, which results in the

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111 Includes lift-equipped taxis as well.
112 Chicago Transit Authority. 2002 Budget Summary. 78.
113 Ibid., 26.
114 Interview with Elaine McCloud and James Payne.
116 LeFevre, Anne and Janasek, Lawrence, Regional Transportation Administration and Chicago Transit Authority. “Eligibility and Paratransit Usage Data,” Received on 13 March 2002.
117 Chicago Transit Authority, Department of Planning and Development. “Mainline Transit Service Barriers and Incentives for Paratransit Customers,” Chicago, 22 November 2000.
opportunity to reduce costs. In 1997, CTA conducted a study to understand the extent of the use of other modes of transport by paratransit riders. Below is a graph that summarizes the modes used to travel by respondents to the survey.\(^{118}\) According to the responses, approximately one-third of the paratransit riders who responded to the survey used private automobiles, vans or trucks as an alternative mode of transport. Only 10% used unsubsidized taxi service. TAP was used almost 14% of the time, perhaps because the service was not heavily marketed to paratransit users at the time. Social and medical service transportation was only used 11.2% and 11%, respectively. Most importantly, 10% and 3.1% of respondents respectively used mainline bus and rail services on a regular basis. These numbers could also be lower than actual usage because of a fear of disqualification of paratransit privileges for use of mainline transit.\(^{119}\)

Figure 3.16 – Modes of Transport Used by CTA Paratransit Users

In an attempt to obtain a better understanding of the extent of mainline transit usage by paratransit riders, CTA asked more in-depth questions throughout the survey. The results showed that 79% of respondents who have used mainline transit indicated that it has occurred irregularly, or less than once per month. Interestingly, only 48% of those who responded felt that they were unable to ever use mainline transit due to


\(^{119}\) Ibid.
various ailments or impediments. Lastly, approximately 25% of the respondents indicated that they could use mainline transit at least some of the time, if not all of the time.\textsuperscript{120}

This demonstrates that although the costs and demand for paratransit are on the rise in Chicago and if previous results are indicative of future outcomes, the numbers will continue to grow, there are still options for improving mobility options for some of the disabled population in the area. TAP demand is on the rise, as well as the use of mainline transit for those who are able. The Specialized Services service area is already greater than the federal requirements and includes the entire city of Chicago, regardless of rider’s proximity to transit, plus areas of Cook County that are served by CTA. However, the majority of Chicago’s disabled citizens are still forced to withstand suboptimal mobility as they are left without high quality transportation services. Their interactions with society remain at a level dictated by service quality of paratransit services.

\subsection*{3.1.3 Metropolitan Bus Authority, San Juan}

Within the San Juan Metropolitan Area (SJMA) there are a number of public transit organizations that provide various types of transportation in addition to the more informal transportation option of publicos. The Metropolitan Bus Authority (AMA) is the only public transit organization that provides the formal paratransit services in the SJMA. Their budget for 2001 was $2.9 million for paratransit services. Of that, $320,000 was used for administrative and overhead functions within AMA. The remainder $2.6 million was used for the purchase of paratransit services for the disabled community in San Juan. In 2001, they provided 93,337 rides at a cost of $28.01 per ride.\textsuperscript{121} Fares range from $.50 to $2.50, which is exactly twice the rate of mainline bus services. The variation results because transfers on mainline bus routes are not free and the ultimate fare varies within that range based on the number of transfers.\textsuperscript{122} An average cost per trip for the disabled patrons in San Juan is estimated to be $1.00, which equates to AMA receiving approximately $94,000 from the farebox and subsidizing the remaining $2.8 million.

\textsuperscript{120} Chicago Transit Authority. “Summary of Paratransit Market Segments, Including High Flyers,” Chicago, 6 March 2001.
\textsuperscript{121} Hernandez, Omar of the Metropolitan Bus Authority to author, e-mail, 15 February 2002, San Juan, Puerto Rico.
\textsuperscript{122} Ibid.
Since 1997, the costs for providing paratransit services have increased 101%, costs per trip to riders has increased by .2%, overall ridership has increased by 58% and ridership per weekday has increased by 91%. In 1997, paratransit expenses were $1.459 million serving 59.0 thousand trips at a cost of $27.95 per trip and culminated in 2001 at $2.934 million for 93.0 thousand trips at a cost of $28.01 per trip. Below are four charts; the first indicates the growth of the expenses associated with the purchase of paratransit services, the second shows the growth of paratransit trips, the third indicates the average cost of paratransit services over the same period and the last chart shows the growth in paratransit trips per weekday.

On a smaller scale, AMA possesses many of the same problems that CTA faces. Demand and costs are increasing with little sign of dwindling and the solutions, if any, are targeted toward only a small percentage of riders.

Figure 3.17 – AMA Paratransit Budget

AMA Paratransit Budget

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Ibid.  
Ibid.  
Ibid.  
Ibid.
Figure 3.18 - AMA Paratransit Trips, 1997-2001

AMA Paratransit Trips

Figure 3.19 - AMA Average Cost per Trip, 1997-2001

AMA Average Cost/Trip

\[126 \text{ Ibid.}\]
\[127 \text{ Ibid.}\]
There are currently 5,175 registered paratransit riders, 2,866 (55.4%) of whom utilize the system on a regular basis. The paratransit service area mirrors the entire AMA service area, which covers the majority of San Juan, but not the entire area. This precludes many disabled residents from utilizing AMA’s paratransit services and they are otherwise forced to find alternative means of transportation or suffer in solitude. All of AMA’s buses are lift equipped so those who are able can make use of mainline transit throughout the area. In addition, once Tren Urbano opens, the entire system will be fully accessible for those patrons within a viable distance from each station. These transit additions however improve mobility for a minority of the disabled population.

The main problem of accessibility and mobility of the disabled community lies with the publicos, the informal transportation service that follows a relatively fixed route, but does not have fixed stops. Most publicos are old vans with an average age of 13 years that have been transformed to carry up to 14-17 passengers.129 The fare is slightly higher than the bus,130 but the flexibility and consistent usage during peak periods often outweighs the cost differential. Individuals privately own the vehicles and must possess a permit, special license and registration, but are not held to implementing any stringent guidelines as to the maintenance or accessibility of their vehicle. For example, most vehicles are not air conditioned, nor are easy to ascend or descend from for nondisabled patrons, let alone disabled patrons. Even with these negatives, given

128 Ibid.
129 Ibid.
130 Ibid.
the rising congestion and the lack of timely public transit, they are the backbone to San Juan’s public transit system.

The potential problem rises in that they are not ADA accessible and there do not appear to be any plans to rectify the situation. Therefore, they are almost completely unusable for the disabled and elderly residents of San Juan. This problem will only increase as Tren Urbano, the new heavy rail system in San Juan, opens and the publicos become a potential feeder system for the train. The lack of accessibility in these vehicles will limit the usage of Tren Urbano for disabled and elderly residents, which will negatively impact the mobility of these citizens.

Both AMA and Tren Urbano have been fairly quick to embrace the ADA requirements and the accessibility and mobility needs of the disabled through mainline transit improvements. However, that only helps a small percentage of the disabled population as San Juan Metropolitan Area has the highest vehicle density per kilometer of paved road and subsequently, utilizes the private automobile to an even greater extent than the US mainland. Since the San Juan community is structured to use the automobile to access all facets of society, the disabled community is often left behind.

3.2 Future Demand

Although there is no definitive estimate of future demand for paratransit services, the ridership increases that have occurred since the ADA’s inception, combined with our aging society, leads to an assumption that the demand for paratransit will increase. As discussed in Chapter 2, demand for paratransit services in Chicago and San Juan has increased by 67% and 58% respectively since the early and mid 1990s. Not only has the actual number of riders requesting paratransit services increased, but as more barriers fall for the disabled community, the demand for a greater number of rides per person will increase as well. Removal of physical barriers, improved educational and work opportunities, the proliferation of social activities and the overall escalation in access to society will continue to open many doors to the disabled and will lend itself to an increase in demand per person.

With little argument, Americans are living longer and healthier lives, which are enabling the older generations of Americans to continue interacting with different facets of society more frequently. This is not to say that being elderly is equivalent to being disabled. However, as one ages, the probability of being disabled rises as well. Chapter

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131 Fagundo, Dr. Fernando E and Allison, Dr. Jack, “Multi-Modal Transportation Presentation, VIII UPR/MIT Encounter” 8 January 2002, A Presentation Given in San Juan, Puerto Rico.
2 provides an indication of the correlation between age and disability. Combined with
the higher chance of having a disability in the higher age brackets, the Baby Boomer
generation will soon reach the 65+ age range, which will increase the numbers of the
65+ cohort.

The Baby Boomer generation is comprised of 76 million Americans who were
born between 1946 and 1964. According to the American Association of Retired
Persons (AARP), 80% of this group plans on working, at least part time, during their
retirement.\footnote{Roper Starch Worldwide, Inc., \textit{Baby Boomers Envision Their Retirement: An AARP
Segmentation Analysis}. Washington, DC: AARP, 1999.} Often, as people age and their faculties diminish, they are less inclined to
continue to utilize their private automobile for personal transportation. In contradiction,
the penchant for living on one’s own, often in single use, low density settings results in a
decreased possibility of using non-automobile transport for mobility purposes. Without
the automobile or other viable option, the reliance on paratransit will continue to grow,
especially if older Americans do not conform to the traditional routes of retirement,
continue to work outside the home and ultimately live longer.

Many of the transit agencies surveyed provide paratransit services to the majority
of their service area. Chicago, for example, provides paratransit services to all eligible
patrons within the city limits plus some areas of Cook County. There are others, like
San Juan, whose service is equivalent only to their fixed route bus service, which does
not encompass the entire metro area. In these cities, the unmet demand goes
unmeasured. In addition, each metro area has latent demand, which is the amount of
demand that does not attempt to make a reservation because they have been
discouraged in the past.\footnote{Chicago Transit Authority. “Paratransit Demand,” 19 February 2001.} This demand includes certified riders who choose not to ride
paratransit services or disabled residents of the region who do not even bother with
certification due to previous negative experiences or stories of poor response. Because
of the uncertainty of latent demand, it is also quite difficult to measure.

3.3 Paratransit Costs and Total Transit Costs

A single dollar amount does not sufficiently describe the impact that paratransit
services have on public transit organizations, especially given the tendency to make
comparisons among transit agencies. Instead, a contrast of each agency’s paratransit
costs with its total operating budget can give better insight into the plight that transit
agencies currently face. The telephone survey used above also obtained the annual
paratransit budget and the total operating budget of each metropolitan area. The larger transit systems, such as New York, Washington DC, and Chicago, that provide a host of transit operations utilize a small percentage of the overall transit budget for paratransit services. These agencies have other operations that can cross-subsidize paratransit expenses. They are also more densely populated and have more mixed use property within the service area, which would reduce the distance traveled per ride and increase the likelihood that more residents are either from similar origins or traveling to similar destinations. Smaller transit properties such as Indianapolis, San Antonio and Las Vegas utilize a greater portion of their total transit budgets for paratransit services. These transit agencies do not always have the financing to cross-subsidize and therefore must spend a greater percentage of their budget on paratransit. In addition, the service areas in these cities are less dense, which require longer, more dispersed trips and lessen overall efficiency of the service.

Below are charts representing how the paratransit budgets measure against the total transit budget for each transit property that responded to the telephone survey.
Figure 3.21 Paratransit Operating Costs versus Total Transit Budget for 32 Largest US Metropolitan Areas

New York City, New York
2.83%
97.18%

Chicago, Illinois
4.00%
96.00%

Washington DC
3.04%
96.96%

Philadelphia, Pennsylvania
5.35%
94.65%

Boston, Massachusetts
3.85%
96.15%

Detroit
2.15%
97.85%

Dallas, Texas
6.24%
93.76%

Fort Worth, Texas
13.09%
86.91%

Houston, Texas
10.57%
89.43%

Atlanta, Georgia
1.94%
98.06%
3.4 What do the results say about the current state of paratransit in transit agencies?

Each of the elements of paratransit costs highlighted above come together to present a clearer picture of financial issues faced by transit agencies nationwide with regard to ADA paratransit services. They demonstrate that each transit agency is utilizing a large amount of resources annually in ADA paratransit services. Even with this high investment, the current state of paratransit does not provide service comparable to levels provided to nondisabled transit riders.

The two case studies of Chicago and San Juan shed light on the increases of demand and cost since the ADA's inception. Interviews with the other large metropolitan areas revealed that Chicago and San Juan are not an anomaly. The issues are truly pervasive throughout the industry. Although these charts are only a snapshot of a recent fiscal year, 2000, 2001 or 2002, combining the charts above helps to paint a clear picture that there is a striking need for increased funding for paratransit operations. Juxtaposing the increasing costs of providing paratransit services with the elimination of operating subsidies, gives an early indication that complying with the federal mandate will become increasingly more difficult. Leveraging reasonable levels of external assistance would improve service for the disabled, as well as mitigate the need to reduce service to the nondisabled public and relieve some of the fiscal problems that transit agencies now face. Otherwise, ADA paratransit will continue to demand greater quantities of transit agency resources, perhaps to the detriment of other transit initiatives or services.
3.5 What are the long-term implications to transit organizations and the region of these growing costs?

Based on telephone discussions with various transit agencies across the US, it is evident that concerns over providing paratransit services in the long-term are growing. Without the addition of federal funds, transit agencies will face many tough choices in the near future. Because they are required to provide paratransit services and are unable to place a cap on the provision of the service, some of these decisions may adversely affect the basic transit needs of the metro area. In order to continue to provide basic transit services, transit agencies may look to tighten the qualifications for paratransit, which only hurts their standing in the disabled community as well as limits mobility options for the disabled. Another money saving alternative is to cut or reduce service to low density or low-income areas, which negatively impacts the mobility of those residents and has the potential to pit those constituencies against the disabled community. Lastly, transit agencies could cut service entirely to an area in order to avoid providing paratransit services to that area. Not only does that reduce mobility for the disabled, but it also forces the non-disabled residents of the area to use other modes, most likely the automobile, for transportation. The negative impacts of more automobile usage in the region in terms of increased congestion and air pollution are potentially more expensive than continued transit provision.

As indicated above, there are already considerable funds being spent on operating paratransit services, none of which are provided by the federal government. In the long term, the capital improvements will be completed and paratransit services will still be required, based on the needs of the disabled community. At that time, those disabled riders who are capable of using fixed route transit will be riding it and those who are unable may demand better service. The political or potential legal consequences of such a demonstration could be detrimental to the transit agencies.

From the perspective of the disabled community, the outlook for paratransit services continues to look bleak. Because the ADA prohibits a cap on service offerings, the disabled community is ensured of continued paratransit service. However, the level of service will inevitably decline due higher demand, less available money for the service and an increased competition with other transit dependent constituencies.
Chapter 4 – Stakeholder Analysis

One of the strategies for managing the costs of paratransit services under the ADA is to reassign the fiscal responsibilities to the federal or state government. With the national surface transportation system up for reauthorization in 2003, this is especially relevant. However, before this can be accurately discussed, an analysis of applicable stakeholders must be undertaken to better help identify coalition partners that can help advance these strategies. In order to progress and improve paratransit services, each stakeholder must "understand which organizations or groups of people are important and which relationships are most pronounced in order to develop comprehensive business and corporate strategies."\(^{134}\) Although each stakeholder’s vision is dynamic throughout the lifecycle of the issue and they may undertake multiple roles at a time,\(^{135}\) it is only after each stakeholder’s views and objectives have been analyzed that valid recommendations can be made to help minimize the gap between the needs of the disabled community, the requirements of the legislation and the physical and financial capabilities of transit agencies. This is especially pertinent if fiscal responsibilities will be reassigned to the federal government, as the stakeholders must present a united front in order to have a prospect of successfully making a case.

From the viewpoint of the transit agencies, there appear to be six different groups of stakeholders, each of which is comprised of multiple organizations, agencies or companies. The first stakeholder group is the users of the transit agency’s product. Within that group, the segments can be further defined as those who are disabled, both those who use ADA complementary paratransit services and those who ride mainline transit, and nondisabled transit patrons. The transit agency’s competitors with respect to paratransit services are the second stakeholder group. This group is mainly comprised of human service agencies, such as faith based or community groups, social organizations, or medical organizations. In some areas, private for profit organizations exist as well. This group of stakeholders also includes the US Department of Health and Human Services (HHS), which provides some funding for disabled transportation. The third stakeholder group consists of advocates for the elderly and disabled. This includes groups such as the American Association of People with Disabilities (AAPD), the American Association of Retired Persons (AARP) and Easter Seals’ Project ACTION.


\(^{135}\) Ibid.
The fourth group is comprised of advocates for improved mobility, be it for the disabled or the nondisabled. The Community Transportation Association of America (CTAA), the Surface Transportation Policy Project (STPP) and the American Public Transportation Association (APTA) are included in this stakeholder group. The fifth group consists of agencies of the federal, state and local government who enacted or are required to enforce compliance with disability legislation, such as the Federal Transit Administration (FTA), the National Council on Disability (NCD) and the US Conference of Mayors. The sixth and final group of stakeholders is the providers of paratransit services. This group consists of all transit agencies in the nation, as they have all been tasked with providing paratransit services. This group of stakeholders also includes contract providers.

A survey of the stakeholders was undertaken to understand each organization's perspective on the importance of mobility and paratransit services for the disabled and to identify their opinions on the use of federal or state funding to improve paratransit services. In Appendix 5 is a copy of the survey, which was distributed to the various stakeholder groups. Within each organization, one or two individuals were targeted based on their work with paratransit, federal legislation and/or policymaking. For confidentiality purposes, these individuals have not been identified. The survey questions focused initially on mobility and its equal provision throughout the United States, as opposed to one's proximity to public transportation. The survey then moved on to query stakeholders' opinions on whether paratransit should be funded as a fundamental part of surface transportation. Third, the questionnaire asked how stakeholders felt federal funding would impact the efficiency and effectiveness of paratransit. Lastly, stakeholders were queried on their perception of where federal funding for paratransit operations falls on the priority list of decision makers for the reauthorization of TEA-21.

Although not inclusive of all stakeholders in this debate, the main stakeholder organizations were identified and questioned. Below is a summary that evaluates various groups of stakeholders and their goals and objectives for transportation services for the disabled. It also summarizes each stakeholder's survey responses. Following this is a discussion of various coalitions that can be formed, based on parallel or similar goals and objectives, in order to formally approach federal funding sources.

4.0 Transit Users

Transit users are obviously a key stakeholder group with regards to improved mobility for the disabled. Following is a summary of how these groups are impacted with
regards to this issue. However, because the coalition is focused on approaching the federal government, which will rely heavily on stakeholders’ influence and close proximity to policymaking, this stakeholder group was not explicitly surveyed.

4.0.1 Disabled Users

The importance of disabled transit riders’ opinions in this debate is obvious, as it is their mobility needs which is one portion of the tension in this debate. Most users readily acknowledge that their mobility situation has greatly improved since the passage of the ADA.

It is well documented that transportation is the main barrier for people with disabilities to work. But improvements in paratransit have given people with disabilities more access to employment and to other activities as well. (Kathleen Gregg, New Jersey)

After years of staying home, I can finally get out of my house and travel. (Sally Scubin, Virginia)

The transportation part of the ADA is changing my life. I can visit my 88-year-old Dad, swim, and go to the library, all because of transportation called for in the ADA. (Christina Keefer, California)

However, for all of the improvements, many still feel that there is a long road ahead to put the disabled on par with the nondisabled, in terms of mobility and accessibility. A Harris Poll conducted in 2000 and funded by the National Organization on Disability showed that almost 30% of disabled Americans found significant problems with “inadequate transportation” as opposed to only 10% of non-disabled Americans, which shows a continued imbalance between mobility and accessibility for the disabled and non-disabled. Below are comments made regarding both mainline transit and paratransit.

One time I was trying to ride the regular CTA bus. But the thing is... if the bus is too high, there’s no such thing. I would be left there. I couldn’t get in there. I couldn’t climb myself up in there. And then if there is speeding or if they have to jerk, then I fall all the way back, and then I wind up getting hurt, cause there’s no place to sit. So I usually ride the CDT (Cook-DuPage Transit, a contractor of paratransit services to Chicago Transit Authority), Special Services. And if I can’t get them – well... I just don’t have a day.

Two or three times I tried it (riding mainline transit). And this is my experience... I was holding – I was waiting [for] two or three buses because... the lift is broke. Or [the driver said], “I’m in a hurry, I’m sorry, I can’t pick you up.”

... For instance, when you are in a wheelchair and you have to everyone else board first, you don’t have room to get into your [space] with more people already on the bus. Also, you could be waiting first and the people fill up the bus and you are left. You can be in the subway and all of a sudden find the elevators don’t [work] and there is no one to help you. You are stranded. On the El, the operators don’t always call ahead and nobody is there with the gap filler. Unless you can physically block the door from closing the train will take off before you can get off. The assistant may put the gap filler down and then when you are through the doors, the train will take off before you can get secured.

They’re (Special Service drivers and reservations takers) indifferent – “so what.” “What do you want me to do about it?” You know, like you didn’t... allow yourself enough time.

I told them I didn't care if they (Access-A-Ride) picked me up at 6, but they told me they did not have any space for me. I'll have to cancel my doctor's appointment if I can't get a ride because I don't have money to travel other ways. (Susana Lopez-Lira, New York)

They are shafting people who are utterly reliant on this transportation mode [paratransit]. (Mark Green, New York City Public Advocate)

Extrapolating from these comments, the disabled community desires a transportation solution that will provide them with the freedom to move about without impediments, just as nondisabled Americans have been doing for decades. Frequent, efficient service, the convenience of traveling on demand as opposed to planning at least 24 hours in advance, and the flexibility to access multiple destinations rather than traveling from a specific origin to a pre-arranged destination often are listed as the needs of the disabled community with regard to mobility and transportation. In addition, there is a need for courteous and competent employees who can assist users when necessary and are patient and understanding to a user’s plight.

4.0.2 Non Disabled Mainline Transit Users

\[^{139}\] Ibid.
\[^{140}\] Ibid.
\[^{141}\] Ibid.
\[^{143}\] Ibid.
Non-disabled mainline transit users are considered latent stakeholders because the outcome of the debate on paratransit may affect their mobility needs in the future, but does not directly affect them presently. Most mainline transit riders demonstrate ambivalence or lack of knowledge with regards to paratransit services. However, due to the increasing financial needs of paratransit, the resulting possibility of mainline service reduction looms real for this group of stakeholders. In addition, because some disabilities appear only with the onset of aging, some members of this population may represent possible future paratransit demand. Currently, however, the vast majority is not concerned with paratransit because they do not understand the connection between paratransit funding and service for mainline transit, nor are they close to needing paratransit services in the future.

4.1 Human Service Agencies

4.1.1 Department of Health and Human Services

The Department of Health and Human Services (HHS) is not traditionally considered a major provider of transportation services. However, although they are not direct providers, transportation plays a tremendous role in the agency’s ability to fulfill its mission—“protect the health of all Americans and provide essential human services, especially to those who are least able to help themselves.” During fiscal year 2001, HHS spent approximately $2.7 billion on transportation for human service programs including the Older Americans Act, the Aging Program, Head Start and Medicaid. Included in that funding is also money for general support services that was spent on transportation. Because general support service funding can be used for a variety of activities, including transportation, and the recipients are not required to account for actual spending, HHS estimates that approximately 5% of the total funding for general support services was used for transportation. The majority of this funding is directed toward small, non-profit social service agencies with specific clientele, as opposed to larger public transit agencies who serve the general public.

When the mandate was passed requiring public transit agencies to provide paratransit services, many social service agencies were able to quietly shift their clients to paratransit and reallocate the money for other pressing needs. However, as paratransit services have reached capacity or been unable to provide high-quality transportation services, the human service agencies have had to renew their efforts in

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145 Dianne McSwain Interview.
providing transportation. Therefore, an improved method for providing transportation services for the disabled would have a direct impact on the provisions of HHS and its dependent social service organizations.

The Department of Health and Human Services did not respond to repeated requests to respond to the survey. Like most government stakeholders, they seemed wary of responding to a survey when the agency as a whole had not yet taken a stand on the issue.

4.1.2 Human Service Agencies

Human service agencies that provide transportation services abound. Instead of focusing on small agencies that provide transport as a subset of their true mission, an organization that provides only transport services was chosen. SCM Community Transport’s mission is “to empower seniors, people with disabilities, and others by providing access to the people and services which nurture and enrich their lives.”

They were originally organized to provide users in Boston’s inner suburbs of Somerville, Cambridge and Medford with alternate means to access people and services, but they have expanded to include many suburbs north of Boston, from Revere and Malden to Lexington and Burlington. They receive much of their funding from local municipalities, councils on aging, commissions for persons with disabilities, elder service agencies, and state government and partner with 35 organizations for their service. In FY 2002, SCM provided 160,000 rides to 4,100 unique riders. Of those riders, 85% were low to moderate income, 94% were elderly, 77% were women, 8% were minorities and 54% of the riders had one or more mobility impairments.

SCM Community Transport was very willing to respond to the survey. Their responses indicated that they strongly believe that mobility should be equivalent throughout the country, regardless of location. From a funding perspective, it was evident from their responses that they felt strongly that there should be federal or state funding and that it would increase the quality and effectiveness of paratransit services. Based on the demographics of their riders, it was not surprising that they disagreed with charging riders are higher fare to use the service and somewhat disagreed with the prospect of opening paratransit services to include a larger constituency. A dedicated fleet operated by private employees would provide the most cost effective service. Improvement in services was observed as able to happen regardless of the type of

146 Plato, Paul. SCM Community Transportation Mission and Background, October 2002.
147 Ibid.
organization funding and operating the service. They felt that paratransit services are in
the middle of the priority list for decision makers. Overall, SCM's responses gave an
indication that the organization would be a willing partner in a coalition to secure federal
money for paratransit services. However, they are a small organization that most likely
does not have strong influence at the federal level.

4.2 Advocates for the Elderly and Disabled

Throughout my conversations with advocates for the elderly and particularly, the
disabled, similar feelings among the groups surfaced. Historically, transit agencies have
been slow to accommodate the needs of the disabled community and traditionally have
fought any improvements to public transit that were undertaken in the name of equality
for the disabled. With regards to increased funding, amongst these advocates there is a
feeling that there is a strong credibility gap between what the transit agencies should do
with additional funds versus what they actually will do if they receive additional funds.
Ultimately, the main question that resonated with many of these stakeholders was, if
faced with new funding, would transit agencies use it to improve paratransit or would
they substitute it for the old funding and still continue to provide sub-par paratransit
services?148 With the long standing discontentment, there is an understandable
wariness in joining a coalition with transit agencies. That said, these organizations are
still very interested in helping their constituencies and if joining this coalition could
provide better transportation services, many indicated their interest.

4.2.1 American Association of People with Disabilities

The American Association of People with Disabilities (AAPD) was founded in
1995 and in seven years has become the largest non-profit, non-partisan cross disability
organization in the United States. Overall, the goal of the organization is to encourage
movement toward political, social and economic empowerment for all disabled
Americans and the organization promises to “bring about the next step in the evolution of
the disability rights movement - economic clout and power through numbers - unity,
leadership and impact.”149 Like AARP, the founders imagined the organization as a way
for all disabled Americans to band together to work toward a common goal and also an
avenue for providing services, such as insurance and other basic benefits, to the

148 Golden, Marilyn. Interview by author, 15 October 2002. Disability Rights Education and
Defense Fund.
149 American Association of People with Disabilities. “Tell Me About AAPD,” http://www.aapd-
dc.org/docs/info.html#about, Internet, Searched on May 9, 2002.
disabled community. Like many other disabled groups, AAPD does not address transportation issues outright, but it is clear from the organization’s goals and objectives that accessible transportation is crucial for attaining their mission.

AAPD was also very willing to respond to the survey. AAPD representatives have testified before both the House and the Senate. Even with that level of interaction, they feel that funding for paratransit services is a low priority in the reauthorization of TEA-21. They are strongly in favor of equal mobility for the entire American disabled community. They also strongly agreed with the questions that advocated federal funding for paratransit services and felt that federal funding would increase the quality and effectiveness of paratransit. They were strongly against charging paratransit users more to use the service. Lastly, they indicated that paratransit services would be improved if they were funded by highway agencies, but provided by private organizations, which is in line with their response to improving cost effectiveness by having a dedicated fleet and private employees. AAPD has demonstrated a close proximity to the legislative process and appears to have influence in decisionmaking. In addition, they have a large and dispersed constituency that can be utilized to approach various Congressional leaders and broaden the scope to present a more cohesive case.

4.2.2 American Association of Retired Persons

The American Association of Retired Persons, commonly referred to as AARP, has been committed to highlighting the needs and interests of Americans fifty and over since 1958. AARP’s mission is to “enhance the quality of life for all by promoting independence, dignity and purpose through education, advocacy, and service.” AARP is considered a stakeholder in the debate on paratransit because the elderly cohorts, particularly those over age 65 and especially those over age 85, comprise a large portion of eligible ADA paratransit riders due to the higher probability of being afflicted by metal and physical ailments as one ages. These ailments often preclude them from utilizing America’s typical means of mobility, the personal automobile, and they are reliant on alternative means of mobility, such as paratransit. Although not all members fall into this category, the quantities are great enough to warrant AARP’s interest.

Based on an interview with a senior AARP staff member, AARP’s view of the goal of paratransit services is simple: to “provide mobility for those who can’t provide it

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150 Ibid.
for themselves.” One of AARP’s main concerns about the current state of ADA paratransit is that there is insufficient funding to properly provide paratransit and mobility needs for the disabled. AARP feels that transit agencies, as well as private and human service agencies, are severely underfunded in their quest to provide equivalent mobility for the transportation disadvantaged, a group which includes the elderly, disabled and poor. Although legislation has been passed on this topic, AARP believes that the amounts have been meager and more importantly, the lack of funding has created competition for scarce resources by these various groups. This has created an environment that focuses more on who gets how much as opposed to focusing on improving mobility for those who are most in need.

The current mechanism for providing transportation options in the US for the disabled community appears to be segregating, not integrating in that there is a separate but supposedly equal system for those who need it. However, the future of paratransit, according to AARP, should be a system that does not provide a wholly separate service for the disabled. Instead, a paratransit service should be open to all levels of transit users, which will undoubtedly improve the efficiency of services, from both a transit agency and individual point of view, and expand the portfolio of transportation options to the public.

AARP was unwilling to respond to the survey as they felt that the issues surrounding paratransit services were too broad to be answered in this survey. They have testified before both the House and Senate regarding transportation needs for older Americans and have also put forward their opinions on the reauthorization of TEA-21. Much of AARP’s focus is on highways, as that is the mode of choice for many elderly. However, as indicated above, there is a portion of non-drivers in AARP’s constituency and AARP is advocating for “increased support to assist them [public transport agencies] in accommodating the diverse population of persons with disabilities… Progress could be made towards achieving these objectives through enhanced subsidies to public transportation providers. Subsidies should be targeted to assisting providers to meet the real needs of their customers with disabilities, irrespective of age.” Although AARP does not directly address funding for paratransit

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152 Straight, Audrey. Interview by author. 6 May 2002. AARP Public Policy Institute.
153 Ibid.
operations, they are highlighting the need for increased funding for transit. In addition, throughout AARP’s existence, the organization has proven itself to be extremely adept at influencing policymaking at the highest levels of government and is well regarded as the voice for elderly Americans. Therefore, even with their lack of response to this survey and inability to accurately ascertain their opinion on federal funding for paratransit, AARP would be an extremely important addition to the coalition.

4.2.3 Easter Seals – Project ACTION

In 1988, Congress commissioned Easter Seals, a national organization committed to helping people with disabilities, to undertake a study to help improve access to public transportation for people with disabilities.\textsuperscript{155} The organization that surfaced was Project ACTION (Accessible Community Transportation in our Nation). After the passage of the ADA, their objectives were broadened so as to proactively help providers implement the transportation aspects of the new law and forge cooperative ties between the disabled community and transportation providers.\textsuperscript{156} Specifically, Congress tasked Project ACTION with (1) identifying people with disabilities and assessing their transportation needs; (2) developing outreach marketing activities to encourage disabled people to use public transportation, especially fixed route services; (3) training transportation providers on the needs of disabled patrons; (4) training disabled people on access to and use of public transportation and (5) encouraging the elimination of barriers to transportation and the development of new technologies.\textsuperscript{157} In the assessment of the future, both in the next five years and beyond, Project ACTION is looking at new opportunities to provide transportation services that will help fill in the gaps between the current options, such as flexible routes, feeder services, and community coordination. They will also look to further promote universal design and livable communities, both of which will help to reduce the barriers of accessing various transportation options. Thirdly, they will continue to improve the coalitions between organizations with similar missions, such as the Community Transportation Association of America (CTAA), AARP and the American Public Transportation Association (APTA) in order to press forward in their quest for universal access.\textsuperscript{158} Lastly, they will attempt to surmount the challenges that are associated with funding of transit services and to

\textsuperscript{157} Ibid., 4.
\textsuperscript{158} Ibid., 5-6.
change the perception that "we 'invest' in our highways, while transit receives 'subsidies'."\textsuperscript{159} The last objective will ultimately lead to improved transport services for all citizens, especially the disabled.

Easter Seals Project ACTION declined to answer the survey as they receive the bulk of their funding from the Federal Transit Administration (FTA) and was concerned about preempting the reauthorization verbiage from the FTA. However, they expressed interest in the topic and are very aware of the needs of the disabled community with respect to transportation. Because part of their mission is to promote cooperation between the transit industry and the disabled community, incorporating them into the coalition would go far in curbing much of the distrust between the two groups. However, because of their funding constraints, they most likely will not be able to play a role in the coalition.

\textbf{4.4 Advocates for Improved Mobility}

\textit{4.4.1 Community Transportation Association of America}

The Community Transportation Association of America (CTAA) is not an organization focused specifically on the disabled. Instead, their mission takes a broader perspective on mobility and accessibility for all people and does not segment the population into groups who have varying transportation needs. They are "attempting to steer policy initiatives toward dealing with the bigger solution of providing all Americans with mobility choices and alternatives."\textsuperscript{160} Their main constituency is comprised of small cities with populations of less than 200,000 persons.\textsuperscript{161} With the changes in operating funds in TEA-21, these communities, unlike those with populations over 200,000, still receive operating subsidies for transit, so CTAA is not as focused on regaining operating funds as compared to other advocacy groups.

CTAA chose not to respond to the survey as they are working on their own TEA-21 reauthorization plan, called the National Transit Renewal Program.\textsuperscript{162} In that document, they have proposed new additions to TEA-21, with the underlying theme that transit, in its own right, needs significantly higher levels of funding to continue to serve its demand. With regards to paratransit services, "there is not enough investment overall in

\textsuperscript{159} Ibid., 10.
\textsuperscript{160} Bogren, Scott, Community Transportation Association of America. E-mail to author, 28 October 2002.
\textsuperscript{161} Bogren, Scott, Community Transportation Association of America. Phone conversation with author, 4 November 2002.
transit to continue to segment services” to serve small portions of the population, such as the disabled. This tactic also often results in pitting one segment against another, often to the detriment of a segment. This is not to say that CTAA does not support paratransit; they do. But they support making everything accessible so that there doesn’t need to be disparate segments.\(^{163}\) Therefore, although CTAA is well respected with regards to policy making, their focus on their own TEA-21 reauthorization plan, coupled with their minimal interest in specific improvements in paratransit do not make them a viable coalition partner.

4.4.2 **Surface Transportation Policy Project**

The Surface Transportation Policy Project (STPP) is a non-profit organization founded as a coalition that was created to address government transportation policies from a conservation of energy, environmental protection, social equity, livable community and economy perspective.\(^{164}\) STPP was formed in 1990 and was a major contributor to ISTEA, the first overarching federal transportation policy to address all facets of surface transportation. Although the coalition is not primarily focused on the disabled, because of their focus on livable communities and equitable transportation, combined with their access to the highest levels of government and success at influencing transportation policymaking, STPP presents a significant voice to help push modifications to current federal transport policy with regards to paratransit operations.

STPP readily responded to the survey, although interestingly identified themselves as providers of transportation services. They strongly agreed that mobility for disabled Americans should be equal throughout the country. They somewhat agreed with the questions surrounding increased federal funding for paratransit services and its subsequent positive impact on quality and efficiency. They did agree that paratransit riders should pay a greater share of the costs for the service. They indicated that improvements to paratransit services would occur if the services would continue to be provided by transit agencies and funded by either transit or highway agencies. The services would be more cost effective, however, if vouchers were provided to purchase individual transportation, thereby giving more options to riders. They do not believe that expanding paratransit services to serve all non-drivers would make paratransit services more efficient. Lastly, with their knowledge of TEA-21 and the legislative process, their perception is that funding for paratransit services is a low priority for decision makers.

\(^{163}\) Bogren, Scott. Phone Conversation.
Based on these survey answers, most importantly their feelings regarding increased funding for paratransit services, and their access to government, they would be beneficial to the coalition.

4.4.3 American Public Transportation Association

The American Public Transportation Association (APTA) is the main advocacy organization for public transit organizations. Its membership consists of bus, rapid transit and commuter rail providers plus other organizations that plan, design, construct, finance and operate transit systems. As they are the main advocates for all public transit providers, they are less likely and less capable of focusing on the needs of one segment of the total constituency such as disabled. Although their members are required by federal law to provide transportation services to the disabled and are under constant pressure to improve the services, APTA is also faced with balancing the needs of other interest groups and constituencies who utilize public transit as well. Therefore, in order to bring APTA into the coalition, a broader view that focuses on federal money for paratransit operations but not at the expense of other public transit funding would be necessary.

APTA responded to the survey, even with their own reauthorization plan in progress. They strongly agreed that mobility should be equal across metropolitan and rural areas. They also somewhat agreed with the questions concerning federal or state funding and its ensuing impact on quality and effectiveness of the service. They somewhat agreed that paratransit users should be paying more for using paratransit services. Not surprisingly, they indicated that paratransit services would be improved if they continued to be provided by transit agencies and funded by either transit agencies or highway agencies. They somewhat agreed that expanding the service to non-drivers would make paratransit services more efficient. Lastly, based on their experience, they believe that funding for paratransit is in the middle of priorities for decision makers.

However, even with its role as spokesperson for the transit agency and influence at the highest levels of government, APTA cannot be utilized as the main voice for the coalition. First, even in their own reauthorization plan, they are not specifically advocating for renewed operating subsidies or specific paratransit solutions. Second, and perhaps more importantly, they, as representatives of the transit industry, have a contentious relationship with many of the disabled advocacy groups. With this

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relationship, if they were the leader, many disabled groups may be hesitant to join the coalition. Obviously, without the disabled community’s voice, the coalition would lose much of its credibility. With their ability to reach the federal level of decision making, APTA should be utilized within the coalition to approach legislators; however, they should be used sparingly so as not to turn away the disabled lobby.

4.5 Federal, State and Local Government

4.5.1 Federal Transit Agency

The Federal Transit Agency (FTA) is the main federal government and Department of Transportation (DOT) organization tasked with strategic, financial and technical and planning assistance for all types of public transportation. Through its grant programs, such as 5310 for the elderly and disabled, the FTA assists in planning, building and operating transit systems nationwide. As evident in this grant program, the FTA recognizes the need for paratransit services for the elderly, hence why they provide funding for capital expenditures and administrative costs. In addition, they provide funding for private nonprofit organizations who provide transportation services for the elderly and disabled, state-approved public bodies who coordinate services for the elderly and disabled, and public bodies who certify that no non-profit was able to provide such services in the area. However, they have neglected the financial needs of large urban public transit organizations’ paratransit services. As it is the main voice for public transit in the federal government, its opinion and influence may help to invoke a change in federal funding for elderly and disabled transportation.

The FTA did not respond to my repeated requests, which is not overly surprising considering they are the source of funding and implementer of TEA-21. Like most government stakeholders, they seemed wary of responding to a survey when the agency as a whole was still formulating its ideas around the reauthorization.

4.5.2 State Departments of Transportation

State Departments of Transportations (DOTs) are the main statewide bodies tasked with distributing some federal transportation funds and overseeing all transportation related projects statewide, from highway and motor vehicles to public transportation. Originally, they were created for highway projects so that one universal body could oversee the construction and maintenance of highways statewide. However, they have morphed into intermodal agencies that include work on rail, air, public transit, bicycle, pedestrian and motor vehicles and their subsequent infrastructure. They also

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166 Congressional Research Service, 1.
often work with or defer to local metropolitan planning organizations (MPOs) for regional planning and decision-making.

The survey was submitted to a large Midwestern state with a significant metropolitan area combined with mainly rural areas throughout the remainder of the state and a small Northeastern state that is mainly rural with a midsize city. The Midwestern state declined to respond to the survey because “we have many issues/initiatives on our plate for the reauthorization of TEA-21 and it is not clear where increased funding for paratransit would fit on that plate. However, obviously we would support any increased funding coming to the state…”\textsuperscript{167} The lack of interest is because paratransit in urban areas, as they are a subset of public transit organizations, are traditionally approached from a local or regional level. Therefore, the state DOTs are hesitant to interfere with their operation. In the case of the Midwestern state, the DOT is “uncertain as to the extent to which it would be part of a coalition for paratransit funding.”\textsuperscript{168}

The second state was a small northeastern state that is mostly rural, with one small urban area under 200,000 people. The state DOT was helpful in forwarding along the survey the largest non-urban public transport system in the state. By forwarding the survey along however, the DOT demonstrated that their view of public transit issues is not unlike that of the large midwestern state above. They appear to view public transit as a local issue and that their duties and opinions are quite limited with regards to public transit. Therefore, based on these two states, state DOTs will not contribute much to the coalition, as this is an issue that is perceived to be a local or regional issue, not a state level issue.

\subsection*{4.5.3 National Council on Disability}

The National Council on Disability (NCD) is neither a rule-making nor funding agency; instead it was developed to make recommendations to both the executive and legislative branches regarding issues that affect the disabled community.\textsuperscript{169} The Council was instrumental in enacting the ADA and has also influenced other federal disability policies. The Council has also undertaken an extensive review of the ADA and its enforcement. Because of its lack of services and grant making abilities, its sole purpose

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\textsuperscript{167} “Response to Paratransit Survey,” e-mail to author from Midwestern State Department of Transportation Employee, 15 October 2002.
\textsuperscript{168} Ibid.
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For being incorporated in this analysis is its access to high levels of federal decision-making.

Due to their position in the federal government, the NCD was unable to respond directly to the survey. Their response indicates that they feel that their views on the subject have been well documented in reports to Congress and the President. The NCD recognizes that disabled Americans continue to experience difficulties with ADA complementary paratransit services, somewhat due to the Federal Transit Administration (FTA) lack of enforcement of ADA requirements. That said, there appears to be a somewhat acrimonious relationship between the NCD and the FTA. The NCD illustrates that one of the major issues is that the FTA is not committed to monitoring the implementation of ADA paratransit services, nor verify that the transit agencies are compliant with the legislation. Instead, in NCD's opinion, the FTA feels that they only need to monitor the submission of written plans by transit agencies for complementary paratransit services, not the services themselves, which ultimately leads to ineffective transportation service for the disabled. In line with other disabled groups' opinions, NCD does believe that there should be an increased focus on fixed route accessibility, as it would not only provide a better experience for current riders of transit, but also would “encourage the use” of fixed route transit by current users of complementary paratransit services.

The NCD does not address the issue of funding for the operation of paratransit services, nor does the organization make any recommendations on possible operational or financial improvements to the services. This is mainly because the federal government has little or no control over the actual operation of these services and making any recommendations would not prove beneficial for the NCD. In the coalition, they could be utilized for their internal knowledge of the disabled community and its needs, but overall, would not be a participant in the coalition.

### 4.5.4 United States Conference of Mayors

The US Conference of Mayors (USCM) is an organization comprised of mayors of cities with populations over 30,000, which correlates to 1,183 US cities. Their responsibility is to advocate jointly for the development of “effective national

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urban/suburban policy” and “ensure that federal policy meets urban needs” among other objectives.\textsuperscript{172} The organization views transportation funding and improvements as crucial to the continuing well-being of metropolitan areas and has put together their own TEA-21 reauthorization proposal. However, they, like most other organizations, are focusing on increasing the level of funding for TEA-21, based on the original legislation. They do not appear to be advocating for renewing operating subsidies or specific solutions for segments of the population, such as the disabled. Instead they are promoting higher level, unsegmented solutions for metropolitan transportation.\textsuperscript{173}

Like most other stakeholders, USCM indicated that mobility for the disabled should not vary based on one’s rural or urban location. They also strongly agreed that that the federal government should fund paratransit as part of the surface transportation system. They somewhat agreed that federal funding would help prioritize other trip purposes so that they would not be secondary to health related trips. USCM somewhat disagreed with charging paratransit riders more for using the service. They somewhat agreed that federal or state funding would improve the quality and effectiveness of paratransit services. They did feel that transit agencies would improve paratransit services and the funding should either be provided by transit agencies or via highway agencies. In addition, USCM felt that paratransit services would be most cost effective if provided by a dedicated fleet operated by public employees. They strongly disagreed with the notion that paratransit would be more efficient if the services were expanded for all non-drivers. Lastly, they feel that funding for paratransit services is in the middle of the priority scale for decision makers.

The USCM has a significant constituency, in that it represents a large scale of cities, from small cities of 30,000 people to large mega cities such as Los Angeles, Chicago and New York. However, they also have to balance their requests in the TEA-21 reauthorization for improvements in transit with highways and other surface transportation needs that will improve the entire urban landscape. Therefore, although they would be a valid addition to the coalition, the organization will have more diverse opinions regarding the best focus for TEA-21 funding.

4.6 Providers of Paratransit Services

4.6.1 Large Providers

\textsuperscript{172} Ibid.
Two large transit operators were surveyed, the Chicago Transit Authority (CTA), which provides transit service to the Chicago Metropolitan Area and the Massachusetts Bay Transportation Authority (MBTA), which provides transit service to the Boston Metropolitan Area. These two transit organizations, along with their counterparts in other urban areas, are the stakeholder group who, together with paratransit users, are most impacted by the costs of paratransit services. It would seem that, since the urban transit agencies are facing similar problems with regards to increasing ADA paratransit costs, they would respond with similar answers to the survey, however that was not the case.

CTA provided 1.4 million paratransit trips in FY 2002 at a total cost of $33.5 million. They strongly agreed that mobility should be equal throughout the disabled community in America. They also strongly agreed that the federal government should fund paratransit as part of the surface transportation system. There was also strong agreement that federal money would help to put other trip purposes on par with health related trips. CTA somewhat agreed that paratransit riders should pay a greater share of the costs of paratransit services. They strongly agree that federal and state money would help to increase the quality and efficiency of paratransit services. Interestingly, CTA believes that paratransit services would be improved if the services were (1) funded by highway agencies, but provided by other private organizations; (2) funded by highway agencies, but provided by transit agencies and lastly, funded and provided by transit agencies. This shows a huge interest in shifting the responsibility for paratransit elsewhere. Cost effectiveness would increase if a dedicated fleet and private employees provided paratransit services. They strongly disagreed that paratransit would be more efficient if the service were opened to all non-drivers. Lastly, they, like many other stakeholders, believe that funding for paratransit services is a low priority for decision makers.

The MBTA provided almost 1.1 million paratransit trips at a total cost of $27.6 million during FY 2002. They somewhat agreed that mobility should be equal across the country. They strongly agreed that the federal government should view paratransit as part of the surface transportation system and fund it accordingly. They somewhat disagreed that federal funding is necessary to place other trip purposes on par with health related trips. They somewhat disagreed that paratransit riders should pay a greater share of the cost for the service. They somewhat agreed that increased federal funding would increase the quality and effectiveness of paratransit services; however,
they somewhat disagreed that additional state funding would have similar outcomes. Their first two choices to improve paratransit services were to fund and provide the service through public transit and to fund through highway agencies, but have transit agencies continue to provide the service. The T also indicated that they were ambivalent between utilizing public or private employees to operate a dedicated fleet to provide a more cost effective service. They strongly disagreed with the notion that paratransit services would be more efficient if they were opened to all non-drivers. Lastly, they perceive that funding for the provision of paratransit services is a low priority among decision makers.

As these large urban transit organizations are integral to making a case for federal funding, they are paramount to the coalition. However, based on Congress’ wariness in funding operations and civil rights (see Chapter 5) and disabled groups suspicion of transit agencies intentions, transit agencies can neither go at it alone, nor lead the coalition. However, they also cannot sit on the sidelines and let other groups do the work. Since they are the organizations that are most affected by any changes, they must be very proactive in developing the coalition and outlining the talking points for the coalition’s approach to Congress.

4.6.2 Small Providers

Four small regional transportation authorities were surveyed in order to assess their opinions on paratransit services and federal funding. Although they are not directly involved in the issue because they do receive federal operating subsidies\textsuperscript{174}, their answers provide insight into their thoughts on the issue. Additionally, their responses can be used to augment the opinions on the larger transit agencies to demonstrate that the issues are pervasive throughout the country, not only in large urban areas.

The first is the Marble Valley Regional Transit District serves the residents of Rutland County, Vermont and is the largest non-urban public transportation system in the state.\textsuperscript{175} They were not contacted directly to answer the survey, but they were sent the survey by the state DOT, as the state DOT did not feel as though they were qualified to answer the survey. As a non-urban provider, they strongly agreed that mobility for the disabled should be equal across the country. The strongly agreed that the federal government should fund paratransit as a surface transportation option. They somewhat agreed that additional federal funding would help to place non-health related trips on

\textsuperscript{174} They either serve urban areas with less than 200,000 people or rural areas.
\textsuperscript{175} Marble Valley Regional Transit District. http://www.thebus.com/, Internet, Searched on November 13, 2002.
equal footing. They somewhat disagreed that paratransit riders should pay more than they currently are. They strongly agreed that both federal and state funding for paratransit services would help to increase the quality and effectiveness of paratransit services. Like many respondents to the survey, the MVRTD felt that improvements in paratransit services would be found if they were either continued at the status quo or funded by highway agencies, but provided by transit agencies. A dedicated fleet with public employees would provide the most cost effective service. They strongly agreed that opening the service to non-drivers would make paratransit services more efficient. Lastly, they felt that funding for operating paratransit services is in the middle of the priorities for decision makers.

The second small transit organization is Link Transit, which serves serving Chelan County and East Wenatchee, Washington. This organization was contacted because the new general manager, Richard DeRock, previously was the executive director of Access Services, the paratransit service in Los Angeles. These experiences combine to provide an interesting outlook on paratransit services in both large urban areas and small, relatively rural regions. Link Transit strongly disagreed that mobility for the disabled should be equal across the US, regardless of location. They strongly agreed that the federal government should fund paratransit as part of the surface transportation system, although they somewhat disagreed that federal funding would help prioritize non-health related trips. They strongly agreed that paratransit riders should pay more for the services. Interestingly, they somewhat disagreed that federal funding would increase the quality and effectiveness of paratransit, but somewhat agreed that state funding would have a positive impact. Their first choice for improvement in paratransit services is to remain at status quo and the second choice is to fund paratransit by highway agencies, but use private organizations to operate the service. They felt that paratransit services would be more cost effective if vouchers were distributed so that users could purchase their own transportation. They strongly disagreed that opening paratransit services to all non-drivers would make them more efficient. Lastly, they perceive that funding for paratransit services is a low priority for decision makers.

The third organization surveyed is the Lowell (Massachusetts) Regional Transit Authority, which provides paratransit services for area residents over 60 years old or
those who are disabled. The Administrator, Robert Kennedy, is also the head of the Massachusetts Association of Regional Transit Authorities. They somewhat agreed that mobility should be equivalent across rural and metropolitan areas, the federal government should fund paratransit as part of the surface transportation system and that federal funding is necessary to put non-health related trips on equal footing. They strongly disagreed that riders should pay more for the service. They strongly agreed that federal funding would improve the quality and effectiveness and somewhat agreed that state funding would do the same. Paratransit would be improved if the funding and operating structure remained as is or was funded by highway agencies and operated by private organizations. A dedicated fleet with private employees would provide a more cost effective service. They strongly disagreed with the notion that paratransit would be more efficient if it were expanded for all non-drivers. Lastly, they perceive funding for paratransit to be a middle of the road priority for decision makers.

The final survey was sent to the Berkshire (Massachusetts) Regional Transit Authority, which serves communities throughout Berkshire County. Their paratransit services are geared toward elderly and disabled, who are unable to use fixed route transit. They somewhat disagreed that mobility should be equivalent across the nation. They somewhat agreed that paratransit should be funded through the surface transportation system and somewhat disagreed that federal funding would help to prioritize non-health related trips. They somewhat agreed that users should pay a greater share for the service. Because they are a rural agency, they do receive federal funds for operations and therefore somewhat disagreed that federal funding would improve the quality and effectiveness of paratransit. However, they strongly agreed though that an increase in state funds would positively impact the quality and effectiveness of the service. Improvements in paratransit services would be observed if the status quo were maintained or if the service were funded by highway agencies and operated by private organizations. Cost effectiveness would increase if paratransit services were provided using a dedicated fleet and private employees. BRTA somewhat disagrees with the notion of expanding paratransit services to all non-drivers. Lastly, funding for paratransit services is perceived to be a middle of the road priority for decision makers.

These answers by the four small transit authorities demonstrate the immense variability between their paratransit operations. However, they did all agree that paratransit should be funded as part of the surface transportation system. Using this, combined with further discussions, the small regional transit agencies can be utilized in the coalition to make a case that this is a nationwide issue, not simply one that is endemic in large urban areas.

4.7 The Survey Results

To summarize, the organizations who responded to the survey were: Somerville, Cambridge, Medford Community Transportation; the American Association of People with Disabilities (AAPD); Surface Transportation Policy Project (STPP); American Public Transportation Association (APTA); the Conference of Mayors; Chicago Transit Authority (CTA); Massachusetts Bay Transportation Authority (MBTA); Lowell Regional Transit Authority (Lowell RTA); Berkshire Regional Transit Authority; Link Transit, Wenatchee, Washington; and Marble Valley Vermont Regional Transit District. Those organizations who responded and said that they were unwilling to answer the survey were: the American Association of Retired Persons (AARP); Easter Seals ProjectACTION; National Council on Disability; Community Transportation Association of America (CTAA) and 2 state Departments of Transportation. In the graphs below, they account for the 'no opinion' responses, which appear on the graphs, but do not appear in the analysis. Those organizations that never responded to my initial inquiries were the Department of Health and Human Services (HHS) and the Federal Transit Administration (FTA). The organizations are not included in the graphs or analysis below.
4.7.1 Question 1

Mobility for the disabled should be equal across rural and metropolitan areas, not based on one's proximity to public transportation.

This question elicited fairly even responses in that most of the organizations strongly agreed that mobility should be equal across the country, regardless of one's proximity to public transportation. The organizations that chose 'strongly agree' were the human service transport providers, the advocates for the elderly and disabled and the advocates for mobility. A few of the transit properties also indicated strong agreement, although the remaining two accounted for the somewhat disagree and strongly disagree responses. This demonstrates that there is a pervasive belief throughout the industry and advocacy groups that mobility should not be based on proximity to public transit, but instead that the disabled should be treated equally, with regards to mobility. Given the overwhelming 'agreed' response, this presents a viable approach to all members of Congress, not just those who represent urban areas.

Figure 4.22 – Results of Survey: Question 1
4.7.2 Question 2

The federal government should fund paratransit as a fundamental part of the surface transportation system.

This question received answers from all stakeholders that were either 'strongly agree' or 'somewhat agree', which demonstrates a definitive opinion that paratransit should not be viewed as a subset of transit. Instead, it should be approached as another mode of surface transport and should be funded accordingly. The consensus here also provides a good basis with which to form the coalition, since all of the stakeholders who responded were in agreement with this statement.

Figure 4.23 - Results of Survey: Question 2
4.7.3 Question 3

Third party payments from sources such as Medicaid often result in health related trip prioritization. Additional federal funding is needed to place other trip purposes on equal footing with health related trips. This question elicited an array of responses, from 'strongly agree' to 'somewhat disagree'. Those that strongly agreed ranged from a large transit provider to an advocate for the disabled community. The three who somewhat disagreed were all providers of transportation, both large and small. The somewhat agreed respondents were the advocates for the elderly and disabled and mobility in addition to two small transit agencies. The breadth of responses show variability in opinions on this issue, but the number of respondents in agreement demonstrates that the preferential treatment of health related trips over other trips is a problem. Because it is against the law to preference trips, establishing the true nature of this issue will be difficult. However, because there have been so many studies undertaken that illustrate the importance of social interaction for healthy living, the positive responses can be used to demonstrate that although this may not be a pervasive issue, it still occurs. Combined with the increasing paratransit costs and demand, this could present a larger problem in upcoming years.

Figure 4.24 - Results of Survey: Question 3
4.7.4 Question 4

Paratransit riders should pay a greater share of the cost for their use of paratransit services.

This question received every possible answer. Those that 'strongly agreed' included a small transit property and a mobility advocacy group. The organizations that 'somewhat agreed' were one large and one small transit property and an advocacy group for public transportation. The 'somewhat disagreed' organizations were one large and one small transit property and an urban focused non-governmental organization (NGO). Lastly, those that strongly disagreed were a small transit property, an advocacy group for the disabled and a small private paratransit organization. Although some organizations may be in agreement that paratransit provides a service that is in excess of fixed route transit and therefore its users should pay more, charging more will neither endear the disabled community to the cause, nor garner much support in Congress. In addition, given the differential between the current fares and costs of providing the service, any additional increase in fare would only minimally increase farebox returns and would greatly dissipate any support from the disabled community. Therefore, approaching the high costs of managing paratransit from this angle has decreasing returns and should not be a focal point.

Figure 4.25 - Results of Survey: Question 4
4.7.5 Question 5

Since 1997, local public transit agencies have not received federal funding for operations. If there were some federal transportation funding available for operating expenses, the quality and effectiveness of paratransit services would be improved.

This response demonstrated mixed attitudes as well. Those that 'strongly agreed' were a private paratransit provider, an advocate for the disabled, a large transit property and a couple of smaller transit properties. The 'somewhat agree' responses came from a large transit organization, an urban NGO, and two surface transport advocacy groups. The 'somewhat disagree' responses came from two small transit properties, which due to their size and location, already receive federal operating subsidies. Removing these two responses, all of the other respondents indicated that there is a belief that the quality and effectiveness would be improved if there were federal funding for operating expenses. As discussed above, the outlying question that many of the disabled groups raised was if transit agencies would substitute federal funding for current spending, thereby not increasing the funding for paratransit services and ultimately providing services at status quo.

Figure 4.26 - Results of Survey: Question 5
4.7.6 Question 6

The quality and effectiveness of paratransit services would be improved if there were additional state funding available for operating expenses.

The answers to this question were mostly in agreement and indicated that the survey recipients believe that additional state funding would improve the quality and effectiveness of paratransit services. The lone negative response was from a large transit operation. The interesting aspect here is that while these groups indicate that they believe state funding would help improve paratransit services, both state DOTs that were contacted declined to answer the survey because they felt that paratransit should be dealt with at a local or regional level. This demonstrates a disparity between how states, providers and advocates view paratransit. This also ties into the initial question of equal mobility throughout the country. States appear to believe that all paratransit is local. The other groups, on the other hand, believe it should be equal throughout the country, thereby necessitating funding and perhaps state or federal regulation.

Figure 4.27 - Results of Survey: Question 6
4.7.7 Question 7

Paratransit services would be improved if they were (Order 1-best option to 4-worst option). (A) Funded and provided by highway agencies; (B) Funded by highway agencies, but provided by transit agencies; (C) Funded by highway agencies but provided by other private organizations; (D) Continued to be funded and provided by public transportation.

The first choice of most respondents was to continue with the status quo of funding and operating by public transit organizations. All except one of the transit agencies, their advocacy group, a private transportation provider and an advocacy group for surface transportation responded with this option as their first choice. This demonstrates that most organizations, including public transit agencies themselves, view public transit as the best provider of paratransit services, perhaps because it is more closely related to their other service offerings, unlike that of a highway agency. This option signifies that any funding that is provided would have to be directly targeted at local or regional transit agencies, which may be detrimental to creating equal mobility for the disabled. This also creates a struggle for funding, since either more money would have to be attributed to mass transit, the pool for mass transit would be reduced as funding is siphoned for paratransit or a separate program would need to be created. However, continuing with the status quo, albeit hopefully with increased funding, would provide the least turmoil to the provision of service.

The second choice of most respondents indicated that highway agencies should fund the service, but that transit agencies would still be the best providers of paratransit services. This included a disabled advocacy group, a few transit agencies and their advocacy group. Funding via the highway agencies would remove the pressure from transit agencies and place it on the transportation system as a whole, while still requiring transit agencies to provide the service. An increased effort of coordination between the two agencies would be required in order for this option to bring about improvements in services to the disabled.

The last two options, funding by highways and providing by private organizations and funded and provided by highway agencies, did not receive many primary responses. These options would require a tremendous amount of effort on the part of the government in order to ensure continued service levels. Overall, the responses demonstrate that most respondents believe that paratransit should remain under the umbrella of public transit services. However, the funding mechanism remains under debate.
Figure 4.28 - Results of Survey: Question 7

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Chapter 4
4.7.8 Question 8

*Paratransit services would be more cost effective if they were provided using (A) A dedicated fleet and public employees; (B) A dedicated fleet and private employees; (C) Vouchers to purchase own public transportation.*

Responses to this question showed even responses between a dedicated fleet and public or private employees. This is in line with the current provision of services nationwide as some transit organizations, in an effort to manage costs, contract their services out to private contractors and others believe that the services are more cost effective if they are provided in house. Those that thought that providing paratransit services by public employees were an advocacy group for the disabled, an urban NGO, and a large and small transit provider. Those that answered that a dedicated fleet with private employees would provide a more cost effective service were two small transit agencies, a large transit agency and a private provider of paratransit services. The two organizations that indicated their preference for the voucher system, a small transit agency and an advocacy group for transportation, demonstrate the growing use of taxis as paratransit vehicles. The wide array of responses indicates that there is not a single held conviction that there is a ‘best’ way to improve the cost effectiveness of paratransit services.

**Figure 4.29 - Results of Survey: Question 8**
4.7.9 Question 9

Paratransit services would be more efficient if they were expanded to provide services to all non-drivers (i.e. elderly, teens, etc.)

Interestingly, almost all survey responses indicated that opening paratransit to all non-drivers would not increase the efficiency of paratransit. This is in line with the attempts by transit agencies to limit the qualified users of paratransit, since most of those organizations that responded negatively were the transit agencies, both large and small. In addition, the urban NGO and the transportation advocacy group also responded with 'strongly disagree'. This demonstrates public transit’s lack of interest in providing paratransit as a full-fledged option in their service offerings and their increasing desire to keep paratransit as an option only for those who demonstrate need. The ‘strongly agree’ response came from a small transit provider who currently does provide service to the non-disabled elderly, as well as the disabled community in the area. The two organizations that ‘somewhat agreed’ were an advocate for the disabled and an advocate for public transportation, which is notable since all of this organization’s constituents ‘strongly disagreed’ with this statement. However, if paratransit services were opened to all non-drivers, this may make the case for federal funding of paratransit as part of the surface transportation system stronger. This would also remove the stigma that paratransit is only for the disabled, as opposed to a mode of choice that can be utilized by the many groups who lack mobility options.

Figure 4.30 - Results of Survey: Question 9
4.7.10 Question 10

What is your perception of where funding for the provision of paratransit services falls among the priorities of decision makers for the reauthorization of TEA-21?

Not surprisingly, no one responded to this question by selecting 'high priority'. There was a split between a perception of medium and low priority. Two respondents who have testified before Congress on the reauthorization of TEA-21 both answered 'low priority', as did most of the transit agencies. The third organization that has testified before Congress responded with 'medium priority', as did the urban NGO, the small private transportation provider and two small public transit organizations. The responses demonstrate that there is not a great belief that funding for paratransit services is on the radar screen, which increases the workload for the coalition. However, the answers to the survey questions above exhibit an interest by varied groups in making a case for federal funding for ADA paratransit services.

Figure 4.31 - Results of Survey: Question 10

4.8 The Emerging Coalition

Based on the objectives and responsibilities of the stakeholders listed above, combined with their responses to the survey, there appears to be an interest in finding funding alternatives to provide an improved level of paratransit services. Given this, forming a coalition seems plausible. However, there are distinct interest groups with varying opinions that need to be taken into account and dealt with accordingly. First, based those that responded to the survey and discussions with Capitol Hill staffers, one of the advocacy groups with significant legislative influence needs to lead the coalition
effort. Those organizations, based on those who actually responded to the survey, are
the American Association of People with Disabilities (AAPD), the Surface Transportation
Policy Project (STPP), the American Public Transportation Association (APTA) or the
Conference of Mayors. With that in mind, the leader also needs to elicit support to bring
together the integral groups on this issue, the disabled community and the transit
agencies. Therefore, the organization needs to be unbiased third party that can garner
the respect of both groups, which removes both AAPD and APTA from leading the
coalition. The Conference of Mayors, while having legislative access, may present a
somewhat urban perspective, which may be detrimental to corralling the non-urban
members of Congress. Therefore, STPP, with its interest in livable communities and
equitable transportation and their access to high levels of government, appear to be the
best leaders for the coalition. They also have a broad perspective on surface
transportation in general and are therefore more capable of seeing viable funding
alternatives that would be acceptable to multiple stakeholders.

Transit agencies, however, are the organizations that stand to gain tremendously
from any legislative changes, so they need to be integral participants in the coalition.
Although STPP would be the lead organization, the efforts, ideas and action must come
from transit agencies themselves. It is their responsibility to make the case of why
federal funding is necessary and what they will accomplish with the federal funding. This
can be presented by STPP, with the endorsement of disabled groups. The disabled
groups must be willing to identify what they require for public transit provided paratransit
services in order to work toward a compromise with the transit agencies.

Even though the perception persists that there is medium to low priority being
given to funding for paratransit services in the reauthorization of TEA-21 and many
organizations reauthorization plans do not specifically discuss paratransit operations,
there appears to be interest around highlighting the need for funding. Through APTA or
their own attempts, transit agencies must move beyond blaming the disabled
constituency for needing paratransit and focus on gathering a viable coalition of
stakeholders to move forward on increased funding and improved services for the
disabled. The disabled community, with their own provisions for improved service,
needs to work past the long standing distrust of public transit and work with the
organizations if there is any hope of presenting a combined front for this issue.
Chapter 5 – Strategies for Managing the Increasing Costs of Paratransit

Since the passage of the ADA, it seems as though paratransit has become an industry unto itself, instead of one piece of a transit system. Combined with the lack of accessible mainline transit, this change of focus from a complementary service that can be used when accessible modes are unavailable, to a main mode of transport has resulted in tremendous growth in the service, both in demand for service and supply of financial requirements. With this in mind, transit agencies have been searching for innovative strategies that can be used to both manage the increasing costs of paratransit operations and improve mobility for the disabled community. However, as the funding needs are extensive, it is important to note that there is not one strategy that will deliver the single solution to both the transit agencies and their disabled clientele. Instead, transit agencies need to pursue a multi-pronged approach through a variety of avenues in order to maximize the possibility of obtaining funding for paratransit operations and improving the services for the disabled community.

The mix of strategies, which will be summarized in this chapter, comes from a variety of directions. First, institutional and policy strategies will be summarized. These mainly look at mobilization at both the federal and regional levels around the reauthorization of TEA-21. These strategies incorporate the stakeholder analysis and coalition partners summarized in chapter four. Second, various financial strategies will be proposed. One such strategy is to obtain some level of federal funding through the reauthorization of TEA-21; however, other strategies will be identified that involve both state and local sources as well. Lastly, internal agency strategies will be summarized that may help increase the efficiency and cost effectiveness of paratransit services within the transit organization and ultimately provide improved service to the disabled community. These strategies vary in their implementation timeline, source of responsibility and overall effort on the part of stakeholders, most importantly transit agencies. Currently, although there is recognition among other stakeholders that changes to the funding structure and service level of paratransit must be made, any movement forward will most likely have to be spearheaded by the transit agencies themselves.

5.0 Institutional and Policy Strategies

Paratransit, as a service for the disabled community, will continue to be required to provide mobility to much of the disabled community, even after full mainline accessibility. As is evident, the service is inadequate to suit the mobility needs of the disabled. Additionally, its cost is not being equitably shared across the entire transportation system. In order to improve the service and equalize the financial responsibilities, federal and regional institutional and policy strategies must be assessed.

5.0.1 Federal Level

With TEA-21 expiring in less than one year\textsuperscript{179}, discussions regarding the reauthorization for the nation’s surface transportation system have begun on Capitol Hill. On the Senate side, funding for transit is approved by the Senate Banking, Housing and Urban Affairs Committee\textsuperscript{180} and on the House side, the Transportation and Infrastructure Committee approves the funding. After the 2002 elections, the shift of power in the Senate moved back with the Republicans so that starting in January 2003, the Republicans will control both Houses of Congress. The Administration will also be weighing in on TEA-21’s reauthorization when they submit their plan at the beginning of 2003.

The Senate

In both houses of Congress, it appears that paratransit is on the radar screen, although not as a stand-alone entity, but as part of the overall transit system.\textsuperscript{181} The Senate Banking Committee’s Subcommittee on Housing and Transportation has been conducting hearings on the importance of transit in America since the beginning of 2002. The hearing have mainly focused on high level issues, such as obtaining more resources for transit in general, as opposed to specific programs or modes of transport. That said, throughout the hearings process, they have had advocates for the elderly and disabled testify before the subcommittee regarding the importance of transit and paratransit to their constituencies. Those who have testified, such as AARP, AAPD and private citizens, have been divided between the need for more accessible fixed route transit and the need for improved paratransit services.\textsuperscript{182}

Senate history depicts an ideological divide between funding and not funding transit operations. Many in the Senate see transit as a social good that will never be

\textsuperscript{179} Official Expiration Date September 30, 2003.
\textsuperscript{180} Funding for highways is decided through the Senate Environment and Public Works Committee.
\textsuperscript{181} Klein, Sarah, Senate Banking Committee Staff. Interview by author, 21 October 2002. Rose, Joyce, House Transportation and Infrastructure Staff. Interview by author, 23 October 2002.
\textsuperscript{182} Klein, Sarah. 21 October 2002.
profitable and therefore should receive operating subsidies, while others, including the current Ranking Member and former Chairman of the Senate Banking Committee, Senator Phil Gramm (R-TX), firmly believe that the federal government should “not be in the business of funding [transit] operations.”\textsuperscript{183} This tension was evident during the debates prior to the passage of TEA-21, the legislation that eliminated funding for operations in areas with more than 200,000 people. However, the tides may be turning because, with the state budget crises, transit agencies are being pushed to their limits and word of their problems is starting to get back to legislators on Capitol Hill.\textsuperscript{184}

Although most funding discussions have remained at the macro level, the notion of funding paratransit has been discussed, if only at the committee staff level. Because the Mass Transit Account (MTA) is struggling to meet its current commitments, utilizing this revenue stream for additional funding is unlikely unless there is increased money from the highway portion of the Highway Trust Fund, increased general funds or a change to capital budgeting.\textsuperscript{185} Staffers on the Banking and Environment and Public Works committees have been discussing alternatives for funding paratransit, such as indexing the gas tax to inflation, authorizing tax credits for capital investments, changing the requirements for funding under Section 5310 or creating a separate paratransit program and funding it solely from the general fund. The first three options would not necessarily change the operating structure of paratransit, but would provide better funding options for transit agencies. The last option would present an opportunity to remove the weight of paratransit services from transit agencies and place it on the shoulders of the entire transportation system.

**The House of Representatives**

In the House, the Transportation and Infrastructure Committee’s Subcommittee on Highways and Transit has conducted 18 similar hearings as well.\textsuperscript{186} However, in conversations with committee staff, the House seems to be looking at paratransit in much the same way as in the past and appears to be lacking any innovative long-term strategic plans for improving overall paratransit services. There is also a feeling within the Republican controlled House that “to liberalize [any transit] operations [in

\textsuperscript{183} Ibid.
\textsuperscript{184} Ibid.
\textsuperscript{185} The Mass Transit Account is comprised of 80% Highway Trust Fund money and 20% General Funds money.
\textsuperscript{186} Rose, Joyce. 23 October 2002.
metropolitan areas with a population over 200,000] would be a step in the wrong direction.\textsuperscript{187}

Currently the two options that are being discussed with regards to paratransit funding are reviewing the adequacy of funding of Section 5310 and increasing coordination among the many federally funded programs that provide transportation programs, such as the Department of Health and Human Services, the Department of Education, public transit providers, Medicaid, ElderCare, and HeadStart, to name a few. In order to improve the opportunities for coordination, they have requested that the Government Accounting Office (GAO) determine which federally funded programs include a transportation program, identify the various requirements and ultimately devise strategies to improve coordination throughout the programs. The latter strategy for improving paratransit through coordination has been in discussion since the mid-1970s and has yet to pay its dividends.

Discussions regarding new innovative solutions do not appear to have taken place thus far in the House. In conversations with committee staffers, the idea of funding paratransit externally, through general funds, existing gas taxes or new gas taxes, instead of through the Mass Transit Account, was placed on the table. On a positive note, the idea of alternative funding did pique their interest; however, their view was that it was possibly something that could be used in conjunction with the improved coordination efforts because increasing the amount of funding to transit “at the expense of highways will never happen.”\textsuperscript{188}

Approaching the Federal Government

Through conversations with various committee staffers in both the House and Senate, one theme was pervasive. In order to increase the likelihood of obtaining federal funding, paratransit must be separated from urban transit, not in its day-to-day provision, but to make a case in this instance. Congress has already proven to be adamant about not funding civil rights legislation and is very unenthusiastic about funding large urban transit operations; therefore this case cannot be viewed as either. Separating paratransit from transit also allows lobbying efforts to include all legislators, as opposed to those from urban areas who are traditionally the only individuals in Congress fighting for transit. While focusing on some key players in the House Transportation and Infrastructure Committee or the Senate Banking, Housing and Urban

\textsuperscript{187} Ibid.
\textsuperscript{188} Ibid.
Affairs Committee can get the issue on the agenda, efforts also need to cross party lines to increase over all support.

Another reason for separating paratransit from traditional transit is due to the current makeup of Congress. Although the Republicans are in the majority, the number of Democrats and Republicans in both the House and Senate is fairly equal and if the case were to be made on a partisan basis like targeting the traditional Democratic strongholds of urban areas, the chance for federal funding would be significantly reduced. Instead, presenting the case as an issue for large, small, rural and urban areas alike, thereby eliminating the typical partisan approach, ensures the greatest likelihood for federal funding.

There appear to be two different avenues to approach Congress during the reauthorization of TEA-21 to place funding for ADA paratransit services on the agenda. The first approach is to present the issue as a problem. That is, the issue needs to be viewed as pervasive throughout the US, affecting a large number of people, and most significantly, be important to the work of at least one major stakeholder in the industry, such as APTA, AARP, Conference of Mayors or a large disabled advocacy group. Through these organizations' lobbying sections, the case can be made for ADA paratransit services to be placed on the radar screen of policy makers during the reauthorization of TEA-21. Without these organizations' input in framing the question and support in making a non-partisan case, the likelihood for federal funding would significantly decrease for the reasons discussed above. Transit agencies presenting their case alone for federal funding could be interpreted as yet another ploy to obtain federal funding, a debate that has been repeated frequently, usually to the detriment of transit.

The second approach is to present funding ADA paratransit operations as a solution to a different problem. At first glance, most people would assume that any funding would come from the Mass Transit Account, the portion of the Highway Trust Fund (HTF) that is set aside for transit. However, transit itself only receives 20% of the HTF funding, as opposed to the 80% provided by the HTF for highway spending. Therefore, identifying any funding within the 20% to pay for paratransit would be akin to 'robbing Peter to pay Paul'. Instead, a new perspective needs to be taken with regards to funding paratransit services. The solution in this case is to present paratransit as an issue faced by the entire transportation system, as opposed to the transit system. Therefore, the money should come from the entire Highway Trust Fund including
highways or the general fund, instead of the meager portion dedicated to transit.\textsuperscript{189} As with any lobbying effort, this too would require extensive interest from many of the stakeholders, as there is substantial opposition within Congress and other interest groups to changing the division of funds from the Highway Trust Fund. The organizations would have to be willing to invest much of their political capital to take on the highway, automobile and construction lobbies.

5.0.2 Regional Level

Federal level institutional and policy strategies undoubtedly will take an extensive amount of time and resources to bring about any major changes. Approaching institutional and policy strategies from a regional level may provide some of the fiscal or managerial alleviation that transit agencies are looking for with a greater likelihood of success. The approaches would be quite similar to the federal level, in that a coalition of regional organizations would need to be formed to discuss options and ultimately to approach either the state or city governments, but the timeline most likely would be condensed.

Regional coalitions have already begun in areas such as Maricopa County, Arizona, which includes Phoenix and its surrounding suburbs. The Maricopa Association of Governments (MAG), the local MPO, formed a coalition to mobilize stakeholders on the issues of aging and mobility, which is of particular interest, given the large regional population of elderly.\textsuperscript{190} MAG has created an elderly and persons with disabilities transportation committee and an elderly mobility working group both of which meet and discuss possible recommendations for improved transportation for these groups. The elderly mobility working group is comprised of numerous community members, from transportation and social service agencies and elderly advocacy groups to health care providers and local, regional and state governments.\textsuperscript{191} Although not specifically targeted at the disabled community, a similar group could be started or the current group could be expanded to include the disabled community.

Their goals were to (1) develop a regional action plan; (2) utilize input from seniors in the plan; (3) integrate the working group’s recommendations with MAG’s

\textsuperscript{189} Squires, Jeff, Senior Policy Advisor, Senate Committee on Environment and Public Works. Interview by author, 16 October 2002.

\textsuperscript{190} MAG appears to have grouped elderly and disability into one group, the transportation-limited population, with the intent to improve transportation for all members of that group.

transportation planning process; and (4) convene a national conference on mobility.\textsuperscript{192} Through working group meetings, focus groups comprised of elderly, baby boomers, caregivers and agency providers, in addition to public forums in different cities, the regional action plan was established. It included recommendations that focused on infrastructure and land use, driver competency, education and training and most importantly, alternative transportation modes. These recommendations were well designed and included rationale for why each initiative should be undertaken, any potential roadblocks, resources that are available for implementation and most importantly, the group identified the individual or organization that has the ultimate responsibility for implementation.\textsuperscript{193}

In the spring of 2002, MAG also convened the National Conference on Aging and Mobility. One of its intents was to discuss the recommendations that had been designed for the regional transportation plan. Another was to develop a national legislative agenda on aging and mobility issues for the reauthorization of TEA-21. At this conference, MAG brought together many of the stakeholders identified in chapter four in addition to other regional or federal agencies. The conference identified the following next steps, both for MAG, the other MPOs who attended, elderly advocates, health agencies, and state and federal government, all of which are relevant to help other regions manage the costs of paratransit services.

\textsuperscript{192} Ibid.
\textsuperscript{193} Maricopa Association of Governments. \textit{Regional Action Plan on Aging and Mobility.} Phoenix: March 1, 2002.
Table 5.32 – Recommendations from the National Conference on Aging and Mobility

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage an MPO to host this conference on an annual basis. It is</td>
<td>important to engage the MPOs and COGs to be leaders in this issue.</td>
</tr>
<tr>
<td>Get prominent elected county, state, and local officials to the next</td>
<td>national conference.</td>
</tr>
<tr>
<td>Broaden participation in the conference and the national dialogue to</td>
<td>include public health professionals and the Centers for Disease</td>
</tr>
<tr>
<td>Disseminate what is happening and working well at the local level to</td>
<td>Control.</td>
</tr>
<tr>
<td>Get leaders and professionals to really see how difficult it is to get</td>
<td>around when you are a transportation-limited individual.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legislation/Leadership</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocate for incentives and funding to be included in the reauthorization</td>
<td>TEA-21 for mobility for projects for transportation limited</td>
</tr>
<tr>
<td>Engage state elected officials (similar to Pennsylvania where they</td>
<td>individuals.</td>
</tr>
<tr>
<td>Provide politicians salient/visual examples of success.</td>
<td></td>
</tr>
<tr>
<td>Need to have national leaders engaged and vocal supporters of this</td>
<td></td>
</tr>
<tr>
<td>Improve local leadership to address paratransit improvements, which</td>
<td>represents the most fragmented transportation system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partnerships</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Broaden partnerships – involve public health and CDC as well as</td>
<td>leading aging and disabled organizations.</td>
</tr>
<tr>
<td>Partner with Medicaid, as they are doing integration of transportation.</td>
<td></td>
</tr>
<tr>
<td>Engage the surgeon general</td>
<td></td>
</tr>
<tr>
<td>Combine senior constituencies with the disabled constituencies, as</td>
<td>well as other transportation-limited constituencies who share</td>
</tr>
<tr>
<td>Funding</td>
<td>many of the same mobility issues.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Require that Aging, Disability and Mobility be considered in the MPO/</td>
<td>state planning process as a planning factor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand the resource base for human service needs overall</td>
<td></td>
</tr>
<tr>
<td>Improve the integration of transportation into other services (medical/</td>
<td>social).</td>
</tr>
</tbody>
</table>

Many of these next steps from the regional meeting involve pushing the issue to the national agenda. Therefore, initially approaching policy and institutional advances from a regional level and then moving to the federal stage may present a good opportunity for the region to fully assess its needs prior to entering the national arena. Additionally, demonstrating success at a regional level may provide an incentive for the federal government to act as well. Unfortunately, there is limited time to act on the reauthorization of TEA-21. Although it may have a shorter implementation timeline than

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the national level, forming a coalition at a regional level and meeting and designing new regional objectives, as was done in Arizona, will take more time than what is available before the deadline of TEA-21. At that point, moving to the national stage will be insignificant as the debate and vote for the reauthorization will have already occurred. Therefore, simultaneous action, through both the federal and regional approaches needs to occur to maximize the outcome.

5.1 Financial Strategies

Since the ADA’s inception, the growth of specialized services for the disabled has been tremendous and unanticipated. Based on past trends and future demographics, this is likely to continue. However, public sector funding for transit has not kept up with the demand and has been stagnant since the early 1980s, when accounted for inflation.\(^{195}\) Compounding that, the portion of the total US budget allocated to public transit has declined by almost half in the same period.\(^{196}\) The outcome has been a decline in the quality, frequency, coverage areas and reliability of public transit, which ultimately affects the provision of paratransit services, as they mirror fixed route transit. Overall, this severely undercuts the ADA’s larger goals, which require “real growth of transit services to ensure that transit access results in genuine economic access.”\(^{197}\)

Successfully implementing any of the following financial strategies would help to facilitate a paradigm shift from mobility for the disabled as a transit issue to an entire transportation system issue. They would also help to expand the fiscal responsibilities of paratransit from transit agencies, to encompass all of the modes of surface transportation. In addition, financial strategies exist at other levels of government that can help to alleviate the costs on transit agencies. The ultimate goal should be to ensure that the financial cost is shared equally among all Americans, on a national, state and regional scale. The issue remains as to how to best approach each level in order to optimize the best overall response.

5.1.1 Federal Level


Financial strategies at the federal level could present transit agencies with a tremendous opportunity to truly improve paratransit services and mobility for the disabled. One of the positive outcomes of obtaining federal funding for paratransit, in addition to improving the service itself, is the ability to direct any growth of the current local funds spent by public transit to provide paratransit into other areas such as fixed route transit or capital expenditures to increase the speed of full accessibility of fixed route transit. However, an increased level of federal funding could result in a reduced level of funding from state and local sources, as budgets at those levels are constrained as well.\(^\text{198}\)

Another issue with regards to obtaining federal funding is the time and resources that must be put forth. The timeline necessary to obtain federal funding for operations may take much longer than other possible strategies because of the inherent political process involved. In addition, considerable stakeholder involvement and coalition building must occur for any action to arise from the federal level and any coalition that undertakes this action must devise a plan for funding sources within the federal government.

One of the greatest concerns in approaching the federal government is that any new funding for paratransit will need to be generated. At first glance, most would assume that the most obvious source would be to take money from other transit programs. However, doing this is counterintuitive to improving overall transit in the US and should not be undertaken. The second most likely source is that of highways, which presents a tremendous obstacle to the coalition: the highway lobby.

Instead, a third option is to create a new program separate from highways and transit that would be funded by additional money from the surface transportation system. The funding for this program would come from an increased highway budget with maintenance of effort from the transit agencies. This means that transit agencies would have to fund at least as much as they did during the previous year and the additional funds needed to provide good mobility services to the disabled would come from increases in the Highway Trust Fund. This would appease the disabled lobby whose concern was that funding from the federal government would allow transit agencies to withdrawal their funding, ultimately leaving paratransit in the same less than adequate shape. It would also placate the highway lobby because there would be additional funding for the highways, part of which would go to the new paratransit program. It is important to note that this new program would not be reducing the funding levels to

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\(^{198}\) Winter and Williams. 678.
highways, just receiving new revenue. The benefits to creating a new program for paratransit are threefold. First, funding would increase to a level that would provide suitable paratransit services for the disabled. Second, this would equitably distribute the costs of paratransit across the transportation system. Third, transit agencies expenses, with regards to paratransit services, would in essence be capped by requiring maintenance of effort. This would allow any growth in local transit operating funds to be directed to general public transportation needs, which may bring about full fixed route accessibility more quickly.

In order to move forward with federal funding, the highway lobby must be brought on board as well. The most likely scenario for this is to advocate for more overall funding for the surface transportation system. With a greater total amount for surface transportation on the table and the disabled community as an important support group for such an increase, the highway lobby may not be as confrontational with regards to providing federal funding for paratransit. Additionally, the elderly and disabled lobbies can be used to counter balance the desires of the highway lobby, as they are quite strong on the national level.

At the federal level, money from the Highway Trust Fund (HTF) or the General Fund could be explicitly dedicated to mobility for the disabled. This funding would be in addition to the transfers that already occur between the HTF and the Mass Transit Account (MTA). Currently, the HTF is comprised of the Highway Account (HA) and the MTA. The Highway Account receives about 80% of the HTF and the MTA receives the other 20%. A third program for paratransit could receive 5% from the HTF, all from the highway portion of the HTF. The result is that highways would receive 75% of HTF inflows, transit would remain at 20% and paratransit would receive 5%. Using maintenance of effort for transit agencies, this division equitably divides the financial responsibilities between transit and the remainder of the transportation system.

Tax revenues that flow into the HTF come motor fuel, trucks, trailers, truck tires, and heavy vehicle use.199 Below is a chart that provides an understanding of the composition of the HTF. Following that is a chart that identifies the income in 1997 of the Highway Account and how the revenue was distributed.

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## Figure 5.33  
Highway Trust Fund Composition

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Effective Date</th>
<th>Rate (cents/gallon)</th>
<th>Highway Trust Fund Account</th>
<th>Mass Transit Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>10/1/97</td>
<td>18.4</td>
<td>15.44</td>
<td>2.86</td>
</tr>
<tr>
<td>Diesel</td>
<td>10/1/97</td>
<td>24.4</td>
<td>21.44</td>
<td>2.86</td>
</tr>
<tr>
<td>Gasohol (10% ethanol)</td>
<td>10/1/97</td>
<td>18.4</td>
<td>15.44</td>
<td>2.86</td>
</tr>
<tr>
<td>Special Fuels</td>
<td>10/1/97</td>
<td>11.9</td>
<td>10.04</td>
<td>1.86</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>10/1/97</td>
<td>11.9</td>
<td>10.04</td>
<td>1.86</td>
</tr>
<tr>
<td>Liquefied Natural Gas</td>
<td>10/1/97</td>
<td>11.9</td>
<td>10.04</td>
<td>1.86</td>
</tr>
<tr>
<td>M85 (from Natural Gas)</td>
<td>10/1/97</td>
<td>9.25</td>
<td>7.72</td>
<td>1.43</td>
</tr>
<tr>
<td>Compressed Natural Gas</td>
<td>10/1/97</td>
<td>48.54</td>
<td>38.83</td>
<td>9.70</td>
</tr>
</tbody>
</table>

## Truck Related Taxes - All Proceeds go to Highway Account

- **Tire Tax**
  - 0-40lbs., no tax
  - Over 40-70lbs., $0.15/lb over 40lbs
  - Over 70-90lbs., $4.50 + $0.30/lb over 70lbs.
  - Over 90lbs., $10.50 + $0.50/lb over 90lbs.

- **Truck and Trailer Sales Tax**
  - 12% of retailer’s sales price for tractors and trucks > 33,000lbs.
  - GVW and trailers > 26,000lbs. GVW

- **Heavy Vehicle Use Tax**
  - Annual tax: Trucks 55,000lbs. and over GVW: $100 plus $22 for each 1,000lbs. over 55,000lbs. up to maximum $550.

## Figure 5.34  
Highway Account Income, FY 1997

**Highway Account Income - FY 1997 (millions)**

- $4,715
- $300
- $1,674
- $762
- $805
- $13,059

- Gasoline
- Interest
- Truck Use
- Truck Sales
- Tires
- Diesel

The largest source of revenue to the HTF comes from gasoline excise taxes. Therefore, to create a pool of money that could be used for paratransit, the most obvious choice would be to amend this tax. This could be accomplished in a number of ways, either by increasing it, aligning it to inflation or modifying the division between the

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200 Ibid.
201 Ibid.
Highway Account and the Mass Transit Account in order to shore up enough funding for paratransit operations throughout the US. Any of these options would shift the fiscal burden from transit providers to the entire surface transportation system.

Currently, the federal gas tax is 18.4 cents per gallon\textsuperscript{202}, which, based on current average gas prices, accounts for approximately 14% of the price of gasoline.\textsuperscript{203} This percentage is in line with 1956, when the 4 cents per gallon tax was initiated.\textsuperscript{204} Of the 18.4 cents/gallon\textsuperscript{205}, transit receives 2.86 cents/gallon, or 15.5% of the tax, and highways receive 15.44 cents/gallon, or 84% of the tax.\textsuperscript{206} The split is not quite 80/20 because the Surface Transportation Assistance Act of 1982, which created the Mass Transit Account (MTA), only allows the MTA to obtain 20% of the increase in the gas tax, over the original 4 cents/gallon. Therefore, the first 4 cents/gallon are always earmarked for the HTF and any remainder is split 80/20 between highways and transit, respectively.\textsuperscript{207,208}

\textbf{Increasing the Federal Gas Tax}

Increasing the gas tax would bring about higher revenues, there are serious obstacles to mount before it can be passed. One of the negative aspects of advocating for modifying the gas tax in any way is that it is considered a regressive tax and would have a greater negative affect on lower-income drivers as opposed to higher income drivers.

In FY 1998, federal gasoline excise tax revenues were $20.6 billion.\textsuperscript{209} Based on the 18.4 cents/gallon excise tax, this translates to 111.96 billion gallons of gasoline sold in FY 1998. Assuming that gasoline consumption rates remain fairly constant, varying a gasoline tax increase would create the following additional revenues for the Highway Trust Fund\textsuperscript{210}, which could be set aside for paratransit.

\textsuperscript{202} See Appendix 6 for a summary of federal gas tax rates and the period of time the tax was applicable.
\textsuperscript{203} United States Department of Energy. \textit{A Primer on Gasoline Prices}. July 2001.
\textsuperscript{204} United States Department of Energy. \textit{Annual Energy Review 2001}.
\textsuperscript{205} 0.1 cents/gallon of the Federal Gas Tax is used for Leaking Underground Storage Tanks (LUST).
\textsuperscript{206} Rose, Joyce. E-mail to author. 28 October 2002.
\textsuperscript{207} Ibid.
\textsuperscript{208} 18.4 cents/gallon - 4 cents/gallon - .1 cents/gallon (LUST) = 14.3 cents/gallon * 20% = 2.86 cents/gallon for transit and 11.44 cents/gallon + 4 cents/gallon = 15.44 cents/gallon for highways.
\textsuperscript{210} Note that the amount for the Mass Transit Account is 20% of any gas tax increase as stipulated by the Surface Transportation Assistance Act of 1982.
Figure 5.35 – Potential Revenues for the Mass Transit Account by Raising the Federal Gas Tax

<table>
<thead>
<tr>
<th>Tax Increase (cents/gallon)</th>
<th>Percentage Increase</th>
<th>New Tax (cents/gallon)</th>
<th>Total Revenue</th>
<th>New Earnings for Highway Trust Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.025</td>
<td>0.14%</td>
<td>$18.425</td>
<td>$20,628,630,000</td>
<td>$28,630,000</td>
</tr>
<tr>
<td>$0.050</td>
<td>0.27%</td>
<td>$18.450</td>
<td>$20,656,620,000</td>
<td>$56,620,000</td>
</tr>
<tr>
<td>$0.075</td>
<td>0.41%</td>
<td>$18.475</td>
<td>$20,684,610,000</td>
<td>$84,610,000</td>
</tr>
<tr>
<td>$0.100</td>
<td>0.54%</td>
<td>$18.500</td>
<td>$20,712,600,000</td>
<td>$112,600,000</td>
</tr>
<tr>
<td>$0.125</td>
<td>0.68%</td>
<td>$18.525</td>
<td>$20,740,590,000</td>
<td>$140,590,000</td>
</tr>
<tr>
<td>$0.150</td>
<td>0.82%</td>
<td>$18.550</td>
<td>$20,768,580,000</td>
<td>$168,580,000</td>
</tr>
<tr>
<td>$0.175</td>
<td>0.95%</td>
<td>$18.575</td>
<td>$20,796,570,000</td>
<td>$196,570,000</td>
</tr>
<tr>
<td>$0.200</td>
<td>1.09%</td>
<td>$18.600</td>
<td>$20,824,560,000</td>
<td>$224,560,000</td>
</tr>
<tr>
<td>$0.500</td>
<td>2.72%</td>
<td>$18.900</td>
<td>$21,160,440,000</td>
<td>$560,440,000</td>
</tr>
<tr>
<td>$1.000</td>
<td>5.43%</td>
<td>$19.400</td>
<td>$21,720,240,000</td>
<td>$1,120,240,000</td>
</tr>
<tr>
<td>$2.000</td>
<td>10.87%</td>
<td>$20.400</td>
<td>$22,839,840,000</td>
<td>$2,239,840,000</td>
</tr>
<tr>
<td>$2.500</td>
<td>13.59%</td>
<td>$20.900</td>
<td>$23,399,640,000</td>
<td>$2,799,640,000</td>
</tr>
</tbody>
</table>

With the current economic and political climate, increasing the federal gas tax may present a hard sell on Capitol Hill. Additionally, an increase in the tax is stagnant. It would be applicable for a few years, at which time law makers would have to pass another increase, if possible, or be faced with similar fiscal problems. On a positive note, with this strategy, the least amount of resistance from the highway lobby may be seen, as they would gain funding as well.\textsuperscript{211} Notice that it would take at least a 5% increase in the gas tax to garner any significant funding. Even with that increase, based on the costs identified in chapter three, transit agencies would only receive a small fraction of the requisite annual funding for paratransit services.

**Align Federal Gasoline Tax with Inflation**

The federal gasoline tax has been 18.4 cents/gallon since October 1, 1993, but the retail price of a gallon of regular conventional area gasoline has risen 22.6% since then.\textsuperscript{212} This means that in 1993, the tax accounted for 17% of the price, but as of October 2002, it accounted for only 14% of the price. Overall, the gas tax is worth less with respect to the price of gasoline now than a decade ago. The following chart indicates the average annual retail price of regular gasoline including all taxes since 1993, the percentage increase over the previous year and the consumer price index.

\textsuperscript{211} The difference between the new revenue for the highway trust fund and the new revenue for the mass transit account = new revenue for the highway account.

Figure 5.36\textsuperscript{213,214} - Percentage Change in Gasoline Price versus Consumer Price Index from 1993-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Average U.S. Regular Conventional Area Retail Gasoline Price (Cents/Gallon)</th>
<th>Percentage Increase in Price</th>
<th>Consumer Price Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>106.7</td>
<td></td>
<td>3.0%</td>
</tr>
<tr>
<td>1994</td>
<td>107.2</td>
<td>0.43%</td>
<td>2.6%</td>
</tr>
<tr>
<td>1995</td>
<td>110.3</td>
<td>2.94%</td>
<td>2.8%</td>
</tr>
<tr>
<td>1996</td>
<td>119.2</td>
<td>8.03%</td>
<td>3.0%</td>
</tr>
<tr>
<td>1997</td>
<td>118.9</td>
<td>-0.27%</td>
<td>2.3%</td>
</tr>
<tr>
<td>1998</td>
<td>101.7</td>
<td>-14.47%</td>
<td>1.6%</td>
</tr>
<tr>
<td>1999</td>
<td>111.6</td>
<td>9.77%</td>
<td>2.2%</td>
</tr>
<tr>
<td>2000</td>
<td>146.2</td>
<td>31.03%</td>
<td>3.4%</td>
</tr>
<tr>
<td>2001</td>
<td>138.4</td>
<td>-5.37%</td>
<td>2.8%</td>
</tr>
<tr>
<td>2002\textsuperscript{*}</td>
<td>130.8</td>
<td>-5.46%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

\* as of October, 2002

If the gasoline tax, instead of remaining constant, were to grow at the previous year's inflation rate, the highway trust fund would have earned $26.2 billion during the past decade. Because tying to inflation would be considered an increase in the gas tax, the Mass Transit Account would receive 20% of the increase, based on FY 1998 estimates of gallons purchased, as shown in the table below. The 80/20 division of the gas tax could be modified as discussed above to provide funding for paratransit.

Figure 5.37 – Possible Revenues for Mass Transit Account by Pegging Federal Gas Tax to Inflation, 1993-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index</th>
<th>New Gasoline Tax Accounting for Inflation (Cents/Gallon)</th>
<th>Additional Highway Trust Fund Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>3.0%</td>
<td>$18.40</td>
<td>$0</td>
</tr>
<tr>
<td>1994</td>
<td>2.6%</td>
<td>$18.95</td>
<td>$620,000,000</td>
</tr>
<tr>
<td>1995</td>
<td>2.8%</td>
<td>$19.44</td>
<td>$1,160,000,000</td>
</tr>
<tr>
<td>1996</td>
<td>3.0%</td>
<td>$19.99</td>
<td>$1,780,000,000</td>
</tr>
<tr>
<td>1997</td>
<td>2.3%</td>
<td>$20.58</td>
<td>$2,440,000,000</td>
</tr>
<tr>
<td>1998</td>
<td>1.6%</td>
<td>$21.05</td>
<td>$2,970,000,000</td>
</tr>
<tr>
<td>1999</td>
<td>2.2%</td>
<td>$21.38</td>
<td>$3,330,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>3.4%</td>
<td>$21.85</td>
<td>$3,860,000,000</td>
</tr>
<tr>
<td>2001</td>
<td>2.8%</td>
<td>$22.56</td>
<td>$4,680,000,000</td>
</tr>
<tr>
<td>2002\textsuperscript{*}</td>
<td>1.40%</td>
<td>$23.23</td>
<td>$5,400,000,000</td>
</tr>
</tbody>
</table>

\* as of October, 2002

\textsuperscript{213} Ibid.
Although there are no predictions for the future consumer price index, the figure typically ranges from 1.5% and 4%, based on historical indices. Using these estimates of inflation, from the start of TEA-3 in FY 2004, through 2013, pegging the federal gas tax would provide an additional $17.8 billion for the Highway Trust Fund and $51.2 billion for the Highway Trust Fund by the end of the next decade. The calculations can be found in Appendix 7 and the graph below depicts the range of additional funding for the Highway Trust Fund that could be generated each year during the next decade by pegging the gasoline tax to inflation.

**Figure 5.38 – Range of Additional Revenues for Highway Trust Fund, 2004-2014**

![Range of Additional Revenues for Highway Trust Fund (millions)]

Again, from a political and economic perspective, decision makers on Capitol Hill most likely will not be enthusiastic about increasing the gas tax, even though pegging it to inflation is simply re-balancing the tax, with regards to the price of other goods. A caveat that limits the percentage increase in the federal gasoline tax during any one year could be added to any legislation, which could quiet critics who are concerned about major swings in the inflation rate. This approach also increases the amount of funding for the HTF, which may lessen the arguments from the highway lobby. Although still a regressive tax, tying the tax to inflation would provide a gradual annual increase in the HTF as opposed to a large step, which is seen in a lump sum increase. It also allows the highway trust fund to earn increased returns from Americans ever-increasing thirst for gasoline.

**Modifying the Division of the Gas Tax**

The federal gas tax is currently divided 80/20, after the initial four cents/gallon is removed for the highway account. Changing this distribution would provide greater
funding for the Mass Transit Account; however, it would be at the politically unpalatable cost to the Highway Account. Additionally, this strategy would not help in the future, as it does nothing to increase the amount of money available for surface transportation, it merely redistributes it. Assuming again, that the $20.6 billion from FY 1998 in federal gas tax revenues stays relatively constant, there is approximately $16 billion available for redistribution. The following figure shows possible redistribution of revenues:

Figure 5.39 – Possible Redistribution of Highway Account Revenues

<table>
<thead>
<tr>
<th>Percentage for Highway Account</th>
<th>Revenues for Highway Account</th>
<th>Percentage for Mass Transit Account</th>
<th>Revenues for Mass Transit Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td>$12,810,000,000</td>
<td>20%</td>
<td>$3,200,000,000</td>
</tr>
<tr>
<td>79%</td>
<td>$12,650,000,000</td>
<td>21%</td>
<td>$3,360,000,000</td>
</tr>
<tr>
<td>78%</td>
<td>$12,490,000,000</td>
<td>22%</td>
<td>$3,520,000,000</td>
</tr>
<tr>
<td>77%</td>
<td>$12,330,000,000</td>
<td>23%</td>
<td>$3,680,000,000</td>
</tr>
<tr>
<td>76%</td>
<td>$12,170,000,000</td>
<td>24%</td>
<td>$3,840,000,000</td>
</tr>
<tr>
<td>75%</td>
<td>$12,010,000,000</td>
<td>25%</td>
<td>$4,000,000,000</td>
</tr>
<tr>
<td>70%</td>
<td>$11,210,000,000</td>
<td>30%</td>
<td>$4,800,000,000</td>
</tr>
<tr>
<td>65%</td>
<td>$10,410,000,000</td>
<td>35%</td>
<td>$5,600,000,000</td>
</tr>
<tr>
<td>60%</td>
<td>$9,610,000,000</td>
<td>40%</td>
<td>$6,400,000,000</td>
</tr>
<tr>
<td>55%</td>
<td>$8,810,000,000</td>
<td>45%</td>
<td>$7,200,000,000</td>
</tr>
<tr>
<td>50%</td>
<td>$8,010,000,000</td>
<td>50%</td>
<td>$8,010,000,000</td>
</tr>
</tbody>
</table>

The redistribution shown here indicates that to obtain a sizable portion of funding, the distribution would have to be modified to at least 75/25. As discussed previously, any redistribution would entail a substantial clash with the highway lobby and many lawmakers on Capitol Hill. Therefore, this presents the least probable option for locating federal funding for ADA paratransit services.

Although these options only look to modify the federal gas tax, similar techniques could be applied to the other revenues that comprise the HTF. Given the calculations and analysis above, the best option appears to be aligning the gas tax with the consumer price index. This option provides the greatest amount of funding for the HTF, to be set aside for paratransit. It also increases the amount of funding for all the entire Highway Trust Fund, which would somewhat pacify the highway lobby. Additionally, it provides a relatively consistent increase in the gas tax, which would allow legislators to avoid directly raising the tax itself.

Capital Budget

215 4.1 cents/gallon or $4.6 billion, is set aside for the Highway Account and the Leaking Underground Storage Account, and is not available for redistribution.
An alternative approach to immediately modifying the gas tax would be the conversion of a substantial part of the current transportation fund revenue to support bonds for capital expenditure. This approach, otherwise known as capital budgeting, would circumvent the traditional "pay as you go" approach. Similar to the capital budgets used by states, this would allow for a one-time program expansion, creating any opportunity to obtain future operating subsidies for paratransit without damaging any other transportation programs in the short term. However, to keep the bonding approach sustainable, a growth in the gas tax would have to occur in the future. From a political perspective, the capital budgeting approach would create more funds for transportation services in the same time frame as the gas tax modifications discussed above, as opposed to receiving taxes immediately to provide transportation benefits in the future, as occurs with the "pay as you go" approach. Capital budgeting could provide the funding necessary to improve the transportation system without the political hazards of increasing the gas tax immediately. This is especially pertinent with the upcoming election year and the current economy, since an increase in the gas tax may not be achievable.

5.1.2 State Level

On the whole, most state level funding focuses on highway, be it construction, operations or maintenance. The majority of federal funding for transit is distributed to local transit operators or metropolitan planning organizations. Although the federal funding for public transit is substantial, it accounts for only 20% of the total. The remaining funding comes from the state or local governments or the system itself. Therefore, although the modifications to federal funding discussed above would serve to significantly help transit properties provide paratransit services, it is necessary to focus on state and regional level finances as well. Additionally, since mass transit and any attempts at alternative transportation, such as transit, pedestrian, bicycling or paratransit, is perceived to be a local issue, much of the decision making is usually delegated to local or regional organizations, enabled by state legislation.

From a state and local perspective, the outlook for obtaining funding appears slightly more positive, if only because transit agencies have more leverage at a state level to drive the implementation of different strategies. Because of this, the timeline to

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receive funding in some local areas is likely to be shorter in comparison to the federal level. In addition, any advancement made on a local or state level demonstrates leadership on this issue, which can be leveraged to build coalitions on a national level.

Similar to the federal examples above, modifications of the state and local gas tax can be implemented from a state and regional level. Again, this would alleviate the pressure from transit riders and equally distribute it across all transportation users, but would not improve the equality of paratransit across the country. A similar argument can be used in increasing the sales tax or parking tax. Increasing taxes, however, must be undertaken conscientiously so that competitive disadvantages are not observed among towns within a region.

The following modifications to the gas tax will be undertaken using Chicago and Cook County, Illinois as an example. However, the same calculations could easily be done for any of the other US states or territories. The gas tax rates for all other US states is located in Appendix 8. Illinois has a gasoline excise tax of 19.0 cents/gallon, which generated $400 million in revenue for the state.\(^{217}\) With the sales tax, which Illinois adds on to the gas tax, the state received an additional $900 million in revenues.\(^{218}\) That revenue is divided among many funds, the Department of Transportation and local governments.\(^{219}\) Residents of Cook County pay an additional 6 cents/gallon and the revenues are placed in a general fund to be used for transportation expenditures, as well as corrections, courts, education and other countywide services.\(^{220}\) In FY 2001, Cook County raised $27 million from the vehicle fuel tax.\(^{221}\) Residents of the City of Chicago pay an additional 5 cents/gallon.\(^{222}\) The City of Chicago does not publish its annual earnings from this tax.

From the state perspective, Illinois' excise tax of 19 cents/gallon is slightly less than the US average of 19.3 cents/gallon.\(^{223}\) However, Illinois adds on an additional 11 cents/gallon of other state taxes, some of which is a 6.25% sales tax on the sale of

---


\(^{221}\) Cook County sold 450 million gallons of gasoline in FY 2001.


gasoline. Combined, these taxes add up to a total state gas tax of 30 cents/gallon, which gives the state with the 7th highest state gas tax in the nation. There have been many negative assessments of the gas tax in Illinois, especially since not all of the revenues go to transportation projects. By June of 2000, the Governor of Illinois even went so far as to suspend the sales tax on gas for the remainder of the calendar year. Given this history and the current state of the economy, a direct increase in the state gas tax will be difficult to pass. However, pegging the gas tax to inflation or introducing legislation that would modify the distribution of revenue and targeting those revenues to fund paratransit for the disabled may be politically saleable and ultimately increase the likelihood of success.

**Aligning the Gas Tax to Inflation**

In theory, this calculation is much like that of the federal calculations conducted in the previous section. Retail gas prices for the Midwest have risen by 27%, so that in 1993, the Illinois gas tax was 18.3% of the price and in 2002, it is 14% of the price. An inflation rate exists for the Chicago area, which includes Chicago, Gary (IN) and Kenosha (WI), and is shown below, as well as the average retail price for regular conventional area gasoline for the Midwest.

**Figure 5.40**

*Chicago Area Inflation Rate and Percentage Increase in Regular Gasoline Prices, 1993-2002*

<table>
<thead>
<tr>
<th>Year</th>
<th>Chicago Area CPI</th>
<th>US Average CPI</th>
<th>Average Annual Midwest Regular Conventional Area Retail Gasoline Price (Cents/Gallon)</th>
<th>Percentage Increase in Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>3.0%</td>
<td>3.0%</td>
<td>104.1</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>2.2%</td>
<td>2.6%</td>
<td>105.5</td>
<td>1.3%</td>
</tr>
<tr>
<td>1995</td>
<td>3.2%</td>
<td>2.8%</td>
<td>106.7</td>
<td>1.1%</td>
</tr>
<tr>
<td>1996</td>
<td>2.7%</td>
<td>3.0%</td>
<td>117.2</td>
<td>9.9%</td>
</tr>
<tr>
<td>1997</td>
<td>2.7%</td>
<td>2.3%</td>
<td>116.5</td>
<td>-0.6%</td>
</tr>
<tr>
<td>1998</td>
<td>2.0%</td>
<td>1.6%</td>
<td>100.7</td>
<td>-13.5%</td>
</tr>
<tr>
<td>1999</td>
<td>2.1%</td>
<td>2.2%</td>
<td>110.3</td>
<td>9.5%</td>
</tr>
<tr>
<td>2000</td>
<td>3.2%</td>
<td>3.4%</td>
<td>146.6</td>
<td>32.9%</td>
</tr>
<tr>
<td>2001</td>
<td>2.6%</td>
<td>2.8%</td>
<td>140.5</td>
<td>-4.2%</td>
</tr>
<tr>
<td>2002</td>
<td>1.4%</td>
<td>1.4%</td>
<td>132.3</td>
<td>-5.8%</td>
</tr>
</tbody>
</table>

* as of October, 2002

---


Because 55% of Illinois’ population lives in the three Chicagoland counties (Cook, DuPage and Lake Counties)\textsuperscript{226}, the following calculations will be used with the Chicago area inflation rate. Alternatively, the US inflation rate given above could be used for the calculations. Assuming a constant sale of gallons of gasoline, if the state of Illinois had pegged the gas tax to the inflation rate starting in 1993, they would have had netted an additional $513 million in revenues that could be allotted to paratransit services, as well as other statewide or local transportation projects. The calculations of this can be viewed below.

**Figure 5.41 – Potential Revenues from Pegging Illinois Gas Tax to Inflation, 1993-2002**

<table>
<thead>
<tr>
<th>Year</th>
<th>Chicago Area CPI</th>
<th>New Gasoline Tax Accounting for Inflation (Cents/Gallon)</th>
<th>Annual New Gas Tax Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>3.0%</td>
<td>19.0</td>
<td>$0</td>
</tr>
<tr>
<td>1994</td>
<td>2.2%</td>
<td>19.4</td>
<td>$9,199,450</td>
</tr>
<tr>
<td>1995</td>
<td>3.2%</td>
<td>20.0</td>
<td>$22,711,142</td>
</tr>
<tr>
<td>1996</td>
<td>2.7%</td>
<td>20.6</td>
<td>$34,497,937</td>
</tr>
<tr>
<td>1997</td>
<td>2.7%</td>
<td>21.1</td>
<td>$46,859,697</td>
</tr>
<tr>
<td>1998</td>
<td>2.0%</td>
<td>21.6</td>
<td>$56,346,630</td>
</tr>
<tr>
<td>1999</td>
<td>2.1%</td>
<td>22.0</td>
<td>$66,121,045</td>
</tr>
<tr>
<td>2000</td>
<td>3.2%</td>
<td>22.7</td>
<td>$81,645,117</td>
</tr>
<tr>
<td>2001</td>
<td>2.6%</td>
<td>23.3</td>
<td>$94,581,143</td>
</tr>
<tr>
<td>2002*</td>
<td>1.4%</td>
<td>23.6</td>
<td>$101,912,655</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$513,875,516</td>
</tr>
</tbody>
</table>

\* as of October, 2002

Again, there are no predictions for the future inflation rate, however, as shown in the federal example above, which corresponds closely to the Chicago Area CPI, the historical trend shows a CPI between 1.5% and 4%. The two tables below depict a range of gasoline taxes and their subsequent revenues for the next decade.

Figure 5.42 – Possible Future Revenues for Paratransit by Pegging Illinois Gas Tax to Inflation at 1.5%

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index</th>
<th>New Gasoline Tax Accounting for Inflation (Cents/Gallon)</th>
<th>Additional New Gas Tax Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1.50%</td>
<td>$19.29</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>2005</td>
<td>1.50%</td>
<td>$19.57</td>
<td>$13,000,000</td>
</tr>
<tr>
<td>2006</td>
<td>1.50%</td>
<td>$19.87</td>
<td>$19,000,000</td>
</tr>
<tr>
<td>2007</td>
<td>1.50%</td>
<td>$20.17</td>
<td>$26,000,000</td>
</tr>
<tr>
<td>2008</td>
<td>1.50%</td>
<td>$20.47</td>
<td>$32,000,000</td>
</tr>
<tr>
<td>2009</td>
<td>1.50%</td>
<td>$20.78</td>
<td>$39,000,000</td>
</tr>
<tr>
<td>2010</td>
<td>1.50%</td>
<td>$21.09</td>
<td>$46,000,000</td>
</tr>
<tr>
<td>2011</td>
<td>1.50%</td>
<td>$21.40</td>
<td>$53,000,000</td>
</tr>
<tr>
<td>2012</td>
<td>1.50%</td>
<td>$21.72</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>2013</td>
<td>1.50%</td>
<td>$22.05</td>
<td>$67,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total $361,000,000</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.43 - Possible Future Revenues for Paratransit by Pegging Illinois Gas Tax to Inflation at 4%

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index</th>
<th>New Gasoline Tax Accounting for Inflation (Cents/Gallon)</th>
<th>Additional New Gas Tax Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>4.00%</td>
<td>$19.76</td>
<td>$17,000,000</td>
</tr>
<tr>
<td>2005</td>
<td>4.00%</td>
<td>$20.55</td>
<td>$34,000,000</td>
</tr>
<tr>
<td>2006</td>
<td>4.00%</td>
<td>$21.37</td>
<td>$52,000,000</td>
</tr>
<tr>
<td>2007</td>
<td>4.00%</td>
<td>$22.23</td>
<td>$71,000,000</td>
</tr>
<tr>
<td>2008</td>
<td>4.00%</td>
<td>$23.12</td>
<td>$91,000,000</td>
</tr>
<tr>
<td>2009</td>
<td>4.00%</td>
<td>$24.04</td>
<td>$111,000,000</td>
</tr>
<tr>
<td>2010</td>
<td>4.00%</td>
<td>$25.00</td>
<td>$132,000,000</td>
</tr>
<tr>
<td>2011</td>
<td>4.00%</td>
<td>$26.00</td>
<td>$154,000,000</td>
</tr>
<tr>
<td>2012</td>
<td>4.00%</td>
<td>$27.04</td>
<td>$177,000,000</td>
</tr>
<tr>
<td>2013</td>
<td>4.00%</td>
<td>$28.12</td>
<td>$201,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total $1,040,000,000</td>
<td></td>
</tr>
</tbody>
</table>

If inflation were assumed to be 1.5% during the next decade, an additional $360 million would be available and if it were 4%, the revenue would be an additional $1 billion. Since the annual rate is historically between the two, the graph below shows the range of possible revenues each year that could be used for paratransit services statewide.
Figure 5.44 – Range of Possible Additional Revenues from Pegging Illinois Gas Excise Tax to Inflation

Range of Additional Revenues from Illinois Excise Tax

Most likely, modifying the gas tax will not garner huge support from the state legislature, for the reasons discussed above. However, it does present the most effective opportunity to transition the costs of paratransit services from the transit agencies to the state transportation system as a whole. Additionally, tying the gas tax to inflation ensures a constant increase in the revenues from the tax without having to debate raising the gas tax periodically.

Modifying the Distribution of Gas Tax Revenues

Based on FY 2000 revenues, the following table displays the recipients of the Illinois state gas tax revenues. Notice that over 50% of the $1.3 billion is provided to local governments, either municipalities or counties, and that Cook County, the county that encompasses Chicago, receives 8.5% of the revenues alone.
Figure 5.45\textsuperscript{227} – Illinois State Gas Tax Outlays

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Percentage of Total Revenue</th>
<th>Annual Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Crossing Protection Program</td>
<td>2.09%</td>
<td>$27,000,000</td>
</tr>
<tr>
<td>Boating Act Fund</td>
<td>0.39%</td>
<td>$5,040,000</td>
</tr>
<tr>
<td>Vehicle Inspection Fund</td>
<td>1.93%</td>
<td>$25,000,000</td>
</tr>
<tr>
<td>Department of Transportation Admin Costs*</td>
<td>0.19%</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Department of Revenue Admin Costs*</td>
<td>0.19%</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Refunds</td>
<td>1.03%</td>
<td>$13,284,511</td>
</tr>
<tr>
<td>Department of Transportation Road Fund</td>
<td>27.05%</td>
<td>$349,584,997</td>
</tr>
<tr>
<td>Construction Fund</td>
<td>15.89%</td>
<td>$205,311,824</td>
</tr>
<tr>
<td>Total to Department of Transportation</td>
<td>42.94%</td>
<td>$554,896,821</td>
</tr>
<tr>
<td>Local Governments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipalities</td>
<td>25.15%</td>
<td>$325,033,247</td>
</tr>
<tr>
<td>Counties with &gt; 1,000,000 population (Cook)</td>
<td>8.58%</td>
<td>$110,815,816</td>
</tr>
<tr>
<td>All other counties</td>
<td>9.36%</td>
<td>$120,944,143</td>
</tr>
<tr>
<td>Road Districts</td>
<td>8.14%</td>
<td>$105,188,967</td>
</tr>
<tr>
<td>Total to Local Governments</td>
<td>51.23%</td>
<td>$661,982,172</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$1,292,203,504</td>
</tr>
</tbody>
</table>

*Estimation, no amount given

The first six line items account for such a minimal portion of the revenues, that it does not appear logical to modify them. However, the division between the Department of Transportation and Local Governments could be modified. Based on the responses from the state DOTs in the survey in chapter four, paratransit is a ‘local’ issue. Therefore, in order to provide funding for its operation, revenues would have to be diverted from the Department of Transportation to Local Governments. Based on FY 2000 data, below is a table that summarizes the returns that the local governments would see if the division between IDOT and local governments were changed. Notice that in order to obtain an additional $30 million, which is the CTA’s paratransit budget for FY 2002, the redistribution would have to be changed by at least 5%.

\textsuperscript{227} Illinois. Department of Revenue. \textit{Annual Report of Collections and Distributions for Fiscal Year 2000}.  

Chapter 5 Page 130 of 173
Additionally, the distribution within 'local governments' could be modified to provide for local paratransit services. However, that would entail removing money from local transit to pay for paratransit services, an option that is not palatable to transit agencies.

Redistribution in the state of Illinois may be difficult to sell because non-Chicago based legislators may view it as an attempt to funnel more money to the Chicago Metropolitan Area. This is a fine line because although the Chicago Metropolitan Area generates most of the state’s tax revenue, non-Chicago based legislators are wary of providing more funding to the area. Improving urban transit, even though it is for the disabled community, is not likely to be high on the priority list of many rural legislators. Therefore, a similar problem to that seen at the federal level may occur. Mobility for the disabled will have to be painted as a statewide issue so that rural and suburban legislators will be able to see the benefits.

Because states manage transit and paratransit issues with a hands off attitude, obtaining state funding for their operations will be quite difficult. Based on the options discussed above, the most viable is to align the state gas tax to the inflation rate. This provides the most funding, as well as providing state legislators with a way to avoid raising the gas tax for the imminent future.

5.1.3 Local or Regional Level

Flexible Funding

In TEA-21, modifications in the uses of Urbanized (Section 5307), Non-Urbanized (Section 5311) and the Elderly and Disabled (Section 5310) funding were put
in place. In particular, in the case of the Nonurbanized Area Formula Program (Section 5311), states are now able to use up to ten percent of their annual apportionment to finance ADA paratransit operations as long as the Federal Transit Administration (FTA) has certified both fixed route and non-fixed route services as ADA compliant.228 This is true as well for the Urbanized Area Formula Program (Section 5307), except that MPOs are authorized to make the transfer.229 In the case of Chicago, the estimated FY 2003 apportionments for Section 5307 is estimated to be approximately $200 million, which means that approximately $20 million could be used for ADA paratransit operations in the Chicago metro area, assuming all fixed routes are ADA compliant.230 In San Juan, the estimated FY 2003 apportionment is estimated to be almost $30 million, which could provide up to $3 million in ADA paratransit funding.231 Obtaining approval for these transfers would entail working with state level DOTs, as they receive the funding from the FTA and the approval of the governor.232 Again, a coalition of local and regional stakeholders should be formed in order to sufficiently make the case that this would be an optimal approach to utilize this funding. The drawback to this approach is that transit is still ultimately paying for ADA paratransit, as the funds from Sections 5307, 5310 and 5311 are initially identified for transit use alone. In the case of transferring funding from 5307 and 5311 or simply using 5307 funds for ADA paratransit, the state would be removing funding for transit that could be used for other improvements, be it capital, operating or planning assistance.

If this approach were undertaken, the use of flexible funding, created in the Intermodal Surface Transportation Equity Act (ISTEA) of 1991, should be analyzed to augment the reduction in Section 5307 or 5311 funds due to the transfer to ADA paratransit operations. Currently, some funding from the Federal-Aid Highway program can be used for flexible funding at the designation of a local MPO. That is, funding can be transferred from highway programs such as the Surface Transportation Program (STP), the STP Apportionment Adjustments, Minimum Allocation, Donor State Bonus, Interstate Maintenance, Bridge Replacement and Rehabilitation, National Highway

229 Ibid.
231 Ibid.
232 US Department of Transportation, Federal Transit Administration. Section 5311 Circular, Chapter II: Apportionments.
System, Substitute Highway, and the Congestion Mitigation and Air Quality Improvement (CMAQ) programs to transit programs, such as the FTA Urbanized Area Formula Program (Section 5307), the Elderly and Persons with Disabilities Program (Section 5310) and the Nonurbanized Area Formula Program (Section 5311). The allowable percentage of transfers varies among the programs. The main caveat is that the funding transferred between these programs can only be used for non-operating expenses. However, this would substitute for the transit programs’ transfers that were used for operating costs. This transfer and use of flexible funding would help to solidify the attitude that transportation services for the disabled is truly a transportation system issue, as opposed to solely a transit problem. It would also demonstrate the seriousness of the issue and perhaps give the federal level case some credence.

Overall flexible funding presents a highly viable method for funding paratransit services without a tax increase. However, as a major caveat to utilizing this approach is fully accessible services, the cities with a significant inaccessible rail system will be waiting a while to use this approach. For those cities that have partially accessible rail, but fully accessible bus services, such as New York City, Chicago and Boston, they could make a case to the federal government to change the verbiage of TEA-21 to allow flexible funding for those areas who have accessible buses only. Rail station upgrades are expensive and require a long time to upgrade, but most cities have fully accessible buses. In effect, by limiting the use of flexible funds to those metropolitan areas that have completely accessible systems, the federal government is essentially penalizing those with older heavy rail since those rail systems are far too extensive to be fully accessible in the near future.

City or Regional Parking Tax

Additionally within the City of Chicago, a parking tax is assessed for all publicly accessible non resident parking facilities. This tax could be increased and expanded as a local option to include either Cook County or the RTA service district, so as to minimize any competitive disadvantages to the city itself. The additional revenue could be provided to CTA or RTA for use in providing paratransit services. Again, this would expand the cost of providing paratransit services to include all beneficiaries of the transportation system in the city, including real estate owners and drivers, as opposed to only transit riders.

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As parking information for Cook County and the entire City of Chicago was unavailable, the data used will be only for public parking in the Central Area\(^{234}\) of the City of Chicago. The rationale could be extrapolated to include other areas within the City of Chicago and Cook County to avoid a competitive disadvantage. It could also be expanded to include all non-residential parking, such as that found in office buildings, shopping centers, medical facilities and places of higher education.

In 1997 in the Central Area, there were approximately 96,200\(^{235}\) publicly accessible parking spaces.\(^ {236}\) When the parking study was conducted, the parking tax during a 24 hour period, was a flat $0.75 for a parking fee between $0 and $4.99 and $1.50 for all parking fees $5.00 and over. In March 2000, the higher fee was increased to $2.00 for all parking fees within a 24 hour period $5.00 and above.\(^ {237}\) Based on data obtained from a field survey conducted in 1997 by the Department of Planning and Development, the following were the average parking fees, inclusive of the parking tax.

**Figure 5.47 – Average Parking Rates, Inclusive of Taxes, in the City of Chicago\(^ {238}\)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1 hour</td>
<td>$7.60</td>
</tr>
<tr>
<td>Up to 3 hrs</td>
<td>$8.23</td>
</tr>
<tr>
<td>Up to 4 hrs</td>
<td>$10.97</td>
</tr>
<tr>
<td>Up to 8 hrs</td>
<td>$11.28</td>
</tr>
<tr>
<td>All day early</td>
<td>$9.77</td>
</tr>
</tbody>
</table>

Given these estimates, the average parking rate appears to be in excess of $5.00; so therefore, all further calculations will use only $2.00 for the tax rate. Actual turnover rates for these public spaces and the breakdown of neighborhood usage were unavailable, so the following assumptions have been made based on general information of each neighborhood in the Central Area. Given these estimates, the total revenue from these publicly accessible parking spaces is about $325,000/day or approximately $100 million annually. Of course, there is additional parking outside of these areas; however, these areas comprise the majority of Chicago’s Central Business District and its cultural center.

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\(^{234}\) Central Area includes the Loop Area, Lakefront, South Loop, Near West Side, Streeterville, River North, and Upper Near North.

\(^{235}\) Loop Area – 22,497 spaces; Lakefront – 15,280 spaces; South Loop – 9,324 spaces; Near West Side – 11,553 spaces; Streeterville – 20,497 spaces; River North – 14,030 spaces; Upper Near North – 3,008 spaces.


\(^{238}\) Ibid.
Figure 5.48 – Potential Parking Tax Revenues for the Central Area of Chicago

<table>
<thead>
<tr>
<th>Central Area</th>
<th>Purpose</th>
<th>Percent of Parking</th>
<th>Number of Spaces</th>
<th>Turnover*</th>
<th>Total Parking Revenue per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loop Area</td>
<td>Cultural</td>
<td>15%</td>
<td>3,375</td>
<td>1,687 Once/day</td>
<td>$3,375</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,687 Twice/day</td>
<td>$6,749</td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>85%</td>
<td>19,122</td>
<td>9,561 Once/day</td>
<td>$19,122</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,693 Twice/day</td>
<td>$26,771</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,868 Three/day</td>
<td>$17,210</td>
</tr>
<tr>
<td></td>
<td>Cultural</td>
<td>15%</td>
<td>3,375</td>
<td>6,112 Once/day</td>
<td>$12,224</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lakefront</td>
<td>Parking</td>
<td>100%</td>
<td>15,280</td>
<td>5,348 Twice/day</td>
<td>$21,392</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,820 Three/day</td>
<td>$22,920</td>
</tr>
<tr>
<td>South Loop</td>
<td>Business</td>
<td>50%</td>
<td>4,662</td>
<td>1,166 Once/day</td>
<td>$2,331</td>
</tr>
<tr>
<td></td>
<td>Residential</td>
<td>50%</td>
<td>4,662</td>
<td>3,497 Twice/day</td>
<td>$13,986</td>
</tr>
<tr>
<td>Near West Side</td>
<td>Business</td>
<td>100%</td>
<td>11,553</td>
<td>4,621 Once/day</td>
<td>$9,242</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,044 Twice/day</td>
<td>$16,174</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,888 Three/day</td>
<td>$17,330</td>
</tr>
<tr>
<td>Streeterville</td>
<td>Shopping</td>
<td>40%</td>
<td>8,199</td>
<td>3,280 Twice/day</td>
<td>$13,118</td>
</tr>
<tr>
<td></td>
<td>Hotels</td>
<td>40%</td>
<td>8,199</td>
<td>3,280 Three/day</td>
<td>$19,677</td>
</tr>
<tr>
<td></td>
<td>Residential</td>
<td>20%</td>
<td>4,099</td>
<td>1,640 Four/day</td>
<td>$13,118</td>
</tr>
<tr>
<td>River North</td>
<td>Residential</td>
<td>25%</td>
<td>3,508</td>
<td>4,919 Once/day</td>
<td>$9,839</td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>75%</td>
<td>10,523</td>
<td>1,754 Once/day</td>
<td>$3,508</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,754 Twice/day</td>
<td>$7,015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,314 Once/day</td>
<td>$12,627</td>
</tr>
<tr>
<td>Upper Near North</td>
<td>Residential</td>
<td>66%</td>
<td>1,985</td>
<td>4,209 Twice/day</td>
<td>$16,836</td>
</tr>
<tr>
<td></td>
<td>Cultural</td>
<td>33%</td>
<td>993</td>
<td>1,489 Once/day</td>
<td>$2,978</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>496 Twice/day</td>
<td>$1,985</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>496 Three/day</td>
<td>$2,978</td>
</tr>
</tbody>
</table>

Total Revenue from Parking Tax in Central Area per Day $333,893

Based on these assumptions, if the gas tax were to be raised by $0.25 or 12.5%, the city would increase its annual parking revenues in the Central Area of Chicago by approximately $12.5 million, which could be targeted to provide paratransit services for the disabled. In order to cover CTA's paratransit expenditures in FY 2002, the parking tax would need to be raised by about 30%. Because of the limited data in the parking study, a more substantial study of parking in the city would prove the viability of this

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239 By residential, it means people who do not have parking with their home or apartment, but park in public parking areas for a monthly rate.
approach. Additionally, the Department of Planning and Development only looked at publicly accessible parking spaces, as opposed to the thousands that are a part of office buildings. Further expanding a study to look at these spaces and the feasibility of assessing a tax there may lead to greater funding opportunities for paratransit services in the city of Chicago.

Finally, the current approach to parking taxation, which involves taxing the act of paying for parking makes this tax complicated to collect. If the basis of the tax were shifted to the owner of the space, collection would be made simpler. If all public parking facilities in the Central Area were taxed annually at $1000, the revenues generated would be the same as with the current plan. Extending the taxes to include employee and residential spaces would provide revenue growth to offset the costs of paratransit services. If the parking tax were expanded beyond the Central Area, which for competitive disadvantage reasons, it should be, the revenue possibilities would be higher still. The assessment of these revenue projections is difficult due to a lack of data; however, this is clearly a possibility for generating revenues, which can be dedicated to offset the costs of paratransit services.

5.2 Internal Agency Strategies

There exist a wide range of internal transit agency strategies that can be implemented in order to manage the costs associated with paratransit provision. Some of the strategies focus on segments of the paratransit population, either the frequent flyers or those paratransit users who can use main line service with encouragement. Many of these strategies have been previously researched and considered by transit properties, but have not been implemented to their fullest extent due to short term financial or political constraints. However, these strategies have significant long term potential in helping to reign in the costs of paratransit and could significantly alter the use of fixed route public transportation for the disabled community.

5.2.1 Full Accessibility of Main Line Transit Vehicles

Full accessibility of main line transit has long been a federal requirement under the ADA. There is little debate among transit properties that full accessibility is advantageous, although the costs for achieving and maintaining full accessibility are high. For the most part, most bus fleets are accessible and according to the ADA Coordinator for Cap-Metro, the Austin, Texas transit authority, the nation’s bus fleet
should be 100% accessible by the end of 2002. Rail stations, on the other hand, have been much more difficult and capital intensive to upgrade. In the mid 1990s, because of the quantity of facilities and vehicles that needed to be upgraded and the associated expenses, large transit agencies received a reprieve from the federal government and were given an extension to complete the upgrades. Instead, of trying to update all stations, they identified key stations on the system and have slowly upgraded these specific stations. Heavy rail transit operators vary on when fully accessibility will occur on their system. In Chicago, for example, 57 of the 143 stations are fully accessible and the CTA expects that by the end of 2002, 64 will be accessible. Because the upgrades to the entire system are so costly and time consuming, the extended implementation timeline has come provided relief to many transit agencies as it has allowed them to limit the financial impact in the short term. The downside, however, is that full accessibility has become a long drawn out affair and the reality is that extensive paratransit services must continue to be provided to many passengers throughout the duration.

Full accessibility and paratransit are often viewed as competing entities from a financial or service perspective, which should not be the case. Financially, all the upgrades required to become fully accessible are labeled as capital expenses and therefore receive up to 80% of funding from the federal government. Paratransit, on the other hand, mainly consists of operating expenses, which are not covered by the federal government. Therefore, the optimal solution is to upgrade as much of the main line service as possible and provide baseline paratransit service as well. Currently, however, large transit stations are adding a few accessible stations to the system every year, which results in an infeasible system for riders who need full accessibility. Without full accessibility, if a rider’s origin is accessible, but the destination is not, then the result is another paratransit trip at a high cost. This pattern will continue until the entire system is completely accessible.

Full accessibility should also be undertaken under the premise of universal design, as opposed to focusing on upgrades for use only by the disabled community.

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241 Chicago Transit Authority. 2002 Budget Summary. 41.
242 Hirano, Steve. 16.
That is, many of the upgrades necessary for the disabled are useful for other groups of individuals as well. Working elevators, wheelchair lifts, and bridges from the train to the platform improve transit accessibility for men or women with baby carriages, shopping carts and the like. The same can be said for ramps, curb cuts and other barriers to entry. Focusing on the benefits of all transit users would minimize the tendency to blame the costs and requirements on the ADA and disabled community and would improve the overall public transportation experience for all users.

The Champaign-Urbana Mass Transit District (MTD) in Illinois has viewed accessibility as their responsibility for two decades and has planned accordingly. They decided in the early 1980s to become fully accessible and have been since 1984. It wasn’t until the passage of the ADA that they introduced ‘special services’ and even today, only provide between 30 and 40 trips per day on paratransit. MTD’s “take no pity” approach provided the area’s disabled population with only one option of fixed route transit from the beginning, which was an option that was inherently cheaper and easier to provide for the MTD. The result is a much lower usage of paratransit services when compared with other similar cities, such as Ann Arbor, Michigan or Springfield, Illinois.

The importance of fixed route accessibility should be emphasized throughout transit agencies, from placing high priority on infrastructure improvements to educating drivers and other employees who interact directly with disabled customers. This is especially true of bus services since these routes reach a greater number of residents in the metropolitan area and are much easier and less costly to maintain. Creating and maintaining a fully accessible system should enhance transit agencies’ status with the disabled community, which since the ADA’s passage has been less than cordial. Once the entire transit system has been made fully accessible, transit agencies should have the ability to implement stricter evaluation techniques to raise the bar for paratransit riders and hence limit usage to those who truly need specialized services. Even before full access, they can fully implement some of the other strategies discussed below. They can also implement new marketing campaigns, such as was done in Kansas City, which made it “disability cool” and showed “disability pride” to ride the accessible

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245 Ibid.
246 Ibid. 14.
247 Ibid.
buses. Full accessibility would provide an equal basis for all transit riders, disabled or not, to pursue any opportunities they are interested in and would help to reach one of the primary goals of the ADA, to "open up everyday American life to persons with disabilities." 

This push for full accessibility does not mean that its completion will lead to the elimination of paratransit services. Instead, the majority of disabled riders will still require paratransit services. As mainline accessibility improves, more disabled riders may be inspired to improve their mobility and the majority will need paratransit. Therefore, mainline accessibility must be vigorously implemented, but it will not decrease the need for paratransit services or its high operating subsidies.

5.2.2 Training of Main Line Usage

Another option for increasing the likelihood of improved main line transit usage is to conduct training courses for paratransit riders. This may only impact a small percentage of riders, so each agency should undertake a cost benefit analysis to insure that the possible return is worthwhile. In Chicago, approximately 5% of 2001 CTA paratransit riders are deemed transitional, a distinction that allows riders to use paratransit until their bus route or subway station is accessible. Although not a tremendous portion of total ridership, it may still warrant training sessions. Additionally, once CTA, or any other transit agency, has a fully accessible transportation system, training may be used with more frequency.

Free travel training can be conducted on an individual basis, or in small groups so that personal attention can be given and questions can be answered accordingly. Additionally, if a peer administers the training, the knowledge that someone in a similar situation can use main line transit may provide the incentive that the trainee needs to learn the system himself. Paratransit riders are not the only system users who should go through travel training; bus and rail operators should also become well versed on the needs of various disabled riders. Without proper training for these transit employees, disabled riders may receive treatment that will turn them against mainline transit and back to paratransit use.

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249 Yee, Silvia and Golden, Marilyn. “Achieving Accessibility: How the Americans with Disabilities Act is Changing the Face and Mind of a Nation.”
CTA conducted a Travel Barriers and Incentives survey in 2000, which helped to identify opportunities for CTA to promote mainline transit usage. In this survey, 36.5% of the respondents indicated that travel training is an incentive that would help change paratransit riders' habits.\textsuperscript{251} Additionally, many of the other fears that are common for paratransit riders, such as rude bus drivers, non-working elevators or options if a rider gets stuck on the platform can be assuaged during travel training.

Fort Worth’s Mobility Impaired Transportation Service (MITS) saw a decrease in paratransit trips in 2001, which they are attributing to a new program that helps to shift paratransit riders to fixed route services. The program, MITS+1, mixes travel training and free fixed route service. Only those who participate in the training can obtain the free pass. The program has resulted in an overall decrease of 4000 trips in 2001, which could probably be increased even more with better marketing by MITS.\textsuperscript{252}

Travel training can be incorporated with the eligibility process, if agencies decide to implement a functional assessment during the eligibility process. Functional assessments evaluate potential users’ abilities to ride mainline transit. As of 1999, Orange, CA, Pittsburgh, PA, Pompano Beach, FL, Seattle, WA and Washington DC all utilized functional testing during the eligibility process.\textsuperscript{253} Those users that ‘pass’ or are borderline for showing enough independence for riding fixed route transit can be offered a training course to augment their fixed route travel needs.

5.2.3 Free Fixed Route Service for the Disabled

A possibility for enticing patrons from the more expensive options of taxis and traditional paratransit is to expand the half fare subsidy for elderly and disabled under 5307. Currently, the subsidy only applies during non-peak periods. However, expending it to include both peak and non-peak travel times may bring about a change in travel patterns. Additionally, some transit agencies, such as Access Services in Los Angeles County, are providing free fares for paratransit eligible riders on mainline transit. They are able to bring a personal care attendant for free as well.\textsuperscript{254} Access Services indicated that paratransit ridership increased to 11% on fixed route.

\textsuperscript{251} Chicago Transit Authority, Planning and Development. “Mainline Transit Service Barriers and Incentives for Paratransit Customers.” 22 November 2000.

\textsuperscript{252} Hirano, Steve. 17.


Using Chicago as an example, their mainline bus service has an average cost of $1.71/trip and rail is $2.15/trip in FY 2001. Given that each paratransit trip costs CTA $23.25\textsuperscript{255}, moving one paratransit rider to a mainline bus and rail would save CTA $21.54 and $21.10, respectively. In order to save $1 million from their paratransit budget, CTA would need to move approximately 46,000 trips to bus or 47,000 trips to rail per year. This is approximately 3% of the total annual paratransit trips. Although this seems to be a large number of trips/month that would need to transition from paratransit to mainline transit, CAT in Las Vegas, Nevada, a much smaller organization that CTA, successfully provided 435,000 (average 36,000/month) free bus trips to paratransit customers in 1999.\textsuperscript{256} Further analysis would need to be undertaken to assess the portion of paratransit riders who would be able to utilize mainline transit. Additionally, without full rail and bus accessibility, there are limits as to the cost savings that this strategy can garner. Finally, the likelihood is that a substantial increase in total mobility for the disabled will occur through a demonstrative effect of the three strategies discussed above. In short, this is good mobility policy and should be undertaken for that reason alone, but will not ultimately make a large impact on finances.

5.2.4 Increase Taxi Participation

In the past few years, transit agencies have used taxis to provide a greater share of paratransit services nationwide. Many agencies utilize taxis as extra capacity, which can be used if demand for any day cannot be met. This type of service typically provides transportation services to users for exactly the same fare as traditional paratransit services, but they benefit by not having to call a day in advance to schedule the ride. Transit agencies are realizing that taxi services provide a less expensive option than traditional paratransit vans. However, the FTA has not yet approved this as a totally viable service, especially since it could be construed as a shift of paratransit responsibilities from transit to taxi providers.

Houston's paratransit service, METROLift, has started to use taxis to further reduce the costs associated with larger paratransit vans, which are often underutilized and not as cost effective. In total, dedicated vans make up 50% of Houston's vehicle fleet and the city uses both dedicated and non-dedicated taxis to help augment capacity.

\textsuperscript{255} Actual per trip cost is $24.75 in FY 2001, but riders pay $1.50/ride for the service, so the subsidy is only $23.25.

\textsuperscript{256} Chicago Transit Authority. "Transit Authorities Offering Free Mainline Service to Paratransit Customers." 23 June 2000.
which allows the organization to dynamically add or remove capacity when necessary.\textsuperscript{257} San Francisco has also started utilizing ramped taxis to augment their paratransit service offerings. Riders are able to contact taxi companies at their will and are given a certain amount each month to spend on this option.\textsuperscript{258}

One of the main drawbacks of this strategy is the difficulty in obtaining increased taxi participation. The quantity of accessible cabs in major cities is woefully inadequate. Taxis are not required to purchase accessible vehicles under the ADA, so many taxi fleets are lacking. Additionally, the operation and maintenance of accessible vehicles are much higher than that of a traditional taxi, which provides another disincentive to purchase accessible vehicles. In order to encourage taxi participation, incentives need to be given, such as less expensive medallions or registration fees. Much of this effort needs to come from city or regional government, which would entail a collaborative effort on the part of transit agencies. Without the FTA's blessing and increased taxi accessibility, transit agencies are potentially promising a service that cannot be provided. If this comes to pass, disabled customers will be even more disheartened by the state of paratransit services.

Because the costs are significantly for taxi use than for a dedicated paratransit fleet, but the service is not robust enough for extensive use, a possible solution could be implemented successively. First, with the current level of accessible taxis, implement a 24-hour advance notice policy, while working to expand the quantity of accessible taxis in the area through low cost medallion offerings to trained drivers. Once there are a substantial number of accessible taxis in the fleet, the 24-hour service period could be eliminated to accurately provide accessible door-to-door spontaneous service to the disabled.

\subsection*{5.2.5 Mini Bus Service for All Non Drivers}

Extending paratransit services to include other non-drivers such as the elderly, school age children and individuals who do not to drive has been discussed for years and even piloted in a few areas. At a macro level, this seems as though it would be a valid proposition or at least worth a pilot project because more users could create a more efficient system, as far as moving multiple people on similar routes. However, as Question 9 in the survey from Chapter 4 indicated, most stakeholders do not believe that opening paratransit services to a greater number of users would make it more efficient.

\begin{itemize}
\item \textsuperscript{257} Hirano, Steve. 16.
\end{itemize}
Therefore, this strategy should be tabled and perhaps explored once other strategies have been utilized.

5.3 Future Research

This research touched upon a variety of issues that were outside the scope of this thesis, but would provide other avenues for future student research. With its focus on strategies for managing the costs of paratransit services under the ADA, the next logical step would be to monitor the implementation of some of these strategies. Research could be done in parallel on the initiation of the taxi program, parking tax, federal lobbying effort. Additionally, monitoring these initiatives to see their progress and impact on the disabled community and transit agencies would provide valid research. Another area of research is the latent demand that undoubtedly exists for paratransit services. This is a concern throughout the transit industry and its quantity and potential impacts have yet to be fully understood. A final research area would be a thorough assessment of extending paratransit to include other non-drivers.

5.4 Conclusion

The provision of paratransit services is not a requirement that will fall by the wayside. As expressed in the Americans with Disabilities Act, mobility, which is the ability to move about freely and achieve access to work, education, social and life opportunities and accessibility to fixed route facilities and vehicles without barriers or impediments, are rights of all citizens. Since the ADA’s passage, the demand for paratransit services clearly demonstrates the value of mobility and accessibility to the disabled community and the expected demographics of the future indicate an even greater demand. However, as Congress does not fund civil rights legislation and has removed public transportation operating subsidies for areas with populations over 200,000, transit agencies are bearing the full responsibility for providing paratransit services at an increasing cost to their bottom line and paratransit’s quality of service. The ultimate recipient of low quality paratransit service is the disabled community, whose mobility needs have been relegated to second place behind the automobile. The result is that although the service exists, the disabled community is still severely lacking in high quality transportation services. Additionally, there is significant inequality of mobility for the disabled across urban, suburban and rural areas. This dichotomy has brought us to a crossroads for providing affordable and sufficient transportation services to the disabled.
Most transportation professionals agree that transit employs a greater core competency to provide paratransit services than a state highway department or human service agency. However, the ability to provide and the capacity to fund should be separated. Mobility for the disabled through paratransit services should be part of the larger surface transportation system, not a subset of public transportation. Therefore, the responsibility for its financial needs should lie within the entire transportation system, not solely on the shoulders of public transit organizations.

Costs for the provision of paratransit services across the largest 32 metropolitan areas are high and continue to rise. A survey of these areas showed that the average cost per paratransit trip is approximately $26. The average fare was almost $2. Therefore, transit agencies are subsidizing an estimated $24 per ride on paratransit. Some stakeholders indicate that the solution can be found at the farebox. However, if the fare were doubled, there would still be an average subsidy of $22. Since many riders are low income and mobility has come to be viewed as a right, the ensuing conflict with the disabled community and others would not be worth the meager reduction in subsidy. Therefore, there is a need to look beyond the typical solutions to provide valid transportation service to the disabled at a reasonable cost to public transit providers.

With the quantity of funding necessary and the desire for high quality mobility, there is not one solution that will resolve the issues. Instead, a multi-pronged approach of institutional and policy, financial and internal agency strategies must be undertaken. Additionally, both the financial and institutional and policy strategies can be implemented from a federal, state and local/regional approach, which must be done simultaneously in order to maximize the probability of success. With these strategies, transit agencies and advocates for the disabled must spearhead the effort, as they are the organizations that stand to gain tremendously from any of these strategies.

The main institutional and policy strategy is to form a coalition of paratransit stakeholders and approach the federal government during the reauthorization of TEA-21, the nation’s surface transportation legislation which is due for reauthorization in 2003. Over the years, there has been an ideological divide in Congress on funding transit operations. Obviously, with the elimination of operating subsidies for areas with populations over 200,000 in TEA-21, the segment that felt that transit’s operations should be funded through the farebox or other local revenue prevailed. Therefore, in any approach to Congress, paratransit provision must be separated from transit, lest legislators interpret this as a ploy for more federal resources for transit.
mobility for the disabled must be understood as a national issue that all areas face, in order to circumvent the traditional pigeonholing as an urban issue which may alienate suburban and rural legislators and ignores the serious mobility challenges in suburban and rural areas.

By approaching the federal government through a coalition led by a non-partisan stakeholder, such as STPP, there is an opportunity to present both the needs of public transit and the disabled community in an amicable environment. In a survey conducted for this research, all paratransit stakeholders, including major advocates for the disabled and public transit agencies, indicated that it is the responsibility of the federal government to fund paratransit services as part of the surface transportation system and most felt that federal operating funding would improve its quality and effectiveness. This clearly demonstrates that there is interest on the part of a wide variety of stakeholders to reconcile the issues.

At a regional institutional and policy level, a similar coalition with local stakeholders can be created. This has been done in the Phoenix, Arizona area with some success. The purpose is to understand the needs, both present and future, of the disabled community and create a regional action plan that will bring about cost effective changes to meet those needs. Ultimately, this plan needs to be integrated with the regional transportation planning process so that the issues do not fall by the wayside in the future. By acquiring success at a local level, transit agencies will be better suited to achieve success at the national level. However, with the timeframe of TEA-21 reauthorization, regional and federal strategies must be conducted in tandem.

From a federal financial perspective, the strategies revolve around increasing the revenues of the Highway Trust Fund. This would provide the shift of financial responsibility to the national surface transportation system. It would also bring about a nationwide increase in equality of mobility for the disabled. Instead of removing funding directly from highways or mass transit, a third program for paratransit should be created by a portion of the additional revenues. Transit agencies would be required to show maintenance of effort and the additional funding necessary to provide high quality paratransit would come from increases to the Highway Account. As gas tax revenues comprise 60% of Highway Trust Fund revenues, the most direct strategy would be to align the gas tax to inflation. Depending on the rate of inflation, the next decade could garner an additional $17 to $51 billion for the Highway Trust Fund. Only a portion of these revenues would be necessary to improve paratransit services nationwide. The
remaining additional funding would be divided between the Highway Account and the Mass Transit Account.

From a state perspective, transit is typically viewed as a local issue and almost all requests are referred to the local metropolitan planning organization (MPO). However, depending on the state and its ability to undertake such a change, transit agencies may be able to make a similar case for aligning the state gas tax with inflation. Locally, a city or regional parking tax can be assessed in order to make up the funds necessary for local paratransit services. The downside of these approaches is that they would provide varying degrees of financial assistance nationwide and would provide unequal mobility for the disabled among states and regions.

From an internal agency perspective, many transit agencies have started to analyze various programs that can be implemented to minimize the demand for paratransit services. However, the purpose of the ADA was not to create an environment that would force transit agencies to minimize demand, but it was passed so that the world could be made available to the disabled community, as it had previously been closed. Some programs, such as mainline transit training and free mainline transit, may provide an avenue to transfer some riders from paratransit to mainline transit, but the high demand for paratransit will still exist and grow. One program however, has provided much less costly paratransit services with higher quality of service. Utilizing taxis as a method to increase capacity or transport frequent riders may provide one avenue for alleviating some of the financial pressures of paratransit. In some cities that have implemented this service, it can be supplied for almost half the cost of traditional paratransit services. However, the caveat is that most cities do not have enough accessible taxis in their fleet and therefore may perhaps be promising something that cannot be fully provided. Working with the city to provide more taxi medallions at a reduced cost to these drivers may provide a solution to the lack of usable taxis. Educating these drivers on the needs of the disabled may also soften the FTA’s disapproving view of this service. Note that with the assumed latent demand for paratransit services, any improvements in its provision will undoubtedly increase the demand for paratransit services.

Overall the picture is quite positive to help manage the costs of ADA paratransit services and provide an improved level of service for mobility to the disabled community. However, first transit agencies must move beyond blaming the disabled constituency for needing paratransit and focus on gathering a viable coalition of stakeholders to move
forward on increased funding and improved services for the disabled. Second, the
disabled community, with their own provisions for improved service, needs to work past
the long standing distrust of public transit and work with the organizations if there is any
hope of presenting a combined front for this issue. Third, the highway lobby needs to
accept paratransit as a noteworthy segment of the nation's transportation system and
work to make it a viable transportation option for the disabled. Additionally, to obtain
further funding for highway projects, the highway lobby needs to expand its coalition to
involve the elderly and disabled, with the ultimate intent to share the new revenues.
Without a cooperative effort, the splintering of perspectives will continue to drive down
mobility and accessibility for the disabled at an increased cost to public transit providers.
Glossary of Terms

**Accessibility** – The ability to move about without barriers or impediments

**Accessible service** – Physical access to vehicles and buildings. Proper training of personnel and maintenance of equipment. Providing public information and communications systems to persons with vision and hearing impairments.

**Americans with Disabilities Act (ADA)** – Legislation passed in 1990 outlawing discrimination against people with disabilities. In relation to transportation, all public entities must provide accessible fixed route service and provide complementary paratransit services to those who cannot use accessible fixed route service and who live within a ¾ mile of fixed route service.

**Baby Boomer** – The generation born between 1946 and 1964

**Demand Responsive** – Any service that is not fixed route.

**Disability** – (A) Any physical or mental impairment that substantially limits one or major life activities, (B) a record of such an impairment, or (C) being regarded as having such an impairment.

**Fare recovery ratio** – The percentage of operating costs recovered by passenger fares.

**Feeder service** – A service that provides a fixed route system user with paratransit service to or from an accessible station or stop.

**Fixed Route** – Service provided along a prescribed route according to a fixed schedule.

**Mainline Service** – See Fixed Route.

**Mobility** – The ability to move about freely and participate in activities that one deems necessary.

**Paratransit** – The family of transportation services which falls between the single occupant automobile and fixed route transit. In the case of this paper, paratransit is defined as non-fixed route service that is geared toward disabled and elderly.

**Public Entity** – Any State or local government, any department, agency, special purpose district, or another instrumentality of a State or States or local government.

**Readily Available** – Easily accomplishable and able to be carried out without much difficulty or expense.

**Response time** – Elapsed time between a request for service and the provision of service. The provision of service is measured as the time the vehicle arrives to pick-up the passenger. ADA requires next day service.

**Taxi Assistance Program (TAP)** – A flexible program created by the Chicago Transit Authority to provide alternative paratransit services to ADA qualified customers in the
Chicago area. Allows users to call the day of a ride, as opposed to the current design whereby users must call at least one day in advance for rides. Provides ADA paratransit services at 50% the cost of traditional ADA paratransit services.
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US Department of Transportation. Federal Transit Administration. Urbanized Area Formula Program: Grant Application Instructions.


Appendix 1: Paratransit Service Areas

LEGEND

- Fixed Bus Route
- Paratransit Service Area

Light or Heavy Rail Paratransit Survey Area

Circle Radius = 3/4 mile

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259 US Department of Transportation. Urban Mass Transportation Administration. ADA
Paratransit Handbook: Implementing Complementary Paratransit Service Requirements of the
260 Ibid.
Paratransit Corridors Including A Core Service Area

Legend

- Fixed Bus Route
- Paratransit
- Service Area

Jurisdictional Limit

0 miles 5 miles

261 Ibid.

Appendix 1
# Appendix 2: Possible Paratransit Capacity Constraint Indicators

<table>
<thead>
<tr>
<th>Level of Service Indicator</th>
<th>Measure</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Time</td>
<td>Time between pick-up and drop-off</td>
<td>Compare to fixed route travel time (same, twice, etc.)</td>
</tr>
<tr>
<td>Missed Trips</td>
<td>Percent of one-way trips canceled by the provider plus trips provided too late for the rider to meet appointment</td>
<td>Compare to percent of missed trips</td>
</tr>
<tr>
<td>Trip Denials</td>
<td>Number of one-way trips unable to be scheduled</td>
<td>Compare to “unmet” fixed route need; potential trips on routes that could be justified by projected fare recovery but are unfunded</td>
</tr>
<tr>
<td>On-time performance</td>
<td>Percent of trips provided within a given window of time (± 15 minutes, ± 30 minutes, etc.)</td>
<td>Compare to fixed route schedule adherence, or define the “window” as a percent of fixed route headway (e.g. ½ the headway)</td>
</tr>
</tbody>
</table>

Appendix 3: ADA Paratransit Certification Definitions

CTA/RTA Paratransit Eligibility Categories

All Trips (1)
Passenger is eligible for ADA paratransit for all travel.

Conditional – Variable Disability (2)
Passenger is eligible for ADA Paratransit trips only on days when the passenger self-
determines that his/her disability prevents use of fixed route service. The passenger’s
disability itself may vary, or the passenger’s functional ability to travel may vary as a
result of specified ‘environmental’ changes (i.e. light/dark, glare/non-glare): both
variations would change the passenger’s mobility and prevent use of fixed route.

Conditional – Orientation (3)
Passenger is eligible for ADA Paratransit trips except when the trip requested has a non-
eligible origin and destination. A non-eligible origin and destination might be for
example: (1) a trip that the passenger is already making consistently and successfully
on fixed route service, or (2) a trip for which the passenger has successfully completed
travel training. The non-eligible trips will be specifically defined in the passenger’s eligibilily
determination.

Conditional – Winter Months (5)
Passenger is eligible for ADA Paratransit trips only from November 15 through March 15

Conditional – Summer Months (6)
Passenger is eligible for ADA Paratransit trips only from July 15 through August 31.

Temporary – Visitor (7)
Passenger will be eligible for ADA Paratransit trips for a 21-day period, based upon the
ADA Paratransit eligibility granted by another public transportation provider. Generally,
the passenger will be eligible for ADA Paratransit service for all travel during this period,
although the potential exists for conditional-type restrictions under this category.

Temporary – Training (8)
Passenger is eligible for ADA paratransit trips for all travel during a period when travel
training will be made available to the passenger. At the completion of either the
temporary period or the travel training, a final eligibility determination will be made.
Temporary – Disability Condition (9)
Passenger will be eligible for ADA Paratransit trips for the period of estimated disability. Generally, the passenger will be eligible for ADA paratransit service for all travel during this period, although the potential exists for conditional-type restrictions under this category.

Not Eligible for Paratransit (10)
Passenger is ineligible for ADA Paratransit service.

Temporary – Interim (11)
Passenger is eligible to use ADA Paratransit service on a temporary basis until their certification decision is made. Used primarily in situation where the eligibility determination has not been made within 21 days of receipt of a completed application.

Conditional – Path of Travel (12)
Passenger is eligible for ADA Paratransit trips when the interaction between the passenger’s disability and a specific environmental condition encountered in the path of travel would prevent the passenger from getting to or from the fixed route bus stop or train station for a particular trip. Such environmental conditions might include curb cuts, sidewalk condition or absence, type of street crossing, and/or distance to the bus stop or train station if the passenger is unable to travel two (2) blocks. For example, a passenger who uses a wheelchair and requires a path of travel with curb cuts and a paved surface in good condition would be eligible for an ADA Paratransit trip if curb cuts were lacking and/or the sidewalk was in poor condition or non-existent. Another example would be a passenger who experiences navigational difficulties due to a visual or cognitive impairment and is unable to cross certain types of intersections without assistance: a trip which required a street crossing of this type would be eligible for ADA Paratransit service. The particular environmental conditions will be specifically defined in the passenger’s eligibility determination.  

## Appendix 4: 32 Largest US Metropolitan Area Paratransit Survey Results

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
<th>Total Cost per Trip</th>
<th>Average Fare (each way)</th>
<th>Est. Rides Per Weekday</th>
<th>Subsidy per Trip</th>
<th>Cost to City (Region) per Day to Provide Paratransit</th>
<th>Paratransit Budget</th>
<th>Total transit budget</th>
<th>Paratransit Percentage of Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New York</td>
<td>$50.33$265</td>
<td>$1.50</td>
<td>5663$266</td>
<td>$48.83$</td>
<td>$276,524</td>
<td>$113,000,000</td>
<td>$4,000,000,000</td>
<td>2.83%</td>
</tr>
<tr>
<td>2</td>
<td>Los Angeles</td>
<td>$25.52$267</td>
<td>$1.87$268</td>
<td>5463$269</td>
<td>$23.65$</td>
<td>$129,200</td>
<td>$57,153,900$270</td>
<td>UA</td>
<td>UA</td>
</tr>
<tr>
<td>3</td>
<td>Chicago</td>
<td>$24.75$271</td>
<td>$1.50</td>
<td>4150</td>
<td>$23.25</td>
<td>$96,488</td>
<td>$34,800,000$272</td>
<td>$869,000,000</td>
<td>4.00%</td>
</tr>
<tr>
<td>4</td>
<td>Washington DC</td>
<td>$25.34$273</td>
<td>$2.20</td>
<td>2200</td>
<td>$23.14</td>
<td>$50,908</td>
<td>$25,000,000$274</td>
<td>$823,000,000$275</td>
<td>3.04%</td>
</tr>
<tr>
<td>5</td>
<td>San Francisco</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
</tr>
<tr>
<td>6</td>
<td>Philadelphia</td>
<td>$23.00</td>
<td>$3.00$276</td>
<td>2800</td>
<td>$20.00</td>
<td>$56,000</td>
<td>$44,000,000$277</td>
<td>$822,000,000$276</td>
<td>5.35%</td>
</tr>
<tr>
<td>7</td>
<td>Boston</td>
<td>$24.00</td>
<td>$1.25$279</td>
<td>3000</td>
<td>$22.75</td>
<td>$68,250</td>
<td>$25,000,000</td>
<td>$650,000,000</td>
<td>3.85%</td>
</tr>
<tr>
<td>8</td>
<td>Detroit</td>
<td>$26.00</td>
<td>$2.50</td>
<td>725$280</td>
<td>$23.50</td>
<td>$17,038</td>
<td>$3,700,000</td>
<td>$172,000,000</td>
<td>2.15%</td>
</tr>
<tr>
<td>9</td>
<td>DFW</td>
<td>$41.00$281</td>
<td>$2.00</td>
<td>2000</td>
<td>$39.00</td>
<td>$78,000</td>
<td>$18,179,913$282</td>
<td>$291,543,034$283</td>
<td>6.24%</td>
</tr>
<tr>
<td>10</td>
<td>Houston</td>
<td>$16.71</td>
<td>$1.15</td>
<td>4112</td>
<td>$15.56</td>
<td>$63,983</td>
<td>$24,984,583$287</td>
<td>$236,388,471</td>
<td>10.57%</td>
</tr>
<tr>
<td>11</td>
<td>Atlanta</td>
<td>$46.00$285</td>
<td>$3.50</td>
<td>622$286</td>
<td>$42.50</td>
<td>$26,435</td>
<td>$6,600,000$288</td>
<td>$340,400,000$288</td>
<td>1.94%</td>
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<tr>
<td>12</td>
<td>Miami</td>
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<td>$2.50</td>
<td>2508</td>
<td>$22.20</td>
<td>$55,678</td>
<td>$14,764,431$289</td>
<td>$216,792,635$290</td>
<td>6.81%</td>
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<tr>
<td>13</td>
<td>Seattle</td>
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<td>$0.75$291</td>
<td>3591</td>
<td>$27.40</td>
<td>$98,393</td>
<td>$33,717,485$292</td>
<td>$518,000,000</td>
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<tr>
<td>14</td>
<td>Phoenix</td>
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<td>$2.40$296</td>
<td>905$295</td>
<td>$24.83</td>
<td>$22,471</td>
<td>$9,800,000</td>
<td>$198,500,000</td>
<td>4.94%</td>
</tr>
<tr>
<td>15</td>
<td>Minneapolis - St. Paul</td>
<td>$19.50</td>
<td>$2.12$296</td>
<td>3600</td>
<td>$17.38</td>
<td>$62,568</td>
<td>$26,076,000$297</td>
<td>$270,000,000$297</td>
<td>9.66%</td>
</tr>
<tr>
<td>Rank</td>
<td>City</td>
<td>Total Cost per Trip</td>
<td>Average Fare (each way)</td>
<td>Est. Rides Per Weekday</td>
<td>Subsidy per Trip</td>
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<td>Paratransit Budget</td>
<td>Total transit budget</td>
<td>Paratransit Percentage of Total Budget</td>
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<td>--------------------</td>
<td>---------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>16</td>
<td>Cleveland</td>
<td>$42.00**</td>
<td>$1.25</td>
<td>1300**</td>
<td>$40.75</td>
<td>$52,975</td>
<td>$11,000,000</td>
<td>$228,000,000</td>
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<tr>
<td>17</td>
<td>San Diego</td>
<td>$22.76**</td>
<td>$4.00</td>
<td>825</td>
<td>$18.76</td>
<td>$15,477</td>
<td>$5,268,919</td>
<td>$131,466,539</td>
<td>4.01%</td>
</tr>
<tr>
<td>18</td>
<td>St. Louis</td>
<td>UA</td>
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<td>UA</td>
<td>UA</td>
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<td>UA</td>
<td>UA</td>
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<tr>
<td>19</td>
<td>Denver</td>
<td>$30.44**</td>
<td>$2.50</td>
<td>2000</td>
<td>$27.94</td>
<td>$55,880</td>
<td>$14,000,000</td>
<td>$285,000,000</td>
<td>4.91%</td>
</tr>
<tr>
<td>20</td>
<td>San Juan</td>
<td>$28.01**</td>
<td>$1.00</td>
<td>369</td>
<td>$27.01</td>
<td>$9,967</td>
<td>$2,934,332</td>
<td>$56,455,741</td>
<td>5.20%</td>
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<tr>
<td>21</td>
<td>Tampa - St. Petersburg</td>
<td>$39.00</td>
<td>$3.45</td>
<td>180</td>
<td>$35.55</td>
<td>$6,399</td>
<td>$2,217,000</td>
<td>$29,000,000</td>
<td>7.64%</td>
</tr>
<tr>
<td>22</td>
<td>Pittsburgh</td>
<td>$15.25</td>
<td>$1.55</td>
<td>2000</td>
<td>$13.70</td>
<td>$27,400</td>
<td>$30,000,000</td>
<td>$285,000,000</td>
<td>9.84%</td>
</tr>
<tr>
<td>23</td>
<td>Portland</td>
<td>$19.14**</td>
<td>$1.30</td>
<td>2732</td>
<td>$17.84</td>
<td>$48,739</td>
<td>$16,936,964</td>
<td>$542,958,411</td>
<td>3.12%</td>
</tr>
<tr>
<td>24</td>
<td>Cincinnati</td>
<td>$26.51**</td>
<td>$1.00</td>
<td>801</td>
<td>$25.51</td>
<td>$20,434</td>
<td>$5,974,166</td>
<td>$72,207,460</td>
<td>8.27%</td>
</tr>
<tr>
<td>25</td>
<td>Sacramento</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
</tr>
<tr>
<td>26</td>
<td>Kansas City, MO</td>
<td>$15.90</td>
<td>$2.00</td>
<td>991</td>
<td>$13.90</td>
<td>$13,745</td>
<td>$5,158,697</td>
<td>$49,660,699</td>
<td>10.39%</td>
</tr>
<tr>
<td>27</td>
<td>Milwaukee</td>
<td>$13.27**</td>
<td>$3.00</td>
<td>3800</td>
<td>$10.27</td>
<td>$39,026</td>
<td>$18,000,000</td>
<td>$129,000,000</td>
<td>13.95%</td>
</tr>
<tr>
<td>28</td>
<td>Orlando</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
</tr>
<tr>
<td>29</td>
<td>Indianapolis</td>
<td>$20.00</td>
<td>$2.00</td>
<td>1100</td>
<td>$18.00</td>
<td>$19,800</td>
<td>$7,970,000</td>
<td>$33,800,000</td>
<td>21.08%</td>
</tr>
<tr>
<td>30</td>
<td>San Antonio</td>
<td>$18.86**</td>
<td>$1.25</td>
<td>3711</td>
<td>$17.61</td>
<td>$65,351</td>
<td>$19,196,789</td>
<td>$99,991,765</td>
<td>19.20%</td>
</tr>
<tr>
<td>31</td>
<td>Virginia Beach</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
<td>UA</td>
</tr>
<tr>
<td>32</td>
<td>Las Vegas</td>
<td>$30.99**</td>
<td>$1.00</td>
<td>1700</td>
<td>$29.99</td>
<td>$50,983</td>
<td>$17,609,880</td>
<td>$75,259,543</td>
<td>23.40%</td>
</tr>
</tbody>
</table>

*System cost - average user cost
**Subsidization/trip * number of rides/day
Paratransit Budget/Total Transit Budget
$50.33/COMPLETED trip; $45.08/SCHEDULED trip; Includes labor, carrier, service cost, vehicle cost, administrative costs
FY 2000
FY 00-01; Operating cost per passenger trip is defined as the ratio of Access Paratransit program costs including eligibility costs, allocated administration less fare revenue, and total passenger trips
Ranges from $1.50-$4.00 based on distance
passengers/day
LA County ADA Expenses for FY 99/00
Budgeted FY 2001
Includes both provision of services and CTA overhead
273 ADA only
274 YTD 24% growth in demand (FY July 1- June 30)
275 $823,000,000 (op) (FY 2002)
276 Seniors – pay 15% of cost of ride ($3.50), PA lottery pays 85% Disabled pay $3.00/ride
277 44M is operating budget; 9.75 is capital budget
278 822M is operating budget; 496M is capital budget
279 Each zone $1.25/trip. Across 2 zones = $2.50
280 ~28,000/mo
281 No elderly service, only ADA
282 FY 2002
283 FY 2002
284 FY 2002
285 includes maintenance, mechanics, service done in house
286 rides operated/day
287 FY 2002
288 FY 2002
290 2000 Operating budgets for metrobus, metromover and metrorail; http://www.co.miami-dade.fl.us/transit/welcome/facts.htm
291 New 2001 fare
292 ADA Paratransit is $29,244,897 (which is already part of the $33 million)
293 27.23 is from ADA and elderly passengers FY 2000-2001; FY 2001-2002, $28.90
294 ADA certified; Same Day Service; 1st zone $1.20; each additional zone $.60
295 FY 2000-2001
296 Rush Hour $2.50; Non Rush Hour $2.00
297 FY 2001. This does not include debt service. This also does not include light rail as only bus is available in the region at this time
298 Disabled Only and a small # of elderly who were grandfathered in 1996; Individuals who qualify for Category I & III are eligible for special Door-to-Door Service. Customers are provided service from point of origination to destination within a five mile radius of their home. Additional service is provided beyond five miles only if RTA provides standard bus and rapid service during the time and in the area the trip would be taken; $42.00 is a fully burdened cost and as such includes all direct cost plus capital and overhead including all support departments including executive
299 Elderly account for about 5% of the 1300 trips
300 Curb-to-curb service for persons whose disabilities prevent them from getting to or using regular bus or trolley services. Seniors may request service on a same-day, space-available basis.
303 $2.50 Local Peak; $1.50 Off Peak
Fares start at $.50, but can go as high as $2.50 with transfers, hence the average of $1.00. $1.55 for disabled, $1.20 for elderly. 

4350 daily rides for the elderly, 2000 for the disabled. Costs include: Administration, Dispatch, Maintenance & Fuel, Contracted Service Providers; Costs do not include: Depreciation of Capital Assets such as buses, computers, etc.

Paratransit & Paratransit Maintenance/ Fuel Budget FY 2002

Agency Budget FY 2002 (General & Operating)

2002 Budget Numbers -- ADA Operating Budget $23.66; ADA Inclusive (salary, benefits, overhead, capital equipment, fuel, utilities, fuel tax) = $26.51; Non ADA + ADA Operating Budget: $22.90; Non ADA + ADA Inclusive: $25.55

FY 2002 Budget - ADA Rides/ Weekday: 801; Non ADA + ADA/ Weekday: 888

Capital - $2,112,985 (we outsource our transportation & we do not own our vehicles); Operations- $5,158,697

Capital - $35,573,01; Operations- $49,660,699

5 different vendors, 5 different costs. $13.27 is the weighted average; Laidlaw $21.62 900/weekday; Transit Express $15.08 1100/weekday; Goodwill $7.18 1000/weekday; Curative $10.40 150/weekday; Taxi (same day service) $8.69 650/weekday

FY 2001

$18.86 is the average, however it can be divided up into the following: Directly operated service (lift equipped vehicles owned, operated and maintained by VIA Metropolitan Transit): $21.40; Purchased transportation service (vehicles owned, operated and maintained by contractor): $16.17

$4.00/day surcharge if outside of the 3/4 radius of fixed route system.

Paratransit Operating Expense Budget FY 2002

Total Operating Expense Budget FY 2002

Contract costs only

UA = Unavailable
## Appendix 5: Questionnaire for Stakeholders

Name of Organization: (optional) ______________________
Type of Organization:

<table>
<thead>
<tr>
<th>advocate for elderly and disabled</th>
<th>advocate for mobility</th>
<th>providers of transportation services</th>
<th>federal government</th>
<th>other</th>
</tr>
</thead>
</table>

1. Mobility for the disabled should be equal across rural and metropolitan areas, not based on one’s proximity to public transportation.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>somewhat agree</th>
<th>somewhat disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

2. The federal government should fund paratransit as a fundamental part of the surface transportation system.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>somewhat agree</th>
<th>somewhat disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

3. Third party payments from sources such as Medicaid often result in health related trip prioritization. Additional federal funding is needed to place other trip purposes on equal footing with health related trips.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>somewhat agree</th>
<th>somewhat disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

4. Paratransit riders should pay a greater share of the cost for their use of paratransit services.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>somewhat agree</th>
<th>somewhat disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

5. Since 1997, local public transit agencies have not received federal funding for operations. If there were some federal transportation funding available for operating expenses, the quality and effectiveness of paratransit services would be improved.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>somewhat agree</th>
<th>somewhat disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

6. The quality and effectiveness of paratransit services would be improved if there were additional state funding available for operating expenses.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>somewhat agree</th>
<th>somewhat disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

7. Paratransit services would be improved if they were (Order 1-best option to 4-worst option).

- [ ] Funded and provided by highway agencies
- [ ] Funded by highway agencies, but provided by transit agencies
- [ ] Funded by highway agencies but provided by other private organizations
- [ ] Continued to be funded and provided by public transportation

8. Paratransit services would be more cost effective if they were provided using

- [ ] A dedicated fleet and public employees
- [ ] A dedicated fleet and private employees
- [ ] Vouchers to purchase own public transportation
9. Paratransit services would be more efficient if they were expanded to provide services to all non-drivers (i.e. elderly, teens, etc.)

| Strongly Agree | Somewhat Agree | Somewhat Disagree | Strongly Disagree |

10. What is your perception of where funding for the provision of paratransit services falls among the priorities of decision makers for the reauthorization of TEA-21?

| High Priority | Middle of the road priority | Low Priority |
### Appendix 6: Gas Tax Rates and Periods of Applicability

<table>
<thead>
<tr>
<th>Rate of Tax in cents per gallon</th>
<th>Period to Which Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>June 21, 1932, to June 16, 1933</td>
</tr>
<tr>
<td>1.5</td>
<td>June 17, 1933, to December 31, 1933</td>
</tr>
<tr>
<td>1</td>
<td>January 1, 1934, to June 30, 1940</td>
</tr>
<tr>
<td>1.5</td>
<td>July 1, 1940, to October 31, 1951</td>
</tr>
<tr>
<td>2</td>
<td>November 1, 1951, to June 30, 1956</td>
</tr>
<tr>
<td>3</td>
<td>July 1, 1956, to September 30, 1959</td>
</tr>
<tr>
<td>4</td>
<td>October 1, 1959, to March 31, 1983</td>
</tr>
<tr>
<td>9</td>
<td>April 1, 1983, to December 31, 1986</td>
</tr>
<tr>
<td>9.1</td>
<td>January 1, 1987, to August 31, 1990 (a)</td>
</tr>
<tr>
<td>9</td>
<td>September 1, 1990, to November 30, 1990</td>
</tr>
<tr>
<td>14.1</td>
<td>December 1, 1990, to September 30, 1993</td>
</tr>
<tr>
<td>18.4</td>
<td>October 1, 1993, to December 31, 1995 (b)</td>
</tr>
<tr>
<td>18.3</td>
<td>January 1, 1996 (c), to September 30, 1997</td>
</tr>
<tr>
<td>18.4</td>
<td>October 1, 1997 (d), to March 31, 2005</td>
</tr>
<tr>
<td>18.3</td>
<td>April 1, 2005, to September 30, 2005</td>
</tr>
<tr>
<td>4.3</td>
<td>October 1, 2005 and thereafter</td>
</tr>
</tbody>
</table>

---

### Appendix 7: Calculations of Inflation Rate

**Calculations Increase in Highway Trust Fund based on Inflation Rate of 1.5%**

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index</th>
<th>New Gasoline Tax Accounting for Inflation (Cents/Gallon)</th>
<th>Additional Highway Trust Fund Revenues (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1.50%</td>
<td>$18.68</td>
<td>$310</td>
</tr>
<tr>
<td>2005</td>
<td>1.50%</td>
<td>$18.96</td>
<td>$620</td>
</tr>
<tr>
<td>2006</td>
<td>1.50%</td>
<td>$19.24</td>
<td>$940</td>
</tr>
<tr>
<td>2007</td>
<td>1.50%</td>
<td>$19.53</td>
<td>$1,260</td>
</tr>
<tr>
<td>2008</td>
<td>1.50%</td>
<td>$19.82</td>
<td>$1,590</td>
</tr>
<tr>
<td>2009</td>
<td>1.50%</td>
<td>$20.12</td>
<td>$1,930</td>
</tr>
<tr>
<td>2010</td>
<td>1.50%</td>
<td>$20.42</td>
<td>$2,260</td>
</tr>
<tr>
<td>2011</td>
<td>1.50%</td>
<td>$20.73</td>
<td>$2,610</td>
</tr>
<tr>
<td>2012</td>
<td>1.50%</td>
<td>$21.04</td>
<td>$2,950</td>
</tr>
<tr>
<td>2013</td>
<td>1.50%</td>
<td>$21.35</td>
<td>$3,310</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$17,780</td>
</tr>
</tbody>
</table>

**Calculations Increase in Highway Trust Fund based on Inflation Rate of 4%**

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Price Index</th>
<th>New Gasoline Tax Accounting for Inflation (Cents/Gallon)</th>
<th>Additional Highway Trust Fund Revenues (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>4.00%</td>
<td>$19.14</td>
<td>$820</td>
</tr>
<tr>
<td>2005</td>
<td>4.00%</td>
<td>$19.90</td>
<td>$1,680</td>
</tr>
<tr>
<td>2006</td>
<td>4.00%</td>
<td>$20.70</td>
<td>$2,570</td>
</tr>
<tr>
<td>2007</td>
<td>4.00%</td>
<td>$21.53</td>
<td>$3,500</td>
</tr>
<tr>
<td>2008</td>
<td>4.00%</td>
<td>$22.39</td>
<td>$4,460</td>
</tr>
<tr>
<td>2009</td>
<td>4.00%</td>
<td>$23.28</td>
<td>$5,470</td>
</tr>
<tr>
<td>2010</td>
<td>4.00%</td>
<td>$24.21</td>
<td>$6,510</td>
</tr>
<tr>
<td>2011</td>
<td>4.00%</td>
<td>$25.18</td>
<td>$7,590</td>
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<tr>
<td>2012</td>
<td>4.00%</td>
<td>$26.19</td>
<td>$8,720</td>
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<tr>
<td>2013</td>
<td>4.00%</td>
<td>$27.24</td>
<td>$9,890</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$51,210</td>
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</table>
## Appendix 8: US State Gas Tax Rates

<table>
<thead>
<tr>
<th>State</th>
<th>State Excise Tax</th>
<th>Other State Taxes</th>
<th>Total State Taxes</th>
<th>Total Federal &amp; State Taxes</th>
<th>Rank (Most Expensive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>16</td>
<td>5</td>
<td>21</td>
<td>39.4</td>
<td>32</td>
</tr>
<tr>
<td>Alaska</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>26.4</td>
<td>51</td>
</tr>
<tr>
<td>Arizona</td>
<td>18</td>
<td>1</td>
<td>19</td>
<td>37.4</td>
<td>40</td>
</tr>
<tr>
<td>Arkansas</td>
<td>21.5</td>
<td>0.2</td>
<td>21.7</td>
<td>40.1</td>
<td>27</td>
</tr>
<tr>
<td>California</td>
<td>18</td>
<td>14</td>
<td>32</td>
<td>50.4</td>
<td>3</td>
</tr>
<tr>
<td>Colorado</td>
<td>22</td>
<td>0</td>
<td>22</td>
<td>40.4</td>
<td>25</td>
</tr>
<tr>
<td>Connecticut</td>
<td>25</td>
<td>4.7</td>
<td>29.7</td>
<td>48.1</td>
<td>8</td>
</tr>
<tr>
<td>Delaware</td>
<td>23</td>
<td>23</td>
<td>46</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Dist. of Columbia</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>13.6</td>
<td>16</td>
<td>29.6</td>
<td>48</td>
<td>9</td>
</tr>
<tr>
<td>Georgia</td>
<td>7.5</td>
<td>4.7</td>
<td>12.2</td>
<td>30.6</td>
<td>50</td>
</tr>
<tr>
<td>Hawaii</td>
<td>16</td>
<td>19.1</td>
<td>35.1</td>
<td>53.5</td>
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<td>Idaho</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>15</td>
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</tr>
<tr>
<td>Illinois</td>
<td>19</td>
<td>11</td>
<td>30</td>
<td>48.4</td>
<td>7</td>
</tr>
<tr>
<td>Indiana</td>
<td>15</td>
<td>3.1</td>
<td>18.1</td>
<td>36.5</td>
<td>43</td>
</tr>
<tr>
<td>Iowa</td>
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<td>21.1</td>
<td>39.5</td>
<td>31</td>
</tr>
<tr>
<td>Kansas</td>
<td>23</td>
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<td>47</td>
<td>17</td>
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</tr>
<tr>
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<td>15</td>
<td>6.4</td>
<td>21.4</td>
<td>39.8</td>
<td>29</td>
</tr>
<tr>
<td>Louisiana</td>
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<td>20</td>
<td>40</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td>22</td>
<td>1.5</td>
<td>23.5</td>
<td>41.9</td>
<td>20</td>
</tr>
<tr>
<td>Maryland</td>
<td>23.5</td>
<td>23.5</td>
<td>47.0</td>
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</tr>
<tr>
<td>Massachusetts</td>
<td>21</td>
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<td>21.5</td>
<td>39.9</td>
<td>28</td>
</tr>
<tr>
<td>Michigan</td>
<td>19</td>
<td>7.2</td>
<td>26.2</td>
<td>44.6</td>
<td>12</td>
</tr>
<tr>
<td>Minnesota</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td>18</td>
<td>0.8</td>
<td>18.8</td>
<td>37.2</td>
<td>42</td>
</tr>
<tr>
<td>State</td>
<td>State Excise Tax</td>
<td>Other State Taxes</td>
<td>Total State Taxes</td>
<td>Total Federal &amp; State Taxes</td>
<td>Rank (Most Expensive)</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>----------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Missouri</td>
<td>17</td>
<td>17</td>
<td>35.4</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>27</td>
<td>0.8</td>
<td>27.8</td>
<td>46.2</td>
<td>10</td>
</tr>
<tr>
<td>Nebraska</td>
<td>24.5</td>
<td>0.9</td>
<td>25.4</td>
<td>43.8</td>
<td>13</td>
</tr>
<tr>
<td>Nevada</td>
<td>23</td>
<td>10.3</td>
<td>33.3</td>
<td>51.7</td>
<td>2</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>18</td>
<td>2.6</td>
<td>20.6</td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td>New Jersey</td>
<td>10.5</td>
<td>4</td>
<td>14.5</td>
<td>32.9</td>
<td>48</td>
</tr>
<tr>
<td>New Mexico</td>
<td>17</td>
<td>1</td>
<td>18</td>
<td>36.4</td>
<td>44</td>
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