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Free-Fare Transit for People Disabilities who are Paratransit Eligible

Intro:

According to the 2000 Census, there are 50 million Americans who identifies as having a disability. Of this figure, over 18 millions people with disabilities between the ages of 16 and older have a condition that impedes their ability to leave their home for social, medical, employment, and personal business travel because of the present physical urban environment[1]. In addition, 1.6 millions people with disabilities who use wheelchairs and scooters report difficulty accessing or utilizing their local public transportation system in its current design and operation[2].

The 1990 American with Disability Act (ADA) prohibits discrimination against persons with disabilities in the areas of employment, public services such as transit, public accommodations, private services, and telecommunications. The statue mandates that any agencies who receive federal monetary aids must provide equal access and service to people with disability. For public transit agencies, who are a major recipient of government financial aids, this means that fix routes service such as buses and rail transit must be in compliance with ADA requirements. When fix routes transit does not comply with the ADA an alternative mode of transportation, called "Paratransit", is necessary.

[1] Waldrop et al., 2003
[2] Kaye et al., 2000

Paratransit is a personalize transportation option that provides door-to-door* service to passengers who are unable to use fix route transit system. For many transit agencies, the rising operation costs and constant demand growth for Paratransit service further tax an already financially strap agency.

The significantly high number of passengers who are unable to use public transportation in its present condition and a urgency for transit agencies to find a sustainable solution to mitigate the increase demand and operational cost of Paratransit, a cost/benefit analysis will be done to examine whether a fare incentives program can offset some of the design and operational issue with fix route transit system and alleviate the Paratransit system. This paper will explore the financial, equity, and social implications of providing free-fare transit to people with disabilities who are paratransit eligible.

Problem:

The accommodation of people with disabilities on American public transit systems has been a complex policy puzzle for nearly forty years. It has long been an objective to accommodate all potential users of public transit, and transit operators know that the disability community includes many regular transit users. The Federal Transit Act of 1970 (Section 16a), The Rehabilitation Act of 1973 (Section 504), The Federal Highway Act of 1973 (Section 165b), and The Surface Transportation Assistance Act (STAA) of 1982 all include language to ensure people with disabilities equal rights to utilize mass transportation facilities and services, and require transit agencies to

* A "Door-to-door" service implies the paratransit driver pick-up the passenger in front of the door at their home and deliver them to the door at their destination. "Curb-to-curb" is a similar services except that the driver only pick-up and drop-off the passenger at the curb.

incorporate accessibility into the planning and design of their infrastructures and services. To implement this goal, accessibility criteria were established to standardize designs and services. The Americans with Disabilities Act (ADA) of 1990 was a landmark in the evolution of public transit. It mandated equity of services and access for people with disabilities. Its provisions led to guidelines for transit service and design features of transit vehicles, stations and stops. Operators must, of course, contain costs while providing efficient service to customers under conditions that include reduced transit funding, crowding, heavy urban traffic, and extreme weather conditions.

Access to transportation network provides people the opportunity to engage in their surrounding environment, as it is the gateway to civic activities and allows one to be productive in society. Millions of people daily use various modes of transit to carry out their daily tasks; accessing employment, social activities, or business and personal travel. As such, transportation needs may differ from person to person depending on their conditions such as physical abilities, economic needs, and time constraints. For person with disabilities all three conditions hold true, especially a person's physical ability to use transportation system.

Transportation modes choices are plentiful for people who have the means to utilize them. Access to transportation as private vehicles, public transit, and rental services (i.e. taxi, City Car Share, rental agencies, etc.) allows a person mobility freedom to chose which mode meets their needs. While access to the above mention transit options is readily available for consumption, for people with disabilities access to such transportation options may be limited. A person health condition can be a factor that may dictate a particular usage of transportation mode, as private vehicles or public transit. The

level of accessibility a transit system that meets the American with Disabilities Act of 1990 (ADA) is another contributing factor that permits usage of a mode by person with disabilities. Frequent and unreliable access to elevator, ramp, and lift on rail and bus transit system are additional impediments to using mass transit for PWD[3]. As a result, there is a higher barrier to accessing transportation system for PWD.

The advantages for owning private vehicles are countless, but some of the key benefits include a reliable mode to travel, flexibility to use, and the convenience of traveling directly the point of interest. However for people with disabilities, there are some challenges to owning private vehicle. The first barrier to owning a car is the significant cost of purchasing a car. One would need to buy a regular automobile, usually a van type for users in wheelchairs, and then modify the vehicle in order to enter and exit it. Once a vehicle is bought, there is the annual cost to maintenance and service the vehicle.

The second impediment of owning a car is the person physical ability to operate it independently. A car can be retrofit with gadgets that will adapt the vehicle control panel to the individual needs, but this is base on the individual economic ability to pay for such modifications. The cost of retrofitting a vehicle can vary depending on the configuration, but price can range $20,000 to $60,000[4]. One can also purchase a used vehicle where price can range from $5,000 to $40,000[5], but the cost is still higher than for a used non-modified regular automobile. The cheapest route is to adapt a private vehicle to allow just access inside, with no steering wheel control modification, and have a non-disabled

[3] Person/People with Disabilities
[4] http://www.vantagemobility.com/
[5] http://www.disableddealer.com

person operate the vehicle. While this method is the most affordable, it still requires PWD to rely on another person for traveling assistance.

Access to transportation is a significant barrier to obtaining employment for the million Americans with disabilities who are transit dependent. One-third of PWD report that the present condition of transportation system is inadequate to achieve employment opportunities. The lack of sufficient reliable transportation options can mean the difference between being employed or unemployed. Of the 50 million PWD in America, "more than 17 million of working-age individuals have a self-reported disability that limits work."[6] According to the 2000 Census data, unemployment rate for PWD is 30% of the total disabled population, twice as high as for those without a work disability. This staggering number implies that those who are unemployed are on federal aids and assistance. In California, an unemployed individual with a disability may receive up to $800 per month in Supplemental Security Income (SSI) to cover the cost of living expenses -- housing, utilities, food, and transportation. The low living allowance put PWD in difficult situation to decide how to best balance the number of time s/he wish to travel outside the house verse the amount spent on food and housing expenditures. The opportunity cost of either choices can mean being isolated at home or not having adequate funds for home expenditures.

Free-fare transit is not a foreign idea and has in fact been implemented for numerous years in different program variation. Many transit agencies and metropolitans offer such option as a mean of social policy and environmental concerns. University Class-Pass, Spare the Air Day, and Transit Zones are examples of some existing free-fare transit programs offer to the general public. The motivation for free-fare programs can be for

[6] The Center for an Accessible Society

various reasons such as environmental concerns, filling up empty buses, or as welfare service.

Benefit/Cost Analysis

Transportation systems have a significant impact on the way a region develops and on the quality of life for its residents by determining access to economic establishments, employment opportunities, housing locations, and recreational activities. Therefore, transportation policy, planning, and investment can be a powerful vehicle for promoting regional equity. However, transit equity needs can vary among stakeholders as each may vie for investments in different areas in transportation services that will meet their group interests.

The goal of any transportation agencies is to provide transit service to the general public who may not have access to private vehicles. As such, transportation planning tries to serve communities that are under serve, while aiming to operate routes that meet the city future growth plans. People of all ages, sizes, and physical abilities all have different transit needs and transportation agencies must somehow finds ways to accommodate them. All metropolitan transportation agencies (i.e. AC Transit, SF Muni, SacRT) are semi-public/private enterprise as they receive funding from the federal government and revenues from the fare collections. This quasi agency therefore operates under a business model and must manage cost. As such, transit agency must find a balance between providing high quality transit services while still being able to balance cost.

The objectives for transit passengers are to find a reliable and affordable mode of transportation that will get them to their destination quickly, safely, and conveniently. For

people with disabilities, transportation needs are greater than their able-body counterparts. One important desire is the ability to access transit vehicles safely and independently. However, current transportation system program and infrastructure designs have not been adequate enough provided this level of accessibility. Cost is the other major concern when using transit, as using any other mode than fix routes lines are expensive. Paratransit charge a fare between $3 to $7 depending on the desire distance traveled[*]; despite this high fare, booking a Paratransit ride is not 100% guarantee as the specialize transit program is overwhelm with requests and there is insufficient resources to meet demand.

The American with Disabilities Act of 1990 (ADA) require transit agency, particularly bus operators, to either modify or purchase new entire fleets of buses with wheelchair ramps or lifts and securement system. In addition, the ADA also requires a complementary Paratransit service must be available to passengers who cannot use fix route transit. Initially Paratransit was seen by transportation agency as a quick fix to provide this specialize transit services to the disability community until infrastructures to transit systems were upgrade to allow PWD equal access to fix routes. However, the design and development of transit system has not adequately been sufficient in providing accommodations that would allow PWD to use transit safely and independently.

The cost of funding Paratransit in the early 1990's was relatively minimal as the number of qualified passengers was low. However as the disability population grew, the demand for Paratransit services increase and so did the cost to operate it too. The East Bay transit agency, AC Transit, saw its Paratransit budget starting from relatively nothing

[*] The fare for a single one way paratransit ride ranges from $3 to $7 based on the distance traveled. The fare is determined by a radius increment and usually the maximum fare is associated with trips to the airport.

in 1990 to increase more than $20 million annually in present day.[7] Paratransit is not just inconvenient to use by passengers, but it is also costly to maintain and operate. During economic times when it is difficult to be financially solvent, transit agencies often make cost saving measures by reducing services or limiting routes or raising fares to meet budgeting objectives. While costs saving plan are carry out, Paratransit remain to be a multimillion-dollar sacred cow whose operation and funding rarely diminish.

AC Transit faces this similar accounting challenge in December 2005, as the agency eliminated 43 fix routes lines to balance a $50 million deficit. However anything associate to the Paratransit program had to remain untouched. As off 2005, Paratransit-related costs comprise roughly 7% of AC Transit's $248 million annual budget. This figure is significant considering that 688,443 riders served annually by the Paratransit program translate only about two thirds of 1% of the agency's total annual ridership of about 69 million. The reason for the significant cost is that the agency heavily subsidizes Paratransit by about $36 per ride, while passenger are charge a fare between $3 to $7 per ride depending on the distance traveled[8].

It is projected as the cost to operate Paratransit service continue to escalate, demand for the service also is expected to increase as insurgent of new audiences, such as baby boomers becoming seniors and war veterans return home, will want to use this transportation service. Aside from cost, it will be challenging for transit to manage subscription as it will be difficult to wean current Paratransit passengers off from this service as many have become accustom to this type of personalize transportation service that best meet their needs. While there may be some members who could technically use

[7] AC Transit's Paratransit GM Memo No. 06-258
[8] AC Transit's webpage

fix route transit in certain situation, they may opt not to and prefer Paratransit because they know they will always be secured properly and will encounter a driver whose entire day involves serving passengers like themselves.

Managing operational cost and regulating future demand is a challenging task transit agency will encounter and need to strategize a course of action to mitigate this issue before it become uncontrollable. One way is to pursue a more aggressive fare policy that will sway riders from choosing fix routes or Paratransit service. A current practice transit agency are employing is the use of financial incentives to use fixed route service can be created simply by raising paratransit fares in relation to fixed route fares. There are provisions in the Americans with Disabilities Act of 1990 that allows ADA Paratransit fares to be up to twice the fare for a comparable trip on the fixed route system. Research suggests that for every 10% increase in paratransit fare, a 3% decrease in ridership can be expected. The relationship between fares and ridership can be expressed as[9]:

$$\log (Rz/Ri) = -0.3 \log (F\sim/FI)$$

Where, RI = ridership prior to the change in fares
FI = original fare
R1= ridership after the change in fares
F2 = new fare

The goal of such program is to make fixed route travel a financially attractive compare to use of the paratransit service but who can sometime make trips on the fixed route system are encouraged to select the fixed route option. The use of financial incentives can reduce the need for trip-by-trip eligibility determination since the rider self-selects the mode that is appropriate and less costly. For non-subscription trips and

[9] TCRP Web Doc 2 Evaluating Transit Operations for Individuals with Disabilities

infrequently made trips (where doing trip-by-trip eligibility determination can be operationally difficult), fare incentive programs are an enhancement that can help to ensure the appropriate use of paratransit service.

From an operation standpoint, using this fare structure is optimal for transit provider as they are able to regulate cost while allowing the end user the choice to decide which transit option to utilize. However, passengers do not benefit from this policy as it restrict them to travel either less or at short distance. PWD who depends on public transit as their mode of travel are generally of lower income and on SSI. As stated earlier, SSI recipients do not have the economic flexibility to travel free as one may wish, because the $800 monthly allowance forces PWD to consciously spend within their means. The consequence of rationalizing between transit and housing needs systematically deny PWD the opportunity to engage in civic activities as the non-disabled population.

A way to encourage PWD to use fix routes is to first improve physical infrastructures that will allow access to use the transit system. The next step is to offer fare incentive programs that will be advantage for PWD to use fix route. One such policy is to introduce free fare on all fix routes system to all eligible Paratransit subscribers. This affords them the option of using fix route in travel that allows it, while having Paratransit as a backup service when situation call for it. The free fare will incentivizes PWD to use fix routes more often as the only cost incur is the time it takes to travel on that mode verse Paratransit.

In a report titled *TCRP Web Doc 2 Evaluating Transit Operations for Individuals with Disabilities*, a comprehensive review of fare incentive programs was examine in Ann Arbor, Michigan, Austin, Texas, Bridgeport, Connecticut, Miami, Florida and Tulsa,

Oklahoma of the results of offering free fare transit program to PWD. The report yield the following interesting findings:

- Overall cost saving by transit operators
- Generate additional travel on transit. Austin, TX experienced the greatest increase, with average 2 to 5 times.
- Revenue loss on fare collection by riders paying half-fares shifting to the new free fare incentive programs was found. This loss of revenue is, in most cases, is a fraction of the potential paratransit cost savings. Politically, however, such a loss of revenue may be difficult to justify or sustain.
- Linking free fares to ADA paratransit eligibility can result in an increase in the number of persons requesting eligibility certification.

In the city of Austin, TX transit riders indicated that free service was one of the reasons they decided to try fixed route and continue riding that service. Even though the free fare was not the primary impetus for using fix routes transit, the program was success in luring PWD to use other mode of transit then Paratransit. Passengers who used the free program consistently opine that fixed route generally provided a better level of service. The TCRP report also examined which programs, policies, and service influenced their decision to use fixed route, and the response were the inflexibility of paratransit and the 6% denial rate were significant reason to use fixed route; the free fares program were noted as a factor[10].

One of the most interesting findings from the TCRP report is a chart that calculates the impact of reducing fare can incentivizes PWD to switch over to fix routes transit system. Table VI-12 depicts the number of annual free fixed route rides each metropolitan provides. Then calculation were performed estimating how many of the free trips were riders shifting from paratransit, riders shifting from the half fare program, or

[10] TCRP Web Doc 2 Evaluating Transit Operations for Individuals

new trips generated because of the lower fare. From this figure, estimated trips shifted from paratransit to fixed route are shown both as a number and as a percentage of the system's total paratransit demand.

Table VI-12. Summary of Free Fixed Route Rides by Type of Rider

	Total Free Fixed Route Rides per Year	Rides Shifted from Paratransit to Fixed Route	% of Total Paratransit Demand Shifted	Rides Shifted from Half-Fare to Free Fare	New Fixed Route Rides by Persons with Disabilities
Ann Arbor	144,300	36,200	23%	44,100	64,000
Austin	1,305,000	106,800	23%	198,000	over 1 million
Bridgeport	253,400	6,400-19,000	6-17%	162,000	72,400-85,000
Miami	187,000	33,000-66,000	4-8%	0	121,000-154,000
Tulsa	72,000	up to 72,000	up to 34%	0	up to 72,000

Using figures calculate from above, Table VI-13 then uses those figures regard the free fixed route rides to determine annualized paratransit savings, fixed route revenue losses and annualized net cost savings. Multiplying the trips shifted to fixed route by the net paratransit trip cost (total cost minus paratransit fares) yield values “Annualized paratransit savings”. Trips shifted from half-fare to free fare multiplied by the fixed route half-fare are “Annualized fixed route revenue losses.” Lastly, the difference between paratransit savings and fixed route revenue losses are displayed in “Annualized net savings.”

Table VI-13. Summary of Estimated Savings

	Annualized Paratransit Savings	Annualized Fixed Route Revenue Losses	Annualized Net Savings
Ann Arbor	$207,535	$15,448	$192,087
Austin	$1,591,320	$99,000	$1,492,320
Bridgeport	$91,072-$270,370	$64,930	$26,142-$205,440
Miami	$505,890-$1,011,780	0	$505,890-$1,011,780
Tulsa	up to $607,680	0	up to $607,680

Conclusion

Transportation is an essential component part of our daily lives. We use various transit modes daily --private and/or public-- to engage the surrounding environment. It is the gateway in accessing economic establishments, employment opportunities, housing locations, and recreational activities. For the million of people with disabilities, public transportation is the primary viable transit option given the financial and physical limitation one may have. In addition, PWD also have a significant unemployment rate and thus more like to dependent on federal aids, such as SSI, to live off. The amount of income received from SSI put many recipients below the poverty level, as annual income is $9,600. Families earning less than $12,000 per year spend over one-third of their income on transportation.[11]

From an equity standpoint, everyone is entitle to adequate access to transportation system and access to it should not discriminate base on one's financial ability. The majority of fix route transit service are not accessible to 18 millions PWD in its present condition. Paratransit is an available option to passengers who cannot use fix routes, but there are a myriad of problems associate with this program. PWD living off SSI funds of $800 per month must stretch that amount to cover all living expenses and it does not leave much opportunity to travel on Paratransit where cost is about $3 to $7 per ride. This means that million of PWD who are financially strapped are face with the difficult choice of either obtaining basic living necessities (i.e. food & housing) or access transportation needs.[12]

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[11] "Driven to Spend," STPP/Center for Neighborhood Technology Report
[12] Disabled win break on RT fees

Implementing a free fare program is not only sound public policy but also benefits both parties involved; passengers with disabilities and transit operators. A free ride program would alleviate some of the financial budget constraints PWD face and afford opportunities to readily engage society. The ability to travel for free help mitigate the current challenges on using transit system that are not 100% accessible.

For transit operators, a free program would incentivize PWD to shift their mode preference from Paratransit to fix routes. This change in modal choice will allow operators to curb the burgeon cost of servicing Paratransit and keep the number of members to a manageable level. The TCRP report evident the success the transit agencies had when it offered a free ride program to its customers. The cost saving of this program greatly is significant and out weight other incentives programs. As the population grows there will be more aging and physically challenge Americans who will need adequate transportation service and free fare program can be the solution to keeping the cost borne by transit operators down.

Appendix

The follow are list of transit agencies in metropolitans across American that currently offer free fare program to incentivize PWD to use fix routes. All of these transportation operators have experience positive cost saving measures from this program, as demand for Paratransit service are keep at manageable levels.

Sacramento Regional Transit (SacRT)
General Information: Provides free fare on all buses and light rail transit system to all eligible paratransit members.

Los Angeles Metropolitan Transportation Authority (METRO)
General Information: Provides free fare on all buses and light rail transit system to all eligible paratransit members.

Washington Metropolitan Area Transit Authority (WMATA)[13]
General Information: In 2004, WMATA launched a pilot program to offer free rides on fix routes to PWD. The program was a success and popular that the transit agency now offer free fare permanently.

Rhode Island Public Transit Authority (RIPTA) -- RIPTA's Pass Program: Senior & People with Disabilities

General Information: Low income persons with a disability or aged 65 and above may ride free of charge with a RIPTA No Fare ID Pass. All other persons aged 65 and above or with a disability pay full fare during RIPTA peak hours of service (7 am - 9 am and 3 pm - 6 pm) on weekdays and pay 1/2 fare all other times upon presentation of a RIPTA Senior/Disabled Reduced Fare ID Pass or a Medicare ID Card.

Fare Policy: Any person holding a Senior or Disabled Reduced Fare ID is required to pay half-fare during off-peak hours and full fare during peak hours on all fixed route service. Any person holding a Senior or Disabled No Fare ID rides free on all fixed route service.

Seattle, WA Metro King County -- Downtown Ride Free Area (map)
General Information: Riding Metro Transit is free between 6 a.m. and 7 p.m. daily in Downtown Seattle. The Ride Free Area extends from the north at Battery St. to S. Jackson St. on the south, and east at 6th Avenue to the waterfront on the west. Metro routes 116, 118 and 119 are not included in the Ride Free area.

Seattle Metro also has map of accessibility features in Downtown (map).

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[13] http://www.wmata.com/about/met_news/PressReleaseDetail.cfm?ReleaseID=1123 & http://www.wmata.com/about/met_news/PressReleaseDetail.cfm?ReleaseID=1377&string=free%20ride

Montgomery County, MD Transit
General Information: Beginning July 3, seniors and people with disabilities can ride FREE, Monday through Friday, 9:30 am - 3:00 p.m. Seniors must be 65 years or older and have a valid Metro Senior ID card or Medicare card and photo ID, and persons with disabilities must have a Metro Disabled ID card.

Miami-Dade, FL Transit
General Information: Metromover is free for ALL passengers (map).

Cape May County, NJ Transit
General Information: Fare-Free Transportation is a client service oriented organization dedicated to providing safe, efficient, and effective accessible transportation to the residents of Cape May County. As a community para transit system, Fare-Free provides demand response, subscription, and modified fixed-route bus transportation service to senior citizens, persons with disabilities, veterans, persons of low-income, and general public on a "seat-available" basis. Eligibility requirements are defined by the requirements of the various funding sources utilized to provide this service free of charge.

Capital Metro, Austin TX Transit
General Information: Seniors, Persons with disabilities, and Medicare Cardholder

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