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School Transportation and Students with Significant Disabilities: A Cost Analysis Strategy

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<u>Abstract</u>

The purpose of this study is to compare the transportation costs associated with three kinds of schools used to provide educational and related services to the vast majority of students with significant intellectual and related disabilities in the USA: home schools, clustered schools and segregated - special - separate schools. A home school is the public school a student would likely attend if she/he was not disabled. A clustered school serves students without disabilities, but it also serves unnatural or disproportionately large numbers of students with disabilities. A segregated - separate school is one that serves only students with disabilities.

Introduction

In 1975 Public Law 94 -142 was passed and for the first time in USA history all children with disabilities were afforded legal rights to tax supported educations. Prior to 1975 approximately one million children in the USA were excluded from public education. Most were among the lowest intellectually functioning 1 - 2% of the extant school age population. Most of the remainder was children with significant physical disabilities and those referred to as severely emotionally disturbed/behavior disordered. This law also mandated that students with disabilities had legal rights to individually appropriate" related services". These included, but were not limited to, occupational, physical and speech and language therapies, psychological services and specialized transportation. Since 1975 the law has been modified and

reauthorized many times. Each time the legal rights of all children to educational and related services have been affirmed (references).

In 1975 most public school officials reasoned that the new students they were legally required to serve were similar to, or extensions of, others they were serving. As most school districts operated clustered and/or segregated schools for students who were then referred to as blind, deaf, orthopedically handicapped, emotionally disturbed and mentally retarded, the overwhelming majority of the new students were assigned to clustered or segregated schools. It was inconceivable to almost all that the formerly excluded children who were considered by extant professionals to be too disabled to attend public schools could or should be allowed in home schools. When school administrators decided to locate educational and related services in clustered and segregated schools, they were also responsible for transporting the students from home to school and back. In almost all instances specialized - segregated - separate - handicapped only - transportation services were provided at taxpayer expense.

<u>A Priori Hypotheses</u>

Many, if Not most, school experiences are means to important ends. The ends of concern here are individuals with disabilities living, working and playing in integrated society at school exit and beyond. Thus, when students with disabilities exit school they should be able to walk, wheel or otherwise travel about their communities on public busses and trains, in car pools and in taxi cabs by themselves and with individuals who are and are not disabled to and from a wide variety of vocational, recreation/leisure and general community settings. If they are not taught integrated travel skills during school years, chances are great they will not be developed later. Unfortunately, if they are dependent upon specialized transportation services in post school years, their work, recreation/leisure and other general community environments and activities will be unnecessarily restricted.

Most of the money needed to pay for specialized transportation services comes from the pockets of taxpayers and flows through the budgets of the federal government, individual states and local school districts. However, just because students with disabilities have legal rights to specialized transportation services does not mean they should actually use them. As little as possible should be spent transporting students with disabilities to and from school. As much as possible should be spent on important instructional and related services. The requests, demands, judgments and wishes of parents are important, but rarely sufficient to justify providing unnecessary specialized transportation services. Parents, as contributing members of educational and related service teams, may influence the transportation services are provided. However, safety, cost - benefit ratios, social relationship development and that which best prepares a student for an integrated and productive post school life must be honored when deciding upon transportation services during school years. Finally, assume an important educational or related service is Not portable; i.e. It can only be provided in a specific place. If a student with disabilities actually needs a Nonportable service, we must transport her/him to and from it. Fortunately, most, if Not all, important educational or related services are portable. It is usually better for service providers to travel to and from schools than for students with disabilities to travel to and from services. Unfortunately, the inverse is the state of the practice.

Home Schools

For many good reasons, federal law requires that a school placement be provided in an individually appropriate educational setting as close to home as possible - the least restrictive environment. It also requires that if an IEP does not describe specific restrictions, an individual is to be educated in the school he/ she would attend if Not disabled - her/his home school. "Home" rather than "neighborhood"

is used to refer to the schools of concern here because many students without disabilities do not attend schools in their neighborhoods for several reasons.

So contact with students who are perceived as negative influences can be escaped, reduced or avoided.

Some districts operate "magnet" schools and students choose to travel long distances and experience the associated inconveniences in order to attend them. Some districts transport large numbers of students across traditional attendance boundaries for racial balance purposes.

Some schools set aside percentages of their capacities and allow "choice" or "random selection" to a limited number of students who do not live in their immediate attendance zones.

Clustered Schools

Clustered schools are a regular/ general education schools that are attended by an unnaturally large proportion of students with disabilities. Often, a regular/general education school in a specific attendance zone with available space is selected and three, four or five classes of students with disabilities are placed or otherwise established therein. For some with disabilities it may be their home school. However, for the overwhelming majority of students with disabilities, the clustered school is not the one they would attend if they were not disabled

Segregated - Separate - Special Schools

Segregated, separate, special schools are attended only by students with disabilities. Their very nature requires specialized transportation services. Typically, the only persons without disabilities involved are paid to be there. Most students who attend segregated schools must spend extraordinary amounts of time and energy traveling relatively long distances getting to and from.

Sources of Information

It is intended that this instrument could be adapted rather easily and used for many purposes. First, it may be of interest to the study school transit related phenomena associated with an individual student. Parents may be interested in the best transit options for their child. Teachers and therapists may be interested in designing the best transit component of an IEP. School and district level administrators may be interested in the most cost efficient transportation option for a particular student. Second, the instrument can be used to study transit related issues associated with two rather than the three school options delineated. It should also be rather easy to adapt it for use with school options not delineated. Third, it can be used in mediation and due process hearings and other judicial procedures as an information gathering aid to dispute resolution. Fourth, it can be used by school boards and other policy making bodies interested in generating the most fiscally sound educational and related services for large numbers of students.

The information contained in this cost analysis study was or will be obtained from at least the following sources.

______interviews of parents of students with disabilities -
live/phone/email______parent records of school experiences______student IEP'S______cumulative school records of students______Special Education teacher records______Special Education teacher interviews - live/phone/email______Special Education administrator records______Special Education administrator interviews - live/phone/email______case manager records______case manager interviews - live/phone/email______case manager interviews - live/phone/email______case manager interviews - live/phone/email

 district level school administrator interviews - live/phone/email
 transportation department records
 transportation administrator interviews - live/phone/email
 district business office records
 district level business administrator interviews - live/phone/email
 the school district website
 direct observations

District Level School Attendance Information

The number of students with special education classifications and IEPs who live in the district and attend different kinds of schools during the 20 - 20 school year is presented in Table 1

Table 1. District Students with Disabilities Who Attend Different Kinds of Schools in 20 20

Kind of School	Number
Home public schools	
Clustered public schools within the district	
Clustered public schools out of the district	
Clustered private schools within the district	
Clustered private schools out of the district	
Segregated public schools within the district	
Segregated public schools out of the district	

Segregated private schools within the district	
Segregated private schools out of the district	
Private general education schools within the district	
Private general education schools out of the district	

Total

Transporting An Individual Student To and From School

The task here is to determine selected transportation and related experiences of an <u>individual</u> student with disabilities. Data gathered in relation to individuals will be collated across students and reported as district level information.

The name or identification number of the student is

The kind of school the student attended is

_____ a home school.

- _____ a clustered public school within the district.
- _____ a clustered public school out of the district.
- _____ a clustered private school within the district.
- _____ a clustered private school out of the district.
- _____ a segregated public school within the district.
- _____ a segregated public school out of the district.
- _____ a segregated private school within the district.

	a segregated	private school	l out of the district.
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_____ a private general education school within the district.

_____ a private general education school out of the district.

If this student was not functioning in her/his home school, report the reasons.

The district does not provide the services needed in her/his home school.

_____ Students of her/his functioning levels are not allowed in their home schools.

____ Students with her/his special education label are not allowed in their home schools.

- A family must win in a due process or mediation hearing before their child will be allowed to function in his/her home school.
- ____ The principal of her/his home school would Not allow her/him to attend.
- _____ Her/his parents do not want him/her to attend the home school.

Are there valid educational reasons why this student was not based in her/his home public school?

_____Yes

____ No

If Yes, report the valid reasons.

Distance From Home To School

 The student lived
 miles from his/her home school.

 The student lived
 miles from the clustered school he/she attended, if he/she did not attend his/her home school.

 The student lived
 miles from the segregated school he/she attended, if he/she did not attend his/her home school.

if he/she did not attend his/her home school.

If she/he did Not attend her/his home school, the clustered or segregated school he/she attended was ______ miles farther from her/his home than is his/her home school.

<u>Time In Transit</u>

This student typically left home for school at	am.
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This student typically arrived at school from home at _____ am.

The amount of time per day the student spent traveling from home to school was

____ min.

This student typically left school for home at _____ pm.

This student typically arrived home from school at _____ pm.

The amount of time per day this student spent traveling from school to home was

_____ min.

The total amount of time per day this student spent traveling from home to school and from

school to home was _____ min.

Transportation Modes

This student typically traveled from home to school as follows.

walked
rode a bicycle
ambulated in her/his wheel chair
small van
typical large school bus
public bus
train
taxi
private limousine
vehicle of parents

This student typically traveled from school to home as follows.

_____walked

_____ rode a bicycle

_____ ambulated in her/his wheel chair

_____ small van

	typical large school bus
	public bus
	train
	taxi
	private limousine
	vehicle of parents
<u>Travel</u>	Companions
Are the	ere valid reasons why this student cannot go to and from school with and as do his/her
brothe	rs, sisters, friends and/neighbors?
	Yes
	No
If Yes,	report the reasons.
This st	udent typically traveled from home to school with
	No one - alone
	other students with disabilities
	students without disabilities
	students with and without disabilities

	siblings
	parents
	paid adults.
	adult volunteers.
This st	udent typically traveled from school to home with
	no one - alone.
	other students with disabilities.
	students without disabilities.
	students with and without disabilities.
	siblings.
	parents.
	paid adults.
	adult volunteers.
Individ	lual Student Travel Costs

The <u>annual</u> cost of transporting this student to and from his/her home to her/his <u>home school</u> was, or would be if she/he attended his/her home school \$_____.

The <u>annual</u> cost of transporting this student to and from her/his home to the <u>clustered school</u> she /he attends, if she attends one was \$_____.

The annual cost of transporting this student to and from his/her home to the <u>segregated school</u> she attends if she attends one was \$_____.

If the student did not attend her/his home school but would be moved to it, a saving in

transportation costs of \$_____per school year would result.

<u>Summary</u>

The student attended a _____home _____ clustered _____ segregated school.

The school the student attended was ______ miles from her/his home.

The home school of the student was _____ miles from her/his home.

The student spent ______ minutes per day traveling to and from the school she/he attended.

The student typically traveled to and from school with

If the student attended his/her home school, she/he would quite likely have traveled with

The annual cost of transporting this student to and from the school he/she attends was

If the student attended his/her home school, the annual transportation cost would have been

Transporting All Students With Disabilities To And From Schools

Table 2 contains information pertaining to the kind of schools all district students with disabilities attend the <u>range</u> of miles they live from their schools and the <u>average</u> number of miles they travel each day to get from their homes to their schools and back.

Table 1. Distances From Homes To Schools Disaggregated By Kind Of School

Kind of school	Range	Average
Home schools	to	
Clustered public schools within the district	to	
Clustered public schools out of the district	to	
Clustered private schools within the district	to	
Clustered private schools out of the district	to	
All clustered schools	to	
Segregated public schools within the district	to	
Segregated public schools out of the district	to	
Segregated private schools within the district	to	
Segregated Private schools out of the district	to	
All segregated schools	to	
Private general education schools within the district	to	
Private general education schools out of the district	to	
	to	

The total number of students with disabilities who attend home schools in the district is

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The total <u>number</u> of miles students with disabilities live from the <u>home schools</u> they attend ranges from ______ to _____.

The <u>average</u> of number of miles students with disabilities live from the <u>home schools</u> they attend is ______.

The total <u>number</u> of students with disabilities who attend <u>clustered schools both within and out</u> <u>of</u> the district is ______.

The total number of students with disabilities who attend clustered schools within the district is

The total <u>number of miles students with disabilities live from the clustered schools</u> they attend in the district ranges from ______ to _____.

The <u>average</u> of number of miles students with disabilities live from the <u>clustered schools</u> they attend in the district is ______.

The total number of students with disabilities who attend clustered schools out of the district is

The total <u>number of miles students with disabilities live from the <u>clustered schools</u> they attend out of the district ranges from ______ to _____. The <u>average</u> of number of miles students with disabilities live from the <u>clustered schools</u> they attend out of the district is ______.</u> The total number of students with disabilities who attend <u>segregated schools</u> both within and out of the district is ______.

The total number of students with disabilities who attend segregated schools in the district is

The total <u>number of miles students with disabilities live from the segregated schools</u> they attend in the district ranges from to .

The <u>average</u> of number of miles students with disabilities live from the <u>segregated schools</u> they attend in the district is .

The total number of students with disabilities who attend <u>segregated schools</u> out of the district is .

The total <u>number</u> of miles students with disabilities live from the <u>segregated schools</u> they

attend out of the district ranges from _____ to _____.

The <u>average</u> of number of miles students with disabilities live from the <u>segregated schools</u> they attend out of the district is ______.

Table 3 contains information pertaining to the kind of schools students with disabilities attend, the <u>range</u> of times they spend getting to and from their schools and the <u>average amount of</u> <u>time</u> they spend getting to and from their schools each day.

Table 3. Travel Times from Homes To Schools Disaggregated By Kind Of School

Kind Of School	Range	Average
Home schools	to	
Clustered public schools within the district	to	
Clustered public schools out of the district	to	
Clustered private schools within the district	to	

Clustered private schools out of the district	to	
All clustered schools	to	
Segregated public schools within the district	to	
Segregated public schools out of the district	to	
Segregated private schools within the district	to	
Segregated private schools out of the district	to	
All segregated schools	to	
Private general education schools within the district	to	
Private general education schools out of the district	to	
	to	
	to	

The <u>total</u> amounts of times per day students with disabilities spend in transit to and from <u>home</u> schools each day <u>range</u> from _____ min to _____ min.

The <u>average</u> amount of time per day students with disabilities spend in transit to and from <u>home schools each day</u> is ______ min.

The <u>total</u> amounts of times per day students with disabilities spend in transit to and from <u>clustered schools</u> in the district<u>range</u> from <u>min to</u> <u>min to</u> <u>min.</u> The <u>average</u> amount of time per day students with disabilities spend in transit to and from <u>clustered schools</u> in the district is <u>min</u>. The <u>total</u> amounts of time per day students with disabilities spend in transit to and from <u>clustered schools</u> out of the district<u>range</u> from <u>min to</u> <u>min to</u> <u>min.</u> The <u>average</u> amount of time per day students with disabilities spend in transit to and from clustered schools out of the district is <u>min.</u>

The total amounts of times per day students with disabilities spend in transit to and from

segregated schools in the district range from _____ min to _____ min.

The <u>average</u> amount of time per day students with disabilities spend in transit to and from <u>segregated schools</u> in the district is min.

The total amounts of time per day students with disabilities spend in transit to and from

segregated schools out of the district range from _____ min to _____ min.

The <u>average</u> amount of time per day students with disabilities spend in transit to and from <u>segregated schools</u> out of the district is ______ min.

Table 4 contains information pertaining to students with disabilities who attend their home schools and the different kinds of companions who travel to and from school with them. The percentages of different kinds of companions all students with disabilities travel to and from home schools with are also presented.

Table 4. To And From Home School Travel Companions Disaggregated By Kind Of Companion

Kind of companion	Number	Percent
No one - alone.		%
Other students with disabilities		%
Students without disabilities		%

Students with and without disabilities	%
Siblings	%
Parents	%
Paid adults	%
Adult volunteers	%
	%
	Total 100%%
As can be discerned from table 4or	% of the
students with disabilities who attend <u>hom</u>	ne schools travel to and from them with
students who are not disabled.	
or% of the	students with disabilities who attend home
schools travel to and from them with	
or% of the	students with disabilities who attend <u>home</u>
schools travel to and from them with	
	·
or% of the	students with disabilities who attend home
<u>schools</u> travel to and from them with	students with disabilities who attend <u>nome</u>

Table 5 contains information pertaining to students with disabilities who attend <u>clustered</u> <u>schools</u> and the different <u>kinds of companions</u> who travel to and from school with them. The percentages of different kinds of companions all the students with disabilities travel to and from clustered schools with are also presented.

Table 5. To And From Clustered School Travel Companions Disaggregated By Kind Of <u>Companion</u>

Kind Of Companion		Number	Percent
No one - alone			
Other students with disabilities			
Students without disabilities			
Students with and without disabilities			
Siblings			
Parents			
Paid adults			
Adult volunteers			
	Total		100%
As can be discerned from Table 5	or%	of the	students with
disabilities who attend <u>clustered schools</u> tr	ravel to and fro	m them with students	who are not

disabilities who attend <u>clustered schools</u> travel to and from them with students who are not disabled.

______ or ____% of the ______ students with disabilities who attend <u>clustered schools</u> travel to and from them with

.

	or	%	of the	students with disabilities who attend
<u>clustered</u>	<u>l schools</u> travel t	o and fror	n them with	
				·
	or	%	of the	students with disabilities who attend
<u>clustered</u>	<u>l schools</u> travel t	o and fror	n them with	

Table 6 contains information pertaining to students with disabilities who attend <u>segregated</u> <u>schools</u> and the different <u>kinds of companions</u> who travel to and from school with them. The percentages of different kinds of companions all the students with disabilities travel to and from segregated schools with are also presented.

Table 6. To And From Segregated School Travel Companions Disaggregated By Kind Of Companion

Kind Of Companion		Number	Percent
No one - alone			
Other students with disabilities			
Students without disabilities			
Students with and without disabilities			
Siblings			
Parents			
Paid adults			
Adult volunteers			
	Total		100%

As can be discerned from Table 6, _____ or ___% of the _____ students with disabilities who attend <u>segregated schools</u> travel from home to school and back with students who are not disabled.

	or	%	of the	students with disabilities who attend
segregated	<u>d schools</u> trave	l from hon	ne to school and ba	ack with
	or	%	of the	students with disabilities who attend
segregated	<u>d schools</u> trave	l to and fro	om them with	

District Level Transportation Costs In The 20-- - 20-- school year

Table 7 contains information pertaining to the <u>tota</u>l and <u>average</u> annual travel costs associated with the kinds of schools students with disabilities attended and the number who attended each.

Table 7. Total And Average Annual Travel Costs Disaggregated By kind Of School

Kind Of School	Number	Annual Cost	Average
Home schools			
All clustered schools			

Clustered public schools within district	 	
Clustered public schools out of district	 	
Clustered private schools within district	 	
Clustered private schools out of district	 	
All segregated schools	 	
Segregated public schools within district	 	
Segregated public schools out of district	 	
Segregated private schools within district	 	
Segregated private schools out of district	 	
Private general ed schools within district	 	
Private general ed schools out of district	 	
Total	 	

During the 20-- -20-- school year, the district transported a total of ______students with and without disabilities from their homes to schools and back.

During the 20--- – 20--- school year, the total district transportation budget for students without disabilities was ______.

During the 20______ -20_____ school year, the district transported a total of _______ students without disabilities from homes to schools and back. The average number of miles students without disabilities traveled to and from schools was

The <u>average</u> annual_cost per mile of transporting students <u>without</u> disabilities to and from schools was \$_____.

The <u>average</u> annual cost of transporting students <u>without</u> disabilities to and from schools was \$_____.

During the 20-- -20-- school year, the district transported a total of ______ students with disabilities from homes to schools and back.

The average number of miles students with disabilities traveled to and from schools was

<u>The average</u> annual cost per mile of transporting students <u>with</u> disabilities to and from schools was \$_____.

The <u>average</u> annual cost of transporting students <u>with</u> disabilities to and from schools was

\$_____.

The total number of district students who attended home schools is

The <u>total</u> annual cost of transporting all students with disabilities to and from the <u>home schools</u> they attended is \$_____.

The average annual cost of transporting all students with disabilities to and from the home

<u>schools</u> they attended is	\$
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The <u>total</u> annual cost of transporting all students with disabilities to and from the <u>clustered</u> <u>schools</u> they attended both within and out of the district is \$_____.

The <u>average</u> annual cost of transporting all students with disabilities to and from the <u>clustered</u> <u>schools</u> they attended both within and out of the district is \$_____.

The <u>total</u> annual cost of transporting all students with disabilities to and from the within_district <u>clustered schools</u> they attended is \$_____.

The <u>average</u> annual cost of transporting all students with disabilities to and from the within district <u>clustered schools</u> they attended is \$_____.

The <u>total</u> annual cost of transporting all students with disabilities to and from the out of district <u>clustered schools</u> they attended is \$_____.

The <u>average</u> annual cost of transporting all students with disabilities to and from the out of district <u>clustered schools</u> they attended is \$_____.

The <u>total</u> annual costs of transporting all district students with disabilities to and from the <u>segregated schools</u> they attended both within and out of the district is \$_____. The <u>average</u> annual cost of transporting all students with disabilities to and from the

segregated schools they attended both within and out of the district is \$_____.

The <u>total</u> annual cost of transporting all students with disabilities to and from within district <u>segregated schools</u> they attended is \$_____.

The <u>average</u> annual cost of transporting all students with disabilities to and from the within district <u>segregated schools</u> they attended is \$_____.

The <u>total</u> annual cost of transporting all students with disabilities to and from the out of district <u>segregated schools</u> they attended is \$_____.

The <u>average</u> annual cost of transporting all students with disabilities to and from the out of district <u>segregated schools</u> they attended is \$_____.

During the 20 20	school year, the total number of vehicles used to transport
students to and from schools within	and out of the district was
The purchase price of a new large sc	hool bus was
The average cost per mile to operate	e a large school bus was
The cost of making a new large scho	ol bus accessible was
The life span of a new school bus wa	s years.
The purchase price of a new school v	/an was
The average cost per mile to operate	e a school van was
The cost of making a new school van	accessible was
The life span of a new school van wa	syears.
The average annual salary of a schoo	ol bus driver was
The average annual salary of a schoo	ol bus driver assistant – travel aide- was
The average cost per gallon of fuel w	/as
The total annual vehicle maintenance	e costs were
The average annual vehicle mainten	ance cost was
The total annual cost of travel insura	ince was
The total annual cost of travel insura	nce for students <u>without</u> disabilities was
The total annual cost of travel insura	nce for students <u>with</u> disabilities was

Summary - Conclusions - Thoughts

The differences in the distances students had to travel per day to the different kinds of schools
were remarkable. Specifically,
Those who attended home schools traveled an average of miles per day
Those who attended clustered schools traveled an average of miles per day
Those who attended segregated schools traveled an average of miles per day
The differences in the amounts of time per day the students spent in transit were dramatic.
Specifically,
Those who attended home schools spent an average ofminutes per day in
transit. The range was to
Those who attended clustered schools spent an average ofminutes per
day in transit. The range was to
Those who attended segregated schools spent an average ofminutes per
day in transit. The range was to
The differences in the companions the students traveled to the different kinds of schools with
were predictable. Specifically,
Those who attended home schools typically traveled with
Those who attended clustered schools typically traveled with
Those who attended segregated schools traveled with
When the transportation costs associated with the three kinds of schools are
compared, schools are the least costly. Specifically,
The average annual cost of transporting a student with disabilities to and from a home school
was

The average annual cost of <u>transporting</u> a student <u>with</u> disabilities to and from a <u>clustered</u> school was ______. The average annual cost of transporting a student<u>with</u> disabilities to and from a <u>segregated</u> school was

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