

TCGIS Transportation Assessment for the 2015-2016 School Year

May 2015

Overview

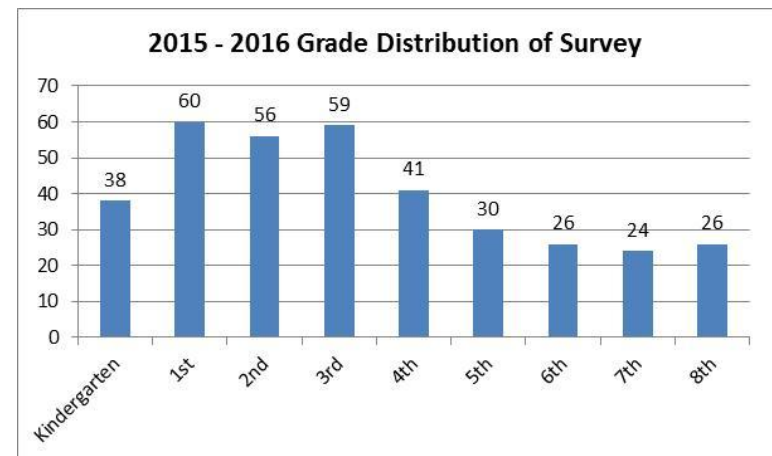
- This document represents the analysis of the Transportation Committee performed over from January to May 2015.
- Committee Members included the following individuals:
 - Rob Hennelly, Ann Jurewicz, Jeff Horton, Matt Burress, Amy Ireland, Lisa Kjellander, Fred Ortstad, Ethan Sutton, Aaron Gjerde, Ted Johnson
- Over the course of the assessment, the committee has held open forums to solicit feedback from the community, conducted a survey on the community, interviewed and solicited input from transportation providers and other schools.
- The findings here layout the best analysis of the committee and provide a recommendation to the board for transportation in the 2015 – 2016 school year.

Survey Results

Survey Overview

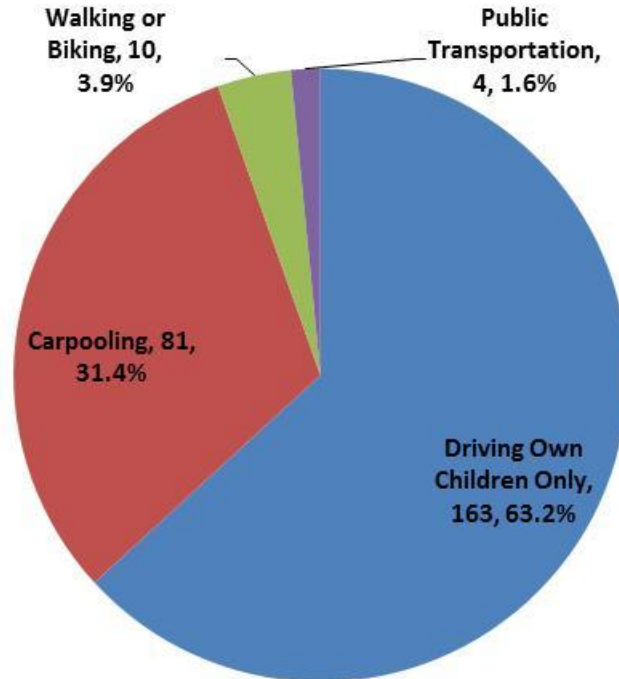
- Estimate that over 80% of the current families took the survey.
- Survey indicated that our families live in 51 different zip codes
- 10 of those zip codes represented 60% of the students in the survey
- 11 of the surveys did not provide address information
- 11 Households had two parents complete survey (duplicates have removed from population totals)

Survey Overview	Nbr	
Current Student Enrollment	435	
Estimated Current Households	290	
Number of Surveys Completed	248	
Number of Households	237	82% of households
Number of student and prospective students represented	360	83% of current student population

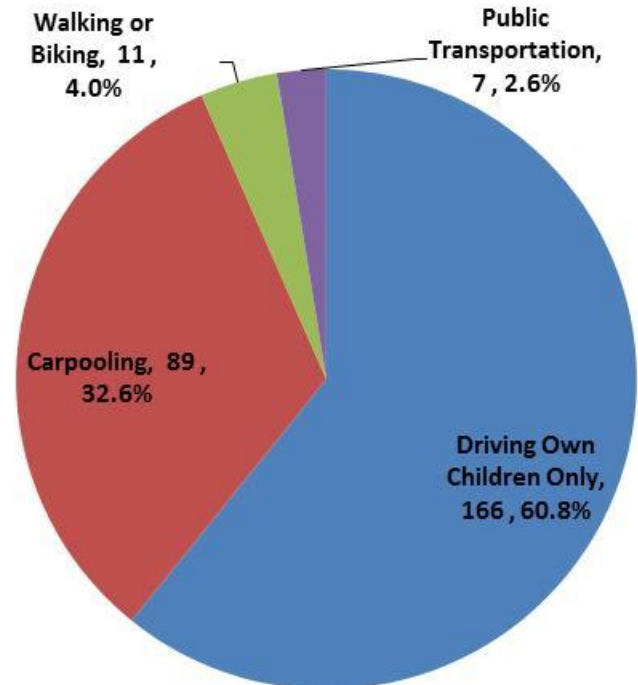


Survey Results – Current Transportation

Morning



Afternoon



- Morning and Afternoon Transportation patterns are fairly similar with just over 60% of families driving their children alone and just over 30% participating in carpools.
- The remaining 5 to 7% of families or walking, biking or using public transportation.
- Estimate 240 to 260 cars come to the school each morning and afternoon excluding faculty and staff.

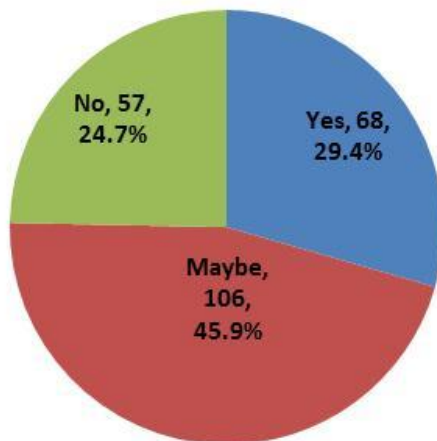
Survey Results - Carpooling

- ❑ 98 families indicated that they did some carpooling.
- ❑ Of the 98 families 83, or about 85%, did it more than 3 days a week, while the remaining 15% carpooled 2 or less times a week.
- ❑ Of those families that carpooled 75% carpooled with one other family and 25% carpooled with 2 other families
- ❑ Regular carpooling accounted for approx. 125 of the 360 children included in the survey or about 35%.
- ❑ Estimate that carpooling eliminates 45 to 55 cars a day coming to the school.
- ❑ Of those families not carpooling, the most frequently given reason was scheduling issues, followed by lack of nearby families or networking, and lack of space in family vehicle.

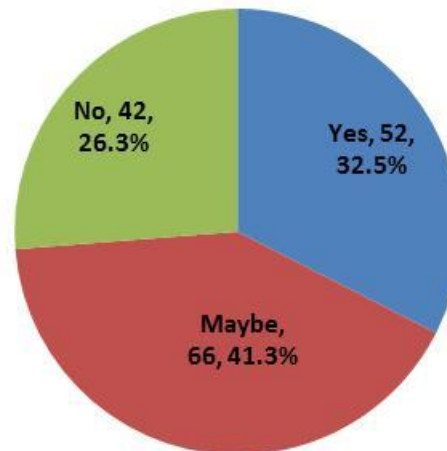
Survey Results - Busing

- The response to the question “If made available, would you use a TCGIS busing service?” indicate a nearly equal divide between Yes and No but a large percentage of respondents answering Maybe.
- Families that carpoled answered yes at a lower rate than families that did not carpool but had a lower rate of No responses and were more likely to say Maybe.
- The survey then asked those responding Yes or Maybe to answer several more questions to better understand what factors would influence their decision

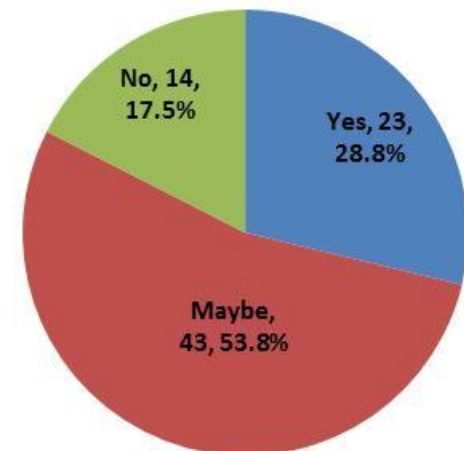
All Families



Families that do not Carpool



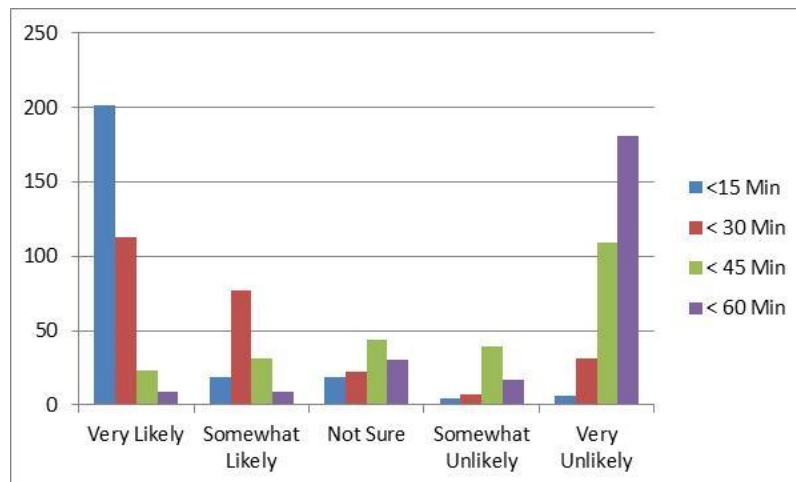
Families that Carpool



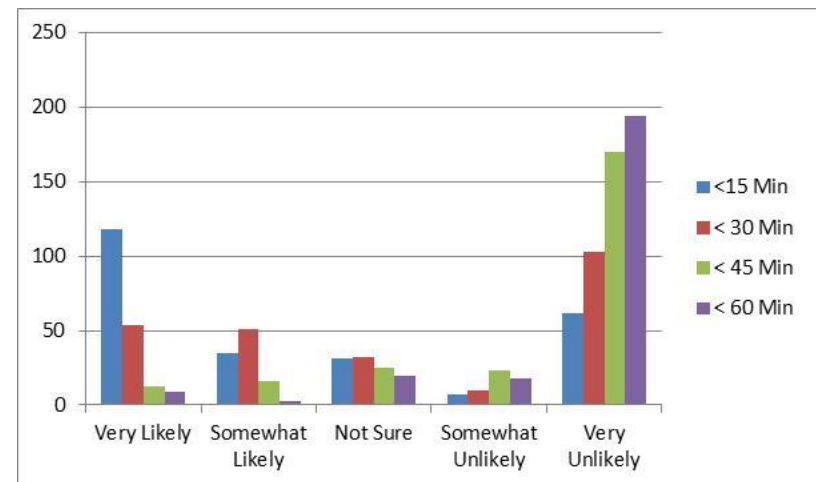
Survey Results - Busing

- The charts below show the number of children that may be likely to use busing given the length of travel time between the bus stop and the school.
- The chart on the left is based on children being able to walk to the bus stop and the chart on the right is based on children needing to be driven to the bus stop.
- The charts show a strong correlation between bus travel time and likelihood of bus use.
- Additionally, children needing to be driven to a bus stop cut the likelihood of bus use in half.

Children able to walk to Bus Stop



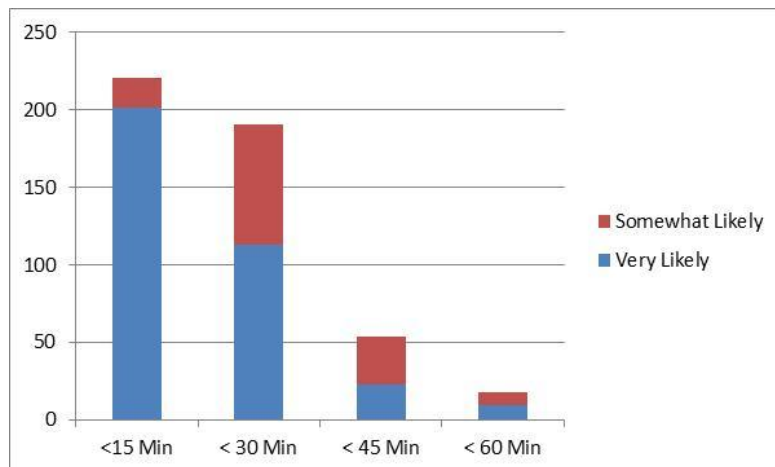
Children driven to Bus Stop



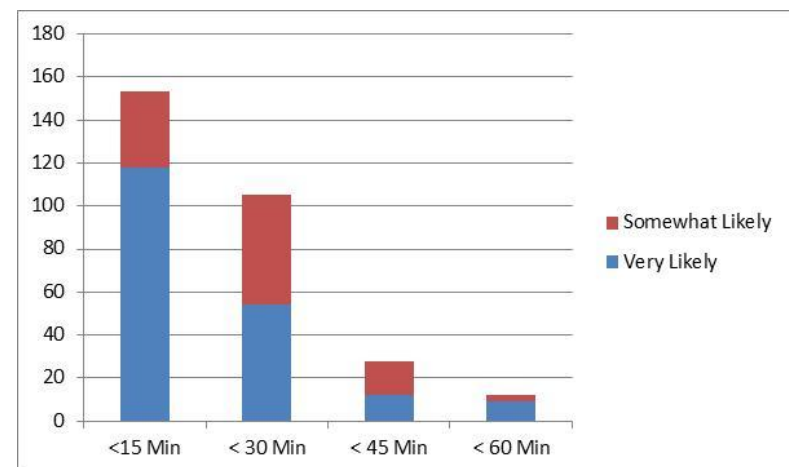
Survey Results - Busing

- The charts below provide an additive view of the number of children very or somewhat likely to using busing at various travel times.
- As on the previous slide, the results are shown for the children walking to the bus stop and being driven to the bus stop.

Children able to walk to Bus Stop



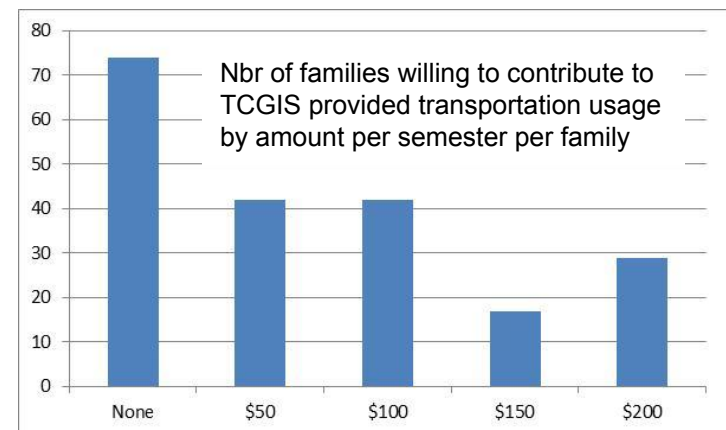
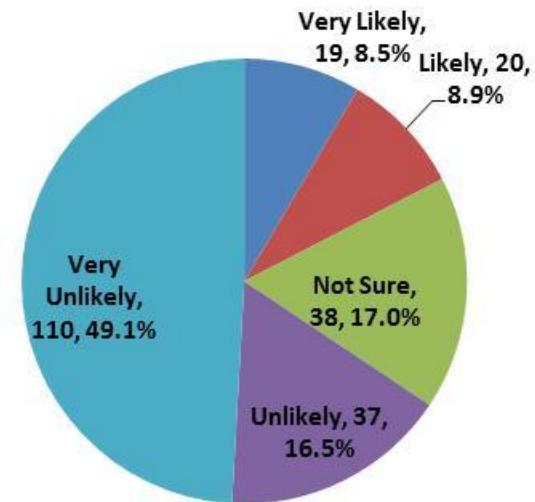
Children driven to Bus Stop



Survey Results – Transit Pass

- 2/3 of the respondents indicated that they were unlikely or very unlikely to use transit pass.
- However, over 17% indicate they were likely or very likely
- Over 60% of respondents indicated they would be will to contribute at least \$50 per family per semester to use TCGIS provided transportation.

Transit Pass Usage



Survey Comments

- A few comments indicated that the respondent thought that busing would only be either available only to St. Paul residents and/or would not be available to those living within two miles of the school.
- Several respondents were confused by the donation question particularly in regards to being asked to donate even if your child was not using a school provided transportation service

Analysis & Recommendation

Analysis Overview

- The committee determined that there were 3 potentially viable options for school provided transportation for the 2015 – 2016 School Year
 - Shuttles, School Bus, Public Transportation
- In evaluating the options, the committee considered the following factors:
 - Program efficiency
 - How much of the TCGIS community could the option serve
 - Per user cost of program
 - Total cost of program
 - Impact on School Traffic Congestion
 - Travel Times
 - Student Safety
 - Flexibility

School Traffic Congestion

- Based on the survey results, the committee estimates between 240 and 260 cars drop off and pickup children each day.
- Current growth projections indicate that 15 – 20 cars will be added each year for next 3 to 4 years. Roughly a 7% increase per year.
- Unchecked the number of vehicles at pick up and drop off could be in the 300 to 340 range in 4 years.

Public Transportation

- ❑ Metro Transit provides broad coverage of the Twin Cities Metro Area at relatively low annual cost of \$350 per student per year
- ❑ However, the routes and bus sizes to TCGIS are limited due in part to the low height train underpass on Lexington
- ❑ For those buses dropping off near the school, the timing is such that students would arrive 30 minutes prior to school start.
- ❑ Public transportation is not seen by many of our families as viable for young children
- ❑ With just over 17% of families responding “Likely” or “Very Likely” to using Public Transportation it is unlikely that such a program will materially reduce the amount of vehicles picking up and dropping off at TCGIS.

Shuttles

- Given the dispersed nature of our student body, shuttles could offer a more flexible method to serve large parts of the community without having onerous travel times.
- Shuttles offer the school more control over the start and end of the school day
- However, Shuttles have very limited capacity in comparison to a school bus (10 vs. 70) driving a very high per rider cost of \$2,500 to \$3,000 per year. The annual cost of a single shuttle runs between \$25,000 and \$30,000 per year.
- Given the high cost to transported student ratio it is unlikely that the school could afford enough shuttles to
 - Fairly serve a our student population, or
 - Materially reduce the amount of vehicles picking up and dropping off at TCGIS.

- ❑ Buses offer high capacity (70+ students) per bus. They are safe and reliable in winter. However, the larger capacity can create unacceptable travel times for some families.
- ❑ They are much cheaper on a per rider basis (\$650 - \$950) than shuttles.
- ❑ The capacity and per rider cost offer the ability to offer service to a larger percent of the TCGIS community.
- ❑ Their capacity offers the best opportunity to reduce traffic congestion at the school.
 - ❑ The committee estimates 60 children being bused to school will reduce the number of vehicles coming to and from the school by 30 to 35.
- ❑ Buses offer the school more control over the start and end of the school day.
- ❑ This alternative offers the option to partner with Great River School to defray costs and expand service area.

Interest in Busing

- The markers on the map below shows the families “Likely” or “Very Likely to use busing if Travel Times are no more than 30 minutes and their children can WALK to the bus stop

Insert Map Here

Interest in Busing

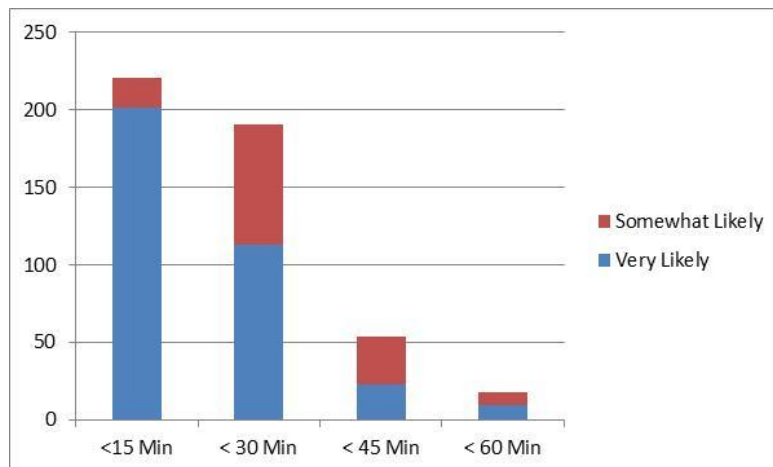
- The markers on the map below shows the families “Likely” or “Very Likely to use busing if Travel Times are no more than 30 minutes and their children must be DRIVEN to the bus stop

Insert Map Here

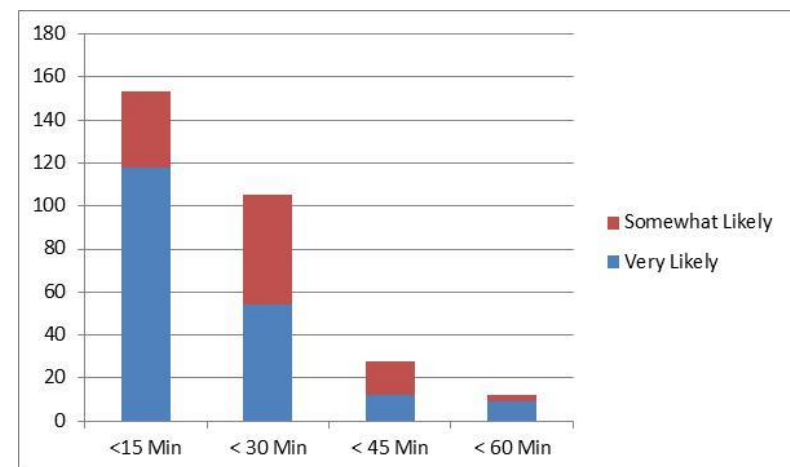
Busing Support

- A per rider cost at our under \$1,000 per year would be similar to the costs paid by other charter schools (see appendix). Based on our estimate we would need about 50 children on a bus to achieve that benchmark.
- The survey results below would indicate enough potential usage to support at least one bus under the conditions described above.
 - In a scenario with children driven to Bus Stops and travel times under 30 minutes, there were 54 children indicating they would be “very likely” to use the bus.

Children able to walk to Bus Stop



Children driven to Bus Stop



Recommendation

Transportation Type	Cost per School Year	Cost Per Pupil	Pros	Cons
Public	\$350	\$350	Low per pupil cost	Variable ride time lengths and transfers Fixed schedule not controlled by School Limited routes to TCGIS Limited number of students can ride at one time. Not viable for many families with children in lower grades Low usage will limit impact on school traffic congestion
Shuttle	\$25,000 - \$30,000	\$2,000 - \$3,000	Likely shorter ride times than a bus option	Small capacity High cost Cost/Capacity will limit impact on school traffic congestion
Bus	\$42,000 - \$50,000	\$650 - \$950	High capacity - serve larger portion of TGCIS families High degree of safety Reliable in winter Moderate per pupil cost if filled Option to partner with Great River Reduces traffic congestion at school Interns could ride as well	Longer ride times - can be reduced through use of Hub Stops - use of Hub Stops makes less of option for some families

- ❑ The high low impact of public transportation on the school and the high cost of shuttle make those options less effective and beneficial to the school.
- ❑ Busing offer a fair balance between cost, coverage, flexibility and impact on traffic congestion to provide substantial value to the school community.
- ❑ The surveys indicate enough support for at least one bus. The transportation committee recommends pursuing busing on a trial basis for the 2015-2016 school year.

Recommendation (cont.)

- The committee also recommends that the school pursue a partnership opportunity with Great River School which is located on Energy Park Drive less than one mile from TCGIS and whose schedule is compatible with our own. This partnership could result in reduced cost and greater coverage of our population.
- The initial 2105 -2016 budget forecast provides enough funds to cover one school bus. The number of school buses ultimately contracted for the 2105 – 2016 school year should be determined by what's affordable within the budget and any partnership we may arrange with Great River School.

Appendices

2013 MDE Charter School Data

- Transportation costs for some local charter schools

FY 2013 PUPIL TRANSPORTATION DATA									
DISTRICT NUMBER	DISTRICT TYPE	DISTRICT NAME	TOTAL REGULAR CATEGORY STUDENTS TRANSPORTED	TOTAL EXCESS CATEGORY STUDENTS TRANSPORTED	TOTAL REGULAR AND EXCESS STUDENTS TRANSPORTED	REGULAR TRANSPORTATION EXPENDITURES FIN DIM 720	REGULAR EXPENDITURE AND DEPRECIATION EXPENSE	COST PER STUDENT (EXCLUDING DEPRECIATION)	TOTAL CONTRACTOR-OWNED VEHICLES
4015	7	COMMUNITY OF PEACE ACADEMY	493	200	693	395,918.86	395,918.86	571.31	18
4042	7	TWIN CITIES ACADEMY	212	0	212	171,667.68	171,667.68	809.75	7
4098	7	NOVA CLASSICAL ACADEMY	430	2	432	235,531.06	236,911.69	545.21	10
4105	7	GREAT RIVER SCHOOL	58	0	58	68,802.50	68,802.50	1,186.25	1
4132	7	TWIN CITIES ACADEMY HIGH SCHOOL	197	0	197	141,467.82	141,467.82	718.11	8
4140	7	YINGHUA ACADEMY	102	0	102	93,141.06	93,141.06	913.15	4
4153	7	DUGSI ACADEMY	478	0	478	404,186.35	404,186.35	845.58	14

Type	Number of Districts	Avg Students Transported	Avg annual cost (incl depr)	Avg cost per student	Avg nbr of district owned vehicles	Avg nbr of contractor owned vehicles
Charter	110	288	\$ 197,715	\$ 753	1.0	7.0
Public	336	1,886	\$ 721,672	\$ 523	13.5	30.0
Grand Total	446	1,492	\$ 592,445	\$ 580	10.4	24.4

Financial Impact Assessment

This slide is definitely draft. Need to get Ted and Matt's input on the final numbers to use as well as everyone's input on the use of these tables and the descriptions



- The percent of budget allocated to Instruction has risen as the school has grown and gained leverage on the administrative costs of the school.

Category	2010	2011	2012	2013	2014
Administration	7.8%	9.0%	7.7%	7.5%	6.4%
District Support Services	8.6%	7.6%	8.5%	7.7%	8.7%
Regular Instruction	40.6%	41.7%	43.3%	42.7%	43.4%
Special Education	13.4%	16.7%	15.9%	15.1%	13.8%
Instructional Support Services	5.1%	0.7%	0.8%	2.0%	2.0%
Pupil Support Services	1.2%	0.4%	0.3%	0.8%	0.5%
Sites and Buildings	22.2%	23.5%	23.1%	23.7%	24.7%
Fiscal and Other Fixed Cost Programs	1.1%	0.4%	0.4%	0.4%	0.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

- Overlaying the cost of busing on to the schools historical and projected spending, shows the decreasing impact of a busing program on the school's budget.

Projected Busing Impact on Budget	2010	2011	2012	2013	2014	2015
Total Expenditures	\$ 1,709,619	\$ 1,957,849	\$ 2,292,504	\$ 2,599,652	\$ 3,153,264	\$ 4,530,299
Busing Cost	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
% of Expenditures	3.5%	3.1%	2.6%	2.3%	1.9%	1.3%