# East Penn School District Transportation Study February 11, 2013

Prepared by:

**East Penn School District Central Office Staff** 

# **Table of Contents**

Section I Transportation Regulations/Guidelines

Section II Current Student Rider Data

Section III Special Education Transportation

Section IV Transportation Costs

Section V Transportation Subsidy Comparisons

Section VI Number of Vehicles and Routes for the 2013-2014 School Year

Section VII Utilization Percentages

Section VIII District Owned Vans

Section IX Update on the Contract with First Student

Section X Update on the Implementation of Versatrans

Section XI Hazardous Route List

Section XII Shared Services Agreements with Other School Districts

Section XIII Cost Estimates of Transporting All Elementary Students Within the 1.5 Mile

Guideline

Section XIV Willow Lane

# List of Tables

Table 1	Summary of Public School Transportation
Table 2	Summary of Riders and Distances
Table 3	Summary of Walkers
Table 4	Categories of Student Riders
Table 5	Charter School Transportation
Table 6	Non-Public/Charter Schools Within East Penn Boundaries
Table 7	Non-Public/Charter School Summary of Riders by Distance
Table 8	Summary of Special Education Transportation
Table 9	Special Education Vehicles
Table 10	Main Transportation Contract Costs
Table 11	Other Transportation Costs
Table 12	First Student Bus Fees Without Aides or Fuel Costs
Table 13	District Transportation Subsidy
Table 14	Bus Utilization Summary
Table 15	Bus Utilization Summary
Table 16	Cost Estimates of Transporting All Elementary Students Within the 1.5 Mile Guideline
Table 17	Willow Lane Site Revision Estimates
Table 18	Willow Lane Car Counts
Table 19	Willow Lane AM Bus Participation
Table 20	Willow Lane PM Bus Participation

# **APPENDIX**

Appendix A	Listing of Hazardous Roads
Appendix B	Willow Lane Buses and Developments
Appendix C	Charts (1-11)— Willow Lane Bus Attendance Reports, January 2013

#### Introduction

In March of 2012, the administration informed the Board of School Directors that a comprehensive study of the transportation system would be conducted in the 2012-2013 school year. This report examines all aspects of the East Penn transportation system and a compilation of key data relative to various aspects of the transportation system. The data will provide the reader with an in-depth view of the component pieces of the entire transportation system.

The report is divided into several sections that concentrate on a particular aspect of the district's transportation system. The sections start with the district's basic transportation obligations under state regulation and includes a special section on the Willow Lane busing situation. The report concludes with administrative recommendations as to how the transportation system may become more efficient and lead to savings.

It is the intent of the administration to present information in a simple yet cohesive manner. We stand ready to answer any questions the Board may have regarding any aspect the transportation system or any of the written recommendations.

In addition to Dr. Seidenberger, the following staff members worked diligently in helping to compile this report. They are:

Mrs. Kristen Campbell, Assistant to the Superintendent

Mr. Lynn Glancy, Director of Operations

Mrs. Debbie Surdoval, Business Manager

Mr. James Frank, Assistant Business Manager

Dr. Thomas Mirabella, Director of Student Services

Mr. Michael Mohn, Director of Technology

Mrs. Nicole Bloise, Community Liaison

Ms. Cecilia Birdsell, Board Secretary

Mrs. Nina Skinner, Technical Assistant

Mrs. Nina Evans, Administrative Assistant for Central Registration and Transportation

The administration would also like to thank the East Penn staff of First Student and Ms. Jennifer Keith of First Student Group for her support in working with the Versatrans software program.

### Section I Transportation Regulations/Guidelines

The requirements for Pupil Transportation can be found in the Pennsylvania School Code of 1949. Interested individuals can access multiple sections of the School Code by visiting the Pennsylvania Department of Education website. Interested individuals can also read the Sections 23.4 and 23.5 of the State Board of Education Regulations on key information on the responsibilities of local school district board of school directors and who is eligible for transportation.

It is important to know that local districts do not have to provide student transportation for regular education students who reside in their district. However, local school districts must provide transportation to charter school students who live within the district, or a charter school that is located not more than ten miles from the nearest public highway beyond the school district boundary or the charter school is a regional charter school in which the school district participates. Districts are not required to provide transportation for charter school students who live within 1.5 miles of their school or 2 miles to their school if they are enrolled in a secondary charter school. School districts must provide the same level of service for charter school students as a district does for its public school students if it offers transportation.

Local school districts are required to transport students as long as transportation is specified in the child's Individualized Education Program (IEP). However, the district may use the services of their Intermediate Unit for the transportation service.

A school district is not obligated to provide transportation for non-public school children unless the district provides transportation for its public school children of the same grade level. The non-public school must be located within ten miles of the district boundary measured by the nearest public road.

PDE offers an informational Frequently Asked Questions in its Pupil Transportation section of its website. Interested individuals can also call The PDE Bureau of Budget and Fiscal Management at (717)787-5423 extension 5.

The East Penn School District's position on student transportation can be found in Board Policy 810 that can be accessed on the district website at <a href="https://www.eastpennsd.org">www.eastpennsd.org</a>.

The Board's position is succinct. The decision to provide free bus service rests solely with the Board. Interested individuals are encouraged to read the complete policy.

#### Section II Current Student Rider Data

# A. Summary of Public School Transportation

The following charts in this section provide key statistics about the current status of students who are transported to school. Currently, the district is transporting elementary students outside the 1.5 mile guideline and the 2.0 mile requirement for secondary students provided there are no hazardous routes.

Readers should understand that some students are transported within the 1.5 mile or 2.0 guidelines. Those numbers have been reviewed by central office and for the most part those students are transported for legitimate reasons such as hazardous roads, no sidewalks, and railroad tracks. In a few instances, the administration discovered some students who were not eligible for transportation. Principals will be notified and it is expected that they will convey a message to affected families that transportation will not be provided commencing with the 2013-2014 school year unless the Board of School Directors changes its current practice of using the 1.5 mile and 2.0 mile distances for busing.

In addition, readers will be able to tell how many charter school and nonpublic school students who are transported.

The information is based on student data found in the transportation system as of January 10, 2013.

Table 1 SUMMARY OF PUBLIC SCHOOL TRANSPORTATION					
School	Student Enrollment	Number of Riders	% of School Population Riding Bus		
Alburtis	352	191	54.3%		
Jefferson	284	160	56.3%		
Lincoln	417	246	59.0%		
Macungie	478	466	97.5%		
Shoemaker	732	709	96.9%		
Wescosville	594	581	97.8%		
Willow Lane	739	681	92.2%		
Eyer	902	870	96.5%		
LMMS	1,096	1,081	98.6%		
EHS	2,592	2,028	78.2%		

Table 2 SUMMARY OF RIDERS AND DISTANCES					
School	Number (and %) of Riders Within 1.5 Miles	Number (and %) of Riders Within 2.0 Miles			
Alburtis	16 (8.38%)	N/A			
Jefferson	149 (93.1%)*	N/A			
Lincoln	191 (77.6%)**	N/A			
Macungie	174 (37.4%)	N/A			

N/A

N/A

N/A

192 (22.1%)

223 (20.6%)

Shoemaker

Wescosville

Willow Lane

Eyer

**LMMS** 

13 (1.8%)

269 (46.3%)

458 (67.3%)

N/A

N/A

<sup>\*\*</sup>Of the 191 Lincoln students who reside within 1.5 miles of the school and receive transportation, approximately 64% of these students reside south of Chestnut Street and approximately 25% of these students would have to cross State Avenue to access the school.

Table 3 SUMMARY OF WALKERS					
School	Walkers Within .75- 1.5 mile Boundary	Walkers Within .75- 2.0 mile Boundary			
Alburtis	20	N/A			
Jefferson	12	N/A			
Lincoln	9	N/A			
Macungie	0	N/A			
Shoemaker	0	N/A			
Wescosville	0	N/A			
Willow Lane	341	N/A			
Eyer	N/A	3			
LMMS	N/A	3			
EHS	N/A	262			

EHS N/A 140 (6.9%) \*Of the 149 Jefferson students who reside within 1.5 miles of the school and receive transportation, approximately 50% of these students reside south of Chestnut Street, approximately 21% reside on streets without sidewalks, and approximately 10% would have to cross Cedar Crest Boulevard to access the school. There are also "hazardous roads" within the Jefferson School boundary.

Table 4 CATEGORIES OF STUDENT RIDERS					
Category	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Public, Non-Hazardous Roads	5,655	5,827	5,862	6,088	6,130
Public, Hazardous Roads	1,286	1,332	1,332	1,250	1,222
Nonpublic	953	945	890	872	859
Total Pupils Transported	7,894	8,104	8,084	8,210	8,211
Nonreimbursable	88	93	109	158	466

Table 5 CHARTER SCHOOL TRANSPORTATION								
Category	Category 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012							
Charter Schools Outside								
District Boundaries	28	26	27	32	33			
Charter School Within								
District Boundaries	0	0	91	99	110			
Total Charter School Pupils Transported 28 26 118 131 143								

Table 6 NON-PUBLIC/ CHARTER SCHOOLS WITHIN EAST PENN BOUNDARIES					
Number of East Penn Resident Students Who School Attend Number of Riders v. Number of Students					
St. Ann's	189	173	91.5%		
Seven Generations	138	122	88.4%		

Table 7 NON-PUBLIC/CHARTER SCHOOL SUMMARY OF RIDERS BY DISTANCE						
Number of Riders Within .75- 1.5 Number of Riders School Mile Boundary Within 1.5 Mile Boundary						
St. Ann's	13	21				
Seven Generations	20	27				

# Section III Special Education Transportation

This section provides the reader with key information about busing for special education students. As noted in the Introduction, the East Penn School District transports special needs students who have transportation services contained in their Individualized Education Program (IEP). In many instances, the district provides curb-to-school service. All information is based on January 10, 2013 student records.

Table 8 SUMMARY OF SPECIAL EDUCATION TRANSPORTATION							
Description 2009 - 2010 2010 - 2011 2011 - 2012 2012 - 2013 (est.)							
Avg. Number of Special Education Students Transported	144.6	180.4	156.3	160.0			
Avg. Number of Students Transported on Special Education Vehicles	194.7	254.0	336.2	340.0			
Cost	\$623,214	\$648,913	\$465,503	\$478,304			
Special Education Bus Aide Cost	\$78,885	\$101,574	\$155,059	\$159,323			
Total Special Education Transportation Cost	\$700,526	\$750,487	\$620,562	\$637,627			

Table 9 SPECIAL EDUCATION VEHICLES							
Description 2009 - 2010 2010 - 2011 2011 - 2012 2012 - 2013 (est.)							
Number of Special Education							
Buses	0	11	1	1			
Number of Mini-busses	22	22	19	20			
Number of Vans	1	1	11	1			
Total Vehicle Cost	\$793,704	\$828,850	\$751,012	\$771,290			

# **Section IV** Transportation Costs

This section provides a complete accounting of transportation costs in the East Penn School District. Information includes the basic cost of the contract between First Student and the East Penn School District. A chart is included that details all expenditure categories for all aspects of the transportation system. Finally, the district provides key information as to how the cost of a bus route is calculated. This calculation will be an important component of how costs are projected in later sections in this report.

Table 10  MAIN TRANSPORTATION CONTRACT COSTS							
Spent         Spent         Spent         Spent         Spent         Spent         Budget           Category         2008-2009         2009-2010         2010-2011         2011-2012         2012-2013							
Public School- Gas	\$287,855	\$332,781	\$417,441	\$473,628	\$463,360		
Public School- Contract	\$3,193,602	\$3,197,094	\$3,345,064	\$3,685,632	\$3,438,935		
Non-public- Gas	\$81,190	\$93,862	\$117,740	\$133,587	\$130,690		
Non-public- Contract	\$1,181,195	\$1,182,487	\$1,237,215	\$1,363,179	\$1,294,125		
District Activity Runs \$28,652 \$23,580 \$24,650 \$27,441 *\$0							
Total Costs	\$4,772,495	\$4,829,804	\$5,142,110	\$5,683,467	\$5,327,110		

<sup>\*\$26,000</sup> Budget Transfer pending Board approval

Table 11 OTHER TRANSPORTATION COSTS					
Category	Spent 2008-2009	Spent 2009-2010	Spent 2010-2011	Spent 2011-2012	Budget 2012-2013
Contracted EP Staff	\$0	\$19,690	\$11,098	\$0	\$3,000
Student Transportation from Another LEA (IU)	\$0	\$0	\$33,043	\$0	\$35,700
Parent Public Transportation	\$0	\$11,299	\$4,608	\$6,806	\$6,000
Alternative Education Transportation	\$0	\$17,752	\$0	\$0	\$0
IU Transportation	\$705,282	\$817,883	\$720,087	\$793,062	\$1,042,922
Postage (Public Transportation)	\$0	\$1,695	\$1,438	\$1,653	\$1,700
Supplies (Public Transportation)	\$0	\$0	\$0	\$226	\$0
Equipment for Transportation	\$2,289	\$0	\$0	\$2,069	\$0
Parent Nonpublic Transportation	\$0	\$0	\$26,628	\$0	\$30,000
Postage (Nonpublic)	\$0	\$300	\$0	\$0	\$0
EHS Activity Transportation	\$34,116	\$20,382	\$21,458	\$17,128	\$25,000
Athletic Transportation	\$109,370	\$109,930	\$94,410	\$103,931	\$173,713
Total Other Transportation	\$851,057	\$998,930	\$912,771	\$924,876	\$1,318,035

Grand Total Transportation\*
\*Includes Tables 10 and 11

Table 12 FIRST STUDENT BUS FEES WITHOUT AIDES OR FUEL COSTS (for 182 School Days)						
Vehicle Type 2009 - 2010 2010 - 2011 2011 - 2012 2012 - 2013						
Bus (72 student capacity)	\$169.09	\$173.74	\$178.52	\$183.43		
Mini-bus (48 student capacity)	\$131.63	\$135.25	\$138.97	\$142.79		
Van (9 student capacity)	\$107.70	\$110.66	\$113.70	\$116.83		
Kindergarten Bus	\$65.65	\$67.46	\$69.31	\$71.22		
Kindergarten Mini-bus	\$49.43	\$50.79	\$52.19	\$53.62		
Kindergarten Van	\$38.55	\$39.61	\$40.70	\$41.82		

\$5,623,552 \$5,828,734 \$6,054,881 \$6,608,343 \$6,645,145

Note: The contract with First Student calls for an increase of 2.75% in each year (fuel is not included)

# Components of the Calculation for the Cost of a Bus Route (72 and 48 Passenger Buses)

The East Penn School District uses a two-tiered system. A bus usually makes a high school or middle school run and then is assigned to an elementary route.

# of buses 125

Average Fuel Cost per \$5,160.00 (for a full two-tier route)

\$2,580.00 (for a one tier route)

Total Bus Cost (Including Fuel) \$38,543.73 for a 72 passenger bus for a two-tiered route

\$31,147.93 for a 48 passenger bus for a two-tiered route

\$19, 271.86 for a 72 passenger bus for a one tier route

\$15, 573.97 for a 48 passenger bus for a one tier route

Note: All figures based on a 182 day pupil school year

# Section V PDE Transportation Subsidy

Table 13 District Transportation Subsidy				
Category	2009-2010	2010-2011	2011-2012	
Nonpublic Aid Ratio Calculation	\$159,366	\$165,128	\$180,181	
Hazardous Road	\$224,630	\$247,136	\$258,287	
Public Non-Hazardous Road	\$714,403	\$792,657	\$916,301	
State Share District Transportation	\$1,098,399	\$1,204,921	\$1,354,769	
Excess Cost	\$0	\$0	\$10,480	
IU Depreciation	\$7,348	\$7,272	\$7,848	
Total District Transportation Subsidy	\$1,105,747	\$1,212,193	\$1,373,097	
Nonpublic & Charter School Transportation	\$373,835	\$388,080	\$386,155	
Total Transportation Subsidy	\$1,479,582	\$1,600,273	\$1,759,252	
Received in Fiscal Year	\$1,479,581	\$1,596,320	\$1,763,206	

The state uses a Half of Mil Market Value and Market Aid Ratio to finalize the subsidy calculation. Those figures are as follows:

Table 14 BUS UTILIZATION SUMMARY			
Year	Half of a Mil Market Value	Market Value Aid Ratio	
2009-2010	\$2,055,561	0.3635	
2010-2011	\$2,104,270	0.3644	
2011-2012	\$2,272,694	0.3642	

After deducting the subsidy received in the following year, the net cost to the district would be as follows:

2009-2010	\$4,143,971
2010-2011	\$4,295,629
2011-2012 (est.)	\$4,828,343

# Section VI Number of Vehicles and Routes in 2012-2013 School Year

This section is basic information on how buses are in use this year and how many total routes carry students in the East Penn School District.

72 Passenger Buses	86
48 Passenger Buses	39
Vans	7
Total Vehicles	132
Public Routes	333
Non-Public Routes	96
LCTI	21
Charter Schools	26
Homeless	5
Total Routes	481

# Section VII Utilization Percentages

First Student uses the following guidelines to develop bus routes. Please recall that middle school and high school students have larger frames than elementary age students, therefore, fewer students are scheduled for those bus runs.

Table 15 BUS UTILIZATION SUMMARY				
Bus	Average Riders	Utilization %		
72 Passenger Elementary Bus	60	83%		
72 Passenger Middle School Bus	45	63%		
72 Passenger High School Bus	36	50%		
48 Passenger Elementary Bus	40	83%		
48 Passenger Middle School Bus	30	63%		
48 Passenger High School Bus	24	50%		

#### Section VIII District Owned Vans

In 2009, the East Penn School District purchased three nine passenger vans to reduce the costs for transporting some sports and academic competition teams and some activity clubs. Each van costs approximately \$25,000. Funds from that year's operating budget were used to purchase the vehicles off the State Contract Bid list. The idea was simple. In a three - year period the vans would basically pay for themselves by eliminating the cost to rent vans from either First Student or a car rental company. The district estimated that the total cost for renting the nine passenger vans would be \$120,000 over a five-year period. Thus the real savings would appear in years four and five.

Vans are routinely serviced by East Penn staff. The cost for using the vans is charged to the activity or athletic team.

This shift to district owned vehicles was also needed since First Student no longer provided small passenger vans. First Student now uses small buses or minivans to transport students.

The following is a record of the van use for the 2012-13 school year:

July 2012	3 trips
August 2012	9 trips
September 2012	18 trips
October 2012	41 trips
November 2012	25 trips
December 2012	17 trips

Please recall that if the district did not have the vans, small passenger buses would have to be rented to transport teachers, students, coaches and team members.

#### Section IX Update on the Status of the Contract with First Student

East Penn has a contract with First Student, Inc. through the 2013/2014 school year. The contract was renewed in June of 2009. In the contract, First Student agrees to provide and maintain the required number of school buses to transport conveniently and safely, any and all resident students, including public and nonpublic, private and special needs students designated by the East Penn School District. The district maintains the right to revise or change any and all of the routes and the number of buses required to best suit its needs at any time before or during the school year. In addition, First Student also provides transportation for field trips, athletic events, excursions and any other purpose designated by the district.

The basic cost of the agreement increases each year by 2.75% of the base vehicle costs. First Student has met all of its required vehicle targets and the vehicles have been inspected as required by state law. In addition, First Student has maintained all of the vehicles as specified in the contract.

The district is appreciative of the willingness of First Student to purchase the Versatrans software program. It is our belief that this program will enable the district to work with First Student to become more efficient in setting up daily routes and the tool will also be valuable as the district enters a period of anticipated growth in student population.

The district had a few ongoing concerns with First Student and the administration will continue to work with depot and regional staff to improve the areas of concern. The concerns include the level of administrative staff at the depot, the number of bus drivers, and the overall cleanliness of the vehicles.

#### Section X Update on the Implementation of Versatrans

First Student has purchased all of the necessary components of Versatrans. However, the Administration has discovered some problems with the transfer of data from the software First Student used in the past to Versatrans. After some discussions with First Student and with a software expert from First Group, the district decided to do a significant amount of work. Through the efforts of our Technology staff, we began nightly uploads from our Student Information System (eSchool), to Versatrans. Basic demographic information is exported daily and changes in our system are reflected in Versatrans the next day. Ultimately, we would like to be in a position to register a child and then have the child automatically assigned to a bus route.

District staff was extremely concerned with how data on hazardous roads was transferred to Versatrans. The district sought current data from Penn DOT and now the district has staff working with the software expert to construct accurate hazardous routes and boundaries information. At this point, we are satisfied that all of the information is loaded and accurate. The East Penn staff will continue to work with the expert who is housed in Montana to develop this most important component that is needed to

generate annual state transportation reports. Coupled with this work is the need to have accurate school boundaries in the event that the district will have to change school boundaries if we see a spike in student enrollment numbers.

District staff has participated in some on-site training. Key district staff members have an idea and understanding of the variety of planning and simulation tools that are part of the Versatrans program.

District staff members are confident that with some more experience, we can offer parents direct information regarding transportation. We envision developing a mobile application that parents and community members such as real estate agents will be able to type in an address on the parent portal and get instant information and maps relative to the eligibility of their child for bus routes and pick-up and drop-off times.

Finally, we are working on a pilot with First Student to create electronic bus cards. The district is researching how to eliminate the labor intensive task of addressing bus information postcards and then mailing them out. We believe that the district will save over \$5,000 in labor, printing postcards, and postage. Parents will be able to view their child's information and, if a change is needed, the change will be made electronically and parents will no longer have to wait for a new postcard to be sent.

#### Section XI Review of Hazardous Roads List

An official list of Hazardous Roads was obtained from the Pennsylvania Department of Transportation, Engineering District 5-0. The Administration wishes to thank Mr. Chade T. Sankari for his assistance in providing us with the up-to-date list. The complete list is provided in Appendix A of the report.

The provisions for Hazardous Walking Routes are contained in 67 Pa. Code Chapter 447. The provisions of Chapter 447 are issued under sections 506 and 2001 of the Administrative Code of 1929 and Sections 1362 and 2541 of the Public School Code of 1949.

#### Section XII Shared Services Agreements/Strategies with Local School Districts

During the 2011-2012 school year representatives from Lehigh County School Districts met to discuss possible ways to share services for transporting nonpublic students. Several meetings were held and some solutions were examined. Unfortunately, no cost effective solutions could be implemented. The group has continued to meet on a periodic basis and representatives will strive to look for cost effective ways to lessen the financial impact of transporting students to nonpublic and private schools.

# Section XIII Cost Estimates of Transporting All Elementary Students within the 1.5 Mile Guideline

As noted in a previous section, the Board can transport any student and set any distance guideline it desires, however, if the Board transports a child within the 1.5 mile guideline and that child does not live along a dangerous road nor face any other specific condition such as no sidewalks, then the Board can't seek transportation reimbursement for that child. It is important that if the Board does provide transportation that it does so in a fair and impartial manner.

In previous sections, data was provided as to how many students are currently not transported. To offer transportation to all elementary students, the district would need to spend the following additional funds.

Table 16 COST ESTIMATES OF TRANSPORTING ALL ELEMENTARY STUDENTS WITHIN THE 1.5 MILE GUIDELINE						
School	Number of Students	Number & Size of Bus (one tier)	Cost	Bus Cost	Fuel Cost	Total Cost
- 14		(2) 72	\$183 per day x 182	4		4.0.0.0
Alburtis	161	passenger	days at one tier level	\$33,306	\$5,160	\$38,466
		(1) 48	\$143 per day x 182			
		passenger	days at one tier level	\$13,013	\$2,580	\$15,593
		(2) 72	\$183 per day x 182			
Jefferson	124	passenger	days at one tier level	\$33,306	\$5,160	\$38,466
		(3) 72	\$183 per day x 182	999		
Lincoln	171	passenger	days at one tier level	\$49,959	\$7,740	\$57,699
		(1) 48	\$143 per day x 182			
Shoemaker	23*	passenger	days at one tier level	\$13,013	\$2,580	\$15,593
		(1) 48	\$143 per day x 182			· · · · · · · · · · · · · · · · · · ·
Willow Lane	33*	passenger	days at one tier level	\$13,013	\$2,580	\$15,593
Estimated Total Cost**						\$181,410

<sup>\*</sup>Note: The Board would also have to extend the invitation to transport all students to St. Ann's and Seven Generations as well. The costs for each would approximate the cost associated with Shoemaker School, totaling \$31,186.00. This would equate to a **Grand Total Cost of \$212,596.00**.

<sup>\*\*</sup>Note: There is no fiscal impact for students attending Wescosville and Macungie Schools.

#### Section XIV Willow Lane

This section examines the Willow Lane situation. At the conclusion of the data and fiscal information, the Administration offers two options for the Board to consider.

Please recall that in September of 2012, the Administration restored busing for a majority of students who live in selected neighborhoods that serve the student population of Willow Lane with the exception of Brandywine II due to its close proximity to the school. The specifics of the savings are as follows:

Reduction of one 48 passenger bus for 182 days \$13,013
Savings in fuel costs \$2,580

Total Savings \$15,593

#### A. Relationship with Lower Macungie Township Officials

District personnel have worked closely with Lower Macungie Township officials. Meetings have been productive and forthright and have always placed an emphasis on safety. The collaborative nature of the meetings has resulted in the district developing a solution that would improve the emergency responsiveness of the Township Fire Department and make travel safer for fire vehicles on the main entrance to the school off Sauerkraut Lane. The Township has developed a plan for the placement of traffic signs, improved cross walks, and the assignment of crossing guards. It is important to note that a state police representative has attended the sessions as well.

We are pleased with the progress of the meetings. The Township is in the final stages of issuing its specific plans for the placement of the traffic signs, cross walks, and the placement of crossing guards.

The district in its efforts to deal with on-site safety issues had engaged Penn DOT to complete a Walkability Study and the services of Liberty Engineering to improve the actual school site for a better flow of parent cars and bus traffic as well as enhancing the walking paths in the rear of the school closest to Mill Creek Road.

The internal site improvements include improving the bus turn-around areas, some new line painting, improving a walking path in the rear of the school, the placement of some new traffic signs on school property, and the installation of traffic gates that will prevent cars from exiting the property by way of the main entrance to the school. The improvements also call for a major shift in car traffic. Parents would enter the school grounds and exit by way of Mill Creek Road. This shift will separate buses from cars and also keep the main driveway open for fire station vehicles should an emergency occur during the start and end of the school day.

The district has presented and reviewed this plan two times in meetings with Township officials. It is also expected that the District will present its plans to a Board of Commissioners Subcommittee in the near future.

	Table 17 WILLOW LANE SITE REVISION ESTIMATES			
Original Bid	Revision	Cost		
	Erosion Control	\$6,000.00		
	Concrete Curb Removal	\$945.00		
	Asphalt Walk Removal	\$750.00		
	Pavement Saw-cut	\$337.50		
	Excavation	\$2,600.00		
	New Concrete Curbing	\$2,000.00		
	Retaining Wall	\$17,600.00		
	New Paving for Bus Training	\$14,000.00		
	New Traffic Control Signs	\$3,750.00		
	Seeding and Restoration	\$2,000.00		
	Engineering and Bid Documents	\$5,000.00		
	Site Surveys	\$5,000.00		
	RipRap Stone	\$11,250.00		
	Line Striping, Line Paint Removal	\$5,000.00		
	Gates	\$5,000.00		
	Subtotal	\$81,232.50		
	Contingency (10%)	\$8,123.25		
Total 1		\$89,355.75		
Alternate Bid				
	Extend Walking Path (rear of school)	\$5,400.00		
	Excavation	\$2,437.50		
	Restoration	\$550.00		
	Subtotal	\$8,387.50		
	Contingency (10%)	\$838.75		
Total 2		\$9,226.25		

The Administration recommends that all site improvements be done as a solution to the number of cars now dropping off children on a routine basis. The revised traffic pattern will keep buses and cars apart and end car traffic near the firehouse exit route. We believe the new traffic pattern will also reduce some of the back-ups at the intersection of Willow Lane and Sauerkraut Lane.

The funds for the site improvement work will come from the Capital Reserve Fund. This use of Capital Reserve Account funds will have no impact on the 2013-2014 Operating Budget.

# B. Car Counts

The district was interested to see how many cars routinely drop off students on a daily basis. A district supervisor completed the following school days:

	Table 18 WILLOW LANE CAR COUNTS				
Date	Day of Week	Number of Cars			
December 14, 2012	Friday	146			
December 18, 2012	Tuesday	134			
December 19, 2012	Wednesday	140			
January 3, 2013	Thursday	139			
January 8, 2013	Tuesday	138			
January 10, 2013	Thursday	122			
January 11, 2013	Friday	121			
Average		134			

# C. Bus Participation

Since so many cars drop students off on a daily basis, the Administration was interested to see how many Willow Lane students in the affected neighborhoods actually use the buses on a daily basis. During the month of January, each bus driver kept a log of students who rode the bus to and from school on a daily basis. Appendix B identifies the buses assigned to each development. Daily bus participation is summarized below:

	Table 19 WILLOW LANE AM BUS PARTICIPATION			
Bus Number	Students Assigned to Bus	Average Number of Riders	Average % of Assigned Students Riding Bus	
7	68	39	57.4%	
40	69	39.4	57.1%	
55	56	31.7	56.6%	
63	67	41.5	61.9%	
65	72	45.1	62.6.%	
66	66	45.1	68.3%	
76	45	31.2	69.3%	
134*	21	17	81.0%	
4*	45	32.2	71.6%	
15	70	44.9	64.1%	
26	67	33.7	50.3%	

<sup>\*</sup>Day Care Runs

Table 20 WILLOW LANE PM BUS PARTICIPATION			
Bus Number 7	Students Assigned to Bus 67	Average Number of Riders 47.3	Average % of Assigned Students Riding Bus 70.6%
40	72	52.0	72.2%
55	59	36.9	62.5%
63	67	42.3	63.1%
65	69	46.8	67.8%
66	68	50.0	73.5%
76	42	33.6	80%
15	69	43.7	63.3%
26	64	46.3	72.3%

# **Willow Lane Options**

# Option 1 Eliminate Busing for Students Who Live Within 1.5 miles to Willow Lane

This option affects approximately 330 students who live in the following developments:

Beaumont at Brookside

Brandywine Village

Brandywine Village II

**Brookside Farms** 

Graymoor

As a result of the district's collaboration with Lower Macungie and the agreement in principle to place two (2) crossing guards at the intersection of Willow Lane and Sauerkraut, it is now believed that children from Penn's Meadow and parts of Brookfield Estates can walk as well.

This option has been well documented. It is anticipated that Dr. Moyer will continue to work with parents on issues related to the start and dismissal times and drop-off procedures.

#### Option 1 Cost Analysis

Total Savings	\$111,761
Reduction of Fuel Costs	\$15,480
(\$183 per day for 182 daysa one tier savings)	\$83,268
Reduction of five 72 passenger buses	
(\$143 per day for 182 daysa one tier savings)	\$13,013
Reduction of one 48 passenger bus and driver	

**Note:** If the district agrees to fund half of the cost of crossing guards then the savings would be reduced  $(7x 1hr. x $15 per hour for 182 days) <math>\div 2 = $9,555.00$ 

\$102,206

Since the contract with First Student is for one more year, the district cannot do a five-year projection. However, if one would put in the increase of 2.75% a year as now is specified in the current contract the district would realize a total savings in excess of \$500,000.

Option 2 The Board moves to extend busing to all students who live within .75 and 1.5 miles of an elementary school. The Board would not change its secondary distance guidelines in this option.

This option is based on a request by a parent offered at a Board of School Directors' meeting. The district contacted PDE relative to the .75 distance and PDE responded that they were not aware of any research that found that .75 of mile is a better distance for a child to walk to school. There is nothing in Board Policy #810 nor is there any regulation that would prevent the Board from implementing such a policy unless the route is classified as hazardous by the state. The district would not be eligible for any state reimbursement for those students who are transported from a distance of .75 of a mile.

Utilization data from the current manner in which First Student schedules students and the results from the participation counts indicate that there may be an opportunity to tighten the building of student assignments to specific buses that serve Willow Lane. In addition an average of 134 cars a day now drop off students on a daily basis. The Administration believes that in Option #2 parents should be contacted to determine if they will use the school bus. If not then parents can opt in at a later in a manner which will be proposed to high school students. We are estimating that at least a 48 passenger bus can be eliminated if First Student uses a different variable in scheduling and parents tell us that they are willing to opt in later.

The Administration believes that approximately 305 Willow Lane students would still be bused under this scenario. Approximately 125 students would not be offered busing under this option.

In fairness to students in other schools, it would be recommended that the .75 distance be extended to other elementary schools. The Administration examined the data and found that 20 students in Alburtis, 12 students in Jefferson, and 9 students in Lincoln would qualify under this scenario. The Administration believes that all of these students could be absorbed into the present system and therefore there would be no additional cost for transporting those students if Option #2 is approved by the Board. There would be no state reimbursement for transporting these students.

The Board would have to be cognizant that the new .75 distance guideline could have a future impact if new developments arise near other district schools since at this point, there are no additional students who qualify from Macungie, Shoemaker and Wescosville.

# Option 2 Cost Analysis

Reduction of two 72 passenger buses at \$183 per day for 182 days

(one tier busing) \$33,306

Reduction of one 48 passenger bus at 143 per day for 182 days

(one tier busing) \$13,013

# **Total Estimated Savings for Option #2**

\$54,059

#### Section XV Recommendations for Board Consideration

#### Recommendation #1

The Administration recommends that the Board review and update Board Policy #810.

#### Recommendation #2

The Administration recommends that the Board transports children to St. Ann's and to Seven Generations in accordance with its practices for transporting students to all public elementary schools in the district. If changes in transportation are needed for certain children who may not qualify, then the Administration will meet with the leaders of St. Ann's and Seven Generations to explain why some children may no longer qualify for daily transportation to and from school.

#### Recommendation #3

The Administration recommends that the Board grant permission to the Administration to pilot a program for high school students that mirrors the philosophy of a neighboring district that gives parents and students an assignment on a bus if requested but also ask parents to waive a bus assignment if their child has a parking pass. The student would be able to gain a seat on a bus with written notification to the high school should the student no longer need a parking pass. It is expected that the district can eliminate two one tier runs and save a minimum of \$34,000 in the 2013-2014 school year.

#### Recommendation #4

The Administration recommends that district personnel work closely with First Student and First Group (the parent company of First Student) to complete the redrawing of the hazardous roads and hazardous boundaries in the Versatrans system. When the work is completed the Administration is recommending that the Technology Department develop a way in which parents and the community can access the data.

#### Recommendation #5

The Administration recommends that First Student in concert with the district use the Versatrans system to develop more efficient bus routes to St. Ann's and Seven Generations schools by assigning students by area and not by school since both schools are so close together. The Administration then proposes that First Student and district personnel work with leaders from St. Ann's and Seven Generations to implement such a change.

#### Recommendation #6

The Administration recommends that First Student and key district staff—use the planning features of Versatrans to run multiple variables of students assigned to 72 and 48 passenger buses to determine if the number of bus routes can be reduced thereby generating additional savings in the overall net transportation costs.

# Recommendation #7

The Administration recommends that the Board directs the staff to prepare bid specifications for bidding out a new transportation contract no later than December 2013.

Appendix A

# **Listing of Hazardous Roads**

		TINEA	RDOUS ROADS		T
County	School District	Dangerous Route	Segment Beginning	Segment End	Year of Evaluation
Lehigh	East Penn	St. Peters Road (SR2023)	SR0100	Stag Drive	2008
Lehigh	East Penn	Willow Lane	2902 Willow Lane	Maple Drive	2008
Lehigh	East Penn	Carls Hill Rd.	7215 Carls Hill Rd.	Geissinger Rd.	1999
Lehigh	East Penn	Ridge Rd.	Woodlawn Dr.	Berks County Line	1998
Lehigh	East Penn	Macungie Mountain Rd.	4941 Macungie Mountain Rd.	Sweetwood Rd.	1997
Lehigh	East Penn	Geissinger Rd.	5411 Geissinger Rd.	Carls Hill Rd.	1997
Lehigh	East Penn	Krocks Rd.	SR 0222	575 Krocks Rd.	1995
Lehigh	East Penn	Minesite Rd.	2060 Minesite Rd.	Hedgerow Dr.	1995
Lehigh	East Penn	Riverbend Rd.	Cottonwood Court	Rosewood Lane	1995
Lehigh	East Penn	Macungie Ave.	Donald Dr.	Lawrence Dr.	1995
Lehigh	East Penn	Donald Dr.	729 Donald Dr.	Iroquois Dr.	1995
Lehigh	East Penn	Buckeye Rd.	SR 0029	Brookside Rd.	1991
Lehigh	East Penn	Buckeye Rd. (north side)	Brookside Rd.	Macungie Borough	1991
Lehigh	East Penn	Lower Macungie Rd.	Cedar Crest Blvd.	Brookside Rd.	1991
Lehigh	East Penn	Lower Macungie Rd.	SR 0222	Brookside Rd.	1991
Lehigh	East Penn	SR 0100	Macungie Borough Line	SR 0222	1991
Lehigh	East Penn	Hamilton Blvd. (north side)	1500 ft east of Krocks Rd.	I-78	1991

Lehigh	East Penn	SR 0100	SR 0029	Macungie Borough	1991
Lehigh	East Penn	SR 0100 / SR 0029	Berks County line	SR 0100/SR 0029 split	1991
Lehigh	East Penn	Buckeye Rd.	SR 0100 intersection		1989
Lehigh	East Penn	Hensingerville Rd.	South Ridge Dr.	Gun Club Rd.	1988
Lehigh	East Penn	Shimerville Rd.	Beck Rd.	300 ft north of Beck Rd.	1984
Lehigh	East Penn	Limeport Rd.	Lower Milford Twp. Line	Baumgartner	1984
Lehigh	East Penn	Longswamp Rd.	Alburtis/Lower Macungie Twp. Line	Berks County Line	1983
Lehigh	East Penn	Krocks Rd.	Lower Macungie Rd.	SR 0222	1983
Lehigh	East Penn	Third, Franklin, Lockridge, & Curch Sts.	Roberts St.	Alburtis Elementary School	1982
Lehigh	East Penn	Macungie Mountain Rd.	The Fanok Residence	T-459	1981
Lehigh	East Penn	Brookside Country Club Rd			1974
Lehigh	East Penn	Liberty Lane			1974
Lehigh	East Penn	State Ave			1974

Source: PA Department of Transportation, Engineering District 5-0

# Appendix B

# Willow Lane Buses and Developments

Bus 7	Shepherd Hills, Bridlepath West, Penn's Meadow, Willow Bend and Brookfield Estates
Bus 40	Danfield Run, Brookfield Estates, and Winding Brook Manor
Bus 55	Brandywine Village, Graymoor, and Beaumont at Brookside
Bus 63	Shepherd Hills, Hamilton Fields, and Hi Point
Bus 65	Brandywine Village, Graymoor
Bus 66	Shepherd Hills
Bus 76	Shepherd Hills, Graymoor
Bus 134	Brookside Daycare, Brookside Road
Bus 4	Cambridge Daycare, Rolling Meadows
Bus 15	Brandywine Village and Beaumont at Brookside
Bus 26	Brookfield Estates, Brookside Farms, Winding Brook Manor, Bridlepath West

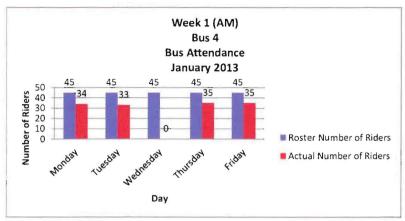
Note: Appendix B Information provided by First Student

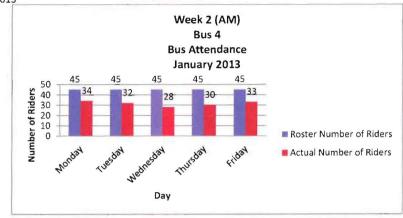
# **APPENDIX C**

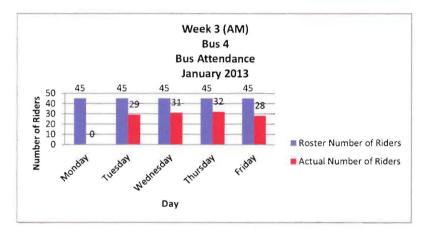
CHARTS (1-11)

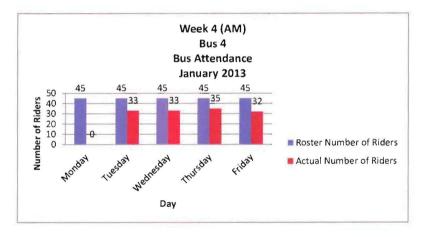
WILLOW LANE BUS ATTENDANCE REPORTS, JANUARY 2013

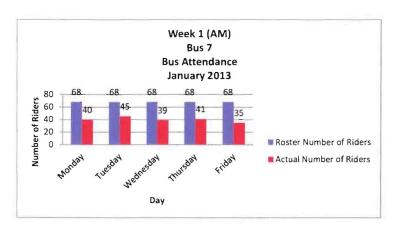
Willow Lane Bus Attendance Reports January 2013

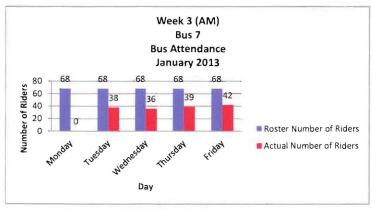


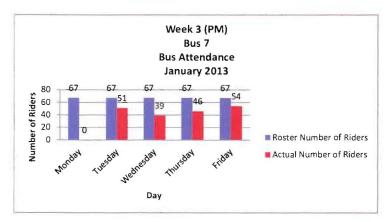




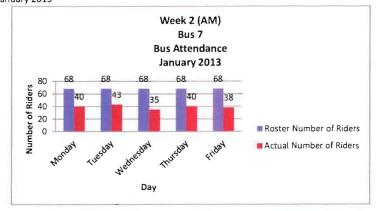


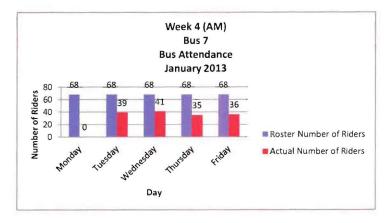


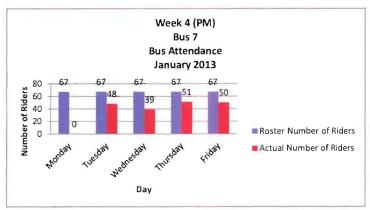


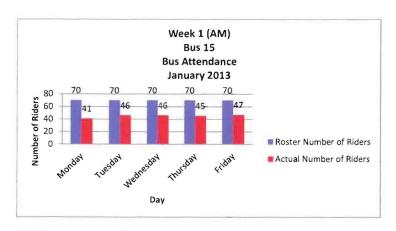


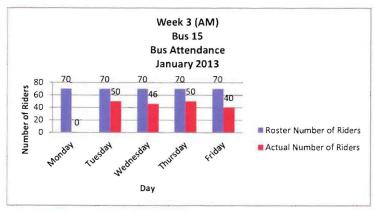
Willow Lane
Bus Attendance Reports
January 2013

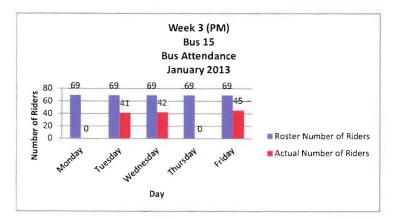




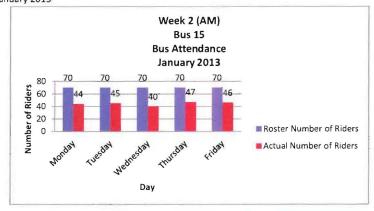


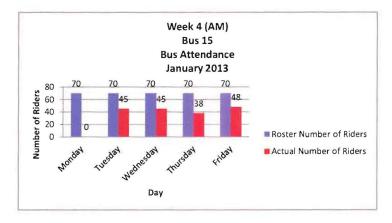


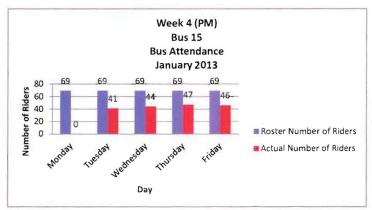




Willow Lane
Bus Attendance Reports
January 2013







Week 1 (AM)
Bus 26
Bus Attendance
January 2013

67 67 67 67 67 67

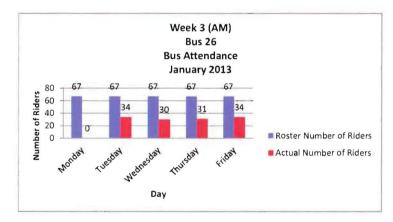
69 40

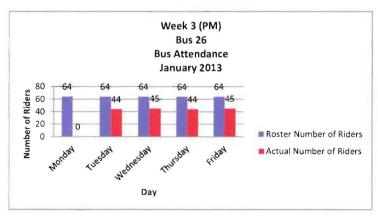
90 20

Particular Actual Number of Riders

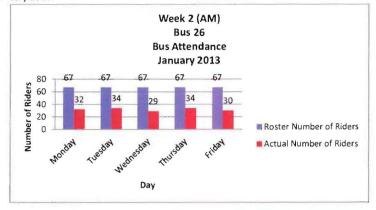
Number of Riders

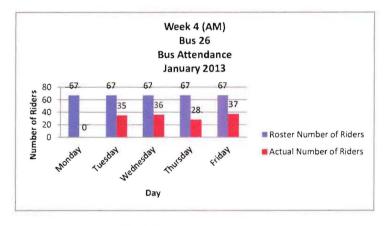
Day

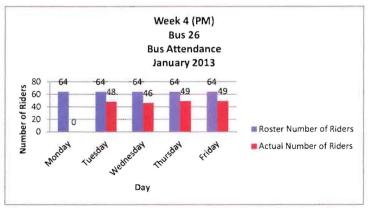


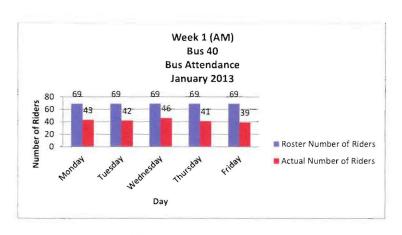


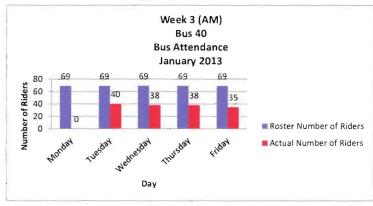
Willow Lane
Bus Attendance Reports
January 2013

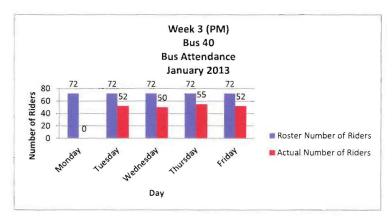




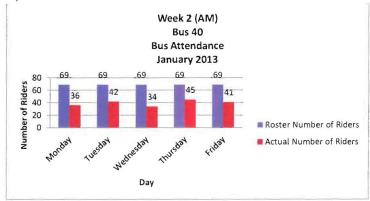


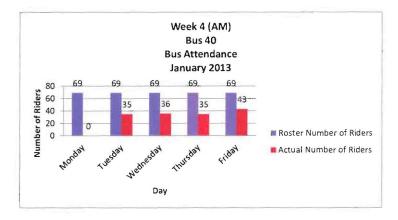


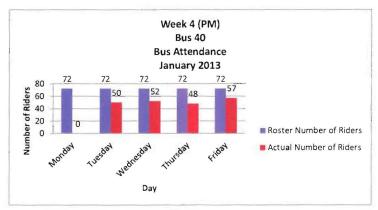


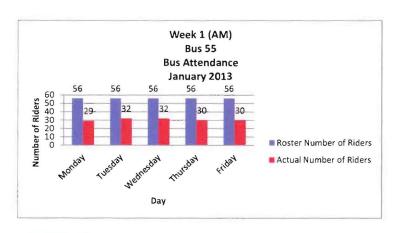


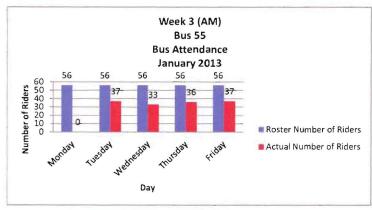


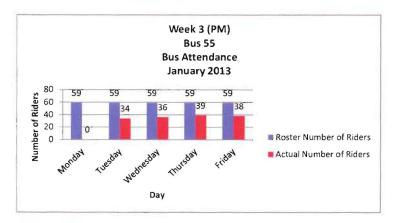




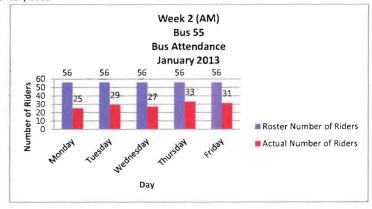


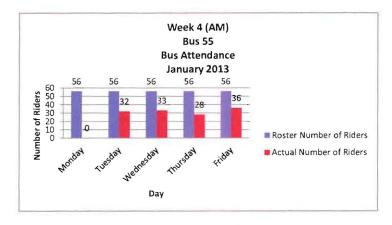


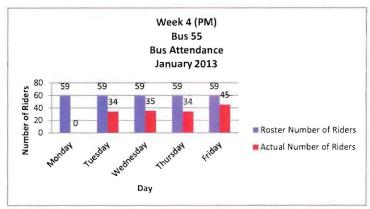




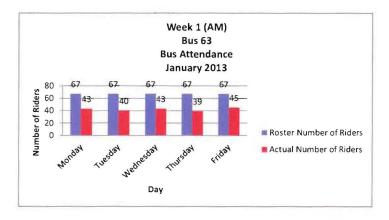
Willow Lane Bus Attendance Reports January 2013

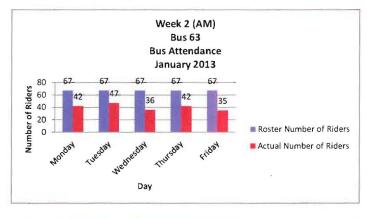


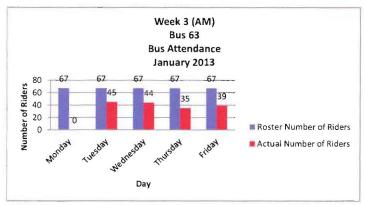


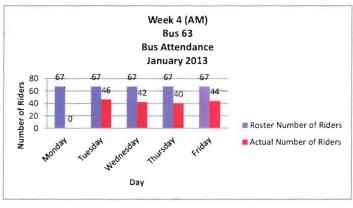


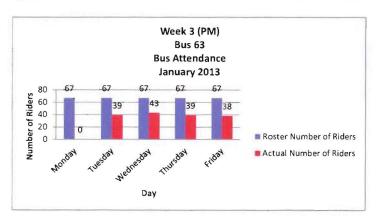
Willow Lane Bus Attendance Reports January 2013

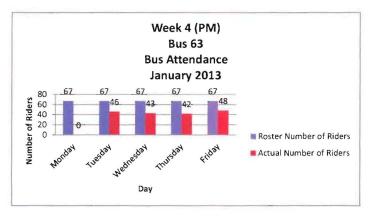


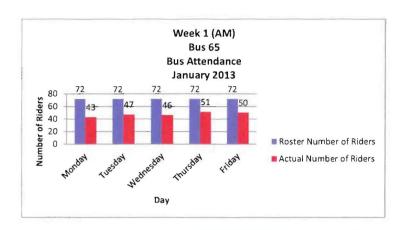


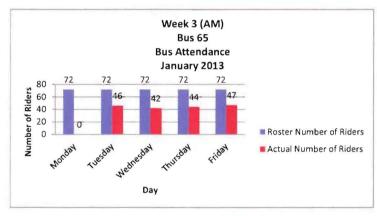


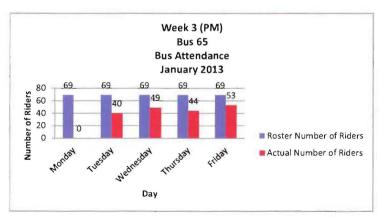




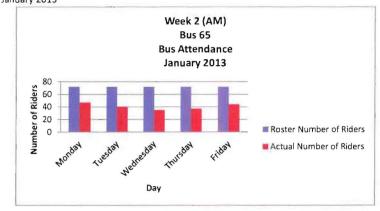


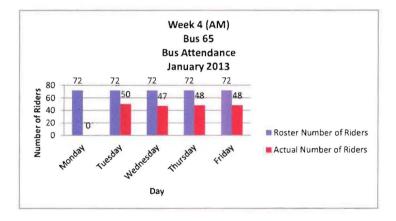


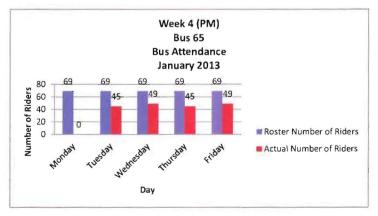


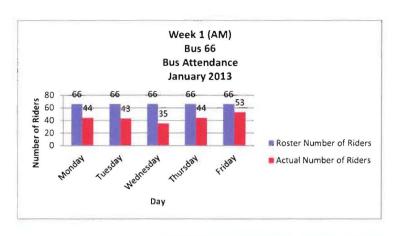


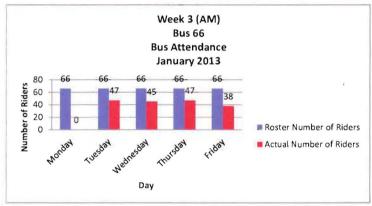
# Willow Lane Bus Attendance Reports January 2013

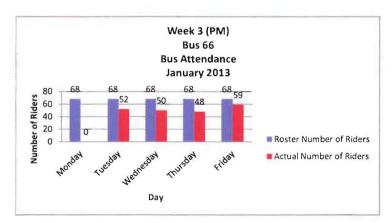




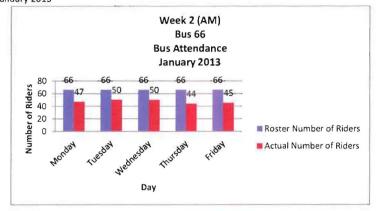


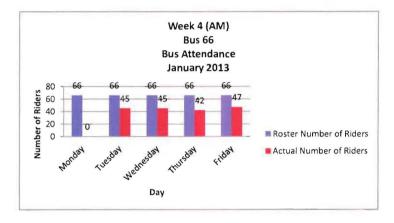


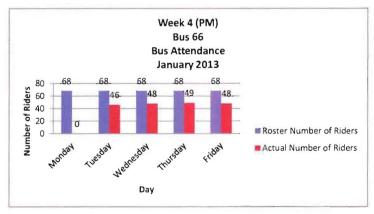




#### Willow Lane Bus Attendance Reports January 2013



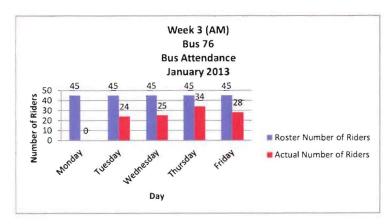


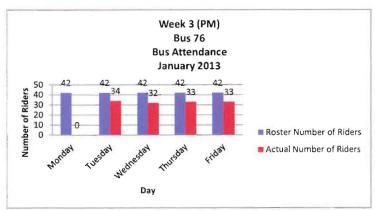


Week 1 (AM)
Bus 76
Bus Attendance
January 2013
45 45 45 45 45
20 10 0
Roster Number of Riders

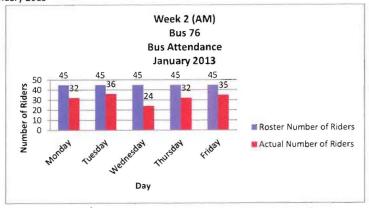
Week 1 (AM)
Bus 76
Bus Attendance
January 2013
45 45 45 45
Actual Number of Riders

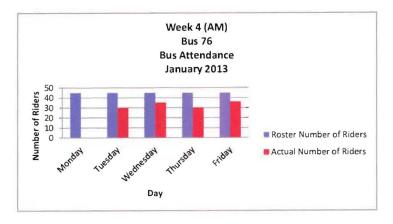
Day

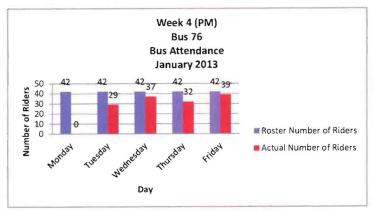




Willow Lane Bus Attendance Reports January 2013







Willow Lane Bus Attendance Report January 2013

