

Pupil Transportation



Prepared by the

Utah State Office of Education
School Finance

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UTAH SCHOOL BUS STATISTICS

2013

SUMMARY OF SCHOOL BUS STATISTICS SUPPLIED BY UTAH SCHOOL DISTRICTS

BASED ON ANNUAL REPORTS RECEIVED ON JULY 15, 2013



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UTAH STATE OFFICE OF EDUCATION
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Summary of State Bus Statistics

Types of Buses by Model Year					
	A	B	C	D	Totals
Total	78	9	152	2,582	2,821
1984	0	0	0	3	3
1985	0	0	0	4	4
1986	0	0	0	5	5
1987	0	0	0	1	1
1988	0	0	0	5	5
1989	0	0	0	13	13
1990	0	0	1	18	19
1991	0	0	0	32	32
1992	0	1	0	45	46
1993	1	1	1	30	33
1994	1	0	3	47	51
1995	0	0	3	40	43
1996	3	4	4	158	169
1997	0	0	2	71	73
1998	0	0	2	132	134
1999	3	0	3	114	120
2000	5	0	1	145	151
2001	4	0	3	153	160
2002	6	1	3	128	138
2003	3	0	1	124	128
2004	11	0	5	139	155
2005	13	0	6	127	146
2006	3	0	16	160	179
2007	11	0	14	123	148
2008	5	1	11	151	168
2009	5	0	3	175	183
2010	0	0	12	105	117
2011	4	0	15	77	96
2012	0	1	17	105	123
2013	0	0	20	146	166
2014	0	0	6	6	12

Total Number of Buses by District	
District	#
Total	2,821
01 Alpine	273
02 Beaver	17
03 Box Elder	123
04 Cache	132
05 Carbon	39
06 Daggett	9
07 Davis	270
08 Duchesne	58
09 Emery	28
10 Garfield	14
11 Grand	13
12 Granite	166
13 Iron	74
14 Jordan	212
15 Juab	16
16 Kane	23
17 Millard	35
18 Morgan	21
19 Nebo	172
20 North Sanpete	24
21 North Summit	14
22 Park City	33
23 Piute	13
24 Rich	11
25 San Juan	70
26 Sevier	42
27 South Sanpete	27
28 South Summit	15
29 Tintic	5
30 Tooele	87
31 Uintah	63
32 Wasatch	43
33 Washington	120
34 Wayne	10
35 Weber	186
36 Salt Lake	94
37 Ogden	40
38 Provo	40
40 Murray	21
42 Canyons	168

Summary of State Bus Statistics

# by Bus Capacity	
Capacity	#
7 -25	54
26-35	127
36-45	140
46-55	214
56-65	134
66-75	188
76-90	1,964
Total	2,821

# by Body Type	
Type	#
Amtran	138
Blue Bird	2,290
International	131
Midbus	0
Thomas	227
Wayne	0
Other	35
Total	2,821

# by Fuel Type	
Type	#
CNG	77
Diesel	2,712
Electric	0
Gas	32
Hybrid	0
Propane	0
Total	2,821

# by Price Range	
Price Range	#
0 - 25,000	86
25,001 - 50,000	41
50,001 - 75,000	889
75,001 - 100,000	992
100,001 - 125,000	688
125,001 - 150,000	98
150,001 - 175,000	6
175,001 - 200,000	0
Total*	2,800

Wheel Chair	748
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Retrofitted	1,073
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2006/older buses not Retrofitted	739
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* 21 buses are being leased

Estimated Cost of New Buses (depending on specifications)

Type A

Gas \$70,000

Normal Seating Capacity = 20



Type B

Diesel \$95,000

Normal Seating Capacity = 30



Type C

Diesel \$102,000

Propane \$115,000

Normal Seating Capacity = 77



Type D

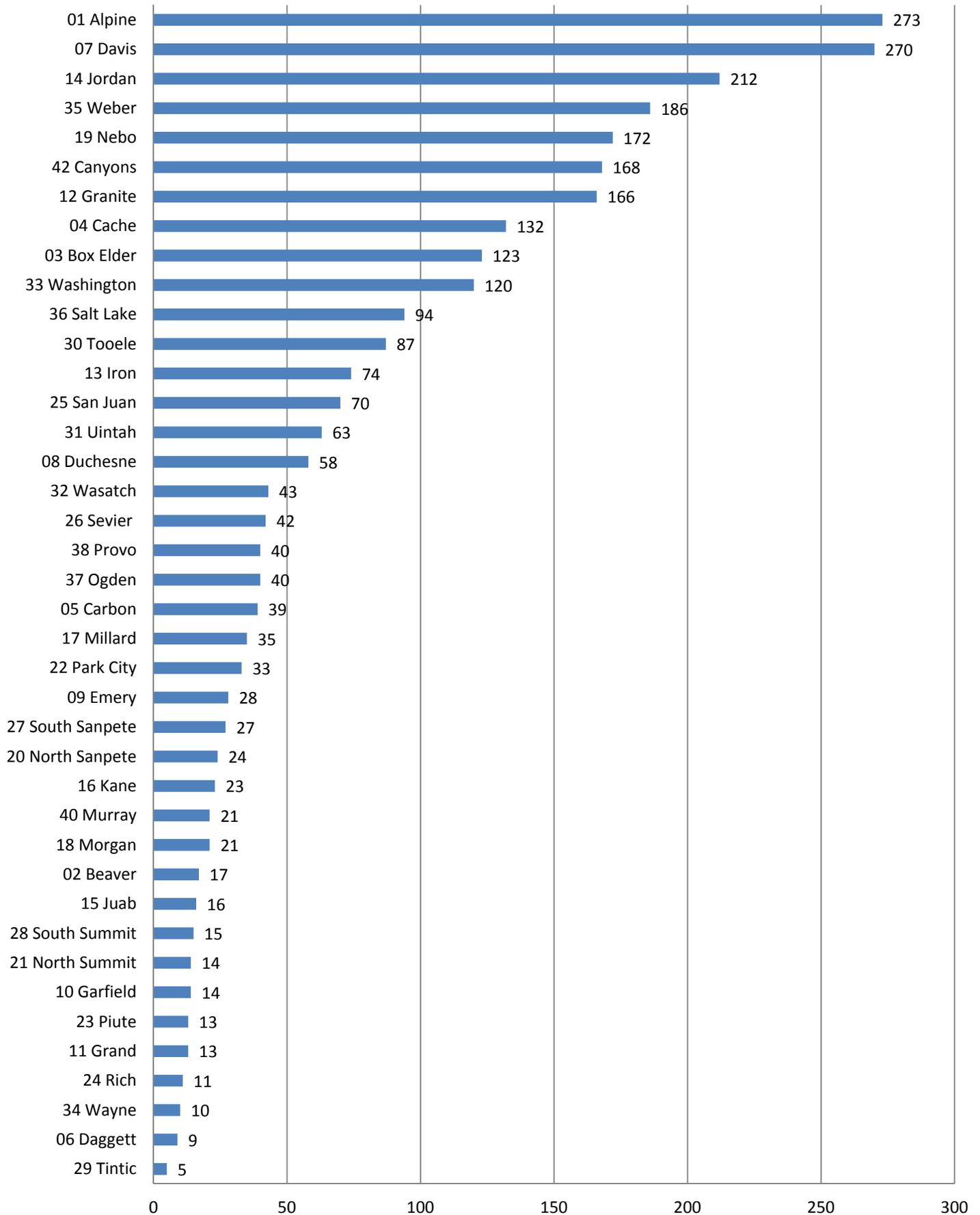
Diesel \$120,000

CNG \$145,000

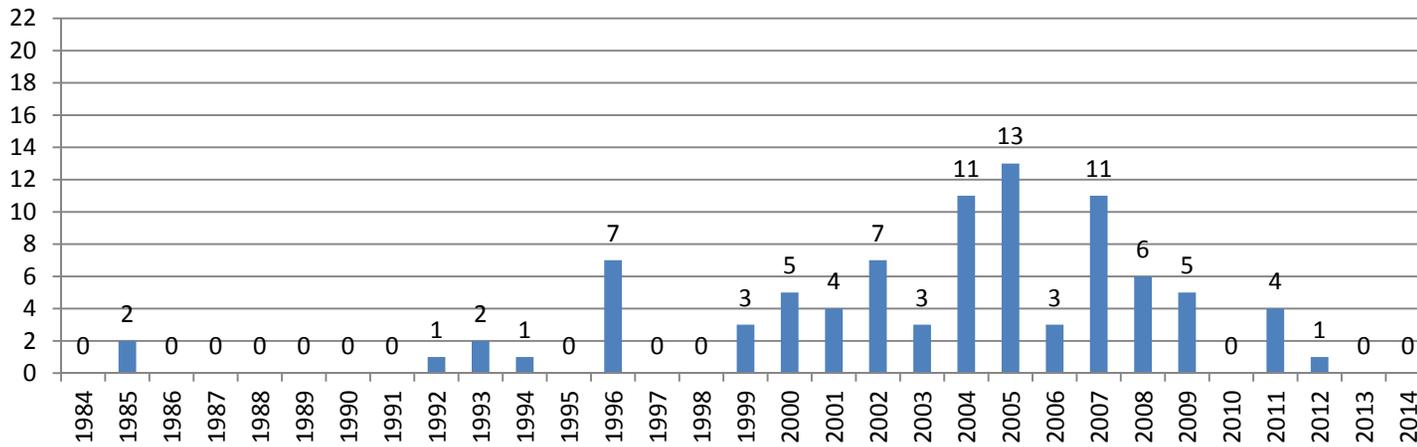
Normal Seating Capacity = 84



Number of Buses by District



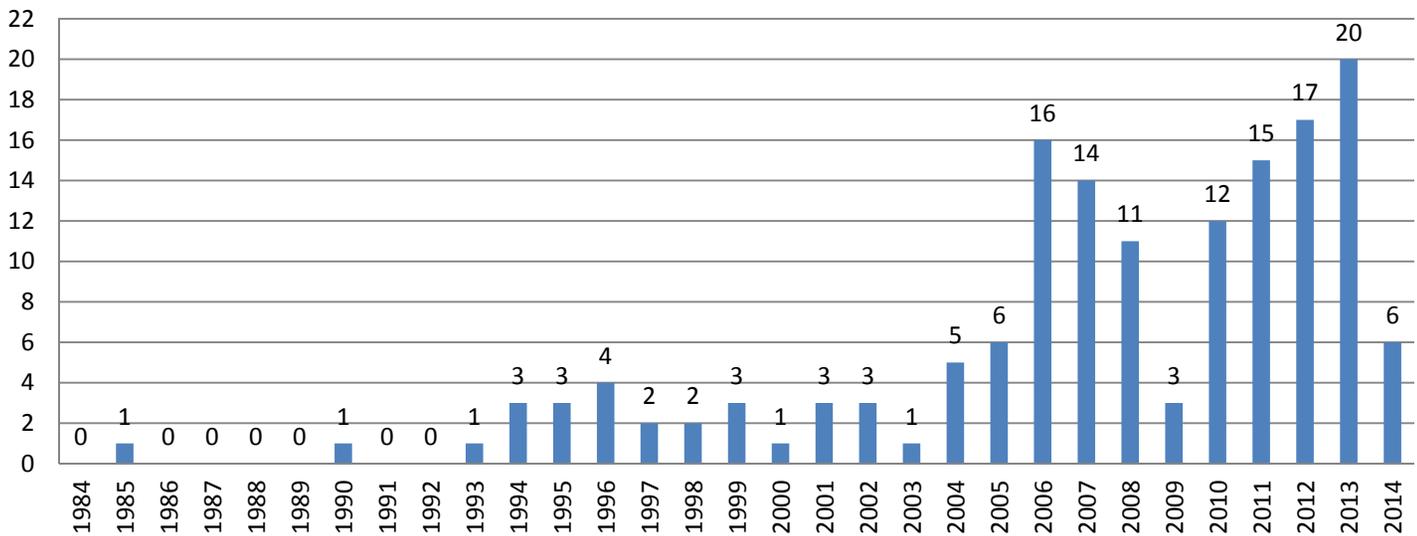
Number of Type A & B Buses by Model Year



Type "A" Bus



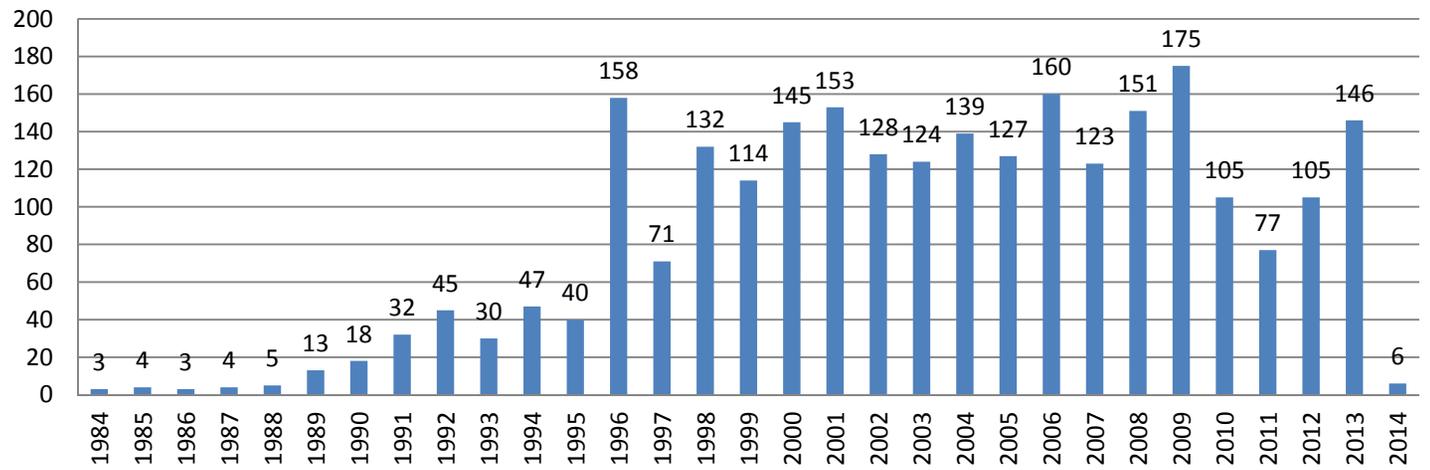
Number of Type C Buses by Model Year



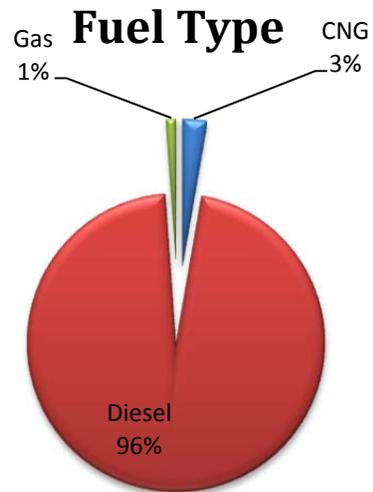
Type "C" Bus



Number of Type D Buses by Model Year



Type "D" Bus



Utah State Office of Education (USOE)

Investment in Clean Air / Safe Kids Funding Proposal *Draft 10-30-13*

At the Request of the Statutory Pupil Transportation Advisory Committee

Prepared by: David Roberts – Finance Director, Murrell Martin – Pupil Transportation Specialist,
Matthew White – Routing/Safety Specialist

Issues and Facts:



- In April 2013, Utah was recognized in Washington D.C. for leading the country in percentage of school buses retrofitted with pollution reduction devices, yet there are still just over 450 older buses that were not able to be included in the grants for retrofitting. Of these buses, 361 have been identified as priority
- In 2012-13 there were **37 RED-alert days** across Salt Lake, Davis, Utah, Weber, and Cache counties
- In 2011-12 there were **5 RED-alert days** across Salt Lake, Davis, Utah, Weber, and Cache counties
- Replacing older buses with new CNG, Propane or Clean Diesel buses would substantially reduce the amount of pollution from Utah air
- School districts have an increased interest in switching to alternative fuels; the obstacles are:
 - Incremental cost difference of replacing diesel with alternative fuels
 - Huge financial cost for the infrastructure for alternative fuels
- Utah is a leading producer of Natural Gas and Propane, and could benefit in multiple ways with increased local use

Potential Benefits of Replacing Dirty Diesel Buses

1. Removing hundreds of the oldest, dirtiest buses from EPA non-attainment air quality counties
2. Since Natural Gas and Propane are natural resources abundant in Utah, new jobs in Utah would be created by more agencies, businesses and individuals using these products
3. School districts can work with other entities [municipalities, businesses, etc.] to make alternative fueling stations available to more than just the school district
 - Example: a slow-fill CNG station on one side of the fence for the district, and a fast-fill station on the other side for the public at large

Estimated Emissions Reduced by Replacing 355 Buses*

Nitrogen oxide • **11,108.34 tons**
Carbon monoxide • **3,748.01 tons**
Hydrocarbons • **572.60 tons**
Particulate matter • **444.80 tons**

* Over the life of the fleet

Note: Currently the Utah Department of Environmental Quality is working with the EPA to project potential reductions

What is the Investment?

- \$13 million for bus replacement as a one-time investment to replace up to 170 buses
 - School districts required to go through an RFP process with the USOE to qualify for half the cost of replacing their buses from 1993 to 2001 with either CNG, Propane, or Clean Diesel
- \$7 million for alternative fuel infrastructure as a one-time investment
 - School districts required to go through an RFP process with the USOE to qualify for funding
 - New fueling stations (with access for other municipalities and the public)
 - Retrofitting bus shops

Bus Replacement - \$13 Million:

50% matching funds to replace an estimated 170 buses

- Due to economic conditions, the annual state funding for Pupil Transportation was cut by 11.6 million dollars in 2010. Most of the reduced funding was being used for bus replacement, and the reduction has
- Districts would go through an RFP process administered by the USOE to qualify for 50% of the cost to replace buses from 1993 to 2001
 - Emphasis would be placed on replacing buses with CNG or Propane (See Alternative Fuel Infrastructure)
 - Districts that do not have a feasible option of replacing buses with CNG or Propane would be able to apply for consideration of Clean Diesel meeting the latest EPA requirements
 - As part of the RFP, districts would be required to verify that an older, dirty diesel bus was removed from operative service
- Potential to replace more than **1/3** of the buses that have not been retrofitted in the first year
- USOE to report back to the legislature for consideration of future funding proposals

Potential Long-Term Fuel Savings

- If 170 dirty diesel buses were replaced with CNG buses
 - Fuel savings estimated at **\$12,512,000** over the life of the buses when calculated according to public pricesⁱ
 - Fuel savings estimated at **\$17,204,000** over the life of the buses when calculated according to contractual ratesⁱⁱ (Fuel savings listed does not include rebates / fluctuation in diesel fuel prices)



Jordan School District bus refueling at an alternative fuel station

Alternative Fuel Infrastructure - \$7 Million:

Purchasing alternative fuel buses without the infrastructure (i.e. fueling stations and an adequate shop) is not something districts are prepared to do. In order to be effective, the Pupil Transportation Advisory Committee has determined alternative fuel buses and infrastructure must be put in place at the same time.

- Districts would be required to go through an RFP process administered by the USOE to qualify for the funds to:
 - Install a fueling station
 - Retrofit their bus shop
- The USOE would facilitate and administer the necessary training of shop technicians in working on alternative fuel buses

Investing in The Future

By investing in Utah's future we will be able to:

1. Provide improved air quality for Utah residents
2. Reduce dependence on foreign oil
3. Assist local school districts in putting additional dollars back into the classroom
4. Have the potential of creating additional Utah jobs

ⁱ Assuming: 1) Diesel prices remain at \$3.33/gallon; 2) Public CNG prices remain at \$1.49/gallon; 3) 6 MPG; 4) 40,000 gallons used over 20 year life of bus

ⁱⁱ Assuming: 1) Diesel prices remain at \$3.33/gallon; 2) Using Jordan School District's contractual rate of \$0.80/gallon for slow-fill CNG; 3) 6 MPG; 4) 40,000 gallons used over 20 year life of bus

Total Number of Older, Dirty Diesel and Gas Buses Per District

District	1984	1986	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Totals
01 Alpine							1	7	2	13	12	11		26	12	84
02 Beaver			1	1							1	3	1			7
03 Box Elder										3	4	10	6	6	10	39
04 Cache			2	2	6	6	8	1		8	2	12	5	11	8	71
05 Carbon								1	1	3	2	2	2	2	3	16
06 Daggett			1			1						1			1	4
07 Davis				1	14	11	8	12	14	15	13	15	15	15	13	146
08 Duchesne			1	1		4				1	4	2	3	3	3	22
09 Emery												1		2	1	4
10 Garfield					1	1		1		1		1			1	6
11 Grand			2	1		1		1				1		1		7
12 Granite							1	1		3		13	12	12	12	54
13 Iron						1	1	2	1	8		3	3	4	4	27
14 Jordan									3	3		7	12	16	17	58
15 Juab											1	1		1		3
16 Kane				1		1	1	1	1	1	1	2		2	1	12
17 Millard													2		1	3
18 Morgan										2		1	1		1	5
19 Nebo							2	4			2	4	8	8	9	37
20 North Sanpete												1	1	2	1	5
21 North Summit												1			1	2
22 Park City														1	2	3
23 Piute			1			1	2			2			1		1	8
24 Rich									1		1		1	1		4
25 San Juan							1		2		5	2	13	1		24
26 Sevier				1		1	1	2		2	2	2	2	2	2	17
27 South Sanpete			1		2					1	1	2	1	2	1	11
28 South Summit												1		1	1	3
29 Tintic					2									1		3
30 Tooele										71						71
31 Uintah													1	1	4	6
32 Wasatch				1		1	1	5	1	1	1	1		2	2	16
33 Washington								6	9	8	2	4	3	6	14	52
34 Wayne						1		1			1			1	1	5
35 Weber	1	1	3	9	9	9				13	10	9	14	4	6	88
36 Salt Lake						5	4	4		5	4	1	2	4	5	34
38 Provo							2	2	3		3	3	2	3	7	25
40 Murray							2	2	3		3	3	2	3	7	25
42 Canyons									4	1		10	6	7	13	41
Totals	1	1	12	18	34	44	35	53	45	165	75	130	119	151	165	1048

Total Buses in "Nonattainment" Air Quality Areas	702	% of Total Fleet	24.88%
Total Buses in "Concern" Air Quality Areas	96	% of Total Fleet	3.40%

Utah State Office of Education
State Pupil Transportation Funding Impacts 2006 - 2013
at the Request of the Pupil Transportation Advisory Committee
Prepared by: Murrell Martin - Pupil Transportation Specialist, USOE

Year	Enrollment & Projected Enrollment	Students Transported	Percent Transported	Increase in Students Transported	Utah Cost Per Student	National Cost Per Student	Actual District Expenditure	Utah Code 53A-17a-126 Contribution 85%	Actual State Funding	Actual State Funding %	District Coverage of State 85% Shortfall	Average Fuel Cost (Granite)	New Bus Cost (Granite)	Total School District Buses
FY06	504,729	152,384	30.2%		\$517	\$813	\$78,817,933	\$66,995,243	\$62,601,763	79.4%	\$4,393,480		\$93,527	2,300
FY07	515,457	167,070	32.4%		\$513	\$839	\$85,628,294	\$72,784,050	\$65,253,194	76.2%	\$7,530,856	\$2.35	\$101,899	2,362
FY08	523,644	174,678	33.4%		\$528	\$874	\$92,225,863	\$78,391,984	\$76,188,780	82.6%	\$2,203,204	\$2.75	\$106,974	2,406
FY09	529,107	175,061	33.1%		\$542	\$868	\$94,888,189	\$80,654,961	\$74,758,330	78.8%	\$5,896,631	\$2.69	\$112,004	2,710
FY10	536,214	175,206	32.7%	145	\$526	Unavailable	\$92,169,999	\$78,344,499	\$63,062,430	68.4%	\$15,282,069	\$2.17	\$112,901	2,695
FY11	542,853	177,692	32.7%	2,486	\$523	Unavailable	\$92,947,189	\$79,005,111	\$63,062,465	67.8%	\$15,942,646	\$2.79	\$120,851	2,701
FY12	550,184	173,588	31.6%	-4,104	\$569	Unavailable	\$98,826,453	\$84,002,485	\$63,062,465	63.8%	\$20,940,020	\$3.33	\$123,751	2,726
FY13	557,297	160,135	28.7%	-13,453	\$626	Unavailable	\$100,264,349	\$85,224,697	\$65,848,600	65.7%	\$19,376,097	\$3.27	\$121,051	2,821

Utah Code-STATE SYSTEM OF PUBLIC EDUCATION 53A-17a-126. State support of pupil transportation

- (1) Money appropriated to the State Board of Education for state-supported transportation of public school students shall be apportioned and distributed in accordance with Section 53A-17a-127, except as otherwise provided in this section.
- (2) (a) The Utah Schools for the Deaf and the Blind shall use its allocation of pupil transportation money to pay for transportation of their students based on current valid contractual arrangements and best transportation options and methods as determined by the schools.
(b) All student transportation costs of the schools shall be paid from the allocation of pupil transportation money specified in statute.
- (3) (a) A school district may only claim eligible transportation costs as legally reported on the prior year's annual financial report submitted under Section 53A-3-404.
(b) The state shall contribute 85% of approved transportation costs, subject to budget constraints.
(c) If in a fiscal year the total transportation allowance for all districts exceeds the amount appropriated for that purpose, all allowances shall be reduced pro rata to equal not more than the amount appropriated.

Summary of Key Events Impacting School District Pupil Transportation Funding:

- Beginning in FY2010 school districts lost \$11.6 million in State funding for bus replacement, and this has impacted the ability of local school districts to replace older school buses.
- Districts required to provide additional local funds for eligible student transportation, have been unable to provide funding for hazardous routing, and this has affected thousands of students.
- With hazardous routing cut to thousands of Utah School Children, there has been an increase in traffic congestion, increase in fuel consumption, and decrease in safety for students.
- The cost of purchasing new buses has increased dramatically in recent years due to new EPA regulations requiring higher emissions standards for school buses.
- Statewide, school districts use buses an average of 20 years. Therefore, school districts are spending additional resources on maintenance and parts for their older fleets.

Efficiencies of Utah Pupil Transportation:

Utah districts transport students at \$299 less than the national average, saving Utah tax payers over \$51 million each year.
In recent years, Utah school districts have implemented a number of efficiencies in their operations. These efficiencies include:

Tiered bus routing with staggered bell times to better utilize buses and drivers.	Route auditing with GPS systems to create greater efficiency.
Computerized bus routing to create and operate more efficient bus routes.	Idling reduction to eliminate waste.

Value of school bus transportation to the State of Utah:

Over \$40 million is saved each year by transporting students on school buses rather than in private vehicles, reducing fuel usage by 11 million gallons and resulting in significant pollution reduction. Each school bus replaces approximately 36 private vehicles. Therefore, Utah school buses reduce traffic by 86,000 vehicles each day.
With the safety record of school buses, at least five lives are saved each year.
Without school bus transportation, many students in Utah would not have adequate access to public education.