



TRANSPORTATION DEPARTMENT

SCHOOL BUS LOGISTICS

Date: September 12, 2023

Version: 3.0

Prepared for: **Mountain View Whisman School District**



September 12, 2023

Dr. Rebecca Westover
Megan Pohlman
Mountain View Whisman School District

Dear Dr. Rebecca Westover & Megan Pohlman,

School Bus Logistics LLC is pleased to deliver this report of our findings after we conducted a review of current data.

The purpose of the report is to provide dual streams of information for the needs of your district. One focus was on our recommendations for the number of vans to purchase and the best utilization of vans to better accommodate and provide additional service for field trips and sporting events. Another focus provides recommendations towards the goal of providing transportation for SED students to Choice Programs for Stevenson Elementary and Mistral Elementary.

We appreciate the assistance from you and each staff member of the routing team. This open line of communication has brought forth a better understanding of the needs of the district and the families it serves.

If you have any further questions regarding this report, please feel free to reach out anytime. I can be reached at 720-425-3969 or by emailing me at melissa.kubica@schoolbuslogistics.com

Regards,

Melissa Kubica
Routing Consultant



Study Overview

School Bus Logistics, LLC was selected to provide an analysis of the district's current school bus routes, recommendations toward the purchase of vans to provide additional services for field trips and sporting events. Also, School Bus Logistics was asked to review and report findings towards the goal of providing transportation for Choice Programs.

Deliverable 1 – Small Vehicle Purchase Recommendations

- Route assessment and review
- Review current load count of trips and routes
- Review scheduling and current route structure
- Work towards a goal that fits the needs of the district and families by collaborating with district stakeholders to preserve the best possible outcomes
 - Present and review a summary report of findings and recommendations
 - Identifying purchasing cost for 3 student passenger vehicles by type (Sports Utility, Van, Type A School Bus and Type C School Bus)
 - Present a summary of findings, recommendations and possible impact.

Deliverable 2 – Transporting SED Students

- **Review and present possible options for transporting SED students to and from Mistral and Stevenson Elementary Schools**
- **Evaluate Bell Times**
- **Present a summary of findings, recommendations and possible impact**



Summary

School Bus Logistics began with creating current, provided routes within the Routefinder Plus Environment. The stops, times, and locations being currently used by the district were provided for us to recreate within the software.

The recommendations are partially reliant on the number of trips that one bus or van could complete in a day based on distance and time from location to location. All trips were compiled within the program and assessed collectively. Ride time is assessed as the amount of time a student would spend going from Point A to Point B and Point B back to Point A. Especially for students in Special Education, this variable was thoughtfully considered.

Taking all of this into account, the current routes would allow for buses in your fleet or additional vans to be used for *most* of the routes to transport students to and from schools. The exceptions would include students that may require additional equipment and space that a van could not accommodate such as a wheelchair or walker. Utilizing vans would allow some flexibility in transporting athletic teams in lieu of large buses based on sporting event schedules and number of participants. This new configuration could be obtained by utilizing non-bus drivers to transport students to and from home, allowing for the bus driver to use the buses for other activities.

School Bus Logistics also focused on creating bus routes for SED students for Choice Programs within Routefinder Plus to provide transportation for both Stevenson and Mistral Elementary Schools and determine what that impact would be on the district with 3 possible options. To obtain this, routes were made by creating a combination of hub stops and campus locations. Both groups of students ride the same routes to ride to both schools, dropping off and picking up at each location.

Because school locations are close to each other. School sites could consider changes to drop off or pick up times at the schools to account for any slight changes to current practices especially for parents or caregivers. Attached are the proposed bus stop locations and times to transport students to and from home to attend either Stevenson or Mistral Elementary school.

With the proposed routes and stop locations for the Choice School routes, the latest afternoon route is completed by 3:15 pm. This time allows for each vehicle to transport after school bussing for sporting events.

The average cost to operate one bus per year is \$148,873.68. This cost includes the average driver's salary and cost per bus. This information was provided by Dr. Westover. School Bus Logistics would propose the purchasing of up to three small passenger vehicles. The additional vans would be an advantage to increase the usage of buses for athletics, field trips, and sporting events (**See table 1**).



Deliverable 1

[Table 1]

Average Cost To Operate One (1) Bus Per Year			
Total Annual Salary and Benefits Cost			\$697,358.09
Average Annual Salary and Benefits Cost			\$116,226.35
Bus Maintenance/Oil/Supplies/Etc Spending			\$195,883.97
Total Number of School Buses in the Fleet			6
Estimated Maintenance Cost Per School Bus			\$32,647.33
Estimated Cost to Operate One (1) School Bus			\$148,873.68
Estimated Total Annual Cost to Operate the School Bus Fleet			\$893,242.08



School Bus Logistics were asked to research and submit the total cost to purchase three (3) small passenger vehicles (See Table 2). These vehicles could be operated by district employees who do not need a commercial driver’s license to operate by the State of California. School district employees (administrators, coaches, teachers and bus assistants) shall be required to possess a valid California driver's license, and at least the minimum insurance required by the school district. No more than nine (9) student passengers including the driver shall be allowed in a van or district owned vehicle (Sport Utility Vehicle). This action will help the school district to increase the number of employees who could transport students to and from school and to school based activities daily.

Mountain View Whisman School Districts can set the qualifications for any employee driver who operates a district owned vehicle by designing a training program that will set practices and guidelines for safe driving. A training program will educate employee drivers to focus on safely transporting students under the district policy, which will be equivalent to the same safety standard as your district school bus drivers. Plus, School Bus Logistics has forwarded Dr. Westover and Ms. Pohlman training materials that will help support the school district with implementing a small vehicle driver training program.

[Table 2]

Estimated Cost of Small Passenger Vehicles

Vehicle Cost Breakdown				
<i>Sport Utility</i>	Average Cost Per Vehicle	Type of Fuel	Number of Vehicles	Total Cost
	\$56,815.00	Gasoline	3	\$170,445.00
	\$71,284.00	Electric	3	\$213,852.00
<i>Van</i>	Average Cost Per Vehicle	Type of Fuel	Number of Vehicles	Total Cost
	\$41,000.00	Gasoline	3	\$123,000.00
	\$47,212.50	Hybrid (Gas/EV)	3	\$141,637.50
<i>School Bus</i>	Average Cost Per Vehicle	Type of Fuel	Number of Vehicles	Total Cost
Type C-72-82 pass	\$130,000.00	Gasoline	3	\$390,000.00
	\$427,153.00	Electric	3	\$1,281,459.00
Type A-15 pass	\$60,000.00	Gasoline	3	\$180,000.00



	\$256,688.00	Electric	3	\$770,064.00
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Summary of Findings and Recommendation

Summary

Students use many modes to travel to and from school and school-related activities. As the scenarios in **Table 1 and Table 2** demonstrates, the cost to operate full size school buses and the cost to purchase small vehicles. There are efficiency factors associated with utilizing both full size school buses and small vehicles to assist Mountain View Whisman School District to extend transportation services to more students is complex and highly interrelated. Changes in any one characteristic of school travel can lead to dramatic changes in the overall risk to the student population. Thus, it is important for school transportation decisions to reflect input from those representing a spectrum of disciplines and perspectives, including district administrators, transportation professionals, school administrators, drivers, parents and students, and possibly others who may have knowledge or expertise regarding the use and safety of the various modes used for school travel.

For this study, the School Bus Logistics grouped the type of vehicles they can purchase for school travel into three (3) categories for cost analysis: Sport Utility Vehicles, (c) Van Passenger Vehicles, and School Buses (Type A and C bus types). Estimates of pricing among these vehicles were retrieved from local dealerships and the State of California government pricing.

It must be recognized, of course, that Mountain View Whisman School District, Board of Education, District Administration, Transportation Professionals select the type of vehicle you purchase to transport students that will be cost effective to your budget. The approach suggested by the School Bus Logistics is to balance route efficiency, student safety and cost saving related factors. School Bus Logistics believes this reconciliation can best be achieved when a broad range of factors and perspectives is considered, and when choices are supported with accurate data and perceptible, experienced knowledge of industry best practices .

Recommendation

The School Bus Logistics developed data that is designed to find the best vehicle type to complement Mountain View Whisman School District's existing fleet to assist the district to efficiently transport students and support school-related activities. Moreover, it is possible to purchase small vehicles to transport students who require transportation under Federal and/or State mandates; so the full size school buses could be used to support school-related activities after students who are transported to and from school are delivered.

It is School Bus Logistics recommendation that Mountain View Whisman School District leadership should purchase Sport Utility Vehicles to use as an extension of their existing pupil transportation fleet. There are many reasons why the Sport Utility Vehicles was our selection for the following reasons:



- Sports Utility Vehicles (SUV) provide a cost effective savings in maintenance and fuel budgetary spending.
 - Sports Utility Vehicles purchase will increase the number of miles per tank (both gasoline or electric).
 - Maintenance cost to a Sports Utility Vehicles will reduce spending from what the district currently spends on full size diesel fueled school buses.
 - Sports Utility Vehicles are more safe to transport students versus vans; however, the full size school bus is the safest form of pupil transportation.
 - Sports Utility Vehicles are better equipped to transport students with disabilities.
 - Sports Utility Vehicles can be utilized to transport school small athletic teams and clubs.
 - Mountain View Whisman School District can train and develop district employees to operate these vehicles (a commercial driver’s license [CDL] is not required to transport students in these vehicles).

It is prudent for the Mountain View Whisman School District implement a training program to promote a standard the district will require employees make sure they adhere to safe driving practices when transporting students in these small vehicles. Plus, this action will expand your pool of drivers who could transport students for your school district.

Closing

Transporting students to and from school is a complex and sensitive issue. Every type of vehicle has its attendant risks, which vary from community to community and school to school, and any shifts from one type of vehicle to another can have a marked effect on the overall safety of school travel for a particular community or school. Mountain View Whisman School District should add Sport Utility Vehicles to its existing fleet to assist the district to efficiently transport students, budgetary cost saving and a new way to support school-related activities. Each State and school district must assess its own situation and circumstances and apply the information presented in this report to make sound, informed decisions. The goal is to improve route efficiency, reduce the operational cost and most importantly, safety for all students traveling to and from school and school-related activities and to provide communities with the information needed to make informed choices that balance their needs and resources.

Deliverable 2



Below are options for transporting SED students to and from Mistral and Stevenson Elementary schools.

Proposed Routes and Bus Stop Locations

Home Campus to Shuttle Bus

A1 -

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
Bubb Elementary	7:52	3:14	19
Imai Elementary	7:50	3:16	4
Vargus Elementary	7:57	3:10	32

A2 -

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
Monta Loma Elementary	7:56	3:10	26
Theuerkauf Elementary	8:02	3:06	13

A3 -

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
Landels Elementary	8:00	3:09	54

Neighborhood Stops to SED Choice Schools



B1-

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
Evandale Ace & Devonshire Ct	8:06 am	2:33 pm	4
Vargus Bus Zone	8:09 am	2:32 pm	32

B2-

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
1190 W Evelyn Ave	7:53 am	2:53 pm	6
E Evelyn Ave & Mondrian Way (W)	7:54 am	2:52 pm	6
Devoto St & Sylvan Ave	7:56 am	2:50 pm	1
AMY IMAI BUS ZONE	8:01 am	2:45 pm	4
BUBB BUS ZONE- 525 Hans Ave	8:03 am	2:43 pm	19

B3

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
GRAHAM MS BUS ZONE	8:07 am	2:49 pm	14
LANDELS BUS ZONE	8:08 am	2:45 pm	54

C1 - AM

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
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Bubb Elementary	7:52	N/A	19
Imai Elementary	7:50	N/A	4
Vargus Elementary	7:57	N/A	32

C2 - AM

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
Monta Loma Elementary	7:56	N/A	26
Theuerkauf Elementary	8:02	N/A	13

C3 - AM

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
Landels Elementary	8:00	N/A	54

C1- PM

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
Evandale Ace & Devonshire Ct	N/A	2:33 pm	4
Vargus Bus Zone	N/A	2:32 pm	32

C2- PM

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
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1190 W Evelyn Ave	N/A	2:53 pm	4
E Evelyn Ave & Mondrian Way (W)	N/A	2:52 pm	5
Devoto St & Sylvan Ave	N/A	2:50 pm	3
AMY IMAI BUS ZONE	N/A	2:45 pm	4
BUBB BUS ZONE- 525 Hans Ave	N/A	2:43 pm	19

C3 PM

Stop Location	AM Pick Up	PM Drop Off	Students Count at Stop
GRAHAM MS BUS ZONE	N/A	2:49 pm	14
LANDELS BUS ZONE	N/A	2:45 pm	54

SUMMARY AND IMPACT

School Bus Logistics is presenting two possible options for servicing transportation for SED students. With each option presented there are possible impacts that may affect the community.

Option A - Students would ride bus to neighborhood school based on residence

- Transfer at Home Campus to Shuttle Bus
- 3 current route buses to run at assigned locations
- No additional fleet required
- Bell Time Adjustment for morning bell time by 15 minutes later for Mistral and Stevenson
- Afternoon transportation to home campus, additional parent transportation required from home campus

Option B - Neighborhood bus to attend Mistral or Stevenson

- No shuttle - Students would ride directly to Mistral or Stevenson
- 3 current route buses to run at assigned locations
- 3 additional fleet vehicles required
- No bell time adjustments required

The impact of using either of the options presented are similar in either time or fleet needs for Mountain View Whisman School District. Selecting any of the options provides transportation for SED students to get to and from Mistral and Stevenson Elementary Schools. To include those impacted should be a factor in the best course



of action in making a decision to include the families, transportation and school staff. This recommendation is believed to best present and service Mountain View Whisman School District and the community.

