

Appendix L VMT Memo for Alternatives

Technical Memorandum

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Project# 29056

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From: Kittelson & Associates, Inc.

RE: Amador County School Consolidation EIR – Alternatives Analysis and Results Memorandum

INTRODUCTION

This memorandum presents the findings of the alternatives analysis in terms of vehicle miles traveled (VMT) for the Amador County Unified School District (ACUSD). This is to determine the transportation impacts for alternatives analysis when compared to the school consolidation effort (herein referred to as the "Project"). ACUSD provides preschool through 12th grade and adult education services to Amador County. The primary aim of this consolidation endeavor is to enhance educational opportunities, counseling, and other support services by focusing resources on fewer facilities and maintain District financial stability by consolidating resources for efficient program administration.

The potential changes in VMT per students are quantitatively analyzed for the two alternatives, provided in detail below.

Alternatives Analysis

VMT per student was determined by estimating the total VMT generated by students and staff and dividing it by the number of students. Total VMT was calculated based on data supplied by ACUSD which provided home locations (and addresses) for students and staff. The trip distance between the home location and the schools where they worked/attended was then used to calculate total VMT. This total VMT was then divided by the number of students and staff to determine a VMT per student + staff under the no Project condition. The students who were taking the bus to and from the school are accounted for and the trip distances for those students are zeroed out in the VMT calculations.

Project VMT

The VMT per student analysis for the alternatives was run using a similar method employed for estimating the VMT of the proposed consolidation plan to assess potential changes. It is assumed that the students who are currently taking the bus will be taking transit with the proposed consolidation plan and the alternatives.

Table 1 illustrates the VMT per student (students + staff combined) for existing conditions with and without the Project. As shown, VMT per student is estimated to increase by about 5.2% resulting in a significant impact.

Table 1: VMT per student – with and without the project

Trip Type	Total Number	Existing VMT	Existing VMT + Project	% Change
Students	4,073	40,356	42,792	6.0%
Staff	382	7,848	7,938	1.1%
Total	4,455	48,204	50,730	5.2%
VMT per student (students + staff combined)	4,455	10.82	11.39	5.2%

VMT for Alternatives

The school district proposed two alternatives for school consolidation and Kittelson quantitatively evaluated the VMT per student for both the alternatives (Alternative#2 and Alternative#3).

Alternative #2 proposes a PK-8 school in Lone, allowing local students to stay until 8th grade. Lone Elementary students would shift to Lone Junior High, creating a comprehensive preschool through 8th-grade campus. Meanwhile, other county 7-8 grade students would attend Amador High for this phase, with Argonaut High serving as the county-wide high school for 9-12 grades.

Based on our analysis, Table 2 illustrates the VMT per student (students + staff combined) for existing conditions without the project and the proposed Alternative #2. As shown in the table below, VMT per student is estimated to decrease by approximately 2.6% compared to the proposed school consolidation.

Table 2: VMT per student – Alternative #2

Trip Type	Total Number	Existing VMT	Existing VMT + Alternative #2	% Change
Students	4,073	40,356	41,454	2.7%
Staff	382	7,848	7,938	1.1%
VMT with Transit (Total)	4,455	48,204	49,392	2.5%
VMT per student (students + staff combined)	4,455	10.82	11.09	2.5%

Alternative #3 aims to balance enrollment between the two high school campuses. Amador High will house 7-9 grades and Argonaut High will have students from Grade 10-12. However, it poses challenges in terms of academic alignment, social-emotional growth, and extracurricular involvement for 9th-grade students, impacting advanced classes, social interactions, and participation in various activities alongside junior high students. The alignment between 7th, 8th, and 9th-grade academic needs would be a significant concern. Mixing these groups might impede 9th graders from enjoying the typical high school experience, hindering their social and extracurricular opportunities.

Based on our analysis, Table 3Table 2 illustrates the VMT per student (students + staff combined) for existing conditions without the project and the proposed Alternative #3. As shown in the table below, VMT per student is estimated to decrease by approximately 0.44% compared to the proposed school consolidation.

Table 3: VMT per student – Alternative #3

Trip Type	Total Number	Existing VMT	Existing VMT + Alternative #2	% Change
Students	4,073	40,356	42,571	5.5%
Staff	382	7,848	7,938	1.1%
VMT with Transit (Total)	4,455	48,204	50,509	4.8%
VMT per student (students + staff combined)	4,455	10.82	11.34	4.8%

CONCLUSION

This memorandum presents the findings of the alternatives analysis in terms of vehicle miles traveled (VMT) for the Amador County Unified School District (ACUSD). The VMT per student is calculated for both the alternatives and the VMT per student is estimated to reduce for both the alternatives when compared to the proposed school consolidation effort.

Appendices

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