

SUPPLEMENTARY SERVICE OVERVIEW

The Alameda-Contra Costa Transit District (the District) provides basic, fixed route bus service to most public and private junior high/middle schools and high schools within its service area using its regular route network. In addition, Supplementary Service trips are provided to meet the demand for increased system capacity at bell times. Resources – operating funds, vehicles, and bus operators – limit how much Supplementary Service can be offered. Pre-COVID, staff estimates the District provided 30,000 rides per day to students through a combination of supplemental and fixed route service.

STATE AND FEDERAL REGULATIONS

AC Transit must comply with state and federal regulations when operating Supplementary Service. AC Transit is prohibited from operating exclusive “school bus” service. AC Transit may only supplement its existing route structure in order to provide needed capacity. Title 49 Code of Federal Regulations, Part 605 and Section 545 of the California Vehicle Code provide the authority under which AC Transit operates Supplementary Service.

In part, these regulations and statutes require AC Transit to publish all Supplementary Service schedules notify the public that the service is available to all potential riders. Once schedule information is posted, AC Transit cannot deviate from the published schedule without providing advance public notification. AC Transit may operate Supplementary Service only over established routes or combined segments of established routes and serve only existing bus stops except for minor deviations. AC Transit is expressly forbidden from customizing “school bus” service to provide home to school transportation.

BOARD POLICY 546 STANDARDS FOR OPERATION OF SUPPLEMENTARY SERVICE

Board Policy 546 provides operational standards for operating Supplementary Service. This includes the following details on coordination, capabilities, and deadlines.

- Staff is expected to coordinate with each school district and/or individual school and identify a single point-of-contact who can coordinate bell times and disseminate information.
- Each school district and school site are provided with specific information regarding AC Transit’s capabilities and requirements.
- Schedule information for the following academic year shall be submitted no later than the second Monday in May for implementation in August.

STANDARD PRACTICE FOR DROP-OFF/PICK-UP

Buses are generally scheduled to arrive at the bus stop closest to a school between 15 to 20 minutes prior to the start of school. In some cases, where there’s a need to combine service to two different schools (e.g., Skyline High School and Montera Middle School), drop-off at a school may occur earlier than 20 minutes prior to the bell. Morning trips are more likely to be shared by multiple schools due to bell times for most schools being around the same time.

Afternoon trips are not generally shared by multiple schools. Buses typically arrive at a school five minutes prior to dismissal bell and leave between five and 10 minutes after the bell. However, a school may request that buses leave later to mitigate barriers such as a large campus size that make it difficult for students to arrive at the bus stop on time.

EXISTING SUPPLEMENTARY SERVICE LEVELS

In Fall 2021, the District operated 167 Supplementary Service trips per day. This includes 145 trips across 44 600-series lines and 22 trips that supplement nine basic lines. These Supplementary Service trips were coordinated with bell times at 38 schools (both public and private schools).

For comparison, in Fall 2019, the District operated 146 Supplementary Service trips per day on 46 600-series lines and an additional 19 Supplementary Service trips added to nine basic lines. These Supplementary Service trips were also coordinated with bell times at 38 schools (both public and private).

As part of the Winter 2021 service staff reduced the number of trips to 165 trips per day (143 600-series; 22 trips on basic lines) after determining that service was not warranted on a few duplicate trips that were scheduled in the Fall.

Over 60 percent of the Supplementary Service trips are operated in the afternoon. This is due to heavier ridership in the afternoons. It is likely that some students are able to get dropped off by a parent/guardian in the morning and then take the bus home in the afternoon.

The District also provides service for weekly recurring early dismissals. In total, 83 of the 101 afternoon trips are scheduled to operate four days per week, with an additional trip being added on the fifth day (typically Wednesday). In years past the District also accommodated up to five additional minimum days per school per year, but this practice was halted due to the extra resources required to provide the added service.

SCHOOLS/DISTRICTS SERVED WITH SUPPLEMENTARY SERVICE: WINTER 2021

Supplementary Service is coordinated with bell times at 33 public schools. School districts that include schools served by Supplementary Service include Alameda Unified School District (AUSD), Fremont Unified School District (FUSD), Hayward Unified School District (HUSD), Oakland Unified School District (OUSD), Newark Unified School District (NUSD), and West Contra Costa Unified School District (WCCUSD).

Alameda Unified School District

Supplementary Service to schools within AUSD account for 5.5 percent (9 of 165) of all daily Supplementary Service trips for the Winter 2021 Sign-up. AUSD schools that have Supplementary Service coordinated with at least one bell schedule include: Alameda High School (Line 631), Encinal Junior & Senior High School (Lines 631 and 663), Island High School (Line 663), and Lincoln Middle School (Line 687).

Fremont Unified School District

Supplementary Service to schools within FUSD account for 12.1 percent (20 of 165) of all daily Supplementary Service trips for the Winter 2021 Sign-up. FUSD schools that have Supplementary Service coordinated with at least one bell schedule include: American High School (Line 621), Centerville Junior High School (Line 625), Hopkins Junior High School (Lines 217 and 624), Horner Middle School (Line 623), Irvington High School (Line 623), Mission San Jose High School (Line 217), Thornton Junior High School (Line 621), and Washington High School (Line 625). Morning service trips to FUSD schools are all shared with one high school and one junior high/middle school.

Hayward Unified School District

Supplementary Service to schools within HUSD account for 2.4 percent (4 of 165) of all daily supplementary trips for the Winter 2021 Sign-up. HUSD schools that have Supplementary Service coordinated with at least one bell schedule include: Bret Harte Middle School (Line 95), Hayward High School (Line 95), and Mt. Eden High School (Line 97).

Supplementary Service trips are added to lines 95 and 97 only in the afternoon. Students use the basic lines to get to school in the morning.

Newark Unified School District

Supplementary Service to schools within NUSD account for 4.8 percent (8 of 165) of all daily Supplementary Service trips for the Winter 2021 Sign-up. NUSD schools that have Supplementary Service coordinated with at least one bell schedule include: Newark Junior High School (Line 620) and Newark Memorial High School (Lines 626, 628, 629).

Oakland Unified School District

Supplementary Service to schools within OUSD account for 40.6 percent (67 of 165) of all daily Supplementary Service trips for the Winter 2021 Sign-up. OUSD schools that have Supplementary Service coordinated with at least one bell schedule include: Bret Harte Middle School (Line 657), Montera Middle School (Lines 642, 646, 649, 650, 653, 655, 660 and 677), Oakland Community Day School (Line 648), Oakland High School (Lines 33 and 657), Oakland Technical High (Lines 51A, 657 and 696), Rudsdale High School (Line 646), Skyline High School (Lines 39, 617, 638, 646, 648, 649, 652, 654, 658 and 662), and Westlake Middle School (Line 611).

The majority of these trips are allocated to Montera Middle School (15) and Skyline High School (34). In order to use resources more efficiently, staff has coordinated with OUSD to make sure Skyline High School morning bell times are staggered from Montera Middle Schools and a few other schools. This allows morning Supplementary Service trips to be combined, reducing the number of buses and operators required to provide the service.

West Contra Costa Unified School District

Supplementary Service to schools within WCCUSD account for 20.6% (34 of 165) of all daily Supplementary Service trips for the Winter 2021 Sign-up. WCCUSD schools that have Supplementary Service coordinated with at least one bell schedule include: Dejean Middle School (Lines 72M and 681), De Anza High School (Lines 669, 671, 676), El Cerrito High School (Lines 667, 675, 684), Helms Middle School (Line 76), Kennedy High School (Line 76), Korematsu Middle School (Lines 667 and 675), Richmond High School (Line 607) and Soskins Middle School (Lines 669, 671, 672, 676). More than half of the morning service trips are shared with one high school and one middle school.

PRIVATE SCHOOLS SERVED WITH SUPPLEMENTARY SERVICE

Supplementary Service is coordinated with bell times at five private schools, including Bishop O’Dowd High School (Lines 680 and 682), Bentley School (Line 604), Head-Royce School (Lines 604, 605, 606), Oakland Hebrew Day School (Line 604) and St. Mary’s High School (Line 688).

Supplementary Service to private schools account for 10.3% (17 of 165) of all daily Supplementary Service trips.

SUPPLEMENTARY SERVICE BY DIVISION

AC Transit operates Supplementary Service out of each of its four bus yards- Division 2, Division 3, Division 4 and Division 6. Division 4 operates the majority of daily Supplementary Service trips (44.2 percent). Exhibit 1 details which school districts are served by each division.

Exhibit 1 – Supplementary Service Trips by Division: Winter 2021

Division	Supplementary Service Provided	Supplementary Trips (600-series + basic trippers)	Percent of Supplementary Trips
2 - Emeryville	Some Supplementary Service trips to OUSD schools and most of the supplementary service trips to private schools.	26	15.8%
3 - Richmond	All WCCUSD Supplementary Service trips	34	20.6%
4 – Seminary (East Oakland)	Most of the Supplementary Service trips to OUSD schools, all of the Supplementary Service trips to AUSD schools and some service to Bishop O’Dowd High School (private school).	73	44.2%
6 - Hayward	All of the Supplementary Service trips to FUSD schools, HUSD schools and NUSD schools.	32	19.4%
Total		165	100%

BUS REQUIREMENTS

The largest portion of Supplementary Service is operated out of Division 4 as a result of the significant service levels for OUSD and other schools in that part of the service area. Division 2 has the least because most schools in that portion of the service area can be accommodated using basic local service given school site locations.

Bell schedule coordination among schools within school districts has helped reduce the number of buses required to operate Supplementary Service. This has worked well for many years for service to OUSD schools. By having Skyline High School start earlier than other schools, buses serving Skyline can recirculate and operate a second Supplementary Service trip to another school.

Another way to operate efficiently is to serve multiple schools on a single trip. This has been done successfully with service to FUSD schools, as each morning trip serves both a junior high/middle school and high school. With the majority of schools in WCCUSD starting at the same time, this same structure had to be implemented this fall in order to reduce the resources required to provide Supplementary Service.

Division 2 has almost all of its morning service interlined with other local/Transbay service. By interlining Supplementary Service trips with other services, the District can reduce the impact of Supplementary Service on operator/vehicle requirements.

Division 3 morning service has been scheduled so one bus is used for each Supplementary Service trip provided. This is very different from how service was provided in previous years. One reason for this is due to many schools in WCCUSD starting their day around the same time. In years past, school bell times were staggered, allowing each bus to operate more than one trip.

Exhibit 2 details the number of trips operated and the number of buses required to operate Supplementary Service trips in the morning.

Exhibit 2 – Supplementary Service Vehicles by Division: Winter 2021 (AM)

Division #	Supplementary Service Trips Operated (AM)	Buses Required to Provide Service (AM)	Buses Interlined with Other Lines (AM)	Buses used only on Supp. Service (AM)
2	9	8	7	1
3	12	12	7	5
4	31	22	6	16
6	10	10	1	9
Total	62	52	21	31

Supplementary Service Overview Memo – Winter 2021

As mentioned earlier, the District operates more Supplementary Service during the afternoon than in the morning. Exhibit 3 details the number of trips operated and the number of buses required to operate Supplementary Service trips in the afternoon.

Exhibit 3 – Supplementary Service Vehicles by Division: Winter 2021 (PM)

Division #	Supplementary Service Trips Operated (PM)	Buses Required to Provide Service (PM)	Buses Interlined with Other Lines (PM)	Buses used only on Supp. Service (PM)
2	17	17	15	5
3	22	14	9	5
4	42	38	27	11
6	22	15	1	14
Total	103	84	52	35

Most of the PM Supplementary Service out of divisions 2, 3 and 4 is interlined with Transbay service. Some PM trips that also operate more than one Supplementary Service trip prior to operating a Transbay trip. Division 6, however, currently does not have much Transbay service available to interline with Supplementary Service trips.

RIDERSHIP

During the Fall 2021 Sign-up, 600-series lines carried an average of 4,359 riders per day. This is a 12-percent decrease from 2015 to 2017 when that figure averaged approximately 5,000 riders per day.

Part of the decrease in ridership can be attributed to trip times not being coordinated with school bell times. Some schools did not finalize their bell schedules until after the deadline provided by staff. Staff requested that schools provide the District with the earliest time that school might start and the latest time that school might end. While this would allow bus service to still be used by students regardless of the bell time that the school ultimately chose, it caused buses to arrive well before the start of the school day or leave well after the school day ended and some students who have other options may have elected not to use the service.

Another factor that might have caused a decrease in ridership is COVID-19. While capacity limits have been lifted on buses, some riders might still avoid taking transit out of caution and look for other means of transportation. In addition, some students may still be attending schools virtually, eliminating the need to take the bus entirely.

600-Series lines to OUSD schools carried 47.8 percent of Supplementary Service ridership. This is greater than the amount of Supplementary Service operated to OUSD schools (40.6 percent of all Supplementary trips). Exhibit 4 below details ridership on 600-series lines to each school district.

Exhibit 4 – 600-series Ridership: Fall 2021

School District	Ridership	Percent of Total Ridership	Number of Daily Trips Operated	Average Riders Per Trip
Alameda Unified	179	4.1%	10	17.9
Fremont Unified	754	17.3%	17	44.4
Newark Unified	33	0.7%	8	4.1
Oakland Unified	2085	47.8%	63	33.1
West Contra Costa Unified	706	16.2%	32	22.1
Private Schools	602	13.8%	15	40.1
Total	4359	100.0%	145	30.1

VEHICLE LOADS: 600-SERIES

A Vehicle Load Factor is the ratio of the number of seats on a vehicle to the number of passengers on board. Load factor is an indicator of the extent or probability of overcrowding and may indicate the need for additional vehicles to maintain useful service.

Per Board Policy 545, the Vehicle Load Factor is determined by taking the number of seats on a specific route which pass the peak load point during the peak hour and dividing that number into the number of passengers that are actually carried past that point during that hour.

Staff reviewed load data (Fall 2021) corresponding to the 600-series trips that are operating today. Two trips (lines 682 and 604) were added in Winter 2021.

In Fall 2021, 91.6 percent of Supplementary Service trips had a load factor of Level of Service (LOS) C or better, which means that all passengers on-board could sit. Nine trips had a Load Factor of LOS D, meaning there is a comfortable standing load aboard the bus. Only one trip (Line 682 from Bishop O’Dowd High School; afternoon trip) operated at LOS F. Table 5 details the LOS for Load factor for 600-series trips.

Table 5- 600-series Load Factor - Fall 2021

LOS	Load Factor Range	Description	Daily Trips	Percent of 600-series Trips
A	0.00-0.50	No passenger need sit next to another	73	51.0%
B	0.51-0.75	Passengers can choose where to sit	34	23.8%
C	0.76-1.00	All passengers can sit	24	16.8%
D	1.01-1.25	Comfortable standee load for design	9	6.3%
E	1.26-1.50	Maximum schedule load	0	0.0%
F	>1.50	Crush load	1	0.7%
No Data Available			2	1.4%
Total			143	100.0%

The low number of trips exceeding LOS C is likely due to the impact that COVID-19 has had on rider behavior, as well as less coordinated bell time schedules than usual as previously stated.

WINTER 2021 SERVICE CHANGES: 600 SERIES

Major schedule changes to Supplementary Service lines typically take place in the fall and schedules remain unchanged until the following school year. Since staff was not able to obtain accurate bell schedule data in time to develop service for the Fall 2021 Sign-up, numerous changes were implemented as part of the Winter 2021 Sign-up. Significant adjustments were made to lines serving the following schools:

- Alameda High School (AUSD): Line 631
- Centerville Jr. High (FUSD): Line 625
- Encinal Junior & Senior High (AUSD): Lines 631 and 663
- El Cerrito High School (WCCUSD): Lines 667, 675, 684
- Head- Royce School (Private): Line 604
- Irvington High School (FUSD): Line 623
- Kennedy High School (WCCUSD): 76
- Korematsu Middle School (WCCUSD): Lines 667 and 675
- Newark Memorial High School: Lines 626, 628, and 629
- Thornton Jr. High (FUSD): Line 621

In addition, a number of schools in Spring/Summer 2021 did not know which day of the week their school would operate on an early schedule when the school year would start. For Winter 2021, additional trips were added to better serve early release days at the following schools:

- Island High School (AUSD): Line 663
- Newark Jr. High (NUSD): Line 620
- Washington High (FUSD): Line 625

Line 604 service to Oakland Hebrew Day School (OHDS) was re-instated. Service to OHDS was originally cancelled at the onset of the pandemic at the request of the school. OHDS requested service be brought back once capacity restrictions were lifted.

Lastly, in order to address heavy loads on Line 682, an additional trip was added in the afternoon from Bishop O’Dowd High School.

BELL SCHEDULE COORDINATION: WINTER 2021

While numerous service changes were implemented in Winter 2021, some Supplementary Service trips may be considered too early in the morning or too late in the afternoon. Staff reviewed how Supplementary Service trip times are coordinated with the regular start and dismissal times of the school or schools that each trip is intending to serve. There are 173 opportunities for coordination per day, with 77 occurring in the morning and 96 occurring in the afternoon.

Morning trips scheduled to arrive at a school between 10 and 30 minutes prior to a school’s start time would be considered “coordinated.” Morning trips scheduled to arrive at a school more than 30 minutes prior to a school’s start time would be considered “not coordinated”. These trips were evaluated more closely, with explanations given for why drop-off is outside of the acceptable threshold. Staff identified 29.9 percent of morning coordination opportunities that were considered “not coordinated”. It should be noted that more than half of these trips are serving Skyline High School, where morning service is purposely scheduled much earlier to allow for interlining between other Supplementary Service trips. Exhibit 6 details the Supplementary Service trips that arrive at school more than 30 minutes prior to the start of the school.

Exhibit 6 – 600-series Schedule Coordination: Winter 2021

School	Line	# of Trips	Rationale
American HS (FUSD)	621	1	Line is shared with Thornton JHS in the morning. Trip is scheduled to arrive 15 minutes before Thornton’s 8:10 a.m. start time. American HS start time is 8:30 a.m.
Irvington HS (FUSD)	623	3	Line is shared with Horner MS in the morning. Trips are scheduled to arrive 13-17 minutes before Thornton’s 8:15 a.m. start time. Irvington HS start time is 8:30 a.m.
Washington HS (FUSD)	625	1	Line is shared with Centerville JHS in the morning. Trips are scheduled to arrive 28 minutes before Centerville’s 8:15 a.m. start time. Centerville requested that trip not be moved later due to traffic associated with student drop-off and ongoing construction. Washington HS start time is 8:30 a.m.
Rudsdale HS (OUSD)	646	1	Trip is interlined with Line 646 trip to Montera MS. Saves resources.

Skyline HS (OUSD)	Many	12	Majority of service to Skyline HS is scheduled more the 30 minutes before school to allow interlining with Supplementary Service trips to other OUSD schools.
Richmond HS (WCCUSD)	607	1	Trip is interlined with Line J trip. Saves resources.
El Cerrito HS (WCCUSD)	675	2	Line is shared with Korematsu MS in the morning. Trip is scheduled to arrive 12 minutes before Korematsu's 8:30 a.m. start time. El Cerrito HS start time is at 8:45 a.m.
	667	1	Line is shared with Korematsu MS in the morning. Trip is scheduled to arrive 13 minutes before Korematsu's 8:30 a.m. start time. El Cerrito HS start time is at 8:45 a.m.
St. Mary's College HS	688	1	Trip is interlined with Line P trip. Saves resources.

Afternoon trips scheduled to leave a school between five and 25 minutes after a school's dismissal time would be considered "coordinated." Afternoon trips scheduled to leave a school more than 25 minutes after a school's dismissal time would be considered "not coordinated." These trips were evaluated more closely, with explanations given for why the trip is scheduled more than 25 minutes after school ends.

The afternoon service was determined to be much more coordinated with school bell times than the morning service. Of the 96 Supplementary Service trips in the afternoon, only a single Line 696 trip serving Oakland Technical High School exceeds the 25-minute window. This trip is interlined with a Line 662 trip serving Skyline High School and cannot be scheduled sooner.

SB 328 AND FUTURE SERVICE IMPACTS

State Senate Bill 328 (SB 328) was signed in 2019. Under this new law, California's middle schools are required to start class no earlier than 8:00 a.m. and high schools no earlier than 8:30 a.m. These guidelines go into effect starting July 2022.

The majority of schools that the District serves have already adjusted their bell schedules in advance of the July 2022 deadline. Staff implemented a number of service changes in the fall to mitigate the impacts of those schedule changes.

One school that has yet to move their bell schedule is Skyline High School in Oakland. Moving Skyline High School's bell schedule in isolation from 8:05 a.m. to 8:30 a.m. has the potential for major cost/resource impacts to the District, due to how bus service to the school is interlined with service to other schools. Staff has been coordinating with OUSD staff in order to help them better understand how SB 328 will impact Supplementary Service to OUSD schools and what additional bell schedule changes are needed to preserve the service that is provided without increasing costs/resources.

Staff has not received any additional requests for changes to Supplementary Service for School Year 2022-2023 at this time. Typically, this coordination begins in March with a formal request for bell times and

early dismissal days from the schools and school districts AC Transit serves. Staff requests that all schedule information for the following year shall be submitted no later than the second Monday in May. This allows time for staff to communicate with school regarding any potential issues that were identified. Coordination concludes by June in order to incorporate any adjustments into the Fall Sign-up.

Staff's coordination with the schools and school districts will allow AC Transit to consider other modifications such as school bell-time adjustments, overcrowding and school closures.

LONG-TERM PLANNING

Each school year brings change that requires the District to pivot. School bell schedules shift, demand for bus service for each line may go up or down, new schools open up and some may even close.

As discussed earlier in this report, staff works with the school/school districts to try to minimize the impacts that bell schedule changes have on the existing service we provide. When schedule changes are unavoidable, staff looks to identify efficiencies that will allow the District to continue to provide the same level of service without adding resources.

Staff continually monitors ridership along each route, identifying potential opportunities to reallocate resources. Low performing Supplementary Services are discontinued. In some cases, multiple schools will share the same trip instead of each school being provided a unique trip.

Due to COVID, staff is not seeing overcrowding as we had previously seen. This depression in ridership, however, is not expected to last forever. At some point, buses will once again become more crowded. Adding capacity to existing lines is likely to cost the District additional resources. Are we committed to providing the required level of service that is needed at each site? Adding capacity to accommodate increasing demand has to be weighed against other priorities.

Changes also occur to the actual schools themselves. Some schools are modernized while others need to be completely rebuilt. In FUSD, for example, junior high schools are transitioning into middle schools, with 6th grade being added. This has already occurred at Horner Junior High (Middle School) and will occur at other sites over the next few years. Ridership is expected to increase at many schools within FUSD over the next few years.

An element of Supplementary Service that does not change very often are the routes themselves. Many of the Supplementary routes that the District operates have been in place for many years. As school boundaries change, are we serving the areas that need to be served? Staff should coordinate with each school to confirm that the 600-series line that is in place is still a viable service. This would also provide an opportunity to review the existing fixed-route service that is available near the school and determine if it is a better option for students.