



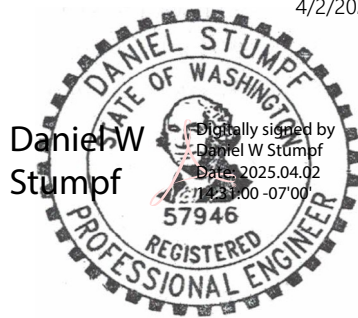
USTA/CSD PNW Tennis Center

Transportation Impact

Study

Camas, Washington

4/2/2025



Date:

April 2, 2025

Prepared for:

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Executive Summary

1. The proposed United States Tennis Association/Camas School District Pacific Northwest (USTA/CSD PNW) Tennis Center to be located at the existing tennis and pickleball courts of Camas High School, addressed at 26900 SE 15th Street in Camas, Washington. The proposal will retain the project site's eight existing tennis courts, remove two existing pickleball courts, and enclose the eight tennis courts with a covered facility that will be owned by the Camas School District and operated and maintained by the USTA. The High School will retain preferential use of the tennis facilities during the school tennis program's Spring and Fall terms as well as during school hours to accommodate High School PE courses.
2. The proposed USTA/CSD facility is expected to generate 0 additional AM and PM peak hour trips and an additional 290 average weekday trips. Note this 290 net new daily trip estimate is conservative and does not consider the school's use of the courts for PE courses, current trip generation associated with the existing eight tennis and two pickleball courts, or trip reductions associated with the removal of the two pickleball courts. Thus, the addition of USTA operation to the existing Camas High School use will have a de minimis traffic impact.
3. Since the proposed development will generate 0 AM and 0 PM peak hour trips and a low volume of new daily trips during the off-peak hours, safety impacts from the proposed facility to the nearby transportation system will be minimal. Therefore, no safety-related issues at nearby intersections and roadways are expected to occur.
4. Since the proposal will not construct new access driveways along adjacent public streets, an evaluation of intersection sight distances is not applicable to this development application. Therefore, no sight distance-related mitigation is necessary as part of this application.
5. Since the proposed development will not increase AM or PM peak hour trips to area intersections and roadways, minimal development impacts to the transportation system will be created. Accordingly, no new dedicated turn lanes, traffic signals, or all-way stop-controls are recommended for installation at nearby intersections as part of the proposed development application.
6. Based on a review of the available pedestrian and bicycle facilities, no additional mitigation is necessary in order to support safe pedestrian and bicycle travel to and from the proposed USTA/CSD facility.
7. Since the proposed USTA/CSD facility will not construct new access driveways or street connections along adjacent public streets, an evaluation of access spacing is not applicable to this development application. Therefore, no access spacing mitigation is necessary as part of this application.
8. Since the proposed development will generate 0 AM and 0 PM peak hour trips and a low volume of new daily trips during the off-peak hours, capacity and queuing impacts from the proposed facility to the nearby transportation system will be minimal. Therefore, no capacity or queuing-related issues at nearby intersections are expected to occur.



Project Description

Introduction

The proposed United States Tennis Association/Camas School District Pacific Northwest (USTA/CSD PNW) Tennis Center to be located at the existing tennis and pickleball courts of Camas High School, addressed at 26900 SE 15th Street in Camas, Washington. The proposal will retain the project site's eight existing tennis courts, remove two existing pickleball courts, and enclose the eight tennis courts with a covered facility that will be owned by the Camas School District and operated and maintained by the USTA. The High School will retain preferential use of the tennis facilities during the school tennis program's Spring and Fall terms as well as during school hours to accommodate High School PE courses.

Based on correspondence with City of Camas staff and in accordance with the City of Camas Transportation Impact Study (TIS) Guidelines, the preparation of a TIS is required if a proposed development is expected to generate 200 or more daily vehicle trips. It is expected that the proposal may results in a net increase of over 200 daily trips generated during the peak use period (i.e. a typical school day when school tennis programs are active); however, the project will not result in an increase in AM or PM peak hour trips (refer to the *Site Trips* section of this report). The City has a policy of requiring analysis of intersections that will be impacted by 20 or more net new peak hour trips that may result with approval of a development application. Accordingly, because no additional peak hour trips will occur here, no specific intersection analysis is necessary or required as part of this development application.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the existing and proposed uses, and to determine any mitigation that may be necessary to do so. Supporting data and calculations are included in the technical appendix to this report.

Location Description

The project site is located within the Camas High School Campus (assessor parcels 178111000 and 178174000), near the north edge of the campus. The site is surrounded by The Heights Learning Center preschool to the west, and low-density residential uses/undeveloped land surrounding the campus in all other directions. Access between the High School and the greater transportation system is provided via three driveways along NE 43rd Avenue/SE 15th Street and a single driveway along NE Garfield Street.

Figure 1 presents an aerial image of the nearby vicinity with the project site outlined in yellow.





Figure 1: Aerial Photo of Site Vicinity (Image from Google Earth)

Vicinity Streets

Camas High School takes access to two nearby roadways: NE 43rd Avenue/SE 15th Street and NE Garfield Street. Table 1 provides a description of these vicinity roadways.

Table 1: Vicinity Roadway Descriptions

Street Name	Jurisdiction	Functional Classification	Lanes	Paved Width (Feet)	Speed (MPH)	On-Street Parking	Curbs & Sidewalks	Bicycle Lanes
NE 43rd Avenue/ SE 15th Street	Camas/Clark County	Arterial	2 to 3	22 to 42	25/40	Not Permitted	Partial Both Sides	Partial North Side
NE Garfield Street	Camas	Local Street	2	20 to 28	10	Not Permitted	Partial East Side	None

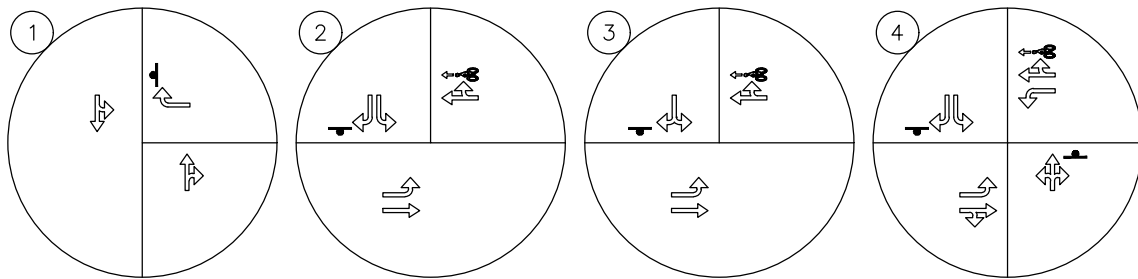
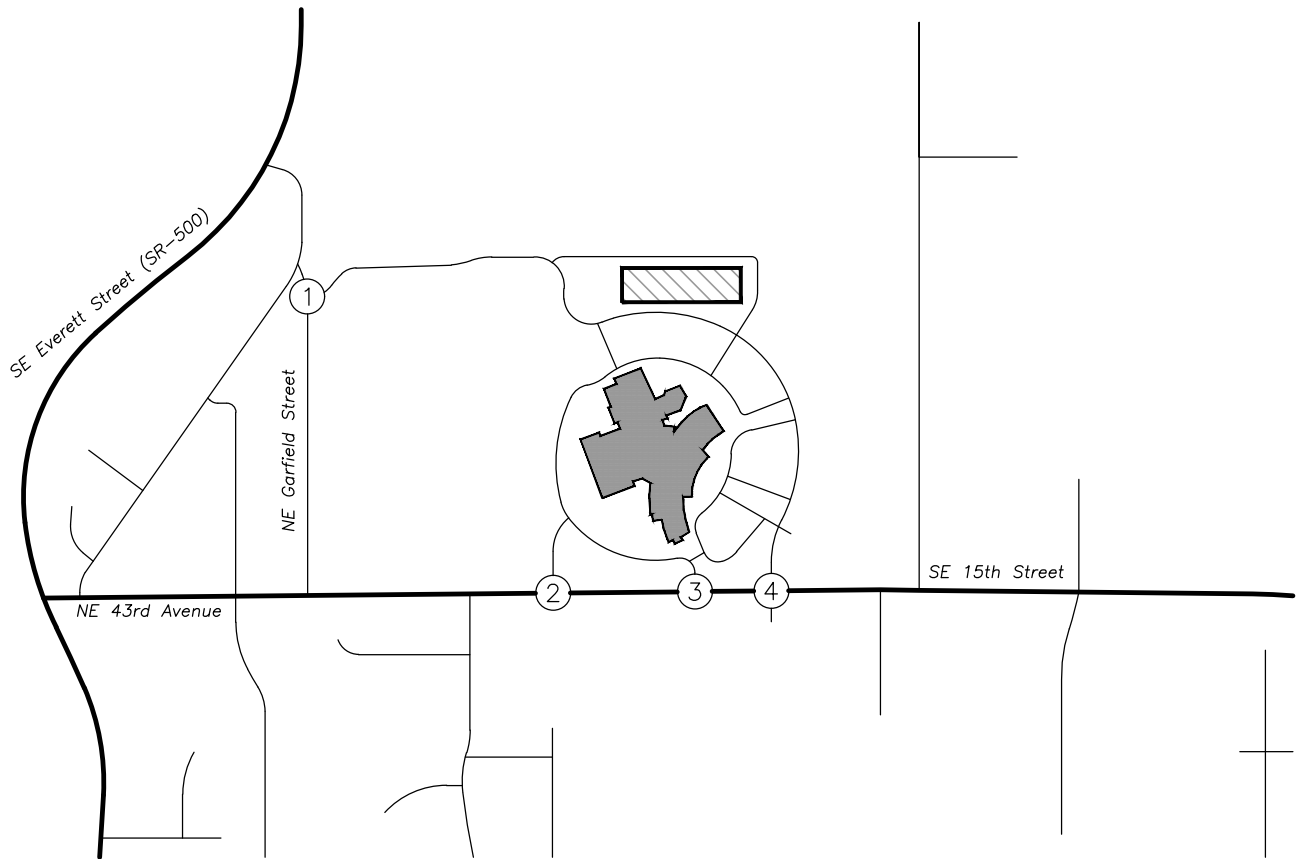
Table Notes: Functional Classification based on City of Camas Traffic Impact Fee Update Figure 1.

Camas High School Driveway Intersections

Camas High School, and subsequently the proposed USTA/CSD facility, will be served by four driveway intersections: three driveways along SE 15th Street and one driveway along NE Garfield Street. Excluding the easternmost school driveway intersection which fronts a single-family house driveway on the opposite side of SE 15th Street, all other driveway intersections are three-legged intersections. All driveway intersections operate under stop control for the driveway approaches.

A vicinity map showing the project site, vicinity streets, and driveway intersection configurations are shown in Figure 2.





LEGEND

-  STUDY INTERSECTION
-  STOP SIGN
-  BIKE LANE
-  PROPOSED BUILDING
-  ARTERIAL ROADWAY
-  LOCAL/PRIVATE ROADWAY



no scale

Site Trips

Trip Generation

Existing School and Proposed Facility General Operations

As described in the *Introduction*, the proposal will retain and enclose the project site's eight existing tennis courts while removing two pickleball courts. The facility will be owned by the Camas School District and operated and maintained by the USTA. The District's operating agreement with the USTA allows the High School preferential use of the facility during the Spring and Fall terms when the girl's and boy's tennis seasons run as well as during school hours to accommodate PE courses. At other times, the facility will be open to the public, and the USTA will provide tennis lessons and other instructional services.

Under existing conditions when the tennis courts are used by the school's tennis teams during the Spring and Fall terms, practices are typically held between 4:00 PM and 6:00 PM and meets are typically held between 3:30 PM and 6:00 PM. When not in use by the school or during off-school hours throughout the regular academic school year, the courts are open to the general public. During summer months when school typically is not in session, the school's tennis programs still utilize the facilities for athletic practices a few weeks prior to the start of the school year. Additionally, the school allows third parties to reserve/temporarily lease up to four tennis courts daily during the summer for activities such as tennis camps. Lower usage of the facilities relative to the rest of the year is typically expected during the Winter term due to weather and shorter daylight hours.

Since no additional courts will be constructed as part of the proposal, the number of patrons that the courts could accommodate at any given time will not change. However, the total number of patrons may increase somewhat over existing conditions because the covered courts will allow play to occur during inclement weather and after dark during certain times of the year. The elimination of the two pickleball courts is expected to offset some of this anticipated increase. In the with-project condition, the main increase in trip generation is expected to occur during school days. This is because currently, during regular school hours (i.e., 8:45 AM – 3:15 PM), the tennis court facilities are not open for use by the general public unless users are given permission by the High School to utilize the facilities while classes are in session. For all other hours and days when school is not in session, excepting the possible use of the facilities for athletic tennis programs, the general public is allowed to utilize the tennis courts regardless of whether or not the courts are or are not covered. In fact, four of the courts are typically rented out daily to third-parties during the summer months.

The USTA/CSD facility is not expected to generate significantly more users of the facility during the Winter months relative to the High School during the normal school year. During the Summer school break, the facility will be open for use by both the USTA and the school, noting the Summer school break does not necessarily mean a complete break of school activity (i.e., High School athletic practices begin prior to the start of the school year). It is anticipated the Summer window without school use of the courts will be temporary and limited to approximately six weeks.

USTA/CSD Hourly Operation Schedule

During the regular school tennis seasons the USTA will utilize the facility from approximately 9:00 AM to 2:30 PM, and from approximately 6:00 PM to 10:00 PM. The intent of scheduling these hours is to:

- Avoid the High School's AM bell time, which occurs at 8:45 AM, and the associated school traffic congestion which occurs up until that time.
- Avoid the High School's PM bell time, which generally occurs at 3:00 PM/3:15 PM, and the associated school traffic congestion which occurs up until that time.
- Allow the Camas High School tennis programs priority use of the courts, where practices are held between approximately 4:00 PM to 6:00 PM and meets are held between approximately 3:30 PM to 6:00 PM.

During the school year when the school's tennis programs are not active, the USTA will use the tennis facilities from 9:00 AM to 10:00 PM. However, no USTA sessions will occur between 2:30 PM and 3:30 PM when the afternoon bell occurs.

Additionally, the school's PE courses will have preferential use of the courts when needed. Based on correspondence with School District staff, it is estimated that PE classes will occupy approximately four of the eight tennis courts.

To reiterate, since the existing tennis courts are currently open for use by the general public during non-school hours, public weekend, holiday, and summer use of the USTA/CSD facility will not likely result in any traffic impacts, because any increase in trips to the facility will be offset by the significant reduction in trips that will occur because school is not in session. The "worst-case" increase in site trip generation is generally expected to occur during school days when the new public trips to the facility will be added to the existing High School traffic. However, because the overall trip generation is limited by the number of courts, this additional public traffic during non-peak hours will have a minimal impact on operations and safety at the school or nearby street grid.

A detailed description of the USTA/CSD hourly operation schedule is included in the appendix.

Trip Generation Methodology & Data Collection

Two trip generation methodologies were considered. Although the *ITE Trip Generation Manual* trip generation numbers are often used in transportation impact studies, in this case, following consultation with City Staff, the District elected to conduct more conservative analysis based on collected traffic data. The results of both methodologies are discussed below:

ITE METHOD

According to the *ITE Trip Generation Manual, 11th Edition*¹, the two land use codes that best reflect the existing and proposed tennis courts are code 490, *Tennis Courts*, and code 491, *Racquet/Tennis Club*. The ITE code descriptions for both land uses are as follows:

- ITE Code 490: *Tennis courts are indoor or outdoor facilities specifically designed for playing tennis. Tennis courts can either be public or private facilities and do not typically include any ancillary facilities other than limited spectator seating.*
- ITE Code 491: *A racquet/tennis club is a privately-owned facility that primarily caters to racquet sports (tennis, racquetball, pickle ball, handball, squash) both indoor and outdoor. This land use may also provide ancillary facilities, such as a whirlpool, sauna, spa, weight room, snack bar, or retail store. Some sites offer daycare. Some sites offer competitive team sports. These facilities are membership clubs that may allow access to the general public for a fee.*

Based on the above ITE code descriptions, the land use code which best reflects the existing courts and the proposed USTA/CSD facilities would be code 490 since limited amenities such as minimal spectator facilities are currently provided and will continue to be provided at the tennis courts. However, for the purposes of providing a thorough/encompassing analysis, the proposed USTA/CSD facility was evaluated utilizing data from both land use codes.

Since both land use codes estimate trip generation based on the number of courts, utilizing either land use code to estimate trip generation of tennis courts will result in no increase in site trip generation, rather trip generation of the facility would decrease with removal of the two existing pickleball courts. Table 2 below reviews trip generation of two proposed development scenarios: one scenario utilizing data from ITE code 490 and the other utilizing data from ITE code 491. To provide a conservative evaluation of the net change in site trip generation, for the purposes of this analysis no trip reductions associated with the removal of the two pickleball courts were considered. Moreover, because of the limitations on hours of USTA operations, no additional AM or PM peak hour trips will be generated by the facility. Trip generation calculations are included in the appendix to this report.

¹ Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.

Table 2: ITE Trip Generation Summary

ITE Land Use Code		Size	AM Peak Hour			PM Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Existing Conditions									
490	Tennis Courts	8 courts*	NA	NA	NA	17	17	34	243
Proposed Conditions - Scenario 1									
490	Tennis Courts	8 Courts	NA	NA	NA	17	17	34	243
Proposed Conditions - Scenario 2									
491	Racquet/Tennis Club	8 Courts	NA	NA	NA	16	15	31	222
Net Change In Site Trip Generation									
Scenario 1			NA	NA	NA	0	0	0	0
Scenario 2			NA	NA	NA	-1	-2	-3	-21

* The existing courts consist of 8 tennis courts and 2 pickleball courts. To provide a conservative evaluation of site trip generation, no trip generation associated with the 2 pickleball courts was considered.

ALTERNATIVE METHODOLOGY

Because site trip generation could increase during school days in the with-project condition because the courts are currently closed to the public during school hours/use periods, the District coordinated with the City of Camas staff on an alternative methodology based on observations of trips generated by the Evergreen Tennis Facility. Trip generation data was collected at the Evergreen Tennis Facility, which is a comparable indoor facility, and the Camas High School to estimate existing and proposed campus trip generation. To reiterate, since the tennis and pickleball courts are currently open for use by the general public during non-school use hours, any increases in site trip generation are expected to be limited to school days when the High School is in session and there is currently no public use of the existing courts during school hours.

To estimate trip generation of Camas High School under existing conditions, traffic counts were collected at each of the four school driveways on Thursday, September 12, 2024, over a 24-hour period. The day of data collection was selected for the following reasons:

- The school's tennis program was in session.
- The school was operating on a regular bell schedule (i.e., no late/early start or dismissal).
- No major holidays were scheduled within a one-week period of the data collection date.

Table 2 presents the existing AM peak hour, PM peak hour, and daily trips recorded at the High School. The traffic count data is included as an attachment to this memorandum.



Table 3: Camas High School Trip Generation Summary

Analysis Period		High School Trips		
		Entering	Exiting	Total
AM Peak Hour	7:45 AM - 8:45 AM	868	394	1,262
PM Peak Hour	5:00 PM - 6:00 PM	238	189	427
Daily Total	12:00 AM - 12:00 AM	2,575	2,573	5,148

To estimate trip generation of the proposed USTA/CSD facility, which will include covered courts and extended off-school hour usage, traffic count data was collected at the Evergreen Tennis Center located at 5225 NW 38th Avenue in Camas, Washington. According to the Evergreen Tennis Center's website, the facility provides four indoor/covered courts with the ability to reserve courts or attend tennis lessons. Data collection at the Evergreen Tennis Center was conducted on Tuesday, August 13, 2024, over a 24-hour period.

Table 3 presents the existing AM peak hour, PM peak hour, and daily trips recorded at the Evergreen Tennis Center. The table also includes a calculation of trip generation during the hours the proposed USTA facility is expected to operate considering the time restrictions imposed by the School District. Trip generation rates were calculated based on the number of courts. The traffic count data is included in the technical appendix to this report.



Table 4: Evergreen Tennis Center Trip Generation Summary

Analysis Period		Evergreen Tennis Center Trips			Number of Courts	Trips Generated per Court		
		Entering	Exiting	Total		% Entering	% Exiting	Rate [Trips/Court]
AM Peak Hour	7:15/7:30/ 7:45 AM - 8:15/8:30/ 8:45 AM	8	0	8	4	100%	0%	2.00
PM Peak Hour	5:00 PM - 6:00 PM	14	13	27	4	52%	48%	6.75
Daily Total	12:00 AM - 12:00 AM	108	110	218	4	50%	50%	54.50
Off-School Hours (Outside Bell Times)*	6:00 PM - 8:00 AM	12	16	28	4	43%	57%	7.00
During School Hours*	9:00 AM - 2:30 PM	65	52	117	4	56%	44%	29.25
Total USTA Use Hours*		77	68	145	4	53%	47%	36.25

* On school days the USTA is expected to be open to the public between 9:00 AM and 2:30 PM. During the Fall and Spring tennis seasons, practices and meets will occur between approximately 3:30-6:00 PM, and USTA would resume public operations between 6:00 PM and 10:00 PM. During school days outside of tennis season, USTA would be open to the public from between 9:00 AM to 10:00 PM with no public traffic allowed between 2:30 PM and 3:30 PM during high traffic student dismissal

Analysis Findings

The proposed USTA/CSD facility will operate as follows:

- On typical school days the facility will be open to the general public during school hours between 9:00 AM to 2:30 PM. This time period takes into consideration the need to avoid school traffic congestion associated with the school bell times (i.e., congestion which may start at approximately 8:00 AM and 2:30 PM), and noting that during the fall and spring tennis seasons, the school's tennis programs may continue using the facilities through 6:00 PM. During school days outside of the school's tennis seasons, the USTA/CSD facility is expected to be open to the public between 9:00 AM and 2:30 PM, with some partial closures of up to four courts to accommodate gym classes, and between 3:30 PM to 10:00 PM.

- No new AM or PM peak hour trips to/from the USTA/CSD facility are assumed to be generated per the reasoning below:
 - The Evergreen Tennis Center facility opens at 8:00 AM on weekdays and generates AM Peak Hour trips. The USTA/CSD facility has a delayed opening (9:00 AM) to avoid conflicts with incoming High School students and staff.
 - During the fall and spring tennis seasons, the High School retains preferential use of the courts between the hours of 4:00 PM to 6:00 PM. Thus, no PM peak hour trip generation from USTA public operations can occur.
 - For non-school days and after the afternoon bell when the school's tennis programs are not active, the eight existing tennis courts and the two pickleball courts are currently open to the general public for use. Since the proposed USTA facility will not construct additional courts, the capacity of the tennis facilities will not increase whereby no additional trip generation is expected to occur (i.e., the capacity, or number of tennis players, using the facility will be limited by the fixed number of available/open courts).
- The proposed USTA/CSD facility will not generate more trips than the school's existing tennis program. This is because the number of courts available for use by the USTA, the Camas School District, or the general public does not change.
- Although the High School may use approximately half of the tennis courts during the day for PE courses (i.e., between 9:00 AM – 2:30 PM), this analysis conservatively assumed the USTA will be allowed full use of all eight tennis courts.

Based on the above, the proposed USTA/CSD facility is expected to generate 0 additional AM and PM peak hour trips and an additional 290 average weekday trips. Note this 290 net new daily trip estimate is conservative and does not consider the school's use of the courts for PE courses, current trip generation associated with the existing eight tennis and two pickleball courts, or trip reductions associated with the removal of the two pickleball courts.

Furthermore, this trip generation analysis provides the most conservative estimate of new site trips generated by this proposed development for the following reasons:

- As previously stated, since the existing tennis courts are currently open for use by the general public during non-school use hours, any increases in site trip generation are generally expected to occur during school days when public use is currently precluded. This is because the existing tennis courts are closed to the general public during school use hours or when classes are in session. For non-school use hour periods, the general public is allowed to use the tennis courts without restriction, regardless of whether or not the proposed USTA/CSD project is developed.
- The analysis takes into consideration trip generation associated with extended tennis court use hours between 6:00 PM to 10:00 PM. This accounts for the existing occurrence of shorter daylight hours between late fall through early spring, and the subsequent shorter use period of the courts during these times of year.

The trip generation analysis is summarized in Table 4.

Table 5: Trip Generation Analysis Summary

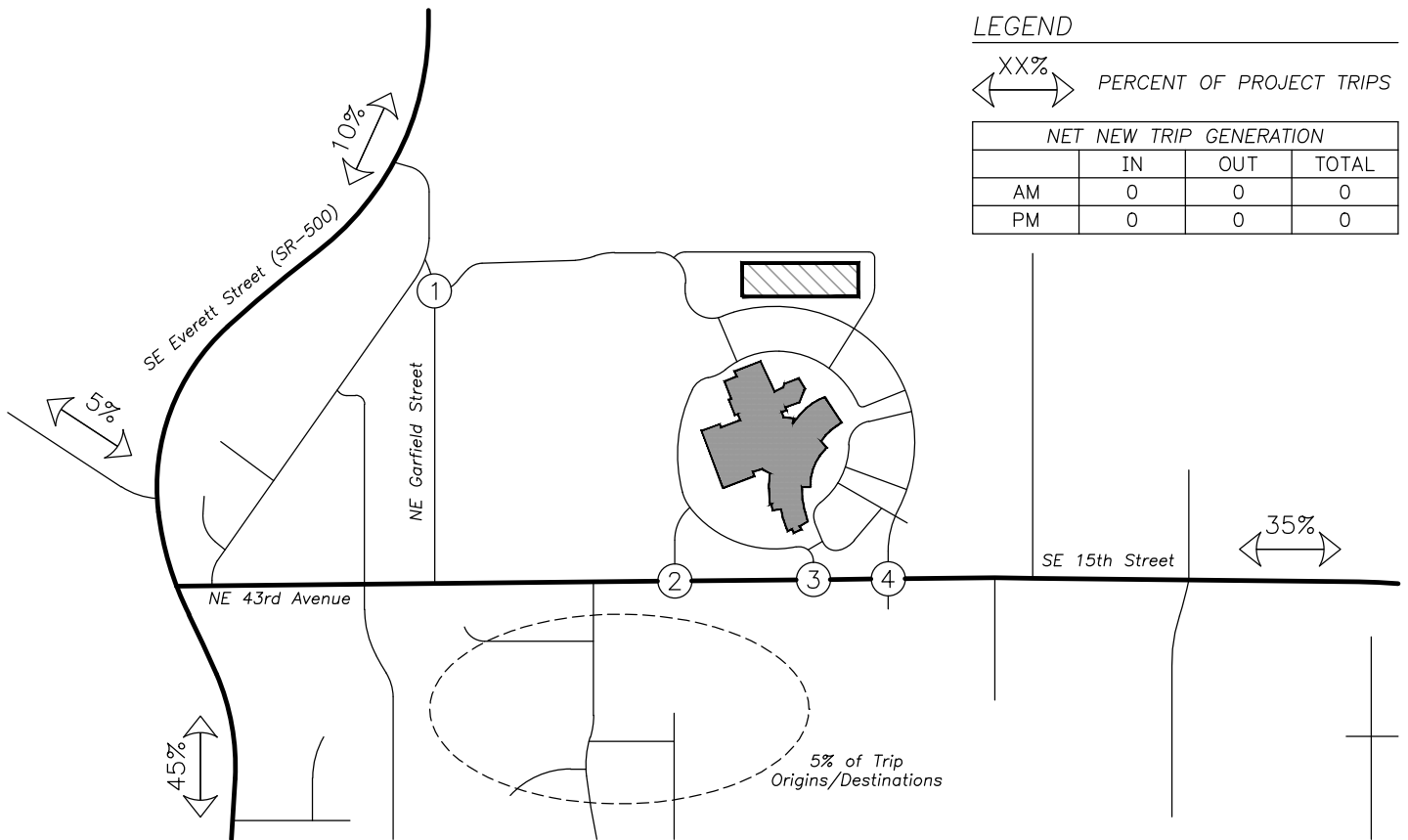
Analysis Period	Number of Courts	High School Trips		
		Entering	Exiting	Total
Existing Conditions (Camas High School)				
AM Peak Hour	8 courts	868	394	1,262
PM Peak Hour	8 courts	238	189	427
Daily Total	8 courts	2,575	2,573	5,148
Proposed USTA/CSD Facility				
AM Peak Hour	8 courts	0	0	0
PM Peak Hour	8 courts	0	0	0
Daily Total	8 courts	154	136	290
Total Trips Generated				
AM Peak Hour	8 courts	868	394	1,262
PM Peak Hour	8 courts	238	189	427
Daily Total	8 courts	2,729	2,709	5,438
Percent Increase in Site Trip Generation				
AM Peak Hour	-	0.00%	0.00%	0.00%
PM Peak Hour	-	0.00%	0.00%	0.00%
Daily Total	-	5.98%	5.29%	5.63%

Trip Distribution

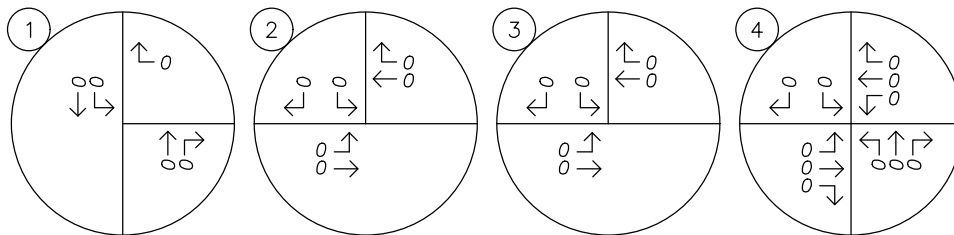
The directional distribution of site trips was estimated based on the locations of likely trip destinations and the locations of major transportation facilities in the site vicinity. The following trip distribution was assumed:

- Approximately 45% of site trips will travel to/from the south along NE Everett Street (SR-500), south of NE 43rd Avenue.
- Approximately 35% of site trips will travel to/from the east along SE 15th Street, east of NE Umatilla Street.
- Approximately 10% of site trips will travel to/from the north along SR-500, north of NE Everett Drive.
- Approximately 5% of site trips will travel to/from the west along SE Leadbetter Road, west of SR-500.
- Approximately 5% of site trips will travel to/from locales/residences within the immediate site vicinity.

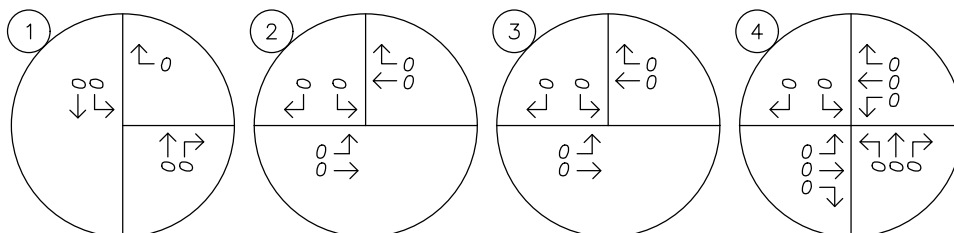
The trip distribution and assignment for the site trips generated during the AM and PM peak hours are shown in Figure 3.



AM PEAK HOUR



PM PEAK HOUR



no scale

Safety Analysis

Crash History Review

The proposed USTA/CSD facility will generate no net new AM or PM peak hour trips. Thus per City of Camas policy, analysis of nearby intersections is not required (i.e., analysis of intersections impacted by 20 or more net new AM or PM peak hour trips is required). Since the proposed development will generate a low volume of new daily trips during the off-peak hours, safety impacts from the proposed facility to the nearby transportation system will be minimal. Therefore, no safety-related issues at nearby intersections and roadways are expected to occur.

Sight Distance Evaluation

Since the proposal will not construct new access driveways along adjacent public streets, an evaluation of intersection sight distances is not applicable to this development application. Therefore, no sight distance-related mitigation is necessary as part of this application.

Turn Lane, Traffic Signal, and All-Way Stop-Control Warrant Analysis

Since the proposed development will not increase AM or PM peak hour trips to area intersections and roadways, minimal development impacts to the transportation system are anticipated. Accordingly, no new dedicated turn lanes, traffic signals, or all-way stop-controls are recommended for installation at nearby intersections as part of the proposed development application.

Pedestrian and Bicycle Safety

Since the proposed USTA/CSD facility will be located within the Camas High School campus, infrastructure for accommodating safe pedestrian and bicycle travel within the site vicinity currently exists.

- Internal school campus sidewalks and intermittent marked drive aisle crosswalks have been constructed/stripped between the main school building/tennis facilities and the adjacent roadways of SE 15th Street and NE Garfield Street.
- Sidewalks and bicycle lanes are constructed along the High School's street frontage with SE 15th Street, and sidewalks are intermittently constructed along the south side of the roadway where higher density residential development has been constructed. A marked crosswalk across SE 15th Street is provided between the High School and the sidewalk which serves the residential subdivision to the southwest of the school campus.
- NE Garfield Street is classified as a local road with a posted speed limit of 10 mph and intermittent speed bumps, both of which preclude high vehicular travel speeds and dissuades cut-through traffic. Sidewalks are available along the east side of the roadway, noting a portion of these pedestrian facilities are located adjacent to The Heights Learning Center building.

Based on a review of the available pedestrian and bicycle facilities, no additional mitigation is necessary in order to support safe pedestrian and bicycle travel to and from the proposed USTA/CSD facility.

Access Spacing

Since the proposed USTA/CSD facility will not construct new access driveways or street connections along adjacent public streets, an evaluation of access spacing is not applicable to this development application. Therefore, no access spacing mitigation is necessary as part of this application.

Intersection Capacity and Queuing Analysis

As stated previously, the proposed USTA/CSD facility will generate no net new AM or PM peak hour trips. Per City of Camas policy, analysis of nearby intersections is not required. Since the proposed development will generate a low volume of new daily trips during the off-peak hours, capacity and queuing impacts from the proposed facility to the nearby transportation system will be minimal. Therefore, no capacity or queuing-related issues at nearby intersections are expected to occur.

Conclusions

The proposed USTA/CSD facility is expected to generate 0 additional AM and PM peak hour trips and an additional 290 average weekday trips. Note this 290 net new daily trip estimate is conservative and does not consider the school's use of the courts for PE courses, current trip generation associated with the existing eight tennis and two pickleball courts, or trip reductions associated with the removal of the two pickleball courts.

Since the proposed development will generate 0 AM and 0 PM peak hour trips and a low volume of new daily trips during the off-peak hours, safety impacts from the proposed facility to the nearby transportation system will be minimal. Therefore, no safety-related issues at nearby intersections and roadways are expected to occur.

Since the proposal will not construct new access driveways along adjacent public streets, an evaluation of intersection sight distances is not applicable to this development application. Therefore, no sight distance-related mitigation is necessary as part of this application.

Since the proposed development will not increase AM or PM peak hour trips to area intersections and roadways, minimal development impacts to the transportation system will be created. Accordingly, no new dedicated turn lanes, traffic signals, or all-way stop-controls are recommended for installation at nearby intersections as part of the proposed development application.

Based on a review of the available pedestrian and bicycle facilities, no additional mitigation is necessary in order to support safe pedestrian and bicycle travel to and from the proposed USTA/CSD facility.

Since the proposed USTA/CSD facility will not construct new access driveways or street connections along adjacent public streets, an evaluation of access spacing is not applicable to this development application. Therefore, no access spacing mitigation is necessary as part of this application.

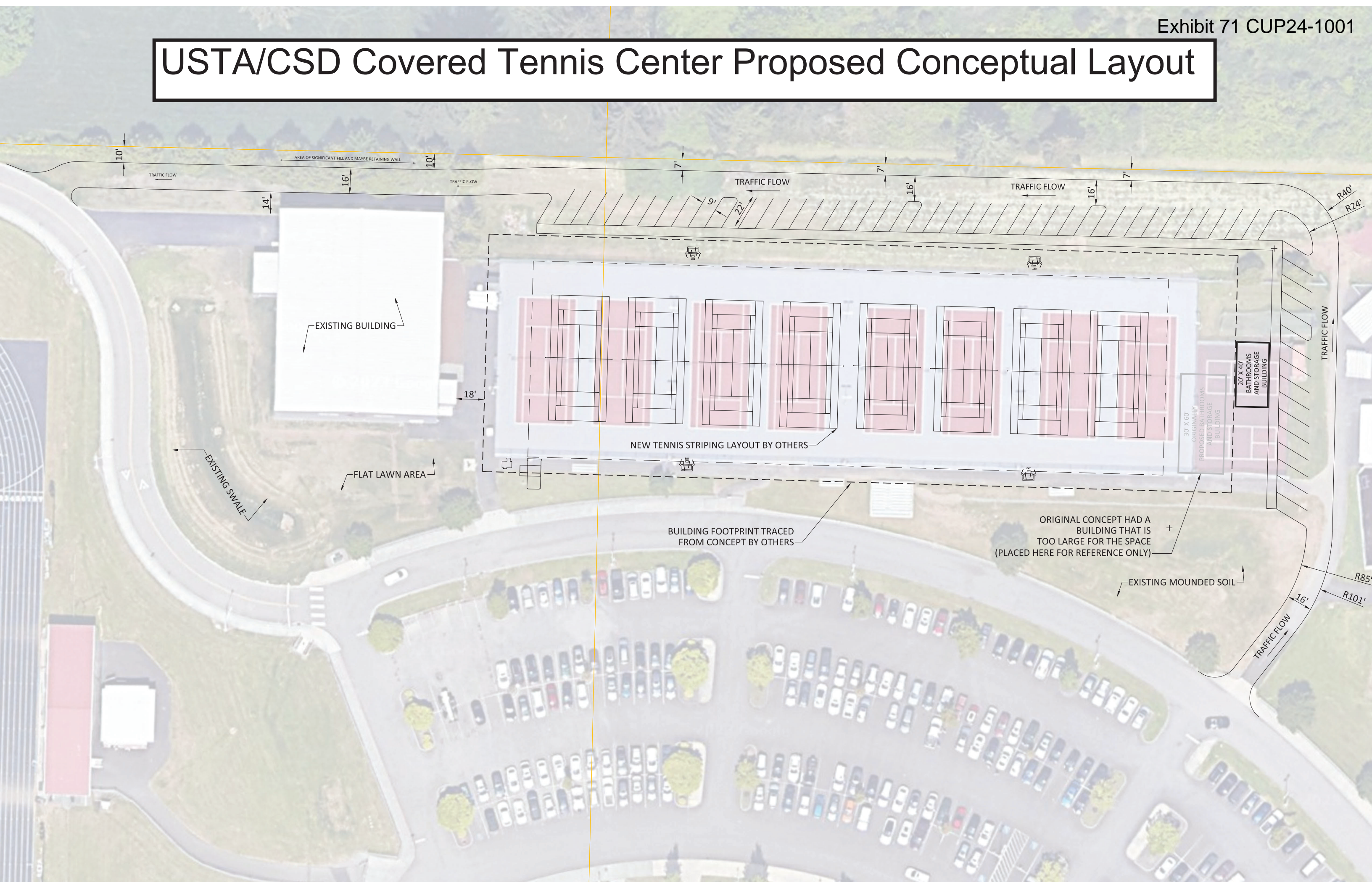
Since the proposed development will generate 0 AM and 0 PM peak hour trips and a low volume of new daily trips during the off-peak hours, capacity and queuing impacts from the proposed facility to the nearby transportation system will be minimal. Therefore, no capacity or queuing-related issues at nearby intersections are expected to occur.

Appendix A – Site Plan

Site Plan



USTA/CSD Covered Tennis Center Proposed Conceptual Layout



Appendix B – Trip Generation

USTA/CSD Operations Schedule

ITE Trip Generation Calculations

Camas High School Count Data

High School Trip Generation Calculations

Evergreen Tennis Center Count Data

Evergreen Tennis Center Trip Generation Calculations



CAMAS HIGH SCHOOL

2025 – 2026

Camas High School Bell Schedule –

8:45am – 3:00pm and 3:15pm

Athletic practice begins at 3:30pm

Buses depart promptly at 3:20pm

Girl's / Boy's High School Season –

8/25/26 – 11/8/26 (Will work with Camas AD regarding court allocations for District's – Bi-Districts Schedule)

3/2/26 – 5/23/26 (Will work with Camas AD regarding court allocations for District's – Bi-Districts Schedule)

In Season

Monday - Friday

9:00am – 2:30pm - Open

2:30 – 3:30pm - Pause

3:30pm – 6:00pm - Practice/Match

6:00pm – 10:00pm - Open

Saturday/Sunday – 8:00am – 8:00pm - Open

Out of Season

Monday – Friday 9:00am – 10:00pm – Open (No sessions start between 2:30 and 3:30pm)

Saturday/Sunday 8:00am – 8:00pm - Open

Holidays/Breaks

Monday – Friday 8:00am – 10:00pm - Open

Saturday/Sunday 8:00am – 8:00pm - Open

Summer –

Monday – Friday – 7:00am – 10:00pm - Open

Saturday/Sunday – 7:00am – 8:00pm - Open

PE Schedule –

Will work with AD to schedule PE Classes (A minimum of 4 courts)



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use: Tennis Courts

Land Use Code: 490

Land Use Subcategory: All Sites

Setting/Location: General Urban/Suburban

Variable: Tennis Courts

Trip Type: Vehicle

Formula Type: Rate

Variable Quantity: 8

AM PEAK HOUR

Trip Rate: NA

	Enter	Exit	Total
Directional Split	0%	0%	
Trip Ends	NA	NA	NA

PM PEAK HOUR

Trip Rate: 4.21

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	17	17	34

Caution: Small Sample Size

WEEKDAY

Trip Rate: 30.32

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	122	121	243

Caution: Small Sample Size

SATURDAY

Trip Rate: NA

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	NA	NA	NA



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use: Raquet/Tennis Club
Land Use Code: 491
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: Tennis Courts
Trip Type: Vehicle
Formula Type: Rate
Variable Quantity: 8

AM PEAK HOUR

Trip Rate: NA

	Enter	Exit	Total
Directional Split	0%	0%	
Trip Ends	NA	NA	NA

PM PEAK HOUR

Trip Rate: 3.82

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	16	15	31

Caution: Small Sample Size

WEEKDAY

Trip Rate: 27.71

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	111	111	222

Caution: Small Sample Size

SATURDAY

Trip Rate: NA

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	NA	NA	NA

Site Code: 4
E DWY N.O SE 15th St

Camas High School Trip Generation Calculations

Start Date: 9/12/2024																			
Start Time: 12:00:00 AM																			
Site Code: 1				Site Code: 2				Site Code: 3				Site Code: 4				CHS Total			
Location 1: North DWY E.O Garfield St Garfield St				Location 1: W DWY N.O NE 43rd Ave Garfield St				Location 1: Middle DWY N.O SE 15th StGarfield St				Location 1: E DWY N.O SE 15th St Garfield St							
IN OUT TOTAL				IN OUT TOTAL				IN OUT TOTAL				IN OUT TOTAL				IN OUT TOTAL PEAK HOUR			
9/12/2024 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	1
9/12/2024 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1
9/12/2024 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	1
9/12/2024 05:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	1
9/12/2024 06:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
9/12/2024 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/2024 06:30 AM	1	0	1	0	0	0	0	2	0	2	7	1	8	10	1	11			
9/12/2024 06:45 AM	5	0	5	2	8	10	10	1	11	16	0	16	33	9	42				
9/12/2024 07:00 AM	4	1	5	2	7	9	10	0	10	23	7	30	39	15	54				
9/12/2024 07:15 AM	56	10	66	5	4	9	8	0	8	66	30	96	135	44	179				
9/12/2024 07:30 AM	12	12	24	5	6	11	16	0	16	17	10	27	50	28	78				
9/12/2024 07:45 AM	30	0	30	4	2	6	35	0	35	32	14	46	101	16	117	428			
9/12/2024 08:00 AM	85	2	87	4	0	4	31	0	31	100	48	148	220	50	270	644			
9/12/2024 08:15 AM	129	24	153	0	24	24	38	1	39	175	103	278	342	152	494	959			
9/12/2024 08:30 AM	92	47	139	0	15	15	9	1	10	104	113	217	205	176	381	1262			
9/12/2024 08:45 AM	3	7	10	0	3	3	2	0	2	14	14	28	19	24	43	1188			
9/12/2024 09:00 AM	0	0	0	0	1	1	2	0	2	10	13	23	12	14	26				
9/12/2024 09:15 AM	0	0	0	1	0	1	0	1	1	12	6	18	13	7	20				
9/12/2024 09:30 AM	0	0	0	0	2	2	1	0	1	22	9	31	23	11	34				
9/12/2024 09:45 AM	0	0	0	0	1	1	1	0	1	8	25	33	9	26	35				
9/12/2024 10:00 AM	0	0	0	0	0	0	0	0	0	7	8	15	7	8	15				
9/12/2024 10:15 AM	0	0	0	0	1	1	2	0	2	11	4	15	13	5	18				
9/12/2024 10:30 AM	0	0	0	0	2	2	1	0	1	30	21	51	31	23	54				
9/12/2024 10:45 AM	0	0	0	0	2	2	1	1	2	23	20	43	24	23	47				
9/12/2024 11:00 AM	0	0	0	0	1	1	1	0	1	5	17	22	6	18	24				
9/12/2024 11:15 AM	0	0	0	1	0	1	0	0	0	12	5	17	13	5	18				
9/12/2024 11:30 AM	0	0	0	0	0	0	1	0	1	13	24	37	14	24	38				
9/12/2024 11:45 AM	0	0	0	1	0	1	0	0	0	14	5	19	15	5	20				

9/12/2024 12:00 PM	0	0	0	0	0	0	0	0	0	0	10	10	20	10	10	20	
9/12/2024 12:15 PM	0	0	0	0	0	0	1	1	2	17	15	32	18	16	34		
9/12/2024 12:30 PM	0	0	0	0	1	1	0	0	0	9	15	24	9	16	25		
9/12/2024 12:45 PM	0	0	0	0	0	0	0	0	0	14	6	20	14	6	20		
9/12/2024 01:00 PM	0	0	0	0	0	0	0	0	0	14	22	36	14	22	36		
9/12/2024 01:15 PM	0	0	0	1	0	1	1	1	2	8	14	22	10	15	25		
9/12/2024 01:30 PM	0	0	0	1	2	3	1	0	1	8	15	23	10	17	27		
9/12/2024 01:45 PM	0	0	0	0	5	5	2	0	2	14	5	19	16	10	26		
9/12/2024 02:00 PM	1	7	8	1	1	2	1	1	2	15	44	59	18	53	71		
9/12/2024 02:15 PM	2	0	2	1	0	1	0	1	1	21	8	29	24	9	33		
9/12/2024 02:30 PM	13	0	13	0	2	2	5	1	6	50	18	68	68	21	89		
9/12/2024 02:45 PM	38	4	42	0	0	0	3	0	3	55	16	71	96	20	116		
9/12/2024 03:00 PM	35	113	148	1	9	10	31	0	31	47	167	214	114	289	403		
9/12/2024 03:15 PM	20	69	89	0	39	39	4	4	8	39	170	209	63	282	345		
9/12/2024 03:30 PM	9	13	22	1	8	9	2	6	8	38	94	132	50	121	171		
9/12/2024 03:45 PM	6	5	11	0	6	6	1	1	2	22	26	48	29	38	67		
9/12/2024 04:00 PM	10	11	21	0	2	2	1	3	4	22	24	46	33	40	73		
9/12/2024 04:15 PM	6	4	10	2	2	4	1	0	1	22	20	42	31	26	57		
9/12/2024 04:30 PM	16	19	35	1	1	2	0	2	2	29	35	64	46	57	103		
9/12/2024 04:45 PM	17	15	32	6	1	7	2	0	2	21	36	57	46	52	98	331	
9/12/2024 05:00 PM	4	5	9	3	7	10	2	0	2	19	36	55	28	48	76	334	
9/12/2024 05:15 PM	8	7	15	3	0	3	0	0	0	46	24	70	57	31	88	365	
9/12/2024 05:30 PM	4	5	9	2	2	4	4	3	7	55	49	104	65	59	124	386	
9/12/2024 05:45 PM	34	10	44	5	2	7	1	3	4	48	36	84	88	51	139	427	
9/12/2024 06:00 PM	9	19	28	5	3	8	4	2	6	41	64	105	59	88	147		
9/12/2024 06:15 PM	4	15	19	4	4	8	3	3	6	11	26	37	22	48	70		
9/12/2024 06:30 PM	4	6	10	8	14	22	3	2	5	14	11	25	29	33	62		
9/12/2024 06:45 PM	8	17	25	2	1	3	2	1	3	18	24	42	30	43	73		
9/12/2024 07:00 PM	5	6	11	4	6	10	3	4	7	14	18	32	26	34	60		
9/12/2024 07:15 PM	4	5	9	6	3	9	2	3	5	17	16	33	29	27	56		
9/12/2024 07:30 PM	0	6	6	1	5	6	2	2	4	13	30	43	16	43	59		
9/12/2024 07:45 PM	2	11	13	0	3	3	0	0	0	5	35	40	7	49	56		
9/12/2024 08:00 PM	1	44	45	2	9	11	1	1	2	7	72	79	11	126	137		
9/12/2024 08:15 PM	2	2	4	0	0	0	0	0	0	7	20	27	9	22	31		
9/12/2024 08:30 PM	1	0	1	1	0	1	0	1	1	4	5	9	6	6	12		
9/12/2024 08:45 PM	0	1	1	0	0	0	0	0	0	7	4	11	7	5	12		
9/12/2024 09:00 PM	2	3	5	0	0	0	0	0	0	3	7	10	5	10	15		
9/12/2024 09:15 PM	0	3	3	0	0	0	0	0	0	1	8	9	1	11	12		
9/12/2024 09:30 PM	0	1	1	0	0	0	0	0	0	0	4	4	0	5	5		
9/12/2024 09:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1		
9/12/2024 10:00 PM	0	1	1	0	0	0	0	0	0	1	0	1	1	1	2		
9/12/2024 10:15 PM	0	0	0	1	0	1	0	1	1	3	0	3	4	1	5		
9/12/2024 10:30 PM	0	0	0	0	0	0	0	0	0	10	2	12	10	2	12		
9/12/2024 10:45 PM	2	0	2	0	0	0	0	0	0	5	21	26	7	21	28		
9/12/2024 11:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1		
9/12/2024 11:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	2	2		
9/12/2024 11:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1		
9/12/2024 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
													Total	2575	2573	5148	

All Traffic Data Services, LLC

12200 W 52nd Ave
Wheat Ridge, CO 80033
www.alltrafficdata.net

Page 1

Site Code: 1
Station ID: 1
Evergreen Tennis Facility Driveway

Start Time	13-Aug-24 Tue	In	Out							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		0	0							0
03:00		0	0							0
04:00		0	0							0
05:00		0	0							0
06:00		0	0							0
07:00		6	0							6
08:00		3	0							3
09:00		9	7							16
10:00		15	2							17
11:00		2	14							16
12:00 PM		25	19							44
01:00		3	8							11
02:00		15	20							35
03:00		7	6							13
04:00		12	12							24
05:00		5	6							11
06:00		5	6							11
07:00		0	5							5
08:00		1	0							1
09:00		0	5							5
10:00		0	0							0
11:00		0	0							0
Total		108	110							218
Percent		49.5%	50.5%							
AM Peak	-	10:00	11:00	-	-	-	-	-	-	10:00
Vol.	-	15	14	-	-	-	-	-	-	17
PM Peak	-	12:00	14:00	-	-	-	-	-	-	12:00
Vol.	-	25	20	-	-	-	-	-	-	44
Grand Total		108	110							218
Percent		49.5%	50.5%							
ADT		ADT 218	AADT 218							

Start Date: 8/13/2024
Start Time: 12:00:00 AM
Site Code: 1
Station ID: 1
Location 1: Evergreen Tennis Facility Driveway

Date	Time	In	Out	Total	Peak Hr
8/13/2024	12:00 AM	0	0	0	
8/13/2024	12:15 AM	0	0	0	
8/13/2024	12:30 AM	0	0	0	
8/13/2024	12:45 AM	0	0	0	
8/13/2024	01:00 AM	0	0	0	
8/13/2024	01:15 AM	0	0	0	
8/13/2024	01:30 AM	0	0	0	
8/13/2024	01:45 AM	0	0	0	
8/13/2024	02:00 AM	0	0	0	
8/13/2024	02:15 AM	0	0	0	
8/13/2024	02:30 AM	0	0	0	
8/13/2024	02:45 AM	0	0	0	
8/13/2024	03:00 AM	0	0	0	
8/13/2024	03:15 AM	0	0	0	
8/13/2024	03:30 AM	0	0	0	
8/13/2024	03:45 AM	0	0	0	
8/13/2024	04:00 AM	0	0	0	
8/13/2024	04:15 AM	0	0	0	
8/13/2024	04:30 AM	0	0	0	
8/13/2024	04:45 AM	0	0	0	
8/13/2024	05:00 AM	0	0	0	
8/13/2024	05:15 AM	0	0	0	
8/13/2024	05:30 AM	0	0	0	
8/13/2024	05:45 AM	0	0	0	
8/13/2024	06:00 AM	0	0	0	
8/13/2024	06:15 AM	0	0	0	
8/13/2024	06:30 AM	0	0	0	
8/13/2024	06:45 AM	0	0	0	
8/13/2024	07:00 AM	0	0	0	
8/13/2024	07:15 AM	0	0	0	
8/13/2024	07:30 AM	0	0	0	
8/13/2024	07:45 AM	6	0	6	6
8/13/2024	08:00 AM	2	0	2	8
8/13/2024	08:15 AM	0	0	0	8
8/13/2024	08:30 AM	0	0	0	8
8/13/2024	08:45 AM	1	0	1	3
8/13/2024	09:00 AM	0	2	2	
8/13/2024	09:15 AM	6	0	6	
8/13/2024	09:30 AM	3	5	8	
8/13/2024	09:45 AM	0	0	0	
8/13/2024	10:00 AM	1	0	1	
8/13/2024	10:15 AM	2	1	3	
8/13/2024	10:30 AM	2	1	3	
8/13/2024	10:45 AM	10	0	10	
8/13/2024	11:00 AM	2	12	14	
8/13/2024	11:15 AM	0	1	1	
8/13/2024	11:30 AM	0	1	1	
8/13/2024	11:45 AM	0	0	0	
8/13/2024	12:00 PM	4	1	5	
8/13/2024	12:15 PM	13	3	16	
8/13/2024	12:30 PM	5	14	19	
8/13/2024	12:45 PM	3	1	4	
8/13/2024	01:00 PM	2	3	5	
8/13/2024	01:15 PM	0	1	1	
8/13/2024	01:30 PM	1	3	4	
8/13/2024	01:45 PM	0	1	1	
8/13/2024	02:00 PM	3	1	4	
8/13/2024	02:15 PM	8	1	9	
8/13/2024	02:30 PM	2	18	20	
8/13/2024	02:45 PM	2	0	2	
8/13/2024	03:00 PM	2	0	2	
8/13/2024	03:15 PM	0	1	1	
8/13/2024	03:30 PM	1	1	2	
8/13/2024	03:45 PM	4	4	8	
8/13/2024	04:00 PM	0	1	1	
8/13/2024	04:15 PM	6	1	7	
8/13/2024	04:30 PM	2	5	7	
8/13/2024	04:45 PM	4	5	9	24
8/13/2024	05:00 PM	2	2	4	27

8/13/2024	05:15 PM	1	0	1	21
8/13/2024	05:30 PM	1	4	5	19
8/13/2024	05:45 PM	1	0	1	11
8/13/2024	06:00 PM	0	1	1	
8/13/2024	06:15 PM	4	1	5	
8/13/2024	06:30 PM	1	3	4	
8/13/2024	06:45 PM	0	1	1	
8/13/2024	07:00 PM	0	1	1	
8/13/2024	07:15 PM	0	1	1	
8/13/2024	07:30 PM	0	0	0	
8/13/2024	07:45 PM	0	3	3	
8/13/2024	08:00 PM	1	0	1	
8/13/2024	08:15 PM	0	0	0	
8/13/2024	08:30 PM	0	0	0	
8/13/2024	08:45 PM	0	0	0	
8/13/2024	09:00 PM	0	0	0	
8/13/2024	09:15 PM	0	0	0	
8/13/2024	09:30 PM	0	5	5	
8/13/2024	09:45 PM	0	0	0	
8/13/2024	10:00 PM	0	0	0	
8/13/2024	10:15 PM	0	0	0	
8/13/2024	10:30 PM	0	0	0	
8/13/2024	10:45 PM	0	0	0	
8/13/2024	11:00 PM	0	0	0	
8/13/2024	11:15 PM	0	0	0	
8/13/2024	11:30 PM	0	0	0	
8/13/2024	11:45 PM	0	0	0	
	Total	108	110	218	
	6:00 PM - 8:00AM	12	16	28	