164TH STREET CORRIDOR

Ash Way, Lynnwood, WA 98087

2 Park and Rides, 3 Park and Pools, with 1,547 parking spaces

- 11 Bus stops in corridor
- 2 Local routes serve the entire corridor
- 12 Bicycle lockers at Ash Way Park and Ride and 2 at Swamp Creek

For the purposes of this case study, the 164th Street corridor is defined as running between 36th Avenue West to the west and SR 527 to the east. The 164th Street corridor lies almost entirely in unincorporated Snohomish County and connects the cities of Lynnwood and Mill Creek.

There are two large, permanent park and rides (Ash Way and Swamp Creek), three leased park and pool lots, and 11 bus stop pairs in the corridor. In 2007, Snohomish County determined that the roadway was at ultimate capacity. An ultimate capacity designation means that the arterial, for various reasons, can no longer be expanded, and shifts efforts to trip reduction and traffic management in place of adding capacity.

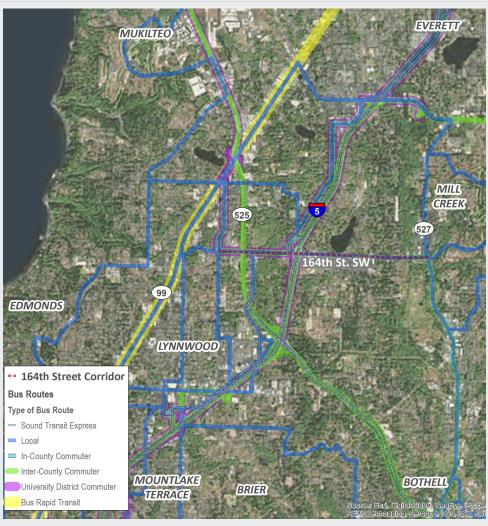


Figure 1: 3-Mile Context Map

Figure 2 provides a closer look at the 164th Street corridor. One of the corridor's most notable features is that it's bisected by I-5. 164th Street is the only arterial crossing of I-5 between 196th Street to the south and 128th Street to the north. As such, 164th Street attracts a significant number of trips heading east-west in Snohomish County or to points north and south along I-5.

The part of the corridor that is west of I-5 includes the two permanent park and rides as well as one park and pool. There is also a large retail shopping center (anchored by Fred Meyer) and several apartment complexes on this side of corridor. The part of the corridor that is east of I-5 includes two leased park and pool lots, a Wal-Mart shopping center, and several apartment complexes.

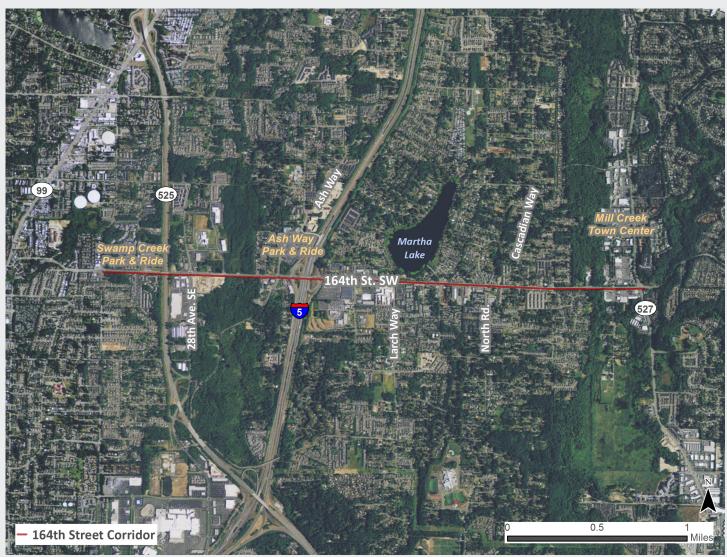


Figure 2: Half-Mile Context Map

LAND USE, POPULATION, AND EMPLOYMENT

While there are variations on either side of the 164th Street corridor, the dominant land uses along both sides is residential, both single- and multi-family, and commercial, typically in the form of retail establishments. For the most part, multi-family residential and commercial uses are found directly on 164th Street and SR 527 in Mill Creek Town Center. There are also several multi-family residential developments just north of the Ash Way Park and Ride. Population and employment growth is expected along the entire corridor but with more expected to come on the west side of the corridor where the majority of the locally designated center is located.

Current Population: 11,000 Current Employment: 1,900



Figure 3: Existing Land Use (West of I-5)

2040 Population: **19,700 (+79%)** 2040 Employment: **4,200 (+121%)**

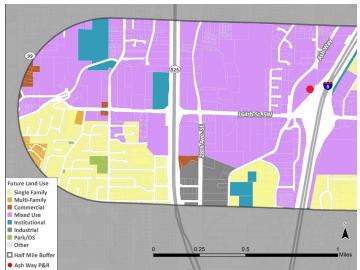


Figure 5: Future Land Use (West of I-5)

Current Population: 21,100 Current Employment: 6,200

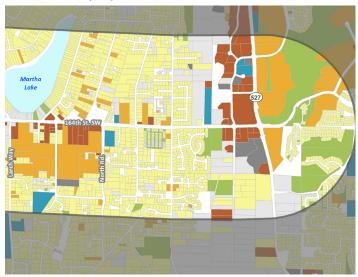


Figure 4: Existing Land Use (East of I-5)

2040 Population: **29,800 (+41%)** 2040 Employment: **8,500 (+37%)**



Figure 6: Future Land Use (East of I-5)

ROADWAY CHARACTERISTICS

Figure 7 below shows the daily vehicle volumes, posted speeds, and bicycle facilities on the 164th Street corridor and surrounding area. The importance of 164th Street in both accessing and crossing I-5 is apparent in Figure 7. Because 164th is the primary access for crossing I-5, it collects traffic from points north and south of the corridor. As a result, and particularly during peak periods, 164th Street is heavily congested, which means longer travel times and much lower speeds than what is posted. This also has consequences for transit performance in the corridor as Community Transit buses experience the same congestion impacts.

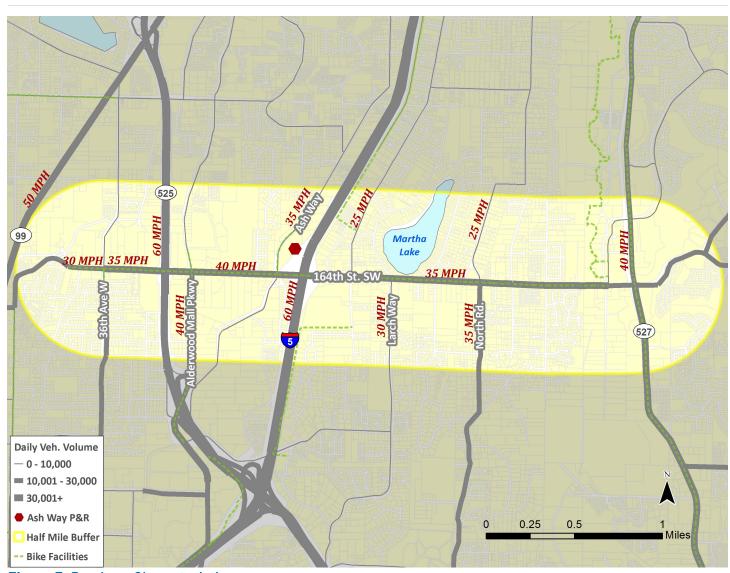


Figure 7: Roadway Characteristics

NONMOTORIZED CONNECTIVITY

The nonmotorized environment on the 164th Street is challenging for the same reason it is challenging for vehicular traffic: 164th is the only arterial crossing of I-5 between 196th Street to the south and 128th Street to the north. If someone is on foot or on bike and wants to cross I-5, it means that they must join the large amount of vehicle traffic on 164th Street, a not all-together pleasant experience for these users. It also means longer travel times and distances as these users get farther from 164th Street.

Using the Nonmotorized Connectivity Tool developed by King County Metro and Sound Transit to look at connectivity to and from Ash Way Park and Ride helps demonstrate the point made above. A person walking from Ash Way Park and Ride can make it quite a distance north, but much less far east as they must first travel south and then east on 164th Street.

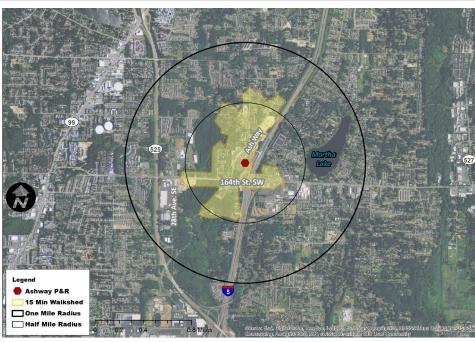


Figure 8: 15-Minute Walkshed

Figure 9 shows the current nonmotorized connectivity index in the immediate vicinity of Ash Way Park and Ride. It shows the difficulty for getting east of I-5, as discussed above, and also demonstrates the difficulty of getting west due to Swamp Creek and the lack of signalized crossings further west on 164th Street and south on 28th Avenue SE.

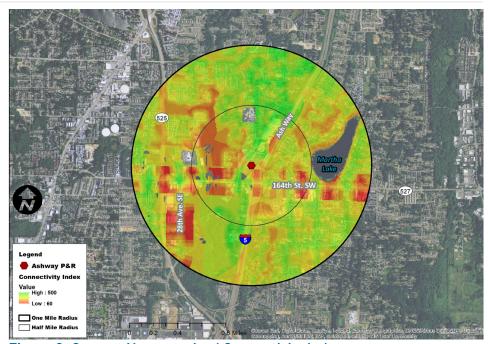


Figure 9: Current Nonmotorized Connectivity Index

TRANSIT SERVICE

| Route | Service Period | Peak Headway | Off-Peak Headway | Travel Time | On-Time Performance | Average Weekday Ridership | Destinations Served |
|----------------|-------------------|-----------------|---------------------|----------------|------------------------|------------------------------|--|
| CT 112* | All-Day | 30 | 60 | 34 | 85% | 32 | Mountlake Terrace, Lynnwood |
| CT 115 | All-Day | 30 | 30 | 79 | 77% | 2,099 | South Everett, Shoreline, Edmonds, Mill Creek, Lynnwood |
| CT 116 | All-Day | 30 | 30 | 77 | 80% | 1,840 | Edmonds, Mill Creek |
| CT 119 | All-Day | 30 | 60 | 41 | 83% | 465 | Mountlake Terrace, Lynnwood |
| CT 201 | All-Day | 30 | 30 | 79 | 77% | 1,545 | Arlington, Everett, Lynnwood |
| CT 202 | All-Day | 30 | 30 | 83 | 76% | 1,517 | Arlington, Everett, Lynnwood |
| CT 410 | Peak | 20 | - | 64 | 43% | 515 | South Everett, Downtown Seattle |
| CT 413* | Peak | 10 | - | 64 | 46% | 1,404 | North Lynnwood, Downtown Seattle |
| CT 415* | Peak | 10 | - | 70 | 47% | 1,123 | North Lynnwood, Downtown Seattle |
| CT 810 | Off-Peak | - | 30 | 65 | 56% | 267 | Mill Creek, University of Washington |
| CT 860 | Peak | 20 | - | 66 | 52% | 705 | Mill Creek, University of Washington |
| CT 880* | Peak | 20 | - | 79 | 47% | 530 | Mukilteo, University of Washington |
| ST 511 | Peak | 15 | - | 62 | 54% | 3,709 | Lynnwood, Downtown Seattle |
| ST 512 | All-Day | - | 15 | 90 | 65% | 3,420 | Everett, Downtown Seattle |
| ST 532 | Peak | 10 | - | 67 | 62% | 1,843 | Everett, Bellevue |
| Operate in I-5 | Corridor | | | | | | |



Figure 10: Transit Travelshed

*Also serves Swamp Creek

The table above shows the transit service at Ash Way Park and Ride. Fifteen routes serve Ash Way, 12 of which are Community Transit routes and three of which are Sound Transit routes. Figure 10 shows the distance a rider can travel within one hour in the AM peak from Ash Way.

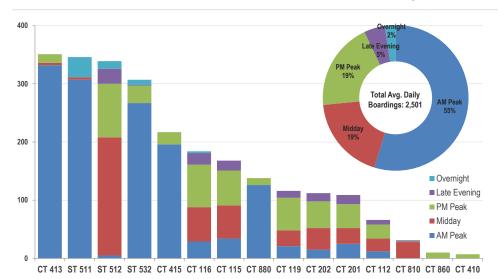


Figure 11 shows boardings by route and time of day at Ash Way. 55% of boardings occur in the AM peak with almost 90% of those boardings on peak-period routes heading to downtown Seattle, downtown Bellevue, and the University of Washington. There are also a substantial number of mid-day and evening boardings equally split between Sound Transit route 512 and seven Community Transit routes.

Figure 11: Daily Boardings by Route and Time of Day (Ash Way)

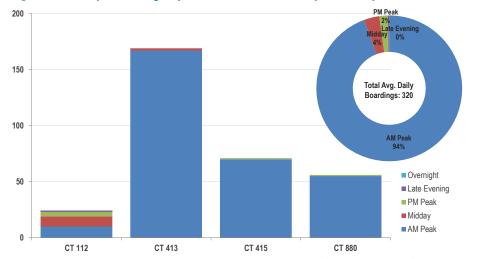


Figure 12: Daily Boardings by Route and Time of Day (Swamp Creek)

Figure 12 shows boardings by route and time of day at Swamp Creek Park and Ride. 94% of boardings take place in the AM peak, almost entirely on routes headed to downtown Seattle and the University of Washington. The total number of parking spaces at Swamp Creek (410) exceeds the total number of boardings the AM peak (302).



Figure 13: Bus Stops on the 164th Street Corridor

There are 11 bus stop pairs along the 164th Street corridor, which is shown on Figure 13 above. Community Transit routes 115 and 116 operate along the entire corridor and together provide 15 minute headways all day long. On the west side of I-5, Community Transit routes 413, 415, and 880 operate between Swamp Creek and Ash Way Park and Rides before heading south on I-5. Community Transit route 112 also operates on the west side of I-5, beginning at Ash Way, traveling through Lynnwood and Mountlake Terrace.

Figures 14 shows boardings by stop and time of day for bus stops east and west of I-5. Figure 15 demonstrates that there is all-day demand along the eastern portion corridor with boardings occurring during the AM peak, mid-day, and PM peak periods. This type of demand is less apparent on the western portion of the corridor where the majority of boardings occur in the AM peak and on routes heading to downtown Seattle.

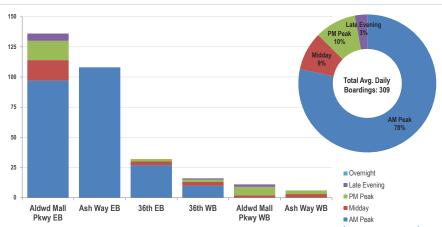


Figure 14: Daily Boardings by Stop and Time of Day (West of I-5)

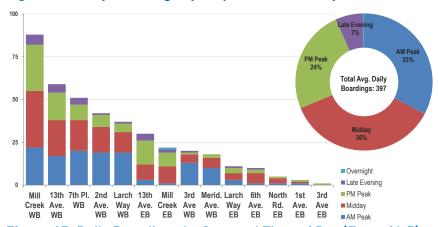


Figure 15: Daily Boardings by Stop and Time of Day (East of I-5)

the congestion

A partnership between
Community Transit and Snohomish County

Community Transit in partnership with Snohomish County, operates a transportation demand management program called Curb the Congestion in the 164th Street corridor. The program goals are to reduce peak hour trips, engage business and jurisdictions, and educate residents on available transportation alternatives. In operation since 2008, Curb the Congestion has funded infrastructure improvements, bus shelters, incentives for program participants trying a new mode, and education and outreach for apartment complexes and businesses in the corridor. In 2015, Curb the Congestion removed nearly 200 average daily peak period trips and more than 70,480 total drive-alone trips in the corridor.

PARKING CHARACTERISTICS

There are five park and rides along the 164th Street corridor: two permanent locations (Ash Way and Swamp Creek) and three leased locations (Martha Lake Covenant Church, Mill Creek Community Church, and North Creek Presbyterian Church). Ash Way Park and Ride is frequently above its capacity of 1,022 stalls and is usually full before 7:30 am. Swamp Creek, on the other hand, has fewer observed boardings than parking lots. Martha Lake Covenant Church, which sits between Ash Way and Swamp Creek on 164th Street, is also at capacity.

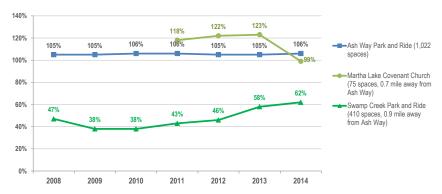


Figure 16: Ash Way, Martha Lake Covenant Church, and Swamp Creek Park and Ride Utilization

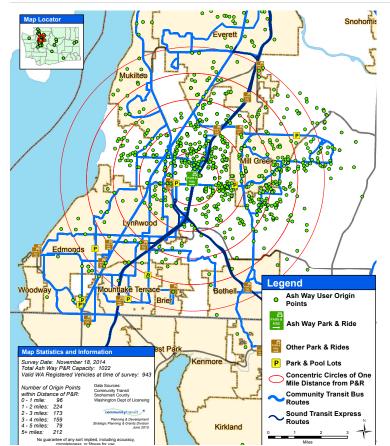


Figure 17: Ash Way Park and Ride License Plate Survey (2014)

32 Vanpools using Ash Way Park and Ride

Average vanpool occupancy

In addition to fixed route transit users, 32 vanpool groups (with an average occupancy of 5 rider) use Ash Way Park and Ride as a meet-up location, though it's uncertain how many people park at Ash Way to meet up with their vanpool group.

Figure 17 shows the origin points of Ash Way users from a license plate survey conducted in November 2014. Due to its central location, users of Ash Way come from all directions. What is noteworthy is how many of them arrive from points east, meaning that they must traverse a congested 164th Street to cross I-5 and reach Ash Way.

FINDINGS

In consultation with Snohomish County and Community Transit staff and the Transit Access Working Group that oversaw and provided guidance on this Transit Access Assessment, the following findings—organized by Urban Form, Transit Service, and Parking—were reached regarding transit access in the 164th Street corridor.

Urban Form

- An incomplete street network provides few east/west alternatives to 164th, creating increased traffic congestion
- Opportunities to improve side street nonmotorized features
- Increased mixed-use development and density, allowed by the comprehensive plan and the zoning code, would create needed pedestrian destinations and increased transit ridership
- Ash Way is a future light rail station location

Transit Service

- East-west transit service is stuck in 164th congestion
- Ash Way has lots of AM peak service/demand
- Transit demand on corridor throughout the day
- Ash Way is a key site for transfers from regional-local transit and local-local transit
- 164th is envisioned as a future BRT corridor

Parking

- Ash Way Park and Ride is typically full before 8:00 am
- Location at I-5 interchange and major east-west roadway is challenging
- Swamp Creek has more parking spaces than average daily boardings
- No major parking capacity east of I-5 where a lot of demand comes from



Figure 18: Ash Way Park and Ride