

Sounder South Strategic Plan Update – Executive Summary

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Revision History

Version	Title	Date	Notes, As Required
1	Draft	February 2024	
2	Draft	March 2024	
3	Pre-final	June 2024	
4	Final Executive Summary	July 2024	Executive Summary Only

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EXECUTIVE SUMMARY

Introduction

The change in travel patterns caused by the COVID-19 pandemic and work-from-home schedules has led Sound Transit to re-examine the priorities presented in the 2020 Sounder South Strategic Plan. As background, in 2016 voters approved Sound Transit 3 (ST3), which included the Sounder South Capacity Expansion program. In early 2020, we completed a [strategic plan](#) to identify projects, service, and completion dates. Program elements in the 2020 plan included longer trains, station access improvements, and potential additional weekday trips. Now, this 2024 plan update delves into the travel pattern changes, including an external engagement process; updates the ridership estimates; provides a peer review; and analyzes the demographics of future passengers. This plan update considers whether any new trips should run midday, evenings, or on weekends, bearing in mind that any new trips require negotiation with BNSF Railway.

Before the pandemic, the forecast for heavy ridership growth during peak periods led to a prioritization of longer trains (10-car trains rather than the 7-car trains used in 2019) to serve that growth. In this report, Sound Transit examines the opportunity to assess the future ridership and determine whether there is a market for new passengers for the Sounder South corridor. The results of the plan update studies described in this report support an approach for Sound Transit to reconsider the Sounder South capital realignment priorities. The opportunity to be considered would prioritize adding Sounder South midday, evening, and/or weekend trips and would defer deploying longer trains during the commute peak periods.

Sounder South entered this new and very different transportation environment in 2020. During the COVID-19 pandemic, ridership on Sounder South fell dramatically as public health measures encouraged people to stay home. In 2024, Sounder South ridership patterns continue to be much different than pre-COVID patterns. These peak-period changes provide the background for a change in priorities.

Figure ES-1 shows the ridership trends for Sounder's history since the year 2000. Additionally, **Figure ES-4** illustrates the hourly peak trips via actual numbers of riders from the past and projections for the future.

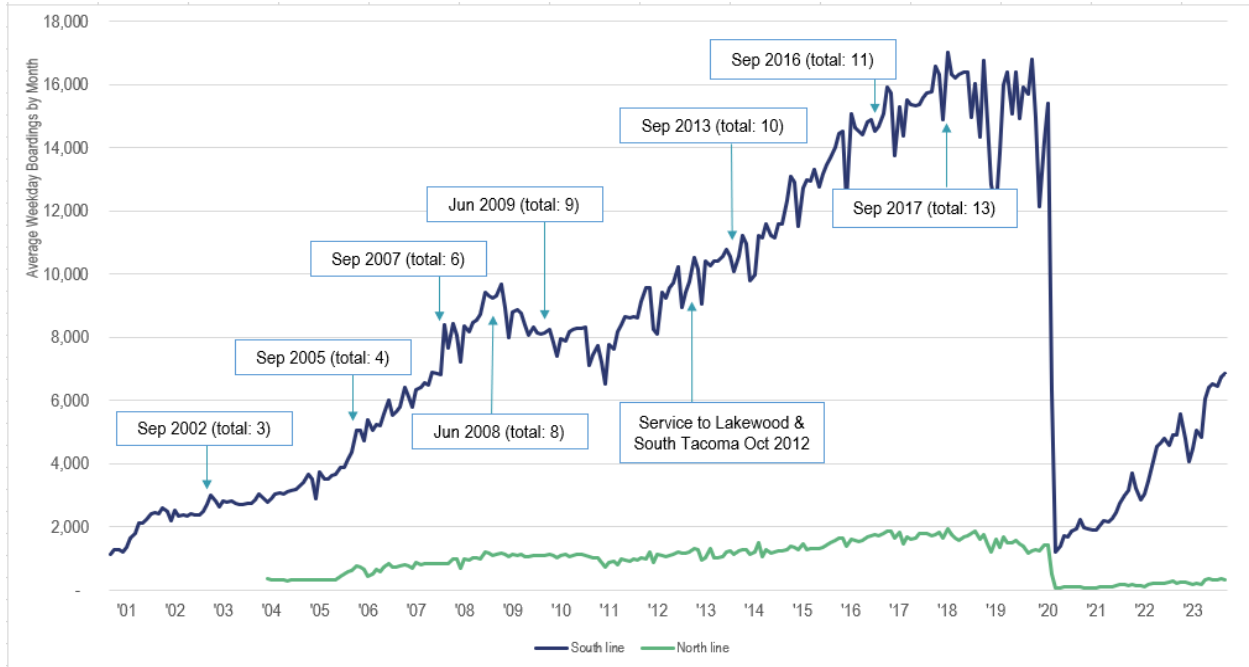


Figure ES-1 Sounder Ridership Trends: 2000 to 2023

These 2023 ridership totals of approximately 6,700 passengers per day are significantly less than Sounder’s 2019 daily totals, which averaged approximately 15,000 passengers per day.

Sound Transit conducted a plan update study during 2023 and early 2024 that examined the effect of these peak-period ridership changes. This study looked at programmatic alternatives to the capital investment and service plan established in the April 2020 Sounder South Strategic Development and Implementation Plan (SDIP), which was published just as the pandemic took hold. The effort to update the SDIP led to this Sounder South Strategic Plan Update and its priority recommendations. The plan update study involved:

- Extensive community outreach and a survey of 5,533 people to understand Sounder passengers—both current and potential. **Figure ES-2** shows the geographic distribution of the people surveyed. Including the survey, the outreach effort had contact with 13,500 people via an online open house, community events, and Sounder South station contacts.
- A Demographics and Equity Study that focused on low-income individuals and people of color to define the total pool of potential Sounder South passengers. This study provided insight into the total pool of passengers to support the ridership evaluation and to identify equitable service opportunities.
- A formal ridership analysis using the Sound Transit model to understand future ridership for years 2036 and 2046, years that align with the Sound Transit Board’s schedule for Sounder South ST3 openings.

- A peer study of five other U.S. transit agencies that operate similar commuter rail services. These five agencies, drawn from the total pool of 31 agencies that provide commuter rail service, are facing ridership changes similar to Sound Transit’s and are envisioning broader regional rail service to expand their operations to reach out to broader populations of potential passengers.

Key plan update study findings

Key findings from the study include:

Community Outreach Findings

As shown in **Figure ES-2**, approximately 90% of the more than 5,000 respondents to the community outreach survey cited above preferred adding new trips on weekends, at midday, and during evenings over prioritizing longer (more cars) peak-period trains.

Preference of all respondents (5,533 total responses)

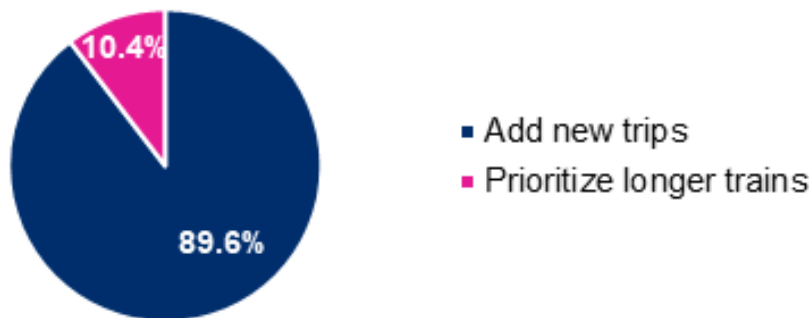


Figure ES-2 Preference of Respondents to Adding New Trips

Adding weekend service was favored by 81.6% of respondents, while adding new weekday service was supported by 57%.

Although somewhat less than 90%, a strong majority of respondents (75.3%) would support reducing frequency during peak periods in order to add trips at other times of the day or week (contingent on BNSF Railway approval).

Demographics and Equity Study findings

The Demographics and Equity Study examined data from a company called Replica to identify potential new markets for Sounder South service outside the current trip times. Over 70% of weekday trips in the corridor occur when Sounder is not running regular service, as do 100% of weekend trips. Every day, Sounder South has the potential to serve more than 500,000 trips, as shown in **Figure ES-3**. Further, this study found that lower-income bus passengers in the Sounder South corridor take more midday and

fewer peak-period trips on weekdays. Thus, new trips outside of the peak periods could be especially beneficial for low-income individuals.

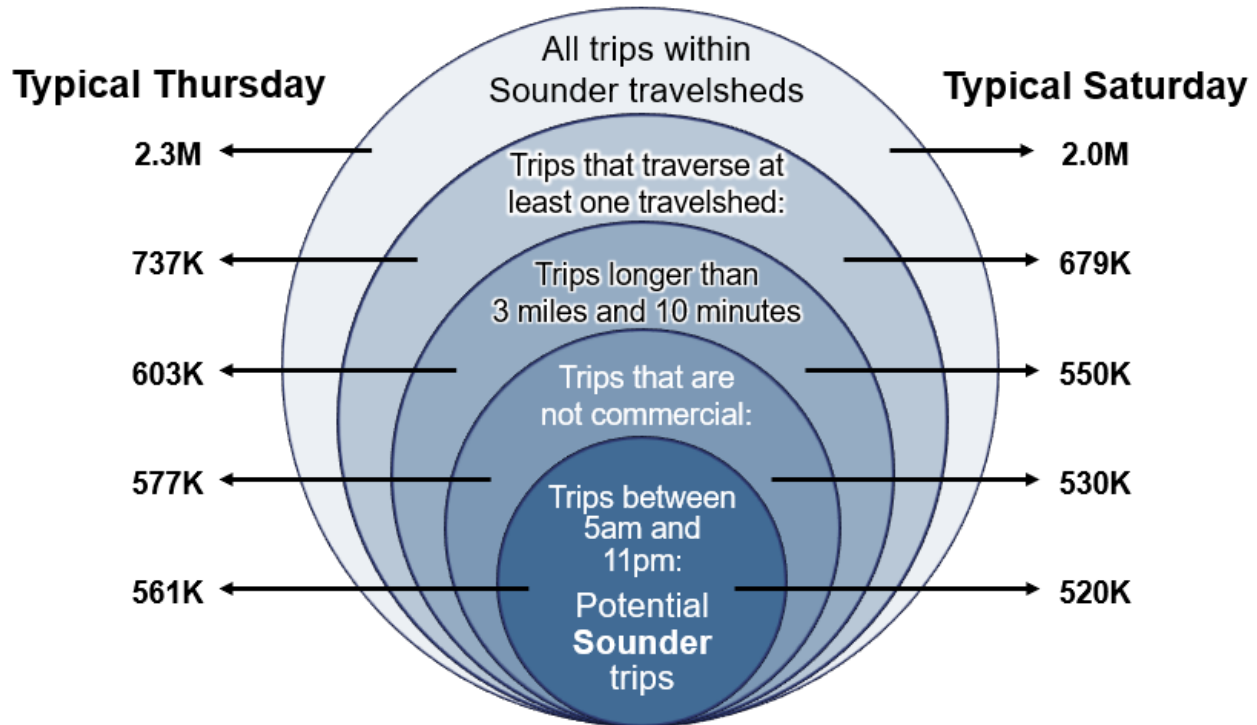


Figure ES-3 Potential Sounder South Trips on a Typical Thursday and Saturday

Ridership analysis findings

The formal ridership analysis sought to understand transit demand in off-peak times and on weekends. The analysis also sought to understand the likelihood of future crowding during peak times and thus the need for longer trains.

The results of the ridership analysis also reinforce that the demand for weekend and off-peak trips is significant and can contribute to a broader Sounder South ridership recovery. This potential growth could include additional trips that align better with the needs of local residents who currently do not benefit from Sounder service as much as daily commuters do.

Sound Transit and its ridership consultants prepared a memo that describes the off-peak and weekend ridership forecasts developed by Cambridge Systematics (CS) in February/March of 2024. The memo contains the project approach, adds details of the ridership and origin-destination data from Replica, and then presents forecasts for several operating concepts developed by Sound Transit.

The concepts that CS modeled allow comparison among several operating scenarios but do not constitute a formal set of alternatives for an alternatives analysis. The ridership analysis:

- Developed a base matrix of observed ridership on the S line.
- Computed levels of work trip-making estimated from Replica data for train travel for times of the day currently served by the S line.
- Estimated ridership for several proposed concepts based on:
 - How ridership demand would differ at the new times of day (off-peak and/or weekend) being proposed for additional service, based on the Replica data.
 - Train frequency adjustments compared with current service times.
- Created ridership estimates to illustrate three scenarios that are explained in more depth in the CS memo:
 - A “low” estimate that corresponds to the post-pandemic, reduced peak demands that have evolved from the post-pandemic work environment.
 - A “return to base” estimate that corresponds to growth from the pre-pandemic ridership levels.
 - A “high” estimate that projects a stronger growth scenario that would include the expectation of a mileage-based road usage charge.

Figure ES-4, Figure ES-6, and Figure ES-6 present the ridership results from the ridership analysis:

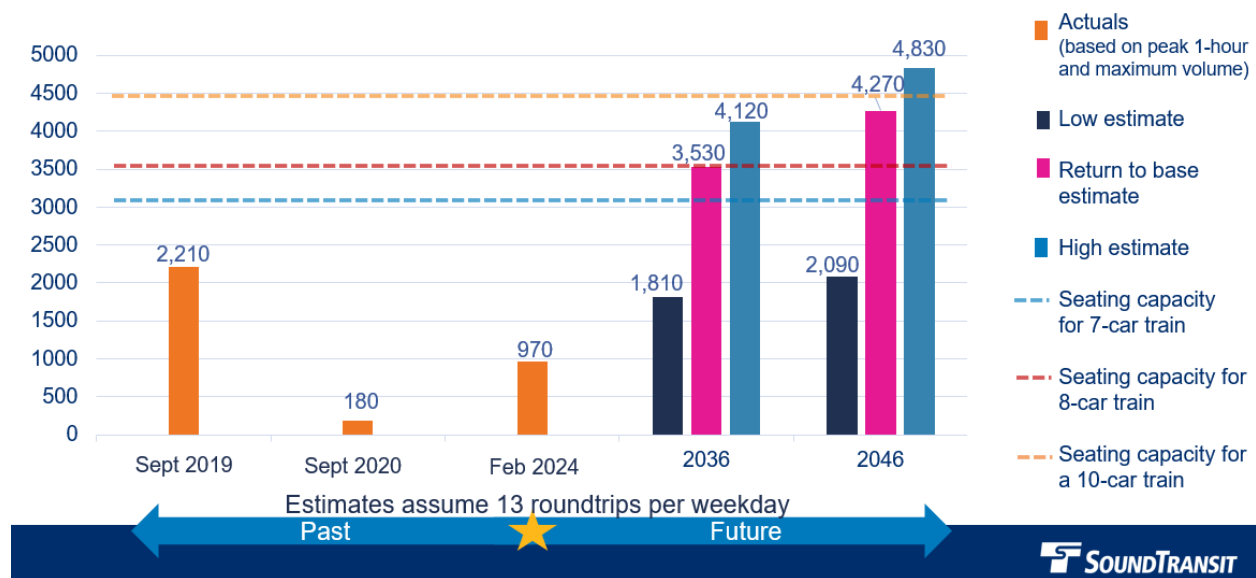


Figure ES-4 Ridership Estimating (2024), Peak Hour Ridership Loads

2046 Off-Peak Ridership Estimates

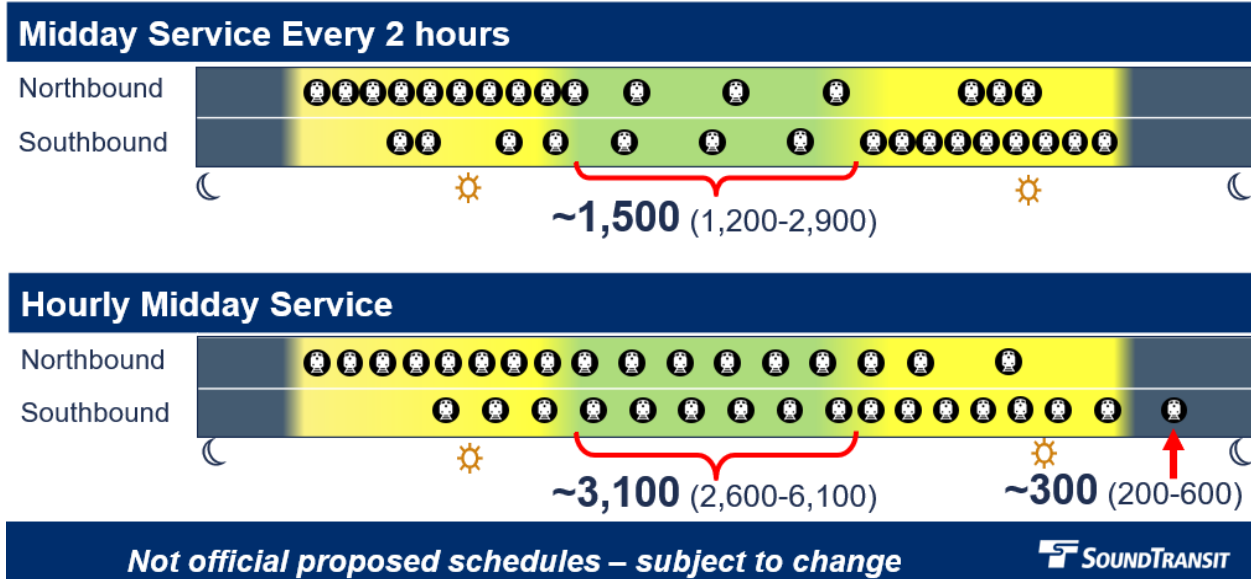


Figure ES-5 2046 Off-Peak Ridership Estimates

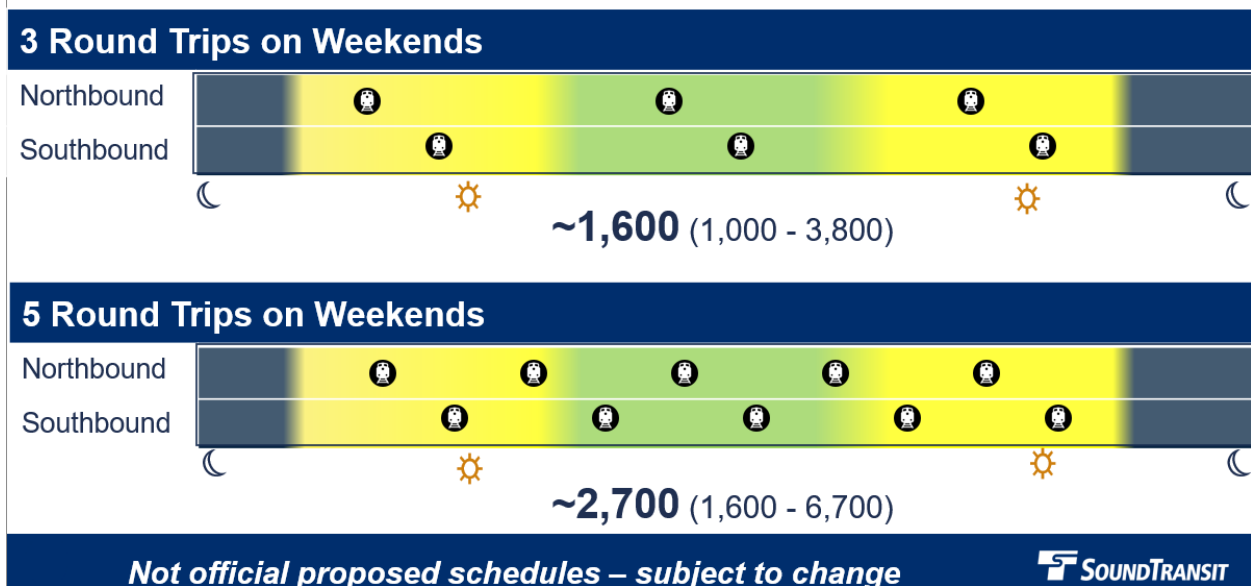


Figure ES-6 2046 Weekend Ridership Estimates

The ridership estimates conclude that the post-pandemic hybrid work environment continues to affect peak ridership numbers. The “return to base” estimates predict some standing on 7-car trains in 2036; 8-car trains can support the “low” and “return to base” estimates in 2036.

Peer study findings

North America's 31 peers to Sounder service were evaluated, and services from five agencies were selected for interviews and analysis. The process to select these five railroads focused on similarity to Sounder's operation on tracks primarily owned by a Class I host railroad. The peer evaluation found that:

1. "Regional rail" is the future of the industry: Service plans that prioritize off-peak trips during midday, evening, and weekend times to attract more ridership, otherwise known as a "regional rail," represent the future of the industry. Of North America's 31 systems, 27 are expanding their market reach in this way.
2. Host railroad relationships provide the foundation for regional rail: This regional rail service goal is not confined to railroads that own their own infrastructure. Seven of ten commuter railroads with Class I host railroads (like Sounder) are working with their host railroads to implement regional rail schedules.
3. Significant federal grant funding is available now for capital investments that result in service enhancements, especially for corridors shared with Amtrak. There has never been more federal funding available to help commuter rail agencies implement enhancements such as regional rail service schedules.

The post-pandemic era is a once-in-a-generation opportunity for the commuter/regional rail industry: The pandemic simultaneously broke the previous commuter-focused business model and caused a shift in behavior for commuter railroads to expand their previously narrow market segment, potentially serving much more diverse populations' travel needs. The post-pandemic period has allowed agencies to implement regional rail service schedules more generally than ever before. Metra in Chicago, for example, has leveraged this opportunity, showing that not only do they provide more service, they serve their populations more equitably.

Looking forward

This Sounder South Strategic Plan Update concludes by seeking to answer the question: *How will we get to regional rail?* The four current study elements that comprise the plan update study have yielded important information for Sound Transit in considering whether to change the current commuter rail service to a regional service model. The staff recommendation is to:

- Prioritize additional round trips before the platform extensions.
- Engage in regular discussions with host railroads.
- Seek opportunities to leverage federal funds.

Specific steps that are part of this staff recommendation include updating strategic plan timelines for the additional round trips and platform extensions that we initially outlined in the SDIP. This step would require Sound Transit Board action to change realignment timelines. A short-term opportunity is to move some existing trips to off-peak times and

weekends. This opportunity will also include initiating conversations with BNSF Railway and incorporating these trip adjustments into the future Souder Service Plan.

Report structure

This Souder South Strategic Plan Update Executive Summary provides background information on Souder South and recaps the four 2023 study elements. The full report is available as a separate document.

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