PROPOSED FINAL REPORT:

Leasing State Highway Right of Way to Sound Transit

LEGISLATIVE AUDITOR'S CONCLUSION:

Sound Transit leases portions of state highway property from WSDOT to build its light rail system. Sound Transit currently pays market value for the leases, but a proposed new Land Bank Agreement may reduce its costs by 56% through 2060. Both agencies would benefit from increased oversight of the Agreement.

January 2023

Executive Summary

Sound Transit builds and operates public transit in the central Puget Sound region. It leases highway right of way (ROW)[1] from the Washington State Department of Transportation (WSDOT) for its light rail system[2].

Before leasing to Sound Transit, WSDOT must determine that the property is not presently needed for motor vehicle transportation. The two agencies signed a Land Bank Agreement in 2000 that provides a framework for leasing and recording in-kind transactions. Sound Transit receives credits from WSDOT for funding transportation improvements that benefit state highways. So far, Sound Transit has earned enough credits to offset its total lease costs without having to pay cash.

The 2021-23 transportation budget directed JLARC to evaluate the method used for leasing highway ROW to Sound Transit for light rail development.

Sound Transit leases highway right of way at 100% of market value. Rates are based on the most commonly used corridor appraisal method and meet industry standards.

[1]The property used for the construction, operation, or maintenance of a transportation facility. It includes the space located above, at, or below the highway's established grade line.

[2]Transit that runs on fixed rails. Light refers to lighter passenger capacity, not the physical weight of the vehicles.

JLARC staff hired independent appraisers to review WSDOT's lease rates. The appraisers confirmed that the corridors were appraised at 100% of market value[3] and that the methods used to calculate the lump sum lease payments were reasonable and supported by market data.

Other states do not charge transit agencies market value to use highway right of way

JLARC staff reviewed leasing practices in five states[4] with rail transit operating in highway ROW. Four of the five states do not charge public transit agencies to use highway ROW. The Oregon Department of Transportation charges Portland's regional transit agency to use highway ROW, but it does so at a discounted rate that does not include the federal share of highway acquisition and construction costs paid for by the federal government, typically 80%-90%.

The Land Bank Agreement would benefit from formalized procedures and more interagency cooperation

The Land Bank Agreement provides a framework for WSDOT to lease property to Sound Transit in exchange for its funding of highway improvements. WSDOT's engineers determine whether a project has a highway benefit and an internal committee makes the final determination on credits and costs.

WSDOT and Sound Transit have developed new practices since the Land Bank Agreement was last updated in 2003. They have not documented many of their procedures and formal interagency coordination is limited.

A proposed new Land Bank Agreement may reduce Sound Transit's costs by 56% through 2060, with cash savings of up to $569 million

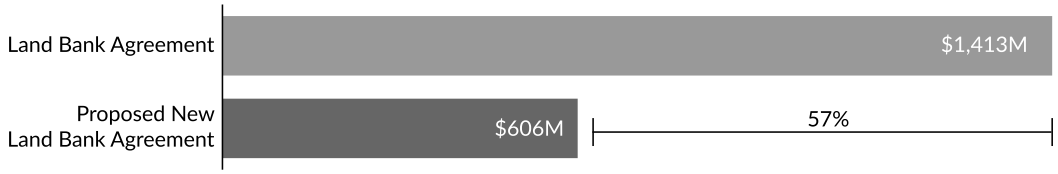
WSDOT and Sound Transit are currently negotiating a new Land Bank Agreement that would extend lease terms and waive the federal share of costs on future ROW lease agreements. JLARC staff compared forecasts from the current Agreement with changes in a proposed new Agreement. The analysis shows that Sound Transit's aggregate highway ROW costs will decline from $1.4 billion to $621 million by 2060, a 56% reduction. Under the proposed new Agreement,

[3]The amount of money a purchaser is willing to pay a seller for a property. Both parties must agree to the price and neither is obligated to purchase or sell.

[4]California, Colorado, Minnesota, Oregon, and Virginia.

the Land Bank is forecast to maintain a positive balance from 2027 to 2063, potentially saving Sound Transit $569 million in cash payments between 2049 and 2060.

Proposed new Land Bank Agreement reduces Sound Transit's long-term ROW costs by 56% through 2060



Source: JLARC staff analysis.

Legislative Auditor Recommendation

WSDOT and Sound Transit should strengthen internal oversight of the Land Bank Agreement and develop written procedures to jointly administer the Agreement. As the agencies negotiate an update to the Agreement, they may consider:

- Establishing formal procedures for interagency collaboration. These could include procedures for jointly preparing the Land Bank forecast and including Sound Transit in some Land Bank Oversight Committee ("the Committee") discussions.
- Incorporating new procedures developed since the last update in the new Agreement (e.g., using temporary construction leases, awarding credits based on actual expenditures, and describing the role of the Committee).
- Documenting when the Committee must vote on specific actions.
- Establishing and documenting criteria for highway improvement projects that are eligible for credit.

WSDOT and Sound Transit concur with this recommendation. You can find additional information in Recommendations.

1. Sound Transit leases portions of state highway property from WSDOT

Sound Transit leases portions of state highway property from WSDOT for its light rail system. Sound Transit earns credits to offset its lease costs by funding projects that benefit highways.

Sound Transit is a regional transit agency serving King, Pierce, and Snohomish counties since 1993. It plans, builds, and operates express buses, commuter rail, and light rail[5]. Roughly half of its funding comes from taxes[6] paid by residents in the Sound Transit taxing district. The agency receives additional funding from federal grants, transit fares, and other sources. Sound Transit is currently building its Link light rail system using portions of state highways that the Washington State Department of Transportation (WSDOT) manages.

Sound Transit is also expanding its bus services on state highways. These projects often include dedicated transit and carpool ramps and lanes that benefit the highway system.

Exhibit 1.1: Construction of the Lynnwood Link Extension along the I-5 corridor

Source: Sound Transit.

Sound Transit leases highway right of way from WSDOT for its Link light rail system

State and federal laws allow WSDOT to lease unused portions of highway right of way (ROW)[7] for non-highway purposes. Highway ROW is also called a highway corridor.

WSDOT and Sound Transit signed a Land Bank Agreement (Agreement) in 2000 that provides a framework for leasing highway ROW to develop light rail. The Agreement creates a ledger to record in-kind transactions between the two agencies. WSDOT leases highway ROW to Sound Transit and the transit agency receives credits for funding highway improvements. Sound Transit then uses those credits to offset the cost of its leases.

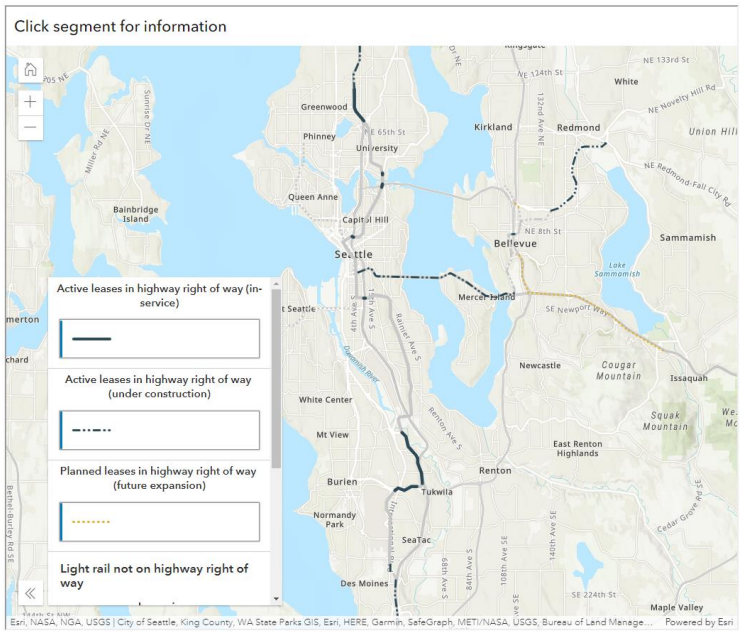
Current and future leases will cover approximately 57 miles of state highway

[5]Transit that runs on fixed rails. Light refers to lighter passenger capacity, not the physical weight of the vehicles.
[6]Motor vehicle excise taxes (car tabs), property taxes, and sales taxes.
[7]The property used for construction, operation, or maintenance of a transportation facility. It includes the space located above, at, or below the highway's established grade line.

As of 2022, Sound Transit has 20 active leases with WSDOT for light rail projects in state highway ROW. The leases include segments of I-5, I-90, and SR-520. Sound Transit uses these properties primarily to build light rail facilities. The two agencies signed their first lease in 2003 and their most recent lease in May 2020 for the Downtown Redmond Link extension. Sound Transit anticipates leasing additional ROW for Link light rail extensions to Everett, Tacoma, and Issaquah.

Exhibit 1.2: Sound Transit's current and future light rail leases in King, Pierce, and Snohomish counties

Click image to view interactive map



Source: JLARC staff analysis of Sound Transit routes and alignments.

Note: The map shows the approximate location of current and planned Link light rail alignments on state highway ROW.

Sound Transit and WSDOT work together to determine whether transit projects are compatible with current and future highway needs

Once Sound Transit identifies a highway corridor for light rail construction, the two agencies complete detailed reviews throughout multiple phases of a project:

- Pre-design: WSDOT's planners work with Sound Transit to determine if the project is compatible with present and future highway needs, including operations, maintenance, and safety.

- Design: Sound Transit hires engineering consultants to study whether the project is compatible with highway needs. The consultants' report must identify any future highway space needs. For example, a future need for additional lanes or a new interchange may affect the footprint that the light rail infrastructure will occupy. WSDOT's engineers must approve the report.
- Construction: WSDOT's inspectors visit the project site to ensure it meets design and compatibility requirements.

WSDOT created a new division to coordinate its work on Sound Transit projects

WSDOT formed the Regional Transit Coordination Division (RTCD) to coordinate activities that involve Sound Transit. RTCD is co-located at Sound Transit's Seattle headquarters. Sound Transit fully funds all of RTCD's work that relates to its projects. For certain projects, WSDOT also engages resources outside RTCD, such as real estate specialists who work in WSDOT's Northwest Region office. In fiscal year 2022, Sound Transit reimbursed WSDOT for $1.9 million in RTCD labor costs and $1.48 million in non-RTCD labor costs (e.g., regional real estate services).

The Federal Highways Administration must approve project plans and leases

In addition to WSDOT and Sound Transit, the U.S. Department of Transportation's Federal Highways Administration (FHWA) also reviews and approves plans and leases for projects in federally funded highway ROWs. Sound Transit's light rail projects are located largely in federally funded highway ROWs.

Sound Transit has earned $602 million in credits to offset its lease costs by funding projects that benefit highways

Since the inception of the Land Bank Agreement, total credits for projects benefiting the highway system have exceeded total lease costs. To date, Sound Transit has not used cash[8] to pay for its leases.

Sound Transit earns credits for projects that have a benefit to the state's highways. WSDOT awards credits based on the design and construction costs of each project. WSDOT maintains

[8]Sound Transit made one cash payment in 2004 for $57,000. It was an administrative error and was not due to insufficient credit in the Land Bank.

records of actual costs because it manages the design and construction of most of these projects.

Sound Transit's highway improvements include reinforcements to the I-90 floating bridges and new high-occupancy vehicle (HOV) on and off ramps that serve buses as well as carpools. See Section 3 for more on the credit process.

Exhibit 1.3: Sound Transit's highway improvement projects include HOV ramps and bridge reinforcements

Highway Improved (City)	Improvement Project Type	Credit Amount
I-5 (Federal Way, Lynnwood, Everett)	Transit/HOV ramps	$79.7M
I-90 (Seattle, Mercer Island, Bellevue)	Transit/HOV ramps & lanes	$293.7M
I-90 (Seattle, Mercer Island)	Floating bridge reinforcement	$43.1M
I-405 (Renton, Kirkland)	Transit/HOV ramps	$159.9M
Other highways (Bothell, Kenmore)	Transit/HOV lanes	$22.7M
TOTAL		**$602.1M**

Source: JLARC staff analysis of WSDOT data.

WSDOT reports additional benefits from Sound Transit's light rail projects

In addition to funding highway improvements throughout the Puget Sound region, WSDOT believes Sound Transit offers other benefits to the state through its light rail projects. WSDOT reports it has:

- Less state land to maintain.
- Lower liability because Sound Transit assumes liability for injuries sustained in the leased areas.
- New noise walls along the highway.
- Less need for adding highway lanes because light rail can transport more people than the extra lanes can accommodate.

Sound Transit does not receive credits in exchange for these benefits.

2. Lease rates are market value

WSDOT leases highway right of way to Sound Transit at 100% of market value. Rates are based on the most widely accepted appraisal method and meet industry standards.

WSDOT leases highway right of way (ROW) to Sound Transit at 100% of market value

External appraisers use market data to determine the value of highway corridors. The Washington State Department of Transportation (WSDOT) sets its lease rates based on those values. Both the Washington Administrative Code (WAC 468-30-110) and the Land Bank Agreement (Agreement) indicate that lease rates must reflect market value[9].

Additionally, the 2019 and 2021 state transportation budgets contained provisos requiring WSDOT to charge Sound Transit 100% of market value. The proviso was not included in the 2022 supplemental transportation budget.

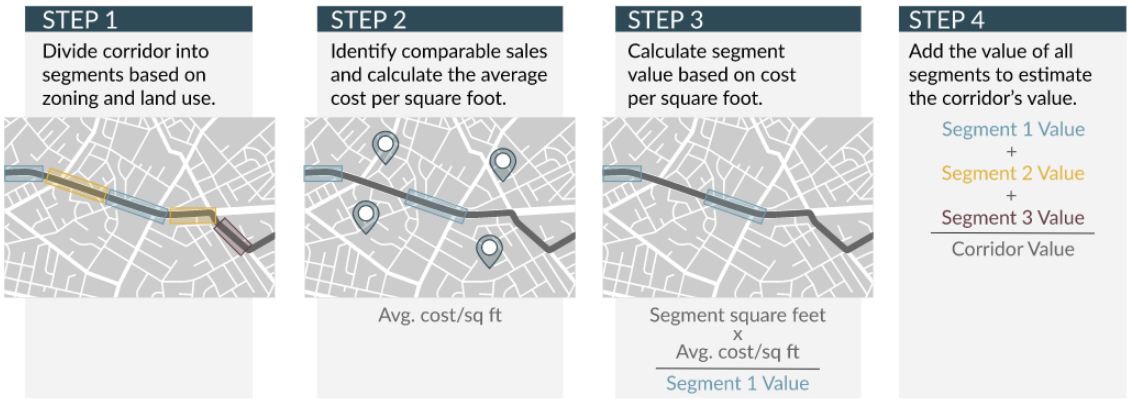
Sound Transit's appraisers use the "across the fence" methodology to value highway corridors and calculate market lease rates

Since there is little or no market data available about corridor sales, the external appraisers estimate the corridor's value based on comparable sales on abutting land. This approach, known as the across the fence (ATF) method, is the most widely accepted way to value highway corridors.

Valuing the corridor: Under the ATF method, appraisers divide the corridor into segments based on the zoning and use of the land abutting the corridor (i.e., the land "across the fence"). The appraisers research market sales of land comparable to the abutting properties. Using those comparable sales, they calculate the average cost per square foot for each segment. Then they add the values of each segment together to determine the corridor value.

Exhibit 2.1: Appraisers value highway corridors based on comparable sales of properties with similar zoning and land use

[9]The amount of money a purchaser is willing to pay a seller for a property. Both parties must agree to the price and neither is obligated to purchase or sell.



Source: JLARC staff analysis.

The Land Bank Agreement requires Sound Transit to pay for the initial lease term in one lump sum. For most long-term leases, the initial term is 20 years.

Calculating lease rates: The appraisers apply a lease capitalization rate[10] to the corridor value to determine the market rental value. The corridor value grows over time because of predicted increases in property values. The appraisers then discount annual lease payments over the 20-year term to present value[11].

WSDOT staff must review and approve each appraisal report before the lease rates become final.

JLARC staff's independent appraisers confirmed that WSDOT's lease rates are 100% of market value and meet industry standards

JLARC staff hired independent appraisers with specialized experience in valuing highway corridors to analyze WSDOT's lease rates. The appraisers reviewed five ROW lease agreements[12] and appraisal reports between WSDOT and Sound Transit. They confirmed that the corridors were appraised at 100% of market value and that the methods used to calculate the lump sum lease payments were reasonable and supported by market data.

JLARC staff's appraisers also confirmed that the ATF method used to calculate WSDOT's lease rates was consistent with state law and complied with the Uniform Appraisal Standards.

[10]The rate of return for a rental property. Rent in year one of a lease is the product of the lease capitalization rate and the appraised fair market value.
[11]The current value of a future cash flow given a specified interest rate.

[12]These covered 2016-2021 and both short-term and long-term leases.

3. Other states do not charge market value to use right of way

Other states do not charge transit agencies market value to use highway right of way

As described in Section 2, the Washington State Department of Transportation (WSDOT) leases highway right of way (ROW) to Sound Transit at fair market value for the construction of its Link light rail. WSDOT uses external appraisals to determine the value of each lease. Currently, lease rates are not discounted to account for the federal share of highway acquisition and construction costs paid for by the federal government, typically 80%-90%.

JLARC staff surveyed five states with light rail in highway ROW

To compare Washington's leasing process to other states, JLARC staff looked for states with:

- Public transit built in highway ROW, preferably light rail.
- Geographic diversity to ensure the comparisons reflect different regional priorities.

JLARC staff used the federal National Transit Database to identify public transit systems in urbanized areas, with a focus on light rail along the interstate highway system. Staff used transit maps and satellite images to determine which of these systems operated within highway ROW. JLARC staff found five states that met these criteria.

Exhibit 3.1: Five other states have rail transit in highway ROW

State	Regional Transit Agency
California	Bay Area Rapid Transit (BART)
Colorado	Regional Transportation District (RTD - Denver)
Minnesota	Metropolitan Council/Metro Transit
Oregon	Tri-County Metropolitan Transportation District (TriMet)
Virginia	Washington Metropolitan and Transit Authority (WMATA)

Source: JLARC staff interviews with other states' departments of transportation (DOTs).

Four of the five states do not charge public transit agencies to use highway ROW

Federal law[13] allows a state DOT to lease federally funded highway ROW to a public transit authority free of charge, as long as the use does not interfere with highway operations. Four out of the five comparison states provide ROW free of charge to public transit agencies for the construction and operation of light rail.

JLARC staff explored whether other states appraise highway ROW in the same manner as Washington. Since the four comparison states do not charge public transit agencies, they do not conduct appraisals. However, staff from all four states indicated that they would use the across the fence (ATF) valuation method if they had to appraise their highway corridors. As described in Section 2, the appraisers hired by Sound Transit use the ATF method.

Oregon provides highway ROW to Portland's regional transit agency at a discounted rate

The Oregon Department of Transportation (ODOT) allows Portland's regional transit agency (TriMet) to use highway ROW for its light rail system. Similar to Washington, Oregon appraises the highway corridor using the ATF method to determine market value. However, ODOT does not charge TriMet for the federal share. TriMet typically pays 8% of the appraised market value, though the exact percentage depends on the specific highway segment. Like Sound Transit, TriMet can receive credits for funding highway improvements (e.g., installing new barriers). These credits are applied to the state share of the appraised market value.

Exhibit 3.2: Washington and Oregon use similar practices, but Oregon waives the federal share of costs

Characteristics of Highway ROW Agreements	Washington	Oregon
Conduct appraisals	Yes	Yes
Enter agreements	Leases	Permanent easements
Waive the federal share of costs	No	Yes
Provide credits for highway improvements	Yes	Yes

Source: JLARC staff analysis of other states' leasing practices.

4. Land Bank Agreement would benefit from increased oversight

[13]See 23 USC Section 142(f) and 23 CFR Section 710.403(e)(5).

The Land Bank Agreement provides a framework for leasing highway right of way. It would benefit from formalized procedures and more interagency cooperation.

The Land Bank Agreement provides a framework for leasing highway right of way (ROW) and funding highway improvements

The Land Bank Agreement (Agreement) provides a framework for the Washington State Department of Transportation (WSDOT) to lease property to Sound Transit in exchange for its funding of highway improvements. WSDOT and Sound Transit signed the initial Agreement in 2000 and updated it in 2003. Sound Transit has leased property to build and operate light rail[14] throughout the central Puget Sound region. It has earned credits to offset its lease costs by funding multiple projects.

The Agreement allows the following lease terms:

- Up to 40-year leases.
- Rates based on the market value[15] determined by an appraiser, with the first 20 years paid in advance.
- Adjustments to lease rates after the initial 20-year term. WSDOT can adjust the rent every five years to account for changes in market value.

The Agreement also covers how Sound Transit earns credits for benefits to the highway system. Before a project becomes eligible for credit, it must be added to one of three exhibit lists that are part of the Land Bank Agreement:

- **Exhibit A-1**: Projects that are "completed, under construction or have a final scope of design agreed to by WSDOT and Sound Transit" and "are deemed, in whole or in part, to be a highway purpose."
- **Exhibit A-2**: Projects that "appear to be, in whole or in part, a highway improvement project but which will need further evaluation once a final design is agreed to by WSDOT and Sound Transit."

[14]Transit that runs on fixed rails. Light refers to lighter passenger capacity, not the physical weight of the vehicles.
[15]The amount of money a purchaser is willing to pay a seller for property, goods, or services. Both parties must agree and are not obligated to purchase or sell.

- **Exhibit A-3**: Projects that Sound Transit contributed funding to "but is not necessarily the lead, contractor, final primary user or owner."

Sound Transit may request credits for project expenditures on the A-1 and A-3 lists. Projects on the A-2 list must be elevated to the A-1 list before they become credit eligible. See Section 1 for more information on credits earned to date.

WSDOT's engineers determine whether a project has a highway benefit. An internal WSDOT committee makes the final determination on credits and costs.

WSDOT awards credits to Sound Transit for projects that benefit highways in one of two ways:

- Increased mobility: measured by the number of vehicles travelling through the highway over a specified time period. For example, Sound Transit may pay for new high-occupancy vehicle (HOV)/transit lanes that increase vehicle capacity on state highways.
- Improved safety: measured by the likelihood of fatalities or serious injuries. For example, Sound Transit may pay for a ramp that links the inner HOV/transit lane to an overpass. This can reduce accidents because buses do not need to weave across lanes of traffic to enter or exit the highway.

WSDOT's Land Bank Oversight Committee decides whether a project is eligible for credits

WSDOT formed the Land Bank Oversight Committee ("the Committee") in 2016 to develop criteria for whether a project is eligible for Land Bank credit. The Committee meets quarterly and leadership from multiple WSDOT divisions serve on it. The exhibit below outlines how WSDOT determines whether a project provides a highway benefit:

Exhibit 4.1: WSDOT Committee reviews credit requests

Source: JLARC staff analysis of WSDOT procedures.

If the Committee decides the project has a highway benefit and is eligible for credits, Sound Transit must submit a list of actual costs after the design and construction are complete. WSDOT

staff review the submitted costs to ensure they all relate to highway benefits. In some cases a project may involve elements that only serve a transit purpose and those costs are not eligible for credits.

Many of the agencies' current practices are not reflected in the Land Bank Agreement

WSDOT and Sound Transit have developed new lease types, processes, and responsibilities since the last update of the Land Bank Agreement in 2003. The existing Agreement no longer reflects current practice.

Some examples of changes not reflected in the Agreement are:

- Using temporary construction leases (TCLs) for the construction period of every light rail project. TCLs were first used under a separate inter-agency agreement on the I-90 center roadway. While TCLs are now standard practice, the Agreement does not include this lease type or the administrative processes necessary to implement it.
- Awarding credits based on actual expenditures after projects are built rather than estimated costs prior to completion, as is required by the State Administrative & Accounting Manual.
- Recording the outstanding credit balance as a liability in the statewide accounting system. Prior to 2015, the credit balance was not recorded as a liability.
- Using the Land Bank Oversight Committee to review highway improvement projects and approve credit requests.

Soon after the Committee formed, the members drafted a series of briefing papers that documented practices to implement the Agreement. However, the Committee's practices have continued to evolve since then without formal documentation.

Some key actions that are not yet documented include:

- Whether the Committee must vote to issue credits when a lease is amended.
- What criteria WSDOT should use to determine if a project is eligible for the A-2 exhibit list.
- Whether the Committee must vote to determine if a project is eligible for the A-2 exhibit list.

WSDOT and Sound Transit lack formalized interagency coordination for the Land Bank Agreement

Staff from WSDOT and Sound Transit work together on the Land Bank projects, but there is no formal interagency process or structure to administer the Agreement. Sound Transit does not participate in Land Bank Oversight Committee meetings, and it does not have its own internal committees or procedures to perform similar functions. Sound Transit reports that it is developing procedures to identify projects that may be eligible for credits. However, there are currently no plans to create formal interagency administrative processes or structures. Formalizing interagency coordination could improve administrative efficiency and ensure that valuable knowledge is retained when staff leave or change roles.

Legislative Auditor recommendation

WSDOT and Sound Transit should strengthen internal oversight of the Land Bank Agreement and develop written procedures to jointly administer the Agreement. As the agencies negotiate an update to the Agreement, they may consider:

- Establishing formal procedures for interagency collaboration. These could include procedures for jointly preparing the Land Bank forecast and including Sound Transit in some Land Bank Oversight Committee ("the Committee") discussions.
- Incorporating new procedures developed since the last update in the new Agreement (e.g., using temporary construction leases, awarding credits based on actual expenditures, and describing the role of the Committee).
- Documenting when the Committee must vote on specific actions.
- Establishing and documenting criteria for highway improvement projects that are eligible for credit.

WSDOT and Sound Transit concur with this recommendation.

5. Proposed new Land Bank Agreement will reduce Sound Transit's costs

Discounting lease rates by the federal share is forecast to reduce Sound Transit’s highway right of way costs by 56% through 2060, with cash savings of up to $569 million

Sound Transit offsets its highway right of way (ROW) lease costs using credits earned from funding improvements to the state's highway system. The terms of the Land Bank Agreement (Agreement) prohibit a negative balance in the Land Bank ledger.

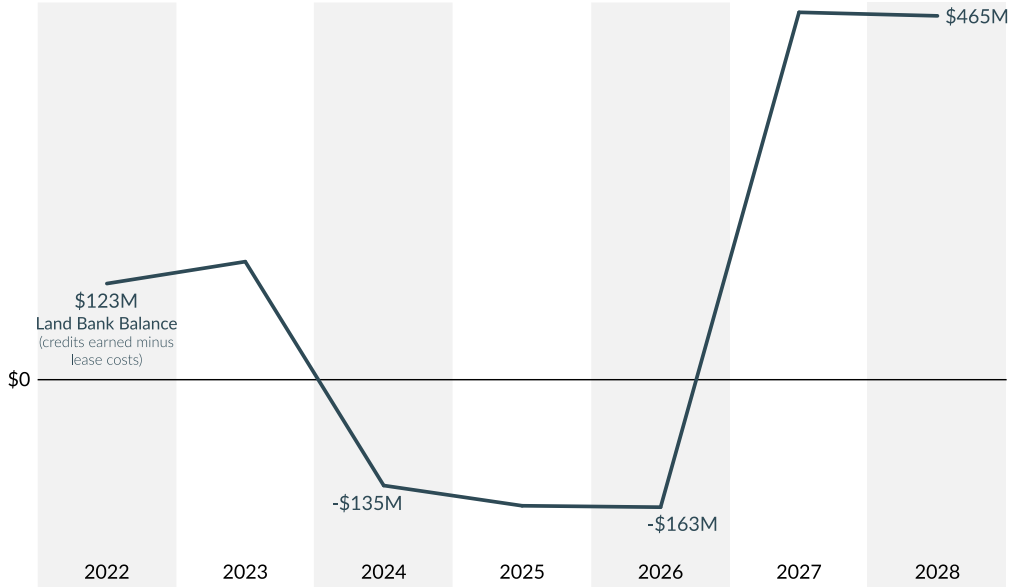
For the first time, Sound Transit is forecasting a negative balance from 2024 through 2026. This means that Sound Transit may have to pay cash to cover the cost of its leases. A proposed new Land Bank Agreement may reduce Sound Transit's costs in the future.

Sound Transit's most recent forecast shows a negative Land Bank balance from 2024 to 2026

Sound Transit conducts annual forecasts of the Land Bank balance to determine whether its credits will cover the costs of its leases with the Washington State Department of Transportation (WSDOT). Due to rising property values and construction delays, Sound Transit's 2022 forecast shows that its lease costs will exceed its credit balance from 2024 to 2026. The forecast estimates a negative balance of $163 million from 2024 to 2026.

Sound Transit expects a return to a positive balance in 2027 due to credits received from the bus rapid transit (BRT) projects on I-405 and State Route (SR) 522. Its 2022 forecast assumes that it will earn $753 million in new credits from these projects and other highway improvements connected to the BRT facilities. See Appendix A for more on the forecast.

Exhibit 5.1: Sound Transit's lease costs are forecast to exceed available credits from 2024 to 2026, likely resulting in cash payments to WSDOT



Source: JLARC staff analysis of forecasted Land Bank balance (credits earned minus lease costs).

A proposed new Land Bank Agreement would reduce Sound Transit's future costs with longer lease terms and discounted lease rates

Sound Transit and WSDOT are negotiating a proposed new Land Bank Agreement that would change lease terms and reduce leasing costs. The new Agreement is based on the terms proposed in a 2015 update that was never adopted. The draft language:

- Extends the initial lease period from 20 years to 50 years. Sound Transit pays in advance for the initial 50-year term.
- Adds the option to extend for another 25 years, with a single reappraisal at the start of the second term and no reappraisals beyond that.
- Waives the federal share[16] of the rental value for new lease agreements. It does not waive the federal share on existing leases.

[16]The percentage of highway acquisition and construction costs paid for by the federal government, typically 80%-90%.

- Updates the lease terms with procedures for utility access, infrastructure maintenance, and hazardous substance removal.

By 2060, the proposed new Land Bank Agreement is forecast to reduce Sound Transit's ROW costs by 56%

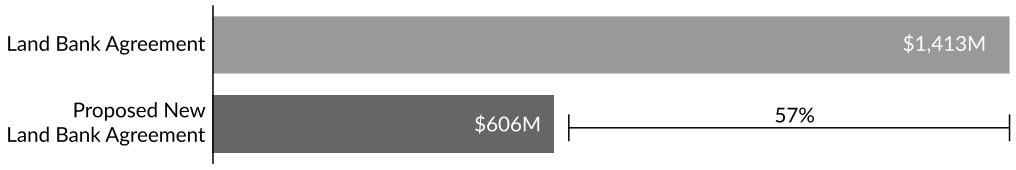
JLARC staff updated Sound Transit's forecast model to reflect the terms in the proposed new Land Bank Agreement. By comparing the results of the two forecasts, JLARC staff estimated the impact of implementing the new agreement on Sound Transit's highway ROW costs.

The proposed new Agreement would increase Sound Transit's short-term costs because it would owe lump sum payments for longer lease terms. However, the long-term savings from discounted lease rates more than offset those costs. By 2060, Sound Transit's aggregate highway ROW costs would decline from $1.4 billion to $621 million, a 56% reduction.

What is the "federal share?"
The percentage of highway project costs paid with Federal Highways Administration (FHWA) funds. Statute defines the base federal share as 90% of project costs. That can vary depending on the project's location and type of improvement. The state must pay for the remainder of project costs.

Typically, states must charge fair market value if they sell or lease highway property acquired with FHWA funding. States must reinvest the federal share of any income earned in other highway projects. However, FHWA now allows states to provide highway ROW to public transit authorities without charge.

Exhibit 5.2: Proposed new Land Bank Agreement reduces Sound Transit's long-term ROW costs by 56% from 2022 to 2060



Source: JLARC staff analysis of Sound Transit forecast model.

Sound Transit is forecast to save $569 million in cash under the proposed new Agreement

In addition to reducing overall lease costs, the proposed new Agreement is expected to reduce the amount Sound Transit may need to pay in cash.

- Under the current Land Bank Agreement, Sound Transit is expected to owe $569 million from 2049 to 2060, after netting out credits from lease costs.
- Under the proposed new Agreement, the Land Bank is forecast to maintain a positive balance from 2049 to 2060. This could save Sound Transit the $569 million in cash payments forecast under the current Agreement.

The impact of the new Agreement will depend on the final terms and other factors

Several factors could impact the amount Sound Transit saves from implementing the proposed changes to the Land Bank Agreement.

- **Sound Transit may earn more credits for future highway improvement projects.** This would reduce the amount of cash it may have to pay in future years. The current forecast does not project any credits beyond 2027.
- **Sound Transit may save more on future leases for planned light rail projects.** Several planned projects are not included in the forecasts. If Sound Transit leases additional ROW for these projects, it would do so at lower lease rates that are discounted by the federal share of costs.
- **The final terms of the new Land Bank Agreement are unknown and could significantly impact potential savings.** For example, it is unclear how the new Agreement will define what is an existing versus prospective lease agreement. Currently, there are six leases valued at $124 million for projects currently under construction.

Appendix A: Forecasting the Land Bank balance

Due to rising property values and construction delays, Sound Transit's 2022 forecast shows that its costs will exceed its credit balance from 2024 to 2026

Each year, Sound Transit conducts a long-term forecast of the Land Bank's credits and debits. The forecast considers:

- Current and future lease agreements (i.e., debits).
- Planned projects that will benefit the highway system (i.e., credits).
- Economic conditions (e.g., discount rates).

Sound Transit completes the forecast analysis each fall as part of its federally mandated long-range financial plan (LRFP). The LRFP projects all agency sources and uses of funds from 1997 to 2060, with a focus on 2017 to 2046. A negative balance in the Land Bank is recorded as a cash liability in the LRFP.

Most recent forecast predicts a negative balance, with Sound Transit owing cash for its leases from 2024 to 2026

In 2021, Sound Transit forecast a positive balance through 2049. The forecast aligned with previous projections for a positive balance over the next 20 to 30 years. Sound Transit's 2022 forecast shows that its costs will exceed its credit balance from 2024 to 2026.

There are two main reasons for the shift in the forecast:

- Rising property values have increased the appraised values of the highway right of way (ROW), leading to higher lease costs.
- Construction delays have affected projects for which Sound Transit is likely to receive Land Bank credits. This has pushed back the date when it will receive those credits.

This means that Sound Transit may have to pay cash for the first time to cover the cost of its leases. The forecast estimates a negative balance of $163 million from 2024 to 2026.

Sound Transit expects a return to a positive balance in 2027 following the completion of bus rapid transit (BRT) projects on I-405 and State Route (SR) 522. The forecast assumes that Sound Transit will earn $753 million in new credits from these projects and other highway improvements connected to the BRT facilities.

Exhibit A1 below provides more details on the five main variables affecting Sound Transit's forecast and the rates used in the most recent forecast.

Exhibit A1: Sound Transit's 2022 forecast variables

Variable	Description	2022 Rate
Right of way (ROW) inflation	Inflates current property values to the year the lease payment is due. A higher, short-term rate is applied over a ten-year period; the long-term rate is applied thereafter.	Short-term: 7.5% Long-term: 4.5%
Capitalization rate	The rate of return for a rental property. Rent in year one of a lease is the product of the lease capitalization rate and the appraised fair market value.	6%
Rent escalation rate	Under the current Land Bank Agreement (Agreement), the base rent is adjusted every five years. Rent in years 1-5 is equal to the appraised market value times the lease rate. Thereafter, rent is escalated every five years through the end of the initial lease term.	10%
Discount rate	Sound Transit pays in advance for the initial 20-year lease term. The parties apply the discount rate to calculate the net present value of the sum of the annual rental payments for the initial term.	8%
Federal share (proposed new Agreement forecast only)	The percentage of the highway ROW that was originally acquired with Federal Highway Administration funding is known as the federal share. Rental payments for future leases under the updated Land Bank Agreement are reduced by the federal share.	85%

Source: Sound Transit Land Bank forecast model.

Appendix B: Applicable statutes and rules

RCW 47.12.120, WAC 468-30-110, 23 U.S.C. § 142(f), 23 C.F.R. § 710.403(e)

Lease of unused highway land or air space

RCW 47.12.120

The department may rent or lease any lands, improvements, or air space above or below any lands that are held for highway purposes but are not presently needed. The rental or lease:

(1) Must be upon such terms and conditions as the department may determine;

(2) Is subject to the provisions and requirements of zoning ordinances of political subdivisions of government; and

(3) Includes lands used or to be used for both limited access and conventional highways that otherwise meet the requirements of this section; and

(4) In the case of bus shelters provided by a local transit authority that include commercial advertising, may charge the transit authority only for commercial space.

Nonhighway use of airspace on state highways

WAC 468-30-110

(1) Definitions:

(a) "Airspace" is that space located above, at or below the highway's established gradeline lying within the approved right of way limits.

(b) "Department" is the Washington state department of transportation.

(2) Any use of such space shall be subject to approval of the Federal Highway Administration.

(3) Any use of such space shall be subject to compliance with all applicable city, town or county zoning requirements.

(4) Any application to the department for the lease of such space shall describe in detail the use to be made of such space and the physical facilities to be installed and maintained on state right of way.

(5) The lessee shall be solely responsible and shall hold the state harmless for liability for any and all damage to persons or to public or private property that may result from or be caused by the use of such space or from the erection or maintenance of any structure or facility upon the highway right of

way. The lessee shall be liable to the department for any moneys expended by it for the protection or repair of any state facility required as a result of any such use.

(6) The lessee shall be required to carry liability and property damage insurance in amounts required by the department.

(7) No use of such space shall be allowed which subjects the highway facility or the public to undue risk or impairs the use of the facility for highway purposes.

(8) Use of such space shall be covered by a properly executed airspace lease.

(9) Consideration for occupancy:

(a) Where the airspace can be developed and used as an entity the consideration shall be economic rent.

(b) Where the proposed use of the airspace is in conjunction with an abutting tract, rent shall be based on its contribution value to the abutting property but not less than economic rent.

(c) When the use of the property constitutes a highway purpose the rent may be offset in part or in whole with other valuable considerations as determined by the department.

(10) The granting of any use of such space shall be subject to the discretion of the department and upon such terms and conditions in addition to those stated herein as it shall deem proper.

(11) No assignment of any lease by the lessee shall be of any force and effect unless prior written approval of such assignment has been given by the department.

Federal-aid highways - public transportation

23 U.S.C. § 142(f)

Availability of Rights-of-Way. - In any case where sufficient land or air space exists within the publicly acquired rights-of-way of any highway, constructed in whole or in part with Federal-aid highway funds, to accommodate needed passenger, commuter, or high speed rail, magnetic levitation systems, and highway and nonhighway public mass transit facilities, the Secretary shall authorize a State to make such lands, air space, and rights-of-way available with or without charge to a publicly or privately owned authority or company or any other person for such purposes if such accommodation will not adversely affect automotive safety.

Right-of-way and real estate - management

23 C.F.R § 710.403(e)

Current fair market value must be charged for the use or disposal of all real property interests if those real property interests were obtained with title 23, United States Code, funding except as provided in paragraphs (e)(1) through (6) of this section. The term fair market value as used for acquisition and disposal purposes is as defined by State statute and/or State court decisions. Exceptions to the requirement for charging fair market value must be submitted to FHWA in writing and may be approved by FHWA in the following situations:

(1) When the grantee shows that an exception is in the overall public interest based on social, environmental, or economic benefits, or is for a nonproprietary governmental use. The grantee's ROW manual or RAMP must include criteria for evaluating disposals at less than fair market value, and a method for ensuring the public will receive the benefit used to justify the less than fair market value disposal.

(2) Use by public utilities in accordance with 23 CFR part 645.

(3) Use by railroads in accordance with 23 CFR part 646.

(4) Use for bikeways and pedestrian walkways in accordance with 23 CFR part 652.

(5) Uses under 23 U.S.C. 142(f), Public Transportation. Lands and ROWs of a highway constructed using Federal-aid highway funds may be made available without charge to a publicly owned mass transit authority for public transit purposes whenever the public interest will be served, and where this can be accomplished without impairing automotive safety or future highway improvements.

(6) Use for other transportation projects eligible for assistance under title 23 of the United States Code, provided that a concession agreement, as defined in § 710.703, shall not constitute a transportation project exempt from fair market value requirements.

RECOMMENDATIONS & RESPONSES
Legislative Auditor Recommendation

The Legislative Auditor makes one recommendation regarding coordinated oversight of the Land Bank Agreement

WSDOT and Sound Transit should strengthen internal oversight of the Land Bank Agreement and develop written procedures to jointly administer the Agreement

As the agencies negotiate an update to the Agreement, they may consider:

- Establishing formal procedures for interagency collaboration. These could include procedures for jointly preparing the Land Bank forecast and including Sound Transit in some Land Bank Oversight Committee ("the Committee") discussions.
- Incorporating new procedures developed since the last update in the new Agreement (e.g., using temporary construction leases, awarding credits based on actual expenditures, and describing the role of the Committee).
- Documenting when the Committee must vote on specific actions.
- Establishing and documenting criteria for highway improvement projects that are eligible for credit.

Legislation Required:	No legislation required.
Fiscal Impact:	None
Implementation Date:	January 2024
Agency Response:	WSDOT and Sound Transit concur with this recommendation.

WSDOT Response

Washington State Department of Transportation

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310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300
360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

December 5, 2022

Mr. Keenan Konopaski, Legislative Auditor
Joint Legislative Audit and Review Committee
1300 Quince St SE
Olympia, WA 98504-0910

Dear Mr. Konopaski:

Thank you for the opportunity to respond to the audit titled *Leasing State Highway Right of Way to Sound Transit*. We have reviewed the report and have provided our formal response below.

The work that Sound Transit is doing in the Central Puget Sound Region to expand its Link light rail system aligns with WSDOT's goal to create a multimodal and sustainable transportation system for the citizens of Washington State. As mentioned in the report, WSDOT has a division that is dedicated to supporting Sound Transit projects from conceptual design through construction and into revenue service. WSDOT looks forward to continuing this productive partnership with Sound Transit, and the Land Bank Agreement is an important component of this relationship.

We appreciate that the audit found that WSDOT was performing the appraisals consistent with the Agreement, related laws and regulations, and complied with the Uniform Appraisal Standards. We also appreciate the peer review of other DOTs that have rail transit operating in their corridors. The analysis of the land bank credit balance was also informative.

We understand there will be a presentation of this report at the JLARC Committee Meeting on January 4th. We look forward to participating in this meeting in case there are any questions for WSDOT.

In the meantime, WSDOT staff are communicating with Sound Transit regarding next steps as they relate to lease rates, lease terms, and the administration of the land bank agreement.

WSDOT Response

Mr. Keenan Konopaski
December 5, 2022
Page 2

WSDOT welcomes ideas to improve its processes for acknowledging Sound Transit for their investments in highway infrastructure and for leasing property to Sound Transit for the expansion of rail transit in the Central Puget Sound Region.

We thank JLARC staff and appreciate their effort in conducting this audit.

Sincerely,

Type text here

Roger Millar, PE, FASCE, FAICP
Secretary of Transportation

RM:jd
Attachment

cc: Amy Scarton, Deputy Secretary of Transportation, WSDOT
Julie Meredith, Assistant Secretary, WSDOT
Dylan Counts, Regional Transit Coordination Director, WSDOT
Bryce Brown, Office of the Attorney General
Steve McKerney, Director of Internal Audit, WSDOT
Zack Freeman, Research Analyst, JLARC
Eric Thomas, Audit Coordinator, JLARC

WSDOT Response

DETAILED RESPONSE TO JLARC'S RECOMMENDATION ON THE AUDIT OF LEASING STATE HIGHWAY RIGHT OF WAY TO SOUND TRANSIT

DECEMBER 5, 2022

This management response to the audit report received on November 22, 2022, is provided by the Washington State Department of Transportation.

Recommendation 1: (Formalized Policies & Procedures)
WSDOT and Sound Transit should strengthen internal oversight of the Land Bank Agreement and develop written procedures to jointly administer the Agreement. As the agencies negotiate an update to the Agreement, they may consider:

- Establishing formal procedures for interagency collaboration. These could include procedures for jointly preparing the Land Bank forecast and including Sound Transit in some Land Bank Oversight Committee ("the Committee") discussions.
- Incorporating new procedures developed since the last update in the new Agreement (e.g., using temporary construction leases, awarding credits based on actual expenditures, and describing the role of the Committee).
- Documenting when the Committee must vote on specific actions.
- Establishing and documenting criteria for highway improvement projects that are eligible for credit.

Agency Position: Concur

WSDOT Action Steps and Timelines:

Immediate Time Frame - now through January 2023:

a. Hold informational session about the land bank agreement for current WSDOT committee members and supporting staff. Currently scheduled for December 5, 2022.

b. Share JLARC recommendations with WSDOT Land Bank Committee, which is next scheduled to meet on January 23, 2023. Review current Charter, procedures, review documentation, identify gaps, and determine next steps and timeline for adjustments.

c. Identify points of contact at Sound Transit for land bank agreement interagency collaboration discussion.

Begin to Address in February - April 2023, with Completion in December 2023:

d. Revise WSDOT Land Bank Oversight Committee Charter and procedures to reflect current practices and bring clarity to any procedural gaps as defined in item "b" above. Processes may include clarity on 1) what the Committee votes on, 2) criteria for inclusion of highway improvement projects on lists in Exhibits A-1, A-2, and A-3 of the Landbank Agreement, 3) clarification of the role of the committee, 4) other details as may be useful.

e. Formalize coordination with Sound Transit to administer the Land Bank Agreement with the goals of strengthening oversight, developing joint procedures, and documentation.

Sound Transit Response

SOUNDTRANSIT

December 6, 2022

Mr. Keenan Konopaski
Legislative Auditor
Joint Legislative Audit Review Committee
106 11th Ave SW
PO Box 40910
Olympia, WA 98504-0910

Formal Response: JLARC Leasing State Highway Right of Way to Sound Transit report

Dear Mr. Konopaski:

Thank you for the opportunity to review the draft report presented to JLARC last week. We are pleased with the thorough work performed by the JLARC team. Our staff appreciated the ease with which we were able to work directly with your team, providing background data for the review and draft report.

We concur with the recommendations in the report and provide the following additional background: Were pleased to see the review of similar processes in other states where transit coexists and is accommodated within public right-of-way. It is also reassuring to see that other states charge no, or reduced, fees for use of existing right-of-way for transit purposes.

The conclusions presented regarding valuation methodology are also confirmed and meet the federal and USPAP standards common within public land acquisition. The method and agreement to the standards used for valuation between Sound Transit and WSDOT have, and will continue to be, an area of common understanding and approach between our two agencies.

With respect to the administration of the land bank and the need for more defined procedures, we have already begun updating and establishing a clearer process for review and inclusion of credits and debits within the land bank. WSDOT and Sound Transit will be incorporating these administrative updates into a future restated land bank agreement; in particular, regular and joint review will be enhanced.

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CHIEF EXECUTIVE OFFICER
Julie Timm

Central Puget Sound Regional Transit Authority • Union Station
401 S. Jackson St., Seattle, WA 98104-2826 • Reception: (206) 398-5000 • FAX: (206) 398-5499
www.soundtransit.org

Sound Transit Response

We are currently in the process of finalizing and executing an updated agreement between the parties. By eliminating the federal share and improving our administrative processes, the region will receive greater value from public rights-of-way.

Thank you again for the opportunity to comment.

Sincerely,

Julie E. Timm, CEO
Sound Transit

Cc: Secretary Roger Millar
Dylan Counts
Alex Soldano
Faith Roland
Patrick Johnson

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OFM Response

The Office of Financial Management (OFM) was given an opportunity to comment on this report. OFM responded that it does not have any comments.

Current Recommendation Status

JLARC staff follow up on the status of Legislative Auditor recommendations to agencies and the Legislature for four years. The most recent responses from agencies and status of the recommendations in this report can be viewed on our Legislative Auditor Recommendations page.

Audit Authority

The Joint Legislative Audit and Review Committee (JLARC) works to make state government operations more efficient and effective. The Committee is comprised of an equal number of House members and Senators, Democrats and Republicans.

JLARC's nonpartisan staff auditors, under the direction of the Legislative Auditor, conduct performance audits, program evaluations, sunset reviews, and other analyses assigned by the Legislature and the Committee.

The statutory authority for JLARC, established in Chapter 44.28 RCW, requires the Legislative Auditor to ensure that JLARC studies are conducted in accordance with Generally Accepted Government Auditing Standards, as applicable to the scope of the audit. This study was conducted in accordance with those applicable standards. Those standards require auditors to plan and perform audits to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on the audit objectives. The evidence obtained for this JLARC report provides a reasonable basis for the enclosed findings and conclusions, and any exceptions to the application of audit standards have been explicitly disclosed in the body of this report.

Study Questions

Click image to view PDF of proposed study questions.

Washington JLARC

PROPOSED STUDY QUESTIONS
Review of Airspace Leasing to Regional Transit Authority

State of Washington Joint Legislative Audit and Review Committee — December 2021

2021 Legislature directed JLARC to review land and airspace leasing to regional transit authority

The Washington State Department of Transportation (WSDOT) leases airspace along state highways to Sound Transit, the only regional transit authority in Washington. Sound Transit plans, builds, and operates express buses, light rail, and commuter train services for the central Puget Sound region.

State-owned highway airspace includes property located above, at, or below the highway's grade line. Sound Transit is currently building its light rail system on highway airspace it leases from WSDOT.

Land Bank Agreement provides framework for mutual cooperation

WSDOT and Sound Transit signed a Land Bank Agreement in 2000 that sets the rules and terms for leasing state-owned airspace. The Agreement creates a ledger to record in-kind transactions between the two agencies. Sound Transit receives land bank credits for funding highway improvements (e.g., direct access bus ramps) and uses those credits to pay rent on its leases. Sound Transit currently has $86 million in unused land bank credits.

WSDOT uses appraised values to set airspace lease rates

Many of the properties WSDOT leases to Sound Transit were originally acquired or improved with funding that included federal dollars (e.g., Interstate 5). The percentage of federal dollars used for these properties is known as the "federal share." Federal law allows states to lease airspace above interstate highways free of charge to publicly owned mass transit agencies. However, since 2019, a proviso in the state transportation budget requires WSDOT to set its lease rates to 100% of the appraised value when leasing to Sound Transit.

This study will examine the Land Bank Agreement and address the following questions

1. What is the process for awarding land bank credits to Sound Transit?
2. What is the process for determining property values and lease rates for land bank debits, and do leases reflect 100% of appraised values?
3. What are the costs and benefits to WSDOT and Sound Transit for leases under the Land Bank Agreement?
4. What are the costs and benefits to WSDOT and Sound Transit if existing and future airspace lease rates were reduced by the federal share of funds originally used to acquire or improve the property?
5. What processes do other states use to lease highway airspace to public transit agencies? Do other states charge for the federal share?

Study Timeframe

Preliminary Report: November 2022 **Proposed Final Report:** January 2023

Study Team

Team Lead	Zack Freeman	(360) 786-5179	zack.freeman@leg.wa.gov
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Project Coordinator	Valerie Whitener	(360) 786-5191	valerie.whitener@leg.wa.gov
Legislative Auditor	Keenan Konopaski	(360) 786-5187	keenan.konopaski@leg.wa.gov

JLARC Study Process

Study Mandate (Budget, legislation, committee direction) → **Proposed Study Questions** → Legislative Auditor's Preliminary Report → Legislative Auditor's Proposed Final Report (Agency response included) → Final Report (Option to append committee comment) → *Committee votes to distribute completed audit*

JOINT LEGISLATIVE AUDIT & REVIEW COMMITTEE
106 11th Ave SW, Olympia, WA 98501
Email: JLARC@leg.wa.gov | **Phone:** (360) 786-5171

Methodology

The methodology JLARC staff use when conducting analyses is tailored to the scope of each study, but generally includes the following:

- **Interviews** with stakeholders, agency representatives, and other relevant organizations or individuals.
- **Site visits** to entities that are under review.
- **Document reviews**, including applicable laws and regulations, agency policies and procedures pertaining to study objectives, and published reports, audits or studies on relevant topics.
- **Data analysis**, which may include data collected by agencies and/or data compiled by JLARC staff. Data collection sometimes involves surveys or focus groups.
- **Consultation with experts** when warranted. JLARC staff consult with technical experts when necessary to plan our work, to obtain specialized analysis from experts in the field, and to verify results.

The methods used in this study were conducted in accordance with Generally Accepted Government Auditing Standards.

More details about specific methods related to individual study objectives are described in the body of the report under the report details tab or in technical appendices.

CONTACT
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