

FROM INTERSTATE TO AIRWAYS:

Airport Drive and Spotted Road Safety and Multimodal Improvements

Spokane International Airport



USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program

February 28, 2023

Project Description

Airport Drive, the principle arterial serving the Spokane International Airport (SIA) terminal, has witnessed 116 crashes (an average of six per year) resulting in 75 injuries and two fatalities since 2009. With anticipated growth of an additional 1,000 vehicles per day within the next 10 years, the hazardous condition will pose an ever-increasing threat.

SIA is requesting \$22.8M in RAISE funding for the Airport Drive and Spotted Road Safety and Multimodal Improvements project. The funds will be used to construct an overpass interchange over both arms of Airport Drive and relocate Spotted Road outside the Runway Protections Zone (RPZ). **The project was listed as a Project of Merit in the** Five people enroute to Spokane International Airport were involved in a serious crash before flight home. October 2020 – KHQ NBC News Affiliate



2022 RAISE grant and is SIA's number one priority transportation safety improvement project.

Background

The Project is located at the east end of the Airport and is entirely within Airport-owned property. SIA is a 6,000-acre commercial service airport located in Spokane County, Washington. It is the second largest airport in Washington State and is an integral part of the region's transportation network and local economy. The Airport is operated by the Spokane Airport Board, is recognized by the FAA as a small hub airport and ranked 66th nationally for enplanements.

Airport Drive extends from US 2 on the east five miles to the Airport terminal on the west with a posted speed limit of 50 mph. About 1,200 feet east of Spotted Road, Airport Drive divides into two segments creating a loop into and away from the Airport, known as Airport Drive Inbound and Airport Drive Outbound. More than 16,500 vehicles travel on Airport Road per weekday and about 14,000 on weekends. Ninety-five percent of this traffic consists of passenger vehicles.

Spotted Road is a north-south collector roadway that begins at US 2 north of Airport Drive and continues south connecting industrial and manufacturing centers between Airport Drive and Flightline Boulevard/ Grove Road and provides direct access to I-90. Spotted Road is also designated a Critical Urban Fright Corridor (CUFC), carrying more than 2,600 vehicles per day – 43% of which is freight transportation. Spotted Road is also used by airport, lodging, and rental car shuttles; Spokane Transit Authority (STA) and Cheney Public School District buses; and airport employees and travelers.

As indicated in **Figure 1** (on page 2), Spotted Road currently intersects Airport Drive twice—once at Airport Drive Inbound and again 700 feet to the south at Airport Drive Outbound. These two intersections are currently stop-sign controlled with Spotted Road traffic stopping for Airport Drive traffic. **Both Inbound and Outbound Airport Drive curve sharply on the approach to the Spotted Road intersections.**

Figure 1. Project Location and Proposed Elements

Although Airport Drive is designed to accommodate traffic traveling at 50 mph, a 2020 traffic study found that vehicles travelled an average of 10 MPH *above* posted speeds. This extreme curvature and oncoming speed reduce sight distance and makes it difficult for motorists stopped at the Spotted Road stop signs to gauge vehicle closing speeds. **Since 2009, the two intersections have experienced 116 crashes, 75 injuries, and two fatalities.**

In addition to the safety hazard created by these at-grade intersections, Spotted Road also bisects the central portion of the RPZ (shaded in blue on **Figure 1**, above). RPZs are designated by the FAA and must be kept clear of roadways, places of public assembly, vertical and horizontal objects, and any other non-aeronautical functions to prevent air navigation hazards and assure the safety of people on the ground.

Statement of Work

To resolve these significant safety issues, the project will construct a grade-separated interchange at the intersection of Airport Drive/Spotted Road and relocate Spotted Road outside the RPZ. The proposed alignment re-routes southbound Spotted Road traffic left onto Tech Park Drive, across both legs of Airport Drive on a grade-separated interchange and then southeast along the relocated

Spotted Road to connect with the existing alignment 500 feet north of West Park Drive. Traffic merging onto the higher-speed Airport Drive would enter the roadway using diamond ramps designed to meet AASHTO criteria, including providing adequate sight distance. The new Spotted Road will include widened shoulders to allow safe access for pedestrians and bicycles and also a safe connection to an existing one-mile shared-use path on Airport Drive that connects to SIA.

As described in the Project Budget, the project scope includes surveying, erosion control and stormwater pollution prevention, landscaping, utilities, preliminary engineering, construction engineering, site preparation, grading, traffic management, surfacing, and construction.

Environmental Clearance and Current Design

The project is the Airport's highest *priority transportation safety improvement project* and is listed on the MPO's Regional Unified List for priority projects. SIA and the FAA originally developed an Environmental Assessment (EA); however, after research and review of technical memos, the FAA determined that a Documented Categorical Exclusion (CatEx) was appropriate. The CatEx was completed and approved by the FAA in January 2023. The project is currently at 20% design and SIA is drafting the request for qualifications to continue engineering design expected to be released in 2Q 2023. Detailed analysis of the CatEx results can be found in the Merit Criteria–Environmental Sustainability section of this application.

Transportation Challenges

The two existing at-grade crossing intersections and the current Spotted Road alignment together present significant safety challenges for traffic on both Airport Drive and Spotted Road. From 2009-2022, 116 collisions have occurred resulting in more than 75 injuries and two fatalities.

Although large and heavy trucks need six seconds to accelerate through the intersections, the curvature of Airport Drive and the speed of oncoming traffic do not provide sufficient sight distance to gauge oncoming traffic—a design failure that is exacerbated in times of low-visibility conditions such as dense fog or heavy or blowing snow. Drivers unfamiliar with the intersection can become confused and

turn the wrong way onto Airport Drive—creating extreme danger for themselves and oncoming traffic. In addition, Spotted Road currently runs through the RPZ which poses a hazard to vehicular traffic and for aircrafts.

How the Project Addresses the Challenges

Once constructed, the project will improve traveler and freight transportation safety, increase efficiency and capacity, reduce gasoline consumption, and meet the FAA's RPZ requirements—all within the RAISE grant program merit criteria. Building a grade-separated interchange over Airport Drive will separate heavy freight traffic from the commuter and passenger vehicles traveling to and from the Airport and is forecasted to **reduce vehicle collisions by more than 80%.** The new alignment also moves Spotted Road out of the RPZ—**reducing the hazard for both ground and air traffic.**

Project History

The Airport and its partners have studied the project to identify and develop the most effective solution for more than 20 years. Numerous studies on the intersection, including a Transportation Impact Analysis (2004), Spotted Road and Airport Drive Safety Improvement Project (2006), West Plains-SIA Transportation Study (2011), the SIA Master Plan (2013), and the Horizon 2045 Transportation Plan (2016), as well as Sight Distance Analysis and the Posted Speed Limit Considerations, have concluded that grade-separating Spotted Road from Airport Drive with a new interchange is the most effective alternative for reducing traffic accidents and enhancing safety and access, along with economic growth, for these vital corridors.

Major improvements recommended in the 2004 and 2006 studies were implemented along the corridor to reduce accidents at Spotted Road/Airport Drive, including moving stop bars, painting lane arrows and turn-lanes, installing Stop Ahead signs with flashing lights and overhead beacons, installing wrong- and one-way signage, removing landscaping to improve sight distance, constructing acceleration and deceleration lanes, adding rumble strips on Spotted Road approaches, and placing real-time speed notification signs on Airport Drive. Despite these efforts, collision data shows minimal success in reducing accidents. The 2016 planning study reiterated the recommendation for a new intersection configuration to reduce crashes, improve traffic flow, and increase safety.

Project Location

SIA is located within the Spokane, WA Urban Census Tract 83764. The Airport and surrounding area are rapidly developing industrial and freight hubs commonly known as the West Plains, administered by the S3R3 Public Development Authority.

As shown in **Figure 2** (right), the Airport lies adjacent to Census Tract 104, which is designated as Historically Disadvantaged Community (HDC) by the USDOT. Other nearby HDCs include Tracts 40 and 106. Additionally, Tracts 11, 19, 20, 23, 24, 32, 35, and 36 are

Figure 2. Areas of Persistent Poverty and Historically Disadvantaged Communities

identified as Areas of Persistent Poverty (APP). There is a low-income housing complex at the intersection of US 2 and Spotted Road.

Approximately 20% of the population in Census Tract 104 has not attained a high school diploma or equivalent. In Census Tract 127, where the Airport is located, 14.3% of the population has not attained a high school diploma or equivalent. The Airport and the adjacent West Plains are significant sources of employment for these neighboring communities, offering good paying, sustainable jobs with ample entry-level positions that offer long-term career advancement. As this area continues to develop and grow, preserving and enhancing the safety and mobility of

populations seeking access to better employment opportunities is also an important objective of the project.

Broader Context

The area north of Airport Drive has developed significantly with industrial and manufacturing businesses, making Spotted Road part of the CUFC, as shown in Figure 3 (below). Planning studies estimate that future commercial and industrial development along this corridor will add an additional 1,000 vehicles per day in the next 10 years. Also, SIA has returned to pre-COVID levels of air traffic growth of approximately 10% commercial and 8% cargo annually, creating additional traffic. US 2, a principal arterial and a Primary Highway Freight Network (PHFN), is at capacity with 30,000 vehicles per day and 4-10 million tons of freight annually. In addition, the project is the first step towards connecting the planned future extension of 21st Avenue that will provide a much-needed parallel route for US 2, while maintaining access to Sunset Highway and I-90, relieving congestion on US 2.

"The SIA (GEG) market serves 41 historically disadvantaged population census tracks. Increasing terminal capacity enhances mobility/accessibility for farmers & migrant workers, Kalispel and Spokane Tribal members, and Alaskan natives living/working in the region. The project includes concession areas for Disadvantaged Business Enterprises (DBE), Woman Disadvantaged Business Enterprises (WDBE), and Veteran-owned and small start-up businesses.."

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The Honorable Pete Buttigieg – Secretary Department of Transportation

Figure 3. Current and Future Airport and Surrounding Areas Development

Project Budget

The estimated total cost for constructing the proposed overpass interchange over both arms of Airport Drive and relocating Spotted Road outside the Runway Protection Zone (RPZ) is \$37.2M. For this *priority transportation safety improvement project*, the Airport has already incurred \$3.4M in costs to advance the project over the last decade through planning studies, environmental evaluations, and construction of mitigation measures, including the Documented Categorical Exclusion (CatEx) that was approved by the FAA in January 2023. **Table 1** (below) summarizes the previous mitigation costs incurred for this project.

Table 1. Previous Mitigation Costs

	Previous	Cost	
Project Effort	WSDOT	Local Match/Airport	
Planning Studies/Mitigation	\$150,000	\$2,870,000	\$3,020,000
Environmental/Preliminary Design		\$397,324	\$397,324
Total	\$150,000	\$3,267,324	\$3,417,324

Sources of Funds

The remaining design and construction costs total \$33.8M, of which Spokane International Airport (SIA) is requesting \$22.8M in 2023 RAISE Grant Program funding. The remaining \$11M will come from FAA Airport Improvement Program (\$5M) and SIA General Funds (\$6M). **Table 2** below illustrates the breakdown by project element and funding source. The total non-federal contribution is 33% of the total project cost.

Table 2. Project Funding Sources

Funding Source	Design	Construction	Total Funding	% of Project
RAISE Funds		\$22,800,000	\$22,800,000	67%
Non-Federal Funds				
Airport Improvement Program (AIP) ⁽¹⁾		\$5,000,000	\$5,000,000	15%
Airport General Fund	\$2,000,000	\$4,000,000	\$6,000,000	18%
Total	\$2,000,000	\$31,800,000	\$33,800,000	

1) 7.5% ticket fee collected on each airline ticket and dispensed by the FAA through Congress Appropriations

Funding for the project consists of committed and planned sources. The Airport has committed \$6M in funding, including \$2M for design and \$4M for construction and Airport Improvement Program is providing \$5M. SIA is jointly owned by Spokane County and the City of Spokane, and under RCW 14.08, operates as a municipality under joint agreement. The Airport is financially self-

sufficient from revenues generated from fees, leases, and concession agreements and does not receive revenue from appropriated tax dollars. The costs depicted on the Project Funding Sources table include a reasonable industry escalation rate to capture material cost increases. The Airport has the capability to fund the project beyond the RAISE amount. **Table 3** (on the following page) indicates that all project costs are attributable to Census Tract 137.

Table 3. Project Cost per Census Tracts

Census Tract(s)	Project Costs per Census Tract
Census Tract 137	\$33,800,000
Total Project Cost	\$33,800,000

Uses of Funds

Table 4 (below) provides the estimated costs for each project element in 2023 dollars, and then the costs inflated to 2025 dollars, the anticipated year of construction. The budget also includes 15% contingency. The total project cost of \$33.8M (2025\$) is comprised of standard interchange and roadway construction elements, including site preparation, traffic management, surfacing, structure and grading. The cost estimate includes a 15% contingency (not applied to mobilization costs), preliminary engineering estimate of 10% of the construction total, and construction engineering also estimated at 10% of the construction total. The costs were escalated from 2023 estimates at 4% a year, assuming construction begins in FY2025, with the exception of preliminary engineering, which would take place in 2024 and therefore was escalated only to FY2024.

Item Description Cost Estimate (2023\$) Cost Estimate (2025\$)* **Civil Improvements** \$1,800,000 Traffic \$2,600,000 \$2,900,000 Site Preparation Surfacing \$3,800,000 Structure \$4,300,800 \$6,600,000 Grading **Construction Subtotal** \$22,500,000 \$3,100,000 Contingency (not on mobilization) (15%) **Construction Total** \$25,600,000 \$28,200,000 \$2,600,000 \$2,600,000 Preliminary Engineering (10%) Construction Engineering (10%) \$2,600,000 \$3,000,000 **Total Project Cost FY** \$30,800,000 \$33,800,000

Table 4. Project Budget Detail

* Assumes construction in 2025

Ability to Address Potential Cost Increases

Through existing reserves and available debt capacity, SIA has access to approximately \$4M that would be used to cover a potential 10% increase in total project costs. While not anticipated, if actual costs do exceed the budget included in this RAISE grant application, the SIA Board would have to approve the use of these fund to cover the funding shortfall.

Previously Incurred Costs

Over the last decade, the Airport has incurred \$3.4M in costs to advance this *priority transportation safety improvement project* through planning studies, environmental evaluations, and construction of mitigation measures, including the CatEx that was approved by the FAA in January 2023. The Project has been developed and refined through multiple planning studies over the past 14 years. Additionally, this project has been studied regionally since 2004, and incremental improvements to enhance the traffic operations and safety of the existing intersections have been ongoing and included public and stakeholder involvement (**Table 5**). Enroute

		A		RAISE		
Project Stages	WSDOT	AIP ⁽³⁾	Local Match/Airport	USDOT RAISE	Cost	% of Total Cost
Planning Studies and Mitigation ⁽¹⁾	\$150,000		\$2,870,000		\$3,020,000	0%
Environmental/ Preliminary Design ⁽¹⁾			\$397,324		\$397,324	0%
Design ⁽²⁾			\$2,000,000		\$2,000,000	0%
Construction ⁽²⁾		\$5,000,000	\$4,000,000	\$22,800,000	\$31,800,000	72%
Total	\$150,000	\$5,000,000	\$9,267,324	\$22,800,000	\$37,217,324	61%

Table 5. Previous and Estimated Project Costs

1. Previously Incurred Costs

2. Future Eligible Costs

3. 7.5% ticket fee collected on each airline ticket and dispensed by the FAA through Congress Appropriations

The improvements described **Table 6** (on page 4) had incremental yet minimal success in reducing collisions at the intersections. All the studies indicated a grade-separated interchange at the project location would reduce collisions by about 80%, resulting in reduced fatalities and injuries, and property damage. The history of the project leading to the current proposed improvement is detailed below and the most recent studies can be found <u>here</u>. With so much already invested in this project, the Airport remains committed to completing this critical safety infrastructure project. As noted in the project description, this is SIA's number one priority project. SIA will continue to advance the project towards construction, beginning with initiating the preparation of final design

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documents, specifications, and associated permit requirements. However, without the RAISE grant, the Airport will not be able to begin construction in the near future, putting additional lives at risk.

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Year	Project Investment	Data-Driven Result	Outcome
2004	Traffic Impact Analysis	Spotted Road and Airport Drive found to be LOS B. Spotted Road and US 2 found to be LOS F during peak hours. Accident Safety Rates for Airport Drive: 1.91–Inbound, 4.4- Outbound.	Labeled high accident location; planned for design of 2005 project
2005	Spotted Road Safety Improvement	Constructed wide-solid stop bars; painted islands to designate turn lanes, through and turn-lane arrows; installed yield, wrong way and one-way signs, and rumble strips.	Enhanced safety at intersections
2006	Spotted Road and Airport Drive Safety Improvement Study	Provided grade-separated crossing to reduce conflict points and increase safety. FAA Planning guide recommended that airports serving more than 2.5M passengers should have "full control of access with no crossings at grade." Performed Sight Distance Analysis.	Sight distance issues at the at-grade intersections were improved; potential benefit from turn lanes.
2008	Spotted Road Lane Reconstruction	Constructed turn lanes and acceleration/ deceleration lanes with dedicated turn lanes to separate through traffic.	Enhanced safety at intersections.
2013 Spotted Road Lane Reconstruction Installed overhead fl illuminated "STOP" s Road and Airport Dr Outbound intersection		Installed overhead flashing red lights and illuminated "STOP" signage at the Spotted Road and Airport Drive Inbound and Outbound intersections to enhance safety	Enhanced safety at high- crash intersections.
2013	Spokane MPO Horizon 2040 Master Plan	Identified needs-based improvements and fiscally constrained transportation improvements	Plan can be found here.
2014	14SIA Master PlanDetermined a compounded annual growth rate of 3.42% and increased enplanements from 1.6 to 2.6M by 2025. Recommended a single grade- separated intersection for Spotted Road/Airport Drive.		Confirmed priority to route public roadway outside the RPZ.

Table 6. Summary of Previously Implemented Spotted Road/Airport Drive Improvements

Airport Drive and Spotted Road Safety and Multimodal Improvements 2023 USDOT RAISE GRANT PROGRAM

Year	Project Investment	Data-Driven Result	Outcome
2014	West Plains/ Spokane International Airport Transportation Study	Forecasted development in the study area that exceeded historic growth rates. Considered official actions taken such as platting, permitting, transportation impact analyses, environmental impact studies, property purchases, and groundbreaking.	Updated the SRTC regional model demographics and tested benefits of several developed alternatives.
2015	Pavement Management Plan	Determined Spotted Road within the project limits as having a Pavement Condition Index (PCI) ranging from 25-85.	Pavement in failing condition.
2015 Airport Drive Couplet Traffic Study Interchange selected as preferred improvement to separate multimod by SIA, WSDOT, City, County, Fire Department, and MPO.		Interchange selected as preferred improvement to separate multimodal traffic by SIA, WSDOT, City, County, Fire Department, and MPO.	Improve safety at the intersection with interchange/overpass.
2019	West Plains Transportation Subarea Plan	Identified safety improvements, transit, and non-motorized improvements needed at Spotted Road and Airport Drive intersections. Noted the lack of north-south and east-west arterial roadways in the study area.	Three-lane arterial proposed to parallel US 2 along 21st Avenue connecting to Spotted Road; reserve right-of way for future five-lane expansion; Spotted Road overpass to Spokane Regional TIP and STIP.
2020 SIA Traffic Study		Performed traffic counts in August, October, and December 2019.	Pursue safety countermeasures at Airport Drive/Spotted Road.
2021	West Plains Subarea Transportation Management Plan	Evaluation of multiple corridors on US 2. Additionally, study discusses intersection configurations and traffic operations at US 2 and Airport Drive/Sunset Highway.	Continued inclusion of the Spotted Road Interchange to benefit traffic operations in the subarea.
2022	West Plains Transportation Network Study	Evaluation of all commercial/industrial businesses within the project area.	Spotted Road to provide access to 21st Avenue and relieve commercial/ industrial traffic to I-90 and US 2.

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Merit Criteria

This priority transportation safety improvement project identified by Spokane International Airport (SIA) and a listed Project of Merit for the 2022 RAISE grant cycle, provides numerous benefits to the travelling public, freight and logistics businesses, the environment, and the nearby communities, and aligns closely with the 2023 RAISE Grant Merit Criteria.

Improving Safety

The Spotted Road/Airport Drive intersections are points of convergence between visitor, passenger, and employee traffic accessing the Airport along Airport Drive and commercial, industrial, and school bus traffic travelling between I-90 and US 2 accessing the Airport's developments from Spotted Road (**Figure 4**, below). The traffic flow, in combination with A two-car accident at Spotted Road/Airport Drive restricted the busy roadway and sent one person to the hospital. According to officials, the driver traveling southbound on Spotted Road failed to yield, hitting the driver going westbound on Airport Drive, rolling the vehicle onto its side. *June 2013 – KHQ NBC News*

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the existing geometric layout and line-of-sight limitations creates substantial safety concerns and resulted in fatalities, serious injury collisions, and damage to property.

Figure 4. Cheney School District Bus Route

"Students attending schools near the airport live north of US Highway 2 and transporting these students to their respective schools requires crossing two major intersections on Spotted Road with the inbound and outbound Airport Drive roadways. Also, one high school that serves Airway Heights, the West Plains area, and Cheney, causing high school students to use that thoroughfare as well."

> **Robert W. Roettger** Former Superintendent Cheney School District

The primary purpose of the project is to mitigate severe and fatal collisions occurring at the intersection of Airport Drive and Spotted Road and protect air transportation passengers from

safety risks. The Project will generate significant benefits for the four million passengers (families and business travelers) a year who traverse the Spotted Road/Airport Drive intersections through the Runway Protection Zone (RPZ). Vehicle traffic volumes along this corridor are expected to grow by more than 20% over the next decade because of on-going and planned development and an increase in air traffic at the Airport. Without the relocation of Spotted Road and the construction of the grade-separated interchange, increased traffic will most certainly result in more serious collisions resulting in injury or death.

Crash Data Analysis

The <u>SIA 2020 Traffic Count Study</u> collected traffic counts for one week in August, October, and December of 2019. Traffic counts determined that peak Average Daily Traffic (ADT) occurred on Thursday and Friday and travel speeds were 4 to16 MPH higher than the posted speed limit. Since 2009 there have been 116 collisions at the at-grade intersections of Spotted Road and Airport Drive (Inbound and Outbound) with a total of 164 vehicles involved, as detailed in **Table 7** (below). Sixtytwo percent of the crashes met the damage threshold of at least \$700 worth of damage indicating that these are high-speed and damage-inducing crashes. Half (48%) of the collisions resulted in injuries, totaling at least 75 people that were serious or potentially disabling injuries, and two resulting in fatalities.

		Crash Severity			Damage		
Year	Collisions	Fatality	Serious Injury	Minor Injury	Unknown/ No Injury	Threshold Met	Injuries
2009-2013	27	1	2	11	13	*	*
2014	5	0	0	5	0	4	12
2015	9	0	0	2	7	7	2
2016	12	0	0	7	5	10	9
2017	7	0	0	3	4	7	16
2018	10	0	0	3	7	9	3
2019	6	0	0	2	4	6	4
2020	12	0	0	6	6	10	8
2021	15	1	2	4	8	10	14
2022	13	0	0	7	6	9	7
Total	116	2	4	50	60	72	75

Table 7. Crash Data by Year

* Comprehensive data not available

2023 USDOT RAISE GRANT PROGRAM

The new interchange eliminates the safety hazard of the two at-grade crossings by replacing them with a single grade-separated overpass with on- and offramps. Crash data included in the 2015 Airport Drive Couplet Traffic Study indicated that *failure to yield, disregard stop sign, and inattention* were cited as the top three circumstances that caused collisions. Of the 54 citations issued, 64% were for *failure to stop/yield at an intersection,* and three drivers were cited for driving the wrong way on a one-way street.

Analysis in the Traffic Study estimated that building the interchange would reduce potential traffic conflicts (a product of the total conflicting movements multiplied by the severity factor of each incident) from 5,207,050 to 1,106,275 –**an 80% reduction**. Based on information from the Crash Modification Factor Clearinghouse the conversion of an at-grade intersection into a grade-separated interchange will result in a 42% reduction in accidents (CMF ID 459). "While the safety benefit alone is substantial, the project additionally decreases overall traffic congestion, improves traffic flow in and around the Airport, enhances multimodal access for both motorized and non-motorized traffic, and reduces the amount of greenhouse gases being emitted. As the Airport continues to grow, separating these roadways and also improving runway and roadway safety is a strategic approach to maximizing benefits for air and surface transportation modes."

> Nadine Woodward, Mayor City of Spokane

According to traffic modelling, the completion of the Project will mitigate 244 vehicle collisions and injuries and five fatalities over the 30-year time horizon. The Project also includes roadway lighting to illuminate vehicle conflict points, which will help reduce crashes that occur during nighttime hours. Of the 84 crashes analyzed, 36% happened during dusk or night-time hours.

Inbound Airport travelers present specific behaviors such as rushing to a flight or meeting loved ones lead to increased travel speeds despite radar speed readback devices. Travelers can also be distracted by determining specific or correct airport entrances, dropping off a rental car, or parking. Out-of-town travelers not familiar with the Airport or correct routes can be distracted or disoriented and misinterpret the flashing beacon as a stopping requirement. **Data**

from the 2015 traffic study indicate that 9.6 percent of Airport Drive Inbound traffic is going more than five mph over the 50-mph speed limit and 8 percent of the total is between 5 and 10 mph over the posted speed. In addition, more than 200 vehicles were going over 60 mph and some more than 70 mph.

Outbound Airport travelers also present unique and specific characteristics, such as fatigue from travelling, relief to be home and anxious to leave the Airport, emotional distraction from having just picked up or dropped off a loved one, being unfamiliar with the road or correct route to take,

nervous about driving an unfamiliar rental vehicle, and thinking about the next steps of their journey, such as upcoming business meeting, wedding, funeral, or vacation.

Commercial and industrial traffic on Spotted Road present specific risks. Heavy loads decrease acceleration speeds to cross the roadways and the need to stop and start to cross both segments of Airport Drive leads to excessively slow speeds crossing each section of Airport Drive. Drivers can also be unfamiliar with the road or correct route and make dangerous and incorrect turns onto Airport Drive.

The time from when approaching vehicles on Airport Drive Inbound and Outbound can be seen, to when they arrive at Spotted Road was also evaluated. It was found that traffic on Airport Drive Inbound can be seen by northbound Spotted Road vehicles about 14 seconds prior to arriving at the intersection. Traffic on Airport Drive Outbound can be seen by southbound Spotted Road traffic nine seconds prior to arrival at the intersection. These times are insufficient to make a safe crossing. **Table 8** summarizes the project's elements that respond to the RAISE grant program's safety goals.

Safety Merit Criteria	Project Benefit
Protect non-motorized travelers and communities from safety risks	The proposed grade separation will eliminate multiple conflict points for non-motorized travelers on Airport Drive as well as Spotted Road. Through traffic will no longer have to stop at the dangerous intersections.
Reduce fatalities and/or serious injuries to bring them below the state-wide average for underserved communities	Estimated reduction in crashes by 244 and reduction in fatalities by five over a 30-year period.
Incorporate and cite specific actions and activities identified in the Department's National Roadway Safety Strategy plan	The Spotted Road and Airport Drive improvements include Complete Street design in a rural context. The roadway will have infrastructure for all users, pedestrians, bicyclists, mobility devices, transit riders, shared ride services, motorists and freight delivery services. Safer speeds will be achieved through the grade- separation project and includes speed-feedback signage and patrols by the SIA police force. Post-crash care will be implemented through on-site monitoring systems connected to the WSDOT Traffic Management Center which will improve responder times and increase safety.

 Table 8. Safety Criteria Evaluation

Environmental Sustainability

This project will take place in the northeast corner of SIA's property which is zoned as an Airfield Overlay Zone and has recently been issued environmental approval thru a Documented Categorical Exclusion by the FAA . The proposed interchange will be constructed northeast from where Spotted

Road currently intersects with Airport Drive. Transmission lines run alongside Airport Drive, both inbound and outbound. The immediate project area has not been previously developed or disturbed; trees are sparse, and vegetation consists of primarily low grasses and shrubs. Exposed bedrock and ridges run through the site. The surrounding area is also primarily vacant and consists mostly of low grasses and shrubs, and water quality treatment swales. There are no species in the area listed or proposed for listing under the Endangered Species Act (ESA). Similarly, the area is not within the designated or proposed Critical Habitat for any species protected under the ESA. The airport is two miles southwest of the Spokane River.

As summarized by **Table 9** (below), the project will provide local and regional environmental benefits in keeping with the stated environmental sustainability goals of the RAISE grant merit criteria.

Environmental Sustainability	Project Benefit
Reduce transportation-related air pollution and greenhouse gas emissions in underserved communities.	The project will eliminate traffic idling at the two Spotted Road stop- controlled intersections. Traffic will now be able to flow freely over Airport Drive. The interchange offramps will have stop signs, and the low volume of traffic will reduce Greenhouse gas emissions by 2,572 tons, and critical air contaminants by .029 tons.
Promote energy efficiencies	Eliminating the two intersections will increase energy efficiency for all vehicles. The relocation of Spotted Road outside the RPZ will increase maintenance efficiency as workers will not need to leave a controlled access and secure facility to maintain the runway lighting system.
Align with the applicant's State, regional, county, or city decarbonization plan;	The Project aligns with the 2021 Spokane Sustainability Action Plan Goal 6 – Reduce motor vehicle miles travelled (VMT) and promote active transportation modes TL 5 – improve transportation safety.
Protect sole source aquifer	Severe collisions can generate vehicle fluids such as oil and fuel, which are then released to the environment during collisions, endangering the surrounding ecosystem. It is estimated that the new interchanges will avoid the spillage of 3,498 quarts of motor oil over 30 years or 117 quarts a year.

Table 9. Environmental Sustainability Evaluation

Sustainable Design and Construction Management Techniques

Sustainability will be prioritized in the design and construction of the Project. Elements include:

- The project retains much of the existing infrastructure, reducing the amount of waste generated by the project.
- Sustainability will be top of mind in the design of the new infrastructure associated with the realignment of Spotted Road.

- Much of the project will be constructed in phases such that the traveling public will not be delayed. Detours will be in place when needed to eliminate stopped and idling traffic.
- Full Depth Reclamation of the existing roadway section on Spotted Road will recycle and reuse existing asphalt and aggregate into the new pavement section reducing the use of new and processed natural resources.

Quality of Life

Improved safety and job creation resulting from this project will enhance the quality of life for residents and those who work on and around the Airport. In addition to reducing vehicle collisions, improved pavement conditions will also reduce the cost of vehicle repairs for businesses and the public. An analysis of SIA employee's residency reveals that 60 percent of Airport employees and related business employees who live in areas of persistent poverty or in historically disadvantaged communities. Improving

This project will protect the safety of more than **4 million people each year**. The Airport has a total economic impact of more than 11,500 jobs, \$0.5B in labor income, \$0.9B in value added, and \$1.5B in business revenues.

> Source: Washington Aviation Economic Impact Study, WSDOT, 2020

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the connection of these residents proactively addresses equity for individuals living in communities around the Airport, like Airway Heights and the surrounding areas in Spokane County.

The Airport and lands directly surrounding the Airport are within Census Tract 137 in Spokane, Washington. Of the total 3,154 people that live in this census tract, the 2020 Census identified racial data for this area: 83.3 percent as White or Caucasian; two percent Black or African American; three percent as American Indian or Alaska Native; five percent Asian; 0.6 percent as Native Hawaiian or Other Pacific Islander; 0.9 percent other race; and 5.2 percent as two or more races (USCB, 2020). Census Tract 137 has a poverty level of 9.6 percent (USCB, 2019). There is no residential land adjacent or near the project area. This project will not cause any disproportionately high and adverse effects to minority or low-income populations. As shown in **Table 10**, the new interchange and Spotted Road relocation will provide safe connections to the 41 census tracts identified as Historically Disadvantaged Communities served by SIA.

Table 10. Quality of Life Benefits

Quality of Life	Project Benefit
Improve access to daily destinations like jobs, healthcare, grocery stores, schools, places of worship, recreation, or parks through transit and active transportation.	SIA employs 3,000 people, many of whom live in the communities designated as Areas of Persistent Poverty (APP) or HDCs near the Airport. The Project will significantly improve access to jobs and travel for those who drive, walk, bike, or take public transit to access SIA.
Implement transit-oriented development that benefits existing residents and businesses, low-income and	Transit services – currently 4 routes – that connect to the fast-growing development at the Airport and the nearby

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Quality of Life	Project Benefit
disadvantaged communities, and minimizes displacement.	West Plains business development area will be safer and more reliable with the completion of the Project.
Improve public health by adding new facilities that promote walking, biking, and other forms of active transportation.	Currently those who walk or bike to access jobs and travel at the airport must navigate the same treacherous intersections as vehicular traffic. The planned bike/ped improvements will improve public health.

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Mobility and Community Connectivity

As indicated in **Figure 5** (below), Spokane Transit Authority (STA) currently serves the Airport and the surrounding employment centers with four bus routes: Route 60 accesses the Airport and the Airport Heights community; Route 61 serves Sunset Highway; Route 63 connects the West Plains Transit Center with Downtown Spokane, as does Route 633. **This priority project will provide safer routes to the approximately 3,000 employees supported by the Airport, 60 percent of which live in underserved/ impoverished areas.**

Figure 5. STA System Map (detail)

In discussing the merits of the project, the STA staff indicated the greatest need is pedestrian facilities, crossings, and lighting at the stop and paths for riders using the Spotted Road/US 2/ Airport Drive bus routes. Currently there are no pedestrian facilities at the bus stops West Spotted Road/ Airport Drive Inbound and east of Spotted Road/ Airport Drive Outbound. People who use the bus stops on Spotted Road work all hours. It is difficult to see passengers during the dark hours, especially if passengers are walking to/from the stops on Spotted Road. People who are walking south on Spotted will get off at the Inbound stop because it is quicker to walk through the intersection than wait on the bus through the terminal. This is a dangerous crossing for these pedestrians crossing inbound and outbound Spotted Road. The new alignment will provide greater service to affordable housing at US 2/Spotted Road.

Figure 6 (right) illustrates passenger origins using Route 633 that serves the Airport, the Amazon Fulfillment Center, and Fairchild Air Force Base, and demonstrates the connection between the disadvantaged communities of Airway Heights and downtown Spokane to these key employment centers. This route would directly benefit from the project's improved connectivity.

The project will also increase mobility for freight movement and improves supply chains efficiencies. Recent growth in the area has centered around freight mobility including the development of the growing aerospace manufacturing industry surrounding the Airport; two new Amazon Fullfillment Centers (GEG 1 Figure 6. Route 633 Passenger Origins

and GEG 2); and the initiation of Amazon Air's air cargo hub at the Airport in October 2021. These types of activities highlight the economic footprint of the Airport in the region with more than 11,000 jobs, \$0.5B in labor income, \$0.9B in value added, and \$1.5B in business revenues.

The project will also enhance community connections for walkability and other modes of transportation with dedicated facilities on Spotted Road that provide connection to identified bike routes and shared-use pathways providing safe and direct access to the airport. **Table 11** (page 9) provides a synopis of the Project's mobility and community connectivity benefits.

	Mobility and Community Connectivity	Project Benefits
	Improve system-wide connectivity with access to transit, micro-mobility, and mobility on-demand.	Improves pedestrian connectivity to transit services; improves safety for transit services.
	Implement plans, based on community participation and data, which identifies and addresses gaps in the existing network.	Feedback from public outreach and community engagement identified the Spotted Road/Airport Drive interchanges as high-priority gap in the transportation network accessing the Airport.
	Include transportation features that increase the accessibility for non-motorized travelers for underserved communities, such as a Complete Streets approach.	Project includes expanded and new facilities for bicycles and pedestrians that will be ADA compliant and in keeping with the <u>SRTC Complete Streets Design policy</u> .
	Directly increasing intermodal and multimodal freight movement.	Recent growth near the Airport includes two new Amazon Fulfillment Centers (GEG 1 & GEG 2) and the initiation of Amazon Air's air-cargo hub (October 2021). The Project provides for efficient and safe freight transport.
	Consider last-mile freight plans in a Complete Streets and multimodal approach	Similar to above, the Project facilitates transportation of freight in the last mile between warehousing, the Airport, and nearby neighborhoods.

Table 11. Mobility and Community Connectivity Merit Criteria and Project Benefits

Economic Competitiveness and Opportunity

The Airport and industrial area are poised to support and enhance the regional economy with an annual economic impact of \$3B and supporting 11,500 jobs. The West Plains is expected to add approximately 5,000 sustainable, good paying jobs to the region and these jobs include entry points into the quickly advancing industrial, aerospace and technology, logistics, and manufacturing positions in the Spokane region. The Airport has a total economic impact of more than \$500M in labor income, \$900M in value added, and \$1.5B in business revenues.

Investing in improved traffic safety and efficiency will improve accessibility to Airport travel and support continued tourism, freight, aerospace, and technology, industrial, and manufacturing growth in the regional economy. The project will also improve long-term efficiency in traffic patterns by providing a safe, alternative route for Spotted Road travelers to cross Airport Drive. Improving safety reduces costs associated with collisions at these intersections and reduces costs associated with transportation of goods thereby improving the fluidity of supply chains.

In addition to benefiting this critical regional economic engine, the planned infrastructure improvements will provide economic benefits through reductions in traffic congestion and travel time. New infrastructure costs less to maintain allowing the Airport to allocate these savings to other needed development and infrastructure, shown in Figure 7. Additionally, the new infrastructure will improve the long-term efficiency, reliability, and economic competitiveness of the transportation system as it continues to support additional traffic due to regional growth. These improvements will support multiple modes of

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Figure 7. Private Development in the Region

transportation including freight, commuter, and active and transit.

As described in **Table 12**, reducing risks to Airport employees and users as well as workers in the industrial region will make this area more accessible to industries and commercial businesses, thereby enhancing the economic strength of this region. Residents of Spokane County and the City of Spokane will benefit from economic growth which will create opportunities and increase property values in the region while improving safety.

Economic Competitiveness and Opportunity	Project Benefits
Improve intermodal and/or multimodal freight mobility, especially for supply chain bottlenecks.	More than half (53%) of the traffic on Spotted Road is trucks; 19% of the average traffic on Airport Road is trucks. The project will improve the reliability and travel times for freight transportation.
Facilitate tourism opportunities.	Improving the safety of Spotted Road and Airport Drive facilitates the 843,000 passengers – many of whom are either arriving in Spokane to visit or departing from Spokane to visit other destinations – the most popular being Seattle, Denver, and California.
Inclusive economic development such as the utilization of Minority Business Enterprises, Minority Owned Businesses, Woman Owned	SIA follows the state and federal guidelines for project design and construction and commits to providing meaningful and wealth-building opportunities for Minority, Women and Veteran-owned businesses. DBEs will be

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Economic Competitiveness and Opportunity	Project Benefits
Businesses, and Veteran Owned Businesses	invited to participate during design, geotechnical investigations, and construction. SIA has set a goal of 1.35% DBE three-year goal (2021-2023)
Promote long-term economic growth and other broader economic and fiscal benefits.	Previous studies indicate that the anticipated growth at the Airport and surrounding areas will generate an additional 1,000 vehicles per day in the next 10 years. Relocating Spotted Road and constructing the interchange is critical to sustaining regional growth.
Promote robust job creation by supporting good-paying jobs directly related to the project with free and fair choice to join a union, expand training programs, and implement policies such as targeted hiring preferences that will promote the entry and retention of underrepresented populations into those jobs including women, people of color, and people with convictions.	The West Plains/Airport Area is the fifth fastest growing area in the state due to the development within the light industrial areas. The project helps facilitate the creation and expansion of good-paying jobs with 5,000 new jobs during construction and through existing and new major and minor employee centers as expansion and further development occurs.
Promote greater public and private investments in land-use productivity, including rural main street revitalization or locally driven density decisions that support equitable commercial and mixed-income residential development.	As evidence both by the attached Letters of support, and the previously indicated participation in public outreach and stakeholder engagement, private enterprise supports this Project, sees the need for it, and is committed to continuing to develop the economic opportunities at and surrounding the Airport.

Maintaining State of Good Repair

As referenced in the 2015 Airport Pavement Management Plan, the existing roadways owned and operated by the Airport are currently in moderate condition, and will require further maintenance and upgrades, eventually leading to complete rebuilds.

Preventative maintenance would be required for approximately 15 to 20 years, and the Airport would incur reduced maintenance costs when compared against the option of maintaining the current roadway. Although the new infrastructure will add maintenance to the overall infrastructure, it will reduce maintenance This project is consistent with and integral to WSDOT's objectives of providing safe and efficient solutions for passenger and freight traffic transiting between I-90, the Airport's passenger terminal and air cargo complexes, and US 2.

> Roger Millar, PE, FASSCE, AICP Washington Secretary of Transportation

costs from \$300,000 per year to \$3,040 per year after build-out. The new road and interchange will be added to SIA's Asset Management Plan.

The new structure will be designed for a design life of 75-years. The Airport is committed to the long-term maintenance of the new infrastructure technically and financially. The source of the maintenance funding is the Airport's General fund which is funded through a combination of fees, leases, and concession agreements. As mentioned previously, *the Airport is self-sustaining and does not rely on tax dollars for its operational and maintenance budget*. Table 13 summarizes the State of Good Repair Merit Criteria and Project Benefits.

Table 13.	State o	of Good	Repair	Evaluation
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State of Good Repair	Project Benefits
Restore and modernize (such as through road diets and complete streets approaches) the existing core infrastructure assets that have met their useful life.	Restores roadway along Spotted Road alignment and adjacent stormwater conveyance and treatment; modernizes design to include pedestrian and bus route access for employment centers.
Reduce construction and maintenance burdens through efficient and well- integrated design.	Existing roadway will stay open through the construction of the new alignment. Design will consider sustainability factors to extend the life of the new facility.
Addresses current or projected system vulnerabilities for underserved, overburdened, or disadvantaged communities.	Relocating Spotted Road outside the RPZ increases reliability and reduces vulnerability to the runway and roadway safety for employees coming to work. More than 60% of Airport employees live in areas of persistent poverty or historically disadvantaged communities and have a median household annual income of approximately \$45,000.
Prioritize improvement of the condition and safety of existing transportation infrastructure within the existing footprint.	Project uses existing PRZ boundaries and infrastructure to tie new roadway and interchange into existing footprint.

Partnership and Collaboration

The project is supported by jurisdictional agencies and major employment centers around the Airport. Each of the partners is committed to providing safe and effective transportation infrastructure to one of the region's key transportation hubs. Government entities, private business, planning organizations and advocates have all contributed to the vision and current design of the project, including the City of Spokane, Spokane County, Spokane Regional Transportation council, WSDOT, Fairchild Air Force Base, SRTC, FAA, and SIA. These long-standing partners have worked together to address the public safety issue by performing multiple studies and conducting the planning and preliminary design work. These partners will continue to work together to support final design and construction through project completion. In addition to the

stakeholder partners, the S3R3 Solutions PDA, Cheney Public School District, and Greater Spokane Inc. (Chamber of Commerce) are also supportive of the project, as evidenced by the letters of support attached to this application. Numerous existing industrial, aerospace and technology, and manufacturing businesses, including Amazon, Triumph, Parker Aerospace Exotic Metals Division, Kenworth, McKinstry, the United States Postal Service, UPS and FedEx have also provided feedback, support, and input. WSDOT contribution of \$150,000 to the original planning studies and mitigation construction over the last 10 years.

Stakeholder Engagement

This project is the result of 20 years of planning, outreach, and stakeholder engagement. Project implementation will include a similarly robust initiative. As shown in **Table 14** (below), as part of the planning process, SIA conducted key stakeholder interviews regarding the project. Interviewees included UPS and FedEx, City of Airway Heights, Washington State Patrol, SIA Police, Best Western, US Postal Service, Fire District 10, and Spokane Transit Authority. SIA also held a public information meeting with 15 people attending, including those representing advocacy organizations, WSDOT, the City of Spokane, local businesses, the local "The Airport's RAISE grant application will resolve current air and surface transportation modal safety and efficiency objectives which delivers an outsized benefit for the transportation system and maximizes the impact of federal funds."

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-Kathy McMorris Rodgers, Member of Congress, 5th District

press, Cheney School District, the Airport leadership, and local residents. Further stakeholder outreach will include meaningful engagement of the community affected by the project, to include environmental justice communities and disadvantaged communities, where applicable.

Partnership and Collaboration	Project Benefit
Engage residents and community-based organizations to ensure equity considerations for underserved communities are meaningfully integrated throughout the lifecycle of the project, for example, by citing and describing how the project aligns with the Department's Promising Practices for Meaningful Public Involvement in Transportation Decision-Making Guide.	SIA has engaged residents and community-based organizations in the planning of the Project. Key stakeholder interviews conducted in 2015 gathered critical information on the problem and proposed solution. Alternative solutions were presented at public outreach meetings. The Airport also actively participates in local partnerships including AGC where they present on projects every year.
Partner with Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, and Veteran Owned Businesses.	SIA follows the state and federal guidelines for project design and construction and commits to providing meaningful and wealth-building opportunities for Minority, Women and Veteran-owned businesses. DBEs will be invited to participate during design, geotechnical investigations, and construction.

Table 14. Stakeholder Engagement Evaluation

Innovation

Innovative Technologies

In addition to solving both landside and airside safety issues, the project will employ other innovations to streamline construction, minimize the ecological footprint, and provide critical information to both the travelling public and roadway management.

- Smart work-zone Intelligent Transportation System (ITS) devices will be deployed during construction, including connected speed management systems for documentation of safety risks.
- 2. SIA will deploy Dynamic Message Signs (DMS) within the project for both inbound and outbound travelers.

 Inbound – The DMS will provide real-time information for available parking within the garages and surface lots allowing the travelers to "This project addresses critical aviation safety and intermodal mobility issues at the Spokane International Airport. It is an important component of the Spokane International Airport's efforts to develop into a world-class multimodal and intermodal center that leverages strategic infrastructure to create family wage jobs related to transportation and logistics, advanced manufacturing and aerospace."

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– Maria Cantwell, US Senator

route to open stalls and save on fuel and reduce emissions rather than driving up and down aisles looking for available parking.

- Outbound The DMS sign and system will be connected to the Spokane Regional Traffic Management Center (SRTMC) and fiber optic system to provide a welcome message and provide advanced travel times to Spokane and Coeur d' Alene, Idaho (a tourist destination approximately 30 miles away). Additionally, the DMS can provide information on road conditions that **document safety and traveler risks** for I-90 and US-2, and other routes managed by WSDOT and regional partners to decrease travel times and reduce fuel consumption and emissions.
- 3. The DMS system will provide a direct connection to the SRTMC and allow for traffic counting and monitoring devices that will be able to document inbound and outbound traffic volume, speed, and vehicle classifications and enhance network for future connected vehicle detection and document safety risks.
- 4. Low-impact, green infrastructure construction techniques will be incorporated. Re-using existing roadways will allow recycling of construction materials and minimizing the ecological footprint of the new design.
- 5. Stormwater design will minimize adverse impacts to wildlife and birds by eliminating standing water that might attract wildlife or birds.
- 6. As is evidenced by the numerous alternatives tested, this intersection solution required creativity and innovation to solve.

Innovative Project Delivery

To reduce the cost of the project and expedite delivery, SIA will implement proven design approaches and follow standard construction processes will be followed, such as pre-cast concrete to accelerate bridge construction. Also, SIA will employ Accelerated Bridge Construction (ABC) techniques to reduce the construction duration and limit impacts to the traveling public. Innovations for this project are summarized in **Table 15**.

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Table 15. Innovative Project Delivery

Innovative Project Delivery	Project Benefit
 Innovative Technologies: Enhance the environment for electric, connected, and automated vehicles to improve the detection, mitigation, and documentation of safety risks Use low-carbon materials Use caps, land bridges, or underdecks 	The Project will include variable messaging signage at critical locations on Airport Drive Inbound and Outbound indicating traffic conditions, weather alerts, and other information for drivers approaching or departing from the airport.
 Use practices that facilitate accelerated project delivery such as single contractor design-build arrangements, congestion management, asset management, or long- term operations and maintenance 	Phased approach to initial concept approval with WSDOT during environmental study, followed by formal approval.

Project Readiness

It is anticipated that all project funds will be obligated by Q1 2024 and will be expended by Q1 2028. This is well in advance of the obligation deadline of June 30, 2027 and expended by September 30, 2032.

All Federal, state, and local environmental approvals will be obtained prior to commencement of construction. Originally, the Airport and FAA were working on an Environmental Assessment (EA). However, after review of the research and technical memos, the FAA determined the project did not warrant an EA and identified the project could undergo a Documented Categorical Exclusion (CatEx). **The completed CatEx was approved by the FAA in January 2023.** SIA is deeply committed to completing the Project has been making progress on moving the critical elements forward. If awarded the project will be ready to move forward into design and preparation.

Detailed Project Schedule

As shown in Figure 8, key project milestones include:

•	Approved NEPA:	Q1 2023
•	Design Consultant Selection:	Q4 2023
•	RAISE Construction Funding Authorization:	Q1 2024
•	Public Involvement:	Q4 2023 – Q4 2024
•	Approval of Plans:	Q1 2025
•	Specifications and Estimates:	Q1 2025
•	State and Local Approvals:	Q1 2025
•	Partnership and implementation agreements:	Q1 2025
•	Construction Contract Advertised:	Q2 2025
•	Construction Bidding Closed:	Q2 2025
•	Procurement/ Project Construction Contract Award:	Q2 2025
•	Construction Complete:	Q4 2027

Figure 8. Project Schedule

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	2004-2019	2020-2021		20	22			20	23			20	24			20	25			20	26			20	27	
Tasks			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Planning Studies																										
Preliminary Design				-																						
Environmental (NEPA)					_		*																			
Design Consultant Selection										*																
Final Design											_															
Construction Authorization											*															
Advertise Construction																										
Contract and Bidding																-										
Construction Contract Awarded																*										
Construction																									_	-

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Required Approvals

Environmental Permits and Reviews

NEPA Status. This project will obtain all environmental approvals from the FAA to comply with NEPA. <u>The CatEx for this project is complete and was approved in January 2023.</u> The project does not impact any wetlands or other Section 4(f) lands (publicly owned parks, recreation areas, public or private historic sites, wildlife and waterfowl refuges, and other similar resources). State Environmental Policy Act (SEPA) approvals will be completed through the design of the project, expected to begin in the summer of 2024 and be completed in 2025. SEPA approval will not cause any impacts to the proposed design or schedule of the project. If awarded, the Project is expected to begin construction in a timely manner.

Reviews and Approvals by Other Agencies

Table 16 provides the reviews and approvals needed from other agencies, and the status of each process.

Agency	Approval Needed	Status
	Design Deviation Request	Will be obtained during preliminary design
WSDOT	Washington State Transportation Improvement Program (STIP)	Will submit project through MPO for inclusion.
	USACE Clean Water Act Section 404 Nationwide Permit 14	Will be obtained prior to construction.
EPA	Section 401 Water Quality Certification	Will be obtained prior to construction.
	National Pollutant Discharge Elimination System (NPDES)	Will be obtained prior to construction.

Table 16. Reviews and Approvals by Other Agencies

Right of Way Acquisition

Not applicable as all land is owned and managed by the Airport.

Environmental Studies and Documents

SIA and the FAA originally developed an Environmental Assessment (EA); however, after research and review of technical memos, the FAA determined that a Documented Categorical Exclusion (CatEx) was appropriate. The CatEx was completed and approved by the FAA in January 2023. The project is currently at 20% design and SIA is drafting the request for qualifications to continue engineering design expected to be released in late 3Q 2023. Detailed analysis of the CatEx results can be found in the Merit Criteria–Environmental Sustainability section of this application. Full environmental documentation can be found on the project website:

https://business.spokaneairports.net/raise-spotted-road/

Discussions with DOT administration field office or headquarters office

SIA has been coordinating with WSDOT Eastern Region planning and traffic operations staff throughout the life of the project. The Eastern Region staff are in support of the project to increase safety and improve mobility. The regional transportation studies have included rerouting of Spotted Road outside the RPZ, the interchange, and the 21st Avenue extension.

Public Engagement

Public engagement is the cornerstone of every Airport project. This project has undergone 17 years of public engagement, and stakeholder and business owner coordination will occur through both the design and construction phases. Public notices for timelines and updates of activity will occur throughout the construction process through public engagement and key stakeholder coordination. Please see additional engagement planning and implementation in the Merit Criteria section.

State and Local Approvals

Spokane Regional Transportation Council (SRTC), the region's metropolitan planning organization (MPO), has published a Metropolitan Transportation Plan (MTP) known as Horizon 2045. This is SRTC's long-range transportation plan and is a multimodal roadmap to meet the transportation needs of the Spokane region through 2045. This project is listed as a Regionally Significant Project under the Road Capital Program.

To do this, the Airport must submit the project through the local MPO which is the SRTC for Spokane County, for inclusion into the regional Transportation Improvement Program (TIP). Once accepted, the project can then be included within the State TIP (STIP). The Airport will coordinate with SRTC upon receiving federal transportation funding to get this project into the regional TIP and STIP for obligation of the federal funds. This process will not cause delays to the locally funded design and will be completed well in advance of obligation of construction funds.

Federal Transportation Requirements Affecting State and Local Planning

Relocating Spotted Road outside the RPZ will increase safety for the traveling public. Presently the FAA does not have any approval authority over the planned project. FAA Draft Advisory Circular 150/5190-4B does recommend:

When possible, limiting transportation modes within the approach or departure zones can minimize the potential for catastrophic effects should an aircraft incident occur. Because many airports are already located in developed areas, citing a specific distance between an airport and these other modes becomes unrealistic, as they may already exist in proximity to the airfield. Although some of these uses may not be able to be relocated, techniques such as down shielding lighting along highways and railroads can help to mitigate some of their impact (visual obstructions). Additional techniques such as adding roadway signage alerting vehicles to the RPZ or prohibiting stopping and standing in the RPZ is recommended. Airports should also work with their local transportation department to avoid locating stoplights near the edge of the RPZ to prevent queues from building into the RPZ.

The proposed project will locate Spotted Road east of the RPZ and lighting is not anticipated along the majority of the roadway to not create visual obstructions. Lighting will be installed along the

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interchange ramps near the gore areas, but down shielding will be employed in coordination with FAA guidance, as warranted.

Assessment of Risk and Mitigation Strategies

Table 17 provides the assessment, based on current planning and environmental documents, on the risks associated with the Project and the commensurate mitigation strategies.

Risk	Mitigation Strategy
Project will impact tribal land or land of interest to the tribes.	The FAA initiated Section 106 consultation with the Spokane Tribe of Indians and the Confederated Tribes of the Colville Reservation on June 12, 2019. Both tribes concurred with the project and no comments were received. Under 36 CFR 800.3(c)(4) and 36 CFR 800.4(d)(1)(i), the FAA's responsibilities under Section 106 have been fulfilled. The Department of Archaeology and Historic Preservation issued concurrence that the project would have no effect on Section 106 resources on April 8, 2020 (Project Tracking Code 2019-06-04218).
Project area includes wetlands	Three wetlands were identified in the east-central portion of the study area. These features were not identified as stormwater swales as they do not receive runoff from the airport and are not part of the SIA stormwater conveyance system. Multi-agency meetings have been held to discuss the project and potential wetland impacts.
Project will require Design Deviation from WSDOT	WSDOT provided funding for initial studies. Coordination has occurred between the Airport and the WSDOT. Further coordination with WSDOT will occur as the design progresses forward.
Project may produce hazardous and/or solid waste either during construction or after.	Construction debris from future development that is not recycled would be handled in accordance with applicable state and local requirements and disposed of in local permitted facilities.

Table 17. Project Risk and Mitigation Strategy

Technical Capacity

The Airport has been managing a multimodal transportation system efficiently and effectively by providing a gateway from the Inland Northwest to the world. The Airport has a team of design professionals with the design and management experience and expertise to complete the improvements on time and within budget. The Airport's Planning & Engineering department personally directs and oversees all planning, engineering, construction, and operations at the facility. Studies previously completed have concluded that all aspects of the project are technically feasible.

As planning and environmental studies have been completed for the project, and with preliminary engineering planned to begin in the winter of 2023, this project is on schedule and ready to

complete all pre-construction services and obligate all grant funding well before June 30, 2027. The Airport Board has mechanisms in-place to allow the project to proceed immediately and expeditiously to complete all phases of the project.

The Airport has been successful in implementing multimodal and safety projects using local and FAA funds, including maintenance activities of the owned and operated facilities. The Airport continues to deliver airside and landside projects that are funded by federal sources. The Airport is successfully delivering the Rail-Truck Transload Facility design using BUILD grant funds through the USDOT and is meeting all reporting requirements.

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