Sisseton-Wahpeton Oyate Tribal Department of Transportation Facility Project

Discretionary Grant Program

Benefit-Cost Analysis

January 2025

The Beckett Group

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The Lake Traverse Reservation is located in the Northeastern part of South Dakota and a small portion of southeastern corner of North Dakota. The reservation boundaries extend across seven counties, two in North Dakota and five in South Dakota. We have a total of 13,872 tribal members located throughout the United States and others serving overseas in the Armed Forces which is one of the many reasons we have created this website, to help keep our tribal members living either on or off of the reservation in touch with their tribe.

TABLE OF CONTENTS

Section I. BCA Summary 1
I.A. Overview 1
I.A.1. Background on the SWO Tribe 2
I.A.2. NO-BUILD SCENARIO 2
I.A.3. Preferred Alternative (Build Scenario) 5
I.A.4. BCA Model Development 6
I.A.5. Components of the Project 6
I.A.6. Organization of the BCA Memorandum 6
I.B. BCA Summary 7
I.C. Annual Results with Completion of the Build Scenario 8
Section II. Project Description 9
Section III. Project Benefits 17
III.A. SUMMARY OF DETAILED BENEFITS 18
III.A.1. Analysis and Economic Assumptions 18
III.A.2. Value of Time 19
III.A.3. Average Daily Traffic (ADT) Assumptions 19
III.A.4. Vehicle Operation Costs 19
III.A.5. Affected Populations and Types of Impacts 19
III.A.6. Reduction in Pedestrian Fatalities 20
III.B. Safety 21
III.C. Economic Competitveness and Mobiltiy 23
III.C.1. Travel Time Savings During Winter Conditions 23
III.D. Emission Savings 29
III.D.1. Emissions saving from Relocation of Transit Hub from Sisseton 29
III.D.1. Emission Saving from conversion to an EV van 30

III.E. Operations and Maintenace 32
III.E.1. Transit Operating Savings 32
III.F. Maintenance of New Facility 36

Section IV: Project Costs 38
IV.A. Project Schedule 38
IV.B. Residual 39

Section V. Benefit Cost Summary 42

Section VI. Non Quantified Benefits 44

List of Exhibits

Exhibit 1: BUILD FY25 Project Matrix 1
Exhibit 2: Current Facility 3
Exhibit 3: Outside Salt / Sand Storage exposed to extreme weather related elements 4
Exhibit 4: Location Map 5
Exhibit 5: BCA Results (30-year analysis) 7
Exhibit 6: Annual Net Benefits by Benefit Area 8
Exhibit 7: Current DOT Facility 11
Exhibit 8: Back side of Current DOT Building 11
Exhibit 9: Road Jurisdictions 12
Exhibit 10: Road Classifications 13
Exhibit 11: Functional Class by Surface Type pulled from RIFDS * 14
Exhibit 12: BIA Road Surface Types on BIA Routes on the Reservation 14
Exhibit 13: Transit Bus / Van 15
Exhibit 15: Profiles of Proposed Facility 16
Exhibit 16: Floor Plan of Proposed Facility 16
Exhibit 17: Detailed Benefits by year 18
Exhibit 18: Assumptions used in calculating Safety savings 21
Exhibit 19: Safety Savings 22
Exhibit 20: Assumptions for Travel Time Savings During Winter Conditions 23
Exhibit 21: Hours Saved in Delays 24

Exhibit 22: Transit Delay Cost During Snow Events due to slow snow removal 25
Exhibit 23:Travel Time Savings During Winter Conditions for Local travelers 26
Exhibit 24: Total Travel Time Savings During Winter Conditions 27
Exhibit 25: Total Travel Savings 28
Exhibit 26: Assumptions for Relocating the Transit Facility to the new site 29
Exhibit 27: Miles No-Build vs. Build 30
Exhibit 28: Total Emission Savings 31
Exhibit 29: Assumptions for Transit Operating Savings 32
Exhibit 30: Transit Operating Savings 33
Exhibit 31: No-Build Operating and Maintenance Cost 34
Exhibit 32: Build Operation and Maintenance Costs 35
Exhibit 33: Assumptions of Maintenance Costs of New Facility 36
Exhibit 34: Maintenance Cost of New Facility 36
Exhibit 35: Total Operation and Maintenance Costs 37
Exhibit 36: Project Costs 38
Exhibit 37: Project Schedule 39
Exhibit 38: Residual Value of New Facility 39
Exhibit 39: Residual Value of Facility and the Van in 2058 41
Exhibit 40: Benefit Cost Analysis Summary 42
Exhibit 41: Final BCA Results 43

Section I. BCA Summary

I.A. OVERVIEW

This memo provides detailed documentation of the Benefit-Cost Analysis (BCA) performed to evaluate the public benefits generated by the (Project). The BCA demonstrates the cost effectiveness of the project for which the project sponsor is seeking Federal support, measured in terms of a benefit-cost ratio (BCR) and net present value (NPV). The Project has independent utility with benefits exceeding cost.

The BCA methodology used in this analysis is consistent with the U.S. Department of Transportation, Benefit-Cost Analysis Guidance for Discretionary Grant Programs, December 2024. The detailed cost and benefit assumptions are provided in this BCA Appendix and have been prepared by an independent professional accountant and economist. Exhibit 1 describes the Current Status (Baseline), the anticipated changes to the baseline (the Build Scenario), types of impacts, Population Affects, anticipated Societal benefits and references to where the details can be found both in this technical memo as well as to which Tab the calculations can be found in the Excel Spreadsheet.

The project matrix below outlines the baseline problem to be addressed, changes related to the preferred alternative, types of impacts, affected populations, areas for monetization, and a summary of results. The impacts include decreased motor vehicle delays, vehicle operation costs, emissions, and risk of loss of life due to delayed emergency services response times. Overall, the project will improve safety for all travelers; access for residential, commercial, transit and emergency services users; and increase efficiency and reliability.

The Sisseton-Wahpeton Oyate (SWO) is requesting $9,338,314 to support completion of final design and construction for the **Sisseton-Wahpeton Oyate Department of Transportation Facility Project (the Project).**

Exhibit 1: BUILD FY25 Project Matrix

Current Status/Baseline and problem to be addressed	Change to Baseline/Alternatives	Types of Impacts (monetized)	Affected Population	Areas for Monetized / Non-Monetized Economic Benefits	Summary of Results
Current conditions with no maintenance facility or covered sand/salt storage capacity result in increased travel time, vehicle operation costs and delayed Transit service during winter weather events for the Tribal Transit program also known as SWO Department of Transportation's operations and Roadway users.	The new facility would allow for more timely and cost effective maintenance and roadway services to be provided on the reservation.	↓ Motor vehicle miles traveled ↓ Delay time ↓ Emergency response times ↓ Maintenance costs ↓ Travel time costs ↓ Emissions	Commercial users Roadway users Transit users Local Residents receiving snow removal services	↓ delay times during winter weather events (↓ motor VHT) ↓ response time from EMS units)- not monitized ↓ reduced emissions- not monitized ↓ vehicle operating costs	↑ efficiency and reliability ↑ access ↑ global economic competitiveness ↑ ease of movement for people and freight

I.A.1. Background on the SWO Tribe

SWO has a current enrollment of approximately 14,000 Tribal members, and just over 6,000 reside on the tribal lands. **Native American individuals living on the Lake Traverse Reservation have a poverty rate of 40.8%**. This is nearly triple the U.S. poverty rate of 13.7%. The reservation's economy relies on farming, ranching, casinos and small industry. Individuals raise cattle, sheep, horses, and hogs, while the Tribe leases land to others for crop production and grazing. The Tribe owns and operates two casinos, which employ 500 people. State and federal agencies, organizations, and schools are located within reservation boundaries and serve as major employers for Indian and non-Indian communities alike.

Long saddled with deep poverty and an unemployment rate exceeding 50%, SWO has come a long way economically in recent decades, operating two successful manufacturing companies and two casinos which – along with SWO government and the local TCU – now provide nearly 1,000 jobs to SWO members and other local residents. While SWO is among the largest employers in its region, in the early years of its economic resurgence it encountered an unexpected problem – many tribal members were struggling to keep their jobs, leading to a 70% turnover rate. In response, key SWO government and business players came together to analyze the issue, leading to SWO's establishment of a holistic solution. **Despite these businesses there are few other available jobs, and one quarter of Lake Traverse tribal residents are unemployed. Tribal members earn, on average, $4,058 per year. Thus, SWO wants to provide a cost-effective Transportation Option for their members.** This BUILD FY25 Grant will allow SWO to build a new Tribal Department of Transportation (DOT) Facility to serve their members. This service includes not only on-demand transit services for necessary daily activities but also provides an improved facility where all the Tribe's DOT functions can be co-located. This will improve communication between departments, efficiency of the office, maintenance and transit facilities all under one roof. Many of these benefits cannot be monetized in a traditional Benefit Cost Analysis. The Analysis below takes the traditional approach for the societal benefits that can be monetized followed by a discussion of additional benefits that the SWO requests that USDOT Economist consider in their review.

I.A.2. NO-BUILD SCENARIO

In recent years, SWO has invested all its available Tribal Transportation Program funds to maintain its reservation roadways and run its Tribal Transit Program. SWO was first awarded an FTA Tribal Transit Competitive Program grant in 2015 to initiate a public shuttle service between Sisseton and Agency Village. With the 2015 funding they started their partnership with Community Transit and purchased 2 buses, which were originally operated by Community Transit through a cooperative agreement with the Tribe. They used their TTP funding to pay for all operating expenses until they finally did not receive any received further FTA grant funding until 2019 and used their TTP funding to pay for all operating expenses. In 2019, an FTA competitive grant was awarded to off-set operating expenses and purchase 2 additional buses to expand transit service and connections Reservation-wide. Competitive grants were awarded in 2020 and 2021 to fund operational expenses for the transit program, and 2021

funding also included a capital request to equip the current fleet of buses with a camera system, improving safety for drivers and passengers. Recently, in January 2025, FTA funded 2 replacement buses that are reaching their useful life of 150,000 miles of usage.

Baseline Infrastructure (No-Build Scenario)

. Currently, Tribal Transit, DOT administration, and Road Maintenance all work out of different facilities. Tribal Transit is working out of the Community Transit, Inc. (Community Transit) office in Sisseton. DOT administration staff, consisting of the director, finance manager and transit administrator, are located at the Tribal Administration building in Agency Village. Road Maintenance is working out of a pole shed on a parcel of land owned by the Tribe approximately halfway between Sisseton and Agency Village. This is the location proposed for the new DOT facility. The existing Road Maintenance facility building is in desperate need of repair. Upgrades to the existing facility are too extensive and costly, and would not only be less economical, but would also not provide the space needed for the Tribe's long-term goals of hiring additional staff and expanding transit services. Having staff located at separate facilities brings many challenges with communication, coordination, and service efficiency. Additionally, transit and maintenance vehicles, as well as the salt/sand piles, are all outside and subject to extreme weather which causes increased deterioration, an increased maintenance, preparation, and warmup time. Tribal Transit is also seeking funding to purchase its first electric transit van as a step towards reducing transportation-related air pollution and providing cost-savings to the Tribe for local routes.

Exhibit 2: Current Facility



As can be seen in Exhibit 2 above, the current facility is way past its current asset life and needs to be replaced as soon as possible. In addition to the condition of the building, transit and maintenance vehicles, as well as the salt/sand piles, are all kept outside, subject to extreme weather elements which causes increased deterioration, and increased preparation and warmup time.

Exhibit 3: Outside Salt / Sand Storage exposed to extreme weather related elements



Weather Conditions- The region lies within the continental zone, which covers most of the north central United States. This classification is characterized by warm summers and cold winters, with a July mean temperature of 78 degrees Fahrenheit (F) and a January mean temperature of 21 degrees F. Temperature extremes have ranged from -30 degrees F to I00 degrees F. The spring season may fluctuate from extremely wet to fairly dry. Hot winds and periods of prolonged high temperatures are characteristic in the summer season. Precipitation in this area averages 31 inches annually, while snowfall averages 22 inches annually. Snowfall is moderate and can be expected in November through March. The frost-free season averages 161 days in length.

Replacement of one Transit Buses- Tribal Transit is also in need of replacing one transit bus that has nearing its end of useful life. The older bus (van) is costly to maintain and is not as environmentally friendly as newer models available on the market.

Existing Transportation Challenges

- Barriers to expand transit service
- Deteriorating facilities
- Lack of efficiency
- Construction and Maintenance burdens
- Transportation and emergency service
- Vulnerabilities to weather conditions, staff in multiple locations, facilities and vans at the end of their useful life.

I.A.3. Preferred Alternative (Build Scenario)

Exhibit 4: Location Map



The *Lake Traverse Indian Reservation* encompasses 1,509 square miles (about the area of Rhode Island) and has nearly 90 miles of BIA and Tribal roads. **Tribal Transit** serves the entire Reservation, with drivers and buses, headquartered in Sisseton at the **Community Transit Inc.** Watertown/Sisseton facility.

Upon completion, the new SWO Department of Transportation (DOT) facility will be located near Agency Village, on BIA 700, at the current Tribal Road Program location. The new facility will serve as a single consolidated location for administrative functions for the DOT, Tribal Transit, and Road Maintenance staff. It will also serve as transit and maintenance vehicle storage, will have in-house

vehicle maintenance and washing bays, and provide a covered sand/salt storage area. This facility will serve the Lake Traverse Indian Reservation in northeastern South Dakota, with lands that stretch into North Dakota. The combined services facility will help the tribal community develop and implement long-term resilience and growth of their transportation programs and infrastructure. This facility will not only assist the Tribe in streamlining current transportation programs but provide opportunities for economic benefit and workforce growth.

With limited ability to use or rehabilitate the existing facility, the Tribe's preferred alternative is to construct the proposed joint Tribal Transit and sand/salt storage facility. The proposed project will provide the Tribal Transit Department with proper facilities to maintain and store their vehicles, while also protecting the assets from extreme weather conditions and vandalism. The improvements to the on-site sand/salt storage area will allow the Tribe to better service Reservation in winter weather events.

The Project will provide the funding needed to construct a new energy efficient Tribal Transportation facility that will improve coordination and efficiency efforts of the SWO DOT staff, reduce financial and maintenance burdens, and expand transit service to this historically disadvantage community.

I.A.4. BCA Model Development

An Excel spreadsheet-based BCA model was developed for the purpose of this analysis. The model utilizes available data provided by the Tribe for project specific data elements, and nationally accepted parameters. Many of the national parameters were provided by the United States Department of Transportation (USDOT) specifically for the purposes of Discretionary Grant applications such as INFRA, RAISE, BULD, PIDP and CRISI.

I.A.5. Components of the Project

USDOT Guidance recommends that a Project Sponsor prepare a BCA for each component of the Project that has independent utility. The Proposed Transit Facility is the only component in this Project.

I.A.6. Organization of the BCA Memorandum

Section II describes the inputs and results of each of the Benefit components of the BCA model. The project specific inputs include items such as freight forecasts, project capital and operating costs, life-cycle costs, annual benefits, and residual value of the project's assets at the end of this analysis. National modeling parameters include emission rates, crash rates, unit operating costs, values of time, fuel efficiency and monetization factors for all classes of benefits. This section also displays the results of each benefit and cost category.

Section III describes the capital cost components of the BCA model.

Section IV summaries the results of the BCA and the resulting BCA ratio.

I.B. BCA SUMMARY

Following is a summary of the findings for each category at a 3.1 percent discount rate for Non-CO_2 Benefits and Costs and 2.0 percent for CO_2 Benefits. The benefit-cost analysis (BCA) follows guidance set forth in the Notice of Funding Opportunity for BUILD FY25 Discretionary Grants as published in the Federal Register. The resulting benefit-cost ratio (BCR) is 5.5 when pedestrian fatalities were estimated to be reduced by 50 percent or a BCR of 3.2 when the pedestrian fatalities were estimated to be reduced by 25 percent.

Exhibit 5: BCA Results (30-year analysis)

Areas of Evaluation	Description	Inputs	Value 2023 dollars	Monetized Value Discount Rate 3.1%/ 2.0%
Safety	Reduced Pedestrian Fatalities	• Saving due to 50% decrease in Ped. Accidents due to access to efficient transit	$ 66,000,000	$ 36,542,549
Economic Competitiveness/Mobility	Travel Time Savings (transit drivers) & Travel Time Savings (daily winter traffic slowed by delayed snow removal)	• Reduction in 1,920 transit vehicle hours traveled (VHT) • Reduction in 231,400 vehicle hours traveled (VHT) by owning facility	$ 8,067,575	$ 4,361,965
	Vehicle Operation Cost Savings (transit)	• Reduction of 1.0 million transit miles saved by relocating the facility • Reduction of operating costs saved by owning facility	included in op and maint below	included in op and maint below
Emissions	Emission reduction due to reduced miles	• Reduction of 1.0 million transit miles saved by relocating the facility • Reduction of miles of emissions saved by EV van	$ 268,413	$ 178,101
State of Good Repair	Life-Cycle Costs - See Maintenance and Residual			
Total Benefits before Maint and Residual			$ 74,335,988	$ 41,082,615
Operations and Maintenance			$ 2,533,826	$ 1,373,369
Residual			$ 2,019,889	$ 693,864
Total Benefits			$ 78,889,703	$ 43,149,848
Total Cost			$ (9,066,325)	$ (7,903,471)
Net Present Value			$ 69,823,378	$ 35,246,377
Benefit Cost Ratio			8.7	5.5

I.C. ANNUAL RESULTS WITH COMPLETION OF THE BUILD SCENARIO

Exhibit 6: Annual Net Benefits by Benefit Area

Table 1. Summary of Benefits

Year	Operations and Maintenance	Safety	Travel Time Savings	Non-CO2 Emission Reduction	CO2 Emission Reduction	Avoided Highway Externality	Residual Value	Total Benefits	Total Discounted Benefits
2029	($54,724)	$2,200,000	$230,544	$923	$8,024	$0	$0	*$2,494,215*	$2,077,183
2030	($236,412)	$2,200,000	$232,874	$923	$8,024	$0	$0	*$2,678,234*	$2,163,412
2031	($58,134)	$2,200,000	$235,235	$923	$8,024	$0	$0	*$2,502,316*	$1,960,639
2032	($59,891)	$2,200,000	$237,626	$923	$8,024	$0	$0	*$2,506,464*	$1,904,910
2033	$118,317	$2,200,000	$240,049	$923	$8,024	$0	$0	*$2,330,679*	$1,718,166
2034	($63,510)	$2,200,000	$242,504	$923	$8,024	$0	$0	*$2,514,961*	$1,798,289
2035	($245,374)	$2,200,000	$244,990	$923	$8,024	$0	$0	*$2,699,312*	$1,872,088
2036	($67,275)	$2,200,000	$247,510	$923	$8,024	$0	$0	*$2,523,732*	$1,697,803
2037	($69,215)	$2,200,000	$250,063	$923	$8,024	$0	$0	*$2,528,225*	$1,649,748
2038	$108,807	$2,200,000	$252,650	$923	$8,024	$0	$0	*$2,352,790*	$1,489,229
2039	($73,210)	$2,200,000	$255,271	$923	$8,024	$0	$0	*$2,537,428*	$1,557,802
2040	($255,269)	$2,200,000	$257,927	$923	$8,024	$0	$0	*$2,722,142*	$1,620,950
2041	($77,368)	$2,200,000	$260,618	$923	$8,024	$0	$0	*$2,546,933*	$1,471,136
2042	($79,509)	$2,200,000	$263,346	$923	$8,024	$0	$0	*$2,551,802*	$1,429,687
2043	$98,307	$2,200,000	$266,110	$923	$8,024	$0	$0	*$2,376,750*	$1,291,698
2044	($83,921)	$2,200,000	$268,912	$923	$8,024	$0	$0	*$2,561,780*	$1,350,372
2045	($266,193)	$2,200,000	$271,752	$923	$8,024	$0	$0	*$2,746,891*	$1,404,392
2046	($88,510)	$2,200,000	$274,630	$923	$8,024	$0	$0	*$2,572,087*	$1,275,602
2047	($90,874)	$2,200,000	$277,547	$923	$8,024	$0	$0	*$2,577,368*	$1,239,839
2048	$86,714	$2,200,000	$280,504	$923	$8,024	$0	$0	*$2,402,737*	$1,121,206
2049	($95,745)	$2,200,000	$283,501	$923	$8,024	$0	$0	*$2,588,194*	$1,171,398
2050	($278,254)	$2,200,000	$286,540	$923	$8,024	$0	$0	*$2,773,741*	$1,217,598
2051	($100,813)	$2,200,000	$289,620	$923	$8,024	$0	$0	*$2,599,380*	$1,106,870
2052	($103,423)	$2,200,000	$292,743	$923	$8,024	$0	$0	*$2,605,113*	$1,076,002
2053	$73,915	$2,200,000	$295,909	$923	$8,024	$0	$0	*$2,430,942*	$973,999
2054	($108,801)	$2,200,000	$299,119	$923	$8,024	$0	$0	*$2,616,867*	$1,016,923
2055	($291,571)	$2,200,000	$302,374	$923	$8,024	$0	$0	*$2,802,892*	$1,056,423
2056	($114,396)	$2,200,000	$305,674	$923	$8,024	$0	$0	*$2,629,017*	$961,214
2057	($117,278)	$2,200,000	$309,020	$923	$8,024	$0	$0	*$2,635,245*	$934,562
2058	$59,783	$2,200,000	$312,413	$923	$8,024	$0	$2,019,889	*$4,481,466*	$1,540,710
Undiscounted Total	($2,533,826)	$66,000,000	$8,067,575	$27,693	$240,720	$0	$2,019,889	*$78,889,703*	*$43,149,848*
Discounted Total	($1,373,369)	$36,542,549	$4,361,965	$15,333	$162,768	$0	$693,864	$43,120,361	$43,149,848

Section II. PROJECT DESCRIPTION

The Project proposes a new facility that will house Tribal Transit, DOT administration, and Road Maintenance staff all in one location. This will improve efficiency and coordination ef-forts between the three transportation divisions, provide adequate space for SWO Transit to grow their capacity and move the Tribe toward operating their own community transit service. Additionally, the facility will provide adequate space for vehicles and maintenance equipment to be stored and maintained and provide for more efficient access and response during emergencies in inclement weather that may require a snowplow to clear roads for emergency services to access a location. The new combined services facility would include and ADA accessible public waiting area and restrooms, staff offices, conference room, parts storage, four drive-through 80-foot by 25-foot bays, a wash bay, a vehicle maintenance bay with vehicle lift, diesel fueling station, two Type-2 electric charging stations, a geothermal heating system, public parking spaces, security cameras and fencing, lighting, and a covered salt/sand storage area that will serve all of the Lake Traverse Reservation. SWO is requesting funding for the purchase of one electric transit vehicle, funding to upgrade the current electrical infrastructure at the proposed location for the electric charging station, and funds to partner with Electic Nation to provide training and outreach to staff and the public on the transition to electric vehicles for local transit routes. Providing safe and efficient transit service is a priority for the Tribe. As seen by the in-crease in ridership numbers provided below, the transit program is utilized by a significant number of people including elderly and disabled adults and children, ensuring not just access to services and goods, but also increased safety for vulnerable and disadvantaged populations.

The Lake Traverse Indian Reservation encompasses 1,509 square miles and has nearly 1300 miles of BIA and Tribal roads. Tribal Transit serves the entirety of the Reservation, with drivers and buses, headquartered in Sisseton at the Community Transit Watertown/Sisseton facility.

There is a current agreement between Tribal Transit and Community Transit, a 501(c)3 non-profit agency, that has recently been extended. Continuing this agreement is necessary due to SWO's limited capacity, staff, and no space to park their buses. Community Transit provides transit services to eight counties in South Dakota and currently assists Tribal Transit with service between Agency Village, where Tribal Headquarters is located, and Sisseton. They transport members of the community to and from employment, healthcare, educational institutions, and essential services, giving Tribal Transit the ability to provide on-demand response services to all seven districts on the Reservation as well as off-peak transportation services to locations such as pow wows, tribal elder days, and school sporting events.

According to the National Equity Analysis, 20 percent of Native American households in the state of South Dakota do not have access to a car[1], limiting access to essential services and goods, and isolating them from educational and workforce opportunities. The transit system is heavily used by a large number of Reservation residents, increasing transportation efficiency, safety, and improving mobility. According to FY24 ridership data, most riders were in the general public category, with elderly citizens as the next highest category, followed by school age youth making up the 3rd highest number of riders. Ridership data indicates in FY24 there were 16,634 rides given to residents of the Lake Traverse Reservation, up fifty-eight percent (58%) from FY23 (10,500 rides) a ninety-two percent (92%) from FY21 (8,656 rides). The most frequently occurring trip purposes were for shopping, employment, and medical appointments. **According to the American Public Transportation Association, in areas where public transit is made available and attractive, pedestrian fatalities decrease by as much as fifty percent (50%). There were five (5) pedestrian fatalities on the Lake Traverse Reservation from 2009-2023. Based off the current statistics, expanding SWO transit service theoretically prevents 2 or 3 fatalities on the Lake Traverse Reservation in the next 15 years.**

The Tribe currently employees a Transit Program Coordinator and four bus drivers. SWO would like to establish an independent community transit service, however, this is hindered by lack of office space, parking capacity, and staff to solely take over public transit service on the Reservation.

Currently, the Road Maintenance department is working out of a pole shed on a parcel of land owned by the Tribe south of the city of Sisseton, where the new DOT facility would be located, as shown in Exhibit 7. This facility is not ADA compliant or environmentally sustainable. It is a pole frame building with metal siding, a dirt floor and single-family-residence-grade electricity and water service. Upgrades to the facility would not be economical, nor provide the space needed for the Tribes long term plans of adding additional staff to provide surveying and construction monitoring services. Transit and maintenance vehicles, as well as the salt/sand piles, are all kept outside, subjected to the extreme weather which causes increased deterioration to equipment and materials.

[1] https://nationalequityatlas.org/indicators/Car_access?geo=02000000000046000&breakdown=by-race-ethnicity

Exhibit 7: Current DOT Facility



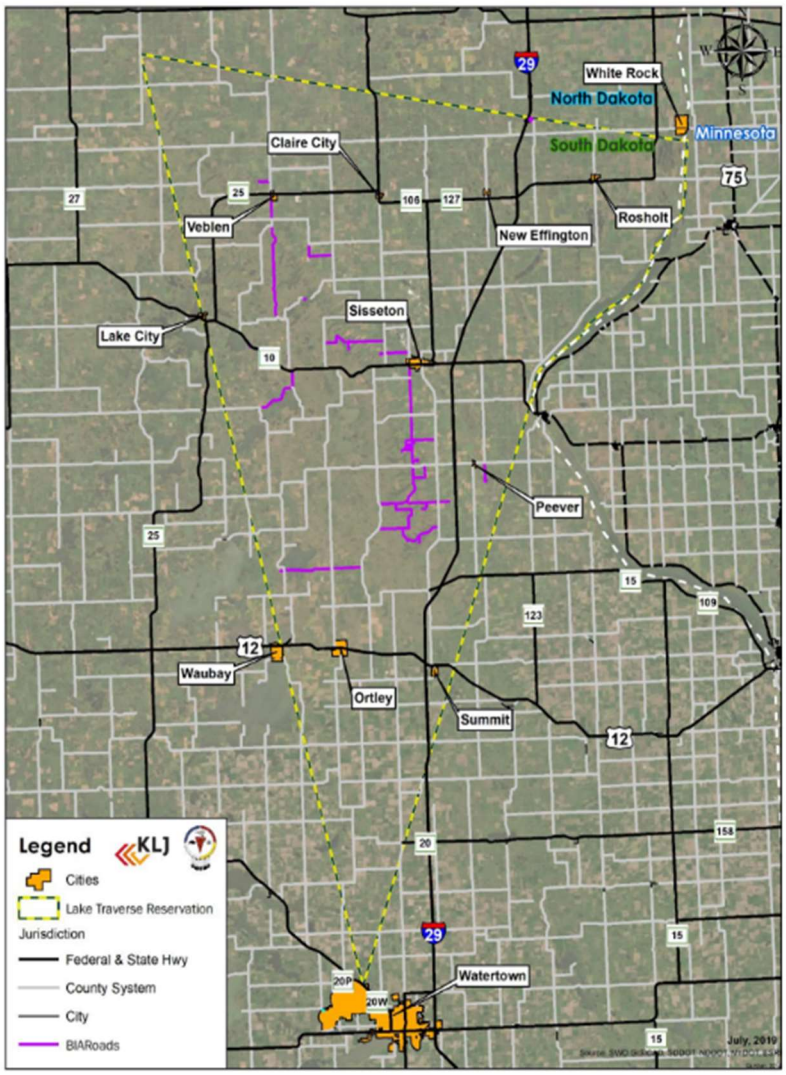
Road Maintenance staff are also early responders assisting in clearing roads during storms for emergency services to safely pass or enact detour operations if necessary. Having equipment stored outside increases warm up and idle time, and sand stored outside often freezes into lumps, increasing maintenance time needed to manually break up the material prior to dispatching for emergency purposes.

Exhibit 8: Back side of Current DOT Building



BIA roads are historically maintained by the federal agency. The local BIA office on the Lake Traverse Reservation has only one staff member. Due to this, BIA has a programmatic agreement with the Tribal Road Maintenance program to assist BIA to clear 120 miles of routes. The Tribe uses TTP maintenance funds to assist with BIA road clearing in the winter. Additionally, the Tribal Road Construction program takes care of some non-federal roads and does driveway clearing for rural, elderly, and disabled residents. This is funded with gaming funds. It is the Tribes long term goal to take over the BIA Road Maintenance Program through PL93-638 contracting, as many other tribes have done the same to streamline and provide better DOT services, road maintenance and snow removal services throughout the Reservation. At that time, BIA staff, their equipment, and their funding package would be incorporated into the space and operation of this new DOT facility.

Exhibit 9: Road Jurisdictions



The Project will improve efficiency and coordination efforts between all three groups, provide adequate space for SWO Transit to grow their capacity and staff to run their own community transit service, provide adequate space for vehicles and maintenance equipment to be stored and maintained, and provide for more efficient access and response during emergencies in inclement weather that may require a snowplow to clear roadways for the ambulance to get to a location.

The new combined services facility would include public waiting area and restrooms, staff offices, conference room, parts storage, four drive-through 80-foot by 25-foot bays, a wash bay, a vehicle maintenance bay with vehicle lift, diesel fueling station as well as space for future alternative fuel sources, a geothermal heating system, public parking spaces, security cameras, lighting, and a covered salt/sand storage area that will serve all of the Lake Traverse Reservation.

SWO is also requesting funding for the purchase of two buses to replace a current bus that has reached its end of useful life. Providing safe and efficient transit service is a priority for the Tribe. The ridership numbers provided by SWO, show the transit program is utilized by a significant number of the adults aged 18-64 (recorded as 'public' on the Transit records), as well as elderly and disabled adults and children, ensuring not just access to services and goods, but also increased safety for vulnerable and disadvantaged populations.

Exhibit 10: Road Classifications

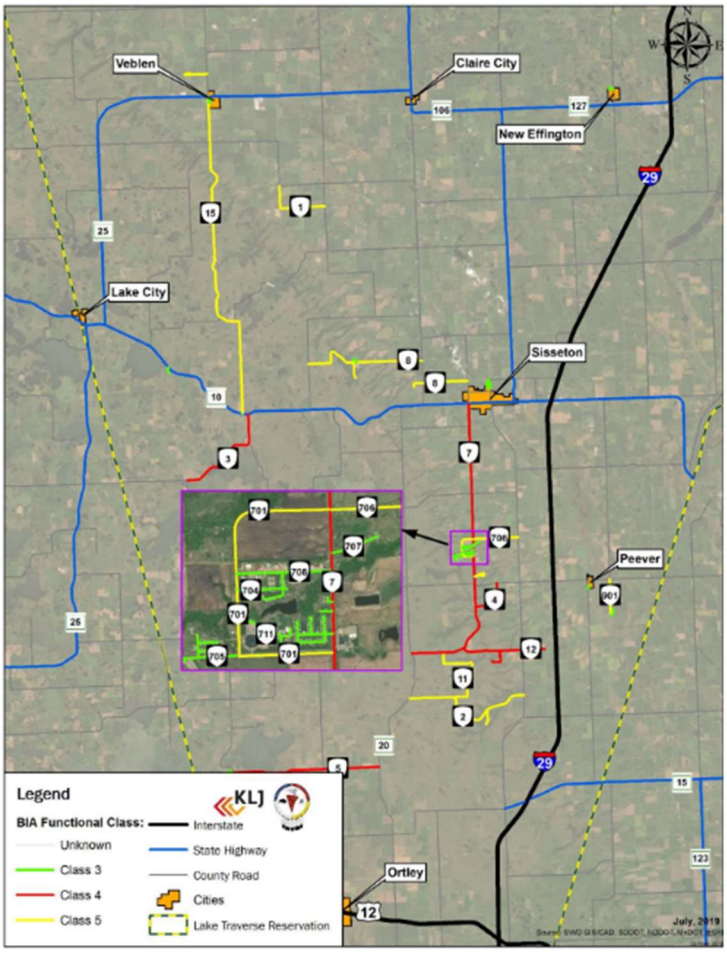


Exhibit 10 shows the roads that are owned by the SWO and the BIA on the Lake Traverse Reservation. The map also shows roads owned by other jurisdictions such as the SDDOT, NDDOT, Counties, and municipalities.

Note the volume of road miles that SWO is responsible for under their contract with BIA.

*Exhibit 11: Functional Class by Surface Type pulled from RIFDS **

Functional Class by Surface Type	Surface Type						
RIFDS Class	Proposed	Earth/ Dirt	Gravel	Asphalt (<2")	Asphalt (>2")	Concrete	Grand Total
Rural Minor Arterial			15.3		12.9		28.2
Community Residential Streets		1.4	1.5	1.8	13.9	1.2	19.8
Rural Major Collector to Local Roads	14.7	79.7	915.3	29.6	9.5		1048.8
Rural Local and Recreation Roads	0.7	53.4	28.8	0.1	0.8		83.8
(blank)				8	87.7		95.7
Grand Total	**15.4**	**134.5**	**960.9**	**39.5**	**124.8**	**1.2**	**1276.3**

*The data was obtained from Road Inventory Field Data System (RIFDS) by Class.

Exhibit 12: BIA Road Surface Types on BIA Routes on the Reservation

Surface Type	Length (mi)	Percentage
Bituminous	42.1	46.9%
Concrete	3.7	4.1%
Gravel	42.3	47.2%
Earth	1.6	1.8%
TOTAL	**89.7**	**100%**

The Tribal government and the BIA are responsible for the maintenance of existing infrastructure of roadways on the BIA system. Of the 2,450[2] miles of roads on the Lake Traverses Reservation, there are 87.9 miles of BIA roads that represent 3.6 percent of the total road miles. Fifty-one percent (45.8 miles) of the BIA roads are paved. The remaining 49 percent (43.9 miles) being non-paved.

As can be seen in the above Exhibits, the Tribe is responsible for approximately 90 miles of roads with multiple types of roads including: dirt, gravel asphalt and concrete. The majority of these roads require maintenance activities such as snow removal and sand / salt applications during winter conditions.

[2] Please note that are there are roads missing in the RIFDS inventory as of October 2019 which was uses to develop the SWO 2019 Long Term Transportation Plan. Thus, the total of miles in the table in Exhibit 11 (1276.3 miles) does not match the total number of miles (2,450) of roads on the Lake Traverses Reservation.

Exhibit 13: Transit Bus / Van



Exhibit14: Location of the Proposed Facility

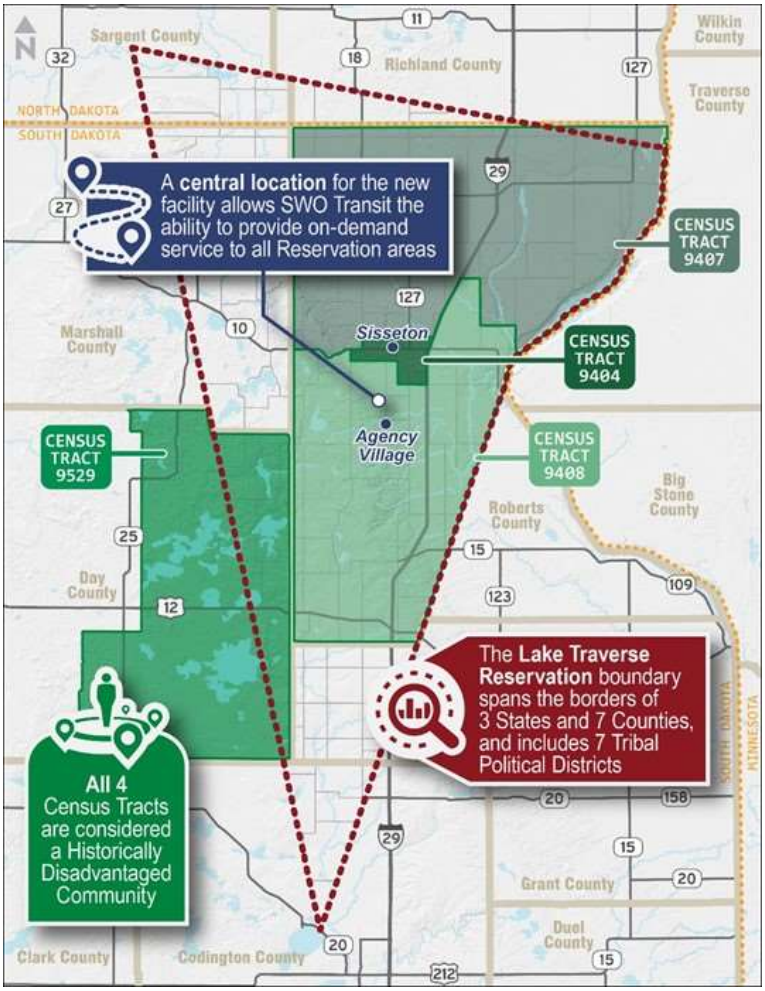


Exhibit 15: Profiles of Proposed Facility

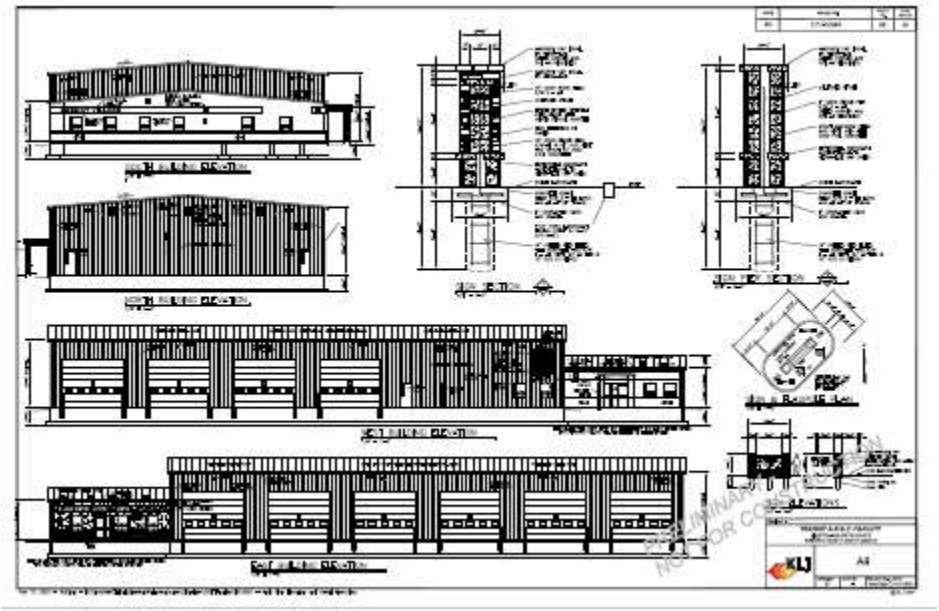
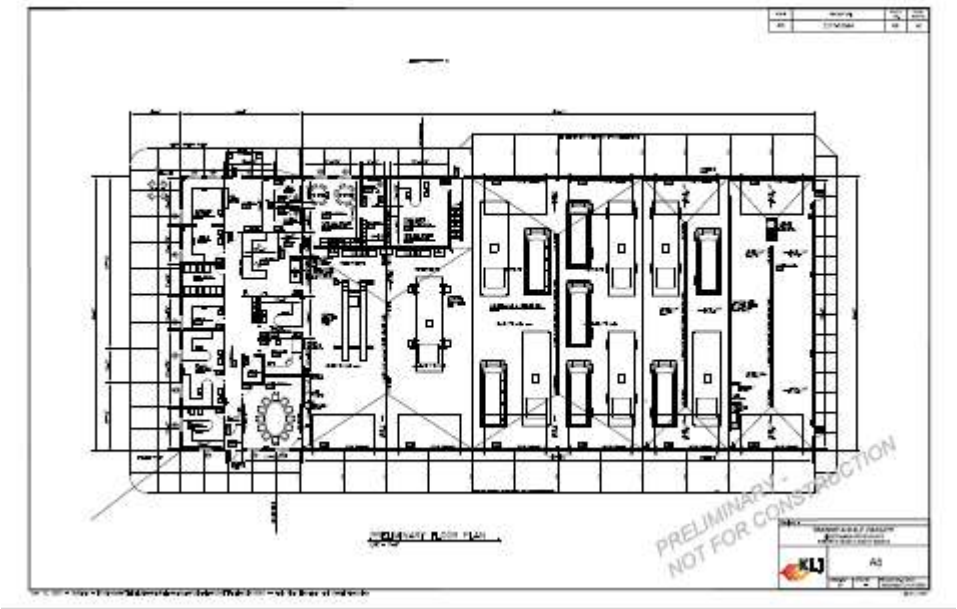


Exhibit 16: Floor Plan of Proposed Facility



Section III. PROJECT BENEFITS

This section describes the key assumptions and results of each of the anticipated project benefit category. Each Category describes the calculation of the benefit, displays the anticipated annual project benefits associated with the no-build and build scenarios. The monetized benefits analyzed in this model include travel time savings, vehicle operation cost savings, and emissions savings because of reduced travel.

This Multi-Purpose Facility will:

- Improve safety and regional access by more promptly providing sand/salt services to the reservation during periods of dangerous winter travel
- Reduce vehicle travel time for transit maintenance trips
- Reduce vehicle travel time response for sand/salt trucks on dangerous winter road conditions
- Reduce vehicle travel time for average daily traffic (ADT) impacted by delayed application of sand/salt and snow removal during dangerous winter weather conditions
- Reduce vehicle operations costs

III.A. SUMMARY OF DETAILED BENEFITS

Exhibit 17: Detailed Benefits by year

Table 1. Summary of Benefits

Year	Safety	Travel Time Savings	Non-CO2 Emission Reduction	CO2 Emission Reduction	Avoided Highway	Total Benefits	Total Discounted Benefits
2029	$2,200,000	$230,544	$923	$8,024	$0	*$2,439,491*	$2,031,618
2030	$2,200,000	$232,874	$923	$8,024	$0	*$2,441,821*	$1,972,488
2031	$2,200,000	$235,235	$923	$8,024	$0	*$2,444,182*	$1,915,102
2032	$2,200,000	$237,626	$923	$8,024	$0	*$2,446,573*	$1,859,408
2033	$2,200,000	$240,049	$923	$8,024	$0	*$2,448,996*	$1,805,355
2034	$2,200,000	$242,504	$923	$8,024	$0	*$2,451,451*	$1,752,895
2035	$2,200,000	$244,990	$923	$8,024	$0	*$2,453,938*	$1,701,980
2036	$2,200,000	$247,510	$923	$8,024	$0	*$2,456,457*	$1,652,566
2037	$2,200,000	$250,063	$923	$8,024	$0	*$2,459,010*	$1,604,606
2038	$2,200,000	$252,650	$923	$8,024	$0	*$2,461,597*	$1,558,059
2039	$2,200,000	$255,271	$923	$8,024	$0	*$2,464,218*	$1,512,882
2040	$2,200,000	$257,927	$923	$8,024	$0	*$2,466,874*	$1,469,035
2041	$2,200,000	$260,618	$923	$8,024	$0	*$2,469,565*	$1,426,478
2042	$2,200,000	$263,346	$923	$8,024	$0	*$2,472,293*	$1,385,172
2043	$2,200,000	$266,110	$923	$8,024	$0	*$2,475,057*	$1,345,082
2044	$2,200,000	$268,912	$923	$8,024	$0	*$2,477,859*	$1,306,170
2045	$2,200,000	$271,752	$923	$8,024	$0	*$2,480,699*	$1,268,403
2046	$2,200,000	$274,630	$923	$8,024	$0	*$2,483,577*	$1,231,745
2047	$2,200,000	$277,547	$923	$8,024	$0	*$2,486,494*	$1,196,164
2048	$2,200,000	$280,504	$923	$8,024	$0	*$2,489,451*	$1,161,628
2049	$2,200,000	$283,501	$923	$8,024	$0	*$2,492,448*	$1,128,107
2050	$2,200,000	$286,540	$923	$8,024	$0	*$2,495,487*	$1,095,570
2051	$2,200,000	$289,620	$923	$8,024	$0	*$2,498,567*	$1,063,988
2052	$2,200,000	$292,743	$923	$8,024	$0	*$2,501,690*	$1,033,333
2053	$2,200,000	$295,909	$923	$8,024	$0	*$2,504,856*	$1,003,577
2054	$2,200,000	$299,119	$923	$8,024	$0	*$2,508,066*	$974,694
2055	$2,200,000	$302,374	$923	$8,024	$0	*$2,511,321*	$946,657
2056	$2,200,000	$305,674	$923	$8,024	$0	*$2,514,621*	$919,443
2057	$2,200,000	$309,020	$923	$8,024	$0	*$2,517,967*	$893,026
2058	$2,200,000	$312,413	$923	$8,024	$0	*$2,521,360*	$867,383
Undiscounted Total	$66,000,000	$8,067,575	$27,693	$240,720	$0	*$74,335,988*	*$41,082,615*

To be conservative, the $74.3 million of Benefits summarized in this analysis are based upon SWO estimates of savings generated when the new facility is operational and sited closer to Agency Village.

The Benefits of the completion of this project have been divided into three societal benefits: Economic-Transit Maintenance Travel Time Savings and Transit Vehicle Operating Cost savings; and Mobility-Travel Time Saved by the Transit users and the General Public when snow removal and road treatments are achieved faster than is currently possible.

III.A.1. Analysis and Economic Assumptions

The BCA was conducted within the parameters of the USDOT BCA Guidance for Discretionary Grants, December 2024. A standard 30-year project lifecycle (post construction) was used with all costs and benefits using 2023 as a base year, recognizing 2027and 2028 as the construction period, and running the post construction 30-year project analysis lifecycle from 2029-2058 Benefits were counted starting in 2029, the first year of full operation after construction. A discount rate of 3.1 percent was used for Non-CO2 benefits and Costs, and a discount rate of 2.0 percent was used for CO2 benefits as directed by the USDOT Discretionary Grant guidelines, December 2024.

Various sources of information were gathered to determine the economic benefits including Tribal Transit usage and maintenance records, area traffic counts and traffic types.

The total cumulative benefits were compared to the total cumulative costs. Future benefits and costs are discounted to present values using a real discount rate of 3.1 percent for Non-CO_2 and 2.0 percent for CO_2 benefits. Project costs include construction of both the building and the sand/salt storage area, project administration, and future maintenance. Maintenance costs for the proposed facility have been estimated and are recognized by the Tribe as a future cost.

III.A.2. Value of Time

The USDOT BCA Guidance for Discretionary Grants issued December 2024 was used for this analysis. The Value of Time savings was calculated in three parts for this analysis: Road Maintenance Driver travel time savings, transit driver travel time savings, and ADT travel time savings. Per BCA guidance, the value of time savings per hour of $35.70 for truck drivers was used for sand/salt calculations, $42.60 for bus drivers for transit calculations, and based on ADT traffic types, $21.10 for all purposes travel and $33.50 for truck drivers were used for ADT travel time savings. It was also assumed that the passenger vehicles had an average occupancy for all travel of 1.52.

III.A.3. Average Daily Traffic (ADT) Assumptions

Existing traffic flow data for the project area was gathered from ESRI and Replica, traffic count estimates showing 2090 trips per day in 2024. The 30-year growth factor of 0.75 percent was estimated per project engineers to conservatively project traffic growth in the project area. Traffic records indicate that 98.5 percent of travel on roads in the project area is passenger vehicles, and 1.5 percent is commercial truck traffic. It was estimated that per winter weather event, two-hours of delay could be expected for travelers. Two-hours of a 24-hour period equals 8 percent. This percentage was used to calculate the ADT that would reasonably be impacted by the snow removal and salt/ sanding application delay. Impacted transit users is 40 per day and ADT is 2090 in the base year of 2024.

III.A.4. Vehicle Operation Costs

Vehicle operation costs were calculated per the BCA guidance, page 41. These costs were calculated in two parts: sand/salt vehicle operation savings and transit vehicle operation savings. The rate for commercial trucks was used at the rate of $1.27per mile and the Transit Vans were considered Light Duty Vehicles at the rate of $0.56 per mile. The reduction in travel distances was used to calculate vehicle operation cost savings.

III.A.5. Affected Populations and Types of Impacts

The primary populations benefitting from this Project include commercial users transporting goods through the region, agricultural producers, transit users, and personal and commercial vehicle operators currently experiencing increased travel time and vehicle operation costs during winter

weather events. Additionally, Tribal members living in the project area benefit from improved emergency response times resulting from the implementation preferred alternative (not monetized in this analysis) and the corresponding improved snow removal and sand/salt application process and improved on-demand transit service.

III.A.6. Reduction in Pedestrian Fatalities

Safety benefits are calculated on providing accessible and attractive public transit to services that the community needs on a daily and weekly basis such as, to and from employment, healthcare, educational institutions, medical appointments shopping, and other essential services,

According to the American Public Transportation Association, in areas where public transit is made accessible and attractive, pedestrian fatalities can drop as much as 50 percent.

There were five (5) pedestrian fatalities on the Lake Traverse Reservation from 2009-2023. Based off the current statistics, expanding SWO transit service theoretically prevents up to 5 fatalities on the Lake Traverse Reservation in the 30 years post-construction.

The value of the Reduced Fatality was monetized at $13.2 million per pedestrian killed per the USDOT BCA Guidance issued December 2024,

III.B. SAFETY

Safety Benefits are based on number of Fatalities reduced over the 30-year analysis period post-construction. As noted above statistics from the American Public Transportation Association estimate that the implementation of accessible and attractive, pedestrian deaths are reduced as much as 50 percent as pedestrians will choose public transit versus walking along rural roads that are unlighted and have no sidewalks or safe paths for pedestrians to travel.

Exhibit 18: Assumptions used in calculating Safety savings

Table 1. Recommended Monetization Values

KABCO Level	Monetized Value (2023 $)
O - No Injury	$5,300
C - Possible Injury	$118,000
B - Non-incapacitating	$246,900
A - Incapacitating	$1,254,700
K - Killed	$13,200,000
U - Injured (Severity Unknown)	$229,800

-

Crash Type	
PDO Crash	$9,500
Injury Crash	$329,500
Fatal Crash	$14,806,000

Pedestrian Accidents that can be cut in half by having access to transit is available and attractive.

According to the American Public Transportation Association[1], in areas where public transit is made available and attractive, pedestrian fatalities decrease by as much as fifty percent (50%). There were five (5) pedestrian fatalities on the Lake Traverse Reservation from 2009-2023.

[1] https://www.apta.com/wp-content/uploads/Resources/resources/reportsandpublications/Documents/APTA-Hidden-Traffic-Safety-Solution-Public-Transportation.pdf

		NoBuild		Build	change
Pedestrian Accident rate per year		0.33	per year	0.167	0.167
	30 years	10		5	5
	Increasing access to transit is estimate to reduce pedestrian fatalities by 5 over the 30 year analysis period				

Exhibit 19: Safety Savings

Table 2. Safety

Year	No Build Safety Costs	Build Safety Costs	Safety Benefits
2029	$4,400,000	$2,200,000	$2,200,000
2030	$4,400,000	$2,200,000	$2,200,000
2031	$4,400,000	$2,200,000	$2,200,000
2032	$4,400,000	$2,200,000	$2,200,000
2033	$4,400,000	$2,200,000	$2,200,000
2034	$4,400,000	$2,200,000	$2,200,000
2035	$4,400,000	$2,200,000	$2,200,000
2036	$4,400,000	$2,200,000	$2,200,000
2037	$4,400,000	$2,200,000	$2,200,000
2038	$4,400,000	$2,200,000	$2,200,000
2039	$4,400,000	$2,200,000	$2,200,000
2040	$4,400,000	$2,200,000	$2,200,000
2041	$4,400,000	$2,200,000	$2,200,000
2042	$4,400,000	$2,200,000	$2,200,000
2043	$4,400,000	$2,200,000	$2,200,000
2044	$4,400,000	$2,200,000	$2,200,000
2045	$4,400,000	$2,200,000	$2,200,000
2046	$4,400,000	$2,200,000	$2,200,000
2047	$4,400,000	$2,200,000	$2,200,000
2048	$4,400,000	$2,200,000	$2,200,000
2049	$4,400,000	$2,200,000	$2,200,000
2050	$4,400,000	$2,200,000	$2,200,000
2051	$4,400,000	$2,200,000	$2,200,000
2052	$4,400,000	$2,200,000	$2,200,000
2053	$4,400,000	$2,200,000	$2,200,000
2054	$4,400,000	$2,200,000	$2,200,000
2055	$4,400,000	$2,200,000	$2,200,000
2056	$4,400,000	$2,200,000	$2,200,000
2057	$4,400,000	$2,200,000	$2,200,000
2058	$4,400,000	$2,200,000	$2,200,000

It is estimated that the No Build Safety Cost will be $4.4million per year compared to the Build Safety Cost of $2.2 million, netting a positive safety benefit of $2.2 million per year.

III.C. ECONOMIC COMPETITVENESS AND MOBILTIY

Economic Competitiveness and Mobility benefits are based on Travel Time Value Saving benefits that are captured from:

1) Transit Operating Savings- This is the Transit Delay Cost During Snow Events due to slow snow removal

2) Travel Time Saving for the road users that do not have an excessive delay during days that require snow removal,

III.C.1. Travel Time Savings During Winter Conditions

This benefit was calculated by determining the delays caused by the percentage of ADT impacted by winter conditions that delay snow removal, sand and salt applications and plow activities due to the condition of the SWO facility that causes delayed response during snow events. This benefit was calculated by determining the delays caused to the percentage of ADT impacted by the delay snow removal, sand and salt applications and plow activities due to the condition of the SWO facility.

Exhibit 20: Assumptions for Travel Time Savings During Winter Conditions

Assumptions		
Number of Transit Buses	4	
2023 Winter Weather Snow Removal Days	60	
Average transit Trips per day in 2024	39.83	
Average riders per transit bus	6.00	
AADT	2090	Replicahq.com
Passenger Vehicles	98.5%	
Trucks	1.5%	
Average Daily Traffic impacted by snow	8%	2 hours in 24 hour period
Transit Hub and improved Snow removal	50%	Percent time saved
Annual ADT Growth	0.75%	
Delayed in Transit pick up during snow events- NO BUILD	0.75	hours
Delayed in Transit pick up during snow events- BUILD	0.25	hours
Average Transit Usage Growth	2.0%	Conservative Estimate
Value of Travel Time Savings- All purpose (Auto)	$ 21.10	All purposes per Nov 2024 BCA Guidance, pg 40
Value of Travel Time Savings- Truck	$ 35.70	Truck Drivers per Nov 2024 BCA Guidance, pg 40
Ave Occupancy- Auto	1.52	Ave Vehicle Occupancy per Nov 2024 BCA Guidance, pg 41
Value of Travel Time Savings -Transit Drivers	$ 42.60	Value of Travel Time per Nov 2024 BCA Guidance, pg 40
Waiting Time- value	$ 38.80	Value of Travel Time per Nov 2024 BCA Guidance, pg 40

Exhibit 21: Hours Saved in Delays

Hours saved in Transit Delays		**Riders**	**Van Drivers**
Travel Hours Delayed by during Snow Removal Events- No Build		1,338	90
Travel Hours Delayed by during Snow Removal Events- Build		446	30
	Savings	892	60
Hours saved by local users due to quicker snow removal		**Autos**	**Trucks**
Hours delay in local users due to delayed snow removal due to machines not ready because outside		357,981	5,451
Hours of delay for local road users with new facility, that can store machines inside			

This calculation captures the net value savings to the All purpose Vehicle operator plus their estimate 1.52 average passengers. Thus, the calculation is the All purpose Hourly Value of $21.10 times 1.52 occupants for an average Hourly rate of $32.07. Commercial Trucks the Hourly Value is $35.70. It is assumed that AADT increases at 0.75% per year

Exhibit 22: Transit Delay Cost During Snow Events due to slow snow removal

Calendar Year	Project Year	Daily Transit trips		Number of Days Snow Removal needed	Hours of Delay - No Build per snow removal event- for riders	Hours of Delay - No Build per snow removal event- for transit drivers	Cost of Transit Delay- No BUILD during Snow Events	Hours of Delay Saved per Snow Removal Event- BUILD for riders	Hours of Delay Saved per Snow Removal Event - BUILD forTransit Drivers	Transit Delay Cost during Snow Events- BUILD	Transit Delay Cost Savings during Snow Events- BUILD vs NO BUILD
2022				-							
2023	1			-							
2024	2	40		60	29.87	3.00					
2025	3	41		60	30.47	3.00					
2026	4	41		60	31.08	3.00					
2027	5	42		60	31.70	3.00					
2028	6	43		60	32.33	3.00					
2029	7	44		60	32.98	3.00	$ 84,440	10.99	1.00	28,147	$ 56,293
2030	8	45		60	33.64	3.00	$ 85,975	11.21	1.00	28,658	$ 57,317
2031	9	46		60	34.31	3.00	$ 87,541	11.44	1.00	29,180	$ 58,361
2032	10	47		60	35.00	3.00	$ 89,139	11.67	1.00	29,713	$ 59,426
2033	11	48		60	35.70	3.00	$ 90,768	11.90	1.00	30,256	$ 60,512
2034	12	49		60	36.41	3.00	$ 92,430	12.14	1.00	30,810	$ 61,620
2035	13	50		60	37.14	3.00	$ 94,125	12.38	1.00	31,375	$ 62,750
2036	14	51		60	37.88	3.00	$ 95,854	12.63	1.00	31,951	$ 63,903
2037	15	52		60	38.64	3.00	$ 97,618	12.88	1.00	32,539	$ 65,079
2038	16	53		60	39.41	3.00	$ 99,417	13.14	1.00	33,139	$ 66,278
2039	17	54		60	40.20	3.00	$ 101,252	13.40	1.00	33,751	$ 67,501
2040	18	55		60	41.00	3.00	$ 103,124	13.67	1.00	34,375	$ 68,749
2041	19	56		60	41.82	3.00	$ 105,033	13.94	1.00	35,011	$ 70,022
2042	20	57		60	42.66	3.00	$ 106,980	14.22	1.00	35,660	$ 71,320
2043	21	58		60	43.51	3.00	$ 108,967	14.50	1.00	36,322	$ 72,644
2044	22	59		60	44.38	3.00	$ 110,993	14.79	1.00	36,998	$ 73,995
2045	23	60		60	45.27	3.00	$ 113,059	15.09	1.00	37,686	$ 75,373
2046	24	62		60	46.18	3.00	$ 115,167	15.39	1.00	38,389	$ 76,778
2047	25	63		60	47.10	3.00	$ 117,317	15.70	1.00	39,106	$ 78,211
2048	26	64		60	48.04	3.00	$ 119,510	16.01	1.00	39,837	$ 79,673
2049	27	65		60	49.00	3.00	$ 121,747	16.33	1.00	40,582	$ 81,164
2050	28	67		60	49.98	3.00	$ 124,028	16.66	1.00	41,343	$ 82,685
2051	29	68		60	50.98	3.00	$ 126,355	16.99	1.00	42,118	$ 84,237
2052	30	69		60	52.00	3.00	$ 128,729	17.33	1.00	42,910	$ 85,819
2053	31	71		60	53.04	3.00	$ 131,150	17.68	1.00	43,717	$ 87,434
2054	32	72		60	54.10	3.00	$ 133,620	18.03	1.00	44,540	$ 89,080
2055	33	74		60	55.19	3.00	$ 136,139	18.40	1.00	45,380	$ 90,759
2056	34	75		60	56.29	3.00	$ 138,708	18.76	1.00	46,236	$ 92,472
2057	35	77		60	57.41	3.00	$ 141,329	19.14	1.00	47,110	$ 94,220
2058	36	78		60	58.56	3.00	$ 144,003	19.52	1.00	48,001	$ 96,002
Total Benefits During 30-Year Analysis Period					**1,337.83**	**90.00**	**$ 3,344,518**	**445.94**	**30.00**	**$ 1,114,839**	**$ 2,229,679**

Exhibit 23:Travel Time Savings During Winter Conditions for Local travelers

Calendar Year	Project Year	AADT	Delay to AADT during a winter storm that requires snow removal from the local streets	Difference in Vehicle Hours Traveled- Auto	Difference in Vehicle Hours Traveled- Trucks	NO BUILD Delay-Auto - Driver and Passenger	NO BUILD Delay for Truck - Drivers	Total NO BUILD Delay Cost Autos and Trucks	BUILD Delay hours Auto - Driver and Passenger	BUILD Delay Hours Truck - Driver	BUILD Delay Auto - Driver and Passenger	BUILD Delay Truck - Driver	Total BUILD Delay Cost Autos and Trucks
2029	7	2,170	10,848	10,685	163	$ 342,692	$ 5,809	$ 348,501	8121	81	$ 171,346	$ 2,904	$ 174,250
2030	8	2,186	10,929	10,765	164	$ 345,262	$ 5,853	$ 351,115	8182	82	$ 172,631	$ 2,926	$ 175,557
2031	9	2,202	11,011	10,846	165	$ 347,852	$ 5,896	$ 353,748	8243	83	$ 173,926	$ 2,948	$ 176,874
2032	10	2,219	11,094	10,927	166	$ 350,460	$ 5,941	$ 356,401	8305	83	$ 175,230	$ 2,970	$ 178,201
2033	11	2,235	11,177	11,009	168	$ 353,089	$ 5,985	$ 359,074	8367	84	$ 176,544	$ 2,993	$ 179,537
2034	12	2,252	11,261	11,092	169	$ 355,737	$ 6,030	$ 361,767	8430	84	$ 177,869	$ 3,015	$ 180,884
2035	13	2,269	11,345	11,175	170	$ 358,405	$ 6,075	$ 364,480	8493	85	$ 179,203	$ 3,038	$ 182,240
2036	14	2,286	11,430	11,259	171	$ 361,093	$ 6,121	$ 367,214	8557	86	$ 180,547	$ 3,060	$ 183,607
2037	15	2,303	11,516	11,343	173	$ 363,801	$ 6,167	$ 369,968	8621	86	$ 181,901	$ 3,083	$ 184,984
2038	16	2,320	11,602	11,428	174	$ 366,530	$ 6,213	$ 372,743	8686	87	$ 183,265	$ 3,107	$ 186,371
2039	17	2,338	11,689	11,514	175	$ 369,279	$ 6,260	$ 375,538	8751	88	$ 184,639	$ 3,130	$ 187,769
2040	18	2,355	11,777	11,600	177	$ 372,048	$ 6,307	$ 378,355	8816	88	$ 186,024	$ 3,153	$ 189,178
2041	19	2,373	11,865	11,687	178	$ 374,839	$ 6,354	$ 381,193	8882	89	$ 187,419	$ 3,177	$ 190,596
2042	20	2,391	11,954	11,775	179	$ 377,650	$ 6,402	$ 384,052	8949	90	$ 188,825	$ 3,201	$ 192,026
2043	21	2,409	12,044	11,863	181	$ 380,482	$ 6,450	$ 386,932	9016	90	$ 190,241	$ 3,225	$ 193,466
2044	22	2,427	12,134	11,952	182	$ 383,336	$ 6,498	$ 389,834	9084	91	$ 191,668	$ 3,249	$ 194,917
2045	23	2,445	12,225	12,042	183	$ 386,211	$ 6,547	$ 392,758	9152	92	$ 193,106	$ 3,273	$ 196,379
2046	24	2,463	12,317	12,132	185	$ 389,108	$ 6,596	$ 395,703	9221	92	$ 194,554	$ 3,298	$ 197,852
2047	25	2,482	12,409	12,223	186	$ 392,026	$ 6,645	$ 398,671	9290	93	$ 196,013	$ 3,323	$ 199,336
2048	26	2,501	12,503	12,315	188	$ 394,966	$ 6,695	$ 401,661	9359	94	$ 197,483	$ 3,348	$ 200,831
2049	27	2,519	12,596	12,407	189	$ 397,928	$ 6,745	$ 404,674	9430	94	$ 198,964	$ 3,373	$ 202,337
2050	28	2,538	12,691	12,500	190	$ 400,913	$ 6,796	$ 407,709	9500	95	$ 200,456	$ 3,398	$ 203,854
2051	29	2,557	12,786	12,594	192	$ 403,920	$ 6,847	$ 410,767	9572	96	$ 201,960	$ 3,423	$ 205,383
2052	30	2,576	12,882	12,689	193	$ 406,949	$ 6,898	$ 413,847	9643	97	$ 203,475	$ 3,449	$ 206,924
2053	31	2,596	12,978	12,784	195	$ 410,001	$ 6,950	$ 416,951	9716	97	$ 205,001	$ 3,475	$ 208,476
2054	32	2,615	13,076	12,880	196	$ 413,076	$ 7,002	$ 420,078	9789	98	$ 206,538	$ 3,501	$ 210,039
2055	33	2,635	13,174	12,976	198	$ 416,174	$ 7,055	$ 423,229	9862	99	$ 208,087	$ 3,527	$ 211,614
2056	34	2,655	13,273	13,074	199	$ 419,296	$ 7,108	$ 426,403	9936	100	$ 209,648	$ 3,554	$ 213,202
2057	35	2,674	13,372	13,172	201	$ 422,440	$ 7,161	$ 429,601	10010	100	$ 211,220	$ 3,580	$ 214,801
2058	36	2,694	13,472	13,270	202	$ 425,609	$ 7,215	$ 432,823	10086	101	$ 212,804	$ 3,607	$ 216,412
Total Benefits During 30-Year Analysis Period			**363,433**	**357,981**	**5,451**	**$ 11,481,173**	**$ 194,618**	**$ 11,675,791**	**272,066**	**2,726**	**$ 5,740,587**	**$ 97,309**	**$ 5,837,896**

It is estimated that there will be approximately 60 days during the wintery months that snow removal or salt/sanding must be applied. Based upon this assumption, it is further assumed that due to the current location of the buses compared to the Transit routes required for the pickups of the transit riders, there is a 45-60 minute delay in transit during winter events. This delay will be reduced by 45 minutes when the new facility is operational. This is an estimated wait savings for Transit riders of $2.2 million over the 30-years post construction. SWO is also responsible for snow removal and Salt / Sand application on Tribal roads and BIA roads under a contract with BIA.

Since BIA 700 between Agency Village and Sisseton requires these services, it is assumed that at least 8% of the users of that section of BIA 700 currently experience delays in the event of winter road conditions. The new Facility is anticipated to save a total of 363,000 hours of delay on the road users, which when monetized at the respective hourly rate is anticipated to be a savings of $5.8 million over the 30-year period.

Exhibit 24: Total Travel Time Savings During Winter Conditions

Calendar Year	Project Year	Total Cost of Delayed Snow Removal - NO BUILD	Total Cost of Delayed Snow Removal - BUILD	Savings from quicker snow removal
2029	7	$ 432,941	$ 202,397	$ 230,544
2030	8	$ 437,090	$ 204,216	$ 232,874
2031	9	$ 441,289	$ 206,054	$ 235,235
2032	10	$ 445,540	$ 207,913	$ 237,626
2033	11	$ 449,842	$ 209,793	$ 240,049
2034	12	$ 454,197	$ 211,694	$ 242,504
2035	13	$ 458,606	$ 213,615	$ 244,990
2036	14	$ 463,069	$ 215,559	$ 247,510
2037	15	$ 467,586	$ 217,523	$ 250,063
2038	16	$ 472,160	$ 219,511	$ 252,650
2039	17	$ 476,791	$ 221,520	$ 255,271
2040	18	$ 481,479	$ 223,552	$ 257,927
2041	19	$ 486,226	$ 225,607	$ 260,618
2042	20	$ 491,032	$ 227,686	$ 263,346
2043	21	$ 495,899	$ 229,788	$ 266,110
2044	22	$ 500,827	$ 231,915	$ 268,912
2045	23	$ 505,817	$ 234,065	$ 271,752
2046	24	$ 510,870	$ 236,241	$ 274,630
2047	25	$ 515,988	$ 238,441	$ 277,547
2048	26	$ 521,171	$ 240,667	$ 280,504
2049	27	$ 526,420	$ 242,919	$ 283,501
2050	28	$ 531,737	$ 245,197	$ 286,540
2051	29	$ 537,122	$ 247,502	$ 289,620
2052	30	$ 542,576	$ 249,833	$ 292,743
2053	31	$ 548,102	$ 252,192	$ 295,909
2054	32	$ 553,698	$ 254,579	$ 299,119
2055	33	$ 559,368	$ 256,994	$ 302,374
2056	34	$ 565,112	$ 259,438	$ 305,674
2057	35	$ 570,930	$ 261,910	$ 309,020
2058	36	$ 576,826	$ 264,412	$ 312,413
Total Benefits During 30-Year Analysis Period		**$ 15,020,310**	**$ 6,952,735**	**$ 8,067,575**

Total Savings is anticipated to be approximately $8.1 million when SWO can provide quicker snow clearing of the roads during snow events.

Exhibit 25: Total Travel Savings

Table 2. Travel Time Savings

Year	No Build Travel Time Costs	Build Travel Time Costs	Travel Time Benefits
2029	**$432,941**	**$202,397**	$230,544
2030	**$437,090**	**$204,216**	$232,874
2031	**$441,289**	**$206,054**	$235,235
2032	**$445,540**	**$207,913**	$237,626
2033	**$449,842**	**$209,793**	$240,049
2034	**$454,197**	**$211,694**	$242,504
2035	**$458,606**	**$213,615**	$244,990
2036	**$463,069**	**$215,559**	$247,510
2037	**$467,586**	**$217,523**	$250,063
2038	**$472,160**	**$219,511**	$252,650
2039	**$476,791**	**$221,520**	$255,271
2040	**$481,479**	**$223,552**	$257,927
2041	**$486,226**	**$225,607**	$260,618
2042	**$491,032**	**$227,686**	$263,346
2043	**$495,899**	**$229,788**	$266,110
2044	**$500,827**	**$231,915**	$268,912
2045	**$505,817**	**$234,065**	$271,752
2046	**$510,870**	**$236,241**	$274,630
2047	**$515,988**	**$238,441**	$277,547
2048	**$521,171**	**$240,667**	$280,504
2049	**$526,420**	**$242,919**	$283,501
2050	**$531,737**	**$245,197**	$286,540
2051	**$537,122**	**$247,502**	$289,620
2052	**$542,576**	**$249,833**	$292,743
2053	**$548,102**	**$252,192**	$295,909
2054	**$553,698**	**$254,579**	$299,119
2055	**$559,368**	**$256,994**	$302,374
2056	**$565,112**	**$259,438**	$305,674
2057	**$570,930**	**$261,910**	$309,020
2058	**$576,826**	**$264,412**	$312,413

III.D. EMISSION SAVINGS

Emission savings occur in two ways: 1) the reduction in miles traveled by the vans due to the relocation of the transit hub from Sisseton to the new Transit Facility and 2) reduction of emissions by replacing one diesel powered van with an electric powered van that will provide efficiency for the local trips around Agency Village.

III.D.1. Emissions saving from Relocation of Transit Hub from Sisseton

Exhibit 26: Assumptions for Relocating the Transit Facility to the new site

Table 1. Emission Costs per VMT and Train-Hour

Vehicle Type and Location	Recommended Value per Mile (2023 $)	Recommended Value per Mile (2023 $)
	Non-CO_2 Emissions	CO_2 Emissions
Light-Duty Vehicles - Urban	*	$0.110
Light-Duty Vehicles - Rural	*	$0.113
Light-Duty Vehicles – All Locations	$0.013	$0.111

Miles per year

No-Build:

There are 4 Diesel- fueled Vans that are stationed in Sisseton, requiring 124.8 miles of "re-positioning each day. For a total of 44,678 miles per year.

Build:

The new Transit hub will be closer to the majority of the tribal population, thus reducing the number of miles the vans have to travel each day from the " home base" / transit hub. It is anticipated that the new location will reduce the mileage for the vans by 31.2 miles per day. For a total savings of 33,500 miles per year.

Exhibit 27: Miles No-Build vs. Build

	Miles		
Year	No Build	Build	Savings
2029	44,678	11,170	33,509
2030	44,678	11,170	33,509
2031	44,678	11,170	33,509
2032	44,678	11,170	33,509
2033	44,678	11,170	33,509
2034	44,678	11,170	33,509
2035	44,678	11,170	33,509
2036	44,678	11,170	33,509
2037	44,678	11,170	33,509
2038	44,678	11,170	33,509
2039	44,678	11,170	33,509
2040	44,678	11,170	33,509
2041	44,678	11,170	33,509
2042	44,678	11,170	33,509
2043	44,678	11,170	33,509
2044	44,678	11,170	33,509
2045	44,678	11,170	33,509
2046	44,678	11,170	33,509
2047	44,678	11,170	33,509
2048	44,678	11,170	33,509
2049	44,678	11,170	33,509
2050	44,678	11,170	33,509
2051	44,678	11,170	33,509
2052	44,678	11,170	33,509
2053	44,678	11,170	33,509
2054	44,678	11,170	33,509
2055	44,678	11,170	33,509
2056	44,678	11,170	33,509
2057	44,678	11,170	33,509
2058	44,678	11,170	33,509

EV mile Savings		
No Build	Build	Savings
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500
37500	-	37,500

III.D.1. Emission Saving from conversion to an EV van

In addition, the purchase of an EV van will reduce the emission an 37,500 additional miles per year.

Exhibit 28: Total Emission Savings

Table 2. Emissions

Year	No Build Non-CO_2 Emission Costs ($)	Build Non-CO_2 Emission Costs ($)	No Build CO_2 Emission Costs ($)	Build CO_2 Emission Costs ($)	NO_x	CO_2	Emission Reduction	CO_2 Emission Reduction
2029	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,500	$262	$923	$8,024
2030	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$267	$923	$8,024
2031	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$272	$923	$8,024
2032	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$275	$923	$8,024
2033	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$280	$923	$8,024
2034	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$284	$923	$8,024
2035	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$288	$923	$8,024
2036	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$292	$923	$8,024
2037	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$297	$923	$8,024
2038	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$301	$923	$8,024
2039	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$305	$923	$8,024
2040	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$310	$923	$8,024
2041	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$314	$923	$8,024
2042	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$319	$923	$8,024
2043	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$324	$923	$8,024
2044	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$328	$923	$8,024
2045	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$333	$923	$8,024
2046	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$338	$923	$8,024
2047	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$344	$923	$8,024
2048	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$348	$923	$8,024
2049	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$353	$923	$8,024
2050	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$357	$923	$8,024
2051	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$362	$923	$8,024
2052	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$366	$923	$8,024
2053	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$366	$923	$8,024
2054	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$366	$923	$8,024
2055	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$366	$923	$8,024
2056	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$366	$923	$8,024
2057	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$366	$923	$8,024
2058	**1068.32**	**$145**	**$9,286**	**$1,262**	$22,900	$366	$923	$8,024

III.E. OPERATIONS AND MAINTENACE

Operations and Maintenance Costs are made up of four element:

1) Reduction of Transit Operating Costs due to SWO taking over the operation of the Vans at the new site and not contraction with Community Transit for dispatch, and other operating activities
2) Van recapitalization costs at the end of the useful life which is estimated at 4 years due to the annual mileage put on the vans.
3) Savings in travel and waiting time at the Dealership for the vans to be serviced, under the Build scenario, SWO will have the facilities to do routine service maintenance at their new Transit Facility and will not have to drive the vans and wait at the dealership during this type of routine service maintenance activities.
4) Maintenance Costs of the facility.

III.E.1. Transit Operating Savings

Currently, SWO contracts with Community Transit for dispatch, and other operating activities. SWO DOT leases their Buses to Community Transit for $1 per year. Community Transit charges SWO an hourly rate for the majority of overhead type activities. It is anticipated that once SWO has their own facility they will take over these aspects and achieve an estimated 40% savings per year.

Exhibit 29: Assumptions for Transit Operating Savings

Bus Operating Costs					Community Transit Agreement		
Round trip miles - No Build	7.8						
Round trip miles - Build	3.9	Route Map	Trip will be reduced by 3.9 miles (the new facility is 1/2 way between Sesston and Agency Village)		Hours per day	8	
Number of trips annually	358	per Community Transit Agreement with SWO for Transit operating services Jan 2024			365	per Community Transit Agreement with SWO for Transit operating services Jan 2024	
Vehicle Operating Costs	$0.56	per mile Per Dec 2025 BCA guidance, pg 41	Used light vehicles as did not have a factor for Transit van		Hourly cost	$ 43.64	
Number of Buses	4						
No Build Number of Trips to Transit Hub per Bus	4						
Number of trips per bus to Transit Hub reduced by 1 beginning of route and 1 at end of day	2						

Exhibit 30: Transit Operating Savings

Calendar Year	Project Year	Annual Savings in Miles Traveled	Annual Savings in Constant Dollars	Community Transit Contract	SWO Facility	Community Transit Contract Savings	Total Savings
2023	1						
2024	2			$ 127,429	$ -		
2025	3			$ 129,977			
2026	4			$ 132,577			
2027	5			$ 135,228			
2028	6			$ 137,933			$ -
2029	7	11,170	$ 6,255	$ 140,692	$ 56,277	$ 84,415	$ 90,670
2030	8	11,170	$ 6,255	$ 143,506	$ 57,965	$ 85,541	$ 91,796
2031	9	11,170	$ 6,255	$ 146,376	$ 59,704	$ 86,672	$ 92,927
2032	10	11,170	$ 6,255	$ 149,303	$ 61,495	$ 87,808	$ 94,063
2033	11	11,170	$ 6,255	$ 152,289	$ 63,340	$ 88,949	$ 95,204
2034	12	11,170	$ 6,255	$ 155,335	$ 65,240	$ 90,095	$ 96,350
2035	13	11,170	$ 6,255	$ 158,442	$ 67,197	$ 91,244	$ 97,499
2036	14	11,170	$ 6,255	$ 161,611	$ 69,213	$ 92,397	$ 98,652
2037	15	11,170	$ 6,255	$ 164,843	$ 71,290	$ 93,553	$ 99,808
2038	16	11,170	$ 6,255	$ 168,140	$ 73,428	$ 94,711	$ 100,966
2039	17	11,170	$ 6,255	$ 171,502	$ 75,631	$ 95,871	$ 102,126
2040	18	11,170	$ 6,255	$ 174,932	$ 77,900	$ 97,032	$ 103,287
2041	19	11,170	$ 6,255	$ 178,431	$ 80,237	$ 98,194	$ 104,449
2042	20	11,170	$ 6,255	$ 182,000	$ 82,644	$ 99,356	$ 105,610
2043	21	11,170	$ 6,255	$ 185,640	$ 85,124	$ 100,516	$ 106,771
2044	22	11,170	$ 6,255	$ 189,352	$ 87,677	$ 101,675	$ 107,930
2045	23	11,170	$ 6,255	$ 193,140	$ 90,308	$ 102,832	$ 109,087
2046	24	11,170	$ 6,255	$ 197,002	$ 93,017	$ 103,986	$ 110,241
2047	25	11,170	$ 6,255	$ 200,942	$ 95,807	$ 105,135	$ 111,390
2048	26	11,170	$ 6,255	$ 204,961	$ 98,681	$ 106,280	$ 112,535
2049	27	11,170	$ 6,255	$ 209,060	$ 101,642	$ 107,419	$ 113,673
2050	28	11,170	$ 6,255	$ 213,242	$ 104,691	$ 108,550	$ 114,805
2051	29	11,170	$ 6,255	$ 217,506	$ 107,832	$ 109,675	$ 115,930
2052	30	11,170	$ 6,255	$ 221,857	$ 111,067	$ 110,790	$ 117,045
2053	31	11,170	$ 6,255	$ 226,294	$ 114,399	$ 111,895	$ 118,150
2054	32	11,170	$ 6,255	$ 230,820	$ 117,831	$ 112,989	$ 119,244
2055	33	11,170	$ 6,255	$ 235,436	$ 121,366	$ 114,070	$ 120,325
2056	34	11,170	$ 6,255	$ 240,145	$ 125,007	$ 115,138	$ 121,393
2057	35	11,170	$ 6,255	$ 244,948	$ 128,757	$ 116,191	$ 122,446
2058	36	11,170	$ 6,255	$ 249,847	$ 132,620	$ 117,227	$ 123,482
		335,088	**$ 187,649**	**$ 5,707,592**	**$ 2,677,386**	**$ 3,030,205**	**$ 3,217,855**

It is projected that there will be a total of 335,088 miles saved by moving the Transit Operation to the new location. This will be an operating cost savings of $3,2 million over the 30-year analysis. In addition, the Tribe will be able to take over the operations of the Transit operations that are currently provided by Community Transit. This transfer in operation is expected to save the Tribe 40 percent compared to the contract that they have with Community Transit for the services.

Exhibit 31: No-Build Operating and Maintenance Cost

	No Build- Op and Maint								
Calendar Year	Community Transit Contract (includes bus maint and building maint)	Bus Op Costs							Total No Build Op and Maint Cost
		Miles to Current Transit Hub	Number of Buses	Number of Trips per day	Number of Days	Annual Miles to Transit Facility- NO BUILD	Op cost per mile	Annual Op Cost to Hub	
2023									
2024		7.8	4	4	358	44,678.40	$0.56	$25,020	
2025									
2026									
2027									
2028									
2029	$ 140,692					44,678.40		$25,020	$165,712
2030	$ 143,506					44,678.40		$25,020	$168,525
2031	$ 146,376					44,678.40		$25,020	$171,396
2032	$ 149,303					44,678.40		$25,020	$174,323
2033	$ 152,289					44,678.40		$25,020	$177,309
2034	$ 155,335					44,678.40		$25,020	$180,355
2035	$ 158,442					44,678.40		$25,020	$183,462
2036	$ 161,611					44,678.40		$25,020	$186,630
2037	$ 164,843					44,678.40		$25,020	$189,863
2038	$ 168,140					44,678.40		$25,020	$193,159
2039	$ 171,502					44,678.40		$25,020	$196,522
2040	$ 174,932					44,678.40		$25,020	$199,952
2041	$ 178,431					44,678.40		$25,020	$203,451
2042	$ 182,000					44,678.40		$25,020	$207,020
2043	$ 185,640					44,678.40		$25,020	$210,660
2044	$ 189,352					44,678.40		$25,020	$214,372
2045	$ 193,140					44,678.40		$25,020	$218,159
2046	$ 197,002					44,678.40		$25,020	$222,022
2047	$ 200,942					44,678.40		$25,020	$225,962
2048	$ 204,961					44,678.40		$25,020	$229,981
2049	$ 209,060					44,678.40		$25,020	$234,080
2050	$ 213,242					44,678.40		$25,020	$238,262
2051	$ 217,506					44,678.40		$25,020	$242,526
2052	$ 221,857					44,678.40		$25,020	$246,877
2053	$ 226,294					44,678.40		$25,020	$251,314
2054	$ 230,820					44,678.40		$25,020	$255,840
2055	$ 235,436					44,678.40		$25,020	$260,456
2056	$ 240,145					44,678.40		$25,020	$265,165
2057	$ 244,948					44,678.40		$25,020	$269,968
2058	$ 249,847					44,678.40		$25,020	$274,866
	$ 5,707,592					1,340,352.00		**$750,597**	**$6,458,189**

Exhibit 32: Build Operation and Maintenance Costs

	Build- Op and Maint										
Calendar Year	Transit Contract (includes bus maint and building maint)	SWO Facility Maintenance	Bus Op Costs							Bus Maint Costs	Total Op and Maint cost
2023			Miles to Transit Hub	Number of Buses	Number of Trips per day_BUILD	Number of Days	Annual Miles to New Transit Facility-BUILD	Op cost/ mile	Total Bus Op cost to Transit Facility	included in op cost/ mile	
2024			3.9	4	2	358	11,169.60	$0.56			
2025											
2026											
2027											
2028											
2029	0	$ 56,277					11,169.60		$6,255		$62,532
2030	0	$ 57,402					11,169.60		$6,255		$63,657
2031	0	$ 58,550					11,169.60		$6,255		$64,805
2032	0	$ 59,721					11,169.60		$6,255		$65,976
2033	0	$ 60,916					11,169.60		$6,255		$67,171
2034	0	$ 62,134					11,169.60		$6,255		$68,389
2035	0	$ 63,377					11,169.60		$6,255		$69,632
2036	0	$ 64,644					11,169.60		$6,255		$70,899
2037	0	$ 65,937					11,169.60		$6,255		$72,192
2038	0	$ 67,256					11,169.60		$6,255		$73,511
2039	0	$ 68,601					11,169.60		$6,255		$74,856
2040	0	$ 69,973					11,169.60		$6,255		$76,228
2041	0	$ 71,372					11,169.60		$6,255		$77,627
2042	0	$ 72,800					11,169.60		$6,255		$79,055
2043	0	$ 74,256					11,169.60		$6,255		$80,511
2044	0	$ 75,741					11,169.60		$6,255		$81,996
2045	0	$ 77,256					11,169.60		$6,255		$83,511
2046	0	$ 78,801					11,169.60		$6,255		$85,056
2047	0	$ 80,377					11,169.60		$6,255		$86,632
2048	0	$ 81,984					11,169.60		$6,255		$88,239
2049	0	$ 83,624					11,169.60		$6,255		$89,879
2050	0	$ 85,297					11,169.60		$6,255		$91,552
2051	0	$ 87,003					11,169.60		$6,255		$93,258
2052	0	$ 88,743					11,169.60		$6,255		$94,998
2053	0	$ 90,518					11,169.60		$6,255		$96,772
2054	0	$ 92,328					11,169.60		$6,255		$98,583
2055	0	$ 94,174					11,169.60		$6,255		$100,429
2056	0	$ 96,058					11,169.60		$6,255		$102,313
2057	0	$ 97,979					11,169.60		$6,255		$104,234
2058	0	$ 99,939					11,169.60		$6,255		$106,194
	$ -	**$ 2,283,037**	**$ -**	**$ -**	**$ -**	**$ -**	**335,088.00**		$187,649	$0	$2,470,686

III.F. MAINTENANCE OF NEW FACILITY

Exhibit 33: Assumptions of Maintenance Costs of New Facility

Cost	
Percent of Construction Cost	0.5%
aint Cost of New Facility	**$ 44,366**

Exhibit 34: Maintenance Cost of New Facility

Maintenance on the Facility		
	No Build	Build
2027		
2028		
2029		$ 44,366
2030		$ 44,366
2031		$ 44,366
2032		$ 44,366
2033		$ 44,366
2034		$ 44,366
2035		$ 44,366
2036		$ 44,366
2037		$ 44,366
2038		$ 44,366
2039		$ 44,366
2040		$ 44,366
2041		$ 44,366
2042		$ 44,366
2043		$ 44,366
2044		$ 44,366
2045		$ 44,366
2046		$ 44,366
2047		$ 44,366
2048		$ 44,366
2049		$ 44,366
2050		$ 44,366
2051		$ 44,366
2052		$ 44,366
2053		$ 44,366
2054		$ 44,366
2055		$ 44,366
2056		$ 44,366
2057		$ 44,366
2058		$ 44,366

It is estimated that maintenance on the new facility will cost $44,400 per year for a total estimated Cost of $1.3 million over the 30 year analysis period post - construction

Exhibit 35: Total Operation and Maintenance Costs

Table 1. Operations and Maintenance

Year	No Build Operations and Maintenance Costs	Build Operations and Maintenance Costs	Operations and Maintenance Cost
2029	$165,712	$110,988	($54,724)
2030	$348,525	$112,113	($236,412)
2031	$171,396	$113,261	($58,134)
2032	$174,323	$114,432	($59,891)
2033	$177,309	$295,627	$118,317
2034	$180,355	$116,845	($63,510)
2035	$363,462	$118,088	($245,374)
2036	$186,630	$119,355	($67,275)
2037	$189,863	$120,648	($69,215)
2038	$193,159	$301,967	$108,807
2039	$196,522	$123,312	($73,210)
2040	$379,952	$124,684	($255,269)
2041	$203,451	$126,083	($77,368)
2042	$207,020	$127,511	($79,509)
2043	$210,660	$308,967	$98,307
2044	$214,372	$130,452	($83,921)
2045	$398,159	$131,967	($266,193)
2046	$222,022	$133,512	($88,510)
2047	$225,962	$135,088	($90,874)
2048	$229,981	$316,695	$86,714
2049	$234,080	$138,335	($95,745)
2050	$418,262	$140,008	($278,254)
2051	$242,526	$141,713	($100,813)
2052	$246,877	$143,454	($103,423)
2053	$251,314	$325,228	$73,915
2054	$255,840	$147,039	($108,801)
2055	$440,456	$148,885	($291,571)
2056	$265,165	$150,769	($114,396)
2057	$269,968	$152,690	($117,278)
2058	$274,866	$334,650	$59,783

SECTION IV: PROJECT COSTS

The engineer's preliminary opinion of cost, completed by KLJ, projects the cost of the project to be $9.3 million in $2024.

Exhibit 36: Project Costs

Item	Cost in $2024	
Soft Costs including Engineering Fee Subtotal (architectural design and detailing for code compliance, electrical and mechanical design, and finalization of the site design)	$	742,532
Construction Cost	$	7,425,320
TERO Fee (4%) and SWO Tax (5.5% of engineering and construction cost only)	$	705,405
Grant Administration (2% of engineering and construction cost only)	$	163,357
FF&E (includes furniture, security, lifts, etc. & 1 EV transit buses)	$	280,000
Education & Outreach	$	21,700
Total Project Amount	**$**	**9,338,314**

The Tribe is prepared to move forward with the construction of this project immediately upon final award of a BUILD FY25 Discretionary Grant funding. This project is scheduled for construction to begin in fall 2026 and continue through 2028.

Note that Residual Value and Maintenance Costs are considered contra-benefits, so are deducted for Total Benefits before Residual and Maintenance Costs.

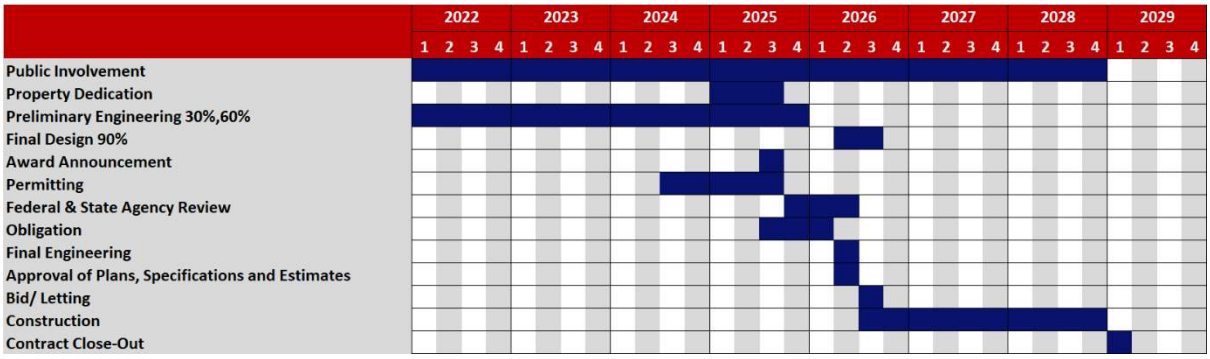
IV.A. PROJECT SCHEDULE

The Sisseton-Wahpeton Oyate (SWO) has long identified the need for the Project, however, due to the significant investment required for project construction, SWO has only recently added it to their transportation program. SWO began the initial planning process for the Project in 2022. Currently, preliminary engineering is at 40 percent. A preliminary building footprint, legal survey, wetland survey, cultural records searches, initial public engagement, and a preliminary site design have been completed. An additional period of public engagement, ROW dedication and environmental clearance

will be completed by end of October 2025. The project qualifies for NEPA clearance under a Categorical Exclusion. The remaining planning activities included in the grant application are fees for architectural design and detailing for code compliance, electrical and mechanical design, and finalization of the site design. The project will be bid in the Q3 of 2026. SWO anticipates a two-year construction period due to short construction seasons with winter months. Final design will be completed in 2025, and then structural construction will take place in 2026/2028. The overall timeline results in substantial completion and project closeout by Q4 of 2028.

- **Preliminary design** – Started in June 2022 will be complete in December 2025
- **Project listed in TTIP** – January 2024
- **NEPA process**: June 2024 – October 2025
- **ROW dedication:** February 2025 – October 2025
- **Stakeholder engagement:** January 2024 – November 2024 and April 2025 - October 2025
- **Finalization of grant agreement/obligation of grant funds**: June 2025 – March 2026
- **Final design**: March 2026 – September 2026
- **Construction**: September 2026 – December 2028

Exhibit 37: Project Schedule



IV.B. RESIDUAL

Exhibit 38: Residual Value of New Facility

Table 1. Useful Life			
Project Component	Capital Cost (2023 $)	Useful Life (Years)	Residual Value
Overall Project if One Component		20	$0
Transit Facility	$8,167,852	39.00	$1,884,889
Van Replacement	$180,000	4	$0
[Text Describing Project Component]	$0	0	$0
[Text Describing Project Component]	$0	0	$0
[Text Describing Project Component]	$0	0	$0
Total Residual Value			$1,884,889

The value of the project's State of Good Repair is based on the remaining value of the infrastructure after the 30-year analysis period.

In addition to the residual value of the Facility, there is a remaining life of the van that is recapitalized every 5th year.

Replacement Schedule - Current Vans paid for under other funding sources			
	No Build	Build	
2027			
2028		in service	
2029			
2030	$ 180,000		
2031			
2032			
2033		$ 180,000	
2034			
2035	$ 180,000		
2036			
2037			
2038		$ 180,000	
2039			
2040	$ 180,000		
2041			
2042			
2043		$ 180,000	
2044			
2045	$ 180,000		
2046			
2047			
2048		$ 180,000	
2049			
2050	$ 180,000		
2051			
2052			
2053		$ 180,000	
2054			
2055	$ 180,000		
2056			
2057			
2058		$ 180,000	
residual value in 2058	$ 45,000	$ 180,000	

Exhibit 39: Residual Value of Facility and the Van in 2058

Table 2. Residual Value

Year	Residual Value
2029	$0
2030	$0
2031	$0
2032	$0
2033	$0
2034	$0
2035	$0
2036	$0
2037	$0
2038	$0
2039	$0
2040	$0
2041	$0
2042	$0
2043	$0
2044	$0
2045	$0
2046	$0
2047	$0
2048	$0
2049	$0
2050	$0
2051	$0
2052	$0
2053	$0
2054	$0
2055	$0
2056	$0
2057	$0
2058	*$ 2,019,889*

This includes original capital cost and residual value of No-Build vs. Build Van replacement purchases every 5th year

Section V. Benefit Cost Summary

Exhibit 40: Benefit Cost Analysis Summary

Benefit Cost Analysis

Summary Matrix

Areas of Evaluation	Description	Inputs	Value 2023 dollars	Monetized Value Discount Rate 3.1%/ 2.0%
Safety	Reduced Pedestrian Fatalities	• Saving due to 50% decrease in Ped. Accidents due to access to efficient transit	$ 66,000,000	$ 36,542,549
Economic Competitiveness/Mobility	Travel Time Savings (transit drivers) & Travel Time Savings (daily winter traffic slowed by delayed snow removal)	• Reduction in 1,920 transit vehicle hours traveled (VHT) • Reduction in 231,400 vehicle hours traveled (VHT) by owning facility	$ 8,067,575	$ 4,361,965
	Vehicle Operation Cost Savings (transit)	• Reduction of 1.0 million transit miles saved by relocating the facility • Reduction of operating costs saved by owning facility	included in op and maint below	included in op and maint below
Emissions	Emission reduction due to reduced miles	• Reduction of 1.0 million transit miles saved by relocating the facility • Reduction of miles of emissions saved by EV van	$ 268,413	$ 178,101
State of Good Repair	Life-Cycle Costs - See Maintenance and Residual			
Total Benefits before Maint and Residual			$ 74,335,988	$ 41,082,615
Operations and Maintenance			$ 2,533,826	$ 1,373,369
Residual			$ 2,019,889	$ 693,864
Total Benefits			$ 78,889,703	$ 43,149,848
Total Cost			$ (9,066,325)	$ (7,903,471)
Net Present Value			$ 69,823,378	$ 35,246,377
Benefit Cost Ratio			8.7	5.5

Exhibit 41: Final BCA Results

Table 1. BCA Results

Category	Value
Total Discounted Benefits	$43,149,848
Total Discounted Costs	$7,903,471
Net Present Value	$35,246,377
Benefit Cost Ratio	5.46

A favorable Benefit- Cost Ratio is one that exceeds 1.0, indicating that the 30-year analysis of the benefits, life-cycle costs and residual value of the asset exceed the capital costs expended during that same time period. As Exhibit 40: Benefit Cost Analysis Summary shows the results of the Project's non-CO_2 Benefits when discounted at 3.1 percent, and the CO_2 Benefits when discounted at 2.0 percent this generates approximately $41.1 million in societal benefits before Operation and Maintenance costs of $1.4 million when discounted at 3.1 percent and a residual value of $0.7 million when discounted at 3.1 percent, for a total Benefits of $43.1 million.

Safety benefits are monetized in this analysis as a 50% saving in Pedestrian accidents. Thus, saving $66.0 million before discounting equivalent to $36.5 million when discounted at 3.1 percent. Savings in Economic Competitiveness and Mobility is calculated on Travel Time Saving related to maintenance of the Buses and the drivers needing to wait while the buses are undergoing those services, and the savings in hours of van users, van drivers, local auto occupants and truck drivers delayed due to snow removal activities for a savings of $8.1 million before discounting based upon faster snow removal and salt/ sand applications during winter road conditions and $4.4 million when discounted at 3.1 percent. Using the USDOT BCA spreadsheet model, Environmental savings is estimated to be $0.3 million before discounting and $0.2 when discounted at the respective 3.1 percent for non-CO_2 and 2.0 percent for CO_2.

Project costs are $9.1 million before discounting equivalent to $7.9 when discounted at 3.1 percent. The Benefit Cost Ratio (BCR) at 5.5 is estimated to exceed 1:1 with a Net Present Value of $35.2 million when discount at the respective rates.

When Pedestrian Safety is tested at a reduction of 25 percent fatalities versus the anticipated 50 percent the BCR is estimated to be 3.2.

Section VI. Non Quantified Benefits

As mentioned above there are many benefits associated with this Project that have not been monetized. These include:

- Improved Emergency Response time during winter conditions
- Jobs associated with the construction of the Project
- Additional future jobs related to the Tribe performing the Transit operations and future additional year round road maintenance activities that can be cost effectively performed out of the new Facility.