Colville Confederated Tribes Community Involvement & Citizen Participation Survey for CCT Transit



Authors:

Angelena Campobasso, MURP, MPA, Eastern Washington University (EWU) Small Urban, & Rural & Tribal Center of Mobility (SURTCOM) Program Manager 2019 - 2021, Eisenhower Transportation Fellow 2009 and 2011, NCST Fellow 2010, former EWU American Indian Business Leaders (AIBL) President & American Indian Science & Engineers (AISES) Vice President 2008- 2011

Dr. Dick Winchell, former Eastern Washington University (EWU) Director of Urban & Regional Planning, Eisenhower Transportation Fellowship Mentor, AIBL & AISES mentor, EWU Advisor

"In preparing for battle I have always found that plans are useless, but planning is indispensable." Dwight Eisenhower

Disclaimer

The contents of this report reflect the views of the authors and are disseminated in the interest of information sharing. This research effort is funded in part by a grant from the U.S. Department of Transportation's University Transportation Centers Program. However, the U.S. Government assumes no liability for its contents or use and the contents do not necessarily reflect the official views or policies of the U.S. Government nor do they reflect any endorsement.

Data Availability

The dataset for this report is available at: https://doi.org/10.5061/dryad.8w9ghx3ms

Abstract

The Colville Confederated Tribes (CCT) is a large reservation (1.4 million acres) the size of Connecticut, with slightly under 10,000 enrolled tribal members in 2021. Six small towns, rural HUD subdivisions and isolated homes create severe problems for access to transportation, especially for elderly, youth, economically distressed, and physically challenged populations. The design and operation of tribal transit on reservations represents a new phase in tribal transportation since 2008. In the rush to create transit systems, tribal transit planning has not always fully involved tribal members and citizens in system design, nor have there always been surveys to identify transportation issues and demand, and to assess the potential user views toward different types of transit. This project represents efforts to develop and carry out citizen awareness and involvement in the needs, issues and opportunities of transit for the CCT, and it developed and carried out a tribal transit comprehensive survey to create data that will support the final design and implementation of tribal transit for the Colville Confederated Tribes.

Table of Contents

Abstract	3
Introduction	8
1.0 The Colville Confederated Tribes' Transit Needs	10
1.1 Transportation and Transit on American Indian Reservations	12
1.2 Problem Statement	13
1.3 Methodology	14
1.4 Value of this Study	15
2.0 Transportation Issues for Confederated Tribe	16
2.1 Transportation on CCT: Defining the Problem	17
2.2 Roads v. Transit	21
2.3 The Colville Confederated Tribes' Population	21
2.3.1 Census Data: Residents on the Reservation	22
2.3.2 CCT Population Pyramid for Enrolled Tribal Members (2016)	22
3.0 CCT Transit Development	24
3.1 CCT Transit Research	24
3.2 Need for a Vision (Purpose)	25
3.3 Process and Goals for Transit Planning	26
3.4 The Tribal Transit Survey	26
3.4.1 The Survey Instrument	27
3.4.2 Survey Design Planning	27
3.4.3 Pre-tests	27
3.4.4 Human Subjects Review	28
3.4.5 Data Collection	28

3.4.6 Survey Assessment	29
4.0 CCT Transit Survey Results	29
4.1 Section 1: Introduction and Purpose of Transit Survey	30
4.2 Section 2: Persons per Household	30
4.3 Section 3: Family's Transportation Needs	35
4.4 Section 4: Perceived Transportation Issues	41
4.5 Section 5: Transit Usuage	42
5.0 The Decision for a CCT Transit System: Alternative and Criterion Matrix	59
5.1 Alternatives and Criterion Matrix Scoring	61
6.0 Summary of Survey Findings	62
References	65
Appendix A: CCT Transit Survey	66
Transit Survey Questions	67
List of Tables	
Table 1: CCT Census Population, 1990-2012	22
Table 2: Colville Tribal Affiliation: Results per district	32
Table 3: Survey question 13: How often do you travel for these services and about you travel for the following services?	
Table 4: How would transit best meet your needs? Top five results	45
Table 5: Alternatives and Criterion Matrix: How should the CCT establish a transit	system? 60

List of Figures

Figure 1: Map of Federally Recognized Tribes of Washington	.11
Figure 2: Colville Tribe's District Map	12
Figure 3: Colville Tribe's Transportation Map	.17
Figure 4: Map of Health Care Providers within the Colville Reservation	20
Figure 5: CCT Population Pyramid for Enrolled Tribal Members	.24
Figure 6: Survey Question (S.Q.) 1: Do you live on the Colville Reservation?	31
Figure 7: S.Q. 3: Are you a member of the Colville Tribe?	.33
Figure 8: S.Q. 5: What age group are you in?	.34
Figure 9: S.Q. 7: How many people in your household are over 65 years old?	.35
Figure 10: S.Q. 8: How many people in your household are under 20 years old?	.36
Figure 11: S.Q. 9: Do you drive a car?	.37
Figure 12: S.Q. 10: Do you have a driver's license?	38
Figure 13: S.Q. 11: Do you have insurance on your car?	.39
Figure 14: S.Q. 12: Do you often ride with someone else? If yes, how many times per week?	.40
Figure 15: S.Q. 14: What do you see as your biggest transportation problems?	.42
Figure 16: S.Q. 15: Do you drive more than two trips per day, to and from home?	.43
Figure 17: S.Q. 16: Do you travel to another district more than twice a week?	44
Figure 18: S.Q. 17: How would the transit system best meet your needs?	.46
Figure 19: S.Q. 18: Would you and members of your family use a transit system if provided?	.47
Figure 20: S.Q. 19: There are several options of a transit system, what would best meet your needs?	.48
Figure 21: S.Q. 20: What times of the day would you use a transit system?	.49
Figure 22: S.Q. 21: What season would you most use the transit system?	.50
Figure 23: S.O. 22: Which days would you use the transit system?	.51

Figure 24: S.Q. 23: If other transit systems in surrounding area were linked to the CCT Transit System, would you use connecting transit to reach outside areas?
Figure 25: S.Q. 24: What surrounding communities would you want CCT Transit System to cover?
Figure 26: S.Q. 25: If a transit system fee were charged, would you be willing to pay?
Figure 27: S.Q. 26: For long distance to be traveled, if a "Park-N-Ride" (parking lot to leave your vehicle) was offered, would you then use transit?
Figure 28: S.Q. 27: Do you think CCT Transit System should have access to current/future bike paths and pedestrian paths on the reservation?
Figure 29: S.Q. 28: While commuting on the CCT Transit System, do you think there would be cause for concern about safety issues?
Figure 30: S.Q. 30: Do you think a transit system would be asset to your community?58

Introduction

The federal legislation for transportation changed dramatically with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. In 2012, Moving Ahead for Progress in the 21st Century Act (MAP 21 – Public Law 112-141) was authorized by President Obama (U.S. Dept. of Transportation, FMCSA, www.fmcsa.dot.gov Feb. 2016). In 2015, President Obama authorized under Federal Transit Administration (FTA), the funding for Fixing America's Surface Transportation (FAST) Act (https://www.transit.dot.gov/FAST), which authorized funding until Fiscal year 2020. In 2021, the new Biden Administration has introduced a Transportation Bill of \$2 trillion dollars to improve the United States transportation system with cleaner and greener jobs. In turn, this would create more sustainable, resilient, environmental friendly jobs, by reducing fossil-fuel usage, and producing vehicles, transit, and transportation services with electric and solar powered engines, hence reducing methane and fossil-fueled contamination, and so much more by year 2030 to reduce and slow down the effects of Climate Change. (npr.org/2021/03/31/982908847/biden-set-to-unveil-expansion-2-trillioninfrastructure-plan). Over the past 30 years, these funding sources have been applied to America's Transportation and Transit projects and services for Tribes and the United States of America's transportation administration, programs, and transportation systems.

American Indian Tribal governments are recognized as active partners with federal and state agencies in transportation planning and related programs. This expanded to transit programs and administrative changes through the FTA, and the tribal transit programs have rapidly expanded within the last ten years. A Transportation Research Board (TRB) study, *Developing, Enhancing, and Sustaining Tribal Transit Services, the Final Research Report and the Research Report and Guidebook, TCRP Project H-38* (Stoddard, et al. 2012) is an important resource for

tribal transit. The TRB Studies document the extent of tribal transit program growth and assess good transportation planning in relation to the needs of reservations. Additionally, it is important that research describing transit planning includes the need for a vision for tribal transit and for citizen involvement and community participation in all aspects of transit design.

Transit has become a critical new component of American Indian tribal transportation planning and program development. However, it is still funded through separate sources and not fully coordinated within Tribal Transportation Program Coordination Committee (TTPCC), formally known as the Indian Reservation Roads Program or IRR. Tribal transportation planning and transit programs for tribes maintain separate funding set-asides and program support systems. The actions of the FTA following recent legislation have recognized that tribes are eligible for transit programs and have tremendous unmet needs. Transit programs are of major importance as tribes address their full range of transportation and access issues. Transportation planning has recognized that continued poverty, the aging of population across Indian Country and the increasing population all impact transit need. Moreover, as the U.S. planning profession recognizes Smart Growth and New Urbanism for connected urban and community systems, American Indian reservations remain some of the most isolated, auto-dependent populations in the nation. Both elderly and youth are under-served, and demand for transit is increasing across rural areas, but especially for large, isolated, low-density reservations.

Funding for tribal transportation is available through federal transit programs, and in 2012, eleven tribes in Washington State split \$1.696 million in federal grants to improve transit service on tribal lands. Under the FTA's Tribal Transit Program during FY 2010, all twenty-nine federally recognized tribes of Washington were eligible to apply for \$16,392,863 in FTA Tribal

Transit funding. In 2010, Washington tribes were awarded \$3,277,995 in tribal transit grant funding.

In 2013, a new federal transportation act passed, "Moving Ahead for Progress in the 21st Century" (MAP 21 Initiative). The MAP 21 Initiative has doubled that figure to \$30,000,000 for tribes of the United States. MAP-21 modifies the Tribal Transit Program and provides \$25 million for formula allocation and \$5 million for discretionary allocation in each of fiscal years 2013 and 2014. This is a continued effort to strive for tribal transit projects to exist and to support tribes in their endeavors to create transit facilities for their tribal governments. As the Colville Tribe is a federally recognized entity, this government is to provide an adequate transit system for its residing members and community.

1.0 The Colville Confederated Tribes Transit Needs

There are twenty-nine federally recognized American Indian Reservations within Washington State, including the Colville Confederated Tribes. The Treaty of 1872 established the Colville Confederated Reservation (See Figure 1).

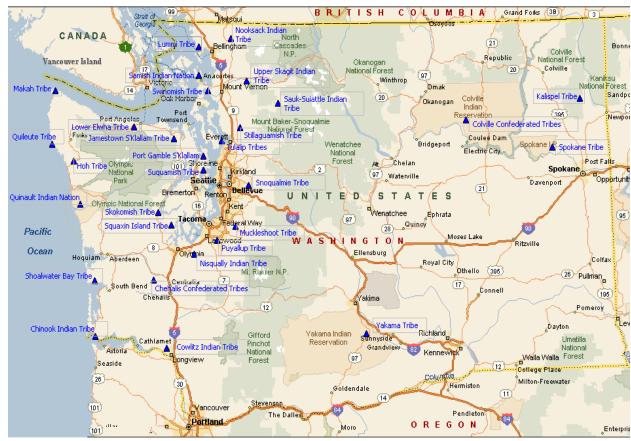


Figure 1: Map of 29 federally recognized tribes within Washington State

Map Source: Washingtontribes.org/the-tribes-of-washington, 2009

The Colville Confederated Tribes occupy a rural, isolated region in Central Washington with over 1.4 million acres, approximately the size of Connecticut, but with less than 10,000 enrolled tribal members. The tribe is divided into four districts (see Figure 2), each with a small urban-center and a small health-care facility. Despite great distances and many who commute to work by driving more than one hour each way to access urban services, there currently is no public transit-system that serves the entire reservation. There is limited public transportation access to a number of services including health care.

The Colville Confederated Tribes Reservation is approximately 100 miles from east to west and 60 miles from north to south (See Figure 2). The map shows the borders of each district: Omak, Nespelem, Keller, and Inchelium. The bottom left corner displays a 50-mile

radius area for which the Indian Health Care (I.H.S.) policy must cover tribal enrolled members with health-care. In addition, transit should be provided to this 50-mile radius area all along the borders of the CCT reservation due to lack of housing and job opportunities for tribal members who also reside in this area.

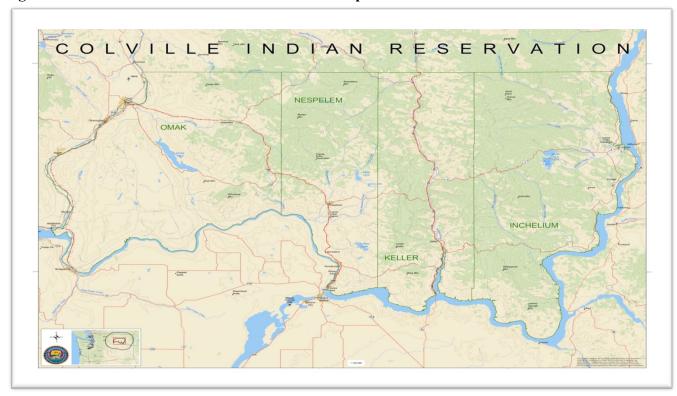


Figure 2: Colville Confederated Tribes District Map

Map Source: Colville Confederated Tribes Map created by the late Colville Tribal member Randy Tonasket, and Angelena Campobasso, 2009

1.1 Transportation and Transit on American Indian Reservations

Prior to Anglo contact, approximately 500 sovereign nations within the United States territory had established their own complex and successful cultures. After contact with Europeans, these sovereign people fought the arrival of foreigners through war. Diseases quickly spread and killed many Natives, and through dispossession of land/rights, resulting in severely

reduced tribal populations. American Indian tribal lands were often isolated from the ports and Anglo settlements that developed after contact, but even those European-based roadways and transportation systems tended to follow the earlier transportation routes. The roads on or leading to reservations were managed for most of the 19th and early 20th century by the Bureau of Indian Affairs (BIA), which followed roadway systems that had evolved from the paths and roadways on the American Indian reservations. The BIA was the only source for transportation funding on reservations for the construction, development, and maintenance of those roads. Historically, transportation on Indian Reservation has always been underfunded. The BIA program did not fully address all transportation needs, but emphasized the roads system, and particularly the BIA roads program.

Transit programs are of major importance as tribes address their full range of transportation and access issues and problems through transportation planning. Access to transportation, made worse by large distances and relatively low populations, recognizes that continued poverty, large numbers of youth, unemployed, disabled populations, and growing elderly populations across Indian Country all impact great transit un-met needs and demands.

American Indian reservations remain some of the most isolated, auto-dependent populations in the nation. Both elderly and youth are under-served, and demand for transit is increasing across rural areas, but especially for large, isolated, low-density reservations.

1.2 Problem Statement

The purpose of this research paper is to assess the complexity of tribal transit programs, including special needs for health and human services, special populations, and access for public transit, as well as the principles of good transit planning. Important components of good planning are citizen involvement and awareness of transit system issues, design, and operation. A survey prior to the design of a transit system is important, and this project is a two-fold effort to: 1)

provide a presentation on tribal transit and transit systems to citizens on the Colville Reservation; and 2) to conduct a survey of current transportation practices, demand for transit, times people would use transit, and public input about the system.

The tribal transit survey will address the issues and special needs of the tribal residents.

Based on a survey and informational presentation, the survey will be able to identify current transportations patterns and uses, critical issues, most valued aspects for transit, and potential for transit use.

1.3 Methodology

This transit study began in 2008 when the CCT had just created a PL 93-638 contract for all transportation programs and services under the tribal government. The contract established a tribal member as director/engineer, after many years of reliance on the Federal Highway Administration (FHWA) for funding. The BIA Tribal Transportation Program Coordination Committee (TTPCC) provided transportation services to areas with less active tribal participation. Over the next few years, the Colville Tribal government again restructured transportation programs giving some authority back under the BIA, with a stronger emphasis on roads and less support for transit as part of the CCT transportation programs. This Eisenhower Research Project was initially begun as part of the CCT planning for transit system development, but over time became a separate independent process that is hoped will support continued development of a tribal transit program.

Using the Community Development model within the urban planning literature, it was determined that many tribal members have not given much thought to how a tribal public transit system might work. Instead of just a survey, a short presentation about tribal transit including examples from nearby tribes was designed for public presentation. A comprehensive survey was

developed, tested and approved, distributed, collected, and analyzed. The initial research design was to complete four presentations with surveys in each district. Because of time, only one presentation and tribal transit survey questionnaire was conducted for tribal members in Keller. A second meeting in Nespelem was held and because of a very low turn- out, the survey was later delivered via email to CCT tribal headquarters. Keeping in mind that CCT tribal employees come from all four districts, this is a good estimate of all the tribal people's needs. This electronic distribution of the survey to CCT tribal employees produced 135 additional surveys, bringing the total returned surveys to 195.

A detailed survey was developed based on other tribal transit surveys. Since the initial project was to work within the tribal transportation department, the author carried out tribal requirements for human subjects review and survey research within the tribe. The survey received tribal approval for use on the CCT reservation by the CCT research review board. The CCT Tribal Business Council (tribal government elected leadership) and tribal staff also reviewed the survey instrument and strategy for data collection. The results from the survey were shared with the CCT Council and Tribal Transportation Planning staff. At the end of January 2012, all research was presented as a poster at the National Transportation Research Board Conference. The presentation completed the Eisenhower Transportation Research Board requirements, along with a final report submitted to the Eisenhower Fellowship Program in the summer of 2012.

1.4 Value of this Study

There is a great need for public transit on many reservations. With only a few years of tribally controlled transit operations, there is little understanding of transit practices that include the proper planning and design, involvement and awareness of the public, and the use of surveys

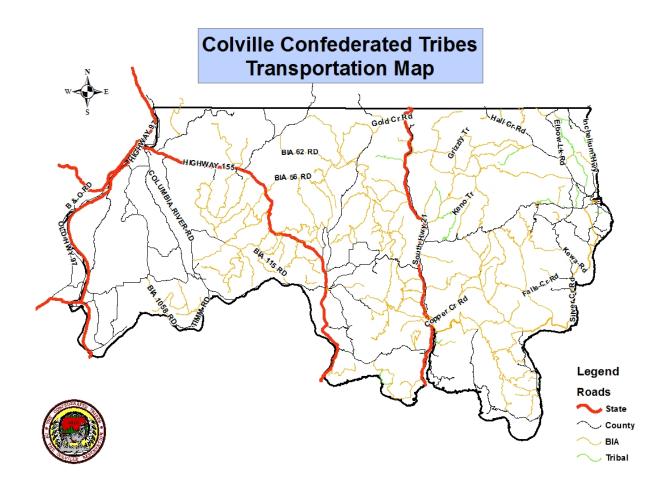
to identify critical issues that are very important. This survey instrument brought hope in that thorough citizen involvement and awareness of the results will assist in on-going CCT tribal transit planning and serve as a resource for other tribes.

2.0 Transportation Issues for the Colville Confederated Tribes

Highway infrastructure on the Colville Confederated Tribes consists of 1,574.9 miles of roads, 525.7 miles of county roadways, and 183.3 miles of state highways (See Figure 3). Of the 1,574.9 miles of roads, approximately 790.4 miles are maintained by the Bureau of Indian Affairs (BIA), of which there are 512.2 (388.6 Bituminous >2." 123.6 Bituminous < 2." miles of paved road, about 263.3 miles of gravel roads, 702.5 miles of earth roads, 2.2 miles of proposed road, .3 miles of concrete road, and 94.4 miles of primitive road (Colville Confederated Tribes Long Range Transportation Plan (LRTP), 2019. p. 66). State Highway 21 traverses the reservation from the state run Keller Ferry in the south to the reservation boundary approximately 40 miles north. State Highway 155 travels from the Grand Coulee Dam north to Colville Indian Agency and Nespelem, then northwest to Omak. There are approximately 54 miles of SH 155 on the reservation (FHWA, Tribal Transportation, 2008). Some of these roadways are significant corridors for reservation commuter and commercial traffic. Daily miles traveled to and from work on the Colville Reservation range from 11-100 miles. This comprises international truck traffic from Canada, and a significant amount of seasonal recreational traffic. There are 60 logging trucks, which take approximately 100 trips on reservation roadways daily. There are another 100 commercial trucks operating daily on the reservation in the agricultural industry and commercial trucking. Additional factors that contribute to the motoring environment within the Colville reservation include the operation of two gaming facilities that

increase the daily traffic volumes. Seven public schools are located on the reservation and immediate surrounding areas (Clark, 2008). This background information allows planners to identify what additional factors contribute to the safety issues within a reservation especially if the accidents were not reported (Sourced: colvilletribes.com website, 2009).

Figure 3: Colville Confederated Tribes Transportation Map



Map Source: Created by the late Colville Tribal member Randy Tonasket, 2009. Colville Confederated Tribes Transportation Map identifies State, County, BIA, and Tribal roads within the reservation and which party is responsible for the maintaining of these roads.

2.1 Transportation on the CCT: Defining the Problem:

Currently, the Colville Confederated Tribes has a public transit system in place that is serving all four districts, with a Memorandum of Understanding (MOU) in place with Okanogan

County's Transit and Nutrition (OCTN) to service the Omak to Coulee Dam route. In 2017, as the Senior Transportation Planner, I applied for and was awarded the FTA Grant and this funding has allowed the Tribe's Department of Transportation (CCT DOT) to purchase six new transit buses for Inchelium, Keller (Keller Route to Nespelem/Inchelium began 2018), Omak, and Nespelem District routes and continue transit operations for the tribe.

Many commuters travel great distances to work (a drive of more than one hour each way), with similar distances for urban and some basic services. Despite these long distances, there is a lack of transportation access across the rural reservation, especially for elderly, youth and those needing health care and other services. However, there is a tribal-shuttle-system established by the Colville Tribal Enterprise Corporation (CTEC) to provide casino workers travel access to tribal jobs on and off the reservation. This tribal-shuttle-system is only for casino employees and offers transport to the Mill Bay Casino and back to the reservation. The tribal-shuttle-system connects the Mill Bay Casino with tribal facilities at Omak, Nespelem, and Coulee Dam, a distance of over 100 miles each way. Census data in 2000 indicated a ridership of 495 people on this system. This high ridership rate indicates the potential for a well-designed transit system to serve the public transportation and access needs for the whole reservation.

During the past eight years, however, the tribe has identified access to transportation services to address transportation demand in the form of a tribal transit system to be an important tribal priority. Like many reservations, this effort to plan for transit follows a tendency to address transit using only a fixed-route bus line model to serve the reservation. Tribal transit design has often not fully explored alternatives or demand in the initial development of the transit system. Alternative transit systems services have generally evolved based on feedback and experience in providing transit, and often fail to examine alternatives that could allow for a combination of

systems including demand-based rather than fixed route (Source: TRB Studies, Stoddard, 2011, 2012).

Health care is a critical service on the Colville Reservation because of the distances and isolation of many of its residents, high levels of poverty, and lack of services or access to services. The tribal community that is NOT employed by the CCT has less access to public transportation or to health care services. There is a lack of walking opportunities and great isolation of individual families and residential areas from community facilities and services.

The importance of direct access to health care was demonstrated by the tribe's establishment of four critical health care facilities in each of the districts. As a tribal planning staff member and grants administrator from 2002 to 2005, I assisted in the development of grants and implementation of local health care facilities under the Health Facilities Project through the Planning Department of the tribe. The CCT Council established a critical care center in each of four isolated districts to provide healthcare services to the communities within the reservation boundaries. The clinics were designed and planned from 2001 to 2002, construction completed in 2005. Since then, there have been major improvements in critical health care across the reservation because of these facilities, but the facilities could gain higher use and value within the community if linked to a public transit system (See Figure 4 below).

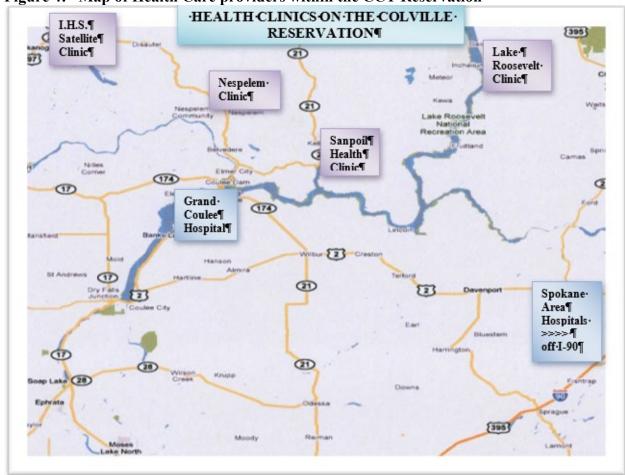


Figure 4: Map of Health Care providers within the CCT Reservation

Map Source: Created by Angelena Campobasso, 2009 to demonstrate medical-service (clinical care) distance on and off the reservation. Hospital services nearing 100 miles distance from the reservation.

The tribe has made major investments in health care facilities in each district.

In 2005, the completion of the Nespelem Clinic, Lake Roosevelt Clinic, and Sanpoil Clinic became a reality. The I.H.S. Clinic in Nespelem after 150 years of service is now a historical monument and was originally built by BIA under a treaty agreement to provide health care to the tribal members for land exchange. Lake Roosevelt Clinic replaced the old Inchelium Clinic and is now a community-based facility that serves both tribal and non-members. The Sanpoil Clinic is a welcome, new facility, and provides Keller community with a telemedicine service as well as meeting the needs of all clinical services and dentistry. Without the new Sanpoil Clinic, Keller

residents had to travel more than 60 to 100 miles one-way for healthcare services. Tribal health programs are also housed in the Lake Roosevelt Clinic in Inchelium, Washington and Sanpoil Health Clinic in Keller, Washington.

2.2 Roads v. Transit:

Historically, Tribal Transportation initiatives have been focused upon roads. The Tribal Transportation Program Coordination Committee (TTPCC) includes all public roads on or leading to the reservation. These roads can be owned or controlled by the Bureau of Indian Affairs (the BIA (TTPCC)), which historically dominated tribal transportation planning through regional and district BIA Roads Engineering-staff, by the federal, state or local jurisdictions, and by the Tribal Government. Transportation is an important element of planning for the total transportation infrastructure of the Colville Tribe. Since the Inter-modal Surface Transportation Efficiency Act of 1991 (ISTEA), other modes of transportation including pedestrian and bicycle; plus scenic byways and "enhancement" projects; concern for cultural and historically significant artifacts and preservation; and involvement of tribal governments and American Indian people in all aspects of all federal, state, and tribal planning are mandated. Subsequent reauthorization bills have continued to expand tribal rights, increase funding, and recognize greater authority in planning and decision-making for tribal governments.

2.3 The Colville Confederated Tribes Population

The most current Census data was collected from the Census website in 2019 of all residents who lived on the Colville reservation during that time. The 2020 Census data for the Colville Tribe has not been fully processed at this time for accurate population data (census.gov, 2021). In addition, a population-pyramid of the Colville Tribes enrolled members was created in 2011. Both pieces of data need be looked at to identify the current and future populations for this

tribe.

2.3.1 Census Data: Residents on the Reservation

The 2010 population for the Colville Confederated Tribes was 7,687, with 60% of those residents American Indian, according to US Census Bureau data (See Table 1). There are slightly fewer than 10,000 enrolled members of the Colville Confederated Tribes, so over half of those live off the reservation in the surrounding communities, or in more distant urban centers including Seattle, Spokane, Yakima, and many others. As the tribe has become successful at creating jobs and housing, as well as access to services, the total reservation population and the population of American Indian/Alaskan Natives have increased from 1990 to 2010. Many tribal enrolled members would move back to the reservation if there were adequate jobs, services, education and other amenities.

Table 1. CCT Population, 1990-2012

	1990 Pop	1990 AIAN	1990% AIAN	2000 Pop	2000 AIAN	2000% AIAN	2010 Pop	2010 AIAN	2010% AIAN
Colville									
Confederated Tribes, WA	7034	3779	53.70%	7598	4479	58.90%	7,687	4,616	60.00%

2.3.2 CCT Population Pyramid for Enrolled Tribal Members (2016)

A second resource for transit planning is the analysis of population by age and sex in the form of a population pyramid. Enrolled membership is important as a reflection of the long-term population changes that may be expected. Male population totaled 4,552 and female totaled 4,873; the combined enrolled tribal population came to 9,425.

The population pyramid shows fewer young people (under age 20); that may be caused by not all young people applying for tribal membership or being eligible for tribal membership in the tribe (blood quantum), and not as many young adults having babies. The pyramid also shows larger populations approaching retirement age, which would reflect an aging population over the next twenty years. Aging tribal membership that had previously lived off reservation, usually do return during the elderly stage of life. This would increase the elderly population and their needs. Additional analysis of 2000 and 2010 reservation populations should be included to explore current and potential demand by age for transportation.

This population pyramid data shows the true tribal enrolled members by age and sex. Due to cooperation of the Colville Enrollment Department, for the sake of the enrolled tribal population counts for the Colville Nation, this population pyramid was produced. These counts do not compare at all to the census population. Once again, only half of the enrolled tribal population actually resides within reservation boundaries (See Figure 5 below).

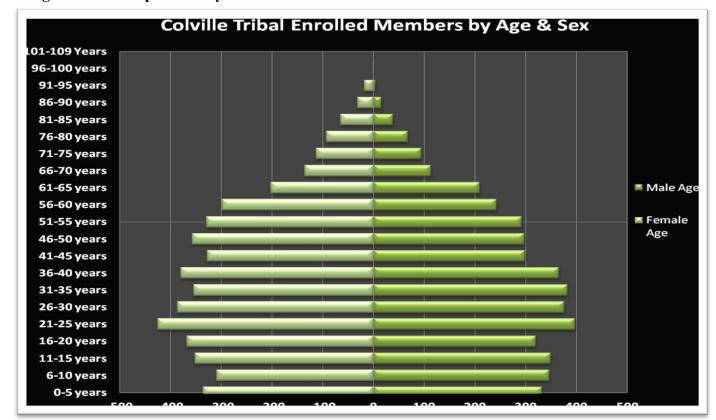


Figure 5 CCT Population Pyramid for Enrolled Tribal Members

Source: Colville Tribe Population Pyramid created by Angelena Campobasso, Colville Tribe's Enrollment numbers 2010

3.0 CCT Transit Development

Transit research identified a need for roads with adequate access and that there was a lack of transit funds until 2008. A review of the census data revealed that many older people (who had been living off of the reservation for most of their lives) return to the reservation if they are in need of healthcare and then subsequently would need a transit system.

3.1 CCT Transit Research

The research efforts for this project began in earlier studies, one that assessed the need for transportation to address transportation access to health care district facilities on the Colville Reservation (Campobasso, 2010), and a second research effort to address the special needs for

youth, elderly, and the underserved populations for transit (Campobasso, 2012). Both pointed to a lack of community awareness and understanding of tribal transit potential. Both also pointed out critical needs for special populations that could not be identified simply by analysis of existing data. It was determined that a survey was very important as a basis for transit, and that data from the survey would provide important and much needed information for transit planning.

The idea of a survey within community contexts stems from community development literature and courses in urban planning (Winchell, 2008). Surveys are not just to extract data for data analysis, but they can also be tools to educate and involve community residents in critical planning issues. That is definitely the case for transit for the Colville Reservation. As a result, instead of just a survey, it was determined that the survey design would include a background presentation about transit and especially tribal transit systems, explaining what tribal transit is and giving examples from nearby tribes as to how their transit systems work.

Additional resources became available near the end of this study through several products in a Transportation Research Board (TRB) research study (Stoddard, et al., 2011). In Stoddard's document of Developing, Enhancing, and Sustaining Tribal Transit Services Preliminary Draft Final Guidebook, Chapter 5, Developing Transit Vision, Goals and Objectives, in order to determine a vision for transit service a SWOT Analysis should be performed. This is a process of understanding your strengths, weaknesses, opportunities, and threats (SWOT). The SWOT process is one of the first steps in developing a vision towards a transit system.

3.2 Need for a Vision (Purpose)

The following goals towards a vision for the transit process were designed to keep in mind the best way to address the Colville Tribes Transit needs. By informing the public through the presentation and survey process, the community could give their opinions and at the same time,

inform the Colville Tribe of their needs. This goal process can assist tribal council, transportation planners, planners, and all stakeholders involved towards a vision of a transit service. This goal/vision process will assist in moving forward the process of attaining, administrating, and monitoring an additional and complete transit program for the tribe. The need for a vision gave way to survey and insight.

3.3 Process and Goals for Transit Planning

The steps for good transit served as the initial framework for this project.

The goals of this project were to:

- ➤ Identify the need for transit
- > Create a visioning process towards a transit system;
- Inform the public about transit through a community participation process;
- > Design, gain approval for the survey instrument, and carry out a transit survey by district;
- ➤ Complete analysis of the survey and related findings to create a power-point and report as a resource to the tribe;
- ➤ Work with Tribal Council & Planning/Transportation staff to use the findings
- Examine the data findings in terms of alternative transit system design by district

3.4 The Tribal Transit Survey

With these broader purposes, although the effort would carry out a comprehensive survey, it was determined that the community context and engaging the residents of each district not only in the survey but also in a presentation on transit would be most valuable. The value of the survey is to make residents aware of transit planning that was on going, to provide mechanisms for discussion and input, AND to create data from the survey.

This is NOT a statistically representative sample; an alternative survey design would be needed for a detailed statistical analysis. The survey was designed instead to reach as many people as possible within each district, and to create a description of the responses. This type of survey of those present at a meeting does produce valuable information about those who

represented the community. For Keller, 60 responses from a total population of around 600 does offer a good representative response, and while not statistically representative, the sample size is adequate as a general assessment of community values. Likewise, for the Nespelem area, the results from the meeting and from the electronic distribution of the survey are not statistically representative of the population, but are an adequate response to be of value in describing the communities.

3.4.1 The Survey Instrument

It was clear that a detailed survey would have to address several general topic areas. Several transit surveys were identified from the literature, as well as a survey carried out by another EWU planning student for an adjoining tribe (Bird-Radford, 2008). Development of the survey included several series of reviews by Richard Rolland, NW TTAP; Dr. Dick Winchell, EWU faculty advisor; and Mr. Mark Wagner, EWU statistician and survey researcher.

3.4.2 Survey Design Planning

The survey was designed around five key sections:

- 1) Introduction to the survey and its purpose;
- 2) Overview of transit presentation
- 3) Questions about the respondent and their family (background)
- 4) Questions about current transportation usage and needs
- 5) Questions about perceived transportation issues, and detailed questions about their potential use, needs, and times/types of service.

3.4.3 Pre-tests

A series of pretests and redrafting of the survey led to a comprehensive survey instrument.

A series of pre-tests were sampled with the survey to determine if it was asking the questions in a way that residents could understand. Is the survey asking questions that contribute to knowledge to aide in transit design? Is it an effective and efficient design? Both transportation officials and tribal residents participated in pre-tests, then review and changes were made to increase the effectiveness of the survey.

3.4.4 Human Subjects Review

The survey instrument and its design are subject to approval by the Colville Confederated Tribes as a research project on the reservation to protect the human subject rights and the rights of tribal culture so research is acknowledged as appropriate. The draft survey and process were documented and submitted to the tribe's research review process, and were approved after some changes.

3.4.5 Data Collection

Initial design of the survey was designed to be carried out, centered around four district meetings, and linked to some regular event where large numbers of local residents would be present. In the end, two such sessions were held, one in Keller, and a second in Nespelem, which was supplemented by electronic distribution of the survey to all tribal employees at the Nespelem tribal headquarters. Due to time and costs for travel, no additional meetings/survey sessions were scheduled, but for more comprehensive data assessment, it is felt that transportation issues will differ by district, and that there would be value in collection and analysis of data by district as well as by the total samples combined. The survey and power point presentation that were used were also presented prior to these sessions to the Tribal Business Council for comment and support.

On August 5, 2011 in Keller, Washington, the first transit survey was conducted. The Keller District had its annual "Senior Meal Site Dinner," with a Hawaiian theme. It was estimated about two-hundred community members had attended, mostly the elderly. The author gave an informative power point presentation to the audience about tribal transit and how other tribes' transit systems have been working. The presentation was followed by a paper transit survey to be filled out by community members in attendance. Approximately sixty transit surveys were completed and returned from Keller.

One month later, a public meeting was held in the Nespelem District to inform the Colville tribal residents through the same power point presentation and transit survey process. Due to low turnout for the Nespelem meeting, a month later, a transit survey questionnaire was approved by Colville Tribal administration to be sent via-email to the Colville Tribal employees. The sixty CCT Transit Surveys received from the Keller District, along with an additional one-hundred and thirty-five surveys from the Nespelem District via email resulted in one-hundred and ninety-five surveys collected from the two districts.

3.4.6 Survey Assessment

From the Keller District, initial assessment results were compiled and presented in a poster- session at the National Transportation Research Board (TRB) Conference in Washington, DC, which was held on January 2012. Expansion of this assessment includes all survey responses that were formalized and represented in the following section.

4.0 CCT Transit Survey Results

Data had been collected at two meetings and through an email survey to tribal employees.

The first meeting was in Keller, Washington during the Annual Senior Dinner on August 5,

2011. The second meeting was in Nespelem on September 5, 2011 at the Nespelem Community

Center. Since there was a small turnout, it was decided to follow up with an email survey with the tribe one week later.

Several techniques were used to speed analysis of the data. In the end, the author completed separate descriptive data analysis for each question, which represents the results of the two district data sets combined. The following data is of the CCT Transit Survey, with a total sample size of 195 surveys.

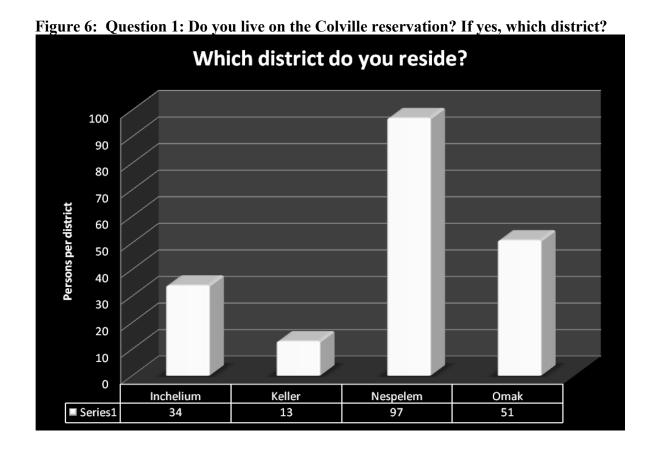
4.1 Section 1 of the CCT Transit Survey: Introduction and Purpose of Transit Survey

The author introduced herself by her tribal heritage and background of where she grew up within the reservation. This established trust with the tribal community, as the author was also an enrolled member of the Colville Tribe. She informed the tribal community where she attended college and explained her study in Urban and Regional Planning and in Public Administration. The author then introduced the idea of a transit system that would be researched for the Colville Tribe. The purpose of this meeting was to perform a public survey through their cooperative participation that would identify the community's needs. This would then lead to analysis of data into a final report that would be given to Colville Tribal leaders, transportation planners, and the Colville Tribe's planning department.

4.2 Section 2 of the CCT Transit Survey: Questions begin with person/s and their households: How many tribal members live per district? Nespelem and Omak are the largest districts of tribal member residents. Another point that came to our attention, if not residing within reservations boundaries, where and why do they live there? According to a 50-mile radius of the reservation, tribal members resided in those areas due to lack of housing and jobs. Being a Colville Tribal member is taken into account as well as the age group to which people belonged. How many people live in your household and the adults per child ratio indicate that the Colville

Tribe does have an aging population that would need transit.

Question 1: This question intended to establish how many people live in each district. The graph clearly shows that there is a larger population base in Nespelem and Omak Districts. These districts are followed by Inchelium, which is a more frontier area, and then last by Keller area, which is off Highway 21. Keller District is just 60 miles from the Canadian border, but Keller is also an isolated area, with very dangerous driving conditions in the winter months (See Figure 6 below).



Question 2: If no, where do you live?

Some of the participants who completed the CCT Transit Survey responded that they lived in the 50-mile radius surrounding the Colville Reservation. Brewster, Okanogan, Mallot,

and Republic were the towns located close to each of the four districts. Tribal members are eligible for I.H.S. Health Coverage, as long as they live within a 50-mile radius of the Colville Reservation. Access for the CCT Transit System should consider coverage of this 50-mile radius that I.H.S. health care covers for adequate preventive medicine and health care needs. Access to transit to meet preventive medical and health care is addressed in the transit survey (See Figure 4, Map of Health Care providers within the CCT Reservation). Lack of jobs and adequate housing are also factors to consider for including the additional 50-mile radius transit coverage.

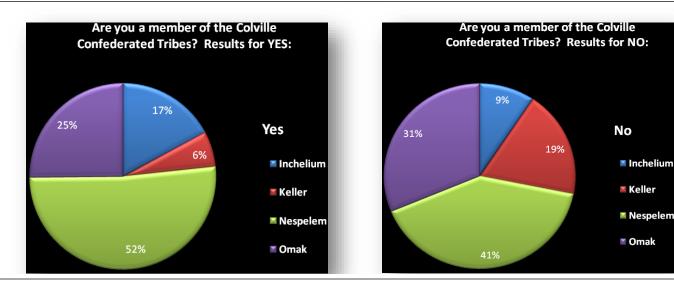
Question 3: Are you a member of the Colville Tribe? Yes/no results per district.

With all 195 surveys tallied, Nespelem will always have the largest totals due to the fact that Nespelem District is the largest district. Omak District comes in second followed by Inchelium and then Keller. Surprisingly, Keller has almost just as many non-members as it does enrolled tribal members living in Keller District. Out of the 195 participants, 10 Keller respondents were tribal enrolled members and 6 were non-tribal members. Nespelem District had 84 out of 195 participants that are enrolled tribal members. 13 additional participants in the same district are non-tribal members. Omak has 41 members out of the 195 surveyed that are tribal enrolled members, and 10 of the additional participants claimed to be non-tribal members (See Table 2 and Figure 7 below).

Table 2. Colville Tribal Affliation results per district

	Yes		No
Inchelium	28	Inchelium	3
Keller	10	Keller	6
Nespelem	84	Nespelem	13
Omak	41	Omak	10
Total:	163		32

Figure 7: Question 3: Are you a member of the Colville Tribe? Yes/no results per district



Question 4: Some other tribe or not enrolled?

All participants that answered "yes" to question three were obviously enrolled Colville Tribal members. All who said "no," were non-tribal members or from another tribe. The following were the additional listed tribal members of another Nation residing on the Colville Reservation: Northern Cheyenne, Northern Cree, Black-Feet, Shoshone Bannock, and French-Canadian tribes.

Question 5: What age group are you in?

Among the 195 participants, the age groups with the largest number of respondents were 36-45 (29%) and 46-61 (26%). Ages 21-35 years came to 20% followed by the oldest age group 76-90 at 9%. This was surprising to find that most of the respondents were middle aged on the way to elderly age, with a small percentage of younger adults.

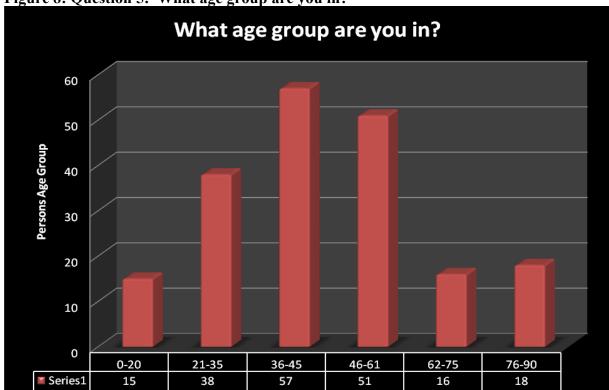


Figure 8: Question 5: What age group are you in?

Question 7: How many people in your household are over 65 years old?

From 195 surveys, only households that actually had a person of 65 or older answered question number seven. Omak district showed that 37% of its households had a person/s of 65 years or older living in the home. Nespelem district came in second showing that 36% of its residents had an elder person 65 years older residing in the home. Keller district came in third at 12% of its residents having an elder person of 65 or older residing in the home. Inchelium district showed 15% of the households had a person 65 or older living in the home.

The respondents represented a high proportion of elderly 65 years or older living in a single person household or with family. If an elder person lives alone, this person may not have a car, or cannot see clearly enough to drive. Family members may not be able to drive the elderly person to their doctor appointments or just clearly not be able to meet the needs or have access to

an automobile due to a one-automobile home. Lack of car insurance or the lack of access to a vehicle is preventing adequate services to this elder population (See Figure 9 below).

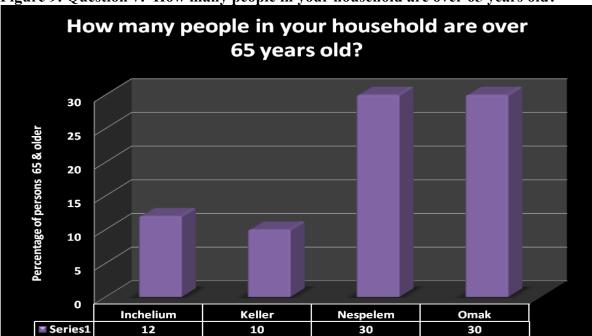


Figure 9: Question 7: How many people in your household are over 65 years old?

4.3 Section 3 of the CCT Transit Survey: Family's Transportation Needs:

A key issue in transit design is what types of transportation travel and need for travel exist within the community. This section describes responses on family transportation need, especially seeking information about special needs.

Question 8: How many people in your household are under 20 years old?

For the 195 people responding to the survey, 187 had youth under the age of 20 in their families. This reflects the tribal culture and extended families. (See Figure 10 below). Due to persons being under the age of 20, usually these younger adults do not have a license, car, or insurance to drive and would need a transit system in place.

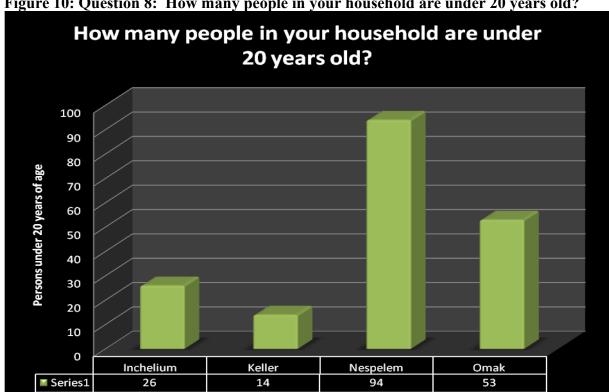


Figure 10: Question 8: How many people in your household are under 20 years old?

Question 9: Do you drive a car?

Within four districts, out of 195 participants, 183 persons own a car. It is imperative to have a vehicle for transportation on the Colville Indian reservation to meet basic needs. Only 12 members who took the survey did not own a vehicle. If these persons who own vehicles decided to commute (to use transit to work 5 days a week), there could be important savings in gas money, car insurance, fuel consumption, maintenance bills, envionmental pollution, and driving time (See Figure 11 below).

Do you drive a car? Reservation-wide responses indicated: 7% Yes ĭ No 93%

Figure 11: Question 9: Do you drive a car?

Question 10: Do you have a driver's license?

Out of the 195 participants, 157 had a driver's license. 38 persons did not have a Washington State Driver's license. Having a transit system in place would be extremely important for those 38 or more persons without their driver's license. This is also a safety concern. No license on a reservation means, it was taken away due to driving while intoxicated, or for dangersous driver infractions. Having this transit system in place would definately keep the tribal residents safer, moving, and still stimulate the economy (See figure 12 below).

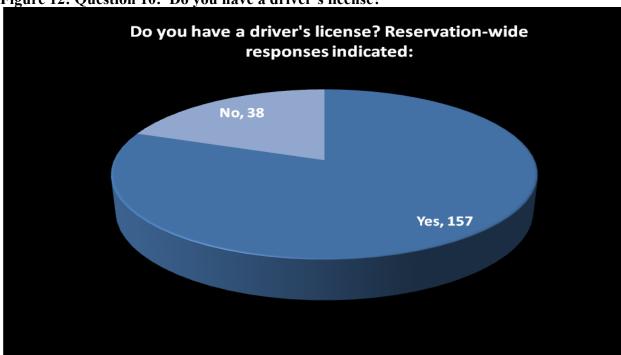


Figure 12: Question 10: Do you have a driver's license?

Question 11: Do you have insurance on your car?

It is significant that 44 of 195 (23%) did not have car insurance. This is a critical issue for safety on the reservation. A second concern is economic, due to people not being able to afford the luxury of car insurance. Out of the 195 participants, 151 person did have car insurance. Again, having a transit system in place would help reduce the risks (See Figure 13 below).

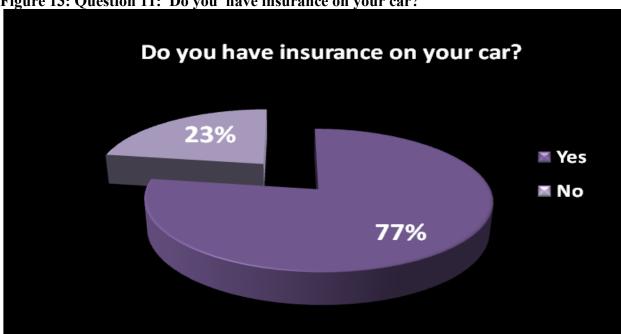


Figure 13: Question 11: Do you have insurance on your car?

Question 12: Do you often ride with someone else? If yes, how many times per week?

Sixty-six respondents stated they traveled with others regularly, with a total of 278 trips/66 = 24 trips per person were shared commuting. By contrast, 128 respondents traveled alone (See Figure 14 below).

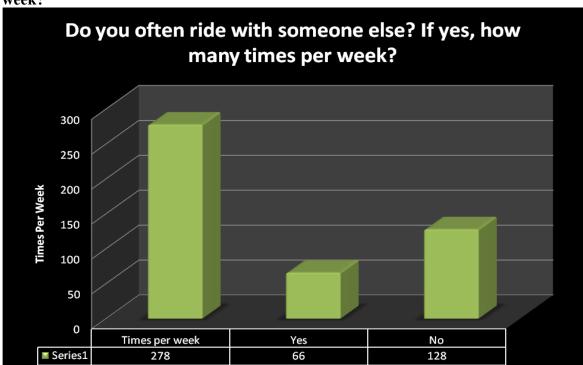


Figure 14: Question 12: Do you often ride with someone else? If yes, how many times per week?

Question 13: How often do you travel for these services, and about how far do you travel for the following services? (Check all that applies to you, then estimate miles per trip).

Due to complexity of this question, the author has determined that the people taking this survey did not fully understand the question. The author received numerous answers that were just one-way miles, and combined with the frequency of different services: daily, weekly, monthly, and yearly miles requested; that this was too much complexity for one survey question. This question was omitted from this survey, but future researchers should restructure the survey into more detailed, independant questions. (See Table 3 below).

Table 3. Question 13: How often do you travel for these services, and about how far do you travel for the following services? (Check all that applies to you, then estimate miles per trip).

		1-2	1-2	1-2	
		times	times	times	
13. How often do you travel		per	per	per	
for these services?	Daily	week	month	year	Miles
Work					
Tribal Office					
Groceries					
Healthcare					
Dental Care					
Eye Care					
Hospital					
Human Services					
Clothes Shopping					
Other goods shopping					
Banking					
Dining/Restaurant					
School					

4.4 Section 4 of CCT Transit Survey: Perceived Transportation Issues:

The following questions seek to identify current transportation usage by respondents and potential issues based on current travel. A focus is on issues that contribute to stress in transportation activities.

Question 14: What do you see as your biggest transportation problems?

This question shows that most of the reservation citizens who participated in this survey are stressing over the use of an automobile for transportation purposes across and beyond reservation lines. Because of the size and isolation of the reservation, it is critical to have an automobile. Distances traveled are at least an hour or more to meet basic needs and the nearest metropolitan area is two hours driving time one way.

For survey results of this question, the "cost of gas" was the number one biggest issue, followed by the "cost of maintenance and repairs." "Cost of car payments," "Cost of auto-

insurance," and "Maintenance care and tires (safety concern)" were other leading issues of concern.

If a reservation-wide transit system were in place, this would alleviate the stress of transportation issues for most residents on the Colville reservation (See Figure 15 below).

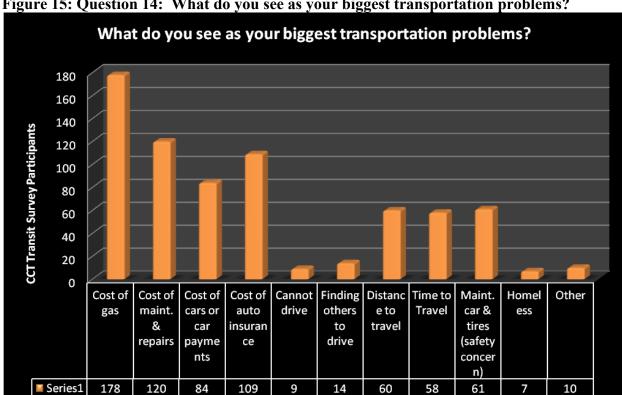


Figure 15: Question 14: What do you see as your biggest transportation problems?

4.5 Section 5 of the CCT Transit Survey: If there were a transit system (Transit Usuage):

The following questions are to find out about people's perceptions and values toward potential transit-use.

Question 15: Do you drive more than two trips per day, to and from home?

One hundred nineteen participants (61%) out of 195 claim they make more than two or more trips per day from home and back. Seventy-six respondents (39%) out of the 195 claim they make only one trip to and from home per day. Transport standards for travel suggest - trips per day for rural households for long distance are traveled less. A transit system that linked needed or desired destinations could reduce stress, and increase transportation access (See Figure 16 below).

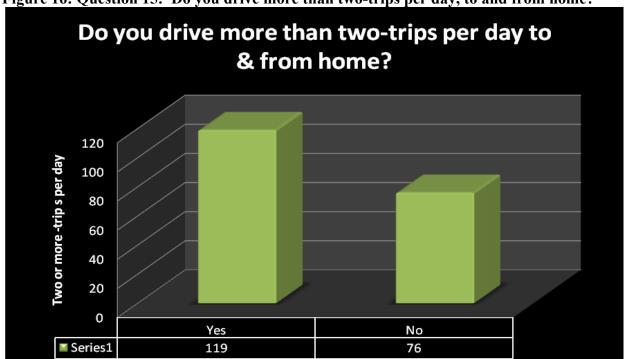


Figure 16: Question 15: Do you drive more than two-trips per day, to and from home?

Question 16: Do you travel to another district more than twice a week?

Out of 195 participants, 121 or 62% of those participants do not travel more than twice a week to a district other than the one they reside in. Seventy-four out of 195 participants or 38% said they do travel outside their district during the week. This question demonstrates a high

demand for traveling greater distances and to other districts. The CCT Transit System should consider a plan for connectivity amongst all four districts (See Figure 17 below).

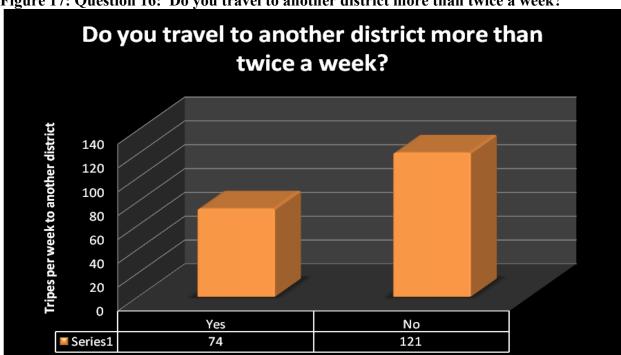


Figure 17: Question 16: Do you travel to another district more than twice a week?

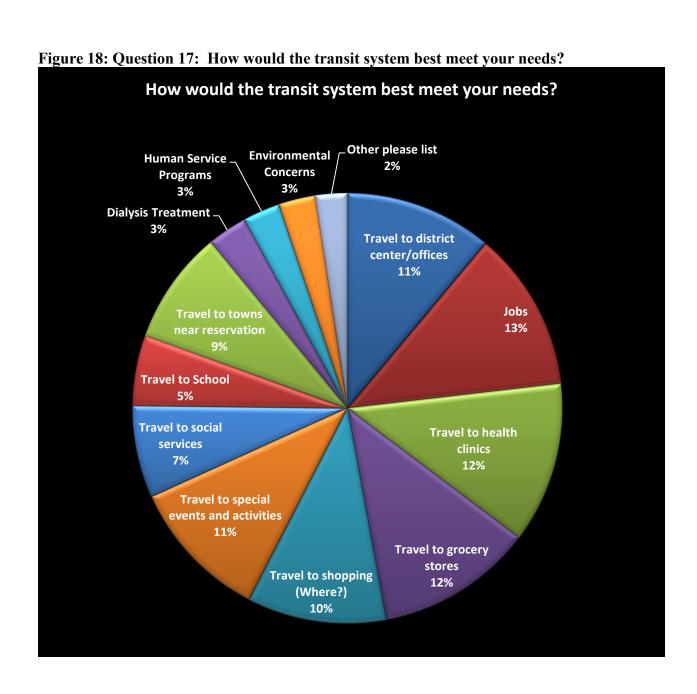
Question 17: How would the transit system best meet your needs?

This question addresses how a transit system would meet resident needs living on the reservation. Access to employment is the number one issue for respondents, along with access to the health clinics in all districts. Being healthy and having access to preventive medicine is of concern. Being able to travel and to attend meetings, local functions, or just visiting was a priority for this community. Perhaps because the Keller area is more isolated one resident felt: "You feel like you will be swallowed up between two mountains." The Keller community also likes to feast during their social events and activities. Perhaps this is why these three needs were at the top. After all, being social is a psychological mental health benefit for one's overall health. "Traveling to district center/offices" came in as a fourth priority for the participants' needs to

conduct their business on the agency campus.

"Jobs" came in first for the number one need to be met, followed by "travel to health clinics" and "travel to grocery stores." "Travel to special events & activities" came in third. The membership considers having transportation to jobs and healthcare to be vital, and being able to reach areas to shop for food and being able to be in a socializing environment to be of importance for a healthy and happy community (See Table 4 and Figure 18 below).

Table 4. How would transit best meet your needs?		
Top five results in meeting needs indicated in green:		
Travel to district center/offices	88	
Travel to jobs	97	
Travel to health clinics	96	
Travel to grocery stores	96	
Travel to special events & activities	88	
Travel for shopping	83	
Travel to social services	55	
Travel to school	42	
Travel to towns near reservation	68	
Dialysis Treatment	24	
Human Service Programs	22	
Environmental Concerns	22	
Other	19	



Question 18: Would you and members of your family use a transit-system if provided?

If a transit system was provided for the Colville Reservation, 195 participants were asked would they use this system. Out of 195 participants only 14 or 7% of the members said "no" to

transit services, and that they wanted to remain independent. 120 out of 195 participants (62%) said they would use the transit system if provided. Sixty-one additional persons said they would "maybe" use this transit system. The type of transit system, its design and schedule could influence their decision. The "maybe" added to the "yes" participants would mean 181 respondents (81%) of the 195 survey participants would use the transit if provided (See Figure 19 below).

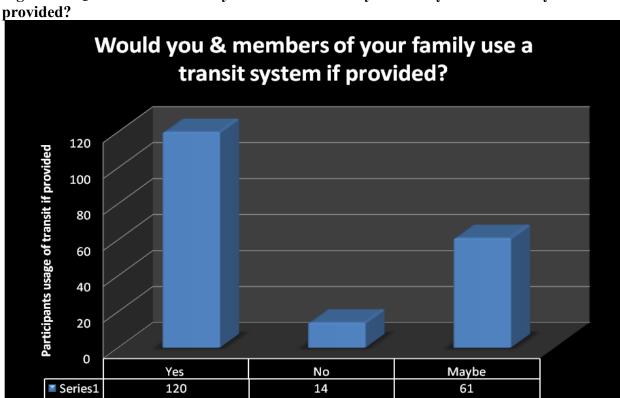
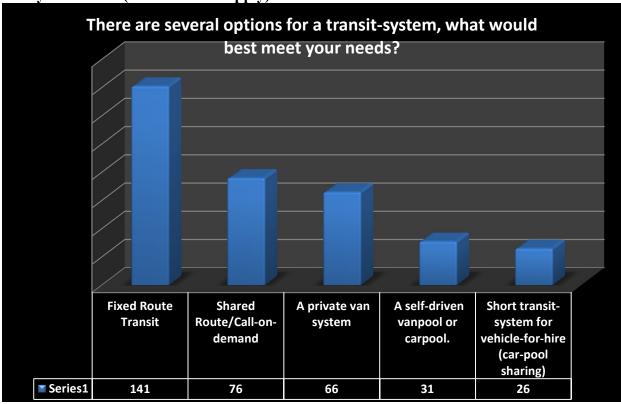


Figure 19: Question 18: Would you and members of your family use a transit-system if

Question 19: There are several options for a transit system, what would best meet your needs? (Circle all that apply)

This graph displays the types of transit routes that could be offered for the Colville Reservations residents. Question 19 asks: There are several options of a transit-system, what would best meet your needs? "Fixed-route transit" came as the number one chosen route. One hundred forty-one participants out of 195 choose this route system. "Shared route/call-on-demand" was the second choice as 76 participants decided upon this type of transit system, and 66 persons perferred the idea of a "private van system." This later type of system would be best suited for the elderly and children for their needs (See Figure 20 below).

Figure 20: Question 19: There are several options for a transit system, what would best meet your needs? (Circle all that apply)

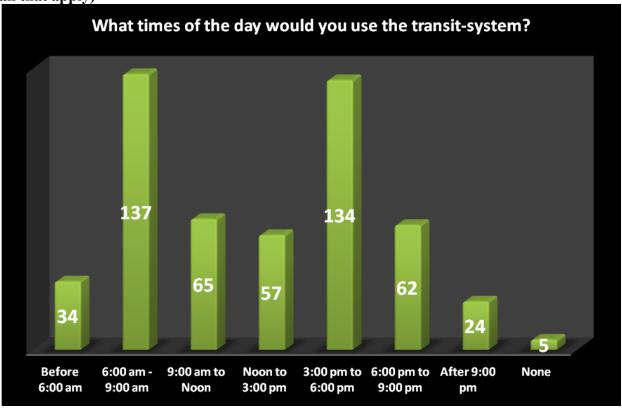


Question 20: What times of the day would you use the transit-system? (Circle all that apply)

The responses indicate that ridership would be highest during the hours before 9:00 am and the hours between 3-6:00 pm. Of 195 participants, 137 favored the 6-9:00 am time of day. This would most likely fit the person who has a job, and would like to commute to and from work instead of driving their own vehicle. The other time perferred the most was 3-6:00 pm. For

the hours of 9-noon, 65 participants chose as next best time for ridership, along with a close 62 persons also perferring the 6-9:00 pm rider times. Out of the entire 195 persons, only 5 people said they would not use the transit at anytime, while 190 people would prefer to use the transit system from 6:00 am until 9:00 pm (See Figure 21 below).

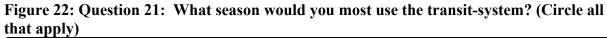
Figure 21: Question 20: What times of the day would you use the transit-system? (Circle all that apply)

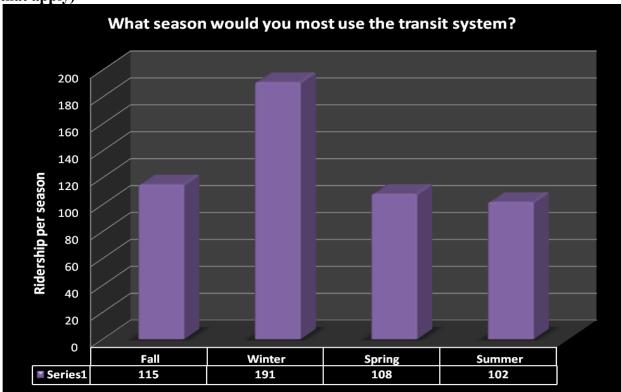


Question 21: What season would you most use the transit-system? (Circle all that apply).

Winter was the number one season chosen. Obviouosly, because it is the most dangerous season to commute, especially for the Keller and Inchelium areas and along Highway 174 from Omak to Nespelem. These are very dangersous routes in the winter months due to mountainous terrain, with much black ice, and snow conditions during this time. Out of 195 participants, 191 said they would ride the transit during this season the most. Fall season came in second with 115

participants out of the 195 who said they would be willing to use transit during the Fall season. Spring season came in third with 108 willing participants. Lastly Summer has the least usage time at 102 persons out of 195 total who would want to use transit during Summer season (See Figure 22 below).





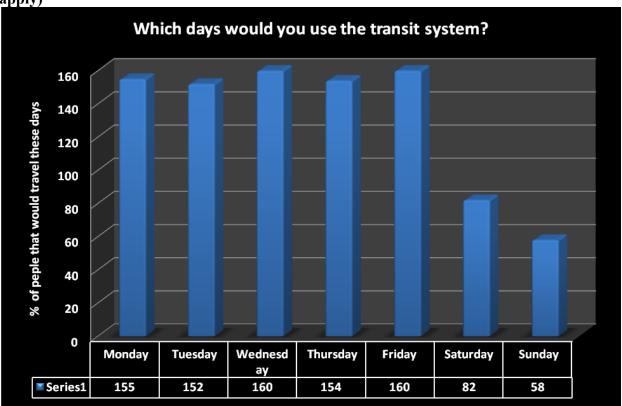
Question 22: Which days would you use the transit-system? (Circle all that apply).

Most survey participants agreed that Monday through Friday would be the best schedule for transit. Wednesday and Friday showed 160 riders out of 195, Monday came in second with 155 participants, followed by Thursday with 154 willing riders. Monday through Friday shows a high ridership, with Saturday and Sunday still showing a good interest by potential users.

Saturday shows 82 riders out of 195 would still use the system on this day and Sunday shows 58

riders out of 195 participants. With a transit system in place, especially during the full Monday-Friday work week, there would be a high ridership turnout for the communities reservation-wide (See Figure 23 below).

Figure 23: Question 22: Which days would you use the transit-system? (Circle all that apply)

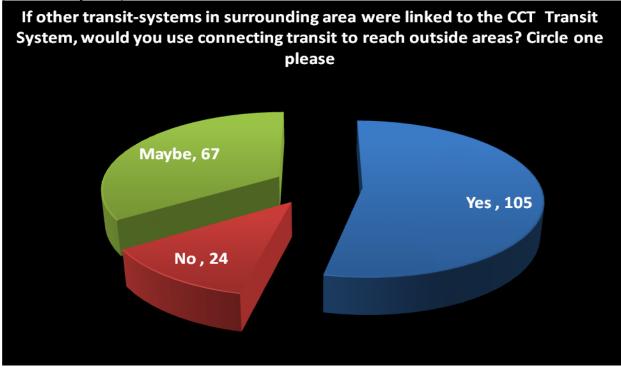


Question 23: If other transit-systems in surrounding area were linked to the CCT Transit System, would you use connecting transit to reach outside areas? (Circle one please).

Question twenty-three addresses the issue of connectivity. Would the tribal member or resident be willing to travel to other districts if the CCT Transit System provided connectivity to outside areas? The outcome from the 195 participants was 105 said "yes" they would take connecting transit if offered. Then, 67 additional participants said "maybe" they would connect if their transit area offered connectivity. Only 24 participants out of 195 said "no" they would not

use transit to reach outside areas. Again, this "maybe" concept can be turned to a "yes" concept (See Figure 24 below).

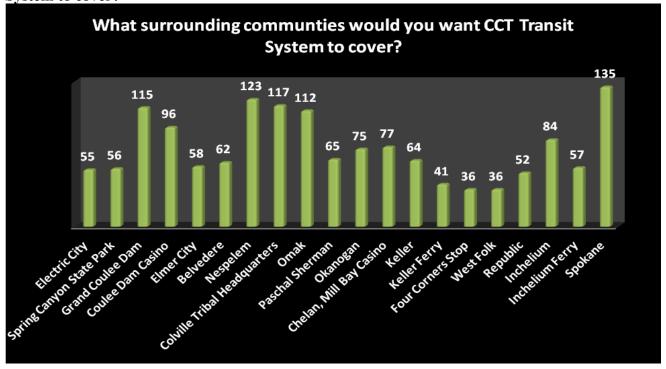
Figure 24: Question 23: If other transit-systems in surrounding area were linked to the CCT Transit System, would you use connecting transit to reach outside areas? (Circle one please)



Question 24: What surrounding communities would you want the CCT Transit System to cover?

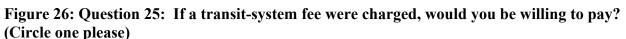
All town and city areas listed are located within a radius of 120 miles from all districts. Spokane is the farthert desired destination, and Spokane was the number one chosen destination. Out of 195 participants, 135 chose this location as most desired. Nespelem came in second as the next best destination, most likely due to the fact that the Colville Tribal Agency is located in Nespelem along with the largest I.H.S facility within reservation boundaries. The Colville Tribal Headquarters came in third, and adjoining towns were Grand Coulee Dam, the fourth desired location. Grand Coulee Dam is only 16 miles South of Nespelem, the largest district on the reservation (See Figure 25 below).

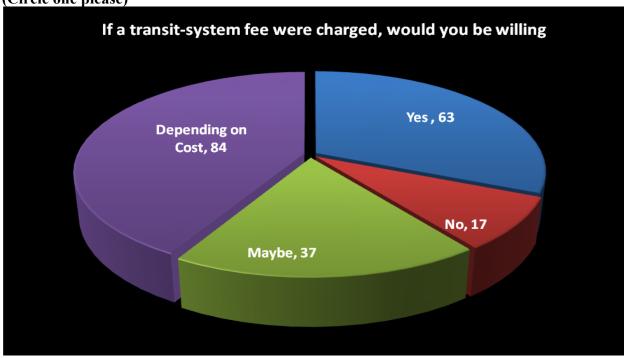
Figure 25: Question 24: What surrounding communities would you want the CCT Transit System to cover?



Question 25: If a transit-system fee were charged, would you be willing to pay? (Circle one please)

Depending on cost, 84 participants out of 195 said they would pay a fee "depending on the cost," 63 participants said "yes" they would pay a fee, 37 participants said "maybe," and only 17 out of 195 said they would not pay a fee to ride the transit system. This is a great question for the future funding concept, as 178 participants would pay or consider paying the fee for transit (See Figure 26 below).

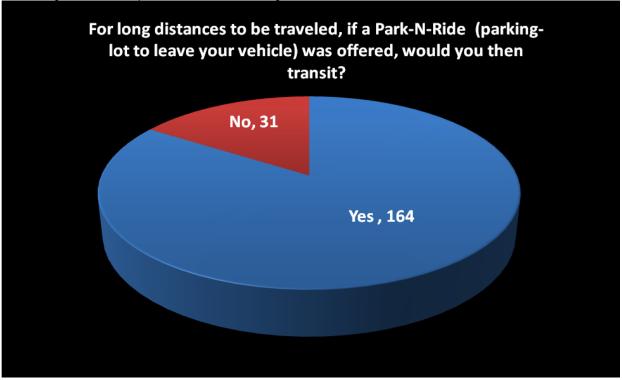




Question 26: For long distances to be traveled, if a "Park-N-Ride" (parking lot to leave your vehicle) was offered would you then use transit?

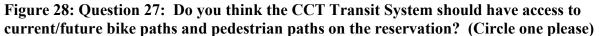
From the 195 participants, 164 of them said they would leave their vehicles at a Park-N-Ride facility and then use transit. 31 participants said no to this concept, that they would not leave their vehicle at a Park-N-Ride facility to use transit (See Figure 27 below).

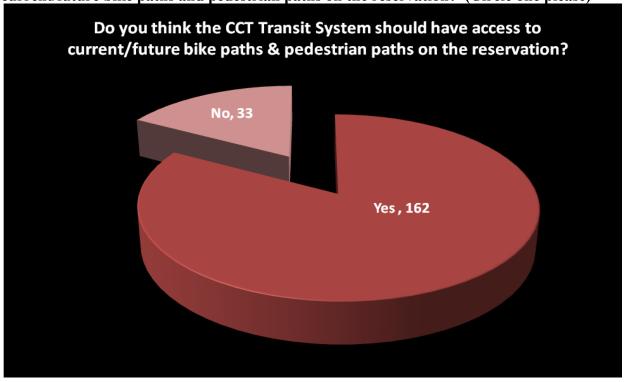
Figure 27: Question 26: For long distances to be traveled, if a "Park-N-Ride" (parking lot to leave your vehicle) was offered would you then use transit?



Question 27: Do you think the CCT Transit System should have access to current/future bike paths and pedestrian paths on the reservation? (Circle one please)

One hundred sixty-two participants out of the entire 195 said they would like to see that the CCT Transit System have access to current or future bike paths and pedestrian paths on the reservation. Under the ARRA road/transit program, this is feasilble and recommended for tribes, because most communities are using safety and enhancement for auto travel and thinking more into the future for the health of the environment and community residents. Bike paths and pedestrian paths connected to transit stations are becoming more and more prevalent in all communities, urban and rural alike. Only 33 participants out of the 195 said they would not like to see this connectivity with the CCT Transit (See Figure 28 below).



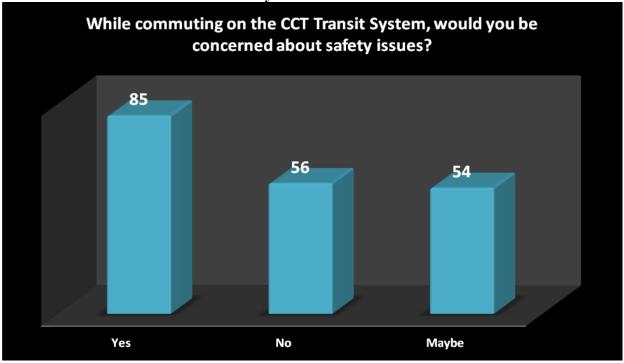


Question 28: While commuting on the CCT Transit System, do you think there would be cause for concern about safety issues?

Eighty-five respondents out of the 195 participants said they would be concerned for safety on the transit system. Fifty-four out of 195 said "maybe" they would be concerned for safety and 56 participants said there would be no cause for safety for them. The issues that the participants were concerned mostly about were: whether the transit driver has a CDL license, proper background check, random drug testing, passengers on drugs or carrying drugs, overall safe transit-buses, safety for elders/children and proper seatbelts, safety for women/children at transit-sites, well-lit waiting areas, sheltered waiting areas, and safe roadways to travel, gangactivity/fights and terrorists, over-crowding of transit buses and if security-guards will be provided. All are well thought out reasons and all safety measures should be taken into account

within the transit system design. Each safety issue should be addressed for proper planning of the CCT Transit System (See Figure 29 below).

Figure 29: Question 28: While commuting on the CCT Transit System, do you think there would be cause for concern about safety issues?



Question 29: How would you address these safety issues?

Making sure that the transit drivers are required to have a CDL license, a proper background check, and random drug test as a tribal employee of the CCT Transit System are important safety considerations. Having proper and adequate lighting and transit shelters for all riders at most routes and perhaps hiring security guards for late night and early morning commutes would help. Having a "No Drug Policy" in place for the transit bus system, and no users or abusers allowed to commute while intoxicated or on drugs should be considered, along with a policy prohibiting firearms or weapons on transit buses. Any gang activity would not be tolerated. Seat belts will be provided and proper restraint devices for disabled would be needed.

Overcrowding should be considered in the CCT Transit system design; properly scheduled maintenance for all buses will maintain safe operating standards.

Question 30: Do you think a transit-system would be an asset to your community?

Out of 195 participants, 188 said having a transit system for their community would be an asset. Only 7 participants came to the conclusion that the CCT Transit System would not be an asset to their community. An overwhelming majority of the participants agree that the CCT Transit System would be a welcome addition to their communities (See Figure 30 below).

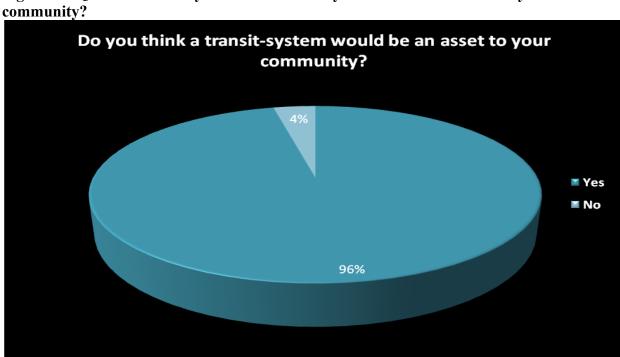


Figure 30: Question 30: Do you think a transit-system would be an asset to your

Question 31: The following are individual and additional comments:

- > Great idea for this survey to see what the community needs are.
- > So many people on our reservation do not have a driver's license, or working vehicles, the cost of gas is continuoulsy going up, and environmental issues of course would benefit through transit reducing pollution.
- Some people like elderly and the disabled need this transit the most.

- ➤ Help provide transportation to those who do not have a vehicle.
- ➤ Would help lots of people with transportation costs and issues
- ➤ I think this transit would be a great advantage for every tribal and non-tribal member.
- In this recession we are in, this would help many people struggling to get by, it would help with the people who do not have a driver's license.
- ➤ It is important to develop alternatives to using cars all the time. A transit system would offer a great community service to the community and become a model for the other communities.
- People forced to shop locally and have poor food choices, higher costs of food in local markets.
- ➤ Currently, only buses offered to tribal employees who already have good income. Disabled, elderly and neglected children do not have those benefits; this transit system would sure help.
- ➤ Would be fantastic for to and from work!
- ➤ It would save wear and tear on personal vehicle, would get people where they need to go to take care of business.
- > I work in a department where many of our clients have transportation issues, some clients call us to pick them up for health appointments and that is not part of our program.
- ➤ I have always thought the Colville Reservation could benefit from a public transportation system.

5.0 How should the CCT establish a transit system? An example of the Alternatives and Criterion Matrix:

A matrix and scoring system can assist in policy analysis towards planning a transit project. This alternative and criterion matrix can assist the policy/stakehoulders in the decision whether to pursue a transit system or not, and in the best system design if a transit is selected. The criteria listed are to guide the decision of whether or not it is feasible to move forward with a transit system, from a political standpoint. Criteria to use to compare for alternatives include: Administration Feasibility, Cost vs. Benefit, Promoting Access, Promoting Safety, Promoting Welfare, Promoting Health, Educating the Public, Creating Jobs, Environmental, and Stakeholder Satification. Would or would this not hurt current tribal council and their administration? Cost has to be considered; promoting health, welfare, and safety must be considered. A matrix can be applied using policy analysis to guide and assist tribes in the decision making process to go forward, maintain, or expand their transit system. Alternatives are

listed as well, including the alternatives from the prior vision and survey process. Criteria were set to measure the outcomes (See Table 5).

Table 5 Alternatives and Criterion Matrix Example:

How should the Colville Tribe establish a Transit System?					
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
	Create a	Informing the public		Summarize findings in terms of alternative	
	visioning	through a	Work with	designs by	
	process for	community	Tribal Council	district for Tribal	S4-4 O
	the CCT towards a	participation process &	& Tribal Planning/Trans-	Transit	Status Quo or Do
	transit	transit survey	portation	services &	Nothing Nothing
Criterion	system	per district	programs	access	Policy
1) Administration					
Feasibility	3	2	3	3	-1
2) Cost vs. Benefit	1	2	3	2	-1
3) Promoting Access	3	1	3	3	-1
4) Promoting Safety	1	1	3	3	-1
5) Promoting Welfare	3	3	3	3	-1
6) Promoting Health	2	3	3	3	-1
7) Educating Public	1	3	3	1	-1
8) Creating jobs	3	3	2	2	-1
9) Environmental	1	1	1	1	-1
10) Stakeholder					
Satisfaction	2	2	3	2	-1
SUM	20	21	27	23	-10
RANK	4	3	1	2	5

5.1 Alternatives and Criterion Matrix Scoring:

Four steps for implementation are listed in the matrix: create a vision; community involvement by district; collaboration with council; and use district level assessment in the design of the system. The final alternative, do nothing, would be selected if the tribe decided not to pursue transit. Although listed as alternatives, these are actually four steps that should be considered for implementation of the transit program. Each is assessed in terms of criteria to evaluate the action (except for the "do nothing" (Status Quo) alternative which is a negative result and should not be considered.

A scoring system of (3 to -3) was used in this example. Three is the highest ranked and most preferable outcome, as compared to a negative three, which is the lowest score. With the matrix, the only thing that scored at or below zero was the Status Quo scenario, with a score of (-1). If the outcome of Status Quo would occur, the Tribe's decision NOT to pursue the Transit Project would be tragic.

Alternative three ranked the highest. This shows a strong indication that working with the Tribal Council and Tribal government needs to occur in order for this transit project to happen. Alternative four came in second, which indicates the data gathered will help with appropriate design of the transit project for each district in terms of access. Alternative two came in third, which clearly shows that keeping the public well informed through community participation process and a transit survey will help to address the community's needs (See Table 5 above).

6.0 Summary of Survey Findings:

The Colville Confederated Tribes occupy a rural and frontier-like, isolated region in Central Washington with over 1.4 million acres. The tribe is so densely populated and rural, having an automobile for access to basic needs is imperative. This tribe is very isolated, autodependent, poverty stricken, with a high unemployment rate, and many disabled and aging residents. The elderly and youth are under-served and in dire need of transit for all basic needs. Locations, distance, types of transit systems addressed, types of needs are very complex. The complexity is immense towards a transit design strategy that can meet access and mobility issues. The CCT transit survey clearly demonstrates that a transit system design will have to be diverse and continually innovative in transit-design by district in order to maintain transit. It will not only be necessary to maintain their transit, but also to expand transit services and connect with outside stakeholders to up passenger counts for both entities. Hence, it may also be necessary to up the funding sources for expanded transit towards medical services (adding medical transport funding), education, jobs, social, and shopping. This would increase the chances of economic expansion and breaking of barriers, not only for the tribal communities, but the surrounding towns, cities, counties, and the State of Washington.

Transit has become a more important element of transportation planning for tribes, as the potential of a well-designed and planned transit system has not been truly recognized for the Colville Tribe. The Colville Tribe does not have reservation-wide transit for all, including non-members. The tribe should consider linking up with surrounding transit services such as People for People, as they have done so with the Okanogan County Transit & Nutrition (OCTN) transit

services via a Memorandum of Understanding (MOU) Agreement between the Colville Tribe and Okanogan County. This way, tribal and non-members could travel outside reservation boundaries and connect to urban areas for additional needed services. This transit opportunity would serve to mobilize the Colville Reservation communities through increased transportation access by keeping people moving, on and off the reservation. Transport onto and within the reservation boundaries, and off the reservation into major metropolitan areas is critical for rural commuting.

The economic impact of this transit can and will positively affect the Colville Tribe and all surrounding communities. By keeping people mobile to meet their needs, CCT Tribal Transit will create jobs, stimulate the economy, and benefit all stakeholders involved. Education could be attained more easily; in addition, healthcare and better preventive-care, access to jobs, shopping, socializing, entertainment, and better lifestyles could occur with this transit in place.

This survey instrument provided a starting point for citizen involvement and awareness, it will assist in on-going CCT tribal transit planning, and it will serve as a resource for other tribes. The survey demonstrates that results from the data can contribute to an effective and efficient design for tribal transit. The survey instrument has demonstrated the needs of the tribe and the citizens of the Colville Tribe, tribal members and non-members alike clearly show an interest in this transit project.

The author hopes the Colville Tribe will be able to use this data towards its vision and mission for a transit system on and off the Colville Tribe Reservation. The tribal community has brought attention to its needs for a better transit system for access to health, welfare, and safety for its citizens. Through the tribal transit survey, a vision for tribal transit can now set the stages for further transit development. This ongoing transit transportation access is a critical need and

the Colville Tribe has the opportunity to address its complex needs as its membership grows and ages along with the rest of the world's population. The tribal transit system should continue efforts towards fuel-efficient, electric-transit/solar powered, environmentally-friendly transit services, and revisit, monitor, and implement current transportation and transit needs for continued improvement of its tribal transit-systems.

References:

Campobasso, A. (2010). *Health care access for the Colville Confederated Tribes, Washington: A critical part of a comprehensive transit system to address community needs.* Cheney: Eastern Washington University, Eisenhower Fellowship Program (unpublished research).

Campobasso, A. (2011). Community Involvement & Citizen Participation for Colville Confederated Tribal Transit, (pg. 18): National Center Senior Transportation (NCST) University Student Scholars Program in Review: 2009-2011 Research

Census Bureau (2012, January). *The American Indian and Alaska Native Population: 2010*. Retrieved July 15, 2012, from US Census Bureau: http://www.census.gov/prod/cen2010/briefs/c2010br-12.pdf

Colville Tribal website: retrieved 2009, from *Colville Confederated Tribes website*: http://colvilletribes.com

FTA website: retrieved 2011, from *Federal Transit Authority*: http://www.fta.dot.gov/regions/region10/regional offices 8176.html.#legal

FTA MAP 21 website: retrieved 2013, from *Federal Transit Authority*: http://www.fta.dot.gov/grants/about FTA 13444html

Lake Roosevelt Community Health Centers: retrieved 2009, *Colville Tribes Health Clinics*: http://www.ferrycounty.com/LRCHC/index.html

Moore, Casey. (2011). *Tribal Transportation Safety Plan Implementation for the Colville Confederated Tribes*. Spokane, WA: Unpublished Eisenhower Tribal Transportation Research Report. Eastern Washington University.

Stoddard, A., et al. (2012). *Developing, Enhancing, and Sustaining Tribal Transit Services: A Guidebook*. Washington DC: TRB, Transit Cooperative Research Program, Report 154. http://www.trb.org/main/blurbs/166797.aspx

University of Idaho. (2011). *Indicators Northwest*. Retrieved June 16, 2011, from http://www.indicatorsnorthwest.org/

US Department of Health and Human Services. (2012, February 2). *The 2011 HHS Poverty Guidelines*. Retrieved July 15, 2012, from ASPE.hhs.gov: http://aspe.hhs.gov/poverty/11poverty.shtml

Winchell, D.G.; Rolland, R; Washington State DOT Planning and Tribal Liaison Office and the Tribal Transportation Planning Organization (TTPO). *Tribal Transportation Planning Guide for Washington State*. Available for on-line download:

 $\frac{http://www.wsdot.gov/NR/rdonlyres/D9668173-F25F-448B-B571-}{57EB32122036/0/TribalTransportationPlanningGuideforWashingtonState.pdf}$

Appendix A: CCT Transit Survey

Section 1. Introduction: My name is Angelena Campobasso; I am a Colville Tribal member. My father was the late Lawrence Campobasso, and my mother is Ramona Campobasso. I was born in Republic, Washington; my younger years I grew up in the Sanpoil area, then later near Rebecca Lake area. I am a Master's student at Eastern Washington University (EWU). I have an Urban & Regional Planning degree from EWU. Through the Eisenhower & National Senior Center of Transportation, I am researching the possibility of pursuing a Transit System for the Colville Tribe. This is the Phase II of the Colville Transit Research Project that I am currently working on. This survey & a public meeting in each district will help complete Phase II research of this project.

Purpose: For this citizenship participation survey process, your participation and willingness to take part in as this survey process could lead to a grant to fund this transit project down the road. Completion of this survey for your district is being conducted here today. The data compiled from this survey will be written into a research report and later presented in Washington D.C. on January 2012, at the Transportation Research Board (TRB), under the Eisenhower Program. This citizenship participation process will help to complete Phase II of the CCT Transit Research Project that could mean the possibility of future transit infrastructure for the Colville Tribe. I will be presenting a short power-point-presentation of 20 minutes, followed by a survey that should take no more than 10 minutes.

Therefore, without further ado, I would like to thank each one of you for your participation in this public participation meeting and survey for the CCT Research Project Phase II.

Purpose of Meetings & Survey:

- Conduct District Meetings and Public Survey in each district to identify the community's transit needs.
- Compile data from meetings and surveys into a final report.
- ➤ Work with Colville Tribal leaders, transportation planners, Colville tribes planning department, and surrounding communities for a transit system that will work for the CCT.
- ➤ This CCT Transit Research Project would greatly improve the quality of life of all residents living on and near the Colville Reservation. Health, safety, and welfare for all communities on and surrounding the Colville Reservation would benefit from this program.
- Report final findings in Washington, D.C. in January 2012 for possible grant funding.

Section 2. I would like to ask a few questions about you and your household to start the survey.

 Do you live on the Colville reservation Inchelium Keller Nespelem Omak 	n? If yes, which district? (Please circle your response).
2. If no, where do you live?	
3. Are you a member of the Colville Tribe a. Yes b. No	e? (Please circle your response).
4. Some other tribe?	or not enrolled (please check)
5. What age group are you in? (Circle you a. 0-20 b. 21-35 c. 36-45 d. 46-61 e. 62-75 f. 76-90	ar response).
6. How many people live in your househo Adults Children	ıld?
7. How many in your household are over	65 years old?
8. How many in your household are under	r 20 years old?
Section 3. Questions about your family'	's transportation needs:
9. Do you drive a car? (Circle one please) a. Yes b. No	•
10. Do you have a driver's license?a. Yesb. No	
11. Do you have insurance on your car? a. Yes	

TYPES OF ACTIVITY:	Daily	1-2 times per week	1-2 times per month	1-2 times per year	Miles
Work	Dany	Week	monen	year	IVIIICS
Tribal Office					
Groceries					
Healthcare					
Dental Care					
Eye Care					
Hospital					
Human Services					
Clothes Shopping					
Other goods					
shopping					
Banking					
Dinning/Restaurant					
School					
4. What do you see as a. Cost of gas b. Cost of maintens c. Cost of cars or c d. Cost of auto instead e. Cannot drive	s your beance & 1 ar paymarance	iggest transportat	ion problems? (C	ircle all that appl	y).
f. Finding others to g. Distance to trave					
g. Distance to travel h. Time to travel	el	(cafety concern)			
g. Distance to trave	el	(safety concern)			

12. Do you often ride with someone else? <u>If yes</u>, how many times per week? _____

b. No

15. Do you drive more than two trips per day, to and from home? (Circle one please).

a. Yes b. No	
16. Do you travel to another district more than twice a week? (Circle one a. Yesb. No	please).
17. How would the transit system best meet your needs? (Circle what apparance and Travel to district center/offices b. Jobs c. Travel to health clinics d. Travel to grocery stores e. Travel to shopping (Where?) f. Travel to special events and activities g. Travel to social services h. Travel to school i. Travel to towns near reservation j. Dialysis Treatment k. Human Service Programs l. Environmental Concerns m. Other, please list	plies to you).
18. Would you and members of your family use a transit-system if provide (For a-c, circle only one. Fill in d if you choose). a. Yes b. No c. Maybe d. Why?	led?
 19. There are several options of a transit system, what would best meet yeall that apply). a. A transit-system with fixed-route bus stops and scheduled pick-up b. A shared transit-system that could be called-on-demand (could devroute)? c. A private van system, or chauffeured transit-system that you could pick-up? d. A self-driven vanpool or carpool? e. Short transit system for vehicle-for-hire (car-pool sharing)? 	times?
20. What times of the day would you use the transit-system? (Circle all the a. Before 6:00 am b. 6:00 am - 9:00 am c. 9:00 am to noon d. Noon to 3:00 pm e. 3:00 pm to 6:00 pm f. 6:00 pm to 9:00 pm	ıat apply).

- g. After 9:00 pm
- h. None
- 21. What season would you most use the transit-system? (Circle all that apply).
 - a. Fall
 - b. Winter
 - c. Spring
 - d. Summer
- 22. Which days would you use the transit-system? (Circle all that apply).
 - a. Monday
 - b. Tuesday
 - c. Wednesday
 - d. Thursday
 - e. Friday
 - f. Saturday
 - g. Sunday
- 23. If other transit systems in surrounding area were linked to the CCT Transit System, would you use connecting transit to reach outside areas? (Circle one please).
 - a. Yes
 - b. No
 - c. Maybe
- 24. What surrounding communities would you want the CCT Transit System to cover? (Circle all that apply).
 - a. Electric City
 - b. Spring Canyon State Park
 - c. Grand Coulee Dam
 - d. Coulee Dam Casino
 - e. Elmer City
 - f. Belvedere
 - g. Nespelem
 - h. Colville Tribal Headquarters
 - i. Omak
 - j. Paschal Sherman
 - k. Okanogan
 - 1. Chelan, Mill Bay Casino
 - m. Keller
 - n. Keller Ferry
 - o. Four Corners Stop
 - p. West Folk
 - q. Republic
 - r. Inchelium
 - s. Inchelium Ferry
 - t. Spokane

25.	If a transit-system fee were charged, would you be willing to pay? (Circle one please). a. Yes b. No c. Maybe d. Depending on Cost?
26.	For long distances to be traveled, if a "Park-N-Ride" (parking lot to leave your vehicle) was offered would you then use transit? a. Yes b. No
27.	Do you think the CCT Transit System should have access to current/future bike paths and pedestrian paths on the reservation? (Circle one please). a. Yes b. No
28.	While commuting on the CCT Transit System, do you think there would be cause for concern about safety issues? (For a-c, circle one. Fill out section d if you chose). a. Yes b. No c. Maybe d. Safety issues of concern, please list:
29.	How would you address these safety issues?
30.	Do you think a transit system would be an asset to your community? (Circle a or b, feel free to fill out section c). a. Yes b. No c. Why or why not?
31.	Additional Comments:

Would you like to receive updates about transit system development? If yes, please provide name, address, or email:					
	=				

Thank you for your participation in this survey.