GVNW Consulting, Inc.

Alaska Network Services Broadband Access Report

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Alaska Network Services (ANS) has been studying all options to help address the issues surrounding lack of affordable broadband throughout the state of Alaska. Geographically speaking, Alaska is a huge, rugged and diverse state as far as terrain goes. It claims some of the most rugged and harsh terrain imaginable with rivers, mountains, tundra, freezing temps and large oceans. The towns and villages are not always available via a road system, and are geographically large distances apart from one another. Providing 21st century broadband in such an environment is very unique when compared to the rest of the US, and will require some unique out-of-the-box solutions if the population is to be served. Business models and mindsets that most people implement in the lower 48 will not suffice for Alaska. This report will not address the general understood need for broadband and all the associated benefits, but assumes the reader already comprehends those needs. Hypothetical income statements contain forward-looking information about a potential ANS network. Forward-looking income statements are statements that are not historical facts. As we present the data to the group, we will rely on words including, but not limited to: believe, expect, may, will, should, project, could, plan, goal, potential, pro forma, seek, intend, and anticipate; and in some cases, the negative thereof. GVNW cautions potential ANS investors not to place undue reliance on these statements. These forward-looking statements are subject to a variety of risks and uncertainties. Consequently, actual results and experience may differ materially from those contained in any forward-looking statements. As more time is devoted to refining the business plan, accuracy in these numbers becomes more reliable.

Scope of the issue

GCI's TERRA project, while impressive in its own right, is a regional network for a portion of the state of Alaska. The scope for this initial phase of the ANS analysis is to study virtually the entire state of Alaska. This produces some mind-boggling statistics as we will demonstrate below.
To put the issue into perspective, we can share some objective financial information gathered during the scope of this project. These numbers are not meant to discourage, but rather to provide context for the size of the effort (and associated dollars) that will be required if terrestrial based broadband is to be provided to all communities in Alaska.

The first effort in this project was to design a network that would meet the stipulated broadband requirements and that could be classified as "21st Century", which would put Alaska on par or ahead of communities in the lower 48 and around the world. To provide terrestrial based broadband (more on Satellite later), a network design was decided upon that includes basically two parts. The first part

will be to build a ring type architecture around the entire state including western, southern, northern and eastern Alaska. This ring will provide redundancy and will traverse anchor communities. The design calls for using existing networks leased from current providers, building new submarine fiber or terrestrial fiber and also using microwave solutions where appropriate. This network would aggregate back into Anchorage and then extend out into the world-wide-web using facilities already available. The second portion of the design calls for branching out from the anchor cities that the ring provides service to, and to the smaller communities in a daisy chain fashion. This would also be accomplished by employing fiber and microwave based solutions.

To build portions of the ring not already serviced by existing solutions, it is estimated to cost about $490,000,000. To complete the portions from the anchor communities to the smaller villages, it is estimated to cost another $1,100,000,000. That is roughly $1.6B to cover the state of Alaska. If ANS was to borrow all the money for example (4% interest for 15 years), it would require $150M per year in cash flow to break even plus an additional $22M per year in maintenance and lease costs. The annual maintenance costs include costs for servicing the microwave sites and labor to run the company. The lease costs are an estimate for costs paid to existing providers for access to their networks to complete the ring.

On a per household basis, it can run as much as $150,000 per home passed to build the network. (The far reaches of the Aleutian chain are even more sobering with it costing as much as $4M per household for terrestrial based fiber). Many areas are as little as $7,000 per household, but on average, it seems to run about $50,000 per home served, which is roughly 10X what most rural communities in the lower 48 experience. Annual maintenance is also relatively expensive given the need to service all the microwave sites which are in very remote areas. Some areas run as much as $20,000 per year per household to cover maintenance and interest (or $1,660 per month per household) in additional to the initial build costs.

Revenue

This network cannot be paid for on the backs of the residential consumers. It will require revenue and investment from many sources including grants, loans, investors and other large entities. Grants and investments could come from government agencies, potential stimulus funds, tribal entities, native corporations, E-Rate and Telehealth funds and other large corporations that want broadband. It will require a unique approach to help pay for the network.

E-Rate and Telehealth

Currently, the largest revenue "bucket" for rural Alaska broadband comes from the E-Rate and Telehealth programs. As of 2016, these programs contributed roughly $54M in revenue out of the anchor ring-based cities. Another $50M is available for all the other communities. This revenue number has the ability to increase (USAC has the budget), but only if broadband were to actually be available. If it was to increase by $50M, that would put total E-Rate and Telehealth available funds at $154M per year. However, these funds would not all be available to ANS as there is competition for these funds as well as the fact that many potential ANS members/investors would be providing the service or are already providing the service. If ANS were to capture 50% of that revenue, even indirectly, it would provide $77M per year in revenue, just from these two programs.

ILEC Revenue

Additional revenue could be secured through middle mile services provided to ILEC's. It is anticipated this additional revenue would be roughly $4M-$6M annually, excluding any potential from ACS villages.

Combining both E-Rate, Telehealth and ILEC revenues puts annual revenues at roughly $83M, still far short ($89M) of the required $172M needed to cover cash flow if using all borrowed funds.

Other Revenue

One of the most difficult items to ascertain for this project is identifying and capturing reliable revenue figures. We know what Alaska is getting today for E-Rate and Telehealth as it is publicly available information. We can take this number and make some adjustments and come up with a ballpark figure. However, other revenue sources are not so clear. Alaska is unique when compared to other parts of the US when it comes to the type of industries that are there. There is mining, oil and gas, fishing, tourism, government agencies like military, DHS, NOAA, FAA, universities, fish and game and other entities. Trying to quantify their available broadband budgets has proven difficult to provide with any confidence. We do know these groups do have some budgets, but how much would be available to ANS, either directly or indirectly, is hard to capture. It will take someone going around and visiting each organization to help capture an accurate picture of how ANS might be able to secure their revenue.

Conclusion

The ILEC's in the state of Alaska were tasked by the FCC to help come up with a potential solution to address the lack of affordable middle mile broadband in Alaska. They felt it was an Alaska problem and should be addressed by Alaskans. ANS hired GVNW Consulting and Vantage Point Solutions to help scope and quantify the issue, and then to provide some guidance on how such a group might move forward. We were tasked with helping scope how a for-profit company might address this rather large issue. Our first effort was to understand the size and scope of the issue in monetary terms by designing and costing a network that would service all communities in Alaska. I think we have done that. Hitherto, most assumptions and information about costs has been anecdotal at best. The ILEC's in Alaska now understand the real costs and scope of providing broadband to all Alaska. From this information, ANS could develop a plan on how best to address these issues associated with high costs of building and maintaining this network, and how best to capture revenue and investment that leads to a profitable business.

The magnitude of the issue is daunting at best. When talking about a $1.5-$1.9B investment, with limited resources to help pay for it, will require some very out-of-the-box solutions. Relying solely on government grants/funds will not be enough. Getting $10M or $20M here and there will help, but the scope is much bigger and will require some careful long term planning. It will take commitment, patience and many years to make a profitable business and to capture a return on investment, all while providing broadband to the communities that need it most.

Moving Forward

The saying "how do you eat a whale?" has as a reply "one bite at a time." Then the corollary to it, where do I take the first bite?

The following section looks at what some first ANS bites might look like.

As with any business, there are two general ways to become profitable, reduce cost and/or increase revenue. For ANS, it will require both. It should also be noted that it would be wise for ANS investors to take a long-term approach to this investment as a project of this scope and magnitude will not be done in just a few years without significant investment.

Some Realities

Given the rather large cost-per-household amount to deliver and maintain broadband to those communities outside the anchor cities, it may be worth acknowledging that in the short term, providing terrestrial based broadband to those communities, may be a "phase II or III" project, or until such time that new as yet-to-be-invented technology becomes available and more affordable. How then does ANS address this issue of affordable broadband to those communities? An option for ANS should be to further investigate the option of becoming a satellite provider and aggregator. Discussions have been ongoing with a few satellite providers that intend launch new satellites over the next few years and they have indicated some very favorable pricing (when compared to today's prices) for broadband. We have seen some prices in the [confidential] per megabit range but subject to commitments. Alaskan ILEC's have reported that today's prices are in the range of [confidential] per megabit for satellite service, so using a collective purchasing commitment, can save the ILEC's a great deal of money, or for the same money, can get a lot more broadband. ANS would have to commit to a certain amount of bandwidth each month to get that favorable pricing and in order to do that, would have to secure commitments from the ILEC's.

It is recognized that satellite is not the most favored technology to use for 21st century broadband, but in our view, it is currently the only somewhat affordable technology available for many of the remote communities in Alaska. It should be viewed as a solution available now while efforts to bring terrestrial based solutions are developed over time.

These satellite solutions discussed have been contingent on certain commitments from ANS. It should be noted that these same satellite companies are also looking at providing broadband

direct to the consumer and bypassing the ILEC altogether. It is our opinion that it would be in the ILEC's best interest to purchase wholesale satellite service through these new providers (via ANS or like entity) as not doing so might create a negative competitive environment.

Vantage Point Solutions and GVNW Consulting have looked at the non-anchor city communities and calculated the current satellite bandwidth requirements to be roughly 10Gbps.

Terrestrial Solutions

If ANS were to use satellite in the short term, as described above, to provide a solution for those communities outside the anchor cities, it would basically leave building the ring architecture to focus on for a "phase I" target.

Having access to a ring architecture may open the door to new revenue sources that would otherwise not be available to the ILEC's. Certain potential government contracts require a certain amount of statewide infrastructure before they will award the services. Many of the rural ILEC's have indicated they cannot participate in that revenue given the narrow-targeted focus of their networks. ANS hopes to bring new revenue opportunities to the ILEC's that they otherwise might now have by building a statewide network.

Current pricing for building the ring comes to roughly $490M. It also would require leasing about $12M per year (not negotiated yet) of existing infrastructure from current ILEC's, Quintillion or other entities. This $490M also assumes some overbuilds of certain areas unless more favorable terms can be negotiated with existing providers, namely GCI in western Alaska. They currently have a monopoly in western Alaska that was partly paid for by grant funds. It was anticipated that because they received grant funding their service would be affordable. However, history suggests that it is still not affordable and will not become affordable unless either a negotiated bulk purchase is entered into, or if competition exists. ANS will have to spend some time investigating both options.

If ANS was to borrow all the funds to help pay for the $490M required to build the ring, it would require $46M annually for principal and interest and another ~$6M in lease payments to ride existing facilities of existing providers. For every $100M in investment funds rather than loan funds, would result in about $10M less of revenue required to satisfy P&I commitments.

By focusing first on the ring architecture, it will open the door to contracts that might not otherwise be available to the ILEC's through government contracts. In addition, once the network is to the anchor cities, ANS can then "cherry pick" which additional communities might warrant a terrestrial based network given market conditions and market demand. For instance, we do know that many tribal institutions and native corporations have indicated they might consider becoming investors in a company like ANS. It is also assumed that many may have conditions on which communities they would like to have built out first as a condition of their investment/grants. They want to serve their communities first even if it does not make sense from an economic standpoint. Their goal may be to get broadband to their communities, rather than make money. ANS can serve as the vehicle whereby they invest and ANS builds and maintains the network. This is an example of the out-of-the-box thinking that ANS will have to employ if they are to provide broadband to all of Alaska.

ANS Options

- **Focus on building the ring first**. This will open options for securing revenue that the current rural ILEC's may not be privy to today. It helps set the stage for building out to the more rural communities on a case by case basis as market conditions/funding becomes available. The issue with building the ring will be deciding on which direction to build first to reach western Alaska, through the north via Quintillion, or from Kodiak out to Unalaska and then onto Dillingham and then up. Getting to western Alaska is an expensive proposition, but required to capture the potential revenue located there.
- **Provide satellite to rural communities**. ANS could be able to purchase bulk bandwidth at wholesale prices from some of the new satellite companies and then extend that more favored pricing to the ILEC's, while still making a profit.
- **Look for investors**. ANS will need investors that have preferences for Alaska. These could include tribal organizations, native corporations, oil and gas companies, government agencies, etc. Each $100M in investment saves about $10M a year in principal and interest payments.
- **Revenue.** Time should be invested to further understand and refine all potential revenue sources, especially from the larger institutions such as government agencies.
- **Existing statewide/state owned network transition**. The state of Alaska currently owns and maintains their own communications network to satisfy their demand. It may be an option for ANS to investigate with them the option of ANS taking over the maintaining and building of this network from the state. It will not be without controversy, but may

provide ANS with an existing network and source of revenue with which to expand upon. There are independent reports demonstrating the states willingness to consider such an option. Due diligence is the next step.

- **Network Management Services**. ANS, as a statewide network, could also be in a position to help provide 24X7 network management and support solutions to the rural ILEC's. GVNW and VPS are currently scoping the cost to build and maintain such a network infrastructure that could then be used to help provide network monitoring for participating ILEC's. Many ILEC's have indicated that they cannot get certain large contracts becomes they lack the 24X7 network management. ANS could fill this need. Once we have the cost in place, we can produce a business plan specifically for this function.

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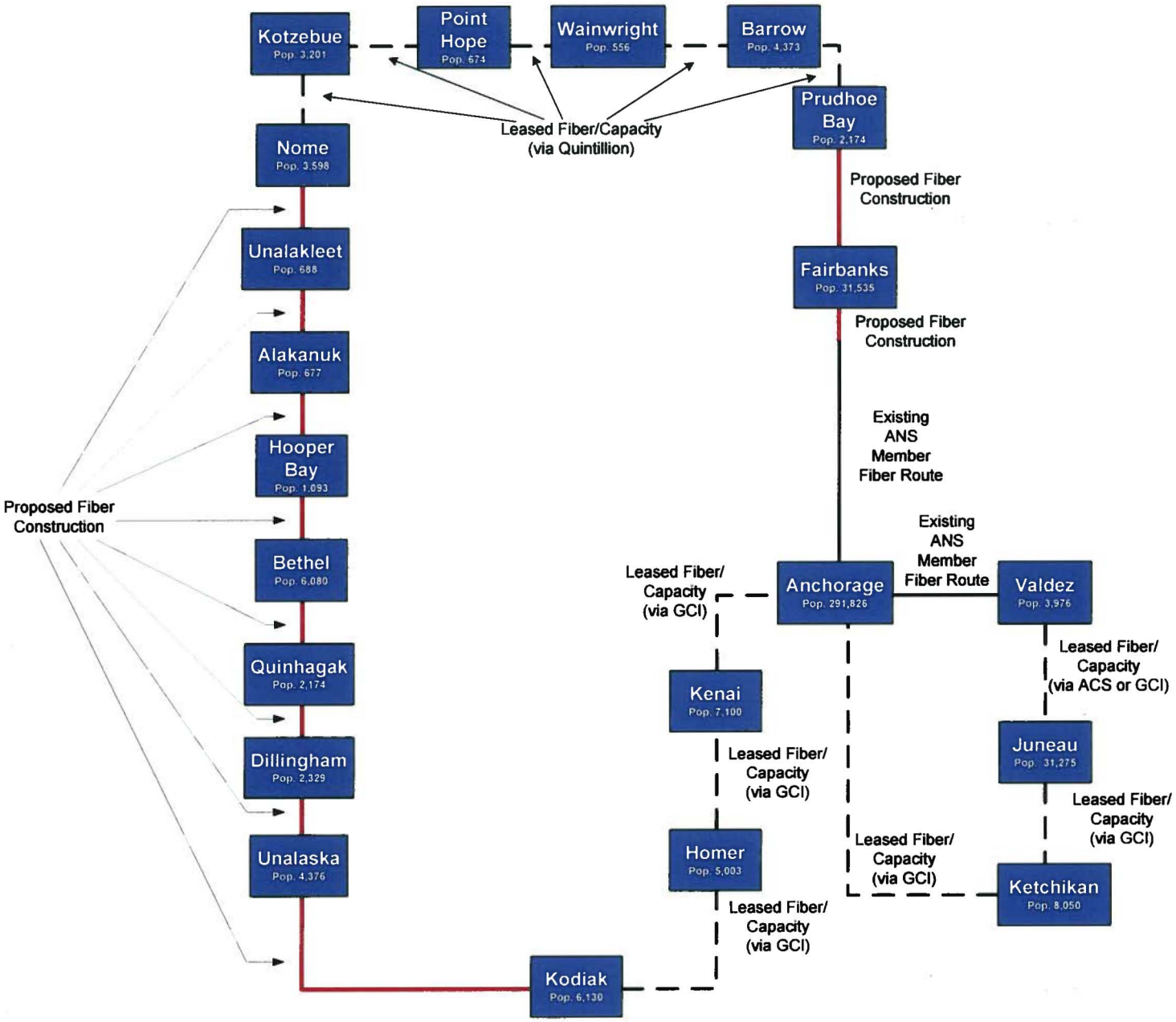
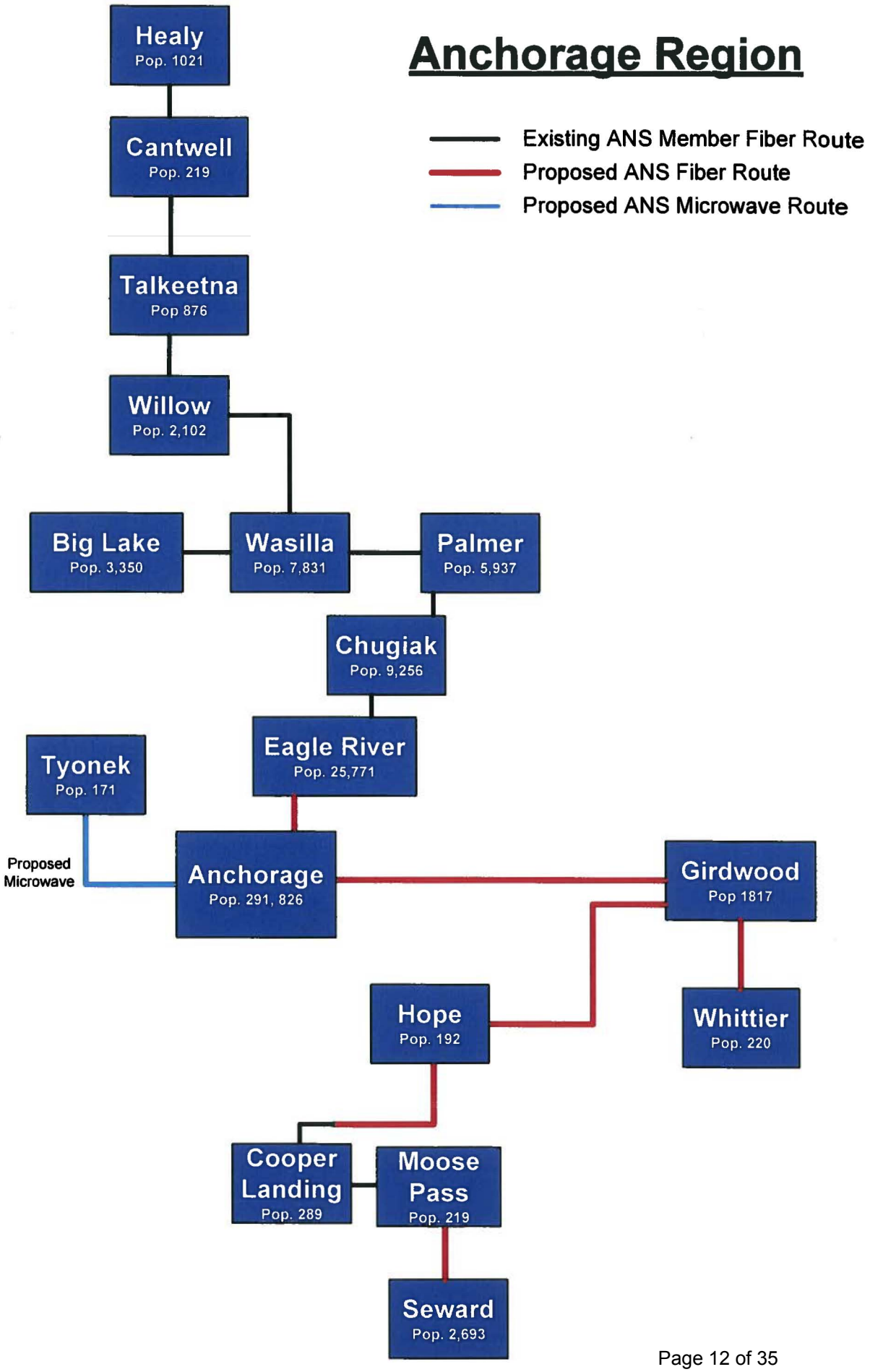
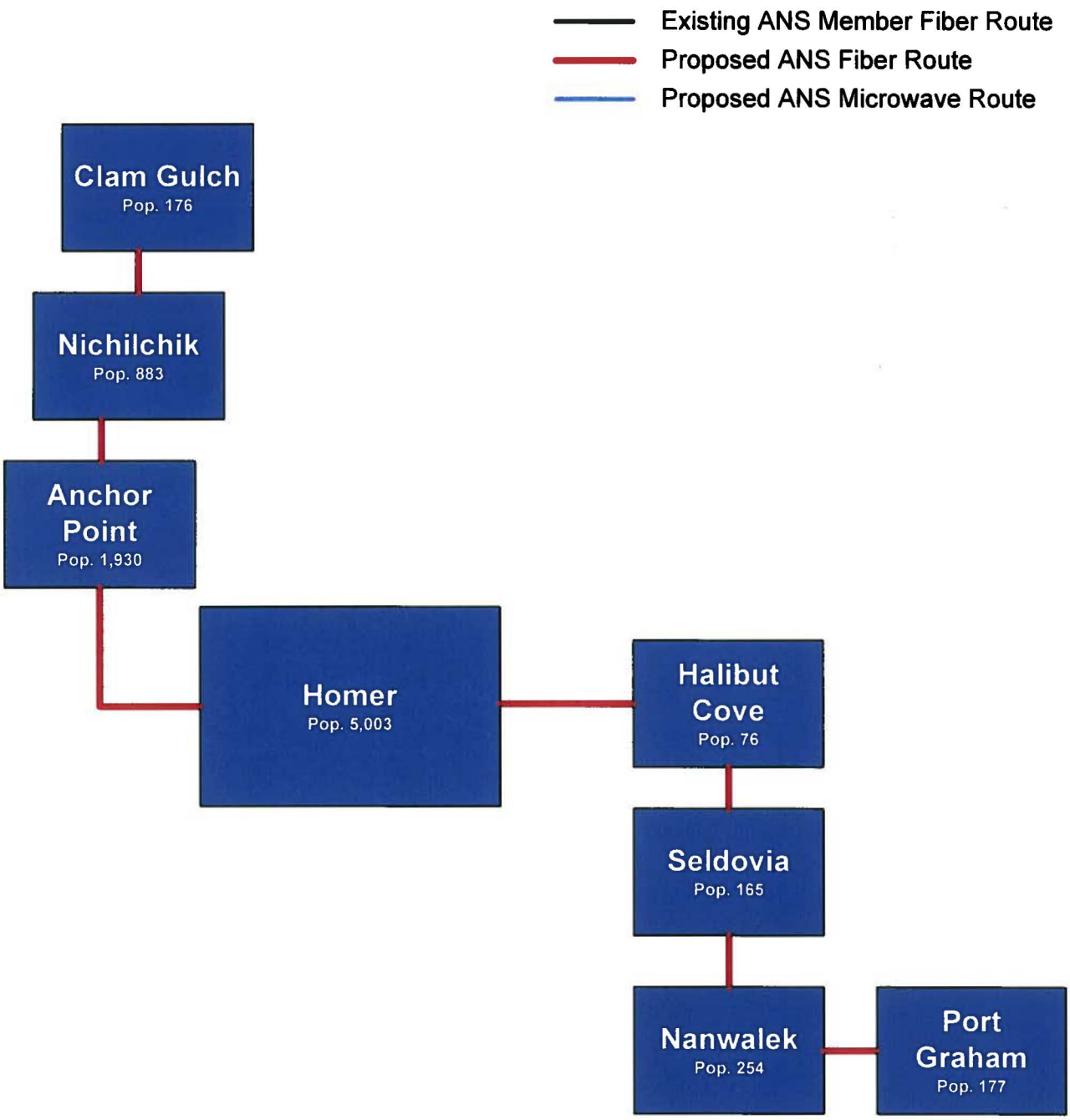
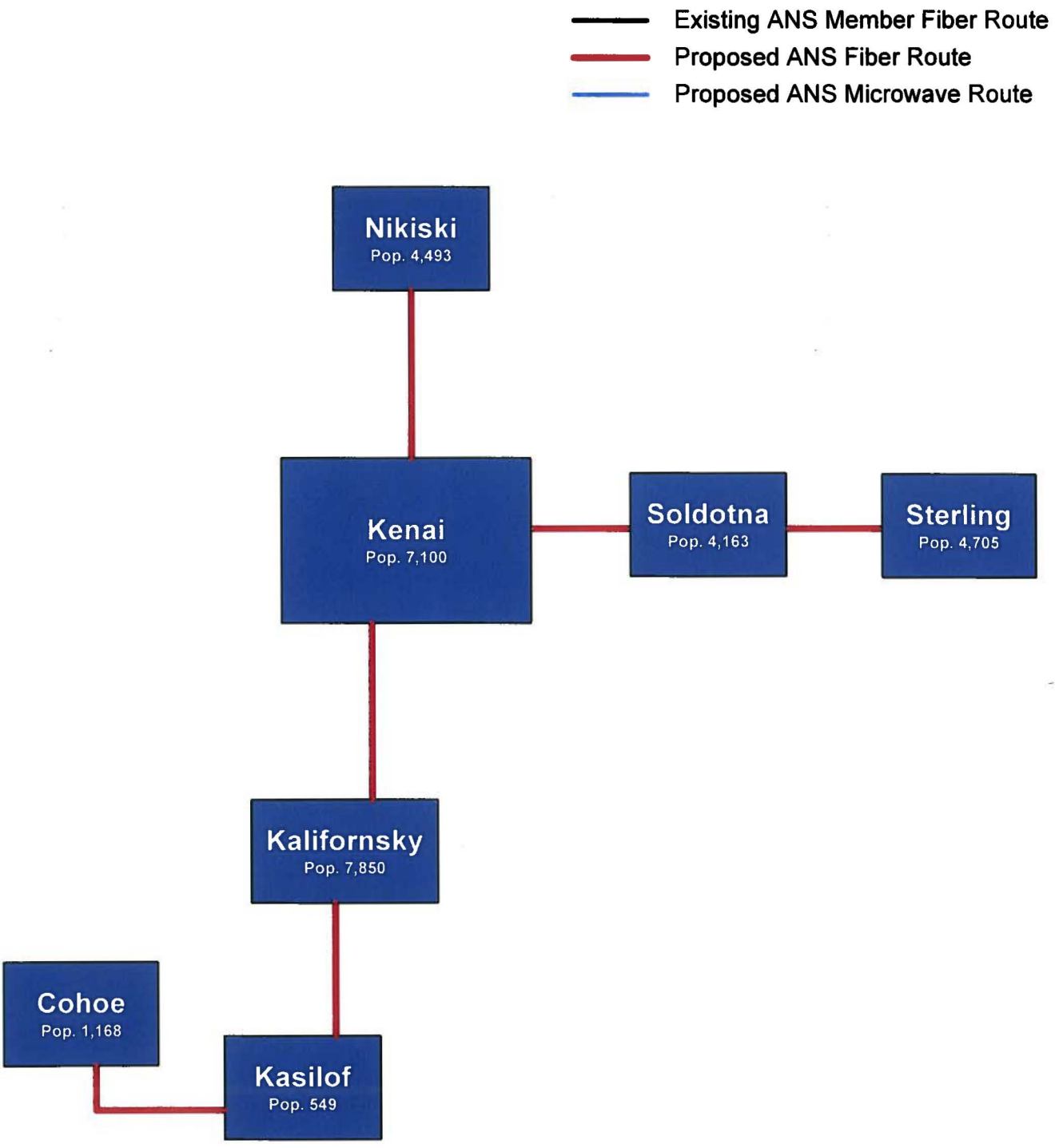

Kotzebue
Pop. 3,201
Point Hope
Pop. 674
Wainwright
Pop. 556
Barrow
Pop. 4,373
Leased Fiber/Capacity
(via Quintillion)
Prudhoe Bay
Pop. 2,174
Proposed Fiber Construction
Nome
Pop. 3,598
Unalakleet
Pop. 688
Fairbanks
Pop. 31,535
Proposed Fiber Construction
Alakanuk
Pop. 677
Existing ANS Member Fiber Route
Hooper Bay
Pop. 1,093
Proposed Fiber Construction
Existing ANS Member Fiber Route
Leased Fiber/ Capacity (via GCI)
Anchorage
Pop. 291,826
Valdez
Pop. 3,976
Bethel
Pop. 6,080
Leased Fiber/ Capacity (via ACS or GCI)
Quinhagak
Pop. 2,174
Kenai
Pop. 7,100
Juneau
Pop. 31,275
Leased Fiber/ Capacity (via GCI)
Dillingham
Pop. 2,329
Leased Fiber/ Capacity (via GCI)
Leased Fiber/ Capacity (via GCI)
Unalaska
Pop. 4,376
Homer
Pop. 5,003
Ketchikan
Pop. 8,050
Leased Fiber/ Capacity (via GCI)
Kodiak
Pop. 6,130

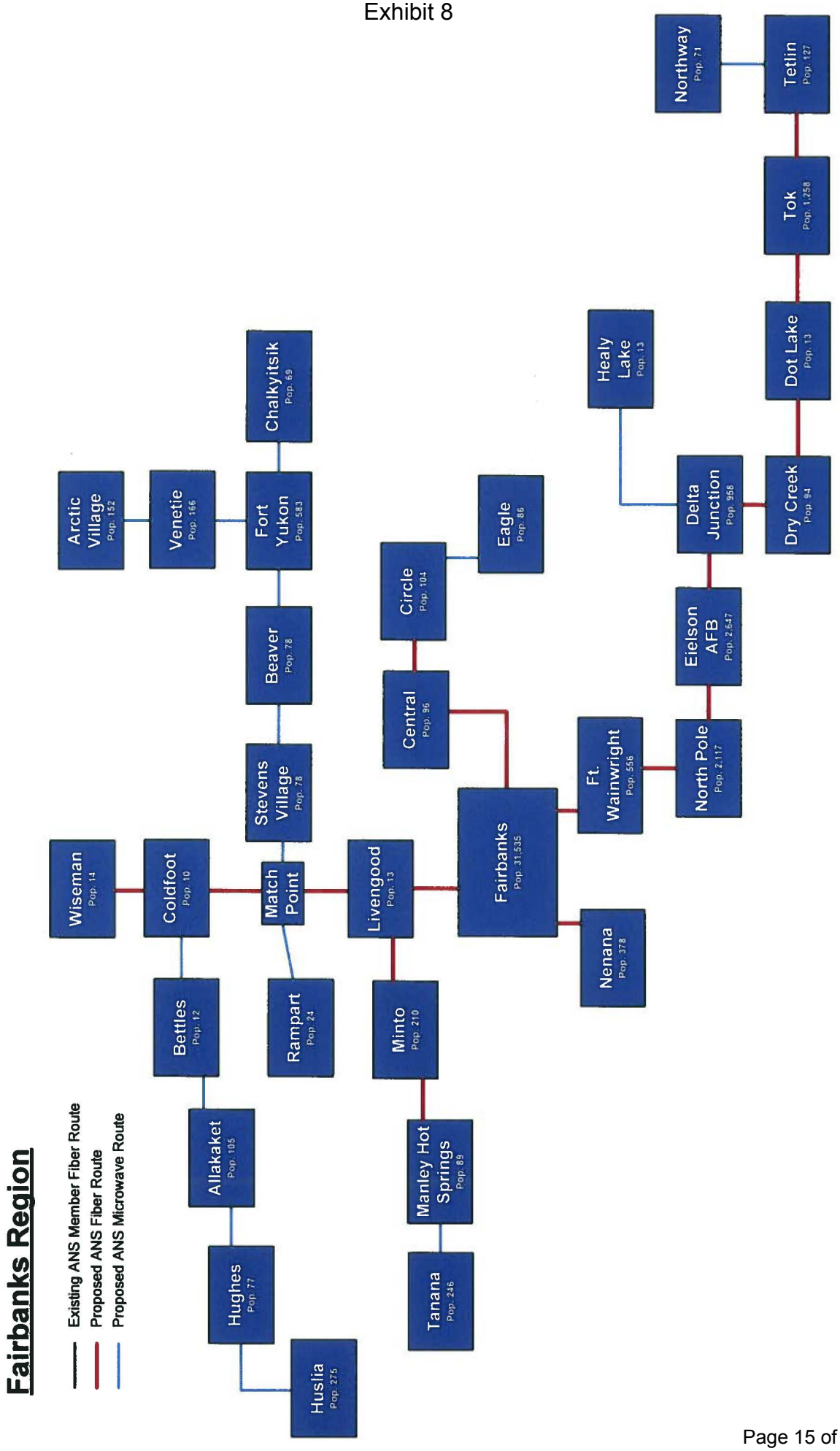

Anchorage Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Healy
Pop. 1021
Cantwell
Pop. 219
Talkeetna
Pop 876
Willow
Pop. 2,102
Big Lake
Pop. 3,350
Wasilla
Pop. 7,831
Palmer
Pop. 5,937
Chugiak
Pop. 9,256
Eagle River
Pop. 25,771
Tyonek
Pop. 171
Proposed
Microwave
Anchorage
Pop. 291, 826
Girdwood
Pop 1817
Hope
Pop. 192
Whittier
Pop. 220
Cooper
Landing
Pop. 289
Moose
Pass
Pop. 219
Seward
Pop. 2,693

Homer Region

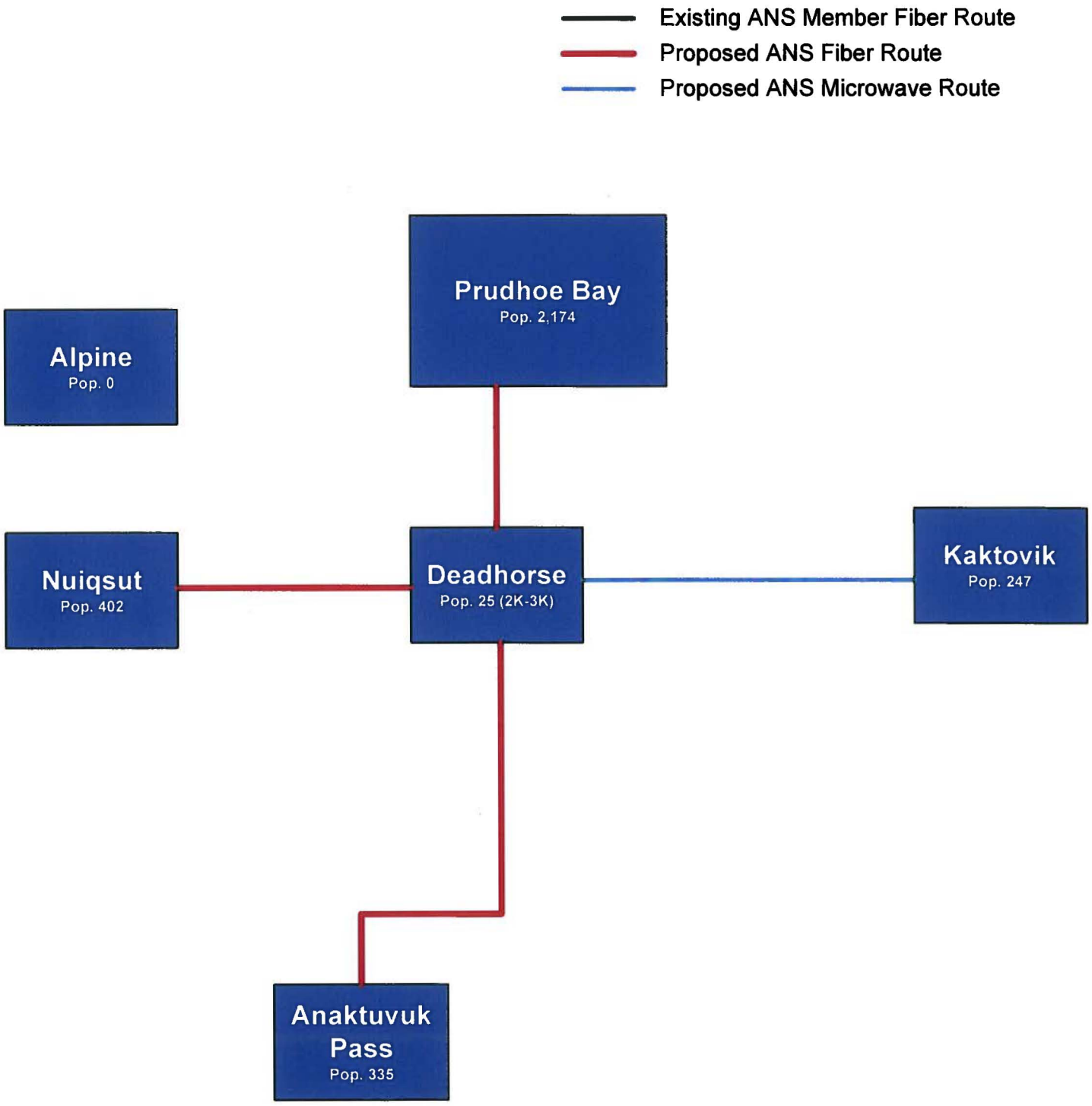


Kenai Region

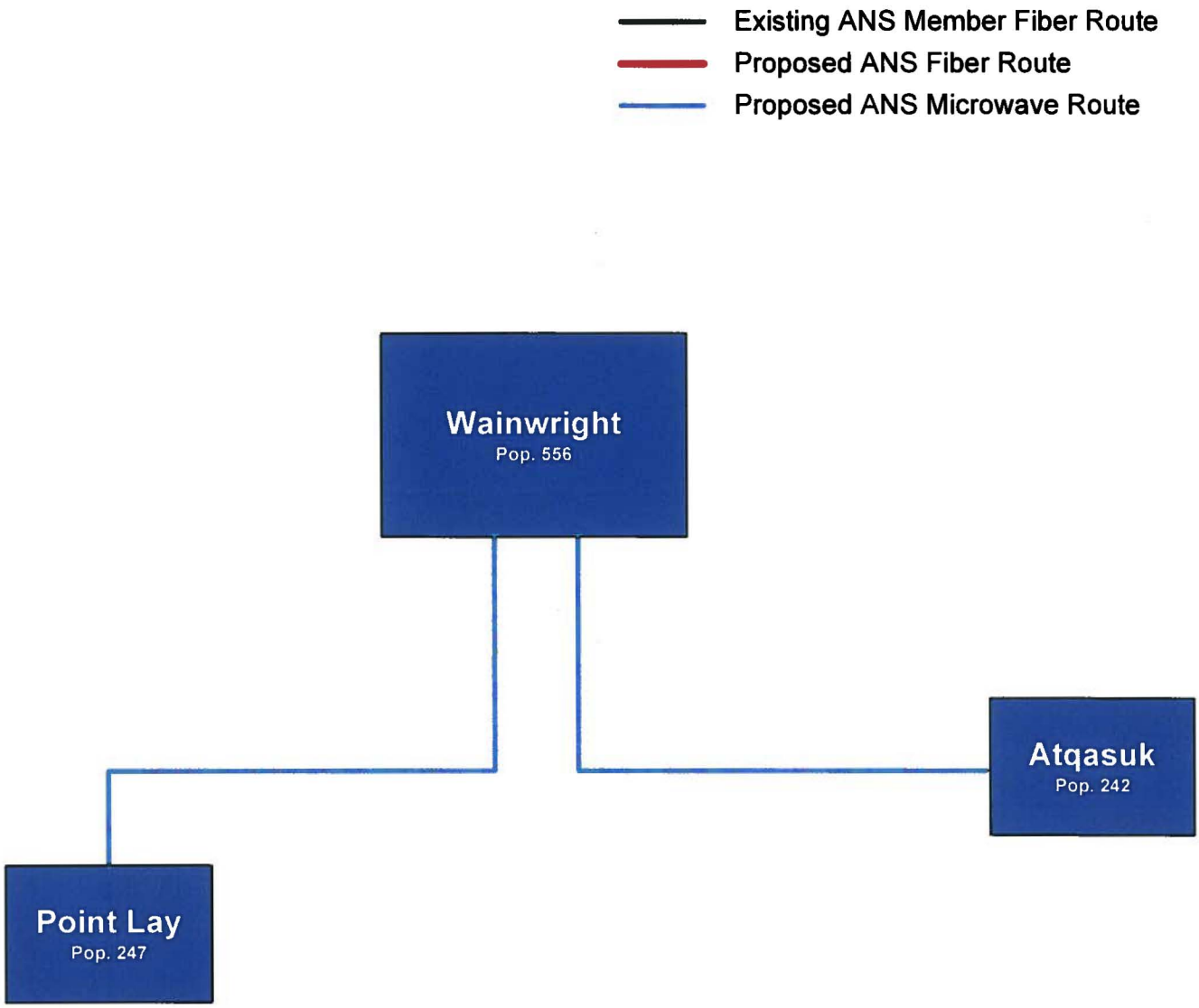


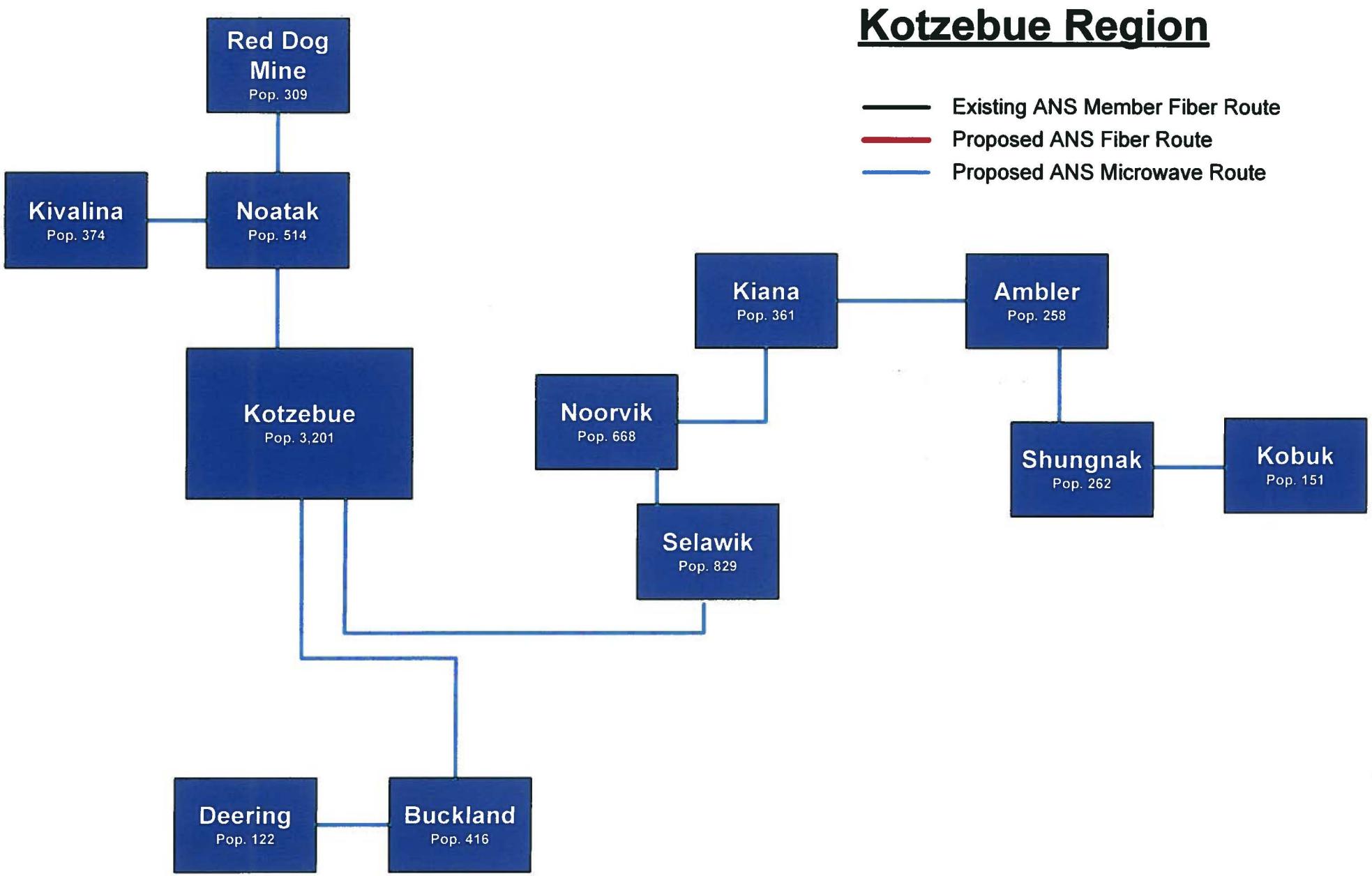

Fairbanks Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Arctic Village Pop. 152
Venetie Pop. 166
Fort Yukon Pop. 583
Chalkyitsik Pop. 69
Wiseman Pop. 14
Coldfoot Pop. 10
Match Point
Stevens Village Pop. 78
Beaver Pop. 78
Circle Pop. 104
Eagle Pop. 86
Central Pop. 96
Livengood Pop. 13
Fairbanks Pop. 31,535
Ft. Wainwright Pop. 556
Nenana Pop. 378
Bettles Pop. 12
Rampart Pop. 24
Minto Pop. 210
Allakaket Pop. 105
Manley Hot Springs Pop. 89
Hughes Pop. 77
Tanana Pop. 246
Huslia Pop. 275
Healy Lake Pop. 13
Delta Junction Pop. 958
Eielson AFB Pop. 2647
North Pole Pop. 2117
Dry Creek Pop. 94
Dot Lake Pop. 13
Tok Pop. 1,258
Northway Pop. 71
Tetlin Pop. 127

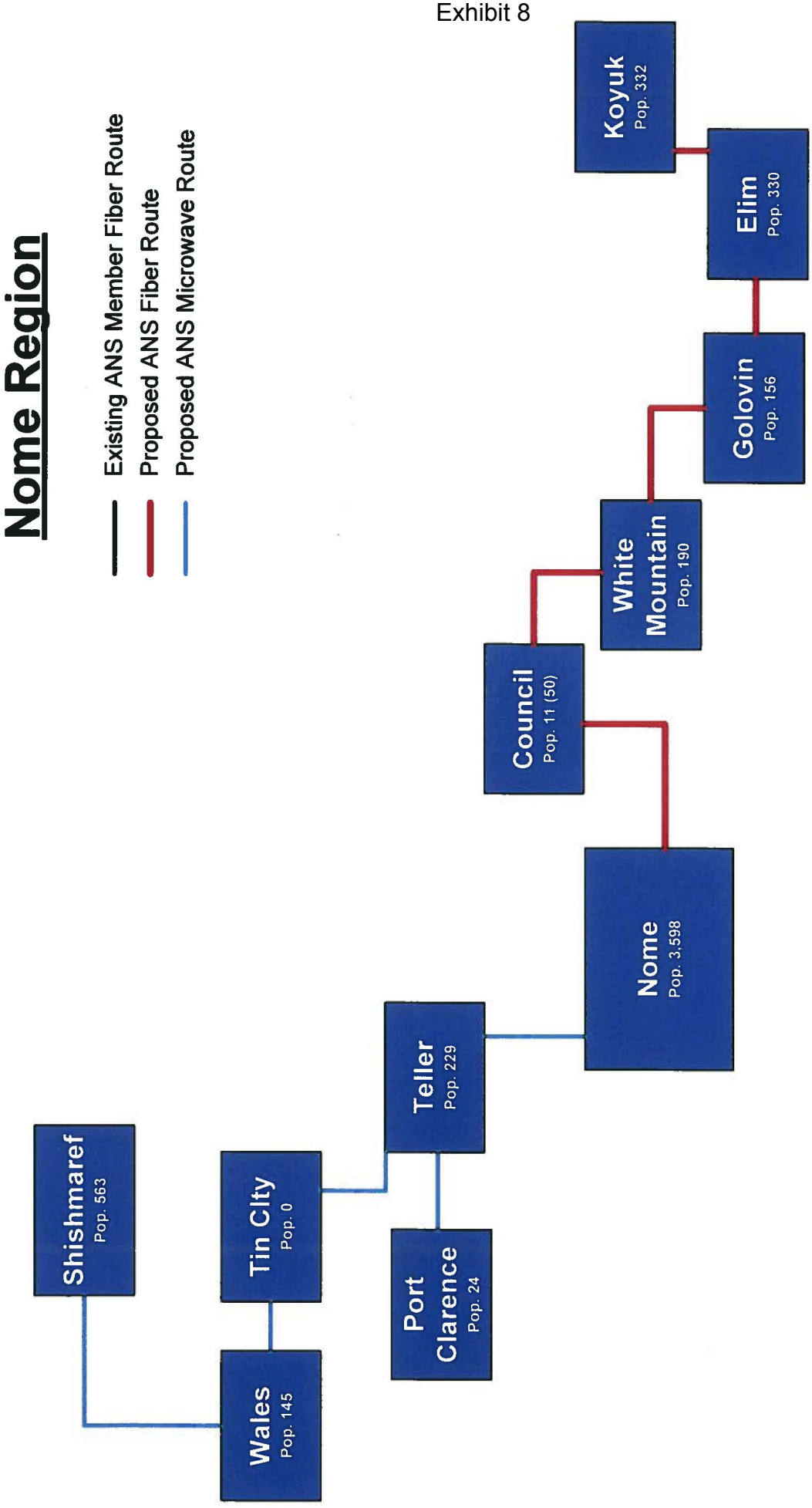
Prudhoe Bay Region



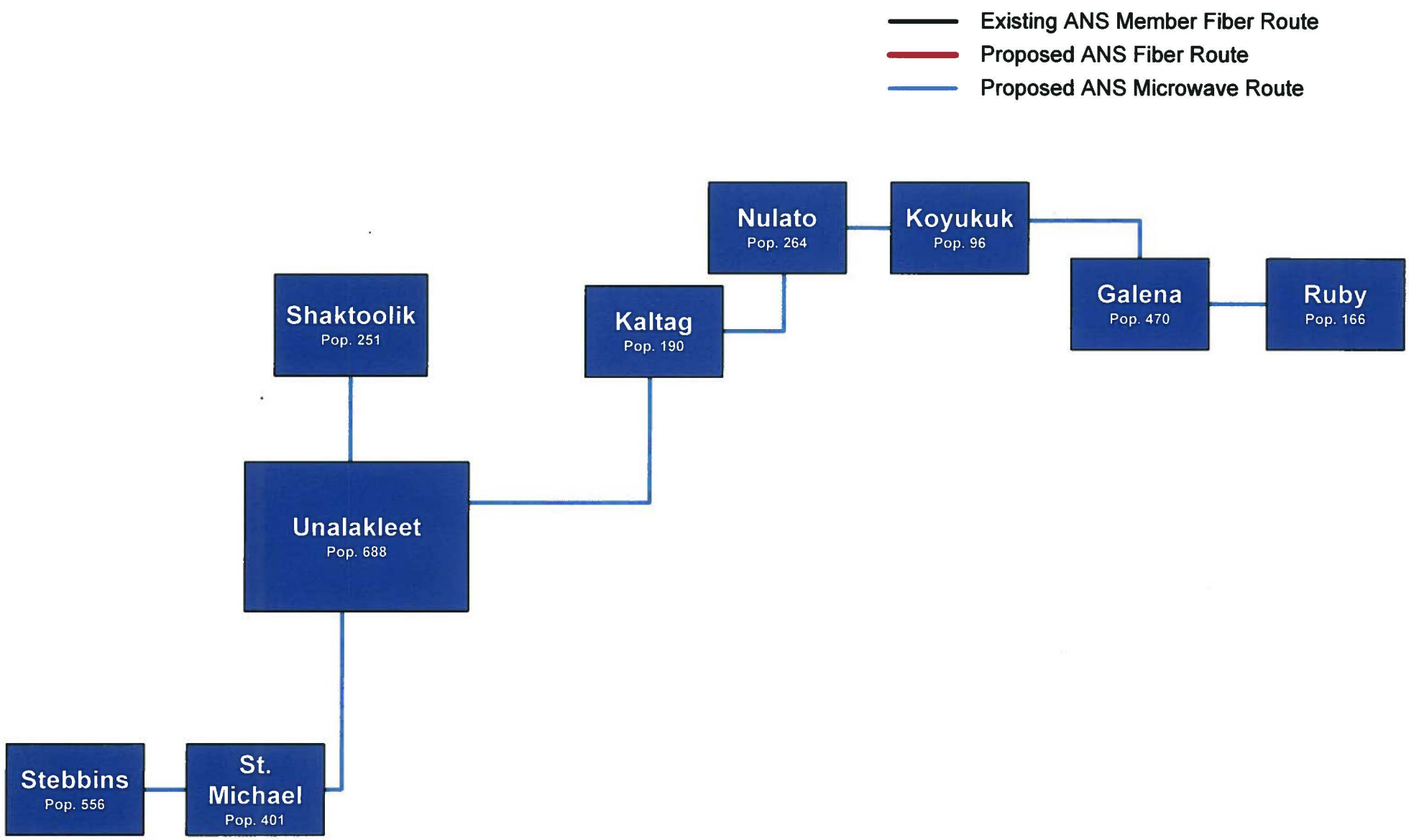
Wainwright Region

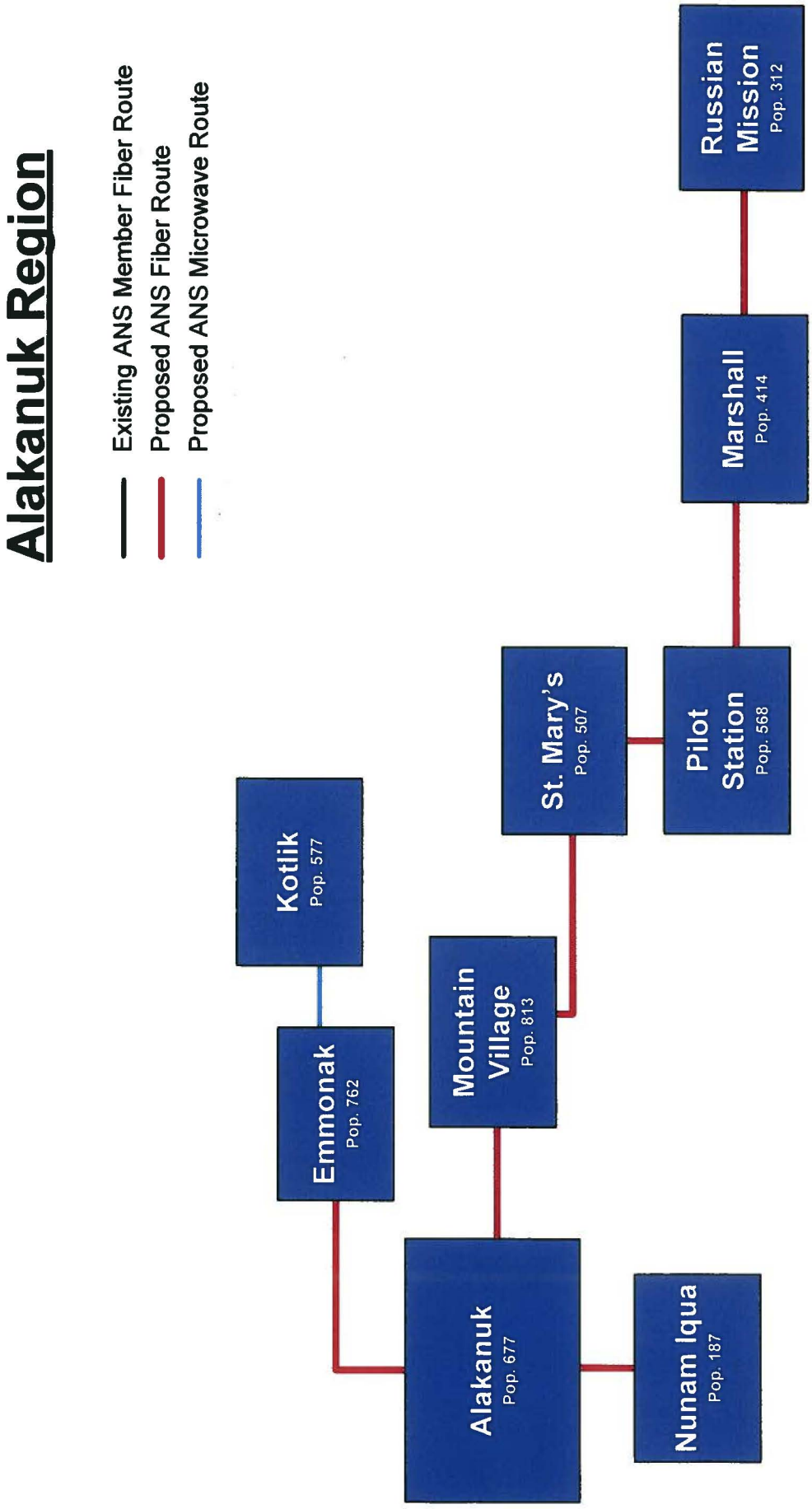



Kotzebue Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Red Dog Mine
Pop. 309
Kivalina
Pop. 374
Noatak
Pop. 514
Kotzebue
Pop. 3,201
Kiana
Pop. 361
Ambler
Pop. 258
Noorvik
Pop. 668
Shungnak
Pop. 262
Kobuk
Pop. 151
Selawik
Pop. 829
Deering
Pop. 122
Buckland
Pop. 416

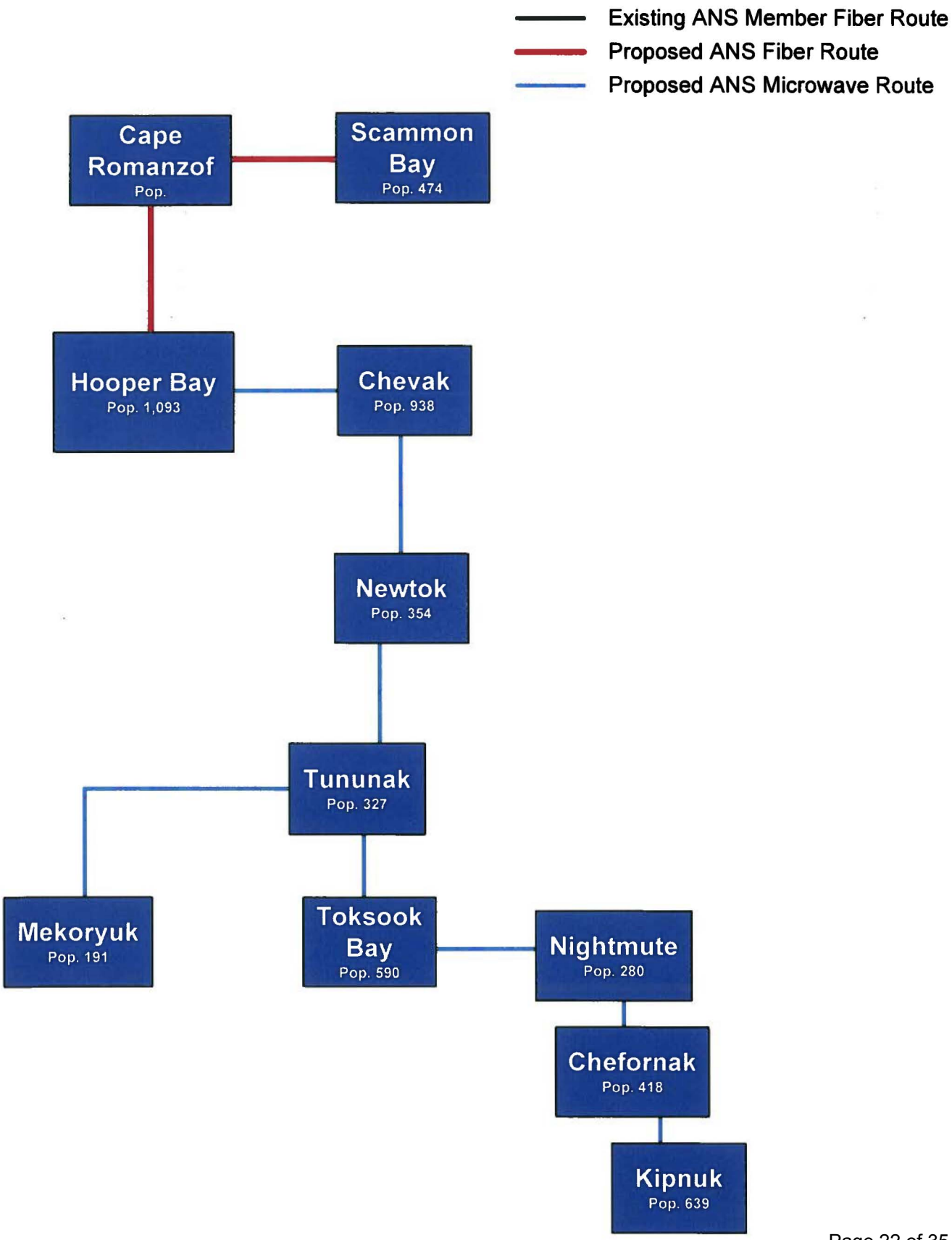

Nome Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Shishmaref
Pop. 563
Wales
Pop. 145
Tin City
Pop. 0
Port Clarence
Pop. 24
Teller
Pop. 229
Nome
Pop. 3,598
Council
Pop. 11 (50)
White Mountain
Pop. 190
Golovin
Pop. 156
Elim
Pop. 330
Koyuk
Pop. 332

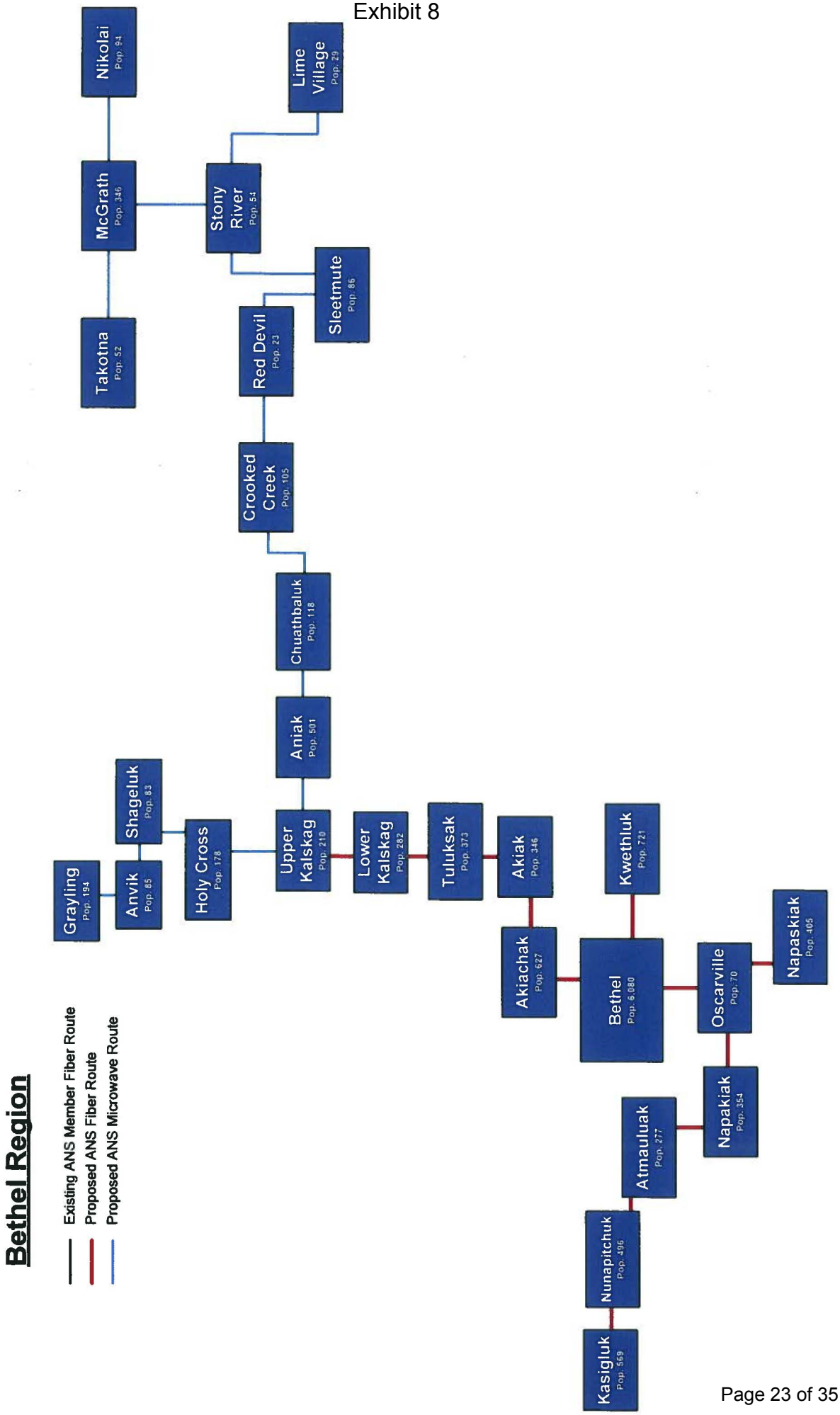
Unalakleet Region

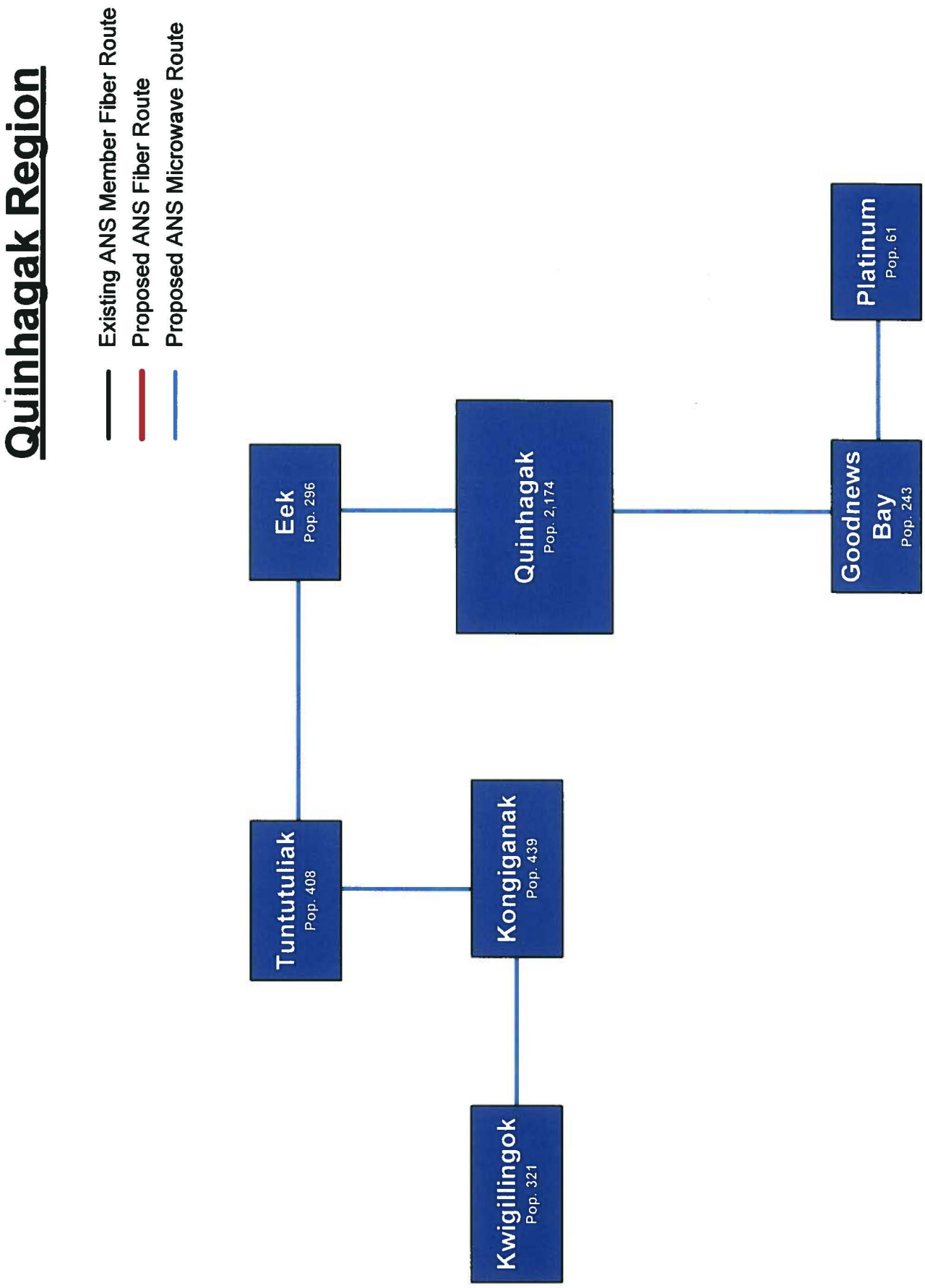


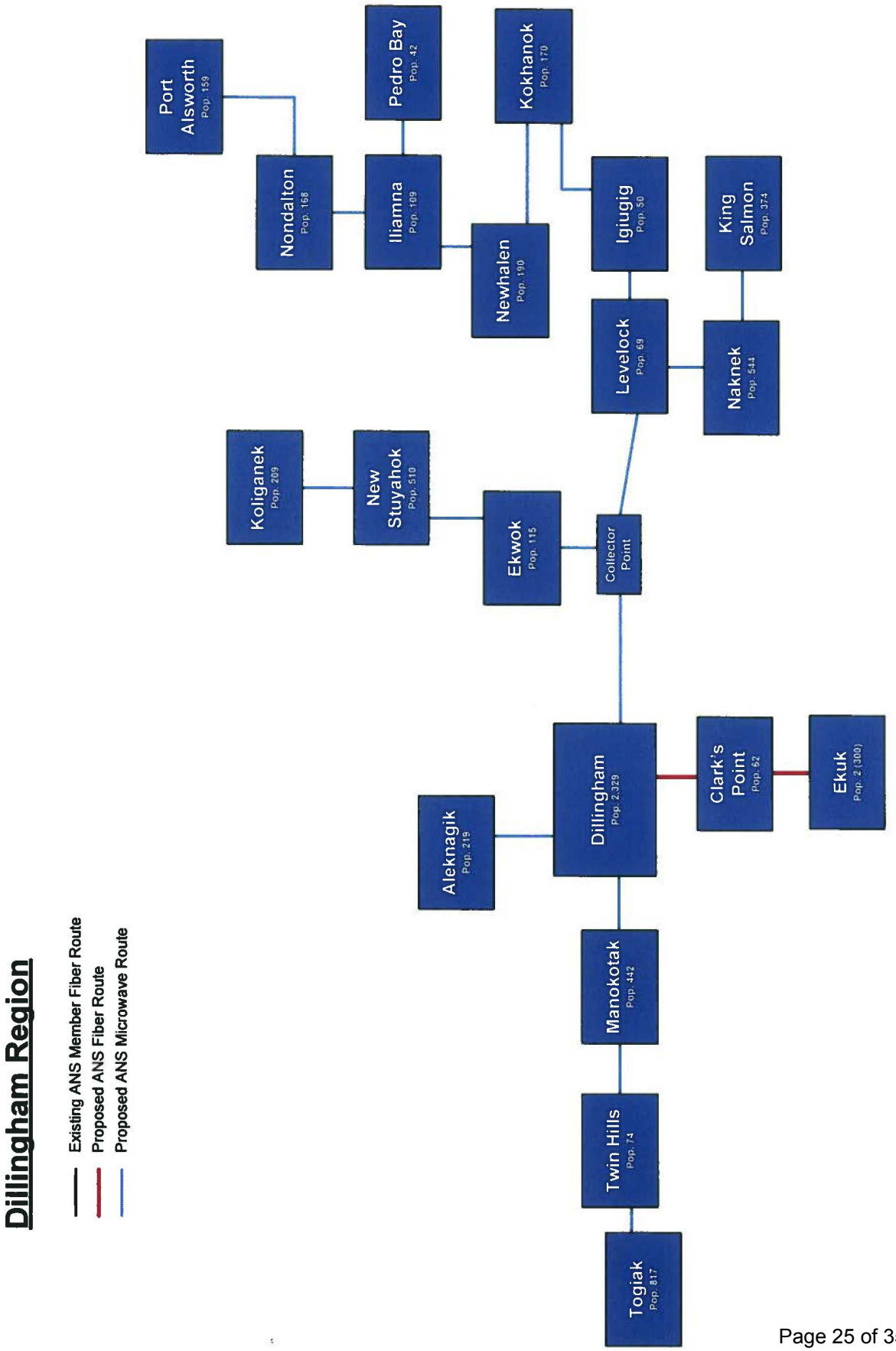

Alakanuk Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Russian Mission
Pop. 312
Marshall
Pop. 414
Pilot Station
Pop. 568
St. Mary's
Pop. 507
Kotlik
Pop. 577
Emmonak
Pop. 762
Mountain Village
Pop. 813
Alakanuk
Pop. 677
Nunam Iqua
Pop. 187

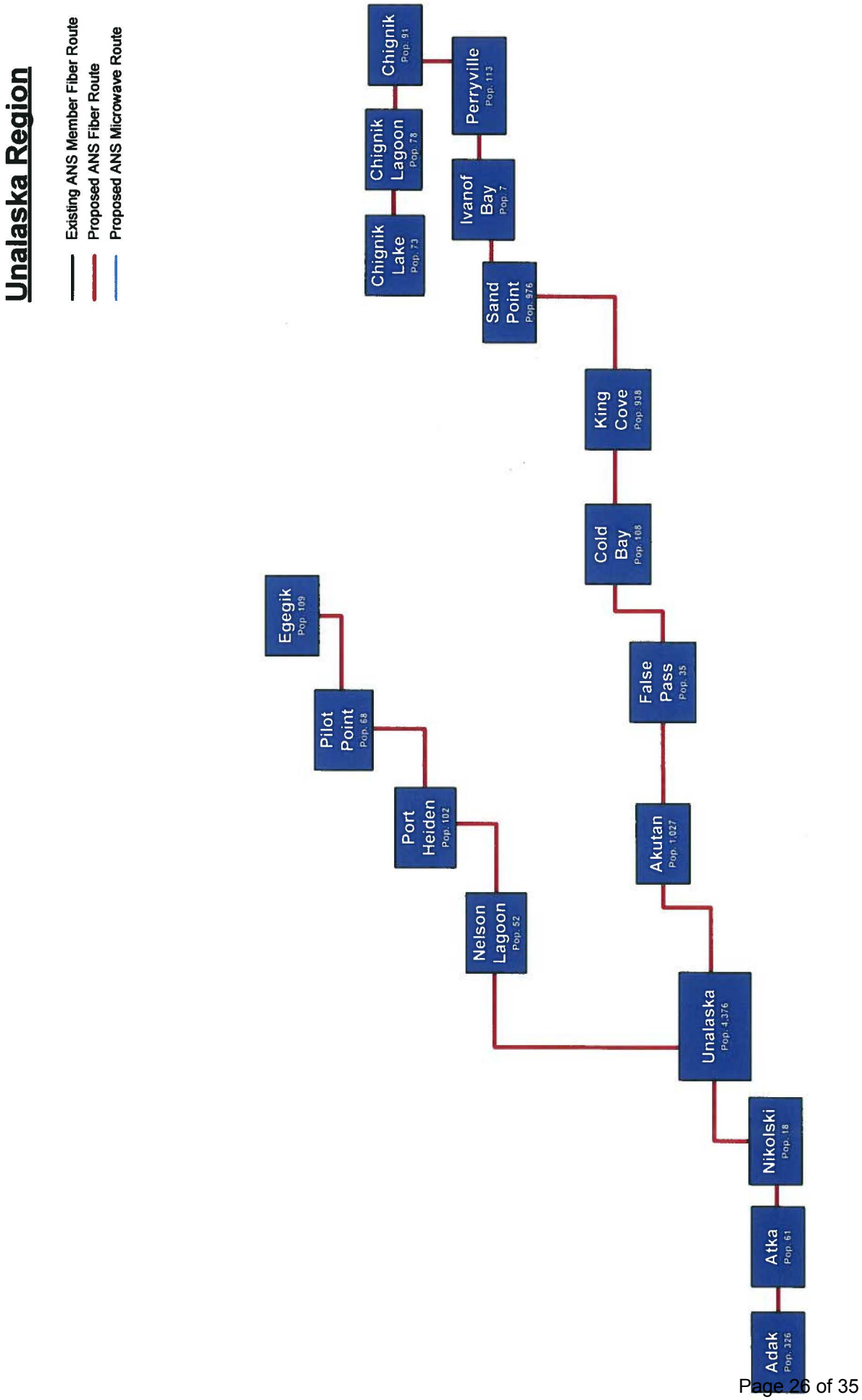
Hooper Bay Region

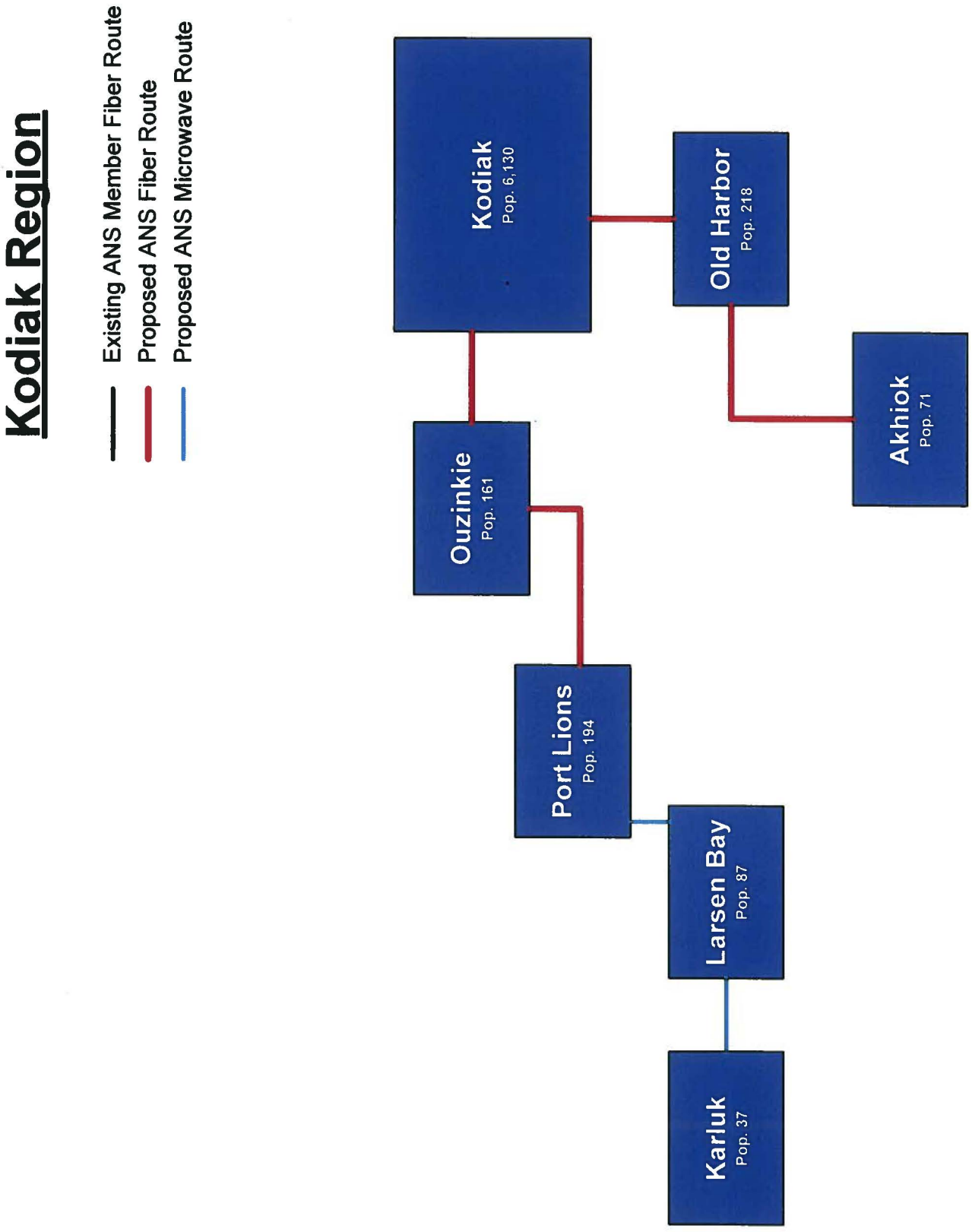



Bethel Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Nikolai Pop. 94
McGrath Pop. 346
Takotna Pop. 52
Lime Village Pop. 29
Stony River Pop. 54
Sleetmute Pop. 86
Red Devil Pop. 23
Crooked Creek Pop. 105
Chuathbaluk Pop. 118
Aniak Pop. 501
Shageluk Pop. 83
Grayling Pop. 194
Anvik Pop. 85
Holy Cross Pop. 178
Upper Kalskag Pop. 210
Lower Kalskag Pop. 282
Tuluksak Pop. 373
Akiak Pop. 346
Akiachak Pop. 627
Kwethluk Pop. 721
Bethel Pop. 6,080
Oscarville Pop. 70
Napaskiak Pop. 405
Napakiak Pop. 354
Atmauluak Pop. 277
Nunapitchuk Pop. 496
Kasigluk Pop. 569

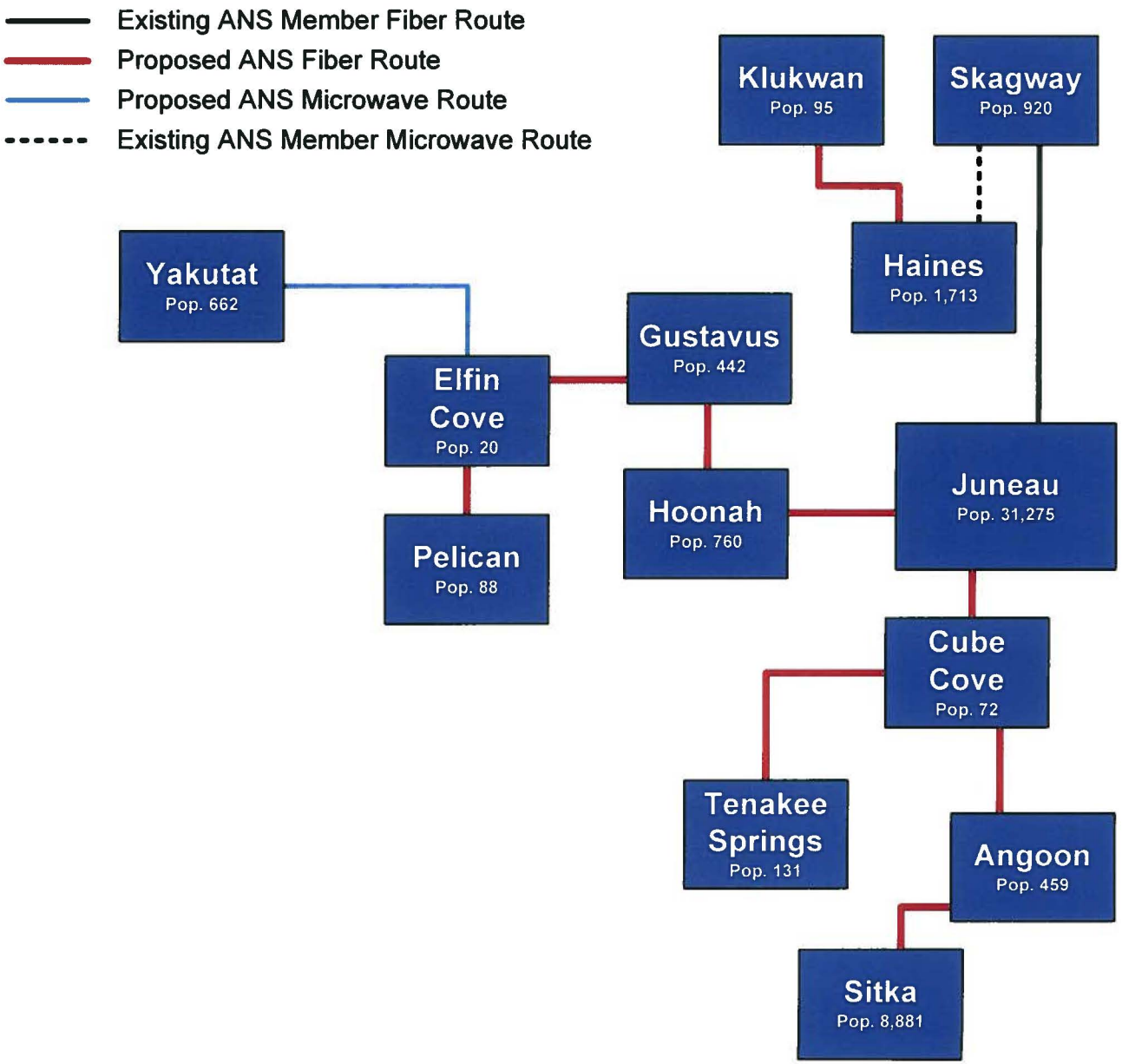

Quinhagak Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Eek
Pop. 296
Quinhagak
Pop. 2,174
Goodnews Bay
Pop. 243
Platinum
Pop. 61
Tuntutuliak
Pop. 408
Kongiganak
Pop. 439
Kwigillingok
Pop. 321


Dillingham Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Port Alsworth
Pop. 159
Pedro Bay
Pop. 42
Kokhanok
Pop. 170
Nondalton
Pop. 168
Iliamna
Pop. 109
Newhalen
Pop. 190
Igiugig
Pop. 50
King Salmon
Pop. 374
Levelock
Pop. 69
Naknek
Pop. 544
Koliganek
Pop. 269
New Stuyahok
Pop. 510
Ekwok
Pop. 115
Collector Point
Aleknagik
Pop. 219
Dillingham
Pop. 2,329
Clark's Point
Pop. 62
Ekuk
Pop. 2 (300)
Manokotak
Pop. 442
Twin Hills
Pop. 74
Togiak
Pop. 817

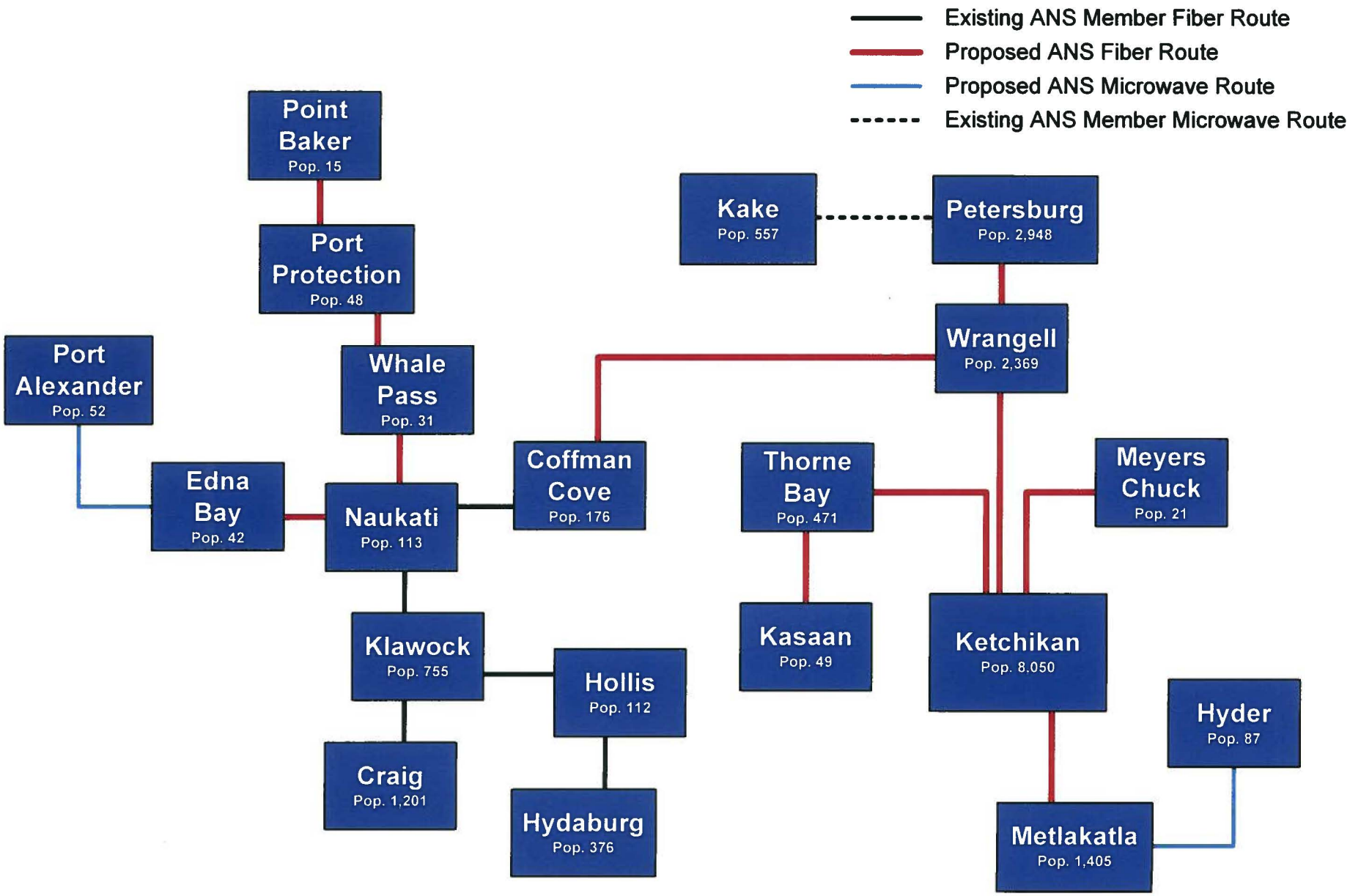

Unalaska Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Chignik
Pop. 91
Chignik Lagoon
Pop. 78
Chignik Lake
Pop. 73
Perryville
Pop. 113
Ivanof Bay
Pop. 7
Sand Point
Pop. 976
King Cove
Pop. 938
Cold Bay
Pop. 108
False Pass
Pop. 35
Akutan
Pop. 1,027
Unalaska
Pop. 4,376
Nikolski
Pop. 18
Atka
Pop. 61
Adak
Pop. 326
Nelson Lagoon
Pop. 52
Port Heiden
Pop. 102
Pilot Point
Pop. 68
Egegik
Pop. 109


Kodiak Region
Existing ANS Member Fiber Route
Proposed ANS Fiber Route
Proposed ANS Microwave Route
Kodiak
Pop. 6,130
Old Harbor
Pop. 218
Akhiok
Pop. 71
Ouzinkie
Pop. 161
Port Lions
Pop. 194
Larsen Bay
Pop. 87
Karluk
Pop. 37

Juneau Region



Ketchikan Region



Alaska Network Services - Theoretical Financial Statements
Assumes Complete Network Build
Ramp over 10 years

Annual Income Statement, All, Debt

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Income Statement										
Revenue										
ILEC Revenue										
Middle Mile Lease Rev	0	0	462,935	1,666,566	2,878,614	4,090,662	5,302,710	6,051,823	6,060,240	6,060,240
Total ILEC Revenue	0	0	462,935	1,666,566	2,878,614	4,090,662	5,302,710	6,051,823	6,060,240	6,060,240
E-Rate and Telehealth										
E-Rate and Telehealth Rev	0	0	5,180,796	10,361,584	15,548,676	20,729,472	25,910,260	31,091,052	36,271,848	41,452,636
Total E-Rate and Telehealth	0	0	5,180,796	10,361,584	15,548,676	20,729,472	25,910,260	31,091,052	36,271,848	41,452,636
Total Revenue	0	0	5,643,731	12,028,150	18,427,290	24,820,134	31,212,970	37,142,875	42,332,088	47,512,876
Operating Expense										
Staffing										
General Manager	58,667	177,173	180,717	184,331	188,018	191,778	195,614	199,526	203,516	207,587
Field Tech	0	300,000	456,000	465,120	474,422	483,911	493,589	503,461	513,530	523,801
Other Staff	83,333	251,667	256,700	261,834	267,071	272,412	277,860	283,418	289,086	294,868
Total Staffing	142,000	728,840	893,417	911,285	929,511	948,101	967,063	986,404	1,006,132	1,026,255
Depreciation	10,000	4,325,389	29,540,799	33,913,253	35,579,767	40,831,082	45,216,001	48,798,040	56,152,451	59,480,451
Lease Costs - Broadband	0	7,000,000	12,140,000	12,382,800	12,630,456	12,883,065	13,140,726	13,403,541	13,671,612	13,945,044
Building Rent/Lease	16,000	48,160	48,642	49,128	49,619	50,115	50,617	51,123	51,634	52,150
Marketing Costs	9,900	51,690	40,562	31,829	24,977	19,600	15,380	12,260	11,681	11,681
Taxes	0	0	338,624	721,689	1,105,637	1,489,208	1,872,778	2,228,573	2,539,925	2,850,773
Ongoing Maintenance	0	606,309	3,999,746	4,442,865	4,592,661	5,146,365	5,630,492	6,065,901	6,845,570	7,164,330
Total Operating Expense	177,900	12,760,387	47,001,789	52,452,849	54,912,628	61,367,537	66,893,058	71,545,842	80,279,005	84,530,684
Operating Profit	(177,900)	(12,760,387)	(41,358,058)	(40,424,699)	(36,485,338)	(36,547,403)	(35,680,088)	(34,402,967)	(37,946,917)	(37,017,808)
Interest Expense										
Interest										
Debt Interest	0	3,993,440	25,459,286	26,507,368	25,501,585	27,031,902	27,846,094	28,139,149	30,455,084	29,460,883
Total Interest	0	3,993,440	25,459,286	26,507,368	25,501,585	27,031,902	27,846,094	28,139,149	30,455,084	29,460,883
LOC Interest	4,639	112,327	2,399,352	6,320,604	10,296,578	14,354,084	18,728,039	23,315,191	28,249,774	33,571,644
Total Interest Expense	4,639	4,105,767	27,858,638	32,827,972	35,798,163	41,385,986	46,574,133	51,454,340	58,704,858	63,032,527
Net Income	(182,539)	(16,866,154)	(69,216,695)	(73,252,671)	(72,283,501)	(77,933,389)	(82,254,221)	(85,857,307)	(96,651,775)	(100,050,335)
Interest Coverage (Earnings Basis)	(41.40)	(3.90)	(1.50)	(1.20)	(1.00)	(0.90)	(0.80)	(0.70)	(0.60)	(0.60)
EBIT % Denominator Value	0	0	5,643,731	12,028,150	18,427,290	24,820,134	31,212,970	37,142,875	42,332,088	47,512,876

Annual Balance Sheet, All, Debt

	2,017	2,018	2,019	2,020	2,021	2,022	2,023	2,024	2,025	2,026
Balance Sheet										
Assets	112,731	517,252,153	702,164,583	703,317,267	734,237,190	788,083,307	844,292,560	852,721,446	943,211,234	946,238,327

Liabilities and Equity										
Liabilities										
Current Liabilities										
Short Term Debt										
LOC	227,305	16,425,423	99,931,180	188,953,168	276,812,456	371,184,583	470,822,257	575,418,354	691,645,920	811,906,532
Total Short Term Debt	227,305	16,425,423	99,931,180	188,953,168	276,812,456	371,184,583	470,822,257	575,418,354	691,645,920	811,906,532
Accounts Payable	45,233	3,117,977	4,238,979	4,447,640	4,848,248	5,286,334	5,773,969	6,077,941	6,836,652	7,174,653
Total Current Liabilities	272,539	19,543,401	104,170,159	193,400,808	281,660,703	376,470,917	476,596,226	581,496,295	698,482,571	819,081,185
Long Term Debt										
Debt	0	513,114,903	674,266,694	650,539,200	656,696,800	684,228,881	712,603,278	691,529,792	750,062,322	720,515,075
Total Long Term Debt	0	513,114,903	674,266,694	650,539,200	656,696,800	684,228,881	712,603,278	691,529,792	750,062,322	720,515,075
Total Liabilities	272,539	532,658,304	778,436,853	843,940,008	938,357,503	1,060,699,797	1,189,199,504	1,273,026,087	1,448,544,894	1,539,596,260
Stockholders Equity										
Common Stock										
Additional Equity	22,731	1,642,542	9,993,118	18,895,317	27,681,246	37,118,458	47,082,226	57,541,835	69,164,592	81,190,653
Total Common Stock	22,731	1,642,542	9,993,118	18,895,317	27,681,246	37,118,458	47,082,226	57,541,835	69,164,592	81,190,653
Retained Earnings										
Beginning Retained Earnings	0	(182,539)	(17,048,692)	(86,265,388)	(159,518,058)	(231,801,559)	(309,734,948)	(391,989,169)	(477,846,476)	(574,498,252)
Net Income	(182,539)	(16,866,154)	(69,216,695)	(73,252,671)	(72,283,501)	(77,933,389)	(82,254,221)	(85,857,307)	(96,651,775)	(100,050,335)
Total Retained Earnings	(182,539)	(17,048,692)	(86,265,388)	(159,518,058)	(231,801,559)	(309,734,948)	(391,989,169)	(477,846,476)	(574,498,252)	(674,548,586)
Total Stockholders Equity	(159,808)	(15,406,150)	(76,272,270)	(140,622,741)	(204,120,314)	(272,616,490)	(344,906,944)	(420,304,641)	(505,333,660)	(593,357,933)
Total Liabilities and Equity	112,731	517,252,153	702,164,583	703,317,267	734,237,190	788,083,307	844,292,560	852,721,446	943,211,234	946,238,327

Annual Cash Flow Statement, All, Equity

	2,017	2,018	2,019	2,020	2,021	2,022	2,023	2,024	2,025	2,026
Cash Flow Statement										
Cash Flows from Operating Activities	(122,667)	(9,355,694)	(36,671,446)	(33,342,890)	(26,539,810)	(22,842,874)	(18,355,282)	(13,888,670)	(11,922,572)	(7,091,971)
Cash Flows from Investing Activities										
Property, Plant and Equipment	(100,000)	(519,845,000)	(205,586,750)	(25,631,000)	(57,180,500)	(84,707,250)	(90,928,750)	(46,318,750)	(134,587,750)	(50,049,750)
Total Cash Flows from Investing Activities	(100,000)	(519,845,000)	(205,586,750)	(25,631,000)	(57,180,500)	(84,707,250)	(90,928,750)	(46,318,750)	(134,587,750)	(50,049,750)
Cash Flows from Financing Activities										
Debt and Other Liabilities										
Long Term Debt										
Debt	0	516,590,014	196,673,571	21,389,813	52,518,718	79,409,049	79,599,772	40,350,860	121,359,757	42,918,863
Total Long Term Debt	0	516,590,014	196,673,571	21,389,813	52,518,718	79,409,049	79,599,772	40,350,860	121,359,757	42,918,863
Total Debt and Other Liabilities	0	516,590,014	196,673,571	21,389,813	52,518,718	79,409,049	79,599,772	40,350,860	121,359,757	42,918,863
Reduction of Debt and Other Liabilities										
Long Term Debt										
Debt	0	(3,475,111)	(35,521,779)	(45,117,307)	(46,361,118)	(51,876,968)	(51,225,375)	(61,424,346)	(62,827,226)	(72,466,110)
Total Long Term Debt	0	(3,475,111)	(35,521,779)	(45,117,307)	(46,361,118)	(51,876,968)	(51,225,375)	(61,424,346)	(62,827,226)	(72,466,110)
Total Reduction of Debt and Other Liabilities	0	(3,475,111)	(35,521,779)	(45,117,307)	(46,361,118)	(51,876,968)	(51,225,375)	(61,424,346)	(62,827,226)	(72,466,110)
Common Stock										
Additional Equity	222,667	16,085,791	81,106,405	82,701,385	77,562,710	80,018,043	80,909,635	81,280,906	87,977,791	86,688,968
Total Common Stock	222,667	16,085,791	81,106,405	82,701,385	77,562,710	80,018,043	80,909,635	81,280,906	87,977,791	86,688,968
Total Cash Flows from Financing Activities	222,667	529,200,694	242,258,196	58,973,890	83,720,310	107,550,124	109,284,032	60,207,420	146,510,322	57,141,721

	Population	Build Cost	Accum Build Cost	Cost Per Person	Cost Per HH
Council	11	$22,260,000	$22,260,000	$2,023,636	$5,059,091
Nikolski	18	$28,000,000	$28,000,000	$3,888,889	$3,888,889
Atka	61	$42,000,000	$70,000,000	$2,215,190	$2,215,190
Bettles	12	$8,160,000	$8,160,000	$680,000	$1,700,000
Ivanof Bay	7	$3,937,500		$1,406,250	$1,406,250
Healy Lake	13	$6,146,000		$472,769	$1,181,923
Adak	326	$29,750,000	$99,750,000	$764,954	$764,954
Rampart	24	$4,226,000	$4,226,000	$176,083	$440,208
Central	96	$14,760,000	$14,760,000	$153,750	$384,375
White Mountain	190	$6,990,000	$29,250,000	$145,522	$363,806
Port Alexander	52	$7,601,000	$12,851,000	$136,713	$341,782
False Pass	35	$4,375,000		$312,500	$312,500
Edna Bay	42	$5,250,000	$5,250,000	$125,000	$312,500
Whale Pass	31	$3,840,000	$3,840,000	$123,871	$309,677
Allakaket	105	$6,294,000	$14,454,000	$123,538	$308,846
Eagle	86	$10,282,000	$10,282,000	$119,558	$298,895
Ekuk	2	$900,000	$7,500,000	$117,188	$292,969
Hughes	77	$6,294,000	$20,748,000	$106,948	$267,371
Clarks Point	62	$6,600,000	$6,600,000	$106,452	$266,129
Kaktovik	247	$25,472,000	$25,472,000	$103,126	$257,814
Golovin	156	$6,990,000	$36,240,000	$101,513	$253,782
Port Protection	48	$3,720,000	$7,560,000	$95,696	$239,241
Circle	104	$3,960,000	$18,720,000	$93,600	$234,000
Point Baker	15	$1,050,000	$8,610,000	$91,596	$228,989
Akhiok	71	$19,635,000	$24,885,000	$86,107	$215,268
Nelson Lagoon	52	$3,500,000		$168,269	$168,269
Elim	330	$8,250,000	$44,490,000	$64,760	$161,900
Igiugig	50	$2,980,000	$5,264,500	$62,302	$155,754
Wales	145	$5,160,000	$15,359,000	$59,187	$147,967
Chignik	91	$5,250,000		$144,231	$144,231
Huslia	275	$6,294,000	$27,042,000	$57,659	$144,147
Koyuk	332	$14,100,000	$58,590,000	$57,498	$143,744
Northway	71	$4,078,000		$57,437	$143,592
Levelock	69	$3,016,000	$3,792,500	$54,964	$137,409
Nuigsut	402	$21,600,000	$21,600,000	$53,731	$134,328
Beaver	78	$4,226,000	$8,304,000	$53,231	$133,077
Atqasuk	242	$12,707,000	$12,707,000	$52,508	$131,271
Stevens Village	78	$4,078,000	$4,078,000	$52,282	$130,705
Point Lay	247	$12,855,000	$12,855,000	$52,045	$130,111
Pilot Point	68	$3,500,000		$128,676	$128,676
Meyers Chuck	21	$1,050,000	$1,050,000	$50,000	$125,000
Karluk	37	$5,196,000	$23,153,000	$48,336	$120,840
Port Clarence	24	$2,625,000	$6,425,500	$46,394	$115,984
Anaktuvuk Pass	335	$15,260,000	$15,260,000	$45,552	$113,881
Lime Village	29	$6,294,000	$20,885,000	$44,201	$110,503
Shageluk	83	$5,196,000	$11,490,000	$44,023	$110,057
Anvik	85	$2,643,000	$14,133,000	$40,847	$102,117
Kaltag	190	$7,749,000	$7,749,000	$40,784	$101,961
Larsen Bay	87	$12,707,000	$17,957,000	$40,627	$101,567

Cold Bay	108	$4,375,000		$101,273	$101,273
Egegik	109	$4,375,000		$100,344	$100,344
Manley Hot Spring	89	$4,800,000	$10,920,000	$36,522	$91,304
Holy Cross	178	$6,294,000	$6,294,000	$35,360	$88,399
Tanana	246	$8,214,000	$19,134,000	$35,108	$87,771
Halibut Cove	76	$2,625,000	$2,625,000	$34,539	$86,349
Port Heiden	102	$3,500,000		$85,784	$85,784
Tyonek	171	$5,740,000	$5,740,000	$33,567	$83,918
Teller	229	$7,601,000	$7,601,000	$33,192	$82,980
Stony River	54	$4,190,000	$29,182,000	$32,900	$82,249
Takotna	52	$4,190,000	$14,632,500	$32,753	$81,883
Kokhanok	170	$3,016,000	$8,280,500	$32,536	$81,341
Grayling	194	$2,643,000	$16,776,000	$31,067	$77,667
Nikolai	94	$4,226,000	$14,668,500	$30,012	$75,031
Sleetmute	86	$4,190,000	$24,992,000	$30,002	$75,006
Oscarville	70	$2,100,000	$2,100,000	$30,000	$75,000
Chignik Lake	73	$2,187,500		$74,914	$74,914
Angoon	459	$6,650,000	$13,475,000	$29,357	$73,393
Minto	210	$6,120,000	$6,120,000	$29,143	$72,857
Nulato	264	$5,160,000	$12,909,000	$28,434	$71,085
Koyukuk	96	$2,625,000	$15,534,000	$28,244	$70,609
Red Devil	23	$8,290,000	$20,802,000	$27,847	$69,618
Platinum	61	$2,140,000	$8,286,000	$27,257	$68,141
Perryville	113	$3,062,500		$67,754	$67,754
McGrath	346	$6,294,000	$20,885,000	$26,453	$66,134
Scammon Bay	474	$1,920,000	$12,420,000	$26,203	$65,506
Goodnews Bay	243	$6,146,000	$6,146,000	$25,292	$63,230
Pedro Bay	42	$2,980,000	$13,572,000	$25,087	$62,717
Shishmaref	563	$5,196,000	$20,555,000	$24,991	$62,477
Old Harbor	218	$5,250,000	$5,250,000	$24,083	$60,206
Deering	122	$5,196,000	$12,954,000	$24,078	$60,195
Seldovia	165	$2,800,000	$5,425,000	$22,510	$56,276
Chignik Lagoon	78	$1,750,000		$56,090	$56,090
Newhalen	190	$1,535,000	$9,815,500	$22,082	$55,205
Mountain Village	813	$17,700,000	$17,700,000	$21,771	$54,428
Nunam Iqua	187	$3,900,000	$3,900,000	$20,856	$52,139
Illiamna	109	$1,553,000	$11,368,500	$20,539	$51,348
Mekoryuk	191	$5,160,000	$20,499,000	$20,489	$51,222
Nondalton	168	$2,980,000	$13,572,000	$20,348	$50,870
Ekwok	115	$1,553,000	$2,329,500	$20,257	$50,641
Shaktoolik	251	$5,048,000	$5,048,000	$20,112	$50,279
Port Alsworth	159	$2,980,000	$16,552,000	$20,039	$50,097
Arctic Village	152	$6,294,000	$20,982,000	$19,851	$49,626
Ruby	166	$5,196,000	$23,373,000	$19,707	$49,269
Buckland	416	$5,160,000	$7,758,000	$18,649	$46,623
Chalkyitsik	69	$2,158,000	$14,688,000	$18,178	$45,446
Russian Mission	312	$9,600,000	$46,980,000	$17,972	$44,931
Galena	470	$2,643,000	$18,177,000	$17,821	$44,551
Crooked Creek	105	$4,226,000	$12,512,000	$17,282	$43,204
Fort Yukon	583	$4,226,000	$12,530,000	$16,955	$42,388

Nanwalek	254	$2,800,000	$8,225,000	$16,616	$41,540
Marshall	414	$10,500,000	$37,380,000	$16,238	$40,595
Venetie	166	$2,158,000	$14,688,000	$16,230	$40,575
McCarthy	28	$450,000	$450,000	$16,071	$40,179
Red Dog	309	$5,196,000	$8,996,500	$15,895	$39,737
Lower Kalskag	282	$12,000,000	$25,800,000	$15,848	$39,619
St Mary's	507	$2,280,000	$19,980,000	$15,136	$37,841
Yakutat	662	$12,707,000	$27,932,000	$14,905	$37,263
Pelican	88	$4,025,000	$19,250,000	$14,808	$37,019
Port Lions	194	$3,150,000	$5,250,000	$14,789	$36,972
Noatak	514	$7,601,000	$7,601,000	$14,788	$36,970
Atautluak	277	$6,300,000	$9,750,000	$14,640	$36,599
Upper Kalskag	210	$900,000	$26,700,000	$14,527	$36,317
Kivalina	374	$5,196,000	$8,996,500	$14,258	$35,644
Pilot Station	568	$6,900,000	$26,880,000	$14,237	$35,593
Eek	296	$4,190,000	$4,190,000	$14,155	$35,389
Aleknagik	219	$2,980,000	$2,980,000	$13,607	$34,018
Port Graham	177	$875,000	$9,100,000	$13,542	$33,854
Chuathbaluk	118	$2,140,000	$8,286,000	$13,386	$33,465
Ouzinkie	161	$2,100,000	$2,100,000	$13,043	$32,609
Hyder	87	$15,260,000	$19,197,500	$12,867	$32,167
Elfin Cove	20	$5,600,000	$15,225,000	$12,459	$31,148
Aniak	501	$6,146,000	$6,146,000	$12,267	$30,669
Twin Hills	74	$1,553,000	$5,884,000	$11,403	$28,508
Nunapitchuk	496	$3,000,000	$12,750,000	$10,972	$27,431
Kobuk	151	$2,625,000	$26,061,000	$10,305	$25,762
Tuluksak	373	$6,900,000	$13,800,000	$10,253	$25,632
Shungnak	262	$2,643,000	$23,436,000	$9,855	$24,638
Ambler	258	$5,196,000	$20,793,000	$9,827	$24,566
Manokotak	442	$4,331,000	$4,331,000	$9,799	$24,497
Tununak	327	$5,196,000	$15,422,000	$9,526	$23,814
Toksook Bay	590	$5,160,000	$20,582,000	$9,317	$23,293
Chefornak	418	$5,160,000	$28,367,000	$9,316	$23,290
Tuntutuliak	408	$2,158,000	$6,348,000	$9,017	$22,543
Kasigluk	569	$2,700,000	$15,450,000	$8,925	$22,314
Napakiak	354	$2,400,000	$3,450,000	$8,869	$22,172
Nightmute	280	$2,625,000	$23,207,000	$8,834	$22,085
Kipnuk	639	$2,643,000	$31,010,000	$8,417	$21,044
Kiana	361	$5,160,000	$15,597,000	$8,395	$20,986
Gustavus	442	$4,375,000	$9,625,000	$8,007	$20,019
King Salmon	374	$2,980,000	$7,549,000	$7,925	$19,814
Newtok	354	$5,196,000	$10,226,000	$7,915	$19,787
Naknek	544	$1,553,000	$4,569,000	$7,898	$19,745
Napaskiak	405	$2,400,000	$3,450,000	$7,841	$19,602
Wrangell	2,369	$18,375,000	$18,375,000	$7,756	$19,391
Kwethluk	721	$4,500,000	$5,550,000	$7,698	$19,244
Kongiganak	439	$2,158,000	$8,506,000	$7,442	$18,605
Kwigillingok	321	$2,140,000	$10,646,000	$7,272	$18,180
Akiachak	627	$4,500,000	$4,500,000	$7,177	$17,943
Akiak	346	$2,400,000	$6,900,000	$7,091	$17,729

Noorvik	668	$5,196,000	$10,437,000	$6,972	$17,430
Hoonah	760	$5,250,000	$5,250,000	$6,908	$17,270
St Michael	401	$2,643,000	$2,643,000	$6,591	$16,478
Kassan	49	$1,560,000	$3,397,500	$6,534	$16,334
Koliganek	209	$1,553,000	$5,417,500	$6,496	$16,240
Selwik	829	$2,643,000	$5,241,000	$6,322	$15,805
New Stoyahok	510	$1,535,000	$3,864,500	$6,183	$15,458
Moose Pass	219	$5,880,000	$12,460,000	$5,592	$13,981
Togiak	817	$1,535,000	$7,419,000	$5,566	$13,914
Stebbins	556	$2,625,000	$5,268,000	$5,505	$13,762
Chevak	938	$5,030,000	$5,030,000	$5,362	$13,406
Coffman Cove	176	$787,500	$787,500	$4,474	$11,186
Kotlik	577	$2,643,000	$5,643,000	$4,214	$10,536
Emmonak	762	$3,000,000	$3,000,000	$3,937	$9,843
Thorne Bay	471	$1,837,500	$1,837,500	$3,901	$9,753
Tetlin	127	$3,240,000	$29,280,000	$3,814	$9,536
Petersburg	2,948	$6,150,000	$15,337,500	$3,711	$9,279
Whittier	220	$3,360,000	$7,560,000	$3,711	$9,278
Sand Point	976	$3,500,000		$8,965	$8,965
Tok	1,258	$5,760,000	$26,040,000	$3,449	$8,624
Tatitlek	88	$300,000	$300,000	$3,409	$8,523
Seward	2,693	$4,060,000	$16,520,000	$3,357	$8,393
Hope	192	$2,380,000	$6,580,000	$3,275	$8,188
Dot Lake	13	$7,680,000	$20,280,000	$3,224	$8,059
Tenakee Springs	131	$3,500,000	$25,987,500	$2,812	$7,030
Metlakatla	1,405	$3,937,500	$3,937,500	$2,802	$7,006
Akutan	1,027	$2,625,000		$6,390	$6,390
Sitka	8,881	$15,750,000	$22,487,500	$2,468	$6,171
Girdwood	1,817	$4,200,000	$4,200,000	$2,312	$5,779
Delta Junction	958	$8,520,000	$12,600,000	$2,007	$5,018
King Cove	938	$1,750,000		$4,664	$4,664
Ft. Wainwright	556	$840,000	$840,000	$1,511	$3,777
Nichilchik	883	$2,170,000	$3,710,000	$1,319	$3,297
North Pole	2,117	$1,680,000	$2,520,000	$943	$2,357
Anchor Point	1,930	$1,540,000	$1,540,000	$798	$1,995
Eielson AFB	2,647	$1,560,000	$4,080,000	$767	$1,917
Salamatof	954	$600,000	$600,000	$629	$1,572
Clam Gultch	173	$650,000	$3,450,000	$354	$886
Soldotna	4,163	$1,250,000	$1,250,000	$300	$751
Cohoe	1,168	$900,000	$2,800,000	$293	$732
Nikiski	4,493	$950,000	$1,550,000	$285	$711
Sterling	4,705	$1,200,000	$2,450,000	$276	$691
Kasilof	549	$600,000	$1,900,000	$226	$566
Kalifornsky	7,850	$1,300,000	$1,300,000	$166	$414