Fairbanks North Star Borough Comprehensive Roads Plan
Steering Committee Meeting #3
January 19, 2022, 3:00 – 5:00 pm

How to Connect

- To join for video, screenshare and audio:
  - https://agnewbeck.zoom.us/j/87145086463?pwd=SFVNWnhDV2U1Mmc4aFpTYmtBM1d0Zz09
- To join by audio only:
  - Call-in number: 1-833-548-0282 (Toll-free)
  - Meeting ID: 871 4508 6463#
  - Passcode: 468823#

Objectives

Share and gather Steering Committee input on:

- Plan purpose and updated timeline.
- Community input and other progress to date.
- Draft policies, future road corridor selection criteria and proposed process.

Materials

- Agenda (emailed, 01-16-22)
- Draft Roads Plan Policies & Corridor Selection Criteria (emailed, 01-16-22)
- Presentation Slides (forthcoming)

Agenda

Time	Item

3:00 – 3:15 pm	**Welcome**
	• Introductions & Land Acknowledgement
	• Plan Purpose & Project Timeline Update
	  ○ Policies
	  ○ Functional Classification & Future Corridors Maps
	• Meeting Purpose & Guidelines

3:15 – 3:30 pm	**Progress-to-Date** • Community Engagement • Policy & Corridor Development
3:30 – 4:20 pm	**DRAFT Policies** *(as a component of the Comprehensive Roads Plan)* • Preliminary Vision, Goals, Strategies& Actions
4:20 – 4:45 pm	**DRAFT Process for Future Road Corridors** *(as a component of the Comprehensive Roads Plan)* • Preliminary Criteria & Process
4:45 – 5:00 pm	**Next Steps & Wrap Up** • Key Tasks, Timeline & Steering Committee Role • Closing Comments

Fairbanks North Star Borough Comprehensive Roads Plan: Corridors, Functional Classifications & Policies

Steering Committee Meeting #3

3:00-5:00 pm January 19, 2022

Virtual

Welcome

Roll Call & Land Acknowledgements

- Steering Committee Members

- Project Team & Technical Staff

Deliverables

Policies: Vision, Goals, Strategies, Actions, & Corridor Selection Criteria

Functional Classifications Map

Future Corridors Map

Plan Purpose and Contents

The Fairbanks North Star Borough (FNSB) Road Comprehensive Plan:

- **provides guidance and plans for future road corridors and land access** while facilitating the securing of legal right-of-way (ROW) and physical road development through the land subdivision process.
- **assigns a purpose for a future road corridor through a functional classification** that is tied to the FNSB's subdivision development process.
- **encourages and supports the FNSB and developers working together** to develop a road system that protects the health, safety, and well-being of the community.

Project Timeline

Spring 2021: Launch & Discover

- Convene Steering Committee
- Conduct initial research

Summer/Fall 2021: Learn and Listen

- Invite public input
- Compile & analyze data
- Develop vision & goals
- Prepare maps

Winter 2021-2022: Draft and Review

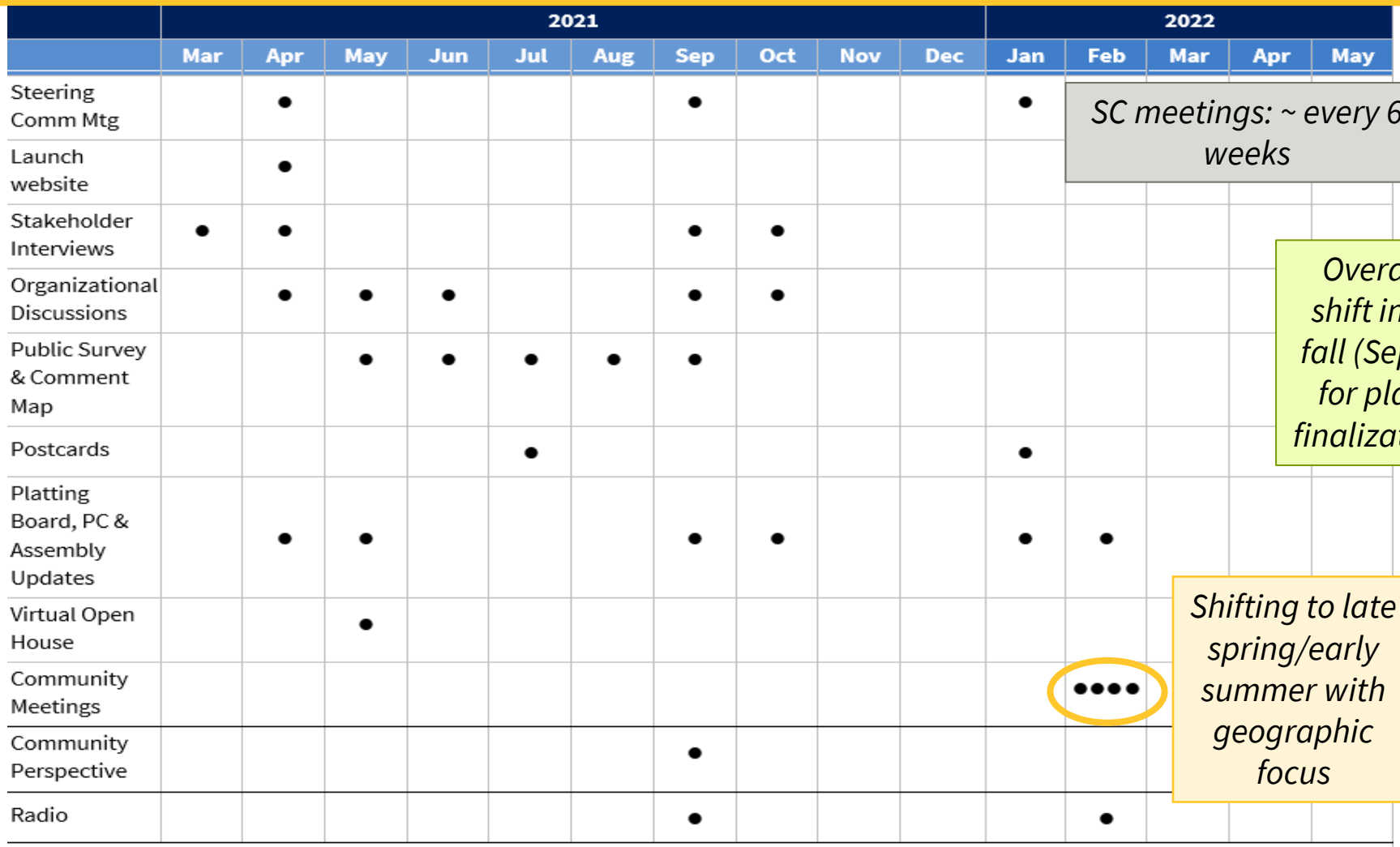
- Develop draft plan
- Collect input on goals, strategies & maps

Fall 2022: Finalize and Adopt

- Adopt plan

Steering Committee Meeting Topics

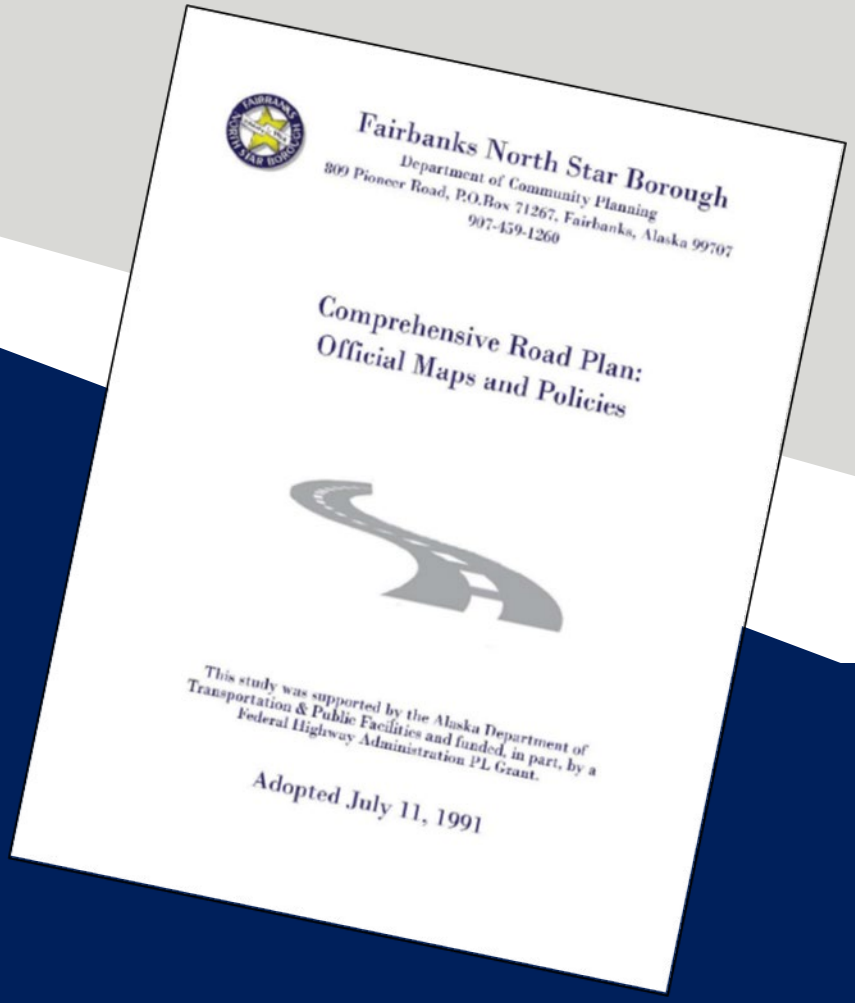
Our Public Involvement Timeline



Today's Meeting Purpose & Guidelines

Share and gather Steering Committee input on:

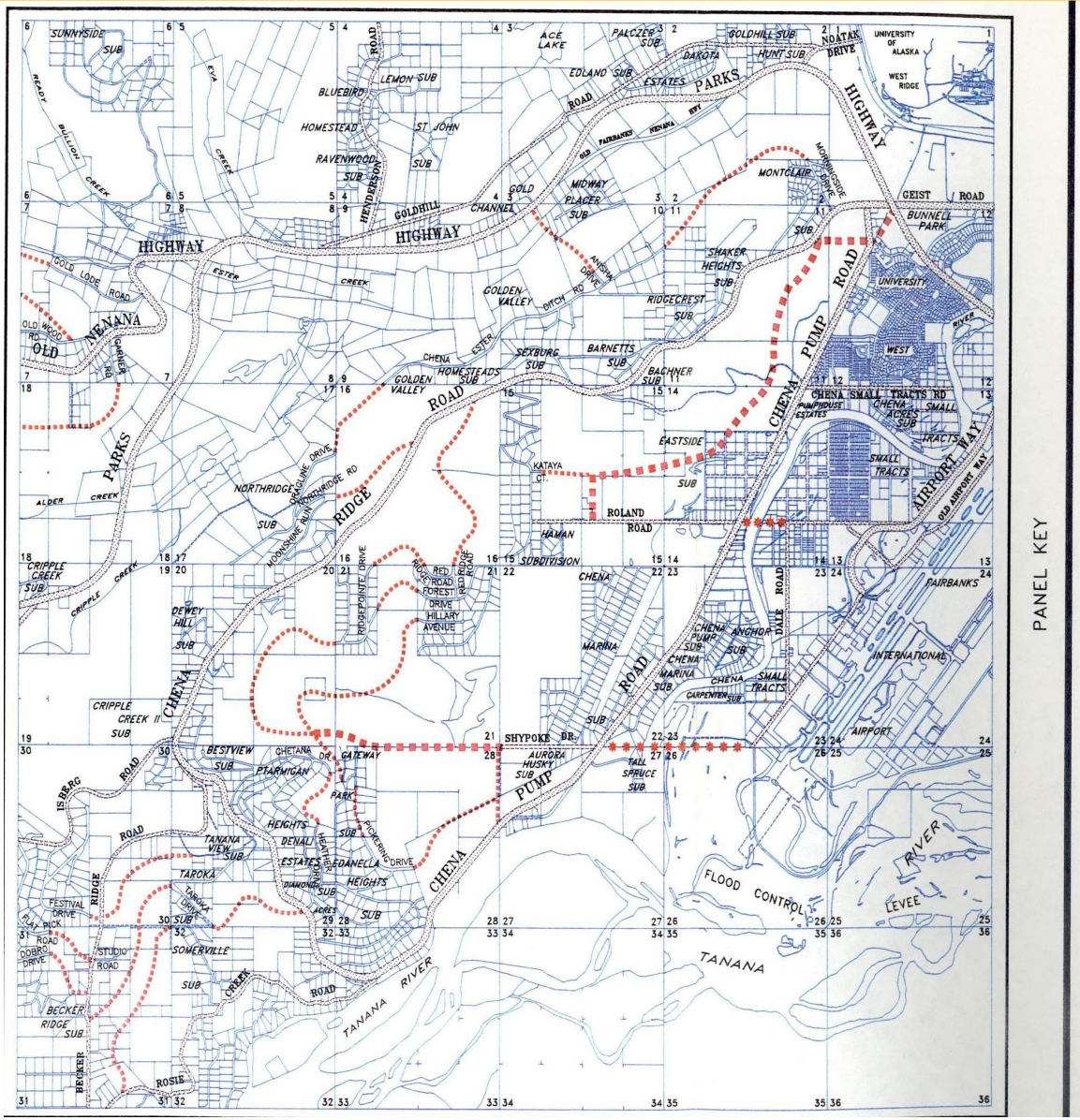
- Plan purpose and timeline.
- Community input and other progress to date.
- Draft policies, future road corridor selection criteria and proposed process.



Review: Examples of 1991 Plan Implementation Success & Limitations

Example from Western Fairbanks: 1991 Roads Plan

How do lines on a map turn into roads?



Source: FNSB Comprehensive Roads Plan 1991

Example from Western Fairbanks: 2012

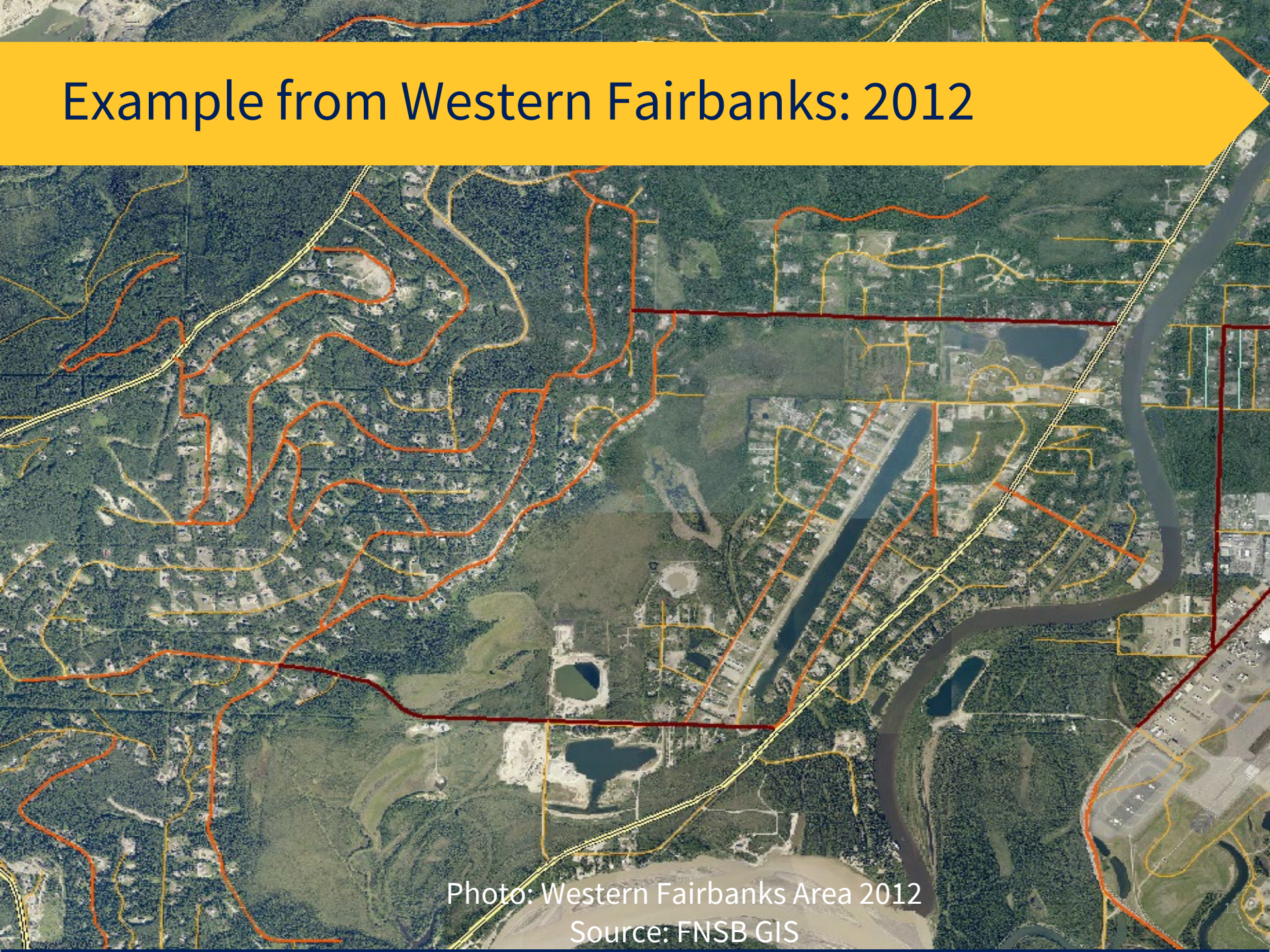


Photo: Western Fairbanks Area 2012
Source: FNSB GIS

Example from Chena Point Avenue: 1949

Chena Point Avenue

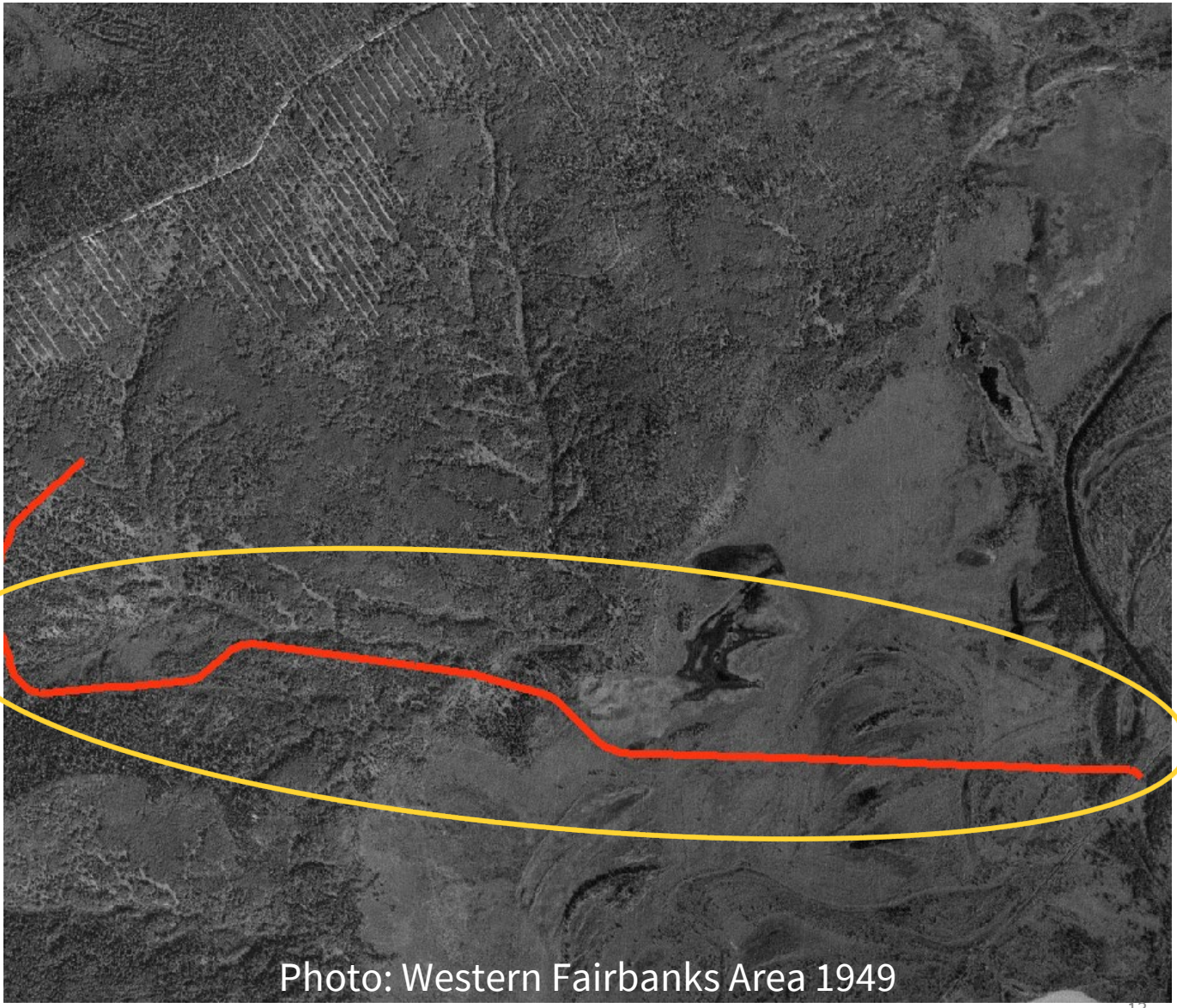
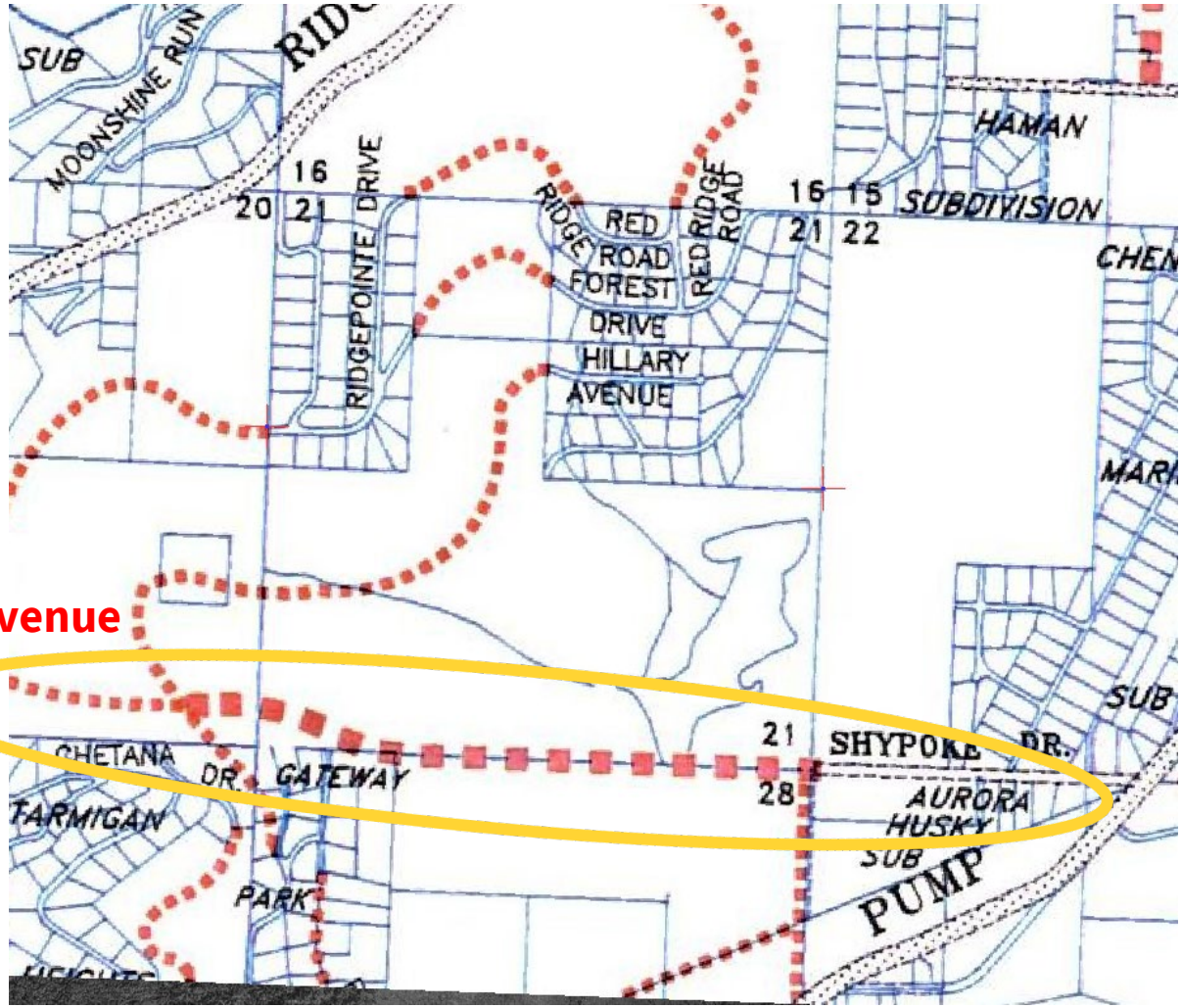


Photo: Western Fairbanks Area 1949

Source: FNSB GIS

Example from Chena Point Avenue: 1991



Chena Point Avenue

Source: FNSB Comprehensive Roads Plan 1991

Example from Chena Point Avenue: 2012

Chena Point Avenue

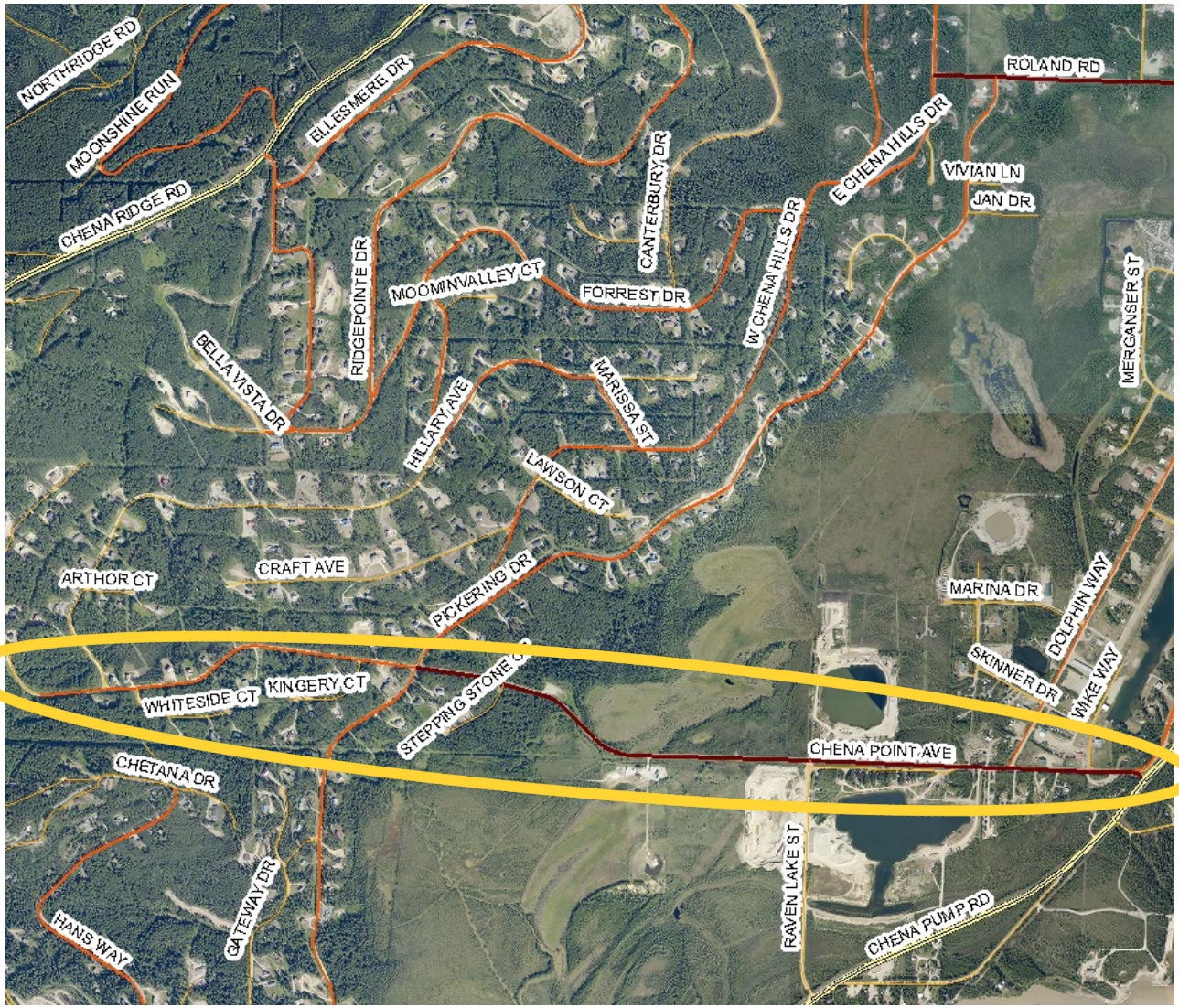
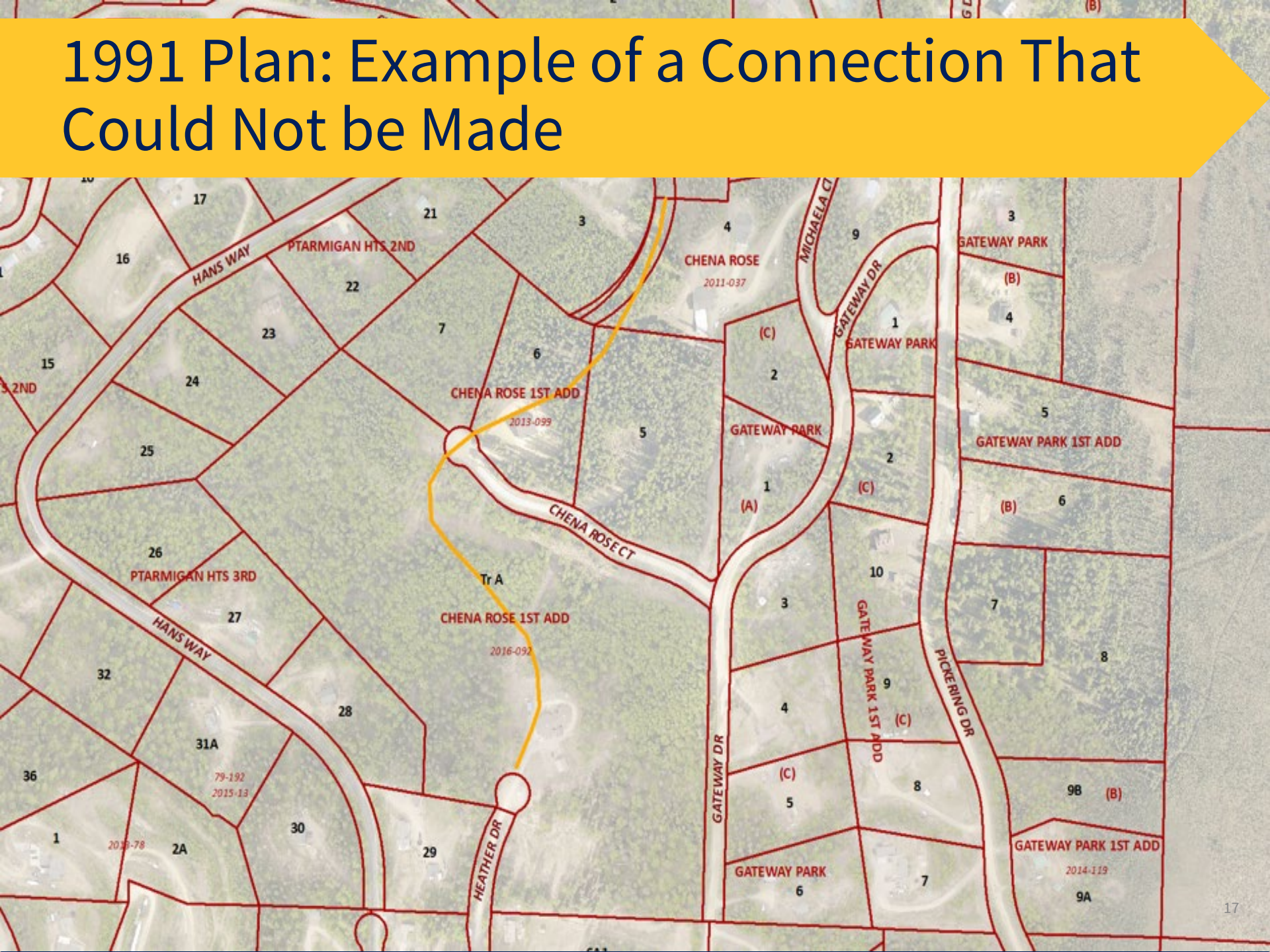


Photo: Western Fairbanks Area 2012
Source: FNSB GIS

Chena Point Avenue: Success Story

- Required incremental dedication from multiple private/public properties
- Major Collector that serves:
  - 4+ minor collectors
  - 10+ local collectors
  - Hundreds of private lots
- One of the most traveled roadways in FNSB
- Chena Point Service Area
- Surface treatment

1991 Plan: Example of a Connection That Could Not be Made

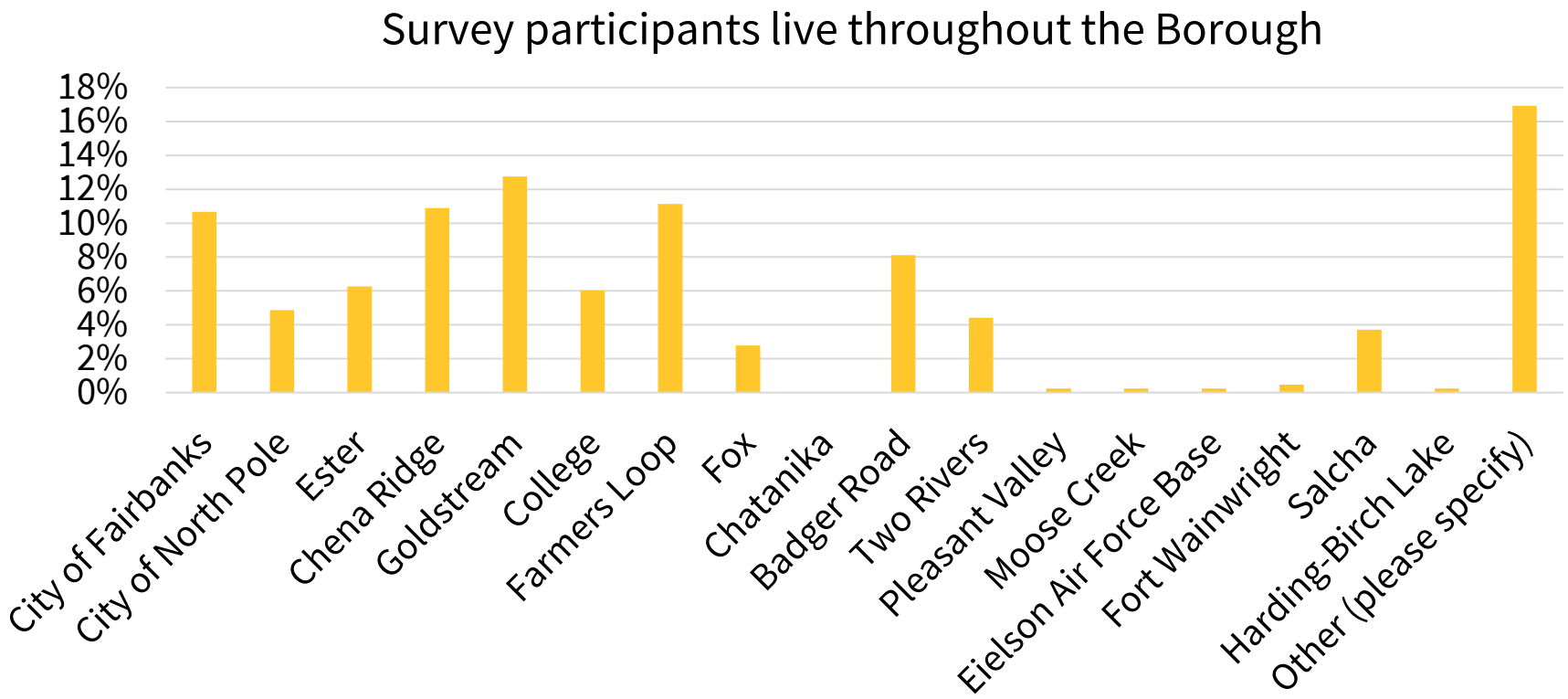


Progress-to-Date

Survey

Open June – October 2021

Received 433 responses



Survey: Key Takeaways

- Overall, respondents generally feel FNSB roads are safe and well-connected.
- Desired improvements include:
  - Better year-round road maintenance.
  - Wider shoulders.
  - Roads constructed with higher-quality material.
  - Protection of private property rights.
  - Reduced development costs.
- There was no strong consensus on specific road connections needed.

Survey: Key Takeaways

When asked to propose a new road connection, no clear consensus emerged.

- 318 participants give a combined 899 comments.
  - 400 of the comments were for a specific connection.
  - The most common proposed connection is a bridge over the Chena River to connect Chena Pump Road to Airport Way.

Survey: Key Takeaways

Many respondents are apprehensive of new roads, saying they would prefer better maintenance on existing roads.

- *“I don’t necessarily think we need more roads. A lack of roads is what keeps neighborhoods quiet and wooded.”*
- *“I don't really see more connecting roads as the solution.”*
- *“If you aren't fixing existing roads, then don't build new ones.”*

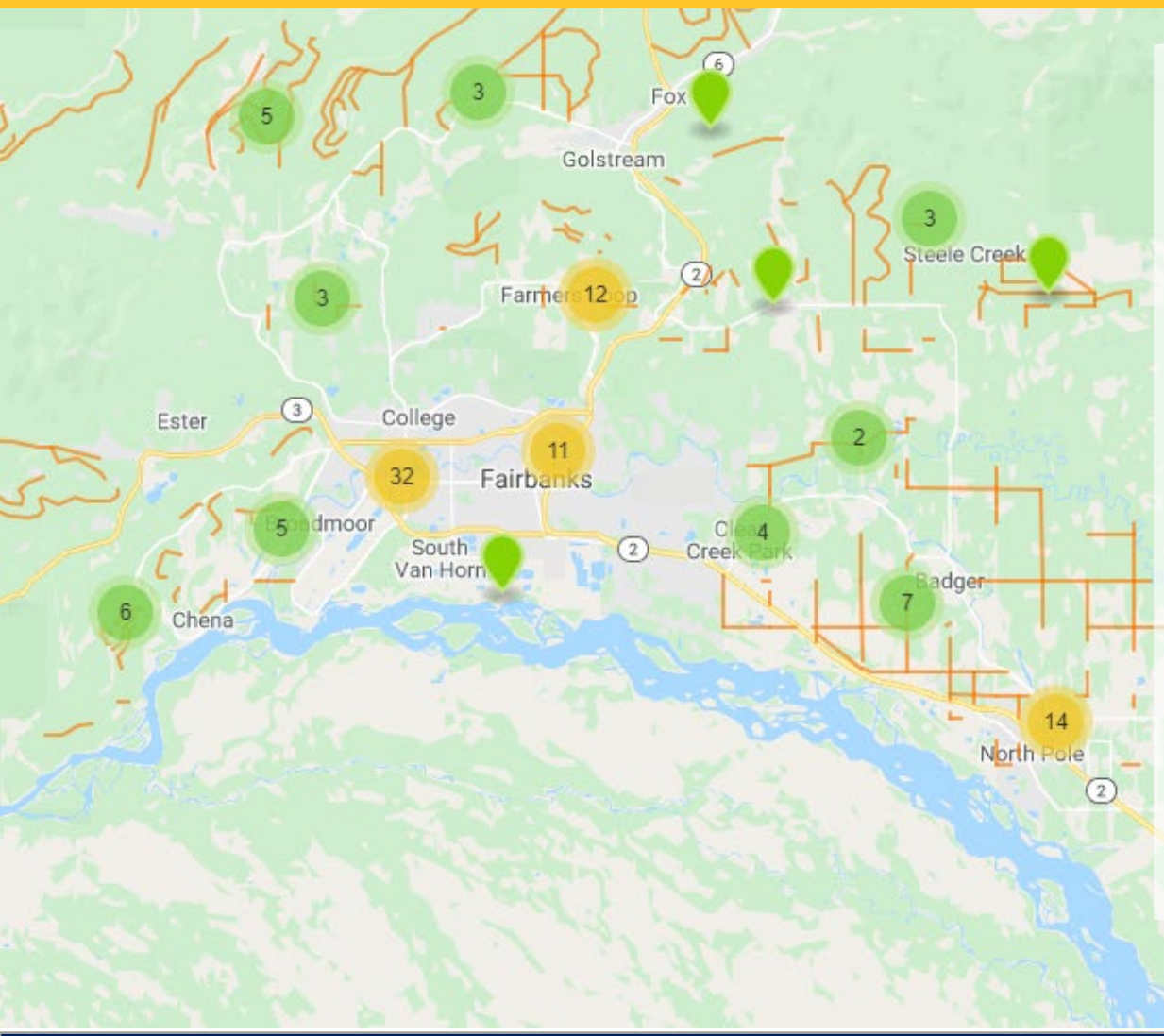
A Lot of Feedback on Topics Outside of Roads Plan Scope

- Increased bicycle and pedestrian pathways
- More road maintenance
- Higher quality road materials

Not in 1991 Roads Plan, could be potential element of the updated plan

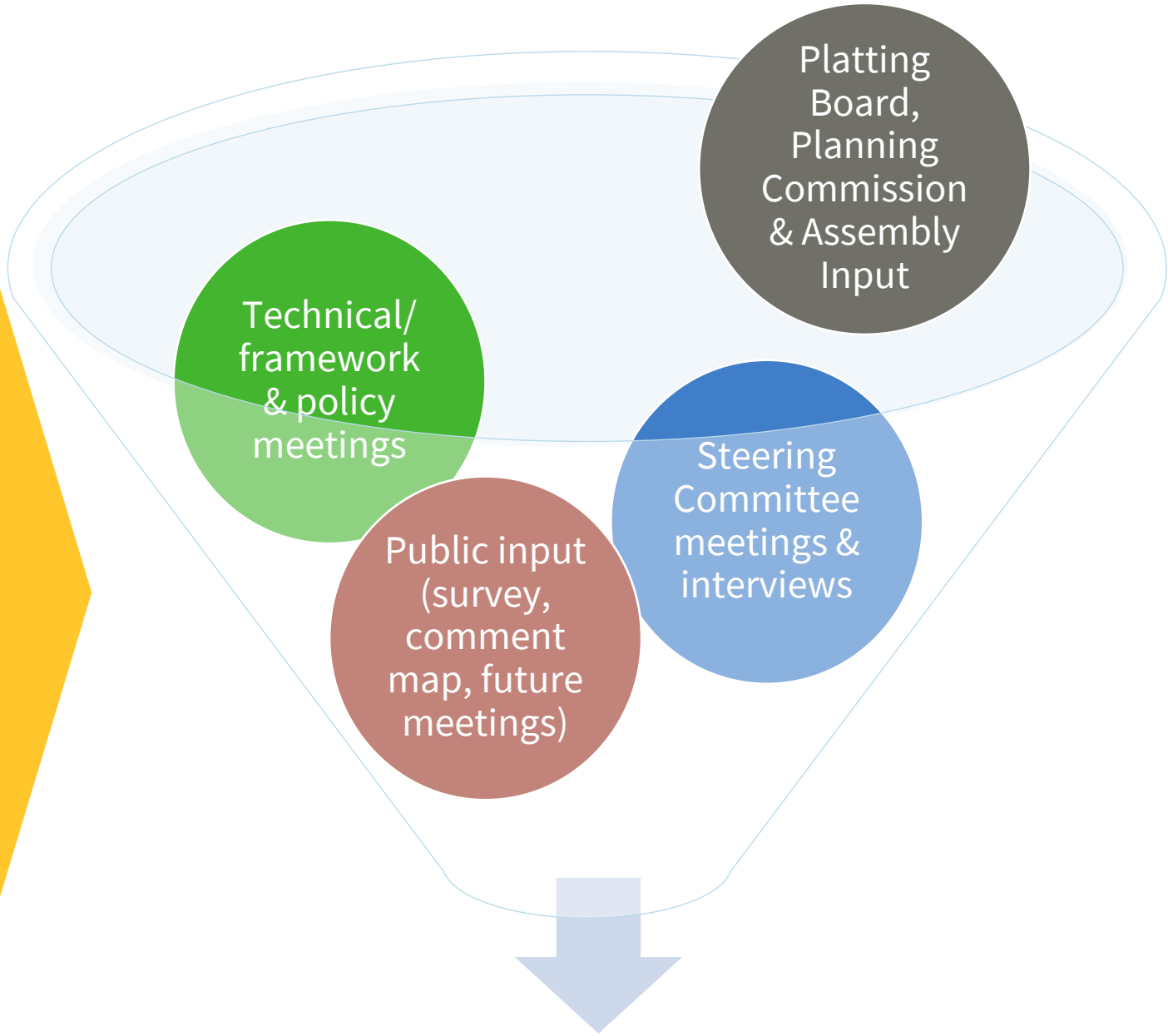
Addressed in other plans such as Non-Motorized Plan, Trails Plan, forthcoming RSA Plan

Comment Map



- Participants shared over 326 comments.
- Comments include examples of good roads, bad roads, and proposed connectors.
- While there is overlap, few specific comments were repeated.

What inputs have and will continue to inform plan components, including the draft policies and criteria shared today?



Draft Policies

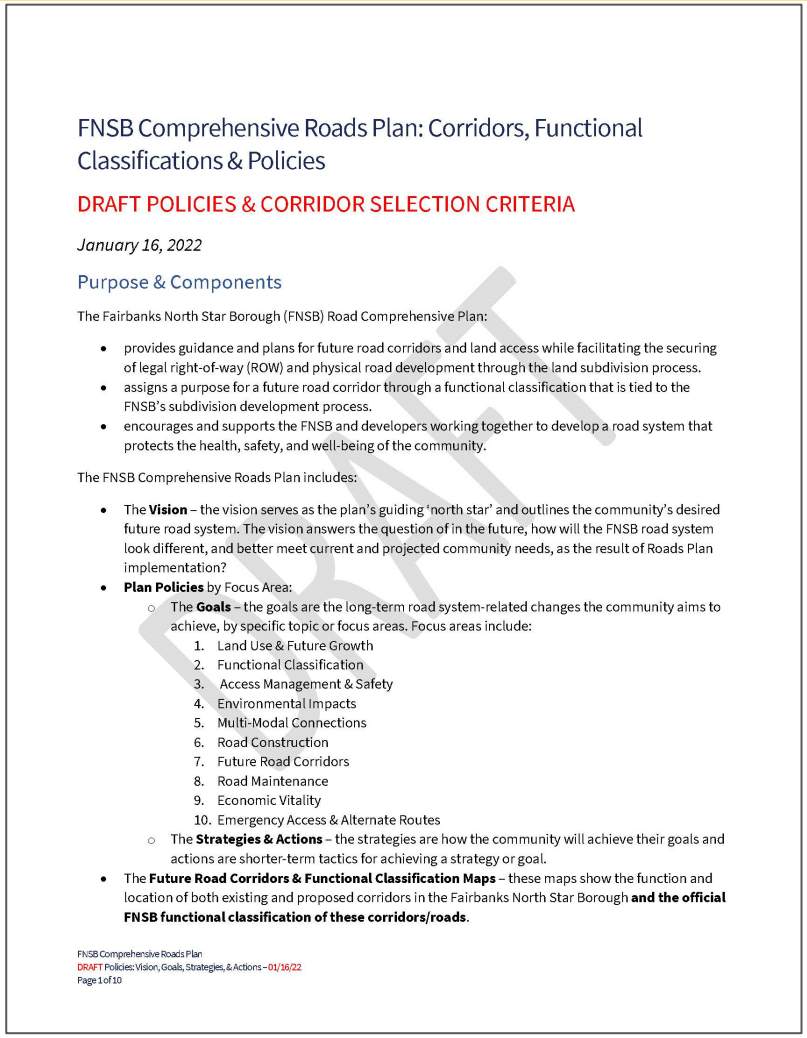
Plan Purpose & Structure

The FNSB Comprehensive Roads Plan:

- provides guidance and plans for future road corridors and land access.
- assigns a purpose for a future road corridor through a functional classification
- encourages and supports the FNSB and developers working together to develop a road system that protects the health, safety, and well-being of the community.

Through (plan components):

- Policies & Related Future Corridor Selection Criteria
- Functional Classification Map
- Future Road Corridor Map



FNSB Comprehensive Roads Plan: Corridors, Functional Classifications & Policies

DRAFT POLICIES & CORRIDOR SELECTION CRITERIA

January 16, 2022

Purpose & Components

The Fairbanks North Star Borough (FNSB) Road Comprehensive Plan:

- provides guidance and plans for future road corridors and land access while facilitating the securing of legal right-of-way (ROW) and physical road development through the land subdivision process.
- assigns a purpose for a future road corridor through a functional classification that is tied to the FNSB's subdivision development process.
- encourages and supports the FNSB and developers working together to develop a road system that protects the health, safety, and well-being of the community.

The FNSB Comprehensive Roads Plan includes:

- The **Vision** – the vision serves as the plan's guiding 'north star' and outlines the community's desired future road system. The vision answers the question of in the future, how will the FNSB road system look different, and better meet current and projected community needs, as the result of Roads Plan implementation?
- **Plan Policies** by Focus Area:
  - The **Goals** – the goals are the long-term road system-related changes the community aims to achieve, by specific topic or focus areas. Focus areas include:
    1. Land Use & Future Growth
    2. Functional Classification
    3. Access Management & Safety
    4. Environmental Impacts
    5. Multi-Modal Connections
    6. Road Construction
    7. Future Road Corridors
    8. Road Maintenance
    9. Economic Vitality
    10. Emergency Access & Alternate Routes
  - The **Strategies & Actions** – the strategies are how the community will achieve their goals and actions are shorter-term tactics for achieving a strategy or goal.
- The **Future Road Corridors & Functional Classification Maps** – these maps show the function and location of both existing and proposed corridors in the Fairbanks North Star Borough **and the official FNSB functional classification of these corridors/roads**.

FNSB Comprehensive Roads Plan
DRAFT Policies: Vision, Goals, Strategies, & Actions – 01/16/22
Page 1 of 10

Steering Committee Input

Apply your local knowledge, technical expertise, and community input to date…

For the draft policies, including proposed vision:

1. *Are there any gaps? What are they?*
2. *What doesn't make sense? What requires dialogue?*
3. *What do you really like and recommend it remain in the draft?*
4. *What do you really dislike and why?*

Definition of Vision

Roads Plan: A ***safer, better-connected*** Fairbanks North Star Borough.

The **vision serves as the plan's guiding 'north star'** and outlines the community's desired future road system.

The vision answers the question of in the future, **how will the FNSB road system look different, and better meet current and projected community needs**, as the result of Roads Plan implementation?

Proposed Vision

Roads Plan: A ***safer, better-connected*** Fairbanks North Star Borough.

We envision a road system in the Fairbanks North Star Borough that:

- allows **safe and efficient multi-modal travel**, in all seasons.
- optimally **connects neighborhoods, businesses, and community**, while protecting neighborhood integrity.
- provides appropriate levels of **access and mobility for residents, visitors, and essential goods and services**.
- can be developed at the time of subdivision, **meeting the future needs of the community**, while protecting private property rights.
- appropriately **considers long-term and seasonal maintenance** of existing and future roads.

Proposed Goals/Topics

1. Land Use & Future Growth
2. Functional Classification
3. Access Management & Safety
4. Environmental Impacts
5. Multi-Modal Connections
6. Road Construction
7. Future Road Corridors
8. Road Maintenance
9. Economic Vitality
10. Emergency Access & Alternate Routes

Goals 1-5

1. Land Use & Future Growth	• Consider land-use when developing the transportation network to better move people and essential goods and services safely and efficiently while minimizing adverse impacts on local neighborhoods.
2. Functional Classification	• Develop and implement the functional classification map to better manage access, reflect local land-use patterns, and integrate multiple transportation modes.
3. Access Management & Safety	• Solidify connections between land use and transportation planning to effectively manage access across the road network.
4. Environmental Impacts	• Minimize and mitigate road network impacts on the natural environment and FNSB community.
5. Multi-Modal Connections	• Support multi-modal transportation linkages and encourage use of non-motorized transportation systems through corridor development.

Example Goal, Strategy & Action

Goal 1 - Land Use & Future Growth

Consider land-use when developing the transportation network to better move people and essential goods and services safely and efficiently while minimizing adverse impacts on local neighborhoods.

STRATEGY 1.1:

Regularly update and maintain the Comprehensive Road Plan.

ACTION 1.1.A:

Update the Roads Plan at least every 20 years, or in alignment with community development and growth.

Goals 6-10

6. Road Construction	• Ensure that road design improves safety for roadway users of all transportation modes and minimizes adverse community and environmental impacts.
7. Future Road Corridors	• Implement the future road corridors map at the time of subdivision to improve and/or create connections reducing out-of-direction travel, vehicle miles traveled, and travel time.
8. Road Maintenance	• Work to ensure consistent, affordable, and equitable road maintenance for roads, bridges, and rail crossings within the borough.
9. Economic Vitality	• Strengthen economic vitality with a transportation network that supports a diversified, sustainable, and thriving local economy in the FNSB and Interior region.
10. Emergency Access & Alternate Routes	• Implement the future road corridor map to expand community connectivity to provide safe, year-round auto and multi-modal transportation routes within and between neighborhoods, public and recreational facilities, and commercial areas.

Draft Process for Future Road Corridors

Future Road Corridors Goal & Proposed Column

Goal 7: Implement the future road corridors map at the time of subdivision to **improve and/or create connections reducing out-of-direction travel, vehicle miles traveled, and travel time**.

PRELIMINARY FNSB FUTURE ROAD CORRIDOR SELECTION CRITERIA		
category	**criterion**	**considerations/guiding questions - Will, or does, the future road corridor…**
access	alternate routes	Provide alternate routes to existing residential areas?
	emergency & essential services	Address a gap and/or provide emergency & essential services access?
	multiple access points	Support multiple access for residential areas with ≥100 dwelling units?
	new access	Provide new access into an area expected to be developed?
	bridges	Provide alternate routes to areas currently accessed solely via a bridge?
connectivity	vehicle miles traveled (VMT)/out of direction travel	Decrease overall VMT and/or out of direction travel?
	small gap closures	Close an existing 'small gap' in the road network?
social	public input	Address community feedback? Do public comments support or oppose the corridor?
	encroachment	Avoid encroachment on military or other existing uses?
	compatibility	Be compatible with existing uses and FNSB plans?
environment	wetlands, flood zones, permafrost, soils	Traverse wetlands, flood zones, permafrost, or poor soils? Can impacts be mitigated?
	recreation/habitat	Conflict with trails, wildlife habitat, or recreational lands? Can conflicts be mitigated?
economic	property rights/rights-of-way dedication	Follow existing ROW/easements? Is additional ROW required?
	feasibility	Be reasonable/feasible to construct?
geometry	road grade	Have a grade ≤ 10%?
	intersection grade	Have an intersection grade ≤ 4% or 6% for through road?
	approach angle	Approach angle as close to 90 degrees as possible, no less than 75?
	corridor spacing	Have corridor spacing 0.25 miles or greater?

Considerations in drafting the future corridors map

PRELIMINARY FNSB FUTURE ROAD CORRIDOR SELECTION CRITERIA

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TEST DRIVE:
Proposed Road Corridor Selection Process

Next Steps and Wrap-Up

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Fall 2022: Finalize and Adopt

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Steering Committee Meeting Topics

Thank you!

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FNSB Comprehensive Roads Plan: Corridors, Functional Classifications & Policies

DRAFT POLICIES & CORRIDOR SELECTION CRITERIA

January 16, 2022

Purpose & Components

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Vision

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- can be developed at the time of subdivision, meeting the future needs of the community, while protecting private property rights.
- appropriately considers long-term and seasonal maintenance of existing and future roads.

Plan Policies by Focus Area

GOAL 1 – Land Use & Future Growth: Consider land-use when developing the transportation network to better move people and essential goods and services safely and efficiently while minimizing adverse impacts on local neighborhoods.

→ **STRATEGY 1.1:** Regularly update and maintain the Comprehensive Road Plan.

- **ACTION 1.1.A:** Update the Roads Plan at least every 20 years, or in alignment with community development and growth.

→ **STRATEGY 1.2:** Develop and implement the future road corridor map so that areas that are currently developing or expected to soon develop are supported with a sufficient road network.

- **ACTION 1.2.A:** Utilize the platting process to implement the future corridor map to ensure that corridors comprising a sufficient road network are established as new areas develop.
- **ACTION 1.2.B:** Plan road corridors through large tracts of public land for dedication and construction if or when that land is subdivided.

  NOTE: *Certain areas of public land have been used as open space but could be subdivided and developed in the future depending on the owner. The intention of this plan is not to advocate for the subdivision and sale of large publicly owned tracts, but to plan a logical, connected, and well-planned road network in the event that future subdivision and development of such areas does occur. The development of these areas depends heavily on the base zoning, FNSB Comprehensive Plan and plans/goals of the owning agencies.*

→ **STRATEGY 1.3:** Update, make consistent, and mutually supportive the FNSB's Title 18 Zoning Code, and Title 17 Subdivision Code.

- **ACTION 1.3.A:** Revise the sight distance requirement in Title 18.96.100 "Street intersection visibility" to take the functional classification and/or speed of adjacent roadways into account.

- **ACTION 1.3.B:** Explore the integration of a Transportation Impact Analysis (TIA) into the platting process for large new subdivision developments, to better understand land use impacts on the transportation network.

GOAL 2 – Functional Classification: Develop and implement the functional classification map to better manage access, reflect local land-use patterns, and integrate multiple transportation modes.

→ **STRATEGY 2.1:** Implement the functional classification map at the time of land subdivision to employ functional classification to manage access.

- **ACTION 2.1.A:** Classify roadways, for access management and right-of-way dedication, by their anticipated future function, based on projections of land use, population growth, and AADT.
- **ACTION 2.1.B:** Update FNSBC 17.56.100(C)(4) Intersection Spacing by functional class based on state and national best practices.
- **ACTION 2.1.C:** Consider the future trip generation potential of key destinations and new developments when siting and classifying future road corridors in the functional classification map.

GOAL 3 – Access Management & Safety: Solidify connections between land use and transportation planning to effectively manage access across the road network.

→ **STRATEGY 3.1:** Limit access along higher capacity roads through a comprehensive access management approach that supports the development of a supportive collector and local subdivision road network.

- **ACTION 3.1.A:** Continue to prohibit direct lot access to major collector and higher classification roads during the subdivision process.
- **ACTION 3.1.B:** Continue to require the development of internally circulating local road networks for subdivisions that are adjacent to a major collector or higher classification road.
- **ACTION 3.1.C:** Enforce access management in partnership with the DOT, CoF, and CoNP through plat notes and driveway permits and standards.
- **ACTION 3.1.D:** Partner with FAST Planning, DOT&PF, the CoF, CoNP, and/or RSAs to apply access management design features such as turn lanes, frontage roads, and driveway consolidation where appropriate or as aspects to construction projects.

→ **STRATEGY 3.2:** Develop and implement the functional classification map to support orderly road network development and appropriate access management through the subdivision process.

- **ACTION 3.2.A:** Update subdivision regulations to include sufficient spacing standards for unsignalized intersections based on state and national best practices guidance and functional classification.

- **ACTION 3.2.B:** Consider developing minimum access point and driveway spacing standards for subdivision regulations based on roadway speed and functional classification.

- **ACTION 3.2.C:** Update sight distance, corner visibility, and intersection spacing standards to align with state and national best practices guidance and functional classification.

GOAL 4 – Environmental Impacts: Minimize and mitigate road network impacts on the natural environment and FNSB community.

→ **STRATEGY 4.1:** Retain the integrity of neighborhoods as the road network expands.

- **ACTION 4.1.A:** Implement the future corridors map that discourages roadway alignments penetrating or dividing established residential neighborhoods from major service facilities such as schools and parks.

- **ACTION 4.1.B:** Provide safe pedestrian access across roadways when they do create barriers for neighborhoods. Emphasis should be given to at-grade facilities with safety features such RRFB or HAWK signals.

- **ACTION 4.1.C:** Support DOT&PF and FAST Planning to establish and implement official heavy industry and trucking through-routes away from areas planned or zoned as residential or commercial.

- **ACTION 4.1.D:** Minimize the impacts of light pollution caused by intersection and road lighting on residential neighborhoods and other sensitive areas outside of the urban core. In sensitive areas, utilize cutoff fixtures or other techniques to mitigate impact if lighting is deemed necessary.

→ **STRATEGY 4.2:** Identify and implement projects and strategies to reduce wildlife collisions.

→ **STRATEGY 4.3:** Implement the future road corridors map that sites roads away from areas with challenging environmental conditions if possible, and work to mitigate road deterioration in challenging areas through improved road standards and design.

- **ACTION 4.3.A:** Consider hydrological and permafrost conditions when siting subdivision streets during the platting process.

- **ACTION 4.3.B:** Ensure that subdivision road designs are of sufficient standards in areas of permafrost and wetland areas and/or areas of other environmental concern, such as those adjacent to streams, rivers, and other water bodies.

- **ACTION 4.3.C:** Ensure that subdivision road designs are of sufficient standards in floodplain areas and in areas with challenging or poor soil conditions.

GOAL 5 – Multi-Modal Connections: Support multi-modal transportation linkages and encourage use of non-motorized transportation systems through corridor development.

→ **STRATEGY 5.1:** Integrate safe walkway and sidewalk circulation into urban road networks and maintain walkways and sidewalks for commuter and recreational users, including those in wheelchairs and users of other mobility aids, pedestrians, and bikes.

- **ACTION 5.1.A:** Work with and support FAST Planning, DOT&PF, the CoF and CoNP and/or RSAs to integrate pedestrian-friendly sidewalks, bike and pedestrian paths, or widened shoulders along newly developed roads or as enhancements during road maintenance in urban areas or along arterials and major collectors.
- **ACTION 5.1.B:** Consider update to Title 17 to consider pedestrian and bike facilities in the subdivision platting process for new developments in urban areas.
- **ACTION 5.1.C:** Work with other public agencies, through the Seasonal Mobility Task Force to implement a maintenance plan for pedestrian walkways that, when possible, makes sidewalks useable year-round for all citizens.
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    - Pedestrian and bicycle facilities along major collectors and arterials during the subdivision platting process.
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- **ACTION 5.2.B:** Work with developers to acquire additional right-of-way for shared trail and road corridors and trail/road crossings through the subdivision platting process, where appropriate.
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	multiple access points	Support multiple access for residential areas with ≥100 dwelling units?
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	bridges	Provide alternate routes to areas currently accessed solely via a bridge?
connectivity	vehicle miles traveles (VMT)/out of direction travel	Decrease overall VMT and/or out of direction travel?
	small gap closures	Close an existing 'small gap' in the road network?
social	public input	Address community feedback? Do public comments support or oppose the corridor?
	encroachment	Avoid encroachment on military or other existing uses?
	compatibility	Be compatible with existing uses and FNSB plans?
environment	wetlands, flood zones, permafrost, soils	Traverse wetlands, flood zones, permafrost, or poor soils? Can impacts be mitigated?
	recreation/habitat	Conflict with trails, wildlife habitate, or recreational lands? Can conflicts be mitigated?
economic	property rights/rights-of-way dedication	Follow existing ROW/easements? Is additional ROW required?
	feasibility	Be reasonable/feasible to construct?
geometry	road grade	Have a grade ≤ 10%?
	intersection grade	Have an intersection grade ≤ 4% or 6% for through road?
	approach angle	Approach angle as close to 90 degrees as possible, no less than 75?
	corridor spacing	Have corridor spacing 0.25 miles or greater?

FNSB Comprehensive Roads Plan: Corridors, Functional Classifications & Policies

DRAFT POLICIES & CORRIDOR SELECTION CRITERIA

January 16, 2022

Purpose & Components

The Fairbanks North Star Borough (FNSB) Road Comprehensive Plan:

- provides guidance and plans for future road corridors and land access while facilitating the securing of legal right-of-way (ROW) and physical road development through the land subdivision process.
- assigns a purpose for a future road corridor through a functional classification that is tied to the FNSB's subdivision development process.
- encourages and supports the FNSB and developers working together to develop a road system that protects the health, safety, and well-being of the community.

The FNSB Comprehensive Roads Plan includes:

- The **Vision** – the vision serves as the plan's guiding 'north star' and outlines the community's desired future road system. The vision answers the question of in the future, how will the FNSB road system look different, and better meet current and projected community needs, as the result of Roads Plan implementation?
- **Plan Policies** by Focus Area:
    - The **Goals** – the goals are the long-term road system-related changes the community aims to achieve, by specific topic or focus areas. Focus areas include:
        1. Land Use & Future Growth
        2. Functional Classification
        3. Access Management & Safety
        4. Environmental Impacts
        5. Multi-Modal Connections
        6. Road Construction
        7. Future Road Corridors
        8. Road Maintenance
        9. Economic Vitality
        10. Emergency Access & Alternate Routes
    - The **Strategies & Actions** – the strategies are how the community will achieve their goals and actions are shorter-term tactics for achieving a strategy or goal.
- The **Future Road Corridors & Functional Classification Maps** – these maps show the function and location of both existing and proposed corridors in the Fairbanks North Star Borough **and the official FNSB functional classification of these corridors/roads**.

Vision

We envision a road system in the Fairbanks North Star Borough that:

- allows safe and efficient multi-modal travel, in all seasons.
- optimally connects neighborhoods, businesses, and community, while protecting neighborhood integrity.
- provides appropriate levels of access and mobility for residents, visitors, and essential goods and services.
- can be developed at the time of subdivision, meeting the future needs of the community, while protecting private property rights.
- appropriately considers long-term and seasonal maintenance of existing and future roads.

Plan Policies by Focus Area

GOAL 1 – Land Use & Future Growth: Consider land-use when developing the transportation network to better move people and essential goods and services safely and efficiently while minimizing adverse impacts on local neighborhoods.

→ **STRATEGY 1.1:** Regularly update and maintain the Comprehensive Road Plan.

- **ACTION 1.1.A:** Update the Roads Plan at least every 20 years, or in alignment with community development and growth.

→ **STRATEGY 1.2:** Develop and implement the future road corridor map so that areas that are currently developing or expected to soon develop are supported with a sufficient road network.

- **ACTION 1.2.A:** Utilize the platting process to implement the future corridor map to ensure that corridors comprising a sufficient road network are established as new areas develop.
- **ACTION 1.2.B:** Plan road corridors through large tracts of public land for dedication and construction if or when that land is subdivided.

  NOTE: *Certain areas of public land have been used as open space but could be subdivided and developed in the future depending on the owner. The intention of this plan is not to advocate for the subdivision and sale of large publicly owned tracts, but to plan a logical, connected, and well-planned road network in the event that future subdivision and development of such areas does occur. The development of these areas depends heavily on the base zoning, FNSB Comprehensive Plan and plans/goals of the owning agencies.*

→ **STRATEGY 1.3:** Update, make consistent, and mutually supportive the FNSB's Title 18 Zoning Code, and Title 17 Subdivision Code.

- **ACTION 1.3.A:** Revise the sight distance requirement in Title 18.96.100 "Street intersection visibility" to take the functional classification and/or speed of adjacent roadways into account.

- **ACTION 1.3.B:** Explore the integration of a Transportation Impact Analysis (TIA) into the platting process for large new subdivision developments, to better understand land use impacts on the transportation network.

GOAL 2 – Functional Classification: Develop and implement the functional classification map to better manage access, reflect local land-use patterns, and integrate multiple transportation modes.

→ **STRATEGY 2.1:** Implement the functional classification map at the time of land subdivision to employ functional classification to manage access.

- **ACTION 2.1.A:** Classify roadways, for access management and right-of-way dedication, by their anticipated future function, based on projections of land use, population growth, and AADT.
- **ACTION 2.1.B:** Update FNSBC 17.56.100(C)(4) Intersection Spacing by functional class based on state and national best practices.
- **ACTION 2.1.C:** Consider the future trip generation potential of key destinations and new developments when siting and classifying future road corridors in the functional classification map.

GOAL 3 – Access Management & Safety: Solidify connections between land use and transportation planning to effectively manage access across the road network.

→ **STRATEGY 3.1:** Limit access along higher capacity roads through a comprehensive access management approach that supports the development of a supportive collector and local subdivision road network.

- **ACTION 3.1.A:** Continue to prohibit direct lot access to major collector and higher classification roads during the subdivision process.
- **ACTION 3.1.B:** Continue to require the development of internally circulating local road networks for subdivisions that are adjacent to a major collector or higher classification road.
- **ACTION 3.1.C:** Enforce access management in partnership with the DOT, CoF, and CoNP through plat notes and driveway permits and standards.
- **ACTION 3.1.D:** Partner with FAST Planning, DOT&PF, the CoF, CoNP, and/or RSAs to apply access management design features such as turn lanes, frontage roads, and driveway consolidation where appropriate or as aspects to construction projects.

→ **STRATEGY 3.2:** Develop and implement the functional classification map to support orderly road network development and appropriate access management through the subdivision process.

- **ACTION 3.2.A:** Update subdivision regulations to include sufficient spacing standards for unsignalized intersections based on state and national best practices guidance and functional classification.

- **ACTION 3.2.B:** Consider developing minimum access point and driveway spacing standards for subdivision regulations based on roadway speed and functional classification.

- **ACTION 3.2.C:** Update sight distance, corner visibility, and intersection spacing standards to align with state and national best practices guidance and functional classification.

GOAL 4 – Environmental Impacts: Minimize and mitigate road network impacts on the natural environment and FNSB community.

→ **STRATEGY 4.1:** Retain the integrity of neighborhoods as the road network expands.

- **ACTION 4.1.A:** Implement the future corridors map that discourages roadway alignments penetrating or dividing established residential neighborhoods from major service facilities such as schools and parks.

- **ACTION 4.1.B:** Provide safe pedestrian access across roadways when they do create barriers for neighborhoods. Emphasis should be given to at-grade facilities with safety features such RRFB or HAWK signals.

- **ACTION 4.1.C:** Support DOT&PF and FAST Planning to establish and implement official heavy industry and trucking through-routes away from areas planned or zoned as residential or commercial.

- **ACTION 4.1.D:** Minimize the impacts of light pollution caused by intersection and road lighting on residential neighborhoods and other sensitive areas outside of the urban core. In sensitive areas, utilize cutoff fixtures or other techniques to mitigate impact if lighting is deemed necessary.

→ **STRATEGY 4.2:** Identify and implement projects and strategies to reduce wildlife collisions.

→ **STRATEGY 4.3:** Implement the future road corridors map that sites roads away from areas with challenging environmental conditions if possible, and work to mitigate road deterioration in challenging areas through improved road standards and design.

- **ACTION 4.3.A:** Consider hydrological and permafrost conditions when siting subdivision streets during the platting process.

- **ACTION 4.3.B:** Ensure that subdivision road designs are of sufficient standards in areas of permafrost and wetland areas and/or areas of other environmental concern, such as those adjacent to streams, rivers, and other water bodies.

- **ACTION 4.3.C:** Ensure that subdivision road designs are of sufficient standards in floodplain areas and in areas with challenging or poor soil conditions.

GOAL 5 – Multi-Modal Connections: Support multi-modal transportation linkages and encourage use of non-motorized transportation systems through corridor development.

→ **STRATEGY 5.1:** Integrate safe walkway and sidewalk circulation into urban road networks and maintain walkways and sidewalks for commuter and recreational users, including those in wheelchairs and users of other mobility aids, pedestrians, and bikes.

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Fairbanks North Star Borough Comprehensive Roads Plan
Preliminary Survey Analysis
December 2021

Overview

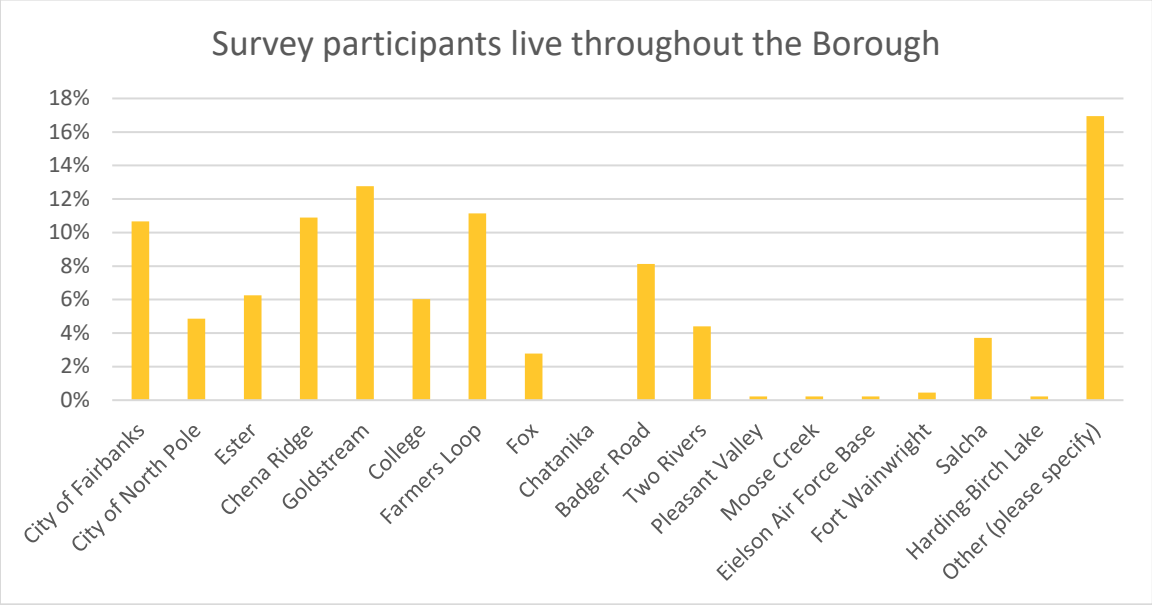
The survey was open from June through October 2021; most participation happened in September and October, following a robust Facebook campaign and publication of a Community Perspective on the Roads Plan. **Of the 433 people who took the survey, 350 did so in September and October.** The survey was completed in an average of nine minutes and 50 seconds. Overall, the survey has **more than satisfactory participation.** Most questions or statements require a yes/no or multiple-choice answer. Of those, the most-skipped question is only skipped by four participants. Short-answer questions have a significantly lower participation rate, with a range of 91-147 participants skipping. The final question asks participants to leave their email address to be notified on project updates, and 250 participants declined to do so.

Key Takeaways

- Survey respondents generally feel their roads are safe and well-connected.
- The main improvements respondents want are better general road maintenance, better winter road maintenance, wider shoulders and roads constructed of higher-quality material.
- Respondents are significantly concerned that more roads will over-burden the FNSB road maintenance department and lead to more roads with potholes and unplowed snow.
- There is no clear consensus on new connector roads, other than respondents want easier access between main arterials.

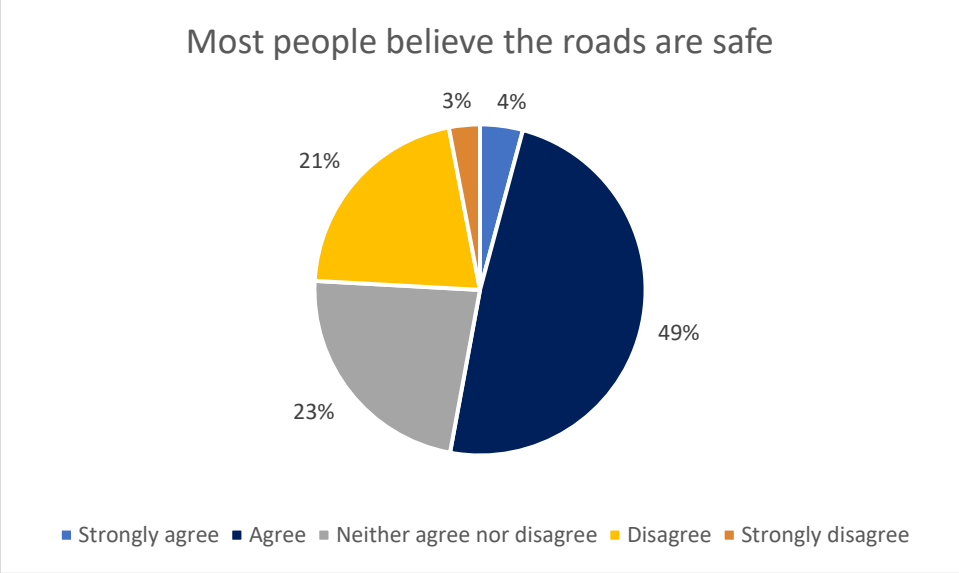
1. *Where is your primary residence?*

This question is answered by 431 participants and skipped by 2. Participants have 17 neighborhoods to choose from, as well as an "other" option where they can specify where they live. **Participants are generally spread throughout the Borough, but the most common answer is "other," which makes up about 17%**. The second most-common answer is "Goldstream" at about 13%. The most common responses for those who selected other are "Chena Hot Springs Road," "Murphy Dome" and "Birch Hill."



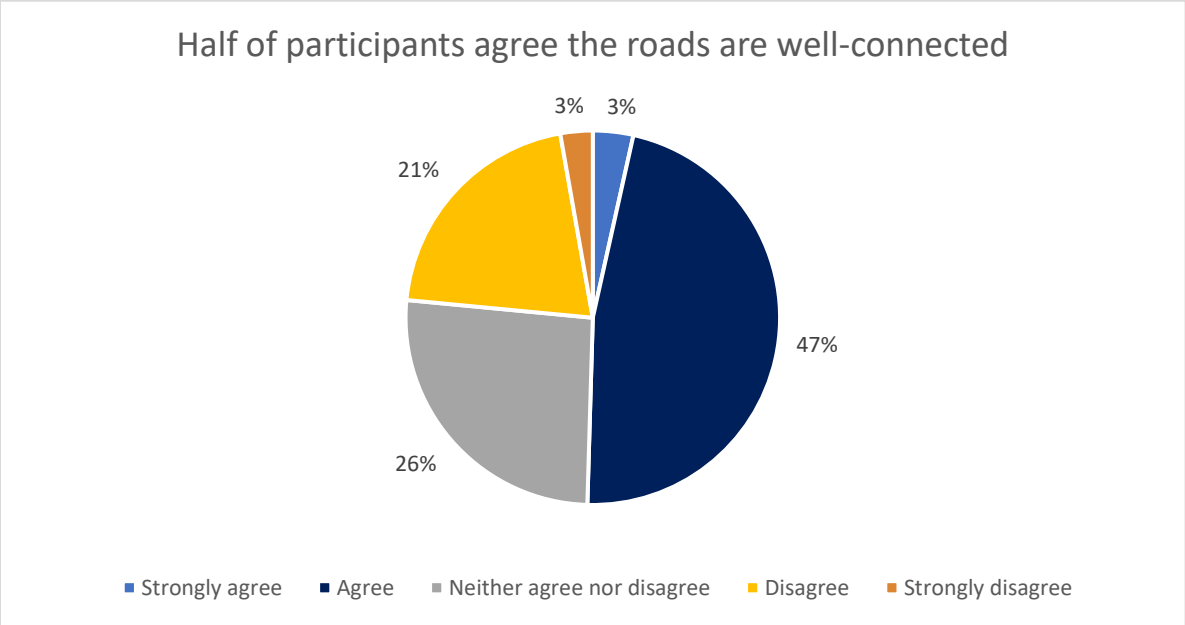
2. *In general, roads in the Fairbanks North Star Borough are safe.*

A total of 431 participants responded to this statement and two skipped it. **A majority affirm they believe the roads are safe.** Only about 24% "disagree" or "strongly disagree" with the statement.



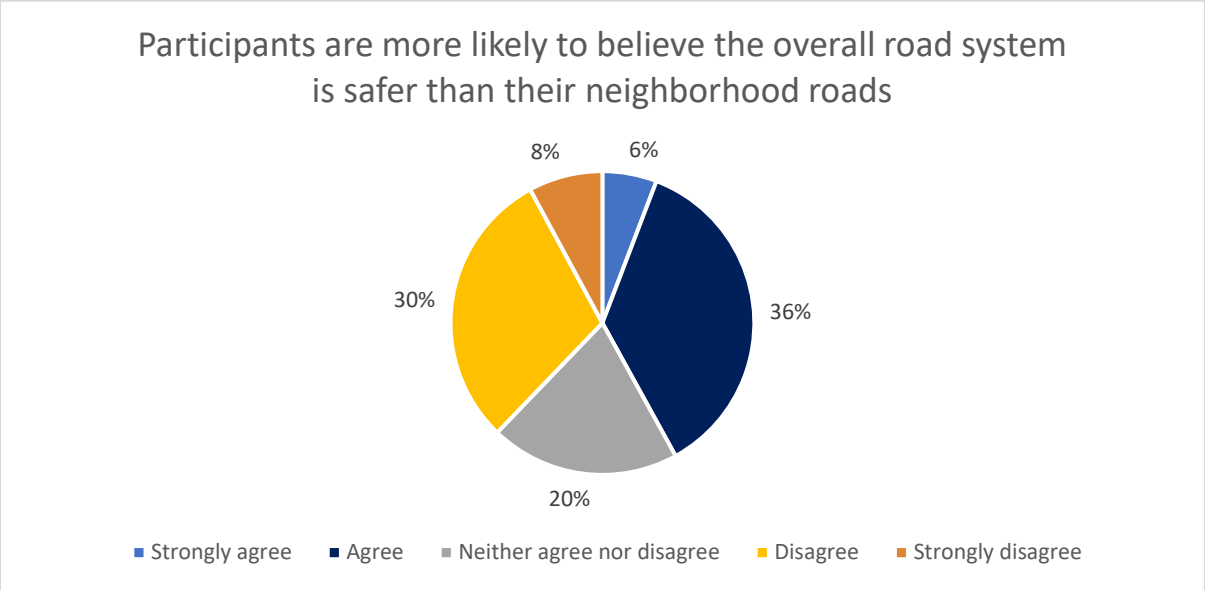
3. *In general, roads in the Fairbanks North Star Borough are well-connected.*

This question has responses from 430 of 433 participants. Again, **half of respondents affirm this statement** and about 24% either "disagree" or "strongly disagree."



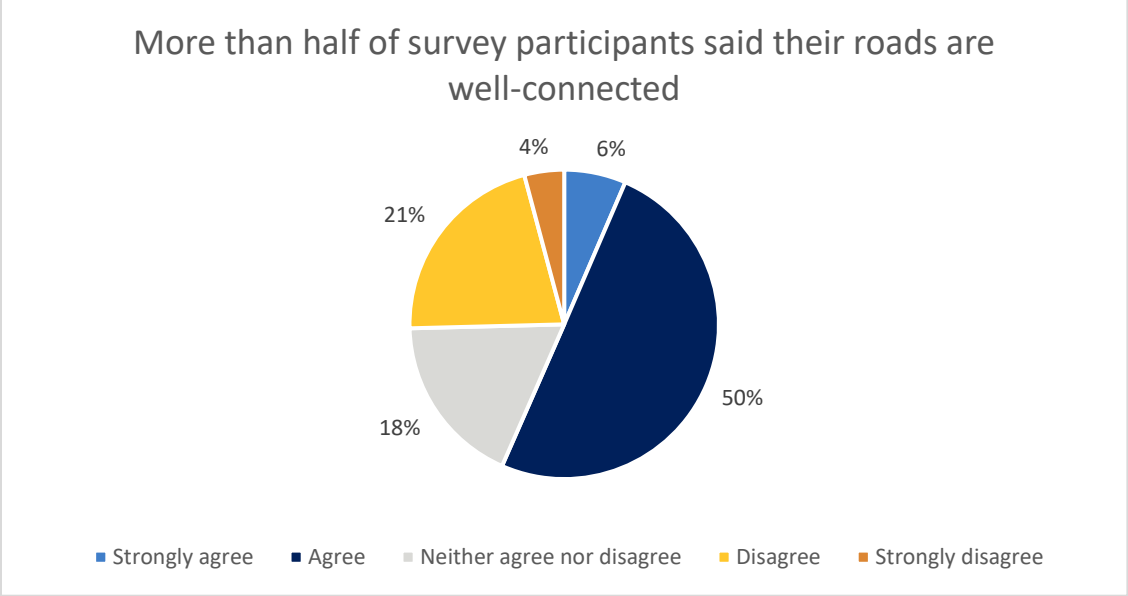
4. *My local/neighborhood roads are safe.*

This question has responses from 431 of 433 survey participants. Interestingly, **participants are more likely to agree the overall Borough road system is safe than they are to agree their neighborhood roads are safe**. Less than 6% "strongly agree" they're safe.



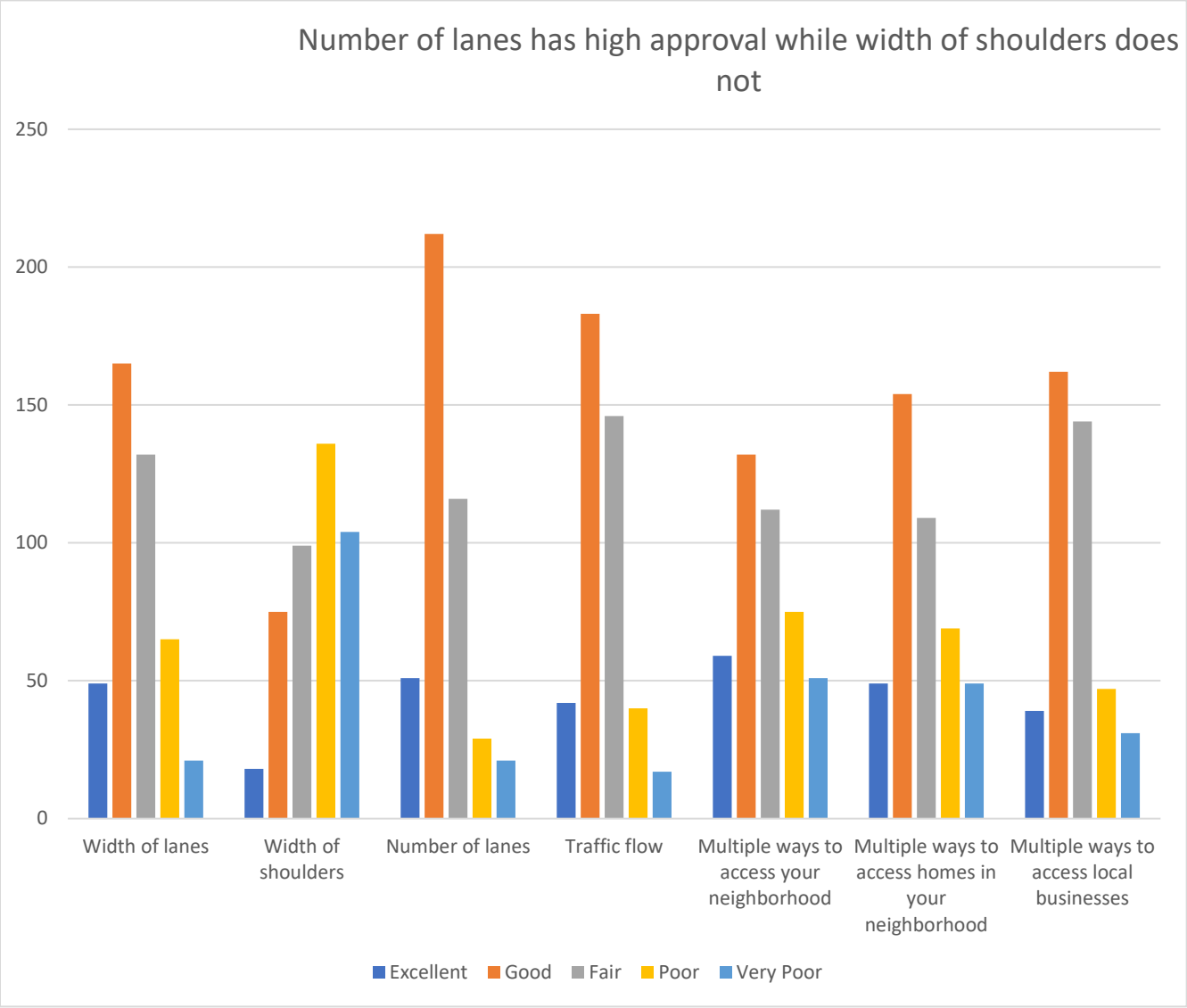
5. *My local/neighborhood roads are well-connected.*

All participants responded to this statement. This statement has more consensus than previous questions, with **56% agreeing or strongly agreeing their local roads are well-connected**. Like the other questions, about 25% of participants disagree with this statement.



6. ***How would you rate the following aspects of your Local/neighborhood roads? Consider how well they meet your expectations/standards for a safe road.***

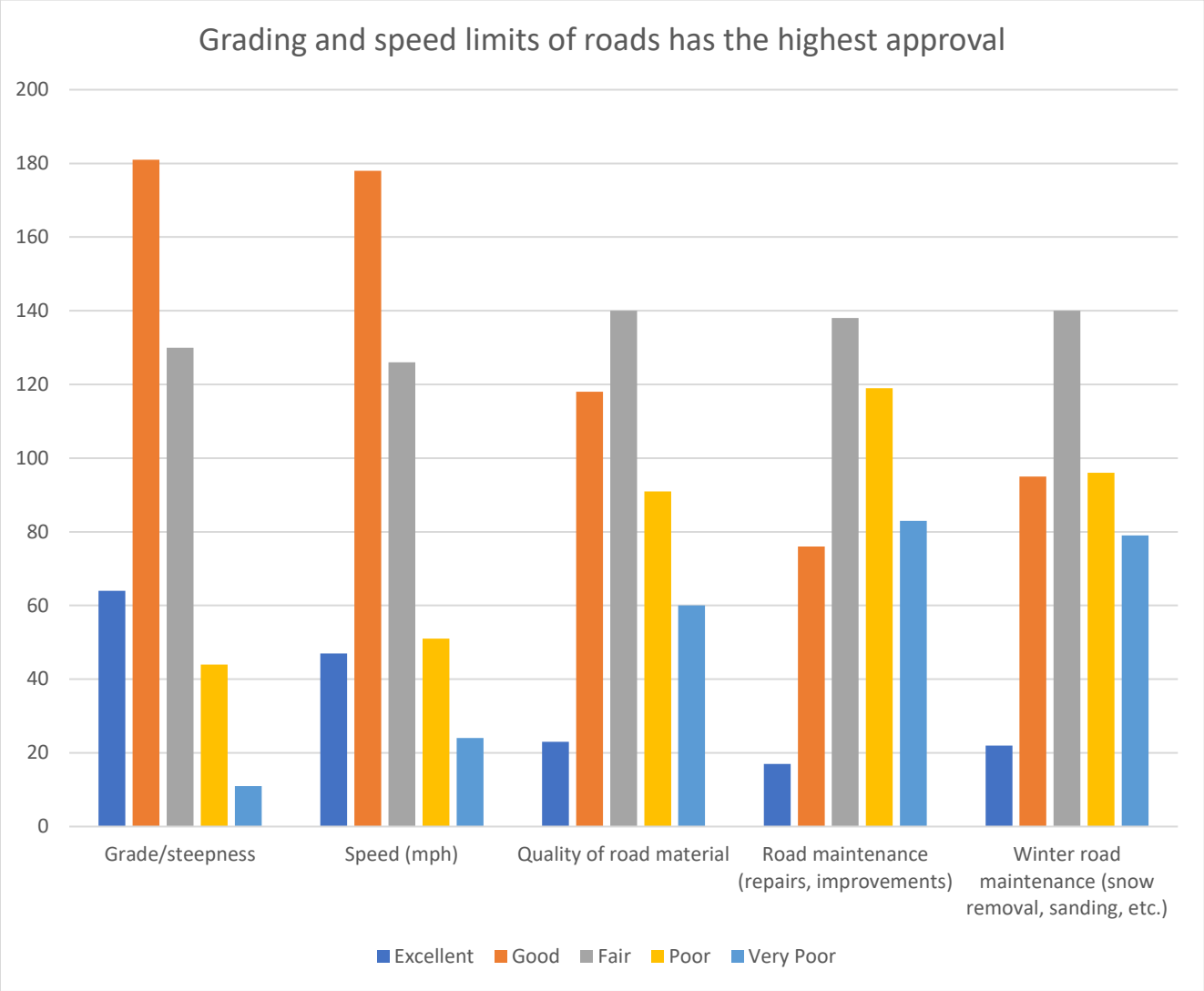
All participants answered this question, and **overall, they are pleased with the number of lanes, the width of lanes and the flow of traffic**. The **highest-rated characteristic is number of lanes**, with about half of participants grading it as "good" and another 12% saying the number of lanes is "excellent." Participants also indicate they have easy access to homes and businesses, with 71% saying access is "fair," "good" or "excellent." The **top aspect they are dissatisfied with is the width of the shoulders, with 56% grading shoulders "poor" or "very poor**." Otherwise, there was no option that participants are significantly dissatisfied with.



7. ***How would you rate the following aspects of your local/neighborhood roads? Consider how well they meet your expectations/standards for a safe road.***

All 433 participants answered this question, and overall **rate the grade of roads and the speed limits highly, with the highest combined "good" and "excellent**." Just 13% of participants disapprove of the grade and 18% disapprove of speed limits. Participants are notably less satisfied with the quality of road materials and road maintenance, winter or otherwise. **More participants rate road maintenance and winter road maintenance negatively**.

- *"Seems like **repair quality is sub-par**, even considering crews are battling permafrost."*
- *"The new roundabouts on Chena hot springs road work ok in the summer but cause wrecks and unnecessary long waits in the winter. **PLEASE DO NOT INSTALL ANY MORE ROUNDABOUTS. Also please use more sand and gravel and less salt on the road**, it kills plants, trees, pollutes streams and is bad for the environment."*
- *"The **roads need to be plowed in the winter with in a day or two so we can get in and out** of our roads without getting stuck."*

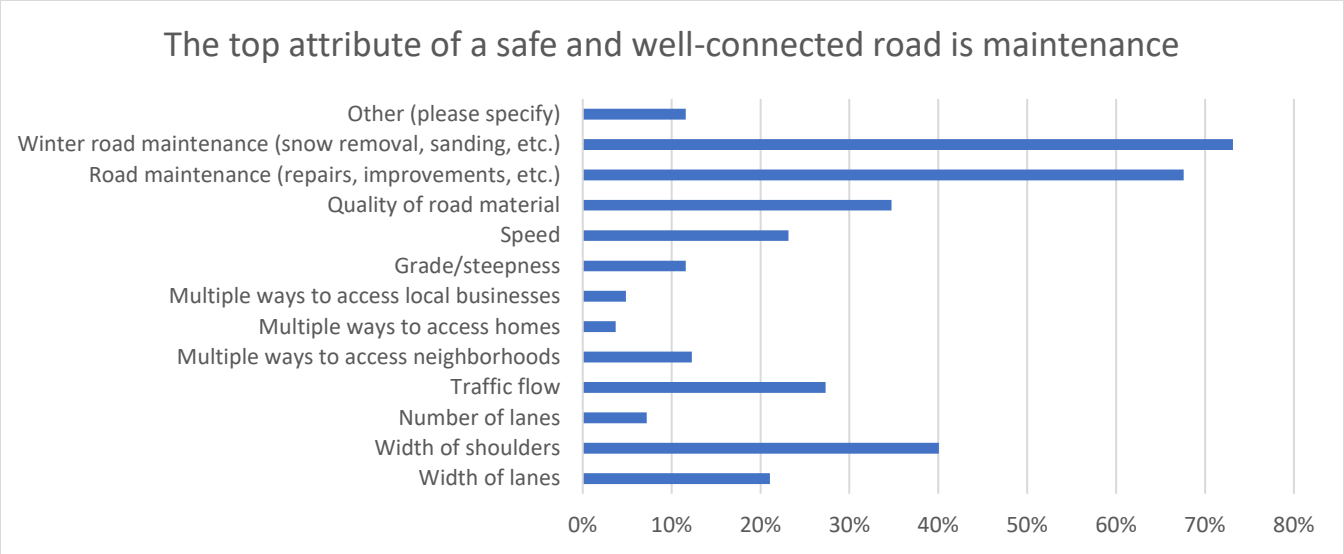


8. When you think about a safe and well-connected road system, which of the following characteristics are the most important to you?

All but one participant answered this question. Participants were asked to select the top three characteristics of a safe and well-connected road system. Again, the interest in road maintenance is reflected. **Winter road maintenance and overall road maintenance are the top two selected characteristics, both being selected by approximately 70% of participants**. The next top, most selected characteristics are "width of road shoulder" and "quality of road material".

Participants have the option to select "other" for at least one of their top three characteristics, and about 12% do. The most common responses are for more bicycle and pedestrian pathways. Additionally, many other participants want overall safer roads, which includes better winter road maintenance, wider lanes and shoulders, and more roundabouts to control speed. However, several participants also request fewer roundabouts, saying they increase the likelihood of cars sliding in the winter.

- *"**Turn lanes for traffic turning off the highway** into neighborhoods along with **well-lit intersections**."*
- *"Once again, **roundabouts are UNSAFE in the winter**, cause congestion due to becoming icy, forcing drivers to need to slow to a crawl to avoid having an accident. THEY DO NOT WORK IN ALASKA."*
- *"Bike lanes and **safe ways to commute in and out of my neighborhood by bicycle**."*



9. ***If you could build three connecting roads anywhere in the borough, what and where would those be?***

This is the first question to see a significant drop in participation, with 115 people declining to give an answer. Despite that, **this question includes robust responses regarding potential future connectors**. Participants propose up to three connecting roads in order of importance. They also can state why they selected their top proposed connecting road and are given an option to provide any other comments they wanted about proposed connections.

In total, **318 participants give a combined 899 comments**. Participants have the option to propose a total of three connections, ranking from most important to third most important. Participants provide 270 comments for most important, 169 comments for second most important and 127 for third most important. All responses are broken down into give categories:

- "Specific connection" – the participant gives provides locations where the proposed new road would start and stop.
- "General connection" – the participant proposes a connection from a specific road to a general area, such as a neighborhood or city within the FNSB.
- "Unspecified connection" – the participant proposes easier access from one part of the borough to another but does not advocate for any specific connection.
- "Nonmotorized connection" – the participant advocates for a walking/biking trail rather than a road.
- "Other" – the participant doesn't provide a response applicable to the question. These answers include things like advocating for more road maintenance and against new roads.

Overall, the most common response was a specific "connection." Of the 270 "most important" connection responses, 130 are "specific connection," 85 are "other," 23 are "vague connection," 22 are "general connection" and 10 are "nonmotorized connection."

For second most important connection, 72 are "specific connection," 70 are "other," 10 are "nonmotorized connection," and "vague connection," and "general connection" each receive eight responses.

For third most important connection, 58 are "specific connection," 57 are "other," and "nonmotorized connection," and "vague connection," each receive six responses.

Despite specific connections being the most common response, the connections being proposed vary widely. **The most common proposed connection is a bridge over the Chena River to connect Chena Pump Road to Airport Way**. A total of 16 responses request this connection, eight being ranked most important, six second most important and two third most important.

Other proposed connections that are mentioned multiple times include **Miller Hill Road to Miller Hill Extension Road** (referenced in 10 responses) and **College Road to Airport Way** (referenced in eight responses).

Why did you select your 1st Most Important?

Participants also provide input on why they selected their top connecting road. Some give very specific answers, such as providing a second route in and out of a neighborhood, while others speak more broadly.

- *"I saw the proposed plan in the News Miner, and **it looks far too confusing**, and hard to navigate in slippery winter conditions, especially for a perpetual population of incoming military who often are brand-new winter drivers."*
- *"**U-turn safe lanes would make traffic more efficient, safer, and better connected roads** as it allows drivers to make their U-turn without sitting at a light, holding up traffic due to needing a large gap in the opposite flow of traffic to make their turn, and prevents the need of turning out wide or making a 2-point turn for the U-turn."*
- *"To allow **another way to access/exit Moose Mountain subdivision**."*

The 123 responses in the "other" text box soliciting further information are **overwhelmingly comprised of statements opposing new connector roads**. Participants say they do not believe more roads are needed, and instead they want the Borough to focus on maintaining existing roads. Several participants also advocate for more pedestrian and bicycle pathways.

- *"**I don't necessarily think we need more roads**. A lack of roads is what keeps neighborhoods quiet and wooded."*
- *"**I don't really see more connecting roads as the solution**. Our neighborhoods and businesses and services throughout the borough are just really spread out. **I see this more as a transportation, zoning, and planning solution**.*
- *"**If you aren't fixing existing roads, then don't build new ones**."*
- *"**More bike/walking paths are welcome**, preferable separate from multi-use 4 wheeler/snow machine trails."*

10. Please share an example of a "good" or "excellent" road in your neighborhood. What qualities make it a "good" or "excellent" road?

342 participants share a response to this question and 91 skip it. Again, like similar questions, responses are diverse. Some participants use specific roads as an example, while others use characteristics such as "wide lanes."

The road mentioned most often in the responses is "Farmer's Loop Road," which is mentioned in 25 of responses. "Chena Pump Road" is mentioned in 19 of responses. The importance of wide shoulders is mentioned 44 times and nonmotorized pathways is mentioned 64 times. The most common theme is road maintenance, which is advocated for in 113 of the responses.

- *"In general, **Eldorado and Red Fox are well maintained, wide, don't suffer from horrible potholes, and get cleared of snow in a timely manner** (until this most recent year)."*
- *"**The Mitchell Expressway - it is well maintained, well lit**, and prior to the bridge revamp did not have any of issues standard to interior roads (pot holes, rippling, etc.)."*

- *"**Davis road** is a good road. There aren't too many stop signs, **it is well maintained, it has good snow removal, it connects lots of roads together**."*

11. Please share an example of a "poor" or "very poor" road in your neighborhood. What qualities make it a "poor" or "very poor" road?

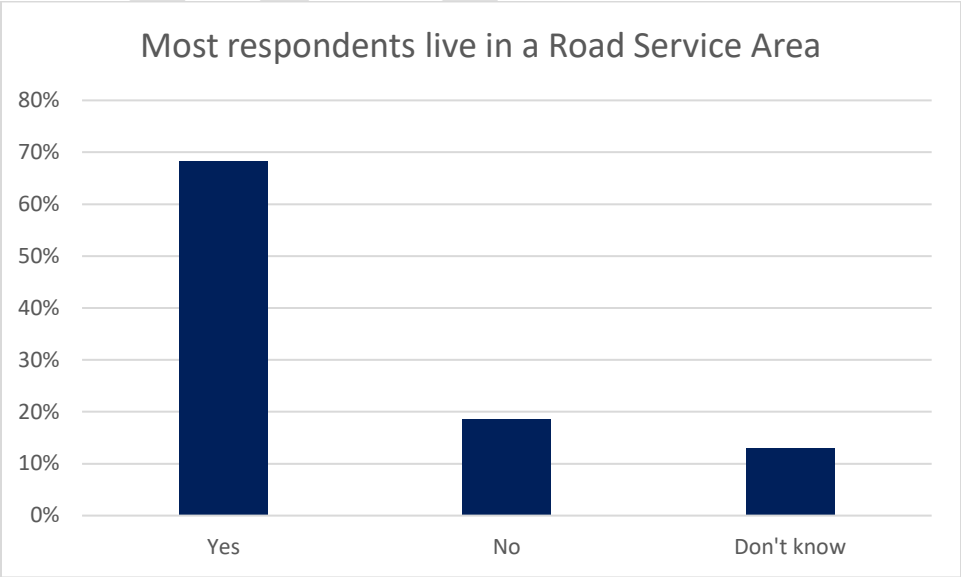
Of the 433 participants, 371 respond to this question. Participants focus more on characteristics of roads rather than specific roads. "**Chena Hot Springs Road" is the most mentioned road but is only mentioned in 21 responses**. Other roads that receive mention are "**Goldstream**" (13), "**Yankovich**" (10) "**College Road**" (eight) and "**Rosie Creek Road**" (seven).

The most common negative characteristics are **"shoulder,"** (47) **"potholes"** (47) **"narrow,"** (38) **"traffic,"** (36) **"winter,"** (32) **and "dangerous"** (19). Maintenance-related terms such as "plowing," "maintenance" and "maintained" combine for a total of 78 references.

- *"**Washboard Deep mud Dust Big rocks Deep snow Ice** (due to steep terrain)."*
- *"**Western Goldstream** and **northern Ballaine**. Bad permafrost damage is usually late to get patched, **snow removal is pathetically late, and the shoulders are too narrow to safely bike or walk on,** especially in the winter."*
- *"**Yankovich** is horrible. **No shoulder for bikes. Road is not smooth, lots of sharp hills**. Could be better."*

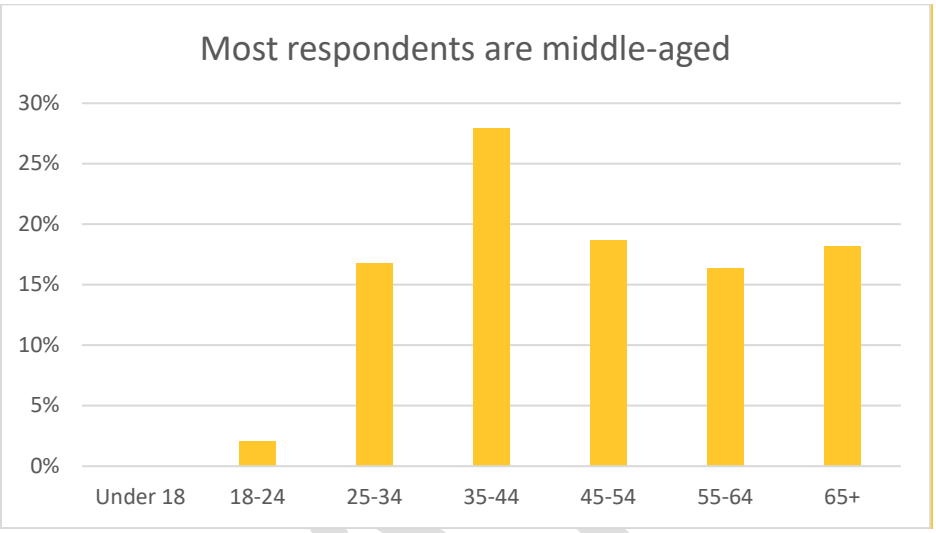
12. I live within a Road Service Area.

Of the 433 survey participants, 429 respond to this statement. Most survey respondents (68%) affirm they live in a Road Service Area. About 19% say they do not, and 13% are not sure whether they live in a Road Service Area.



13. *What is your age group?*

Of the 433 survey participants, 429 respond to this statement. The most prevalent age group in this survey is 35-44 years old. Age groups 25-34, 45-54, 55-64 and 65 and older all have similar representation in this survey and each account for between 16% and 19% of all participants. Participants between 18 and 24 years old only account for 2% of all participants, and there is no participation of people under the age of 18.



14. *What else would you like to share with the project team? Please write in the space provided below.*

This is the most-skipped question with 286 providing an answer and 147 declining. Overall, responses touch on a number of roads topics, but mostly are consistent with responses to other questions. Participants advocate for more bicycle and pedestrian pathways, wider lanes with wide shoulders, more frequent snow plowing and filling of potholes. As seen throughout the short answer portions of the survey, some participants advocate for more roundabouts while others say they make winter driving more dangerous. Several participants also express gratitude for the work the Borough does and for putting out this survey.

- *"I would **focus efforts on maintaining roads we have as opposed to building more**. But I'm sure there are good examples out there of roads that would make like easier and safer."*
- *"**We do NOT need more round abouts** and the new road ideas to help traffic flow are not good ideas. I do like how well the borough clears snow though from the roads."*
- *"**I would like bicycling and mass transit taken into account more** for the future. Wider shoulders, dedicated bike lanes, and more bus stops."*

15. *If you would like to receive electronic project updates (approximately 5 total between now and Spring 2022), please provide your email in the space below.*

A total of 286 participants provide a response to this question, eight of those whom do not leave an email address. 174 leave an email address.