



Methodology

Survey Purpose

The Birchwood Airport is a public-use airport owned by the State of Alaska located within the boundaries of the Municipality of Anchorage. It is primarily used for general aviation and does not have air traffic control or an on-site manager. The Alaska Department of Transportation and Public Facilities (DOT&PF) is undergoing a Master Plan update for the Birchwood Airport which includes development and analysis of alternative airport layouts that will better meet existing and future needs of airport users.

As a part of the master planning process, a survey was launched in December of 2021 to collect and understand levels of support and related feedback on potential layout alternatives. The primary purpose of the stakeholder survey was to poll users on potential layout changes. The project team developed four layout alternatives, ranging from a “no build” option which keeps the layout as-is, to a “Cadillac” option which considerably changes the layout of the airport and allows for the most future growth.

The survey showed detailed maps of each alternative, color-coded so participants can see how the alternatives differ from the current airport layout, and the differences between each potential layout. Participants were asked to rate their support from “strongly support” to “strongly oppose” for each individual alternative. They were also asked to rank the alternatives from highest to lowest preference.

No layout changes are guaranteed, and three of the four changes would require a land acquisition. All layout changes would need to be approved for funding by the Federal Aviation Administration (FAA).

Survey Development Process

The survey was developed by the project team and is based on interviews with airport and community stakeholders, community meetings, and Stakeholder Advisory Group (SAG) input.

The survey’s primary purpose was to gauge levels of support for each of the four alternatives and to see how participants would rank them, one to four, in order of how closely an alternative meets a participant’s vision for the airport and related needs. The analysis that follows looks at individual levels of support for each alternative, and a weighted ranking of the alternatives, where the most preferred option has a value of four points and the least preferred has a value of one point. In other words, a respondent’s “most preferred” option would receive four points and their “least preferred” option would receive one point.

Response Window

The survey opened December 18, 2021, with an original close date of January 19, 2022. Outreach to announce and encourage survey participation included an “email blast” to approximately 300 project contacts, including airport lessees, tenants, users, key organizations, and other stakeholders. The contact list was generated using a combination of contacts from previous projects at the Birchwood Airport and information the lessee or tenant has on file with the DOT&PF Statewide Aviation Leasing. The project team also worked with the SAG to distribute the survey through SAG member contacts and networks. The survey was also posted to the project website and via social media. At least three reminders went to

all stakeholders, including reminders of the original and extended survey deadline of February 4, 2022. See “Outreach Methods” below for additional details regarding survey outreach.

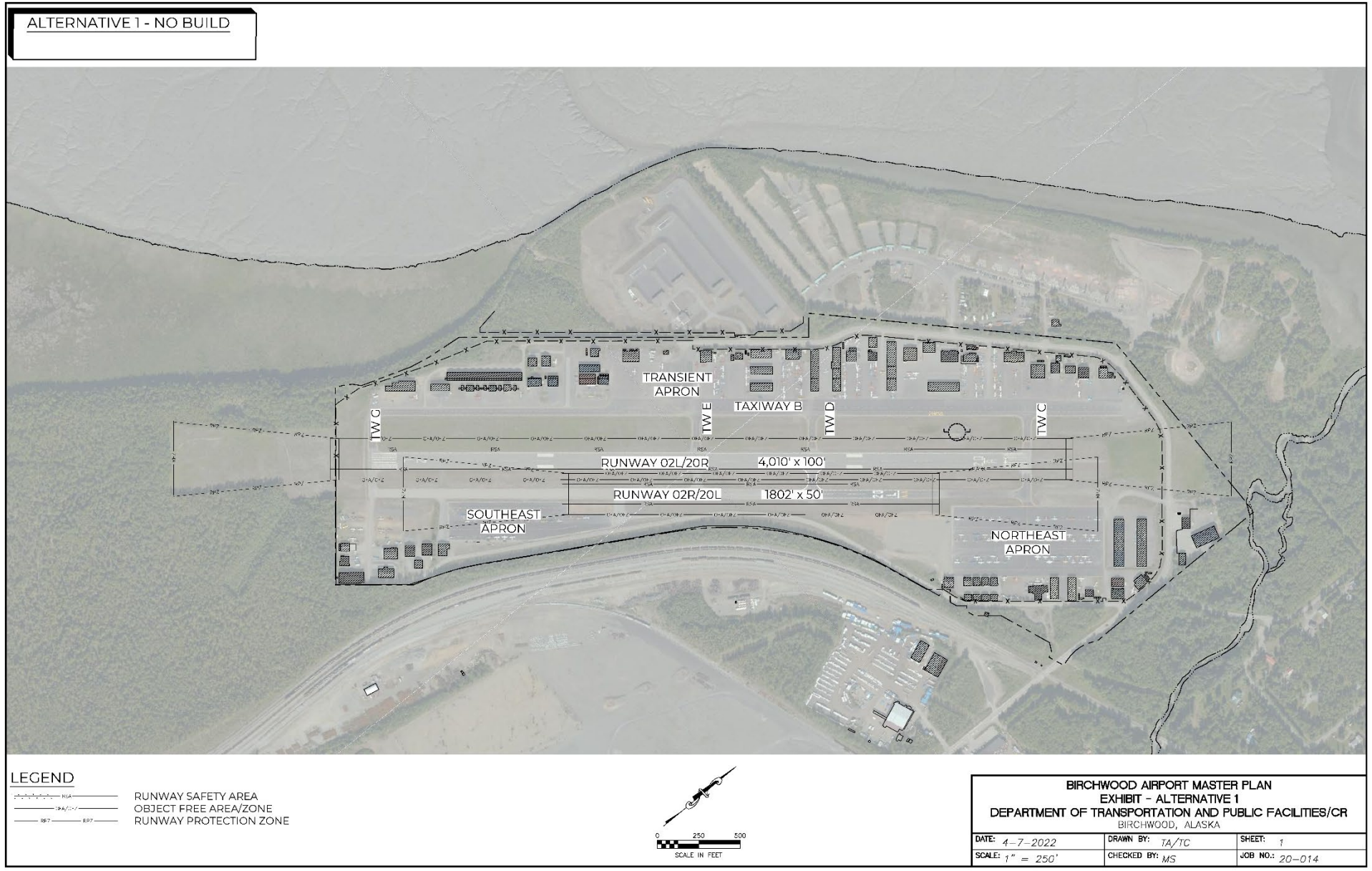
Number of Responses and Response Completeness

The survey received 108 responses. All questions were optional; therefore, the number of responses to each question varies. The “n”, or number, in the result charts that follow indicate the total number of responses to each question. Nearly all participants responded to multiple-choice questions (100 out of 107), but participation dropped for open-ended or short-answer questions (75 out of 107). The survey took an average of seven minutes to complete.

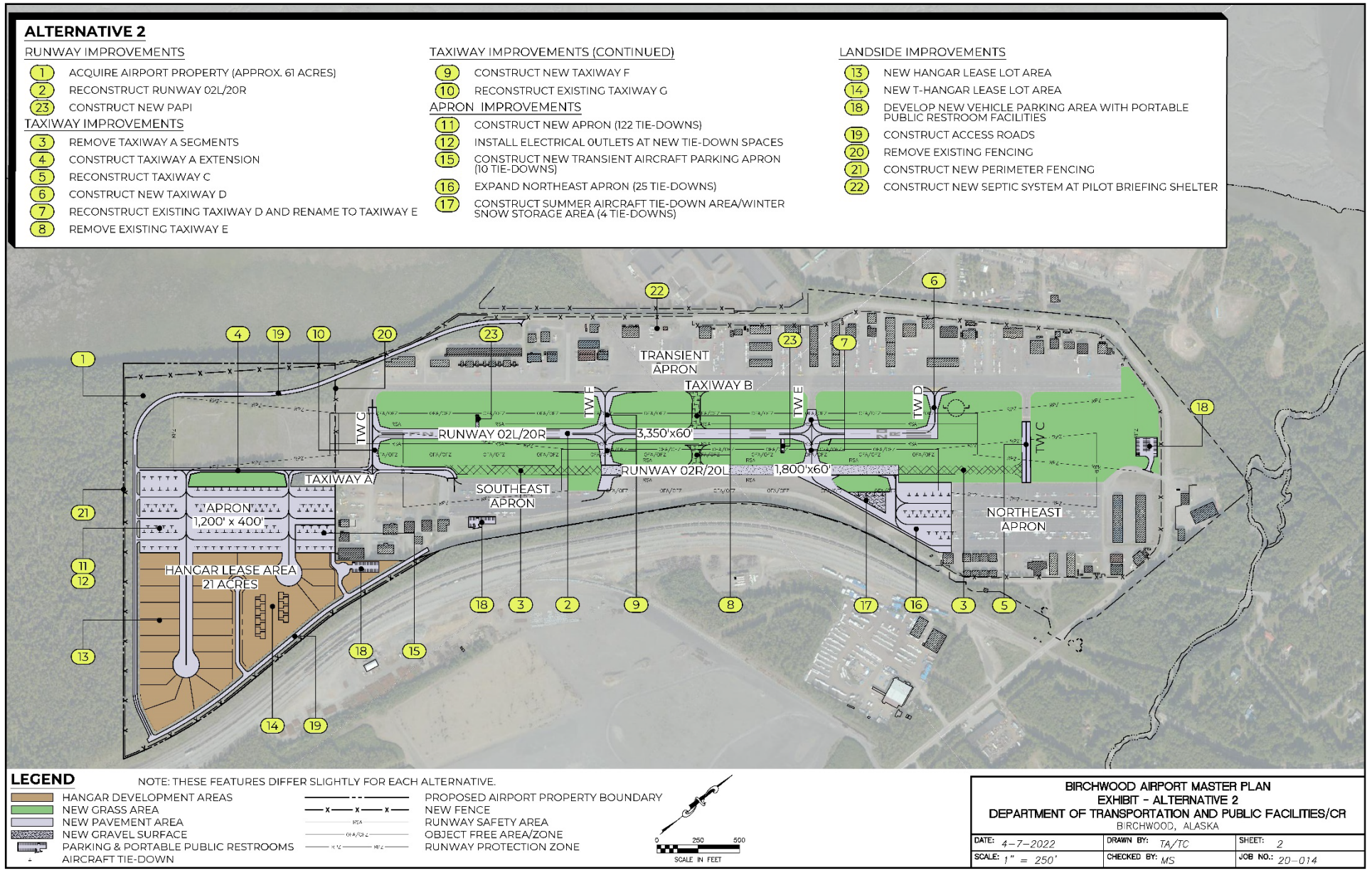
Alternatives Under Consideration (4)

Images on the pages that follow

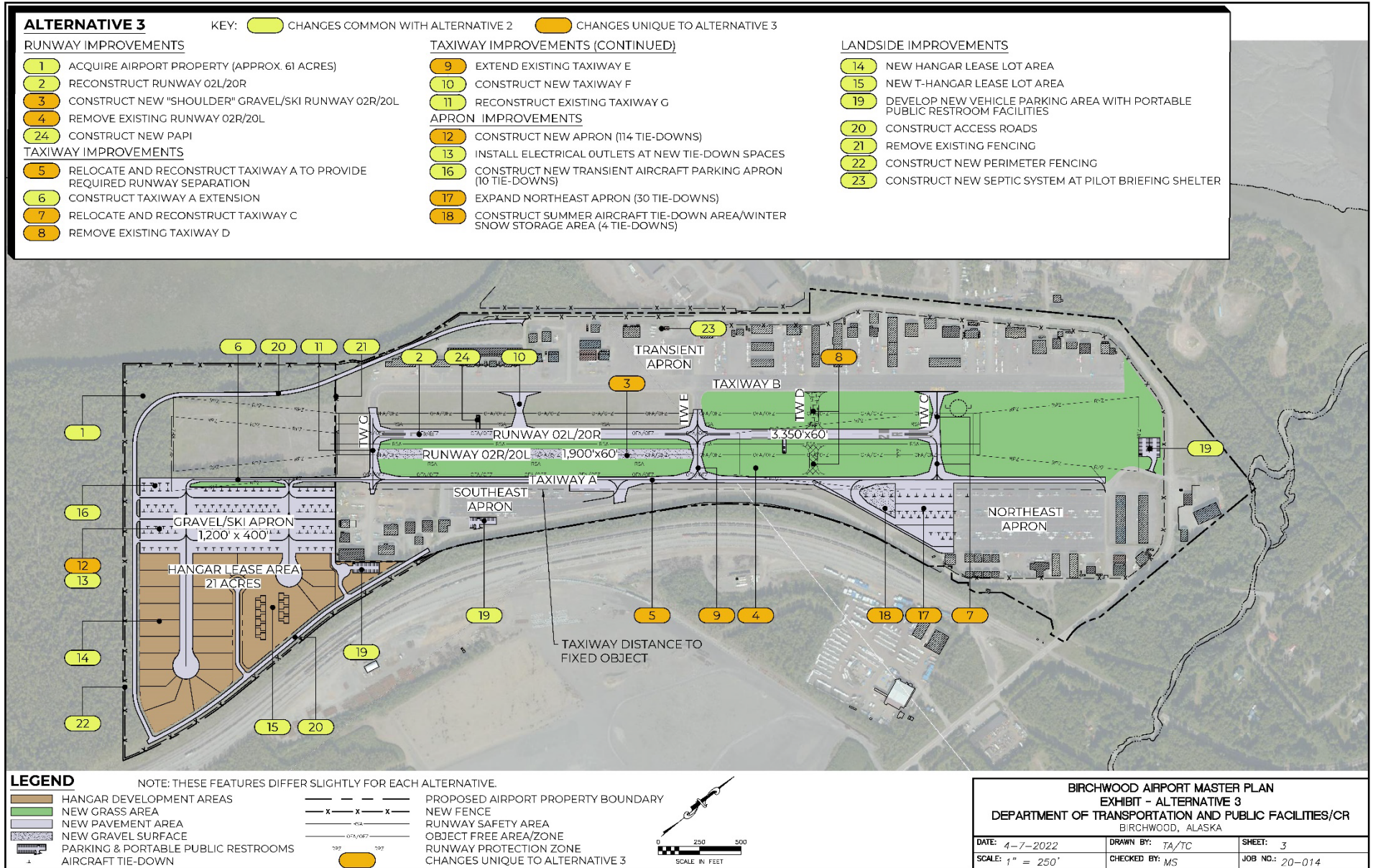
Alternative One:



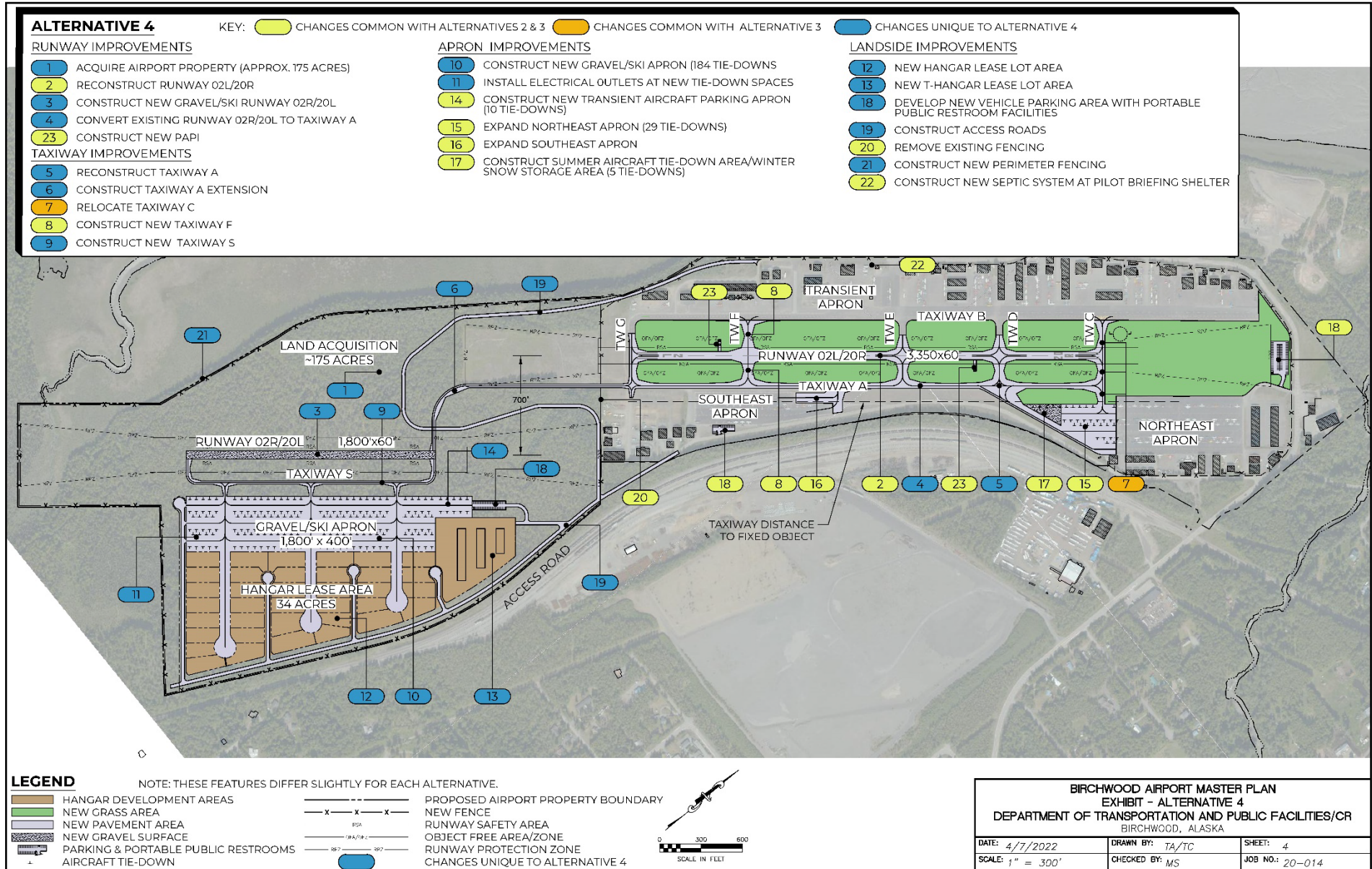
Alternative Two:



Alternative Three:



Alternative Four:



Outreach Methods & Related Next Steps

Previous work on this project focused on broad outreach to community members and the public. This survey, however, was targeted specifically to airport stakeholders.

- The survey was developed to get a better understanding of support for the four alternatives. This work started with developing the alternatives; alternative development was an iterative process informed by data collection and input from SAG members, airport users, community members, and other stakeholders, and took approximately nine months to develop.
- Initially, there were three alternatives, but a fourth “no build” alternative was added at the suggestion of the SAG during an October 12th meeting to review preliminary alternatives.
- Prior to launching the survey, the alternatives were discussed during SAG and community meetings, the latter of which was heavily advertised to the public.
- On December 18, 2021, an email announcing the survey was sent to the project contact list, which includes over 300 individual contacts.
- The survey was also advertised and linked on the [project website](#).
- SAG members were encouraged to share the survey among the various aviation associations, stakeholder groups and informal organizations engaged with the Birchwood Airport.
- On December 23, 2021, the Birchwood Airport Association [posted the survey to its private Facebook page](#) with 191 members. The post had 101 views.
- On January 17, 2022, the project team emailed the full project contact list to announce the extension of the survey to February 4, 2022. Again, the email asked contacts to share the survey with stakeholders who might want to provide input.
- This survey is a starting point for discussion and will provide context for an in-person community workshop aimed at getting additional input on potential layout alternatives spring/summer 2022.

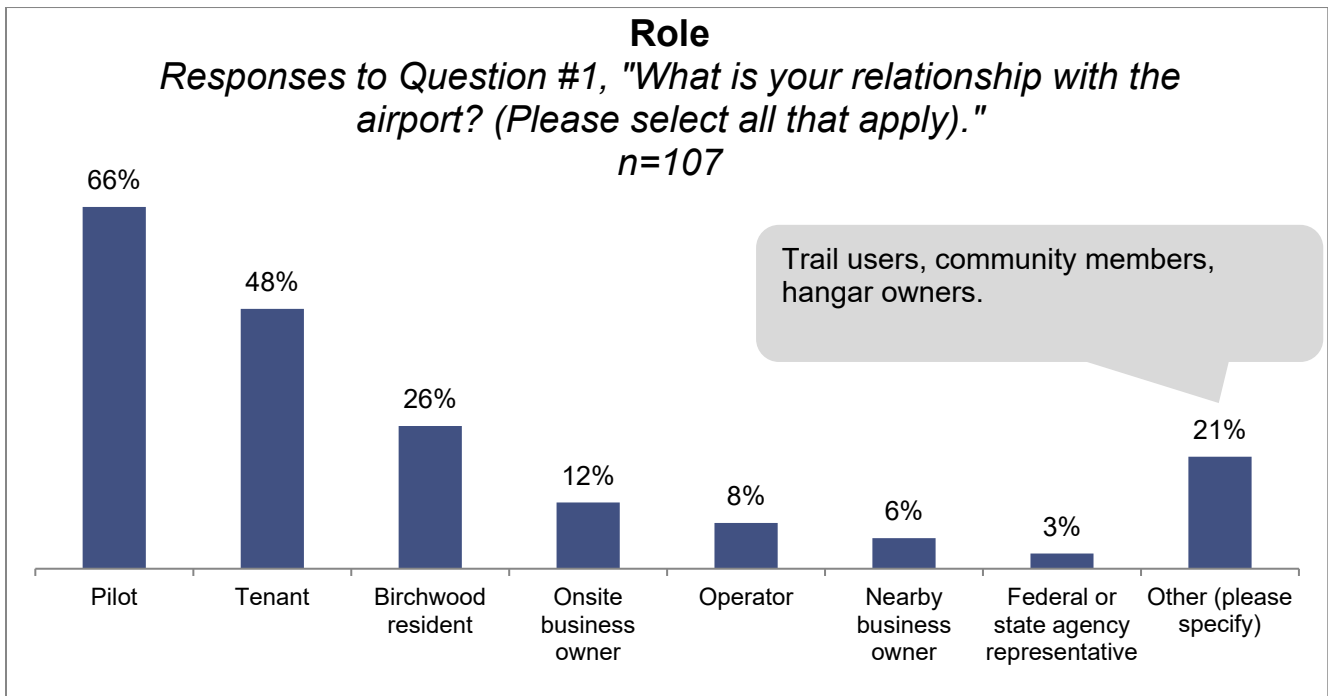
Participation & Limitations

This is not a statistically valid survey and is not intended to provide statistically representative data or represent the views of all airport users, business owners, community members, and other stakeholders. The goal of this survey was to poll airport users, or individuals that will be most impacted by any changes to the airport layout and surrounding area.

The majority, 66 percent, of survey participants are pilots. The second most common option selected is tenant, at 48 percent. Birchwood residents make up 26 percent and on-site business owners make up 12 percent, though both are likely to include overlap with pilots and tenants as participants were encouraged to select all that apply.

Twenty-two participants, accounting for 21 percent of respondents, selected “other” which asked for specification. Several participants selected “other” despite fitting into the options, such as an on-site business owner or Birchwood resident.

QUESTION #1



Key Takeaways

- Alternative One has the highest level of support, followed by Alternative Two, Alternative Three, and Alternative Four.
- The weighted ranking reflects a slightly different range of support for the four alternatives, with Alternative One having the most points, followed by Alternative Two, Alternative Four, and Alternative Three.
- While Alternative Two has more support and less opposition, many participants advocate for Alternative Four in the short answer response questions.
- A combination of quantitative and qualitative responses indicates that participants are divided on wanting no or minimal growth versus more robust/extensive growth. There is little support for moderate growth.

Leave well enough alone.
Alternative one has worked for many years, safely and successfully.
 Plans 2,3,4 are way too complicated, unnecessary, and costly.

"1 AND 2 preserve all winter use of ski strip/parking for straight ski aircraft. **2 Will also expand much needed hanger/tiedown space.**"

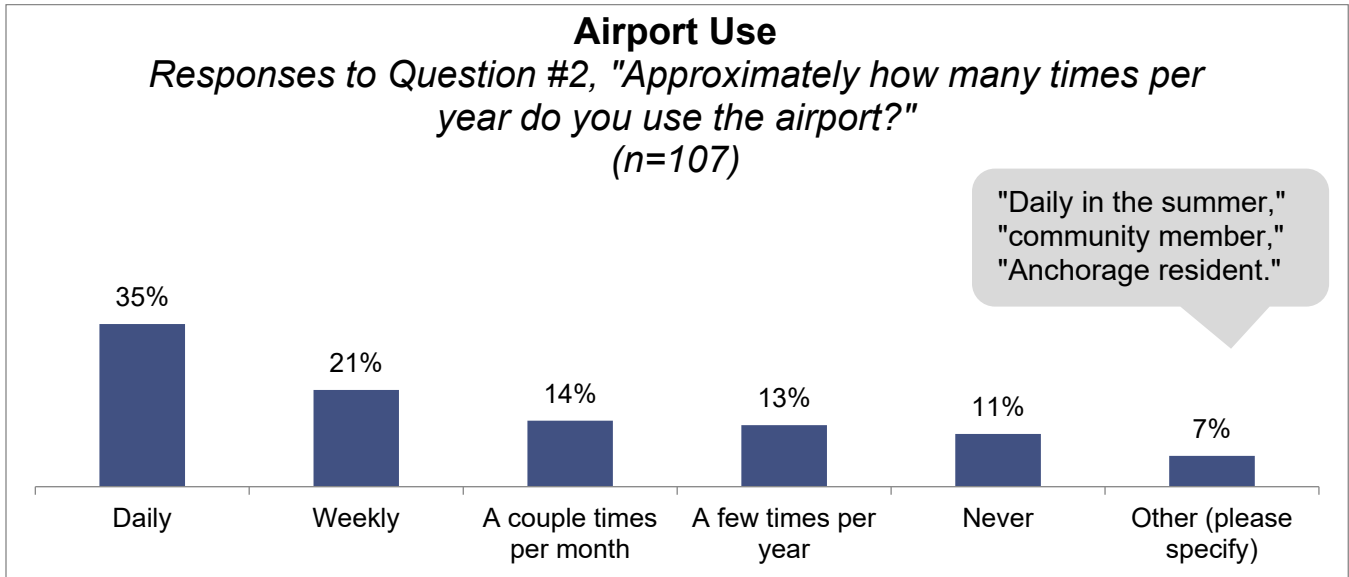
"**Planning for some future expansion may be desirable for younger pilots** or those wanting access to more space for hangar construction."

"**Alt 4 solves a lot of issues and provides for the greatest expansion.**"

QUESTION #2

Approximately how many times per year do you use the airport?

Thirty-five percent of survey participants use the airport weekly, and 21 percent use it daily. Less than a third of participants use the airport “a couple of times per month” to “a few times per year”, and 14 percent say they never use it. Seven participants selected “other,” the majority of whom say they use the airport daily in the summer and infrequently in the winter.



QUESTION #3, 4, 5, and 6 – Please indicate your level of support for Alternative “X”.

ALTERNATIVES	Strongly Support or Support	Neutral	Oppose or Strongly Oppose
Alternative 1 (n=101)	50%	35%	15%
Alternative 2 (n=101)	35%	22%	43%
Alternative 3 (n=100)	35%	18%	47%
Alternative 4 (n=102)	32%	14%	54%

- Alternative One is the most supported alternative, with half (50 percent) of participants strongly supporting or supporting the alternative, and 15 percent expressing some level of opposition.
 - Alternative One has the highest level of neutrality, with 35 percent saying they are neutral to it.
 - This is the only alternative where combined support is higher than combined opposition.
- Alternative Two is tied for the second highest level of support (35 percent) with Alternative Three and has the second lowest level of opposition. However, this alternative has more opposition than support. 22 percent are neutral to this alternative.
- Alternative Three has 35 percent support, tied with Alternative Two, but has slightly higher opposition (47 percent). 18 percent of participants are neutral in their support of Alternative 3.

- Alternative Four is the fourth-most supported option and has the highest opposition. With 54 percent of participants opposing Alternative 4, it is the only option that most participants opposed. It also has the lowest neutrality (14 percent).

Support by Type of Participant

Below is a breakdown of levels of support by participant type. Given participants were allowed to select more than one response to the question, “What is your relationship to the airport?” some responses may be duplicated.

- When levels of support are parsed out by stakeholder type, they generally matches the average of all participants, or the “field” average.
- Alternative Two is the only alternative that pilots preferred at a rate above the field average.
- Birchwood residents show much less support for alternatives two through four than the field average, and support Alternative One at an average rate.
- Pilots and operators are within 10 percent of the field average for opposition to all alternatives.

Combined Strongly Support and Support by Participant Type				
	Alternative One	Alternative Two	Alternative Three	Alternative Four
Pilot (n=70)	57%	<i>47%</i>	42%	34%
Tenant (n=50)	<i>62%</i>	42%	38%	24%
Operator (n=8)	38%	38%	<i>50%</i>	33%
Birchwood Resident (n=27)	52%	19%	26%	22%
Onsite Business (n=13)	<i>69%</i>	23%	31%	31%
Overall Average	50%	36%	35%	32%

- *Green/italics* indicates a stakeholder group supported an alternative **at least 10 percent above the field average**.
- **Red/bold** indicates a stakeholder group supported an alternative **at least 10 percent below the field average**.
- This table excludes results from federal and state agency partners, as well as nearby businesses, which account for three and six participants, respectively. Those stakeholders were excluded because their participation numbers were too low to provide a representative sample size.
- Survey participants were allowed to select multiple relationship to airport types.

QUESTION #7

Please rank the four alternatives from highest to lowest in how they represent your vision and needs (what you want and would like to see) for the Birchwood Airport over the next 10 to 20 years.

This question asked participants to rank the alternatives based on what they want the airport to look like in the future. Participants were asked to rank the alternatives from one to four, with one being the alternative that most represents their desired changes and four being the alternative that least represents their desired changes. The weighted ranking applies a descending point value to each selection.

- First choice is worth four points
- Second choice is worth three points
- Third choice is worth two points
- Fourth choice is worth one point.

Alternative One has the highest weighted ranking, followed by Alternative Two, Alternative Four and Alternative Three.

- Alternative One: 219 points
- Alternative Two: 206 points
- Alternative Four: 197 points
- Alternative Three: 195 points

QUESTION #8 (see “2022 Raw Survey Results” for all participants responses)

What do you like most about the alternatives and why?

Analysis of short-answer responses were coded into four primary categories based on the frequency of response themes: opportunity for growth/more amenities, no changes desired, did not like any options, and increased safety.

Growth and Increased Amenities (33 mentions): The most represented theme is opportunity for growth/more amenities. In these 33 responses, participants said they appreciate the alternatives providing more space for things like tie-downs, lease lots and hangar space. Many of these responses specifically reference Alternative Four as their desired layout.

“I love the idea of expansion in option 4. There is such a great demand for hangar and tie down space. The expansion would be great and just what is needed.”

No Change Desired (12 mentions): Twelve participants say they do not want any changes, indicating support for the “no build” alternative.

“Alternative One meets the needs of the majority of the populace with no expensive involved. It keeps the airport as a quiet, fun and safe user-friendly airport.”

Do Not Like Any Options (5 mentions): Five participants indicate they do not like any of the four alternatives.

Increased Safety (4 mentions):
Four participants say they appreciate the alternatives considering enhanced safety.

“I like that they improve safety, provide growth for general aviation, and that they establish parallel taxiway on the east side.”

Twenty of the 73 responses did not fit into an overall theme and are therefore not categorized. Those responses include short statements, such as “modernization” as well as comments about not having a preference or wanting a multi-use trail through the airport.

QUESTION #9 (see “2022 Raw Survey Results” for all participants responses)

What do you like least about the alternatives and why?

Analysis of short-answer responses were coded into four primary categories based on the frequency of response themes: opportunity for growth/more amenities, moving the gravel runway, confusing air traffic patterns, the no build alternative, shortening the main runway, and no addition of a recreational trail.

Opportunity for Growth/More Amenities (nine mentions):
Growth, as well as moving the gravel runway, was the element least liked about the alternatives. Nine participants oppose any alternatives that allow for future growth of the airport.

“Too many changes that do not represent the future phases of General Aviation.”

Moving the Gravel Runway (nine mentions):
Nine participants oppose all alternatives that relocate the gravel runway.

“Relocating the gravel strip or eliminating it would be folly. leave it as it is.”

Confusing Air Traffic Patterns
Seven participants state that the alternatives either create confusing air traffic patterns, or fail to address existing confusing air traffic patterns.

“None of the new options address the unsafe parallel operations or security.”

No Build Alternative
Seven participants oppose a “no build” option, which several characterize as a build or growth “moratorium.”

“The build moratorium is a bad idea given the interest. Need to expand this airport for economy and safety.”

Shortening the Main Runway (five mentions):
Five participants object to the shortening of the main runway.

“I hate that it makes 20R/02L shorter. Limits the aircraft that can use the runway.”

No Addition of a Recreational Trail (seven mentions):
Seven participants advocated for a multi-use trail to be included in the Master Plan.

“No public use trail system included in any of the plans.”

QUESTION #10 (see “2022 Raw Survey Results” for all participants responses)

What other comments or questions do you have about the four alternatives or the Airport Master Plan Update process?

Responses range significantly and include inquiries about cost, timeline, the feasibility of land acquisition, whether alternatives two through four would require air traffic control, and the likelihood of the Master Plan being fully implemented. Key themes included:

Multi-use Trail (13 mentions):

The most common theme is people advocating for a multi-use trail, which some participants say was discussed during previous Master Plan updates.

“Way back when there was a plan to allow for a separated bike/multiuse path. That doesn’t exist in any of these plans and would be a shame to omit.”

No Growth (12 mentions):

Several participants use this opportunity to once again voice opposition to alternatives that set the stage for more growth.

“Keep it simple and a fun airport, and we will monitor rule breakers and safety in operations.”

No Shortened Runway (three mentions):

Three participants use this final opportunity to voice concern over any shortening of runways.

Twenty-three of the 54 responses do not fit into a larger theme. Those include questions regarding: the feasibility of land acquisition; how long it will take to fully implement the selected alternative; what the pilot bathroom situation will be in the selected alternative; and how changes would be funded.

“Is there any way to do the improvements but not shorten the main runway?”