



## **Anchorage International Airport Master Plan Update**

### **Technical Advisory Committee**

#### **Meeting #4**

Date: Thursday, May 9, 2013

Time: 1:30PM – 3:30PM

Location: Badge Office Room NA165, North Terminal, Anchorage International Airport

### **DRAFT ALTERNATIVE NOTES AND KEY FEATURES**

There are five Draft Alternatives for the possible future development of Ted Stevens Anchorage International Airport. The elements of each Draft Alternative are described herein. The Draft Alternatives may be refined to reflect the input of the Master Plan Update Working Group, Technical Advisory Committee, general public, and results of the technical analysis. As input is considered and technical analysis occurs, elements of the Draft Alternatives may be refined to better accommodate forecast demand or address Master Plan Update goals and objectives.

The elements included in each alternative may be paired differently than presented here once alternatives are refined. As an example, a refined preferred alternative may feature the terminal element included in Alternative 4 and the Airside element featured in Alternative 3.

#### Alternative 1 – Minimize Development

Alternative 1 limits investment at Anchorage International Airport to those elements necessary to meet airport design standards while identifying areas for tenants to develop facilities as they see fit. The airside elements in Alternative 1 are required to meet new FAA airport design standards. The Alternative 1 airside elements are included in all five alternatives. Alternative 1 attempts to maintain balance between the airside, terminal, landside, and airport support facilities. Alternative 1 does not meet the 20-year facility requirements and may result in untenable delays and a reduced level of airport efficiency. It is anticipated that Alternative 1 would reduce the Airport’s economic benefit to Anchorage and Alaska.

Alternative 1 features the following elements:

#### **Airside**

1. Angled Taxiways R, G, F, E, D, and C removed and replaced with 90-degree taxiways
2. Runway 15-33 shortened to eliminate intersection with Runway 7L-25R

#### **Terminal**

1. Existing use of the North Terminal continued; facility maintained as warranted

### **Landside**

1. Parking demand managed or facility expanded at the South Terminal as demand warrants

### **Airport Support**

1. General aviation and small commercial aviation operations expanded in South Airpark east and west of Taxiway Z as demand warrants; new west access road provided
2. Airline / airport support expanded in South Airpark in former Kulis site as demand warrants
3. Fuel storage facility expanded to the north as demand warrants
4. Potential hotel site identified
5. Air cargo and airline / airport support expanded in Postmark Bog as demand warrants
6. Air cargo expanded in North Airpark, adjacent to Taxiway Q as demand warrants

## Alternative 2 – Optimize Use of Alaska International Airport System Infrastructure

Alternative 2 balances demand between Anchorage International Airport and Fairbanks International Airport, making greater use of existing Alaska International Airport System (AIAS) infrastructure.

Alternative 2 attempts to maintain balance between the airside, terminal, landside, and airport support facilities. Alternative 2 meets the 20-year facility requirements with the assumption that half of all “gas-n-go” air cargo flights would utilize Fairbanks International Airport (FAI) instead of Anchorage International Airport. It is anticipated that Alternative 2 would reduce the Anchorage International Airport’s economic benefit to Anchorage but may maintain the economic benefit of aviation in Alaska.

Though Alternative 2 assumes some air cargo demand would be accommodated at Fairbanks International Airport, it should be noted that the ANC and FAI cannot require airlines to utilize a specific airport. Airlines have the right to utilize any public use airport that provides the required facilities.

Alternative 2 features the following elements:

### **Airside**

1. Angled Taxiways R, G, F, E, D, and C removed and replaced with 90-degree taxiways
2. Runway 15-33 shortened to eliminate intersection with Runway 7L-25R

### **Terminal**

1. North Terminal renovated to meet 20+ year demand

### **Landside**

1. Parking demand managed or facility expanded at the South Terminal as demand warrants

### **Airport Support**

1. General aviation and small commercial aviation operations expanded in South Airpark east and west of Taxiway Z as demand warrants; new west access road provided
2. Airline / airport support expanded in South Airpark in former Kulis site as demand warrants
3. Fuel storage facility expanded to the north as demand warrants
4. Potential hotel site identified
5. Air cargo expanded in southern portion of Postmark Bog as demand warrants; new taxiway developed north of the expansion area
6. Air cargo expanded in the North Airpark, adjacent to Taxiway Q as demand warrants
7. Air cargo expanded south of Taxiway P as demand warrants; Taxiway P extended to the east
8. Air cargo expanded between Taxiways U and P (“Papa” spots) as demand warrants

## Alternative 3 – Optimize Use of Existing Anchorage International Airport Infrastructure

Alternative 3 utilizes existing airfield infrastructure at Anchorage International Airport to maximize capacity of *existing* runways by eliminating the preferential runway use policy during daytime hours. This policy is currently in effect at all times to reduce noise impacts on residential areas east of Anchorage International Airport. Alternative 3 would result in an increase in noise impacts due to more frequent use of Runway 7L for departures by jet and heavy jet aircraft.

Alternative 3 would provide additional capacity with the existing three runway system by eliminating restrictions on runway use during the hours of 7:00 AM to 10:00 PM.

During peak **arrival** periods when there are more landings than take-offs, air traffic control would use Runway 7R and Runway 15 for arriving aircraft. Runway 7L would be used for all take-offs. This provides two runways for arriving aircraft and one runway for departing aircraft.

During peak **departure** periods when there are more take-offs than landings air traffic control would use Runway 7L and Runway 33 for departing aircraft. Runway 7R would be used for all landings. This provides two runways for departing aircraft and one runway for arriving aircraft.

Alternative 3 attempts to meet demand without any substantial investment in new airfield infrastructure. Alternative 3 attempts to balance airside, terminal, landside, and airport support facilities. Alternative 3 meets the 20-year facility requirements for terminal, landside and airport support facilities. However, it does not meet the airside facility requirements in all conditions. The Airport would continue to rely on a single north-south runway significantly reducing airfield capacity and efficiency during certain weather conditions.

Alternative 3 features the following elements:

### **Airside**

1. Angled Taxiways R, G, F, E, D, and C removed and replaced with 90-degree taxiways
2. Runway 15-33 shortened to eliminate intersection with Runway 7L-25R

### **Terminal**

1. North Terminal downsized and renovated to meet 20+ year demand

### **Landside**

1. Parking demand managed or facility expanded at the South Terminal as demand warrants
2. Postmark Drive relocated east of the U.S. Postal Service facility to accommodate an eastward expansion of air cargo and airline / airport support facilities

### **Airport Support**

1. General aviation and small commercial aviation operations expanded in South Airpark east and west of Taxiway Z as demand warrants; new west access road provided
2. Airline / airport support expanded in South Airpark in former Kulis site as demand warrants

3. Fuel storage facility expanded to the north as demand warrants
4. Potential hotel site identified
5. Air cargo expanded in the southern portion of Postmark Bog as demand warrants; new taxiway developed north of the expansion area
6. Air cargo expanded in the North Airpark, adjacent to Taxiway Q as demand warrants
7. Air cargo expanded south of Taxiway P as demand warrants; Taxiway P extended to the east
8. Air cargo expanded between Taxiways U and P ("Papa" spots) as demand warrants
9. Air cargo and airline / airport support expanded eastward into the Turnagain Bog as demand warrants; Taxiway T extended eastward into the Turnagain Bog

## Alternative 4 –New Closely Spaced Runway

Alternative 4 increases airport capacity by adding a new north-south runway parallel to and west of Runway 15-33. The parallel runways would be separated by 908 feet between runway centerlines. A closely spaced parallel runway provides modest additional capacity. Alternative 4 attempts to balance airside, terminal, landside, and airport support facilities. Alternative 4 is not anticipated to completely meet the 20-year facility requirements in all conditions because closely spaced runways cannot be operated independently.

Alternative 4 features the following elements:

### **Airside**

1. Angled Taxiways R, G, F, E, D, and C removed and replaced with 90-degree taxiways
2. Runway 15-33 shortened to eliminate intersection with Runway 7L-25R
3. Taxiway Z extended east providing access between the South Airpark and former Kulis site
4. New 10,000-foot long runway constructed 908 feet west of existing Runway 15-33
5. New taxiway constructed 520 feet west of the new runway

### **Terminal**

1. North Terminal concourse removed, leaving terminal processor building
2. New concourse added to South Terminal providing 5 additional gates for domestic and international flights and concessions

### **Landside**

1. Parking demand managed or facility expanded at the South Terminal as demand warrants
2. Postmark Drive relocated east to provide safe access to the U.S. Postal Service facility

### **Airport Support**

1. General aviation and small commercial aviation operations expanded in South Airpark east and west of Taxiway Z as demand warrants; new west access road provided
2. Airline / airport support expanded in South Airpark in former Kulis site as demand warrants
3. Fuel storage facility expanded to the north as demand warrants
4. Potential hotel site identified
5. Air cargo expanded in the southern portion of Postmark Bog as demand warrants; new taxiway developed north of the expansion area
6. Air cargo expanded in the North Airpark, adjacent to Taxiway Q as demand warrants
7. Air cargo expanded south of Taxiway P as demand warrants; Taxiway P extended to the east
8. Air cargo expanded between Taxiways U and P (“Papa” spots) as demand warrants
10. Air cargo and airline / airport support expanded westward in the West Airpark, north of the fuel storage facility, as demand warrants

## Alternative 5 – New Widely Spaced Runway

Alternative 5 increases airport capacity by adding a new north-south runway parallel to and west of Runway 15-33. The parallel runways would be separated by approximately 3,100 feet between runway centerlines. A widely spaced parallel runway provides substantial additional capacity. Alternative 5 attempts to balance airside, terminal, landside, and airport support facilities. Alternative 5 is anticipated to exceed the 20-year facility requirements in most conditions because widely spaced runways can be operated independently.

Alternative 5 features the following elements:

### **Airside**

1. Angled Taxiways R, G, F, E, D, and C removed and replaced with 90-degree taxiways
2. Runway 15-33 shortened to eliminate intersection with Runway 7L-25R
3. Taxiway Z extended east providing access between the South Airpark and former Kulis site
4. New 8,000-foot long runway constructed approximately 3,100 feet west of existing Runway 15-33
5. New taxiway constructed 520 feet east of the new runway

### **Terminal**

1. North Terminal concourse removed entirely, including terminal processor building
2. New concourse added to South Terminal providing 5 additional gates for domestic and international flights and concessions

### **Landside**

1. Parking demand managed or facility expanded at the South Terminal as demand warrants
2. Postmark Drive relocated east to provide safe access to the U.S. Postal Service facility
3. Tunnel access provided to the West Airpark from Postmark Drive

### **Airport Support**

1. General aviation and small commercial aviation operations expanded in South Airpark east and west of Taxiway Z as demand warrants; new west access road provided
2. Airline / airport support expanded in South Airpark in former Kulis site as demand warrants
3. Fuel storage facility expanded to the north as demand warrants
4. Potential hotel site identified
6. Air cargo expanded in the North Airpark, adjacent to Taxiway Q as demand warrants
8. Air cargo expanded between Taxiways U and P ("Papa" spots) as demand warrants; Taxiway P extended to the east
10. Air cargo and airline / airport support expanded westward in the West Airpark, north of the fuel storage facility, as demand warrants