APPENDIX C

ALTERNATIVES

Appendix C: Alternatives

C.1 Alternatives Development

As described in **Section 1.1.2**, Runway 14R-32L, its blast pad, and taxiway connectors need to be rehabilitated, and the separation between Taxiway B and Runway 14R-32L needs to increase to 400 feet to meet FAA AC 150/5300-13B, *Airport Design – Change 1* standards for ADG IV aircraft.[1] Runway 14R-32L, its blast pad, and taxiway connectors would be rehabilitated or reconstructed under all alternatives, except the No Action Alternative. Thus, the following alternatives evaluate approaches to meet the 400-foot runway-to-taxiway centerline separation at BFI.

C.1.1 Alternative 1: Relocate Taxiway B approximately 50 to 75 feet West

The lateral shift of Taxiway B to the west would require the following actions:

– Reconstruct and extend taxiway connectors between Runway 14R-32L and Taxiway B to accommodate the 400-foot runway-to-taxiway centerline separation for ADG IV aircraft. During reconstruction, Taxiway Connectors B1, B2, B5, and B10 would be reconfigured, and Taxiway Z replaced by an aircraft turnaround to meet FAA AC 150/5300-13B, Change 1 standards.

– Demolish and relocate landside facilities within the shifted Taxiway B Taxiway Object Free Area (TOFA), which extends 121.5 feet on each side of the taxiway centerline. Alternative 1 would affect approximately 20 acres of landside facilities, including two buildings, aircraft aprons, vehicle parking lots, Vehicle Service Road (VSR), security and blast fencing, underground utilities, and support facilities, among others (see Appendix B).

C.1.2 Alternative 2: Relocate Runway 14R-32L approximately 75 feet East

– The lateral shift of Runway 14R-32L to the east would require the following actions:

[1] Federal Aviation Administration. (2024, August 16). Advisory Circular 150/5300-13B, *Airport Design - Change 1*. Retrieved March 2026 from https://www.faa.gov/Advisory_Circular/AC-150-5300-13B.pdf

- Reconstruct and extend taxiway connectors between Runway 14R-32L and Taxiway B to accommodate the 400-foot runway-to-taxiway centerline separation for ADG IV aircraft. During reconstruction, Taxiway Connectors B1, B2, B5, and B10 would be reconfigured, and Taxiway Z replaced by an aircraft turnaround to meet FAA AC 150/5300-13B, Change 1 standards.

- Demolish and relocate Runway 14L-32R and all or portions of Taxiway Connectors A1 through A9 by approximately 75 feet east to maintain the existing 375-foot runway-to-runway centerline separation.[2]

- Demolish and relocate Taxiway A by approximately 75 to 110 feet east between Taxiway Connectors A2 and A6 to maintain the existing 270-foot runway-to-taxiway centerline separation between Taxiway A and Runway 14L-32R.[3]

- Demolish and relocate Taxiway A by approximately 100 feet east between Taxiway Connectors A7 and A8 to meet the 400-foot runway-to-taxiway centerline separation standards between Taxiway A and Runway 14R-32L.

- Demolish and relocate landside facilities within the shifted Taxiway A TOFA, which extends 121.5 feet on each side of the taxiway centerline. Alternative 2 would affect approximately 17.7 acres of landside facilities, including two buildings, aprons, parking lots, VSR, and other landside infrastructure.

[2] BFI operates under an FAA Air Traffic Directives Waiver/Authorization (02-T-08) allowing for 375-foot runway separation, which is anticipated to remain in effect under Alternative 2.

[3] Alternative 2 would maintain the above-standard 270-foot separation between Runway 14L-32R and Taxiway A.