

# B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or  
Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



## Public Hearing Presentation for the B-21 Main Operating Base (MOB) 1 Beddown Draft Environmental Impact Statement (EIS)

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**October 2020**



# Purpose of Public Hearings

- Present information regarding the potential environmental impacts of the proposed B-21 MOB 1 beddown
- Receive public comments on the Draft EIS
- Draft EIS has been prepared in accordance with the National Environmental Policy Act, the regulations of the President's Council on Environmental Quality, and the Air Force Environmental Impact Analysis Process

# The National Environmental Policy Act (NEPA)



- Federal law that requires agencies to identify and consider the environmental consequences of implementing proposals.
- NEPA requires a rigorous process to be followed prior to making a final decision, including consideration of comments.
- The analysis of environmental consequences is presented in an EIS, which accomplishes the following objectives:
  - Identifies and describes the affected environment and evaluates the potential environmental consequences of reasonable alternatives
  - Identifies environmental permits and specific mitigation measures to avoid, minimize, or reduce adverse environmental impacts, if required
- The NEPA process concludes with a Record of Decision (ROD) that identifies which alternative is selected and outlines any mitigation measures that are required.



# Background of the Proposed Action

- The Department of Defense is developing a new bomber aircraft, called the B-21 “Raider,” in honor of the Doolittle Raiders of World War II.
- The B-21 Raider will:
  - Eventually replace existing B-1 and B-2 bomber aircraft
  - Have both conventional and nuclear roles
  - Penetrate and survive advanced air defense environments
  - Operate under the direction of the Air Force Global Strike Command
- The B-21 is projected to enter service in the mid-2020s.
- The Air Force intends to build at least 100 B-21 aircraft.



# Background of the Proposed Action (continued)

- The Air Force is proposing to beddown the following elements at the first of three potential Main Operating Bases:
  - B-21 Operational Squadrons
  - B-21 Formal Training Unit (FTU)
  - Weapons Generation Facility (WGF)
- This EIS focuses on the beddown location alternatives for MOB 1, which evaluates environmental and socio-economic impacts from construction and operations associated with the B-21 beddown at either Dyess AFB or Ellsworth AFB.



# Purpose and Need for the Proposed Action

- The Air Force's purpose of the Proposed Action is to:
  - Implement the goals of the 2018 National Defense Strategy by modernizing the U.S. bomber fleet capabilities
- The B-21 Raider is being developed to:
  - Carry conventional and nuclear payloads
  - Support nuclear triad modernization, which includes aircraft-, land- and submarine-launched weapons
  - Provide a visible and flexible nuclear deterrent capability that will assure allies and partners through the United States' commitment to international treaties

# Purpose and Need for the Proposed Action

(continued)



- The Air Force's need for the Proposed Action is to:
  - Support deterrence capabilities by basing the B-21 at an installation that can support the Air Force Global Strike Command's MOB 1 mission.
- The B-21 will provide the only advanced stealth bomber capability and capacity needed to deter, and if necessary, defeat our adversaries in an era of renewed great power competition.
- The installation will support training of crewmembers and personnel in the operation and maintenance of the B-21 aircraft.



# Proposed Alternatives

- The Air Force has proposed two alternatives for this EIS, in addition to the No Action Alternative:
  - Dyess AFB Alternative
  - Ellsworth AFB Alternative



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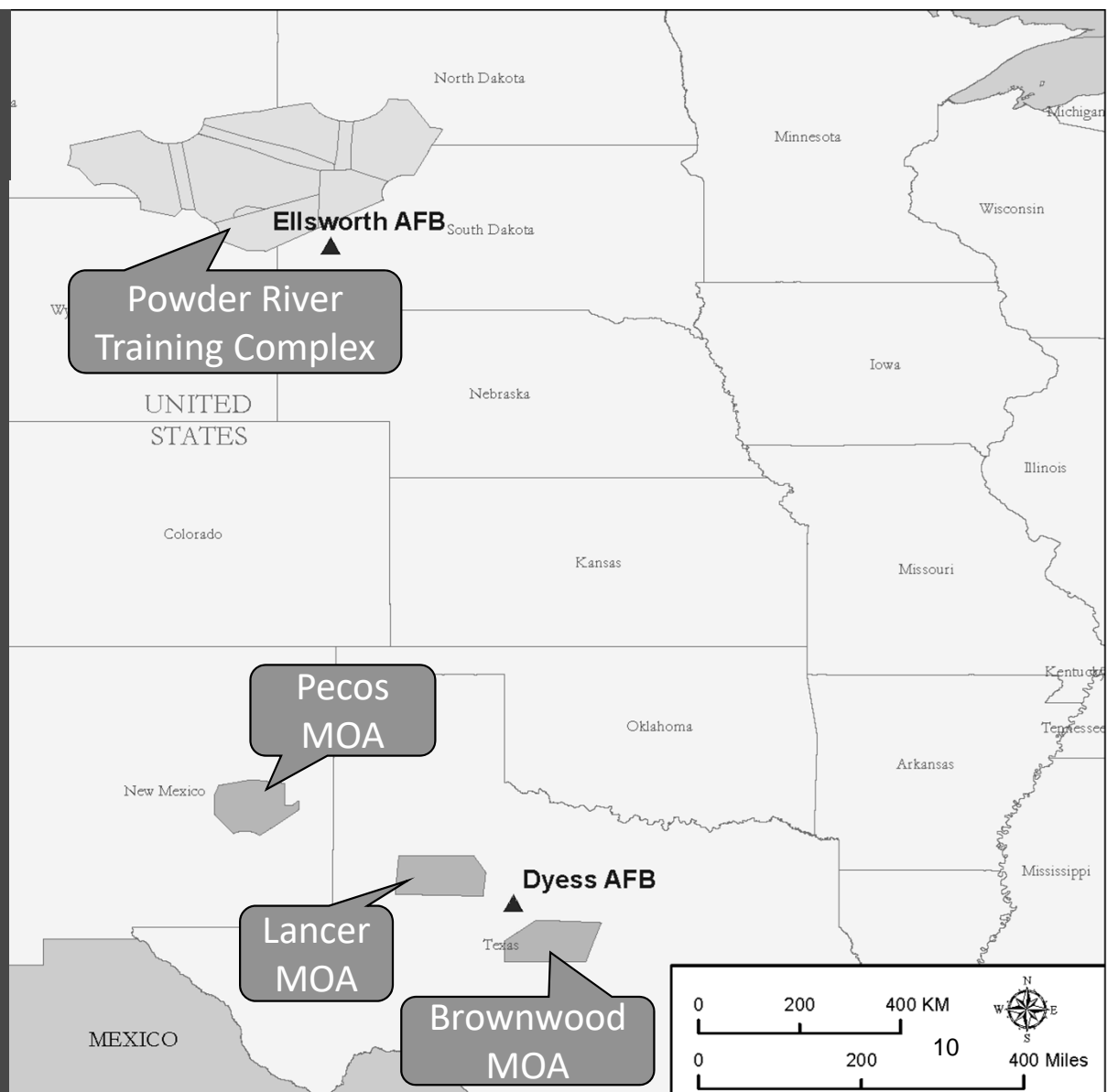


# Commonalities – Personnel and Airfield Operations

- The Proposed Action includes common elements that the B-21 would bring to, or require at, both candidate bases:
  - Personnel
    - Approximately 3,500 military personnel
    - Approximately 4,200 dependents
  - Airfield Operations
    - Approximately 9,100 operations per year
    - Approximately 40% conducted between 10 p.m. and 7 a.m.

# Commonalities – Airspace and Range Utilization

- Dyess AFB aircraft
  - Primary training areas:
    - Pecos Military Operating Area (MOA)
    - Lancer MOA
  - Additional training areas:
    - Brownwood MOA
    - Powder River Training Complex (PRTC)
- Ellsworth AFB aircraft
  - Primary training area:
    - PRTC
- Includes associated air traffic control assigned airspaces, or ATCAAs



# Commonalities – Weapons Generation Facility (WGF)



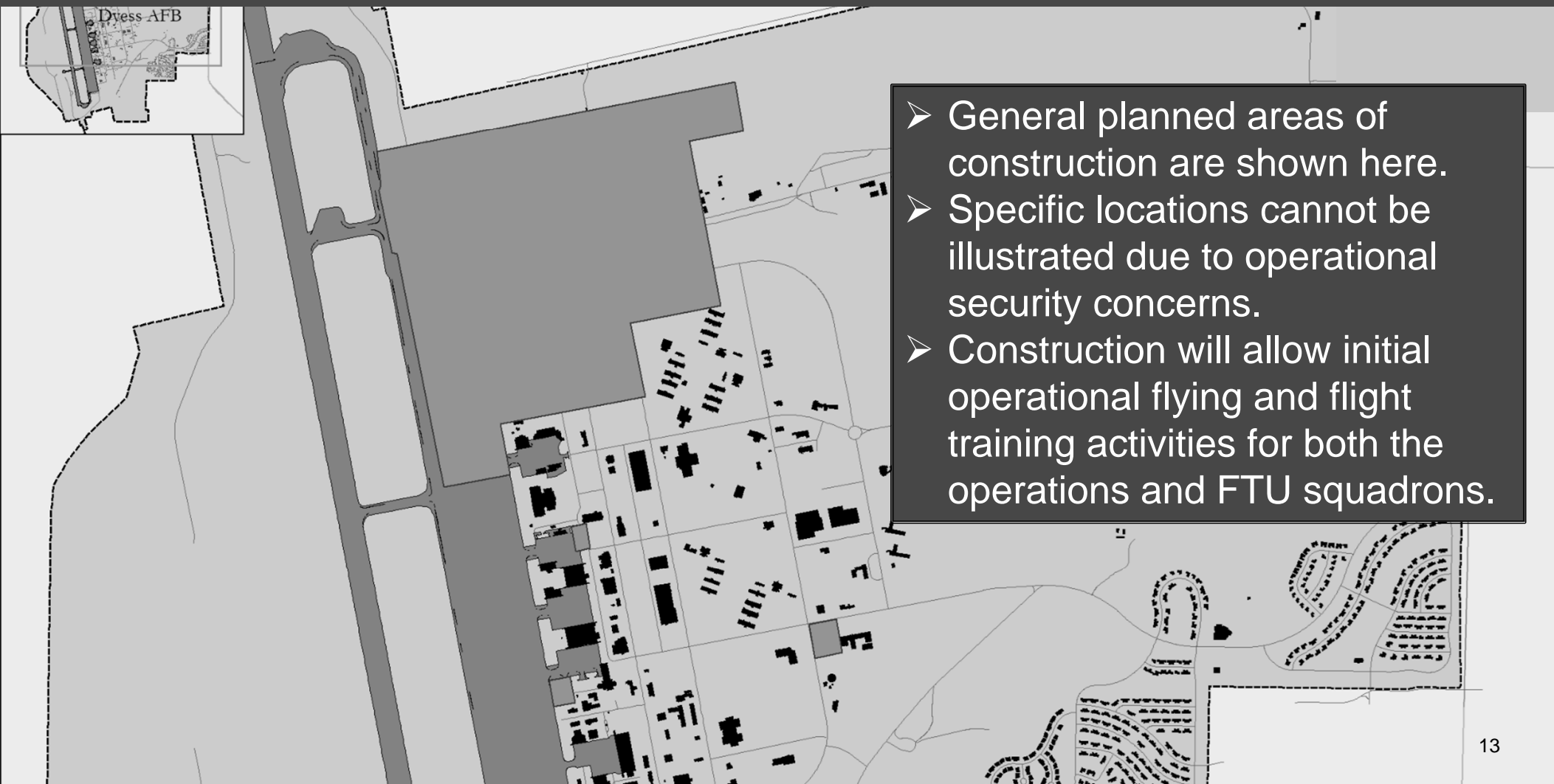
- Facility requires new construction at the selected base
- Requires approximate 35-acre footprint with approximate 52,000-square-foot building and a 17,000-square-foot munitions maintenance building
- Offers a safe and secure location for storage of nuclear munitions
- Provides a consolidated facility within a single, controlled site
  - Accommodates maintenance, storage, and support functions to deliver enhanced operations and security measures for the entire mission



# Dyess AFB Alternative

- Establish MOB 1 at Dyess AFB, Texas
- Includes all common elements described previously
  - Personnel, Airfield Operations, Airspace and Range Utilization, and the WGF
- Also includes:
  - Alternative-specific construction of facilities and infrastructure
  - Siting of the WGF

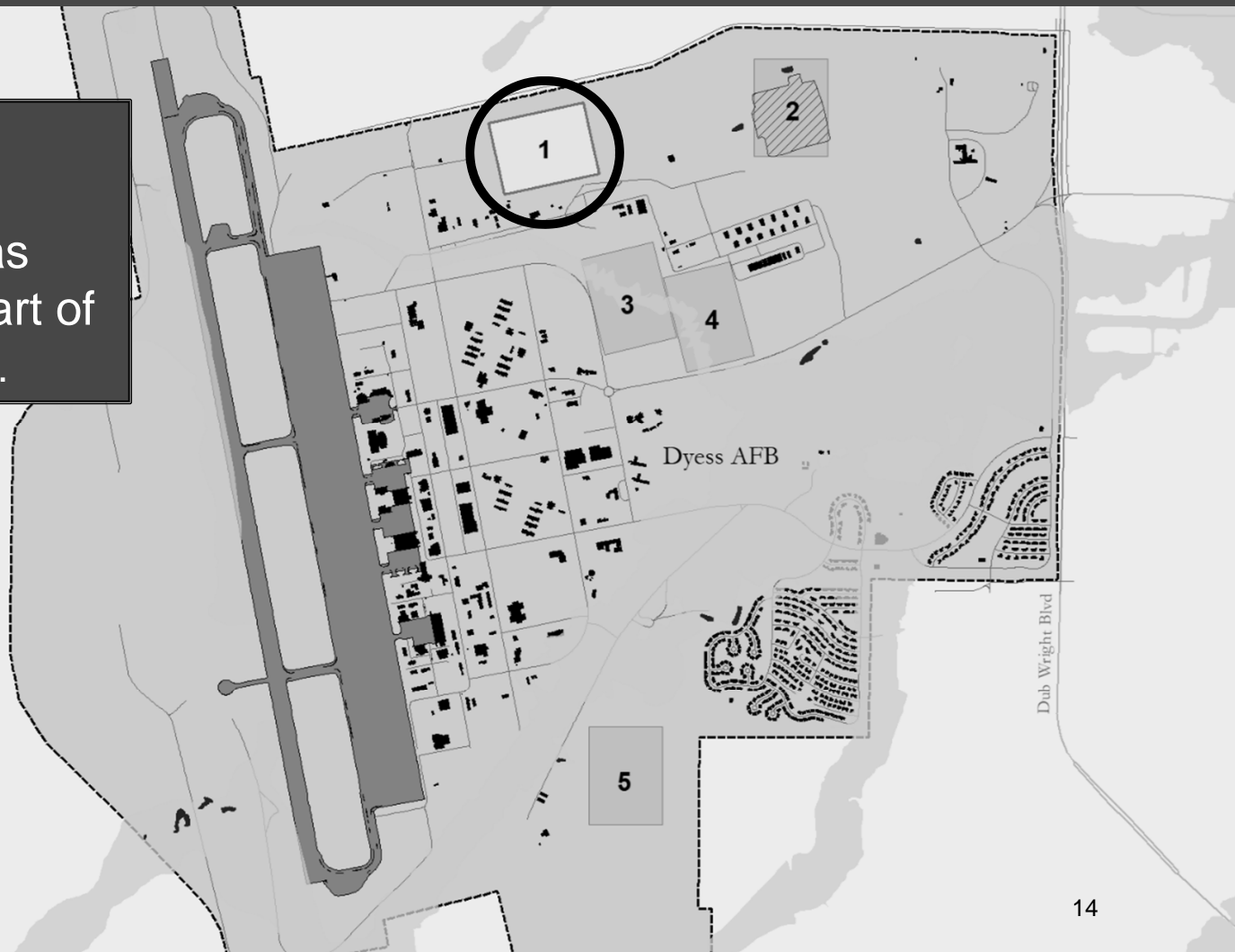
# Dyess AFB Alternative – Facilities and Infrastructure



- General planned areas of construction are shown here.
- Specific locations cannot be illustrated due to operational security concerns.
- Construction will allow initial operational flying and flight training activities for both the operations and FTU squadrons.

# Dyess AFB Alternative – Weapons Generation Facility

- Location 1 satisfied all evaluation criteria that are unique to the WGF and has been carried forward as part of the Dyess AFB Alternative.

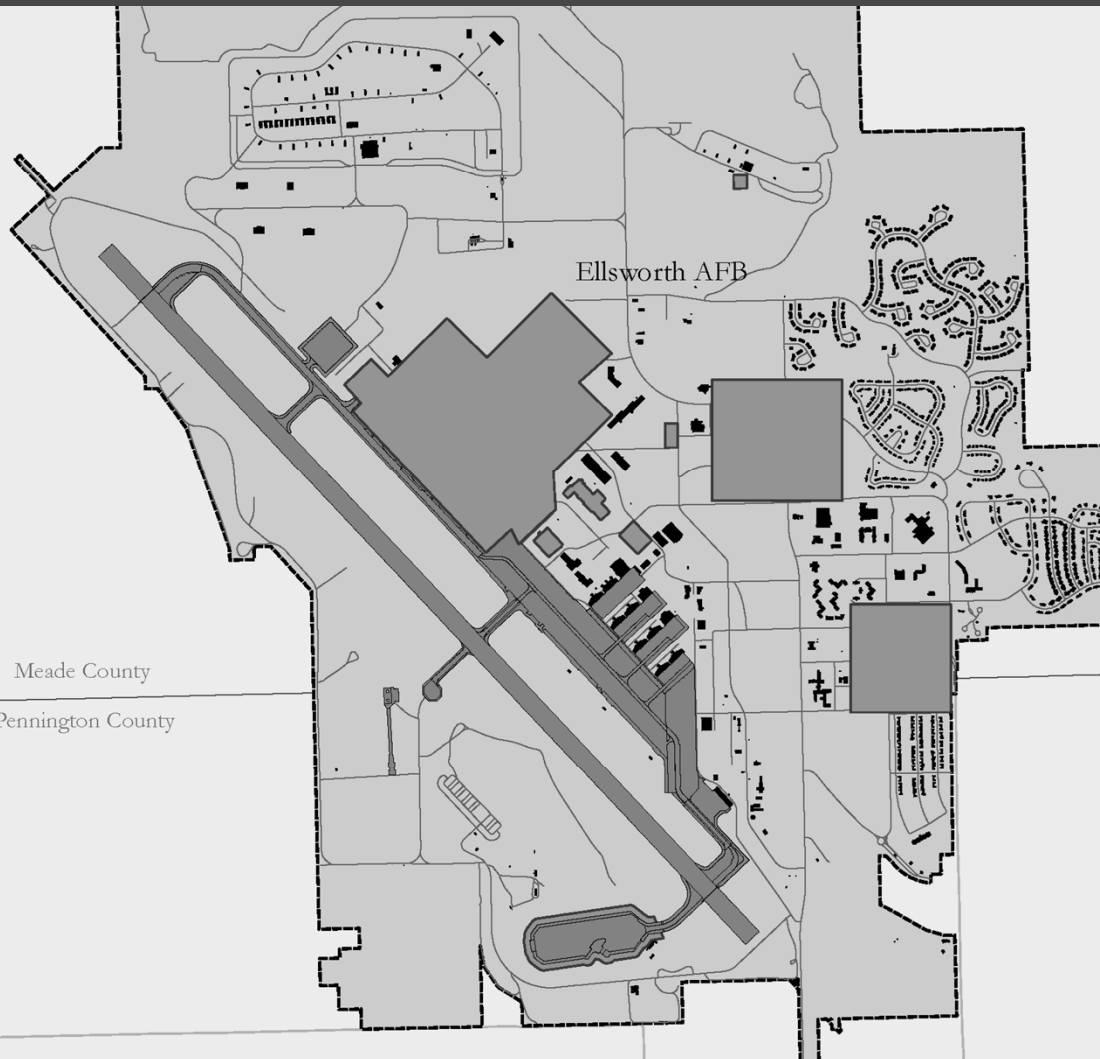




# Ellsworth AFB Alternative

- Would establish MOB 1 at Ellsworth AFB, South Dakota
- Includes all common elements described previously
  - Personnel, Airfield Operations, Airspace and Range Utilization, and the WGF
- Also includes:
  - Alternative-specific construction of facilities and infrastructure
  - Siting of the WGF

# Ellsworth AFB Alternative – Facilities and Infrastructure



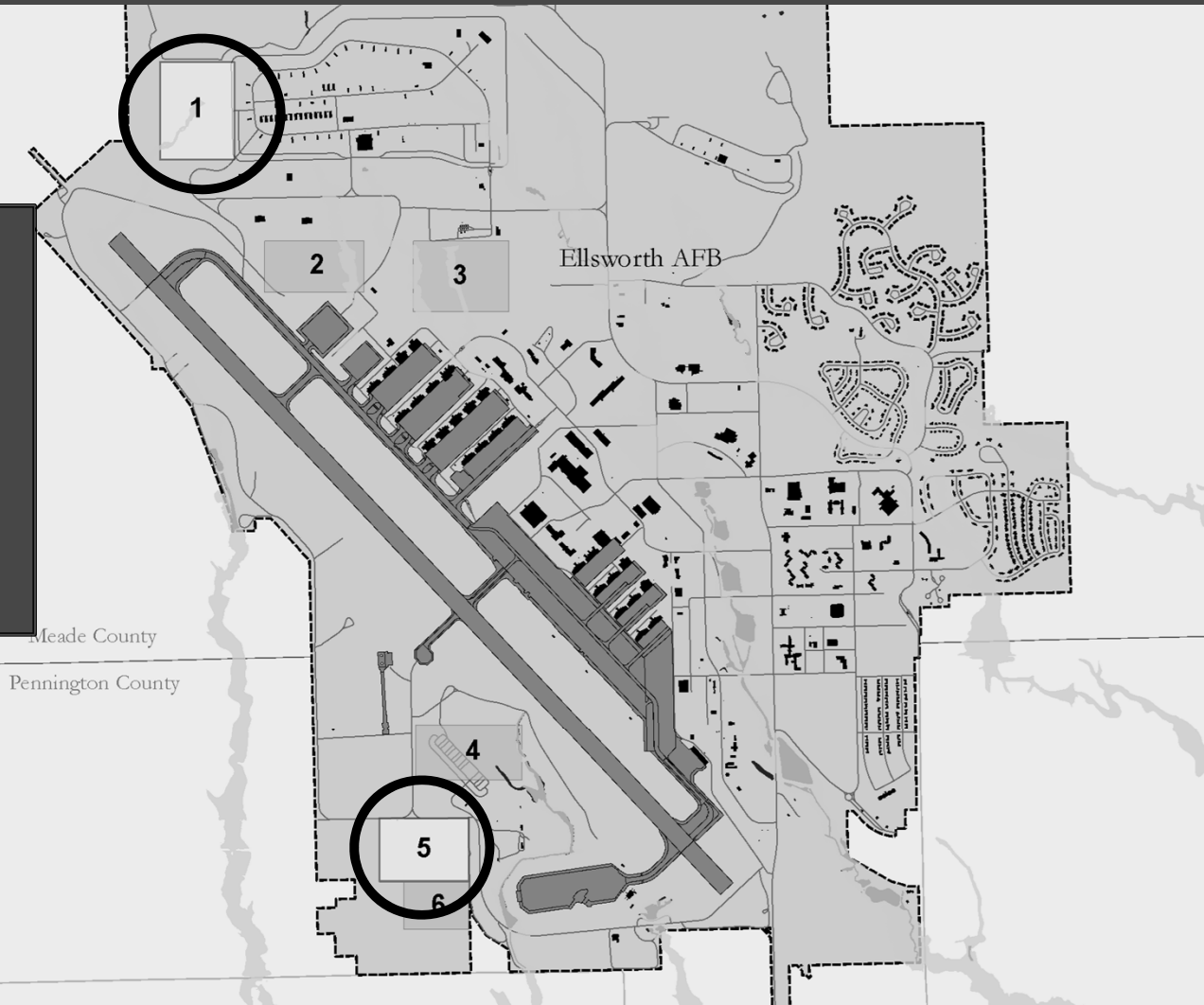
- General planned areas of construction are shown here.
- Specific locations cannot be illustrated due to operational security concerns.
- Construction will allow initial operational flying and flight training activities for both the operations and FTU squadrons.



# Ellsworth AFB Alternative – Weapons Generation Facility

➤ The following locations satisfied all evaluation criteria that are unique to the WGF and have been carried forward as subalternatives:

- Location 1 - North WGF Site
- Location 5 - South WGF Site





# No Action Alternative

- NEPA requires that the analysis in the EIS must include a “No Action Alternative”
- For this EIS, the No Action Alternative states:
  - The B-21 would not beddown at either Dyess or Ellsworth AFB
  - Each installation would continue their individual missions (including the B-1 mission) at current levels
- The No Action Alternative represents the baseline for the analysis, against which decision makers can compare the magnitude of potential environmental effects resulting from the action alternatives.



# Environmental Resources Analyzed

- Air Quality
- Airspace Use and Management
- Biological Resources
- Cultural Resources
- Environmental Justice
- Hazardous Materials and Solid Wastes
- Health and Safety
- Land Use
- Noise
- Physical Resources (water and soils)
- Socioeconomics
- Transportation
- Utilities



\*Key resource areas potentially impacted by the B-21 beddown discussed in this presentation.

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# Airspace Use and Management Impact Summary



## ➤ Dyess and Ellsworth AFB Alternatives

- There are no plans to modify any of the airspace as part of the Proposed Action.
- PRTC-related B-21 air operations would adhere to the legal descriptions for the PRTC MOAs published in the National Flight Data Digest.

# Airspace Use and Management Impact Summary (continued)

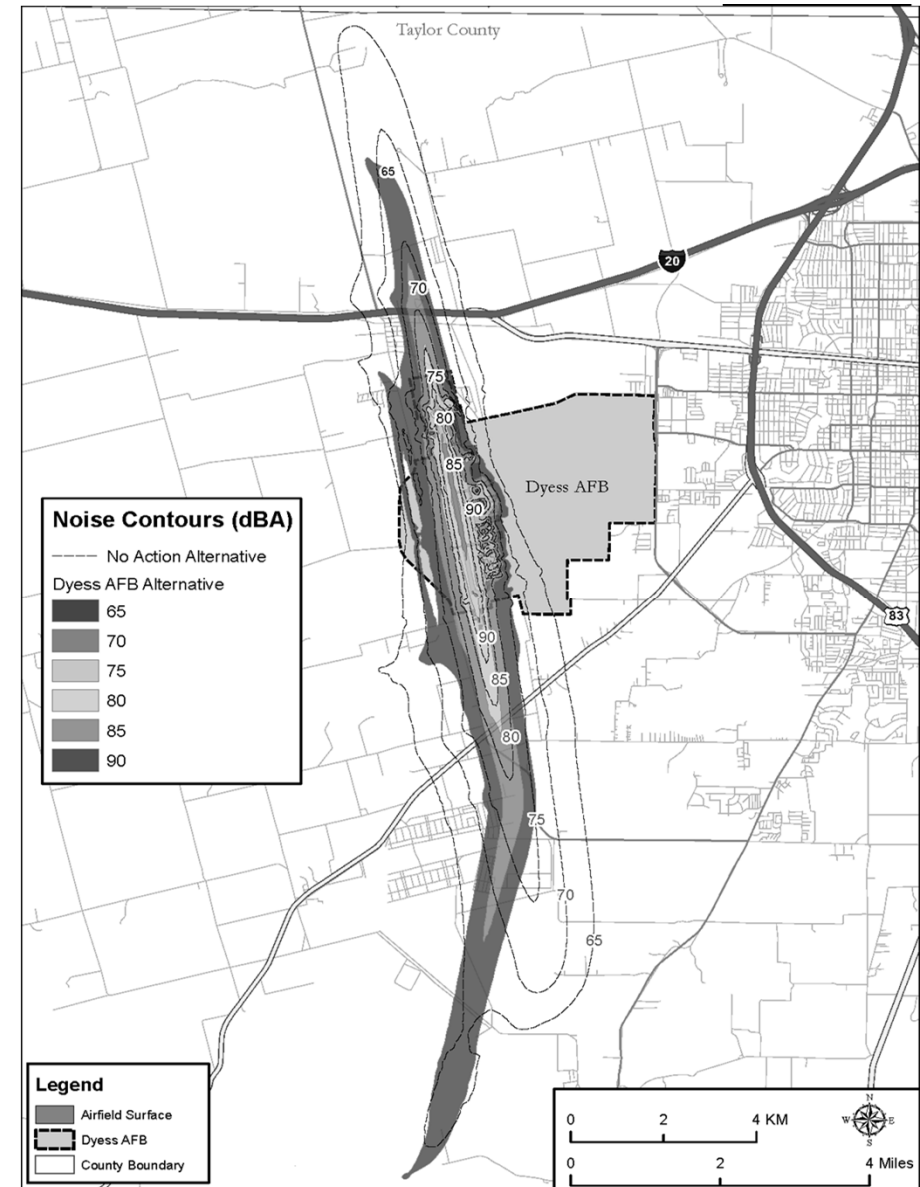


Aircraft Operations Summary			
Airfield/Airspace	No Action Alternative	Proposed Action	Change from No Action Alternative
<b>Dyess AFB Alternative</b>			
Dyess AFB Airfield	48,940	48,394	-546 (-1.12%)
PRTC	2,778	2,760	-18 (-0.65%)
Brownwood MOA	2,467	2,454	-13 (-0.53)
Lancer MOA	1,376	1,132	-244 (-17.73%)
Pecos MOA	2,425	2,781	356 (+14.68%)
<b>Ellsworth AFB Alternative</b>			
Ellsworth AFB Airfield	8,910	10,318	1,408 (+15.8%)
PRTC	2,778	3,921	1,143 (+41.1%)

- Increases in airspace operations could lead to increased congestion and/or scheduling impacts; however, airspace would not be adversely impacted since the B-21 is projected to use higher airbands.

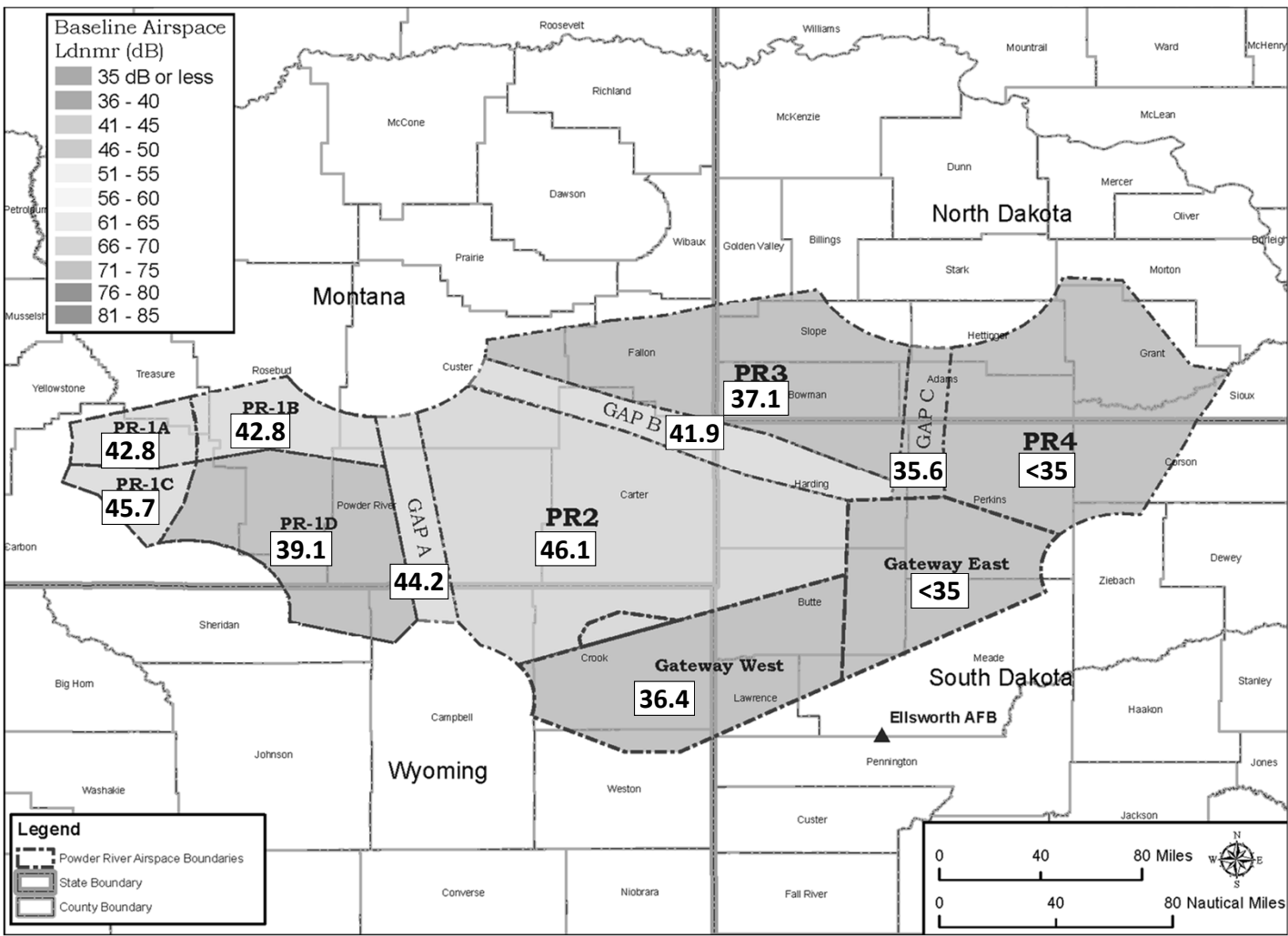
# Noise Impact Summary – Dyess AFB Alternative

- Approximate 62% **decrease** in acres of land exposed to noise levels exceeding 65 dB DNL
  - Decrease of 7,142 acres from the No Action Alternative
- Approximate 65% **decrease** in number of persons exposed to noise levels exceeding 65 dB DNL
  - Decrease of 923 persons from the No Action Alternative



# Noise Impact Summary – Dyess AFB Alternative

- **No change** in noise levels at PRTC from the No Action Alternative
  - Noise levels at PRTC would remain between less than 35 to 46.1 dB  $L_{dnmr}$



# Noise Impact Summary – Dyess AFB Alternative

## ➤ Pecos MOA

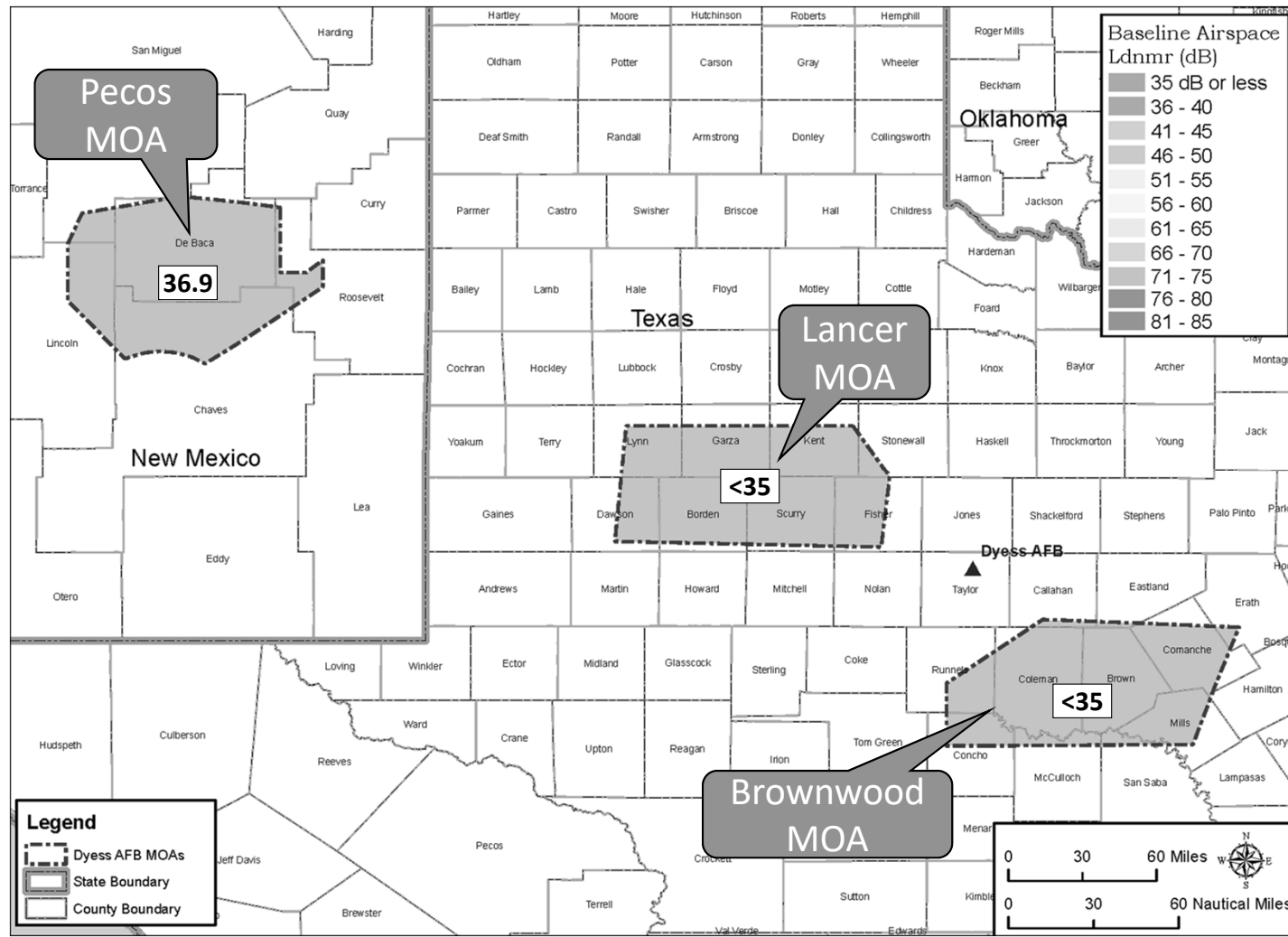
- A **decrease** of 19 dB  $L_{dnmr}$  from the No Action Alternative
- Noise levels would be reduced to 36.9 dB  $L_{dnmr}$

## ➤ Lancer MOA

- A **decrease** of 8.4 dB  $L_{dnmr}$  from the No Action Alternative
- Noise levels would be reduced to less than 35 dB  $L_{dnmr}$

## ➤ Brownwood MOA

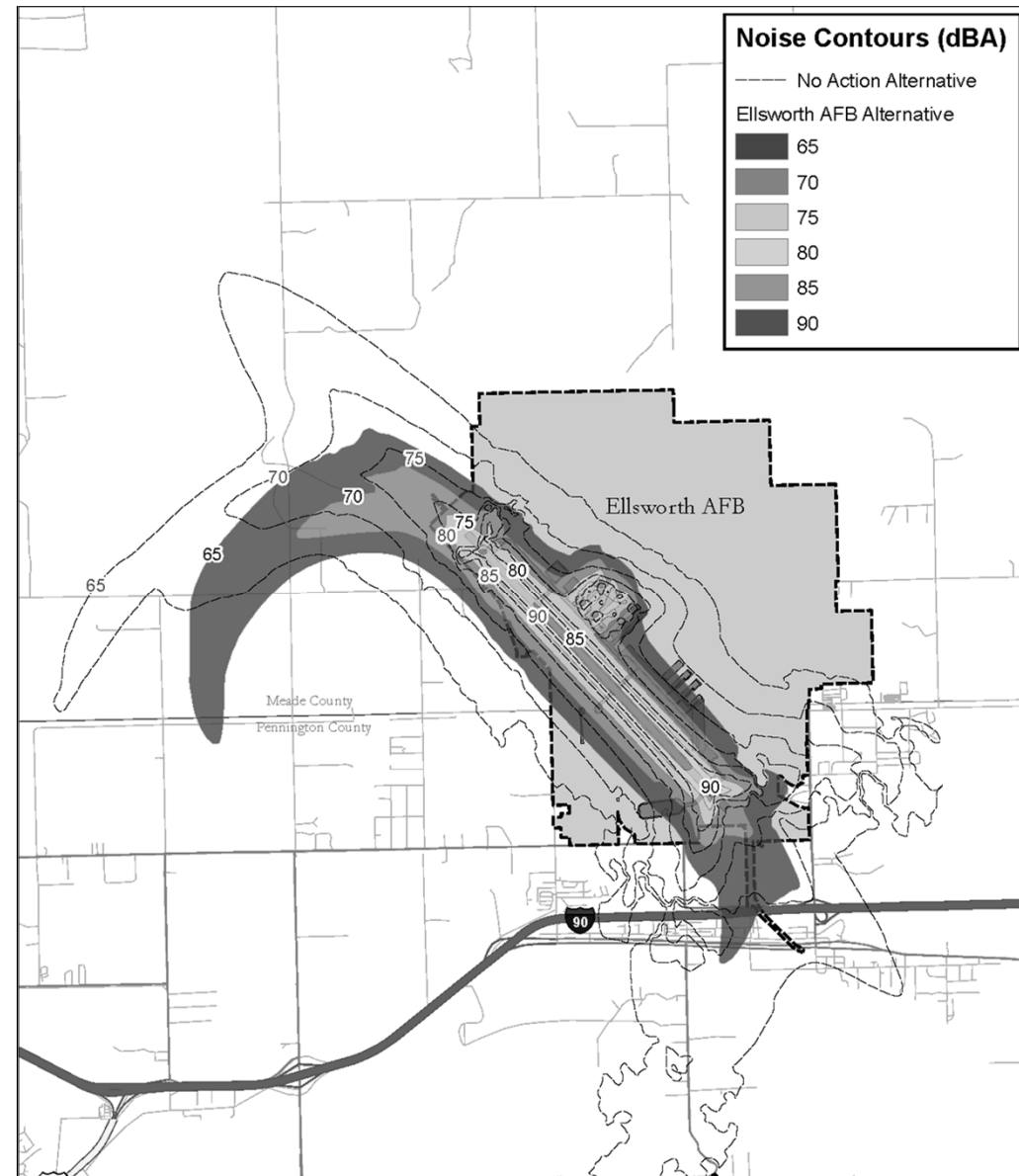
- **No change** from the No Action Alternative
- Noise levels would remain at less than 35 dB  $L_{dnmr}$





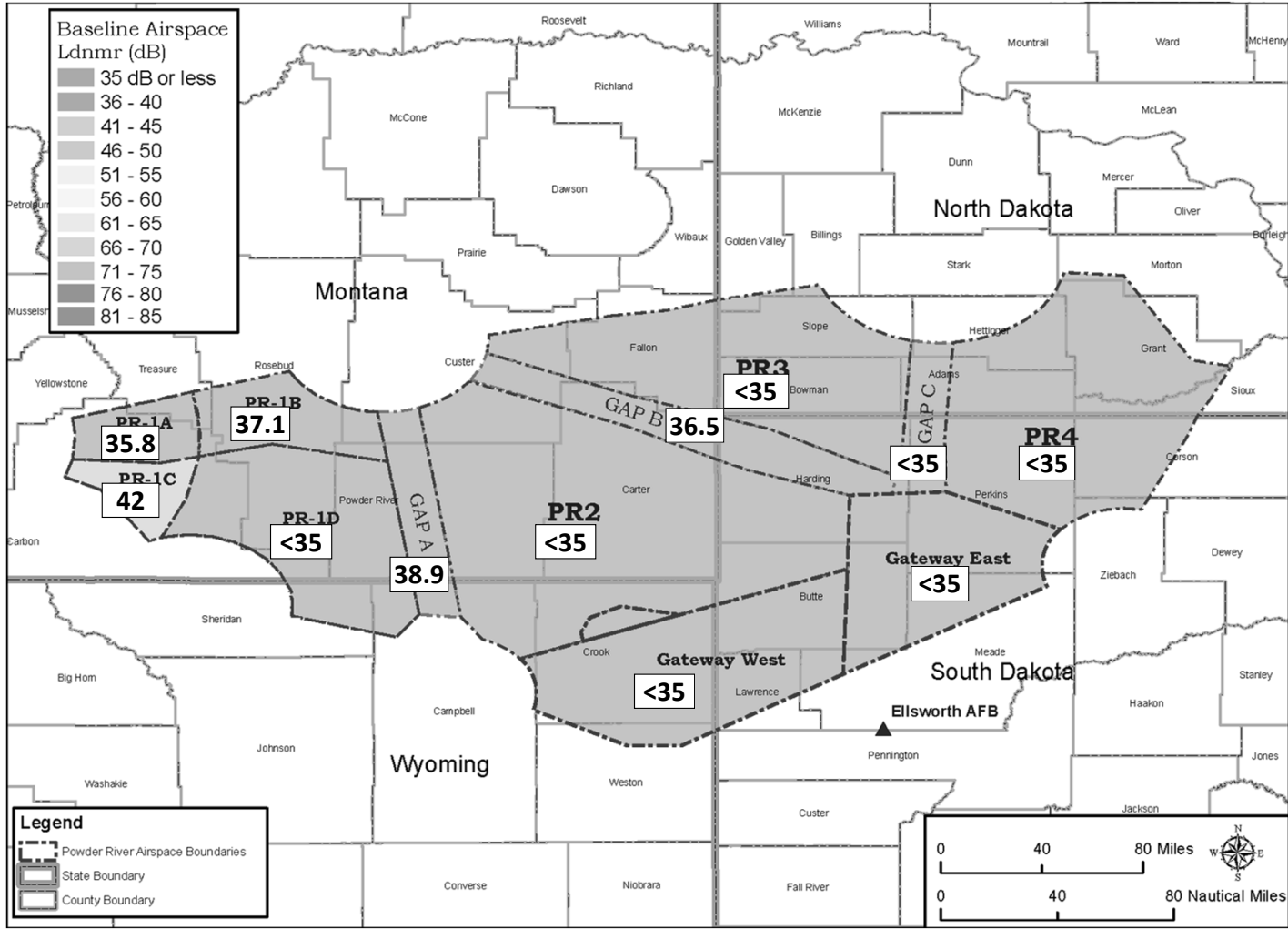
# Noise Impact Summary – Ellsworth AFB Alternative

- Approximate 72% **decrease** in acres of land exposed to noise levels exceeding 65 dB DNL
  - Decrease of 4,224 acres from the No Action Alternative
- Approximate 82% **decrease** in number of persons exposed to noise levels exceeding 65 dB DNL
  - Decrease of 1,627 persons from the No Action Alternative



# Noise Impact Summary – Ellsworth AFB Alternative

- Noise levels at PRTC would decrease up to 11 dB  $L_{dnmr}$  from the No Action Alternative
- Noise levels at PRTC would range from less than 35 to 42 dB  $L_{dnmr}$





# Air Quality Impact Summary

## ➤ Dyess AFB Alternative

- Air emissions from personnel and training operations would increase for all criteria pollutants by less than 3.5 percent, except for carbon monoxide, which would decrease
- Air emissions under the airspace would decrease or remain nominal
- No adverse impacts to regional air quality are anticipated

## ➤ Ellsworth AFB Alternative

- Air emissions from personnel and training operations would decrease for all criteria pollutants except for nitrogen oxides, which would increase by approximately 1.6 percent
- Air emissions in the PRTC would decrease for all criteria pollutants
- No adverse impacts to regional air quality are anticipated



# Socioeconomics Impact Summary

Socioeconomic Factor	Change from No Action Alternative	
	Dyess AFB Alternative	Ellsworth AFB Alternative
<b>Total Persons</b>	3,953 (39% increase)	3,147 (30% increase)
<b>School Age Children</b>	727	284
<b>Direct Jobs</b>	1,645	1,664
<b>Indirect Jobs</b>	477	582
<b>Value</b>	\$19,945,461	\$23,878,400
<b>Housing</b>	1,170 units	1,011 units
<b>Public Service Professionals Demand</b>	48	39



# Environmental Justice (EJ) Impact Summary

## ➤ Dyess AFB Alternative

- There would be a 65 percent decrease in total residents exposed to noise levels greater than 65 dB
- EJ and sensitive populations exposed to noise levels greater than 65 dB would also decrease by between 63 and 73 percent
- Positive impacts to EJ and sensitive populations would occur due to decreased noise levels

## ➤ Ellsworth AFB Alternative

- There would be a 82 percent decrease in total residents exposed to noise levels greater than 65 dB
- EJ and sensitive populations exposed to noise levels greater than 65 dB would also decrease by between 81 and 86 percent
- Positive impacts to EJ and sensitive populations would occur due to decreased noise levels

# Cultural Resources Impact Summary – Commonalities



- No adverse impacts to cultural resources are anticipated from flight operations under either alternative
  - Noise levels at either base would be expected to decrease and would be well below the thresholds that might cause damage to historical properties/structures
  - Noise levels at PRTC under both alternatives as well as the Brownwood, Pecos, and Lancer MOAs under the Dyess AFB Alternative would either stay the same or be reduced
  - The B-21 generally flies higher than the B-1, so the visibility of the aircraft from historic properties below these airspaces would decrease
  - Since the 2014 PRTC Programmatic Agreement has expired, the Air Force would continue to adhere to the 2014 stipulations until the Programmatic Agreement is renegotiated

# Cultural Resources Impact Summary – Dyess AFB Alternative



- No historic properties or archaeological resources occur within the proposed construction footprints at Dyess AFB
- No adverse impacts to cultural resources are anticipated from construction activities
- Consultation with Texas State Historic Preservation Officer (SHPO) is not required

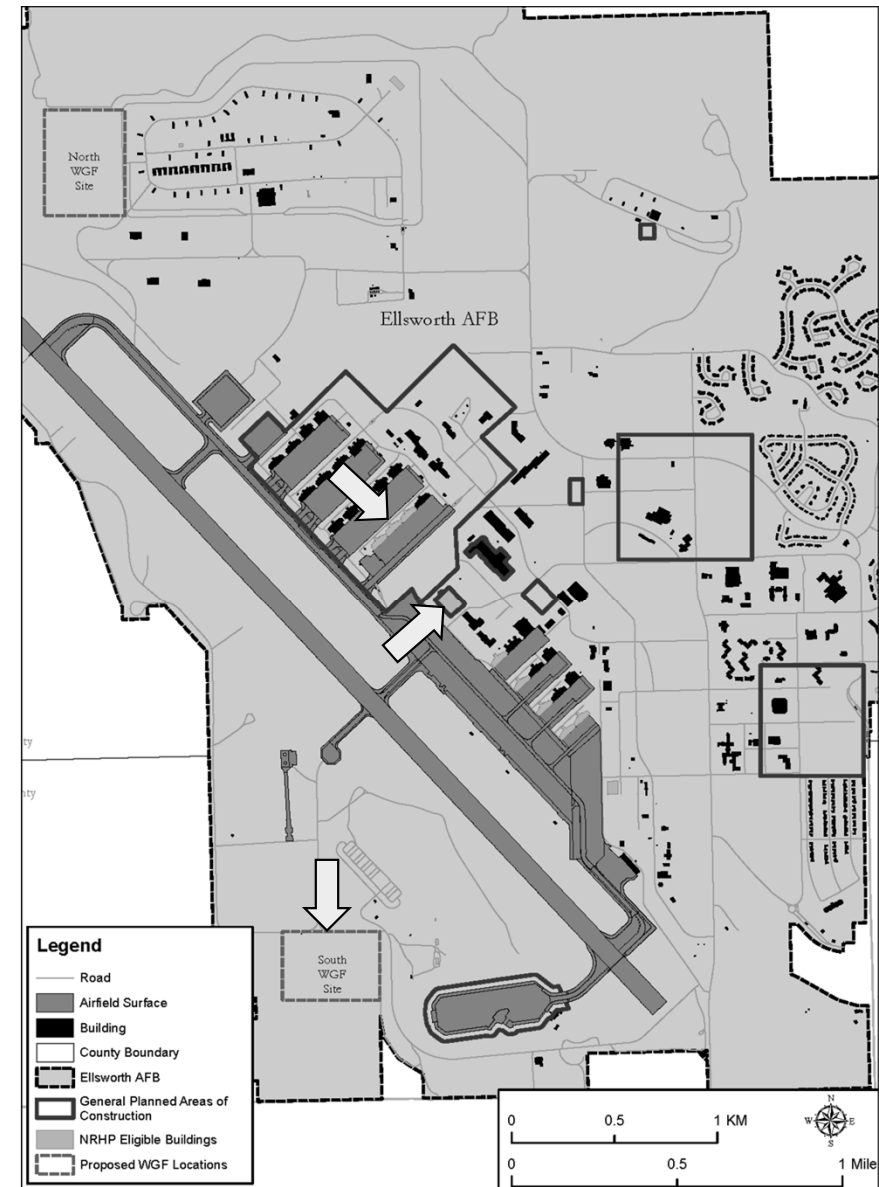


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# Cultural Resources Impact Summary

## – Ellsworth AFB Alternative

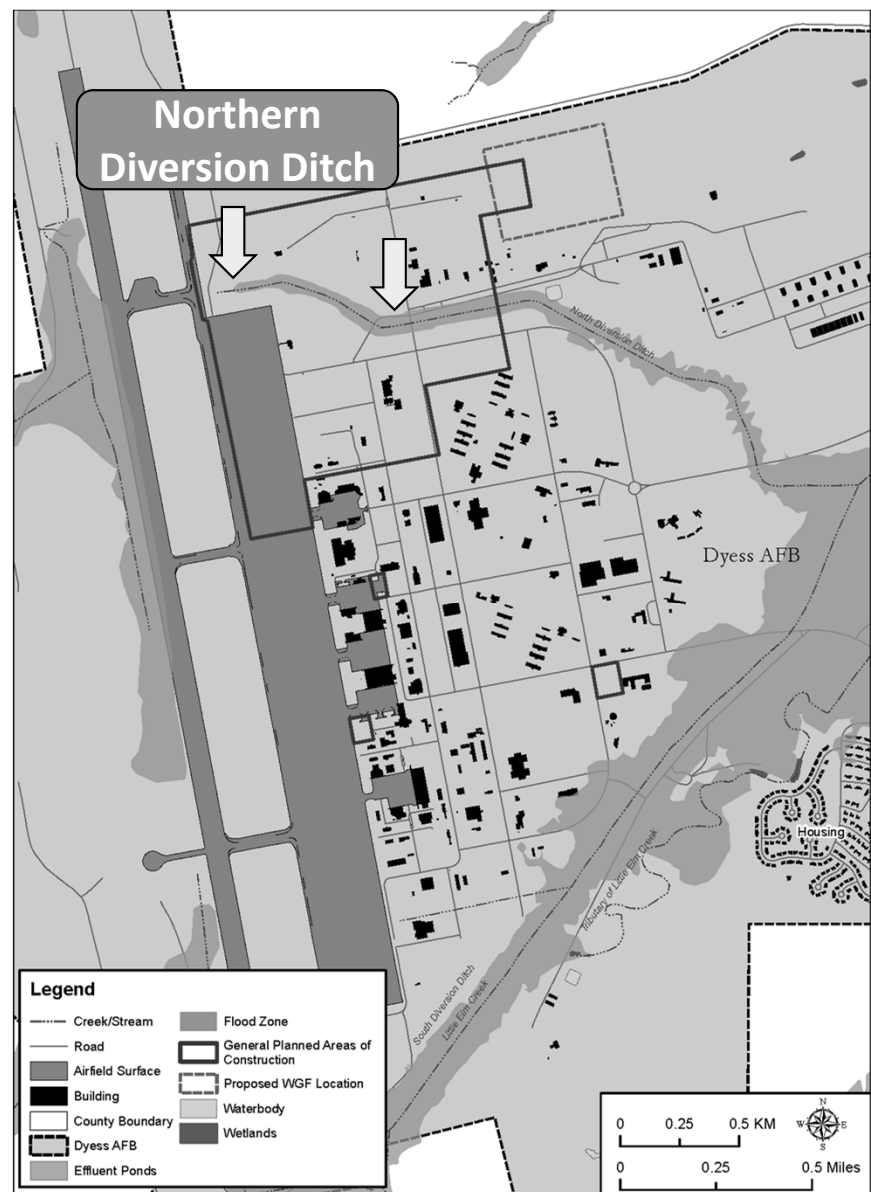
- Development of facilities and infrastructure would require the demolition of three historic properties and renovation of a fourth historic property (the PRIDE Hangar)
  - Consultation with South Dakota SHPO is ongoing
  - SHPO has concurred with the finding of an adverse effect for the demolition of the three historic properties and the finding of no adverse effect for the renovation of the PRIDE Hangar
- South WGF Site Subalternative requires an archaeological survey for Section 106 compliance, as the land was acquired after the base-wide 1994 survey
- Results of SHPO consultation and the archaeological survey will be included in the Final EIS





# Physical Resources Impact Summary – Dyess AFB Alternative

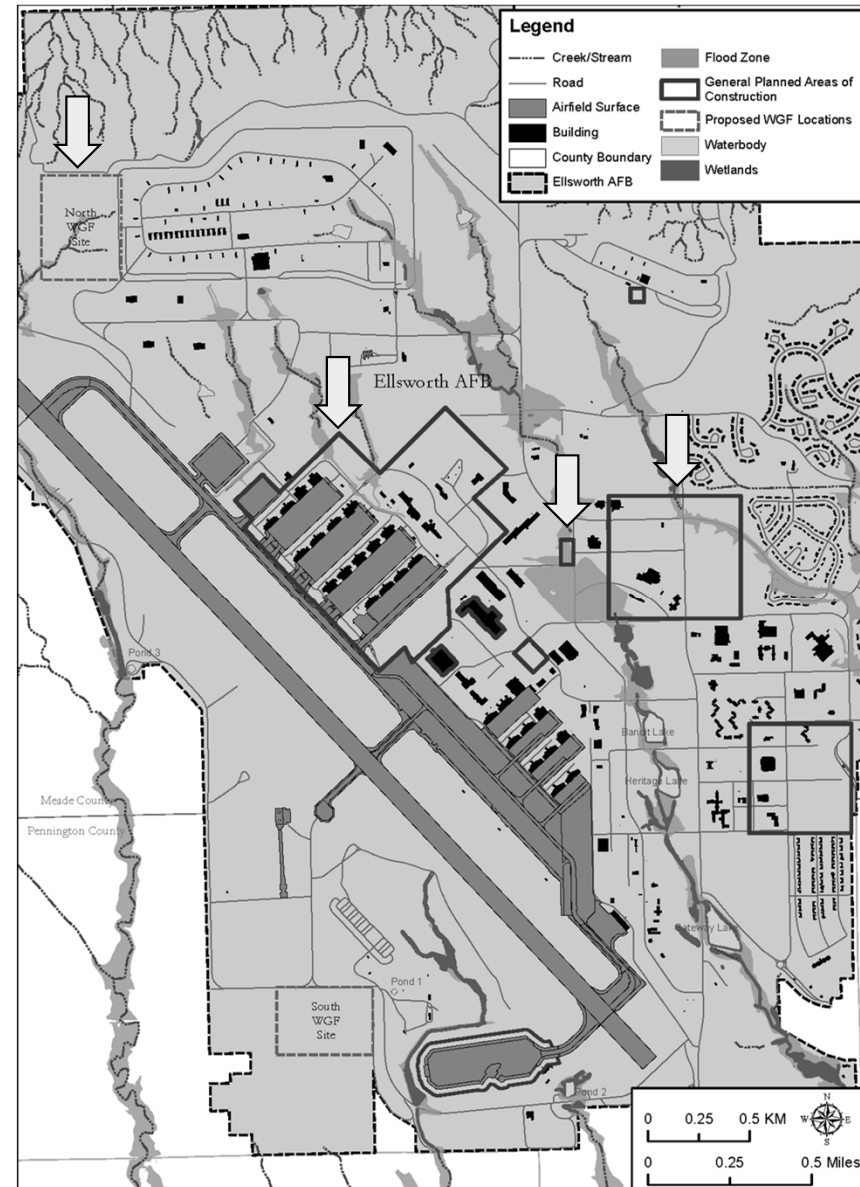
- One of the planned construction areas includes 100-year floodplains
- Buildings would be sited to avoid 100-year floodplains, where feasible
- Proposed expansion of the existing aircraft parking apron would impact a portion of the Northern Diversion Ditch, including approximately 2 acres of floodplains
  - Area is an already disturbed environment
  - Expansion would extend existing culvert, maintaining flow capacity and discharge routes
  - Hydrological properties of the floodplain would not be impacted
- A Finding of No Practicable Alternative will be included in the Record of Decision
- Overall, no significant impacts would occur



# Physical Resources Impact Summary

## – Ellsworth AFB Alternative

- Some of the planned construction areas and the planned North WGF Site include 100-year floodplains
- Buildings would be sited to avoid 100-year floodplains, where feasible
- A Finding of No Practicable Alternative will be included in the Record of Decision
- Overall, no significant impacts would be expected with:
  - Implementation of erosion control measures in areas with moderate to steep topography
  - Proper design of facilities in the 100-year floodplain



# Hazardous Materials and Hazardous and Solid Wastes



- No changes to permits, hazardous waste generator status, or management procedures would be required at either location.
- Management of toxic substances and hazardous and nonhazardous wastes would be accomplished in accordance with all regulatory requirements and established procedures.
- Development on or near any Environmental Restoration Program (ERP) or per- and polyfluoroalkyl substances (PFAS) sites would be coordinated with the state regulatory agency and other relevant stakeholders, as applicable.



# B-21 EIS Anticipated Milestone Schedule

**March 6, 2020**

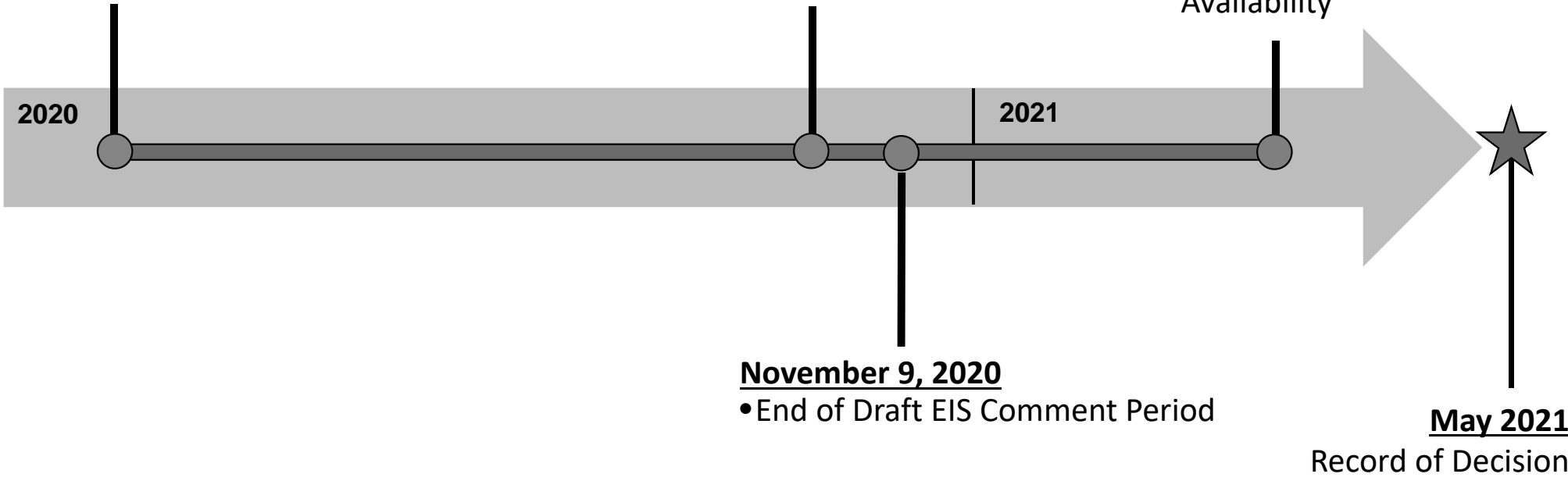
- EIS Notice of Intent
- Start of Public Comment Period

**September 25, 2020**

- Draft EIS Notice of Availability
- Start of Draft EIS Public Comment Period

**April 2021**

Final EIS Notice of Availability





# Commenting on the Draft EIS

- Ways to submit comments:
  - Provide verbal comments during this hearing, which will be recorded by a court reporter
  - Submit written comments via the project website at [www.B21EIS.com](http://www.B21EIS.com)
  - Mail written comments to: Leidos  
ATTN: B-21 EIS  
1456 Woodlawn Way  
Gulf Breeze, FL 32563
- To be considered in the Final EIS, all substantive comments should be received or post-marked by no later than **November 9, 2020**.
- All substantive comments received, regardless of format, will be given full and equal consideration and will become part of the official administrative record.



# Substantive vs Non-Substantive Comments

## ➤ Substantive

- Challenge the Draft EIS as being factually inaccurate or analytically inadequate
- Identify impacts not analyzed
- Identify reasonable alternatives or feasible mitigations not included
- Offer differences in interpretations of information, such as interpretations of significance, scientific, or technical conclusions
- Clarifying questions about the EIS process or the proposed action or alternatives

## ➤ Non-Substantive

- Non-specific
- Agree or disagree with the proposal
- Vote for or against a proposal or particular alternative
- State a personal preference or opinion

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