

## 6.28 SUMMARY OF ENVIRONMENTAL IMPACTS, BENEFITS, AND MITIGATION ASSOCIATED WITH THE PROPOSED REPLACEMENT AIRPORT

Table 6.333

### SUMMARY OF ENVIRONMENTAL IMPACTS AND BENEFITS ASSOCIATED WITH THE PROPOSED REPLACEMENT AIRPORT

Impact Category	Proposed Replacement Airport	
	Potential Impacts	Potential Benefits
Airport Noise	Aircraft noise may be introduced to new areas.	No dwellings are located within the 65 DNL noise contour.  Aircraft approach and departure paths will occur over undeveloped land.
Land Use	Conversion of undeveloped land.	Compatible with the overall General Plan for the City of St. George and Washington City and land uses planned for the area in the future.  Meets the forecast aviation demand needs of the region.  Contributes to the redevelopment of the existing airport site into a combination of residential and commercial uses.
Air Quality	Increase in the annual rate of emissions of CO, VOC, No <sub>x</sub> , So <sub>x</sub> , and PM <sub>10</sub> in Washington County, with a net emissions increase of 80.65 tons in 2010 and 55.56 tons in 2020.  Temporary construction emissions will occur with development of the replacement airport and redevelopment of the existing airport..	The proposed relocation of the airport conforms to the Utah SIP and Section 176(c) of the CAA.  Larger aircraft will be able to operate at the replacement airport, contributing to fewer overall operations and a decrease in jet fuel demand, contributing to lower VOC emissions.
Historic, Architectural, Archeological, and Cultural Resources	Overflights of several NRHP-eligible or NRHP-listed sites, including Little Black Mountain Petroglyph Site, will occur.	None
Department of Transportation Act, Section 4(f)/303(c) Properties and Resources	Overflights of several Section 4(f)/303(c) properties, including Zion National Park, Dixie National Forest, and Pine Valley Mountain Wilderness, will continue to occur with relocation of the airport.	None
Water Quality	Temporary degradation of stormwater may occur as a result of construction.  The operation of the replacement airport will introduce stormwater into the Fort Pearce Wash.	None

**Table 6.333, Continued**  
**SUMMARY OF ENVIRONMENTAL IMPACTS AND BENEFITS ASSOCIATED**  
**WITH THE PROPOSED REPLACEMENT AIRPORT**

Impact Category	Proposed Replacement Airport	
	Potential Impacts	Potential Benefits
Wetlands	A total of 0.246 acres of waters of the U.S. will be filled to construct the replacement airport.	No wetlands are impacted by construction of the replacement airport and impacts to other waters of the U.S. (dry washes) have been minimized to the greatest extent practicable.
Floodplains and Floodways	The construction and operation of the replacement airport will introduce stormwater into the Fort Pearce Wash; although no physical alteration of the floodplain will occur.	None
Wild and Scenic Rivers	N/A	N/A
Biological Resources, Threatened and Endangered Species	Construction and operation of the replacement airport has the potential to impact habitat and individuals of the following species: burrowing owl, common chuckwalla, desert tortoise, kit fox, sidewinder, western banded gecko, and zebra-tailed lizard.  Loss of ephemeral stream and desert scrub habitat.  Construction and operation of the replacement airport may result in the introduction of invasive species and in aircraft/wildlife collisions.	The habitat affected by construction of the replacement airport is degraded, low quality desert scrub habitat.  The project will have no effect on Mexican spotted owls.
Farmlands	None	None
Natural Resources	Natural resources (i.e., fuel, water, stone, wood, etc.) would be consumed for construction and operation of the replacement airport.	None
Hazardous Waste	None	With construction of the replacement airport, the underground and above-ground fuel tanks at the existing airport will be removed and areas of contaminated soils will be remediated.
Solid Waste	Solid waste will be generated with construction and operation of the replacement airport.	None
Construction Impacts	Increased air emissions, fugitive dust, noise, solid waste, and stormwater will be generated during construction. These impacts will be short-term and temporary.	Improved airport.

**Table 6.333, Continued**  
**SUMMARY OF ENVIRONMENTAL IMPACTS AND BENEFITS ASSOCIATED**  
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Impact Category	Proposed Replacement Airport	
	Potential Impacts	Potential Benefits
Social and Socioeconomic Impacts	Short-term and temporary disruption of traffic patterns in the vicinity of the airport during construction.	No residential or business displacements occur.  The existing airport site will be redeveloped into a multi-use development, providing a mixture of residential, commercial, and business uses.  Stimulate local economic activity.
Secondary, Induced, and Infrastructure Impacts	None	Introduction of infrastructure and utilities to an area ready for rapid growth.  Short and long-term growth in economy due to construction activity and the operation of the replacement airport and redevelopment of existing airport.
Surface Transportation	Roadway noise along new roadways that provide access to the airport, including the Southern Corridor.  Temporary roadway detours and congestion due to construction activities.	Access to the airport will be provided from the Southern Corridor, relieving the traffic burden from local streets.
Environmental Justice	None	No minority or low-income populations are displaced or disproportionately impacted by the replacement airport.
Energy Supply	Increased energy consumption proportionate to increase in aircraft operations.	New facilities would be more energy efficient.
Sustainable Design and Development	None	Design, materials, and construction methods proposed should minimize waste, increase energy efficiency of buildings, and reduce pollution.
Visual and Aesthetic Impacts	Introduce new source of light emissions to a rural, undeveloped area.	The planned design of the terminal and ancillary buildings is intended to compliment the natural forms and colors of the surrounding landscape.
Coastal Zone Management	N/A	N/A
Coastal Barriers	N/A	N/A
Short Term Uses and Long Term Productivity of the Environment	Short-term and temporary construction impacts, increased use of natural resources, and increased consumption of energy.	Enhance the contribution of the St. George Airport to the region's overall transportation system.  More efficient airport operations, minimizing energy consumption by aircraft and ground support equipment.

Source: Landrum & Brown, 2005.

**Table 6.334**  
**SUMMARY OF ENVIRONMENTAL MITIGATION ASSOCIATED WITH THE**  
**PROPOSED REPLACEMENT AIRPORT**

Impact Category	Proposed Replacement Airport
	Proposed Mitigation
Airport Noise	No mitigation is required, but the FAA and the City of St. George have elected to do the following: <ul style="list-style-type: none"> <li>• FAA would establish an approach procedure for the replacement airport designed to keep aircraft as high as possible and west of Zion National Park without affecting final approach minimums.</li> <li>• The FAA would work with NPS to establish an Air Tour Management Plan for Zion National Park, in accordance with the National Parks Air Tour Management Act.</li> <li>• The City of St. George and the FAA Airports District Office in Denver would work together to develop voluntary noise abatement initiatives at the replacement airport involving a pilot education program, commercial operator agreements, printed informational materials, and flight monitoring.</li> </ul>
Land Use	No mitigation is required.
Air Quality	No mitigation is required.
Historic, Architectural, Archeological, and Cultural Resources	No mitigation is required.
Department of Transportation Act, Section 4(f)/303(c) Properties and Resources	No mitigation is required, but the FAA and the City of St. George have elected to do the following: <ul style="list-style-type: none"> <li>• FAA would establish and approach procedure for the replacement airport designed to keep aircraft as high as possible and west of Zion National Park without affecting final approach minimums.</li> <li>• The FAA would work with NPS to establish an Air Tour Management Plan for Zion National Park, in accordance with the National Parks Air Tour Management Act.</li> <li>• The City of St. George and the FAA Airports District Office in Denver would work together to develop voluntary noise abatement initiatives at the replacement airport involving a pilot education program, commercial operator agreements, printed informational materials, and flight monitoring.</li> </ul>
Water Quality	The City of St. George would require the construction contractor to: <ul style="list-style-type: none"> <li>• Follow the construction procedures outlined in FAA AC 150/5370-10, <i>Standards for Specifying Construction of Airports</i></li> <li>• Install oil traps and waste oil tanks to manage petroleum wastes</li> <li>• Use absorbent materials to remove small spills from work areas</li> </ul> <p>In addition, the City of St. George would:</p> <ul style="list-style-type: none"> <li>• File a Notice of Intent with the UDWQ to obtain coverage for construction activities under the UPDES General Permit for Storm Water Discharges Associated with Construction Activity.</li> <li>• Develop a Stormwater Pollution Prevention Plan (SWPPP) for the Airport.</li> <li>• Obtain an UPDES permit from the UDWQ for the discharge of stormwater resulting from normal airport operations</li> </ul>
Wetlands	Minor fills may be required potentially for road crossings of ephemeral tributary washes to the Fort Pearce Wash. Final mitigation requirements would be determined once final design plans for the replacement airport and access road have been completed. At that time, the mitigation requirements would be coordinated with the UDEQ and USACE. No other wetlands or aquatic resource impacts are anticipated.

Table 6.334, Continued

## SUMMARY OF ENVIRONMENTAL MITIGATION ASSOCIATED WITH THE PROPOSED REPLACEMENT AIRPORT

Impact Category	Proposed Replacement Airport
	Proposed Mitigation
Floodplains and Floodways	No mitigation is required.
Wild and Scenic Rivers	No mitigation is required.
Biological Resources, Threatened and Endangered Species	<p>Gila Monster and Other State Sensitive Reptile Species:</p> <ul style="list-style-type: none"> <li>Continue coordination with Utah Department of Wildlife Resources (UDWR) to identify and implement site-specific mitigation measures.</li> <li>Conduct clearance surveys, as appropriate, prior to construction.</li> <li>Install barrier fencing adjacent to reptile habitat prior to initiating construction.</li> <li>Construct culverts at major washes to allow passage of reptiles.</li> <li>Establish on-site conservation easements to preserve habitat after construction is completed.</li> </ul> <p>Desert Tortoise:</p> <ul style="list-style-type: none"> <li>Conduct presence/absences surveys prior to initiating construction.</li> <li>If tortoises are present, UDWR biologists would remove the tortoises under an incidental take permit.</li> <li>If tortoises are encountered during construction, they would be relocated in coordination with the UDWR and according to the Washington County Habitat Conservation Plan.</li> </ul> <p>Burrowing Owl and Kit Fox:</p> <ul style="list-style-type: none"> <li>Conduct presence/absences surveys prior to initiating construction.</li> <li>UDWR would determine which nests (owl) and dens (kit fox) would be candidates for relocation.</li> <li>UDWR would determine which individual animals should be relocated.</li> </ul> <p>Migratory Birds:</p> <ul style="list-style-type: none"> <li>During the nesting season prior to initiating construction, existing raptor nests would be identified and confirmed.</li> <li>Raptor nesting sites and territories would be avoided through continued coordination with UDWR and USFWS.</li> <li>Raptor nests would be relocated, as determined by USFWS, and methods to deter nesting would be implemented per the direction of USFWS.</li> <li>Spatial buffer zones may be established, depending on the timing of construction.</li> <li>Final design plans would be coordinated with UDWR to ensure power lines are installed and maintained to reduce raptor collisions.</li> </ul> <p>Invasive Species:</p> <ul style="list-style-type: none"> <li>Conduct pre-construction survey of the site to identify invasive species.</li> <li>Wash earth moving and hauling equipment at the contractor's storage facility prior to mobilizing to the construction site.</li> </ul> <p>All areas disturbed during construction that would be permanently landscaped or stabilized would be done using native species.</p>

Table 6.334, Continued

## SUMMARY OF ENVIRONMENTAL MITIGATION ASSOCIATED WITH THE PROPOSED REPLACEMENT AIRPORT

Farmlands	No mitigation is required.
Natural Resources	No mitigation is required.
Hazardous Waste	No mitigation is required.
Solid Waste	No mitigation is required.
Construction Impacts	Water Quality – see mitigation commitments listed above  Air Quality: <ul style="list-style-type: none"> <li>• Use of best management and construction practices.</li> <li>• Minimize the generation, stirring, or entrapment of fugitive dust in construction staging areas, disturbed areas, and along haul roads by wetting surfaces with water or other dust reducing chemical compounds.</li> <li>• Used covered trucks to haul construction materials, fill, or waste materials, or wet the contents of the truck bed to minimize the generation of fugitive dust.</li> <li>• Designate haul roads to minimize impact on local traffic patterns.</li> </ul>
Social and Socioeconomic Impacts	No mitigation is required.
Secondary, Induced, and Infrastructure Impacts	No mitigation is required.
Surface Transportation	No mitigation is required.
Environmental Justice	No mitigation is required.
Energy Supply	No mitigation is required.
Sustainable Design and Development	No mitigation is required.
Visual and Aesthetic Impacts	No mitigation is required.
Coastal Zone Management	No mitigation is required.
Coastal Barriers	No mitigation is required.
Short Term Uses and Long Term Productivity of the Environment	No mitigation is required.

Source: Landrum &amp; Brown, 2006.