

Chapter 20: Construction Impacts

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20.1 Introduction

Constructing the West Davis Corridor (WDC) would cause a number of temporary impacts from disturbing the ground and operating construction equipment. Construction could affect air quality, water quality, wetlands, noise and vibration levels, visual resources, light levels, cultural resources, wildlife, the flow of vehicles (business operations and traffic delays), utility service, and hazardous material sites. In addition, the project could cause impacts from the use of sand and gravel pits and hauling these materials by truck to the construction site. Most construction-related impacts to the public would be associated with travel delays on local streets.

20.2 No-Action Alternative

With the No-Action Alternative, the WDC would not be constructed, so there would be no construction-related impacts from the WDC. The Utah Department of Transportation (UDOT) would continue to conduct maintenance, make safety improvements, and construct other roadway projects identified in the Wasatch Front Regional Council's (WFRC) Regional Transportation Plan in the WDC study area. These activities would occur with both the No-Action and WDC action alternatives. The construction-related impacts from these activities would be similar to those described in Section 20.3 below.

What is the WDC study area?

The WDC study area is the area described in Section 1.2, Description of the Needs Assessment Study Area.

20.3 Action Alternatives

The WDC action alternatives would require new construction in both developed and undeveloped areas (see Chapter 2, Alternatives). Unless otherwise stated, the following discussion of impacts is common to all of the action alternatives.

A comprehensive public information program would be implemented to inform the public about construction activities and to minimize impacts. Information would include the periods when construction is scheduled to take place, work hours, and alternate routes. Construction signs would be used to notify motorists about work activities and changes in traffic patterns, such as detours. In addition, night and weekend work could be scheduled to shorten the duration of construction.

20.3.1 Easements

UDOT might need to obtain easements for some properties in order to construct the selected WDC alternative. These properties are not included in the right-of-way analysis (see Chapter 3, Land Use). Easements would be required for properties that are outside the right-of-way of the selected alternative but would be affected by the cuts or fills required during roadway construction, would need utilities to be relocated, or would need to have their access modified to fit within the proposed WDC design.

UDOT would use these properties and would provide compensation to the landowner for the use. For some construction and utility easements, the property would be fully returned to the owner when the use of the property is no longer required, typically when construction is complete or when the utility is buried. These properties might be temporarily affected, but no long-term impacts are expected.

For some utilities, such as water canals and power poles, permanent easements might be required. The locations of these easements would be determined during the final design phase of the project in coordination with the utility companies. For this reason, the exact locations of the easements are not known at the time of the release of this Final EIS. For permanent easements, the appropriate environmental documentation will be prepared for any potential

impacts. The type of impacts would be the acquisition of open land, and the required easement could be designed to avoid residential relocations and sensitive environmental resources.

20.3.2 Construction Phasing

In general, the alternatives analysis in a National Environmental Policy Act (NEPA) study for a federal-aid transportation project focuses on the impacts and benefits of the alternatives in a single future year—often called the *design year*—which is usually 25 to 30 years in the future, or, in the case of the WDC Project, the year 2040. The impacts of the project are defined as the total impacts of an action alternative in the design year assuming full construction of all elements included in that alternative. Similarly, the benefits of the project are defined as the benefits that would result from full operation of an action alternative in the design year.

At the end of the NEPA process for a project, if the lead agency has prepared an Environmental Impact Statement (EIS) as its NEPA environmental document, the lead agency issues its Record of Decision (ROD) for the project. Assuming that the lead agency's decision is to select one of the action alternatives (that is, the No-Action Alternative is not selected), the ROD identifies the alternative in the EIS that has been selected for implementation. Once the ROD has been issued, the project sponsor often implements the project through a series of separate contracts for individual sections of the project. Unless otherwise specified in the ROD, the project sponsor has the flexibility to determine the appropriate construction phasing. (For the WDC Project, the lead agency is the Federal Highway Administration [FHWA], the project sponsor is UDOT, and the NEPA document is this EIS.)

According to WFRC's 2015–2040 Regional Transportation Plan, the initial portion of the WDC from Interstate 15 (I-15) to Antelope Drive would be constructed during Phase 1 of the plan (2015–2024) with all segments from Antelope Drive to the northern terminus completed by 2034. The actual timing of construction would be based on the availability of funding and the consideration of safety factors and the need for the roadway improvement. If FHWA selects an action alternative, funding for the project will be identified in the ROD.

If only partial funding is allocated for construction, UDOT would construct portions of the selected alternative based on the amount of the funding while considering safety and operational benefits. Any implemented portion of the selected alternative would need to operate in an independent and acceptable manner with appropriate and functional project limits.

What is the Wasatch Front Regional Council (WFRC)?

The Wasatch Front Regional Council is the designated metropolitan planning organization that works in partnership with UDOT, city and county governments, and other stakeholders to develop the Regional Transportation Plan for the Wasatch Front Urban Area. This plan is the region's plan for highway, transit, and other transportation-related improvements to meet the area's growing transportation needs over the next 30 years.

Most of each WDC action alternative would be constructed in areas that have been developed or have been previously disturbed through agricultural practices. The WDC team reviewed the resources considered in this EIS and determined that a phased approach to construction (the project is constructed in segments as funding becomes available) would have similar impacts as a non-phased approach (the entire project is constructed all at once) on all resources except for the community, economics, farmland, transportation, ecosystem resources, and air quality. The impacts of a phased approach on these resources are described below.

What is the WDC team?

The WDC team consists of the lead agencies for the WDC Project (FHWA and UDOT).

20.3.2.1 Impacts from Phased Construction

Community and Economics. Construction over a longer period would prolong congestion and reduce access to residences and businesses in the vicinity of the project during the longer construction period. This reduced access and construction-related congestion over a longer period could cause a loss of revenue by businesses and would increase the travel costs for residents during the longer construction period. Businesses and residents that would be relocated by the project could stay in business or in their residences for a longer period under a phased-construction scenario. This could be an adverse impact to some residents if they desired to sell their house and move prior to construction.

Depending on the location of construction, congestion from a phased approach could occur over longer periods. As a result, emergency services (ambulance, fire, and police services) and buses (municipal buses, school buses, and transportation for the handicapped and elderly) could experience detours or slower travel during construction where access to or passage through existing roads might be restricted or temporarily closed off. Most of this type of impact would occur north of Gentile Street, since south of this street the WDC would be on the western edge of development and would not affect local traffic circulation.

The WDC Project has a design year of 2040 so that the WDC can provide benefits for many years before other improvements might be required. If project construction spans a long period, the benefit of the WDC would be substantially reduced, and the full benefits to safety and travel time would be available over a much shorter period.

Farmland. Phased construction would postpone direct impacts to some of the agricultural land in the project area. If construction of some segments were delayed to a later phase, agricultural land would be available to farm for a longer period prior to construction.

Transportation. Phased construction could result in the initial segment of the WDC ending south of the ultimate northern terminus. UDOT would ensure that the initial WDC segment ends at a logical terminus that allows safety and traffic requirements to be met. UDOT would ensure that the WDC design at the ending terminus under a phased construction approach would operate at an acceptable level of service until future phases of the WDC can be constructed.

Ecosystem Resources. Phased construction would postpone direct impacts to some of the wildlife habitat and wetlands in the project area. If construction of some segments were delayed to a later phase, wildlife habitat and wetlands would be available to the area's wildlife for a longer period prior to construction.

Air Quality. Phased construction would result in lower air quality because there would be several construction mobilization and demobilization periods that would reduce air quality. In addition, phased construction would delay the complete congestion-reducing benefit of the WDC within the WDC study area, potentially increasing vehicle emissions.

20.3.2.2 General Mitigation and Permit Requirements for Phased Construction

As part of constructing a section of the WDC, UDOT would acquire the right-of-way needed to build that section. At the time of construction for each phase, UDOT would implement the mitigation measures required for that phase of construction for impacts to farmland, community impacts, relocations, economic impacts, pedestrian and bicyclist impacts, and impacts to archeological and paleontological resources.

UDOT will coordinate with the U.S. Army Corps of Engineers (USACE) during the Clean Water Act Section 404 permitting process. UDOT will mitigate the impacts to wetlands based on the Section 404 permit submitted to USACE. Mitigating the wetland impact from each phase during that phase would allow UDOT to fully consider any future design modifications that could develop once final design is completed for that phase and would also account for any future changes to wetlands in the project area. Wetlands might also be mitigated for the entire project depending on funding. Wetlands mitigation requirements will be specified by USACE Corps in the Section 404 permitting process. [For more information, see Section 25.2.1, Individual Permit under Section 404 of the Clean Water Act (USACE).]

If applicable, noise, floodplain, visual, and water quality mitigation measures will be implemented for the specific design for each phase. As part of the final design process during each phase, UDOT will conduct a noise analysis in accordance with UDOT's noise policy to determine the locations that will receive noise mitigation measures based on expected traffic volumes and the roadway design. This will allow UDOT to account for any future design modifications or changes in traffic volumes that could affect noise impacts. Future mitigation for subsequent phases will take into account the final design for that phase and any changes in regulations or potential improvements to best management practices at the time of construction.

The mitigation measures related to construction impacts, such as those listed in Chapter 11, Air Quality; Chapter 14, Ecosystem Resources; and this chapter, will be implemented during each phase as part of the construction activity.

20.3.2.3 Project Permitting

This project will require environmental permits, including Section 404 permits under the Clean Water Act. UDOT could seek a single Section 404 permit for the entire roadway

project or could apply for permits for individual project phases or sections. UDOT will determine the appropriate permitting strategies in consultation with USACE and other agencies.

20.3.3 Air Quality Construction Impacts

Air quality impacts during construction would be limited to short-term increases in fugitive dust, particulates, and local pollutant emissions from construction equipment. The project would generate pollutant emissions including the following:

- Emissions from excavation related to cut-and-cover
- Mobile emissions from construction workers' vehicles as they travel to and from the project site
- Mobile emissions from on-site equipment and from delivering and hauling construction supplies and debris to and from the project site
- Stationary emissions from on-site construction equipment such as generators
- Mobile emissions from vehicles whose speeds are slowed because of increased congestion caused by WDC construction activity

Because the WDC would be constructed as funding becomes available, it is difficult to determine the emissions associated with construction. The proposed improvements would occur over an extended period, and construction would be local and short-term. Thus, any impacts to individual air quality receptors would also be short-term. The largest source of air pollution during construction would be PM₁₀ (particulate matter with a diameter of 10 microns or less). Potential construction-related air quality mitigation measures are described below.

20.3.3.1 Mitigation Measures for Construction-Related Impacts to Air Quality

Construction-related impacts to air quality will be minimized by implementing dust- and emission-control measures. These measures will be developed as part of the emission control plan submitted to the State of Utah. These measures will include the following:

- **Fugitive Dust Emission-Control Plan.** In accordance with UDOT specifications, the construction contractor will submit a fugitive dust emission-control plan to the Utah Department of Environmental Quality. The plan will describe project-specific activities for emission control and monitoring throughout construction in accordance with state and federal requirements. UDOT expects that strategies to control fugitive dust could include wetting excavation areas, unpaved parking and staging areas, and onsite stockpiles of debris, dirt, or dusty material; chemical stabilization; planting vegetative cover; providing synthetic cover and wind breaks; reducing construction equipment speed; covering loads; using conveyor systems; street sweeping at paved site-access points; setting limits on construction vehicle idling; and washing haul trucks before leaving the loading site.

Other measures recommended by the U.S. Environmental Protection Agency (EPA) that could be considered to reduce air quality impacts include the following:

- Develop requirements in the project contract package to require the contractor to implement an emission-reduction plan that limits idling and encourages the use of energy-efficient equipment, equipment maintenance, emission controls, and alternative fuels and/or engines to reduce consumption and limit emissions where feasible.
- Reroute truck traffic away from schools and communities when possible.

20.3.4 Water Quality Construction Impacts

Excavation, grading, and other construction activities could increase sediment and potential pollution (oil, gas, etc.) levels in stormwater runoff, and this sediment could enter nearby waterways. The potential for sediment and pollution levels to increase would exist until the WDC is completed and permanent soil-stabilization measures are installed.

A Storm Water General Permit for Construction Activities and a Stormwater Pollution Prevention Plan would be required for construction activities. Best management practices specified in the Stormwater Pollution Prevention Plan would be used during construction to reduce impacts to surface water.

20.3.5 Wetland Construction Impacts

Construction-related wetland impacts and mitigation are identified in Chapter 14, Ecosystem Resources. During construction, some erosion might occur outside the specific roadway construction zone, and this erosion might increase sediment levels in adjacent wetlands, thereby placing fill in the wetlands. Best management practices such as silt fences and other erosion-control features would be used in areas adjacent to wetlands. In addition, wetlands outside of but adjacent to the construction footprint would be fenced so that the area would be avoided. If any construction activities would affect wetlands through increased sediments or fill, the construction contractor would be required to identify the additional amount of wetlands that is affected. The contractor would also be responsible for obtaining the necessary authorization from USACE and all other environmental clearances before affecting these areas.

20.3.6 Noise and Vibration Construction Impacts

20.3.6.1 Noise Impacts

Constructing roads causes a substantial amount of temporary noise. Noise during construction could be a nuisance to nearby residents and businesses. All of the action alternatives would generate similar types of noise that would occur sporadically in different locations throughout the construction period.

The most common noise source in construction areas would be from engine-powered machinery such as earth-moving equipment (bulldozers), material-handling equipment (cranes), and stationary equipment (generators). Mobile equipment (such as trucks and excavators) operates in a sporadic manner, while stationary equipment (generators and compressors) generates noise at fairly constant levels. The loudest and most disruptive construction activities would be pile driving (including driving sheet pile).

Typical noise levels from construction equipment range from 69 dBA (decibels on the A-weighted scale) to 106 dBA at 50 feet from the source; however, the majority of typical construction activities fall within the 75-to-85-dBA range at 50 feet. Peak noise levels from pile driving associated with structures such as interchanges and overpasses are about 106 dBA at 50 feet. To some people, noise at 65 dBA is intrusive and 80 dBA is disruptive. At 80 dBA, people must shout to be heard. Hearing protection is recommended at noise levels above 90 dBA.

Construction noise at locations farther away than 50 feet would decrease by 6 to 8 dBA for each doubling of the distance from the source. For example, if the noise level from a jackhammer is 90 dBA at 50 feet, it would decrease to about 83 dBA at 100 feet and 76 dBA at 200 feet.

The impacts of construction noise on wildlife are analyzed in Chapter 14, Ecosystem Resources.

20.3.6.2 Vibration Impacts

The Federal Transit Administration's *Transit Noise and Vibration Impact Assessment* suggests a damage threshold for fragile buildings (such as historic structures) of 5 mm/sec (millimeters per second), or 0.2 in/sec (inches per second) (Miller 2006). Based on this assessment, a threshold of 5 mm/sec (0.2 in/sec) for isolated vibration events such as trucks passing by or pile driving is a conservative standard to apply to the WDC Project.

Truck Traffic. The following research regarding vibrations from construction truck traffic generally indicates the vibration levels at a specified distance from the vibration source.

- The above-mentioned Federal Transit Administration assessment indicates that the vibration impact from loaded trucks is 1.9 mm/sec (0.076 in/sec) at a distance of 25 feet (Miller 2006). This equals about 2.4 mm/sec to 2.7 mm/sec (0.095 in/sec to 0.106 in/sec) at 20 feet from the road, which is below the 5-mm/sec (0.2-in/sec) threshold used by the Federal Transit Administration.
- A study by the City of Jacksonville monitored vibration levels from truck traffic (gravel trucks, logging trucks, and commercial trucks). The monitors were placed on buildings that were located only a few feet from the edge of the road. In most cases, the vibration levels associated with truck traffic were less than 1 mm/sec (0.04 in/sec) and in all cases were less than 2 mm/sec (0.08 in/sec) (Hee 1994, Executive Summary, page 1).

Based on the results of these studies, UDOT expects that vibration from trucks would be below the 5-mm/sec (0.2-in/sec) threshold and, therefore, would not affect structures.

Pile Driving. Earth-borne vibration levels from impact pile driving range from 1.1 mm/sec to 38.5 mm/sec (0.04 in/sec to 1.5 in/sec), depending on the force of the pile driver, the distance from the pile driver to the receptor, and the type of soil between the pile driver and the receptor.

Vibrations from impact pile-driving activities generally do not exceed the threshold for damage to historic buildings of 5 mm/sec (0.2 in/sec) farther than 200 feet from the pile driver, even with poor soil conditions. Pile-driving activities more than 75 feet from newer, non-historic buildings would not exceed the risk criterion for these buildings (HDR 2004).

20.3.6.3 Mitigation Measures for Construction-Related Noise and Vibration

Construction noise would be minimized by following UDOT's Standard Specifications for Environmental Protection (Section 01355). No mitigation is proposed for construction-related vibration.

20.3.7 Visual and Light Construction Impacts

Construction-related visual impacts would be essentially the same with all of the action alternatives. During construction, the work zone would be cleared of vegetation, and the exposed bare ground would contrast visually with the surrounding agricultural, recreational, and residential areas that viewers of the area are accustomed to seeing. In addition, construction equipment and materials would clutter views in the construction area.

Visual quality from sensitive viewer locations would be temporarily reduced during construction. Until construction is completed and the right-of-way is revegetated, the construction area would visually stand out. Also, lights used for nighttime construction could disturb people within one or two blocks of construction or staging areas.

20.3.7.1 Mitigation Measures for Construction-Related Visual and Light Impacts

Impacts from lights used during nighttime construction will be minimized by aiming construction lights directly at the work area to avoid disturbing nearby residents.

20.3.8 Cultural Resource Construction Impacts

During construction, additional archaeological, paleontological, or historical resources might be discovered other than those identified during the cultural resource surveys (see Chapter 16, Historic, Archaeological, and Paleontological Resources).

20.3.8.1 Mitigation Measures for Construction-Related Impacts to Cultural Resources

In accordance with UDOT's Standard Specifications for Environmental Protection, if cultural resources are discovered during construction, activities in the area of the discovery will immediately stop. The construction contractor will notify UDOT of the nature and exact location of the finding and will not damage or remove the resource. Work in the area of the discovery would be delayed until UDOT evaluates the extent and cultural significance of the site in consultation with the State Historic Preservation Officer. The course of action and the construction delay would vary depending on the nature and location of the discovery. Construction will not resume until the contractor receives written authorization from UDOT to continue.

20.3.9 Wildlife Construction Impacts

Construction activities could disrupt the feeding, nesting, and reproduction activities of wildlife in or near the right-of-way because of higher noise levels, construction equipment activity, and lights. These temporary construction activities are of particular concern during nesting periods for migratory birds near the right-of-way because the activities could disrupt nesting or cause birds to flee the nest. For more information, see Chapter 14, Ecosystem Resources.

20.3.10 Motorist, Pedestrian, Bicyclist, and Business Construction Impacts

20.3.10.1 Motorist, Pedestrian, and Bicyclist Impacts

The primary construction impacts that would affect motorists, pedestrians, and bicyclists during construction of any of the action alternatives would be the following:

- Traffic detours and some temporary road closures would change frequently throughout construction. Changes in roadway conditions could include rerouting of traffic onto other roads, temporary closure of lanes or sections of roads, and temporary lane shifts. These conditions could occur both on major cross streets such as Antelope Drive and on minor roads. Detours and road closures would temporarily increase vehicle commute times, fuel use, and air pollutant emissions. Construction could also temporarily increase response times for emergency service vehicles.
- Access to residential and commercial areas would be temporarily disrupted, resulting in longer commute times and a potential loss of revenue for some businesses.
- Alternatives B1 and B2 would require detours and temporary trail closures on the Old Emigration Trail.

20.3.10.2 Business Impacts

Construction activities could temporarily affect access to businesses in the area of construction. Although UDOT would maintain access to properties to the extent practicable, temporary detours would limit some access or change the route to some businesses. The resulting traffic congestion and motorists' perceptions of inaccessibility could discourage some customers from patronizing businesses in the area of construction. Any business-related impacts would likely occur north of Gentile Street, since south of this street the WDC would be built on the western edge of development and would not affect traffic circulation except for the area in south Farmington near Glovers Lane.

The businesses most likely to be affected are those that cater to impulse shopping or "in-route" shopping. Fast-food restaurants and gas stations belong to this first group and are considered high-impact businesses (the businesses that would experience the most impacts from construction). Destination businesses that have extensive competition, such as grocery stores, hardware stores, and sit-down restaurants, are the group that would experience the second-most impacts and are therefore considered moderate-impact businesses.

Low-impact businesses include specialty and unique stores, because these businesses are likely to be only slightly affected by construction. The fourth group of businesses, which includes offices, industrial parks, schools, and churches, is expected to be negligibly affected. Construction activities would most likely not affect this group's day-to-day operations since consumer traffic generally does not sustain their business activities.

20.3.10.3 Mitigation Measures for Construction-Related Impacts to Motorists, Pedestrians, Bicyclists, and Businesses

In accordance with UDOT's standard operating procedures, the construction contractor will develop a maintenance-of-traffic plan that defines measures to minimize construction impacts on traffic. A requirement of this plan will be that, to the extent practicable, access to businesses and residences will be maintained and existing roads will be kept open to traffic unless alternate routes are provided. Information will be made available by phone and internet that describes construction activities and provides alternate transportation routes.

To the extent possible, trails will be kept open. If closure is required, a detour might be provided.

Even with the implementation of the maintenance-of-traffic plan, traffic congestion would increase in the short term around the construction area. Street closures would be short-term and limited to the closures that are specified in the maintenance-of-traffic plan as approved by UDOT before the start of construction.

UDOT and the contractor will coordinate with emergency service providers such as police, fire protection, and ambulance service before construction to ensure that access for their vehicles will be maintained.

20.3.11 Utility Service Construction Impacts

Utility service could be temporarily disrupted during construction and could affect nearby residents and businesses. The disrupted utilities could include electrical, gas, water, sewer, phone, cable, and storm drainage. Utility service would be maintained throughout most construction activity, and the public is typically notified by the utility company of any temporary disruptions. There could also be temporary impacts to some railroad operations. For more information regarding utilities, see Chapter 5, Community Impacts.

20.3.11.1 Mitigation Measures for Construction-Related Impacts to Utility Service

In accordance with UDOT's standard operating procedures, the construction contractor will coordinate with all utility providers to minimize utility service interruptions. UDOT will coordinate with railroad companies to ensure that their operations are maintained during construction. This mitigation could require constructing temporary tracks in the area of construction.

20.3.12 Hazardous Materials Construction Impacts

No hazardous materials sites have been identified within the construction areas for the WDC action alternatives. However, as with any ground-disturbing activities, there is the potential to encounter previously unknown sites such as underground storage tanks, leaking underground storage tanks, and other hazardous materials sites. Exposure to these sites could pose a health risk. Because the general public would not be allowed onto construction sites, there would be no health risks to the public from ground contamination found on site.

20.3.12.1 Mitigation Measures for Construction-Related Discoveries of Hazardous Materials

If contamination is discovered during construction, mitigation measures will be coordinated according to UDOT Standard Specification 01355, Environmental Compliance, which directs the construction contractor to stop work and notify the engineer of the possible contamination. Any hazardous materials will be disposed of according to applicable state and federal guidelines.

20.3.13 Impacts from Sand and Gravel Sources and Truck Hauling

Sand and gravel sources for highway construction projects can include existing commercial sand and gravel pits (also referred to as material borrow sources) or new sources developed for a specific project. Since UDOT does not specify particular sand and gravel sources for the construction contractors bidding on a project, it is unknown whether a new sand and gravel pit would be developed for constructing the WDC. However, commercial pits already exist near the action alternatives, and this could eliminate the need for new locations. The following paragraphs discuss the typical impacts to be expected from the procurement of sand and gravel based on other construction activities similar to those required for building the WDC.

UDOT does not specify particular sand and gravel sources for its contractors because this would eliminate competition from non-specified sources and would be inconsistent with the State of Utah's procurement guidelines, which are designed to control the costs of publicly funded projects. Therefore, private contractors bidding on a UDOT project need to determine the sources of the sand and gravel to be used on the project and how the material would be transported.

Typically, contractors use dump trucks to haul the material from commercial sand and gravel pits to various staging areas along the project route. The environmental effects of the sand and gravel sources are addressed during the permitting process for a particular site. Local governments regulate local impacts from operation of a sand or gravel pit; these impacts can include noise, dust, congestion, traffic, and erosion runoff. The Utah Department of Environmental Quality also regulates dust and water quality impacts from mines and gravel pits.

Typical impacts from sand and gravel pit operations include noise, increased truck traffic on local routes, and air quality and water quality impacts caused by fugitive dust, erosion, and suspended sediments. For existing active commercial sand and gravel pits, these impacts are already present and mitigation measures are in place.

If an existing sand and gravel pit were to provide material for constructing the WDC, this could temporarily increase the quantity of material mined at the pit. Increasing the quantity of material mined at a particular pit would not necessarily increase impacts to air quality or water quality, because air and water quality impacts depend on the surface area of earth that is disturbed, and mining activities would most likely extend vertically instead of horizontally. Noise and truck traffic associated with the sand and gravel pit would increase temporarily.

For all of the WDC action alternatives, trucks would most likely be the primary mode for transporting materials into and out of the project site. All of the action alternatives would increase the number of trucks in the area since equipment, soil, and materials would be trucked into and out of the area. Trucks would increase noise levels in neighborhoods during construction and could also increase congestion on local streets.



20.4 References

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