



Finding of No Significant Impact (FONSI) for the Ogden/Weber State University Transit Project

The Federal Transit Administration (FTA) served as the lead agency under the National Environmental Policy Act (NEPA) for Ogden/Weber State University Transit Project. The Utah Transit Authority (UTA) prepared the Environmental Assessment (EA) and supplemental information in compliance with NEPA, 42 U.S.C. § 4321 *et. seq.*, and with FTA's regulations, 23 CFR part 771. The EA discusses the potential impacts of the project so that FTA can determine whether significant adverse impacts (40 CFR 1508.27) are probable. If such a determination were made, the preparation of an Environmental Impact Statement would be required. The FTA has determined that the build alternative, as documented in the December 2018 EA, will have no significant adverse impact on the human environment. This Finding of No Significant Impact (FONSI) is based on the December 2018 EA, which has been independently evaluated by the FTA and determined to adequately and accurately discuss the project's purpose, need, environmental issues, impacts, and mitigation commitments. The FTA takes full responsibility for the accuracy, scope, and content of the December 2018 EA.

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Regional Administrator
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Date



Project: Ogden/Weber State University Transit Project
Applicant: Utah Transit Authority
Project Location: Ogden, Weber County, Utah

Proposed Action

The Utah Transit Authority (UTA) proposes to construct a 5.3-mile bus rapid transit (BRT) system in Ogden, Weber County, Utah. The BRT route would connect the Ogden Intermodal Transit Center to Weber State University and McKay-Dee Hospital. Project partners include Ogden City, Weber County, the Wasatch Front Regional Council (WFRC), the Utah Department of Transportation (UDOT), Weber State University, and McKay-Dee Hospital.

Because the Ogden/Weber State University Transit Project may receive Federal financial assistance through the Federal Transit Administration (FTA), FTA serves as the lead agency under the National Environmental Policy Act (NEPA) for the project. An Environmental Assessment (EA) was prepared in accordance with NEPA to evaluate impacts of the project on the natural and social environment. The EA was approved by FTA and UTA and distributed for public review in December 2018. Details of the proposed action are provided in the December 2018 EA.

The purpose of the project is to:

- Improve transit facilities and amenities, travel time, and reliability in the proposed transit corridor to provide greater comfort and safety.
- Connect the main and south campuses of Weber State University per the Weber State University Campus Master Plan.
- Reduce the growth in automobile trips and parking demand at Weber State University.
- Encourage transit-oriented land uses per Ogden City's General Plan and support other local and regional planning initiatives and land-use strategies that aim to foster economic development because of investment in transit infrastructure.
- Reduce transportation-related energy use, air pollutant emissions, and greenhouse gas emissions.

The project is needed because:

- The existing transit service lacks the amenities, travel time competitiveness, and reliability that makes it more attractive to new riders.
- Weber State University consists of two non-contiguous campuses.
- Growth forecasted for Weber State University would overwhelm roadway and parking capacity unless there are alternatives to auto travel.
- Local and regional land-use plans and economic and redevelopment initiatives aren't adequately supported by UTA's existing fixed-route bus system.



- Traffic congestion is growing, and roadway level of service, and local and regional air quality are declining.

The project study area and the BRT route are shown in Figure 1. The BRT route would be about 5.3 miles long (about 10.6 miles round trip) and would include both bus-only and mixed-flow traffic segments and 13 stations with enhanced amenities. The BRT route would be an enhanced service route, with more-reliable service using specialized vehicles with distinctive branding. The BRT service would replace existing bus route 603.

As shown in Figure 1, The BRT route would start at the Ogden Intermodal Transit Center, head east in mixed-flow traffic on 23rd Street to Washington Boulevard, south on Washington Boulevard to 25th Street, east on 25th Street to Harrison Boulevard, and south on Harrison Boulevard. At about 31st Street and Harrison Boulevard, the BRT route would transition to center-running, bus-only lanes. It would continue on a dedicated busway through the Weber State University campus and then travel west to McKay-Dee Hospital, where it would again travel in mixed-flow traffic. The BRT route would loop back on the same route.

The BRT station would include a platform, canopy, landscaping, and station amenities. Station platforms would be elevated for level boarding and each would accommodate one 60-foot or two 40-foot BRT vehicles. Station shelters would include a combination of glass panels and solid support members. Station canopies would provide shelter from sun and rain. The station amenities could include off-board fare collection, seating, lighting, a canopy and wind screens, garbage receptacles, and wayfinding information (maps and signs).

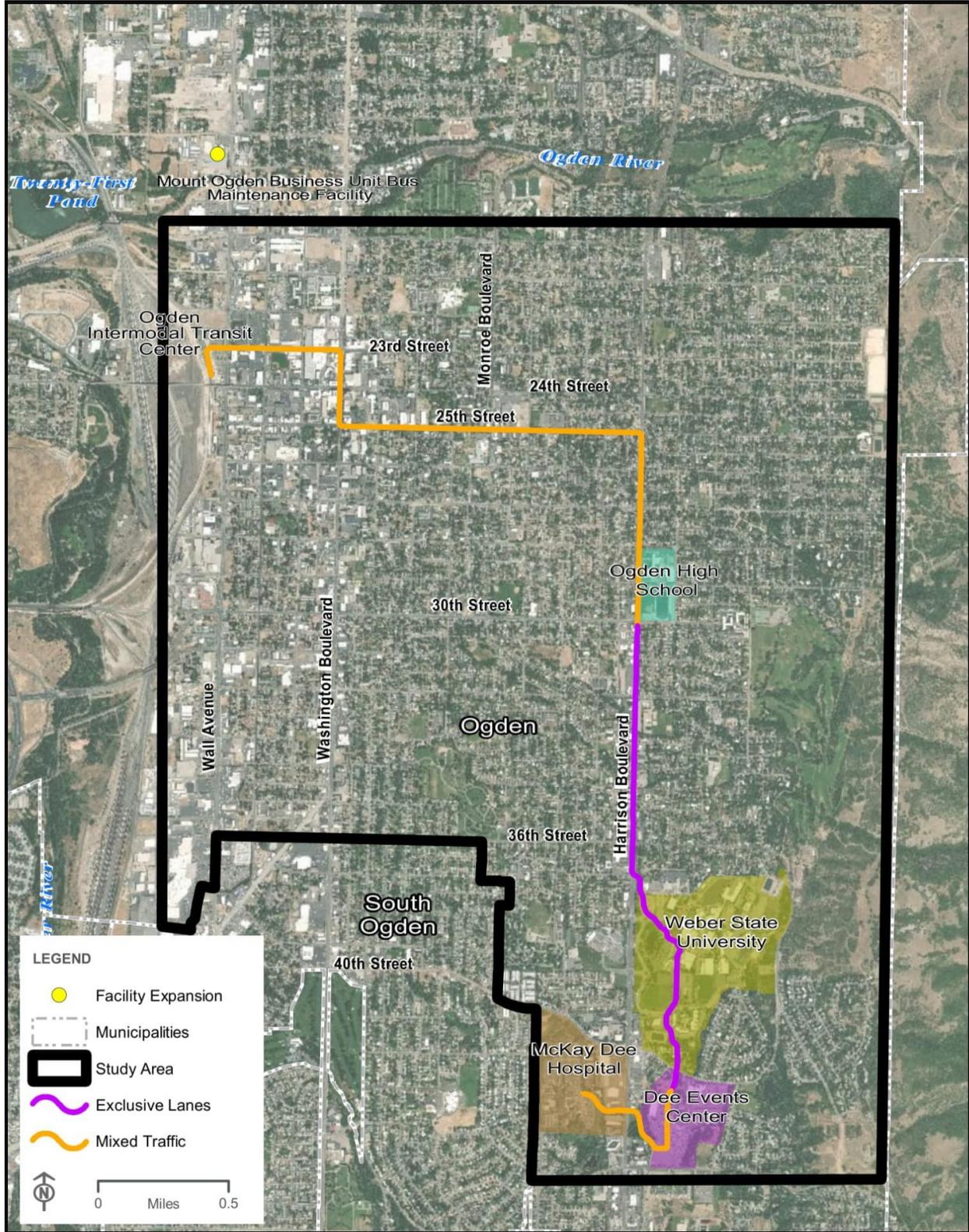
BRT Stations

The proposed action includes construction of 13 stations for opening day. Three (3) additional stations are designated as potential future stations, to be constructed based on ridership and station demand. Most of the stations in the mix-flow portion of the alignment would be curbside stations. South of 31st Street on Harrison Boulevard, where the BRT bus would operate in center-running bus-only travel lanes, the stations would be located in the median. A median station is also an option on Washington Boulevard.

The station near the Dee Events Center would include additional amenities and function as an intermodal center to connect passengers to local bus routes, bicycle facilities, and automobiles. Additional amenities could include electric bus-charging equipment and a rest facility for bus drivers.



Figure 1. Project Study Area





The BRT stations are listed below and locations are shown in Figure 2.

1. Ogden Intermodal Transit Center/Ogden FrontRunner Station
2. 23rd Street and Lincoln Avenue (*future station*)
3. 23rd Street and Kiesel Avenue – “The Junction”
4. 25th Street and Washington Boulevard – “Washington Blvd”
5. 25th Street and Jefferson Avenue
6. 25th Street and Monroe Street
7. 25th Street and Jackson Avenue (*future station*)
8. Harrison Boulevard and 25th Street
9. Harrison Boulevard and 28th Street
10. Harrison Boulevard and 30th Street (*future station*)
11. Harrison Boulevard and 32nd Street
12. Harrison Boulevard and 36th Street
13. Browning Center on Weber State University campus – “Central Campus”
14. Student Housing near Village Drive on Weber State University campus – “Student Housing”
15. Dee Events Center Campus Shuttle Stop
16. McKay-Dee Hospital

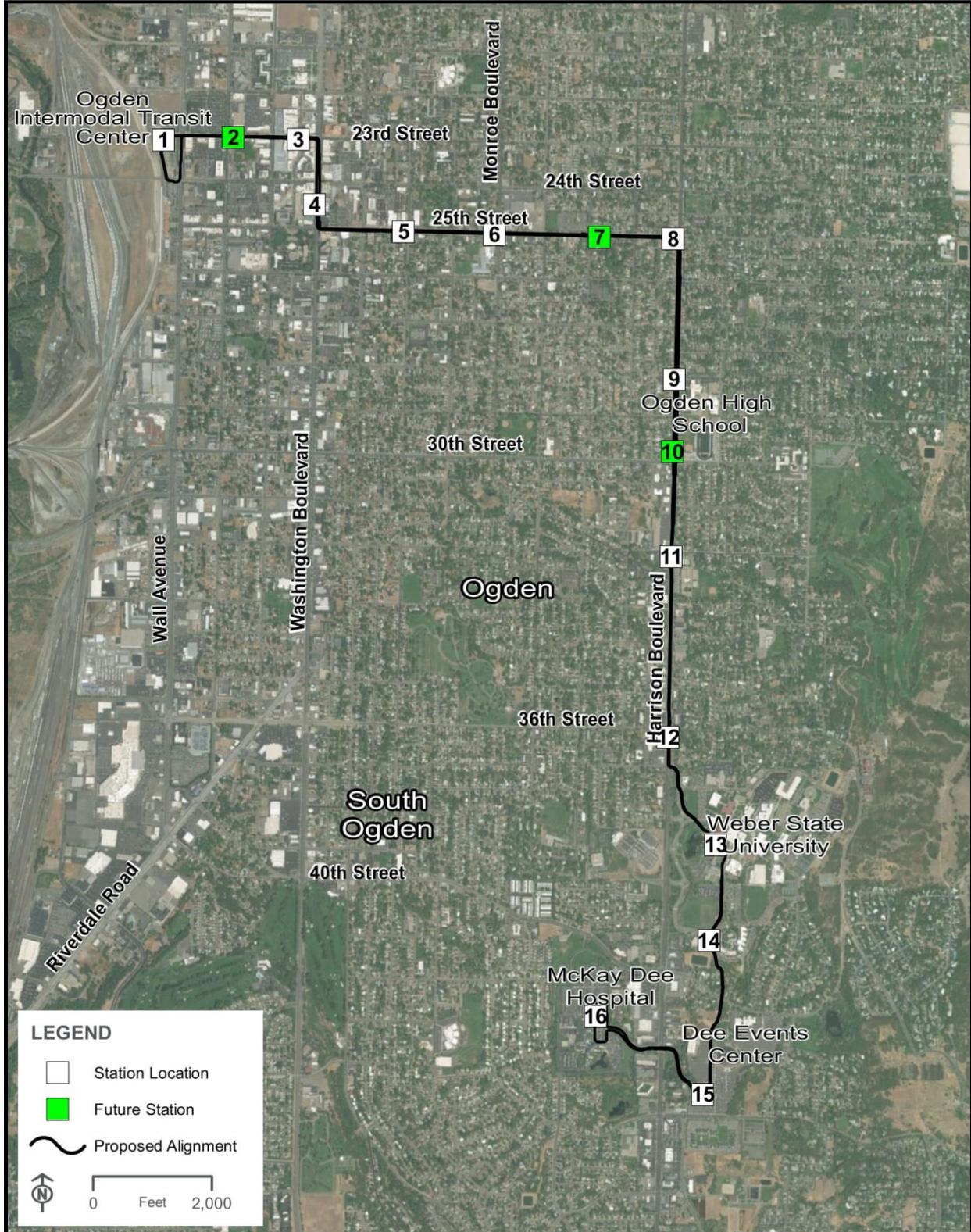
BRT Operations and Ridership

The proposed BRT service is planned to open in 2020 and would operate 7 days per week, between 4:30 AM and 12:30 AM the following day at 10- to 15-minute frequencies on weekdays and Saturday, and reduced service on Sunday. The BRT travel time is projected to be about 18 minutes from the Ogden Intermodal Transit Center to the center of the Weber State University campus and about 23 minutes to McKay- Dee Hospital.

Preliminary ridership for 2020 is projected to range from 2,600 to 3,100 daily boardings. The BRT buses would also replace the Weber State University Wildcat Shuttle (since service would be duplicative). In addition to the 10-to-15-minute BRT service, UTA would operate a campus circulator during fall and winter semesters from 8:00 AM to 2:00 PM, thereby providing service approximately every 5 minutes between the Dee Events Center and the University’s main campus. The campus circulatory would result in an additional 2,600 daily boardings. The total projected ridership for the proposed action, including the campus circulator, is 5,200 to 5,700 riders per day.



Figure 2. BRT Station Locations





The BRT buses would likely be all-electric, hybrid diesel-electric, or super-low emission diesel buses. If all electric buses are used, bus-charging equipment would be installed at the Mount Ogden Business Unit Bus Maintenance Facility and at the new enhanced station near the Dee Events Center on the Weber State University campus.

Signal Modifications

Transit signal priority (TSP) would be used to minimize travel time variability for the BRT buses, but the treatment would not reduce regular traffic operations to an unacceptable level of service. The locations for TSP would be determined during the final design phase of the project.

Traffic Modifications

Bus-only lanes on Harrison Boulevard would start south of 31st Street, where the street is currently wider, and would continue through the Weber State University campus. The bus-only lanes on the southern segment of the alignment would improve the reliability of the BRT service and would create a presence that would foster economic development. Traffic capacity wouldn't be reduced, though left turns across the bus-only lanes from Harrison Boulevard onto cross streets or businesses at unsignalized intersections would be restricted via a raised median installed to delineate the bus-only lanes as well as by the addition of no-left-turn signs. However, multiple local streets are available in the area to provide connections. In addition, Ogden City has stated that parking on Harrison Boulevard south of 31st Street wouldn't be allowed after the proposed action is implemented. All the businesses and residents in that area have off-street parking.

The alignment through the Weber State University campus would be mostly bus-only lanes and would follow the transit alignment in the Weber State University Master Plan for the purpose of connecting the north and south campus. To accommodate the University's need for a station near the student union building, a portion of the alignment through the University would include a single-lane busway to avoid the iconic duck pond and nearby buildings. The single-lane busway would be shared by buses from both directions, and block signaling would be used to indicate when it's safe for a bus to enter the shared lane. In the neighborhood that connects north and south campus, a four-way stop would be installed at 4225 South and a signalized intersection would be installed at Country Hills Drive to ensure safe access across the busway and safe entrance to and exit from the neighborhood. The proposed action includes a busway through the Dee Event Center parking lot. To minimize conflicts with the busway, curbs would be installed to redirect traffic in the parking lot. Pedestrian-bike path would be included along the BRT alignment from the Dee Event Center to Village Drive.

For the mix-flow segment on 23rd Street and 25th Street, roadway improvements would include traffic modifications. Details are discussed later in the Roadway Improvements section.



Roadway Improvements

The project would also include roadway improvements on 23rd Street and 25th Street to support the BRT system by improving roadway infrastructure, automobile traffic, and providing safer active transportation (walking and bicycling) facilities. 25th Street would be rebuilt from the bottom up to extend the service life of the road to support more frequent BRT service. In certain instances, water mains would be replaced, storm sewers would be installed, and sanitary sewers would be repaired. Depending on the extent of the utility work, curbs might be fully replaced. 23rd Street roadway infrastructure would be upgraded between Wall Avenue and Kiesel Avenue to better support the BRT system and active transportation. Improvements would include adding a traffic signal at Lincoln Avenue, restriping, adding bicycle lanes, adding crosswalks, reconstructing curbs, and reconfiguring parking. All improvements would occur within the existing roadway right-of-way.

Maintenance Facility

The project would include expansion of the existing Mount Ogden Business Unit Bus Maintenance Facility to accommodate and service the additional BRT buses. The proposed expansion would add four maintenance bays to the east side of the existing north maintenance building and enlarge the overall facility from 32,000 square feet to about 40,000 square feet. The expansion would be built entirely on the existing UTA maintenance facility site, so no additional property would be required.

Agency Coordination and Public Opportunity to Comment

At the start of the EA process in November 2016, FTA sent scoping letters to all state and federal agencies and Native American tribes with a potential interest in the proposed action. These included 10 letters to federal agencies, 16 letters to state agencies, and 6 letters to Native American tribes. None of the recipients of the scoping letter had any comments on the project. The list of scoping letter recipients and a sample letter are included in the EA, Appendix C3, Agency Scoping Letters.

As part of the EA process, UTA and the project partners engaged the community, elected officials, and other agencies in the project's development. Public outreach activities conducted during the EA phase included general outreach and community meetings for concept designs, coordination with agencies with jurisdiction over potentially affected resources, stakeholder and technical advisory meetings, and elected official briefings. The information obtained through public and agency involvement were incorporated the EA. In addition, FTA consulted with Utah State History Office (SHPO) and the Advisory Council on Historic Preservation regarding potential impacts to historical properties.

In December 2018, FTA sent out comment request letters to federal and state agencies, Native American Tribes, and other consulting parties with potential interest in the proposed action project. The letter provided instructions on how to obtain a copy of the EA and requested



comments on the EA. It also included information on the public comment period and open house. The list of comment request letter recipients and sample letters are included in Appendix A. A total of 50 letters were sent out, which included 10 letters to federal agencies, 17 letters to state agencies, and 12 letters to Native America tribes.

The EA for the for Ogden/Weber State University Transit project was made available for public review for a 6-week comment period from December 9, 2018 to January 20, 2019. The legal notice for the EA ran in *The Salt Lake Tribune*, *Deseret News*, and *Ogden Standard-Examiner* on December 9, 2018. Notice was also posted on the Utah Public Notice website and the UTA website.

Copies of the EA were made available at five locations: UTA Ogden Intermodal Transit Center, UTA Frontlines Headquarters, Ogden City Offices, Weber County Main Library, and WSU Stewart Library. The EA was also posted on UTA's website. In addition, the executive summary of the EA was translated to Spanish and made available with the EA.

A public open house was held on January 9, 2019 to present the proposed action and take comments on the EA. A news article was published in the *Ogden Standard-Examiner* on December 28, 2018 about the release of the EA and the open house. Mailers announcing the availability of the EA and the public open house for the project were sent the first week of January 2019 to property owners within 1/2 mile of the BRT route. Fox 13 News at Five (FOX) and 2 News at 6 pm (CBS) both reported on the project and the open house on January 9, 2019 (during the time of the open house). At the open house, a Spanish interrupter was present and Spanish version of the information boards were made available as handouts. 37 members of the general public attended the open house, and 9 comments were received at the open house.

In total, 21 comments were received at the open house and through mail or email during the 6-week comment period. In addition to comments from the general public, comments were received from FEMA Region VIII, Bureau of Reclamation, Shoshone-Bannock Tribes, Utah Public Lands Policy Coordinating Office, and UDOT. In general, the comments received were in support of the proposed action. No comments were received on the adverse effect determination and mitigation of adverse effects on historic properties. No comments were received that opposed the project or identified any significant impacts to the natural or social environment. A summary of the comments received is presented in Appendix B, along with the responses from FTA and UTA. Additional agency and public involvement are planned during the final design phase to determine design details for buses, stations, and bus-only lanes. Preliminary inputs on some of these aspects were collected through a survey that was conducted at the public meeting on January 9, 2019.



Determination and Findings

Land Use and Zoning

The proposed action is consistent with and complementary to existing land uses and zoning and complies with regional and local plans and policies including Ogden City's General Plan, Central Business District Community Plan, East Central Community Plan, and the Weber State University Master Plan and Master Plan update. This results in no negative impacts to land use in the study area.

Land Acquisitions, Displacements and Relocations of Existing Uses

The proposed action would require acquisition of about 1 acre of right-of-way to construct the bus-only lanes on Harrison Boulevard from 31st Street to the Weber State University campus. One business, Carriage Cleaners, at 3205 S. Harrison Boulevard, would need to be acquired, demolished, and relocated. In addition, the 7-Eleven at 3195 S. Harrison Boulevard would lose its sign and gas pumps, though the convenience store building itself wouldn't be affected. Loss of the gas pumps could affect the overall viability of the business. UTA would make a final determination about the viability of this business during the preliminary engineering and final design phases of the project. The proposed action would also require minor strips of property from approximately 15 other residential and business parcels on Harrison Boulevard, though no structures would be affected (see EA Figure 23 through Figure 26).

About 5.6 additional acres would be required from Weber State University to construct the busway on campus. The University would donate the land to the project. Several properties in the Country Hills neighborhood, which separates the University campus, would also be affected. The buildings at 1360 East 4225 South, 1361 East 4225 South, 1332 Country Hills Drive, and 1350 Country Hills Drive are currently owned by Weber State University and are slated for demolition by the University in support of its campus Master Plan. The University would donate the required land to the project, and UTA would construct the busway across these vacant properties. Two additional properties in the Country Hills neighborhood that are not owned by Weber State University would be directly affected by the proposed action. The building at 1341 Country Hills Drive would need to be acquired, demolished, and the resident relocated. The building at 1348 Country Hills Drive would not be affected, but a strip take of about 0.014 acre along the southwest corner of the property would be required.

Road improvements on 23rd Street and 25th Street would be done in the right-of-way. Expansion of the Mount Ogden Business Unit Bus Maintenance Facility would be done within the existing UTA facility property. Therefore, no property acquisition would be required for these improvements.

Temporary construction impacts may include use of property for temporary construction easements or equipment staging; restricted access; and road and bicycle/pedestrian closures and detours.



Social Conditions

The proposed action would have a positive impact on the social conditions of the area by improving transit reliability and connectivity to community facilities. Temporary construction impacts would include temporary changes in local travel patterns; roadway and sidewalk alternate routes or detours and traffic congestion; and dust and noise impacts to adjacent neighborhoods. In addition, highway users may experience delays during construction.

Economic Conditions

Minimal impacts are anticipated and would be offset by long-term benefits for businesses and the local economy because of improved mobility and increased economic investment throughout the proposed transit corridor. Benefits of the proposed action would include supporting economic development plan with greater cohesion between land use and transportation by the addition of permanent transit elements, creating opportunities for higher-density economic development with mixed-use and commercial redevelopment in the transit corridor, providing transit access to the commercial areas, and improving the transit system to supporting the increased employment as a result of increased development in the area.

During construction, adjacent businesses may experience temporary noise, dust, and visual changes; temporary access modifications to adjacent businesses, which may result in a temporary reduction in retail revenue; and increased construction employment and revenues from construction workers.

Environmental Justice

Federally funded projects are required to ensure that low-income households, minority households, and minority business enterprises do not suffer a disproportionate share of adverse environmental impacts. UTA analyzed environmental justice as part of the EA. Environmental justice impacts were assessed according to Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations), the U.S. Department of Transportation (DOT) Order 5610.2(a) and FTA Circular 4703.1 on Environmental Justice.

The analysis indicates that no disproportionately high or adverse impacts to minority or low-income populations would occur as a result of this project. The general population will benefit from increased mobility, connectivity, and access to transit. Extensive meaningful opportunities for public involvement by environmental justice populations were provided during project planning and development.

Cultural Resources (Section 106)

FTA initiated Section 106 consultation with the Utah State Historic Preservation Officer (SHPO) and the Native American Tribes in May 2016. FTA and UTA consulted with the Utah SHPO on multiple occasions between 2016 and 2018 through written correspondence and verbal



communication. None of the Native American tribes contacted by FTA requested to be consulting parties. Local entities that requested to be a consulting party included the Ogden City Landmarks Commission, the Utah Heritage Foundation, and the Weber County Heritage Foundation. Details are provided in the EA under Appendix B13 – Historic Properties Technical Report and Appendix C2 – Section 106 Consultation.

The Utah SHPO concurred with FTA's Determination of Eligibility and Finding of Adverse Effect for historic properties on October 22, 2018. The SHPO also concurred that mitigation for the undertaking has been completed. FTA subsequently notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect to a historic property; the ACHP indicated on November 8, 2018, that its participation in the consultation to resolve adverse effects is not needed. On November 20, 2018, the local consulting parties listed above were sent a project update email and a copy of the Utah SHPO's October 22, 2018 concurrence letter. No comments were received from the local consulting parties. During the EA public comment period, no comments were received from the general public regarding impacts to historical properties.

The proposed action would result in **no adverse effect** on 21 National Register of Historic Places (NRHP)-eligible historic structures and 1 archaeological site (42WB373 - the Ogden Rail Yard site). The proposed action would require a small strip take at historic properties, but the area to be acquired does not include the historic structures or contributing features. Some new station platforms and shelters would be placed near NRHP-eligible structures but outside the parcel boundaries. The stations would be designed to complement the surrounding areas and would not unduly compromise the historic setting of the properties. In addition, there would be **no adverse effect** to the Crossroads of the West, Ogden Central Bench, Jefferson Avenue, and Eccles Avenue Historic Districts.

Several properties with NRHP-eligible structures in the Country Hills neighborhood would be affected by the proposed action. These properties are within the acquisition zone for the Weber State University campus Master Plan. A Memorandum of Agreement (MOA) has been executed between Weber State University and the Utah SHPO regarding the purchase and demolition of properties within the acquisition zone, and mitigation efforts were completed by the University and approved by the SHPO in 2018. The historic buildings at 1360 East 4225 South, 1361 East 4225 South, 1332 Country Hills Drive, and 1350 Country Hills Drive are currently owned by Weber State University and are slated for demolition by the University in support of its Campus Master Plan. These historic properties would not be affected by the proposed action since they are assumed to be demolished by the time the proposed action starts.

The proposed action would result in one **adverse effect** to a historic property at 1341 Country Hills Drive. This property is currently not owned by Weber State University, but is within the acquisition zone for the Weber State University Campus Master Plan and was included in the MOA between Weber State University and the SHPO. Since the mitigation measures completed by Weber State University are the same mitigation measures that FTA would propose to complete, SHPO has concurred that mitigation measures for the adverse effect to



1341 Country Hills Drive from the proposed action have been completed. A MOA between FTA and SHPO has been executed and is included in Appendix C.

Inadvertent discovery of cultural resources and/or human remains may be encountered during construction. The project study area is within the inherent ancestral lands of the Shoshone and Bannock people and continues to hold important cultural properties, traditional hunting, fishing and gathering activities still practiced by members of the Shoshone-Bannock Tribes. Any inadvertent discovery will be managed in accordance with the MOA.

Visual and Aesthetic Resources

The proposed action would create minimal visual and aesthetic impacts due to the road improvements in the mix-flow segment, construction of the bus-only lane on Harrison Boulevard and Weber State University campus, and construction of enhanced stops along the alignment.

Road improvements in the mix-flow segment would benefit from improved streetscape aesthetic. Bus-only lanes on Harrison Boulevard would be a noticeable change. However, the proposed action would facilitate redevelopment of blighted or run-down commercial areas on Harrison Boulevard which would improve the overall visual surroundings through this area. The new busway through Weber State University is part of the campus's Master Plan, and would include retaining walls in steep areas and removal or redesign of some existing walkways and landscaping. However, changes to landscaping, walkways, and crosswalks on campus would improve circulation, safety, and aesthetics. Enhanced stations would be designed to be sensitive to the local character of the project study area and would minimize potential visual impacts to historic resources. The stations wouldn't substantially block views of homes or distant mountains.

Comments were received during the EA public comment period regarding potential increase in light pollution from lights in BRT buses and at stations. Lighting within the bus is shielded by the roof of the bus and does not significantly contribute to light pollution. The station lighting will be evaluated during final design, and will be designed to minimize light pollution while improving safety.

Parks and Recreation

Parks and recreation resources are located within one-half mile of the proposed transit corridor, but none would physically be affected by the proposed action.

Section 4(f) Resources

The proposed action would have a Section 4(f) **de minimis use** of 22 properties (21 NRHP-eligible historic buildings and one archaeological resource, site 42WB000373) and four historic districts—the Crossroads of the West, Ogden Central Bench, Jefferson Avenue, and Eccles Avenue Historic Districts—due to a finding of **no adverse effect** under Section 106. In addition,



one NRHP-eligible historic building would have a full Section 4(f) **use** due to a finding of **adverse effect** under Section 106.

The proposed action would result in one full **use** of a historic property at 1341 Country Hills Drive. After taking into account the ability to mitigate impacts, the severity of the remaining harm, the significance of the resource, and the views of the officials with jurisdiction over the resource, FTA has concluded that there are no prudent or feasible avoidance alternatives to the proposed action and, therefore, in accordance with 23 CFR 774.3(a), the proposed action would cause the least overall harm to Section 4(f) properties.

Farmland

No farmlands are located in the study area; therefore, no impacts would occur.

Air Quality and Energy

There would be minimal to no direct or indirect impacts to air quality and energy consumption as a result of the proposed action. Minimal temporary construction impacts, including decreased air quality due to fugitive dust and use of energy resources during construction and operations could occur.

Based on the determinations made in compliance with relevant provisions of federal law, FTA finds that the Ogden/Weber State University Transit Project satisfies the requirements of the National Environmental Policy Act of 1969, the Clean Air Act Amendments of 1990, and the U.S. Department of Transportation Act of 1966, as amended. The project is identified in the conforming long-range transportation plan (WFRC's 2015–2040 RTP) and in the conforming Transportation Improvement Program for Weber County (Utah's 2019–2024 TIP).

Noise and Vibration

The proposed action would have no noise and vibration impacts. A noise and vibration assessment was conducted using FTA's guidance manual Transit Noise and Vibration Impact Assessment to identify potential noise and vibration impacts. The noise analysis conducted for this project considered predicted project noise levels, combined with the existing noise levels. In the areas, north of 31st Street where BRT buses would operate in mixed flow, the proposed action would not cause significant noise impacts beyond the existing noise levels. In the areas, south of 31st Street where BRT buses would operate in dedicated lanes, the noise analysis indicated no noise impacts. Because the proposed action includes the use of rubber-tired vehicles, no vibration impacts are expected.

Temporary noise and vibration impacts associated with construction activities and equipment could occur.



Water Resources

Impacts from pollutant loading or increased impervious surface would be minimal. Temporary construction impacts, including vegetation removal at construction sites and sediment deposit onto surrounding roads from construction vehicles, will be mitigated.

Wetlands

No wetlands were identified in the study area; therefore, no impacts would occur.

Flooding and Floodplain Management

North of 31st Street, the proposed action would not require any substantial construction that would affect floodplains. South of 31st Street, the proposed action would include road widening to accommodate the bus-only lanes, which would encroach on the Sullivan Hollow regulatory floodplain (at about 33rd Street and Harrison Boulevard). The proposed action would cross floodplain associated with Beus Creek, but no new construction is planned for this area, so the floodplain wouldn't be affected.

Executive Order 11988, Floodplain Management (May 24, 1977), established federal policy “to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” The “expansion of a facility already located within a floodplain usually would not be considered a significant encroachment” by FTA.

Mineral Resources, Geology, and Soils

Direct impacts would be minimal and would be similar to temporary construction impacts, which include loss of slope stability, erosion and aggradation, ground surface settlement, impacts to structure foundations due to adverse soil conditions, topography and design, potential loss of opportunity to extract mineral resources, and seismic risk. No impacts are anticipated with proper implementation of construction mitigation.

Through the Weber State University campus, the areas with the greatest potential for slope failure have steep slopes and weak underlying rock or soil conditions. Between Village Drive and Country Hills Drive on the University campus, construction of the busway on the steep slope would require retaining walls, particularly near the student housing complex, that range from 3 to 10 feet high. The overall risk for slope instability or failure along the proposed alignment is low since the steepest slopes are about 7%, flatter than 10%. A geotechnical survey of the alignment through the University campus, with emphasis in areas with the steeper grades and near the detention basin, would be required during the final design phase of the project.



Erosion would be a concern during construction. Temporary erosion and sedimentation control would substantially reduce the volume of eroded soil and the potential for discharging silt-laden runoff into nearby waters.

Biological Resources

Wildlife and fisheries, and threatened and endangered species were not identified in the Project area; therefore, no or negligible impacts would occur.

Hazardous Materials

Although there are hazardous waste sites in the project study area, none would be affected by construction or operation of the proposed action, nor would construction or operation of the proposed action affect these sites.

The proposed station at 25th Street and Washington Boulevard is near a Brownfields targeted site (an area between 22nd Street and 24th Street north to south and between Washington Boulevard and Grant Avenue west to east), though no known contamination is present specifically at the proposed station location.

The proposed future station at 30th Street and Harrison Boulevard would be within 100 feet of an underground storage tank (UST) associated with the USA Mini Mart, an active fueling station located at 3026 Harrison Boulevard. However, because construction of the station would be limited to the area immediately adjacent to the road, it wouldn't affect the UST, and no impacts to the USA Mini Mart are expected.

The gas pumps at the 7-Eleven located at 3195 S. Harrison Boulevard would be directly impacted by the proposed action. Removing the gas pumps would require closing the associated USTs. Gas pumps and USTs will be closed in accordance with state and federal regulations. Evaluation of potential environmental concerns associated with this property is normally conducted as part of the property acquisition process.

One dry cleaning business, Carriage Cleaners, at 3205 S. Harrison Boulevard, would need to be acquired and demolished. Dry cleaning includes handling of hazardous material. Evaluation of potential environmental concerns associated with this property is normally conducted as part of the property acquisition process.

Public Safety and Security

Minimal to no impacts are anticipated. During construction, roadway closures and detours may cause temporary impacts to police, fire, and emergency providers.

Utilities

Minimal to no direct and indirect impacts to utilities in the project study area are anticipated. As part of the project, UTA and Ogden City would reconstruct 25th Street between Adams Avenue



and Jefferson Avenue from the bottom up. In certain instances, water mains would be replaced, storm sewers would be installed, and sanitary sewers would be repaired. Final design would require coordination with local jurisdictions. Construction could cause short-term impacts to utilities.

Transportation

The areas of mixed flow wouldn't have substantial effects on the transportation system because the BRT vehicles would operate similarly to the existing conventional bus service. The BRT service in the segment with bus-only lanes would not cause failing levels of service at any of the analyzed intersections on the project's opening day.

Traffic patterns on Harrison Boulevard would be slightly modified due to construction of the bus-only lanes in the median. The bus-only lanes would be physically separated from mixed-flow traffic and demarcated by the use of pavement striping, rumble strips, or any combination of these elements. In addition, a 9-inch-high median barrier would be installed between the two bus-only lanes to prevent automobiles from using the bus-only lanes as turning lanes.

Left turns onto Harrison Boulevard from 33rd, 34th, and 35th Streets would be eliminated. In addition, left turns across the bus-only lanes from Harrison Boulevard onto cross streets at unsignalized intersections would also be restricted due to the raised median. Access to Fire Station #5 (at 3450 S. Harrison Boulevard) would be maintained via a gap in the median barrier. UTA would work with UDOT during the final design phase of the project to properly sign and mark intersections to make sure that other vehicles don't mistakenly enter the busway.

FTA finds that there will be no significant impacts to transportation and traffic resulting from the proposed action.

Construction activities can disrupt vehicle and pedestrian access at different locations and times throughout project construction. Construction could involve temporary lane closures or detours near the project. Construction could temporarily affect the speed and reliability of the existing bus service, and could require closing bus stops.

Mitigation Measures to Minimize Impacts

Measures that will be undertaken by the UTA to mitigate impacts as a result of the proposed action are summarized below:

Resources that Require No Mitigation

Because minimal to no impacts would occur to the following resources, no mitigation is necessary:

- Land Use and Zoning
- Environmental Justice



- Parks and Recreation
- Farmland
- Wetlands

Resources that Require Mitigation

Mitigation activities are necessary for the following resources:

- Land Acquisitions, Displacements and Relocations of Existing Uses
- Social Conditions
- Economic Conditions
- Cultural Resources
- Visual and Aesthetic Resources
- Section 4(f) Resources
- Air Quality and Energy
- Noise and Vibration
- Water Resources
- Flooding and Floodplain Management
- Mineral Resources, Geology, and Soils
- Hazardous Materials
- Public Safety and Security
- Utilities
- Transportation

A summary of the mitigation measures is provided in Appendix D.

Section 4(f) Findings

Section 4(f) of the Department of Transportation Act of 1966, codified at 49 USC 303, declares a national policy that a special effort should be made to preserve the natural beauty of the countryside, public park and recreational lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation may not approve transportation projects that adversely affect such resources unless a determination is made that there is no feasible and prudent alternative, and that all possible planning has been done to minimize harm (23 CFR 771.135, 23 CFR 774).

The Proposed Action will result in the use of one property at 1341 Country Hills Drive under Section 4(f). Based on the Section 4(f) Evaluation presented in the EA of the project's use of Section 4(f) properties, FTA finds that there are no prudent and feasible avoidance alternatives to the use of the property at 1341 Country Hills Drive, and that all possible planning has been done to minimize harm.

Environmental Finding

UTA has incorporated environmental considerations into a study of project alternatives, and has conducted evaluations of the project's potential environmental impacts. The EA was issued in



December 2018. The EA found that the project's construction and operation will cause no significant adverse environmental impacts. This finding applies to all applicable environmental elements, including social conditions, environmental justice, land use, economic conditions, land acquisitions, displacements and relocations of existing uses, cultural resources, visual and aesthetic resources, parks and recreation, air quality and energy, noise and vibration, biological resources, mineral resources, geology, soils, water resources, wetlands, floodplains, hazardous materials, public safety and security, utilities, and transportation.

After carefully considering the EA, its supporting documents, and the public comments and responses, FTA finds under 23 CFR 771.121 that the proposed action, with the mitigations to which UTA has committed, will have no new significant adverse impacts on the environment. The environmental record provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Specific project impacts have been identified for each environmental element.



U.S. Department
of Transportation
**Federal Transit
Administration**

Appendix A
Environmental Assessment Notification Letters

Ogden/Weber State University Transit Project

Environmental Assessment Notification Letters

Agencies List

*Agency that was sent a letter with Section 106 updates.

Federal Agencies

Bryan Bowker, Director
Bureau of Indian Affairs
Western Regional Office
2600 North Central Avenue, 4th Floor Mailroom
Phoenix, AZ 85004-3050

Leede Palo, Regional Administrator
Federal Emergency Management Agency
Denver Federal Center, Building 710, Box 25267
Denver, CO 80225-0267

Paul Ziman, Area Engineer, Region 1
Federal Highway Administration
2520 West 4700 South, Suite 9A
Salt Lake City, UT 84118-1880

Christopher Wilson, Program Analyst *
Advisory Council on Historic Preservation
Office of Federal Agency Programs
401 F Street NW, STE 308
Washington, DC 20001-2637

Hollis Jencks, Project Manager, Utah Regulatory Office
U.S. Army Corps of Engineers
533 West 2600 South, Suite 150
Bountiful, UT 84010-7744

Lisa Lloyd, Transportation Sector Lead
U.S. EPA Region 8 (EPR-N)
1595 Wynkoop Street
Denver, CO 80202-1129

Wayne Pullan, Area Manager
US Department of Interior, Bureau of Reclamation
Bureau of Reclamation, Provo Area Office
302 East 1860 South
Provo, UT 84606

Tim Wilson, State Conservationist
USDA Natural Resources Conservation Service
Wallace F Bennett Federal Building
125 South State St., Room 4010
Salt Lake City, UT 84138-1100

Cory Angeroth, Director
U.S Geological Survey
Salt Lake Field Office
2329 West Orton Circle
Salt Lake City, UT 84119

Larry Crist, Field Supervisor
U.S. Fish and Wildlife Service
2369 W. Orton Circle, Suite 50
West Valley, UT 84119

State Agencies

Brandon Weston, Environmental Services Director
Utah Department of Transportation
4501 South 2700 West (West Valley City)
PO Box 148450
Salt Lake City, UT 84114

Kris Peterson, Region One Director
Utah Department of Transportation
166 Southwell Street
Ogden, UT 84404-4194

Darin Fristrup, Region One Traffic Operations
Utah Department of Transportation
166 Southwell Street
Ogden, UT 84404-4194

Pam Kramer, Wildlife Manager
Utah Division of Wildlife Resources
515 East 5300 South
Ogden, UT 84405

Michael Styler, Executive Director
Utah Department of Natural Resources
1594 W. North Temple
PO Box 145610
Salt Lake City, UT 84114-5610

Bryce Bird, Director
Utah Division of Air Quality
195 North 1950 West
PO Box 144820
Salt Lake City, UT 84114

Marie Owens, Director
Utah Division of Drinking Water
195 North 1950 West
PO Box 144830
Salt Lake City, UT 84114

Brent Everett, Director
Utah Division of Environmental Response and Remediation
195 North 1950 West
PO Box 144840
Salt Lake City, UT 84114

Erica Gaddis, Director
Utah Division of Water Quality
195 North 1950 West, Third Floor
PO Box 144870
Salt Lake City, UT 84114

Kent L. Jones, State Engineer/Director
Utah Division of Water Rights
1594 W. North Temple, Suite 220
PO Box 146300
Salt Lake City, UT 84114

Eric Millis, Director
Utah Division of Water Resources
1594 W. North Temple, Suite 310
PO Box 146201
Salt Lake City, UT 84114

Mike Fowlks, Director
Utah Division of Wildlife Resources
1594 W. North Temple, Suite 2110
PO Box 146301
Salt Lake City, UT 84114

Sindy Smith, RDCC Coordinator
Resource Development Coordinating Committee
Public Lands Policy Coordination Office
PO Box 141107
Salt Lake City, UT 84114

Dominique Talahaftewa, Administrative Assistant
Utah Division of Indian Affairs
250 North 1950 West
Salt Lake City, UT 84116

Jeff Rasmussen, Director
Utah Division of State Parks and Recreation
1594 West North Temple, Suite 116
Po Box 146001
Salt Lake City, UT 84114

Kathy Holder, Floodplain Manager
Utah Department of Public Safety, Division of Comprehensive Emergency Management
1110 State Office Building, 350 N. Capitol Blvd
PO Box 141710
Salt Lake City, UT 84114

Cory Jensen, State Historic Preservation Officer *
Utah State History
State Historic Preservation Office
300 S. Rio Grande Street
Salt Lake City, UT 84101

Native American Tribes

Darren Parry, Chairman *
Northwestern Band of Shoshone Nation
707 N. Main Street
Brigham City, UT 84302

Patty Timbimboo-Madsen, Cultural Specialist *
Northwestern Band of Shoshone Nation
707 N. Main Street
Brigham City, UT 84302

Shanan Martineau, Cultural Resource Director *
Northwestern Band of Shoshone Nation
6060 West 3650 North
Ivins, UT 84738

Nathan Small, Chair *
Shoshone-Bannock Tribes of the Fort Hall Reservation
PO Box 306
Fort Hall, ID 83203

Louise Dixey, Cultural Resources Director *
Shoshone-Bannock Tribes of the Fort Hall Reservation
PO Box 306
Fort Hall, ID 83203

Rupert Steele, Tribal Chairman *
Confederated Tribes of the Goshute Reservation
PO Box 6104, 195 Tribal Center Road
Ibapah, UT 84034

Mary Pete-Freeman, Roads Planning Coordinator *
Confederated Tribes of the Goshute Reservation
PO Box 6104, 195 Tribal Center Road
Ibapah, UT 84034

Tamra Borchardt-Slayton, Tribal Chairperson *
Paiute Indian Tribe of Utah
440 N. Paiute Drive
Cedar City, UT 84721

Dorena Martineau, Cultural Resources Manager *
Paiute Indian Tribe of Utah
440 N. Paiute Drive
Cedar City, UT 84721

Candace Bear, Chairperson *
Skull Valley Band of Goshute Indians
407 Skull Valley Rd.
Skull Valley, UT 84029

Shaun Chapoose, Chairman *
Ute Indian Tribe/Uintah and Ouray Reservation
Uintah & Ouray Tribal Business Committee
PO Box 190
Fort Duchesne, UT 84026

Betsy Chapoose, NAGPRA Representative *
Ute Indian Tribe/Uintah and Ouray Reservation
PO Box 190
Fort Duchesne, UT 84026

Local /Regional Entities

Mark Johnson, Chief Administrative Officer
Ogden City
2549 Washington Blvd
Ogden, UT 84401

Janene Eller-Smith, Executive Director
Ogden City Council
2549 Washington Blvd
Ogden, UT 84401

Doug Larsen, Economic Development
Weber County
2380 Washington Blvd
Ogden, UT 84401

Callie New, Transportation Planner
Wasatch Front Regional Council
295 North Jimmy Doolittle Road
Salt Lake City, UT 84116

Benjamin Quick, General Manager
Ogden River Water Users Association
471 West 2nd Street
Ogden, UT 84404

Melissa Call, Public Relations, Marketing
IHC/McKay-Dee Hospital
4401 Harrison Blvd
Ogden, UT 84403

Norm Tarbox, Interim President
Weber State University
3850 Dixon Parkway
Miller Administration Building Room 302
Ogden, UT 84408

Dan Schroeder, Conservation Chair
Sierra Club
Ogden Group Sierra Club
PO Box 1821
Ogden, UT 84402

Consulting Parties

Greg Montgomery, Planning Manger *
Ogden City Landmarks Commission
2549 Washington Blvd
Ogden, UT 84401

Kirk Huffaker, Executive Director *
Utah Heritage Foundation/Preservation Utah
375 N. Canyon Rd
Salt Lake City, UT 84103

Shalae Larsen *
Trolley District Community Council
2604 Jefferson Ave
Ogden, UT 84401

Example Letter 1 - EA Notification Letter



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION VIII
Colorado, Montana,
North Dakota,
South Dakota,
Utah and Wyoming

1961 Stout Street
Suite 13301
Denver, Colorado 80294
(303) 362-2400 (voice)

December 9, 2018

Bryan Bowker
Director
Bureau of Indian Affairs
Western Regional Office
2600 North Central Avenue, 4th Floor Mailroom
Phoenix, AZ 85004-3050

Subject: Notice of Availability of and Request for Comments on the Ogden/Weber State University Transit Project Environmental Assessment

Dear Mr. Bryan Bowker,

On behalf of the Utah Transit Authority (UTA), this letter transmits details regarding the Environmental Assessment (EA) for the Ogden/Weber State University Transit Project in Weber County, Utah. As an invited consulting party, you are entitled to information about our efforts to address cultural resources in the project study area and to provide input into the Federal Transit Administration's (FTA) process of identifying cultural resources and evaluating their significance.

In accordance with the 36 CFR Part 800 regulations published by the Advisory Council on Historic Preservation, FTA requests that you review this information. We would greatly appreciate any comments on this document by **January 20, 2019**.

Project Background

With this project, UTA proposes to replace the existing route 603 bus service with a bus rapid transit system in Ogden, Utah. The project is intended to provide a connection from FrontRunner and the Ogden Intermodal Transit Center to Weber State University and McKay-Dee Hospital. The current 6.5-mile 603 bus route is one of Weber County's busiest, with an average of 1,610 weekday boardings in 2017. By enhancing the transit facilities and amenities that connect employment and educational hubs, residential areas, shopping areas, civic resources, historic districts, cultural landmarks, and entertainment venues in central Ogden, the project would further improve mobility and accessibility for the people who live, work, and visit the project study area.

The EA will be available for public review and comment from **December 9, 2018 to January 20, 2019**. During this period, the EA will be available for review at the following locations:

- Project website – <https://www.rideuta.com/About-UTA/Active-Projects/Ogden-BRT>

Example Letter 1 - EA Notification Letter

- UTA Headquarters – 669 West 200 South, Salt Lake City, Utah 84101
- UTA Ogden Intermodal Transit Center – 2393 Wall Avenue, Ogden, Utah 84401
- Ogden City Offices – 2549 Washington Boulevard, Ogden, Utah 84401
- Weber County Main Library – 2464 Jefferson Avenue, Ogden, Utah 84401
- Weber State University Stewart Library – 3921 Central Campus Drive, Ogden, Utah 84408

Public comments on the EA can be submitted in the following ways:

- **Email** to: hearingofficer@rideuta.com
- **Online** at: <https://www.rideuta.com>
- **At the public open house**
- **U.S. postal mail** to the following address:

Ogden/Weber State University Transit Project
Attn: Hal Johnson
Utah Transit Authority
669 West 200 South
Salt Lake City, UT 84101

A public open house to be held at the following location:

Ogden High School
2828 Harrison Boulevard
Ogden, UT 84403
Wednesday January 9, 2019
5:30 pm to 7:30 pm

At the open house, UTA will have the EA available for review and comment, along with information about the project. UTA representatives will be present to review and discuss the EA, provide information and answer questions. Additional information is also available on the project website at <https://www.rideuta.com/About-UTA/Active-Projects/Ogden-BRT>.

If you have any concerns, questions, or would like any additional information, please contact Kevin Osborn at 303-362-2393 or at kevin.osborn@dot.gov.

Thank you for your attention to this update and any comments you have.

Sincerely,



Kevin Osborn
Transportation Program Specialist
Federal Transit Administration, Region 8

cc: Autumn Hu, NEPA Project Administrator, UTA



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION VIII
Colorado, Montana,
North Dakota,
South Dakota,
Utah and Wyoming

1961 Stout Street
Suite 13301
Denver, Colorado 80294
(303) 362-2400 (voice)

December 9, 2018

Christopher Wilson
Program Analyst
Advisory Council on Historic Preservation
Office of Federal Agency Programs
401 F Street NW, STE 308
Washington, DC 20001-2637

Subject: Notice of Availability of and Request for Comments on the Ogden/Weber State University Transit Project Environmental Assessment

Dear Mr. Christopher Wilson,

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The EA will be available for public review and comment from **December 9, 2018 to January 20, 2019**. During this period, the EA will be available for review at the following locations:

- Project website – <https://www.rideuta.com/About-UTA/Active-Projects/Ogden-BRT>

Example Letter 2 - EA Notification Letter with Section 106 Updates

- UTA Headquarters – 669 West 200 South, Salt Lake City, Utah 84101
- UTA Ogden Intermodal Transit Center – 2393 Wall Avenue, Ogden, Utah 84401
- Ogden City Offices – 2549 Washington Boulevard, Ogden, Utah 84401
- Weber County Main Library – 2464 Jefferson Avenue, Ogden, Utah 84401
- Weber State University Stewart Library – 3921 Central Campus Drive, Ogden, Utah 84408

Public comments on the EA can be submitted in the following ways:

- **Email** to: hearingofficer@rideuta.com
- **Online** at: <https://www.rideuta.com>
- **At the public open house**
- **U.S. postal mail** to the following address:

Ogden/Weber State University Transit Project
Attn: Hal Johnson
Utah Transit Authority
669 West 200 South
Salt Lake City, UT 84101

A public open house to be held at the following location:

Ogden High School
2828 Harrison Boulevard
Ogden, UT 84403
Wednesday January 9, 2019
5:30 pm to 7:30 pm

At the open house, UTA will have the EA available for review and comment, along with information about the project. UTA representatives will be present to review and discuss the EA, provide information and answer questions. Additional information is also available on the project website at <https://www.rideuta.com/About-UTA/Active-Projects/Ogden-BRT>.

Section 106 Update

For the EA analysis, FTA conducted more-detailed cultural resource surveys and investigations within the area of potential effects (APE). The Ogden/Weber State University Transit Project team has produced two reports, *An Archaeological Resources Assessment for the Ogden-Weber State University Bus Rapid Transit Project* (May 27, 2016) and *Revised – Selective Reconnaissance-Level Historic Structures Assessment for the Ogden-Weber State University Bus Rapid Transit Project* (March 29, 2018). After the completion of the surveys and during the preliminary engineering and design process, the project team attempted to avoid and minimize impacts to all archaeological and historic sites to the extent possible.

The project team also prepared and submitted a Determination of Eligibility and Finding of Effect (DOE/FOE) to the Utah State Historic Preservation Office (SHPO) on October 10, 2018. The proposed project would have an **adverse effect** on one historic property (1341 Country Hills Drive, Ogden UT) eligible for inclusion in the National Register of Historic Places (NRHP). FTA has determined that

Example Letter 2 - EA Notification Letter with Section 106 Updates

mitigation measures for the adverse effect to this property from the proposed project have been completed, and the SHPO concurred on October 22, 2018.

Section 4.15 and Appendix B13 of the EA describe the expected impacts to historic properties from the proposed project. Appendix C2 of the EA includes copies of correspondence pertaining to historic properties.

If you have any concerns, questions, or would like any additional information, please contact Kevin Osborn at 303-362-2393 or at kevin.osborn@dot.gov.

Thank you for your attention to this update and any comments you have.

Sincerely,

A handwritten signature in black ink, appearing to read 'K Osborn', written over a horizontal dashed line.

Kevin Osborn
Transportation Program Specialist
Federal Transit Administration, Region 8

cc: Autumn Hu, NEPA Project Administrator, UTA



Appendix B

Response to Comments

**Ogden/Weber State University Transit Project
Environmental Assessment Comments and Responses**

Comment Response Number	Number of Comments	Subject	Comment Summary	FTA and UTA Response
Design				
1	6	Bus Type	Preference stated for electric buses on the route to limit emissions and noise on the route.	The bus propulsion type will be determined in final design based on cost and feasibility. UTA recognizes local community member's desire for electric buses.
2	3	Station	Desire for a station located at 43rd Street and Harrison Blvd near retail development.	Stops on the project were consolidated in order to provide faster transit service. A station at 43rd Street is not part of the proposed action. UTA may explore building a station near this location in the future if demand warrants.
3	2	Station	Stated that the station at 30th Street & Harrison Blvd is needed now.	Stops on the project were consolidated in order to provide faster transit service. The station at 30th and Harrison, was identified as a future stop which will be constructed as demand warrants. Subject to funding, UTA may explore building this station as part of the initial project.
4	1	Station	Stated that the station at 23rd Street & Lincoln Ave is needed now.	Stops on the project were consolidated in order to provide faster transit service. The station at 23rd Street & Lincoln Ave, was identified as a future stop which will be constructed as demand warrants. Subject to funding, UTA may explore building this station as part of the initial project.
5	2	Station	Desire for covered stops.	Stations will include covered canopies, benches, and other amenities.
6	1	Station	Idea to reduce plastic waste: install water bottle refill machines at the stations.	Noted, station amenities will be determined during final design.
7	1	Pedestrian	Desire stated for improved sidewalks.	Sidewalk improvements will be made within the project corridor during construction.
8	1	Pedestrian	Desire for a pedestrian light at 25 th Street.	Unclear of exactly where this comment is referring on 25th Street. This project will include pedestrian enhancements near the BRT stations.
9	1	Parking	Desire for no parking signs on the corridor.	"No Parking" signs will be installed where appropriate along the corridor as part of the construction of the project.
Transit Service				

Comment Response Number	Number of Comments	Subject	Comment Summary	FTA and UTA Response
10	2	Service	Desire for Sunday service.	The BRT would operate 7 days per week, between 4:30 AM and 12:30 AM the following day at 10- to 15-minute frequencies on weekdays and Saturday, and reduced service on Sunday. Sunday service would be similar to existing service provide by route 603.
11	1	Service	Desire for additional weekend service.	See response to comment 10.
12	1	Service	Desire for 10-minute service.	See response to comment 10.
13	1	Bus connections	Question about whether there would be feeder routes connecting to the project such as paratransit routes. Desire for a Flex service (deviation route) in and out of Country Hills Square condos and in/out of McKay Dee Hospital stated.	UTA's Paratransit Service ADA program is for people with physical, cognitive or visual disabilities who are functionally unable to independently use the UTA fixed route bus service either all of the time, temporarily or only under certain circumstances. This service will continue to be operated, as per federal laws. The BRT will replace route 603. Other local routes will continue to run in Ogden. Figure 5 of the EA shows the local bus routes in the project area. As discussed in Section 3.2.5 of the EA, the enhanced station at the Dee's Event Center, just east of the McKay Dee Hospital, would enable passengers to transfer between the BRT route and local bus routes. UTA's service planners will evaluate the need for route changes or new feeder routes as this project gets implemented.
Concerns				
14	2	Light Pollution	Concerns with light pollution	The potential to increase light pollution has been added as a concern under the Visual and Aesthetic section of the FONSI and the mitigation table. Station lighting will be designed to minimized light pollution while improving safety.
15	2	Left Turns on Harrison	Concern stated about Harrison Boulevard and the potential impacts of eliminating left turns from or to Harrison Boulevard from 31st Street south to 37th Street where the BRT line enters the Weber State University campus. Additionally, a concern was stated about turn signals currently on Harrison not being long enough and a worry that the BRT would make it worse.	UTA will work closely with UDOT during final design to ensure that the roadway operates efficiently for auto users.

Comment Response Number	Number of Comments	Subject	Comment Summary	FTA and UTA Response
16	1	Floodplain	FEMA's major concern is if this project is located within a mapped Special Flood Hazard Area as development in these areas requires further consideration. They recommend that project staff contact Mr. Jared Andersen, Staff Engineer, at 801-399-8009, to receive further guidelines regarding the Floodplain Comments of the Ogden/Weber State University Transit Project, which might be relative to the regulations and policies of the National Flood Insurance Program.	UTA contacted Mr. Jared Andersen, Weber County Engineer, and provided him with a copy of the EA and the Floodplains Technical Report (EA Appendix B11) for review. Mr. Andersen concurred with the assessment of the report and agree that there will be no significant impact associated with the project. As requested, UTA will coordinate with Mr. Andersen during the design phase of the project.
17	1	Business	Concern stated about the loss of commercial frontage at 32nd Street and Harrison Blvd. Particularly concerned about the 7-Eleven and Carriage Cleaners.	UTA will be purchasing the 7-Eleven and Carriage Cleaners on 32nd Street in order to accommodate the BRT project. Ogden City and UTA have been working on a study, Ogden OnBoard, to promote economic development along the corridor. See the project website for more details http://ogdenonboard.com/
18	1	Land use & Ridership	Concerned about the BRT alignment through single-family residential areas. Does not think this level of density justifies bus rapid transit.	Route 603, one of UTA's top performing bus routes, currently operates on a similar alignment as the BRT. The proposed project builds upon the success of route 603, providing improved transit service and promoting economic development. It will connect the Ogden FrontRunner station, downtown Ogden, Weber State University, and McKay Dee Hospital, as well as provide residents on 25th Street and Harrison Boulevard access to other parts of the community.

Comment Response Number	Number of Comments	Subject	Comment Summary	FTA and UTA Response
19	1	Cultural Resource	<p>The Shoshone Bannock Tribes HeTO has reviewed the EA and would like the rich pre-contact history of the proposed project area acknowledged and included in the EA. The proposed project will also consist of ground disturbing activities, therefore, the Tribes HeTO requested the following inadvertent discovery clause incorporated into the construction plan.</p> <p><i>In the event of an inadvertent discovery (cultural resources and/or human remains) the Tribes HeTO requests a Stop Work Order implemented regarding construction activities and immediate notification to the Tribes HeTO. Construction shall cease until proper treatment of cultural resources and/or human remains is achieved.</i></p>	<p>The pre-contact history of the tribes has been added to the Cultural Resources section for the FONSI. During construction, inadvertent discovery of cultural resources or human remains will be managed in accordance with the Memorandum of Agreement (MOA) between FTA and SHPO for this project. As stipulated in the MOA, if Native American human remains are discovered, FTA and UTA will comply with the Federal Native American Protection and Repatriation Act (NAGPRA) of 1990 and any state equivalent.</p>
20	1	Stops	Concern stated about loss of stops on the route.	<p>The proposed project will consolidate stops on route 603 (which this project replaces) in order to provide faster service on the corridor. This project includes 13 stations with 3 future stations planned as ridership demands. The local bus route 625 will continue to provide service to existing bus stops on Harrison Boulevard. Route 455 is also planned to continue to provide service to existing stops on Harrison Boulevard south of 30th Street.</p>
21	1	ADA	Concern stated with ADA accessibility due to loss of stops (particularly at 30th Street).	<p>A detailed Title VI Analysis, which ensures transit service is provided in a non-discriminatory manner, will be conducted before this project is implemented.</p>
22	1	Safety	Concern with pedestrian safety at center stations.	<p>Safety enhancements will be included in the final design to ensure pedestrians can safely access the system.</p>
Clarification/Additional Information Requested				
23	1	Need Info	<p>The Bureau of Reclamation wishes to have a copy of the cultural resources inventory for this project when it is available, to see which sites may be impacted by the proposed project.</p>	<p>The cultural resources inventory was included in the EA Appendix B13 Historic Technical Report. Instructions on how to download an electronic copy was emailed to Zac Nelson (znelson@usbr.gov) on 1/28/2018.</p>

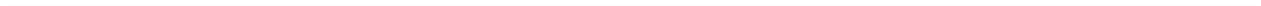
Comment Response Number	Number of Comments	Subject	Comment Summary	FTA and UTA Response
24	1	Station/Bus	Question about the design of the center station. Wanted to know if the project would be like the Provo/Orem BRT, with doors on both side of the buses or similar to the 35Max.	Buses will only have doors on one side of the vehicle, with separate platforms for each direction of travel. Center stations will be similar to those on the 35MAX in Salt Lake County.
25	1	Pedestrian	Question about whether or not there would be pedestrian access between the student housing and Dee Events Center.	A sidewalk will run parallel to the bus lanes between the main campus, Wildcat Village (student housing), and the Dee Events Center. Preliminary design drawings were provided in Appendix D of the Environmental Assessment.
26	1	Alignment	Question about how the extra Dee Events Center to center campus trips (shuttle) will turn around to change directions.	BRT would turn around at the Dee Events Center parking lot. The exact route will be determined in final design.
27	1	Alignment	A desire for detailed maps around the Dee Events Center was stated.	Figure 15 and 16 in the Environmental Assessment show the preliminary designs for the project near the Dee Events Center.
28	1	LPA Clarification	Stated support for the project, but was confused about the final mode and alignment.	The Locally Preferred Alternative (LPA) is a bus rapid transit (BRT) line which will connect the Ogden FrontRunner station, downtown Ogden, Weber State University, and McKay Dee Hospital. It will run on 23rd Street to Washington Boulevard and connect to 25th Street. From here it will run to Harrison Boulevard and connect to Weber State University. Exclusive bus lanes will began on Harrison Boulevard and run through WSU's campus to the Dee Events Center. The BRT will connect to McKay Dee Hospital via 4400 South. See the Environmental Assessment for detailed maps.
29	1	ADA Accessibility	Wanted to know if the project would be wheel chair and stroller friendly.	As per the Americans with Disabilities Act of 1990, UTA designs its projects to be accessible to all community members.
Other				
31	1	Environmental Justice	Desire for the service to be accessible to poorer communities with assisted programs	UTA has existing programs in place to ensure that the system is accessible to all community members.
Project Support				
30	3	Support Project	Stated support for the project.	Noted.



U.S. Department
of Transportation
**Federal Transit
Administration**

Appendix C

Memorandum of Agreements



MEMORANDUM OF AGREEMENT

**BETWEEN
FEDERAL TRANSIT ADMINISTRATION (FTA) AND
UTAH STATE HISTORIC PRESERVATION OFFICER (SHPO)**

**REGARDING
THE OGDEN / WEBER STATE UNIVERSITY TRANSIT PROJECT
WEBER COUNTY, UTAH**

WHEREAS, the FTA has determined that, should FTA provide financial assistance for construction of the Ogden/Weber State University Transit Project, it will constitute a Federal undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) and 36 CFR 800; and

WHEREAS, Section 106 of the NHPA, 16 USC 470 *et seq.* requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings; and

WHEREAS, the proposed federally assisted undertaking is the construction of the Ogden/Weber State University Transit Project (the Project) which is described in detail in the *Ogden/Weber State University Transit Project Environmental Assessment, December 2018*; and

WHEREAS, the FTA has determined that the construction of the Project will have an adverse effect on one historic structure at 1341 East Country Hills Drive in Ogden, Utah, which has been previously determined to be eligible for the National Register of Historic Places (NRHP); and

WHEREAS, the historic structure at 1341 East Country Hills Drive in Ogden, Utah is located within the area of potential effect (APE) of the Weber State University (WSU) campus master plan, as identified in *A Cultural Resources Assessment for the Weber State University Master Plan—Property Acquisitions & Demolitions, Ogden, Weber County, Utah, August 27, 2016*, which was initiated by WSU; and

WHEREAS, a Memorandum of Agreement (MOA) between WSU and SHPO regarding the campus master plan property acquisitions and demolitions was executed on September 14, 2016 to account for the adverse effects of the actions on historic properties, including the historic structure at 1341 East Country Hill Drive; and

WHEREAS, the SHPO acknowledged in a letter to WSU dated July 3, 2018 (Attachment A), that the mitigation commitments stipulated in the MOA between WSU and SHPO had been fulfilled; and

WHEREAS, the FTA has consulted with the SHPO pursuant to 36 CFR 800 and has notified the ACHP of its adverse effect determination pursuant to 36 CFR 800.6(a)(1) and the ACHP has determined that their participation in the consultation to resolve adverse effects is not needed; and

WHEREAS, UTA has participated with the FTA in the consultation with the SHPO and has been invited to be a signatory to the MOA to reflect its commitment to the measures described in this MOA.

NOW, THEREFORE, the FTA, UTA and the SHPO agree that the proposed federally assisted undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on the historic property listed above and identified in the Environmental Assessment.

STIPULATIONS

The FTA shall ensure that the terms of this MOA are carried out and will require, as a condition of any approval of FTA funding for the Project, adherence to the stipulations of this Agreement. UTA, as the project sponsor, will take the lead on the implementation of each stipulation unless otherwise noted in the stipulation.

- I. **MITIGATION:** The following measures have been implemented to mitigate adverse effects to the historic property located at 1341 East Country Hills Drive in Ogden, Utah:
 - A. Preparation of Intensive Level Survey (ILS) form for the adversely affected historical subdivision – Halverson Subdivision; and
 - B. Preparation of a neighborhood history for the area including the Halverson Subdivision.
 - C. SHPO acknowledged in a letter to FTA dated October 22, 2018 (Attachment B) that mitigation has been completed for this undertaking.
- II. **DISCOVERY:** In accordance with 36 CFR 800.13(b), UTA is providing for the protection, evaluation, and treatment of any historic property discovered prior to or during construction. This stipulation specifies procedures to be followed by all UTA employees and all UTA contractors and subcontractors should any archaeological, historic, or paleontological resources be discovered during construction of the project. The procedures, which will be incorporated into all construction contracts, are as follows:
 - A. Immediately suspend construction operations in the vicinity of the discovery if a suspected historic, archaeological or paleontological item, feature, prehistoric dwelling site or artifact of historic or archaeological significance is encountered.

- B. Notify the UTA Project Manager for the project verbally of the nature and exact location of the discovery.
 - C. The UTA Project Manager for the project will contact the SHPO immediately and will consult with a qualified historian or archaeologist to advise SHPO and UTA regarding the significance and recommended disposition of the discovery.
 - D. The UTA Project Manager for the project will protect the discovered objects from damage, theft, or other harm while the procedures of this stipulation are being carried out.
 - E. UTA will consult with the SHPO in accordance with 36 CFR 800.13(b)(3) toward developing and implementing an appropriate treatment plan prior to resuming construction. SHPO will expedite its response time in consideration of the cost of the suspension of construction activities. The time necessary for the SHPO to advise UTA, and for UTA to handle the discovered item, feature, or site is variable and will depend on the nature and condition of the discovered item. UTA will not resume construction until SHPO has agreed to that resumption.
 - F. Should human remains be inadvertently discovered during construction, all project-related ground disturbances within 300 feet of the discovery shall cease immediately. The SHPO and most likely descendent Native American Tribes shall be notified as soon as possible. The relevant county sheriff or coroner shall also be notified as soon as practicable. UTA shall consult with these agencies and Tribes to determine the appropriate treatment of the remains. If it is determined that the remains are Native American, no project-related ground disturbance shall resume in the area of the discovery until written permission to do so is provided by SHPO. If Native American human remains are discovered, FTA and UTA will comply with the Federal Native American Protection and Repatriation Act (NAGPRA) of 1990 and any state equivalent.
- III. REPORTING: UTA shall provide any and all reports on activities carried out pursuant to this MOA to the SHPO, and upon request, to any other interested parties.
- IV. PERSONNEL QUALIFICATIONS: UTA shall ensure that all work carried out pursuant to this MOA is completed by or under the direct supervision of a person or persons meeting or exceeding the *Secretary of the Interior's Professional Qualification Standards for History and/or Archaeology* (36 CFR Part 61) as appropriate to the specific task.
- V. DURATION: This MOA will be null and void upon completion of the undertaking, as evidenced by FTA close-out of all grants related to the project, or ten (10) years from the date of execution of the MOA, whichever occurs first. Prior to such time, any of the Parties hereto may consult to reconsider the terms of the MOA and amend it in accordance with Stipulation VII below.

VI. DISPUTE RESOLUTION: Should SHPO object at any time to any actions proposed by UTA or the manner in which the terms of this MOA are implemented, UTA and SHPO shall consult to resolve the objection. If UTA or SHPO determines that the objection(s) cannot be resolved, it will notify FTA and FTA will attempt to resolve the issue. If the dispute cannot be resolved by parties, documentation will be forwarded on to ACHP and they may provide FTA/UTA advice.

Further, at any time during implementation of the measures stipulated in this MOA should an objection to any such measure be raised by a member of the public, UTA shall take the objections into account and consult as needed with the objecting party and the SHPO and FTA to resolve the objection.

VII. AMENDMENTS AND NONCOMPLIANCE: If any Party to this MOA determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that Party shall immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy, signed by all of the original signatories, is filed with ACHP. If the Parties cannot agree to appropriate terms to amend the MOA, any signatory may terminate the MOA in accordance with Stipulation VIII, below.

VIII. TERMINATION: If an MOA is not amended following the consultation set out in Stipulation VII, it may be terminated by any signatory.

Execution of this MOA by the FTA, SHPO, and UTA, the submission of documentation and filing of this MOA with ACHP pursuant to 35 CFR 800.6(b)(1)(iv) prior to FTA's approval of this undertaking, and implementation of its terms, is evidence that the FTA has taken into account the effects of this undertaking on historic properties, and has afforded the SHPO and ACHP an opportunity to comment on the effects of the project on historic properties.

SIGNATORIES

FEDERAL TRANSIT ADMINISTRATION



Date 02/22/2019

Cindy Terwilliger, FTA Region VIII Administrator

UTAH STATE HISTORIC PRESERVATION OFFICE



Date 2/25/2019

Chris Hansen, Preservation Planner/Deputy SHPO,
Utah State Historic Preservation Office

INVITED SIGNATORY

UTAH TRANSIT AUTHORITY

DocuSigned by:



Date 2/25/2019

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Steve Meyer, UTA Interim Executive Director



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Jill Remington Love
Executive Director
Department of
Heritage & Arts



Brad Westwood
Director

July 3, 2018

Craig Sears
Real Property Business Manager
Weber State University

RE: WSU Master Plan Acquisitions Mitigation

For future correspondence, please reference Case No. 16-0844

Dear Mr. Sears:

The Utah State Historic Preservation Office received your submission of the documentation for the above-referenced project in March of 2017. SHPO acknowledges that the materials submitted to our office met the Stipulations outlined in the Memorandum of Agreement (MOA finalized 9-14-2016) and that the terms of the MOA have been fulfilled. Thank you for your work on this.

This information is provided to assist with state law responsibilities as per Utah Code Section 9-8-404. If you have questions, please contact me at (801) 245-7239 or by email at clhansen@utah.gov.

Sincerely,

Christopher Hansen
Preservation Planner/Utah SHPO



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Jill Remington Love
Executive Director
Department of
Heritage & Arts



Don Hartley
Director
State Historic Preservation Officer

October 22, 2018

Kevin Osborn
Federal Transit Administration, Region VIII
1961 Stout Street, Suite 13301 | Denver, CO 80294

RE: Ogden/Weber State University Transit Project - Case No. 16-0616/18-2313 Request for Consultation Regarding Determinations of Eligibility and Findings of Effect and Notification of Section 4(f) De Minimis and Use Findings (SHPO Updated Concurrence Letter)

For future correspondence, please reference Case No. 18-2313

Dear Mr. Osborn:

The Utah State Historic Preservation Office received your documentation and request for our comment on the above-referenced undertaking on October 11, 2018.

Based on the information provided to our office, we concur with your new area of potential effect, determinations of eligibility, finding of effect, and that mitigation (see corresponding SHPO Case No. 16-0616) has been completed for this undertaking.

This letter serves as our comment on the determinations you have made within the Section 106 consultation process as specified in §36CFR800. If you have questions, please contact me at (801) 245-7239 or by email at clhansen@utah.gov.

Sincerely,

Christopher Hansen, Preservation Planner & Deputy SHPO
Utah State Historic Preservation Office



Appendix D

Mitigation Measures

Ogden/Weber State University Transit Project

Mitigation Measures

Resources	Impact	Mitigation
Land Use and Zoning	The project is consistent with and complementary to existing land uses and zoning and complies with regional and local plans and policies.	None
Land Acquisitions, Displacements and Relocations of Existing Uses	<p>Carriage Cleaners, at 3205 S. Harrison Boulevard, would need to be acquired, demolished, and relocated.</p> <p>7-Eleven at 3195 S. Harrison Boulevard would lose its sign and gas pumps.</p> <p>Minor strip take required at approximately 15 residential and business parcels on Harrison Boulevard.</p> <p>Residential property at 1341 Country Hills Drive would need to be acquired, demolished, and resident relocated.</p> <p>Minor strip take at 1348 Country Hills Drive.</p> <p>Temporary construction impacts may include use of property for temporary construction easements or equipment staging; restricted access; and road and bicycle/pedestrian closures and detours.</p>	<p>Property acquisitions will be conducted in accordance with the provisions in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC §61 and the implementing regulation 49 CFR 24). This process will ensure just compensation for all properties and will minimize any adverse effects on the current owners and residents. UTA will prepare a relocation plan in advance of displacements.</p>
Social Conditions	<p>The proposed action would have a positive impact on the social conditions of the area.</p> <p>Temporary construction impacts would include temporary changes in local travel patterns; roadway and sidewalk alternate routes or detours and traffic congestion; and dust and noise impacts to adjacent neighborhoods. In addition, highway users may experience delays during construction.</p>	<p>See mitigations under:</p> <ul style="list-style-type: none"> • Air Quality and Energy • Noise and Vibration • Transportation

Resources	Impact	Mitigation
Economic Conditions	<p>Minimal impacts are anticipated and would be offset by long-term benefits for businesses and the local economy because of improved mobility and increased economic investment throughout the proposed transit corridor.</p> <p>During construction, adjacent businesses may experience temporary noise, dust, and visual changes; temporary access modifications to adjacent businesses, which may result in a temporary reduction in retail revenue; and increased construction employment and revenues from construction workers.</p>	<p>See mitigations under:</p> <ul style="list-style-type: none"> • Air Quality and Energy • Noise and Vibration • Transportation
Environmental Justice	<p>No disproportionately high or adverse impacts to minority or low-income populations would occur as a result of this project. The general population will benefit from increased mobility, connectivity, and access to transit.</p>	None
Cultural Resources	<p>The proposed Project would result in one adverse effect to a historic property at 1341 East Country Hills Drive. SHPO has concurred with FTA's determined that mitigation measures for the adverse effect to 1341 East Country Hills Drive from the proposed project have been completed.</p> <p>Some stations would be placed near historic structures.</p> <p>Inadvertent discovery of cultural resources and/or human remains may be encountered during construction.</p>	<p>Mitigations for 1341 East Country Hills Drive, as stipulated in the Memorandum of Agreement (MOA) between FTA and SHPO for this project, included documentation of the Halverson Subdivision and preparation of a neighborhood history, and were completed by WSU prior to July 2018. The stations will be designed to complement the surrounding areas and would not unduly compromise the historic setting of the historic properties.</p> <p>Inadvertent discovery of cultural resources or human remains will be managed in accordance with the Memorandum of Agreement (MOA) between FTA and SHPO for this project.</p>
Visual and aesthetic resources	<p>The proposed action will create minimal visual and aesthetic impacts. There is a potential to increase light pollution.</p>	<p>Station lighting will be designed to minimize light pollution while improving safety.</p>

Resources	Impact	Mitigation
Parks and Recreation	Parks and recreation resources are located within one-half mile of the proposed transit corridor, but none would not physically affected by the proposed project.	None
Section 4(f) Resources	The proposed action would result in one full use of a historic property at 1341 Country Hills Drive.	See mitigations under <ul style="list-style-type: none"> • Cultural Resources
Farmland	No farmlands are located in the Study Area.	None
Air Quality and Energy	Construction activities could generate fugitive dust and emissions from use of fuel.	<p>The construction contractor will submit a Fugitive Dust Control Plan to the Utah Division of Air Quality (UDAQ) as required by Utah Administrative Code Rule R307-309, and will comply with the Fugitive Dust Control Plan.</p> <p>Construction trucks will be routed and scheduled to reduce travel delays and thereby prevent unnecessary fuel consumption and pollutant emissions.</p>
Noise and Vibration	<p>The proposed action would have no noise or vibration impacts.</p> <p>Temporary noise and vibration impacts associated with construction activities and equipment could occur.</p>	<p>Construction activities would be carried out in compliance with all applicable local noise regulations.</p> <p>Control measures for noise and vibration may include the following:</p> <ul style="list-style-type: none"> • Avoiding nighttime construction in residential neighborhoods. • Using quieter equipment with enclosed engines or high-performance mufflers. • Locating stationary construction equipment as far as possible from noise-sensitive sites. • Operating earth-moving equipment as far away from sensitive sites as possible. • Avoiding impact pile-driving if possible. • Avoiding vibratory rollers and packers near sensitive areas.
Water Resources	Construction that disturbs more than 1 acre would need to demonstrate compliance with the State's general permit for stormwater construction discharges.	Temporary impacts will be controlled through best management practices (BMPs) and Utah Pollutant Discharge Elimination System (UPDES) permit requirements.

Resources	Impact	Mitigation
	Along the proposed transit corridor, surface water is managed via a system of catch basins, stormwater pipes, and detention basins; these could potentially be impacted by proposed project.	Final design process will include coordination with Ogden City, Weber State University, the Bureau of Reclamation, and other service providers to ensure that design is compatible with existing water system.
Wetlands	No wetlands were identified in the Study Area	None
Flooding and Floodplain Management	The proposed project would include road widening to accommodate the bus-only lanes, which would encroach on the Sullivan Hollow regulatory floodplain (at about 33 rd Street and Harrison Boulevard).	<p>UTA or its construction contractor will obtain floodplain development permits for the segment that would encroach on the Sullivan Hollow regulatory floodplain.</p> <p>The design of the roadway widening to accommodate the bus-only lanes will follow the more stringent of FEMA requirements or local floodplain ordinances.</p> <p>UTA or its construction contractor will also obtain a stream alteration permit from the Utah Division of Water Rights.</p> <p>Based on the nature of the expected impacts to the Sullivan Hollow regulatory floodplain, pre- and/or post-project revisions to FEMA maps might be required.</p> <p>Detailed floodplain impact analyses could require significant time and effort and should be performed early in project development to avoid potential coordination and permitting delays.</p>
Mineral Resources, Geology, and Soils	<p>Portion of the alignment through the Weber State University campus would include construction of the busway on steep slopes with retaining walls.</p> <p>There is potential for soil erosion during construction which could impact soil stability and water quality.</p>	<p>A geotechnical survey of the alignment through the University campus would be required during the final design phase of the project.</p> <p>UTA would design the BRT system to withstand seismic effects using the best available technology.</p> <p>Erosion and sediment control plan would be developed and implemented. Also see mitigation under Water Resources</p>

Resources	Impact	Mitigation
Hazardous Materials	Underground storage tanks at fueling stations have been identified near the proposed stations on 30th Street and 32nd Street.	<p>Prior to beginning construction, UTA will confirm the locations of all additional USTs near the alignment.</p> <p>If UST sites can't be avoided, the sites would be closed in accordance with state and federal regulations.</p>
Public Safety and Security	Minimal to no impacts are anticipated. During construction, roadway closures and detours may cause temporary impacts to police, fire, and emergency providers.	<p>See mitigation under:</p> <ul style="list-style-type: none"> • Transportation
Utilities	Minimal to no direct and indirect impacts to Study Area utilities are anticipated. Construction could cause short-term impacts to utilities.	<p>UTA will coordinate with local jurisdictions during the final design phase of the project to determine impacts on utility and appropriate utility treatments.</p> <p>The construction contractor will coordinate with Ogden City public utilities, Weber State University, or other utility companies to plan work activities so that any utility disruptions to a business occur when the business is closed or during off-peak times.</p> <p>Residents and businesses would be informed as soon as possible of any planned utility disruptions.</p>
Transportation	<p>Traffic pattern on Harrison would be slightly modified due to addition of the bus-only lanes.</p> <p>Construction activities can disrupt vehicle and pedestrian access at different locations and times throughout project construction. Construction could involve temporary lane closures or detours in the vicinity of the project.</p> <p>Construction could temporarily affect the speed and reliability of the existing bus service, and could require closing bus stops.</p>	<p>UTA will work with UDOT during the final design phase to properly sign and mark intersections to ensure safety for pedestrian and vehicles.</p> <p>UTA will work with all stakeholders during final design and construction to and provide vehicle and pedestrian access to properties, businesses, and community services in the construction zone. UTA, in coordination with UDOT and Ogden City, will prepare and implement a traffic-management plan. UTA will conduct public outreach to advise the community on the project schedule, and will provide updates on changes in access and traffic patterns.</p> <p>Temporary bus stops would be provided nearby during the active construction period.</p>