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Envision Utah

February 12, 2007

FEB 14 2007

Dave Kilmurray
HDR
3995 South 700 East
Salt Lake City, UT 84037

SUBJECT: Air Quality Conformity and Congestion Management Process:
SR-108 from Antelope Dr. to Midland Dr. to 1900 West [STP-0108(13)4e]
Hinckley Dr. Extension from 1900 West to Midland Dr. [STP-0079(2)0]

The SR-108 project from Antelope Drive to Midland Drive and the Hinckley Drive Extension from Midland Drive to 1900 West are included in the current 2030 Regional Transportation Plan (RTP) and the 2007-2012 TIP. In a letter dated January 20, 2004 the Federal Highway Administration and the Federal Transit Administration found that the Wasatch Front Regional Council 2030 Long Range Plan conforms to the air quality goals of the State Implementation Plan. The FHWA and FTA also found that the 2007-2012 TIP conforms to the State Implementation Plan as stated in a letter dated September 28, 2006.

Enclosed is a copy of the original Congestion Management Process (CMP) justification for the above project for the current RTP. In the CMP analysis the projects were identified as 2000 West in Davis County and Midland Drive in Weber County. The original CMP analysis was based on v/c ratios and LOS "D" threshold.

At the time of this writing an updated RTP is being prepared including a new CMP analysis of capacity increasing projects. The above mentioned projects are included in the CMP for the updated 2030 RTP which is still in draft form. The new CMP uses the travel model to evaluate the congestion reduction benefits of various strategies for Transportation System Management (TSM) and Transportation Demand Management (TDM). Like the previous CMP analysis, the result of this latest CMP analysis demonstrates that additional capacity is warranted for the subject facilities based on operating speed and LOS "E" threshold. TSM and TDM strategies are recommended to be included with the proposed project improvements, but these strategies alone are insufficient to meet future demand at LOS "E" or better according to the CMP analysis. Recommendations for TSM and TDM strategies appropriate for minor arterial projects are enclosed with this letter.

The capacity justification analysis contained in this report is from a planning perspective as part of the Congestion Management Process (CMP) of the Wasatch Front Regional Council. The purpose of the CMP is to determine in general terms whether or not a capacity increasing project should be included in the long range plan and does not replace the need for a more detailed traffic study for the proposed project.

Please call if you have questions or concerns about the Congestion Management Process.

Sincerely,

Kip Billings

[Excerpts from WFRC Congestion Management Document]

Justification of Single Occupant Vehicle Capacity Projects

Purpose

The motivation for requiring justification of projects that increase single occupant vehicle (SOV) capacity lies primarily in the growing national recognition that we cannot build our way out of congestion and accompanying pollution. Hence, efforts must be directed toward alternative methods of reducing congestion and pollution. Federal directives legislate this recognition into a two-step process: 1) "In a TMA designated as non-attainment for carbon monoxide and/or ozone, the CMS shall provide an appropriate analysis of all reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (adding general purpose lanes to an existing highway or constructing a new highway) is proposed;" 2) "If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the CMS shall identify all reasonable strategies to manage the SOV facility effectively (or to facilitate its management in the future). Further the legislation directs that: "All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation."[1]

The WFRC has completed step 1) by conducting analyses of reasonable demand management and system management strategies, which are presented in Table 7a and Table 7b. Following the analysis in Tables 7a-7b, is a section describing general guidelines that project sponsors need to follow to comply with step 2) above. More specific guidelines for individual projects are discussed with the project sponsor during the concept development or environmental phase of the project.

Strategy actions may be applied on a regional basis or on a facility-by-facility basis. If the strategy actions are not regional in scope, it is the responsibility of the sponsor to implement the strategy in the project section and coordinate with other agencies for its implementation in the corridor. If the strategy actions are regional in scope, a regional agency, such as UDOT or UTA, is responsible for implementation of the strategy. Where applicable, the sponsor needs to coordinate its actions with existing regional plans.

Procedure - New Capacity Analysis

Capacity increasing projects proposed for the Long Range Plan can be classed in one of two groups. The first group involves projects that add highway capacity by adding travel lanes to existing facilities. The second group of capacity increasing projects involves construction of new highway facilities.

In the case of widening existing facilities, the new capacity analysis compares traffic conditions in a "no build" scenario to a "no build with CMS" scenario. The "no build" scenario is a travel model run using

[1] Federal Register 23 CFR part 500.109, 6c.

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the existing highway network and the 2030 transit system described in the Plan. Traffic demand for the year 2030 based on projected socio-economic conditions is then applied to the "no build" network. The average PM peak period volume to capacity ratio (V/C) is then calculated for each project proposed in the Plan for the "no build" scenario.

Next a "no build with CMS" post model scenario is created by adjusting the volume and capacity in the "no build" scenario with appropriate system management and demand management strategies. The V/C values are then re-calculated. The list below summarizes the TSM and TDM adjustments to volume and capacity. These factors are based on local and/or national experience with similar management strategies. Following this list is a brief discussion of how each factor was derived.

Table 7
System Management and Demand Management Factors

Strategies	Facility	Factor	Applied to:
System Management			
Incident management	Freeway	0	Preserves existing capacity, does not increase capacity
Ramp metering	Freeway	0	Preserves existing capacity as already assumed in travel model, does not increase capacity
Signal coordination/timing	Arterial	0.05	Capacity
Access management	Minor arterials Principal arterials	0.03 0.07	Capacity
Intelligent Transportation Systems (traffic operations center, variable message signs, etc.)	Various	0	Preserves existing capacity, does not increase capacity. Future evaluations will be made using the IDAS software
HOV (high occupancy vehicle) lanes	Freeway	-2,010 (offset, not a factor)	Capacity (vehicle capacity reduction is based on HOV lane operating at LOS "C" or better rather than "E".)
Demand Management			
HOV (high occupancy vehicle) lanes	Freeway	-2,190 (offset, not a factor)	Volume (reduced vehicle demand based on increased HOV auto occupancy from 1.2 to 2.2)

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Strategies	Facility	Factor	Applied to:
Transit	Various	-0.015	Volume
Pedestrian/Bicycle	Arterial	-0.007	Volume
Ridesharing	Various	-0.0043	Volume
Flextime/ Telecommuting/ Growth Management	Various	-0.01	Volume

Derivation of TSM (Transportation System Management) Factors

Incident Management *- Incident management has proven effective at reducing delays and hence increasing effective capacity of freeways in the WFRC area. It was determined, however, that delay resulting from incidents was not recurring delay (although it may be rather chronic) and therefore no specific benefit in terms of capacity increase could be assigned. In another sense, the incident management may be effective at reducing delay but it does not increase the design capacity of the freeway.*

Ramp Metering *- Ramp metering obviously applies only to freeways. While ramp metering does not increase the design capacity of the freeway, it was determined that the effective peak-period capacity would be increased by 500 vehicles as a result of ramp metering. This figure was arrived at primarily through assumptions about the impact of uncontrolled ramp volumes on the outside lane of the freeway creating an effective capacity lower than the design capacity by 500 vehicles during the three-hour peak period. Since the WFRC travel model already assumes the same LOS "E" capacity for the outside freeway lanes as all other general purpose freeways lanes, no additional capacity benefit is applied for ramp meters. Ramp meters are already in place on most ramps on I-15 in Salt Lake and southern Davis Counties.*

Signal System Improvements/Coordination *- Traffic signal coordination is typically used to improve the effective capacity of principal arterials and minor arterials. Based on local experience with traffic signal coordination as discussed in Chapter 5, a 5% increase in effective capacity is a reasonable expectation. Improving intersection and interchange geometrics is also included in this category of system management strategies.*

Access Management *- Increased capacity through access management was assumed for principal arterials and minor arterials. Based somewhat on local experience and largely on national research a 7% increase on principal arterials and a 3% increase on minor arterials was assumed.*

Intelligent Transportation Systems (ITS) *- ITS improvements are relatively new and include a diverse array of improvements. Isolating and measuring the benefits of these improvements is very challenging. WFRC has recently acquired the IDAS software package which is a tool that provides a consistent means of evaluating diverse combinations of ITS improvements, but as yet WFRC has insufficient data to develop a regional ITS credit. It should be noted that ITS measures in general do not increase the capacity of a highway facility but act to preserve the design capacity of the facility.*

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HOV (High Occupancy Vehicle) Lanes *- This is discussed in the following section regarding demand management strategies.*

Derivation of TDM (Transportation Demand Management) Factors

HOV (High Occupancy Vehicle) Lanes *- HOV lanes apply only to freeway sections. HOV lanes were opened in the WFRC area in 2001 and the impact of this improvement is still being studied. For planning purposes competing impacts of HOV lanes are applied to freeway projects. It was determined that HOV lanes should operate at LOS "C" in order to provide an attractive alternative to single occupant vehicle travel in general purpose freeway lanes. For a three hour PM peak period this change in LOS from "D" to "C" reduces capacity by 2,010 vehicles. On the other hand, a 2+ HOV lane would carry 2.2 passengers per vehicle rather than the overall average 1.2 passengers per vehicle thus reducing demand by 2,190 vehicles during the PM peak period. Thus there is a net benefit for a 2+ HOV lane, and potentially greater benefits if demand for a 3+ HOV lane can be sustained.*

Transit: Bus & Rail *- A significant increase in bus and rail service is already assumed in the 2030 Long Range Plan. It is conceivable that refinements beyond the planned transit service increase to address specific corridor needs can translate into even more transit riders. The demand reduction analysis in Table 4 applies a 1.5% reduction to travel demand to reflect corridor specific improvements in transit service.*

Pedestrian/Bicycle *- Improvements that encourage walking and cycling are applicable to principal arterials, minor arterials, and collectors. A weighted average of walk and bicycle trip rates from the 2000 Census data for the four counties (Salt Lake, Davis, Weber, and Utah) indicates that roughly 3% of work trips use one of these two modes. Given that roughly 25% of peak-period trips are work trips then it is reasonable to expect that about 0.7% of the PM peak-period demand could use walking or cycling modes to commute.*

Ridesharing *- Ridesharing encompasses ECO Pass (Employer Commute Options), carpool matching, park and ride, and vanpools. These transit and rideshare related improvements are regional in nature and apply to all facilities. Based on UTA reports on the effectiveness of these programs about 0.43% of all trips are eliminated using one of these modes or programs.*

Flextime, Telecommuting, and Growth Management *- This group of demand management strategies was assumed to have a combined reduction in travel demand of 1.0%.*

WFRC uses the freeway PM peak period, peak direction V/C ratio (volume to capacity) for LOS "D" (level of service) as a planning guideline to determine at what point additional capacity in a corridor is required. This planning guideline of LOS "D" is consistent with UDOT's guidelines for highway design in urban areas.

In Table 23-2 of the 2000 Highway Capacity Manual, the V/C ratio for a freeway with a free flow speed of 65 mph operating at LOS "D" is given as 0.89. The HCM defines LOS in terms of V/C for freeways only. For planning purposes and evaluation of new capacity needs as part of the CMS, WFRC has chosen to apply the 0.89 V/C threshold to arterials as well.

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The choice of LOS "D" as a planning guideline is an attempt to balance the costs and impacts of new highway construction with the costs and impacts of excessive congestion. A more aggressive guideline of LOS "C" would require an ambitious highway construction program that would constantly be competing for funding. On the other hand, a less aggressive guideline of LOS "E" would create higher costs in terms of increased delay and emissions, as well as inefficient traffic operations for both people and goods.

In the case of new construction projects, the "no build" approach described above requires some modification since new construction projects by definition are not included in the "no build" scenario. The chosen approach to determine if new construction projects are warranted from a congestion management standpoint is to compare "no build" and "no build with CMS" V/C ratios for a corresponding section of a comparable parallel facilities. To accomplish this in some cases it is necessary to create customized "no build" scenarios that include all highway and transit projects in the Plan except the project in question. In this way it is possible to determine whether the other transportation network improvements described in the plan, plus the associated CMS improvements, can satisfy projected traffic demand without the new project.

For example, the Long Range Plan proposes to construct Legacy Parkway in southern Davis County. A 2030 travel model scenario is created that includes all transit and highway projects in the Plan except the Legacy Parkway in the area of southern Davis and northern Salt Lake Counties. Then a V/C analysis of I-15 (a comparable parallel facility) is made including post model adjustments for CMS strategies. If I-15 is over capacity in this section after all the other transportation improvements are made, planners can be reasonably confident that the proposed new construction project on Legacy Parkway has merit.

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Table 8

Congestion Management Analysis of New Capacity (widening) Projects
WFRC 2030 Long Range Plan

COUNTY	Facility	Direction	STREET_N	From	To	Average PM Peak V/C - "No Build"	Average PM Peak V/C - with CMS
DA	Art	East/West	1800 N	Main Sunset	5000 W	1.36	1.19
			200 N	I-15	Legacy Pk	1.33	1.16
				700 E	Hwy-89	1.20	1.06
			500 S	I-15	Legacy Pk	1.62	1.47
			Gentile S	SR-126 (Main)	Oakhills	1.24	1.10
			Main St	Mutton Ho	I-15	1.51	1.32
			Oakhills	1350 E	US-89	1.30	1.19
			Parrish L	I-15	Legacy Pk	1.22	1.08
			Syracuse	1000 W	2000 W	1.27	1.08
				2000 W	4500 W	0.93	0.82
			200 S/700 S	State St Clrfld	Legacy Pk	1.22	1.07
		North/South	2000 W	Syracuse Rd	Weber Co	1.43	1.25
			Fairfield	200 N	SR-193	1.19	1.05
			Main St	Fort Ln	200 N	1.39	1.22
			Redwood Rd	500 S	Salt Lake Co	1.36	1.19
	Fwy	North/South	I-15 nb	I-215	US-89	1.21	1.19
				Hillfield Rd	Weber Co.	1.03	0.99
			US-89 nb	I-15	I-84	1.27	1.30
SL	Art	East/West	10400 S	Redwood R	Bangerter	1.52	1.33
			11400 S	Highland	I-15	1.21	1.07
				Redwood R	Bangerter	1.29	1.14
			11800 S	Bangerter	SR-111	1.98	1.68
			12600 S	Bangerter	5200 W	2.28	1.84
			13400 S	Mtn View	Bangerter	4.42	3.29
			3500 S	Redwood Rd	8400 W	1.33	1.12
			3900 S	2300 E	Highland	1.41	1.23
			4500 S	I-15	State St	1.40	1.18
				2300 E	700 E	1.00	0.86
			4700 S	4000 W	Mtn View	1.35	1.14
				Redwood	I-15	1.29	1.10
			500 S	Surplus Canal	Mtn View	0.94	0.84
			7000 S	3000 E	Big Cotto	1.53	1.34
				Redwood R	Bangerter	1.75	1.51
			7800 S	2700 W	SR-111	2.23	1.87
			9000 S	Bangerter	New Bingham	2.83	2.35
				700 E	1300 E	1.60	1.39
			Californi	Mtn View	Pioneer R	1.12	0.99
			New Bingh	7800 S	SR-111	1.97	1.68
			Porter Rockwel	I-15	Minuteman	2.08	1.71
			10600 S	1300 E	Highland	1.31	1.15
			9400 S	2100 E	Wasatch	1.14	0.97

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Table 8 (continued)

Congestion Management Analysis of New Capacity (widening) Projects
WFRC 2030 Long Range Plan

COUNTY	Facility	Direction	STREET_N	From	To	Average PM Peak V/C - "No Build"	Average PM Peak V/C - with CMS
		North/South	700 E	9400 S	12300 S	1.37	1.15
			8400 W	SR-201	3500 S	1.50	1.27
			900 E	2900 S	6600 S	1.22	1.04
			Redwood Rd	10400 S	Utah Co.	2.03	1.65
				Davis Co.	1000 N	1.04	0.93
			SR-111	11800 S	5400 S	2.24	1.83
			State St	7200 S	11400 S	1.63	1.42
			Wasatch B	7000 S	Little Co	1.46	1.23
	Fwy	East/West	I-80 eb	State	Parley's Cnyn	0.94	0.88
			SR-201 wb	Jordan River	Mtn View	1.08	1.05
		North/South	I-15 nb	I-215	600 N	1.05	1.02
			I-215 W sb	I-80	300 E	0.98	0.94
			I-15 sb SL	10600 S	Utah Co.	1.18	1.16
WE	Art	East/West	1200 S	I-15	Legacy Pk	1.44	1.24
			12th St	1200 W	Wall Ave	1.07	0.92
			24th St	I-15	Lincoln	1.46	1.28
			4000 S	1900 W	4700 W	0.97	0.86
			5500 S	3500 W	5900 W	1.09	0.96
			Hinckley	I-15	Wall Ave	1.45	1.22
		North/South	1200 W	12th St	400 N	0.89	0.80
			3500 W	Midland D	Davis Co.	1.60	1.38
			Harrison	12th St	US-89	1.19	1.01
			Riverdale	SR-126	Washington	1.28	1.09
	Fwy	North/South	I-15 nb	2700 N	Davis Co.	1.04	1.00
			US-89 nb	I-84	Harrison	1.33	1.37

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Table 9

Congestion Management Analysis of New Capacity (new construction) Projects
WFRC 2030 Long Range Plan

COUNTY	Direction	Project	From	To	Parallel	Average PM Peak V/C "No Build"	Average PM Peak V/C - with CMS
DA	East/West	700 S, Layton	I-15	2700 W	Gentile S	1.82	1.62
		Hillfield Ext	2200 W	3200 W	1000 Nort	1.75	1.56
		Antelope	2200 E	Hwy-89	Antelope	0.78	0.70
	North/South	Legacy NSL	Hwy-89	I-215	I-15	1.09	1.06
		Legacy S Davis	Gentile	Hwy-89	I-15	1.07	1.03
		Legacy N Davis(2)	Weber Co. Line	Syracuse	2000 West	1.08	0.93
		Legacy Cent Davis(126)	Syracuse	Gentile	Main St	0.99	0.85
SL	East/West	10400 S	Bangerter	SR-111	11400 Sou	1.15	0.99
		11400 S	I-15	Redwood	10400S/10600S	1.75	1.50
		12600 S	5200 W	SR-111	12600 Sou	1.85	1.65
		2700 S	4800 W	5600 W	3500 Sout	1.00	0.89
		6200 S	5600 W	SR-111	5400 Sout	1.74	1.55
		9000 S	Bangerter	New Bingham	7800 Sout	1.73	1.49
		Bingham Jct	6800 S	8400 S	700 West	1.73	1.53
		Porter	I-15	Redwood	14600 Sou	2.29	2.05
	North/South	Highland	13800 S	I-15	12300 Sou	1.05	0.90
			9400 S	13800 S	1300 East	1.50	1.30
		MVC	13400 S	Utah Co	I-15	1.32	1.17
			2100 S	13400 S	Bangerter	1.40	1.21
			I-80	2100 S	4000 West	1.02	0.98
WE	East/West	Midland	SR-126	3500 W	Midland D	1.22	1.09
		Monroe	1300 N	2700 N	Washingto	1.25	1.07
		Mountain Rd East	400 E	Canyon	3100 Nort	0.98	0.87
		Mountain Rd West	US-89	400 E	Pleasant	0.62	0.55
		Legacy Weber(2)	5500 S Roy	Weber Co. Line	3500 West	1.27	1.10
		5600 S Connector	I-15	I-84	Riverdale	1.03	0.92
	North/South	4700 W Weber	4000 S	4800 S	3500 West	1.53	1.37

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STRATEGIES GENERALLY APPROPRIATE FOR MINOR ARTERIALS

Minor Arterial Street System *- The minor arterial street system should interconnect with and augment the urban principal arterial system and provide service to forecasted trips of moderate length at a somewhat lower level of travel mobility than principal arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system.*

The minor arterial street system includes all arterials not classified as principal and contains facilities that place more emphasis on land access than the higher system, and offer a lower level of traffic mobility. Such facilities may be expected to provide for movement within communities, but ideally should not penetrate identifiable neighborhoods.

SYSTEM MANAGEMENT

Signal System Improvements / Coordination - Coordination is important for arterials because of the greater emphasis on mobility for longer trips. Signal coordination is especially critical for minor arterials because of the closer signal spacings. Where signals are spaced at intervals between 1/4 mile and 1 mile, they should be coordinated. Other system improvements, such as installation, removal, or phasing, must be determined on a site specific basis.

Regional plans exist for signal system improvements and coordination. Where plans exist for signal coordination, the sponsor needs, at the minimum, to lay conduit. The sponsor needs to work with the signal coordination committee or other appropriate group for installation of the system. Traffic volumes at each signalized intersection need to be checked annually and if they have changed significantly, timing plans must be updated to accommodate the traffic changes.

Capacity Additions - New lanes or roads are particularly critical in high growth areas. They are also perhaps more often needed for arterials, which are designed to carry higher volumes of traffic. Without proper demand and system management, additional capacity will not prevent congestion in the long term. Hence the requirements for the sponsor to implement all other reasonable strategies when capacity is added.

Access Management - Access management is usually most appropriate for arterials, again because of the greater emphasis on mobility. Less aggressive control standards are desirable for minor arterials, such as driveway spacing, corner clearance, better driveway design which emphasizes through street movements, signal restrictions at private driveways, and limited turn restrictions at driveways.

The sponsor needs to develop an access management plan that balances socioeconomic impacts of access control with the primary mobility function of the minor arterial. The measures listed above need to be implemented, at a minimum, for new access. Since minor arterials are to offer a higher degree of access than principal arterials, completely limiting access is not appropriate. However, access should be encouraged on the lower of two intersecting functional classes.

Intelligent Transportation Systems (ITS) - Some ITS technology is appropriate for minor arterials. For example, signal timing and coordination enhancements should accommodate communication. Variable message signs may be appropriate at locations such as canyon access points. The sponsor should interface with the regional ATMS as much as possible.

Incident Management - Because minor arterials carry intermediate volumes of traffic, incident management programs are not cost effective for them.

Reversible Lanes - Minor arterials are designed to accommodate a moderate level of access and consequently, turning volumes typically create too much flow conflict for reversible lanes to be feasible. However, if they are feasible, they should be considered.

Ramp Metering - Ramp metering does not apply to minor arterials.

Improving Intersection / Interchange Geometrics - When improving the geometrics of an intersection on a minor arterial, the engineer needs to pay attention to both the mobility and access needs of traffic on the facility.

If right-of-way is available or not excessively expensive, the sponsor needs to incorporate geometric improvements at the intersections, as appropriate for the projected volumes along the project facility and intersecting streets. If plans exist for signal improvements, geometric modifications need to be coordinated with those improvements.

DEMAND MANAGEMENT

Rideshare Programs - Rideshare programs potentially affect many trips on minor arterials connecting to principal arterials carrying work trips to the same or nearby destinations. A regional program, called the Transportation Brokerage, is in place, and consequently, no requirements are made of sponsors.

Staggered and Flexible Work Hours - The validity of this strategy is similar to that of rideshare promotion. A regional promotion program is in place, and consequently, no requirements are made of sponsors.

Telecommuting - This strategy is regional in nature. The Transportation Plan for the area assumes that telecommuting will increase modestly in the future. However, no significant effect has been assumed.

Growth Management / Land Use Planning - This strategy is regional in nature. The Transportation Plan for the area assumes that growth management will increase modestly in the future. However, no significant effect has been assumed.

Transit Improvements - Transit improvements are sometimes regional in nature, and sometimes facility specific. Strategies that may be appropriate for minor arterials include transit malls, transit priority systems, limited stop buses, bus transfer centers, and new routes or frequency improvements.

Sponsors need to coordinate with UTA for any of the above items planned for the project section, as well as shelter/bench improvements.

High Occupancy Vehicle (HOV) Lanes - HOV lanes are not appropriate for minor arterials because of their intermediate trip lengths and higher turning volumes.

Walk / Bicycle - Minor arterials are good candidates for walk/bicycle routes, because of the emphasis on through movement, but the relatively lower speed. The sponsor should coordinate with local governments to ensure that existing bicycle and pedestrian routes/facilities are preserved and that planned routes/facilities are incorporated into the project.

Employer Commute / Trip Reduction Ordinances - Trip reduction ordinances would impact minor arterials. A regional plan is needed for this strategy, but has not yet been developed.

Congestion Pricing - There are presently no likely candidates for congestion pricing.

Parking Management / Increase Parking Costs - This strategy is most appropriate on facilities leading to major employment or activity centers. Techniques vary from instituting peripheral parking to removing on-street parking. Methods such as removing on-street parking are generally more appropriate for arterials with their emphasis on through movement.

Increase Gas or Auto-Related Taxes / Fees - This strategy is regional in nature. The Transportation Plan for the area assumes that taxes and fees will continue to increase at historical rates.

[Excerpts from WFRC Congestion Management Document]

Justification of Single Occupant Vehicle Capacity Projects

Purpose

The motivation for requiring justification of projects that increase single occupant vehicle (SOV) capacity lies primarily in the growing national recognition that we cannot build our way out of congestion and accompanying pollution. Hence, efforts must be directed toward alternative methods of reducing congestion and pollution. Federal directives legislate this recognition into a two-step process: 1) "In a TMA designated as non-attainment for carbon monoxide and/or ozone, the CMS shall provide an appropriate analysis of all reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (adding general purpose lanes to an existing highway or constructing a new highway) is proposed;" 2) "If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the CMS shall identify all reasonable strategies to manage the SOV facility effectively (or to facilitate its management in the future). Further the legislation directs that: "All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation."[1]

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Procedure - New Capacity Analysis

Capacity increasing projects proposed for the Long Range Plan can be classed in one of two groups. The first group involves projects that add highway capacity by adding travel lanes to existing facilities. The second group of capacity increasing projects involves construction of new highway facilities.

In the case of widening existing facilities, the new capacity analysis compares traffic conditions in a "no build" scenario to a "no build with CMS" scenario. The "no build" scenario is a travel model run using

[1] Federal Register 23 CFR part 500.109, 6c.

IV-12

The SHOSHONE-BANNOCK TRIBES

P.O. BOX 306
FORT HALL, IDAHO 83203
PHONE (208) 238-3706
FAX # (208) 237-0797

CULTURAL RESOURCES
HERITAGE TRIBAL OFFICE (HETO)

April 11, 2007

Edward Woolford
Environmental Specialist
2520 West 4700 South
Suit 9A
Salt Lake City, Utah

RE: SR-108, SR-127 to SR-126 on the North Environmental Impact Statement (EIS)
Request for Scoping Comments
Project Number STP-0108(13)4E

Dear Mr. Woolford:

The Shoshone-Bannock Heritage Office (HeTO) appreciates the opportunity to provide technical comments to the proposed SR-108, SR-127 to SR-126 on the North Environmental Impact Statement (EIS).

The Shoshone-Bannock Tribes have an interest in this project as the location of this project is within aboriginal lands of the Shoshone-Bannock Tribes. Our primary interest is protecting and preserving our cultural and natural resources within inherent lands of the Shoshone-Bannock Tribes. HeTO is concerned with impact to natural and cultural resources which includes air quality, water quality, botanical resources and soils. HeTO requests a copy of the draft EIS and cultural resources report when completed and to participate as a consulting party during the development of the EIS.

The purpose of this letter is to provide technical input and not intended as formal government to government consultation. Should there be any questions or concerns, feel free to contact me at (208)478-3706 or e-mail at: csmith@shoshonebannocktribes.com

Sincerely,

Carolyn B. Smith
Cultural Resource Coordinator
Shoshone-Bannock Tribes

Cc.

Dr. Elizabeth Perry, SWCA Project Anthropologist
File

U.S. Department Of Transportation Federal Highway Administration

Utah Division

2520 West 4700 South, Ste. 9A
Salt Lake City, UT 84118-1847

Date: June 4, 2007

File: STP-0108(13)4E Pin: 4745

Ms. Carol Legard, FHWA Liaison
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Room 803
Washington DC 20004

SUBJECT: SR-108 from SR-127 to SR-126; Davis and Weber Counties, Utah
Advisory Council Notification of Adverse Effect

Dear Ms. Legard:

The Federal Highway Administration (FHWA) and the Utah Department of Transportation (UDOT) are proposing transportation improvements along SR-108 in the cities of Syracuse, West Point, and Clinton in Davis County, Utah, and in the cities of Roy and West Haven in Weber County, Utah (see attached Project Area Maps). The project proposes to widen SR-108 from two lanes to four lanes, from SR-127 to SR-126, a length of approximately 9.5 miles. The project is needed in order to reduce roadway congestion, eliminate roadway deficiencies, and allow for regional growth. In compliance with the National Environmental Policy Act, an Environmental Impact Statement is being prepared for this project. Two alternatives are being considered: Minimize 4(f) Impacts Alternative and West Alternative.

In accordance with 36 CFR 800.6(a)(1), the FHWA and the UDOT are providing this letter to the Council as notification that both the Minimize 4(f) Impacts Alternative and the West Alternative for the proposed project will have an Adverse Effect on historic properties. As specified in 36 CFR 800.11(e), the following documentation is enclosed:

1) A description of the undertaking specifying the Federal involvement and its area of potential effects including photographs, maps, and drawings, as necessary;
2) A description of the steps taken to identify historic properties;
3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register;
4) A description of the undertaking's affects on historic properties;

MOVING THE AMERICAN ECONOMY

File Name: 0108013.070604.ACHP Notification Letter.etw

Legard
June 4, 2007
Page 2 of 2

5) An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and
6) Copies or summaries of any views provided by consulting parties and the public.

The effort to identify and evaluate all historic, archaeological, and paleontological resources within the Area of Potential Effects, as defined by 36 CFR 800.16(d), was completed and reported by the UDOT in a report prepared by SWCA Environmental Consultants in November 2006, titled Archaeological and Architectural Resource Surveys for the SR-108, SR-127 to SR-126 Project in Davis and Weber Counties, Utah (see enclosures). The inventory and evaluation efforts were conducted in accordance with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 Federal Register Part IV).

A total of 109 architectural properties and 4 archaeological sites were identified and recorded. Of these, 61 architectural properties and 1 archaeological site are considered eligible to the National Register of Historic Places. The Minimize 4(f) Impacts Alternative would have an adverse effect on 14 architectural properties. The West Alternative would have an adverse effect on 22 architectural properties. No known traditional cultural properties or paleontological resources are located in the APE. The Utah State Historic Preservation Office (USHPO) has concurred with the Determinations of Eligibility and the Findings of Effect for the two alternatives being considered (see enclosed letters dated September 11, 2006, and April 12, 2007).

A preferred alternative has not been selected for this project. Mitigation of adverse effects and negotiation of a memorandum of agreement will be based on the selection of the preferred build alternative.

The FHWA and the UDOT request that the Council review the attached information and determine whether it wishes to enter the consultation process. If the Council chooses to participate, a response within 15 days would be appreciated. Please feel free to contact me at 801-963-0078 ex. 235 to answer any questions or provide any additional information.

Yours truly,

Edward T. Woolford
Environmental & Realty Specialist

Enclosure(s): Documents w/ CD

cc: Ms. Katry Harris, ACHP w/o enclosures
Mr. Christopher Lizotte, UDOT, Region 1, w/o enclosures
Ms. Jennifer Elsken, UDOT, Region 1, w/o enclosures

File Name: 0108013.070604.ACHP Notification Letter.etw

State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

JOHN R. NJORD, P.E.
Executive Director

CARLOS M. BRACERAS, P.E.
Deputy Director

June 6, 2007

Mr. Edward Woolford
Environmental Specialist
FHWA Utah Division
2520 West 4700 South, Suite 9A
Salt Lake City, UT 84118-1880

Subject: UDOT Project Number: STP-0108(13)4E; SR-108 from SR-127 to SR-126; Davis and Weber Counties, Utah.
Section 4(f) *De Minimis* Impacts Finding Concurrence Request

Dear Mr. Woolford:

The purpose of this letter is to request your concurrence with the Utah Department of Transportation's (UDOT's) recommendation that, pursuant to Section 6009 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the associated FHWA guidance dated December 13, 2005, a Section 4(f) *de minimis* impact finding is appropriate for the historic properties affected by the subject project. These properties are eligible to the National Register of Historic Places and are considered Section 4(f) resources.

This project is being funded, in part, with federal funds administered by the Federal Highway Administration (FHWA). The project proposes to widen SR-108 from two lanes to four from SR-127 to SR-126, a length of approximately 9.5 miles (see attached map). The project is needed in order to reduce roadway congestion, eliminate roadway deficiencies, and allow for regional growth. In compliance with the National Environmental Policy Act, an Environmental Impact Statement is being prepared for this project. Two alternatives are being considered for this project: Minimize 4(f) Impacts Alternative and West Alternative. The Section 4(f) resources affected by both of these alternatives and the nature of the impacts to these resources are provided in Tables 1 and 2. A preferred alternative has not yet been selected.

The Minimize 4(f) Impacts Alternative will have *de minimis* impacts on 39 historic properties. The West Alternative will have *de minimis* impacts on 32 historic properties. Impacts to these Section 4(f) resources are minor impacts from roadway cut and fill which will not impact eligible buildings or contributing features to the property. The transportation use of these eligible historic properties does not adversely affect any of the activities, features, and attributes that qualify these historic properties for protection under Section 4(f).

Region One Headquarters • 166 West Southwell Street • Ogden, UT 84404
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Table 1. Project Effects on Section 4(f) Resources: Minimize 4(F) Impacts Alternative.

Address	SHPO Rating/ NRHP Eligibility	NRHP Effect	Section 4(f) Use	Section 4(f) Impact
?1451 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1419 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1401 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1373 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1317 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1217 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1189 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1147 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1133 South 2000 West, Syracuse	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
963 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
39 South 2000 West, West Point	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
?20 South 2000 West, West Point	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
310 North 2000 West, West Point	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
647 North 2000 West, West Point	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
667 North 2000 West, West Point	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
817 North 2000 West, Clinton	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
868 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
881 North 2000 West, Clinton	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1071 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1141 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1253 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1969 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2162 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2184 North 2000 West, Clinton	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2282 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1988 West 2300 North, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2342 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2404 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2422 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2541 North 2000 West, Clinton	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5986 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5939 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5867 South 3500 West, Roy	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5844 South 3500 West, Roy	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5839 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5823 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
3982 Midland Drive, West Haven	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
3964 Midland Drive, West Haven	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
3801 Midland Drive, West Haven	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill

Table 2. Project Effects on Section 4(f) Resources: West Alternative.

Address	SHPO Rating/ NRHP Eligibility	NRHP Effect	Section 4(f) Use	Section 4(f) Impact
?1451 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1419 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1401 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1373 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1317 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1217 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1189 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1147 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1133 South 2000 West, Syracuse	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
963 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
723 South 2000 West, Syracuse	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
39 South 2000 West, West Point	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
?20 South 2000 West, West Point	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
310 North 2000 West, West Point	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
868 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill

Address	SHPO Rating/ NRHP Eligibility	NRHP Effect	Section 4(f) Use	Section 4(f) Impact
2162 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2184 North 2000 West, Clinton	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2282 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
1988 West 2300 North, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2342 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2404 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
2422 North 2000 West, Clinton	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5986 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5939 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5867 South 3500 West, Roy	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5844 South 3500 West, Roy	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5823 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
5720 South 3500 West, Roy	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
4180 Midland Drive, West Haven	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
4148 Midland Drive, West Haven	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
3982 Midland Drive, West Haven	A-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill
3964 Midland Drive, West Haven	B-rating/Eligible	No Adverse Effect	*De minimis*	Minor impact from cut/fill

The Utah State Historic Preservation Office (USHPO) has been consulted and informed of FHWA's intent to make a Section 4(f) *de minimis* impact finding based on the USHPO's written concurrence that the project will not adversely affect the activities, features, and attributes that qualify these eligible historic properties for protection under Section 4(f) (see enclosed letter dated April 12, 2007). The public has been afforded an opportunity to review and comment on this project, including its effects on historic properties, and will continue to be provided this opportunity.

Based on the foregoing analysis, it is UDOT's recommendation that a Section 4(f) *de minimis* impact finding be approved by FHWA for the eligible historic properties listed in Tables 1 and 2 affected by this project.

Should you have questions concerning this matter, please contact me at 801-620-1635 or jelsken@utah.gov.

Sincerely,

Jennifer Elsken
NEPA/NHPA Specialist
UDOT Region 1

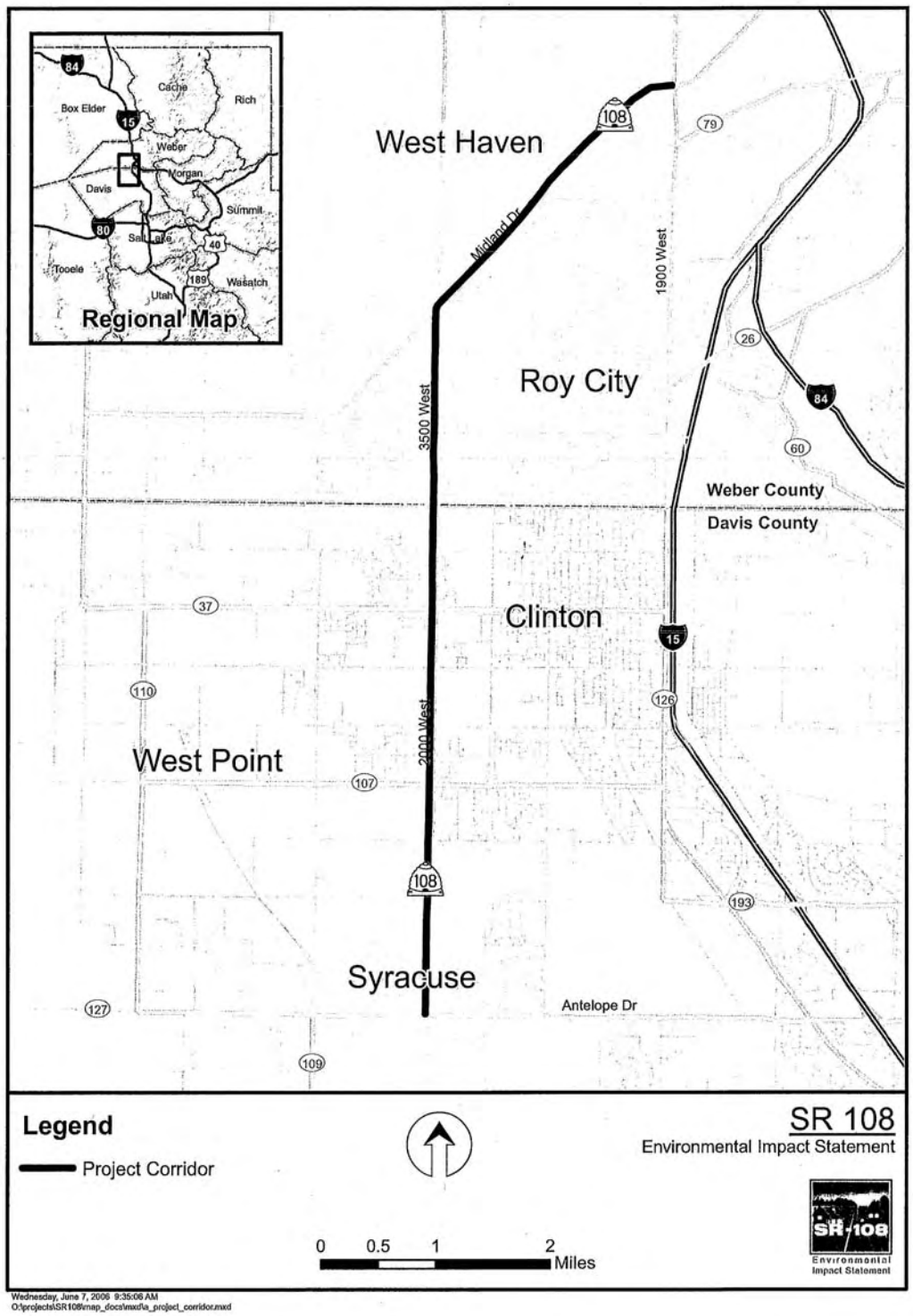
Enclosures

CC: David Kilmurray, HDR Engineering
Chris Lizotte, UDOT Region 1
Dave Adamson, UDOT Region 1

Regarding UDOT Project Number: STP-0108(13)4E; SR-108 from SR-127 to SR-126; Davis and Weber Counties, Utah, I concur with UDOT's recommendation that a Section 4(f) *de minimis* impact finding be approved by FHWA for the eligible historic properties listed in Tables 1 and 2 affected by this project.

Walter Waidelich, Division Administrator
Federal Highway Administration

Date


Regional Map
Box Elder
Cache
Rich
Weber
Morgan
Davis
Summit
Salt Lake
Tooele
Utah
Wasatch
West Haven
Midland Dr
1900 West
Roy City
3500 West
Weber County
Davis County
Clinton
2000 West
West Point
Syracuse
Antelope Dr
Legend
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SR 108
Environmental Impact Statement
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State of Utah

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Governor

GARY R. HERBERT
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

JOHN R. NJORD, P.E.
Executive Director

CARLOS M. BRACERAS, P.E.
Deputy Director

April 12, 2007

Cory Jensen
Architectural Historian/National Register & Survey Coordinator
Division of State History
300 Rio Grande
Salt Lake City, UT 84101-1182

RE: SHPO Case Number 06-1634
UDOT Project Number: STP-0108(13)4E; SR-108 from SR-127 to SR-126; Davis and Weber Counties, Utah. **Finding of Adverse Effect.**

Dear Mr. Jensen,

The Utah Department of Transportation (UDOT), in partnership with the Federal Highway Administration (FHWA), is preparing to undertake the subject federal-aid project. The project proposes to widen SR-108 from two lanes to four from SR-127 to SR-126, a length of approximately 9.5 miles (see attached map). The project is needed in order to reduce roadway congestion, eliminate roadway deficiencies, and allow for regional growth. Two alternatives are being considered for this project: Minimize 4(f) Impacts Alternative and West Alternative.

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, 16 U.S.C. §470 et seq., and Utah Code Annotated (U.C.A.) §9-8-404, the FHWA, in partnership with the UDOT, is taking into account the effects of this undertaking on historic properties, and will afford the Advisory Council on Historic Preservation (Council) and the Utah State Historic Preservation Office (USHPO) an opportunity to comment on the undertaking. Additionally, this submission is in compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 U.S.C. § 138 (as amended) and 49 U.S.C. § 303 (as amended).

In September 2006, the Determinations of Eligibility were sent to your office. USHPO concurrence with those determinations was given on September 12, 2006. This document

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contains the Findings of Effect (for both Section 106 and Section 4(f)) for all historic properties eligible for inclusion on the National Register of Historic Places (NRHP) located within the area of potential effects (APE) for this project. This information is provided for both alternatives being considered.

The APE for this project has been surveyed in its entirety resulting in identification of 109 architectural properties and 4 archaeological sites. Of these, 61 architectural properties and 1 archaeological site are considered eligible to the NRHP. No known traditional cultural properties or paleontological resources are located in the APE.

The Findings of Effects on these eligible properties are enclosed with this letter (see Tables 1 and 2) and are summarized below. A finding of no adverse effect is based on minor impacts from roadway cut and fill which will not impact eligible buildings or contributing features to the property. A finding of no effect is based on avoidance of eligible historic properties.

Minimize 4(f) Impacts Alternative
This alternative would have an adverse effect on 14 architectural properties, no adverse effect on 39 architectural properties, and no effect on 8 architectural properties (Table 1). This alternative would have no effect on the eligible archaeological site (42Wb352). Additionally, in accordance with Section 4(f), this alternative will require Complete Uses of 14 properties and have *de minimis* impacts on 39 properties.

West Alternative
This alternative would have an adverse effect on 22 architectural properties, no adverse effect on 32 architectural properties, and no effect on 7 architectural properties (Table 2). This alternative would have no effect on the eligible archaeological site (42Wb352). Additionally, in accordance with Section 4(f), this alternative will require Complete Uses of 22 properties and have *de minimis* impacts on 32 properties.

Therefore, both the Minimize 4(f) Impacts Alternative and the West Alternative for the proposed UDOT Project Number: STP-0108(13)4E; SR-108 from SR-127 to SR-126; Davis and Weber Counties, Utah, will have an **Adverse Effect.** The Minimize 4(f) Impacts Alternative will require Complete Uses of 14 properties and have *de minimis* impacts on 39 properties. The West Alternative will require Complete Uses of 22 properties and have *de minimis* impacts on 32 properties.

A preferred alternative has not been selected for this project. Mitigation of adverse effects and negotiation of a memorandum of agreement will be based on the selection of the preferred build alternative.

Also enclosed, please find the final copy of the cultural resources inventory report and associated materials—IMACS site forms, hard copies of the RLS printouts and digital contact sheets, and a CD with the updated electronic database for the documented architectural properties. The report was prepared by SWCA Environmental Consultants in November 2006 and is titled *Archaeological and Architectural Resource Surveys for the SR-108, SR-127 to SR-126 Project in Davis and Weber Counties, Utah.*

Please review this document and, providing you agree with the findings contained herein, sign and date the signature line at the end of this letter. Should you have any questions or need additional information, please feel free to contact me at (801) 620-1635 or jelsken@utah.gov.

Sincerely,

Jennifer Elsken
NEPA/NHPA Specialist
UDOT Region 1

Elizabeth Giraud
Architectural Historian
UDOT

Enclosures

Regarding UDOT Project Number: STP-0108(13)4E; SR-108 from SR-127 to SR-126; Davis and Weber Counties, Utah, I concur with the finding of effect, submitted to the Utah State Historic Preservation Office in accordance with Section 106 of the NHPA and U.C.A. 9-8-404, which states that the UDOT has determined that the Minimize 4(f) Impacts Alternative and the West Alternative for the proposed project will have an **Adverse Effect.**

Cory Jensen
Architectural Historian/National Register & Survey Coordinator
Division of State History

4/19/07
Date

HDR ONE COMPANY | Many Solutions™

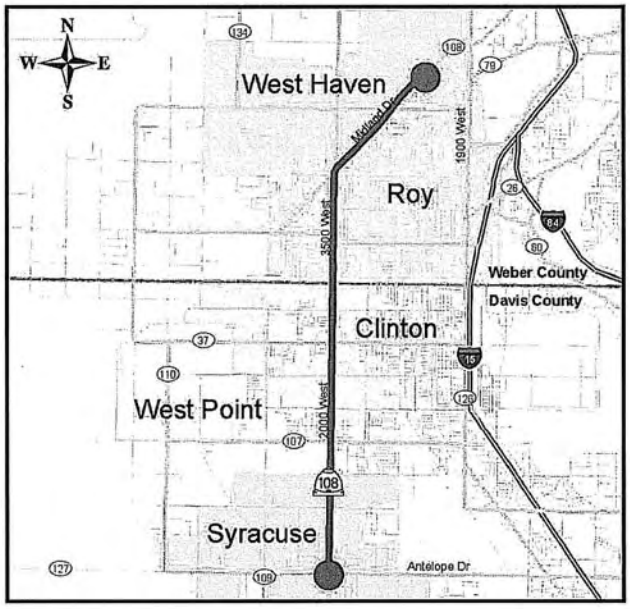
June 07, 2007

Mr. Larry Crist
U.S. Fish and Wildlife Service
Utah Field Office
2369 West Orton Circle
West Valley City, Utah 84119

RE: SR-108 Special Status Species

Mr. Crist, as you may recall, UDOT is preparing a Draft Environmental Impact Statement (EIS) to evaluate existing and future transportation conditions on S.R. 108 between Antelope Drive (S.R. 127) in Syracuse and 1900 West (S.R. 126) in West Haven, a distance of about 9.5 miles. The project study area includes the cities of Syracuse, West Point, and Clinton in Davis County and Roy and West Haven in Weber County, Utah.

Figure 1 shows the project study area and the segment of S.R. 108 under evaluation. S.R. 108 is also known as 2000 West (in Syracuse, West Point, and Clinton) and 3500 West and Midland Drive (in Roy and West Haven). S.R. 108 is currently a two-lane road through the study area.



This letter details the findings of the wildlife conditions throughout the corridor, especially with emphasis on federally listed threatened and endangered species under the Endangered Species Act (Act) of 1973. This letter is intended to fill the requirements of informal Section 7 consultation as outlined in the Act.

HDR Engineering, Inc.
3995 South 700 East
Suite 100
Salt Lake City, UT 84107-2594
Phone: (801) 743-7800
Fax: (801) 743-7878
www.hdrinc.com

Field surveys for vegetation and wildlife habitat were conducted on June 26, 2006, September 14, 2006, and November 11, 2006. Field investigations consisted of on-site field reconnaissance and aerial photo interpretation.

In general, the project corridor is highly developed and urbanized, consisting of residential and commercial areas with a few remaining agricultural remnants, many of which are idle and planned for development. The dominant vegetation types found are that of landscaped, ornamental or agriculturally planted, invasive weedy species on disturbed sites, mixed native, planted range, and invasive species on active or idle pasture land, and small pockets of emergent vegetation associated with drainage ditches and storm-water drainage collection.

In general, no fish habitat occurs within the project study area. With respect to wildlife, no pristine habitat for wildlife exists within the study area, only areas of urbanized or post-agricultural habitat. Such disturbed and fragmented lands may only provide brief, transitory benefits to all but the most urbanized adapted species.

Special status species include plant and animal species that are currently listed, or are proposed for listing, as threatened and endangered by the USFWS. Species listed by USFWS are afforded special consideration when it comes to any activity that may impact any individuals or habitat of the protected species. Species listed by the USFWS as occurring or potentially occurring in the study area are presented below (Table 1).

In compliance with the Endangered Species Act of 1973, as amended, the USFWS were consulted to determine if any potential impacts to any threatened, endangered, or special status species would occur as a result of implementing the proposed alignment. As shown in the Table 1 below, the only federally listed species that could occur in or near the project area is the bald eagle, which is addressed in more detail in the sections following.

Table 1. Status and Probability of Occurrence of Special Status Species in the SR 108 Corridor

		Sensitive Status	Probability of Occurrence
Common Name	**Scientific Name**	**Fed.**	
Plants			
Ute Ladies'-tresses	*Spiranthes diluvialis*	T	No habitat within project corridor
Birds			
Bald eagle	*Haliaeetus leucocephalus*	T	Known to occur outside study area
Yellow-billed cuckoo	*Coccyzus americanus occidentalis*	C	No habitat within project corridor
Reptiles/Amphibians/Fish			
June sucker	*Chasmistes liorus*	E	No habitat within project corridor
Invertebrates			
Ogden rocky mountain snail	*Oreohelix peripherica wasatchensis*	C	No habitat within project corridor
Mammals			
Canada lynx	*Lynx canadensis*	T	No habitat within project corridor

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Common Name	Scientific Name	Sensitive Status	Probability of Occurrence
		Fed.	

Federal status
T = Federal threatened,
E = Federal endangered,
C = Federal candidate

The only federally listed species that is known to occur near, but outside, of the area is the bald eagle (*Haliaeetus leucocephalus*). No other federally listed species that have a potential to occur in Weber or Davis Counties have potential habitat within the project corridor.

The bald eagle is primarily a migrant through Utah, although two nesting pairs are known to exist in the state. There are also migratory roosts in small sites along the mountainous areas of the Wasatch Front, where groups of bald eagles will rest during migration and for feeding stopovers to the Great Salt Lake ecosystem. Otherwise, bald eagles typically choose roosting sites comprised of dense deciduous or especially conifer stands within an easily traveled distance from feeding areas (between less than 4 and up to 30 km distance). This species is capable of flying over unsuitable, urbanized areas during migration and daily flight, and does so without apparent concern over many such areas across the U.S. Cottonwood snags within the project area *could* be used by bald eagles as a temporary perch; however, other perching snags are fairly ubiquitous throughout the Weber and Davis Counties. Additionally, all of the lands within the project area are either pasture, cropland, or urbanized, no roosting, nesting, or foraging habitat exists for this species along the SR 108 study corridor.

It is therefore, our determination that the proposed SR-108 project will have "**no-effect**" on federally listed threatened, endangered or candidate species.

We understand that the USFWS no longer provides concurrence on "**no-effect**" determinations; as such, this letter is intended to fill the requirements of informal Section 7 consultation as outlined in the Act. If you have any questions, feel free to contact me at (801) 743-7800.

Sincerely,

HDR Engineering, Inc.

Heidi Spoor

Heidi Spoor
Deputy Project Manager

cc: Paul West, UDOT Wildlife Biologist
Dave Adamson, UDOT PM
Dave Kilmurray, HDR PM
Project Files

HDR Engineering, Inc.

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Preserving America's Heritage

June 19, 2007

Mr. Edward T. Woolford
Environmental & Realty Specialist
Utah Division
Federal Highway Administration
2520 West 4700 South, Suite 9A
Salt Lake City, Utah 84118-1847

Re: *SR-108 Improvements from SR-127 to SR-126*
Davis and Weber Counties, Utah
ACHP Ref. 6279

Dear Mr. Woolford:

On June 6, 2007, the Advisory Council on Historic Preservation (ACHP) received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on properties eligible for inclusion in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the Utah State Historic Preservation Office (SHPO), affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Utah SHPO, Indian tribes, and other consulting parties, and related documentation at the conclusion of the consultation process. The filing of this MOA with the ACHP and fulfillment of its stipulations are required to complete your compliance responsibilities under Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require further assistance, please contact me at (202) 606-8520 or kharris@achp.gov.

Sincerely,

Katry Harris

Katry Harris
Historic Preservation Specialist
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION
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