

Air Quality Memorandum (draft)

MEMO # 2050RTP-1

DATE April 11, 2019

FROM Cache Metropolitan Planning Organization (CMPO)

SUBJECT DRAFT CONFORMITY ANALYSIS FOR THE CACHE COUNTY 2050 REGIONAL TRANSPORTATION PLAN

ABSTRACT

Portions of Cache County, Utah and Franklin County, Idaho were designated by EPA as a non-attainment area for fine particulate matter (PM_{2.5}) on December 14, 2009. The Fixing America's Surface Transportation (FAST) Act and the Clean Air Act Amendments (CAAA) require that all regionally significant highway and transit projects in air quality non-attainment areas be derived from a "conforming" Regional Transportation Plan (RTP). A conforming Plan or Program is one that has been analyzed for emissions of controlled air pollutants and found to be within emission limits established in the State Implementation Plan (SIP) or found to be in compliance with EPA interim conformity requirements until a SIP is approved. This conformity analysis has been prepared by the Cache Metropolitan Planning Organization (CMPO) and submitted to the Federal Highway Administration and the Federal Transit Administration for their concurrence.

This document analyzes the air quality impacts of the proposed CMPO 2050 Regional Transportation Plan (RTP) projects (see Appendix 1).

Based on the analysis presented in this document, the CMPO 2050 RTP conforms to mobile source budget in the PM 2.5 Moderate Area State Implementation Plan for the Logan, UT-ID Nonattainment area. This mobile source budget was given an "adequacy determination" by EPA with an effective date of September 28, 2015.

A. Conformity Requirements

This conformity analysis report compares expected emissions in various future years to emission "budget" thresholds as established by federal regulations. This analysis must include all anticipated capacity increasing transportation projects and take in account the normal population growth impacts. All projects included in the amended 2050 RTP (see Appendix 1) were included in this emissions analysis.

Conformity Process

Since the commencement of the planning requirements in the late 1960s, further requirements (most recently the Fixing America's Surface Transportation (FAST) Act and the 1990 Clean Air Act Amendments) have added to the responsibilities and the decision-making powers of local governments through the Metropolitan Planning Organization. The Cache Metropolitan Planning Organization (CMPO) is the Metropolitan Planning Organization for the Logan Urbanized Area.

In November 2009, the Environmental Protection Agency (EPA) issued rules establishing the interim procedures to be used, prior to the approval of a State Implementation Plan (SIP), to show that transportation plans and programs conform to air quality regulations. Developed by the State of Utah's Department of Environmental Quality, a "SIP" is a specific plan to attain the air quality standard in Cache Valley for PM_{2.5} by a specified time. The SIP has been submitted to EPA but has yet to be approved for the Logan Ut/ID non-attainment area.

Effective September 28, 2015 the Motor Vehicle Emission Budget (MVEB) included in the submitted SIP (yet to be fully approved) is considered "adequate" and must be used for any transportation conformity demonstration. Under this process, the MVEB from the SIP is approved in advance of approval of the entire SIP (at least for conformity analysis purposes). The SIP MVEB only applies to the Cache County portions since Idaho would have their own MVEB as part of the Idaho PM_{2.5} SIP.

Conformity regulations require that transportation projects that use federal funds, as well as "regionally significant" transportation projects sponsored by recipients of other federal funds, may not proceed in areas designated as "non-attainment (or maintenance) with respect to the National Ambient Air Quality Standards" until and unless a regional emissions analysis of the Plan and TIP demonstrates that conformity requirements are satisfied. This report summarizes CMPO's conformity analysis of the 2050 RTP.

This conformity analysis is subject to public and agency review and requires the concurrence of the Federal Highway Administration.

Conformity Requirements

The CAAA established conformity requirements for transportation plans. These requirements are outlined in 40 CFR 93.109 and include the following:

Latest Planning Assumptions

Current travel models are based on the latest available (2019-2050) socioeconomic data from the Governor's Office of Management and Budget and the Division of Workforce Services. Current zoning and future land use plans were used to anticipate housing and employment growth to the year 2050. This socio-economic data was allocated to traffic analysis zones by CMPO for use in the travel demand model.

Latest Emissions Model

The conformity analysis presented in this document is based on the EPA mobile source emissions model MOVES 2014b.

Consultation Process

Section 105 of 40 CFR Part 93 (Conformity Rule) requires, among other things, interagency consultation in the development of conformity determinations. As a member of the Interagency Consultation Team defined in the Conformity SIP adopted by the State Division of Air Quality and approved by EPA, CMPO subscribes to the interagency consultation procedures outlined in the Conformity SIP. As part of the consultation procedures defined in the Conformity SIP, the CMPO will present this report for review and public comment. The Utah Division of Air Quality, UDOT, CVTD, FHWA, and FTA will also be provided with a copy of this report at the beginning of the public comment period.

This Conformity Analysis for the amended CMPO 2050 RTP will be made available for public inspection and comment from in accordance with EPA conformity regulations. This Conformity Analysis will also be posted on the CMPO website for public access and review during the public comment period. Written comments are due by the noticed comment period expiration date. A notice of RTP and this conformity report will be sent by e-mail to interested stakeholders and published in the Herald Journal newspaper.

Transportation Control Measures

A conformity analysis for the 2050 RTP must certify that nothing in the RTP interferes with the implementation of any Transportation Control Measure (TCM) identified in the applicable State Implementation Plan (SIP). There were no TCM activities identified as mobile source control strategies latest SIP revision submitted by the Utah State Governor in December 2014.

Emission Budget

In the revised State Implementation Plan (SIP) submitted to EPA by the Utah Governor December 2014 (and subsequent amendments) a Motor Vehicle Emission Budget (MVEB) is identified for direct PM 2.5 as well as precursor emissions for NO_x and VOC pollutants. This mobile source budget was given an “adequacy determination” by EPA with an effective date of September 28, 2015.

Currently Conforming Plan and TIP

As demonstrated in this document, the 2050 RTP for Cache County satisfies conformity requirements. Also, all projects in the CMPO’s 2019-2024 Transportation Improvement Program (TIP) for Cache County are defined in the 2050 RTP. Therefore, the TIP also satisfies conformity requirements.

Regionally Significant

All regionally significant projects, regardless of funding source (federal, state, or local) are included in the CMPO 2050 RTP. Regionally significant projects are identified as those projects functionally classified as principal arterial or higher, or certain minor arterials as identified through the interagency consultation process. At the time of this document preparation, Cache County has not designated any minor arterials as regionally significant. This action will be considered as needed in the future and in accordance with interagency consultation procedures. The current Utah Department of Transportation Functional Classification map was used to

identify principal arterials. Interstate highways, freeways, expressways, principal arterials, light rail, and commuter rail are treated as regionally significant projects.

Because of their relative impact on air quality, all regionally significant projects regardless of funding source must be included in the regional emissions analysis, and any significant change in the design or scope of a regionally significant project must be reflected in the regional emissions analysis. The transportation projects identified in Appendix 1, including all regionally significant projects, have been included in the regional emissions analysis, and the modeling parameters used for these projects are consistent with the design and scope of these projects as defined in the 2050 RTP. In order to improve the quality of the travel model, other minor arterials and collectors, as well as local transit service, are also included in the regional travel model (and thus the regional emissions analysis) but these facilities are not considered regionally significant since they do not serve regional transportation needs as defined by EPA.

PM_{2.5} “Hot Spot” Analysis

In addition to the regional emissions conformity analysis presented in this document, Section 93.116 of the Transportation Conformity Regulations states that specific projects within particulate matter (PM_{2.5}) non-attainment areas are required to prepare a “hot spot” analysis of emissions. The “hot spot” analysis serves to verify that localized emissions from a specific project will meet air quality standards. This requirement is addressed during the NEPA phase of project approval before FHWA or FTA can issue final project approval.

B. Transportation Modeling

Cache County Utah Travel Demand Model (TDM)

For Cache County Utah a travel demand model was used to estimate vehicle miles of travel (VMT) and hourly speed profiles for analysis years 2019, 2021, 2030 2040 and 2050. Improvements to the CMPO travel model practice and procedure is an ongoing process. This conformity analysis is based on the latest version of the CMPO travel model. The CMPO travel modeling domain is only for Cache County Utah.

In 2018 the CMPO complete a major update of its TDM. This included updated traffic analysis zones geography, sub county land use forecasting, socioeconomic updates based on the Utah Governor’s Office of Management and Budget countywide totals for employment and population.

Planning Process

Federal funding for transportation improvements in urban areas requires that these improvements be developed through a comprehensive, coordinated, and continuous planning process involving all affected local governments. The planning process is certified annually by the CMPO Executive Council and reported to the Federal Highway Administration and Federal Transit Administration.

The documentation of the planning process includes, at a minimum, a twenty-year Regional Transportation Plan updated at least every four years; and a three-year to five-year Transportation Improvement Program (capital improvement program) updated and adopted at

least every four years. The planning process includes the involvement of local elected officials, state agencies, and the general public.

Travel Characteristics

The CMPO travel model is used to estimate vehicle miles traveled (VMT) and vehicle speeds for current and future transportation networks. The model VMT for 2016 is factored to match the 2016 VMT reported by UDOT through the HPMS data reporting system. The resulting 2016 HPMS adjustment factor (see Table 1 below) for each road type is then applied to the travel model VMT for future years resulting in the HPMS adjusted future VMT. The CMPO travel demand model is based on the latest available planning assumptions and a computerized representation of the transportation network of highways and transit service. The travel model files used for this conformity analysis are available upon request.

Table 1
Summary of 2016 Model to HPMS Factors

	2016 HPMS Adj Factor
Rural Interstate	NA
Rural Other Principal Arterial	1.14
Rural Minor Arterial	0.98
Rural Major Collector	1.30
Rural Minor Collector	0.91
Rural Local	11.43
Urban Interstate	NA
Urban Freeway and Expressway	NA
Urban Other Principal Arterial	1.10
Urban Minor Arterial	1.13
Urban Collector	1.18
Urban Local	3.10

Table 2 summarizes the weekday vehicle miles traveled (VMT) for Cache County in each horizon year included in the regional emissions analysis. The HPMS adjusted average weekday VMT data shown in Table 2 is adjusted further for winter variations as part of the emission projection calculation in a separate step.

Table 2
Vehicle Miles Traveled (HPMS Adjusted Average Winter Weekday)

	2019	2021	2030	2040	2050
Cache County	3,190,979	3,312,468	3,967,381	4,655,438	5,225,227

C. Emission Modeling

The MOVES model computer program developed by the EPA and is the required platform to complete emission modeling for conformity purposes. Inputs to the MOVES2014b model include vehicle population, emission testing programs, fuel supply, fuel formulation, meteorological conditions, and vehicle age.

Average Speed Distribution

Cache MPO obtained average speed distributions from its Travel Demand Model. The TDM analyzes thousands of separate traffic segments called "links" that together comprise the network of roads in Cache County. Each link is assigned, for each of the four major time periods during the day (AM peak, midday, PM peak and nighttime), an average speed, an increment of VMT and an increment of VHT (vehicle hours traveled). A specific number of links are assigned to each of the UDOT HPMS functional classes (road types, e.g., rural local, urban local, rural minor arterial, urban minor arterial, and so on). In effect, average speeds, VMT and VHT for each of the functional classes are combined to obtain average speed, VMT and VHT for rural arterials, urban arterials, rural local roads and urban local roads. (There are no interstates in Cache County).

Year 2019 = 2019 TDM Speeds

Year 2021 = 2024 TDM Speeds

Year 2030 = 2030 TDM Speeds

Year 2040 = 2040 TDM Speeds

Year 2050 = 2050 TDM Speeds

Alternative Vehicle and Fuel Technology

MOVES alternative vehicle and fuel technology was updated with 2017 State DMV registration data on fuel type for registered light duty vehicles (passenger cars and light duty trucks). The DMV fractions were applied to all model years. MOVES2014b default AVFT values were used for all remaining source type vehicles.

Fuel

MOVES 2014a default fuel parameters for diesel and CNG were used.

HourVMTFraction

MOVES2014b default Hour VMT Fraction values were used.

HPMSvTypeYear (VMT)

UDOT HPMS 2016 counts.

I/M Coverage

UDAQ constructed the Cache I/M Program coverages in consultation with the Bear River Health department. The Cache County I/M program exempts the first six model years and perform a biennial test on vehicles beginning in the seventh model year. Vehicles older than 1995 undergo a Two Speed Idle (TSI) test and vehicles newer than 1996 undergo On Board Diagnostic Testing (OBD). Below is a summary covering I/M programs in the year 2019.

Summary of the I/M Program for Cache County

Year	Vehicle Type	Beg Model Year	End Model Year	Frequency	I/M Test
2019	Cars & Trucks	1968	1995	Biennial	TSI
2019	Cars & Trucks	1996	2013	Biennial	OBD

Road Type Distribution

UDOT Division of Systems Planning and Programming provided 2017 VMT travel fractions for FHWA vehicle classes grouped by Gross Vehicle Weight Rating (GVWR) ranges. The travel fractions were obtained by county from automated pneumatic counters that detect axle spacing and "weigh-in motion" (WIM) counters placed on arterial, interstate, and local roads. CMPO TDM 2019 VMT and Vehicle Mix data were used to construct road type distribution and VMT by sourcetype.

Source Type Age Distribution

Utah Department of Motor Vehicle (DMV) provided a single age distribution for passenger cars (21) and light trucks (31,32) for 2017. The age distribution was held constant for all years modeled in the SIP. MOVES2014b default age distribution values were used for all remaining source type vehicles.

Source Type Year (Vehicle Population)

The CMPO utilized Utah DMV 2017 registration data for Model Years 2017-1969 for motor cycles, passenger cars, and light duty trucks up to 10,000 GVWR. The MOVES default vehicle fraction for these vehicles was used to determine the difference between cars and trucks since the DMV data cannot discern between a passenger car and light duty truck. The VMT growth rate from the CMPO travel demand model was used to estimate future population growth for motorcycles, passenger cars, and light duty trucks up to 10,000 GVWR.

ZoneMonthHour (Meteorological Data)

The metrological conditions are from the approved PM2.5 SIP for the Logan, UT-ID Nonattainment Area and consist of the average temperatures from January 11-21 2007 episode.

D. Conformity Determination

The following conformity findings for the Cache 2050 Regional Transportation Plan (RTP) are based on the transportation systems and planning assumptions described in this report, and the vehicle emissions model approved by EPA, MOVES2014b.

Logan Utah PM_{2.5} Non-attainment Area

Transportation capacity increasing projects found in Appendix 1 were included as part of this air quality analysis and resulting conformity report.

PM_{2.5} related emissions are present in two varieties referred to as direct emissions and precursor emissions. In this analysis, direct emissions of PM_{2.5} consist of particles emitted from vehicle exhaust and brake wear, and tire wear. Precursor emission of PM_{2.5} refers to vehicle exhaust emissions of gaseous nitrogen oxides (NO_x) that change to a particulate form through subsequent chemical reactions in the atmosphere. Nitrogen oxides Volatile Organic Compounds (VOC) are the main component of mobile source PM_{2.5} emissions in the Cache Valley Area.

As summarized in Tables 5a, 5b and 5c, emission estimates for the CMPO 2050 RTP satisfy the approved emission budget test for direct emissions and precursor emissions of PM_{2.5} in the Cache Valley non-attainment area. From this demonstration, it is concluded that the CMPO 2050 RTP conforms to EPA interim conformity requirements for PM_{2.5} non-attainment areas.

Table 5a
Logan Utah PM 2.5 Non-attainment Area
NO_x Precursor Conformity Determination

Year	2019	2021	2030	2040	2050
Seasonal Vehicles Miles Traveled (VMT)	3,190,979	3,312,468	3,967,381	4,655,438	5,225,227
2015 SIP Motor Vehicle Emission Budget (tons/day)	4.49	4.49	4.49	4.49	4.49
2050 RTP Emission Projections (tons/day)	3.08	2.53	1.28	0.98	1.08
Projection < SIP MVEB Test	PASS	PASS	PASS	PASS	PASS

Table 5b
Logan Utah PM 2.5 Non-attainment Area
Direct Particulates Conformity Determination

Year	2019	2021	2030	2040	2050
Seasonal Vehicles Miles Traveled (VMT)	3,190,979	3,312,468	3,967,381	4,655,438	5,225,227
2015 SIP Motor Vehicle Emission Budget (tons/day)	0.32	0.32	0.32	0.32	0.32
2050 RTP Emission Projections (tons/day)	0.21	0.18	0.11	0.10	0.11
Projection < SIP MVEB Test	PASS	PASS	PASS	PASS	PASS

Table 5c
Logan Utah PM 2.5 Non-attainment Area
VOC Conformity Determination

Year	2019	2021	2030	2040	2050
Seasonal Vehicles Miles Traveled (VMT)	3,190,979	3,312,468	3,967,381	4,655,438	5,225,227
2015 SIP Motor Vehicle Emission Budget (tons/day)	3.23	3.23	3.23	3.23	3.23
2050 RTP Emission Projections (tons/day)	2.31	2.03	1.42	1.33	1.48
Projection < SIP MVEB Test	PASS	PASS	PASS	PASS	PASS

Appendix-1

Highway and Transit Projects 2050 RTP

Cache County

CMPO 2050 REGIONAL TRANSPORTATION PLAN HIGHWAY PROJECTS

Phase 1 Highway Capacity Projects 2019 to 2030

Phase	Project #	Length (Miles)	Funding/Ownership	Project Name	Project Type	Lanes	Model Performance	2019 Estimated Cost	Phased Cost
1	1	0.41	local	Logan-No. Logan 1200 E., 2440 N to 2750 N	New Construction	2	High	\$3,272,604	\$3,992,577
1	2	1.05	local	Hyde Park -Smithfield 1200 E., 3800 N to 5000 N	New Construction	2	Med	\$8,483,504	\$10,349,874
1	3	1.54	local	No. Logan-Smithfield 1200 E.,3100 N to 4300 N.	Widening	2	Med	\$11,002,822	\$13,423,442
1	10	0.53	local	Logan, 300 S. Main St to 400 E	Widening	2	High	\$3,789,117	\$4,622,723
1	13	1.26	local	Logan 1800 N., 1000 W. to Main St.	Widening	2	High	\$9,494,137	\$11,582,847
1	16	4.94	state	Logan One-way Couplets (100 W.) from Hwy 89/91 to 800 N.	Widening	3	High	\$104,332,042	\$127,285,091
1	17	0.51	local	Logan 1400 N., 600 W. to 200 W.	Widening	4	High	\$3,678,051	\$4,487,223
1	20	0.16	local	Nibley 3200 S. Realign, Hwy 89/91	New Construction	2	NM	\$1,472,792	\$1,796,806
1	21	1.85	local	Nibley 800 W., 3200 S. to Logan	Widening	2	High	\$13,933,236	\$16,998,548
1	23	0.13	local	Nibley, 1200 West, 3200 S Realignment	New Construction	2	High	\$1,053,831	\$1,285,673
1	24	1.05	local	Nibley, 1200 West, 3200 S to Nibley Park Ave	Widening	2	High	\$7,651,517	\$9,334,850
1	25	0.56	local	Nibley, 1200 West, Nibley Park Ave to Hwy 89/91	New Construction	2	High	\$4,519,121	\$5,513,328
1	26	2.27	local	Nibley 1200 West, Hyrum to 3200 S.	Widening	2	High	\$16,378,252	\$19,981,468
1	32	0.74	local	Nibley, 3200 S, Hwy 165 to Main Street Millville	New Construction	2	Med	\$5,818,518	\$7,098,592
1	47	0.80	local	Hyde Park Wolfpack Way, 3100 N. to 3700 N.	New Construction	2	Med	\$7,321,826	\$8,932,628
1	52	0.87	local	Hyde Park 3100 N., Wolfpack Way to 800 E.	New Construction	2	High	\$6,211,349	\$7,577,846
1	53	0.43	local	Hyde Park, 3100 N., 800 E. to 1200 W.	Widening	2	Med	\$3,267,199	\$3,985,983
1	55	0.37	local	Logan 200 E, 300 S. to Gateway Dr	New Construction	2	High	\$3,401,796	\$4,150,191
1	58	0.28	local	Logan 400 N., 850 W. to 600 W.	New Construction	2	High	\$2,577,698	\$3,144,791
PHASE 1 TOTALS								\$217,659,413	\$265,544,483
PHASE 1 TOTALS FOR COUNTY								\$113,327,371	\$138,259,393
PHASE 1 TOTALS FOR STATE								\$104,332,042	\$127,285,091

Phase 2 Highway Capacity Projects 2031 to 2040

Phase	Project #	Length (Miles)	Funding/Ownership	Project Name	Project Type	Lanes	Model Performance	2019 Estimated Cost	Phased Cost
2	7	1.56	local	Logan 1000 N, Main to 1200 E.	Widening	4	Med	\$23,983,793	\$43,170,828
2	11	0.80	local	Logan 300 S, 600 W. to Main St	Widening	4	High	\$5,729,209	\$10,312,576
2	12	1.04	local	Logan, 400 E. 300 S. to Hwy 89	Widening	4	High	\$7,556,328	\$13,601,391
2	15	2.93	local	Logan 600 W., SR 30 to SR 252	Widening	2	High	\$21,723,707	\$39,102,673
2	29	0.65	local	Hyrum, 600 East, 300 N. to Hwy 165	Widening	2	Med	\$4,711,654	\$8,480,976
2	30	1.16	local	Wellsville 400 N., Hwy 23 to Hwy 89/91	Widening	2	Med	\$8,441,952	\$15,195,514
2	41	4.51	state	Nibley-Logan Western Arterial, Hwy 89/91 to SR 30	New Construction	4	High	\$60,463,535	\$108,834,363
2	42	8.26	state	Logan-Smithfield Western Arterial, SR 30 to Hwy 218	Widening	4	High	\$107,799,867	\$194,039,761
2	46	1.76	local	Smithfield 600 S., 200 W to 1000 E.	Widening	2	Med	\$12,575,131	\$22,635,236
2	49	0.84	local	Hyde Park, Wolf Pack Way, 3700 N to 4300 N.	New Construction	2	Med	\$7,745,273	\$13,941,491
2	50	1.59	local	Hyde Park 450 N., Hwy 91 to 700 E.	New Construction	2	Med	\$11,600,913	\$20,881,643
PHASE 2 TOTALS								\$272,331,363	\$490,196,453
PHASE 2 TOTALS FOR COUNTY								\$104,067,961	\$187,322,329
PHASE 2 TOTALS FOR STATE								\$168,263,402	\$302,874,124

Phase 3 Highway Capacity Projects 2041 to 2050

Phase	Project #	Length (Miles)	Funding/Ownership	Project Name	Project Type	Lanes	Model Performance	2019 Estimated Cost	Phased Cost
3	4	2.7	local	Logan & No. Logan, 1200 E., Hwy 89 to 3100 N	Widening	2	High	\$19,426,792	\$51,869,535
3	6	1.3	local	Logan 1000 N, 1000 W to Main	Widening	4	Low	\$19,533,175	\$52,153,578
3	8	0.5	local	Logan 200 E. 1400 N. to 1800 N.	Widening	4	Low	\$8,735,409	\$23,323,542
3	14	0.9	local	Logan 200 W., 1800 N. to 2200 N.	Widening	2	Low	\$7,086,733	\$18,921,578
3	18	2.3	local	Logan 600 W. from Hwy 89/91 to SR 30	Widening	2	Med	\$16,519,797	\$44,107,859
3	19	3.4	state	Nibley-Logan Hwy 89/91, 3200 S to 100 W.	Widening	6	Low	\$41,841,881	\$111,717,822
3	28	3.8	local	Nibley, 4400 North Widen & New Road from Hwy 165 to Hwy 89/91	Widening	2	Low	\$27,426,918	\$73,229,871
3	31	2.4	state	Wellsville Hwy 23, Hwy 89/91 to 500 N.	Widening	4	Low	\$16,791,218	\$44,832,552
3	35	0.5	local	Nibley, 200 West, Ridgeline to Mill Road	New Construction	2	Low	\$3,396,591	\$9,068,899
3	38	0.4	local	Providence, Gateway Dr., 100 S to 550 N. Millville	Widening	2	Low	\$3,145,155	\$8,397,563
3	40	0.4	local	Providence 100 S, Gateway Dr to 200 W.	Widening	2	Low	\$2,490,239	\$6,648,937
3	43	2.1	local	Logan Airport Road, SR 252 to 2400 W.	Widening	4	Low	\$16,098,213	\$42,982,228
3	44	1.4	state	Logan 1000 W., 1400 N. to 2500 N.	Widening	4	Low	\$21,198,657	\$56,600,415
3	45	2.5	local	Smithfield 200 W., 5000 N. to 3100 N. Hyde Park	New Construction	2	Low	\$20,116,939	\$53,712,226
3	48	0.9	local	Smithfield 250 E. 4300 N. to 600 S.	Widening	2	Low	\$6,614,197	\$17,659,907
3	59	3.2	state	Logan, Hwy 91 from 800 N. to 2500 N., No Logan	Widening	6	NM	\$49,542,349	\$132,278,071
3	60	2.2	state	No. Logan, Hwy 91 from 2500 N. to 600 E. Smithfield	Widening	6	NM	\$34,283,833	\$91,537,833
PHASE 3 TOTALS								\$314,248,096	\$839,042,415
PHASE 3 TOTALS FOR COUNTY								\$150,590,158	\$402,075,722
PHASE 3 TOTALS FOR STATE								\$163,657,937	\$436,966,693

Appendix-2

List of Acronyms

ADT	Average Daily Traffic
CAAA	Clean Air Act Amendments
CMPO	Cache Metropolitan Planning Organization
CVTD	Cache Valley Transit District
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HPMS	Highway Performance Management System
IDOT	Idaho Department of Transportation
IDEQ	Idaho Department of Environmental Quality
MPO	Midland-Odessa Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Policy Act
PM 2.5	Particulate Matter less than 2.5 micrometers
RTP	Regional Transportation Plan
SIPs	State Implementation Plans
VMT	Vehicle Miles Traveled