Appendix A
Conformity Document
FY 2007
Transportation Improvement Program

Introduction

United State Department of Transportation's Transportation Conformity Reference Guide May 2000 provides the best explanation of transportation conformity. It states "Transportation conformity is a way to ensure the Federal funding and approval are given to those transportation activities that are consistent with air quality goals." It ensures that these transportation activities do not worsen air quality or interfere with the State Implementation Plan for the non-attainment area.

Bannock Plannong Organization (BPO) is part of the Portneuf Valley Non-Attainment Area (PVNAA). The PVNAA is a moderate Particulate Matter less than 10 microns in size (PM_{10}) non-attainment area as defined by the Environmental Protection Agency (EPA). As a Metropolitan Planning Organization (MPO), BPO is required to conduct a conformity analysis for all transportation plans and programs.

The annual update to the Metropolitan Transportation Improvement Program (MTIP) is one of the many triggers that require a conformity determination. A conformity determination is BPO's Policy Board assurance to the Idaho Transportation Department, Federal Transit Administration, and Federal Highway Administration that projects which are federally funded are consistent with air quality goals and the Clean Air Act Amendments (CAAA) of 1990.

The 1990 CAAA prohibits any Federal agency from supporting activities that do not conform to the applicable State Implementation Plan (SIP). Specifically the CAAA prohibits Metropolitan Planning Organizations from approving transportation plans, projects or programs that do not conform to the SIP.

The PVNAA SIP was submitted in May 2005 but has yet to be approved. The Motor Vehicle Emissions Budget (MVEB) for the PVNAA was determined to be adequate for conformity purposes on August 31, 2004. The MVEB determines the maximum emissions for This PM_{10}, Nitrogen Dioxide (NO_x), Volatile Organic Compounds (VOCs), Total Exhaust, PM_{10} Emissions, and re-entrained road dust. Table 1 establishes the emission limits (Motor Vehicle Emissions Budget) for the various pollutants. PM_{10} budget includes Total Exhaust, PM_{10} Emissions, and re-entrained road dust.

Table 1: PVNAA Emissions Budget for 2005, 2010, and 2020.

Year	Particulate Matter PM10	Nitrogen Oxides	Volatile Organic Compounds
2005	897	1575	983
2010	1120	1085	716
2020	1364	514	585

Budget test is a comparison of the budget limits to the emissions from the transportation system after the improvements proposed in the FY 2005 MTIP and Long Range Transportation Plan (LRTP) are implemented throughout the twenty year time frame of the LRTP.

Types of Emissions Modeled

During the development of the SIP for the PVNAA secondary, IDEQ identified aerosols as an important component of the mobile emissions. To address all the mobile emissions problems, BPO must monitor Nitrogen Dioxide (NOx), Volatile Organic Compounds (VOCs), Total Exhaust PM_{10} Emissions, and re-entrained road dust. IDEQ identified these pollutants as having the biggest contribution to the mobile emissions in the PVNAA.

Total vehicle emissions are calculated by adding the emissions generated by the vehicle to the emissions generated by the vehicle traveling over the roadway. The EPA regulates the method used to calculate the vehicle emission. Currently, MOBILE6.2 is the recognized model for vehicle emissions. The regulations are not as clear for calculating the emissions for roads. EPA recommends using emissions factors from Compilation of Air Pollutant Emission Factors, AP-42, or developing a local formula to determine the amount of re-entrained road dust. In 1998, BPO, in cooperation with Idaho Department of Environmental Quality, completed a road dust study for the Power/Bannock Non-Attainment Area. This study produced formulas to calculate the emission factors for dust by roadway classification. The only roadway type where this does not apply is non-paved roads. For non-paved roads the AP-42 unpaved roads procedure was used.

MOBILE6.2

MOBILE6.2 is the required emissions model provided by the EPA's Office of Transportation and Air Quality (OTAQ), and is used to determine the on-road vehicle VOC and NOx emissions. MOBILE6.2 produces emission factors for each pollutant based on the physical environment and vehicle operating characteristics. Emission factors are reported in grams of pollutant/vehicle miles traveled. The results are then converted from grams to pounds to be consistent with the emissions inventory. PVNAA uses the MOBILE6.2 national default characteristics and percentages for vehicle fleet mix. Table 2 lists the input parameters for the MOBILE6.2 model. Appendix A contains the input and outputs of the MOBILE6.2 model.

Besides the required MOBILE6.2 inputs VOC and NOx, the PVNAA requires total PM_{10} exhaust. Additional parameters used for exhaust emissions were particulates which start the PM portion of the model, particle size (set at 10.0 microns), and various lookup tables associated with PM emissions. These defaults were used for each table. The conformity process had forty-eight model runs. Table 3 lists the emission facts for VOC, NO_x and total PM_{10} as determined by MOBILE6.2.

Table 2: Parameters for MOBILE6.2 Emissions Model

Parameter	Modeled at	Note
VMT Mix	Model defaults	BPO conducted limited filed studies to confirm the ratio of vehicles in the PVNAA were comparable to the national average
Min/Max Temp	Winter = 45 / 76 F Summer = 23 / 44	National Weather Service monthly average from 1938 to 2002. Winter is October through March. Summer is April through September
Absolute Humidity	January = 20 grains/lb July = 45 grains lb	Values used in PVNAA Emissions Inventory.
Fuel RVP	January =15 psi July = 11.5 psi	Values used in PVNAA Emissions Inventory.
Diesel Fuel Sulfur Content	500 ppm	Idaho default as agreed to by IDEQ.
Fuel Program	3	Fuel Program represents Tier 2 Sulfur phase-in schedules. the number 3 applies to Conventional Gasoline West.
Facility Types	Interstate, Arterial @32, Arterial @30 represents collector roads), Local	MOBILE 6.2 defaults except that interstate ramps are not used. They are included in the interstate category.
Facility Speeds	Interstate = 65 mph; Arterial (Principal and Minor) = 32 mph; Collector = 30 mph; Local = 25 mph	The speeds are those used on most links within the travel demand model. Speeds represent the normal conditions within the urban area.
# of Precipitation Days	96 days	Road Dust Study divided into average days per month.
Average Fleet Weight	Weighted national defaults	The national VMT percent by vehicle type was used to calculated the average fleet weight. This number is used in calculating the PM_{10}.
VMT	Calculated by travel demand model.	VMT is calculated into Interstates, Principal Arerials, Minor Arterials, Collector, and Locals as a percentage of the previous four.
Seasonal Evaluation	Winter (January) - Summer (July)	Winter is October through March. Summer is April through September
Altitude	Low	Low was used in the emissions inventory
Evaluation Month	January and July	MOBILE 6.2 defaults. For specific months represented see seasonal evaluation.

Pocatello Road Dust Study and AP-42

The 1998 Road Dust study developed formulas for calculating emissions caused by vehicles traveling over the road surface. These emissions come from the material previously deposited on the roadway surface or the resuspension of material from tires and undercarriages. The study found that the number of vehicles, average vehicle weight, and surface silt-loading were the primary factor to consider. The BPO travel demand model determines the number of vehicles for each roadway type. Running the MOBILE6.2 model using national defaults determined the average vehicle weight by classification. Pocatello Road Dust Study provided the Silt-loading for each roadway class. Silt-loading is a measurement of the mass of material per unit area.

Table 3: MOBILE6.2 Emission Factors

Local January						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.0001356	0.0001005	0.0000794	0.0000719	0.0000697	0.0000688
VOC	0.0038801	0.0025705	0.0017857	0.001444	0.0012698	0.0012169
Nox	0.0053439	0.0034656	0.0020503	0.0013757	0.0010736	0.0009303
Local July						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.0001336	0.0000981	0.0000791	0.0000716	0.0000697	0.0000688
VOC	0.0049272	0.0034502	0.0024493	0.0020745	0.0017725	0.0017306
Nox	0.0046561	0.002963	0.0017482	0.0012412	0.0009237	0.0008025
Collector January						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.0013448	0.0010031	0.0000794	0.0000719	0.0000697	0.0000688
VOC	0.003157	0.0019797	0.0013668	0.0009987	0.0009436	0.0008995
Nox	0.0051477	0.0032606	0.0019555	0.0013294	0.0010736	0.0009215
Collector July						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.0001325	0.0000981	0.0000785	0.0000719	0.0000697	0.0000688
VOC	0.0036817	0.0023832	0.0016733	0.0013139	0.001142	0.0011067
Nox	0.0044444	0.0027535	0.001649	0.0011243	0.0008951	0.000787
Arterial January						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.000134	0.0001003	0.0000791	0.0000719	0.0000697	0.0000688
VOC	0.0030908	0.0019444	0.0013448	0.0010714	0.0009259	0.000884
Nox	0.0051411	0.0032496	0.0019466	0.0013205	0.0010494	0.0009171
Arterial July						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.0001321	0.0000981	0.0000785	0.0000716	0.0000697	0.0000688
VOC	0.0035957	0.0023325	0.001638	0.0012853	0.0011155	0.0010802
Nox	0.0044268	0.0027425	0.0016424	0.0011199	0.0008907	0.0007848
Freeway January						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.0001338	0.0001003	0.0000791	0.0000719	0.0000697	0.0000688
VOC	0.0027601	0.0017504	0.0012302	0.0009832	0.0008488	0.0008091
Nox	0.0073567	0.0045877	0.0026213	0.0017041	0.0012985	0.0011089
Freeway July						
Emission	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
Total PM10	0.0001318	0.0000981	0.0000785	0.0000716	0.0000697	0.0000688
VOC	0.0030401	0.0020018	0.0014286	0.0011199	0.0009612	0.0009281
Nox	0.0064859	0.0039572	0.0022553	0.001466	0.0011177	0.0009546

AP-42 Section 13.2.2 Unpaved Roads provide the emissions factors for those roadways within the PVNAA that are unpaved. The Road Dust Study provides some information for the AP-42 formula.

BPO in cooperation with the Idaho Department of Environmental Quality (IDEQ), conducted a Road Dust Study in 1998. The purpose of this study was to develop local emission factors for fugitive dust. EPA recommends that local data be used whenever possible. The Road Dust study developed two equations for emissions from streets; one for industrial and one for non-industrial streets. BPO uses the non-industrial equation below for all paved roads:

EFPAVED lbs/vmt= 7.47* S0.0401*W0.93* 0.101

Where: S = Silt Loading in g/m2
W = Average fleet vehicle weight in tons.

Silt Loading

Table 4 provides the average silt loading by month for each type of roadway. This data was collected during the Road Dust Study and is also presented in the Emissions Inventory.

Table 4: Silt Loading in g/m^2 by Month

Month	Local	Collector	Arterial	Interstate
October	7.015	1.380302	1.683412	0.414859
November	1.88582	0.0684349	1.109212	0.387629
December	8.081476	0.230741	1.1141108	0.243469
January	2.57565	0.183005	0.98315	0.418063
February	2.905615	0.603188	0.35789	0.120533
March	2.761456	0.603588	0.35789	0.120533
April	4.909966	0.53902	1.352833	0.185806
May	1.14153	0.233657	0.184234	0.065032
June	2.230638	0.23993	0.34504	0.065032
July	1.142598	0.316613	0.370698	0.067274
August	0.867093	0.268261	0.576638	0.024667
September	0.52111	0.267843	0.097654	0.058305
Source: Light 1998				

Fleet Vehicle Weight

The average fleet vehicle weights were determined using MOBILE6.2 national averages. The percent of the fleet and the average weight for that class was calculated to determine the average fleet weight in tons. Table 5 has the inputs for each roadway class by year.

Table 5: Average Fleet Vehicle Weight by Year in Tons

Road Class	2005	2010	2015	2020	2025	2030
Local	2.33	2.47	2.57	2.62	2.63	2.63
Collector	2.33	2.47	2.57	2.62	2.63	2.63
Arterial	4.09	4.24	4.34	4.42	4.42	4.42
Interstate	4.09	4.24	4.34	4.42	4.42	4.42
Average fleet in tons						

Using the above data emission factors for each roadway class by month was calculated. Table 6 is a summary of these calculations.

Table 6: Fugitive Dust Emissions Factors by Roadway Class and Year

Road Type:	Local											
Year	01-Jan	01-Feb	01-Mar	01-Apr	01-May	01-Jun	01-Jul	01-Aug	01-Sep	01-Oct	01-Nov	01-Dec
2000	0.005035	0.005284	0.005177	0.006521	0.003633	0.004753	0.003634	0.003254	0.002653	0.007525	0.004443	0.007964
2005	0.005339	0.005604	0.005491	0.006916	0.003853	0.005040	0.003854	0.003450	0.002813	0.007979	0.004712	0.008445
2010	0.005643	0.005923	0.005803	0.007309	0.004072	0.005327	0.004073	0.003647	0.002973	0.008433	0.004980	0.008926
2015	0.005840	0.006129	0.006005	0.007564	0.004214	0.005513	0.004216	0.003774	0.003077	0.008728	0.005154	0.009237
2020	0.005963	0.006258	0.006132	0.007724	0.004303	0.005629	0.004304	0.003854	0.003142	0.008911	0.005262	0.009432
2025	0.005969	0.006265	0.006138	0.007732	0.004307	0.005635	0.004309	0.003858	0.003145	0.008921	0.005268	0.009442
2030	0.005969	0.006265	0.006138	0.007732	0.004307	0.005635	0.004309	0.003858	0.003145	0.008921	0.005268	0.009442
2035	0.005969	0.006265	0.006138	0.007732	0.004307	0.005635	0.004309	0.003858	0.003145	0.008921	0.005268	0.009442
Road Type:	Collector											
Year	02-Jan	02-Feb	02-Mar	02-Apr	02-May	02-Jun	02-Jul	02-Aug	02-Sep	02-Oct	02-Nov	02-Dec
2000	0.001744	0.002813	0.002814	0.002689	0.001923	0.001944	0.002172	0.002033	0.002031	0.003921	0.001175	0.001914
2005	0.001849	0.002983	0.002984	0.002852	0.002039	0.002061	0.002304	0.002156	0.002154	0.004158	0.001246	0.002029
2010	0.001954	0.003153	0.003154	0.003014	0.002156	0.002179	0.002435	0.002278	0.002277	0.004394	0.001317	0.002145
2015	0.002022	0.003263	0.003264	0.003119	0.002231	0.002255	0.002520	0.002358	0.002356	0.004547	0.001363	0.002219
2020	0.002065	0.003332	0.003333	0.003185	0.002278	0.002302	0.002573	0.002407	0.002406	0.004643	0.001392	0.002266
2025	0.002067	0.003335	0.003336	0.003188	0.002280	0.002304	0.002575	0.002410	0.002408	0.004648	0.001393	0.002269
2030	0.002067	0.003335	0.003336	0.003188	0.002280	0.002304	0.002575	0.002410	0.002408	0.004648	0.001393	0.002269
2035	0.002067	0.003335	0.003336	0.003188	0.002280	0.002304	0.002575	0.002410	0.002408	0.004648	0.001393	0.002269
Road Type:	Arterial											
Year	03-Jan	03-Feb	03-Mar	03-Apr	03-May	03-Jun	03-Jul	03-Aug	03-Sep	03-Oct	03-Nov	03-Dec
2000	0.003422	0.002282	0.002282	0.003889	0.001748	0.002249	0.002314	0.002763	0.001355	0.004245	0.003591	0.003598
2005	0.003629	0.002420	0.002420	0.004124	0.001854	0.002385	0.002454	0.002930	0.001437	0.004502	0.003809	0.003815
2010	0.003835	0.002557	0.002557	0.004359	0.001960	0.002520	0.002594	0.003097	0.001519	0.004758	0.004025	0.004032
2015	0.003969	0.002647	0.002647	0.004511	0.002028	0.002608	0.002684	0.003205	0.001572	0.004924	0.004166	0.004173
2020	0.004053	0.002702	0.002702	0.004606	0.002071	0.002663	0.002741	0.003272	0.001605	0.005028	0.004253	0.004261
2025	0.004057	0.002705	0.002705	0.004611	0.002073	0.002666	0.002744	0.003275	0.001607	0.005033	0.004258	0.004265
2030	0.004057	0.002705	0.002705	0.004611	0.002073	0.002666	0.002744	0.003275	0.001607	0.005033	0.004258	0.004265
2035	0.004057	0.002705	0.002705	0.004611	0.002073	0.002666	0.002744	0.003275	0.001607	0.005033	0.004258	0.004265
Road Type:	Interstate/Freeway											
Year	04-Jan	04-Feb	04-Mar	04-Apr	04-May	04-Jun	04-Jul	04-Aug	04-Sep	04-Oct	04-Nov	04-Dec
2000	0.002429	0.001475	0.001475	0.001754	0.001152	0.001152	0.001167	0.000781	0.001102	0.002421	0.002356	0.001955
2005	0.002575	0.001564	0.001564	0.001860	0.001221	0.001221	0.001238	0.000828	0.001169	0.002421	0.002356	0.001955
2010	0.002722	0.001653	0.001653	0.001966	0.001291	0.001291	0.001308	0.000875	0.001235	0.002713	0.002641	0.002191
2015	0.002817	0.001711	0.001711	0.002035	0.001336	0.001336	0.001354	0.000905	0.001278	0.002808	0.002733	0.002268
2020	0.002876	0.001747	0.001747	0.002078	0.001364	0.001364	0.001382	0.000925	0.001305	0.002867	0.002790	0.002316
2025	0.002879	0.001749	0.001749	0.002080	0.001365	0.001365	0.001384	0.000926	0.001307	0.002870	0.002793	0.002318
2030	0.002879	0.001749	0.001749	0.002080	0.001365	0.001365	0.001384	0.000926	0.001307	0.002870	0.002793	0.002318
2035	0.002879	0.001749	0.001749	0.002080	0.001365	0.001365	0.001384	0.000926	0.001307	0.002870	0.002793	0.002318

Unpaved Roads

The PVNAA still has some unpaved roads. The emission factors for these roads were taken from the emissions inventory developed for the SIP. The factors used AP-42 unpaved road equations. Table 7 lists the emission factors used for unpaved surfaces.

Table 7: Unpaved Road Fugitive Road Dust Emission Factor by Month

Month	Smoothed Moisture Content, %	Silt Content, %	Unpaved Road PM10 EF, lb/VMT	Unpaved Road PM2.5 EFa, lb/VMT
January	3.34	3.25	0.0863	0.0049
February	3.34	2.02	0.0591	0.0034
March	3.34	1.9	0.0561	0.0032
April	3.21	2.81	0.0798	0.0046
May	3.21	0.52	0.0208	0.0012
June	3.21	1.39	0.0454	0.0026
July	0.67	2.25	0.3221	0.0184
August	0.67	6.38	0.7411	0.0422
September	0.67	5.13	0.6226	0.0355
October	3.21	5.35	0.1336	0.0076
November	3.34	1.71	0.0516	0.0029
December	3.34	6.7	0.1538	0.0088
Average	3.34	3.46	0.1977	0.0113

a. Per Treasure Valley Road Dust Study, PM2.5 constitutes 5.7% of the PM

Travel Demand Model

The methods used to calculate mobile emissions use Vehicle Miles Traveled (VMT) and emissions factors. Emission factors were discussed in the previous section. BPO's travel demand model generates VMT by using socioeconomic data to simulate vehicle traffic on local, collector, arterial, and freeway segments. BPO's model is based on 2003 socioeconomic data that BPO has projected through the year 2030.

Conformity Procedure

Transportation conformity determines if the proposed Transportation Improvement Program (TIP) and the Long Range Transportation Plan meet the Clean Air Act and the National Ambient Air Quality Standards. Regional travel is converted from Vehicle Miles Traveled into pounds of pollutants. The period for conformity is the life of the Long Range Transportation Plan (LRTP) or twenty-years. Analysis periods must be no more then five years from 2006 and every ten years after that. The last analysis period must be the last year of the LRTP or 2030, the horizon year.

Baseline

Baseline emissions are not calculated in a Budget Conformity test, but the VMT is calculated to show the changes in VMT as a result of the MTIP. The baseline VMT assumes that only the demographic data (population and employment) will change over the twenty-year period. The 2004 Base network was used to determine the model's calibration. The projected VMT from today's system is used to analyze 2005, 2010, 2015, 2020, 2025 and 2030 horizon years using demographic projections.

Action

Action emissions are those emissions that will occur if proposed projects are constructed according to the MTIP and Long Range Transportation Plan. These projects were divided into five year intervals. Table 8 shows the VMT for the Base and Table 9 for the VMT after the projects listed in the MTIP and Long-range Transportation Plan were included in the model. The MTIP VMT numbers are slightly higher than the Base until 2020 when several capacity projects allow more traffic on slightly shorter routes. The other note is Collector VMT in the MTIP is lower due to the construction of the South Valley Connector (Minor Arterial) and removal of Cheyenne Ave (Collector)

Table 8: VMT for Base by Five Year Period

Classification	2005	2010	2015	2020	2025	2030
Local	139,366	148,324	173,029	190,095	215,589	220,207
Collector	75,536	85,675	94,022	102,929	117,659	117,991
Minor Arterial	228,252	256,657	289,271	320,689	371,931	376,636
Principal Arterial	417,238	452,490	492,833	531,993	592,992	599,742
Interstate	450,118	451,602	577,900	641,822	729,091	756,114
Total	1,310,510	1,394,748	1,627,055	1,787,528	2,027,262	2,070,690

Table 9: VMT for MTIP and Long Range Transportation Plan

Classification	2005	2010	2015	2020	2025	2030
Local	139,995	148,677	173,116	190,065	215,313	219,853
Collector	81,131	76,558	84,151	90,846	98,670	100,963
Minor Arterial	220,183	266,650	302,317	337,280	381,999	386,360
Principal Arterial	420,215	442,114	479,680	519,477	590,173	598,466
Interstate	454,903	464,061	588,609	649,578	738,509	761,716
Total	1,316,427	1,398,060	1,627,873	1,787,246	2,024,664	2,067,358

Scenarios

2010 Analysis Year

The base travel demand model was modified to include changes as a result of regionally significant projects in the TIP. No regionally significant non-federally funded projects are planned. The projects in the Pocatello/Chubbuck area for 2004 - 2005 project years are outlined below. A project was included in this analysis year if the project had an anticipated construction start date before or during 2005.

Project Title: Clark Street Overpass
Key Number: 7120
Anticipated CN Start: 2005
Project Description: Replace the north and south interstate bridges and widen Center Street to four lanes with two left turn lanes.
Model Modifications: Increase capacity from 19,178 to 43,298 under the Interstate and from to 15,241 from Interstate off ramp to 19th Street.

Project Title: Signal Coordination
Key Number: 7804
Anticipated CN Start: 2005
Project Description: Implement traffic signal coordination system
Model Modifications: Project modified the signal coordination and system on the Yellowstone corridor. Delay was reduced. A one mile per hour increase was added to links on Yellowstone from Alameda to Oak. Most of the benefits of Signal Coordination are related to the peak hour and for CO and PM2.5.

Project Title: I-86 Widening; Chubbuck IC to Pocatello Creek IC
Key Number: 7829 and 8662
Anticipated CN Start: 2008
Project Description: Add third lane on the west bound lanes on I-86 west of Chubbuck interchange to I-15 Pocatello Creek interchange.
Model Modifications: Increased capacity on East bound lanes only from Pocatello Creek from IC to Alameda Road.

Project Title: Cheyenne Corridor Safety Improvement Phase I
Key Number: 7508, 9399, 9699,9721
Anticipated CN Start: 2007
Project Description: Connect Bannock Highway to South 5th with grade separate crossing.
Model Modifications: Located a new road connecting Leo-Harper with South 5th. A connection to South 2nd was also made. The new road will be 4 lanes with turn pockets at the intersection. Capacity was set at 26,836. The road was classified as a Minor Arterial. The speed was set at 35 mph. Cheyenne's connection to South 2nd was removed and all links on Cheyenne reclassified as local.

Project Title: Alameda Road Bike Lane
Key Number: 8126
Anticipated CN Start: 2008
Project Description: Re-align road to allow for bicycle and pedestrian facilities and add turn lane.
Model Modifications: Increased capacity from 21,469 to 26,838

Project Title: Hiline Road Widening - Chubbuck to Flandro
Key Number: 8472
Anticipated CN Start: 2009
Project Description: Widen Hiline Road from Chubbuck to Flandro Drive to five lanes.
Model Modifications: Increase capacity from12,262 to 28,836.

2015 Analysis Year

The projects in the Pocatello/Chubbuck area for 2011 - 2015 project years are outlined below.

Project Title: Intersection Alameda and Hawthorne
Key Number: 8127
Anticipated CN Start: 2011
Project Description: Modify the existing intersection and add two additional signals.
Model Modifications: No model modifications made.

Project Title: Chubbuck IC Bridge on I-86
Key Number: 9547
Anticipated CN Start: 2012
Project Description: Replace bridge and add one additional trough lane; one each side.
Model Modifications: Increase capacity from 5 lanes to 7 lanes.

Project Title: Hiline Road: Alameda Road to Pearl Street
Key Number: LRPT 2006
Anticipated CN Start: 2014
Project Description: Add turn lane at three intersection locations.
Model Modifications: Increase capacity from 2 lane to 3 lane.

Project Title: Yellowstone Avenue: Intersection with Pearl Street
Key Number: LRPT 2006
Anticipated CN Start: 2015
Project Description: Signalize intersection
Model Modifications: Remove delay on Pearl Street.

Project Title: Yellowstone Avenue: I-86 to Chubbuck Road
Key Number: LRPT 2006
Anticipated CN Start: 2015
Project Description: Added an additional third lane north bound.
Model Modifications: Increased capacity by one lane to the north bound only traffic.

2020 Analysis Year

The projects in the Pocatello/Chubbuck area for 2016 - 2020 project years are outlined below.

Project Title: South 5th Avenue: Clark Street to Sherman
Key Number: LRPT 2006
Anticipated CN Start: 2016
Project Description: Add an additional third lane north bound.
Model Modifications: Increased capacity to three lanes north bound only traffic.

Project Title: South 5th Avenue: Clark Street to Sherman
Key Number: LRPT 2006
Anticipated CN Start: 2016
Project Description: Add an additional third lane south bound.
Model Modifications: Increased capacity to three lanes south bound only traffic.

Project Title: Hiline Road: Pearl Street to Flandro
Key Number: LRPT 2006
Anticipated CN Start: 2018
Project Description: Widen section from 2 lanes to 5 lanes.
Model Modifications: Increased capacity from 2 lanes to five lanes.

Project Title: Hawthorne: Eldredge to Quinn
Key Number: LRPT 2006
Anticipated CN Start: 2019
Project Description: Widen section from 2 lanes to 3 lanes and add sidewalk on both sides.
Model Modifications: Increased capacity from 2 lanes to 3 lanes.

Project Title: I-86 West and East Bound Bridges at Hawthorne
Key Number: LRPT 2006
Anticipated CN Start: 2020
Project Description: Replace existing bridges and allow for wider span underneath allowing for widening of Hawthorn to 5 lanes.

Model Modifications: Increased capacity from 2 lanes to 5 lanes.

2025 Analysis Year

The projects in the Pocatello/Chubbuck area for 2021 – 2025 project years are outlined below.

Project Title: Hawthorne: Intersection at Quinn
Key Number: LRPT 2006
Anticipated CN Start: 2021
Project Description: Signalize Intersection
Model Modifications: No model changes

Project Title: Bannock Highway: South Grant to Johnny Creek
Key Number: LRPT 2006
Anticipated CN Start: 2023
Project Description: Widen section from 2 lanes to 5 lanes.
Model Modifications: Increased capacity from 2 lanes to 5 lanes.

Project Title: South 5th Street: Intersection with Barton
Key Number: LRPT 2006
Anticipated CN Start: 2024
Project Description: Signalize intersection
Model Modifications: No model changes.

Project Title: Chubbuck Road: Intersection with Hawthorne
Key Number: LRPT 2006
Anticipated CN Start: 2025
Project Description: Signalize intersection
Model Modifications: No model changes.

2030 Analysis (Horizon) Year

The projects in the Pocatello/Chubbuck area for 2026 - 2030 project years are outlined below.

Project Title: Bannock Highway: South Grant to Main Street
Key Number: LRPT 2006
Anticipated CN Start: 2026
Project Description: Widen section from 2 lanes to 5 lanes.
Model Modifications: Increased capacity from 2 lanes to 5 lanes.

Project Title: Memorial Drive: Bonneville to Carter
Key Number: LRPT 2006
Anticipated CN Start: 2027
Project Description: Widen section from 2 lanes to 5 lanes.
Model Modifications: Increased capacity from 2 lanes to 5 lanes.

Project Title: South 4th Street: Intersection with Barton
Key Number: LRPT 2006
Anticipated CN Start: 2029
Project Description: Signalize intersection
Model Modifications: No model changes.

Project Title: Carter Street: Intersection with 5th
Key Number: LRPT 2006
Anticipated CN Start: 2029
Project Description: Signalize intersection
Model Modifications: Removed delay on Carter Street.

Project Title: Chubbuck Road at the intersection with Hawthorne
Key Number: LRTP 2006
Anticipated CN Start: 2029
Project Description: Add center turn lanes and bus pull outs.
Model Modifications: Increased capacity from 4 lanes to 5 lanes

Emissions

Regional emissions analysis comprises the basis of the conformity determination and is performed to demonstrate the consistency of transportation plans and MTIP with the SIP vehicle emissions budget.

Conformity procedures were outlined earlier in this document. This section reports the roadway classification emissions by analysis periods. Table 11 illustrates that in all analysis years the action emissions are lower than the Motor Vehicle Emissions Budget for the same time period.

Table 10: MVEB and MTIP Emissions Comparison

	2005		2010		2015		2020		2025		2030	
	MVEB	LRTP	MVEB	LRTP	MVEB	LRTP	MVEB	LRTP	MVEB	LRTP	MVEB	LRTP
PM10	897	556	1,120	601	1,120	781	1,364	781	1,364	874	1,364	890
VOC	983	810	716	562	716	394	585	394	585	388	585	382
NOx	1,575	1,312	1,085	869	1,085	440	514	440	514	381	514	343
All values are tons/yr												