

# Noise

## **I-84, KARCHER INTERCHANGE TO FIVE MILE**

Boise, Meridian, Nampa, Idaho  
Completed October 2008

A noise study was performed for a project located in Canyon and Ada counties, Idaho on approximately 16 miles of the existing I-84 corridor, from Karcher Interchange in Canyon County to east of Five Mile Overpass in Ada County. Noise measurements were taken in the field using a CEL-593.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5. Noise mitigation receptors were identified. Bionomics attended public meetings to explain noise environment and impacts to the general public.



## **TEN MILE INTERCHANGE**

Meridian, Idaho  
Completed June 2007

A noise study was performed for a new interchange on I-84. Noise measurements were taken in the field using a CEL-593.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5. Noise mitigation receptors were identified. Bionomics attended public meetings to explain noise environment and impacts to the general public.



## **SH-44 CORRIDOR PRESERVATION STUDY**

Eagle, Nampa, Caldwell, Idaho  
Ongoing

Noise was measured for a study of the SH-44 corridor from Ballantyne Ln. to I-84 to assess the potential for widening SH-44 from two lanes to four lanes in both directions. Improvements to the highway will also include turn lanes, barrier medians, frontage and backage roads, and increasing the space between access points on the corridor, including driveways. Noise measurements were taken in the field using a CEL-593.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5.



## **I-84, GARRITY TO MERIDIAN**

Meridian, Nampa, Idaho  
Completed April 2007

Noise was measured for a study of the I-84 widening between the Garrity and Meridian interchanges. Noise measurements were taken in the field using a CEL-593.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5.



## **I-90 ACCESS IMPROVEMENTS**

Post Falls, Idaho

Completed September 2007

Noise was measured for a corridor study to improve access to I-90 through new interchanges or reconstructed interchanges. Noise measurements were taken in the field using a CEL-573.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5.



## **I-84 ORCHARD TO GOWEN**

Boise, Idaho

Completed December 2005

A noise study was performed for approximately 2.6 miles of Interstate 84 (I-84) in Boise, Idaho. The project involved reconstruction of existing lanes, addition of lanes, reconstruction of four interchanges, and replacement of railroad and canal structures. Noise measurements were taken in the field using a CEL-573.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.1. Noise mitigation receptors will be identified and barriers will be designed, using the noise analyses, to minimize noise impacts resulting from reconstruction. Bionomics attended public meetings to explain noise environment and impacts to the general public.



## **OWYHEE MOTORCYCLE CLUB**

Boise, Idaho

Completed May 2003

A noise analysis was conducted for a planned relocation of a motocross racetrack and racetrack associated infrastructure. Noise readings were taken during race and non-race events at the track and entrance gate using a CEL-573.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the FHWA Traffic Noise Model 2.1. Readings were taken and modeling was performed for areas in the vicinity of the possible new racetrack location to determine noise impacts on surrounding areas if the relocation occurred.



## **RED LODGE NORTH RECONSTRUCTION**

Red Lodge, Montana

Completed September 2002

A preliminary noise analysis was performed for a road improvement project approximately 19 miles in length. The project study area began at the northern edge of Red Lodge and proceeded north. Improvements included upgrading the road to current standards and adding sidewalks, curbs, gutters, and storm drains. Noise readings were taken using a CEL-573.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the FHWA Traffic Noise Model 2.0.



## **US 20/26, EAGLE TO JOPLIN**

Boise, Idaho

Completed August 2002

This project included travel and turn-lane additions and existing lane improvements. Noise readings were taken using a CEL-573.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the FHWA Traffic Noise Model 2.0. Results of the modeling indicated noise barriers were warranted as noise abatement measures. Four noise barriers were modeled from 6.5 to 10 feet high.



## **GARNET ENERGY FACILITY**

Middleton, Idaho

Completed June 2001

A noise study was completed for the proposed construction of a 273-megawatt, combined-cycle, natural-gas fired electrical generating facility. The amount of electricity produced by the facility would supply current, annual needs of communities the size of Nampa, Caldwell, and Meridian combined. Noise measurements were taken at four locations in the vicinity of the proposed facility at various times of the day using a CEL-573.C1 precision impulse integrating sound level meter, S1.4 Type 1.



## **11TH AVENUE UNDERPASS**

Nampa, Idaho

Completed August 2001

A noise study was conducted for reconstruction of an underpass. The project included widening 11<sup>th</sup> Avenue to four lanes in the underpass and construction of a pedestrian tunnel, curbs, and sidewalks. The project also included access control features to improve traffic handling along the underpass. Commercial enterprises were principal land uses along the corridor; a church on the northwest section of the project was also a principal land use. Noise readings were taken with a CEL-573.C1 precision impulse integrating sound level meter, S1.4 Type 1. Noise modeling was performed using the FHWA Traffic Noise Model 2.0. Barriers were not analyzed because enterprises in the project area did not desire a noise wall.

