

# NET BENEFIT ANALYSIS

Senate Bill 177

## PROJECT INFORMATION

Date:	
Project PIN:	
Project Name:	
Project Manager:	
Project Scope:	
Lowest Posted Speed Limit:	
Local Jurisdictional Authority(s) (LJA) Affected:	
LJA Contact Name(s) and Number(s):	

## NET BENEFIT ANALYSIS - Compare Nighttime Work to Daytime Work

Check the box if documentaton is attached

<input type="checkbox"/>	<b>Public Health</b> <i>(Noise Pollution, Sleep)</i>	
<input type="checkbox"/>	<b>Project Completion Time</b> <i>(Schedule, Project Duration)</i>	
<input type="checkbox"/>	<b>Air Quality</b> <i>(Congestion Reduction)</i>	
<input type="checkbox"/>	<b>Traffic</b> <i>(Delays, Construction Impacts)</i>	
<input type="checkbox"/>	<b>Economics</b> <i>(User costs, Business access)</i>	
<input type="checkbox"/>	<b>Safety</b> <i>(Traveling Public, Workers)</i>	
<input type="checkbox"/>	<b>LJA Concerns</b> <i>(Preference)</i>	

## CONCLUSION - Engineer's Analysis

### Final Assessment

### LJA Requested Mitigation Measures

### Noise Permit Information - LJA Permits (s) and Date Received

# Temporary Noise Permits

## ***Net Benefit Analysis***

### **Overview**

The net benefit analysis compares night work to day work to determine if night work provides a greater net benefit to the community. It is required to be completed on all projects with night work and a posted speed limit below 55 mph. This includes work done on side streets.

### **Net Benefit Analysis Instructions**

Each analysis area, as outlined by the law, is to be rated negative, no change, or positive. Analysis areas are listed below with ideas to consider when completing the net benefit analysis:

**Public Health** – Is the route along commercial or residential properties? Is construction noise long or short term? Have any mitigation measures been included in the project to reduce noise?

**Project Completion Time** – Will project duration be negatively affected by night work? Are production rates affected?

**Air Quality** – Air quality is negatively impacted by congestion. Will night work ease congestion? The traffic management group may provide some pollution figures with user costs depending on route and analysis used.

**Traffic** – Will night work ease congestion?

**Economics** - User costs are required for all UDOT projects (UDOT Policy 08A-13). Do user costs justify nighttime construction? What do local businesses prefer? Are they busier at night or during the day?

**Safety** – NCHRP report 627 states that nighttime construction is typically safer than daytime construction (confirmed by analysis of Utah crash data). Is there any reason why this project will differ from the report's findings?

**Local Jurisdictional Authority(s) Concern** – What is the LJA concern?

Each section on the form has an area for comments and a check box for attachments. Explain how and why the team came to each conclusion and attach any supporting documentation, such as, user costs calculations and emails.

### **Example**

If night work relieves congestion and reduces user costs, you would mark positive on traffic, economics, and air quality. If the construction is louder than existing traffic and the roadway abuts residential homes, then public health would be marked negative.