Nighttime Construction Noise

Urban and Rural highway projects

Type of construction projects

- Mega projects
  Sound Transit, Alaskan viaduct
- Highway projects
  Paving, traffic signal installation
- Urban construction
  Building demo/construction, city's arterial/Street improvements.
Nighttime construction work

- WSDOT must obtain variance from jurisdiction to work after 10:00 PM to 7:00 AM
- WSDOT incorporates noise mitigation conditions on contract plans
- WSDOT monitors compliance during construction.
- WSDOT responds to complaints.

Selection of mitigation measurements vs. type of highway project

- Highway preservation projects - Paving -
- Mobility projects - HOV widening -
- Traffic/Electrical/Retrofit projects
- Structural projects
- Maintenance projects
Construction nighttime noise variance

Condition types

- Minimum WSDOT standard conditions
- Special conditions required by specific jurisdiction
- Conditions that depend on the location, duration and type of project.
- Conditions identified during a public process.

Minimum WSDOT standard conditions

- Back up alarms
- Temporary Shields
- No tail gate banging allowed
- No parked or idling vehicles near residences
- Public notification by contractor of nighttime construction
Special conditions required by specific jurisdiction

- Provide 24hr emergency phone line
- Noise training to workers
- Construction site monitoring
- No work allowed within the same neighborhood for more than 2 consecutive weeks
- Publish notices
- Provide VMS signs

Conditions that depend on the location, duration and type of project

- On Site control
  - Work hours limitation
  - Scheduling
  - Temporary barriers
  - Equipment location and Traffic control site
  - Equipment & material handling
  - Back up alarms

- Off Site Strategies
  - Ear plugs
  - Public meetings/neighborhood group meetings.
  - Notices : flyers, Newspapers, signs
  - Window insulations Styrofoam.
  - Out of the box
Conditions identified during a public process

- Relocation of resident may be justified if 2 consecutive complaints are received.
- Special notification for sensitive residences such as nursing homes and hospitals.

Constraints for implementation of construction mitigation measurements

- Project construction budget.
- Type of construction operations
- Construction seasons: Summer vs. Winter
- Limitation on schedule: lane closures, environmental permits
- Topographical features
- Safety issues
Mitigation strategies

Approach

- Present a set of mitigation conditions to the jurisdiction that the agency is able to bid within budget.
- Present effective tools to minimize nighttime construction noise nuisances.
- Coordinate efforts between jurisdiction and contracting agency to update mitigation measures in case of complaints.

Agency Coordination

Successes

- Public information
- Develop trust with jurisdiction (city or county)
- Lessons learned - apply them
- Back up action plan available (practice worst, medium case scenario)

To improve

- Enforcement
- Construction equipment upgrade & maintenance
- Project changes
- Contract provisions.