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## Regulatory Agency Coordination



Federal Highway Administration



Environmental Protection Agency

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## Project-Level Air Quality



## Noise Abatement



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## Why is it Required



### Regulations:

- Clean Air Act (amended 1990)
- 40 CFR Parts 51 & 93

### Project-Level Guidance:

- Particulate Matter (PM) & Carbon Monoxide Hot-spot Analyses
- Mobile Source Air Toxics (MSAT)

CONFORMITY

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## Project Information

1. Is the project area in a nonattainment or attainment/maintenance for any criteria pollutants?
2. Is the project included in the transportation improvement program (TIP) or State transportation improvement program (STIP)?
3. Is this a project of local air quality concern?



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### EPA National Ambient Air Quality Standards (NAAQS) Designations

#### Criteria Pollutants:

- Carbon Monoxide – CO
- Ozone – O<sub>3</sub>
- Particulate Matter –  
PM<sub>2.5</sub> & PM<sub>10</sub>
- Nitrogen Dioxide – NO<sub>2</sub>
- Sulfur Dioxide – SO<sub>2</sub>
- Lead - Pb



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## Project Conformity

- Incorporated through the Transportation Strategic Planning process
- Project Level:  
Transportation Improvement Program (TIP) / State  
Transportation Improvement Program (STIP)
- Primarily Capacity Change Projects

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## Project of Local Air Quality Concern



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# Noise Abatement



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# Why is it Required

Code of Federal Regulation  
Title 23 Section 772  
(23 CFR 772)

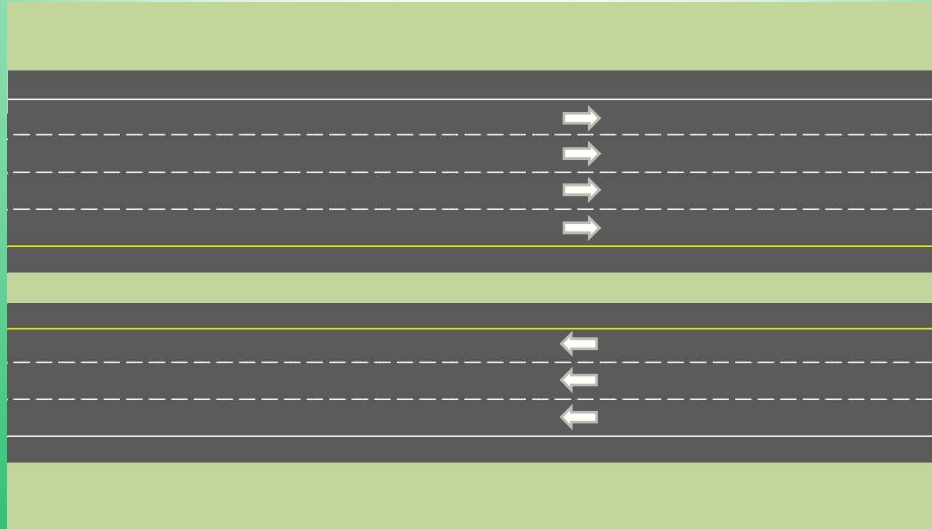
**MICHIGAN DEPARTMENT OF TRANSPORTATION  
HIGHWAY NOISE ANALYSIS AND ABATEMENT HANDBOOK**  
JULY 13, 2011

**COMMISSION POLICY**  
MICHIGAN DOT  
July 19, 2002

**NOISE BARRIER**  
Noise Barrier along Southland Road, Lansing  
City of Lansing

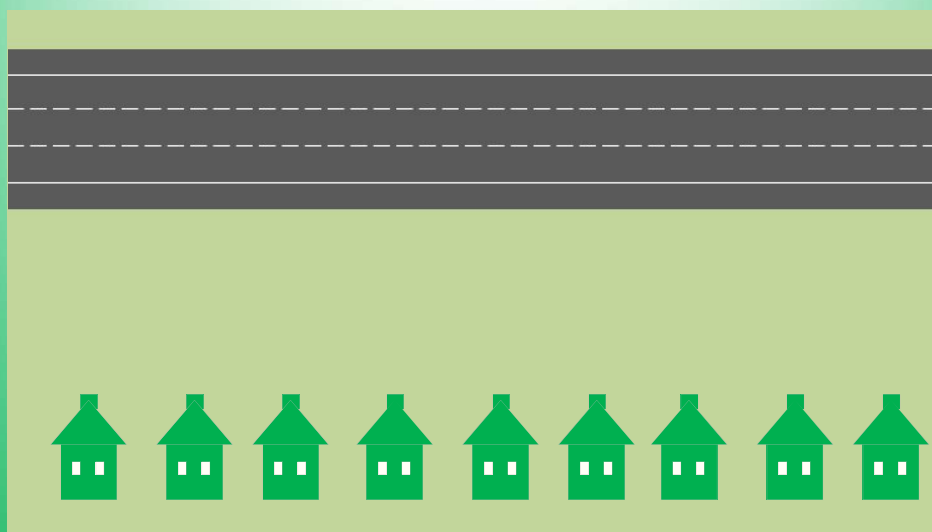
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## Type I Project: Adding a lane



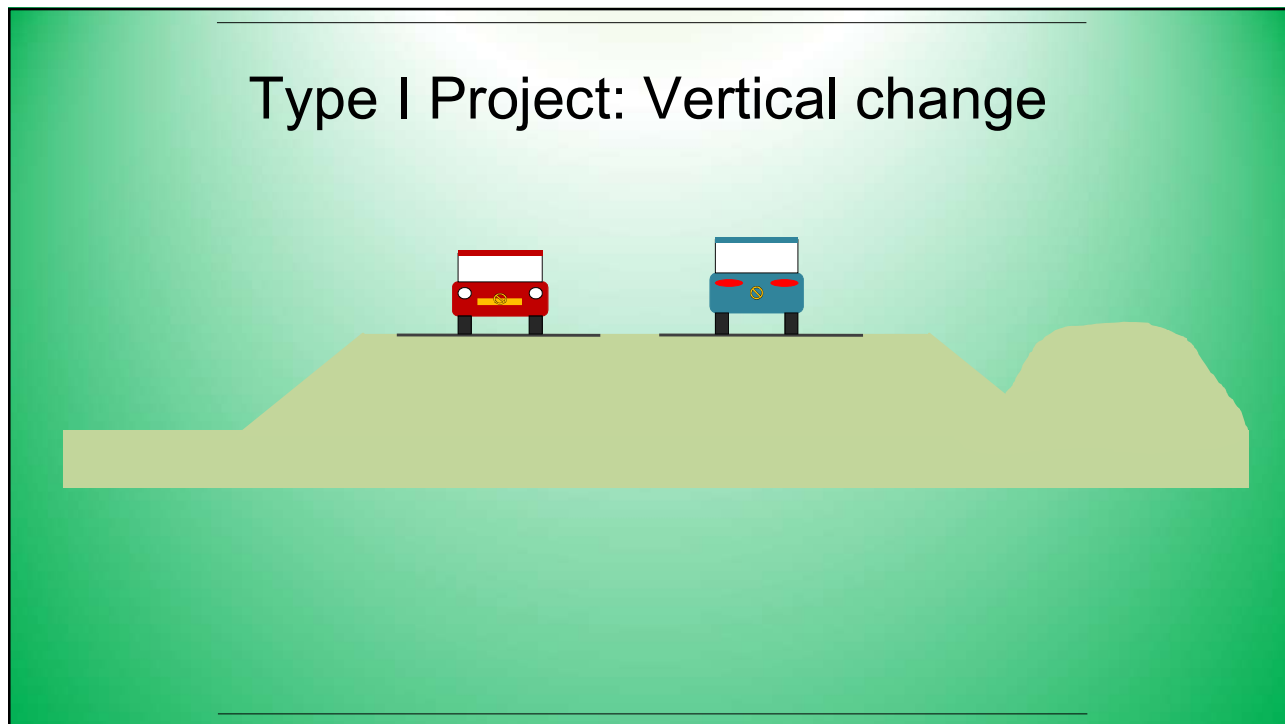
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## Type I Project: Horizontal change



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## Type I Project: Vertical change



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## other Type I Projects

- Addition or relocation of interchange ramps added of a quadrant to complete an existing partial interchange; or
- Adding a new or substantially altering a weigh station, rest area, ride-share lot, or toll plaza.
- If part of a project is defined as a Type I project then a noise analysis must be conducted for the whole project as defined in the environmental document.

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## Noise Sensitive Land Uses



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## Noise Analysis Requirements

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- Notification e-mail to PM with data needs
  - Traffic – Traffic Analysis Request (Form #1730)
  - Design plans (alignment and elevations; existing and proposed)
  - Survey out to about 300' - 500' depending on project area characteristics
- PM hires a consultant
- Analysis will take 4 to 6 months depending on the project characteristics, need for abatement, and the weather

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## Noise Analysis Process

- Land use identification
- Impact analysis
- Abatement analysis
- Documentation and public involvement
- Noise contours report for local officials



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## Noise Abatement

- Walls – Concrete post and panel
- Earth berms
- Earth berm/wall combinations



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## Things You Should Know

- After the CE Classification, no additional noise abatement will be considered unless there are substantial changes affecting abatement during design
- No sound insulation for residential buildings
- Cannot accept third party funds to make abatement reasonable
- Vegetation must be deep, dense, and tall to provide noise reduction.

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## I-75 over Goddard Road, City of Allen Park



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## I-75 over Goddard Road, City of Allen Park



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**Thank You**

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