

# Project Information Evolution

## Example: Noise Analysis



### Project Phase

#### Phase 1

##### Alternatives Identification

Rail Alignment

- Corridor A
- Corridor B
- Corridor C

Rail Technology/Vehicle Type

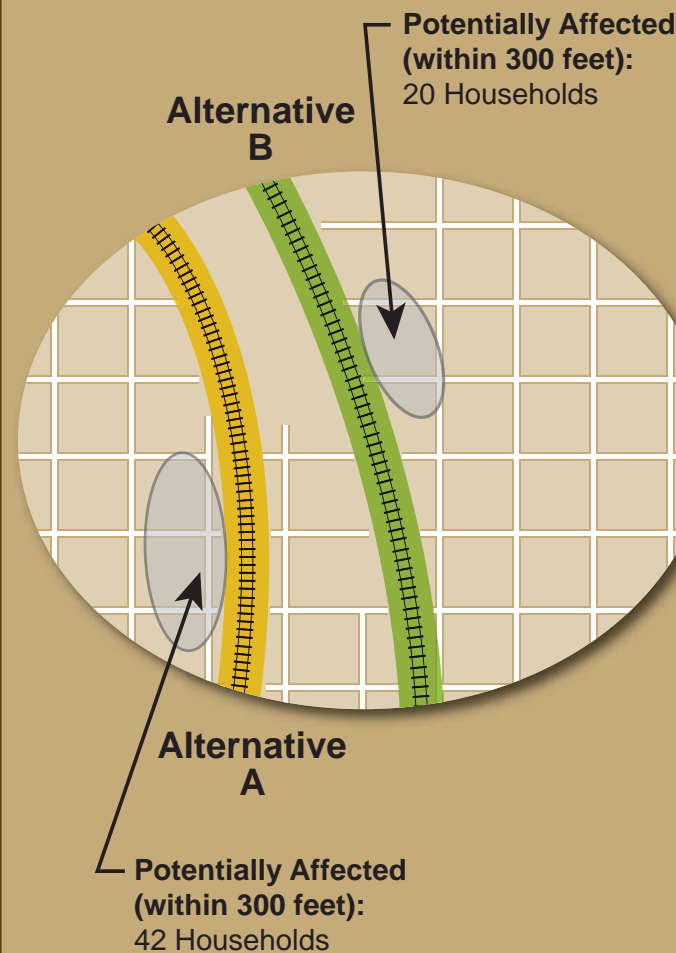
- LHC
- DMU
- EMU
- LRT
- Streetcar

No Action

Baseline or Transportation System Management alternative

#### Phase 2

##### Alternatives Screening

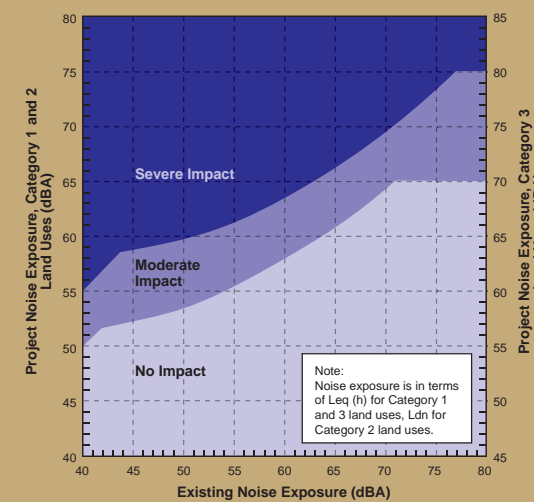


#### Phase 3

##### Preparation of DEIS and FEIS

- 1 Existing noise measurements
- 2 Predict 2030 No Action and Build noise levels (using FTA and FRA models):
  - Diesel exhaust noise
  - Cooling fan noise
  - Wheel/rail interaction noise
  - Horns and crossing gate bells
  - Bells approaching stations
  - Station noise (buses idling, autos, PA systems, idling engines)

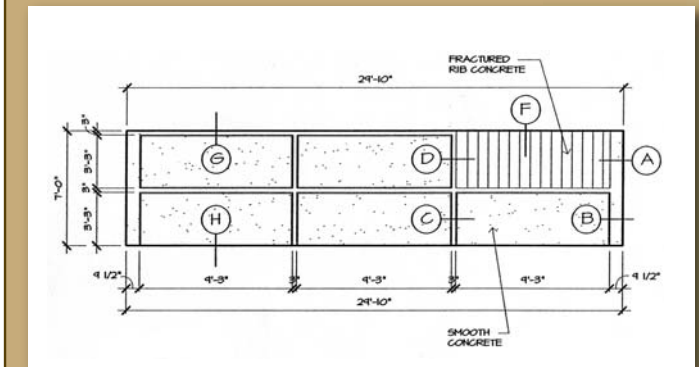
- 3 Apply FTA noise impact criteria



- 4 Determine if mitigation is warranted
  - Areas of moderate and severe impact

#### Phase 4

##### Final Design



Noise mitigation is included as appropriate

- Vehicle and equipment noise specifications
- Resilient or damped wheels
- Vehicle skirts
- Wide turn radii
- Special at-grade crossing treatments
- Regular wheel maintenance
- Sound barriers

### Level of Noise Information Known and Used:

- Not used

- Numbers of households within 300 feet of particular alignment

- Noise monitoring
- Number of trains, autos, buses
- Train speed
- Track type

- Final drawings
- Final specifications