

# Tonight's Meeting

**Open House**

**6:00 to 6:30 PM**

**Presentation**

**6:30 to 7:00 PM**

**Questions & Answers**

**7:00 to 8:00 PM**

# Concept Evaluation Process

## Preliminary Concepts

1. No Build
2. Rebuild Virginia Avenue Tunnel
  - Temporary South Side Runaround
3. Rebuild Virginia Avenue Tunnel
  - Temporary North Side Runaround
- 3A. Rebuild Virginia Avenue Tunnel
  - Permanent Twin Tunnels (New Tunnel on North Side of Existing VAT)
4. Rebuild Virginia Avenue Tunnel
  - Temporary Combination Runaround
5. Rebuild Virginia Avenue Tunnel
  - Permanent Twin Tunnels (New Tunnel on South Side of Existing VAT)
6. Rebuild Virginia Avenue Tunnel
  - Rebuild On-Line
7. Rebuild Virginia Avenue Tunnel
  - Temporary Reroute
8. Deep Bore Tunnel
9. NCPC Indian Head Alignment
10. NCPC Dahlgren Alignment
11. Permanent Reroute

## PRELIMINARY SCREENING

## Concepts Retained for Detailed Study

1. No Build
2. Rebuild Virginia Avenue Tunnel
  - Temporary South Side Runaround
5. Rebuild Virginia Avenue Tunnel
  - Permanent Twin Tunnels
6. Rebuild Virginia Avenue Tunnel
  - Rebuild On-Line

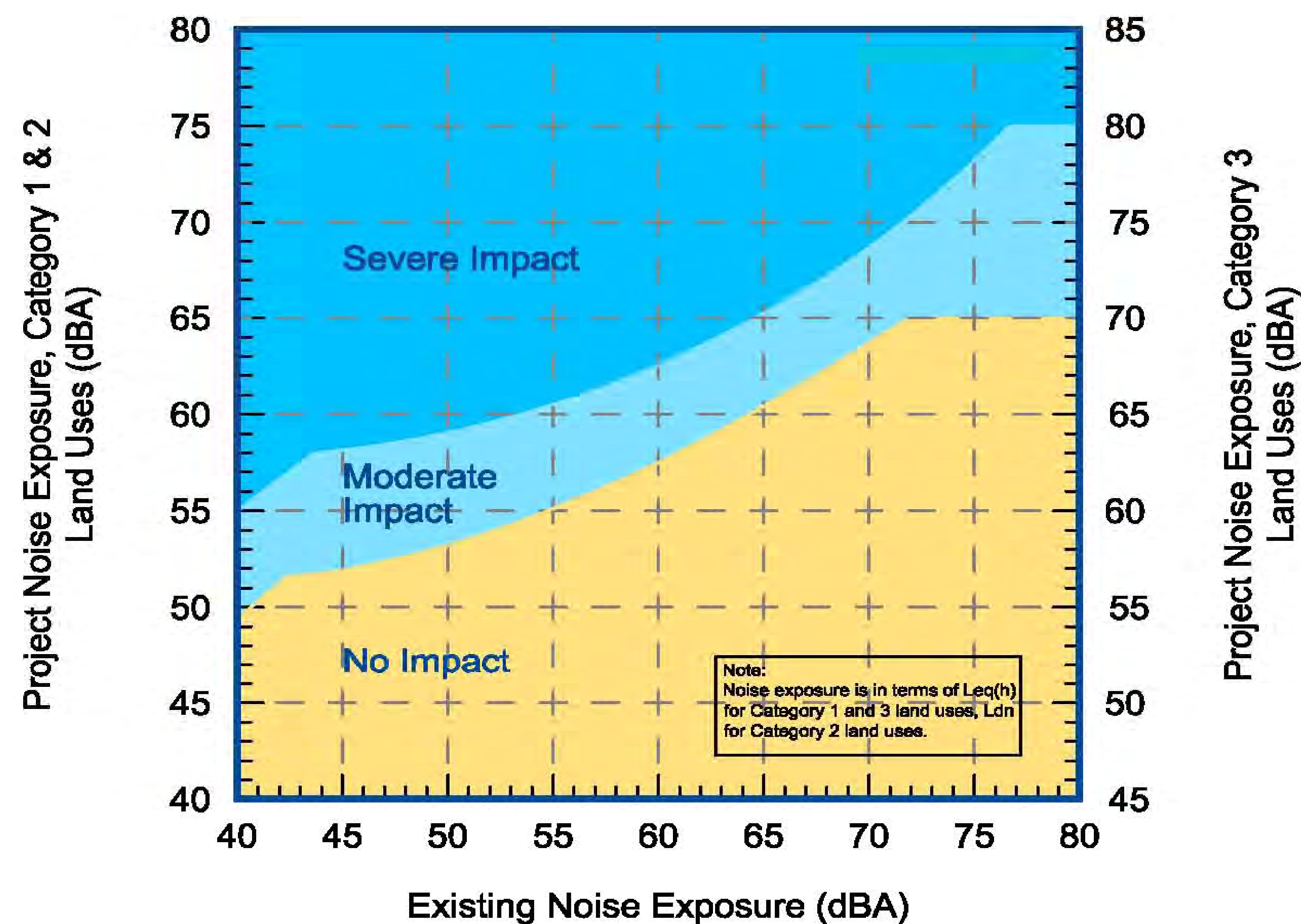


# Rail Noise Analysis Criteria

*Land Use Categories and Metrics for Transit Noise Impact Criteria*

Land Use Category	Noise Metric (dBA)	Description of Land Use Category
1	Outdoor $L_{eq}(h)$	Land where quiet is an essential element in their intended purpose.
2	Outdoor $L_{dn}$	Residences and buildings where people normally sleep.
3	Outdoor $L_{eq}(h)$	Institutional land uses with primarily daytime and evening use.

*Noise Impact Criteria for Transit Projects*



Source: *Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006*

Predicted noise impacts are based on increase above existing background noise levels.



# Human Perception of Sound Level

## Perceived Change in Decibel Level

Change in Sound Level	Perceived Change to the Human Ear
$\pm 1$ dB	Not Perceptible
$\pm 3$ dB	Barely Perceptible
$\pm 5$ dB	Noticeable
$\pm 10$ dB	Twice (or Half as Loud)

Source: *Highway Noise Fundamentals*, Federal Highway Administration, September 1980

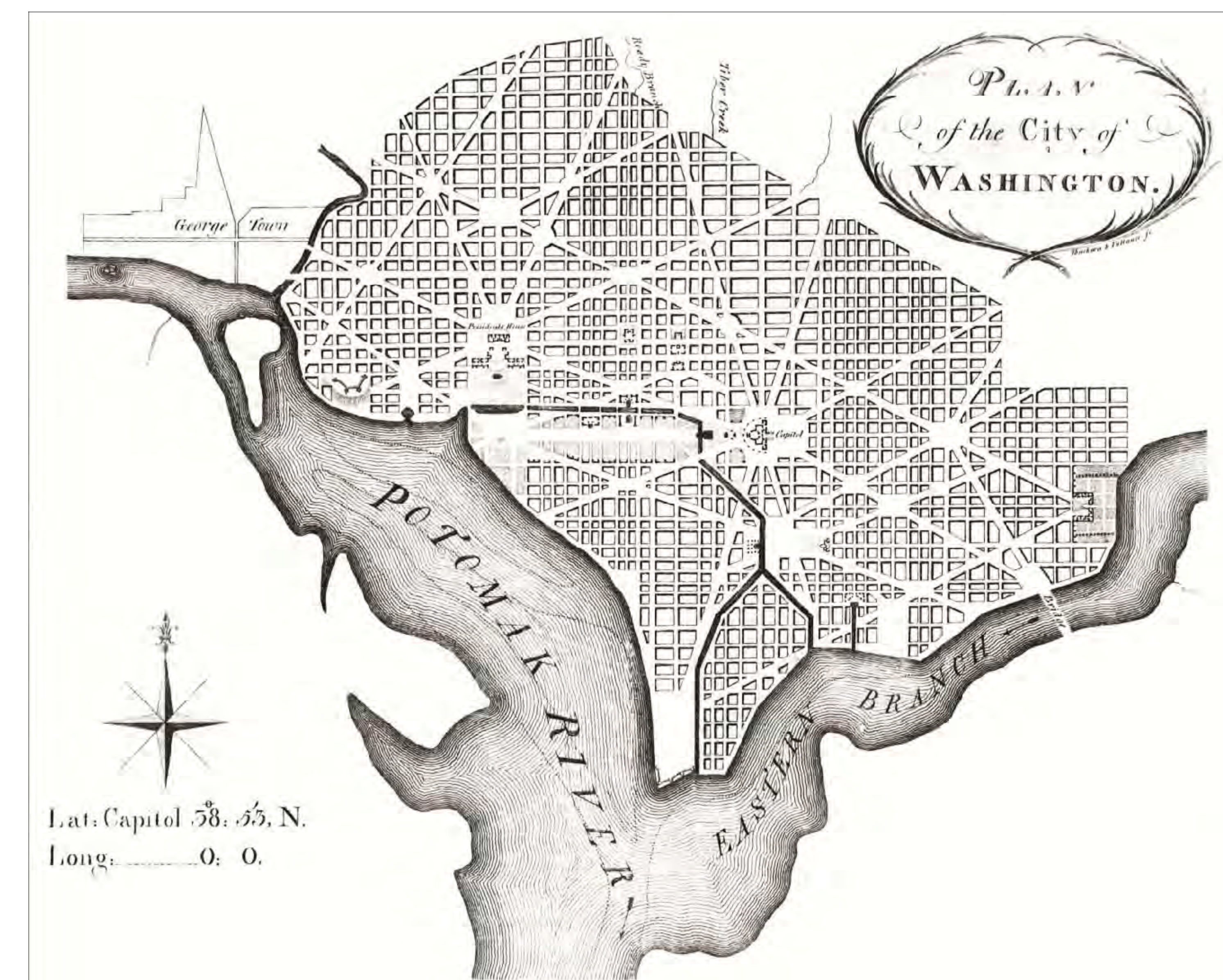


# Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act as amended requires consultation with the State Historic Preservation Officer and other interested parties for any federal undertaking.

An assessment of effect on historic properties will be conducted and disclosed in the project's Environmental Assessment.

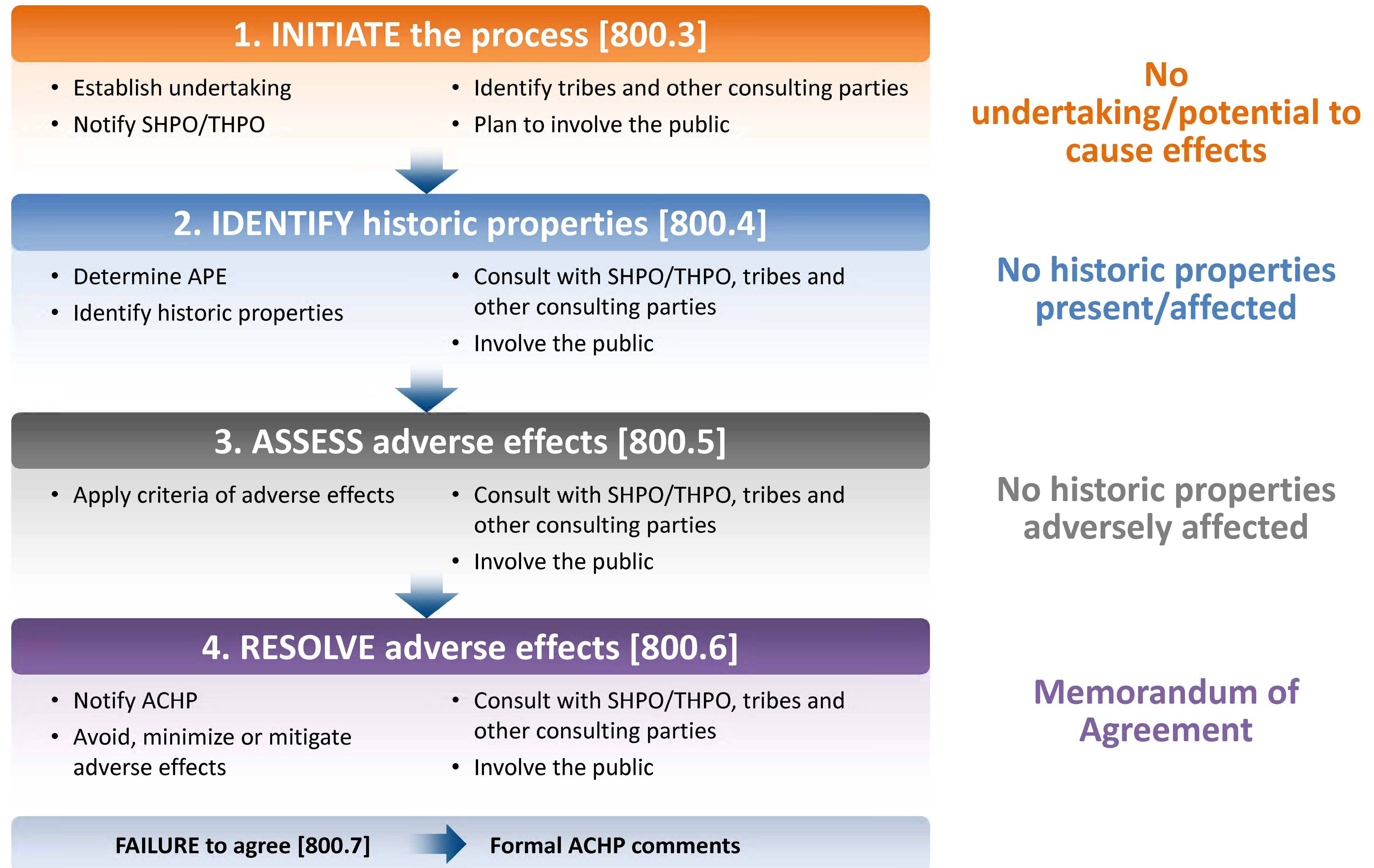
Interested parties are invited to participate.





# The Section 106 Process

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# NEPA Environmental Process





# Virginia Avenue Tunnel Project

## Major Eastern Railroads



### LEGEND

- CSX Transportation
- Norfolk Southern
- Union Pacific
- Burlington Northern Santa Fe
- Kansas City Southern
- Canadian National
- Regional/Local Railroads



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# Virginia Avenue Tunnel Project

## Washington DC Extended Region Railroad Map

**LEGEND**

- CSX Transportation
- Norfolk Southern
- Regional/Local Railroads

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