



NASHVILLE AREA

**Metropolitan Planning Organization**

# **Nashville Regional Freight & Goods Movement Study – Phase III**

**Freight Advisory Committee Meeting #2  
June 3<sup>rd</sup>, 2015**

# Agenda

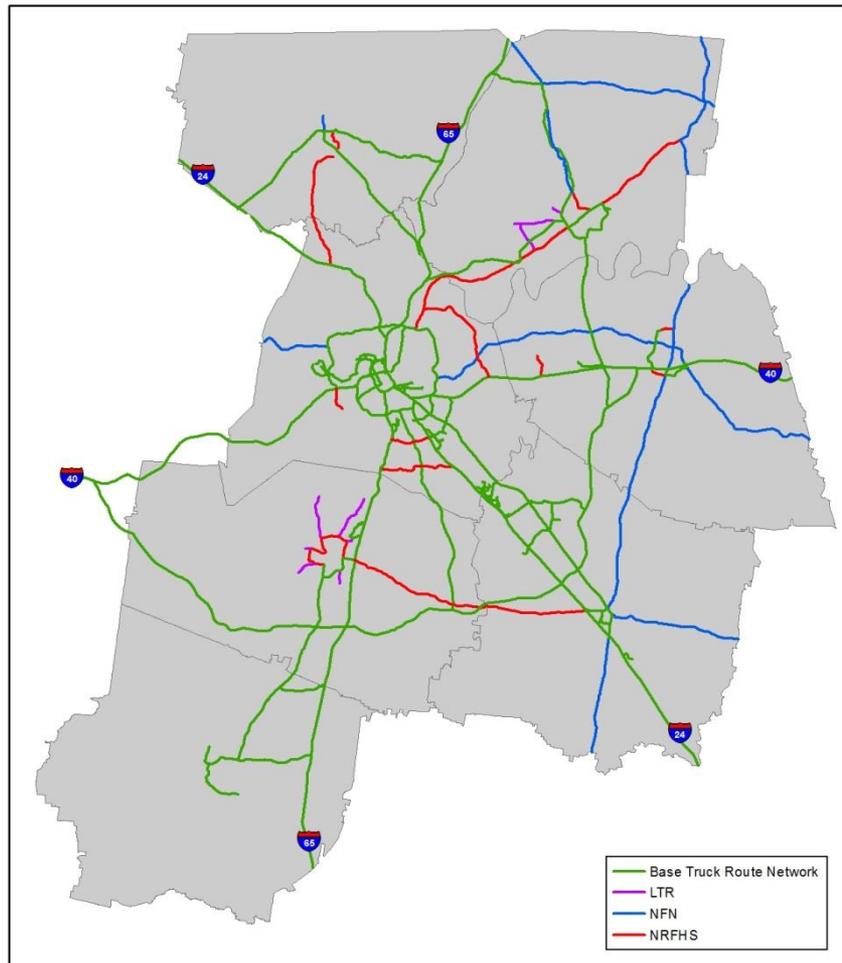
- ➔ Update on Freight Vision/Regional Truck Route Network
- ➔ Preliminary Guidance on Freight and Land Use Issues
- ➔ Freight Project and Policy Recommendations
- ➔ Next Steps

# **UPDATE ON REGIONAL TRUCK ROUTE NETWORK**

# Truck Route Development Process

- ➔ Assembled Federal, state, and regional truck route information
- ➔ Assembled locally designated truck routes and prohibitions
- ➔ Conducted 2 Trucker's Forum to discuss key roads utilized
- ➔ Identified key facilities for other modes and land uses nearby to roads considered for regional truck route
- ➔ Developed preliminary truck route
- ➔ Finalizing truck route based on feedback from multiple sources
- ➔ Develop design features for truck route in heavy urban, suburban, and rural locations

# Base and Expanded Truck Route Network

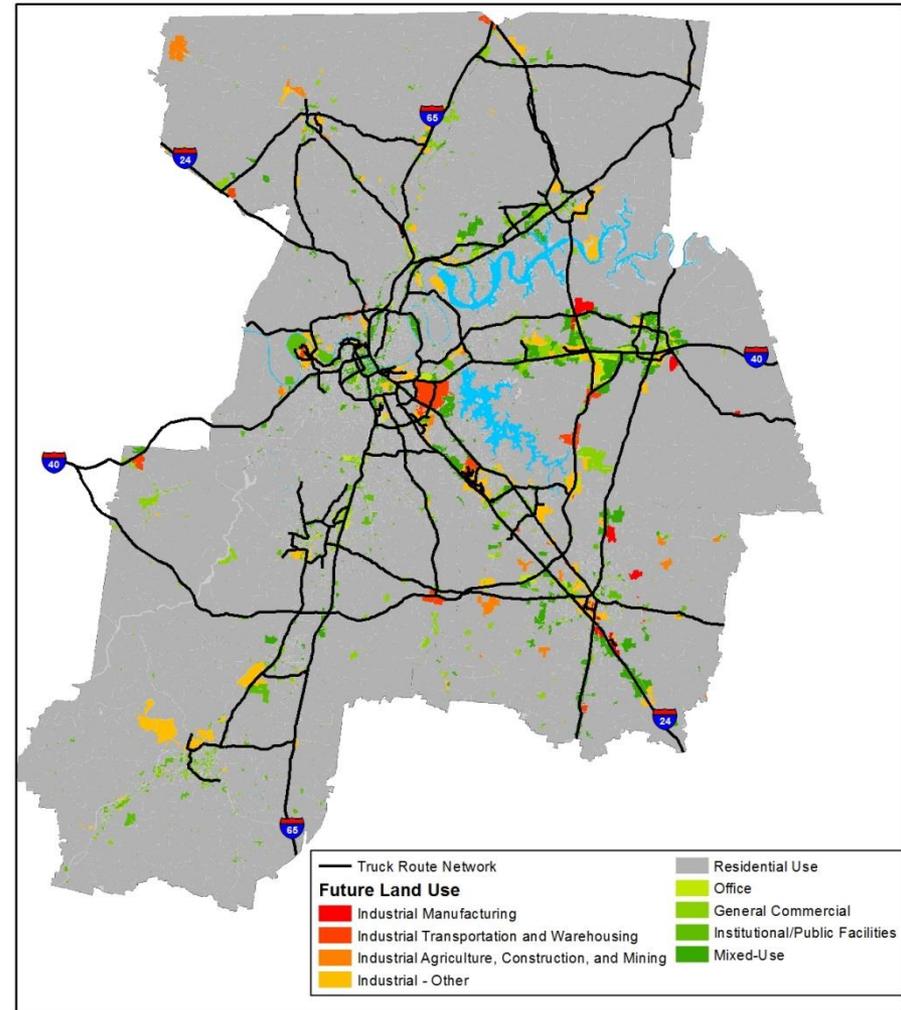


- ➔ Base network is the primary truck route network
- ➔ Expanded network provides alternatives when primary network experiences operational issues



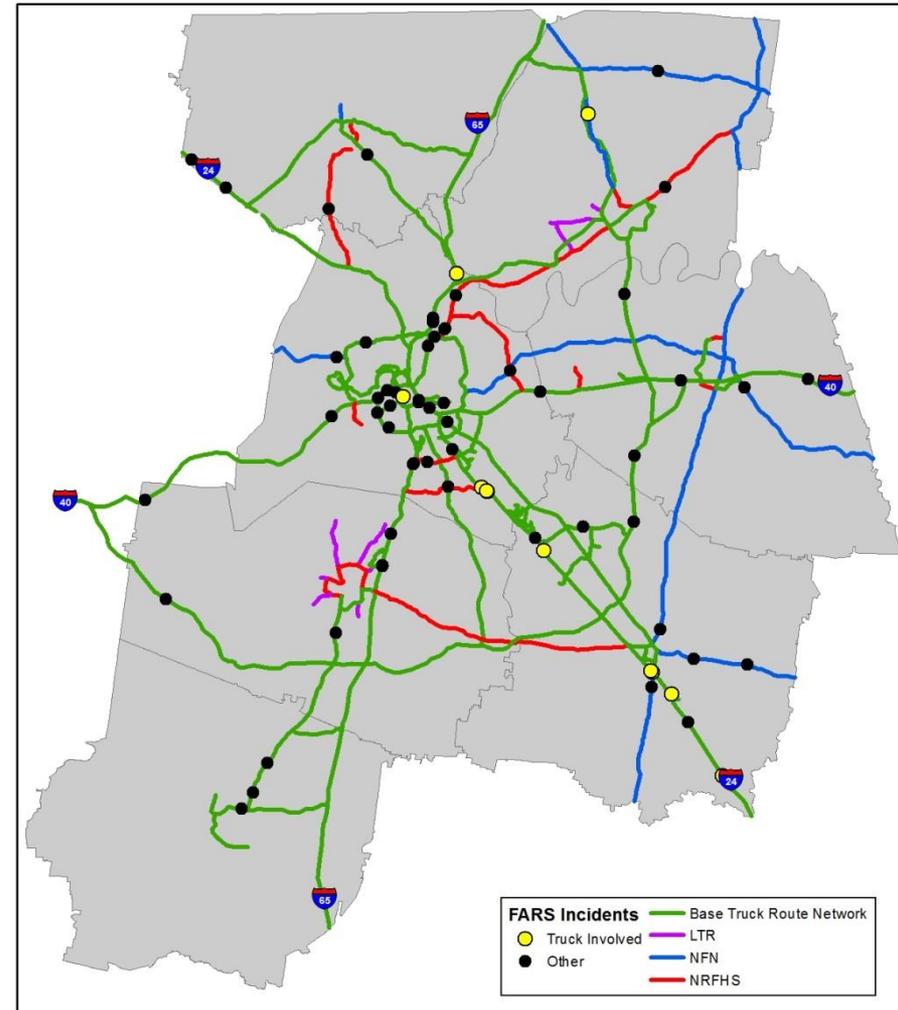
# Truck Routes and Land Uses

- ➔ Truck route network provides access to all major industrial land uses
- ➔ Also provides access to truck cluster locations based on GPS data



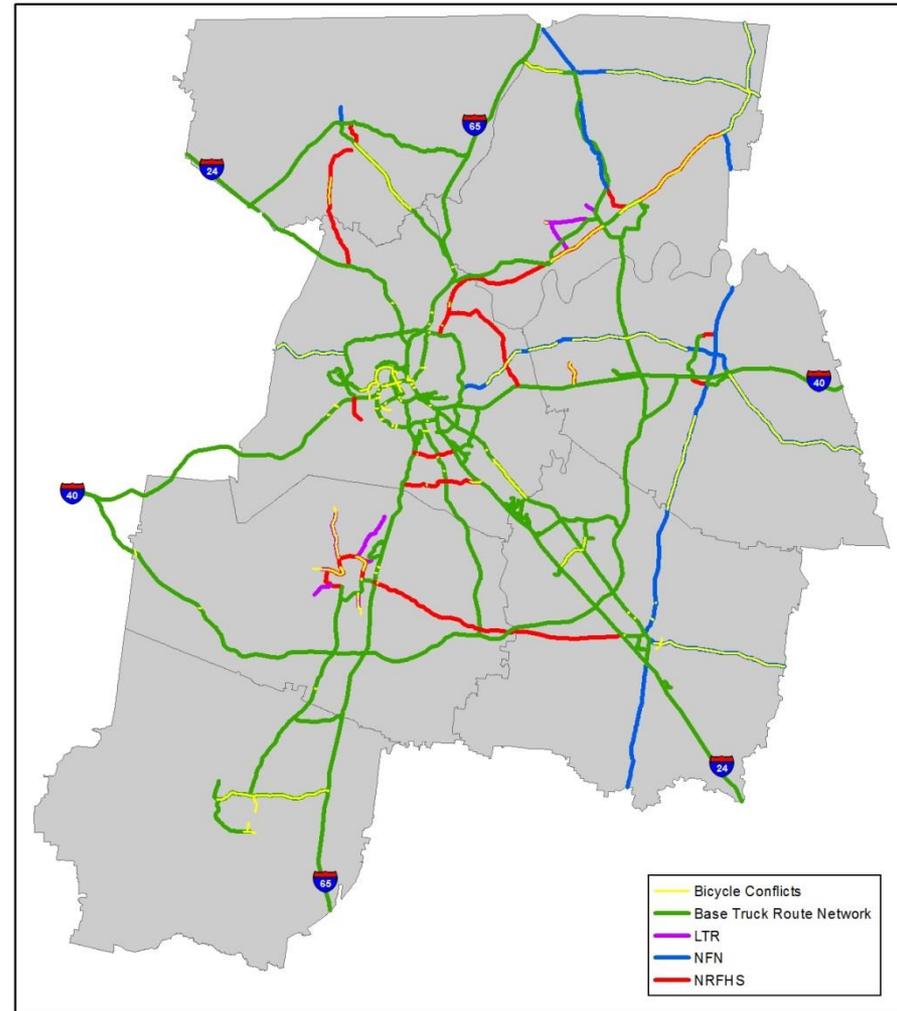
# Truck Routes and Safety

- ➔ Identified high truck crash corridors along the network
- ➔ Identified fatal crash data on network
- ➔ Infrastructure improvements will include some safety recommendations
  - Intersection and interchange improvements
  - Median barriers



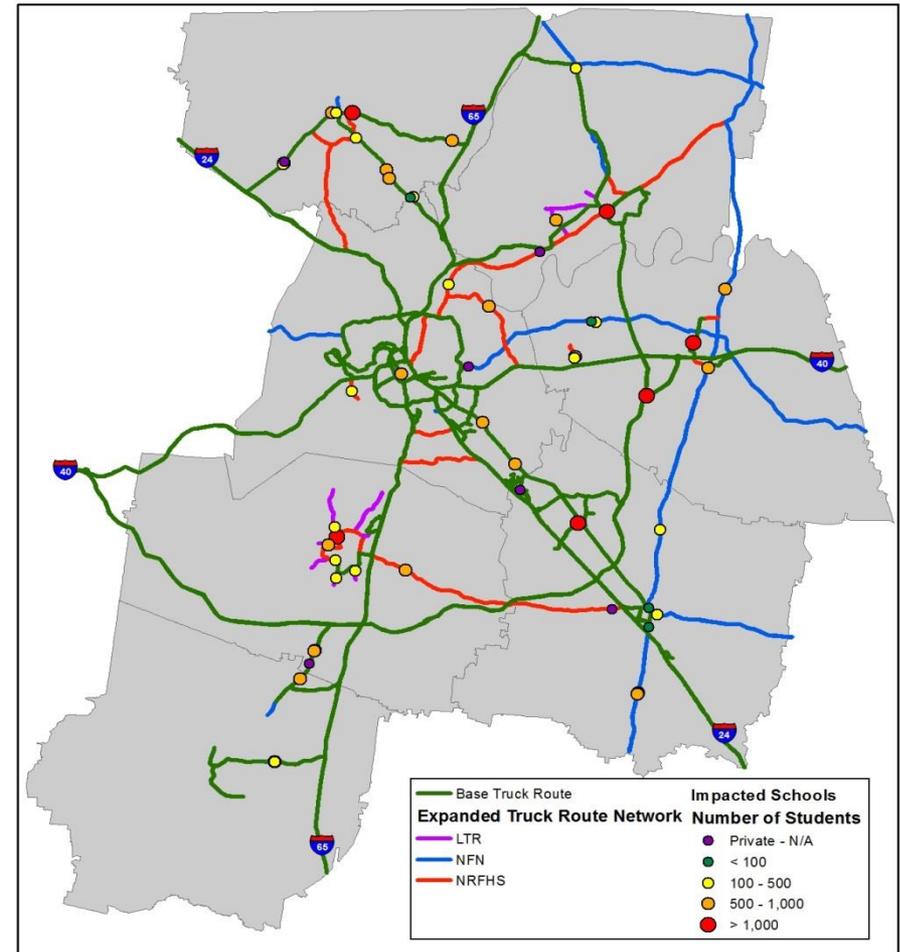
# Truck Routes and Bicycle Lanes

- ➔ Identified segments that have overlapping truck route networks and bicycle lanes
- ➔ No network changes recommended for either modal facility group
- ➔ “Overdesign” recommended for segments that have both truck routes and bicycle lanes



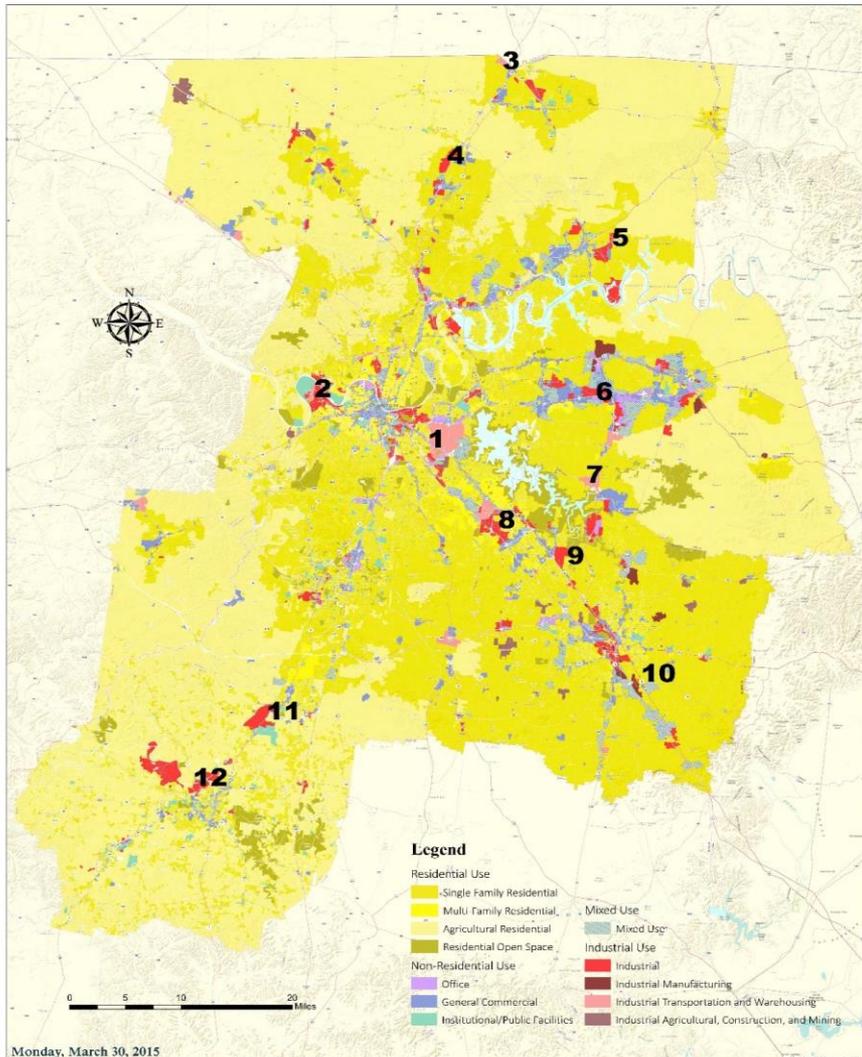
# Truck Routes and Schools

- ➔ Several schools on truck routes
- ➔ Improved signage near schools recommended
- ➔ Supplemental educational information be made available to schools



# **FREIGHT AND LAND USE ISSUES**

# Nashville Area Land Use Designations



➔ Land use designations identify 12 clusters of freight activity in Nashville region

- ➔ 1 - Downtown SE and airport
- ➔ 2 - Downtown NW
- ➔ 3 - I-65 and SR 109 cluster
- ➔ 4 - White House cluster
- ➔ 5 - Gallatin
- ➔ 6 - Lebanon
- ➔ 7 - Smyrna/SR 840
- ➔ 8 - LaVergne
- ➔ 9 - Smyrna/Nissan
- ➔ 10 - Murfreesboro
- ➔ 11 - Spring Hill/GM
- ➔ 12 - Columbia

# Freight and Land Use Items

- ➔ Zoning
- ➔ Research of local ordinances
- ➔ Permitted uses
- ➔ Location of freight intensive development
- ➔ Vehicular circulation
- ➔ Industrial site access
- ➔ Intersection turning radii
- ➔ Truck traffic restrictions
- ➔ Parking restrictions
- ➔ Loading requirements

Which topics are most important for supporting freight movement and why?

Which topics are most important for “freight as a good neighbor” with other modes?

What additional land use ordinances and specifications should be considered?

# Research of Local Ordinances

➔ Freight-related land use ordinances and subdivision regulations were analyzed in the following localities:

Brentwood

Columbia

Fairview

Franklin

Gallatin

Goodlettsville

Greenbrier

Hendersonville

Lebanon

LaVergne

Maury County

Millersville

Mt. Juliet

Metropolitan Nashville

Murfreesboro

Portland

Robertson County

Rutherford County

Smyrna

Springfield

Sumner County

White House

Williamson County

Wilson County

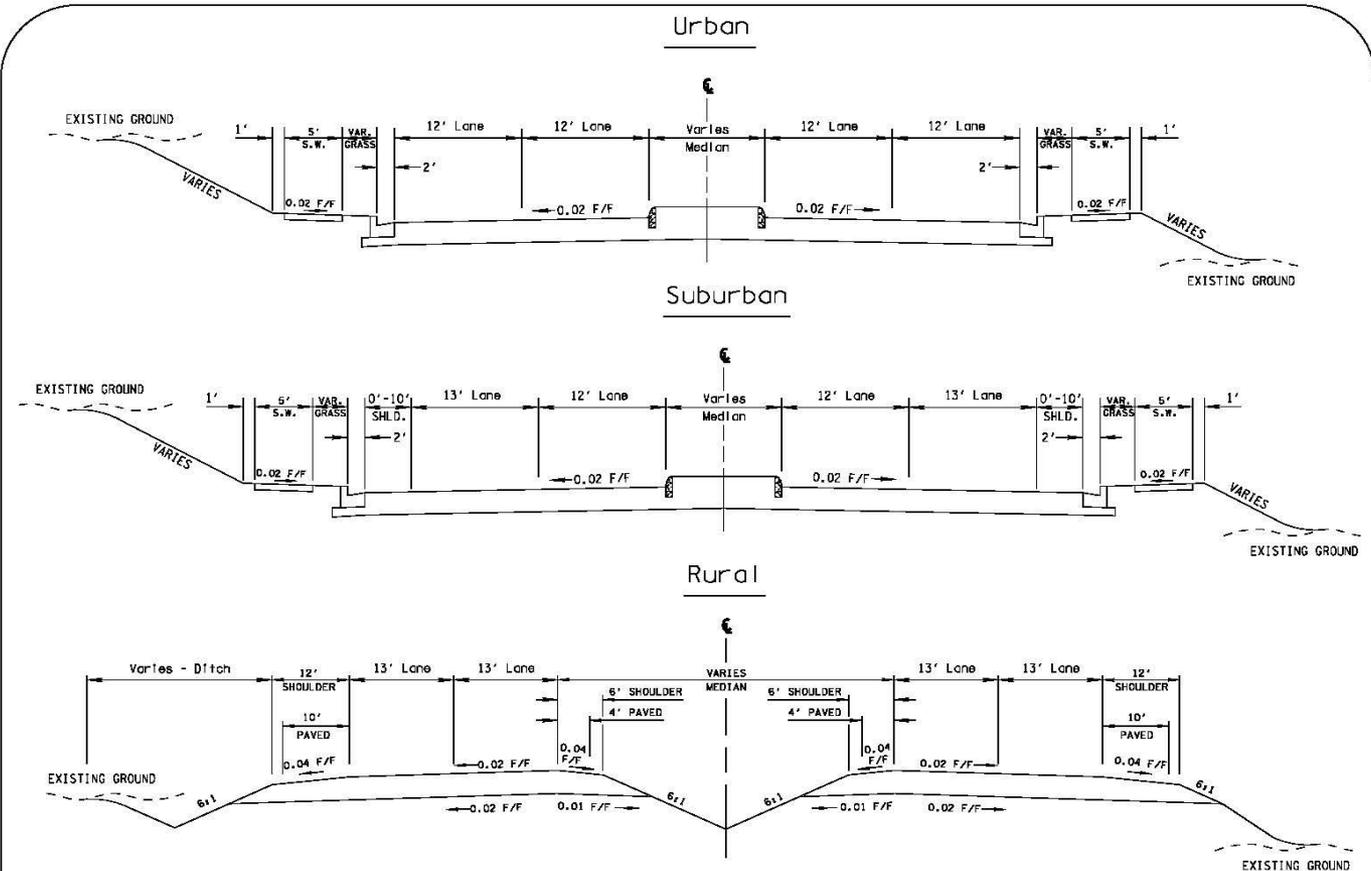
# Recommendations for Municipalities

Land Use Topic Area	Recommendation
Permitted Uses	Subdivide Industrial land use category into Manufacturing, Transportation, and Warehouse/Distribution Center to specify different on-site activities and truck trip generation levels
Access Management	Require access to industrial facilities from arterial or collector street. Driveway separation between property and street shall be appropriate for adjacent uses.
Industrial Overlay District	Develop districts to preserve areas for future industrial activity
Setback Standards	Side or Rear Yard Adjacent to Residential Use: 50 feet. Front yard: 50 feet.
Landscape and Buffer Standards	Industrial buildings located in close proximity to residential neighborhoods must maintain minimum 10 feet planting and vehicular use areas shall be screened from public streets and adjacent uses.

# Recommendations for Municipalities

Land Use Topic Area	Recommendation
<b>Performance and Context Standards</b>	Industrial buildings shall have requirements to avoid nuisances of noise, air pollution, hazardous waste, and odor requirements on adjacent land uses
<b>Parking, Loading and Circulation Standards</b>	Parking and loading requirements shall be consistent with facility usage. Major industrial facilities must conduct a traffic impact analysis.
<b>Truck Route Standards</b>	A regional truck route network should be incorporated into local truck route designation. Municipalities can add supplemental roads based on local needs including truck prohibited routes. Designated truck routes should have adequate pavement depth and material. Designated truck routes should be designed appropriately based on urban, suburban and rural designations. Additional design features should be considered for truck designated routes that are adjacent to bicycle lanes, sidewalks, schools and hospitals.

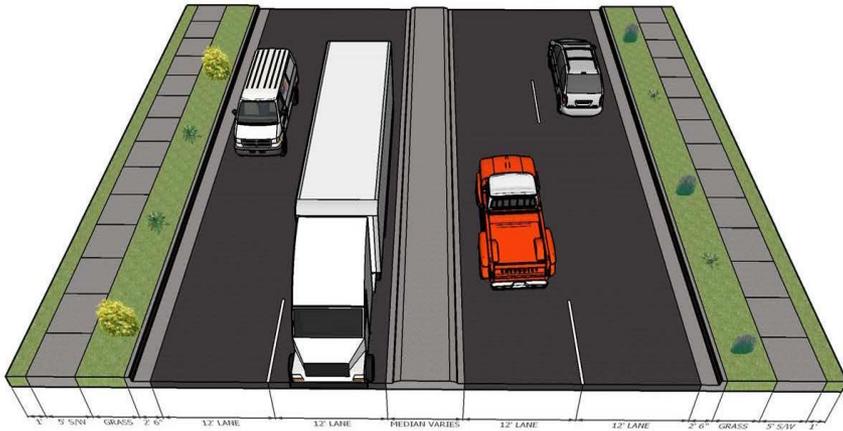
# Truck Route Design Recommendations



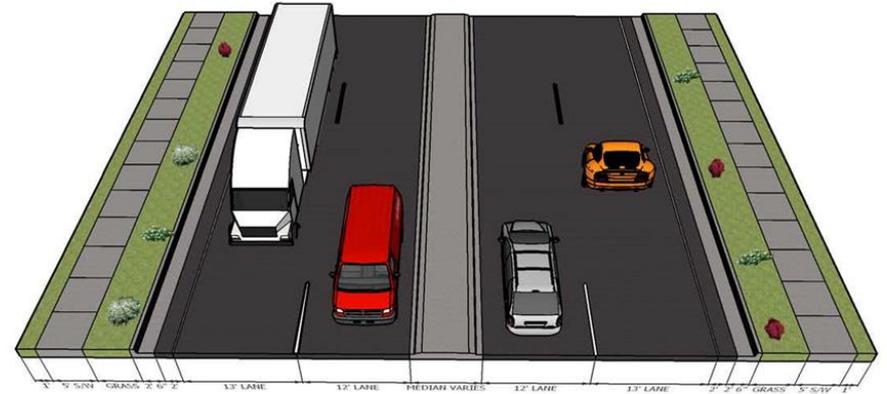
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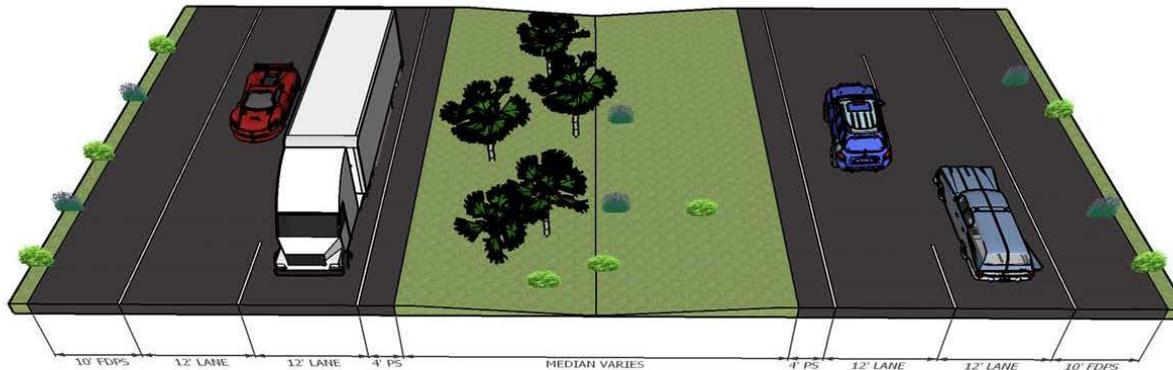
# Truck Route Design Recommendations



**Urban**

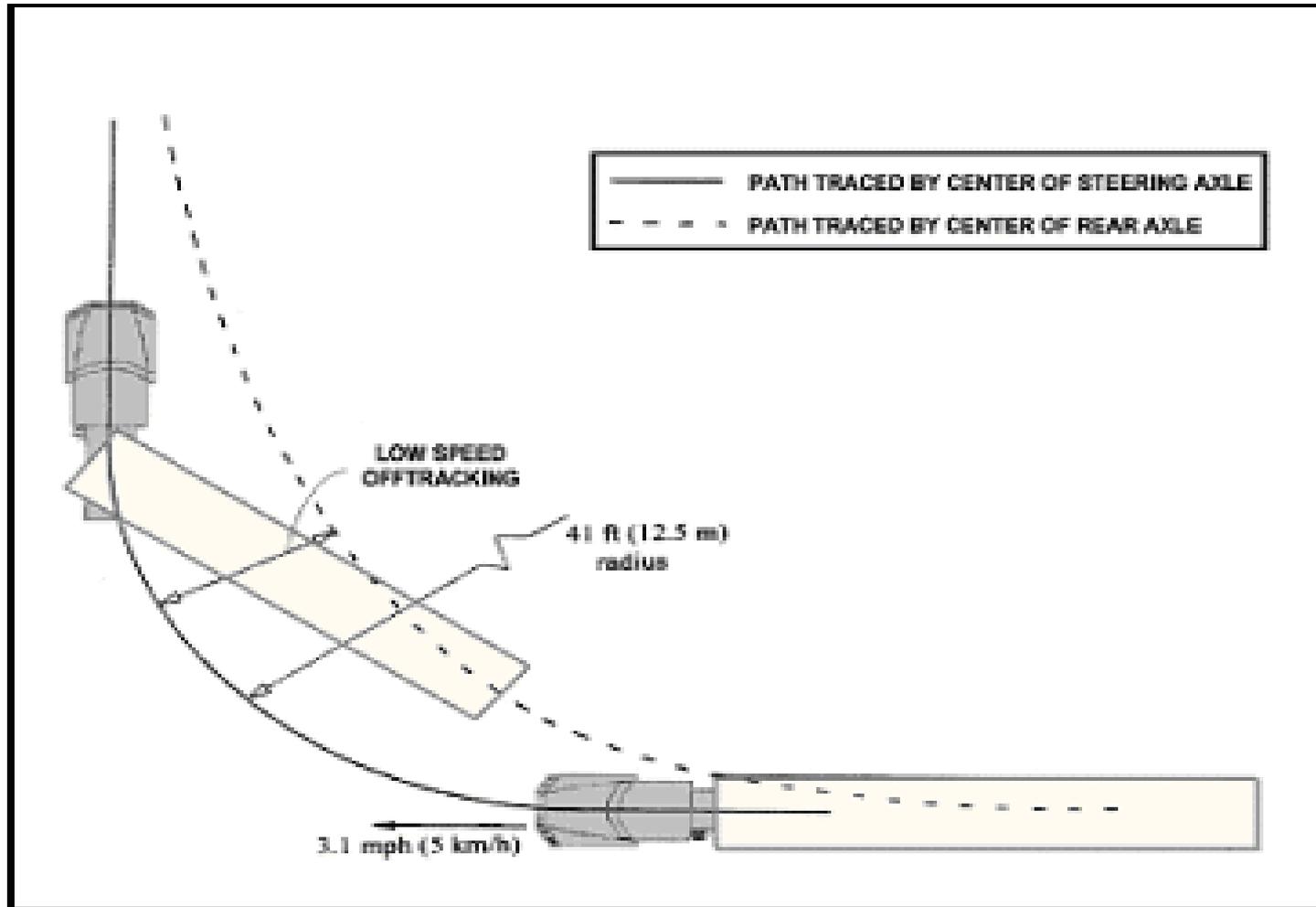


**Suburban**



**Rural**

# Truck Route Design Recommendations



# **DRAFT FREIGHT PROJECT AND POLICY IMPROVEMENTS**

# Mega-Projects

- ➔ Continue upgrades of SR 109
  - Enhances truck bypass around Nashville region
  - 72 percent of trucks surveyed on I-65 north of Nashville are through truck trips. Kentucky and Georgia are the two external states with the most through truck flows.
- ➔ Increase speed limit along SR 840
  - Improve level of service
  - Provide additional incentive to divert away from I-40
- ➔ Increase capacity and operational flow on I-24
  - Over half of the freight flows in the region comes from submarkets along this corridor
- ➔ Increase capacity on I-65 between downtown and KY state line

# Interchange Improvements

- ➔ Improve old interchanges adjacent to most freight-intensive portion of Nashville region in the southeast
  - Interchanges have tight radius and no downstream traffic signals
- ➔ Key interchanges include
  - I-24 at Hickory Boulevard
  - I-24 at Lee Victory Boulevard
  - I-24 at Je B. Jackson Parkway

# Safety Projects

- ➔ Add median barriers to high truck volume corridors, high truck crash corridors, and emerging freight corridors
  - **High Truck Crash Corridors** - Charlotte Pike, Nolensville Pike, and Columbia Avenue in Davidson County; Murfreesboro Road, Bristol Highway in Rutherford County; Gallatin Pike in Sumner County; Murfreesboro Road and SR 109 in Wilson County
  - **High Truck Volume Corridors** – SR 6 in Sumner County, SR 106 in Davidson County
  - **Emerging Freight Corridors** - Joe B. Jackson Parkway

# Smyrna Area Traffic Improvements

Project Description	Rationale
<p>Improvements at Nissan Dr./Enon Springs Rd.</p> <ul style="list-style-type: none"><li>• Longer left and right turn lanes on Enon Springs Road westbound</li><li>• Add right turn lane from Nissan Drive heading northbound to Enon Springs Road</li><li>• Move access road at NE corner of intersection from Enon Springs Road to side street</li></ul>	<p>Turning truck traffic often backs up into through lanes which prevents vehicles from passing through intersection on Nissan Drive</p>
<p>Add traffic signal at Gate 5 intersection with Enon Springs Road</p>	<p>Police officer currently used to direct traffic during shift changes and peak periods</p>
<p>Consider removing bicycle lane on Nissan Drive</p>	<p>Adjacent to heavily trafficked road with many turning trucks and autos from Nissan Dr. to Enon Springs Rd.</p>

# Policy Recommendations

- ➔ Preserve industrial land along SR 840
- ➔ Support increasing capacity on I-65 outside of Tennessee as this is the inter-state long haul corridor that carries the largest amount of Nashville's freight

# Next Steps

- ➔ Finalize regional truck route network
- ➔ Finalize recommendations
  - Land use recommendations for municipalities
  - Project and policy recommendations for the Nashville Area MPO
- ➔ Develop final Nashville Area Freight Study

# For Additional Project Information

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**Thank you for your participation  
today!**