Transportation Impact Analysis (TIA) Requirements

Purpose, Limitations, and Policy Considerations

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Transportation and Public Works

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Purpose

- Explain the role of transportation impact analyses
- Discuss strengths and limitations of transportation studies
- Review how transportation metrics influence land use outcomes
- Consider alignment with City policy goals

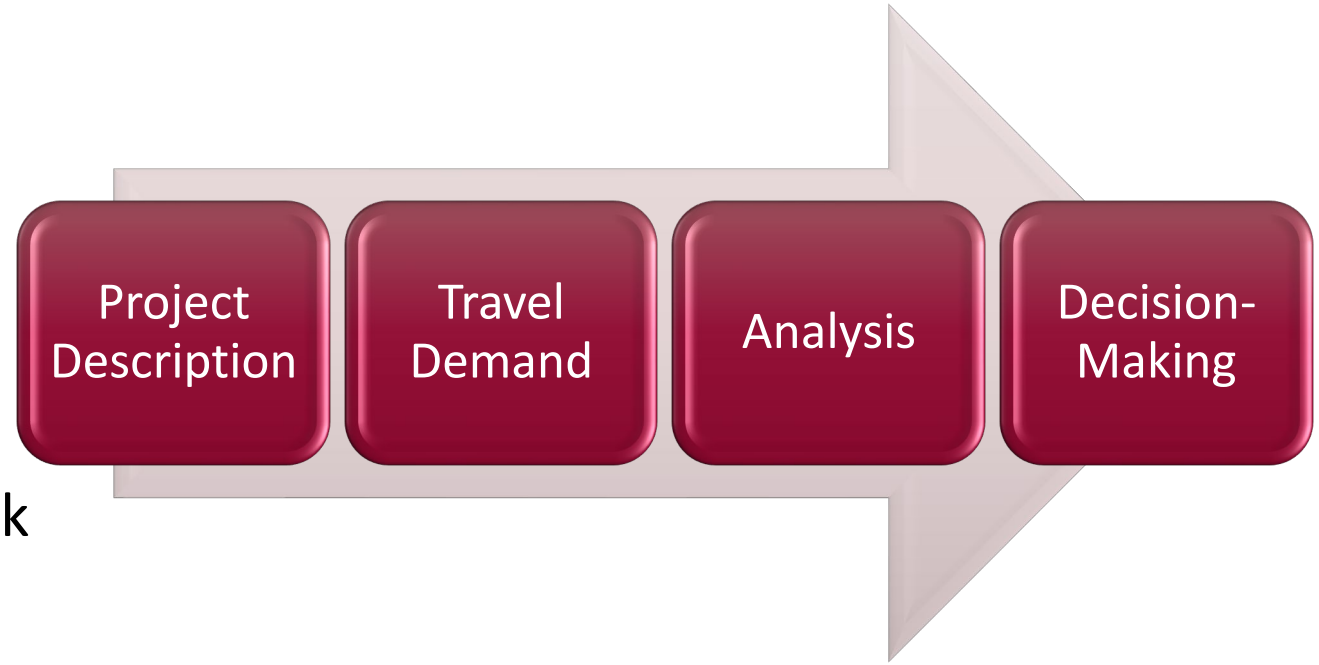
Key Question: How can transportation analyses provide meaningful information without creating unnecessary cost, complexity, and confusion?

What Is a TIA?

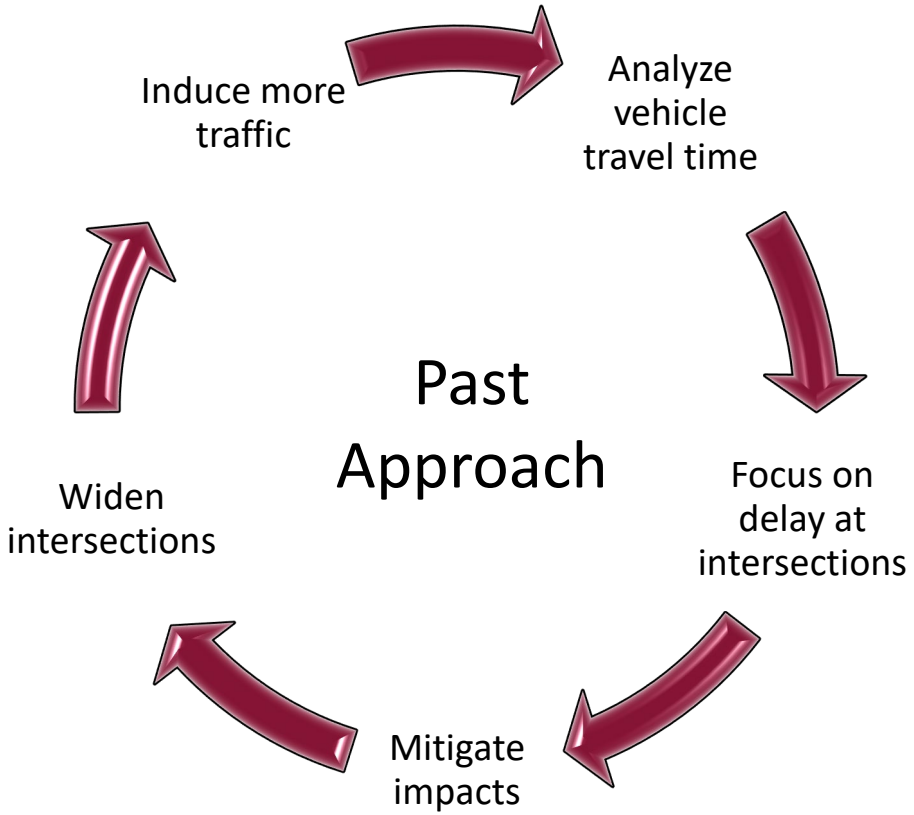
Definition: A forecasting tool used to estimate how a proposed development may affect the transportation system.

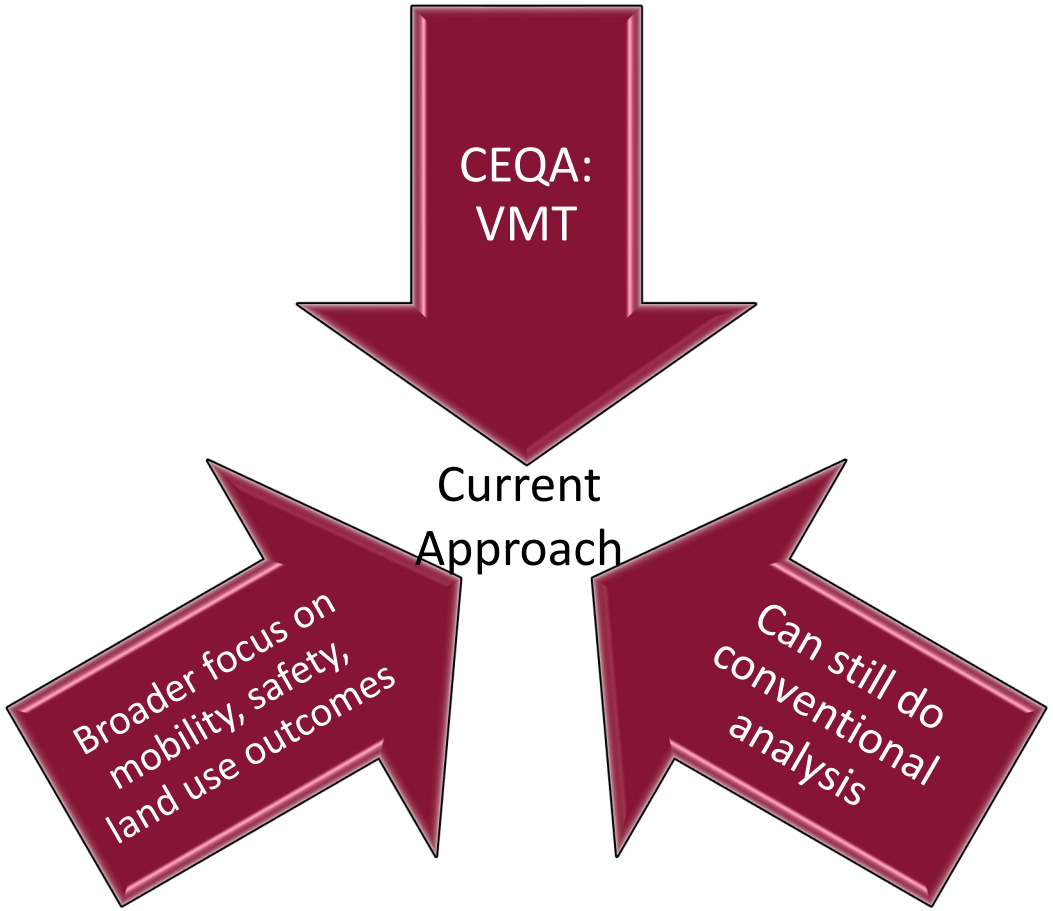
Typically evaluates:

- Project-generated travel demand
- Traffic operations
- Vehicle Miles Traveled (VMT)
- Access and circulation
- Current and future transportation network
- Potential transportation improvements



TIA Evolution





Why Are TIAs Valuable

Predictability	• Consistent evaluation framework
Methodology	• Estimates project travel demand • Identifies locations warranting further review
Impact Determination	• Evaluates potential improvements • Supports transparent and predictable decision-making

Staff Perspective: Transportation analyses help inform professional judgment; they do not replace it.

How TIAs Are Used

Use for:

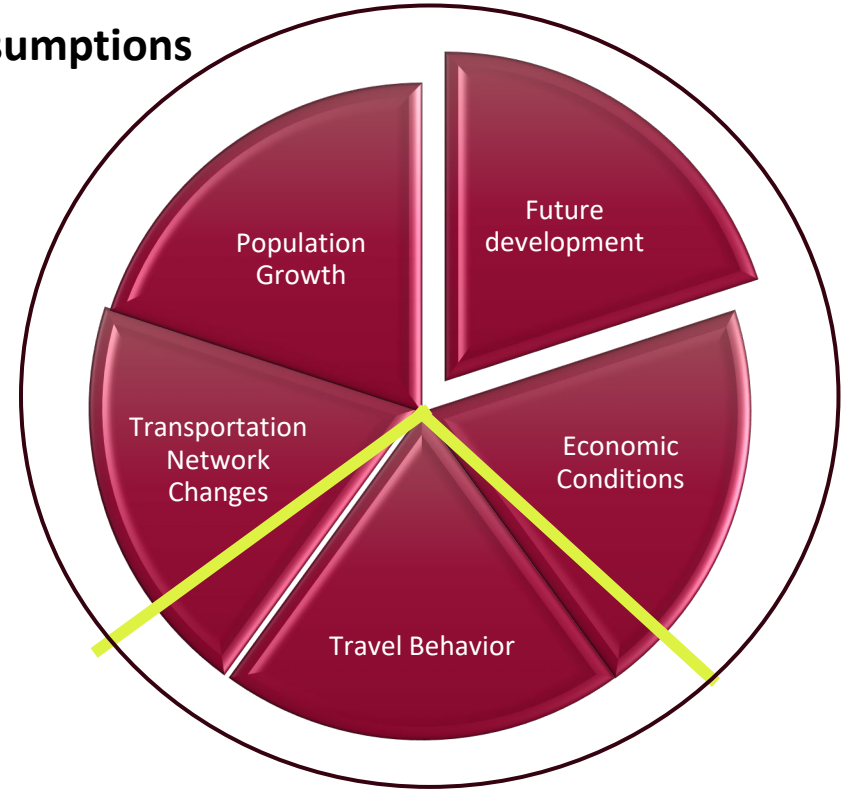
- Screening Tools
- Planning Tools
- Framework for Improvements
- Input to decision-making

Not as:

- Precise forecasts
- Guarantees of future conditions
- Sole basis for project decisions

Precision vs. Uncertainty

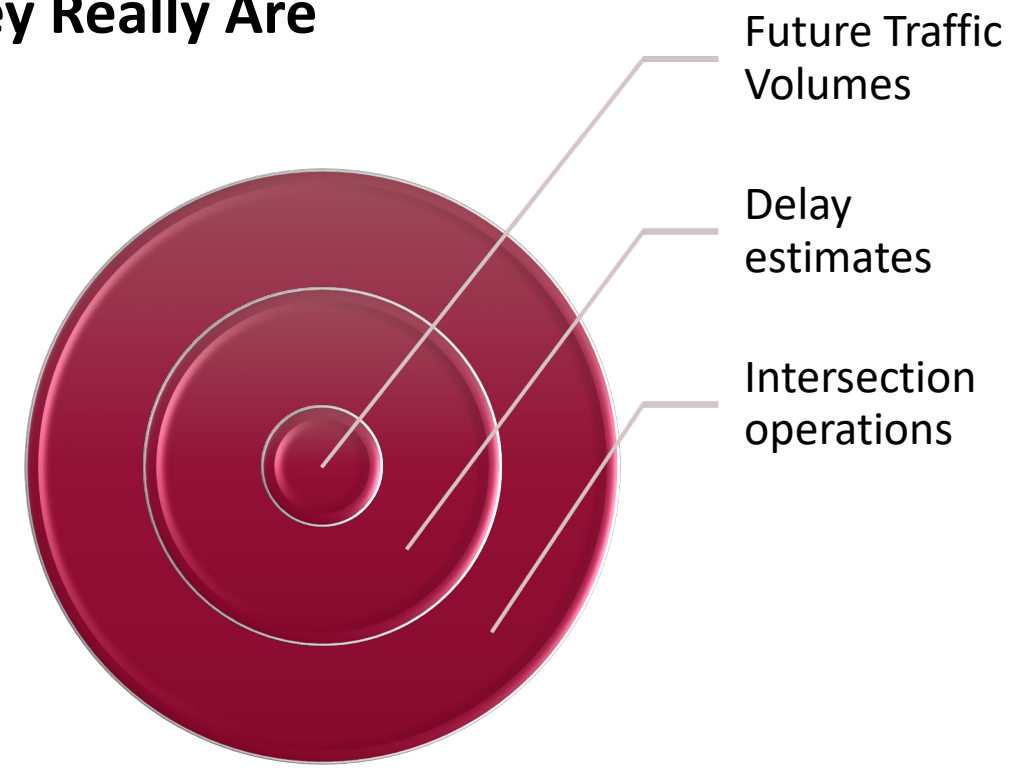
Assumptions



Important Reality

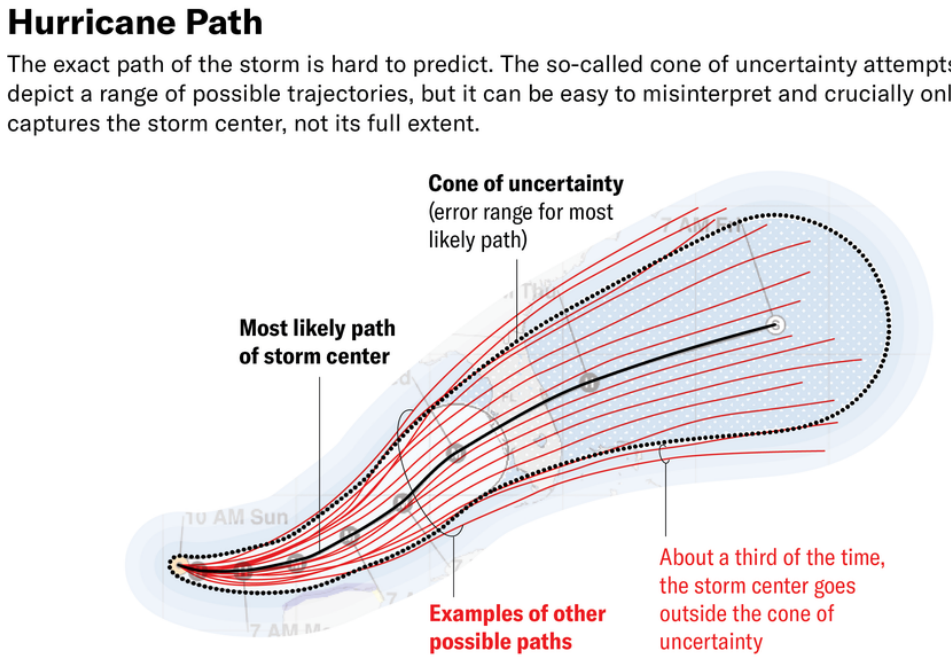
Small changes in assumptions can produce different results.

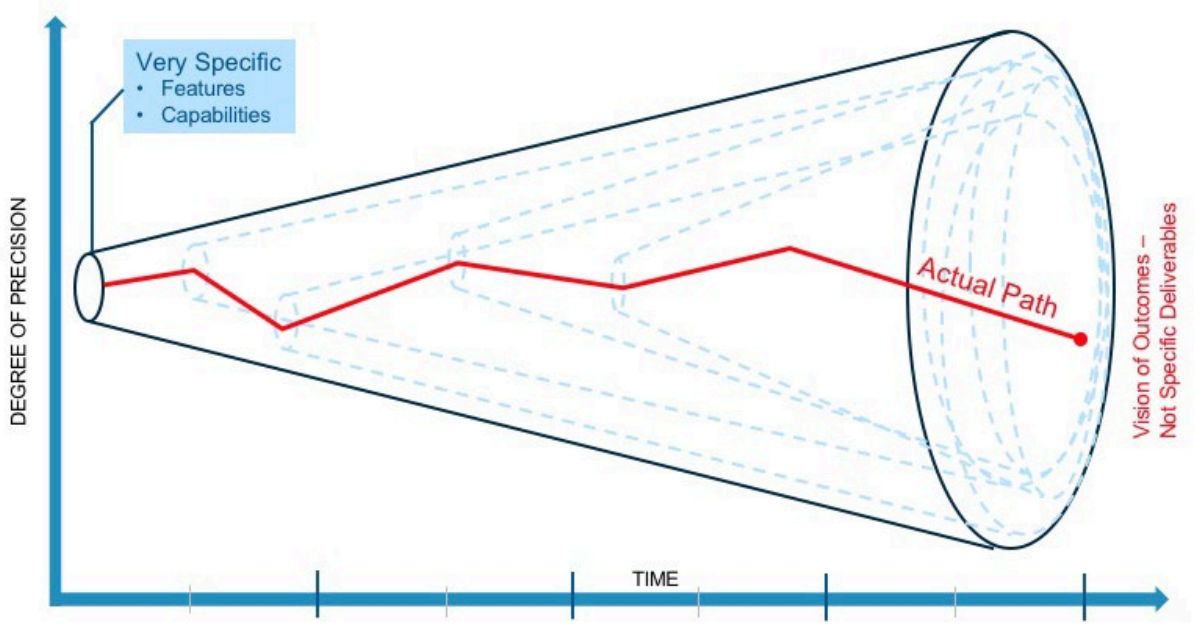
Forecast Outputs Often Appear More Precise Than They Really Are



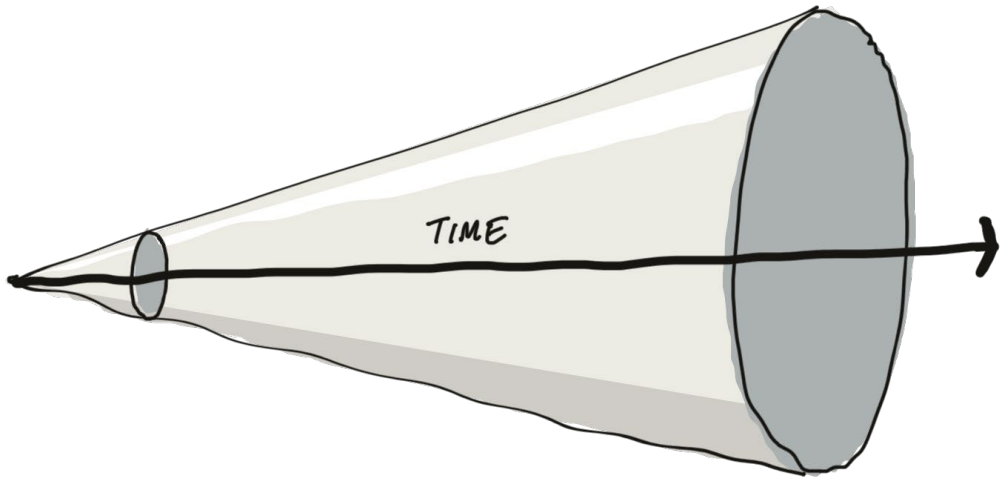
Precision vs. Uncertainty

- Real-world conditions constantly change
- Models contain uncertainty
- Results should be interpreted accordingly





Challenges with Small Projects



Transportation impacts are often small relative to:

- Background growth
- Daily traffic fluctuations
- Seasonal variation
- Changing travel behavior

Potential Issue: More analysis does not always mean more useful information.

- Documentation increases
- Costs increase
- Uncertainty remains largely unchanged

TIAs in Public Forums

A Common Challenge

Transportation studies are often used to support broader debates regarding:

- Growth
- Neighborhood character
- Community change
- Development policy

Professional organizations (ITE, APA) have noted that individual metrics or model outputs may be cited beyond their intended purpose.

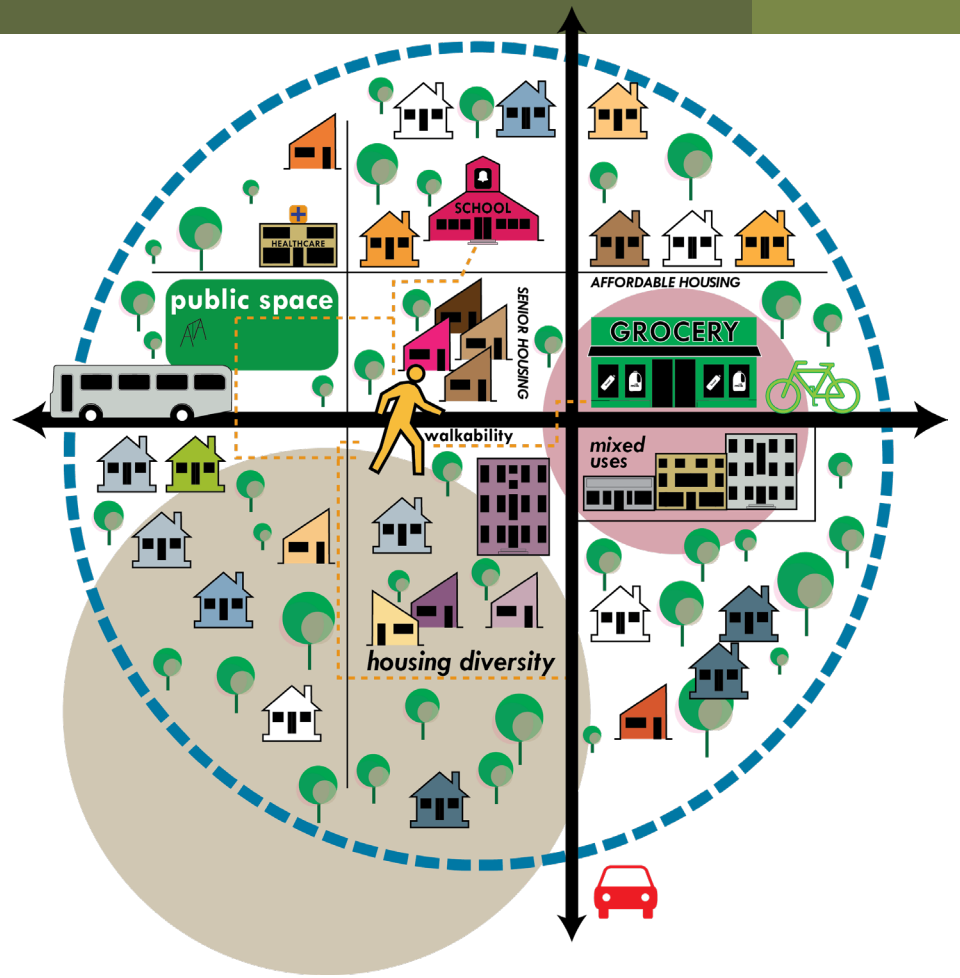
Key Point: Understanding study limitations is as important as understanding study findings.

Transportation Metrics Influence Development Patterns

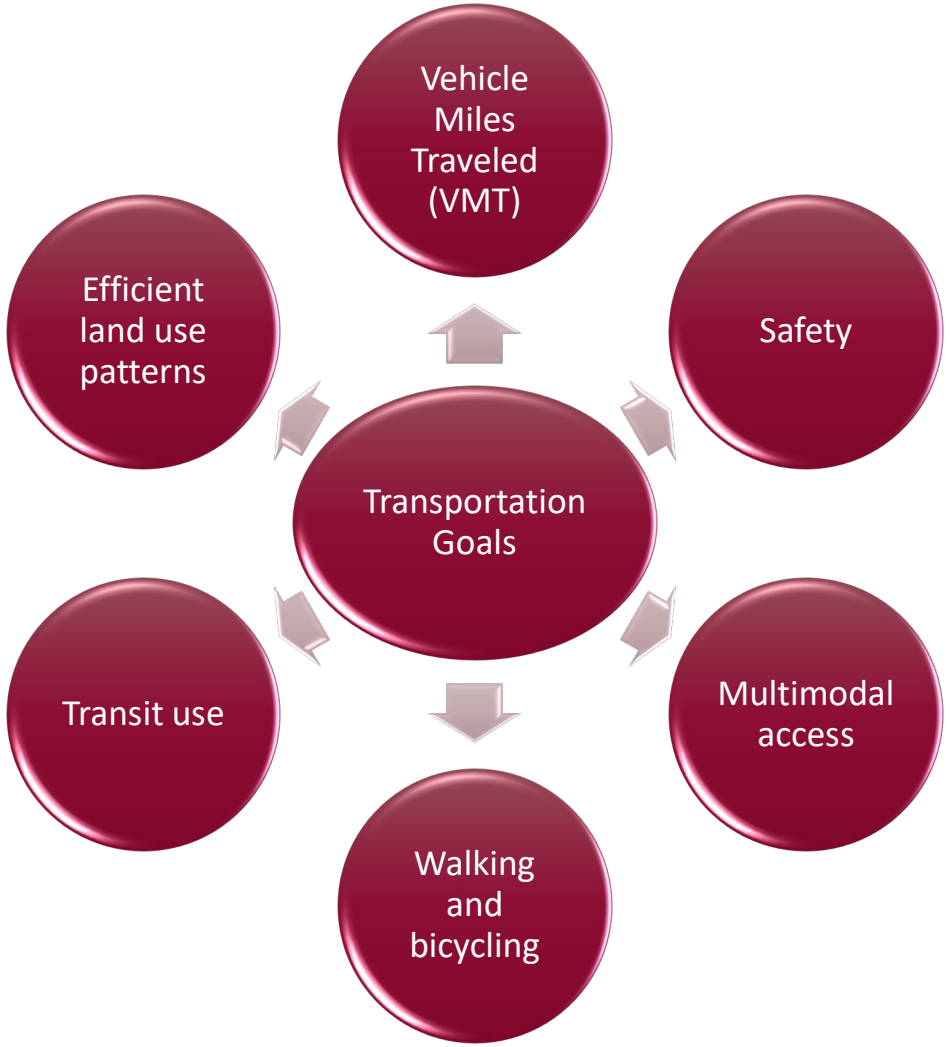
Transportation Frameworks Are Not Value-Neutral
Metrics influence outcomes.

Historically:
Delay-focused analysis makes infill development appear more impactful.
Edge development may appear less impactful due to available roadway capacity.

Potential Result:
Preference for roadway expansion
Preference for dispersed development patterns



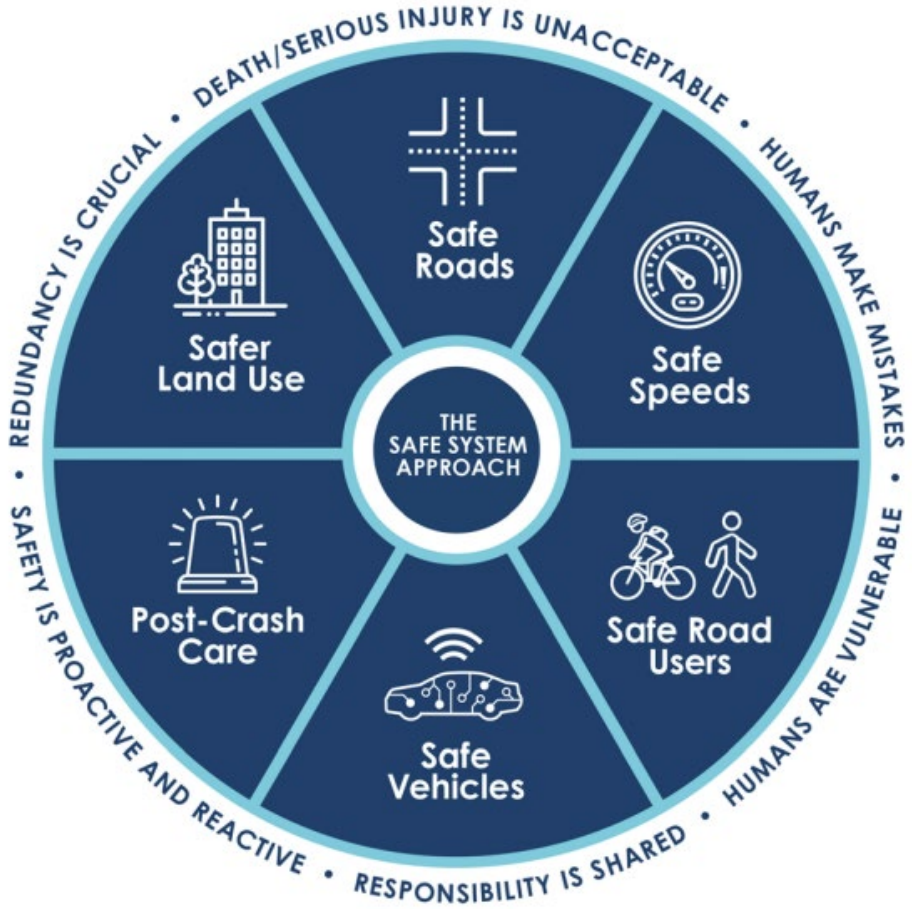
Why Agencies Are Shifting Beyond Congestion



Recognition that:

- Added roadway capacity can induce additional travel
- Congestion relief may be temporary

Reflecting Community Values



Transportation Analysis Is Also a Policy Choice

- When should studies be required?
- What metrics matter most?
- Which impacts warrant mitigation?
- What do we want from our transportation network?

These decisions reflect:

- Community priorities
- General Plan policies
- Desired transportation and land use outcomes
- Understanding the connection between transportation and land use

Alignment with City Goals

The General Plan supports:

- Compact infill development
- Connected transportation networks
- Multimodal travel options
- Safety and accessibility
- Efficient land use patterns

Therefore, transportation analysis requirements should focus on:

- Safety
- Connectivity
- Multimodal access
- Meaningful transportation impacts

Rather than analytical requirements with limited decision-making value.

What Do We Want to Be?

LOS A

LOS F

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Key Conclusions

- Transportation analyses remain important technical tools.
- Transportation models provide estimates, not predictions.
- Analysis requirements influence development outcomes.
- Requirements should align with adopted City goals.
- Detailed studies should be focused where meaningful transportation issues may exist.
- TIA metrics and statements are often misused by project supporters and opponents.
- “Traffic” is a frequent crutch used by the public without being a useful descriptor.

Questions?