

MAKING COUNTS COUNT: WHY USE A TRAFFIC FORECASTER?

Partnering Conference 2012

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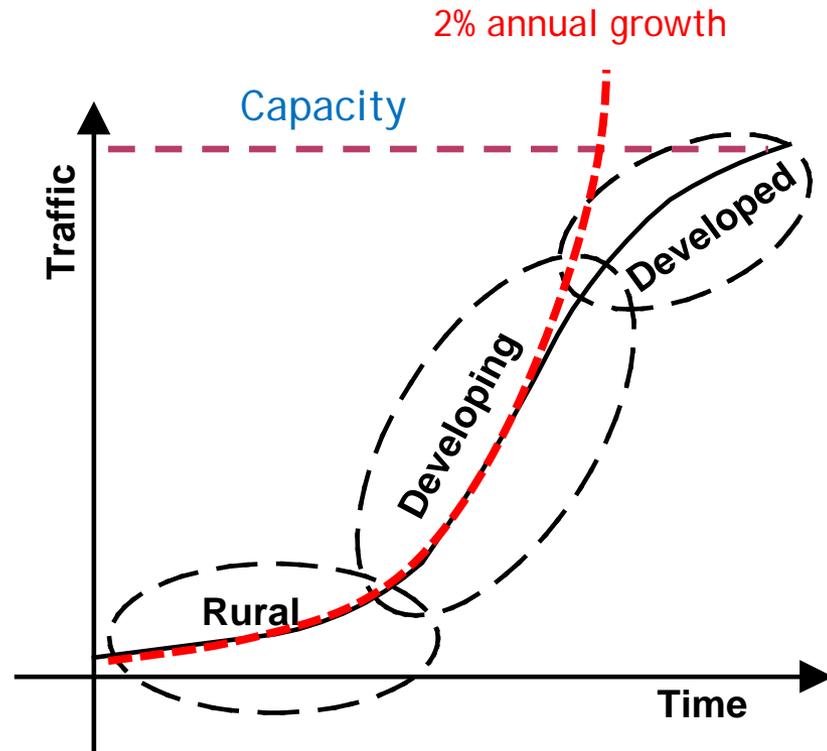
ONE SIZE FITS ALL

- Not every project needs a full-scale, in-depth, detailed forecast; ones that don't:
 - Bridge Replacements
 - Resurfacing
 - Safety
- Finding Thresholds
 - 400 ADT for bridges
 - 1,000 ADT for turning movements
- Put the effort where it makes a difference
- Make counts count



WHY ARE FORECASTS IMPORTANT?

- Optimization of public investment is critical
- Multimillion-dollar decisions based on how much, how long, when, etc.
- “Two percent per year” not an appropriate approach any more



Acknowledgement: Dr. Alan Horowitz, University of Wisconsin-Milwaukee

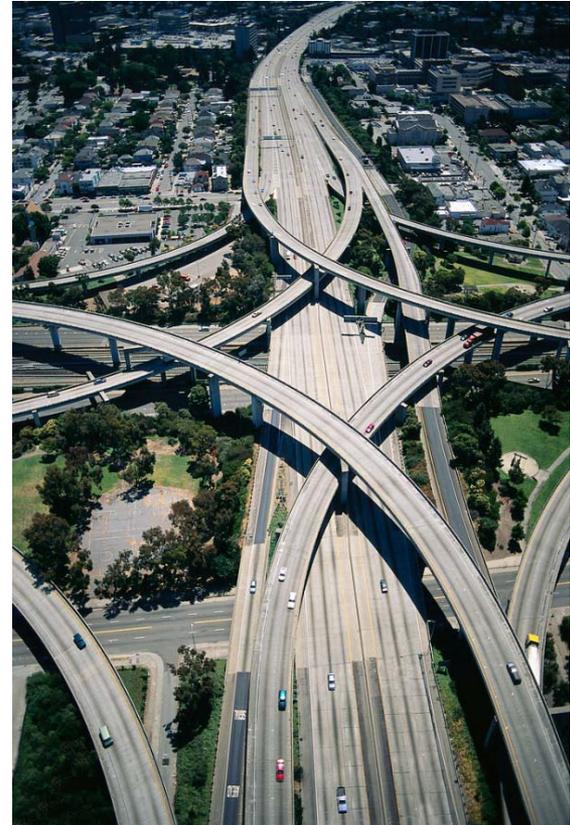
OPTIMIZATION INVESTMENT

- ◉ Planning - Scoping and Official Orders
- ◉ Design - Highway and Structures
- ◉ Environmental - Air and Noise
- ◉ Traffic Operations - Signal Warrants and Timing
- ◉ Scenario Analysis - Location and Material



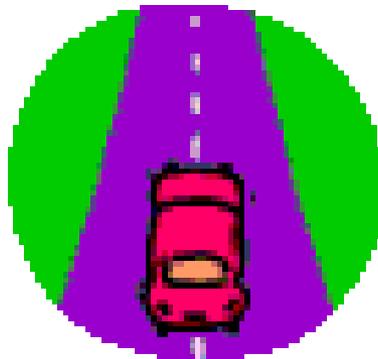
OPTIMIZATION INVESTMENT

- Forecast development
 - Right level at each phase
 - Establish analysis years
- Planning ahead for traffic counts
 - Special counts take time/money
 - School, events, winter
- Sizing requirements better understood
 - Number of turning movements
 - Analysis years



OPTIMIZATION INVESTMENT

- Transportation Demand Models
 - Only IF needed
 - To produce right model for context
- Subject Matter Expert (SME) to evaluate-
 - Scope of work, hours, assumptions, process/plan, timetable/milestones.

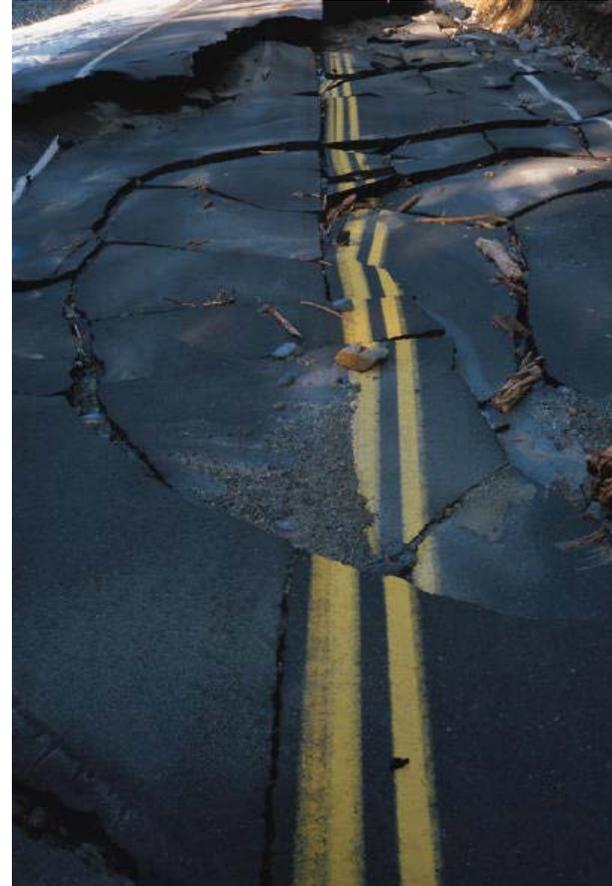


SUBJECT MATTER EXPERTS

- ◉ **The Subject Matter Expert is** that individual who exhibits the expertise in **performing a specialized job, task, or skill within the organization.**
- ◉ An SME is anybody with in-depth knowledge of the subject you are attempting to document. You need to talk to SMEs in **the research phase** of a documentation project (to get your facts straight) and you need to involve them **in the technical validation & interpretation of your drafts** (to make sure that your **information** matches theirs). (SixSigma)

DECISION MAKING

- Documentation of fundamental geometric design parameters
- It can prevent over-design
 - Important to know thresholds
 - Auxiliary turning lanes
 - Add through lanes
 - Turning movements
 - Pavement design
 - Future development plan impacts
 - Alternative design scenarios and analysis
 - The great unknown...



WHEN TO CONTACT THE FORECASTER?

- Involve Multimodal Branch early
 - Submit advertisement drafts
 - Understand how to proceed
 - Can follow the forecast to its completion



WHEN TO CONTACT THE FORECASTER?

- ◉ As soon as you know you will need one
- ◉ Traffic counts usually the starting point for forecasts
- ◉ Counts can take awhile (\$\$\$ + Time)
 - Traffic Impact
 - KYTC or Consultants
- ◉ Counts require people and equipment
 - What is the desired coverage?
 - Does the area get congested?

WHEN TO CONTACT THE FORECASTER?

- ◉ Invite the forecaster to team meetings
- ◉ Schedule pre-project meetings to fit the forecast within the time and money allocated
- ◉ Earliest start will result in the least cost by keeping it off the project's critical path
- ◉ Alternative Scenario Analysis if needed



RIGHT TOOL FOR THE JOB

○ ***IF*** a model is needed:

○ Time-

- 8+ months, depending on coverage
 - Scenarios/Alternative Analysis
 - Design decisions
 - Public Meeting Tool
- Micro-simulations take more data, time, and \$'s



WHAT IF IT IS TOO LATE TO START ON THE FORECAST?

- It's never too late.
- It WILL cost you.



FINALLY, SOME GUIDANCE

The Multimodal Branch is rolling out a new policy manual.

- ◉ Establishes procedure - central/district/consultant
- ◉ Formalizes Traffic Forecasts & Models as unique elements in project decisions
- ◉ Creates a defined location for documentation
- ◉ State of the Practice
 - Research-NCHRP 8-83

TYPES OF TRAFFIC FORECASTERS

- ◉ Division of Planning
 - *Central Office-Multimodal Branch-*
 - Highway District Office
- ◉ Consultant
 - Planning Forecast Consultants
 - Project Consultant
- ◉ External Agency
 - MPO
 - ADD
 - City/County

FORECASTS: CORNERSTONE OF A PROJECT!

- Consistency in approach
 - Corridor
 - Phase to Phase
- Proofing for errors or conflicts in the report
 - Reasonable use of assumptions & factors
 - Missing results
 - Reasonable conclusions
- Verify critical considerations
 - Especially when near thresholds

FORECAST FOLDER

- ◉ ProjectWise is the electronic folder
- ◉ What a folder will contain:
 - Forecast request form and map
 - Project forecast correspondence and meetings minutes
 - Existing counts and research materials
 - Special count request form, maps and counts
 - Final project report

REMEMBER

- ◉ Involve traffic forecasters early and often
- ◉ If a traffic model is needed- adds time and cost
- ◉ Traffic Forecaster SME are in Planning's Multimodal Branch
- ◉ ProjectWise is location for traffic forecast

