Traffic Analysis as a Decision Making Tool

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Introduction

- What is “Traffic Analysis”

- How it’s applied
  - Examples

- Questions
What is Traffic Analysis

- Typically associated with development
  - Residential, commercial, offices, etc.
  - How many trips and where they go
  - What improvements are needed

- Safety
  - Sight distance
  - Access spacing
  - Collision history
How It’s Applied

- Standards
- Development by development
- Long range planning
How It’s Applied
Standards

- It’s easy!

- All types of developments

- Surrounding jurisdictions
  - Typically based on national standards
  - Easy adoption
  - Consistent application
How It’s Applied
Standards

- Where do I put my driveway or access?
  - #1 – Sight distance
    - Stopping sight distance
    - Entering/Intersection sight distance
  - #2 – Access separation
How It’s Applied Standards

- #1 – Sight Distance
  - Stopping Sight Distance
    - Safety
#1 – Sight Distance

- Entering/Intersection Sight Distance
  - Capacity
How It’s Applied Standards

- #2 – Access Separation
  - Reduce vehicle conflicts
    - Left-turn head-on collisions
How It’s Applied
Development

- Development by development analysis
  - Typical TIA application
  - Good for small developments
    - Is a signal needed?
      - MUTCD Signal Warrant Analysis
        - Volumes (vehicles and pedestrians)
        - Collisions
    - Is channelization needed?
      - Left-turn
      - Right-turn
  - Each development mitigates their impacts
How It’s Applied
Long Range Planning

- Long range planning
  - Typically large commercial developments
    - Casinos, administration complex, etc.
  - Performed early
  - Includes different mixes of uses
    - Flexibility in uses
  - Several future scenarios
  - Several different improvements
    - Phasing of improvements
    - Mitigation fees
How It’s Applied
Long Range Planning

- Tulalip Tribes – Quil Ceda Village
  - Planned for 20+ years
  - Large commercial area – 2,000 Acres
  - Several different land uses
  - Bank of trips
How It’s Applied
Long Range Planning

- Tulalip Tribes – Quil Ceda Village
How It’s Applied
Long Range Planning

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How It’s Applied
Long Range Planning

- Tulalip Tribes – Quil Ceda Village
  - Cabelas
  - Is there enough capacity?
  - What improvements are necessary?
  - Transportation decisions in days
    - Opening April 19
Summary

- 3 ways to help decision making
  - Standards
  - Development by Development
  - Long Range Planning
Questions