

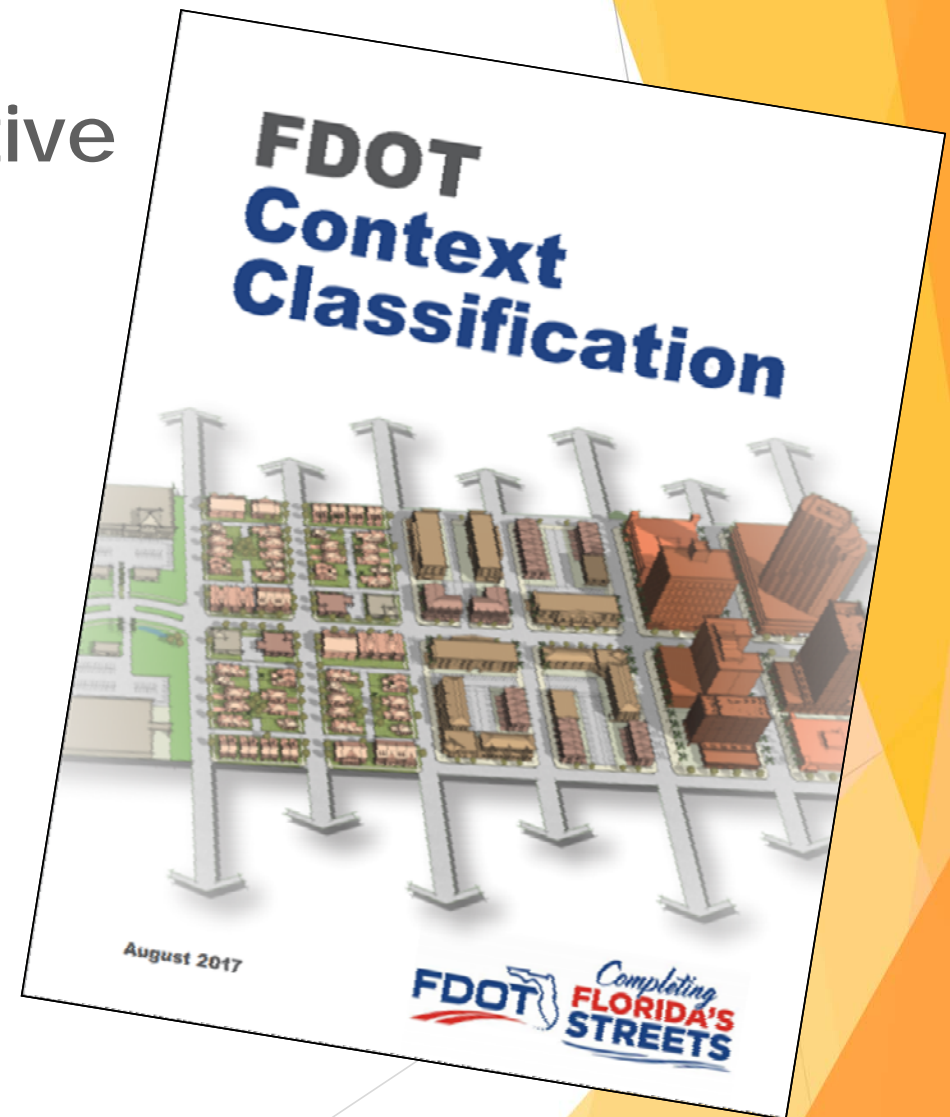


District 5 Corridor Planning: Implementation-Focused Plengineering


D10-FSITE/SFWTS Annual Meeting
FDOT District Five Planning and Corridor Development
October 30, 2018

Complete Streets Initiative

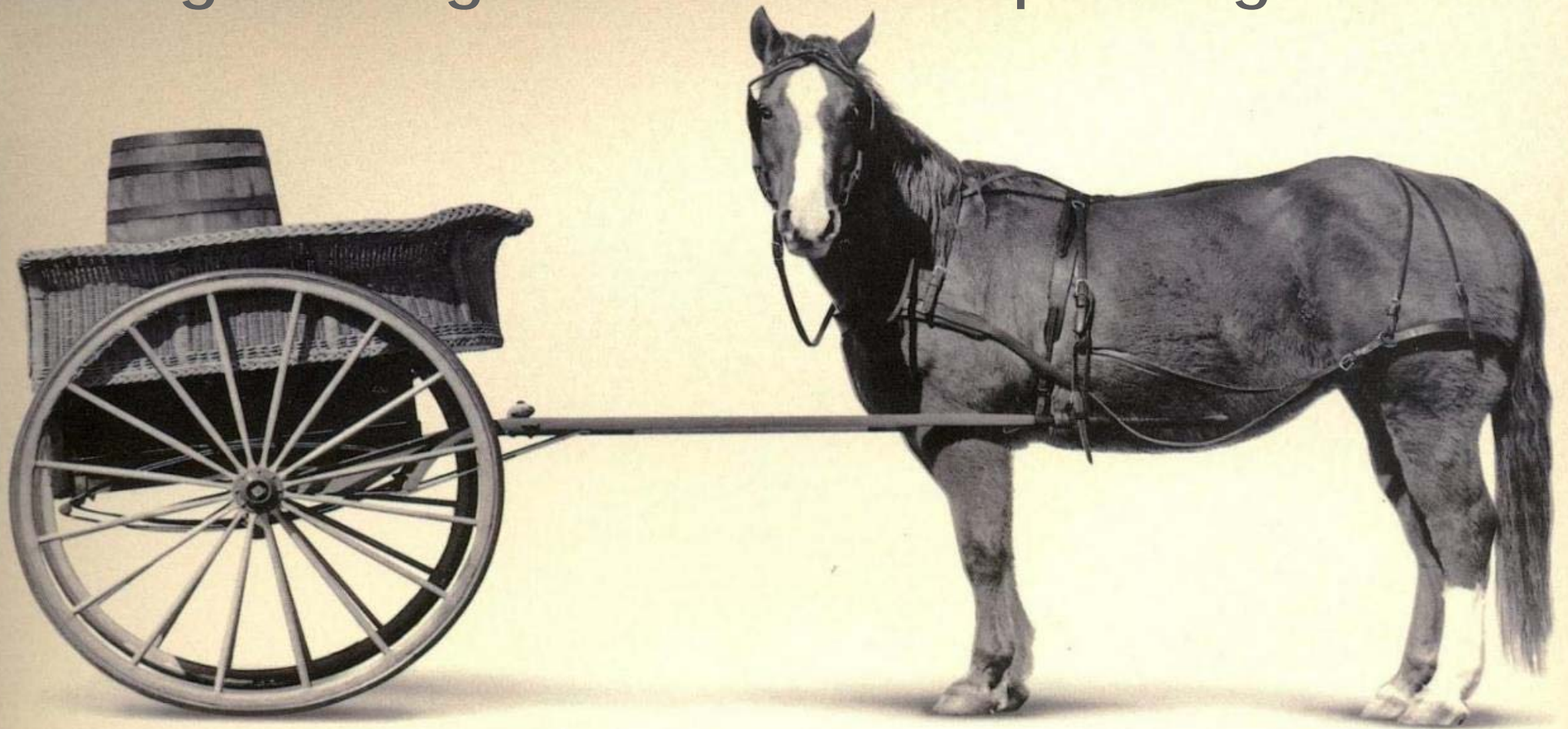
- ▶ Serve the transportation needs of transportation system users of all ages and abilities.
- ▶ Promotes safety, quality of life, and economic development.
- ▶ Context sensitive system of “Complete Streets.”



**Introducing Complete Streets
concepts during design is too
late.**



Programming a solution before planning



What is planning? When do we do planning?



STRENGTHEN THE ROLE OF PLANNING

STATE
DIRECTIVES

REGIONAL
PLANNING &
PRIORITIES
(LRTPs)

PLANNING

CAPITAL
IMPROVEMENT
PROGRAMS

NEPA &
PRELIMINARY
ENGINEERING

FINAL DESIGN &
PERMITTING

ROW & UTILITIES

CONSTRUCTION &
MAINTENANCE

Stronger planning leads to **better results**

Multi-Modal Planning



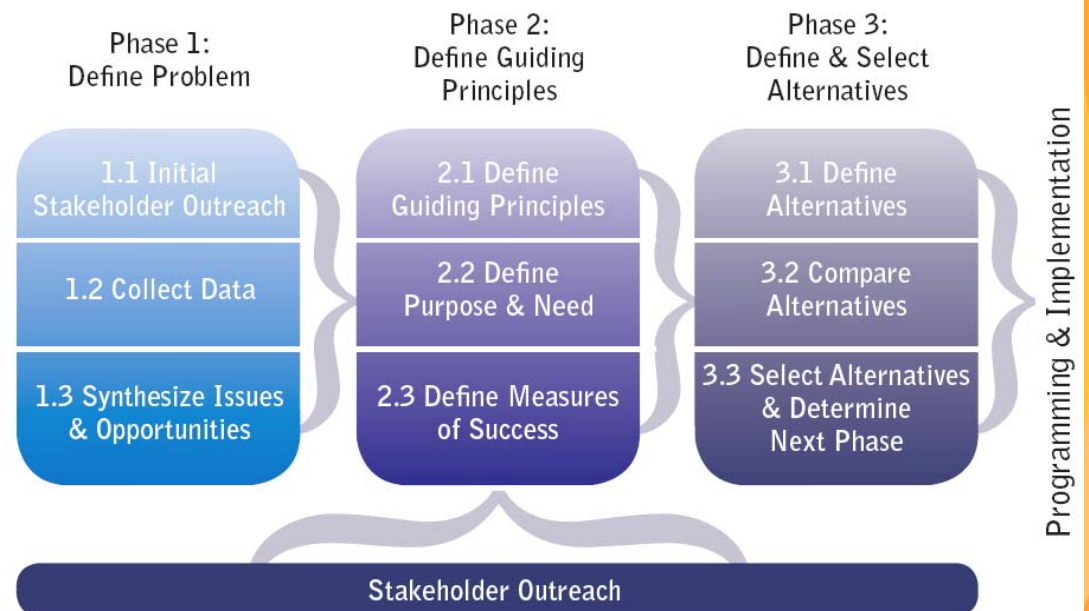
What **projects** do you want?

What **problems** do we have?

What **opportunities** do we have?

How can we **leverage our investments** to make us more **sustainable and competitive?**

Focus on Planning



It is ok **not to know the solution!**

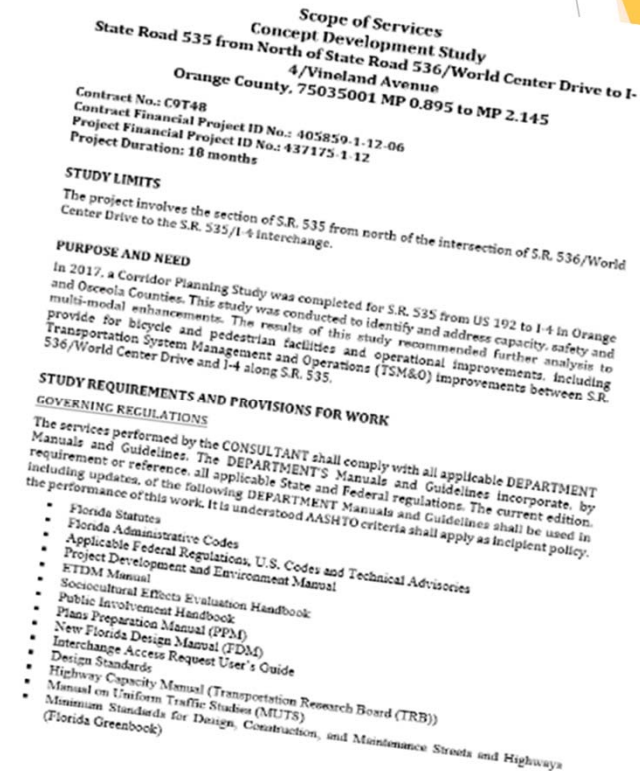


It is ok **not to know the problem!**



Multi-Disciplinary Scoping Process

- ▶ Review project applications from MPO/TPO
- ▶ Identify project needs for all modes
- ▶ Review data to be collected and existing Infrastructure
- ▶ Define study framework
- ▶ Review technical components
 - ▶ Roadway
 - ▶ Drainage
 - ▶ Utilities
 - ▶ Right of Way
 - ▶ Environmental



Multi-Disciplinary Data Collection

Planning

- Planning consistency
- LRTP/TIP information
- Funding
- Ongoing/planned projects
- Work Program
- PUDs/DRIs
- Traffic data / growth rates



Engineering

- **As-builts**
- Design plans
- **ROW maps**
- RRR projects
- **LiDAR/topo**
- Survey
- Parcel data
- Access class
- Crash data
- Traffic counts
- Drainage calculations/capacity
- Utilities



Environmental

- Permits
- GIS data: social, natural, cultural, physical
- Wetlands
- Wildlife
- Contamination
- Parks / Recreation
- Historic / Archaeological
- Community resources and features



Public Involvement

- Community demographics
- Local issues/concerns
- HOAs / community groups
- Local government stakeholders
- Special interest groups
- PVT / PAG members
- Meeting sites

Data-driven understanding of problem

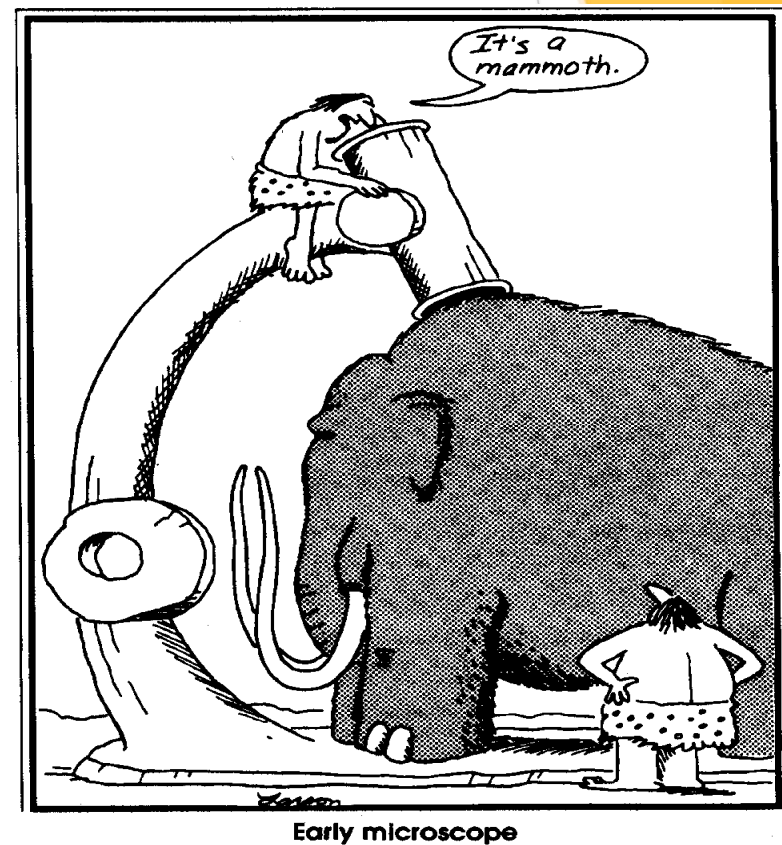
Data helps us understand the problems, opportunities, and points to alternatives that are context-based

- ▶ Data to Understand the Transportation Context
- ▶ Data to Understand the Land Use Context
- ▶ Data to Understand the Policy and Financial Contexts



Information vs Data:

Using the right level of analysis to make the decision at hand



Meaningful Stakeholder Engagement

- ▶ Strong community and agency engagement
- ▶ Cross functional internal FDOT meetings
- ▶ Relevant information sharing
 - ▶ Current project
 - ▶ Other projects within study area
- ▶ Share best practices
- ▶ Identified range of alternatives
- ▶ Collaborative problem solving
- ▶ Cost savings ideas
- ▶ Cross functionally supported concepts (design ready)
- ▶ Program the “right” projects



A photograph of a city street with cars, a bus, and a person walking. The image is overlaid with text and a plus sign. The text is in yellow and white. The plus sign is yellow. The background is a street scene with cars, a bus, and a person walking. The text is in yellow and white. The plus sign is yellow. The background is a street scene with cars, a bus, and a person walking.

TRANSPORTATION

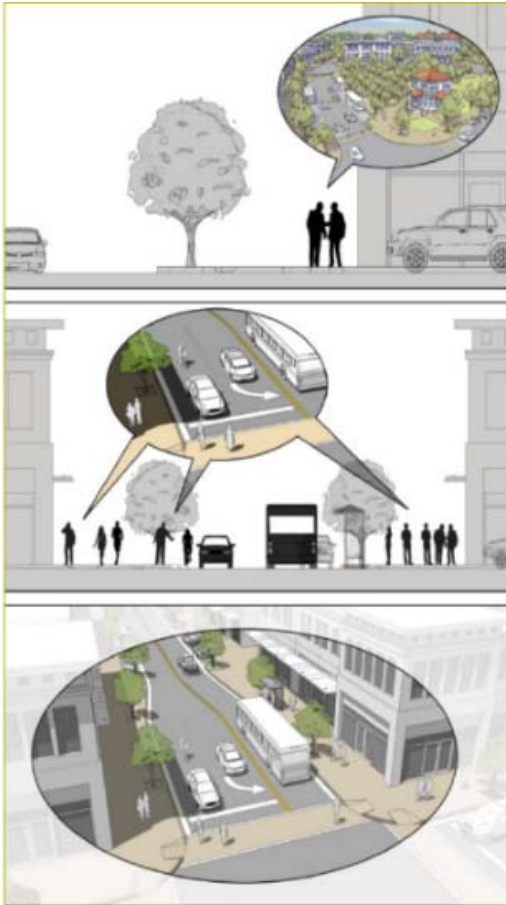
Place to comfortably and safely walk,
bicycle, take transit, or drive on



LAND USE

Places to conveniently walk to,
bicycle to, reach by transit, or drive to

Multi-Disciplinary Approach to Planning



CONTEXT CLASSIFICATION

What place are we serving?
Who are the users?



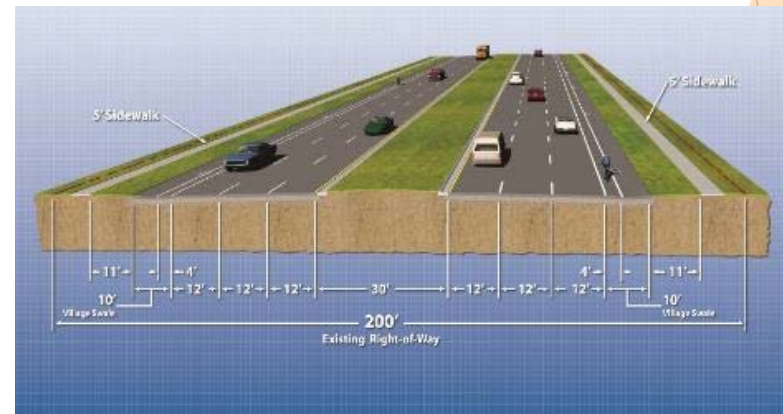
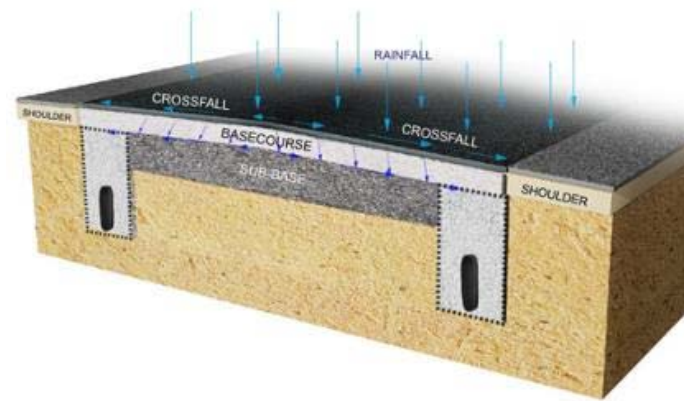
TRANSPORTATION CHARACTERISTICS

What is the role of the roadway?
Who are the users?

**HOW SHOULD ROADWAY
BE PLANNED/DESIGNED?**

Multi-Disciplinary Approach to Engineering

- ▶ **Multimodal**
 - ▶ Bike, Pedestrian, Transit, Freight, Auto
- ▶ **Traffic Operations**
 - ▶ Access Management
 - ▶ Operational Performance
- ▶ **Roadway Design**
 - ▶ Existing Deficiencies
 - ▶ Design Standards
 - ▶ Roadway Alignments
- ▶ **Drainage**
- ▶ **Right of Way**
- ▶ **Structures**
 - ▶ Age, Condition, etc.
- ▶ **Cost Estimates**



Planning has many outcomes

Multimodal Corridor Planning

Land Use Strategies

- Land Use Policies/Regulations
- Detailed Land Use Plans
- Land Use Programs
- Other Land Use Strategies

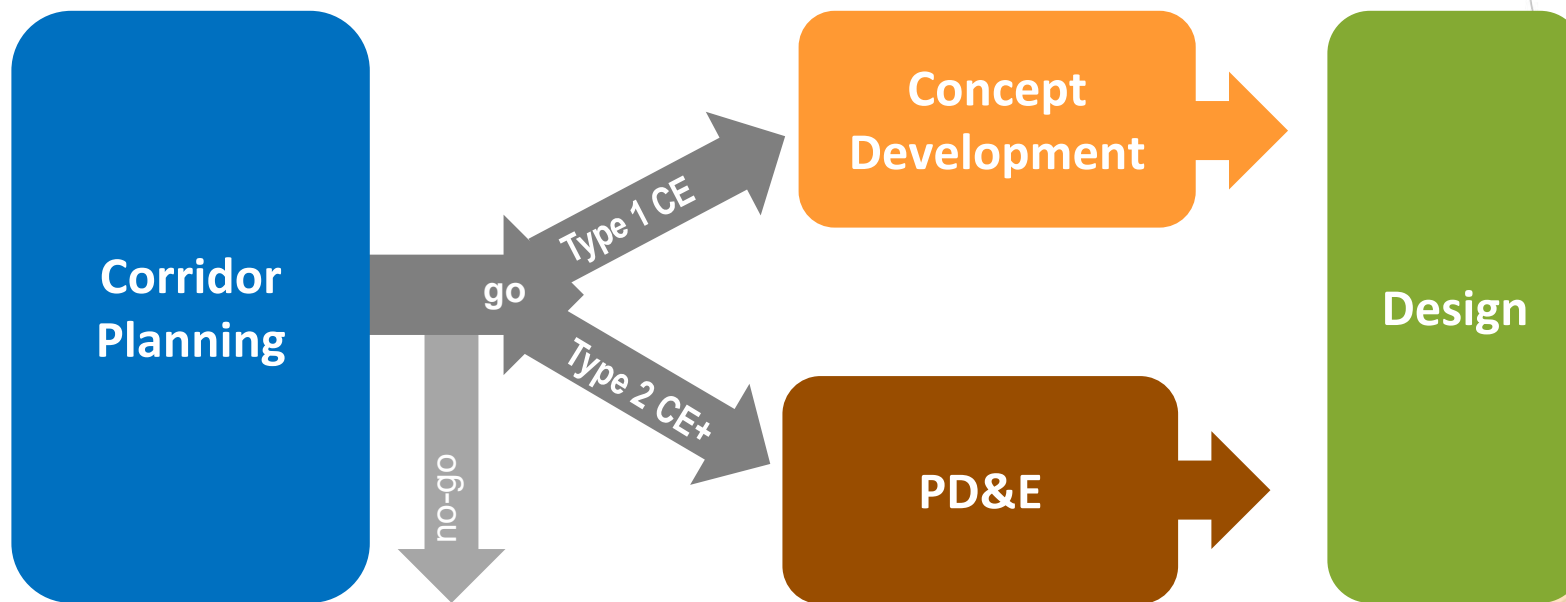
Transportation Strategies (all modes)

- Capital Improvements
- Transportation Operations
- Maintenance Project
- More Detailed/Area-Specific Transportation Plans and Programs
- Other Transportation Strategies

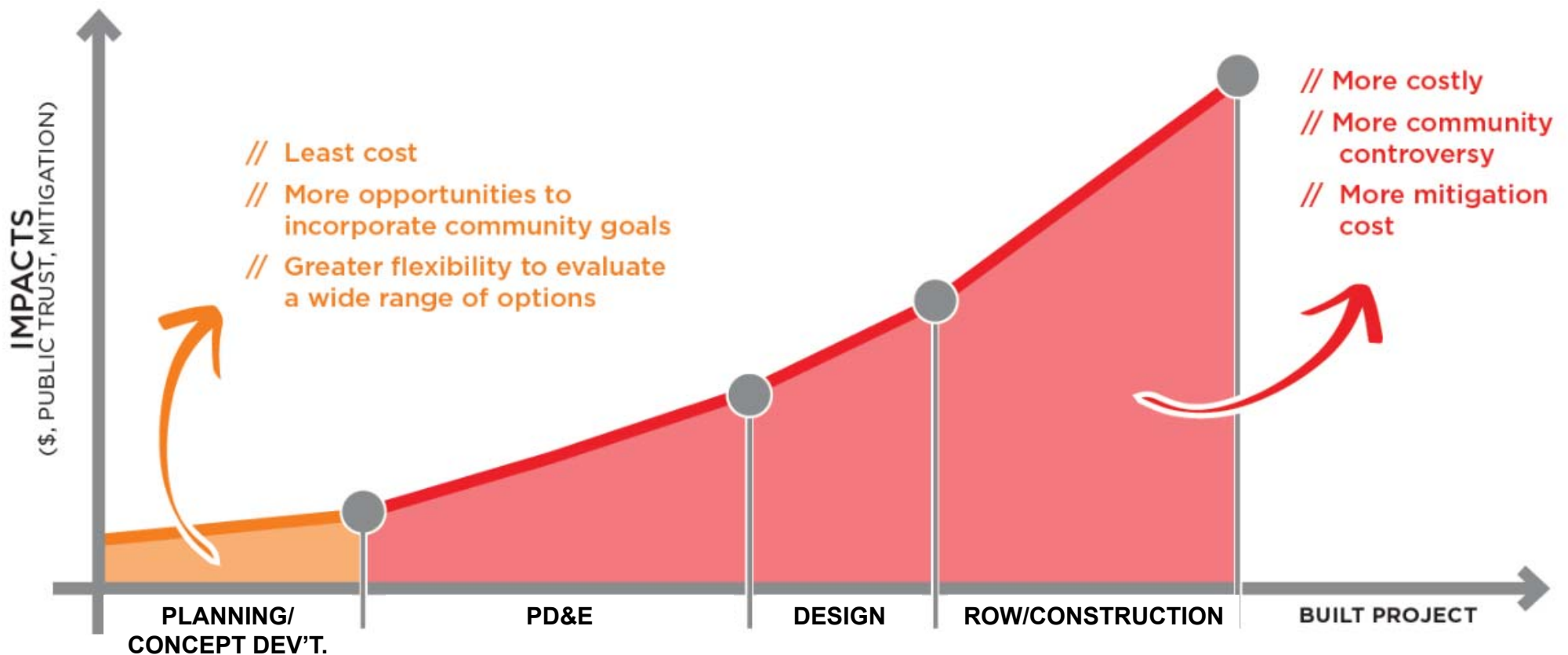
Other Strategies

- Utility/Infrastructure Improvements
- Organizational Changes
- Do nothing (No-Build)
- Other Strategies

Planning for Implementation

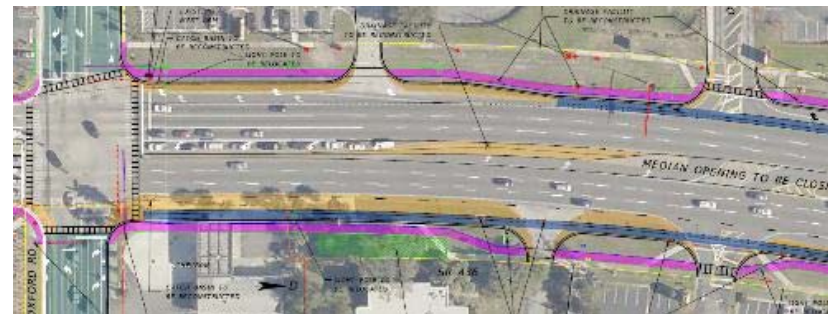


What happens when commitments change throughout the project development process?



Implementation-focused Plengineering leads to...

- ▶ Clear and publicly supported purpose and needs
- ▶ Good multimodal data to support alternatives evaluation
- ▶ Understanding of trade-offs
- ▶ Public buy-in on trade-offs and commitments
- ▶ Design- and implementation-ready concepts!
- ▶ Built projects!



District 5 Corridor Planning & Concept Development

- ▶ Conducting planning studies prior to all PD&E studies.
- ▶ ~50 studies conducted since 2011
- ▶ 15% determined no-build or no need for PD&E
- ▶ 15% advance to PD&E
- ▶ 70% advance to Concept Development
 - ▶ CD provides necessary information for technical scopes and estimates for design

Goal: Planning for Implementation!

FLORIDA DEPARTMENT OF TRANSPORTATION
District 5

**MULTI-MODAL CORRIDOR
PLANNING GUIDEBOOK**

Version 3 | DRAFT- September 2014



Thank You!



Heather Garcia
Planning & Corridor Development Manager
Heather.Garcia@dot.state.fl.us

Jane Lim-Yap
jlim-yap@kittelso.com