2040 Metropolitan Transportation Plan (MTP) and Comprehensive Transportation Plan (CTP)

Alternatives Analysis

Public Input Process

August 28, 2012

Presentation Outline

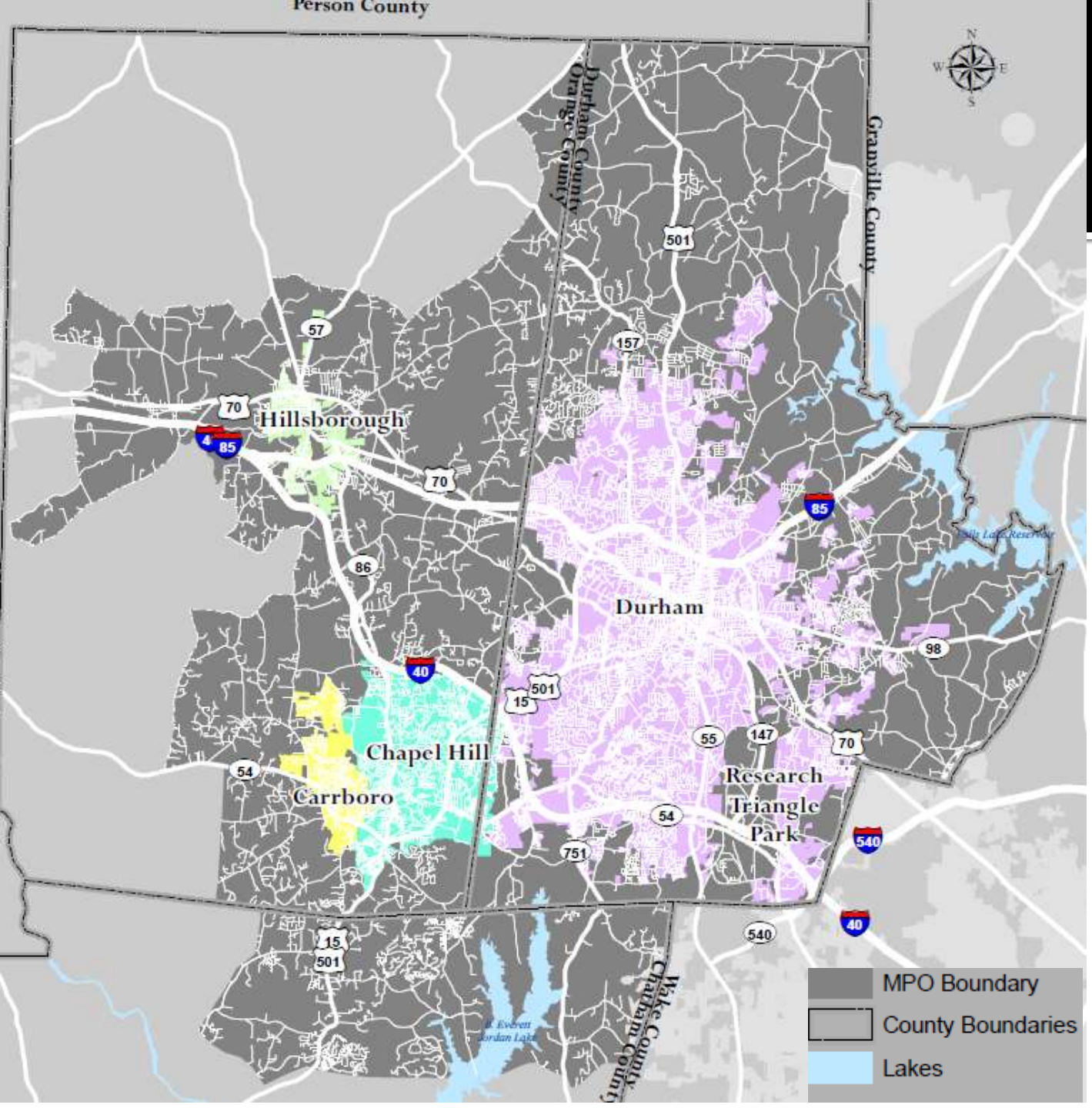
- What is DCHC MPO?
- What is 2040 MTP?
- What is Alternatives Analysis?
- How to understand the data provided for the Alternatives Analysis
- Next steps

What is the DCHC MPO?

Durham-Chapel Hill Carrboro Metropolitan Planning Organization

- Responsible for long range transportation planning in
  - Durham City and County, and
  - Parts of Orange County and Chatham County.
- Federal mandate – MPO must plan use of federal transportation funding
- Project must be in MPO plan to receive state or federal funding (CTP, MTP and TIP)
- Policy Board -- Transportation Advisory Committee (TAC) composed mostly of local elected officials.

What is the DCHC MPO?



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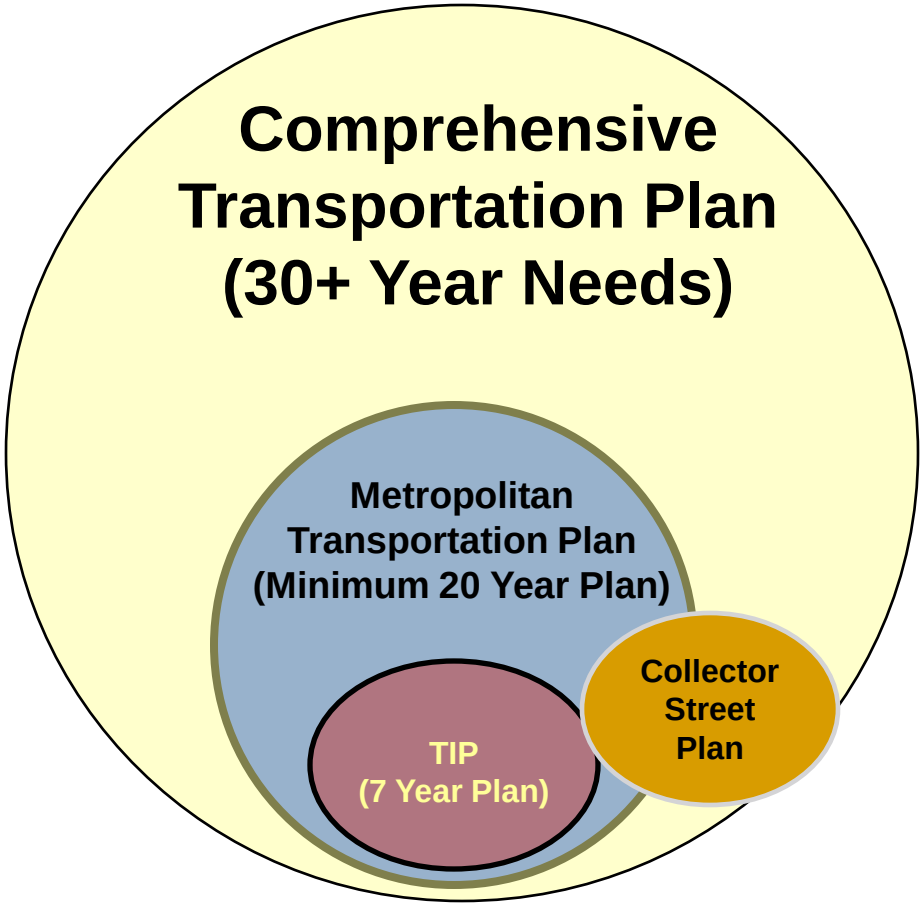
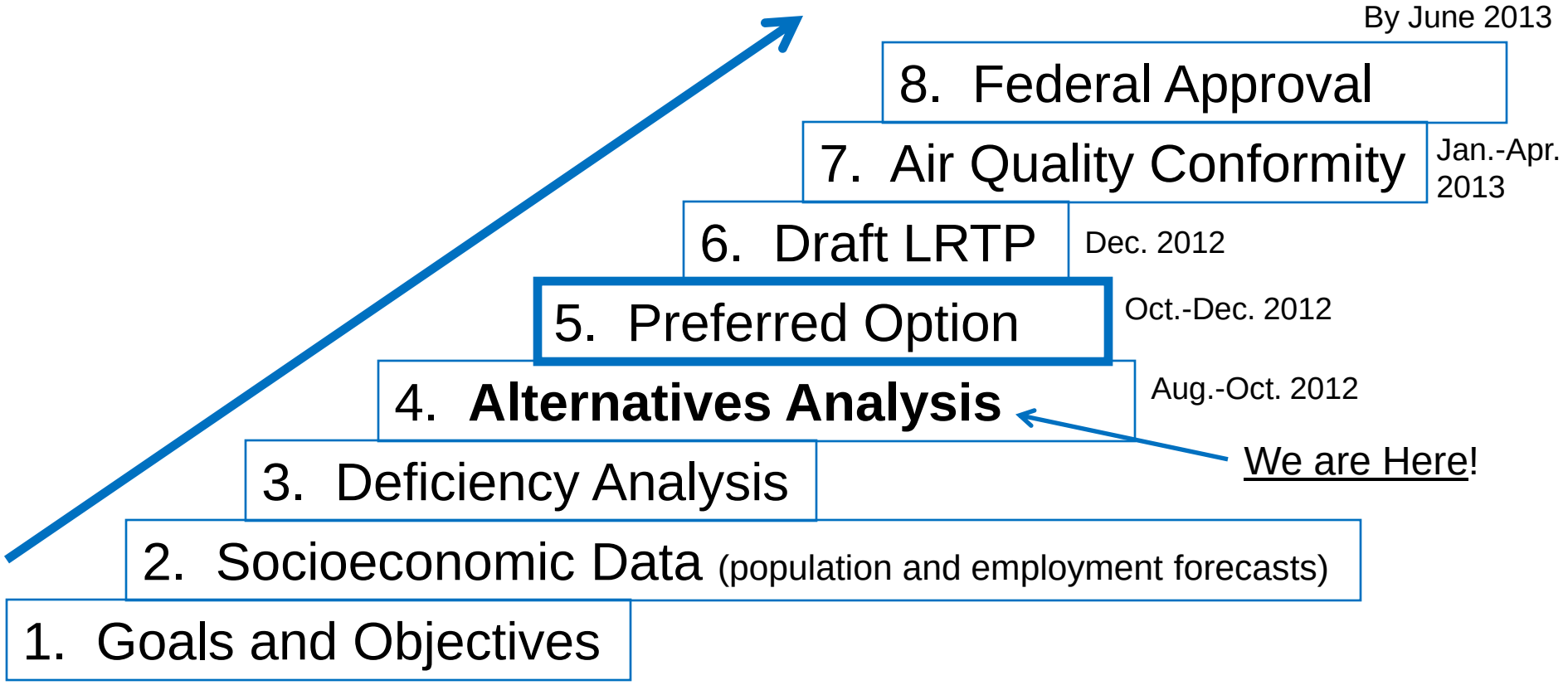
Relationship Between Plans



What is the 2040 Metropolitan Transportation Plan (MTP)?

- Lists highway, transit and other transportation projects to address future transportation deficiencies through year 2040.
- Assumptions – based on future land use, population and employment.
- Fiscal Constraint – Anticipated revenues must cover anticipated project costs.
- Funding -- Projects must be in LRTP to receive state and federal funding (via Transportation Improvement Program – TIP)
- Used for Planning
  - e.g., In development review, use LRTP to reserve right-of-way for future highway and fixed guideway projects

What is the 2035 LRTP Process?



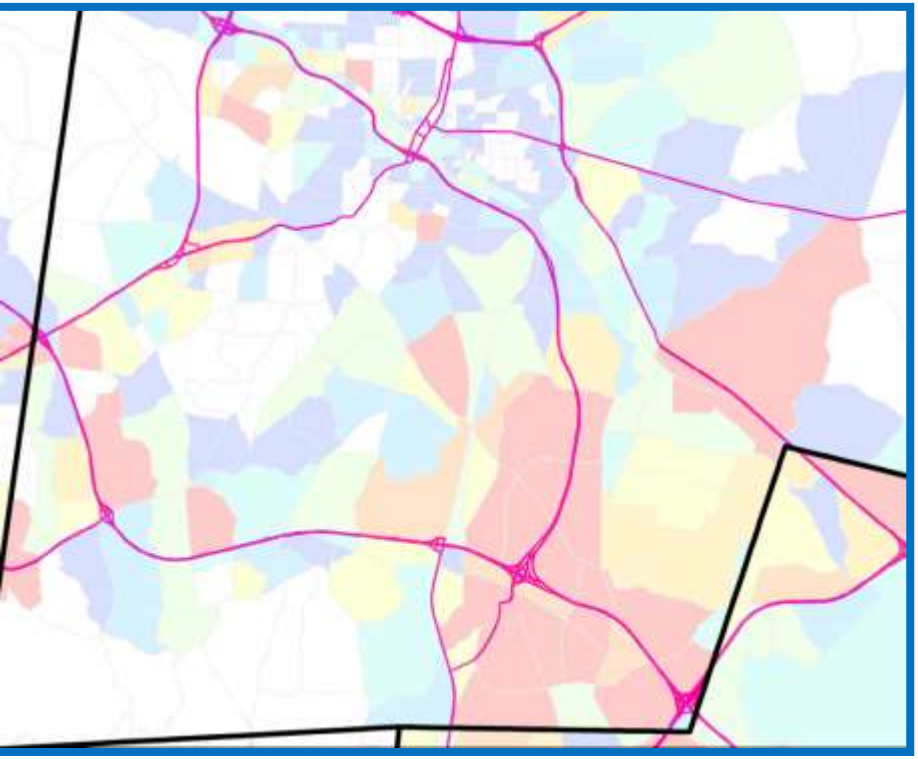
Alternatives Analysis

- What –
  - Set of highway and transit projects, and land use assumptions that produce transportation scenario for year 2040
- Why –
  - Compare impact of different projects and sets of projects on meeting transportation demand.
  - Inform development of final MTP and CTP
- When –
  - Release in August 2012
  - Public input (e.g., workshops, public hearing) in August, September and early October 2012

Alternatives Analysis

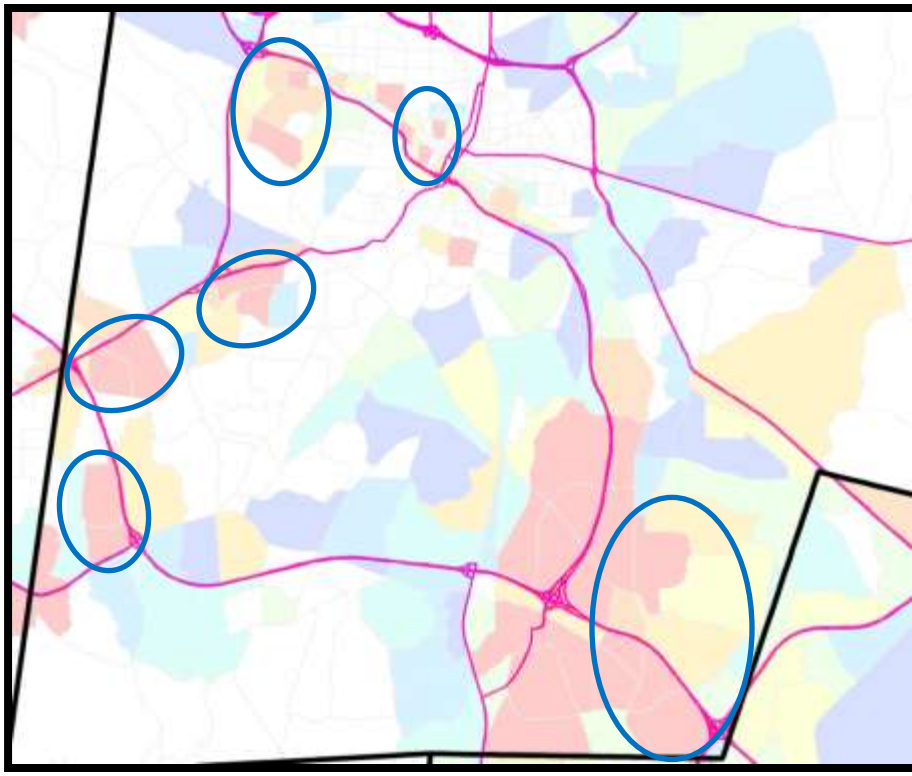
-- Land Use Scenarios **Example**

Higher suitability around rail stations results in…



2040 Community Plan -- Employment

= Increased employment concentrations adjacent to rail transit



2040 Highway Intensive -- Employment

Alternatives Analysis

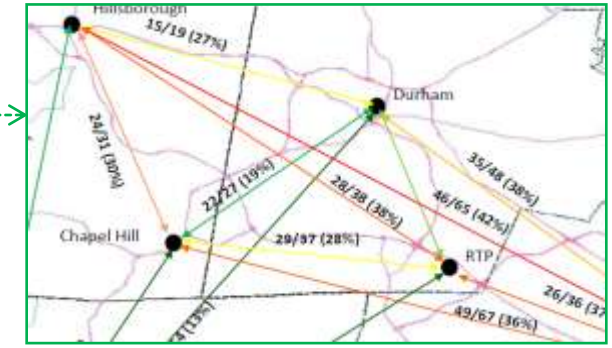
-- Transportation Networks

	Highway Intensive	Transit Intensive	Moderate
Highway	• 2035 LRTP • CTP highway projects ➢ 410 new lanes miles ➢ 2,979 total lane miles in network	• Basically, 2015 and 2025 tier • No 2035 tier or CTP highway projects ➢ 120 new lanes miles ➢ 2,842 total lanes miles in network	• Basically, 2035 LRTP (minus some minor highway projects) ➢ 261 new lanes miles ➢ 2,737 total lanes miles in network
Transit	• Current bus transit • No rail transit ➢ 2,028 bus transit line miles (Triangle)	• Current bus transit • County plans (based on ½ cent sales tax) • LRT between Durham and Wake (instead of CRT) • LRT and CRT extensions in Orange County • CRT addition between Cary and western RTP • All Bus Rapid Transit (BRT) in Chapel Hill ➢ 2,646 bus transit line miles (Triangle) ➢ 69,354 transit service miles (Triangle) ➢ 520 miles of rail transit line (Triangle)	• Current bus transit • County plans (based on ½ cent sales tax) • LRT and CRT (based on Locally Preferred Alternative) • MLK Blvd Bus Rapid Transit (BRT) in Chapel Hill ➢ 2,882 bus transit line miles (Triangle) ➢ 66,211 transit service miles (Triangle) ➢ 150 miles of rail transit line (Triangle)

Alternatives Analysis
-- Triangle Regional Model Output

- Triangle Regional Model Output
  - Performance Measures
  - Travel Isochrones
  - Travel Time
  - Congestion Maps (V/C)

Performance Measures -- DCHC MPO				
	SE Data	2010	2040	2040
	Transportation Network	2010	E+C	2035
1	Performance Measures			
1.1.1	Total Vehicle Miles Traveled (VMT-daily)	13,217,550	20,368,697	20,581,822
1.1.1a	Total Vehicle Miles Traveled (VMT-per capit	33	32	33
1.2.1	Total Vehicle Hours Traveled (VHT-daily)	312,669	581,776	536,746
1.2.1a	Total Vehicle Hours Traveled (VHT-per capit	0.77	0.92	0.85
1.3	Average Speed by Facility (miles/hour)			
1.3.1	- Freeway	63	57	61
1.3.2	- Arterial	42	38	39
1.3.3	- All Facility	51	47	50



Travel isochrones and travel time by TAZ presented only if results are informative.

Alternatives Analysis

-- Performance Measures **Example**

TRM Performance Measures Summary -				
		2040 E+C	Highway	% Change
1	Performance Measures			
1.1	Total VMT (daily)			
1.1.1	All Facility Connectors	21,281,636	21,962,571	3%
1.1.2	All Facility (no C Connectors)	19,842,072	20,556,024	4%
1.2	Total VHT (daily)			
1.2.1	All Facility Connectors	614,488	560,421	-9%
1.2.2	All Facility (no C Connectors)	517,982	466,092	-10%
1.3	Average Speed by Facility (miles/hour)			
1.3.1	- Freeway	55	61	10%
1.3.2	- Arterial	37	39	5%
1.3.3	- All Facility	46	50	10%
1.4	Peak Average Speed by Facility (miles/hour)			
1.4.1	- Freeway	52	59	13%
1.4.2	- Arterial	35	38	7%
1.4.3	- All Facility	43	48	12%
1.5	Daily Average Travel Length - All Person Trips			
1.5.1	- Travel Time	15.4	14.5	-6%
1.5.2	- Travel Distance	5.9	6.2	4%

E+C v. Highway Intensive

- Moderate changes
- VMT is up a little
- VHT is down
- Speeds are faster
- Travel time is down a little
- Greater travel distances

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Alternatives Analysis

-- Congestion Maps **Example**

2040 E+C (no build)

2040 Highway Intensive

In Highway Intensive, congestion persists on interstates, freeways and major road corridors.

Alternatives Analysis

-- Public Input

- Period – From August 17 through October 10 (TAC public hearing)
- Notice – newspaper, email lists, public service announcements
- Workshops – Durham (2), Chapel Hill and Hillsborough
- Hearing – At September 12 TAC meeting
- Community – Presentation and comments at local boards and commissions (elected and appointed)
- Agency – MPO will request comments from environmental and resource agencies

2040 MTP

-- Next Steps

- Develop the Preferred Option
  (release in October 2012)
- Get public feedback on the Preferred Option (October through December 2012)
- Approve draft 2040 MTP
  (December 2012)

What are your preferences? Given the limited budget, and projected areas of congestion, where do we invest our money?

- Are there certain projects and policies that should be promoted?
- Invest more on Roadways or Transit?
- Invest more on roadway widenings or "hotspots" (e.g., intersections with long delays)?
- Invest more on local bus service or fixed guideway service (e.g., rail transit)?
- Use traditional revenue sources only or increase local taxes (e.g., sales tax, real estate transfer tax)?

Send Comments to:

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