

## Presentation of Study Findings

### Preliminary Traffic and Revenue Study

## Proposed Monroe Connector



August, 2006



## Study Overview

- Preliminary Study
  - Not intended for use in support of project financing
- Used Available Economic Forecasts and Transportation Models From MPO
- Considered Two Project Alternatives
  - Monroe Connector with Free Monroe Bypass
  - Monroe Connector + Tolloed Monroe Bypass
- Tested Toll Rate Sensitivity
- 40-Year Revenue Forecast



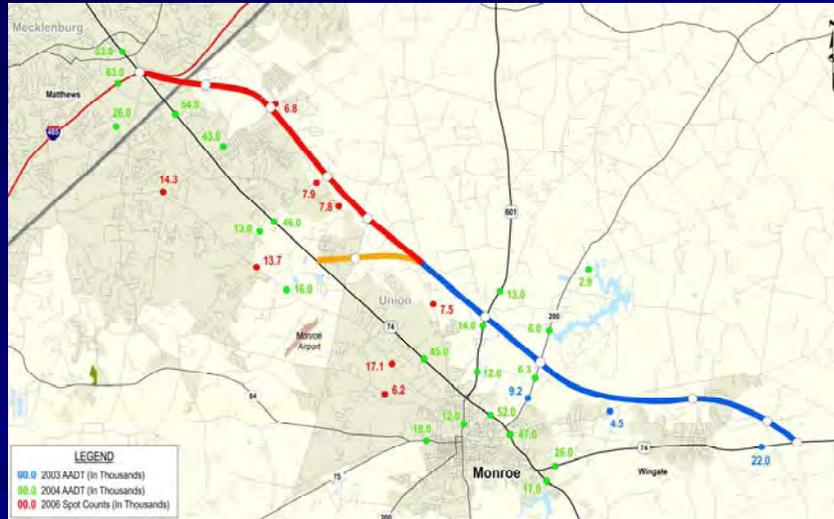
## Regional Location Map



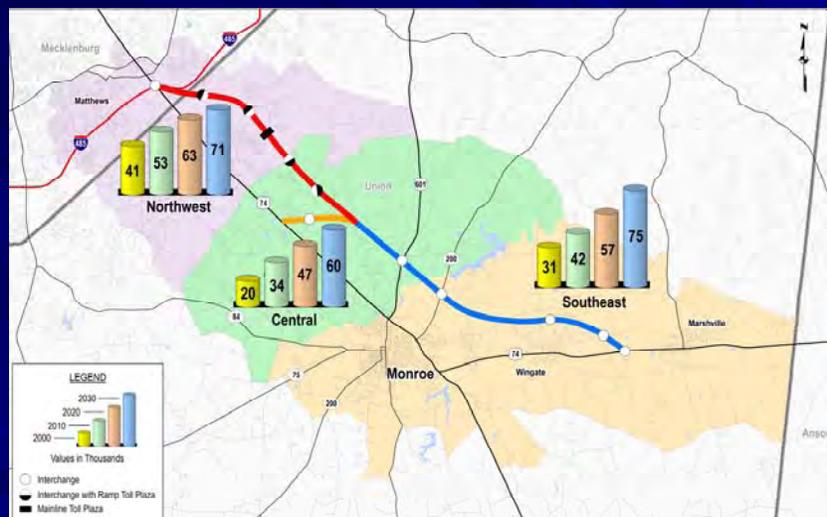
## Study Approach

- Corridor Review and Speed / Delay Studies
- Traffic Counts
- Traffic Modeling at 2015, 2020, 2030 Levels
- Toll System and Rates
- Preliminary Annual Traffic and Revenue Forecasts

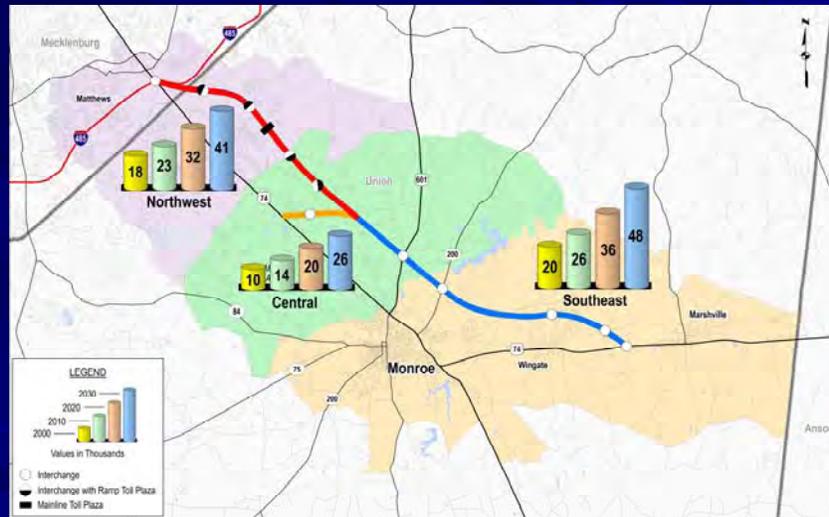
## 2003 – 2006 Traffic Counts



## Population Growth by Corridor Sector



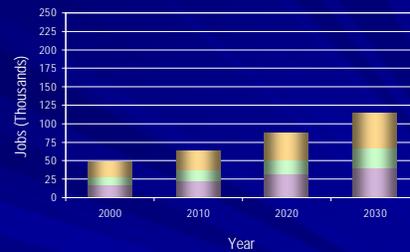
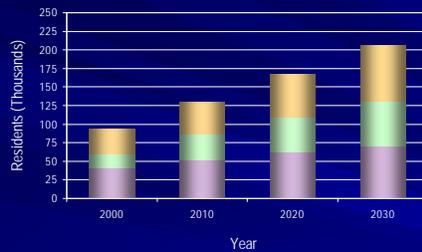
# Employment Growth by Corridor Sector



# Study Area Projected Growth

**2000 - 2030**  
 • 113,000 More Residents  
 • 2.7% Average Growth Per Year

**2000 - 2030**  
 • 67,000 More Jobs  
 • 2.9% Average Growth Per Year



Population

Employment

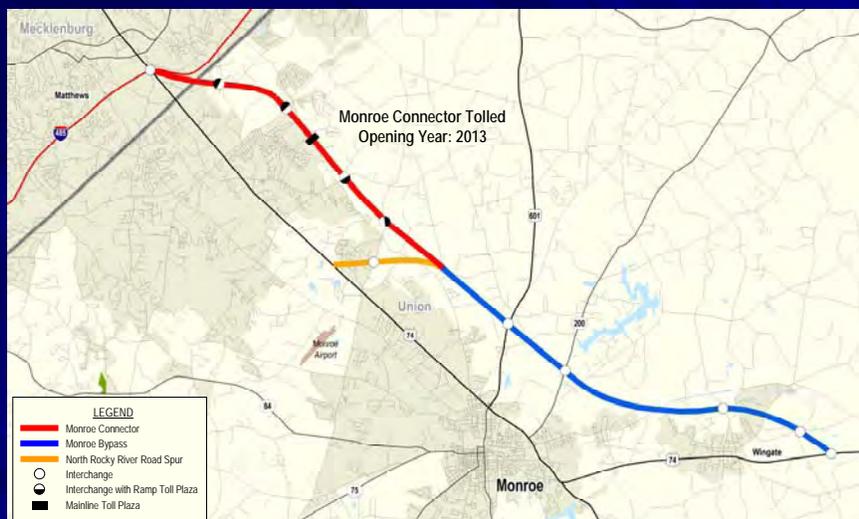


## Project Scenarios

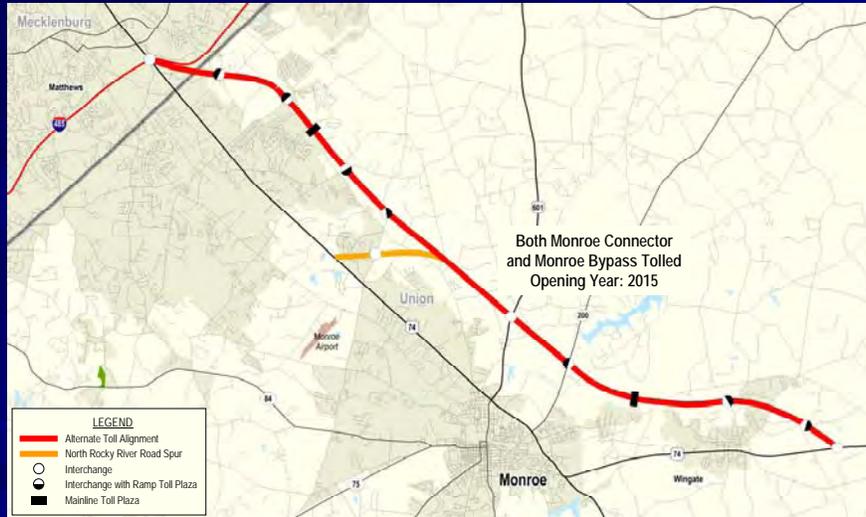
- **Scenario 1: Monroe Connector:**
  - From Proposed Monroe Bypass to I-485
  - One mainline toll plaza and four ramp plazas
  - Monroe Bypass is freeway
  - Open in 2013
- **Scenario 2: Monroe Connector + Monroe Bypass Tolled**
  - From US 74 to I-485
  - Two mainline toll plazas and seven ramp plazas
  - Both segments tolled
  - Open in 2015



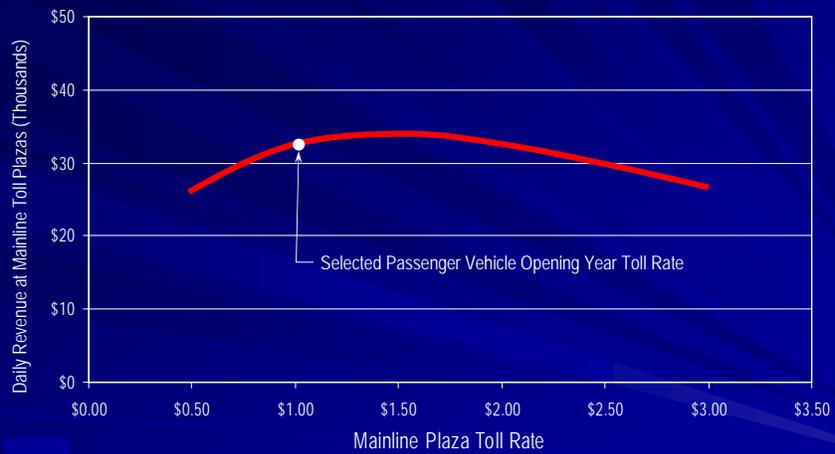
## Monroe Connector Scenario 1 Toll Concept



# Monroe Bypass + Monroe Connector Scenario 2 Toll Concept



# 2013 Toll Sensitivity Curve (Scenario 1)





## Comparison of Per Mile Toll Rates

	Maximum Length	2013		2015	
		Through Toll	Per Mile	Through Toll	Per Mile
Monroe Connector	10.9	\$1.00	\$0.092	\$1.25	\$0.115
Monroe Connector + Monroe Bypass	19.7	-	-	\$2.50	\$0.127

Range of Current Rates in Urban Facilities: \$0.07 - \$0.28 Per Mile



## Mainline Plaza Passenger Car Toll Rate Assumptions

	Western Plaza	Eastern Plaza
2013	\$1.00	-
2015	\$1.25	\$1.25
2020	\$1.50	\$1.50
2025	\$1.75	\$1.75
2030	\$2.00	\$2.00

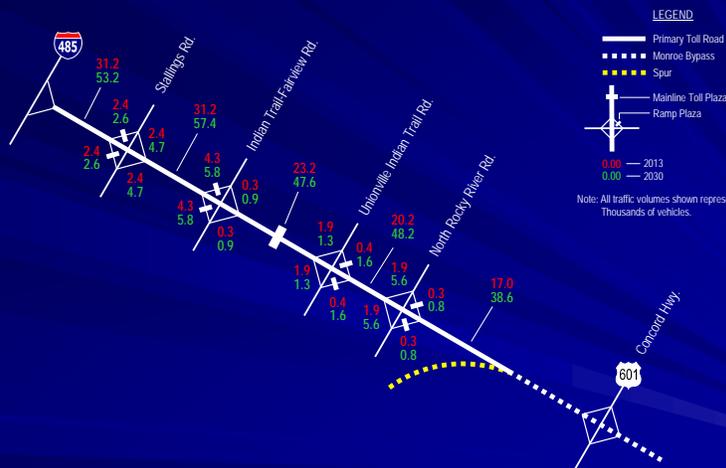


# Key Assumptions

- Monroe Connector open by 2013
- Monroe Connector + Monroe Bypass as a Toll Road Open by 2015
- Monroe Bypass from Connector to US 74 Northeast of Monroe free under Both Scenarios
- Road Projects Contained in MPO Long Range Transportation Plans will be Completed as Shown in the Plans
- Economic Growth Will be as Estimated in Metrolina Regional Transportation Demand Model
- Both Cash and Electronic Tolling Offered; Majority of Users Expected to Use Electronic Payment
- Opening Year Toll Rates and Future Increases as Discussed in Report



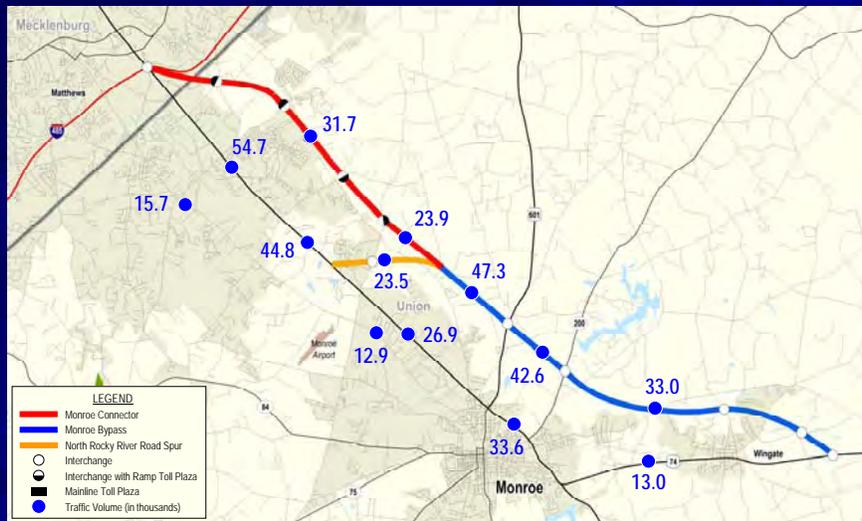
# Estimated Weekday Traffic Scenario 1 – Monroe Connector



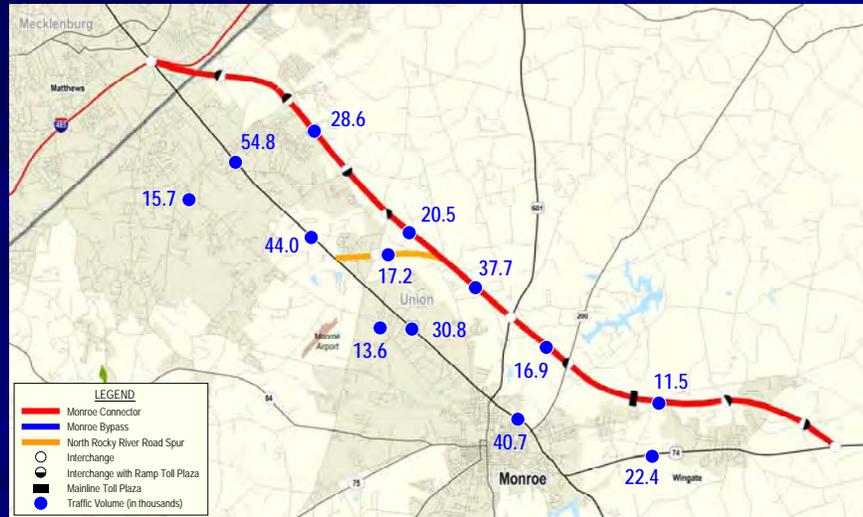
## Estimated Weekday Traffic Scenario 2 – Monroe Connector + Monroe Bypass



## Estimated 2015 Traffic Share – Scenario 1



## Estimated 2015 Traffic Share – Scenario 2



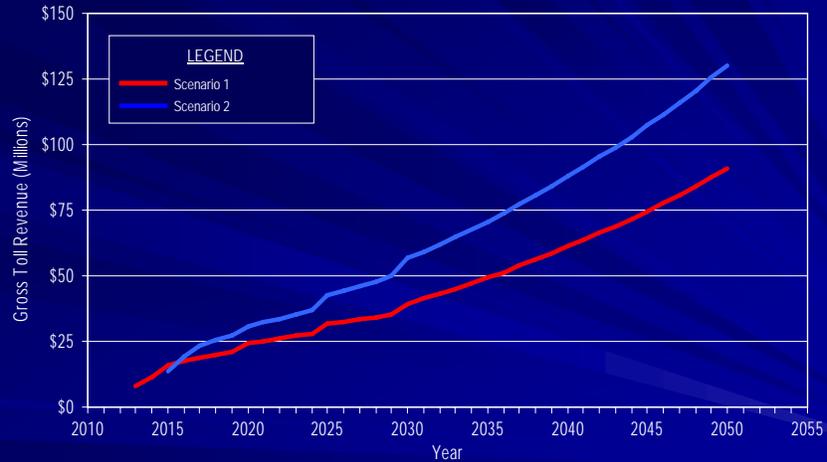
## Comparison of Estimated Annual Revenue (Thousands)

Year	Scenario 1 Monroe Connector	Scenario 2 Monroe Connector + Monroe Bypass
2013	\$12,852	-
2015	\$15,701	\$22,565
2030	\$39,471	\$56,686

Note: Excludes Ramp-up Adjustments where applicable



## Annual Gross Revenue Forecasts Proposed Monroe Connector



## Summary and Conclusions

- Monroe Bypass is an Essential Link Either as a Freeway or a Toll Road
- Relatively Strong Traffic and Revenue Potential for Monroe Connector
- Tolling Monroe Bypass Portion Increases Revenue but Shifts some Traffic back Into Monroe

