

## Public Private Partnership Industry Forum

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### Preliminary Traffic and Revenue Study

(January 24, 2007)

## Proposed Mid-Currituck Bridge



May 7, 2008



## Study Overview

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- Preliminary Study – completed January 2007
  - Not intended for use in support of project financing
- Conducted Origin-Destination Travel Surveys
- Developed Travel Demand Model
- Land Use Plans from Currituck and Dare
- Tested Toll Rate Sensitivity
- Examined Seasonal Tolling Due to Potential Travel Market
- 40-Year Revenue Forecast



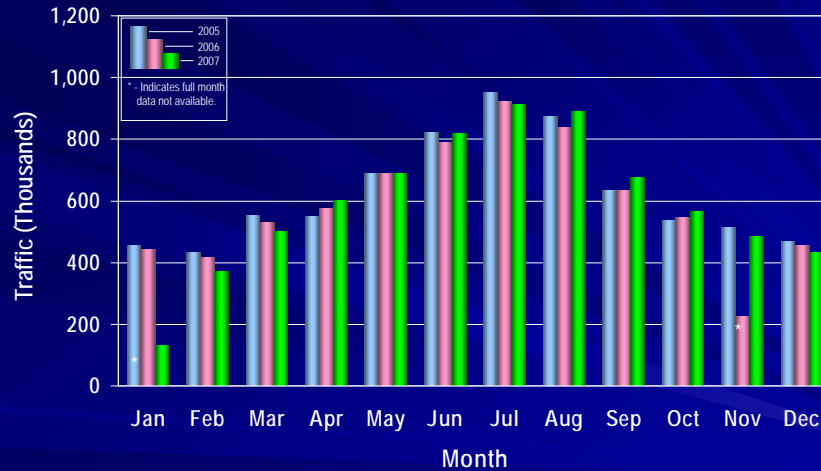
# Proposed Mid-Currituck Bridge



# 2005 – 2006 Traffic Counts



## Traffic on Wright Memorial Bridge



## Travel Demand Survey

- August and September 2006
- One Weekday and One Weekend Day for Each Survey Period
- Mail-back surveys distributed at red light
- 19% return in August
- 11% return in September



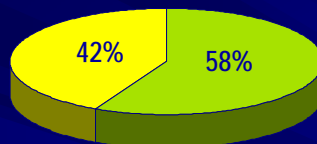
## Survey Questions

- Origin and Destination of Trip
- Trip Purpose
- Trip Frequency
- Vehicle Occupancy
- Vehicle Type and Registration
- Resident vs. Visitor
- Frequency of Visits
- Season for Visits

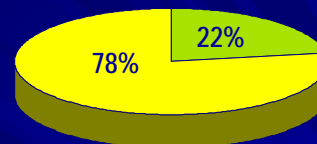


## Survey Residency Status

Summer Weekday

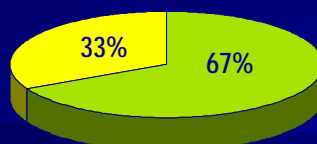


Summer Weekend

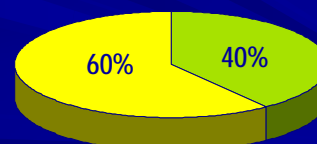


■ Resident  
■ Visitor

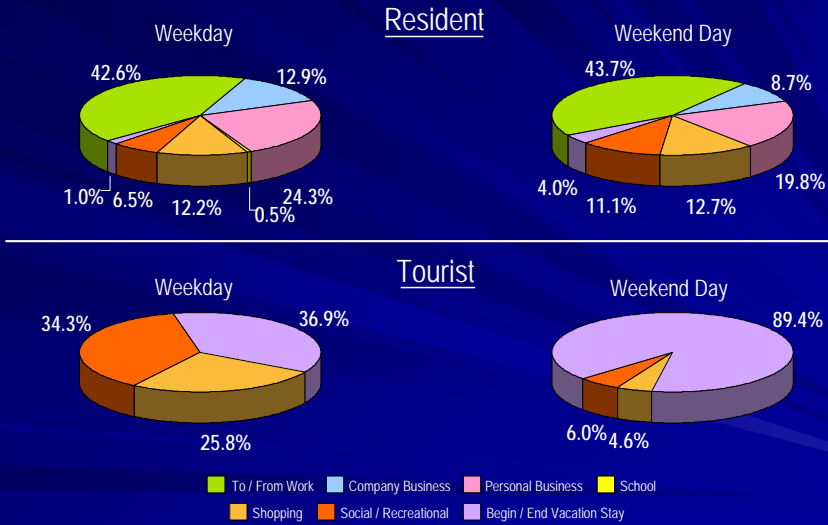
Non-Summer Weekday



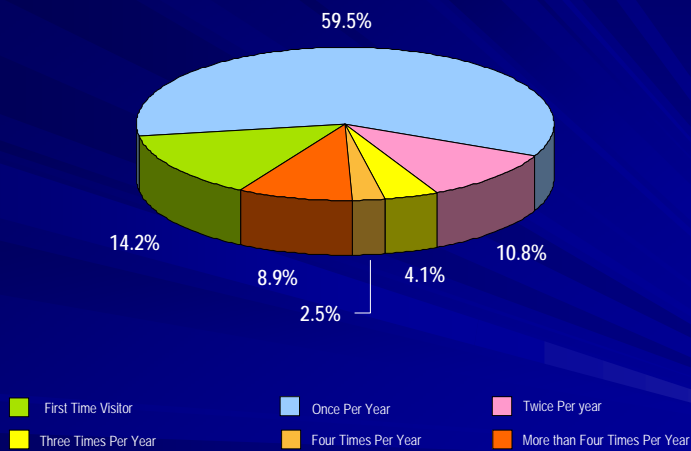
Non-Summer Weekend



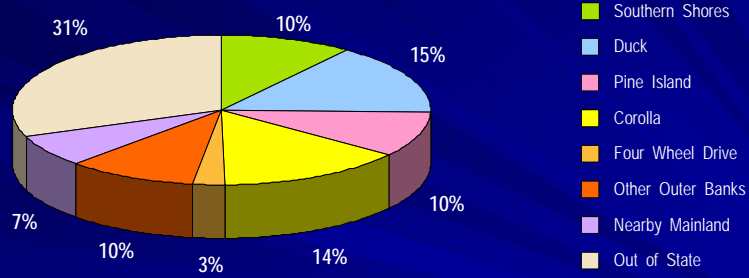
## Survey Summer Trip Purpose



## Survey Vacation Frequency



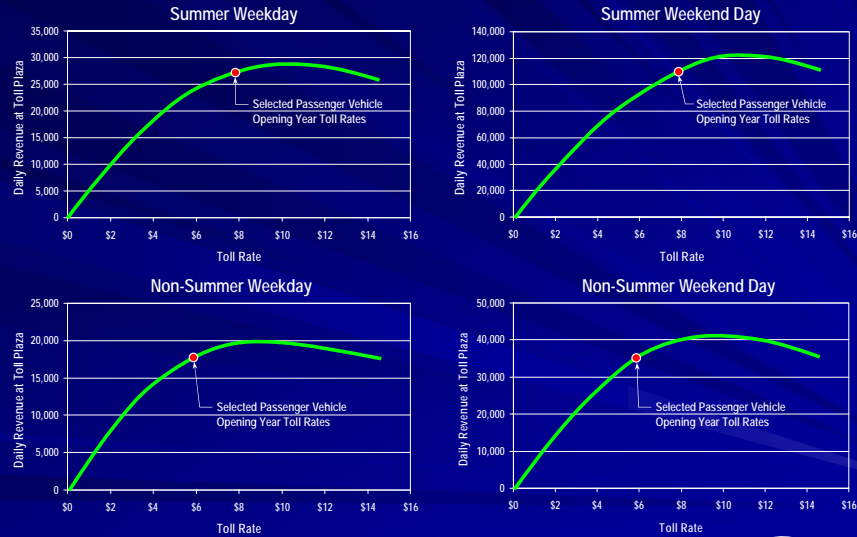
## Survey Summer Weekend Origins and Destinations



## Time & Distance Savings with Mid-Currituck Bridge



## 2013 Toll Sensitivity Curves



## Passenger Car Toll Rate Assumptions

	Summer	Non-summer
2013	\$8.00	\$6.00
2015	\$9.00	\$7.00
2020	\$10.00	\$8.00
2025	\$12.00	\$9.00

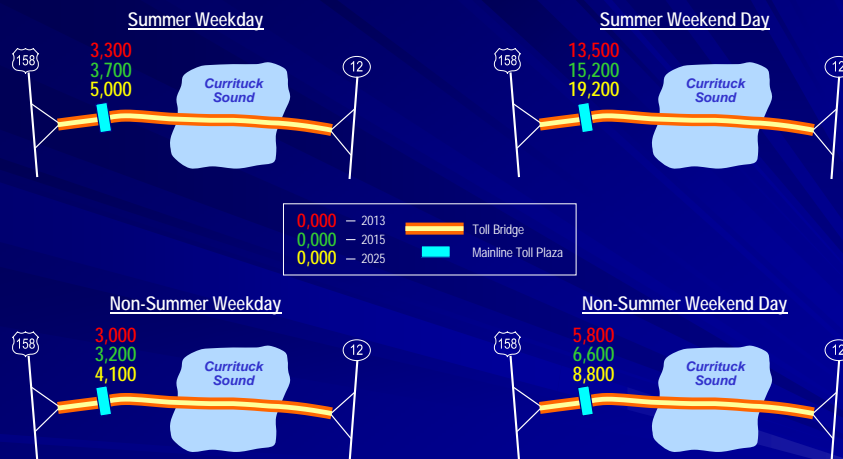


## Key Assumptions

- Mid-Currituck Bridge open by 2013.
- No Competing Bridge, Ferry or Significant Road Improvements Will Be Completed During the Project Period.
- Economic Growth Will be as Estimated in the Currituck and Dare County Land Use Plans.
- Induced Traffic Can Be Expected Due to Implementation of Major New Bridge and Improved Accessibility.
- 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 2013, 2015, and 2025 Traffic

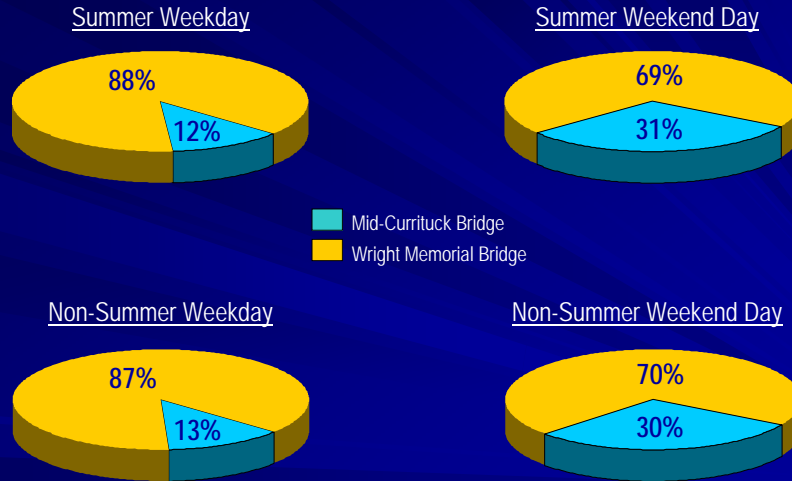


Note: 1. All traffic volumes shown represent thousands of vehicles.  
2. Includes induced traffic.





## Traffic Market Share - 2025

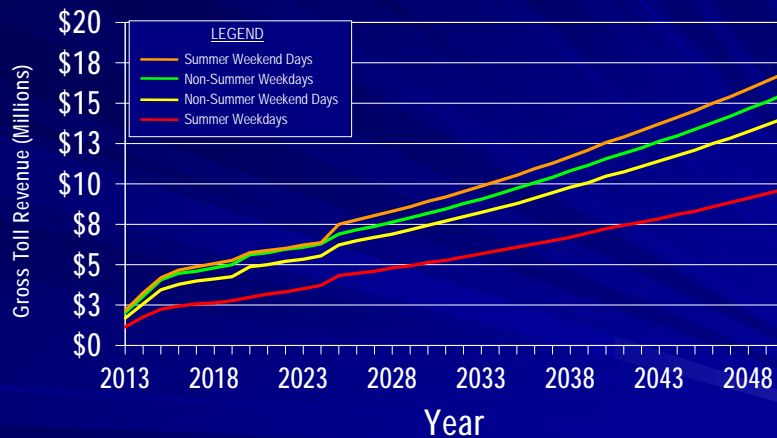


## Estimated Annual Revenue (Thousands)

<u>Year</u>	<u>Total Revenue</u>
2013	\$7,023
2020	\$19,165
2030	\$29,588



## Annual Gross Revenue Forecasts Proposed Mid-Currituck Bridge



## Summary and Conclusions

- Implementation of Mid-Currituck Bridge Is Critical for Traffic Reasons.
- Distance and Time Savings Alone May Be Sufficient Reason to Construct This Bridge
- Tolls Can Be Relatively High Due to Unique Nature of the Bridge Location and the Potential Toll Customer Market.
- Seasonal Pricing and Other Pricing Mechanisms Should be Considered to Market the Toll Bridge
- This Bridge Could Provide an Important Additional Evacuation Route.

