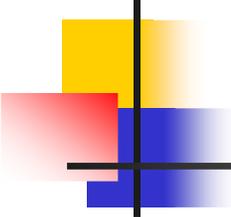
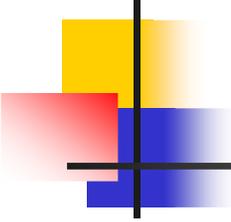


Business and Property Value Impacts of Raised Medians



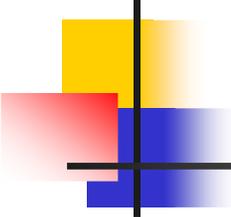
Presentation Outline

- Background
- Recommended Methodology
- Analysis and Findings
- Conclusions



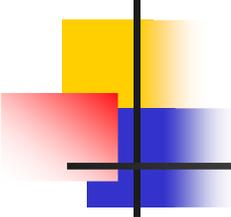
Background

- TxDOT Needs
 - Increased implementation
 - Public interest / concern
- Previous Studies
 - Capacity
 - Safety



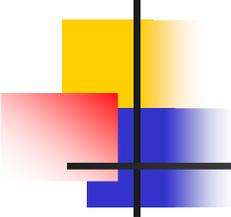
Background

- Objectives
 - Develop and test methodology
 - Developed recommended methodology
- Four-year Project History



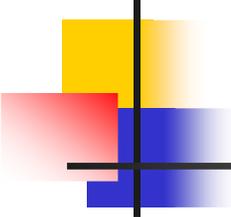
Methodology

- Identify sites (cities)
 - Construction 4 to 6 years prior
- Identify corridor characteristics
 - Land use
 - Access locations
 - Roadway geometry
 - Site circulation



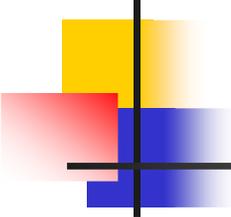
Methodology

- Contact local sources of information
 - Chamber of Commerce
 - Neighborhood Associations
 - Appraisal District
- Inventory businesses
 - Windshield surveys
 - Create maps
 - Contact information



Methodology

- Obtain non-survey information about businesses
 - Texas Workforce Commission
 - Texas Comptroller of Public Accounts
- Prioritize businesses



Methodology

- Collect survey data
 - Interviews and/or mail-out
- Analyze and summarize results

Case Study Locations

- TWLTL to raised median
 - College Station (Interview)



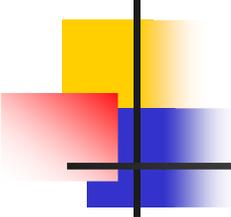
Case Study Locations

Added Landscaped Raised Median



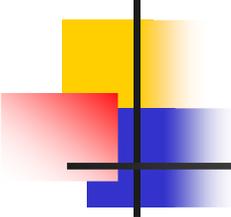
Physically Removed Left-Turn Option





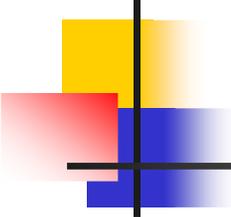
Case Study Locations

- Undivided to raised median
 - Houston (4) 1 Interview, 3 Mail
 - Port Arthur Mail
 - McKinney Interview
 - Wichita Falls Interview
 - Odessa Interview



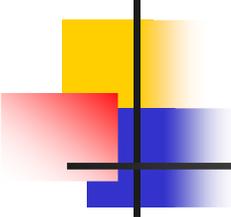
Case Study Locations

- Flush to raised median
 - Longview Interview
- Raised median to TWLTL
 - Port Arthur Mail
 - Amarillo Interview



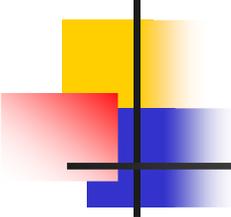
Case Study Locations

- Land use mix, primarily retail
- Half-mile to 2.5 miles
- Interview and mail-out surveys
 - Business surveys
 - Undeveloped land surveys



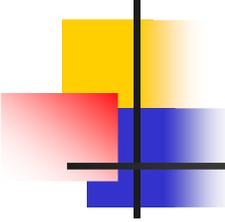
Case Study Locations

- Customer surveys (5 sites)
 - College Station corridor
 - 2 sit-down restaurants
 - 1 fast-food restaurant
 - 2 gas stations



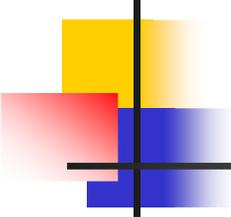
Response Rates

- Mail-out surveys (5 sites)
 - Businesses: 26 returned, 8%
 - Undeveloped land: 8 returned, 13%
- Interviews (6 sites)
 - 136 businesses, average 58%
- Customer surveys
 - Range from about 20 to 70 responses



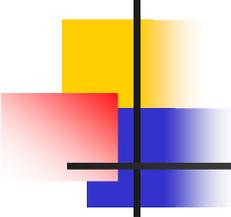
Analysis

- Variables of most interest
 - Employees, gross sales, property values, customers per day
- Stratifying variables
 - Business type
 - When established relative to when interviewed
 - Location (along corridor and by site)
 - Survey type



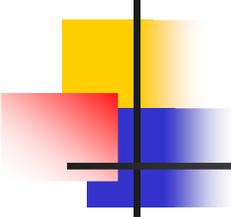
Findings

- Most businesses increased in gross sales
- Gas stations / Auto repair indicated perceived decreases in gross sales
- Generally followed city and county trends
- Similar pattern with customers per day
- Property values increased for all businesses



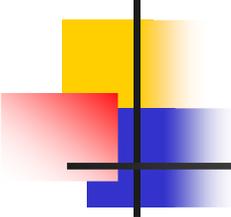
Findings

- All but gas stations / “other services” indicated no affect on full-time emp.
- Decreases in sales were common during construction
- GOOD Communication with business owners is vital



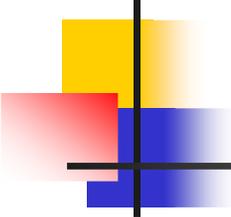
Findings

- Regular customers
 - Majority “stay about the same” except gas stations (40%) and fast-food rest (45%)
 - Customer surveys indicated same majority as business owners for all sites



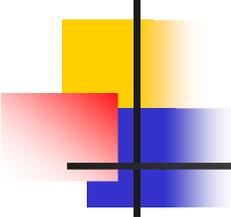
Findings

- Accessibility to Store
 - Usually 4th or higher--3rd for gas stations and fast-food rest.
 - Ranked behind customer service, product quality, and product price
 - Always ranked lower by customers
 - Product quality ranked first for all but gas stations (product price by customers)



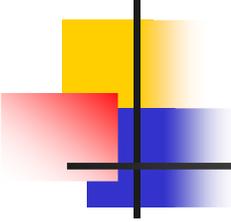
Findings

- Customers:
 - Indicated that access had generally declined
 - Customer service remained the same or improved



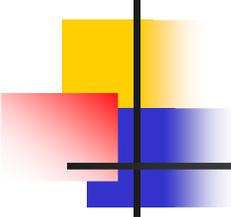
Conclusions

- In general, no significant negative economic impacts
 - Some businesses affected more
- General loyalty to employees
- Many economic factors
- Public involvement “low” for 62% of respondents
- Good communications is vital



Conclusions

- Construction phase most difficult
 - Ensure access throughout
 - Perform quickly
 - Consider smaller segments on long projects
 - Customers indicate less likely to visit
 - Communication essential



Conclusions

- Interviews
 - Provide most reliable data
 - Appreciation to express concerns
- Customer surveys
 - Provide valuable insight
 - Relatively easy to perform