



Metro Transit Authority

Baltimore Red Line Analysis

EGR 7112 Economic/Social Equity Integrators

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Project Overview

Overview

- Evaluate potential new light rail option running 14 miles in length with projected 55,000 daily ridership.
- Runs through East-West transportation corridor of Baltimore County/City.

Baltimore Red Line



Objective

- Using the STEEP model, evaluate two transit options for the East-West transportation corridor for Baltimore, MD.
- Two options include light rail, or maintaining existing auto/bus transit options.

Analysis

Social

- Commuters: Increased connectivity and reduced travel times
- Residents: Displacement, gentrification, reduced traffic

Technological

- Light rail: Not a new innovation, but paradigm shift from auto.
- Five miles of tunnels in high water table presents technical challenge.

Environmental

- Greenhouse gas emissions per mile are reduced.
- However, with development and growth, overall miles traveled increases.

Economic

- Revitalization and connectivity
- Short and long term employment and revenue
- If carbon is priced in the future, ROI increases.

Political

- Divisions across parties and levels of government
- Election cycles and short term nature of political calculation

Conclusions & Recommendations

Reduce Risk

- Fewer auto accidents
- Consistent travel schedule
- Improved air quality

Cut Costs

- Reduce energy costs due to travel times
- Reduce car ownership rates
- Lower insurance premiums

The Sustainable Business Case for the Light Rail

Drive Growth

- Increased business
- Increase residential development

Enhance Brand

- Improve Baltimore's image
- Investment improves citizen/govt. relationship