Assessing the Benefits of Bus Rapid Transit (BRT) Elements

Introductory workshop at TRB
January 12, 2009

Breakthrough Technologies Institute
Washington, DC

Who We Are

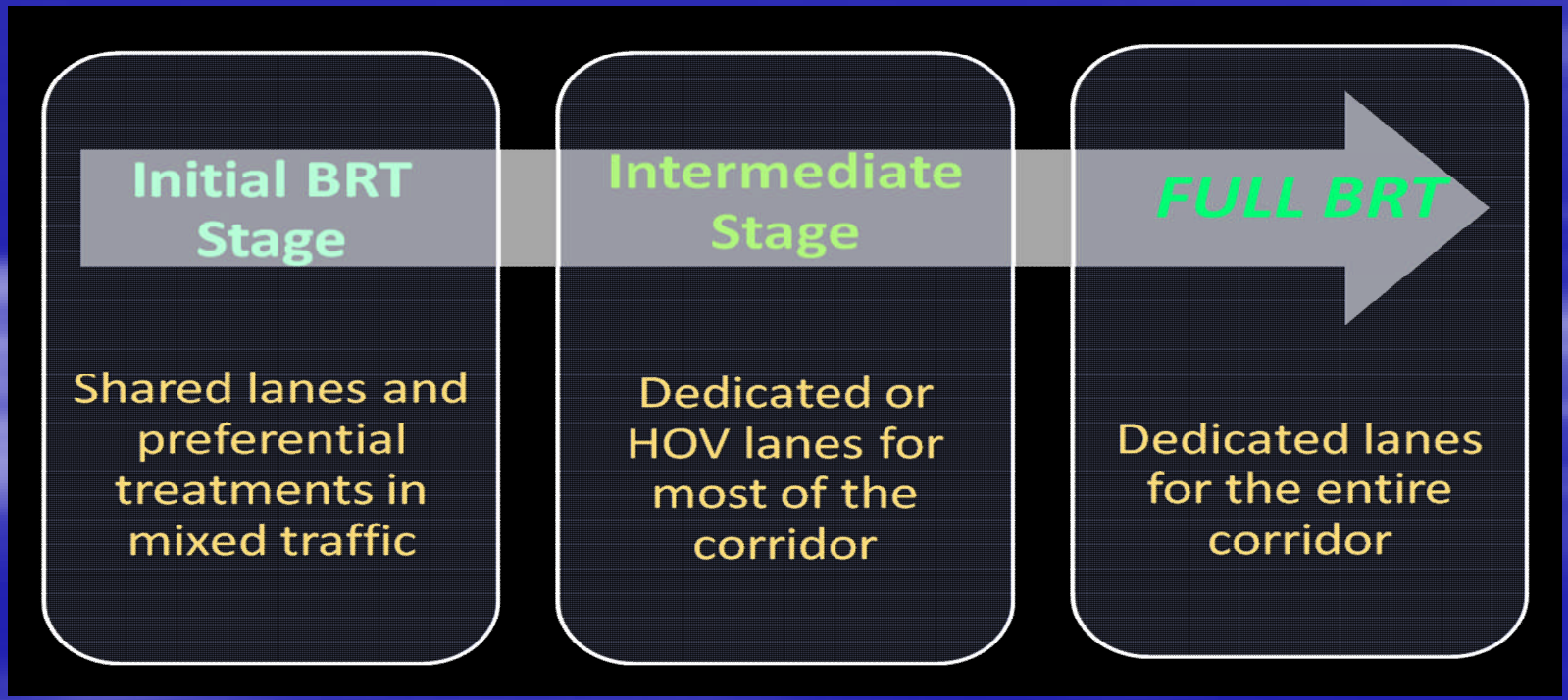
- Breakthrough Technologies Institute
  - Promote technologies and strategies that improve the environment
    - Public transport (including BRT, carbon finance, etc.)
    - Energy
    - Urban land use
- Our team
  - Staff
    - Bill Vincent
    - John Niles
    - Sandra Curtin
  - Advisory Board
    - Jack Gonsalves (PB)
    - Rex Gephart (LA Metro)
    - NBRTI

Public Transit Facing Significant Challenges

- Ridership: up significantly in many areas
- Energy prices: up, down, but most likely up again
- Local financial support: hit hard by the recession
- Federal support: increasingly competitive

Addressing the Challenge

- Likely will be increasing pressure to
  - Provide existing passengers with higher quality service at greater efficiency
  - Attract and retain new riders as cost-effectively as possible
- "Incremental" BRT will be an important strategy



Project Goal

- To help transit agencies and communities better understand the potential benefits of investing in specific BRT components

BRT Element	Benefits
▪Priority treatments (TSP, queue jumps, etc.) ▪Dedicated lanes ▪"Virtual" busways ▪Stop spacing	▪Reduced operating costs ▪Improved travel time ▪Reduced fuel consumption ▪Ridership increases In short: improve system efficiency and effectiveness

Project Approach

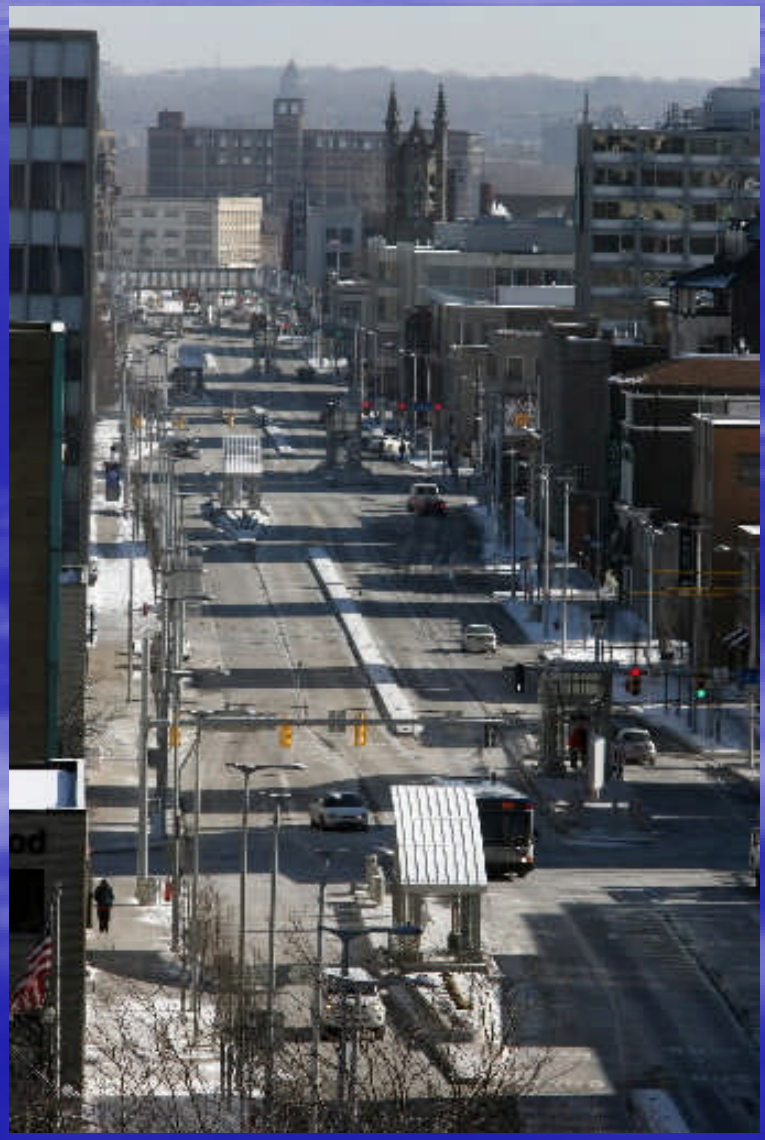
- Phase I
  - 4 case studies
    - Eugene, York Viva, Los Angeles, VTA
  - Designed to assess various approaches to BRT implementation
    - Corridor versus network-wide
    - “Full” BRT versus rapid bus
  - Supported by the Mineta Transportation Institute

Project Approach

- Phase II
  - Additional data collection
  - Additional case study sites
    - KC MAX
    - Foothill Transit
    - Cleveland
    - Others? (New York?)
  - Assess efficiency and effectiveness improvements of particular BRT elements
  - Interested in success stories

Purpose of This Workshop

- Hear some real world experiences
  - E.g., Cleveland Euclid Corridor carrying same number of passengers with 16 bus drivers that were previously carried with 28 bus drivers
- Discuss project goals and ambitions
- Request your help
  - Feedback on
    - Scope
    - Methodology
    - Etc.
  - Data regarding
    - impacts of various BRT investments on
      - Operating costs
      - Travel time
      - Fuel consumption
      - Other
    - Costs of BRT component investments



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Thank You

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Questions for Discussion

- Which BRT elements are the most promising targets for improving service effectiveness and efficiency, including:
  - Travel time improvements
  - Ridership increases
  - Other measures / issues
    - Vehicle characteristics (styling, capacity, weight and fuel efficiency, other)
- What data are available to document experience to date?
  - What are you able to share?
  - Others we should contact?