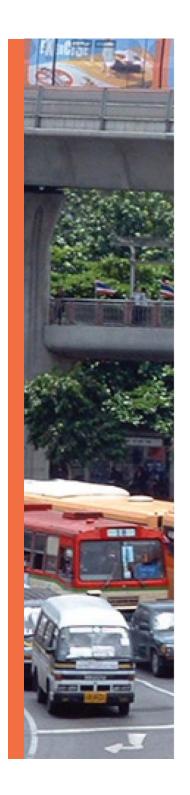
Transit Oriented Development and opportunities for Bus Rapid Transit in the United States

Ramon J. Cruz, Charlotte, NC

February 4, 2011





Overview of the presentation

- Transit Oriented Development (TOD)
- Evidence of TOD in the United States (US)
- BRT as a positive component for TOD
- Prospects of BRT in the US
- Making World class BRT happen in the US

Transit Oriented Development (TOD)



Defined as:

- Development near and functionally related to public transport stations and passenger interchange terminals
- Compact, mixed-use developments that encourage walking, cycling and transit use by residents, employees, shoppers and visitors

What Kind of Transit is needed for TOD work positively around Stations???

- Fast and Frequent
- Permanent and permanently functional
- High quality and high performance
- High ridership public transport
- Attractive vehicles and stations
- ...irrespective of mode or what wheels are made of!

Where TOD is Unlikely

San Diego LRT on RR ROW





Where TOD is Unlikely



U.S.1 South Alexandria, Va. (Wash., D.C.)



Market Factors for TOD Around Stations & Terminals

- A healthy general development market
- Highly accessible station and terminal sites, accessible to/from entire city and locally
- Large volumes of public transport customers



Public Transport Planning/Design Criteria

- Rapid transit levels of service; high frequency all day, all week
- Pervasive system identity, image, branding
- Permanence, quality of "hard" elements
 - Stations and terminals
 - Running Ways
- Safe, secure access to stations and terminals
- Attractive, quality vehicles



Stations and Terminals

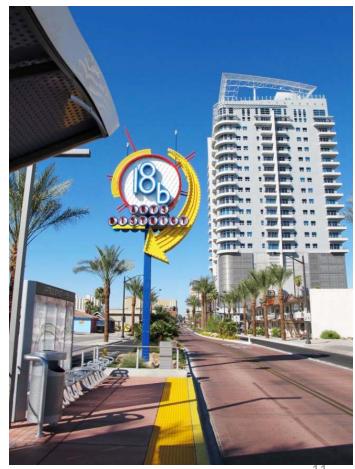
- Large enough to handle large numbers of waiting passengers
- Weather protected
- Amenities, passenger information
- Good, safe pedestrian, bike, local bus, taxi auto (drop-off, pick-up) access
- Safe, secure; well-lit
- Branded to convey unique identity, quality
- Design integrated with surroundings
- Part of comprehensive streetscape improvement package

Examples in the United States

Las Vegas

- High quality, attractive vehicles
- Stations of unique identity





Seattle CBD LRT/BRT Tunnel

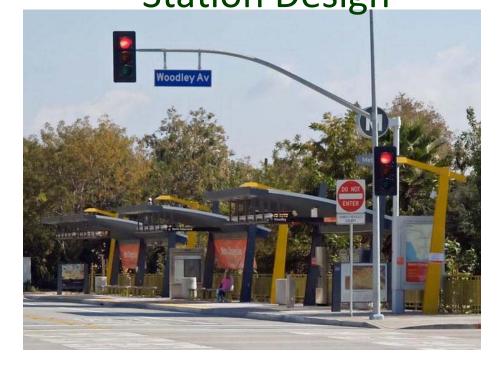






Los Angeles Orange Line

Consistent, Branded
Station Design



Cleveland - Healthline - "Art in Public Transport"



Bus Rapid Transit can provide these elements of TOD

Development Effects of BRT

- BRT provides inducement to sustainable locations, site plans
- Needs to be combined with supportive investments, policies:
 - Streetscape
 - Zoning
 - tax abatements
- Infrastructure and facility quality, aesthetics and urban design integration key design criteria

Development Effects of BRT

- Evidence in the US and abroad:
 - Cleveland Healthline
 - Boston Silver Line
 - Denver
 - Curitiba, Brazil
 - Ottawa Transitway System, Canada
 - Brisbane SE Busway, Australia
 - York VIVA, Canada



Bus stops designed by Robert P. Madison International are a signature feature of the Greater Cleveland Regional Transit Authority's Silver Line on Euclid Avenue.

Inside

See where the more than \$4 billion in investment is along the Euclid Corridor, A8



STEVEN LITT | PLAIN DEALER ARCHITECTURE CRITIC

AMID ALL THE BAD NEWS ABOUT CLEVELAND'S ECONOMY, one big, positive number is sure to impress all but the most hardened cynics: \$4.3 billion. ¶ That's how much fresh investment — conservatively speaking — is being poured into the four-mile-long strip of land flanking Euclid Avenue, the city's Main Street, between Public Square and University Circle. The spending, which encompasses everything from museums and hospitals to housing and educational institutions, includes projects completed since 2000, those now under way and those scheduled for completion within five or six years.

ANALYSIS not speculators, are gearing up to start projects worth more than \$1 billion along the cor-Richard Maron, and Gordon Priemer.

The amounts they and nonprofit institutions are investing will easily dwarf the money spent funded primarily by federal money, as a boon-

Private developers with by government and partners in the 1990s on doggle. Media coverage has focused primarily proven records as doers, sports stadiums and the Rock and Roll Hall of on businesses that failed during construction, Fame and Museum.

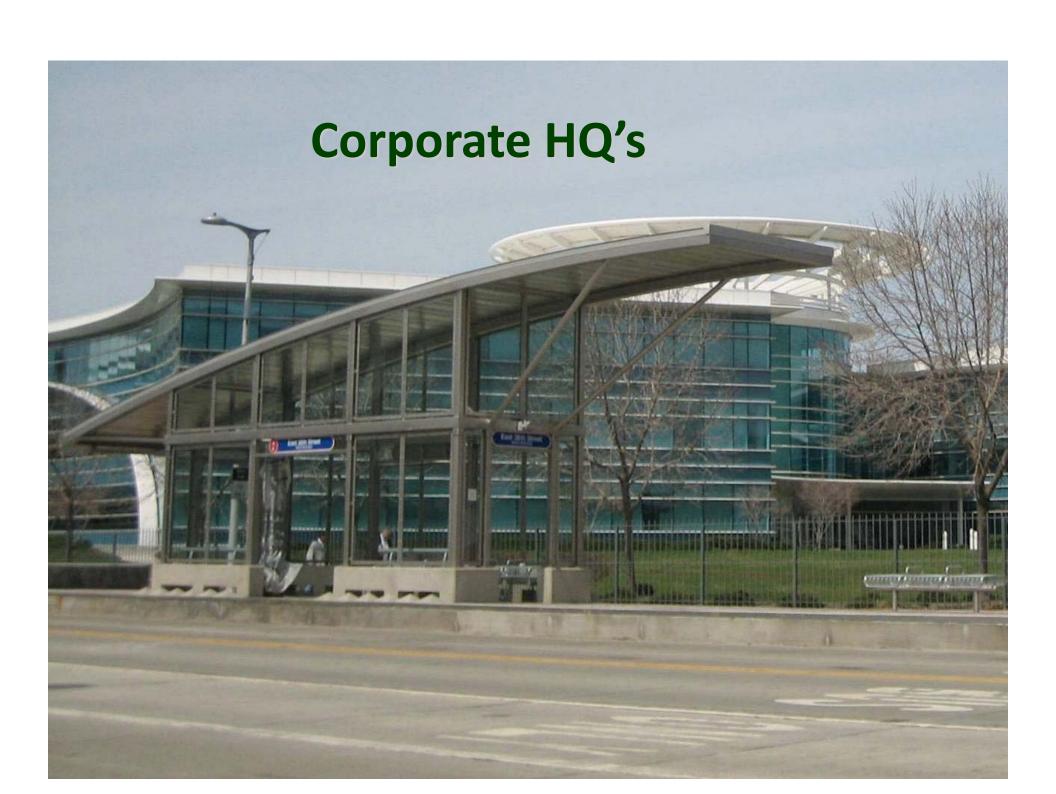
One big reason for the energy is the Greater ridor in the next five years or so. They include Cleveland Regional Transit Authority's \$200 mil-Douglas Price III, Nathan Zaremba, Ari and lion Euclid Corridor project, which is reshaping Euclid Avenue around a bus rapid transit line.

Pundits have long derided the project,

along with the hassle of negotiating a sea of orange traffic cones.

The mortgage-foreclosure crisis, which has left as many as 12,000 homes vacant in Cleveland neighborhoods, has also obscured the impending rebirth of Euclid Avenue.

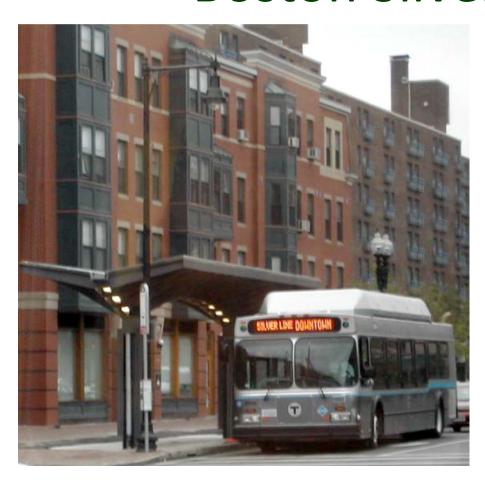
SEE EUCLID | A8



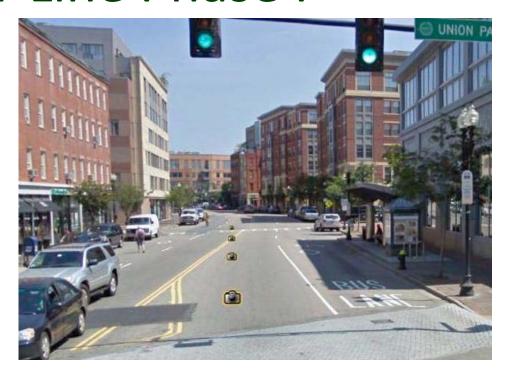




Boston Silver Line Phase I



New Mixed Use Development Adjacent to Stations

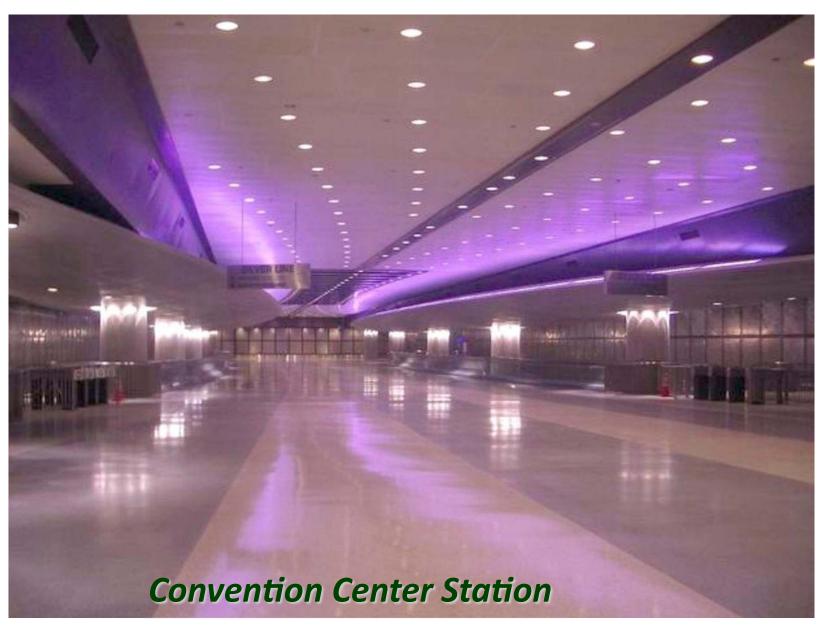




TOD Near Silver Line Phase II: Part of Comprehensive Redevelopment Initiative for Former Port, Industrial Area



Silver Line Phase II



Boston MBTA Silver Line Phase II



New Mixed Use Development Adjacent to Stations





However...compared to other parts of the world, US BRT and TOD could improve further to become world examples...

Current Prospects for World-Class BRT in the US



ITDP-Rockefeller Foundation project Initial Screening of US BRT Initiatives

- Austin
- Boston
- Charlotte
- Chicago
- Cleveland
- Denver
- Eugene
- Las Vegas

- Los Angeles
- Miami
- Montgomery Co. MD / Washington, DC
- New York City
- Portland, OR
- San Fran. Bay Area
- Seattle



Criteria for Initial Screening

- Political support
- Existence of BRT Plans
- Strength of BRT Plans
- Funding



Site Visits of US BRT

- Austin
- Boston
- Chicago
- Cleveland
- Eugene
- Las Vegas
- Los Angeles
- Montgomery County, MD/ Washington, DC
- New York City
- San Francisco Bay Area Oakland and San Jose

Proposed BRT in key US cities: Can we take it to world class?

RATING PROPOSED US BRT SYSTEMS	2-way dedicated lanes, central verge	Local & Express	Off-board fare collection	Comprehensive BRT network	Platform-level boarding	High service frequency	Turn restrictions at junctions	Unique branding	Private/Quality of service contracting	Safe, wide, weather- protected stations	Station spacing	On highest-demand corridors
San Francisco	M	L	Н	M	H	?	M	М	L	M	L	н
East Bay	Н	L	Н	L	Н	М	M	M	L	M	M	н
Chicago	Н	?	?	L	?	?	?	Н	L	?	?	н
Las Vegas	M	L	I	н	Ξ		?	I	M	M	?	н
Mont. County, Maryland	M	L	Н	н	Ξ	?	?	?	н	?	?	н



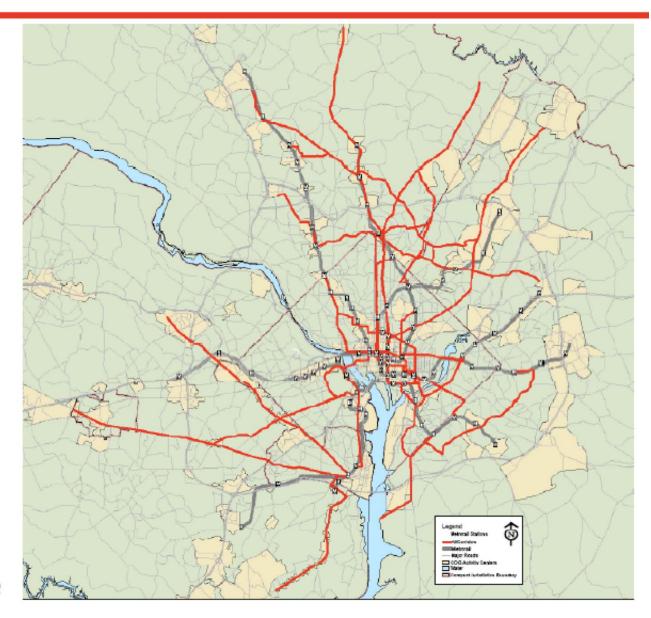
Highest potential locations

- Montgomery County, MD:
 - Political support for comprehensive local/regional BRT network
 - Plausible fast-track PPP funding framework with strong interest from two equity investors and business groups
 - Funding crises at state, local, federal level



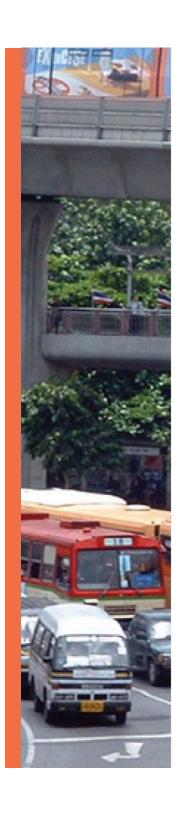
Proposed Priority Corridor Network

- Network of 24 corridors
- High ridership arterial services (half of system)
- Candidates for multiple types of services
- Selected by
 - Performance
 - Ridership
 - Land use
 - Service levels
 - Jurisdictional support
- 6 Year Schedule









Another High-Potential Location: East Bay – Oakland, CA

- Strong proposal in a long (14.5-mile) corridor
- Dedicated lanes in central verge
- Though Berkeley voted it down, Oakland and San Leandro city councils gave preliminary unanimous support
- Corridor passes through low income & immigrant communities that favor transit – expected ridership 50,000
- Opposition from some in business community, but not substantial enough to change the project

East Bay BRT





Other cities to watch in the near future:



San Francisco

Van Ness and Geary St.
Corridors

- Long range vision for 12 BRT corridors
- FTA funding for 2 corridors
- High ridership
- Connection to other modes
- Political Support
- Civil Society involved



BRT Pilot Program-Jeffery Boulevard Corridor Existing CTA Service **EDOT**

Chicago

Multiple BRT initiatives in planning stages:

- \$26 M funding from FTA for E-W corridor within the "Chicago Central Area Transitway"
- \$11 M funding from FTA for Jeffrey corridor: high-quality transit link to CBD
- Western Avenue proposal submitted to FTA
- Metropolitan Planning Council: Working with CTA, CDOT on citywide BRT proposal
- Funded proposals are BRT-lite
- Uncertain political situation

Las Vegas

- Currently one of the boldest & highest-quality BRT lines in the US
- Ambitious system expansion plans
- High visibility city





Boston



- Silver Line being improved but not true BRT
- Blue Hill Ave. (Rt.28) BRT failed 2009 due to resistance from minority communities that wanted light rail
- New Mass DOT commissioner; door reopened on Blue Hill Ave. corridor proposal
- 18-month study started 10/2010 with taskforce including 30 community members

Los Angeles

- Orange Line: a best practice of BRT in the US
- Extending Orange Line
- Mayor, politicians, activists focused on LRT & "Subway to the Sea"
- Some openness to expanded BRT network





Next steps in advancing TOD and world class BRT in the US

- 1. Use Strategic Communications & Branding
 - Understand and respond to public attitudes and values
 - Educate Editorial Boards, Reporters, Opinion makers
- 2. Bolster Political Leadership
 - Form national & regional BRT leadership coalitions
 - Provide targeted world-class technical expertise
- 3. Be Nimble & Responsive in Finance & Operations
 - Expand use of Public Private Partnerships (P3s)
 - Expand use of performance-based contracting