



Thruway Authority



Metro-North Railroad

TZ-040E

TAPPAN ZEE BRIDGE/I-287 ENVIRONMENTAL REVIEW

Let Us Know What You Think

Tappan Zee Bridge/I-287 Environmental Review Scoping Meetings

**Thursday, January 16th, 2003
Orange County Community College**

The New York State Thruway Authority and MTA Metro-North Railroad are interested in learning more about what you think. Please use this comment form to let us know your thoughts about this important study.

Please leave this form with us tonight or mail to: Veronica Bailey, Howard/Stein-Hudson Associates, 516 West 36th Street, 4th Floor, New York, NY, 10018 or fax to (917) 339-1068.

Name LB  **LLOYD BUCHALTER**
214 Mountain View Ave.
Walkkill, NY 12589

Organization/Affiliation ASME (RET)

Street Address _____

City _____ **State** _____ **Zip** _____

Tel 845-564-4809 **Fax** _____ **E-mail** _____

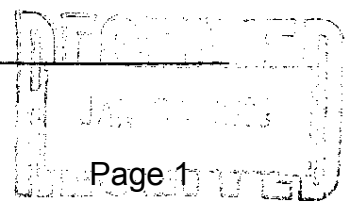
How did you hear about this meeting?

- Received Flyer
- Web site
- Saw Newspaper Ad
- Radio
- Through a Friend
- If so, which newspaper?**
- Journal News
- Pennysaver
- Times Herald Record

Are you a part of any organization that would like to hear more about the project?

Who can we contact in your organization?

Please use the back of this form for comments.



Let Us Know What You Think

Purpose and Need

Goals and Objectives

Preliminary Alternatives

PATTERNS

Other Comments

Examination of traffic quantity

21 Jan 03

Tappan Zee Bridge: I-287 Environmental Review----Comments.
16 JAN 03 Meeting.

These comments may be somewhat disoriented as they are "stream of Con-
science" set down.

205

First, following the outline on the "Let Us knowSide" of the sheet.

Purpose and Need" Wouldn't it be better to encourage people to go OUT
of the city rather than try to crowd more into it? If you encourage
more people to come into the city, where will you put them? What provi-
sion can you make for their feeding and medical care? How will you
provide water, sewage, gas and electricity? How will you provide
security against bombs, fire, etc.?

05

Why not provide a bridge/tunnel from Long Island to Connecticut? Now,
any one going from/to Connecticut/Long Island must go through New York
City(except for a small ferry from Port Jefferson to Bridgeport)

08

Alternatives: Build in the Secaucus Marshes and other unoccupied spaces.
Also, the Patterns for Progress proposals seem sound.

07 05

WHY DEMOLISH THE TAPPAN ZEE BRIDGE? It is the youngest bridge across
the Hudson, except for the Verazano Narrows which is not proposed for
demolition. If any more access routes into the city are considered, all
the roads and other transportation facilities involved with that must
also be considered and enlarged.

02

Contrary to one comment I heard on why to demolish the TZB, was that'
it was built from old Libertyship hulls that had been anchored in the
Hudson river. I don't believe that for a second. The hull plating was
to thin to be reformed in the beams used in bridge construction. and
was probably not of the correct alloy.

be generating

Conveyances: MAGLEV is unacceptable as it is too energy inefficient and,
therfor, costly ro operate. There would have to be generating stations at
comparatively frequent intervals to provide to amount of power required.
Linear motion trackage would be subject to being easily damaged and
expensive to repair. (Bit of info'- Linear elertric propulsion was
considered in the 1930's for use in field and anti-aircraft artillery,
did not prove feasible.)

06

AIR Levitated vehicles are far less expensive to operate as there would
be a turbine unit on each set of cars that would provide both propulsive
force and compressed air for floating the vehicles on a cushion of air.

Switching would be difficult for MagLev. While not easy for Air Lev,
it would be easier than MagLev as only the guiding trough section need
be moved. For Maglev, the magnetic force section would also need to be
moved. IF MEMORY SERVES, GERMANY HAS ONLY ONE EXPERIMENTAL SECTION OF MAGLEV.

Hudson River crossings will require considerable Real Esrtate for
appro and departures. Existing tra the West Side Drive area
would nee to be rehabilitate

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OVER
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Hudson River crossings will require considerable Real Estate for approaches and departures. Existing trackage down the west side of Manhattan to a suitable terminal area for commuter traffic.

01

Comments on "Classification of Transit Modes."

BRT Trolley Bus. Impracticable as the conveyance cannot move away from its course any farther than the trolley bars can allow. This was tried in Brooklyn (and other cities) and dropped because other traffic interfered with motion to the curb for passenger pickup.

03

RRT Ground Level Power source (third rail) is inherently unsafe. Overhead catenary is used on some lines in the US and almost invariably overseas. When designed from the start, overhead catenary can be used in underground subways. Most ground level systems use three or four rails; two load carrying rails, one of which is a power return rail and the other is a "signal" rail. The third rail is the power supply rail. England uses a four rail system, NONE OF THEM PROTECTED AGAINST ACCIDENTAL CONTACT.

06

Commuter Rail In this class, I would put the Bay Area Rapid Transit (BART) This is an unattended, automatic controlled standard rail spacing. This connects San Francisco, Oakland and East Bay communities.

Inter-City Rail You should include BritRail, in England. Overhead catenary, standard rail spacing and high speed. Possibly over 100 mph. It carried me between London and Edinburgh in about five hours. (85 pounds English)

06

High speed ferry boat How about "Air Cushion"? USED BY USN & USCG

04

Definitions

"Exclusive Right Of Way" MUST BE 100% Exclusive!!!

LNG/LPG These are petroleum derived fuels.
~~Dual fuel engines may also be dual fuel~~

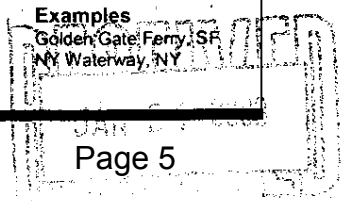
*As you can see, I have had trouble with this electric typewriter.
Robert C. Bombardieri*



People on the Move

Classification of Transit Modes

<p>BUS RAPID TRANSIT (BRT)</p> <p>Description Rubber tired vehicles operating on fixed routes in exclusive lanes or separated roadways.</p> <p>Top speed: 65 mph Weight: 12.5 - 17.5 tons Station Spacing: Short to Long</p>	<p>Technology Options</p> <ul style="list-style-type: none"> • Articulated Bus: Long bus, two bodies connected by a joint, allows higher capacity. • Hybrid Electric: Dual propulsion vehicle with electric motor powered by batteries and diesel. • Trolley Bus: Guided busway propelled by electric motor. 	<p>Applications</p> <p>Used for all types of services: short-haul to regional and local to express. Operates on exclusive transitways, HOV lanes, expressways, or ordinary streets.</p>	<p>Examples</p> <p>Pittsburgh Bus Transit Metro-Rapid, LA MTA Silverline, MBTA Boston Curitiba, Brazil Seattle Bus Tunnel</p>
<p>RAIL RAPID TRANSIT (RRT)</p> <p>Description Fully grade-separated rapid transit. Also known as "subway" or "metro".</p> <p>Top speed: Up to 80 mph Weight: Variable (47-87 tons) Gauge: 4 feet 8 1/2 inches Station Spacing: Medium to long</p>	<p>Technology Options</p> <ul style="list-style-type: none"> • Partial/Full automation • Rubber tired • 3rd Rail power source • Can use overhead power 	<p>Applications</p> <p>Mainly used in high-density corridors.</p>	<p>Examples</p> <p>MTA NYCT Chicago Metro Orange line, Boston MARTA, Atlanta Jubilee, LONDON Washington Metro</p>
<p>LIGHT RAIL</p> <p>Description Self-propelled rail cars operated in multiple car units.</p> <p>Top speed: Up to 65 mph Weight: 35.5 - 43.5 tons Gauge: 4 feet 8 1/2 inches Station Spacing: Short to Long</p>	<p>Technology Options</p> <ul style="list-style-type: none"> • Conventional electric (overhead wires) • Diesel multiple units • Highly flexible operating environment • At grade/elevated/below grade 	<p>Applications</p> <p>Used in widest variety of environments from in-street single-car trams to high capacity subways in up to six car trains.</p>	<p>Examples</p> <p>NJT Hudson-Bergen line Metro-Rail, Buffalo NY Baltimore MD Porto Portugal Green line, Boston</p>
<p>COMMUTER RAIL</p> <p>Description Conventional railroad locomotive for urban passenger train service between a central city and adjacent suburbs.</p> <p>Top speed: Up to 100 mph Weight: 46 tons to 75 tons Gauge: 4 feet 8 1/2 inches Station Spacing: Long</p>	<p>Technology Options</p> <ul style="list-style-type: none"> • Diesel Locomotive • Electric Locomotive • Dual Propulsion • Bi-level coach 	<p>Applications</p> <p>Long distance commute trips to core city. Typically serves major terminal in Central Business District. Utilizes existing railroad infrastructure shared with freight.</p>	<p>Examples</p> <p>MARC, Baltimore, MD MTA MNR, NY SEPTA, Philadelphia RER, Paris</p>
<p>INTER-CITY RAIL</p> <p>Description Passenger service part of a railroad system connecting cities and regions.</p> <p>Top speed: Up to 150 mph Weight: 55-75 tons Gauge: 4 feet 8 1/2 inches Station Spacing: Long</p>	<p>Technology Options</p> <ul style="list-style-type: none"> • Diesel locomotive • Electric locomotive • High speed trains • Magnetic Levitation (for high speed) 	<p>Applications</p> <p>Long distance travel.</p>	<p>Examples</p> <p>Amtrak, USA Shinkansen, JAPAN Eurostar, EUROPE ICE, GERMANY</p>
<p>AUTOMATED GUIDEWAY TRANSIT (MONORAIL)</p> <p>Description Guided transit passenger vehicles operating under a fully automated system (no crew on transit units).</p> <p>Top speed: Up to 55 mph Weight: 9.5-13.76 tons Gauge: 2 feet to 2.62 inches Station Spacing: Short</p>	<p>Technology Options</p> <ul style="list-style-type: none"> • Alternate propulsion systems • Steel wheel/rubber tire/air cushion/magnetic levitation 	<p>Applications</p> <p>Widely used in airport, amusement center, short-distance travel in central business district.</p>	<p>Examples</p> <p>Air Train, JFK Schwebebahn, Germany Disneyland, FI Newark Airport Airtrain</p> <p><i>BY AIRPORT</i></p>
<p>HIGH SPEED FERRYBOAT</p> <p>Description Vessel carrying passengers/vehicles over water.</p> <p>Top speed: 25 to 40 knots (29 to 46 mph)</p>	<p>Technology Options</p> <ul style="list-style-type: none"> • High speed catamarans • Wave piercing water-jet technology <p><i>Air Ferry</i></p>	<p>Applications</p> <p>Cross river/harbor commuter service.</p>	<p>Examples</p> <p>Golden Gate Ferry, SF NY Waterway, NY</p>



TECHNOLOGY OPTIONS

Guideway Systems

- Conventional Steel Wheel/Rail
- Conventional Rubber Tire
- Monorail
- Magnetic Levitation

Control Systems

- Conventional driver controlled
- Partial automation (driverless)
- Full automation (unattended)

Propulsion Systems

- Conventional rotary electric
- Linear induction electric
- Internal combustion
- Diesel
- LNG/LPG

DEFINITIONS

Control Systems--System for controlling train movement, speed, and stopping. Existing options are:

Conventional driver controlled--A system in which train movement is controlled by an operator.

Partial automation--An automatic train control in which train movement is partially controlled by computers (driverless).

Full automation--An automatic train control system in which train movement is fully controlled by computers (unattended). Also known as Automated Train Operation (ATO).

Conventional Steel Wheel/Rail--Transportation systems that consists of steel-wheeled trains running on duo rail tracks.

Conventional Steel Rubber Tire--Transportation systems that consists of rubber-wheeled vehicles running on roadways. *UNSAFE*

Exclusive Right-of-Way (ROW)--Roadway or other right-of-way reserved at all times for transit use and/or other high occupancy vehicles. The restriction must be sufficiently enforced so that 95 percent of vehicles using the right-of-way are authorized to use it. *100%*

Gauge--The distance between the rails of a rail track.

Guideway--In transit systems, a track or other riding surface (including supporting structure) that supports and physically guides transit vehicles specially designed to travel exclusively on it.

Magnetic Levitation (MAGLEV)--Support technology that keeps a vehicle vertically separated from its track or riding surface by magnetic force, either attractive or repulsive.

Mode--A system for carrying transit passengers described by specific right-of-way, technology and operational features.

Monorail--A transit mode that is an electric railway of guided transit vehicles operating singly or in multi-car trains. The vehicles are suspended from or straddle a guideway formed by a single beam, rail, or tube.

Propulsion Systems--The motors, driving mechanisms, controls, and other devices that propel a vehicle. Existing options are:

Conventional rotary electric--An electric motor that produces mechanical force through rotary motion.

Linear Induction electric--An electric motor that produces mechanical force through linear, instead of rotary, motion. It is chiefly used for propelling vehicles along a track or other guideway.

Internal combustion--An engine in which the power is developed through the expansive force of fuel that is fired or discharged within a closed chamber or cylinder.

Diesel--Type of fuel.

LNG/LPG--(liquid natural gas/liquid propane gas) Alternative fuel composed of a liquid or gaseous non-petroleum fuel.

Dual-Propulsion System--A propulsion system that is capable of operation of two different types of power sources, for example and internal combustion engine and electricity.

Transit--Transportation by bus, or rail, or other conveyance, either publicly or privately owned, providing to the public general or special service (but not including school buses or charter or sightseeing service) on a regular and continuing basis. Also known as "mass transit" and "public transportation".

TRANSIT LINKS

American Public Transportation Association (www.apta.com) This site provides information and news related to U.S. and international public transportation systems.

Public Transportation (<http://www.publictransportation.org>) This site provides information and news related to public transportation.

Subways.net (www.subways.net) This site, created by a subway and trolley fan, contains photos, maps, and links to other transit sites.

National Transportation Library ([HTTP://NTL.BTS.GOV](http://ntl.bts.gov)) This site, maintain by the U.S. Department of Transportation, provides reference material on transportation.