East Side Access vs. Delcan’s Evaluation of the Upper Level Proposal

February 2006
East Side Access – Manhattan Alignment

LIRR Station/Concourse at GCT
Vanderbilt Avenue
Park Avenue
MNR Upper Level
MNR Lower Level

LIRR Concourse
Passenger Elevators
Mezzanine
Lower Platform

New LIRR Tunnels
Existing 63rd St. Tunnel

GRAND CENTRAL TERMINAL

LIRR Terminal below GCT Lower Level
Delcan Uses Existing Upper Level

- Platform tracks 38-42
- LIRR Inbound Track
- LIRR Outbound Track
- Upper Level Loop
Delcan’s Operational Claims

- **CLAIM:** Can operate 18 trains to GCT in AM peak and 21 trains in PM peak

  **REALITY:** Can only operate 12 trains/hour and has serious reliability flaws; ESA has reliable capacity for 24 trains/hour

- **CLAIM:** Minimal impacts on GCT and Metro-North operations

  **REALITY:** Huge impacts on GCT and MNR – permanently reduces MNR peak hour service by 25-30%
Delcan’s proposal cannot support LIRR’s opening year schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Train Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30 AM</td>
<td>On-time</td>
</tr>
<tr>
<td>7:00 AM</td>
<td>28 minutes late</td>
</tr>
<tr>
<td>7:30 AM</td>
<td>72 minutes late</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>99 minutes late</td>
</tr>
</tbody>
</table>

Under ideal conditions on-time performance would no longer exist!
Impacts on GCT Not Considered by Delcan

- More crowded conditions within GCT – 85% increase in customers with no new passenger circulation or waiting space created
- More crowded stairs and escalators will increase time for customers to get to platforms and streets
- GCT improvements to ventilation and other mechanical issues are ignored – significant additional capital investment required
## Impact of Upper Level Alternative to Metro-North Railroad

<table>
<thead>
<tr>
<th>Metro-North Use of GCT</th>
<th>MNR Existing Conditions</th>
<th>With East Side Access</th>
<th>With Upper Level Loop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Avenue Viaduct Tracks</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Approach Tracks to GCT Upper Level</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Approach Tracks to GCT Lower Level</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Access to Upper Level Loop Track</td>
<td>Full Access</td>
<td>Full Access</td>
<td>Access Severed</td>
</tr>
<tr>
<td>Access to Back Yard</td>
<td>Full Access</td>
<td>Full Access</td>
<td>Access Severed</td>
</tr>
<tr>
<td>Trains to GCT During Morning Peak Period</td>
<td>125</td>
<td>125</td>
<td>85-95</td>
</tr>
</tbody>
</table>
Delcan’s Schedule Claim

- CLAIM: Can be built faster than current plan for East Side Access

REALITY: Adds 4 years to the project before any further construction can begin to complete EIS and different real estate acquisitions
Delcan’s Cost Savings Claim

- CLAIM: Will save $1.2 billion in construction costs

REALITY: No cost savings for an inferior option that is fatally flawed!

Required Costs Underestimated or Omitted:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($ in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrances/ADA</td>
<td>21</td>
</tr>
<tr>
<td>Ventilation/Safety</td>
<td>104</td>
</tr>
<tr>
<td>Tunnel Construction</td>
<td>350</td>
</tr>
<tr>
<td>Circulation/Finishes</td>
<td>530</td>
</tr>
<tr>
<td>Escalation</td>
<td>372</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,377</strong></td>
</tr>
</tbody>
</table>
Upper Level Loop Alternative = High Risk Construction

- Requires underpinning MNR facilities.
- Inadequate rock cover (less than 15 feet) requires underpinning subway.
- Depth of tunnel structure less than 70 feet from street.

East Side Access Alignment – Minimum depth 115 feet from street.
Summary – Is Upper Level Loop Alternative Viable? NO!

- Many alternatives evaluated – this one does not work.
- Operational features are inferior
- Cannot operate 24 LIRR trains in the peak hour
- Major impact to MNR
- Claimed cost savings do not exist
- Schedule impact – 4 years of delay and escalation