Table of Contents

- California High-Speed Rail Opportunity
- Investment Planning Principles
- Value Capture and Project Delivery Structures
High-speed rail is a “once in a generation” program with enormous social, economic and property development potential

- Many cross-over benefits will be felt across several industries, real estate in particular
- Investment in transit oriented development at stations presents a compelling real estate opportunity for the Authority and its future operator
- The specific potential for each community and station will be unique
- Taking a structured approach to evaluating each opportunity and calibrating development strategies for each locality is key to maximizing revenue
High-Speed Rail will change the way we interact economically, socially, and expand our reach...

Today
60 mph by Car

2030
220 mph by High-Speed Rail
Historical Context for High-Speed Rail Development

- Introduction of high speed rail networks worldwide have historically led to increases in property values and development activity

- Benefits can vary over near-mid-long term periods

- Benefits will also vary by location and size of market; small cities tend to present particularly high benefits for communities as a result of high-speed rail investments

- While some evidence suggests short term negative property value impacts, overall, high-speed rail networks tend to have a positive impact on land values in the short and long terms when stations are built and successfully integrated with local communities; connected to commercial and retail centers and accessible to other public transportation outlets
How is Land Value Created?

- High-speed rail benefits land value in a number of ways:
  - Improved connectivity between cities and regions, enabling more efficient flow of people and trading of goods and services
  - Increased potential for new economic activity in area to attract private investment, employment, housing, etc.
  - Station becomes a destination, with an opportunity to increase place-making and city attractiveness that can spur additional commercial development

- Changes in land values will vary across station markets, and will be dynamic throughout short/medium/long term stages of the high-speed rail system implementation
How is Land Value Captured?

- High-speed rail as an enterprise has interests and influence beyond rail developer and operator:
  - The Authority plays a leadership role to achieve long term solutions and outcomes
  - Land management strategies are necessary to fulfill the Authority’s mission and goals of sustainability and revenue generation

- Creating and capturing value from property development requires planning, preparation and participation
  - Leverage the benefits of transit oriented development with a strategy for phasing development and capturing value over time
  - Ensure complementary development and access improvements that maximizes the market potential of the area by working in partnership with each local community
Maximize development potential with early, coordinated planning

- Investment and development decisions must be timed to:
  - Increase high-speed rail ridership and revenue
  - Reduce land needed for new growth
  - Maximize multi-modal access
  - Serve local communities

- A three stage analysis process where each stage informs and guides actions in subsequent phases
  1. Develop a strategic investment approach
  2. Apply it to district-scale planning efforts
  3. Plan for implementation (project delivery)
Table of Contents

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- Value Capture and Project Delivery Structures
Key considerations during investment planning phase:

✓ Financial goals and constraints
✓ Level of control and risk considerations
✓ Site and Market Conditions
✓ Stakeholder / Community Engagement Strategy
✓ Timeline: Planning & Development
✓ Project delivery models and funding alternatives

- **Step 1:** Establish investment goals
  - Define objectives, performance requirements, and measures of success

- **Step 2:** Evaluate current situation relative to the investment goals
  - Where are we, where do we need to go?

- **Step 3:** Assess alternative ways to achieve desired investment goal
  - Formulate and evaluate different plans of action

Explore Alternative Paths To Achieve Measurable Investment Goals
Development frameworks can provide a structured way to evaluate and execute on strategy.
Within 5 years of a development action…. Prioritize investments, align resources, and ensure long-term value

<table>
<thead>
<tr>
<th>Pre-Development Planning</th>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>STAGE 3</th>
<th>STAGE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develop a Project Description</td>
<td>Refinement of Project Description</td>
<td>Feasibility</td>
<td>Project Execution</td>
</tr>
<tr>
<td>• Define the project</td>
<td></td>
<td></td>
<td></td>
<td>• Project delivery model/financing</td>
</tr>
<tr>
<td>• Determine project objective(s)</td>
<td></td>
<td></td>
<td></td>
<td>• Construction</td>
</tr>
<tr>
<td>• Establish project framework</td>
<td></td>
<td></td>
<td></td>
<td>• Selling/leasing/operations</td>
</tr>
</tbody>
</table>

- Perform formal market study
- Develop high level pro forma
- Analyze deal structures

Engage HSR Operator as early as possible
In synch with station project delivery approach....
Table of Contents

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Various Value Capture Instruments are Available

- Large infrastructure investments often require significant and diverse funding and financing sources beyond the traditional Federal Contributions and State & Local Programs
- Land Value Capture Instruments provide capital and operating funds
- Some of the various Land Value Capture Instruments that can be utilized are:
  - Tax Increment Financing
  - Ground Lease Monetization
  - Transfer / Award of Commercial Development Rights
  - Real Estate Asset Sale / Monetization
  - Joint-Venture Developments / Equity Partnerships
  - Public-Private Partnerships (P3)
  - Payment In Lieu of Tax – PILOT Payments Securitization
Various Project Delivery Structures are Available

- Similar to funding, there are numerous ways to deliver station development that can fulfill objectives and desires set forth during the planning stage of development
  - Examples include: Joint Power Authority (JPA); Economic Development Corporations (EDC); Joint Ventures (JV); Public-Private Partnerships (P3s)
  - The delivery method chosen will depend on policy tools and objectives as well as the nature of market opportunities; customized for each station and opportunity

- Public-Private Partnerships (P3s)
  - Offer a broad range of project delivery and funding structures by attracting private enterprise and investment; also attracts expertise and innovation
  - There are a variety of P3 structures with trade-offs between level of ownership, risk, and return that is expected
The deal structures will be shaped by policy as well as market development values and opportunities

- Influence project financing and funding strategies; funds will necessarily require a mix of capital sources, including both short-term and long-term funding sources, as well as public-private.
- Shaped by legislative and legal governance policies for each locality
- International deal structures can vary considerably as a result of policy differences in the country’s approach to infrastructure investments, ownership, and delivery
Most TOD projects utilize funds from federal, regional, local development authorities as well as private investment via P3 frameworks

- A review of select domestic TOD funding precedents and regional projects indicates that private backed funding can range from roughly 30 up to 45% of development costs
- Private contributions are correlated to revenue / fee generating potential; revenue profiles will vary greatly for each station area
- Moynihan Station and World Trade Center Redevelopment are two good case studies
Moynihan Station Case Study

**PROJECT PROFILE**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Mixed-Use TOD Development – Regional Train Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>Manhattan, NYC</td>
</tr>
<tr>
<td>Public Train Hall</td>
<td>255,000 SF</td>
</tr>
<tr>
<td>Private Development Scope:</td>
<td>Commercial: 588,000 SF Retail: 125,000 SF</td>
</tr>
</tbody>
</table>

Moynihan Station – Farley Redevelopment

- Owner: Moynihan Station Development Corporation, a subsidiary of Empire State Development Corporation
- Commercial Condominium Structure; with long-term net leases
  - Public Train Hall & Private Mixed-Use Development
- Development Partnership Scope: Design – Build – Finance – Operate – Maintain – Lease

Moynihan Station Train Hall
- Amtrak / LIRR
- Train Hall Retail

“Farley Annex”
- Mixed-Use Commercial Unit

Penn Station

9 AVE

8 AVE

A C F
World Trade Center Redevelopment Case Study

**PROJECT PROFILE**

- **Industry:** Mixed-Use Development / TOD Development / Cultural and Tourism / Transportation Hub
- **Geography:** Manhattan, NYC
- **Site Owner:** Port Authority of NJ&NJ
- **Acreage:** 16

**Private Development Scope:**
- Commercial: approx. 12+M SF
- Retail: approx. 450K SF
- Museum / Memorial Cultural

**1. World Trade Center**
- P3 Equity Joint Venture (2010)
- Ownership: PANYNJ & Private Developer

**Museum / Memorial**
- Non-Profit
- Operating Agreement

**WTC Site wide Frameworks**
- Shared Operating Agreements

**WTC Retail**
- 2 Stage Transaction
- 50% Joint Venture – (2012)
- Remaining 50% Interest - (2013)

**Transportation Hub**
- PANYNJ - Public Space
- Integrated Retail Program

**Towers 2, 3, 4**
- Long-term Ground Lease (99yrs)
- Private Developer
St. Pancras Railway Station & High Speed 1 Case Study

PROJECT PROFILE

Industry: Mixed-Use Development / TOD Development / Cultural and Tourism

Geography: London, UK

Annual Traffic: approx. 28 million

Private Development Scope: Retail & Hospitality

Key Design Considerations: The station is considered among the most sophisticated stations in the UK as it serves high speed rail (Eurostar)

- Developer: London and Continental Railways
- Owner: High Speed 1, Ltd.
- Operator: Network Rail High Speed

High Speed 1 Concession Agreement

- In 2010, 30-year concession to own and operate HS1 for £ 2.1 billion was awarded to consortium of Borealis Infrastructure and Ontario Teacher’s Pension Plan
In summary, value capture and intelligent developer is critical to the overall success of each station district

- Engage private sector interested parties (Developers, Operator) early in the planning process
- Build relationships, align local interests with high-speed rail enterprise interests
- Ensure investment priorities are consistently applied across the system
- Ensure development concepts and land assemblage reflects the unique characteristics, opportunities and constraints of each location
- Ensure individual station investments are appropriately structured and scaled to the market