October 14, 2014

Framingham Downtown Transportation Planning Study

Prepared for the Metropolitan Area Planning Council and the Town of Framingham

The Cecil Group with GPI

Topics

- Development Testing
  - Pearl Street Scenario
  - Howard Street Scenario
  - Hollis Court Scenario

- Development Feasibility Discussion

- Roadway Alternatives Discussion
Development Context

Potential for TOD and Downtown Framingham

Initial Candidate Sites
Potential for TOD and Downtown Framingham

Selected Test Sites

- Massing diagrams intended to test the scale of potential redevelopment
- Development program derived from the building volumes
- Test overall development feasibility physically and financially
- Stylizations help to visualize the massing as part of the downtown
- All depictions are diagrammatic and hypothetical
- Implementation would require public and private actions on public and private property
Potential for TOD and Downtown Framingham

Pearl Street – Existing Parcels

Pearl Street – Existing Buildings

Existing FAR = 0.88
Potential for TOD and Downtown Framingham

Pearl Street – Redevelopment Assumptions

- Retain existing building assets on the block
- New construction scaled to allow cost-effective stick-built construction
- Average residential unit size of 1,200 square feet
- New construction scaled to be supported by surface parking
- New surface parking resources at interior of the block could be shared through agreements to serve redevelopment of the block
- Parking provided at ratios of 1.5 spaces/unit and 1 space/1,000 square feet of retail or office space

Pearl Street – Redevelopment Scenario

Proposed FAR = 1.54

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.
Potential for TOD and Downtown Framingham

Pearl Street – Potential Scenario Phasing

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.

Potential for TOD and Downtown Framingham

Pearl Street – Potential Character Illustration

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Potential for TOD and Downtown Framingham

Pearl Street – Potential Character Illustration

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Pearl Street – Observations and Discussion

- Redevelopment program focused on residential uses to support downtown activity, business and vitality
- Approximately 150 residential units
- Opportunity for enhanced pedestrian circulation from city-owned parking structure
- More consistent street wall, massing and scale supports downtown character and sense of place
- Overall scale of 3- to 4-story redevelopment respects adjacent context
- Ongoing small scale infill development opportunities should be encouraged and supported
Potential for TOD and Downtown Framingham

Howard Street – Existing Parcels

Parcel Area = 144,300 SF (3.4 Acres)

Potential for TOD and Downtown Framingham

Howard Street – Existing Buildings

Existing FAR = 0.74

Existing Building Area to Remain = Approx. 12,000 SF
Existing Building Area to be Removed = Approx. 39,000 SF
Potential for TOD and Downtown Framingham

Howard Street – Redevelopment Assumptions

- Retain existing building assets on the block
- New construction scaled to allow cost-effective stick-built construction
- Average residential unit size of 1,200 square feet
- New construction scaled to be supported by surface parking
- New surface parking resources at interior of the block could be shared through agreements to serve redevelopment of the block
- Parking provided at ratios of 1.5 spaces/unit and 1 space/1,000 square feet of retail or office space

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.
Potential for TOD and Downtown Framingham

Howard Street – Redevelopment Scenario
(parking deck)

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.

Potential for TOD and Downtown Framingham

Howard Street – Potential Scenario Phasing

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Potential for TOD and Downtown Framingham

Howard Street – Potential Character Illustration

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.
Potential for TOD and Downtown Framingham

Howard Street – Observations and Discussion

- Mixed-use redevelopment program adds activity to Concord Street
- Difficult to achieve required parking without a parking deck
- Approximately 50 residential units with 12,000 sf ground floor retail
- Opportunity to frame the Downtown Common and add an open space
- More consistent street wall, massing and scale supports downtown character and sense of place
- Overall scale of 3- to 4-story redevelopment respects adjacent context
- Scale of development could be expanded with a parking deck at the rear of the site

Potential for TOD and Downtown Framingham

Hollis Court – Existing Parcels
Potential for TOD and Downtown Framingham

Hollis Court – Existing Buildings

Existing FAR = 0.42

Potential for TOD and Downtown Framingham

Hollis Court – Redevelopment Assumptions

- Retain existing building assets on the block
- New construction scaled to allow cost-effective stick-built construction
- Average residential unit size of 1,200 square feet
- Consolidate commuter parking in parking structure, scale up to support and share amongst redevelopment
- Elevated walkway from parking structure to commuter rail platforms
- Parking provided at ratios of 1.5 spaces/unit and 1 space/1,000 square feet of retail or office space
Potential for TOD and Downtown Framingham

Hollis Court – Redevelopment Scenario
(surface parking supports development)

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.

FAR = 1.09

Potential for TOD and Downtown Framingham

Hollis Court – Redevelopment Scenario
(expand parking structure to support development)

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.
Potential for TOD and Downtown Framingham

Hollis Court – Potential Scenario Phasing

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Potential for TOD and Downtown Framingham

Hollis Court – Potential Character Illustration

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.
Hollis Court – Potential Character Illustration

Note: scenario is hypothetical to test and depict the potential scale and character of development. Redevelopment would require private and public actions to implement.

Potential for TOD and Downtown Framingham

Hollis Court – Observations and Discussion

- Redevelopment program focused on mixed-use to add activity to Hollis Street
- Hollis Court can be connected to Waverly depending on street options
- Shared parking structure could be used to enable large scale redevelopment
- Convenient location for commuter rail parking and pedestrian access to consolidate and unlock land for other uses
Development Feasibility Analysis

Downtown Framingham
Transit Oriented Development
October 14, 2014
Are the potential revenues from a project greater than the cost to construct it?

**Key Assumptions:**

- Each scenario treated as single development project
- Current market conditions suggest that individual sub-projects could initially be undertaken
  - 20-30 units or fewer at a time
  - As market strengthens, bigger projects likely to take off
- New office and retail limited to protect existing businesses
- Assumes residential is developed as apartments
  - Condominiums are also possible – market evidence of increasing demand, improves financial feasibility
- Actual development costs will vary
  - Financial model assumptions are easily changed
  - Achievable revenues (property values) should increase over time as market strengthens
Estimated Development Costs

• **Acquisition** - @ Assessed value + 25%
• **Demolition** - @ $5 per square foot (PSF)

**New Construction**

- Commercial @ $120 PSF (hard & soft costs @ 20%)
- Residential @ $144,000/unit ($120 PSF)

• **Renovation of Existing Space**

- Commercial @ $42 PSF
- Residential @ $60 PSF

• **Parking**

- $3,000 per space for surface parking
- $15,000 per space for parking deck
Potential Revenue

• **Office**
  • Average Lease Rate - $15 PSF (NNN)
  • Cap Rate – 10%
  • Value = $150 PSF

• **Retail**
  • Average Lease Rate - $12 PSF (NNN)
  • Cap Rate – 8%
  • Value = $150 PSF

• **Residential (apartments)**
  • Rent PSF - $1.60 (per month) ............($1,920/month)
  • Operating Expenses – 40%
  • NOI = $13,824 per unit
  • Cap Rate – 6%
  • Value = $230,400 per unit
**Pearl Street Parcels**

- 337,300 SF total
- $30-$35 million
- 155 residential units
- Renovate three buildings
- 11,300 office (renovation)
- Parking garage remains

**Project(s) appear to be economically feasible**

<table>
<thead>
<tr>
<th>Economic Feasibility</th>
<th>Acquisition</th>
<th>$9,979,375</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Demolition</td>
<td>$185,865</td>
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<td></td>
<td>Renovation</td>
<td>$1,346,328</td>
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<td>$21,463,800</td>
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<td>TOTAL</td>
<td>$32,975,368</td>
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<table>
<thead>
<tr>
<th>Total Revenues</th>
<th>Office</th>
<th>$1,694,880</th>
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<tbody>
<tr>
<td></td>
<td>Retail</td>
<td>$0</td>
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<tr>
<td></td>
<td>Residential</td>
<td>$35,724,480</td>
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<tr>
<td></td>
<td>TOTAL</td>
<td>$37,419,360</td>
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</table>

**NET Revenue**

$4,443,992
Town of Framingham Transit-Oriented Development

Howard Street Parcels
$20-$25 million
Without parking deck
165,100 SF
  34,400 Sf retail
  23,500 SF office
  64 residential units

With parking deck
201,500 SF
  34,400 SF retail
  32,100 SF office
  82 residential units

Appears feasible

<table>
<thead>
<tr>
<th>Economic Feasibility</th>
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<th>w/ Parking Deck</th>
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<tbody>
<tr>
<td>Total Costs</td>
<td></td>
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<tr>
<td>Acquisition</td>
<td>$8,019,625</td>
<td>$8,019,625</td>
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<td>New Construction</td>
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<td>$461,899</td>
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<td>Parking Deck</td>
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<td>$1,200,000</td>
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<tr>
<td>TOTAL</td>
<td>$20,171,898</td>
<td>$25,162,030</td>
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</table>

| Total Revenues       |                 |                 |
| Office               | $3,520,688      | $4,816,688      |
| Retail               | $5,164,005      | $5,164,005      |
| Residential          | $14,756,099     | $18,835,715     |
| TOTAL                | $23,440,791     | $28,816,407     |

NET Revenue
$3,268,893            $3,654,377
## Hollis Court Parcels

299,800 SF  
157 residential units  
56,200 SF street retail  
Shared parking (surface plus deck/garage)

### Economic Feasibility

<table>
<thead>
<tr>
<th>Economic Feasibility</th>
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</thead>
<tbody>
<tr>
<td>Total Costs</td>
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<tr>
<td>Acquisition</td>
<td>$9,923,250</td>
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<tr>
<td>Demolition</td>
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<td>Renovation</td>
<td>$1,586,994</td>
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<tr>
<td>New Construction</td>
<td>$26,867,045</td>
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<tr>
<td>Surface Parking</td>
<td>$1,068,433</td>
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<td>Parking Deck **</td>
<td>$0</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$39,743,127</strong></td>
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<tr>
<td>Total Revenues</td>
<td>$44,500,671</td>
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<tr>
<td>Office</td>
<td>$0</td>
</tr>
<tr>
<td>Retail</td>
<td>$8,434,635</td>
</tr>
<tr>
<td>Residential</td>
<td>$36,066,036</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$44,500,671</strong></td>
</tr>
</tbody>
</table>

NET Revenue                  $4,757,545

Assumes parking deck (or garage) is funded from other sources. If not, project becomes marginally feasible.
Town of Framingham Transit-Oriented Development

Fiscal Impacts

• Potential tax revenues
  • $750,000 - $1 million per scenario at full build out

• Municipal Service Costs
  • Per capita costs (public safety, general government)
  • Addt’l education costs (depends on size and type of units)
  • Assumes existing infrastructure can accommodate new development (water, sewer, stormwater)

• Additional spending in downtown Framingham
  • 350-400+/- new households
  • ~$8-$12 million per year in spending potential

• Stimulate additional development in and around downtown
  • Smaller, in-fill opportunities – townhomes, 4-8 units
  • Improvements to existing buildings
Town of Framingham Transit-Oriented Development

Next Steps

• **Refine estimates and assumptions**
  - Discuss with development community
  - Reconcile assessment data

• **Test feasibility of individual elements/buildings**

• **Recommended zoning requirements**
  - Shared parking opportunities
  - FAR, set-backs, building height

• **Value Capture Analysis**
  - Look at opportunities for Public-Private Partnerships
  - State & Federal funding sources
    - I-Cubed, DIF, Tax Credits

• **Complete report**
Town of Framingham

Multi-Modal Improvements
October 14, 2014

In association with:

Purpose - Multi-Modal Improvements

• Identify Steps to Advance Downtown Vision
  ◦ “Re-energized, Walkable, Mixed-Use Core”
  ◦ Specific Multi-Modal Improvements to Support Identified Development Parcels
Multi-Modal User Groups
... Connections by all Modes

GPI Greenman-Pedersen, Inc.
Vehicle Operations are well documented

Evening Peak Hour Volume
Over Past Decade

2014 volumes collected were compared to 2006 evening peak hour traffic volumes. The intersection of Route 135 at Bishop Street past evening peak hour volumes were collected in 2004.

+2.1%

-6.2%

+8.6%
Lack in Bicycle Infrastructure

- Limited Bicycle Storage
- Recreational Rail Trails

*No accommodations within the street networks*

Next Steps…

Bicycle Volumes Crossing Rail Tracks (4-6PM)

A total of 31 bicyclists crossings were recorded during this time, 65% of which were at the intersection of Route 135 at Concord Street.
Regional Bike Network

- Bruce Freeman Rail Trail
- Cochituate Rail Trail
- Weston Aqueduct Trail
- Sudbury Aqueduct Trail
- Upper Charles River Trail

Next Steps…

Pedestrian Volumes Crossing Rail Tracks (4-6PM)

A total of 300 pedestrian crossings were recorded during this time, 85% of which were at the intersection of Route 135 at Concord Street.
Route 126 Improvements

- Streetscape and Sidewalk Improvements
- Enhancements to the corridor for pedestrians

Leaves gaps in pedestrian network for TOD parcels

Existing Pedestrian Deficiencies

- Documented in the MPO Study in 2008
- Majority of issues still exist in 2014
Relocation of MWRTA Central Hub

- Central hub relocated to facility on Blandin Avenue, south of Route 135
- Larger facility to handle increased service while maintaining existing Central Hub
- Rerouting of various key bus routes for efficiency
- Utilize the MBTA "banana lot"
Strengthen Pedestrian Connection between Hubs

Town-wide Transportation Context

Table 2-6 - Gate Closure Summary

<table>
<thead>
<tr>
<th></th>
<th>Existing Conditions Morning Peak Hour</th>
<th>Existing Conditions Afternoon Peak Hour</th>
<th>Future Conditions Morning Peak Hour</th>
<th>Future Conditions Afternoon Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuter Train Crossings</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Typical Duration of Closure (mm:ss)</td>
<td>2:03</td>
<td>1:45</td>
<td>2:03</td>
<td>1:45</td>
</tr>
<tr>
<td>Freight Train Crossings</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Typical Duration of Closure (mm:ss)</td>
<td>4:19</td>
<td>1:20</td>
<td>4:19</td>
<td>1:20</td>
</tr>
<tr>
<td>Total Duration of Closure (mm:ss)</td>
<td>12:30</td>
<td>9:40</td>
<td>20:41</td>
<td>17:00</td>
</tr>
<tr>
<td>Typical Duration of Closure (mm:ss)</td>
<td>2:30</td>
<td>1:37</td>
<td>2:18</td>
<td>1:42</td>
</tr>
</tbody>
</table>

The gates were closed five times during the morning peak hour to allow four commuter trains and one freight train to cross for a total time of 12 minutes and 30 seconds or a typical closure of 2 minutes and 30 seconds. The typical duration of a commuter train closure during the morning peak hour was 2 minutes and 3 seconds; the typical closure was 4 minutes and 12 seconds for a freight train. The total gate closure time of 12 minutes and 30 seconds effectively reduces the morning peak hour intersection capacity by approximately 21 percent.
Alternative - Depress Route 126

...depressing Route 126 under Route 135 would adversely impact the Downtown environment...

Alternative - Depress Route 135

...depressing Route 135 under Route 126 would enhancing pedestrian connections within Downtown...
Alternative - East (Bishop) Bypass

...an overpass at Bishop cripples the pedestrian fabric of this corridor...

Alternative - West Bypass

...Unfeasible expense for infrastructure...
Initiatives

PARKING REGULATIONS REPORT
Town of Framingham, Massachusetts

June 2014
Prepared by:
Inscho/Stein-Hudson Associates
11 Beacon Street, 3rd Floor
Boston, MA 02108
&
Berwick Community Planning & Design, LLC (BCPD)

ATTENTION FRAMINGHAM BICYCLISTS AND PEDESTRIANS!
SAVE THE DATE!
Livable Community Workshop kick-off meeting for Framingham’s Bike and Pedestrian Plan

2000

<table>
<thead>
<tr>
<th>Subject</th>
<th>Framingham CDP, Massachusetts</th>
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<tbody>
<tr>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Workers 16 years and over</td>
<td>37,377</td>
</tr>
<tr>
<td>MEANS OF TRANSPORTATION TO WORK</td>
<td></td>
</tr>
<tr>
<td>Car, truck, or van</td>
<td>84.3%</td>
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<tr>
<td>Drove alone</td>
<td>73.4%</td>
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<tr>
<td>Carpoled</td>
<td>10.9%</td>
</tr>
<tr>
<td>In 2-person carpool</td>
<td>9.0%</td>
</tr>
<tr>
<td>In 3-person carpool</td>
<td>0.8%</td>
</tr>
<tr>
<td>In 4-or-more person carpool</td>
<td>1.1%</td>
</tr>
<tr>
<td>Workers per car, truck, or van</td>
<td>1.0%</td>
</tr>
<tr>
<td>Public transportation (excluding taxicab)</td>
<td>5.2%</td>
</tr>
<tr>
<td>Walked</td>
<td>5.2%</td>
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<tr>
<td>Bicycle</td>
<td>0.6%</td>
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<tr>
<td>Taxicab, motorcycle, or other means</td>
<td>1.0%</td>
</tr>
<tr>
<td>Worked at home</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

| Worked at home                               | 1,170                         |
|Percent                                       | 3.4%                          |
Town of Framingham
Multi-Modal Improvements
October 14, 2014
Alternatives 3 & 4 - By-Pass

...Reduces Vehicle Traffic in the Downtown Area...