Discovery Findings

Four Corners – Town Center District Conditions

April 2, 2012
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Study Area

Town Center District
Broad Project Goals

To develop a practical, functional, revitalization plan for the Four Corners.

The plan will provide a clearly visualized future scenario for the area with a development concept plan, market strategy, and implementation road map.
Project Findings – Land use
Land Use Analysis

Purpose: to document existing land use patterns and identify future land use development potential

Methodology

1) Evaluate current land use
2) Assess environmental constraints to development
3) Examine land use policy and zoning
4) Identify build-out potential
5) Assess related parking demand
Existing Land-use
• 175 acres total
• 148 total housing units
• Newberry Village is more than 50% of residential use
• Non-residential use predominantly retail and mixed commercial
• Auto services only 2%
• Non-residential nearly 30% vacant
Development
Constraints
Buildable Parcels
Build-Out as a Benchmark

• Maximum feasible development under zoning

• Maximum required parking to serve development

• NOT tied to market demand

• Build-out assumptions (see spreadsheet in supporting documentation)

• Assumed sensitive land not buildable
Build-out Potential

• 35 parcels with infill, redevelopment or new development potential

• 67 acres of buildable land

• 1,250,000 square feet (s.f.) of possible non-residential development
  • 739,000 s.f. Retail
  • 313,000 s.f. Services
  • 198,000 s.f. Office

• 291 Additional Residential Units
Parking Observations

- Approximately 1170 commercial (non-residential) parking spaces
  - 575 north of Station Road
  - 550 south of Station Road
  - 45 on Whisconier Road
- No public parking
- Limited connectivity

Under full build-out there could be approx. 5,600 parking spaces required by zoning to serve new development.
Project Findings – Market Analysis
Market Study

Purpose: To identify the demographic characteristics and market conditions within the study area as a basis for understanding and projecting market opportunities.

Methodology
1. Profile demographics
2. Define the market sectors; residential, office, and retail
3. Conduct local interviews
4. Inventory existing supply within the various market sectors
5. Define existing market demand
6. Identify existing and unmet market demand in market sectors
Demographics Analysis
Key Findings: Socio-Economic Analysis

More than two times as much: The 2010 spending potential index (212) of town of Brookfield residents in the consumer category of entertainment and recreation, as compared to the national average spending potential index of 100.

$6,393: The per-household spending on dining out by residents of the town of Brookfield, as compared to $4,686 per household in the same category by residents in the tri-county region.

32 percent: The increase in the 65-74 age bracket from 2000 to 2010 in the town of Brookfield, versus a two percent loss in this age bracket in the tri-county region during the same timeframe.

Approximately 63 out of 100: The number of Brookfield households with estimated 2010 annual incomes greater than $75,000, as compared to an estimated 44 out of 100 households for the three county region in that same year.
Town of Brookfield

- Population: 16,790
- Total Households: 6,000
- Median Age: 43
- Median Household Income: $81,274
- Percent of Household Incomes >$75,000: 53%
- Percent Owner-Occupied Housing: 63%

10-minute Driving Contour from Four Corners Retail Area

- Population: 65,843
- Total Households: 23,798
- Median Age: 39
- Median Household Income: $81,274
- Percent of Household Incomes >$75,000: 53%
- Percent Owner-Occupied Housing: 61%

Fairfield, Litchfield and New Haven Counties (Region)

- Population: 1,947,871
- Total Households: 736,767
- Median Age: 40
- Median Household Income: $74,314
- Percent of Household Incomes >$75,000: 44%
- Percent Owner-Occupied Housing: 62%

Source: US Census Bureau; Esri; Scan US; 4ward Planning LLC, 2012
Household Population

Figure A-1: Household Population Annualized Pct. Change

Source: US Census Bureau; Esri; Scan US; 4ward Planning LLC, 2012
Household Formation

**Figure A-2: Annualized Pct. Chg. in Family Households**
- Fairfield-Litchfield-New Haven Counties: 0.0% (2000-2010), 0.2% (2010-2015)
- Town of Brookfield, CT: 0.7% (2000-2010), 0.3% (2010-2015)
- Four Corners 10-Min Drive Contour: 0.5% (2000-2010), 0.1% (2010-2015)

**Figure A-3: Annualized Pct. Chg. in Non-Family Households**
- Fairfield-Litchfield-New Haven Counties: 0.5% (2000-2010), 0.5% (2010-2015)
- Town of Brookfield, CT: 1.1% (2000-2010), 0.8% (2010-2015)
- Four Corners 10-Min Drive Contour: 0.8% (2000-2010), 0.6% (2010-2015)

Source: US Census Bureau; Esri; Scan US; 4ward Planning LLC, 2012
Steady increase of affluent households bodes well for new dining and specialty retail establishments.

Source: US Census Bureau; Esri; Scan US; 4ward Planning LLC, 2012
These age cohorts will greatly influence housing choice over the next decade.
Renter-Occupied Housing Trends

Figure A-17: Rented Housing Units Comparison

Source: US Census Bureau, Scan US; 4ward Planning LLC, 2011
Labor & Industry Analysis
10-minute Driving Contour from Four Corners Retail Area

Northwest CT Workforce Investment Area (WIA)

Fairfield, Litchfield and New Haven Counties

Total Primary Jobs: 34,018

Total Primary Jobs: 193,822

Total Primary Jobs: 754,944

Source: US Census Bureau; Esri; Scan US; 4ward Planning LLC, 2012
Top Ten Industries by Employment
Four Corners 10-min. Drive Contour

Source: US Census Bureau; Esri; Scan US; 4ward Planning LLC, 2012
Real Estate Supply & Demand Analysis
Assumptions for Residential Unit Demand

Two Household Formation Growth Scenarios Examined:

**Scenario 1**
Modest (0.75% per annum) Annual Household Growth within Four Corners 10-Minute Drive Contour

Total Net New Units Needed in 10-Minute Area by 2016: 2,536
Replacement Units: 247
Units Representing Pent-Up Demand: 2,289

If 10 percent of these units are captured in Four Corners: 254
If 15 percent of these units are captured in Four Corners: 380
Assumptions for Residential Unit Demand

Two Household Formation Growth Scenarios Examined:

**Scenario 2**
Flat (0.0 % per annum) Annual Household Growth within Four Corners 10-Minute Drive Contour

Total Net New Units Needed in 10-Minute Area by 2016: **1,612**
- Replacement Units: **247**
- Units Representing Pent-Up Demand: **1,364**

If 10 percent of these units are captured **in Four Corners**: **161**

If 15 percent of these units are captured **in Four Corners**: **242**
Assumptions for Residential Unit Demand

**Assumed Pent-Up Housing Demand from Persons Living More Than 10-minutes from Four Corners**

In 2009, an estimated 34,000 persons worked within the Four Corners 10-minute drive contour.

Approximately 31,000 of these workers lived outside of the Four Corners area.

We assume 10 percent of (3,100) of these workers desire to live closer to their places of employment, provided adequate housing choice (price, location, size, style) availability in the Four Corners area.

We further assume that at least 1 out of 20 (five-percent) of the above 3,100 could be captured in a residential mixed-use project in Four Corners.
Assumptions for Residential Unit Demand Continued........

• Year over Year Median Sales Price in Brookfield: $220,000 (down 45 percent over previous year)

• Year over Year Home Sales in Brookfield: 17 (down 17 percent over previous year)

• Currently Listed Two-bedroom Rental Units in Brookfield: 2

• Median Monthly Rent for Two-bedroom Apartment: $1,850

Sources: Trulia.com; Zillow.com; Informatics.com; 4ward Planning LLC, 2012
Assumptions for Residential Unit Demand Continued:

*Non-family households will influence residential demand into near future:*

An increasing number of one- and two-person households will create strong demand for smaller rental units.
Housing Unit Demand in Four Corner’s 10-Minute Drive Contour:

**Flat Household Growth Scenario**

**Note:** Housing units are not additive, in this graphic.
Housing Unit Demand in Four Corner’s 10-Minute Drive Contour:

Modest Household Growth Scenario

Note: Housing units are not additive, in this graphic.
What type and how much retail will be successful in Four Corners?

- Convenience and small format specialty retail
- Whole Foods or similar type of small format grocer
- Spa/salon, fitness center, dry cleaners and art gallery.
- 15,000 to 20,000 s.f. of total retail, exclusive of grocery store

Full-service sit-down restaurants/fine dining establishments will do well in this context and are in demand.
The local region is sufficiently retailed

<table>
<thead>
<tr>
<th>Center Name</th>
<th>City</th>
<th>State</th>
<th>GLA</th>
<th>Year Opened</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire Shopping Center</td>
<td>Danbury</td>
<td>Connecticut</td>
<td>400,000 sqft.</td>
<td>1961</td>
<td>Community Center</td>
</tr>
<tr>
<td>Danbury Fair</td>
<td>Danbury</td>
<td>Connecticut</td>
<td>1,292,176 sqft.</td>
<td>1986</td>
<td>Super-Regional Center</td>
</tr>
<tr>
<td>Hawley Lane Plaza</td>
<td>Trumbull</td>
<td>Connecticut</td>
<td>340,430 sqft.</td>
<td>1998</td>
<td>Community Center</td>
</tr>
<tr>
<td>Ridgeway Shopping Center</td>
<td>Stamford</td>
<td>Connecticut</td>
<td>369,563 sqft.</td>
<td>1947</td>
<td>Community Center</td>
</tr>
<tr>
<td>Stamford Town Center</td>
<td>Stamford</td>
<td>Connecticut</td>
<td>772,000 sqft.</td>
<td>1982</td>
<td>Regional Center</td>
</tr>
<tr>
<td>Stop &amp; Shop Plaza</td>
<td>New Fairfield</td>
<td>Connecticut</td>
<td>320,000 sqft.</td>
<td>1997</td>
<td>Community Center</td>
</tr>
<tr>
<td>The Dock</td>
<td>Stratford</td>
<td>Connecticut</td>
<td>273,000 sqft.</td>
<td>1970</td>
<td>Community Center</td>
</tr>
<tr>
<td>Walmart Center</td>
<td>Norwalk</td>
<td>Connecticut</td>
<td>250,000 sqft.</td>
<td>1951</td>
<td>Community Center</td>
</tr>
<tr>
<td>Waypointe</td>
<td>Norwalk</td>
<td>Connecticut</td>
<td>535,000 sqft.</td>
<td>2013</td>
<td>Lifestyle/Specialty Center</td>
</tr>
<tr>
<td>Westfield Trumbull</td>
<td>Trumbull</td>
<td>Connecticut</td>
<td>1,124,382 sqft.</td>
<td>1964</td>
<td>Super-Regional Center</td>
</tr>
</tbody>
</table>

Total Square Footage: 5,676,551 sqft.

Additional large-scale retail (big box comparison retail) is planned for development within the next three years.
Identified Major Retail Centers Near Four Corners
What type and how much office space will be successful in Four Corners?

• Small format professional office space (two and three story buildings)
• 10,000 to 15,000 square feet total, at full buildout.
• Medical office buildings is a logical choice, based on area demographics

Local professionals (attorneys and accountants) seeking work space closer to where they live will also find this space attractive.
<table>
<thead>
<tr>
<th>Land-Use Categories</th>
<th>Modest HH Growth Scenario</th>
<th>Flat HH Growth Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESIDENTIAL UNITS</strong></td>
<td>254</td>
<td>161</td>
</tr>
<tr>
<td><strong>RETAIL (SQUARE FOOTAGE)</strong></td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>OFFICE (SQUARE FOOTAGE)</strong></td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>DINING (SQUARE FOOTAGE)</strong></td>
<td>6,000</td>
<td>6,000</td>
</tr>
</tbody>
</table>
Project Findings – Transportation System
More Parking Observations

Available parking is mostly underutilized

• Observed utilization 20% to 80%
• Average utilization about 40%
  \[(468 \text{ in use} - 702 \text{ not in use})\]
• Some uses require parking during different times of the day (e.g. evening –vs- daytime)
System Overview - Connectivity

- HART ‘7’ Route
- 4-Corners
- Proposed multi-use path
- 4-Corners
- Recommended Bicycle Routes – 2002 Plan
- Potential Rail Service Expansion

See inset
Geometrics
Functional classification - streets and highways are grouped into classes according to the character of service they are intended to provide.

Often, roadway design standards are tied to functional classification, and the prevailing national and local design manuals tend to encourage optimizing the public right-of-way for automobile mobility.

Federal Road and Whisconier Road are classified as Minor Arterials.
Angle of Intersection
Crossing roadways should intersect at 90 degrees, if possible, and at no less than 75 degrees.

Intersection is at a 76 degree skew

Horizontal and Vertical Alignment
Road alignment must promote driver awareness, and have sufficient sight and braking distance to safely come to a stop.

Whisconier Rd has limited sight and braking distance at curve
Geometry is influenced by the Design Vehicle

<table>
<thead>
<tr>
<th>For Turn Made From</th>
<th>For Turn Made Onto</th>
<th>Minimum Suggested Design Vehicle</th>
<th>Turning Radii (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway Ramp</td>
<td>All</td>
<td>Moving WB-50*</td>
<td>60</td>
</tr>
<tr>
<td>Arterial</td>
<td>Arterial Collector</td>
<td>Moving WB-50</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>Moving SU</td>
<td>60</td>
</tr>
<tr>
<td>Collector</td>
<td>Arterial Collector</td>
<td>Moving SU</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>Moving SU</td>
<td>60</td>
</tr>
<tr>
<td>Local</td>
<td>Arterial Collector</td>
<td>Stopped SU</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>Stopped SU</td>
<td>45</td>
</tr>
</tbody>
</table>

*WB-62 must be physically able to make the turn.

Trucks will encroach onto opposite lane if corner radius is too small
### Example Guidelines

**Guidelines for the Selection of Intersection Design Vehicles**

<table>
<thead>
<tr>
<th>Rural Highways</th>
<th>Design Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate/freeway ramp terminals</td>
<td>WB-50</td>
</tr>
<tr>
<td>Primary arterials</td>
<td>WB-50</td>
</tr>
<tr>
<td>Minor arterials</td>
<td>WB-50 OR WB-40</td>
</tr>
<tr>
<td>Collectors</td>
<td>SU-30</td>
</tr>
<tr>
<td>Local Streets</td>
<td>SU-30</td>
</tr>
</tbody>
</table>

**Operating Characteristics of Intersection Corner Radii**

<table>
<thead>
<tr>
<th>Corner Radius</th>
<th>Operational Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>Not appropriate for even P-design vehicles</td>
</tr>
<tr>
<td>10</td>
<td>Crawl-speed turn for P vehicles</td>
</tr>
<tr>
<td>20-30</td>
<td>Low speed turn for P vehicles; crawl-speed turn for SU vehicles with minor lane encroachment</td>
</tr>
<tr>
<td>40</td>
<td>Moderate speed turn for P vehicles; low-speed turn for SU vehicles with minor lane encroachment</td>
</tr>
<tr>
<td>50</td>
<td>Moderate-speed turns for all vehicles up to WB-50</td>
</tr>
</tbody>
</table>
Traffic
Observations:

- Diverted traffic was forecasted to decrease by 60%-70% after completion of bypass
- 2010 traffic (north of 4-Corners) is about 33% less than forecasted
- Whisconier Rd is highest volume leg of 4-Corners intersection
- Some traffic from Rt 25 diverts to Ironworks Hill Rd
Safety
Bicycle and Pedestrian Conditions