



Discovery Findings

Four Corners – Town Center District Conditions

April 2, 2012



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- Land use Conditions
- Market Conditions
- Transportation System Conditions

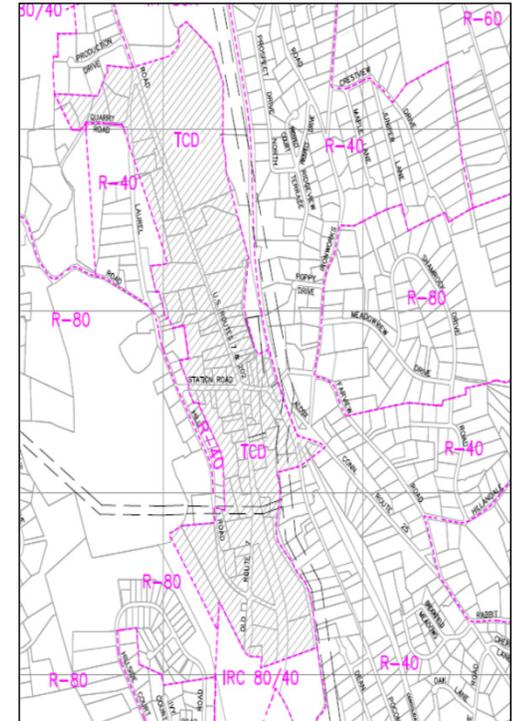
Supporting Documentation

- Town Center District Land Use Snapshot with Zoning Analysis
- Maximum build-out scenario worksheet
- Four Corners Socio-economic Trends Summary
- Four Corners Business Interviews Memorandum



Four Corners
Brookfield Town Center Revitalization Plan

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.



Four Corners
Brookfield Town Center Revitalization Plan

Project Findings – Land use





Land Use Analysis

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

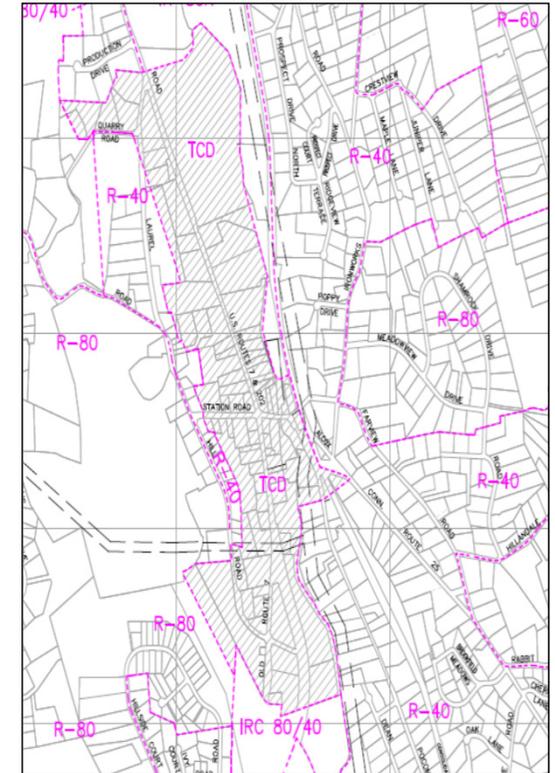
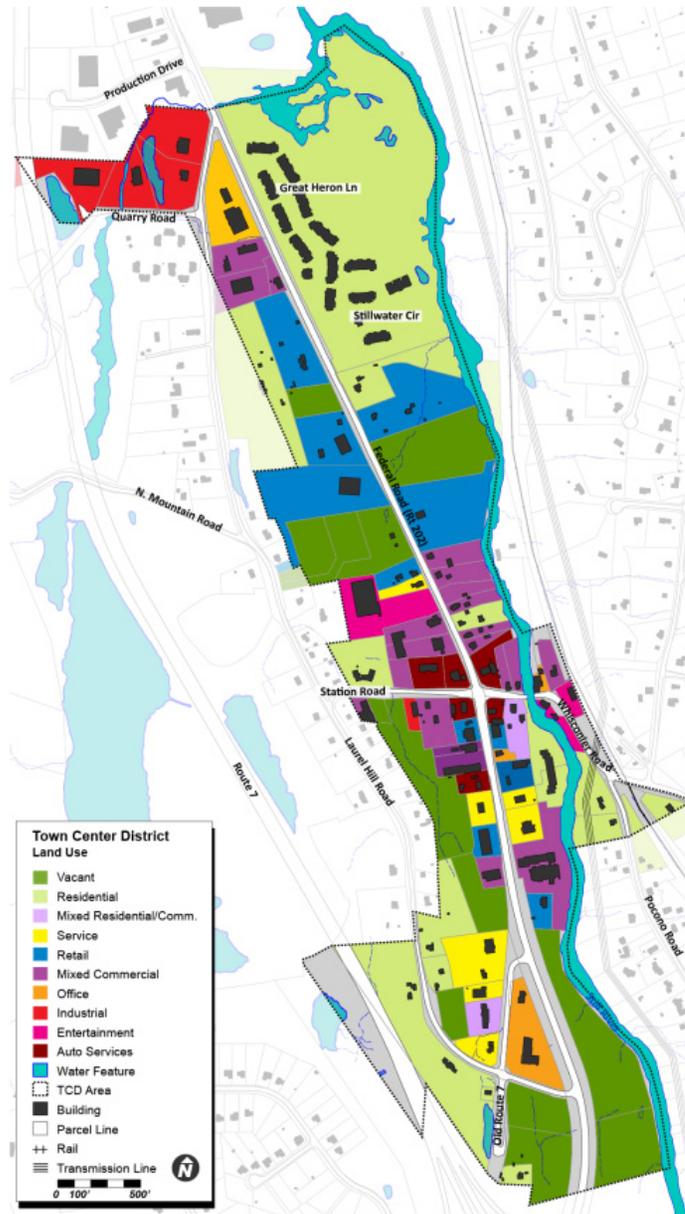
Methodology

- 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



Four Corners Brookfield Town Center Revitalization Plan

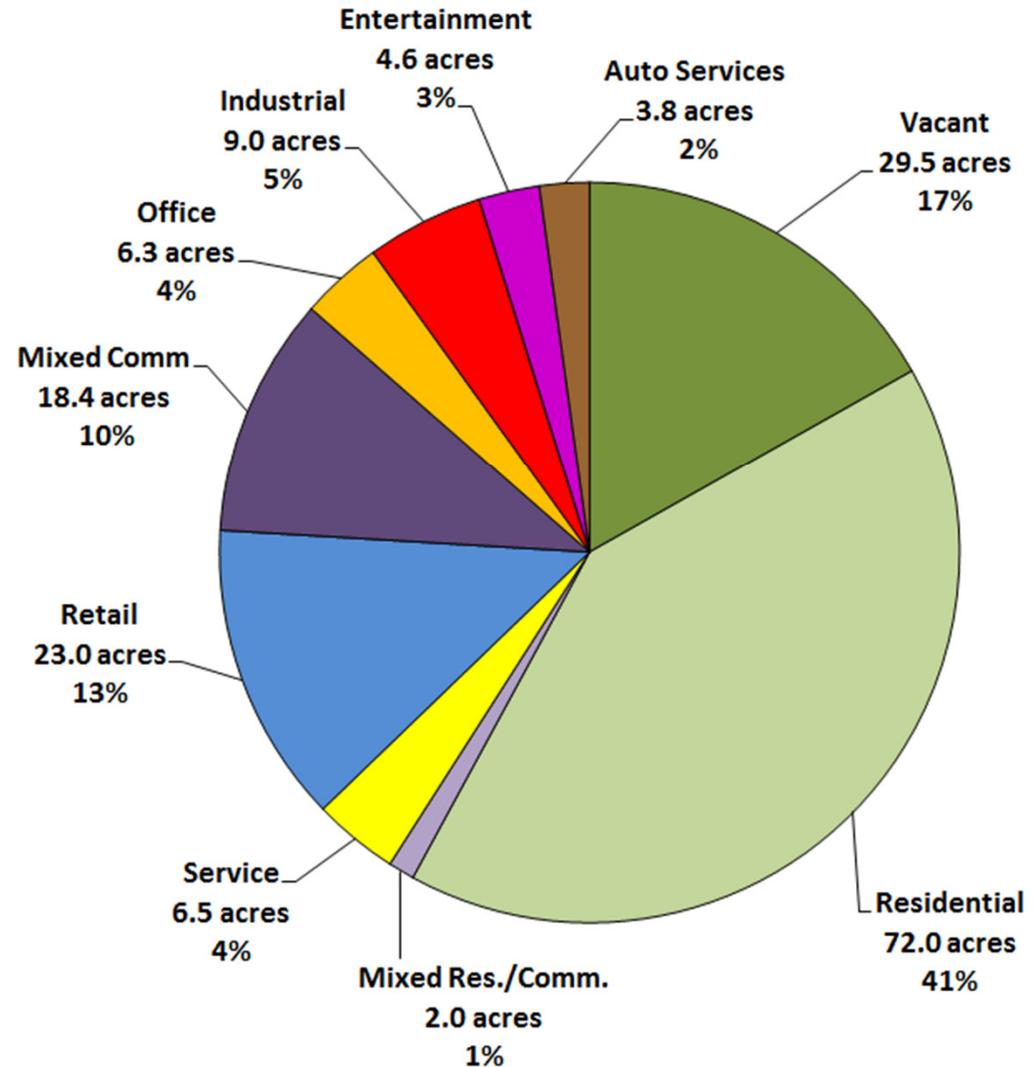
Existing Land-use





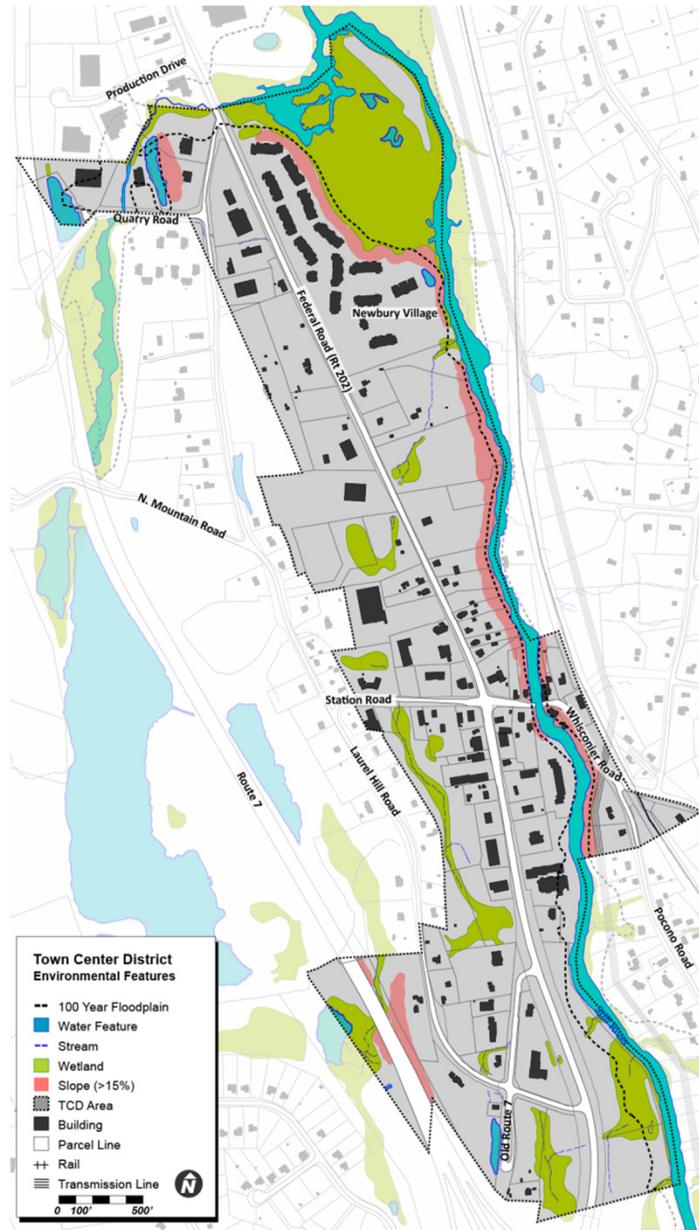
- 175 acres total
- 148 total housing units
- Newberry Village is more than 50% of residential use
- Non-residential use predominantly retail and mixed commercial
- Auto services only 2%
- Non-residential nearly 30% vacant

Land Use Town Center District





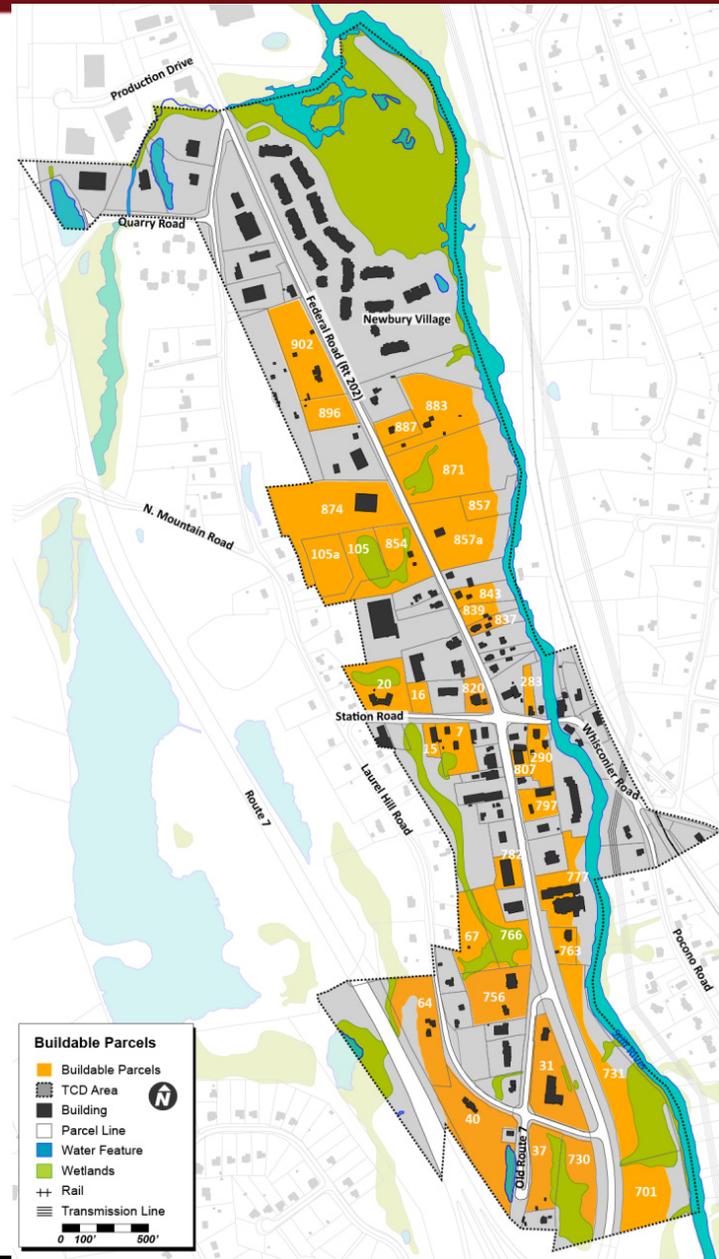
Development Constraints





Four Corners Brookfield Town Center Revitalization Plan

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



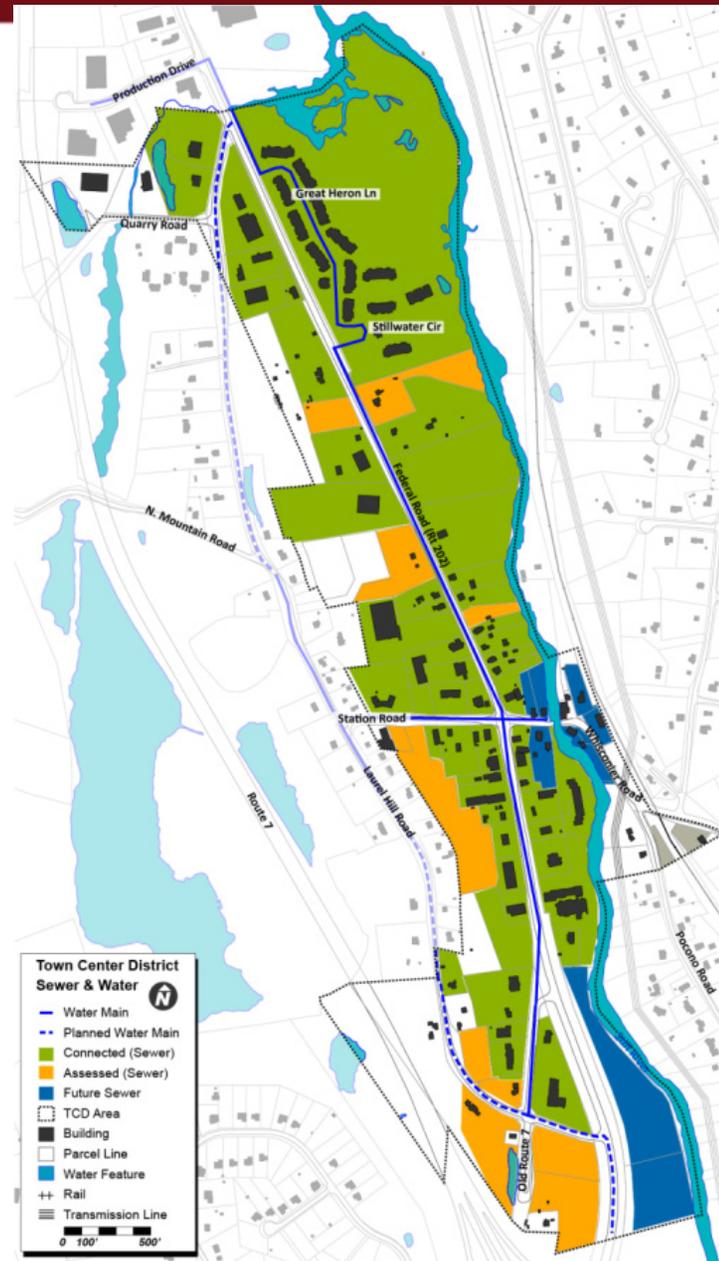
Build-out Potential

- 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



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Brookfield Town Center Revitalization Plan

Water and Sewer Service Area





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



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Project Findings – Market Analysis





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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.

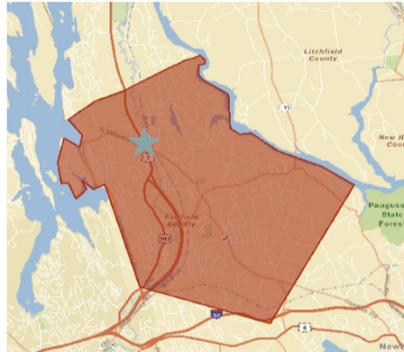
32 percent: The increase in the 65-74 age bracket from 2000 to 2010 in the town of Brookfield, versus a two percent loss in this age bracket in the tri-county region during the same timeframe.

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.



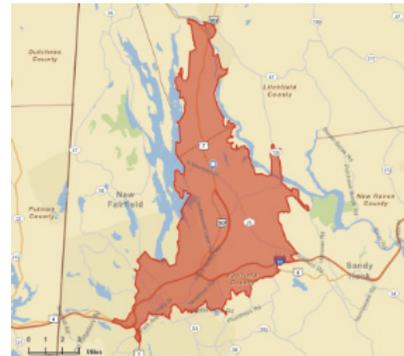
Four Corners Brookfield Town Center Revitalization Plan

Town of Brookfield



Population:	
Total Households:	16,790
Median Age:	6,000
Median Household Income:	43
Percent of Household Incomes >\$75,000:	\$108,210
Percent Owner-Occupied Housing:	63%
	83%

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)



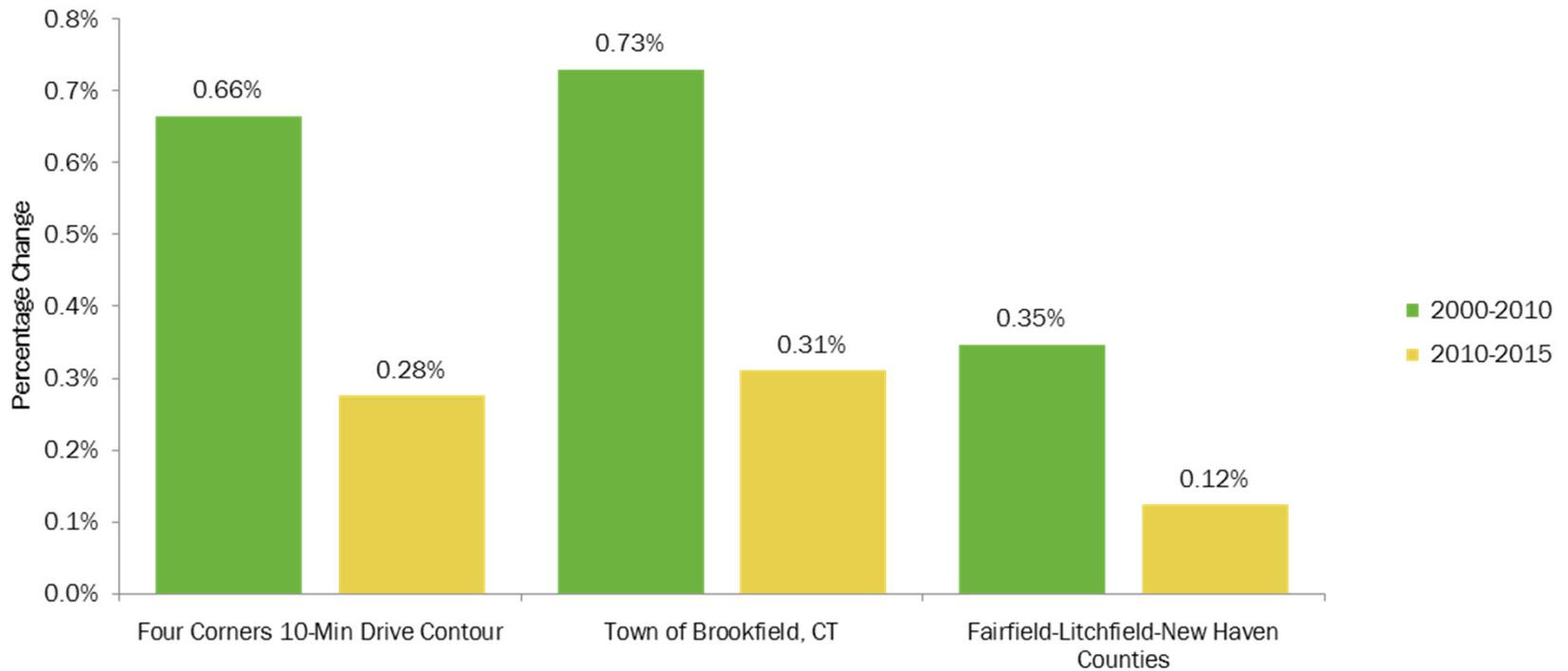
Population:	1,947,871
Total Households:	736,767
Median Age:	40
Median Household Income:	\$74,314
Percent of Household Incomes >\$75,000:	44%
Percent Owner-Occupied Housing:	62%

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

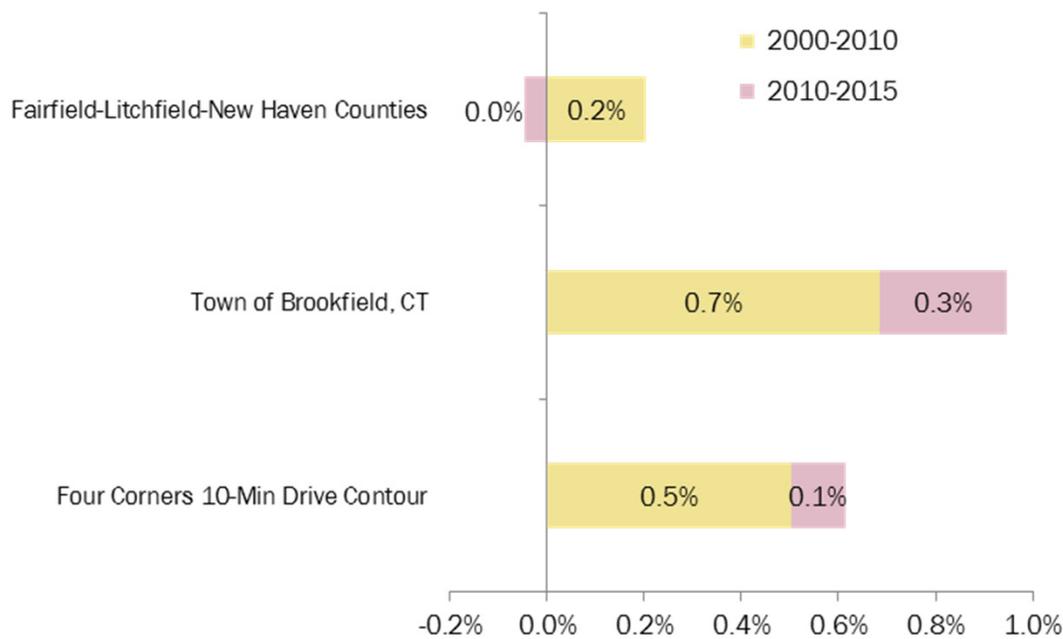
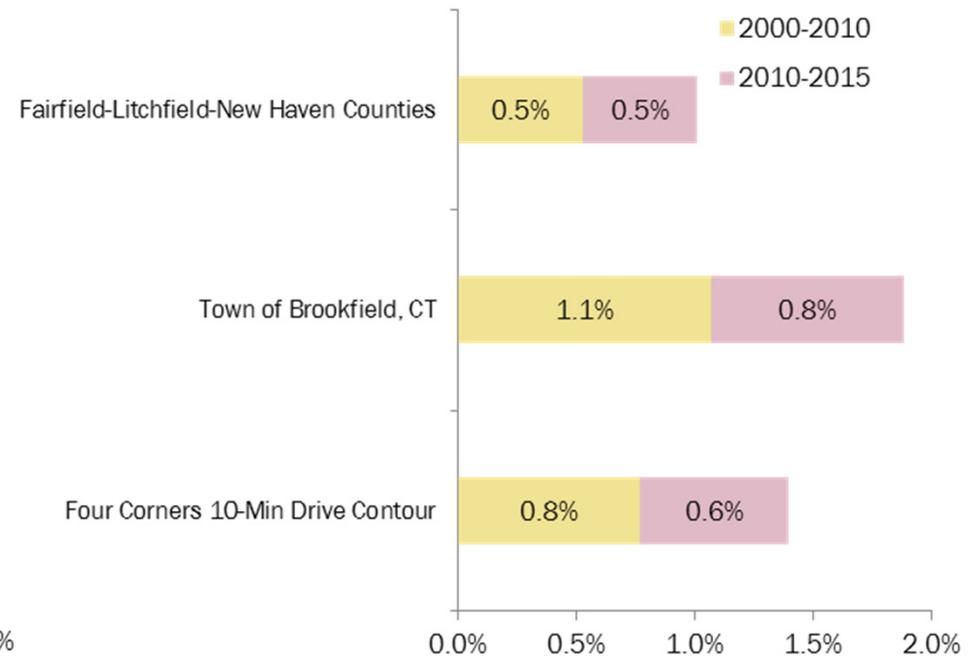


Figure A-3: Annualized Pct. Chg. in Non-Family Households

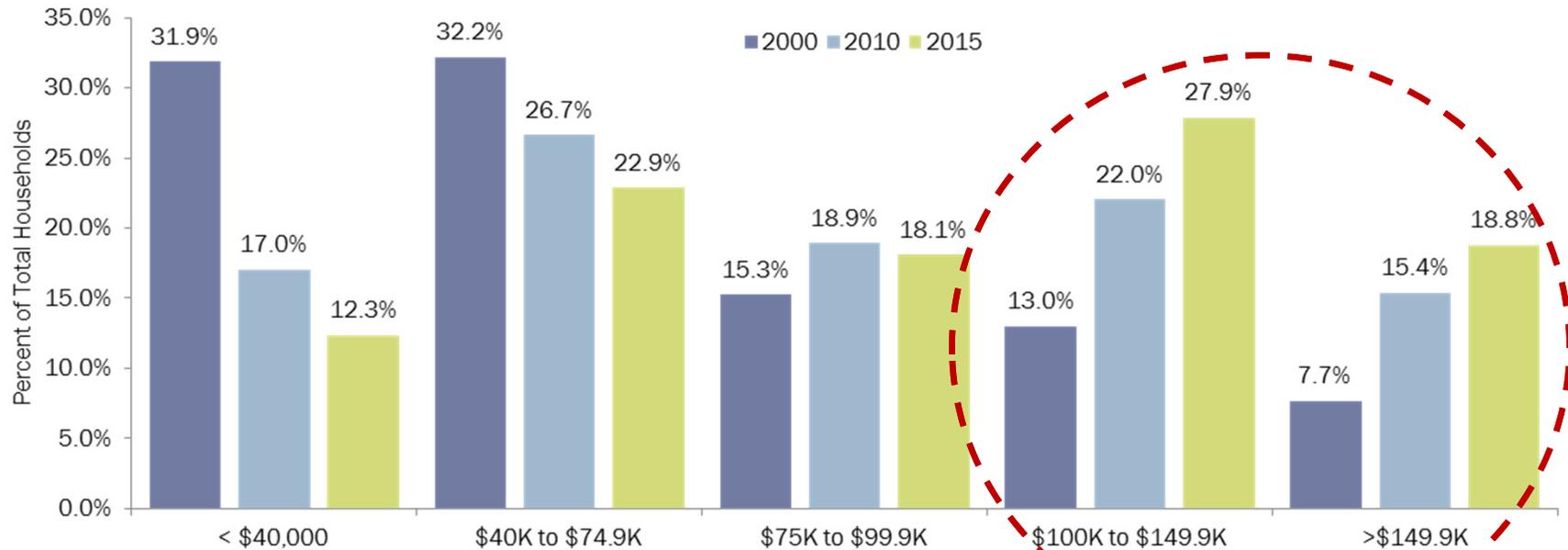


Source: US Census Bureau; Esri; Scan US; 4ward Planning LLC, 2012



Household Income

Figure A-4: Households by Income, Four Corners 10-minute Drive Contour



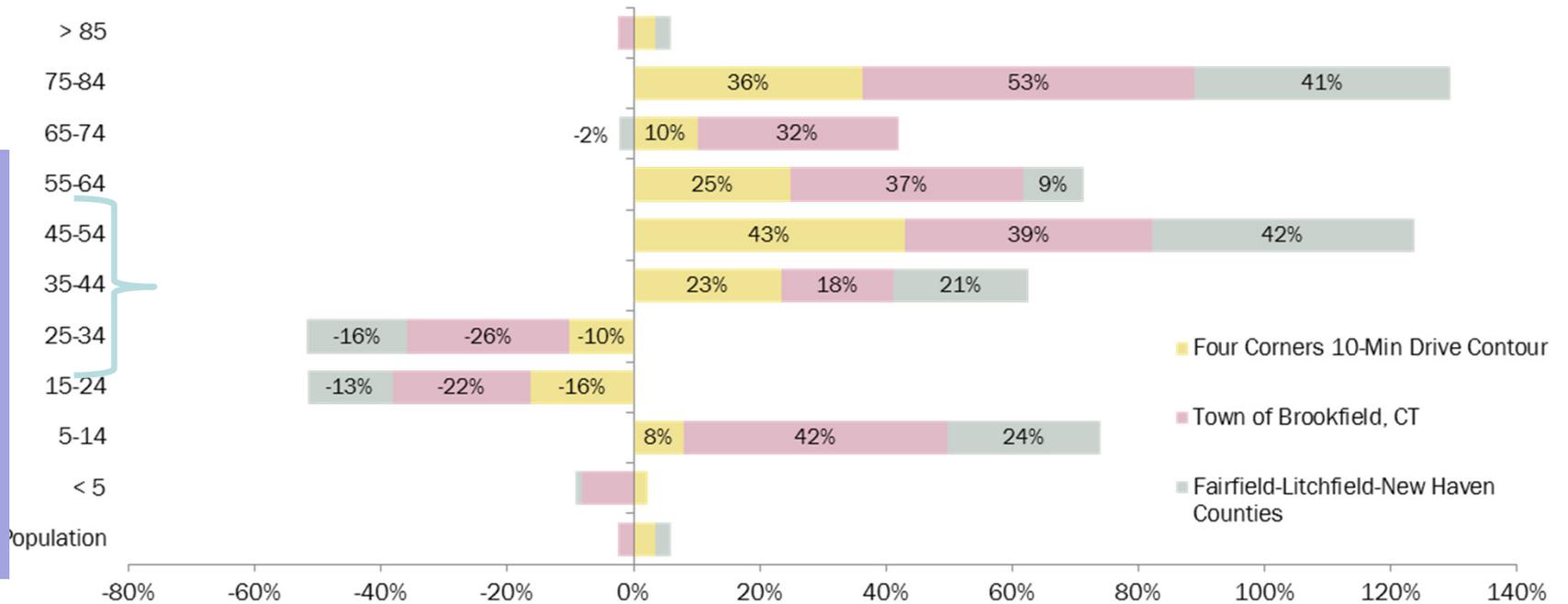
Steady increase of affluent households bodes well for new dining and specialty retail establishments.

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



Age

Figure A-14: Annualized Percentage Change in Population by Age Cohorts, 2000-2010



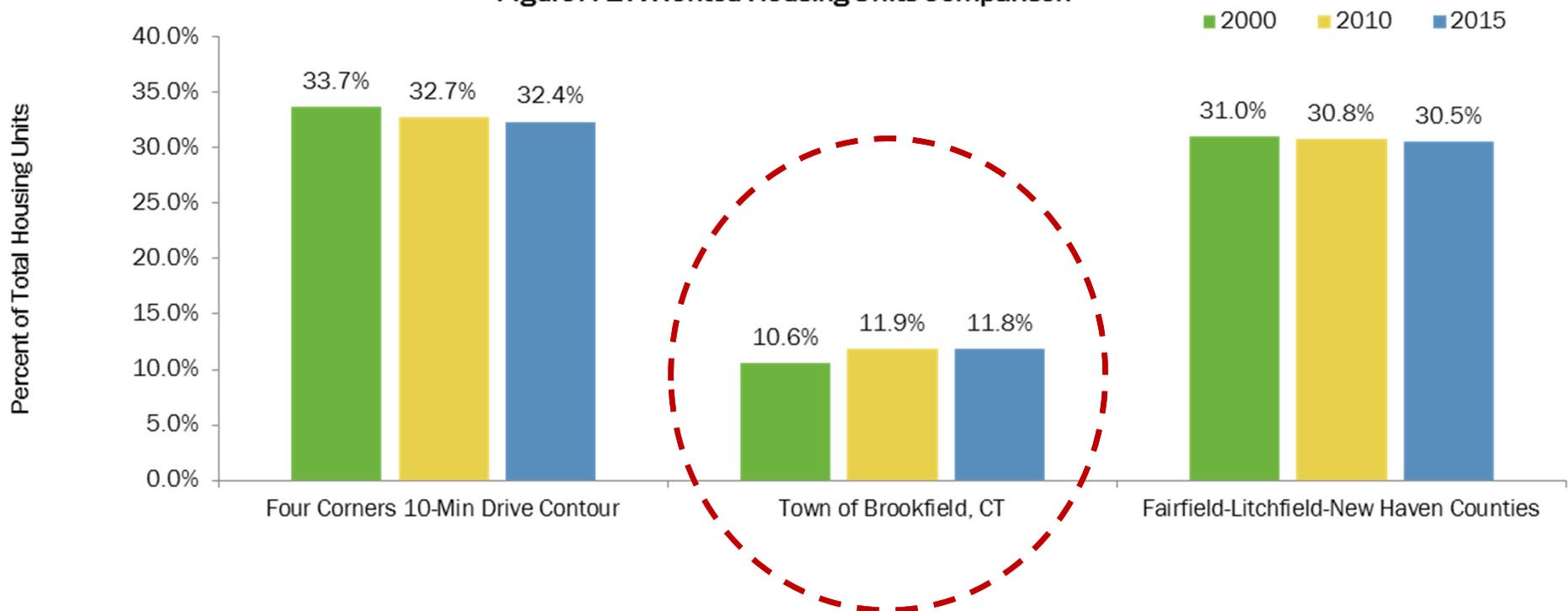
These age cohorts will greatly influence housing choice over the next decade.

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



Renter-Occupied Housing Trends

Figure A-17: Rented Housing Units Comparison



Source: US Census Bureau, Scan US; 4ward Planning LLC, 2011



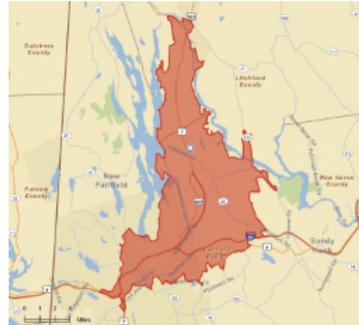
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Labor & Industry Analysis



Four Corners Brookfield Town Center Revitalization Plan

10-minute Driving
Contour from Four
Corners Retail Area



Total Primary Jobs: 34,018

Northwest CT
Workforce
Investment Area
(WIA)



Total Primary Jobs: 193,822

Fairfield, Litchfield
and New Haven
Counties



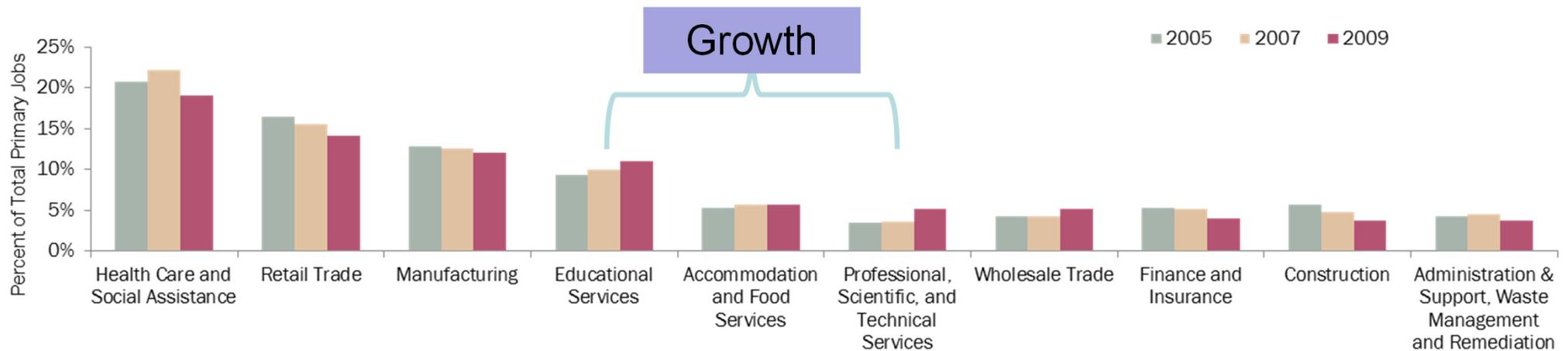
Total Primary Jobs: 754,944

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



Top Ten Industries by Employment Four Corners 10-min. Drive Contour

Figure B-2: Four Corners 10-minute Drive Contour Top Ten Industries by Percent of Total Employment



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



Four Corners
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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

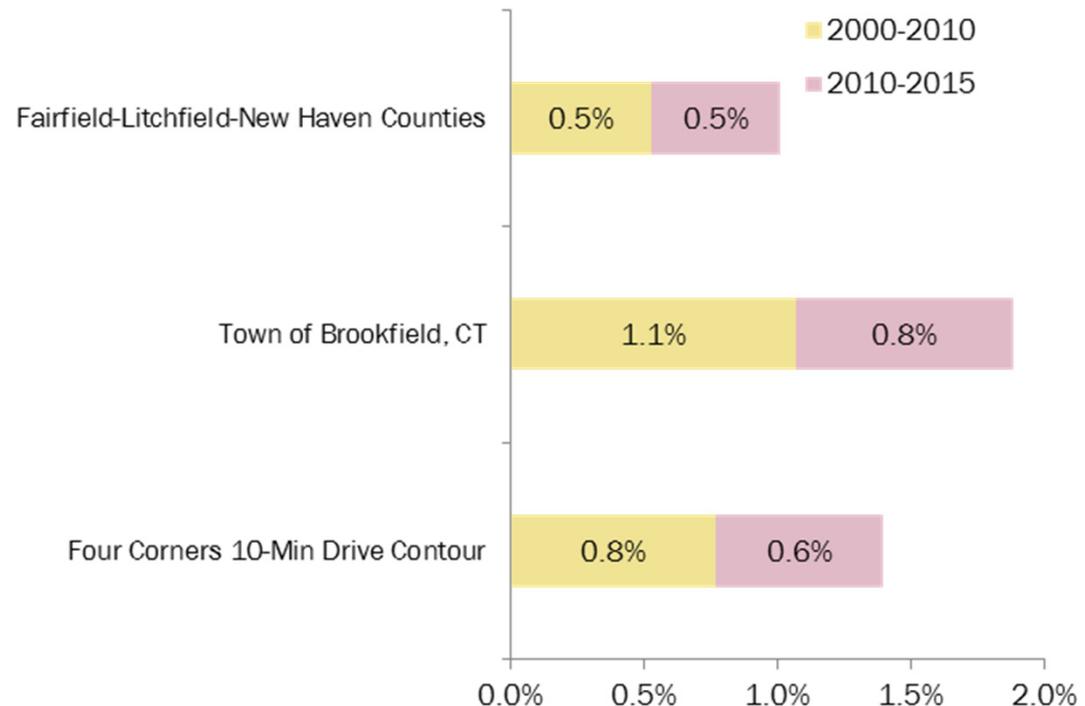
Sources: Trulia.com; Zillow.com; Informatics.com; 4ward Planning LLC, 2012



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





Four Corners Brookfield Town Center Revitalization Plan

Housing Unit Demand in Four Corner's 10-Minute Drive Contour:

Flat Household Growth Scenario

Note: Housing units are not additive, in this graphic.

Primary Market Area	Four Corners 10 Minute Drive Contour			
Growth Projection Scenarios	2011	2016	2021	2026
Scenario: Flat Annual Growth				
Population	65,843	65,843	65,843	65,843
Households	23,798	23,798	23,798	23,798
Owner Households	14,517	14,517	14,517	14,517
Renter Households	7,853	7,853	7,853	7,853
Employed within Four Corners Drive Contour (full- and part-time estimate)	34,702	36,472	38,332	40,288
Total Workers Living Outside of Four Corners 10-Minute Drive Contour	10,064	10,577	11,116	11,683
Housing Units	25,479			
Physically Obsolescent Units (esimate based on field observations and age of stock)	764			
New Units Delivered (based on report estimates)	-	-	-	-
Net Marketable Housing Units	24,715	24,467	24,223	23,981
Pent-Up Housing Unit Demand Estimate	1,006	1,058	1,112	1,168
Households	23,798	23,798	23,798	23,798
Estimated Total Housing Unit Demand	24,804	24,856	24,910	24,966
Add Average Number of Naturally Occuring Vacant Units	1,236	1,223	1,211	1,199
<i>Net Housing Unit Demand (Excess Units)</i>	<i>1,325</i>	<i>1,612</i>	<i>1,898</i>	<i>2,185</i>
Replacement Demand	255	247	245	242
Household Growth and Pent-Up Worker Demand	1,071	1,364	1,653	1,943
Demand - Owner-Occupied	809	983	1,158	1,333
Demand - Rental	437	532	626	721
Demand - One Bedroom (20%)	265	322	380	437
Demand - Two Bedroom (70%)	928	1,128	1,329	1,529
Demand - Three Bedroom or Greater (10%)	133	161	190	218
Demand - HH Income \$75,000 and Greater (15%)	199	242	285	328
Demand - HH Income \$40,000 to \$74,999 (15%)	199	242	285	328
Demand - HH Income \$39,999 and Less (70%)	928	1,128	1,329	1,529



Four Corners Brookfield Town Center Revitalization Plan

Housing Unit Demand in Four Corner's 10-Minute Drive Contour:

Modest Household Growth Scenario

Note: Housing units are not additive, in this graphic.

Primary Market Area	Four Corners 10-Minute Drive Contour			
Growth Projection Scenarios	2011	2016	2021	2026
Scenario: Modest Annual Growth				
Population	65,843	68,349	70,951	73,652
Households	23,798	24,704	25,644	26,621
Owner Households	14,517	15,069	15,643	16,239
Renter Households	7,853	8,152	8,463	8,785
Employed within Four Corners Drive Contour (full- and part-time estimate)	34,874	37,109	39,487	42,017
Total Workers Living Outside of Four Corners 10-Minute Drive Contour	10,113	10,761	11,451	12,185
Housing Units	25,479			
Physically Obsolescent Units (estimate based on field observations and age of stock)	764	-	-	-
New Units Delivered (based on report estimates)	-	-	-	-
Net Marketable Housing Units	24,715	24,467	24,223	23,981
Pent-Up Housing Unit Demand Estimate	1,011	1,076	1,145	1,218
Households	23,798	24,704	25,644	26,621
Estimated Total Housing Unit Demand	24,809	25,780	26,789	27,839
Add Average Number of Naturally Occurring Vacant Units	1,236	1,223	1,211	1,199
<i>Net Housing Unit Demand (Excess Units)</i>	1,330	2,536	3,778	5,057
Replacement Demand	255	247	245	242
Household Growth and Pent-Up Worker Demand	1,076	2,289	3,533	4,815
Demand - Owner-Occupied	812	1,547	2,304	3,085
Demand - Rental	439	837	1,247	1,669
Demand - One Bedroom (20%)	266	507	756	1,011
Demand - Two Bedroom (70%)	931	1,775	2,644	3,540
Demand - Three Bedroom or Greater (10%)	133	254	378	506
Demand - HH Income \$75,000 and Greater (15%)	200	380	567	759
Demand - HH Income \$40,000 to \$74,999 (15%)	200	380	567	759
Demand - HH Income \$39,999 and Less (70%)	931	1,775	2,644	3,540



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



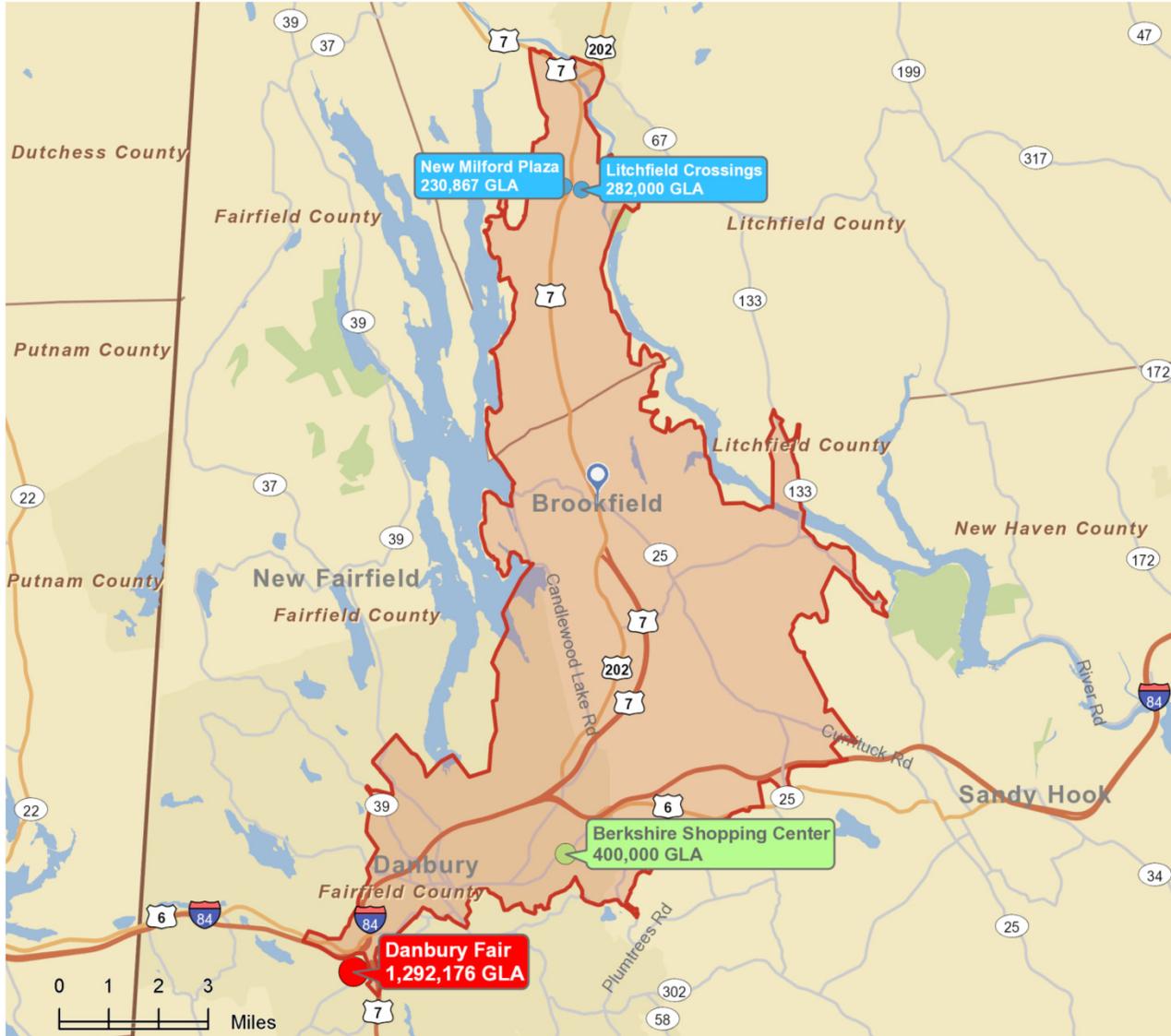
The local region is sufficiently retailed

<u>Center Name</u>	<u>City</u>	<u>State</u>	<u>GLA</u>	<u>Year Opened</u>	<u>Classification</u>
Berkshire Shopping Center	Danbury	Connecticut	400,000 sqft.	1961	Community Center
Danbury Fair	Danbury	Connecticut	1,292,176 sqft.	1986	Super-Regional Center
Hawley Lane Plaza	Trumbull	Connecticut	340,430 sqft.	1998	Community Center
Ridgeway Shopping Center	Stamford	Connecticut	369,563 sqft.	1947	Community Center
Stamford Town Center	Stamford	Connecticut	772,000 sqft.	1982	Regional Center
Stop & Shop Plaza	New Fairfield	Connecticut	320,000 sqft.	1997	Community Center
The Dock	Stratford	Connecticut	273,000 sqft.	1970	Community Center
Walmart Center	Norwalk	Connecticut	250,000 sqft.	1951	Community Center
Waypointe	Norwalk	Connecticut	535,000 sqft.	2013	Lifestyle/Specialty Center
Westfield Trumbull	Trumbull	Connecticut	1,124,382 sqft.	1964	Super-Regional Center
Total Square Footage			5,676,551 sqft.		

Additional large-scale retail (big box comparison retail) is planned for development within the next three years.



Four Corners Brookfield Town Center Revitalization Plan



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.



Unit Capture within Four Corners

Land-Use Categories	Modest HH Growth Scenario	Flat HH Growth Scenario
RESIDENTIAL UNITS	254	161
RETAIL (SQUARE FOOTAGE)	15,000	15,000
OFFICE (SQUARE FOOTAGE)	10,000	10,000
DINING (SQUARE FOOTAGE)	6,000	6,000



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Project Findings – Transportation System





More Parking Observations

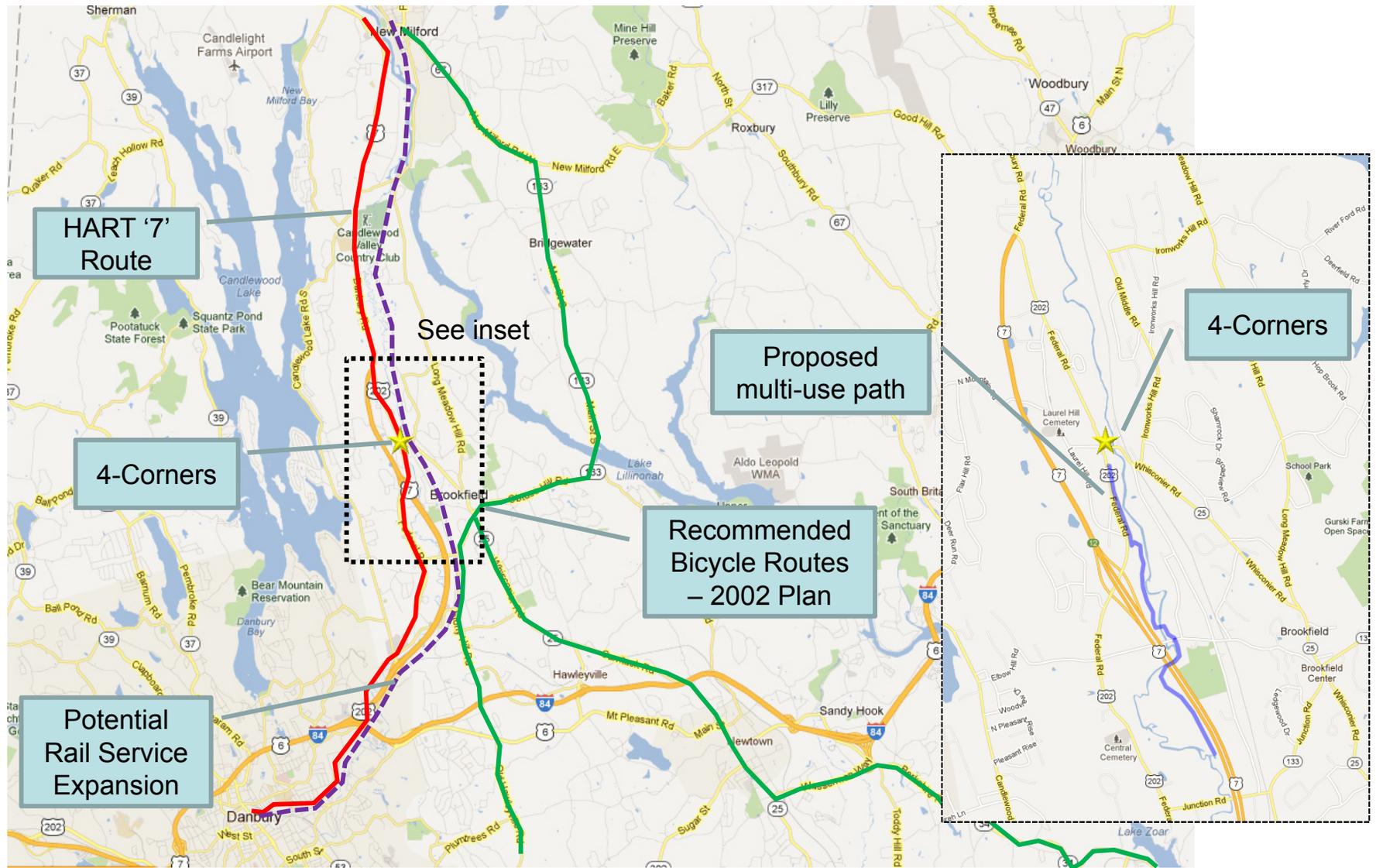
Available parking is mostly underutilized

- Observed utilization 20% to 80%
- Average utilization about 40%
(468 in use – 702 not in use)
- Some uses require parking during different times of the day (e.g. evening –vs- daytime)





System Overview - Connectivity





Four Corners
Brookfield Town Center Revitalization Plan

Geometrics



Functional Classification

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

FUNCTIONAL CLASSIFICATION LEGEND

URBANIZED AREA



Principal Arterial

- Interstate



- Other Expwy



- Other



Minor Arterial



Collector



Local





Four Corners Brookfield Town Center Revitalization Plan



Lane width



Vertical



Horizontal



Curb return





Angle of Intersection

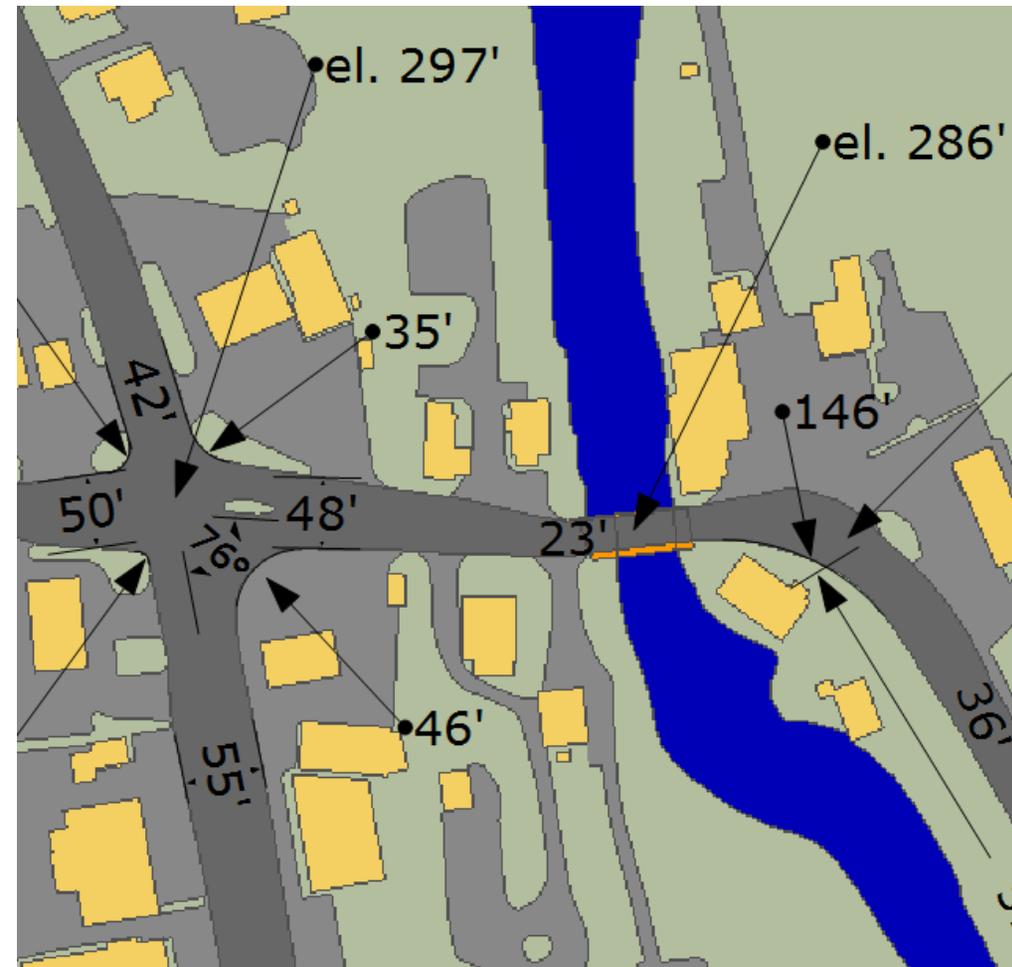
Crossing roadways should intersect at 90 degrees, if possible, and at no less than 75 degrees.

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



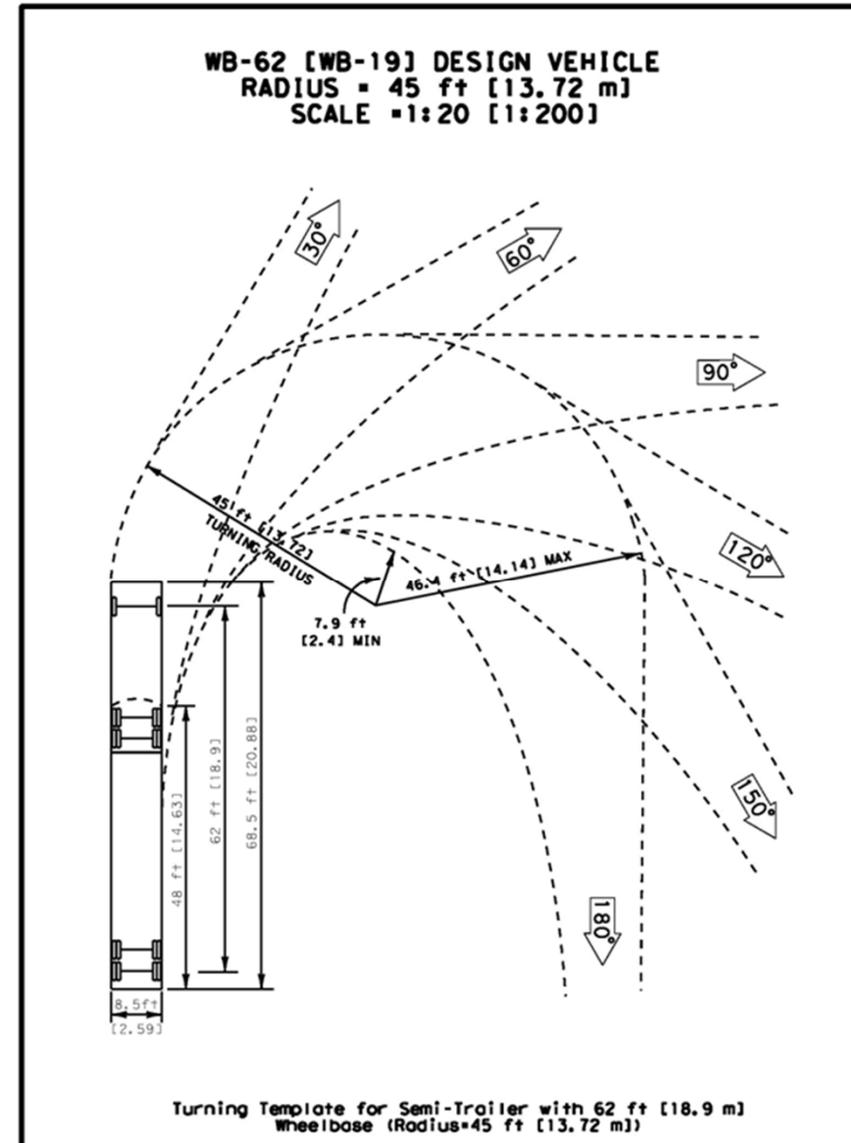


Geometry is influenced by the Design Vehicle

For Turn Made From	For Turn Made Onto	Minimum Suggested Design Vehicle	Turning Radii (ft)
Freeway Ramp	All	Moving WB-50*	60
Arterial	Arterial	Moving WB-50	60
	Collector	Moving SU	60
	Local	Moving SU	60
Collector	Arterial	Moving SU	60
	Collector	Moving SU	60
	Local	Moving SU	60
Local	Arterial	Stopped SU	45
	Collector	Stopped SU	45
	Local	Stopped SU	45

*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

Rural Highways	Design Vehicle
Interstate/freeway ramp terminals	WB-50
Primary arterials	WB-50
Minor arterials	WB-50 OR WB-40
Collectors	SU-30
Local Streets	SU-30

Operating Characteristics of Intersection Corner Radii

Corner Radius	Operatoinal Characteristics
<5	Not appropriate for even P-design vehicles
10	Crawl-speed turn for P vehicles
20-30	Low speed turn for P vehicles; crawl-speed turn for SU vehicles with minor lane encroachment
40	Moderate speed turn for P vehicles; low-speed turn for SU vehicles with minor lane encroachment
50	Moderate-speed turns for all vehicles up to WB-50





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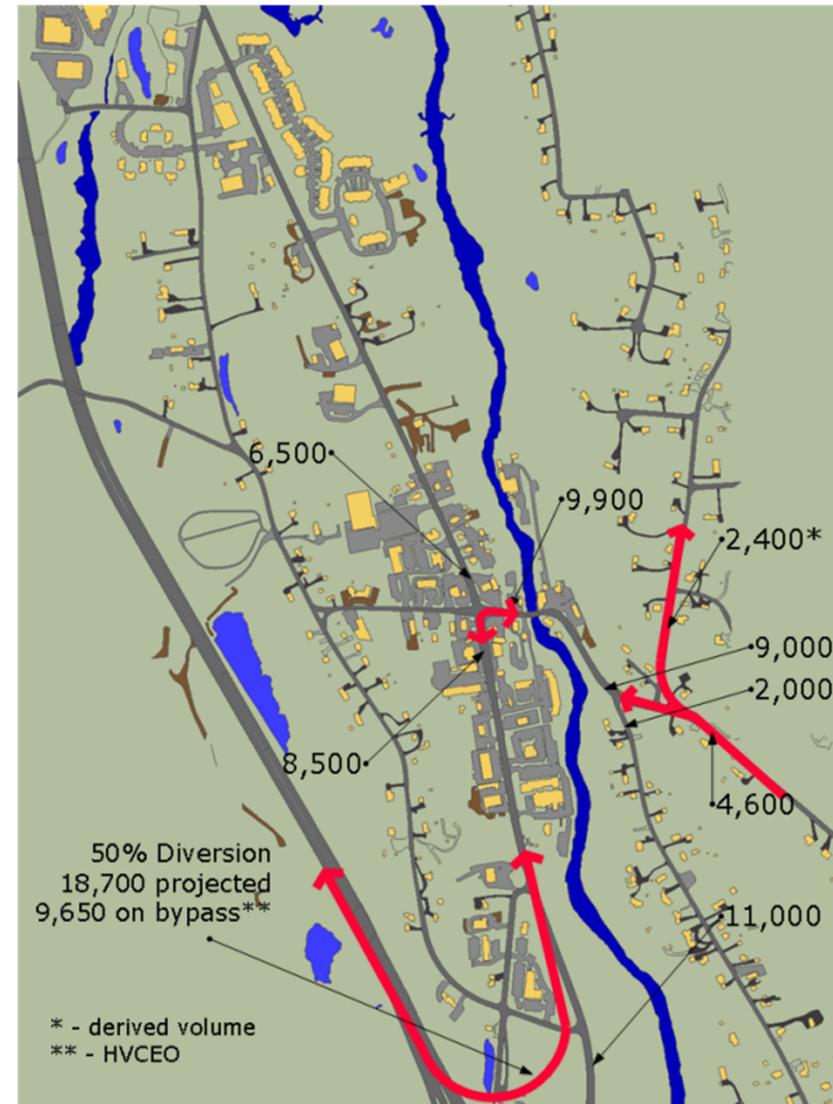
Traffic



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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



2010 CTDOT Traffic Volumes



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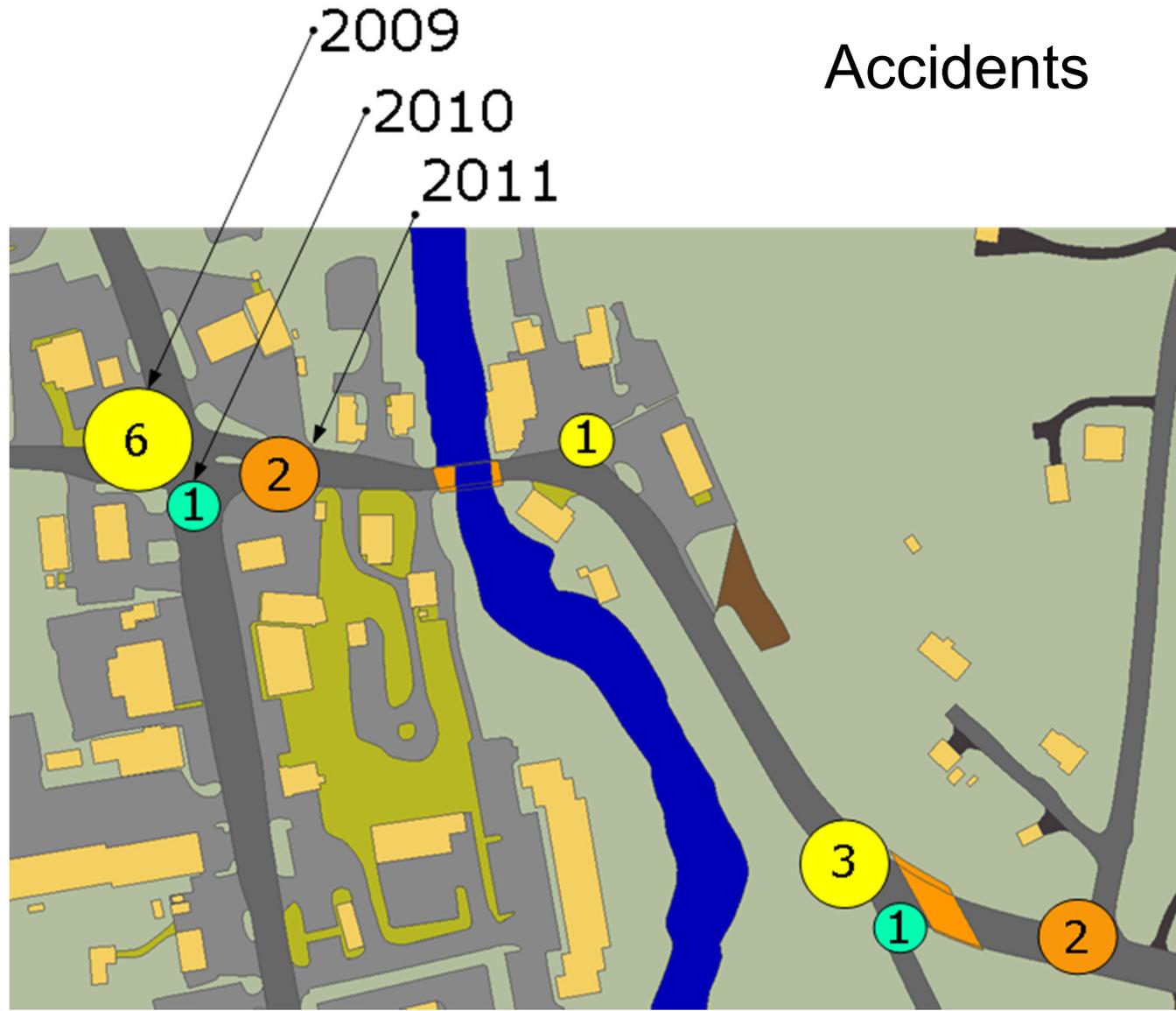
Safety



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Accidents





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Curb-cut density

11/2250'

40/2170'

2/2100'





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Bicycle and Pedestrian Conditions

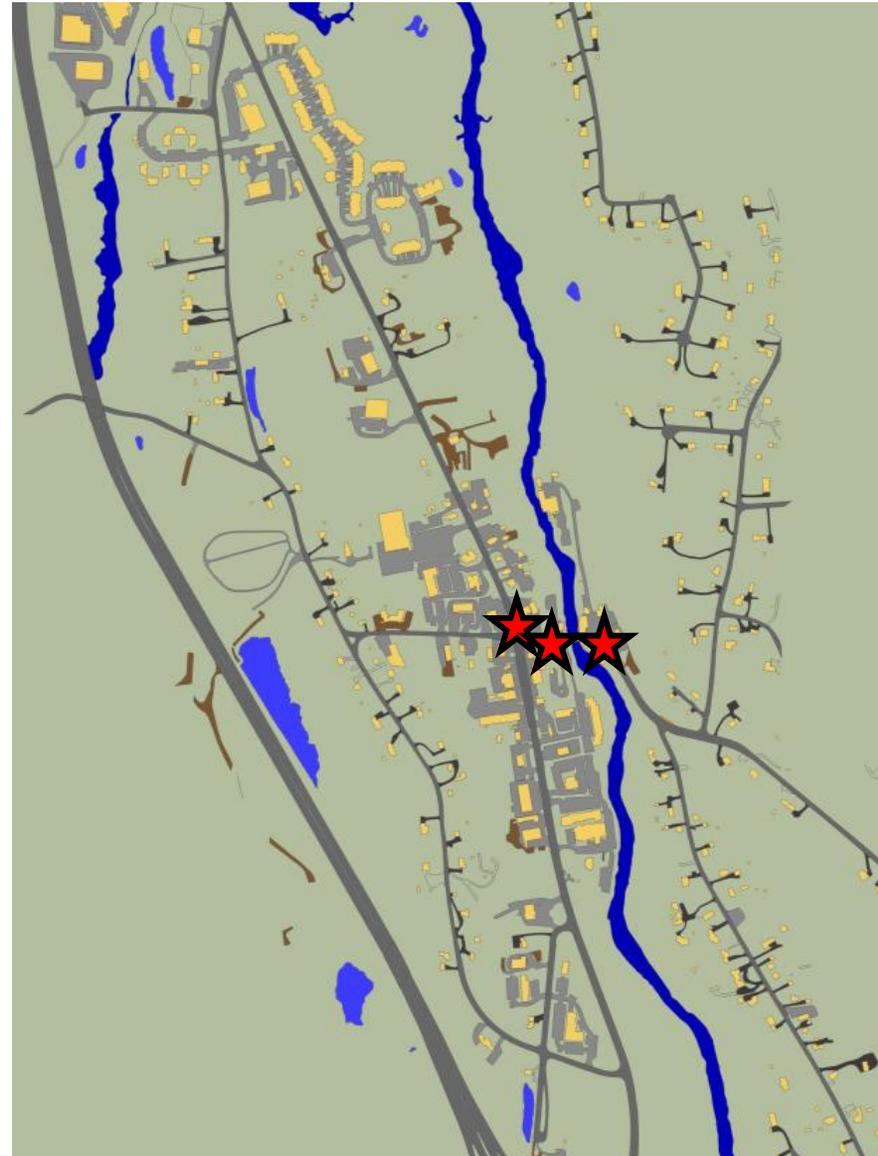


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