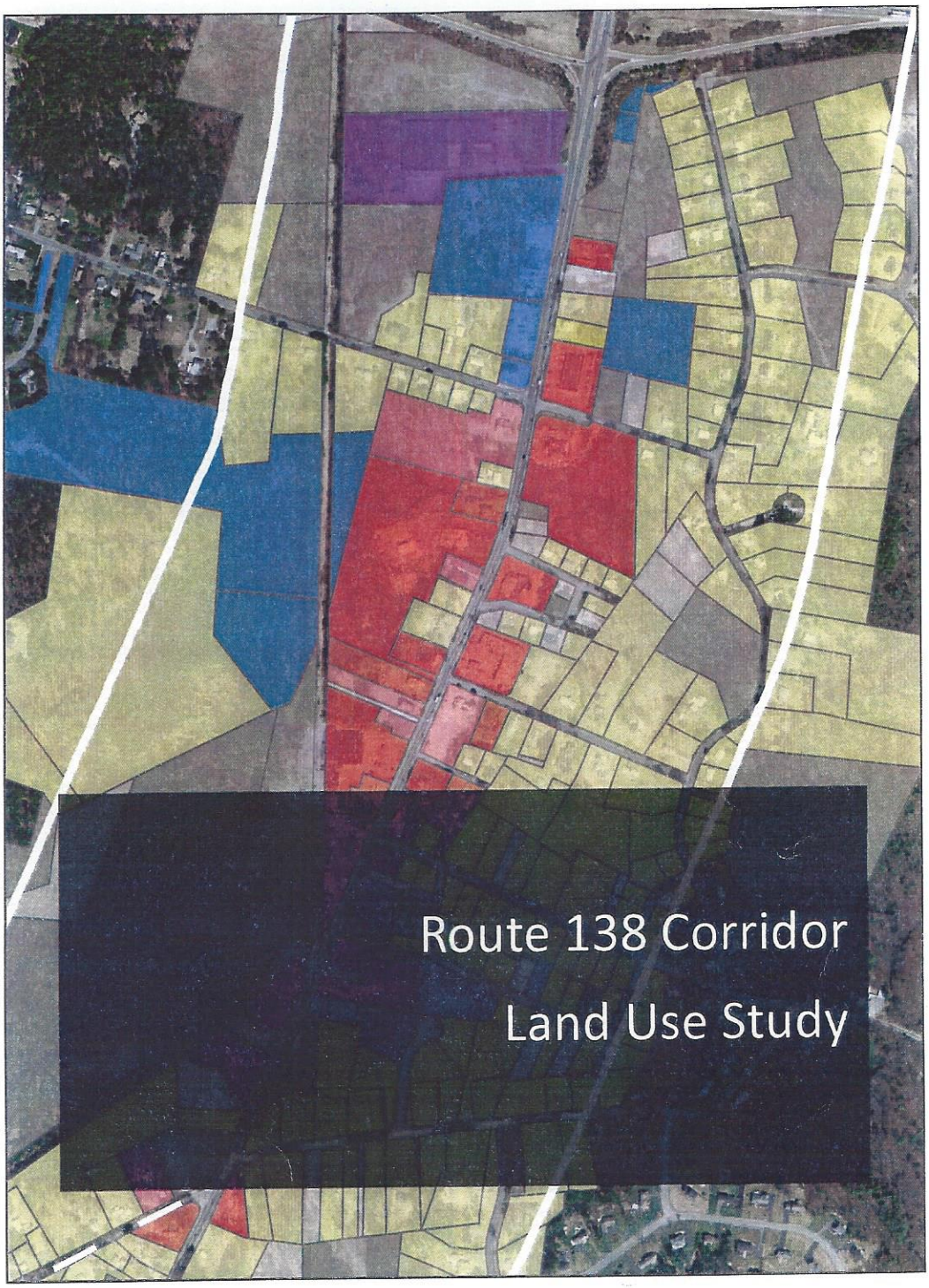

Route 138 Corridor Land Use Study

Town of Raynham, Massachusetts
SRPEDD
June 2012

TOWN OF RAYNHAM, MA

Planning Board:
Daniel Andrade, Chairman
P. Burke Fountain, Vice-Chairman
Chris Gallagher, Clerk
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The data presented in this report comes from the following sources: U.S. Fish and Wildlife Service, MassGIS, MassDOT, Massachusetts Department of Revenue, Town of Raynham Assessors Office, Applied Geographics, InfoGroup, and SRPEDD. The maps and diagrams for this report are for planning purposes only. Any questions regarding the document or its content can be addressed to SRPEDD at gking@srpedd.org.

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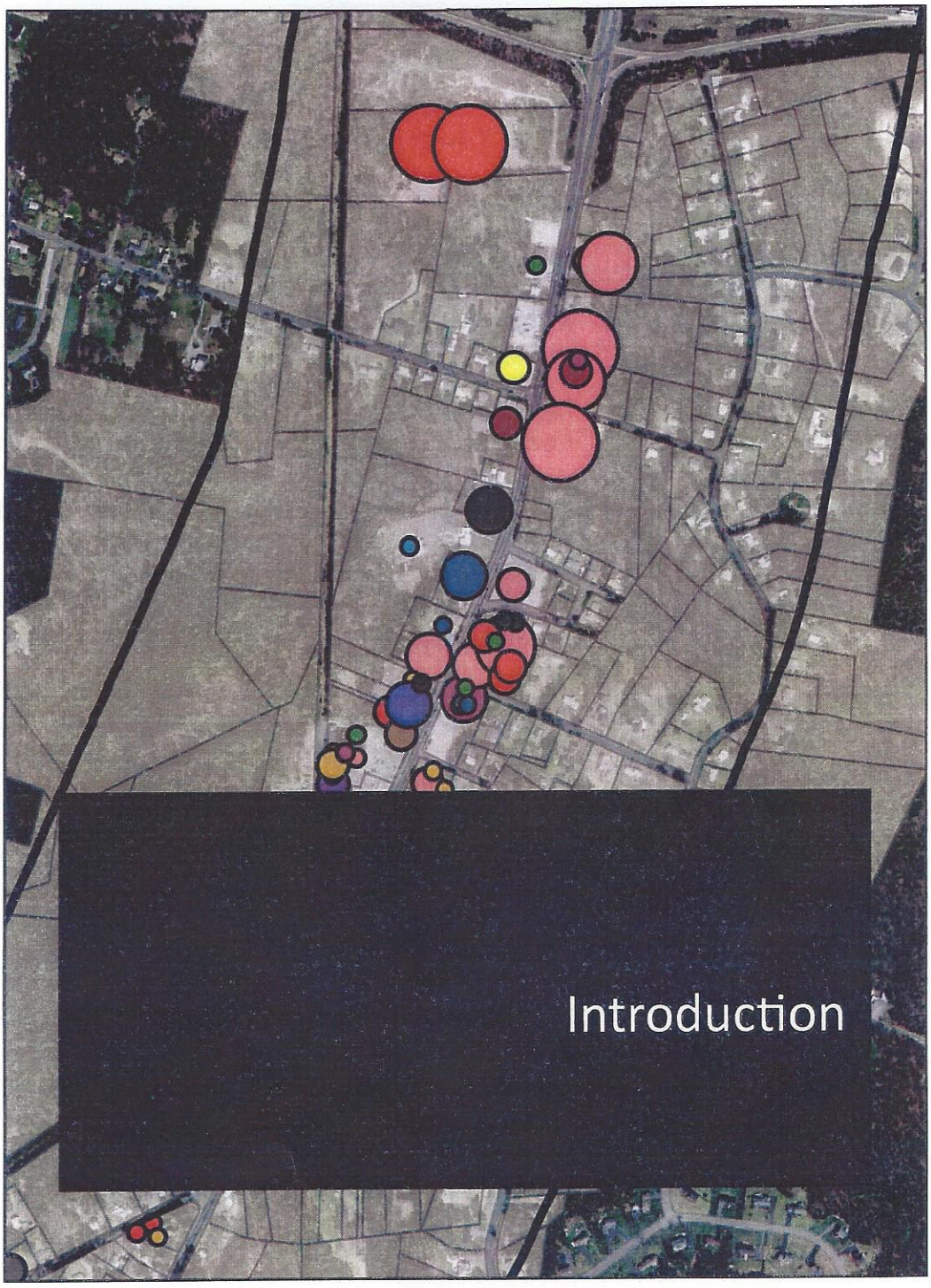


Introduction

PROJECT INTRODUCTION

This study benefited from direct input by Raynham officials, an eight-person project Steering Committee made up of a balance of business and neighborhood representatives, and the general public. This document (1) presents the study area's Existing Conditions and synthesizes those findings in order to understand the study area's possibilities and limitations, (2) identifies "probable" and "possible" Future Scenarios for the corridor, and (3) designates Planning Tools that position the study area for the future while respecting the parameters of its present character.

The Steering Committee unanimously voted to recommend this study and its findings and proposals to the Planning Board and Board of Selectment. It is the Committee's hope that this document will be used to facilitate and inform Town decisions as it plans for a Route 138 Corridor that balances the needs and wishes of residents, businesses, and Town government.

The Town of Raynham is located in Southeastern Massachusetts. It is bordered by the Towns of Easton and West Bridgewater to the north, the Towns of Bridgewater and Middleborough to the east, and the City of Taunton to the south and west.

Raynham is served by Interstate 495, Routes 24 and 44 (both principal arterial roadways), Route 104, and Route 138 - a portion of which is the focus of this study. The Forge River flows through the central part of Raynham and the Taunton River forms the Town's southern boundary with Taunton.

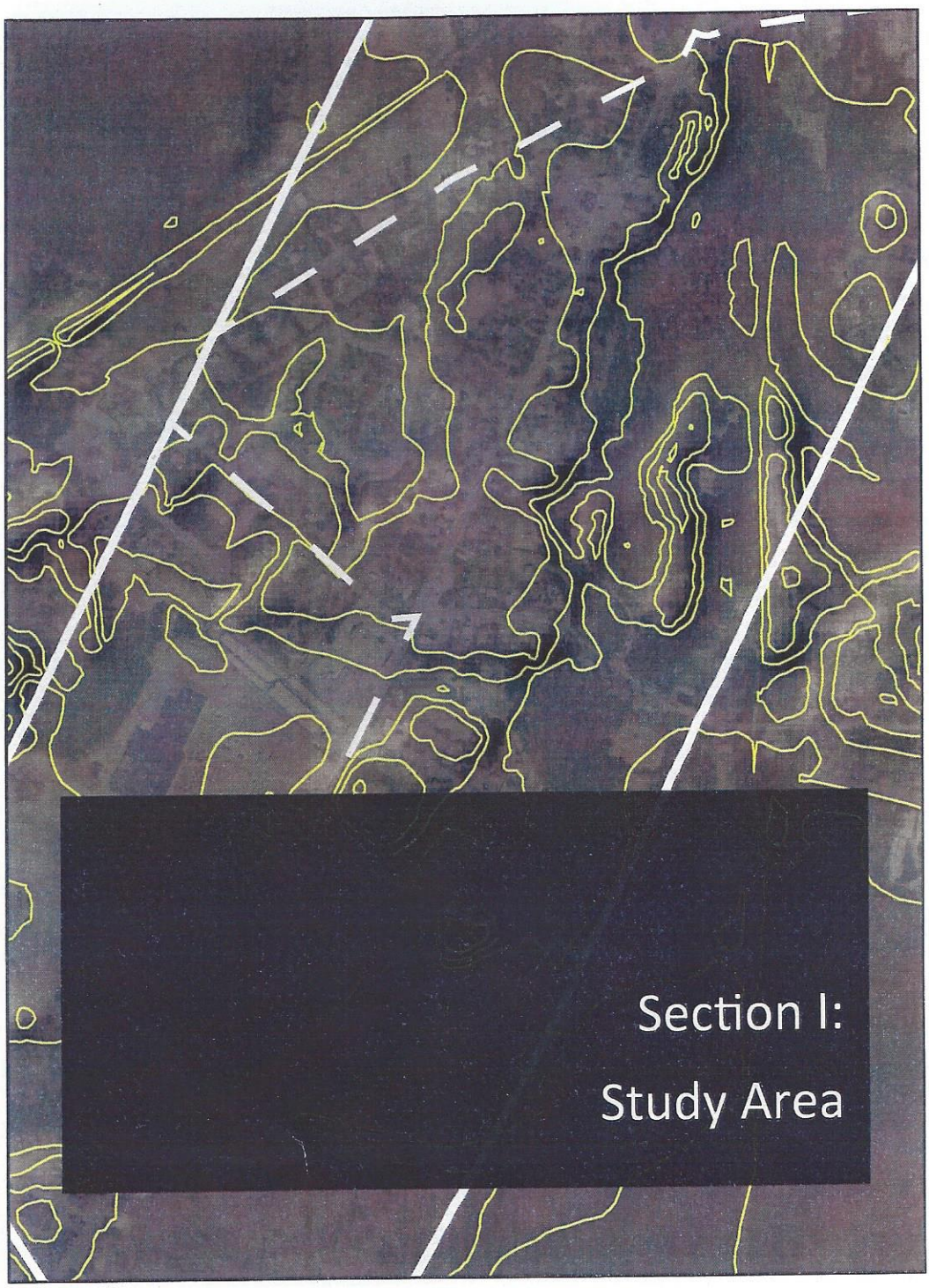
Between Census 2000 and Census 2010 Raynham's population grew 14% (from 11,739 to 13,383 residents). This growth rate significantly outpaced that of the Commonwealth as a whole, which grew at a rate of 3.1%.

Like many other towns across Massachusetts, Raynham has transitioned from agricultural and industrial beginnings to a more suburban character over the last 50 years. ("Once a rural hamlet, the town is fast becoming a suburban bedroom community . . . because of its location at the crossroads of Route 24, 44 & I-495 [as well as Route 138 & 104], it is also a commercial center in its own right. [Town website].") This process, along with potential regional projects such as the South Coast Rail project and casino facilities, bring common town planning challenges along with them: land use changes, business and neighborhood growth, and pressures on infrastructure and environmental resources.

The Town of Raynham requested that SRPEDD undertake this *Route 138 Corridor Land Use Study* to examine these very challenges - challenges that are currently affecting the neighborhoods, businesses, infrastructure, and natural resources along Broadway stretching from I-495 to the Taunton line.

This study benefited from direct input by Raynham officials, an eight-person project Steering Committee made up of a balance of business and neighborhood representatives, and the general public. This document (1) presents the study area's *Existing Conditions* and synthesizes those findings in order to understand the study area's possibilities and limitations, (2) identifies "probable" and "possible" *Future Scenarios* for the corridor, and (3) designates *Planning Tools* that position the study area for the future while respecting the parameters of its present character.

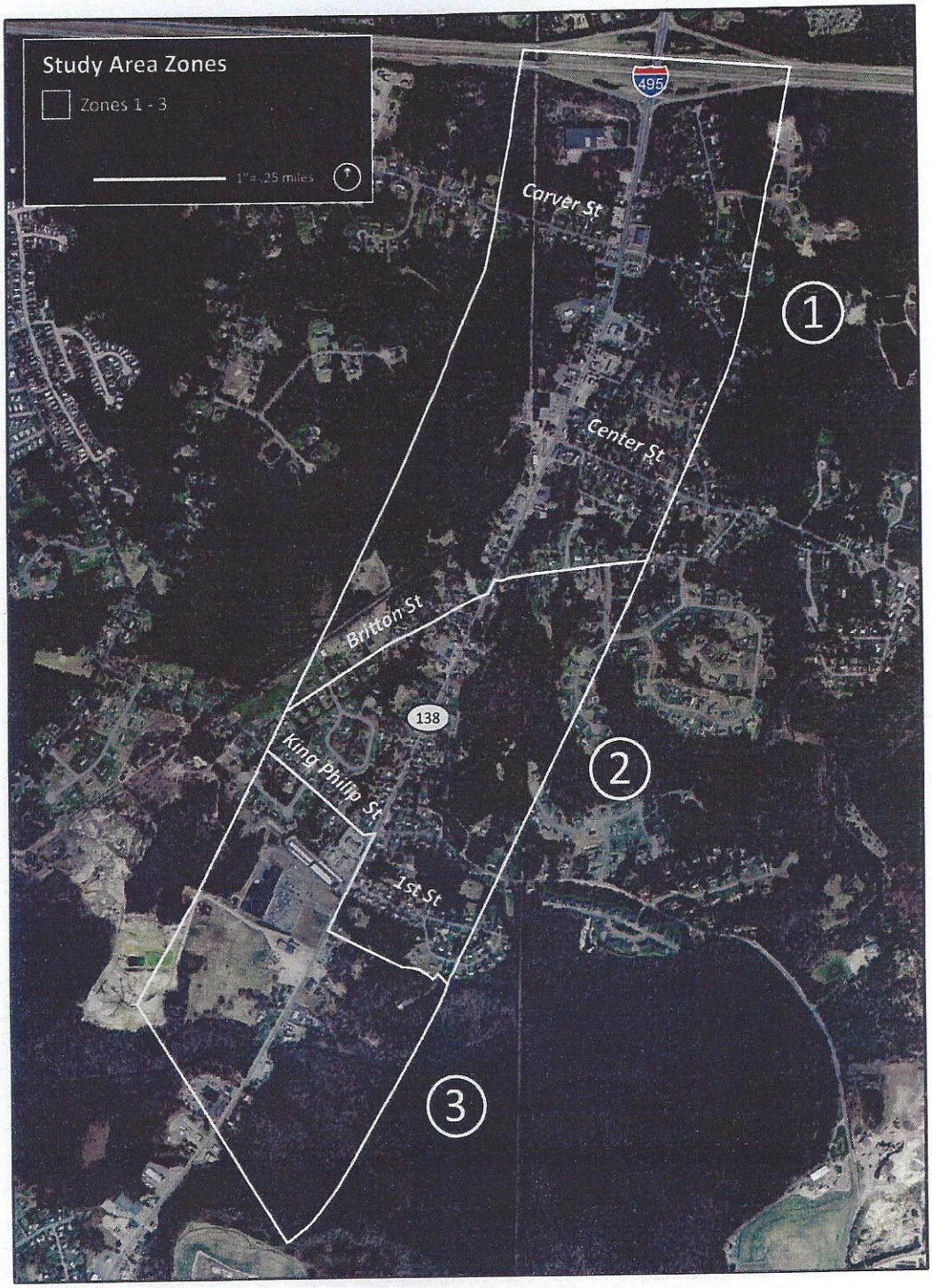
The Steering Committee unanimously voted to recommend this study and its findings and proposals to the Planning Board and Board of Selectmen. It is the Committee's hope that this document will be used to facilitate and inform Town decisions as it plans for a Route 138 Corridor that balances the needs and wishes of residents, businesses, and Town government.



Section I:
Study Area

Figure I-1: Study Area

The study area boundary extends .25 miles from either side of the Broadway center line and covers an area of 695 acres or 1.09 square miles. SRPEDD staff divided the study area into three "Zones" using land use patterns, boundaries (such as roadways and property lines), and site visits. Any property intersecting the study area boundary, however slightly, is considered to be the part of the study area.



Zone 1: I-495 south to Britton Street

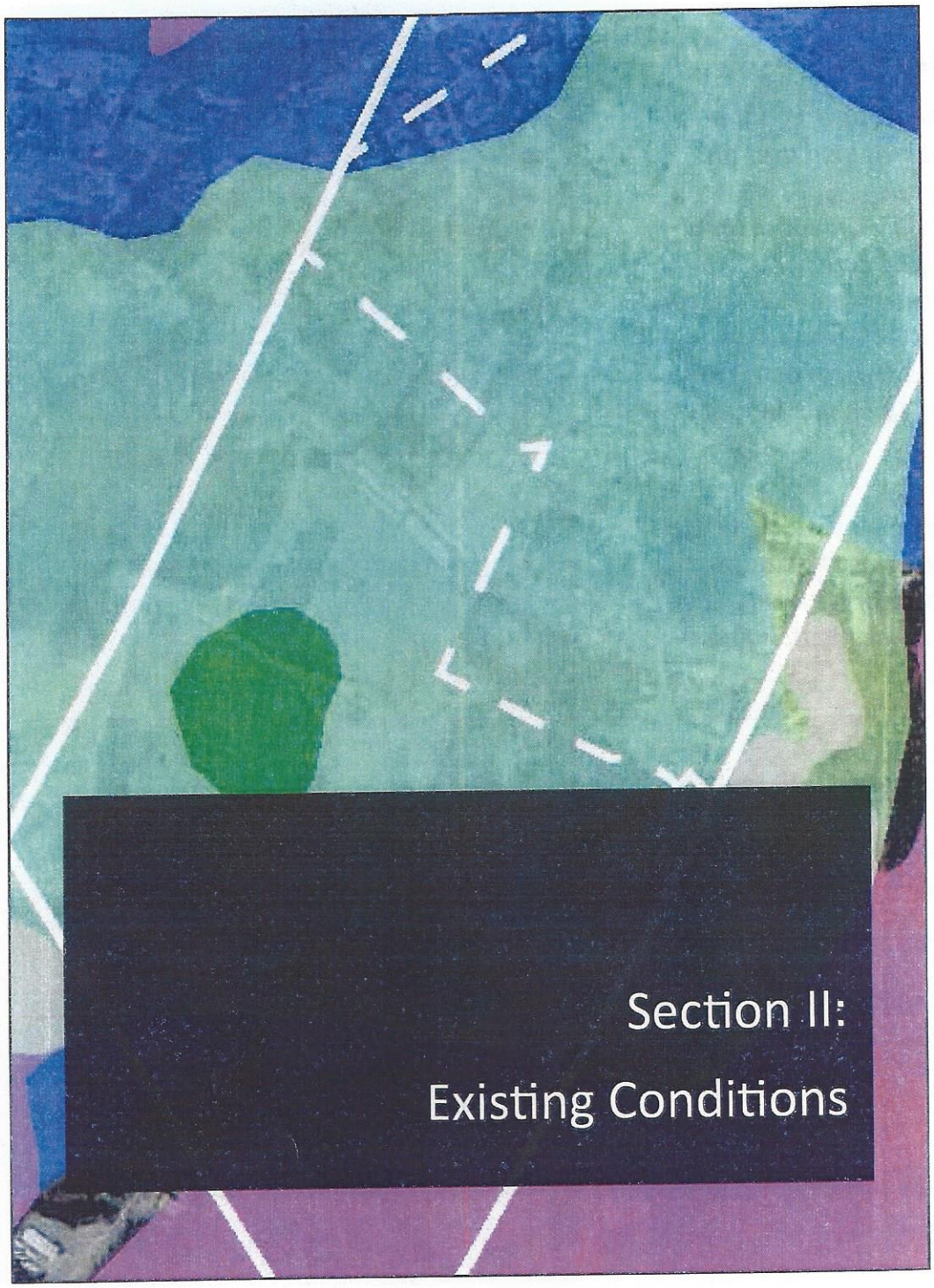
Zone 2: Britton Street south to King Philip Street, down the Route 138 center line, and south of the 1st Street neighborhood (following parcel boundaries).

Zone 3: Southern boundary of Zone 2 to the Taunton City line.

The RTE 138 (Broadway) study area is centered on a 2.15-mile roadway segment stretching from the Raynham-Taunton line to Interstate 495; RTE 138 is an urban minor arterial roadway segment as defined by MassDOT. The study area boundary extends .25 miles from either side of the Broadway center line and covers an area of 695 acres or 1.09 square miles. Any property intersecting the study area boundary, however slightly, is considered to be the part of the study area.

For the purposes of the *Existing Conditions* analysis, SRPEDD staff divided the study area into three "Zones" using land use patterns, boundaries (such as roadways and property lines), and site visits. Zone 1 has an area of 347 acres (49.9% of the study area). Zone 2 has an area of 177 acres (25.4%). Zone 3 has an area of 172 acres (24.7%).

The next section of this document explores the sixteen (16) categories of analysis Zone-by-Zone, presenting a brief text description of the main findings ("Take-aways") in each category. Combined with direct input from the project Steering Committee and the public, these *Existing Conditions* serve as the foundation for creating *Future Scenarios* and identifying *Planning Tools* for the three Zones and the study area as a whole.



Section II:
Existing Conditions

Figure II-1: Land Use

The study area's top four (4) land uses are Residences (344.9 acres or 40.7%), Vacant land (155.4 acres or 18.4%), Institutional (137.2 Acres or 16.3%), and Retail (131.0 acres or 15.5%). See Appendix for tables.

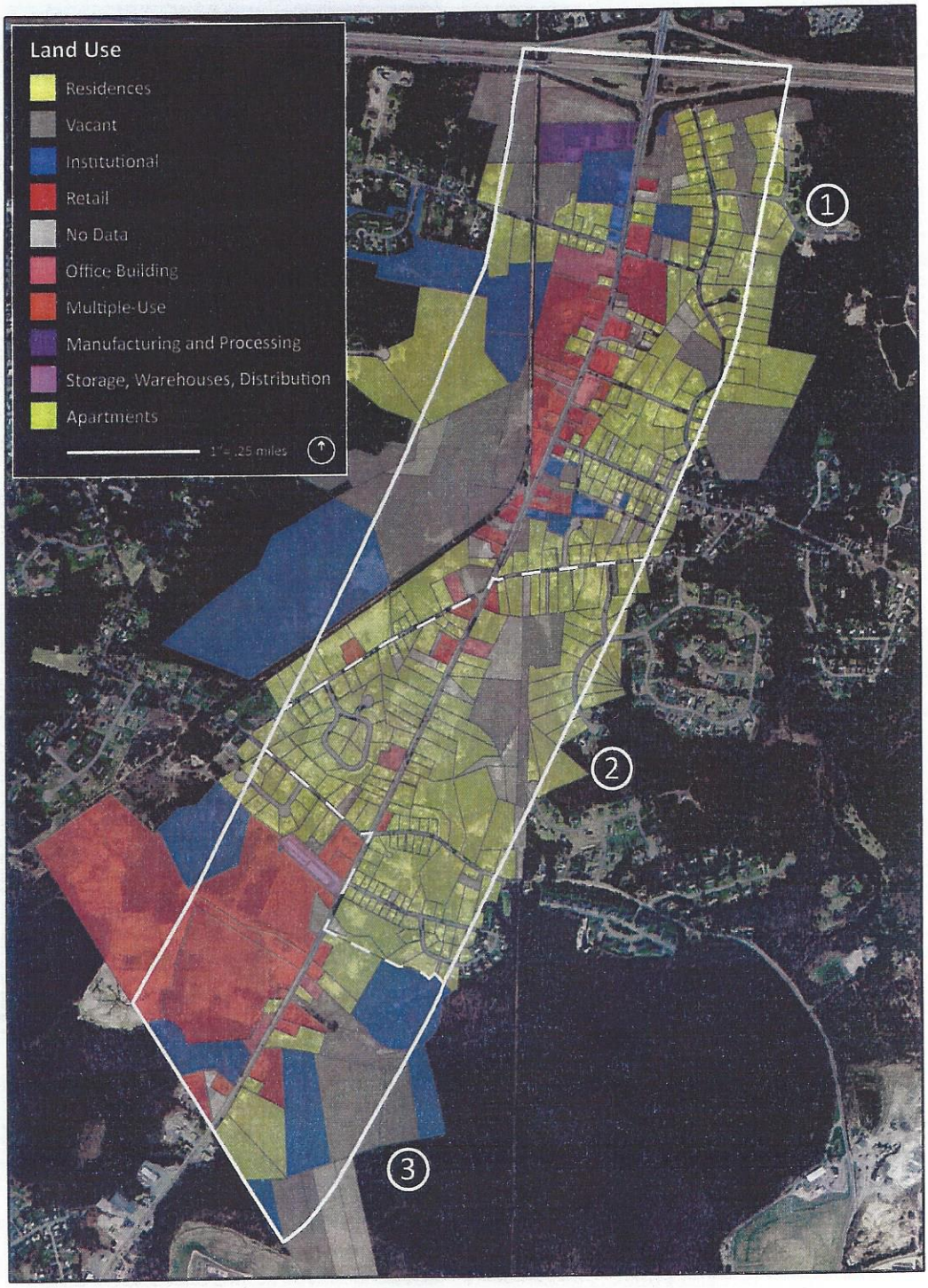
Note: Any property that intesects the study area boundary is included in the Existing Conditions analysis.

Take-aways:

Zone 1: Medium intensity mixed-use corridor

Zone 2: Neighborhood

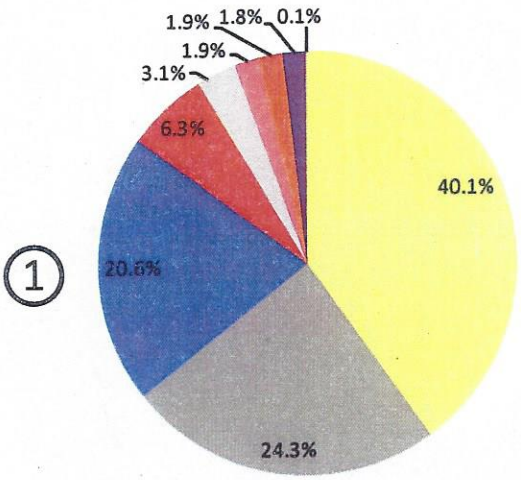
Zone 3: Medium intensity retail, working district



Zone 1: (Medium intensity mixed-use corridor) This area's predominant land uses are residential (40.1%), vacant (24.3%), and institutional (20.6%). Despite this, retail (6.3%), office (1.9%), and multiple-use (1.9%) areas along Broadway give Zone 1 its medium intensity mixed use corridor character.

Zone 2: (Neighborhood) Residences constitute the vast majority of uses (81.0%) in this area and provide it with its neighborhood feel, even with the presence of Broadway, an "urban minor arterial" roadway, at its center.

Zone 3: (Medium intensity retail, working district) Zone 3 is characterized by the Market Basket plaza, storage facilities, John Deere, and a light quarry/construction operation, pictured in red on the west side of RTE 138. With retail the predominant use (41.0%) and the arrival of the Wal-Mart store in 2014, Zone 3 is transitioning to a higher intensity retail district.



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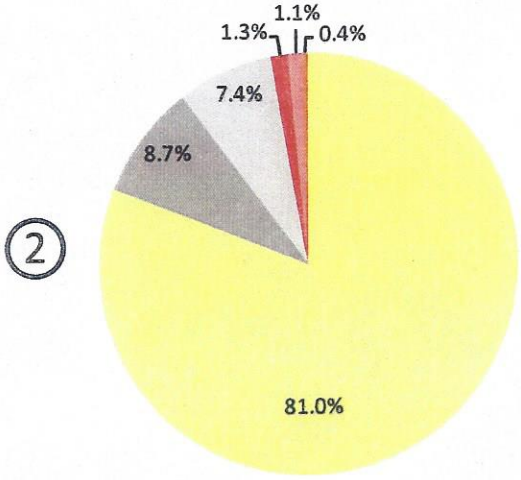

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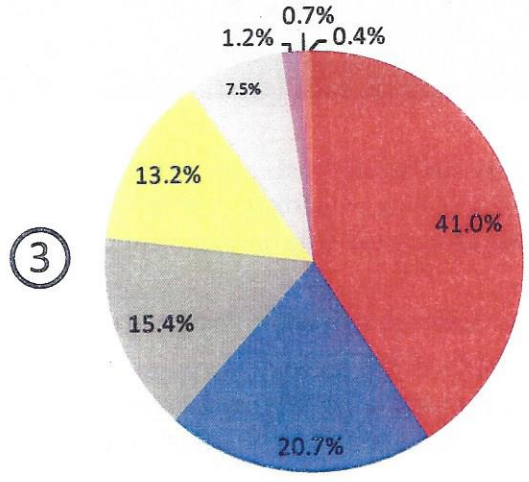

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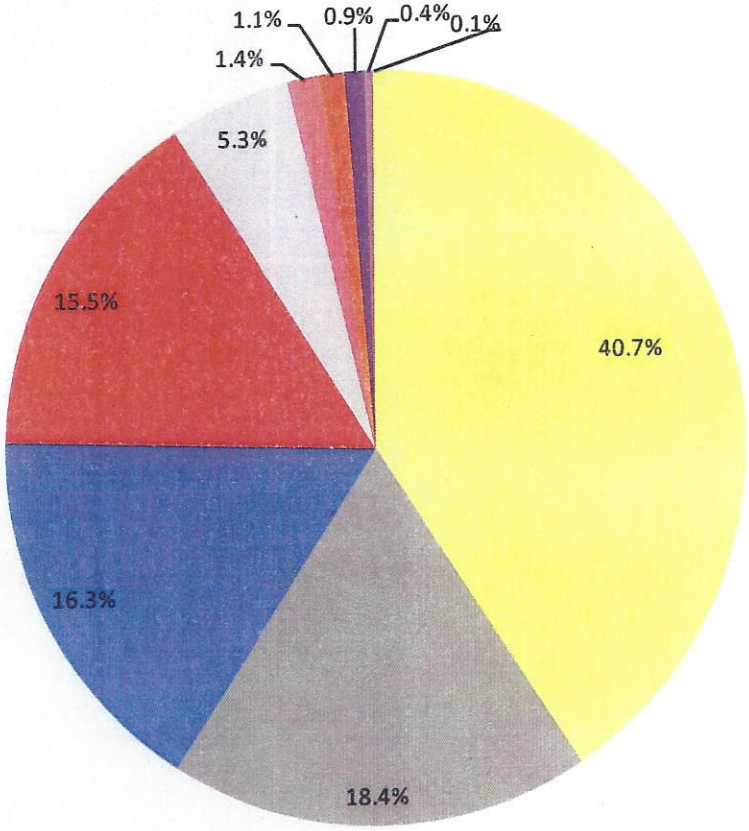


All

Tables available in Appendix

Land Use

- Residences
- Vacant
- Institutional
- Retail
- No Data
- Office Building
- Multiple-Use
- Manufacturing and Processing
- Storage, Warehouses, Distribution
- Apartments

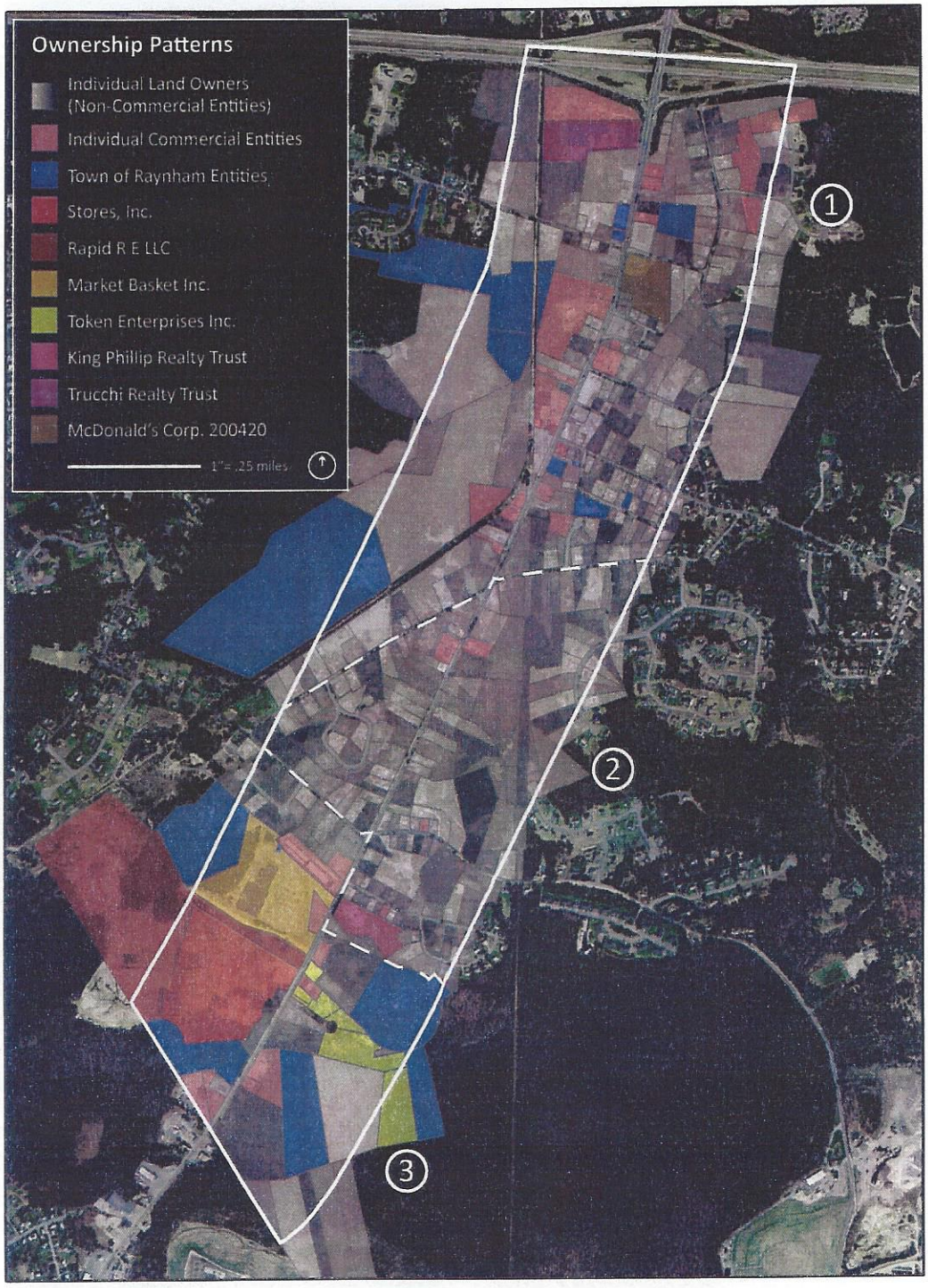
Figure II-2: Ownership Patterns

Take-aways:

Zone 1: Patchwork of commercial and non-commercial entities

Zone 2: Numerous homeowners

Zone 3: Large, non-residential holdings



Zone 1: (Patchwork of commercial and non-commercial entities) Several individual real estate trusts own parcels along Broadway. There is also a patchwork of individual (mostly residential) land owners holding property beyond the main corridor. This ownership pattern is typical of the classic low density, low intensity commercial strip development pattern approaching a major interstate interchange.

Zone 2: (Numerous homeowners) The ownership pattern in Zone 2 is largely a checkerboard of non-commercial entities with small land holdings. Very few commercial entities own property in this area, even along Broadway.

Zone 3: (Large, non-residential holdings) Real estate trusts and commercial and institutional entities own several large properties and a few smaller holdings throughout the entire Zone 3 area (that is to say, larger, non-residential property types extend beyond those located immediately along RTE 138).

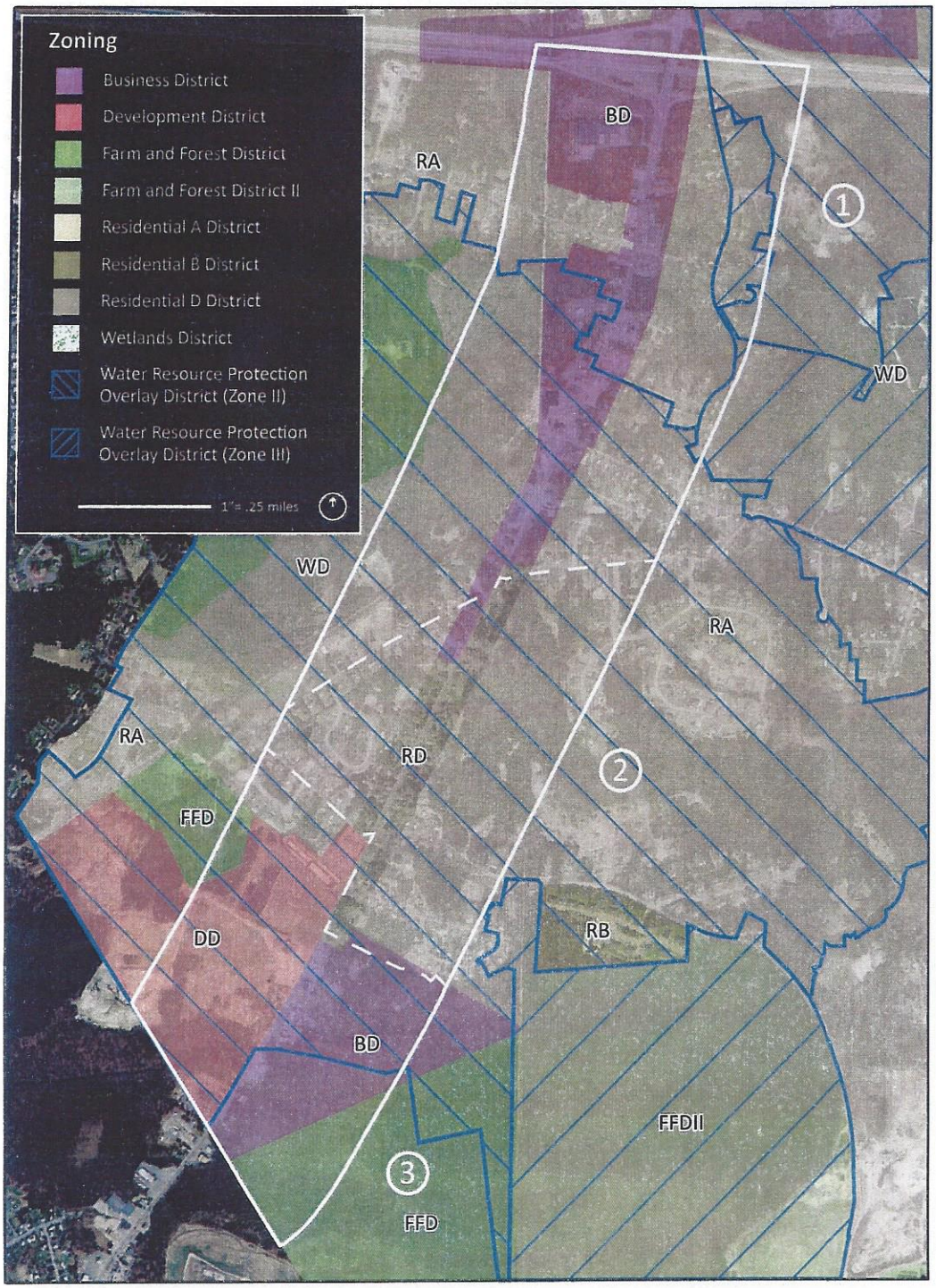


Figure II-3: Zoning

Take-aways:

Zone 1: Business corridor; Residential margins

Zone 2: Residential

Zone 3: Business area, Farm and Forest protection at margins

Note: Zone II and Zone III Water Resource Protection Overlay (WRPO) districts are present in the study area. These overlays can impose additional regulations on uses. The purpose of WRPOs is to protect the public health of the residents of the Town of Raynham from contamination of existing and potential public groundwater supplies.

Zone 1: (Business corridor; Residential interior) The Residential A (RA) district is the base zoning district in the town, allowing fairly low intensity residential, religious, educational, municipal, hospital, and agricultural uses by right; RA covers most of Zone 1. The Business District (BD) corridor surrounding RTE 138, itself, accounts for the more diverse and higher intensity uses adjacent to the main roadway segment; RA uses (except subdivisions) are also permitted in BD areas, allowing for the area's mixed-use character. Zone II and Zone III Water Resource Protection Overlays (WRPO) are also present.

Zone 2: (Residential) RA zoning covers the vast majority of Zone 2, with the exception of a Residential D (RD) corridor surrounding Broadway. RD permits all the uses in RA zones, but also allows select low intensity home office and professional uses enumerated in Article 4.1.4 of the Raynham Zoning Bylaws. A small "sliver" of BD zoning extends south from Zone 1 on the west side of Broadway allowing for the "Flying Dog" restaurant location (see Firms analysis, next page). A Zone II WRPO covers the entirety of Zone 2.

Zone 3: (Business area, Farm and Forest protection at margins) BD and Designated Development District (DD) are the primary zoning regulations affecting Zone 3 and permitting its higher intensity uses. A Zone II WRPO covers most of Zone 3.

Figure II-4: Firms by Sector and Number of Employees

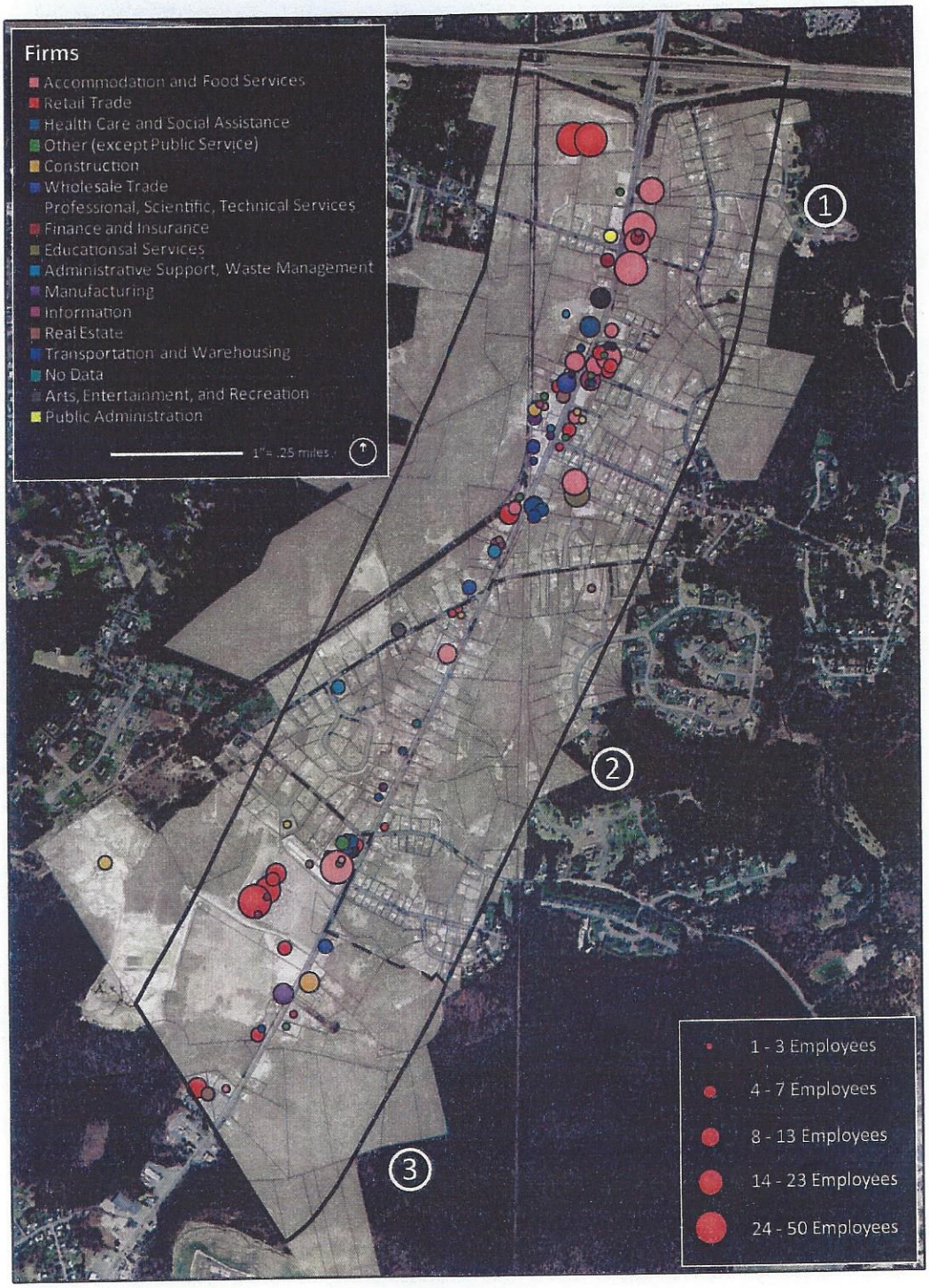
The study area's top four (4) firm types according to NAICS 2-Digit Codes and in terms of number of employees are: Accommodation and Food Services (264 employees or 34.4% of the 768 total jobs in the study area), Retail Trade (225 employees or 29.3%), Health Care and Social Assistance (50 employees or 6.5%), and Other (except Public Service; 29 employees or 3.8%). See Appendix for Tables.

Take-aways:

Zone 1: Mid-size to large-size service firms

Zone 2: Home offices

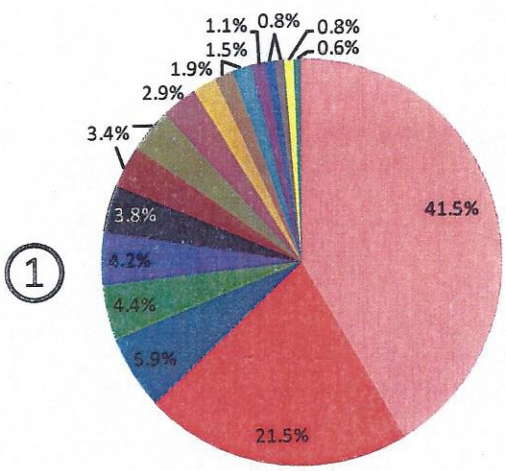
Zone 3: Mid-size retail firms



Zone 1: (Mid-size to large-size service firms) Zone 1's business profile is consistent with its land use and ownership profile: the area is characterized by mid-sized firms representing the Accommodation and Food Services sector (13 firms, 218 employees, 41.5% of Zone 1 employment) and Retail Trade sector (14 firms, 113 employees, 21.5% of Zone 1 employment). These sectors average 16.8 and 8.1 employees per firm, respectively. Secondary clusters of Health Care and Social Assistance firms and Wholesale Trade firms are also present. There are 525 total jobs in Zone 1 (68.4% of the study area total).

Zone 2: (Home offices) Zone 2 has a small number of firms (11) and employees (37) - only 4.8% of the jobs in the study area. Its largest firm (12), the "Flying Dog" restaurant, recently changed ownership and has closed/reopened several times in the recent past. Most other firms employ 1-3 people and are based out of residences or converted homes.

Zone 3: (Mid-size retail firms) Zone 3 has ten (10) Retail Trade firms and three (3) Accommodation and Food Services firms averaging 10.5 employees and 11.3 employees, respectively. These businesses (Market Basket, CVS, Dunkin Donuts, Payless Shoes, etc.) represent a combined 67.5% of Zone 3's employment. Secondary Health Care and Social Assistance and Construction firms are also present. Zone 3 has a total of 206 jobs, or 26.8% of the total in the study area.



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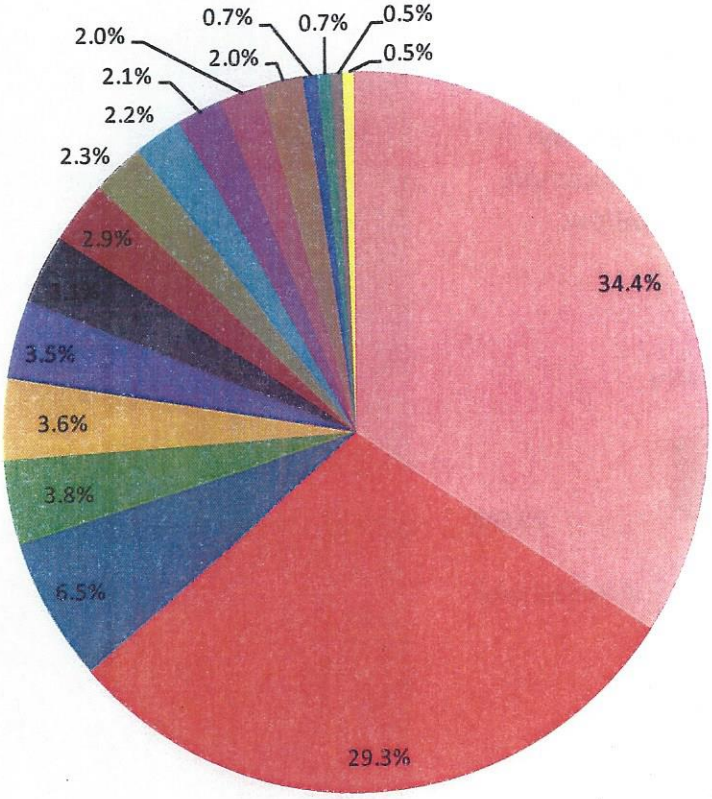

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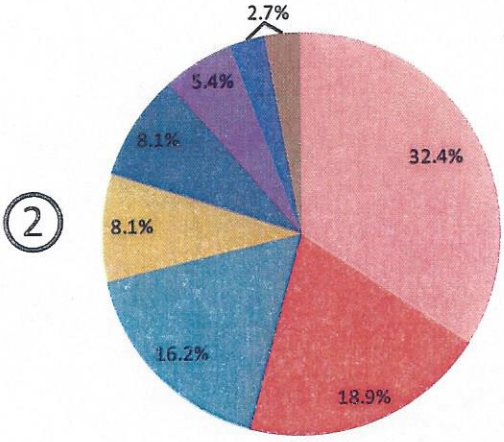

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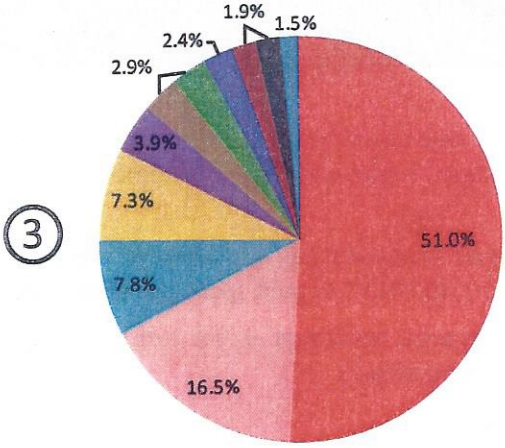
Tables available in Appendix



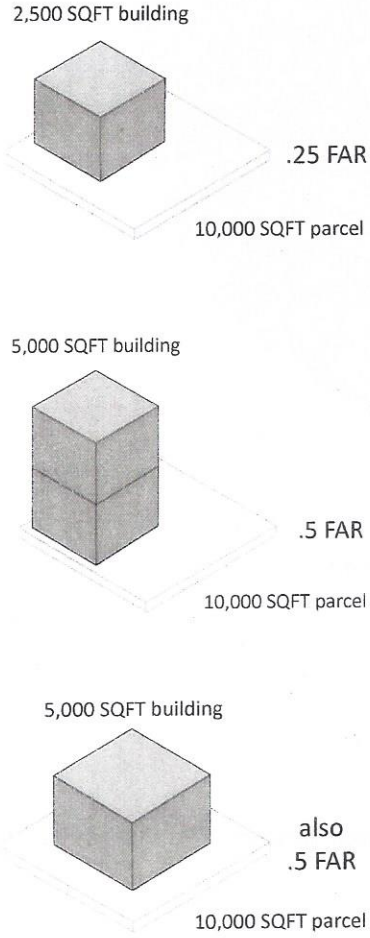
3

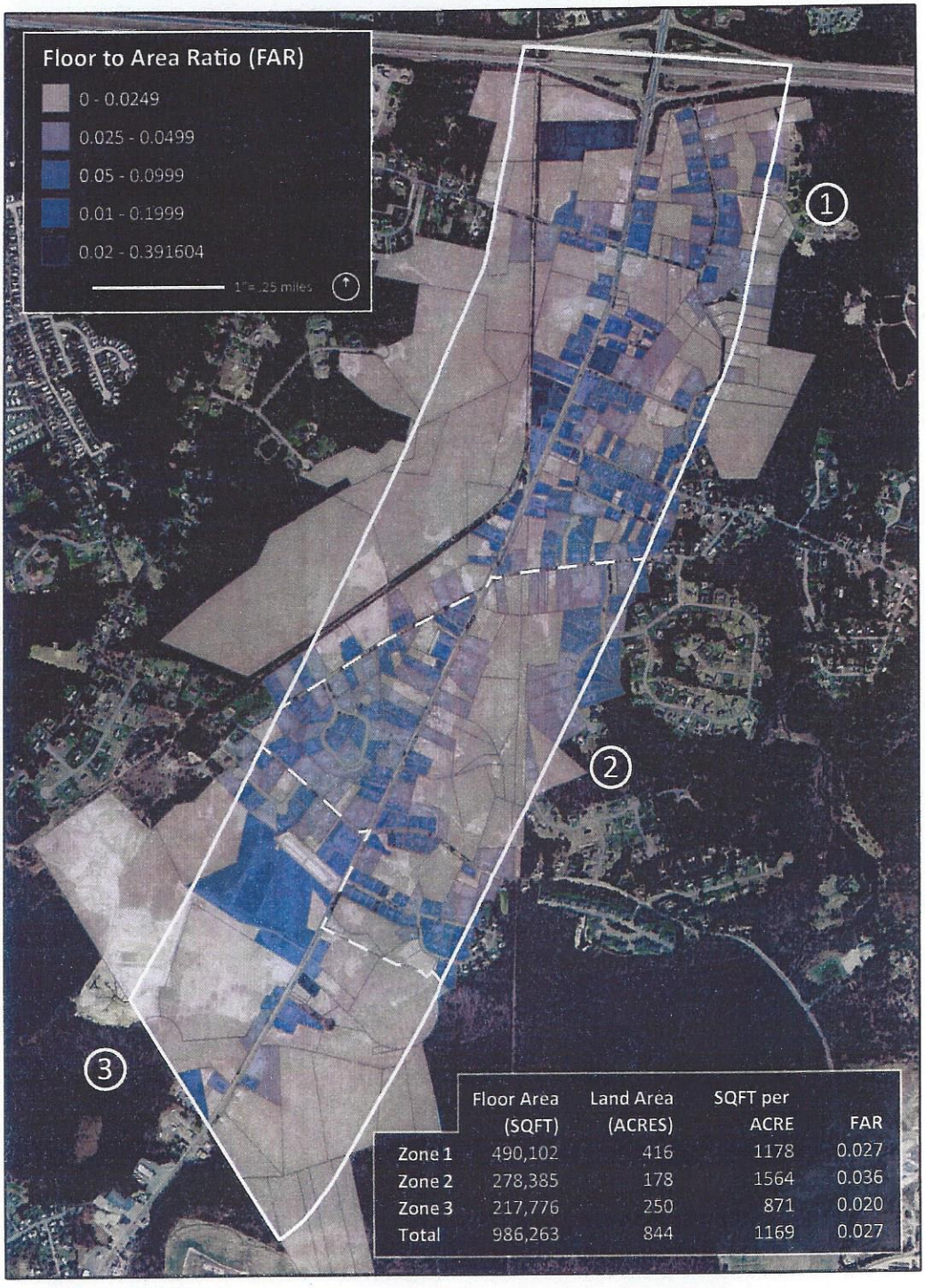
Firms

- Accommodation and Food Services
- Retail Trade
- Health Care and Social Assistance
- Other (except Public Service)
- Construction
- Wholesale Trade
- Professional, Scientific, Technical Services
- Finance and Insurance
- Educationsal Services
- Administrative Support, Waste Management
- Manufacturing
- Information
- Real Estate
- Transportation and Warehousing
- No Data
- Arts, Entertainment, and Recreation
- Public Administration

Figure II-5: Floor to Area Ratio (FAR)

FAR is a measure of density; higher FARs indicate more densely-built areas. FAR Example diagrams are below.



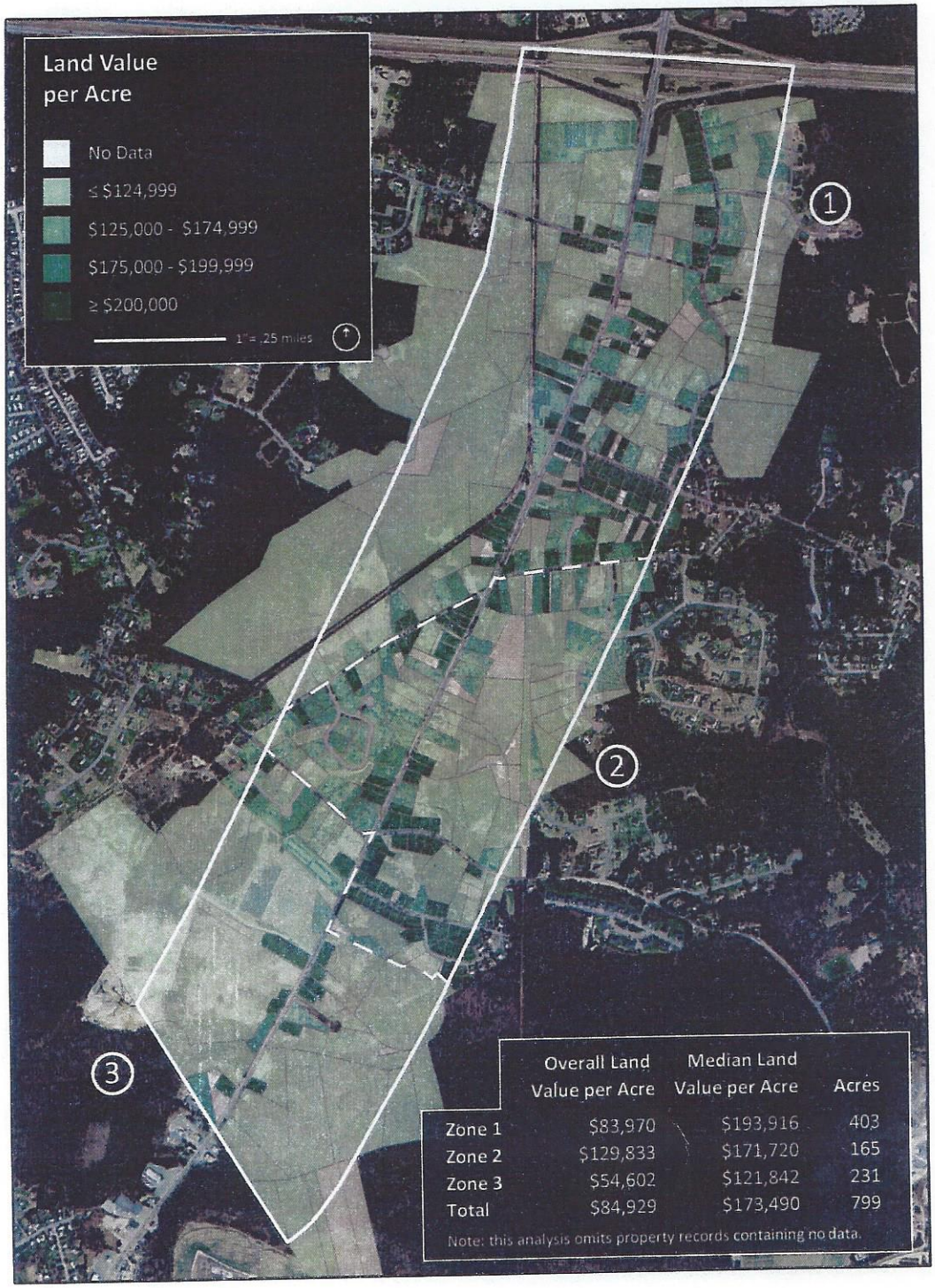


	Floor Area (SQFT)	Land Area (ACRES)	SQFT per ACRE	FAR
Zone 1	490,102	416	1178	0.027
Zone 2	278,385	178	1564	0.036
Zone 3	217,776	250	871	0.020
Total	986,263	844	1169	0.027

Zone 1: (Average density) Zone 1 is built to the same level of density as the study area as a whole (0.027). This translates to approximately 1,200 SQFT of built space per acre of land. (Note: a typical modern "single-wide" mobile home is approximately 1,200 SQFT.)

Zone 2: (Above average density) Zone 2 has an FAR of 0.036, exactly 33.33% higher than the study area average and exactly 80% higher than Zone 3 to its immediate south. This translates to approximately 1,600 SQFT of built space per acre of land.

Zone 3: (Below average density) Zone 3 is the most sparsely built Zone in the study area. Its FAR of .020 is 26% below the study area average. This translates to approximately 900 SQFT of built space per acre of land.



	Overall Land Value per Acre	Median Land Value per Acre	Acres
Zone 1	$83,970	$193,916	403
Zone 2	$129,833	$171,720	165
Zone 3	$54,602	$121,842	231
Total	$84,929	$173,490	799

Note: this analysis omits property records containing no data.

Figure II-6: Land Value per Acre

Take-aways:

Zone 1: Above average value

Zone 2: High value clusters

Zone 3: Below average value

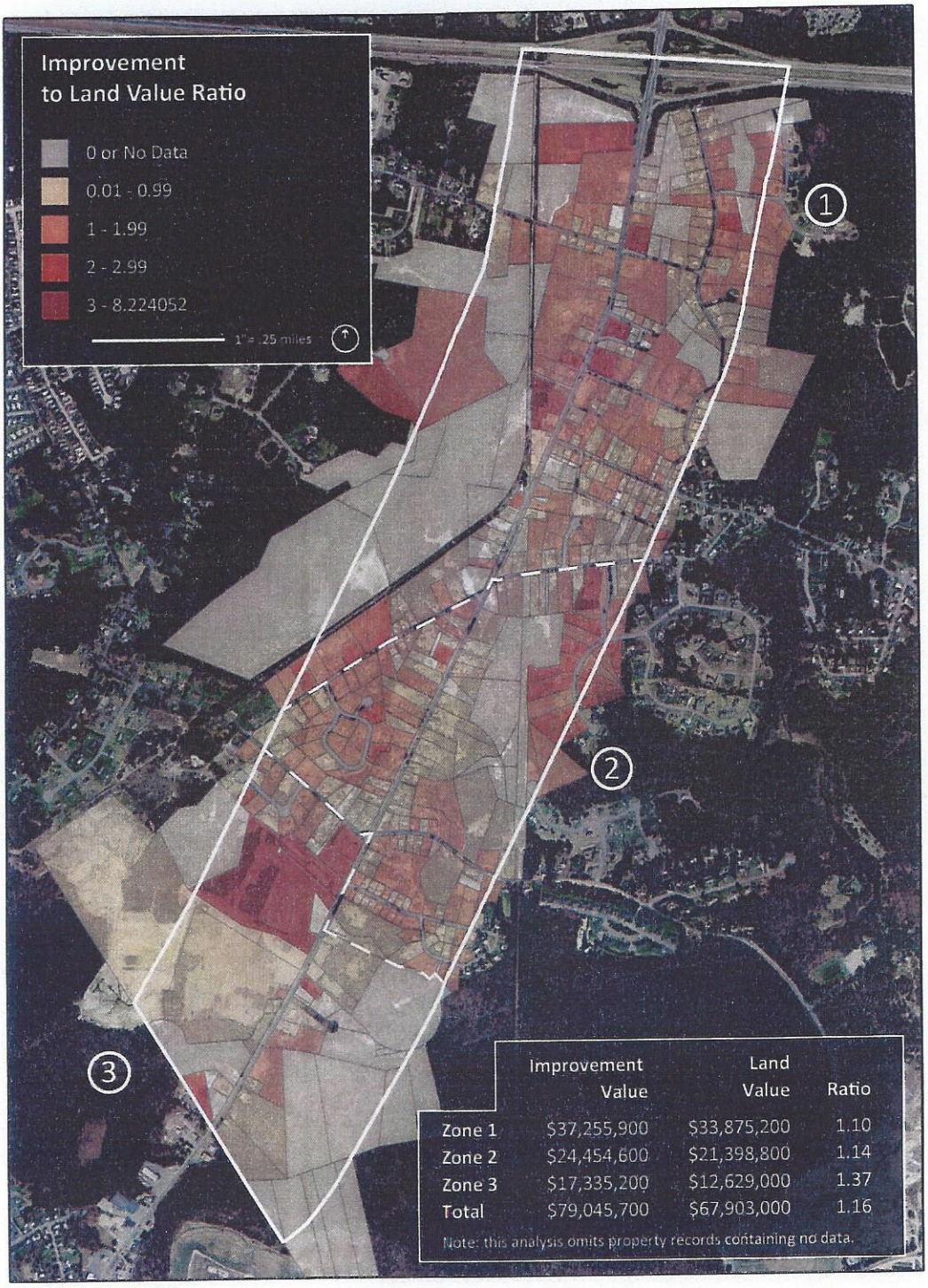
Zone 1: (Above average value) When considered as a whole, Zone 1's overall land value per acre is roughly equal to the overall land value per acre of the study area. Measures of average, such as mean and median, provide a different picture, however: the mean land value per acre in Zone 1 is 13.5% higher than that of the study area; the median land value is 11.7% higher. High value properties line Broadway, Center Street, and Oak Street.

Zone 2: (High value clusters) When considered as a whole, Zone 2's overall land value per acre is much higher (52.9%) than the overall per acre value of the study area; this indicates a density of high-value land in Zone 2, particularly on the southern boundary with Zone 3. However, when considering means and medians, Zone 2 is roughly on par with the study area as a whole. (Its mean land value per acre is 6.4% lower than that of the study area; its median land value per acre is a mere 1.0% lower.)

Zone 3: (Below average value) Land values in Zone 3 are lower than the study as a whole according to all methods of measurement: overall land value per acre (35.7% lower), mean land value per acre (37.9% lower), and median (29.8%). Low values are likely due to existing low density industrial uses and significant environmental considerations and constraints.

Figure II-7: Improvement to Land Value Ratio (ILVR)

The overall study area's ILVR (a measure of the extent to which an area or a parcel has been improved) is roughly equal to 1 indicating that the value of improvements is approximately equal to the value of the land. In back-of-the-envelope terms, areas with ratios less than 1 (and greater than 0) can indicate potential pressure to improve/develop the land, particularly when the area or property in question is surrounded by high value uses, good circulation, and other development-friendly factors. Areas with ratios greater than 1 can indicate high value improvements and/or low value land.



	Improvement Value	Land Value	Ratio
Zone 1	$37,255,900	$33,875,200	1.10
Zone 2	$24,454,600	$21,398,800	1.14
Zone 3	$17,335,200	$12,629,000	1.37
Total	$79,045,700	$67,903,000	1.16

Note: this analysis omits property records containing no data.

Zone 1: (Average) Zone 1's ILVR of 1.10 is roughly equal to that of the overall study area (1.16). Certain highly valued improvements such as McDonald's, the Camfrost Corp-owned plaza (Raynham Depot), the 855 Broadway Plaza (Honey Dew Donuts), and China Garden stand out along Broadway.

Zone 2: (Average) Zone 2's ILVR of 1.14 is amost exactly equal to that of the overall study area (1.16).

Zone 3: (High value improvement cluster, low land values) Zone 3's ILVR of 1.37 is significantly higher than that of the overall study area due to two factors: (1) as demonstrated by the Land Value per Acre analysis, Zone 3 is characterized by relatively low land values, making ILVR particularly sensitive to the value of improvements; and (2) there is a cluster of highly valued improvements along Broadway and King Phillip Street (creating four of the top six ILVRs, including the top two): Market Basket plaza (3.73), Self Storage (ESS Prisa LLC; 5.88), Dunkin Donuts/Subway plaza (Mello Realty LLC; 4.63), and the corner office development (Hillcrest Realty LLC; 8.22). With the expected arrival of the Wal-Mart store, Zone 3's ILVR is likely to rise even further.

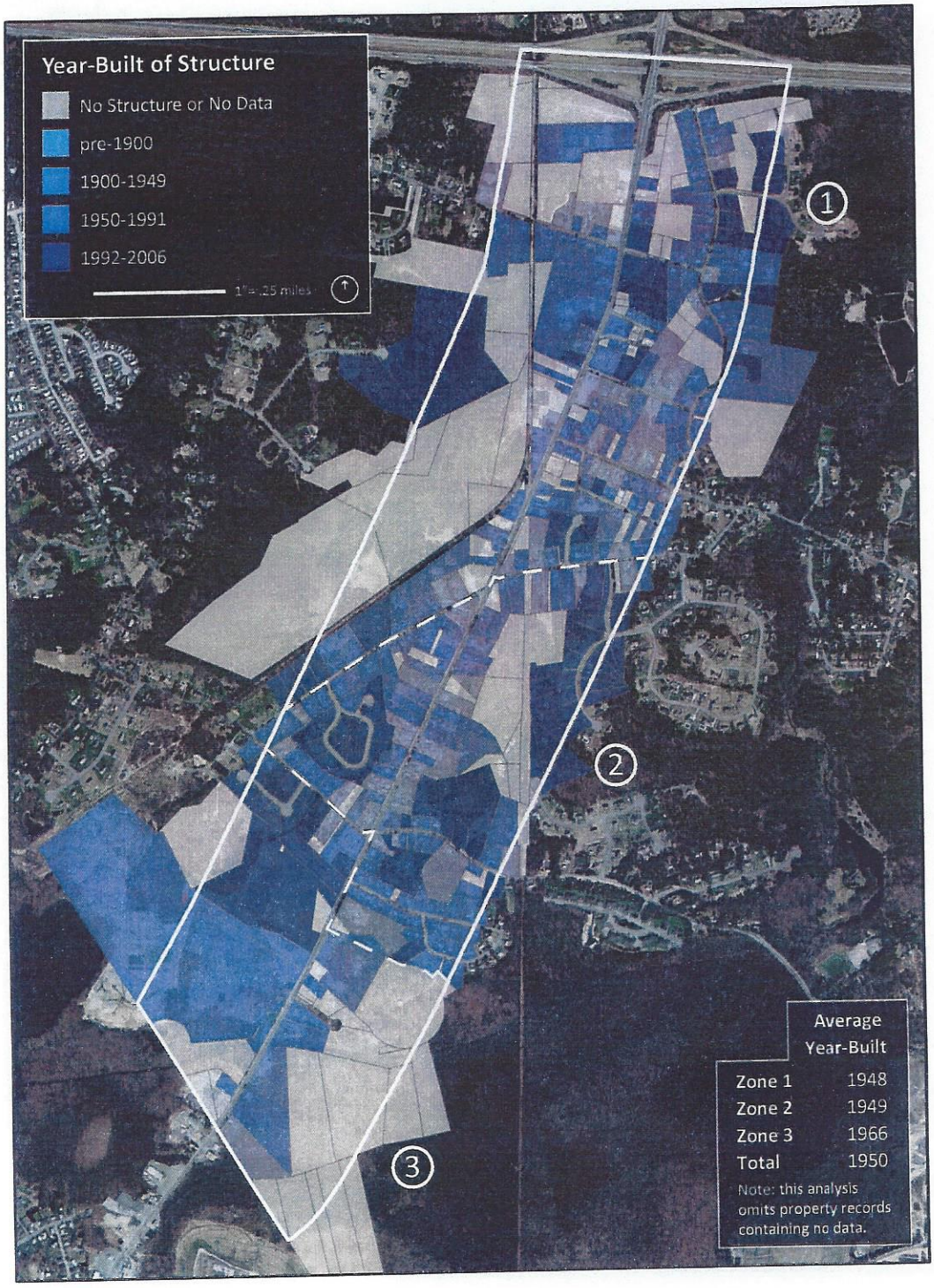


Figure II-8: Year-Built of Structure

Take-aways:

Zones 1 and 2: Average; pre-1950

Zone 3: More recent; post-1965

Zone 1: (Average; pre-1950) The average year-built of structures in Zone 1 is 1948, roughly equal to the overall study area average of 1950. Very few modern structures (post-1992) are present in Zone 1, with the exception of McDonalds and retail buildings on Carver Street and recent residences on Oak Street.

Zone 2: (Average; pre-1950) The average year-built of structures in Zone 2 is 1949, equal to the overall study area average of 1950. Three clusters of modern (post-1992) single-family homes are present in Zone 2.

Zone 3: (More recent; post-1950) The average year-built of structures in Zone 3 is 1966, 16-years more recent than the study area average of 1950. This departure from the average is due to the numerous modern (post-1992) structures on the northwestern edge of the Zone, including Market Basket plaza, Self Storage, and a residential subdivision.

Figure II-9: MassDEP Tier Classified Oil and/or Hazardous Materials Sites

"Releases of oil and/ or hazardous materials are reported to the Massachusetts Department of Environmental Protection's (MassDEP) Bureau of Waste Site Cleanup (BWSC), according to procedures established in the Massachusetts Contingency Plan (MCP) . . . [these points represent the] approximate location of oil and/or hazardous material disposal sites that have been (1) reported and (2) Tier Classified under M.G.L. Chapter 21E."

Source: MassGIS

Zone 1: (Two sites, one unremediated) The Southern portion of Zone 1 has two Tier ID sites - a classification where the responsible party fails to provide a required submittal to MassDEP by a specified deadline. The northern site at Central Oil dates from 2002 and was a release or potential release of kerosene and diesel fuel. The southern "Unlocated" site was not mapped by MassGIS, but was instead located by SRPEDD using the MassGIS "unmapped Tier Classified Chapter 21E sites" database. The site was a small release (< 10 gallons) of driveway sealer that has been remediated.

Zone 2: (One remediated site) Zone 1 has one Tier IB site located at the former Texaco station, recently reopened as an Irving Oil filling station. The site was a spill of hydrocarbons and a fuel component. ("Any site receiving a total [numerical ranking] score of less than 550 and equal to or greater than 450 is a Tier IB. The NRS is a point system based on a variety of factors, including the site's complexity, the type of contamination, and the potential for human or environmental exposure to the contamination."). The site did not require a Response Outcome Action (RAO) and remained a fuel station use.

Zone 3: None.

Figure II-10: South Coast Rail Priority Areas (State and Local)

Take-aways:

Zones 1: Local Priority Development

Zone 2: None

Zone 3: Local Combined Priority Development and Priority Protection

Communities, Regional Planning Agencies such as SRPEDD, and Commonwealth agencies identified Priority Protection Areas (PPAs) and Priority Development Areas (PDAs) as part of the South Coast Rail Land Use and Economic Development Plan. SRPEDD worked with communities through an extensive public outreach process to identify local priorities, which were then examined at the regional and state levels.

Zone 1: (Local Priority Development) A small portion of the Hockomock Swamp Area of Critical Environmental Concern (State PPA, see pages 20 and 21, below) and the Dead Swamp (Local PPA) are located in the extreme northeast portion of Zone 1; much of this area is already built out or constrained by wetlands (see page 20, below). A large central section of Zone 1 west of Broadway is designated as the "Triangle Redevelopment Area" local PDA. According to the Town's SCR report, this 60 acre area "has excellent transportation access and is served by water and sewer . . . [it also has] Economic Opportunity Area (EOA) designation potential."

Zone 2: None.

Zone 3: (Local Combined Priority Development and Priority Protection) The "Westside Designated Development Area" is identified in the Town's SCR report and corresponds to the DD zoning district. According to the report, the 111 acre area "provides opportunities for mixed-use redevelopment and offers access, water, and sewer;" like the Triangle Redevelopment Area, this site "could also be a potential EOA." It's "combined" status is likely due to surrounding environmental and water resource considerations (see pages 20-22, below).

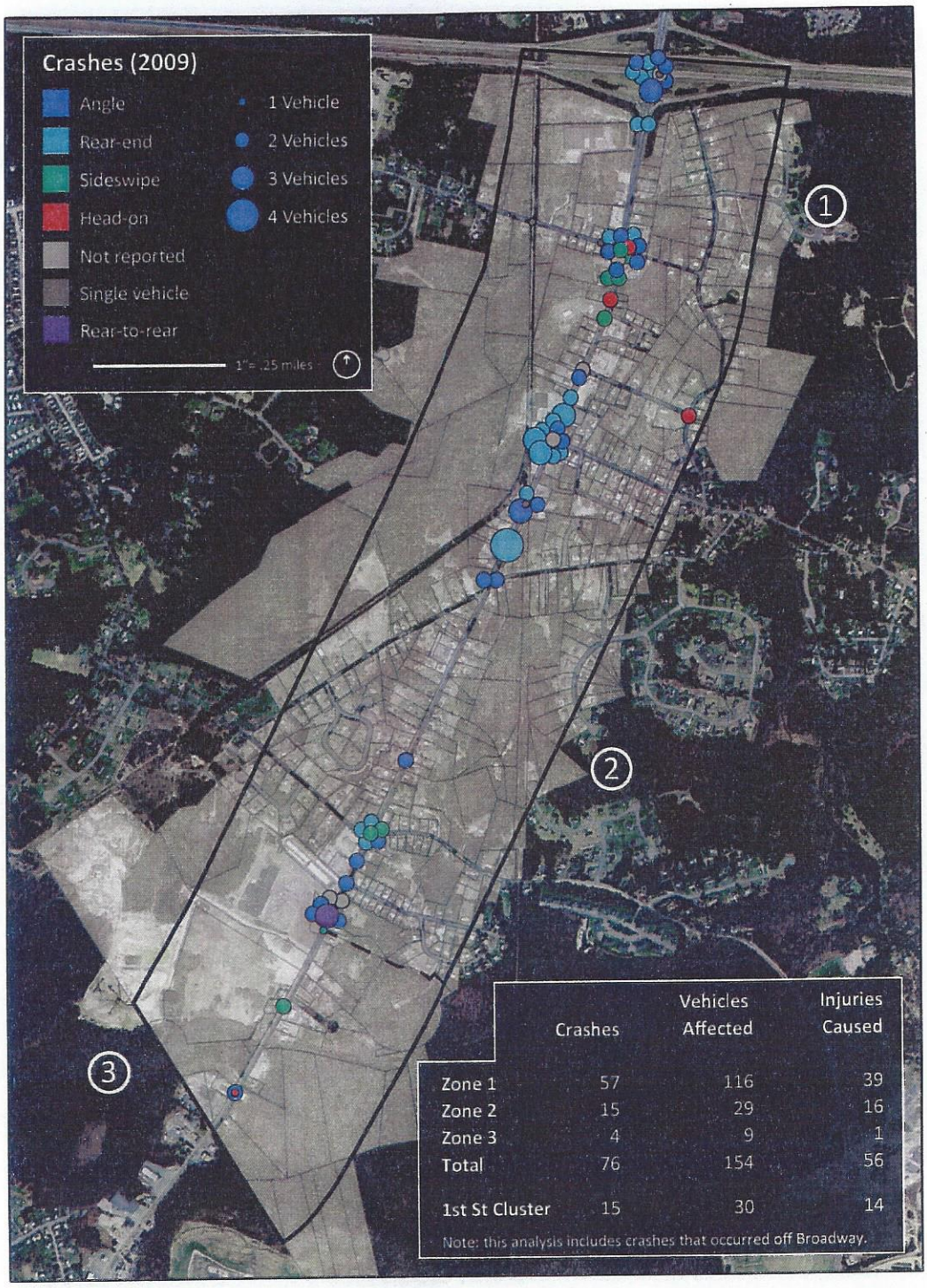
Figure II-11: Crashes

In 2009, there were 73 crashes along the 2.15 mile roadway segment of Broadway in the study area. The 2009 MassDOT (Mass Highway) procedures for calculating crashes per million vehicle miles travelled (MVMT) yield a rate of 5.08. This figure exceeds the 3.72 threshold for an "urban minor arterial" roadway segment such as Broadway, indicating a higher than normal crash rate along Broadway in the study area.

Take-aways:

Zone 1: Corridor-wide; above average

Zones 2 and 3: 1st Street Cluster



	Crashes	Vehicles Affected	Injuries Caused
Zone 1	57	116	39
Zone 2	15	29	16
Zone 3	4	9	1
Total	76	154	56
1st St Cluster	15	30	14

Note: this analysis includes crashes that occurred off Broadway.

Zone 1: (Corridor-wide; above average) This portion of the study area is the most affected by crashes in a number of ways: overall crashes (75.0%), vehicles involved (75.3%), injuries (69.6%). This is true despite the fact that only 1.02 miles (47.4%) of the study area's overall 2.15 mile roadway length are in Zone 1. Clusters of accidents occurred at the intersections of Broadway with Britton Street, Center Street, Carver Street, and the interchange with I-495.

Zones 2 and 3: (1st Street Cluster) The center line of Broadway forms the boundary between Zone 2 and Zone 3; it is therefore difficult to quantify the impact of Broadway crashes on these zones. However, visually inspecting the map reveals that the roadway segment centered on 1st Street (from the intersection of King Phillip Street and the entrance to the Market Basket plaza) is a crash-prone area, accounting for 19.7% of study area crashes, 19.5% of vehicles involved, and 25.0% of injuries.

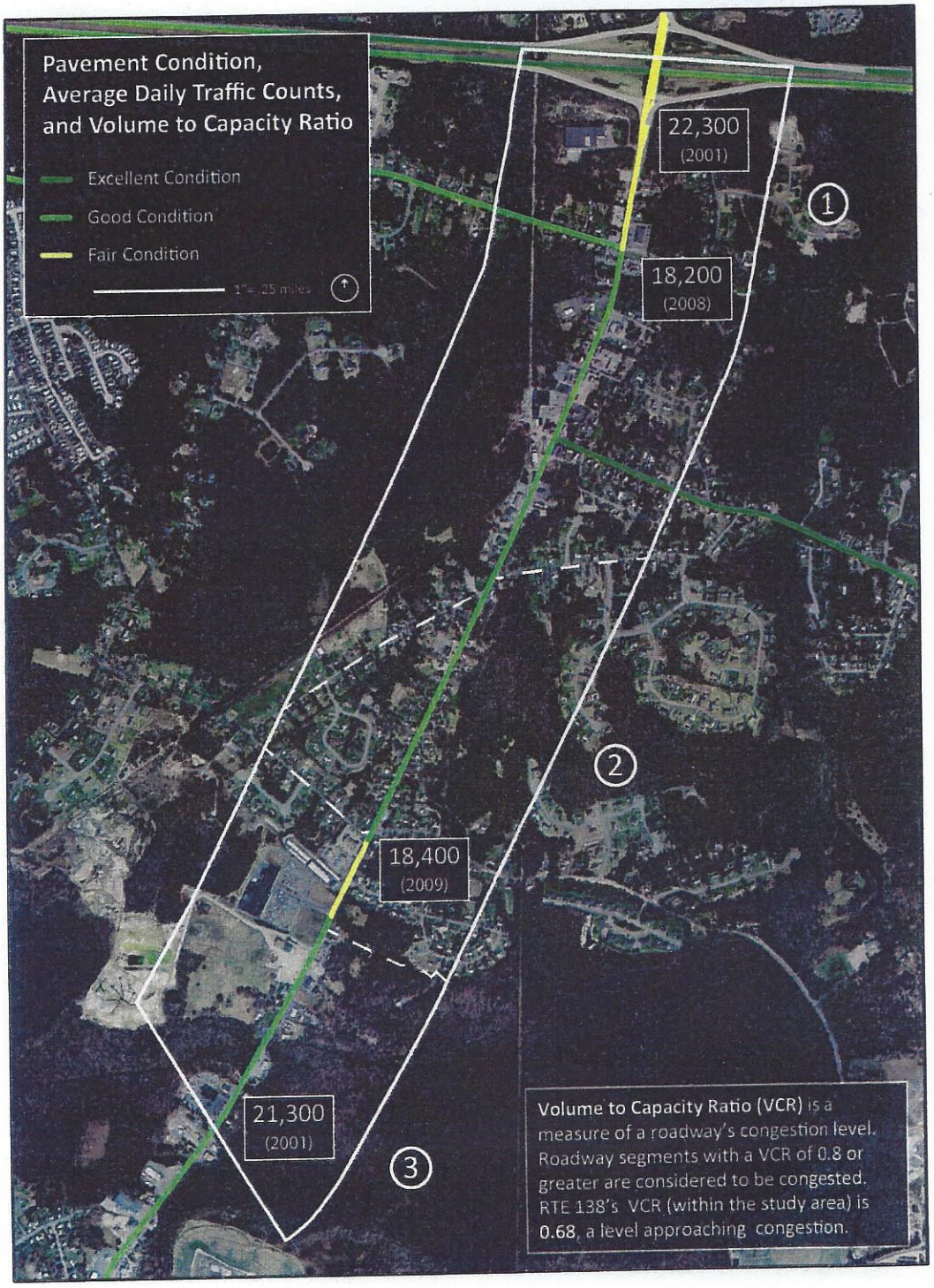


Figure II-12: Pavement Condition, Average Daily Traffic Counts, and Volume to Capacity Ratio (VCR)

Take-aways:

Zone 1: Good; Average

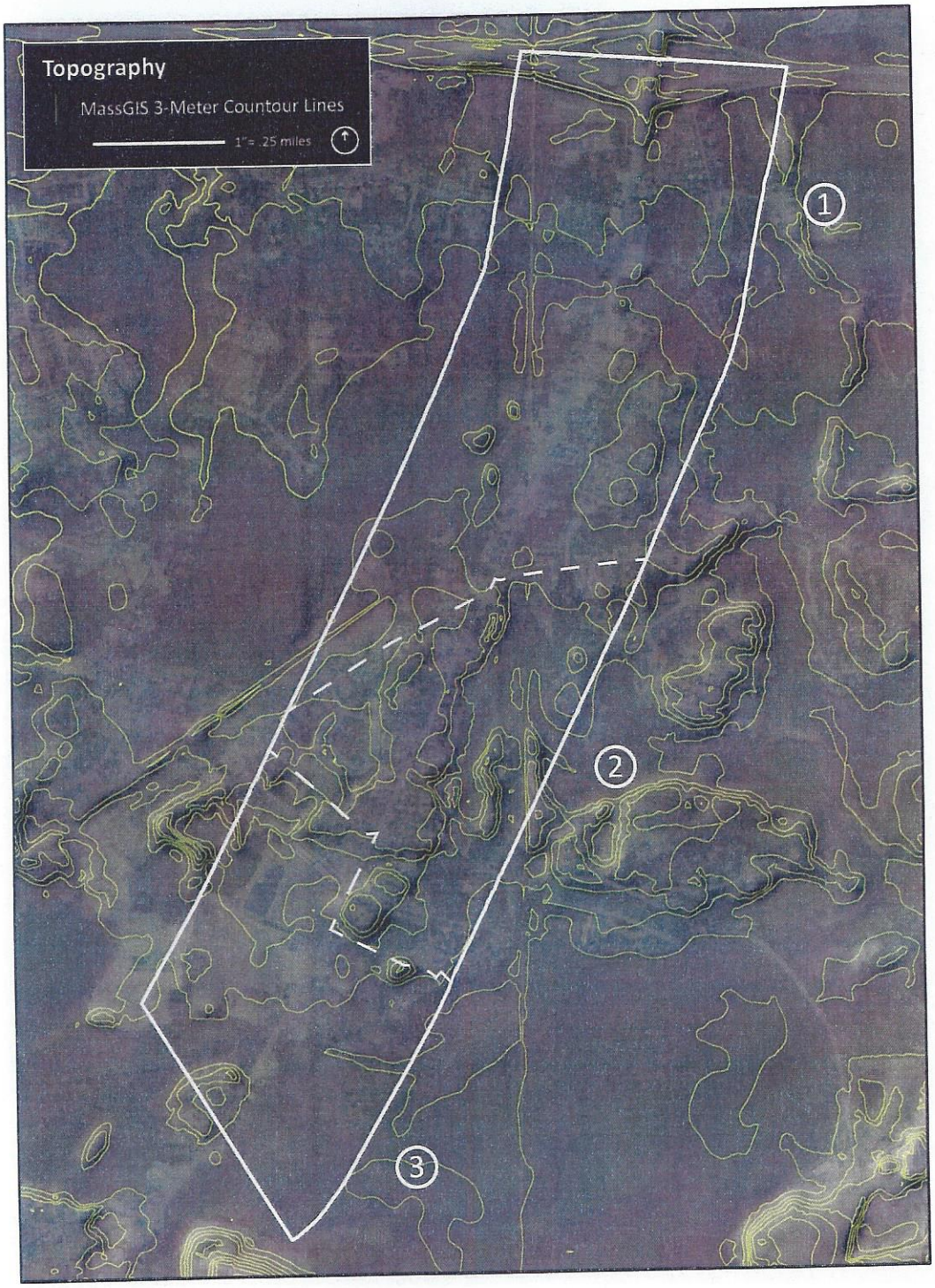
Zones 2 and 3: Fair (Broadway @1st Street segment); Average

Note: RTE 138's VCR is currently 0.68. A VCR of 0.8 is the level at which a roadway is considered congested. According to the SRPEDD/SMMPO Regional Travel Demand Forecasting Model, by 2035 the ratio will be 0.75.

Zone 1: (Good; Average) Average Daily Traffic (ADT) counts indicate an approximate volume of about 20,000 vehicles along the Broadway roadway segment (averaging counts from 2001 and 2008). Pavement conditions in the study area are "excellent" to "good" with the exception of Broadway north of Carver Street, which is in "fair" condition.

Zones 2 and 3: (Fair [Broadway @1st Street segment]; Average) Average Daily Traffic (ADT) counts indicate an approximate volume of about 20,000 vehicles along the Broadway roadway segment in Zones 2 and 3 (averaging counts from 2001 and 2009). Moreover, visually inspecting pavement conditions reveals that the roadway segment centered on 1st Street (from the intersection of King Phillip Street and the entrance to the Market Basket plaza) is characterized by fair to "poor" pavement conditions.

Figure II-13: Topography



Take-aways:

Zones 1 and 3: Level

Zone 2: 1st Street Hill

Zone 1: (Level) Zone 1 is characterized by relatively level topography with the exception of a small hill at the Broadway/I-495 interchange.

Zone 2: (1st Street Hill) A fairly significant hill (approximately 6 to 9 meters or 20 to 30 feet above Broadway grade) is located near the intersection of 1st Street and Broadway. The remainder of Zone 2 is relatively level with the exception of a small wooded hill on the eastern edge of the Zone

Zone 3: (Level) Zone 3 is relatively level with the exception of a small hill at the Taunton City line.

Figure II-14: Wetlands Considerations under Chapter 131 Wetlands Protection Act

Take-aways:

Zone 1: Hockomack Swamp connections

Zone 2: Intermittent

Zone 3: Extensive

Note: The right-of-way for the South Coast Rail project's preferred route (the Stoughton Route, as selected by MassDOT) is visible in the wetlands analysis. The existing railroad berm is the north-south line that bisects the Pine Swamp east of Zone 3 and the shrub/wooded swamp to the west of Broadway in Zone 1.

Zone 1: (Hockomock Swamp connections) Zone 1 is characterized by a significant shrub swamp on its western edge and intermittent, undeveloped wooded swamps throughout. When viewed along with hydric soils and hydric connections, the wetlands on the eastern side of Broadway form a contiguous connection to the Hockomock Swamp ACEC (see Habitat Considerations), which is bisected by I-495. Most upland areas in Zone 1 are developed.

Zone 2: (Intermittent) Zone 2's wetlands are less intact than those of Zones 1 and 3. Isolated wooded swamps, bogs, deep marshes, and small open water ponds are nestled within the residential developments. Small areas of Hydric soils and hydric connections are their only link to larger wetland networks.

Zone 3: (Extensive) The southern edge of Zone 3 includes a small portion of the extensive Pine Swamp. Another large wooded swamp on the western side of Broadway connects to Prospect Hill Pond. The expected Wal-Mart site is adjacent to this swamp.

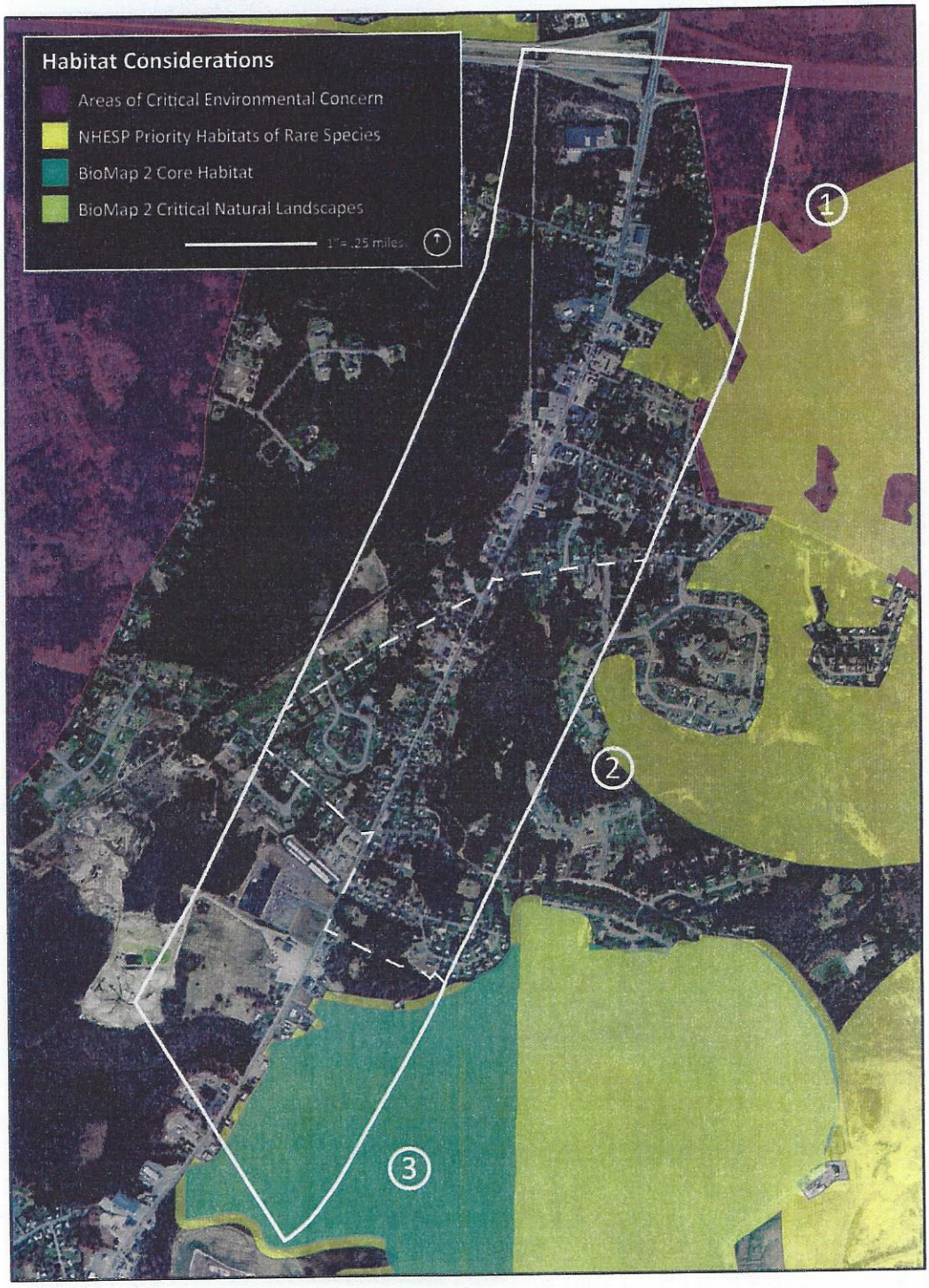
Figure II-15: Habitat Considerations

Take-aways:

Zone 1: ACEC, NHESP

Zone 2: None

Zone 3: NHESP, BioMap 2



Zone 1: (ACEC, NHESP) The Hockomock Swamp Area of Critical Environmental Concern (ACEC) and a Natural Heritage and Endangered Species Program (NHESP) Priority Habitat are on the eastern edge of Zone 1, including much of the wooded swamp network illustrated by the Wetland Considerations analysis. ACECs are areas designated by the Massachusetts Executive Office of Energy and Environmental Affairs as deserving special recognition due to the quality and significance of their natural and cultural resources. Communities nominate areas for consideration. NHESP is a Massachusetts Fish and Wildlife conservation designation under Chapter 131 and Chapter 131A.

Zone 2: (None) None.

Zone 3: (NHESP, BioMap 2) The Pine Swamp on the Eastern side of Zone 3 is a NHESP Priority Habitat, and a BioMap 2 Core Habitat. The BioMap 2 designation is a guide to biodiversity resulting from a collaboration between NHESP and the Nature Conservancy.

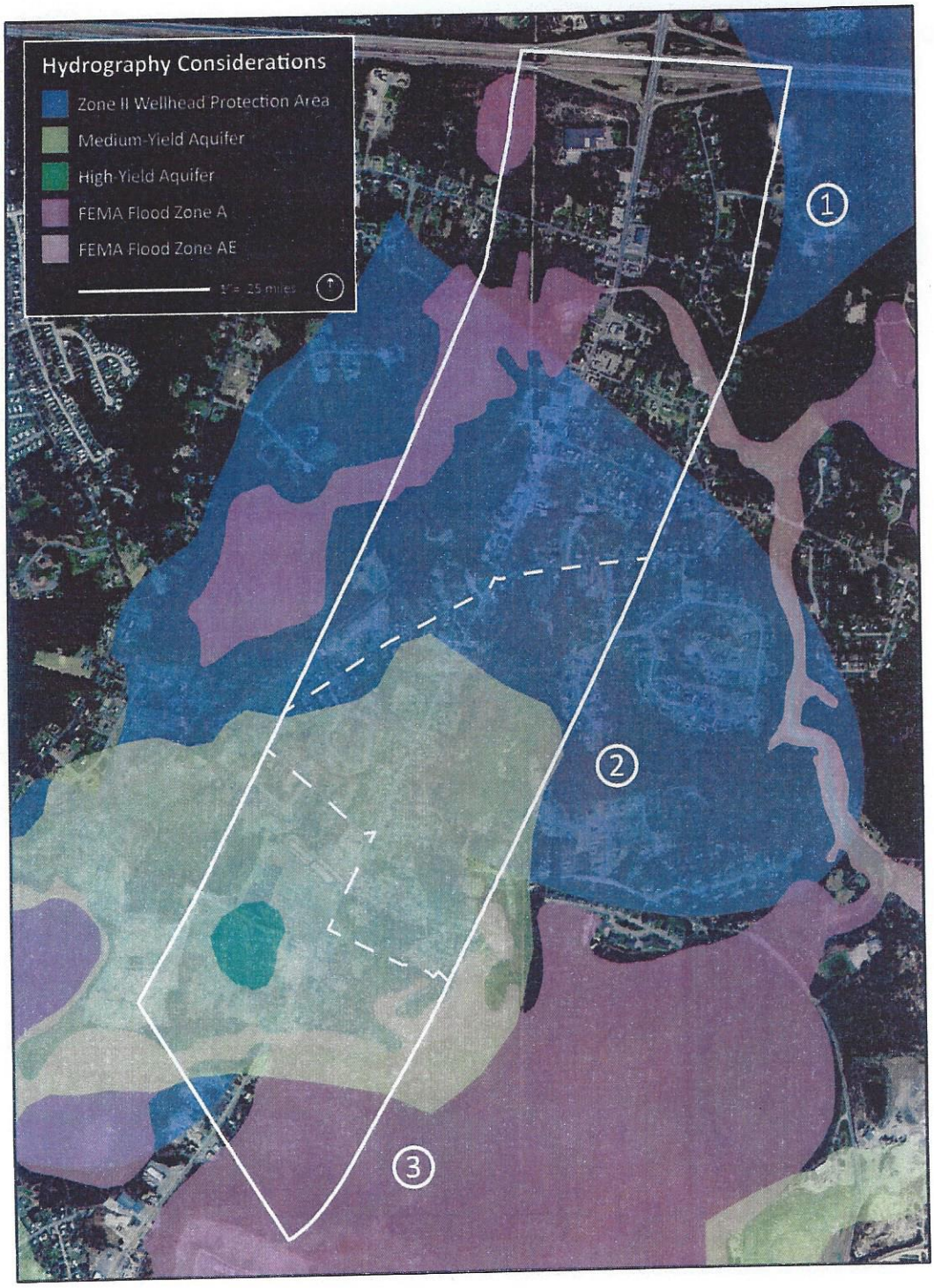


Figure II-16: Hydrography Considerations

Take-aways:

Zone 1: Moderate

Zone 2: Significant

Zone 3: Extensive

Note: FEMA Zone A is a "high risk" flood zone that has a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage.

FEMA Zone AE is also a "high risk" flood zone that establishes the base floodplain where base flood elevations are provided. It is less high risk than Zone A. Zone AEs replaced A1 - A30 designations on new format Flood Insurance Rate Maps (FIRM).

Zone 1: (Moderate) Two FEMA Flood Zone types (A and AE) run east-west through the center of Zone 1. The zones straddle a hydric connection (stream) and cover a significant wetlands network. Additionally, a significant portion of Zone 1's southern area is a Zone II Wellhead Protection Area, limiting development intensity and use types.

Zone 2: (Significant) All but a tiny portion in the eastern part of Zone 2 is covered by a Zone II Well Protection Area. A significant portion of Zone 2 is also is a Medium-yield Aquifer.

Zone 3: (Extensive) The majority of Zone 3 is also in a Zone II Wellhead Protection Area. Moreover, both High-yield and Medium-yield aquifer areas also occupy the majority of the area. Lastly, a FEMA Flood Zone (type AE) extends from the Pine Swamp across Broadway to Prospect Hill Pond.

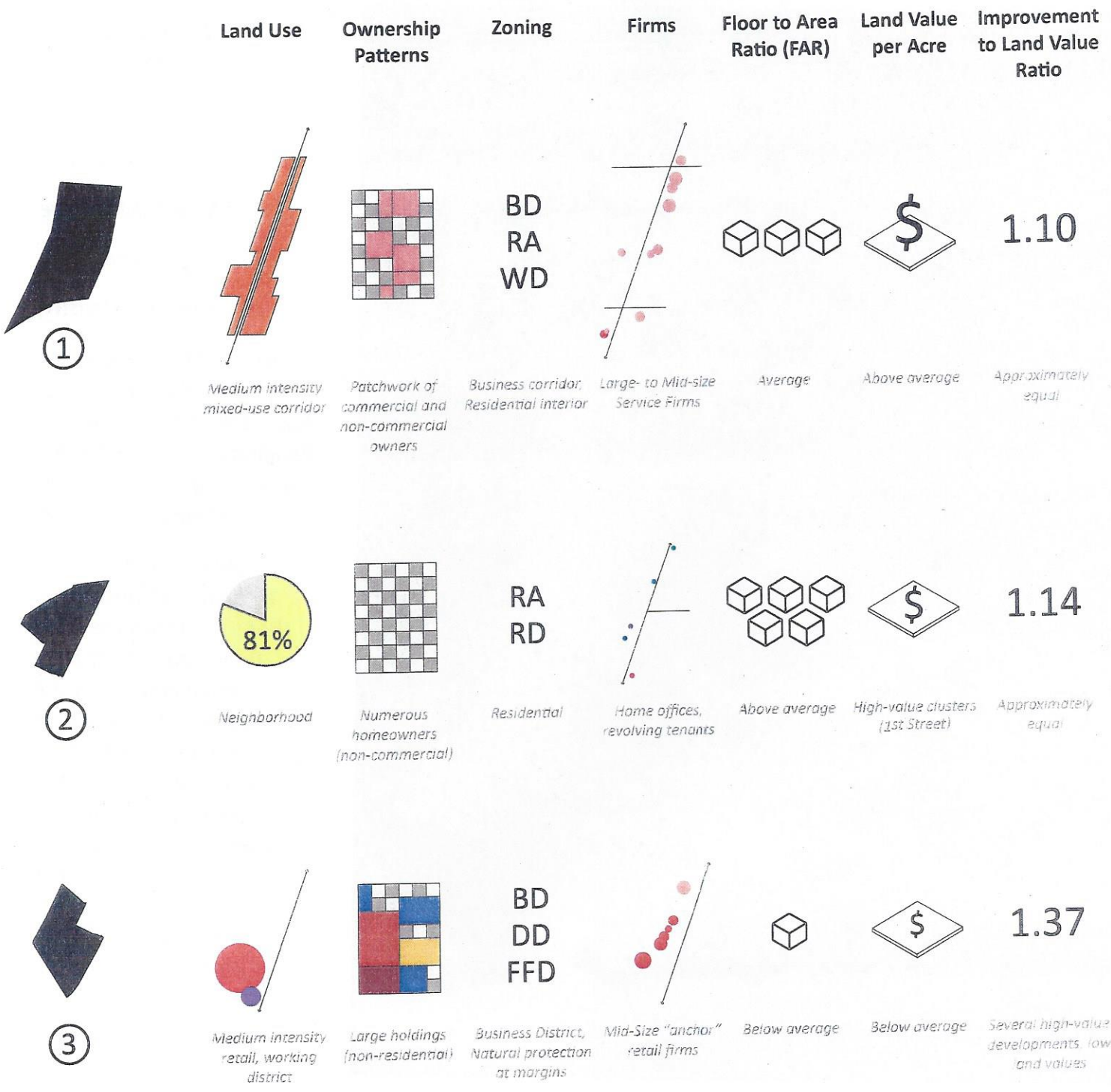


Figure II-17: Existing Conditions Summary Diagram

This diagram summarizes the major "Take-aways" from each Zone in each category of Existing Conditions analysis; these categories are represented in 15 columns, Land Use through Targeted Redevelopment Areas (which combines MassDEP Brownfields and SCR PDA/PPA areas).

The diagram is meant to be the first step in knitting the Existing Conditions analysis into an accurate statement describing the main conditions in the three Zones and therefore in the study area as a whole (this process continues Zone by Zone on pages 25 - 27 below). For example, examining diagram suggests that there are sections of the study area that underscore common issues due to various factors. For example, the boundary of Zones 2 and 3 (centered on 1st Street) requires special consideration: (a) Zone 2's boundary area includes the thriving 1st Street neighborhood, above average densities, a cluster

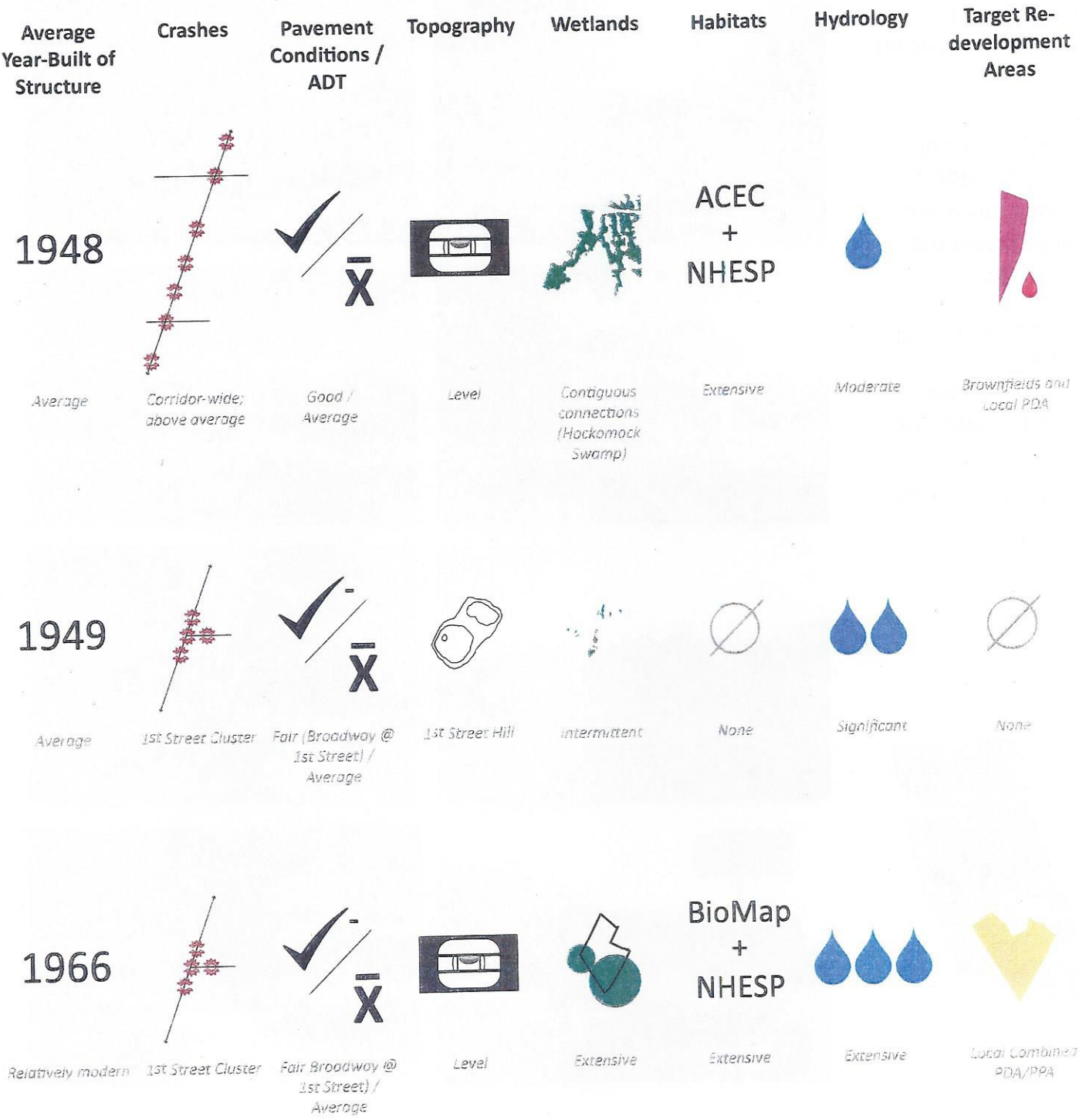


Figure II-17: Existing Conditions Summary Diagram (Continued)

of high value properties, and the study area's only significant topography; (b) on the other side, in Zone 3, the existing retail and working district, large property holdings, DD and BD zoning, low densities, low property values, and recent development trends - including the upcoming arrival of Wal-Mart - point to an entirely different future; (c) both areas have crash and road condition considerations and both are affected to different degrees by environmental constraints (Zone 3 much more so). These many factors converge on this boundary area and highlight the type of issues that shaped the Steering Committee's creation of "Probable" and "Possible" Future Scenarios in the next section (Section III). They also point to the types of interventions, such as strategic zoning changes and transportation/transit improvements, that will position the area to respond to the needs and demands of the future while acknowledging present parameters diagrammed above.

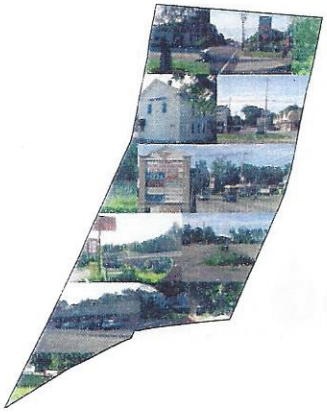
Figure II-18: Zone 1 Existing Conditions Photos

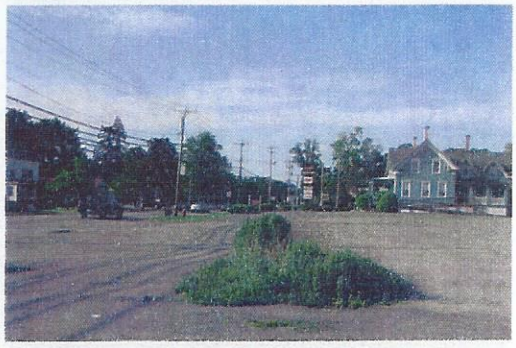
Take-aways:

Zone 1 is influenced by its proximity to I-495 and performs much like a traditional mixed-use highway corridor.

Existing Conditions suggest that Zone 1 presents the Town with infill and redevelopment opportunities.

Photos taken by Grant King, SRPEDD.





Zone 1 is influenced by its proximity to I-495 and preforms much like a traditional medium intensity mixed-use highway corridor: it has strips of retail and service developments and pockets of high value residential uses. Correspondingly, its ownership patterns are a mix of mid-size commercial and small residential owners. Zone 1 also has comparatively high property values coupled with building densities on par with the study area as a whole (at 1,200 SQFT per acre).

Business Development (BD) zoning surrounds the RTE 138 roadway in Zone 1 with Residential A (RA) and Wetlands District (WD) zoning away from the corridor. This WD zoning only covers a small portion of the significant wetland and habitat considerations associated with the Hockomock Swamp on both sides of RTE 138.

Zone 1 also possesses brownfield sites, underdeveloped areas, and a local (Town-designated) Priority Development Area.

In 2009, Zone 1 saw 75% of the study area's crashes on RTE 138 despite having only 47.4% of its length.

Existing Conditions suggest that Zone 1 presents the Town with infill and redevelopment opportunities.

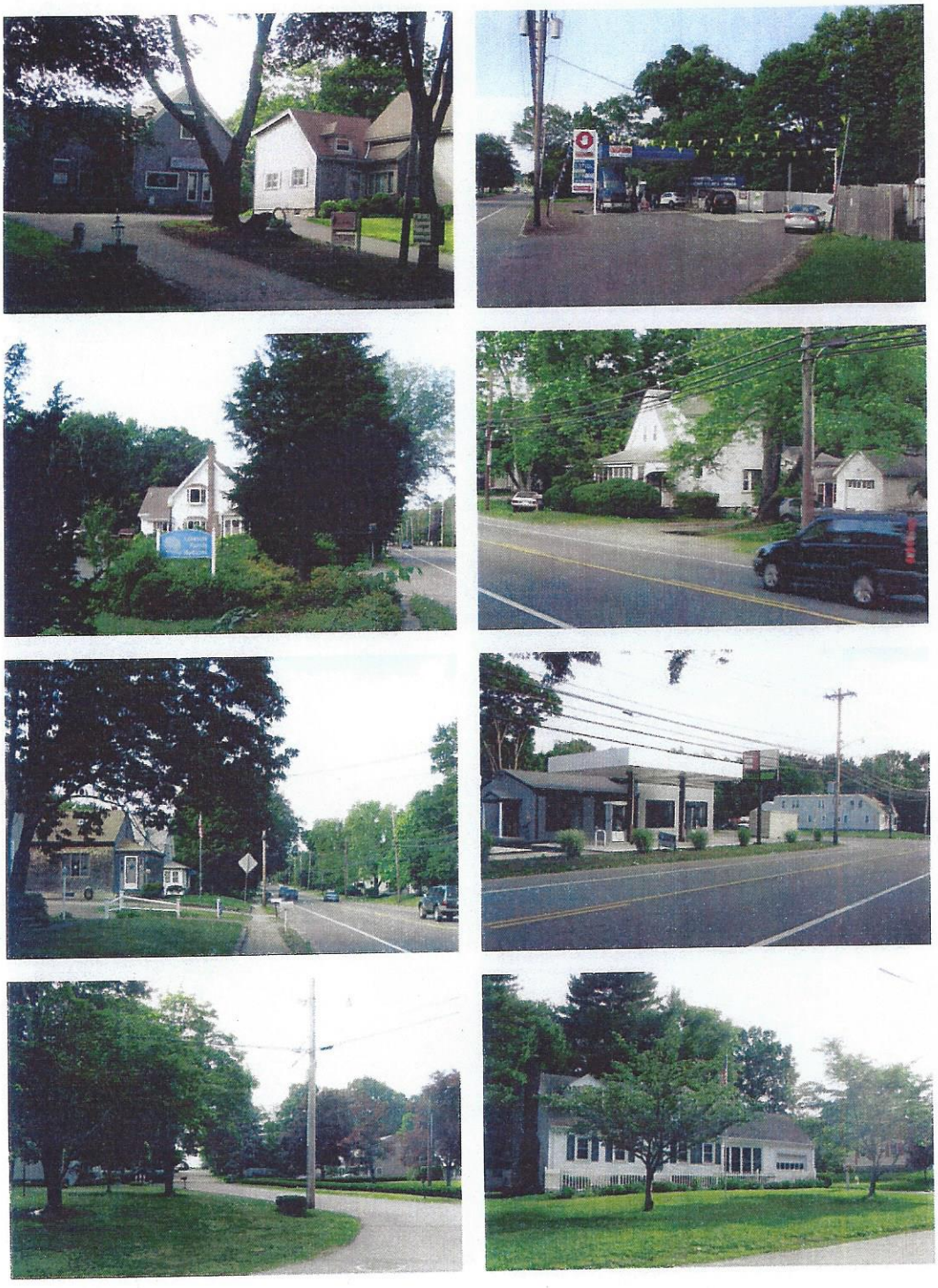


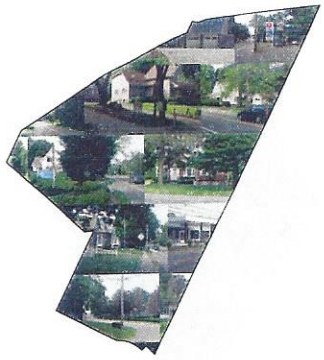
Figure II-19: Zone 2 Existing Conditions Photos

Take-aways:

Zone 2 is predominantly residential (81%) and maintains a thriving neighborhood feel and character.

Existing Conditions suggest that Zone 2 presents the Town with a challenge - it must respect and plan for Zone 2's neighborhoods while supporting surrounding developments with a safe and efficient RTE 138 roadway.

Photos taken by Grant King, SRPEDD.



Zone 2 is predominantly residential (81%) and maintains a thriving neighborhood feel and character even along Broadway. The few professional/home-office firms that are present are due to small sections of BD and RD zoning along RTE 138; this "corridor" zoning gives the impression that this segment of Broadway is more business-oriented than it actually is - only 4.8% of the study area's total jobs are in Zone 2. Ownership patterns are a checkerboard of small holdings by numerous home- and small business-owners.

Zone 2 is more densely built than the rest of the study area, with an average of 1,600 SQFT of built space per acre of land; this is exactly 33.33% higher than the study area average and exactly 80% higher than Zone 3 to the immediate south.

The study area's only major topography - the 1st Street hill - is situated in Zone 2.

Existing Conditions suggest that Zone 2 presents the Town with a challenge - it must respect and plan for Zone 2's neighborhoods while supporting surrounding development with a safe and efficient RTE 138. Furthermore, ownership patterns, densities, and property values make roadway widening and property assembly difficult under existing conditions.

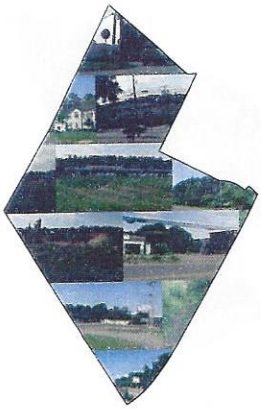
Figure II-20: Zone 3 Existing Conditions Photos

Take-aways:

Zone 3 currently functions as a retail and working district.

Existing Conditions suggest that Zone 3 presents opportunities for targeted, low-impact development on under-utilized and vacant sites.

Photos taken by Grant King, SRPEDD.



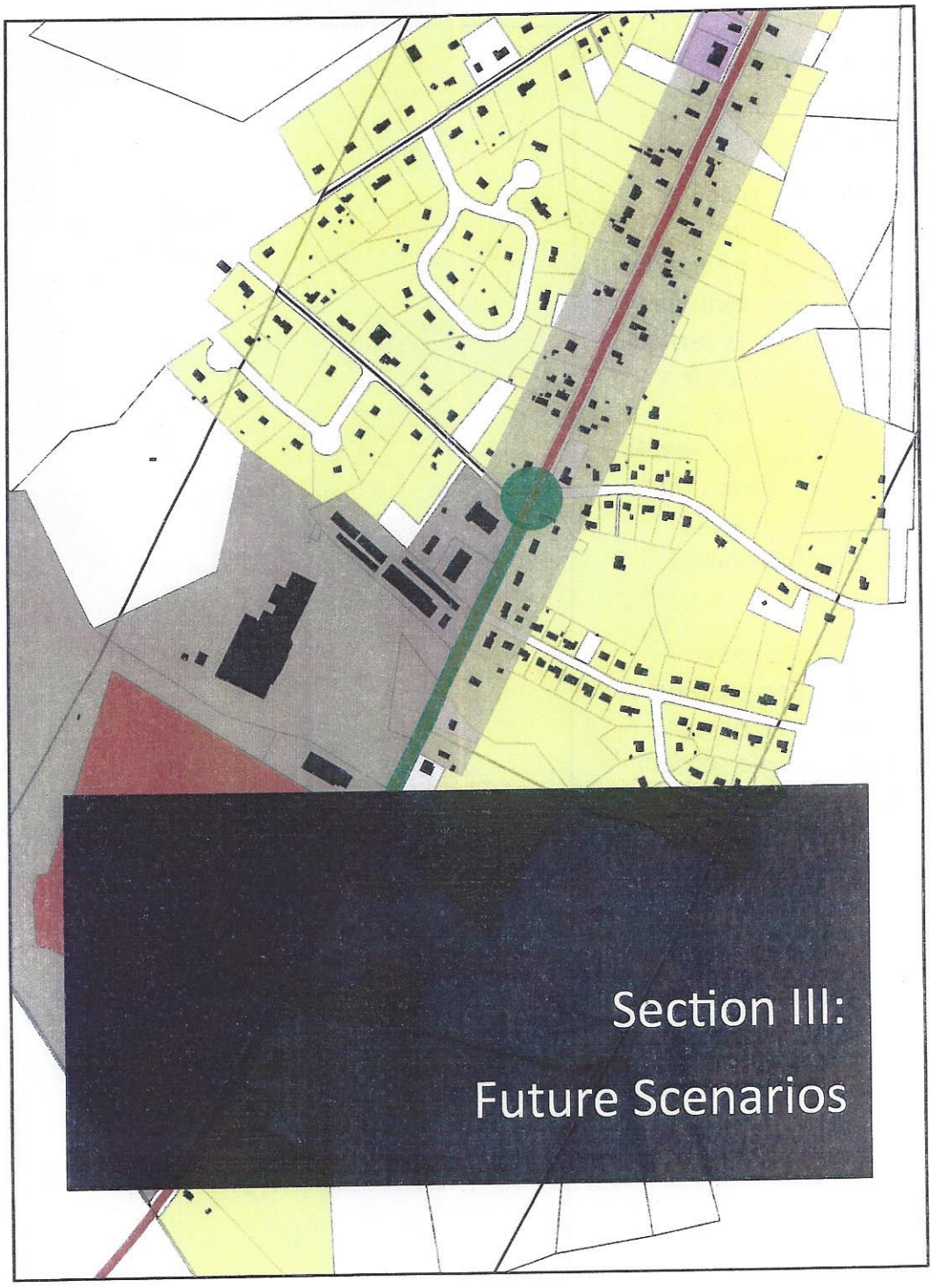
Zone 3 currently functions as a retail and working district. (Wal-Mart will join the existing mid-size anchor retail firms in 2014.) It has the "youngest" building stock in the study area, with an average year-built of 1966 (compared to 1950 overall).

Zone 3 has the lowest densities in the study area at about 900 SQFT of built space per acre of land, 26% below the study area average. Its property values are also low in comparison to the rest of the study area. Both conditions are partially due to significant wetlands and habitat constraints on development potential - the Pine Swamp and Prospect Hill pond are situated on the southern edge of the Zone.

This area also has extensive hydrography considerations, notably a high yield aquifer and a Zone II Wellhead protection district.

Zone 3 has a local Combined Priority Development and Priority Protection area (as designated by the Town) that covers the entire Designated Development (DD) zoning district on the west side of RTE 138.

Existing Conditions suggest that Zone 3 presents opportunities for targeted, low-impact development on under-utilized sites.

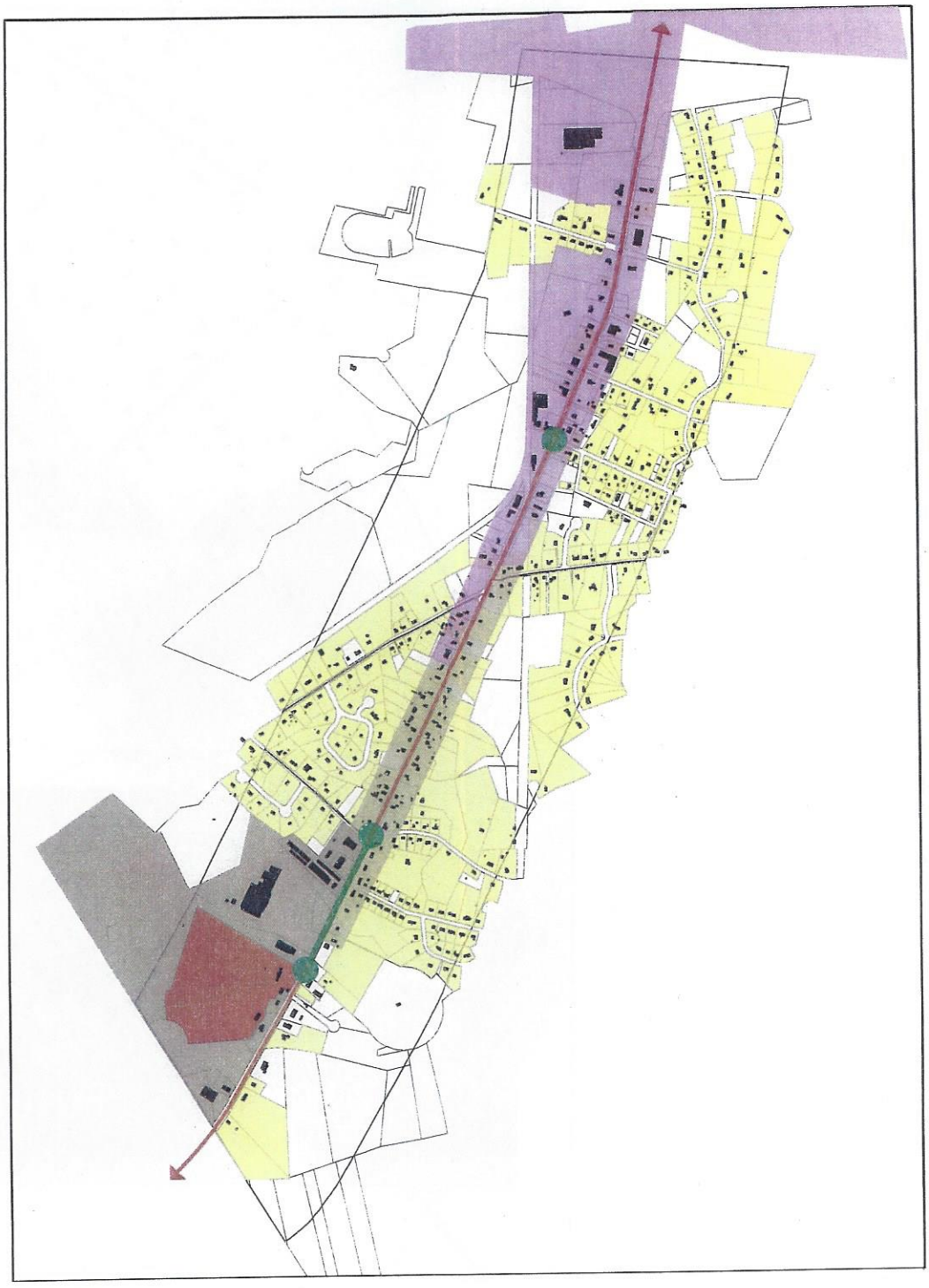


Section III:
Future Scenarios

Figure III-1: Probable Scenarios and Trends (Near-Term)

*Based on the preceding Existing Conditions analysis and their personal experiences as Raynham residents, business-owners, and officials, the project Steering Committee identified several **probable** scenarios and trends that will likely take place in study area in the near future.*

Trends and scenarios are depicted on the map with their corresponding descriptions (color-coded) on the opposite page.



Based on the preceding Existing Conditions analysis and their personal experiences as Raynham residents, business-owners, and officials, the project Steering Committee identified several ***probable*** near-term scenarios and trends that will likely take place in the near future. These future scenarios will be directly addressed by planning proposals in the next section, "Planning Tools."

The major ***probable*** scenarios and trends include: continued thriving neighborhoods in Zones 1 and 2; continued infill commercial and service development in Zone 1; increased traffic affecting households in the RD zoning district directly along RTE 138; the arrival of Wal-Mart and its positive and negative impacts along the study area corridor; continued stagnation and underutilization of the portions of Zone 3 zoned DD; and roadway improvements including resurfacing and widening from King Phillip Street to the Wal-Mart entrance and the addition of three signalized intersections at Center Street, King Philip, and the Wal-Mart entrance.

In the next section, "Planning Tools", the Committee will identify planning initiatives that work within the parameters of the preceding Existing Conditions analysis while positioning the study area to respond to the probable scenarios detailed here.

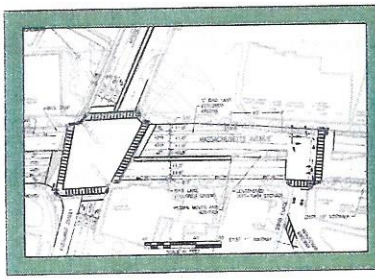
Thriving Neighborhoods:
Single-family, high-value neighborhoods off-Broadway in Zones 1 and 2 continue to thrive. These households are less directly affected by increased traffic on RTE 138, but are affected indirectly by issues accessing RTE 138.

Infill Commercial Development:
Incremental infill development continues in the BD zoning district in Zone 1. Franchise marketing dictates roadway "look and feel" and study area place-making.

Increased Traffic Affects Households:
Homes and small businesses in the RD zoning District along RTE 138 are affected by increased traffic. There is a probable rise in vacancies, reduced maintenance, and professional business uses.

Development District Freezes Uses:
Restrictive use schedules and dimensional requirements in the DD zoning district prevents small- to medium-scale satellite development that could accompany Wal-Mart in areas not constrained by environmental considerations.

Wal-Mart Arrives:
Wal-Mart brings jobs and activity, but also 10,300 additional vehicle trips per day, 4.63 acres of building footprint, 15.2 acres of impervious surface, and other impacts along the study area corridor.



Roadway Improvements:
Three new signalized intersections (at Center Street, King Philip Street, and the Wal-Mart entrance) and the resurfacing and widening of RTE 138 from King Philip to the Wal-Mart entrance alleviate some circulation impacts.

Figure III-2: Possible Scenarios and Trends (Mid- to Long-Term)

*The project Steering Committee also identified several **possible** scenarios and trends that could take place in the study area and across the region in the mid- to long-term future.*

Trends and scenarios are depicted on the map with their corresponding descriptions (color-coded) on the opposite page.

This map is zoomed out slightly from the study area (in orange) in order to depict possible developments of regional significance that are very close to the RTE 138 corridor.

The project Steering Committee identified several ***possible*** scenarios and trends that could take place in the study area and across the region in the mid- to long-term future.

The major ***possible*** scenarios and trends include: continued population growth throughout Raynham; continued roadway intensification along RTE 138; the arrival of South Coast Rail commuter rail service in Raynham and Taunton; the arrival of gaming developments in the region; increased demand for a more intense and wider mix of land uses in the study area; and continued use of regional roadway networks, with RTE 138 becoming increasingly travelled.

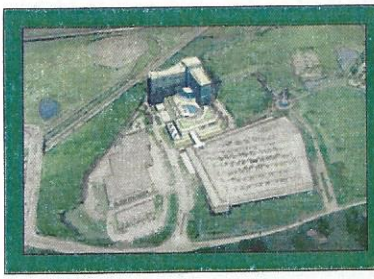
In the next section, "Planning Tools", the Committee will identify planning initiatives that work within the parameters of the preceding Existing Conditions analysis while positioning the study area to respond to the "possible" scenarios detailed above and the "probable" scenarios listed here.

Raynham Continues to Grow Quickly:
The Town's rapid population growth and its transition from a "rural hamlet" to a "suburban bedroom community" continue.

RTE 138 Roadway Continues to Intensify
Regional development creates more trips on RTE 138. The existing two-lane layout's VCR approaches 0.8, indicating congestion. Roadway widening is difficult due to ownership and property characteristics.

SOUTH COAST RAIL

South Coast Rail Commuter Rail Arrives:
Commuter Rail arrives in Raynham and Taunton, bringing increased pressure to live and work near station sites and in the study area.



Gaming Arrives:
Potential casino developments arrive at sites in Raynham and Taunton. The June 2012 pro-casino referendum in Taunton makes this appear even more likely.

Demand for Higher Intensity, Mixed Use:
Due to surrounding public and private sector investment, there is increased demand for a wider and more intense mix of land uses in the study area.

495 44 24

138 140 104

Regional Roadway Network:
Interstate 495, RTE 44, and RTE 24 continue to serve as main regional arteries; secondary arteries such as RTE 138, RTE 140, and RTE 104 become increasingly travelled links in the regional roadway network.

In light of the preceding Future Scenarios, the project Steering Committee intends to advance planning interventions that enable the Town to mitigate negative trends while taking advantage of positive ones.

The project Steering Committee believes that inaction would set the study area up for long-term disadvantages. However, while the Committee agrees that the cost of not planning would be high, it also believes that the recommended changes must effectively balance the realities of a growing region with the needs and desires of area residents and businesses.

New zoning that enables different types of development must take pains not to negatively impact the study area. Transportation investments can't just increase capacity and auto use. Put differently, new strategies adopted by the Town must not only limit negative impacts, they must actively work to enhance the quality of life on the entire RTE 138 corridor.

FUTURE SCENARIOS SUMMARY STATEMENT

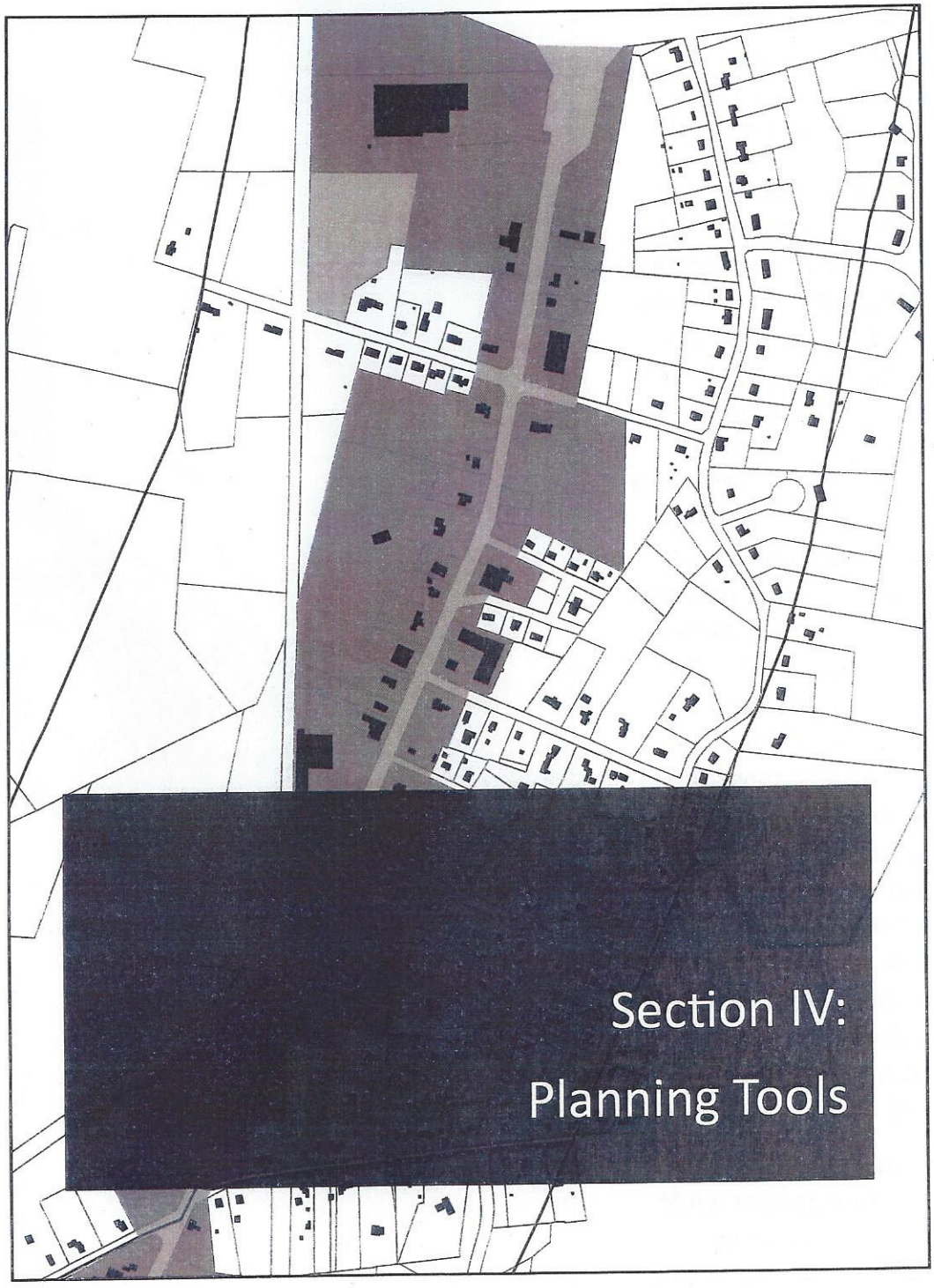
In light of the preceding *Future Scenarios*, the project Steering Committee intends to advance planning interventions that enable the Town to mitigate negative trends while taking advantage of positive ones.

For example, the Committee hopes to leverage anticipated demand for mixed-use development to set up standards that shape the character and form of that development. The Committee also hopes to address rising traffic volumes and congestion by recommending low-cost initiatives that improve circulation, safety, and quality of life.

In summary, the project Steering Committee believes that inaction would set the study area up for long term disadvantages. However, while the Committee agrees that the cost of not planning would be high, it also believes that the recommended changes must effectively balance the realities of a growing region with the needs and desires of area residents and businesses.

New zoning that enables different types of development must take pains not to negatively impact the study area. Transportation investments can't just increase capacity and auto use. Put differently, new strategies adopted by the Town must not only limit negative impacts, they must actively work to enhance the quality of life on the entire RTE 138 corridor.

The Committee believes the strategies laid out in the next section, *Planning Tools*, present the vision for this balanced future and lay the groundwork for getting there.



Section IV: Planning Tools

Figure IV-1: Create a "Gateway" Mixed Use Overlay for RTE 138

The goal of this type of mixed use overlay is: (1) to encourage interaction among uses and activities; (2) to enhance business vitality, mitigate increased vehicular traffic, and provide employment opportunities for residents close to home; (3) to ensure the compatibility of commercial, residential, and circulation activities; (4) to ensure that the appearance and effects of buildings and infrastructure are harmonious with the character of the area; and (5) to generate positive tax revenue by providing for new business growth alongside higher density residential opportunities that serve all household types.

The overlay provides additional options while leaving the existing underlying zoning in place.

Proposed Concept for a "Gateway" Mixed Use Overlay

Create a *"Gateway" Mixed-Use Overlay* district:

The project Steering Committee recommends that a "Mixed-Use Overlay" district be studied by the Planning Board and added to the Town Zoning bylaws. The area of the proposed Overlay would include all properties with frontage on RTE 138, pictured in dark grey, with the addition of a small number of other strategic areas, pictured in light grey. The seven additional strategic areas include two target redevelopment properties and five properties surrounded by parcels with frontage on RTE 138, but without frontage themselves. The Steering Committee rejected an initial proposal that located this overlay exclusively in Zone 1, closest to I-495 and covering the "Triangle Redevelopment Area" local PDA. Instead, the Committee elected to extend the Overlay to all properties along RTE 138 in order to allow all owners to benefit from future mixed use development and to mitigate negative traffic impacts on their properties. Moreover, it chose the overlay zoning mechanism to create a *specific menu of acceptible uses and design standards that protect and complement abutting residential neighborhoods*.

The goal of this type of mixed-use overlay is: (1) to encourage interaction among uses and activities located within the overlay; (2) to enhance business vitality, reduce vehicular traffic, and provide employment opportunities for residents close to home; (3) to ensure the compatibility of commercial, residential, and circulation activities; (4) to ensure that the appearance and effects of buildings and infrastructure are harmonious with the character of the area in which they are located; and (5) to generate positive tax revenue by providing the opportunity for new business growth and local jobs alongside higher density residential opportunities that serve all household types.

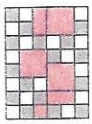
The overlay achieves its goals through a variety of zoning mechanisms:

- Site Plan Review that prioritizes design standards, open space amenities, signage guidelines, and low impact development techniques (such as stormwater management).
  - This process already exists in Article 13 of the Town of Raynham Zoning bylaws, which requires a Site Plan Review process for non-residential projects greater than 1,200 SQFT of built area, projects requiring additional parking spaces, multi-family housing greater than two units, and changes from residential uses to non-residential uses.
- Dimensional Standards that:
  - Reduce setbacks and height limitations while increasing open space requirements and buffer and screening standards
  - Set maximum gross floor area caps that limit big box development.
- Roadway access point management and parking reductions paired with sidewalk and pedestrian amenities.
- Use schedules that:
  - Permit multiple complementary uses within the same structure (vertical mixed use) and/or on the same parcel (horizontal mixed use).
  - Set limits on proportions of a project that can be devoted to specific uses, such as retail or office.
- Incentives for assembling small parcels into larger holdings in order to provide an opportunity to comprehensively plan for a large tract of land (with higher standards for design, limited curb cuts, and better overall circulation).

It is the Steering Committee's hope that this type of regulatory change will shape the character of anticipated future development while addressing some of the relevant existing conditions in Zone 1. The Committee believes that the proximity of I-495 along with regional growth trends, including the arrival of South Coast Rail and proposed nearby gaming facilities (in Taunton) and slot facilities (at Raynham Park), position this portion of the study area to experience continued and increased demand for development. Moreover, the area's existing mix of uses, ownership patterns, built environment, and potential redevelopment areas make it ready to successfully accommodate additional growth - the character of which will ensure no negative impact on sensitive wetland networks or nearby neighborhoods.

Main Concepts Addressed:

Medium intensity mixed-use corridor



Patchwork of commercial and non-commercial owners

Local Combined PDA/PPA

Brownfields and Local PDA

Contiguous wetland connections

Neighborhoods along Broadway (in Zone 2)

Infill Commercial Development

Regional Roadway Network

South Coast Rail Arrives

Demand for Higher Intensity Mixed Uses

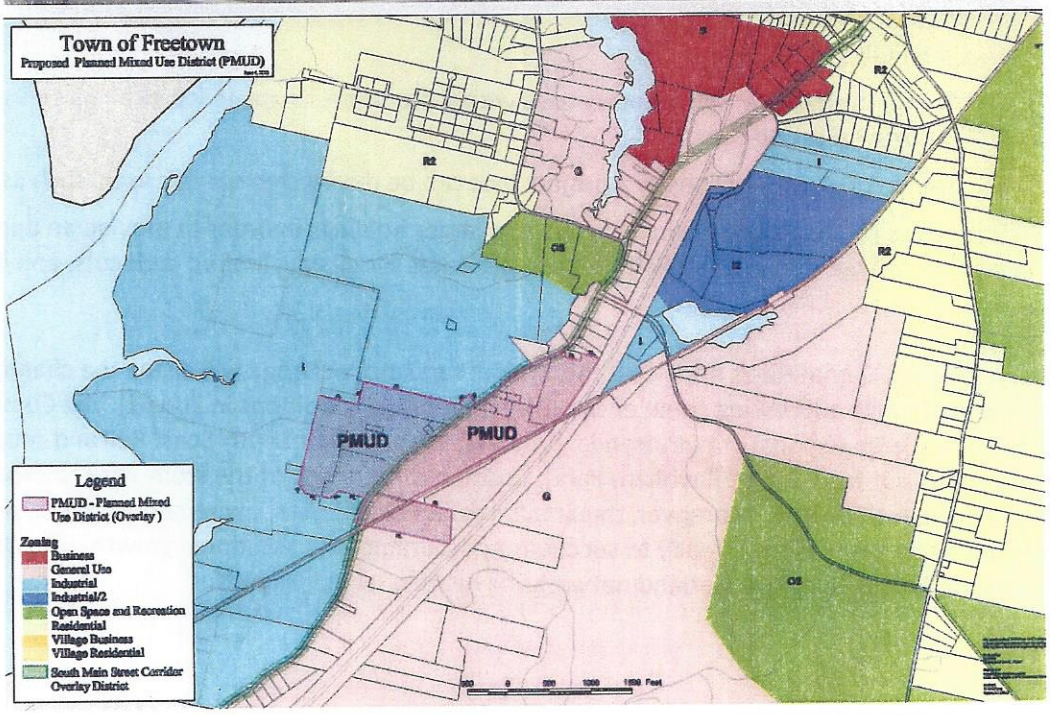
Thriving Neighborhoods

Gaming Arrives

Figure IV-2: Gateway Mixed Use Overlay Examples

While its overall size is somewhat larger than desired, the Mashpee Commons mixed use development (top right) represents a regional example of the mix of businesses and residents, increased densities, and balanced circulation system envisioned by the project Steering Committee. Like Zone 1, Mashpee Commons is adjacent to major roadway networks. (Photo from Flickr, June 6, 2007.)

The Town of Freetown adopted a "Planned Mixed Use Development" (bottom right) bylaw at their annual Town meeting on June 4, 2012. This successful regional example required three years of study, refinement, and compromise.



Gateway Mixed-Use Overlay Examples:

- Mashpee Commons, Mashpee, MA
- Freetown, MA: Planned Mixed Use Development Distinct (PMUD), which was passed at Town Meeting on June 4, 2012.
- Arlington Street Transit Oriented Development Overlay District in Taunton, MA
- Southfield, MA: Form Based Code (Mixed-Use Village District, Main Street Overlay District, Shea Village Commercial District, etc.).

The project Steering Committee identified the above examples that it believes are representative of the "look and feel" that the Gateway Mixed-Use Overlay will create. The Committee also identified examples for the bylaw's implementation.

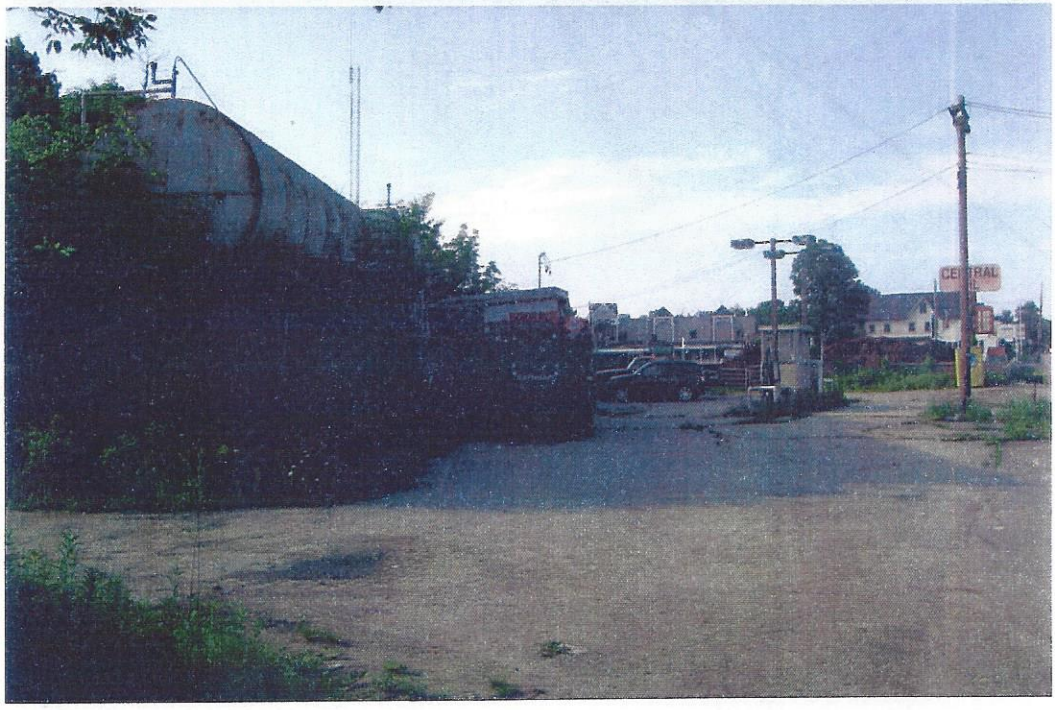


Figure IV-3: Sites with Redevelopment Potential

Photos taken by Grant King, SRPEDD.

While its overall size is larger than desired, the Mashpee Commons mixed use development in Mashpee, MA, represents a regional example of the densities, mix of businesses and residents, and balanced circulation system envisioned for the district. Like Zone 1, Mashpee Commons is adjacent to major roadway networks.

The Town of Freetown, MA recently adopted a "Planned Mixed Use Development" (PMUD) bylaw at their Annual Town Meeting on June 4, 2012. This successful regional example required three years of study, refinement, and compromise - a process that will be outlined in the "Action Plan" portion of this section. Similar regulatory changes in Taunton, MA (the Arlington Street Transit Oriented Development Overlay District) and in Southfield, MA (Mixed Use Village District, Main Street Overlay District, Shea Village Commercial District, etc.) also provide examples of this type of zoning reform.

It is the Committee's hope this type of regulatory change can reshape traditional strip development and underutilized sites in Zone 1. It believes this type of intervention can successfully limit negative impacts of growth and enhance the quality of life on the entire RTE 138 corridor.

Figure IV-4: Develop a Balanced RTE 138 Circulation Strategy

New developments such as Wal-Mart and probable future growth will further strain safe and efficient travel in the study area. In order to directly address these concerns and accommodate new development while also protecting the quality of life for area residents, the Committee recommends that the Town develop a "Balanced RTE 138 Circulation Strategy." This strategy should include near-term, low-cost initiatives and long-term infrastructure investments within the existing two-lane layout.

Develop a Balanced RTE 138 Circulation Strategy (with near-term and long-term action items):

One of the project Steering Committee's major concerns for the study area is circulation on RTE 138. As the existing conditions analysis demonstrates, RTE 138 is already experiencing high crash rates and volumes approaching congestion levels, particularly between I-495 and King Philip Street. New developments such as Wal-Mart and probable future growth will further strain safe and efficient travel in the study area. In order to directly address these concerns and accommodate new development while also protecting the quality of life for area residents, the Committee recommends that the Town develop a "Balanced RTE 138 Circulation Strategy." This strategy should include near-term, low-cost initiatives and long-term infrastructure investments that work within the existing two-lane layout (60' right-of-way).

Initiatives that are appropriate for existing and near-term conditions can include:

- Working with the Greater Attleboro Taunton Regional Authority (GATRA) and SRPEDD's Transit Department to establish

bus service to the Wal-Mart development and further north on RTE 138 (where demand exists). GATRA established bus service to the RTE 44 Raynham Wal-Mart and has expressed interest in serving similar scale developments. Furthermore, the May 17, 2006 Final Environmental Impact Report for the RTE 138 Wal-Mart included the following mitigation measure: "Modify the site plan to incorporate a bus stop shelter, a drop off area, and a bus turn around in accordance with the Greater Attleboro Taunton Regional Authority (GATRA) needs with a sidewalk providing direct store access for bus patrons."

- Focus on enforcement of existing speed limits and traffic laws. Changing the speed limit along the corridor would require a speed study by MassDOT, which would set the speed limit at the 85th percentile speed. Given current elevated speeds on this corridor, a speed check could actually lead to a speed limit *increase* if the 85th percentile speed exceeds the current speed limit.
- Leverage Wal-Mart investments associated with traffic mitigation (these include intersection improvements and roadway widening) to include "measures to narrow the [roadway's] apparent width." Reduction of the apparent street width can be an important traffic calming element (MassDOT Highway Division's *Project Development and Design Guide* [2006], page 16-7). These measures work by affecting a driver's perception of the roadway and its safe travel speeds. Initiatives can include:
  - Visible and consistent signage. Special attention should be paid to pedestrian facilities and signage that creates a sense of welcome at points of entry into the town; opportunities for this type of intervention exist at forthcoming signalized intersections, at Gilmore Hall (Carver Street), and at the Taunton line.
  - Textured pavement denoting crosswalks.
  - Painted bike lanes that integrate with the proposed SRPEDD Regional Bicycle Network, which skirts the west side of RTE 138 between Center Street and Britton Street.
  - Continuous sidewalks throughout the study area with raised curbs.
  - Buffer street plantings, street lighting, and street furniture (such as benches at crosswalks and bus stops)
  - Zoning that allows buildings closer to roadways (such as described in the Gateway Mixed Use Overlay District proposal, above).
- Use the Site Plan Approval process enabled by Article 13 of the Town zoning bylaws to more closely manage roadway access for new developments. This can limit the number and type access points to RTE 138.

It is the Steering Committee's hope that near-term recommendations can be implemented quickly, particularly in light of the existing elevated crash rate, the rising volume to capacity ratio, and the investment momentum created by the arrival of Wal-Mart and associated roadway improvements.

Longer term investments and studies *should only be considered if zoning initiatives similar to the Gateway Mixed Use Overlay District help create a truly mixed use district existing alongside thriving neighborhoods*. These long-term actions could include medians and crossing islands, curb extensions coupled with on-street parking, and further signalization. Increased capacity should not be considered.

Main Concepts Addressed:

Medium intensity mixed-use corridor

Corridor-wide crashes at above average rates

1st Street Crash Cluster

Four roadway conditions (Broadway @ 1st Street) Volume approaching congestion

Neighborhoods along Broadway (in Zone 2)

Wal-Mart Arrives

Roadway Improvements

Demand for Higher Intensity, Mixed Uses

Thriving Neighborhoods

RTE 138 Roadway Continues to Intensify

Gaining Arrives Nearby

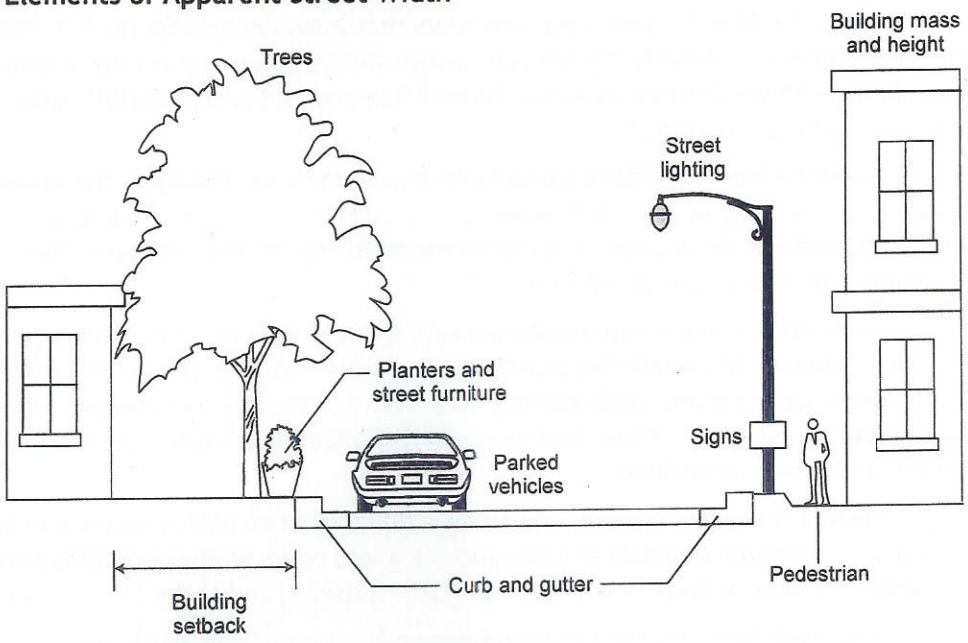
Figure IV-5: Examples of Balanced Circulation Strategies

Exhibit 16-3 on page 16-8 of the MassDOT Highway Division's Project Development and Design Guide (top right) illustrates elements that affect a driver's perception of the street width and safe driving speeds.

Also working within a 60' right-of-way and two-lane layout, The City of Cranston, RI implemented a series of traffic calming investments along Broad Street in Pawtuxet Village (bottom right). Near-term measures to be considered include signage and textured crosswalks; long-term investments include curb extensions, streetscaping, and on-street parking.

Photo taken by Grant King, SRPEDD.

Elements of Apparent Street Width



Source: MassHighway

Examples of Balanced Circulation Strategies:

- MassDOT Highway Division's *Project Development and Design Guide* (2006)
- City of Cranston, RI traffic calming investments in Pawtuxet Village
- City of Attleboro, MA traffic calming and streetscaping investments in the downtown area.

The project Steering Committee identified the above examples that it believes are representative of the type of balanced circulation strategy it is proposing for consideration by the Town.

MassDOT's *Project Development and Design Guide* provides extensive information regarding efficient and safe circulation for all transportation modes in the Commonwealth. This document and its author agency should be a resource for Raynham as it explores both near-term and long-term solutions for the study area.

Figure IV-6: Sites Within The Study Area That Have "Unbalanced" Circulation Conditions

Photos taken by Grant King, SRPEDD.

The Cities of Cranston, RI and Attleboro, MA have implemented successful traffic calming programs along busy roadways. Cranston's intervention within the 60' Broad Street right-of-way in Pawtuxet village closely resembles the near-term and long-term initiatives envisioned by the Steering Committee. These programs have improved safety for all roadway users and have positively affected the character of the surrounding area. The Town should consult these examples when pursuing circulation system proposals.

Cost Estimates:

SRPEDD acquired cost figures for a similar, 2010 project in Jamestown, RI in order to provide a ballpark frame of reference for costs associated with traffic calming and streetscaping improvements similar to those included in this proposal. The project is not identical to the RTE 138 propsal and is provided only as an example. The project's total cost was $615,000 for the following improvements: 1,250 feet of pavement on a 31-foot wide roadway (38,750 sq. feet), two 9-foot sidewalks for 1,250 feet (22,500 sq. feet), 5 curb extensions/bumpouts, 9 textured crosswalks (275 linear feet), 1 bench, 6 bike racks.

Figure IV-7: Make Designated Development (DD) Zoning District More Flexible

The project Steering Committee identified the Designated Development (DD) District as an area requiring special consideration. Neighborhood representatives want to ensure that no further big box development arrives in the area and that any future projects complement and serve their neighborhoods. Business representatives and Town officials believe that use schedules and dimensional regulations in the current DD zoning will limit potential off-shoot development that could improve vacant and underutilized properties and bring tax revenue to the Town. This tension requires compromise in order to ensure that the area is positioned for future growth that is compatible with the needs and desires of all interested parties.

Make Designated Development (DD) District Zoning More Flexible:

The project Steering Committee identified the area zoned Designated Development (DD) District in Zone 3 as an area requiring special consideration. Neighborhood representatives want to ensure that no further big box development arrives in the area after Wal-Mart opens and that any future projects complement and serve their neighborhoods; they seek this outcome out of concern for environmental and water resources and in order to prevent roadway congestion. Business representatives and Town officials believe that use schedules and dimensional regulations in the current DD zoning - amended at a Special Town Meeting on November, 2007 in response to the Wal-Mart approval process - will limit potential off-shoot development that could improve vacant and underutilized properties and bring tax revenue to the Town; this belief is especially strong for several moderate to small-sized parcels along RTE 138. This tension requires compromise in order to ensure that the area is positioned for future growth that is compatible with the needs and desires of all interested parties.

The Committee therefore recommends further study and possible revision of all relevant zoning sections affecting

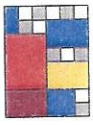
Designated Development (DD) Districts. The goal of this process would be (1) to ensure vacant and underutilized properties along RTE 138 can be appropriately redeveloped without adverse impacts on surrounding neighborhoods and environmental resources and (2) that large properties adjacent to the Wal-Mart and Market Basket sites area available for appropriate, realistic, and profitable redevelopment opportunities. (The only other area zoned DD in the Town is the Paramount Drive area on RTE 44; that area is almost entirely built-out or is encumbered by wetland constraints.)

Possible revisions for consideration should include:

- Amending Article 7: Use by Special Permit of the Town Zoning Bylaws in order to add *specific* and *agreed-upon* uses available in DD districts. Additions should not limit redevelopment potential in small lots by adopting restrictive requirements for minimum lot sizes, setbacks, parking spaces, etc.
    - Article 7 and M.G.L.'s special permit process requires a Public Hearing that guarantees that area residents will have direct input on future developments. Furthermore, Article 13: Site Plan Approval and the overarching Zone II Water Resource Protection district provide for a comprehensive review of a proposed development's impacts.
    - Committee members identified several possible uses for consideration: "pocket/cluster" retirement neighborhoods (similar to, but smaller than, those described in Article 18: Adult Retirement Community), mixed use developments, small- to medium-scale retail, etc.
        - It is important to note that Article 7 currently authorizes the following uses in DD districts by special permit: (1) "ANY USE PERMITTED IN A BUSINESS DISTRICT . . . on a parcel of not less than four (4) acres and three hundred fifty feet of frontage (350) . . ." and (2) "ANY USE PERMITTED IN A RESIDENTIAL B DISTRICT . . . on a parcel of not less than fifteen (15) acres . . ." Put differently, some of the desired uses described by the project Steering Committee, such as cluster developments permitted in Residential B districts, are already available to the development community by special permit. The extent to which the Town wishes to explicitly describe particular use types or change development densities and forms should therefore determine the extent of the amendment process.
- Alternatively, *specific* and *agreed-upon* uses could be made available by right in DD districts by amending Article 4.10, governing permitted uses.
    - Once again, amendments should not limit redevelopment potential in small lots through restrictive requirements for minimum lot sizes, parking spaces, etc. This would be accomplished by revising requirements detailed in Articles 6.9.1 - 6.9.9 governing DD regulations. For example, under existing regulations, only three parcels (the former Auto Mall, the gravel pit owned by Rapid RE LLC, and the Market Basket parcel) would be conforming lots that could accommodate redevelopment by right. Changes in dimensional requirements are therefore necessary for small lots along Broadway to be available for redevelopment *regardless of chosen regulatory approach*.
- Lastly, a *limited* area abutting RTE 138 could be rezoned Business District to match the zoning across RTE 138. Zoning "corridors" of 400' (200' each side) centered on the center line are typical in the study area and provide precedent for this type of regulatory reform. Rezoning could extend further into the DD zone than 200' in order to affect desired areas. (For example, the dashed line pictured at left is 400' from the center line.)

Main Concepts Addressed:

Medium intensity retail, working district



Large holdings (non-residential)

Below average

Extensive

Neighborhoods along Broadway (in Zone 2)

Extensive

Wal-Mart Arrives

Development District Freezes Uses

Increased Traffic Affects Households

Demand for Higher Intensity, Mixed Uses

Thriving Neighborhoods

Infill Commercial Development

Figure IV-8: Examples of Development Types Desired for the DD Zoning District

Top photo taken by Grant King, SRPEDD.

Bottom photo available in the AARP Bulletin May 3, 2012

Examples:

- Stone Forge Tavern on RTE 44 in Raynham, MA
- Greenwood Avenue Cottages in Shoreline, WA

The project Steering Committee identified preliminary examples of compromise uses for consideration in the DD district. While uses similar to these are currently allowed either by right (non-fast food restaurants such as Raynham's own Stone Forge Tavern) or special permit ("pocket/cluster" neighborhoods such as Greenwood Avenue Cottages in Shoreline, WA), the Committee believes a comprehensive review of all relevant zoning sections affecting Designated Development (DD) Districts would guarantee that future development aligns with neighborhood, business, and Town interests.

Figure IV-9: Sites in Zone 3 with Redevelopment Potential

Photos taken by Grant King, SRPEDD.

Furthermore, the Committee identified areas in Zone 3 that are desirable for redevelopment. These sites are either abandoned and in disrepair or are recently vacant. Even though increased traffic is a concern the Committee addressed in its recommendation for "a balanced RTE 138 circulation strategy," it is important to emphasize the benefits of appropriate new growth on these sites outweigh the costs of incremental auto trips if they are appropriately addressed by a balanced circulation strategy.

New tax revenue for the Town, increased activity that complements surrounding neighborhood uses, and improvements to the look and feel of the study area are all goals that the Committee agrees are desirable for this portion of the RTE 138 Corridor.

PLANNING TOOL ACTION ITEMS

At its last meeting, on June 25, 2012, the project Steering Committee voted unanimously to recommend this report and its content to the Town's Board of Selectmen and Planning Board. To further facilitate this process, SRPEDD has identified a brief set of "next steps" that Raynham's Town government can consider in order to advance the strategies contained in this document. These next steps are presented as an outline of implementation action items for each of the three major Planning Tools described above.

At its last meeting, on June 25, 2012, the project Steering Committee voted unanimously to recommend this report and its content to the Town's Board of Selectmen and Planning Board. To further facilitate this process, SRPEDD has identified a brief set of "next steps" that Raynham's Town government can consider in order to advance the strategies contained in this document. These next steps are presented as an outline of implementation action items for each of the three major Planning Tools described above; the two zoning initiatives are grouped together. Each set of action items consists of three phases - Phase 1: Formalizing Municipal Support; Phase 2: Buy-in and Further Participation; Phase 3: Positioning the Study Area for Growth.

Gateway Mixed Use and **DD Zoning Reforms**

Phase 1: Formalizing Municipal Support

- The Planning Board endorses and adopts this planning document.
- The Board of Selectmen reaches consensus to support the document and advance its recommendations.
- The Planning Board initiates further study in order to create the content for a Mixed Use Overlay (such as its exact boundaries, menu of uses, dimensional regulations, design standards, access management strategies, incentives, etc., as explored above).
- The Planning Board initiates further study in order to identify aspects of the existing Zoning bylaw relevant to DD districts that should be reformed. Articles for consideration include Article 4, Article 6, and Article 7.
- The Planning Board can apply to complete some or all of this work with SRPEDD through the District Local Technical Assistance (DLTA) program, South Coast Rail Technical Assistance program, the Municipal Assistance (MA) program, or direct contract.

Phase 2: Buy-in and Further Participation

- The Town appoints a focused committee of citizens, real estate developers, affected property owners, and Town officials to craft the Mixed Use Overlay bylaw and revise relevant DD zoning provisions.
- Further examples of/precedents for desired outcomes and mechanisms are identified and explored.
- The Town conducts a public outreach and informational campaign that educates the general public and builds support in advance of Annual Town Meeting voting.

Phase 3: Positioning the Study Area for Growth

- Annual Town Meeting passage/Attorney General approval.
- Upon passage of the bylaw, the Town reaches out to regional developers in order to make sure the Mixed Use Overlay and DD provisions are understood and recognized by the development community and property owners.
- The Town utilizes the bylaw's new potential for oversight and public-private cooperation.

Balanced RTE 138 Circulation Stategies

Phase 1: Formalizing Municipal Support

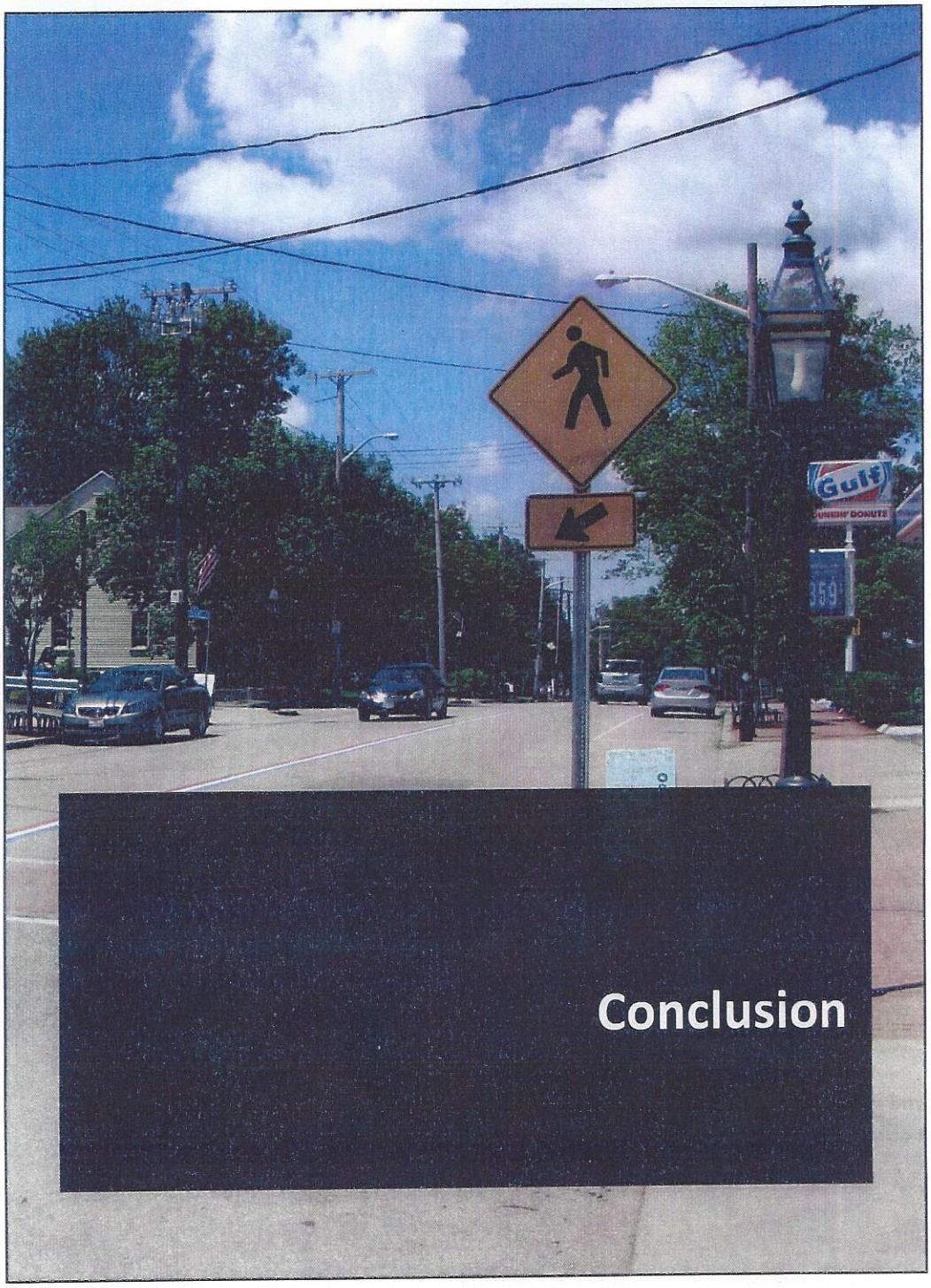
- The Planning Board endorses and adopts this planning document.
- The Board of Selectmen reaches consensus to support this document and advance its recommendations.
- The Town Highway Department reviews this document and examines the feasibility of its near-term and long-term circulation strategies.
- The Town contacts SRPEDD's Transit Department and GATRA in order to initiate bus service to the upcoming RTE 138 Wal-Mart and throughout the RTE 138 corridor.
- The Town contacts MassDOT and SRPEDD/SMMPO to present proposed transportation projects and discuss funding, phasing, and implementation strategies. This process creates an understanding of the types of resources that are available for specific mitigation and investment projects.

Phase 2: Buy-in and Further Participation

- The Town Highway Department initiates near-term, low cost interventions as described in this document.
- Working alongside interested citizens, the Town creates a permanent, standing transportation advisory committee to continue to advocate for a balanced circulation system and to continue to build support for identified projects.
- The Town initiates MassWorks, Chapter 90, and/or Transportation Improvement Program (TIP) processes for identified and eligible long-term infrastructure investments.

Phase 3: Positioning the Study Area for Growth

- Construction projects are phased and managed to minimize negative impacts along the corridor during and after construction.

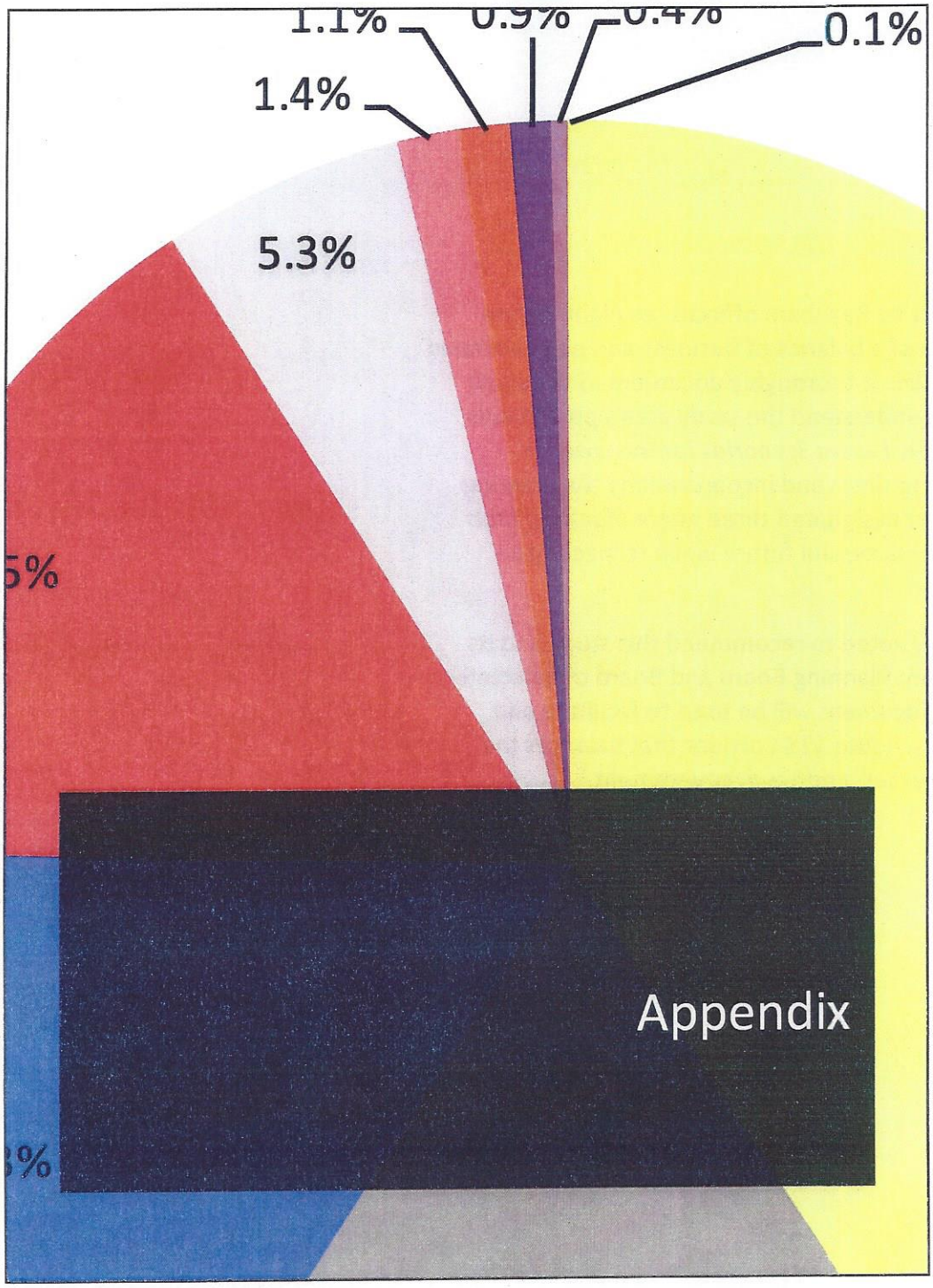


Conclusion

CONCLUSION

This study benefited from direct input by Raynham officials, an eight-person project Steering Committee made up of a balance of business and neighborhood representatives, and the general public. It thoroughly documented the study area's *Existing Conditions* in order to understand the study area's possibilities and limitations. It then identified likely *Future Scenarios* for the corridor, bulding upon the *Existing Conditions* findings and incoprorationg the Steering Committee's views. Finally, the report designated three major *Planning Tools* that can position the study area for a successful future while respecting its present character.

The Steering Committee unanimously voted to recommend this study and its findings and proposals to the Raynham Planning Board and Board of Selectmen. It is the Committee's hope that this document will be used to facilitate and inform Town decisions as it plans for a Route 138 Corridor that balances the needs and wishes of residents, businesses, and Town government.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Appendix

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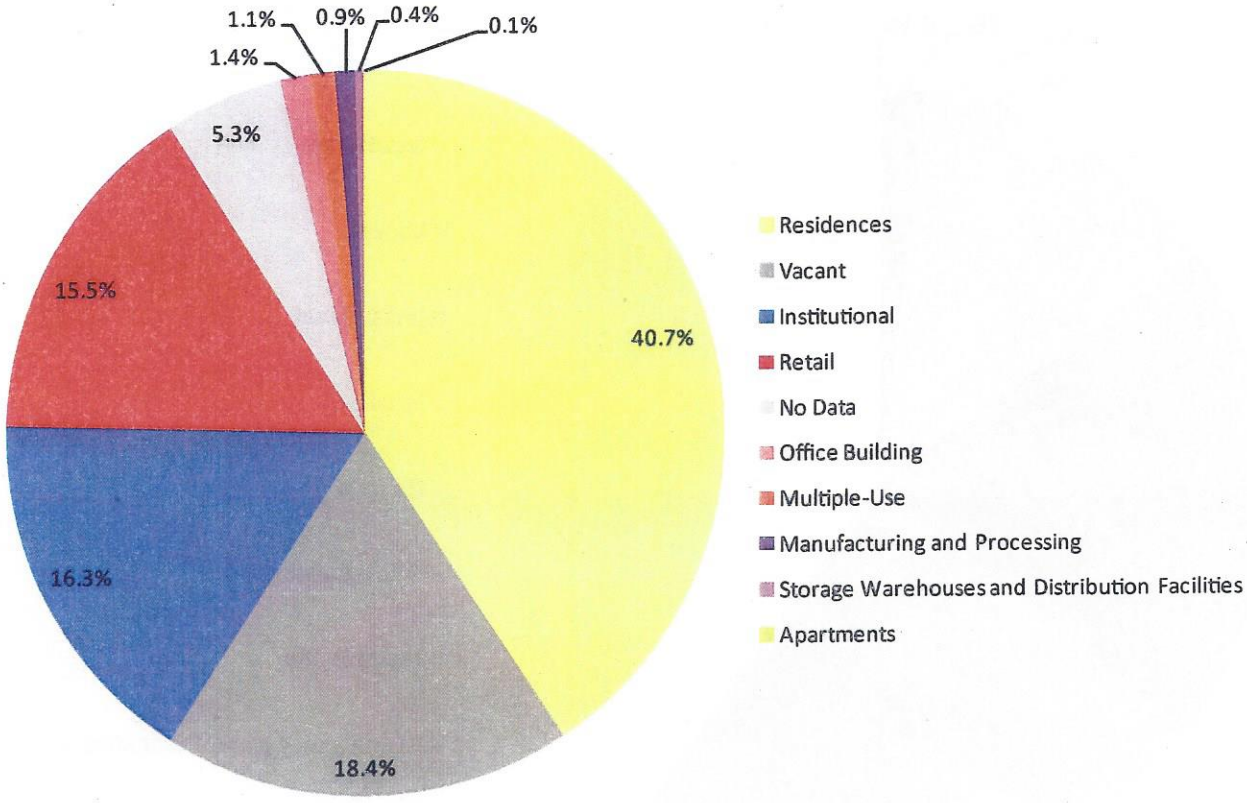
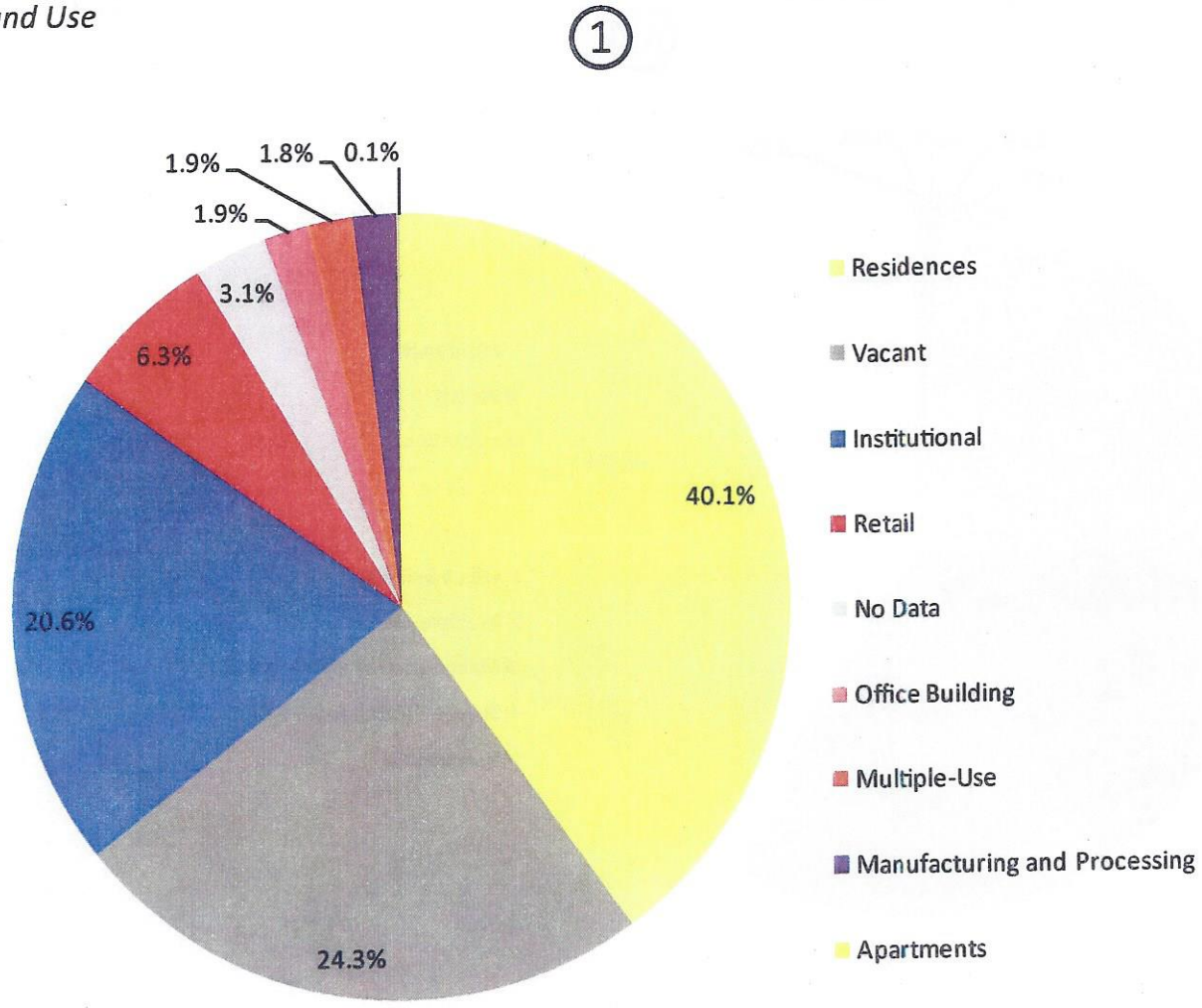
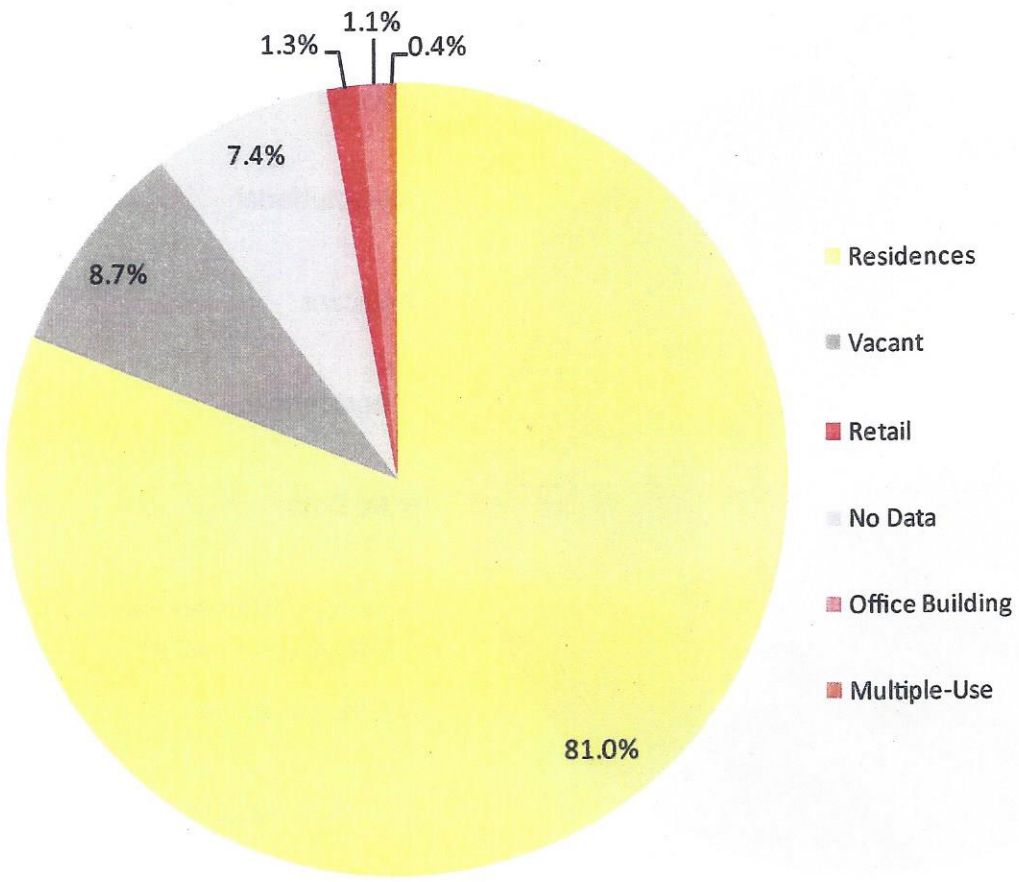


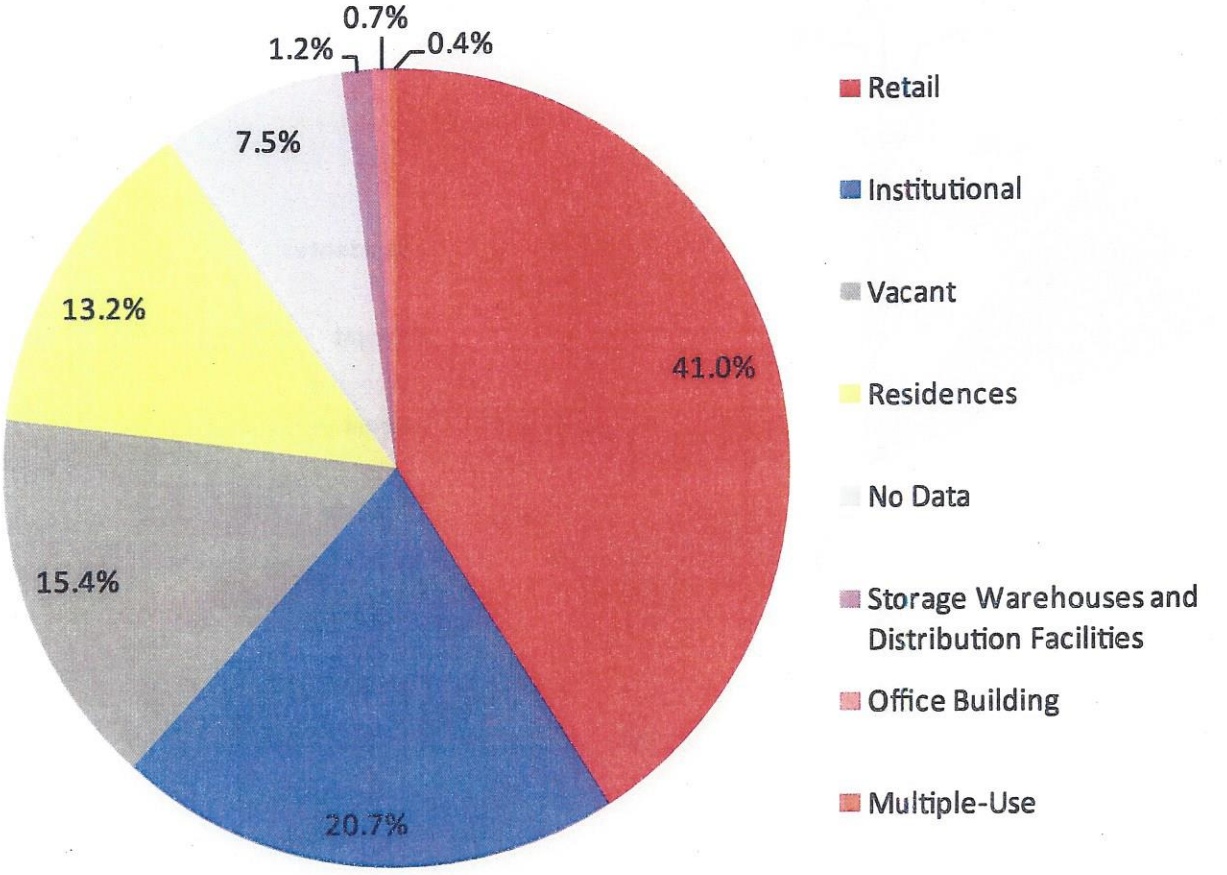
DOR 2- Digit Property Code	Description	Acres	Percent of Study Area
10	Residences	344.9	40.7%
13,39	Vacant	155.4	18.4%
35, 92, 93, 94, 95, 96, 98	Institutional	137.2	16.3%
32,33	Retail	131.0	15.5%
No Data	No Data	44.8	5.3%
34	Office Building	11.5	1.4%
0	Multiple-Use	9.4	1.1%
40	Manufacturing and Processing	7.5	0.9%
31	Storage Warehouses and Distribution Facilities	3.1	0.4%
11	Apartments	0.5	0.1%
	TOTAL	844.4	100.0%



DOR 2- Digit Property Land Use Code	Description	Acres	Percent of Study Area
10	Residences	166.8	40.1%
13,39	Vacant	101.3	24.3%
35, 92, 93, 94, 95, 96, 98	Institutional	85.5	20.6%
32,33	Retail	26.2	6.3%
No Data	No Data	12.7	3.1%
34	Office Building	7.8	1.9%
0	Multiple-Use	7.8	1.9%
40	Manufacturing and Processing	7.5	1.8%
11	Apartments	0.5	0.1%
31	Storage Warehouses and Distribution Facilities	0.0	0.0%
	TOTAL	416.2	100.0%

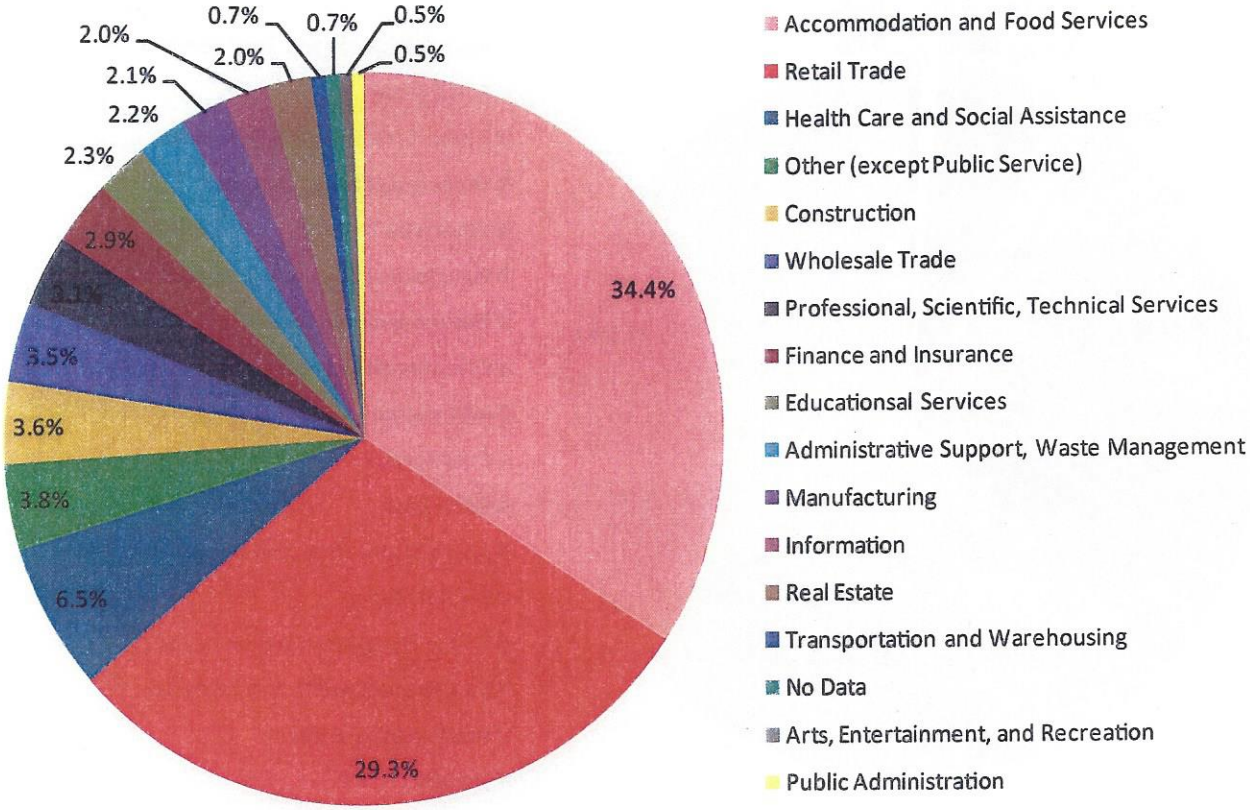


DOR 2- Digit Property Land Use Code	Description	Acres	Percent of Study Area
10	Residences	144.2	81.0%
13,39	Vacant	15.6	8.7%
No Data	No Data	13.3	7.4%
32,33	Retail	2.3	1.3%
34	Office Building	2.0	1.1%
0	Multiple-Use	0.7	0.4%
11	Apartments	0.0	0.0%
31	Storage Warehouses and Distribution Facilities	0.0	0.0%
40	Manufacturing and Processing	0.0	0.0%
35, 92, 93, 94, 95, 96, 98	Institutional	0.0	0.0%
	TOTAL	178.1	100.0%

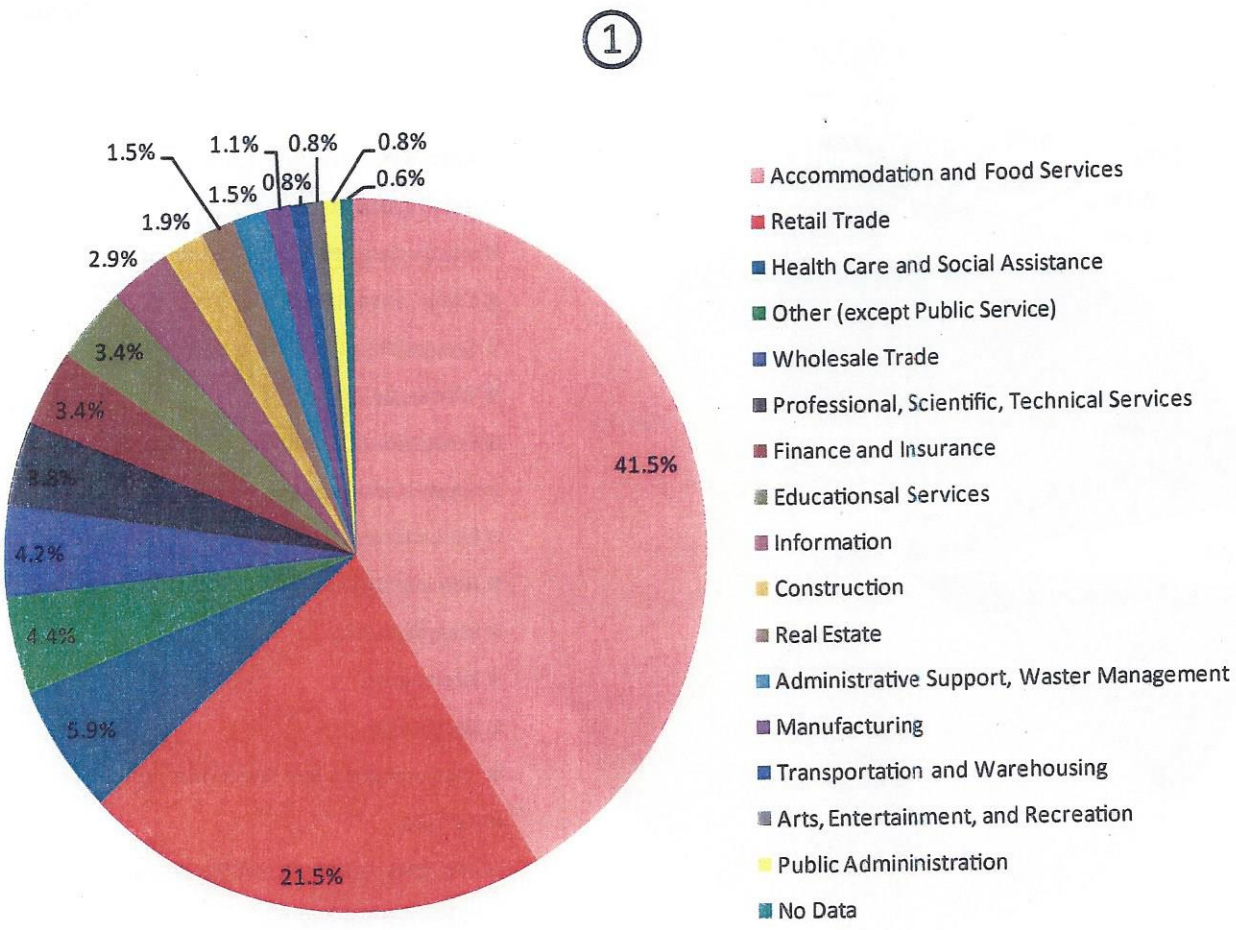


DOR 2- Digit Property Land Use Code	Description	Acres	Percent of Study Area
32,33	Retail	102.4	41.0%
35, 92, 93, 94, 95, 96, 98	Institutional	51.7	20.7%
13,39	Vacant	38.5	15.4%
10	Residences	32.9	13.2%
No Data	No Data	18.8	7.5%
31	Storage Warehouses and Distribution Facilities	3.1	1.2%
34	Office Building	1.7	0.7%
0	Multiple-Use	0.9	0.4%
11	Apartments	0.0	0.0%
40	Manufacturing and Processing	0.0	0.0%
	TOTAL	250.1	100.0%

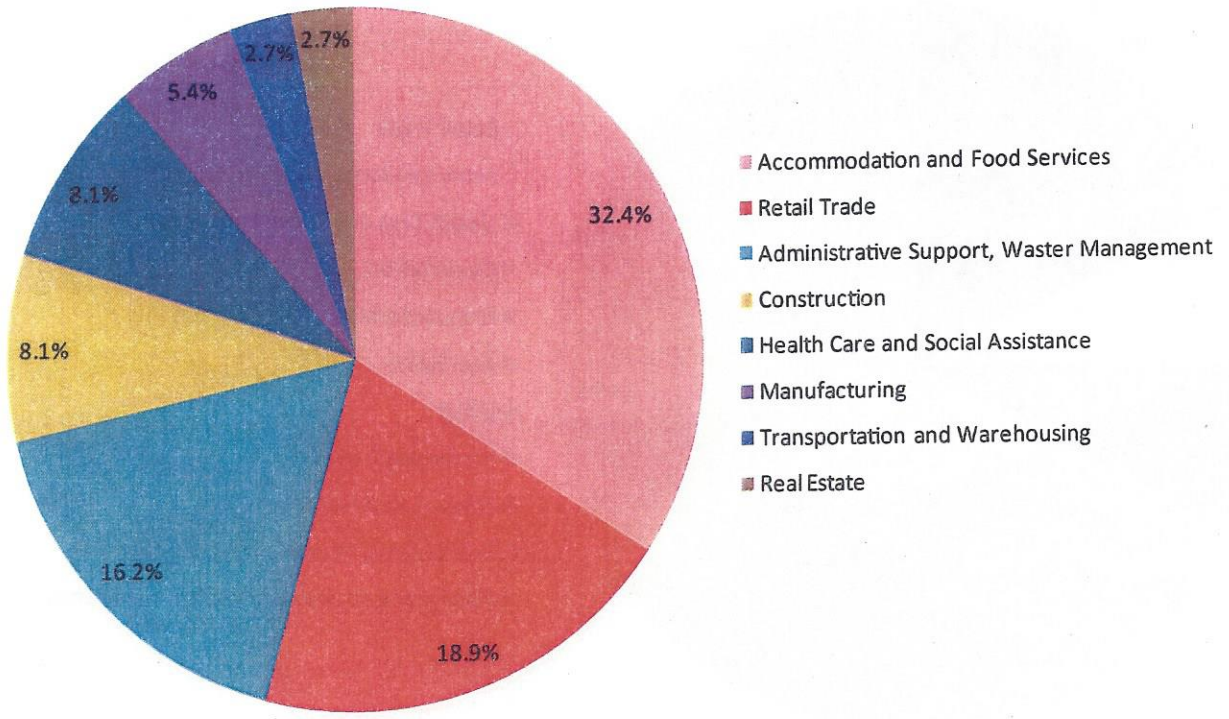
All



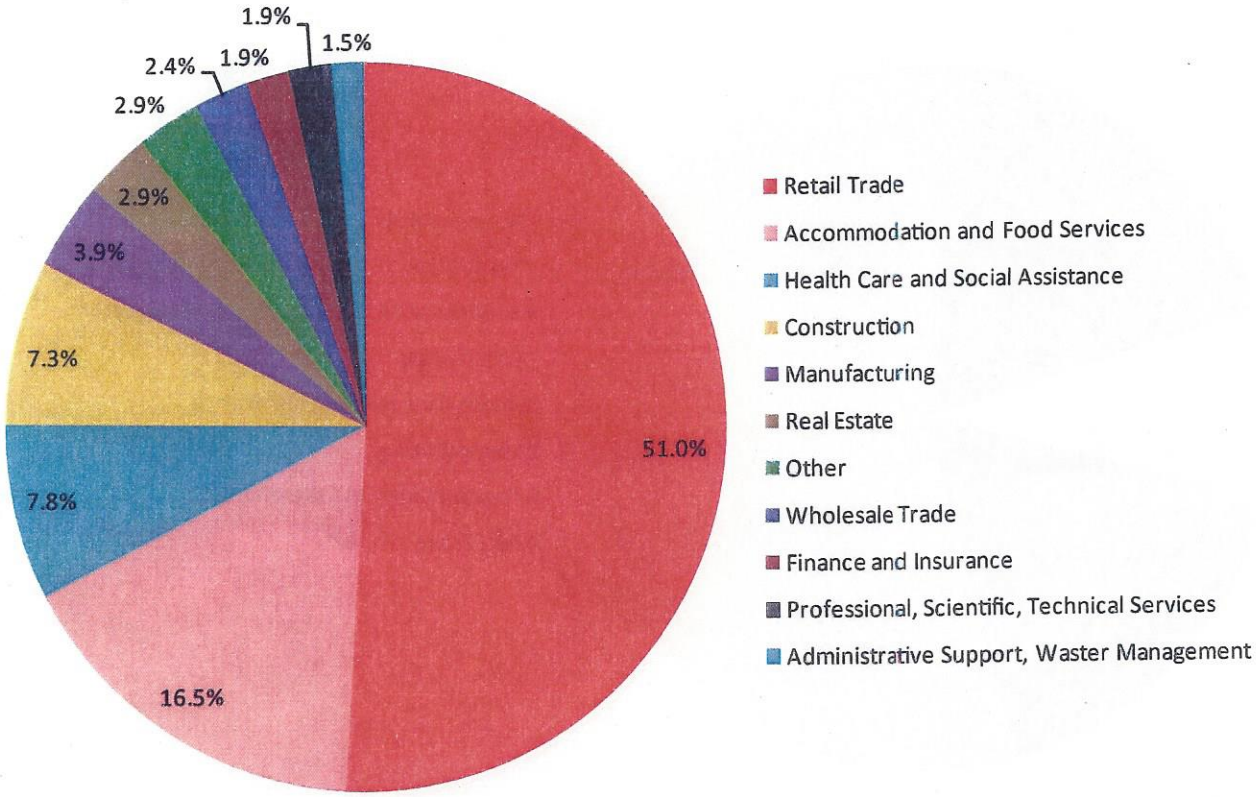
NAICS 2-Digit Code	NAICS Category	Number of Firms	Total Number of Employees	Average Firm Size (Employees)	Percent Total Study Area Employees
72	Accommodation and Food Services	17	264	15.5	34.4%
44-45	Retail Trade	27	225	8.3	29.3%
62	Health Care and Social Assistance	12	50	4.2	6.5%
81	Other (except Public Service)	12	29	2.4	3.8%
23	Construction	8	28	3.5	3.6%
42	Wholesale Trade	5	27	5.4	3.5%
54	Professional, Scientific, Technical Services	6	24	4.0	3.1%
52	Finance and Insurance	7	22	3.1	2.9%
61	Educationsal Services	1	18	18.0	2.3%
56	Administrative Support, Waster Management	5	17	3.4	2.2%
32-33	Manufacturing	4	16	4.0	2.1%
51	Information	3	15	5.0	2.0%
53	Real Estate	6	15	2.5	2.0%
48-49	Transportation and Warehousing	2	5	2.5	0.7%
0, 99	No Data	2	5	2.5	0.7%
71	Arts, Entertainment, and Recreation	1	4	4.0	0.5%
92	Public Admin	1	4	4.0	0.5%
		119	**768**	**6.5**	**100.0%**



NAICS 2-Digit Code	NAICS Category	Number of Firms	Total Number of Employees	Average Firm Size (Employees)	Percent Total Study Area Employees
72	Accommodation and Food Services	13	218	16.8	41.5%
44-45	Retail Trade	14	113	8.1	21.5%
62	Health Care and Social Assistance	6	31	5.2	5.9%
81	Other	9	23	2.6	4.4%
42	Wholesale Trade	4	22	5.5	4.2%
54	Professional, Scientific, Technical Services	5	20	4.0	3.8%
52	Finance and Insurance	5	18	3.6	3.4%
61	Educationsal Services	1	18	18.0	3.4%
51	Information	3	15	5.0	2.9%
23	Construction	4	10	2.5	1.9%
53	Real Estate	3	8	2.7	1.5%
56	Administrative Support, Waster Management	3	8	2.7	1.5%
32-33	Manufacturing	2	6	3.0	1.1%
48-49	Transportation and Warehousing	1	4	4.0	0.8%
71	Arts, Entertainment, and Recreation	1	4	4.0	0.8%
92	Public Admin	1	4	4.0	0.8%
0, 99	No Data	1	3	3.0	0.6%
	TOTAL	76	525	6.9	100.0%
		Zone employment as percent of Total			68.4%



NAICS 2-Digit Code	NAICS Category	Number of Firms	Total Number of Employees	Average Firm Size (Employees)	Percent Total Study Area Employees
72	Accommodation and Food Services	1	12	12.0	32.4%
44-45	Retail Trade	3	7	2.3	18.9%
56	Administrative Support, Waster Management	1	6	6.0	16.2%
23	Construction	1	3	3.0	8.1%
62	Health Care and Social Assistance	1	3	3.0	8.1%
32-33	Manufacturing	1	2	2.0	5.4%
48-49	Transportation and Warehousing	1	1	1.0	2.7%
53	Real Estate	1	1	1.0	2.7%
42	Wholesale Trade	0	0	-	-
51	Information	0	0	-	-
52	Finance and Insurance	0	0	-	-
54	Professional, Scientific, Technical Services	0	0	-	-
61	Educationsal Services	0	0	-	-
71	Arts, Entertainment, and Recreation	0	0	-	-
81	Other	0	0	-	-
92	Public Admin	0	0	-	-
0, 99	No Data	1	2	-	-
	TOTAL	11	37	3.4	100.0%
		Zone employment as percent of Total			4.8%



NAICS 2-Digit Code	NAICS Category	Number of Firms	Total Number of Employees	Average Firm Size (Employees)	Percent Total Study Area Employees
44-45	Retail Trade	10	105	10.5	51.0%
72	Accommodation and Food Services	3	34	11.3	16.5%
62	Health Care and Social Assistance	5	16	3.2	7.8%
23	Construction	3	15	5.0	7.3%
32-33	Manufacturing	1	8	8.0	3.9%
53	Real Estate	2	6	3.0	2.9%
81	Other	3	6	2.0	2.9%
42	Wholesale Trade	1	5	5.0	2.4%
52	Finance and Insurance	2	4	2.0	1.9%
54	Professional, Scientific, Technical Services	1	4	4.0	1.9%
56	Administrative Support, Waster Management	1	3	3.0	1.5%
48-49	Transportation and Warehousing	0	0	-	-
51	Information	0	0	-	-
61	Educationsal Services	0	0	-	-
71	Arts, Entertainment, and Recreation	0	0	-	-
92	Public Admin	0	0	-	-
0, 99	No Data	0	0	-	-
	TOTAL	32	206	6.4	100.0%
		Zone employment as percent of Total			26.8%