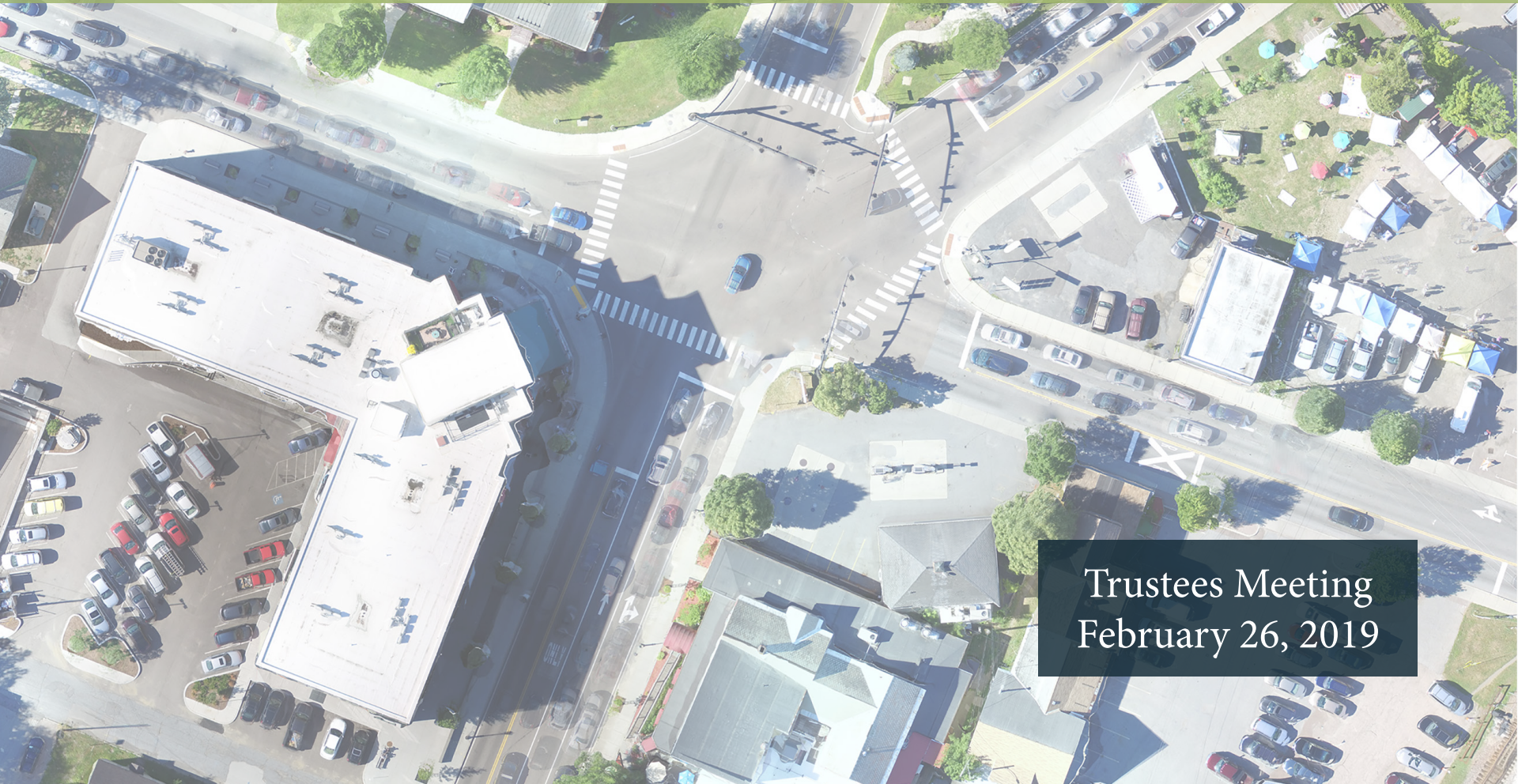


Design 5 Corners

Implementation Plan



Trustees Meeting
February 26, 2019

Project Team

Robin Pierce, Village of Essex Junction

Peter Keating, CCRPC

Marshall Distell, CCRPC

Julie Campoli, Terra Firma Urban Design

Lucy Gibson, D&K

Chris Sargent, D&K

Julia Ursaki, D&K



Project Background

Design 5 Corners Project Report

Submitted to the Village of Essex Junction, VT May, 2015
Julie Campoli, Terra Firma Urban Design
www.juliecampoli.com



COMPREHENSIVE PLAN 2014

Adopted August 26, 2014

INDEX OF SHEETS:

- 1 TITLE SHEET
- 2 GENERAL NOTES
- 3 STANDARD SYMBOLS & LEGEND
- 4-5 TIE SHEETS
- 6-9 TYPICAL SECTIONS
- 9-11 QUANTITY SHEETS
- 13-18 PLAN AND PROFILE SHEETS
- 19-23 UTILITY & LIGHTING PLANS
- 24 TYPICAL DETAILS
- 25 GRADING DETAILS
- 26-33 PAVEMENT MARKING & SIGNING PLANS
- 34-40 TRAFFIC SIGN SUMMARY SHEETS
- 41 SIGN DETAIL SHEET
- 42-49 CROSS SECTIONS

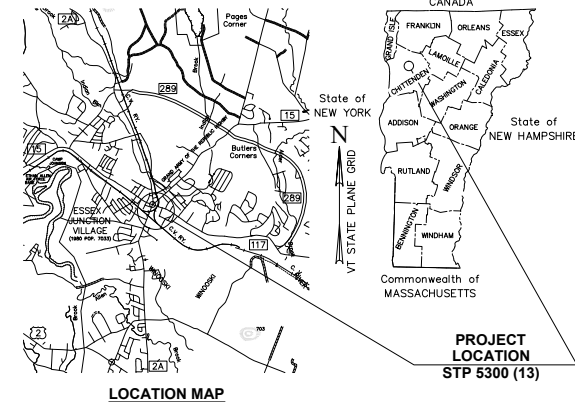
SUPPLEMENTAL PLANS:

- TRAFFIC SIGNAL PLANS
- RAIL CROSSING PLANS

PROPOSED IMPROVEMENT VILLAGE OF ESSEX JUNCTION COUNTY OF CHITTENDEN STP 5300 (13) CRESCENT CONNECTOR

PROJECT LOCATION BEGINNING AT A POINT ON PARK STREET APPROXIMATELY 875 FEET SOUTH OF THE "S CORNERS" INTERSECTION, THEN EXTENDING NORTH ALONG PARK STREET TO THE NEW ENGLAND CENTRAL RAILROAD (NECR) BURLINGTON BRANCH; ALONG THE EAST SIDE OF NECR'S BURLINGTON BRANCH AND CROSSING NECR'S MAIN LINE; CONTINUING NORTH ACROSS MAPLE STREET; AND THEN ALONG THE EXISTING ALIGNMENT OF RAILROAD STREET TO THE INTERSECTION OF MAIN STREET.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS CONTRACT INCLUDES THE CONSTRUCTION OF A NEW ROADWAY (RAILROAD STREET) ON A NEW ALIGNMENT; ADDITION OF TURNING LANES ON PARK STREET AND MAPLE STREET; RECONSTRUCTION OF RAILROAD STREET; INSTALLATION OF TRAFFIC SIGNALS AND RAILROAD SIGNALS; AND INSTALLATION OF CONCRETE SIDEWALKS, GRANITE CURBS, STREET LIGHTS, DRAINAGE IMPROVEMENTS, PAVEMENT MARKINGS, AND SIGNS.



LOCATION MAP
0 1 2 4
APPROXIMATE SCALE IN MILES

**RAILROAD STREET STA. 23+40.49 =
END PROJECT STP 5300(13)**

**MAIN STREET STA. 72+11.07
LIMIT OF CONSTRUCTION**

**RAILROAD STREET STA. 18+47.91 =
MAPLE STREET STA. 50+99.61**

**MAPLE STREET STA. 54+30.00
LIMIT OF CONSTRUCTION**

**RAILROAD STREET STA. 14+31 (±)
END RAILROAD CROSSING
RESUME ROADWAY**

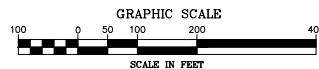
**STA. 14+26.49 RAILROAD STREET
M. M. 108.02 NECR**

**RAILROAD STREET STA. 14+11 (±)
STOP ROADWAY
BEGIN RAILROAD CROSSING**

**RAILROAD STREET STA. 10+13.76
BEGIN PROJECT STP 5300(13)**

**PARK STREET STA. 33+61.70
LIMIT OF CONSTRUCTION**

**PARK STREET STA. 29+74.07
LIMIT OF CONSTRUCTION**



PLOTTED Jun 27, 2016

**PRELIMINARY PLANS
SEPTEMBER 2014**

VILLAGE OF ESSEX JUNCTION
CHAIR, TRUSTEES

APPROVED _____ DATE _____

PROJECT NAME : CRESCENT CONNECTOR
PROJECT NUMBER : STP 5300 (13)

SHEET 1 OF 49 SHEETS

QUALITY ASSURANCE PROGRAM: LEVEL 2

SURVEYED BY: DUBOIS & KING, INC. IN 2012

DATUM

VERTICAL : NAVD 83 (GEOID 12A)
HORIZONTAL : NAVD 83 (2011) EPOCH 2010.0



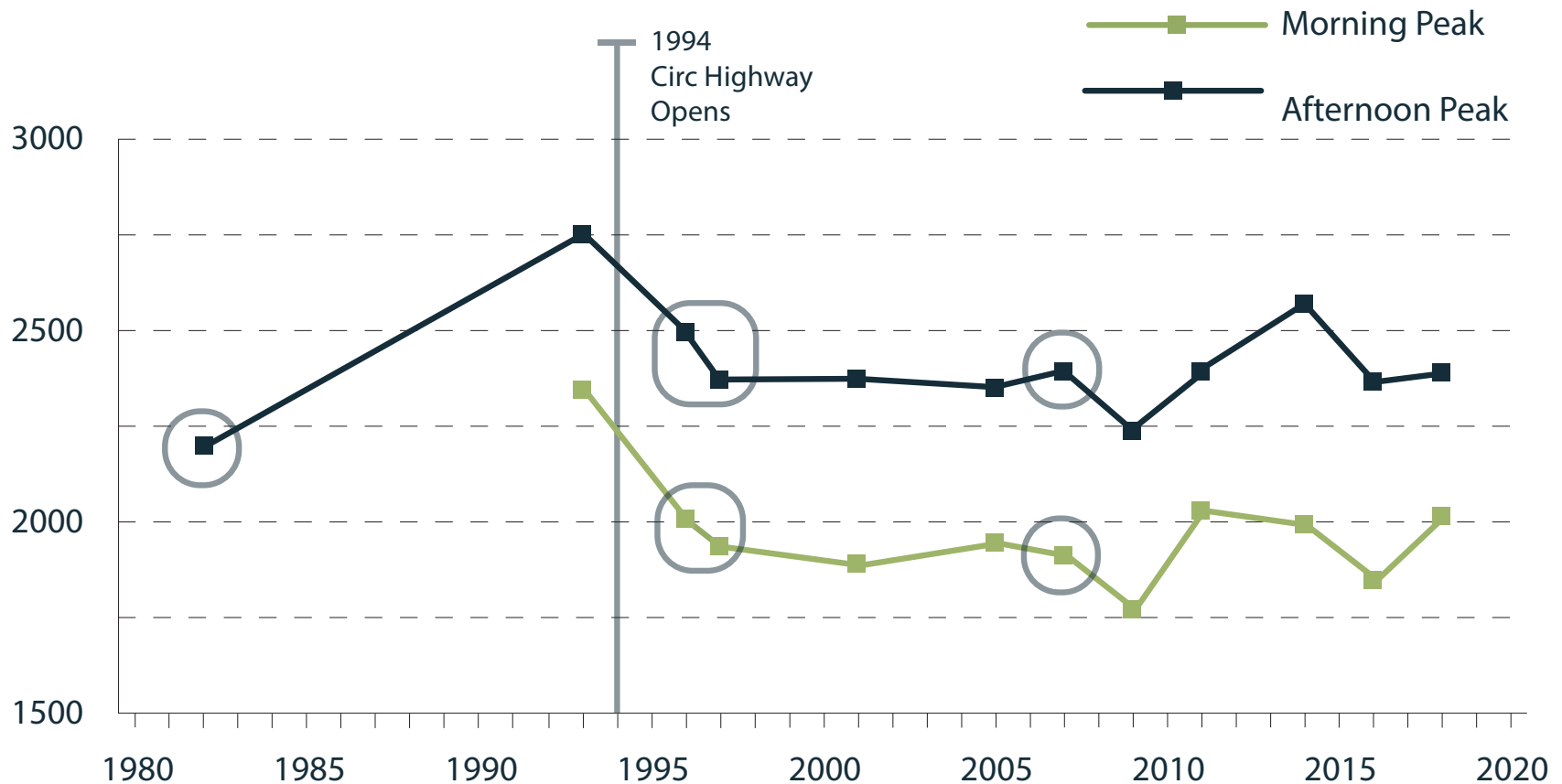
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011, FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS

Existing Conditions



Traffic Volumes

Existing Conditions

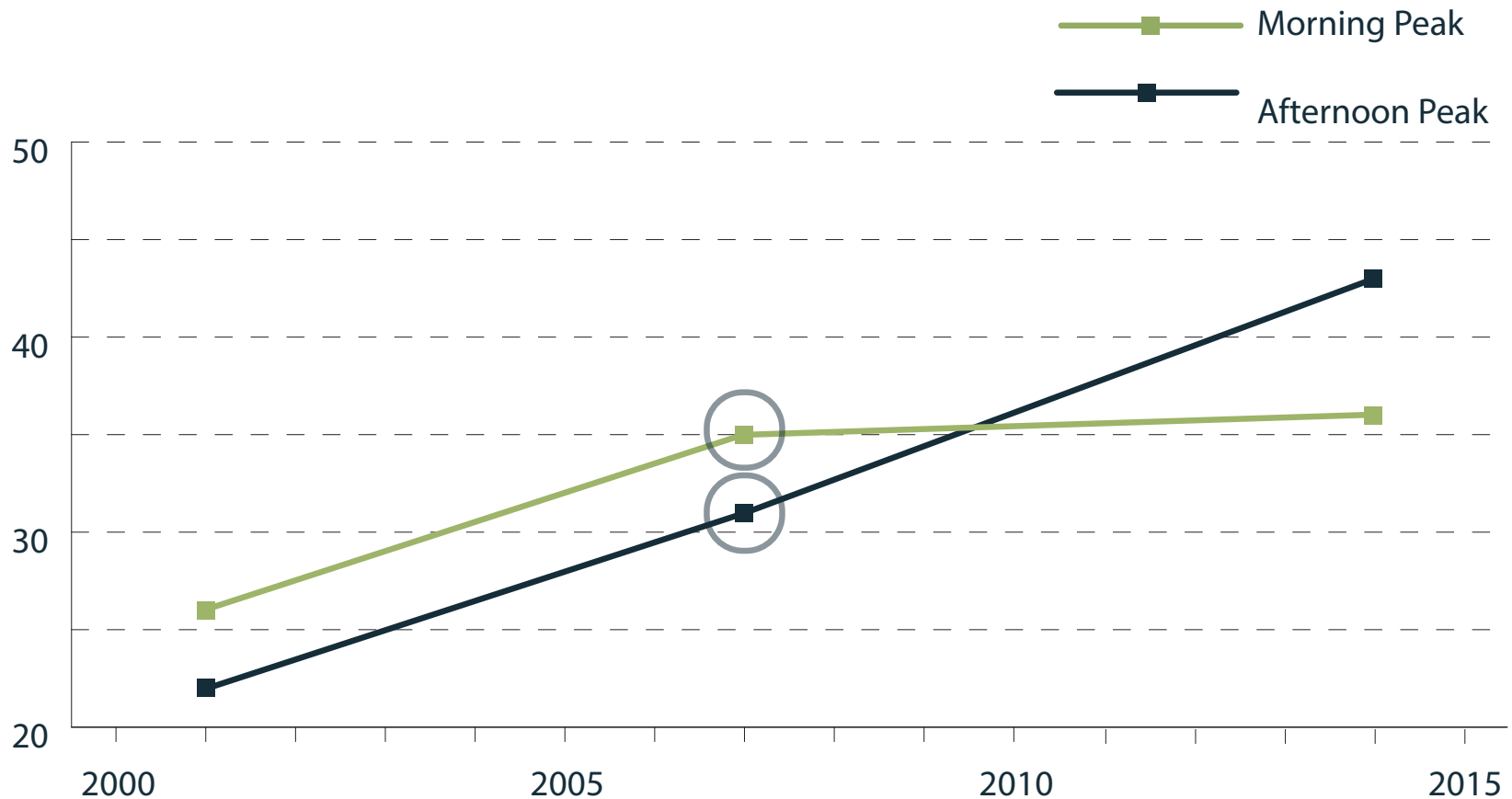


Peak Hour Traffic Volumes at 5 Corners, 1982 - 2018

Circled data points are counts taken during the school year, all others are from July or August

Pedestrian Volumes

Existing Conditions



Pedestrian Peak Hour Volumes at 5 Corners, 2001 - 2014

Circled data points are counts taken during the school year, all others are from July or August

How would you rate the following as reasons that you walk through 5 Corners frequently?

- I live within **walking distance** (90%)
- I like to **walk for exercise** (88%)
- I like walking to the **restaurants and shops** (90%)

How would you rate the following as reasons that you **don't** walk through 5 Corners frequently?

- It's **too far** for me to walk to (55%)
- **Lack of places** to walk to (49%)

Images courtesy of Julie Campoli



Design 5 Corners + The Plan



Park St



Pedestrianized
Main Street

Green Stormwater
Infrastructure

Central Village Green

More Street Trees

Converting 5
Corners to a 4-way
Intersection

Safer Pedestrian
Crossings at 5 Corners

Park St

Transportation Improvements

Design 5 Corners + The Plan

Goal 2

Promote **thoughtful growth** (Priority Goals for Next 5 Years)

Goal 4

Implement projects that will **move traffic more efficiently** while making the Village a more **welcoming place for all modes of travel**. (Priority Goals for Next 5 Years)

Objective 4.3

Consider alternatives for vehicular traffic through Five Corners, such as **redirecting Route 15**. (Priority Goals for Next 5 Years)

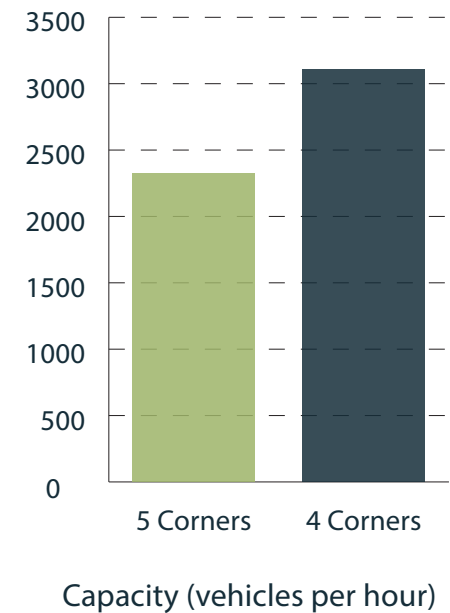
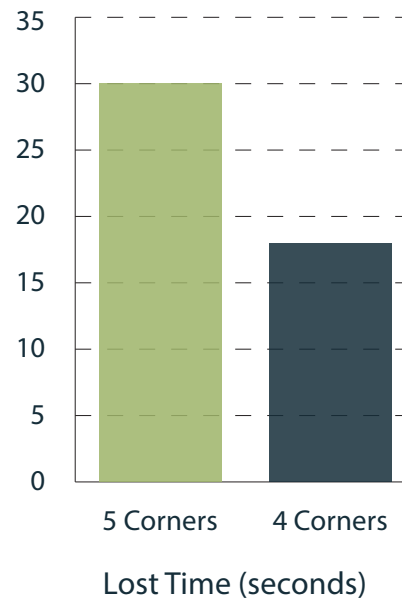
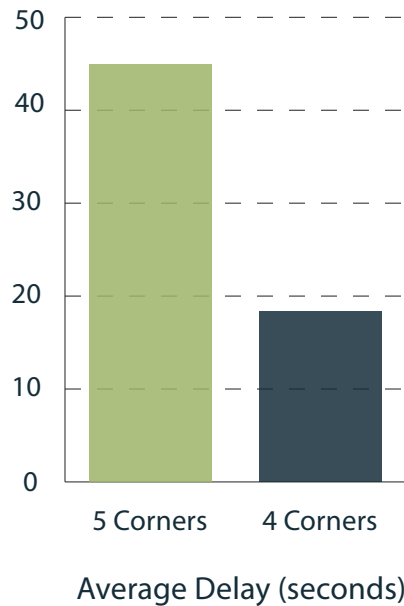
Safer Pedestrian
Crossings at 5 Corners

Pedestrianized
Main Street

Converting 5
Corners to a 4-way
Intersection

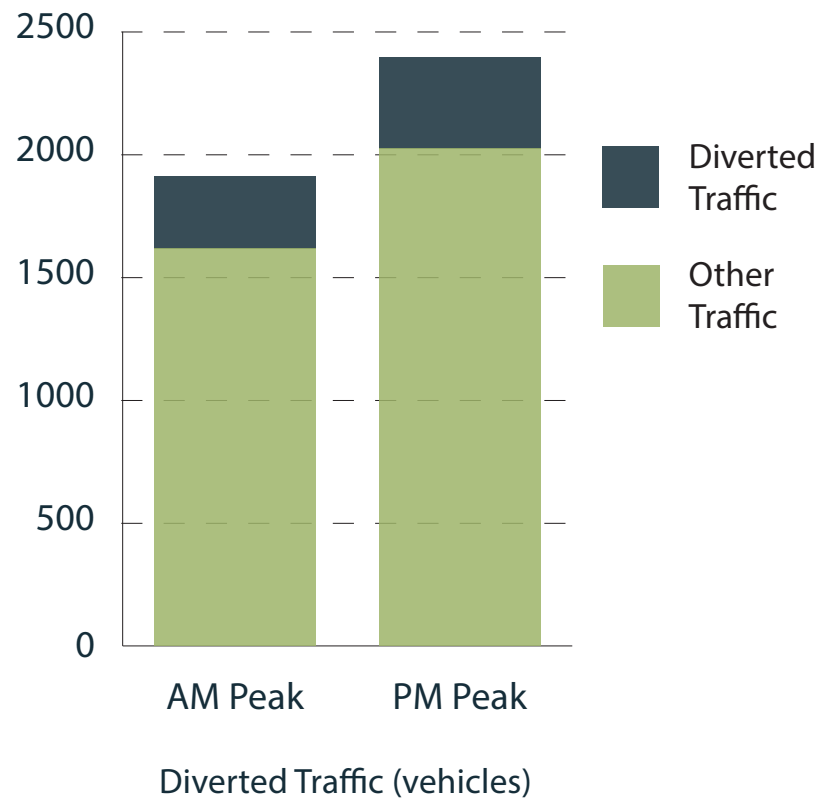
Transportation Improvements

Design 5 Corners + The Plan



Transportation Improvements

Design 5 Corners + The Plan





PEARL

LINCOLN

MAIN

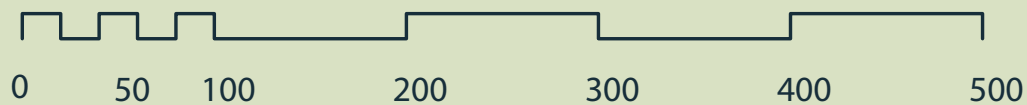
MAPLE

PARK

4 Corners 95th Percentile Queues

5 Corners 95th Percentile Queues

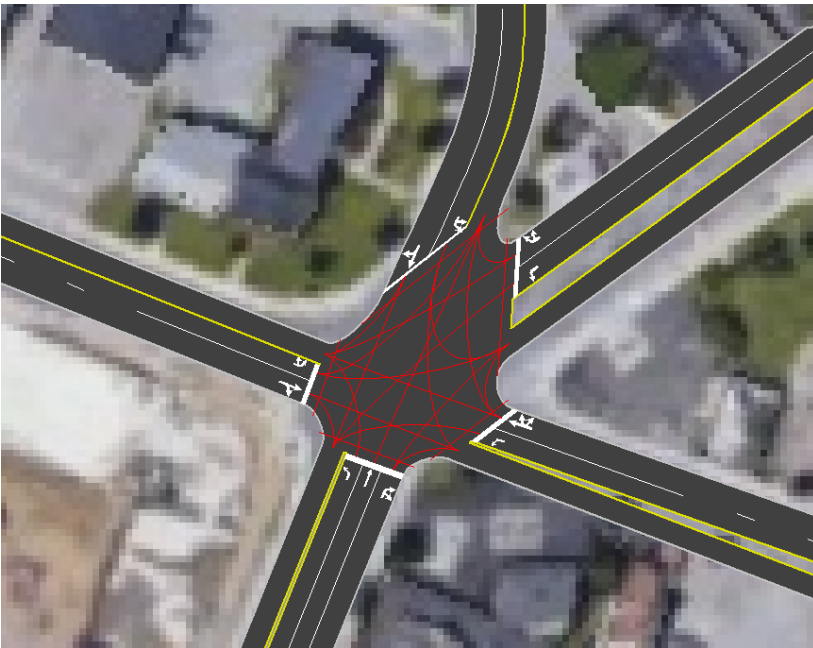
Feet



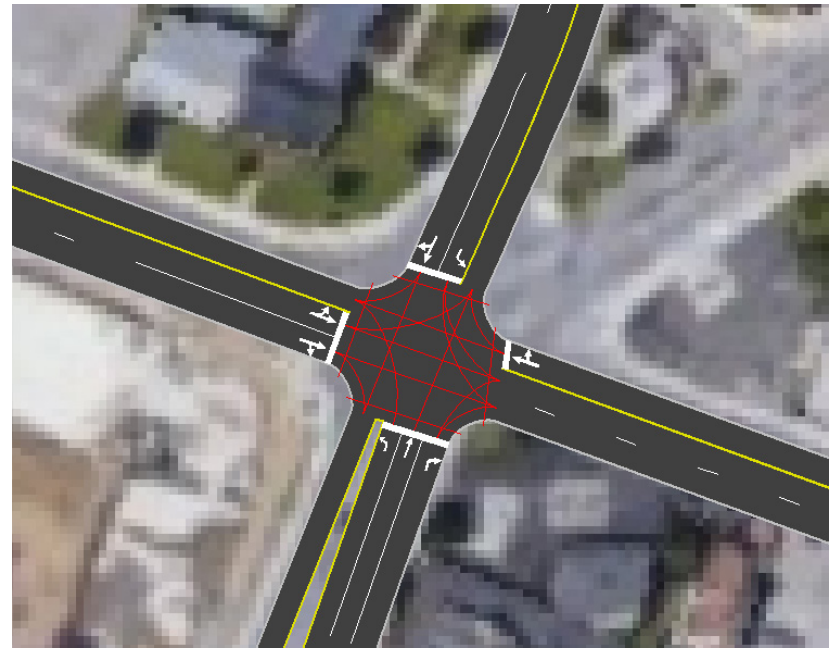
Transportation Improvements

Design 5 Corners + The Plan

48 conflict points



31 conflict points



Pedestrian Improvements

Design 5 Corners + The Plan

Objective 1.3: Emphasize **local access**, public transit, bicycle facilities, **pedestrian safety and access**, and **aesthetics** in future streetscape projects. (Transportation)

Objective 2.4: Continue improvements in the public realm for a **high quality pedestrian experience**. (Priority Goals for Next 5 Years)

Objective 4.2: Consider the **pedestrianization of Main Street**. (Priority Goals for Next 5 Years)

Central Village Green

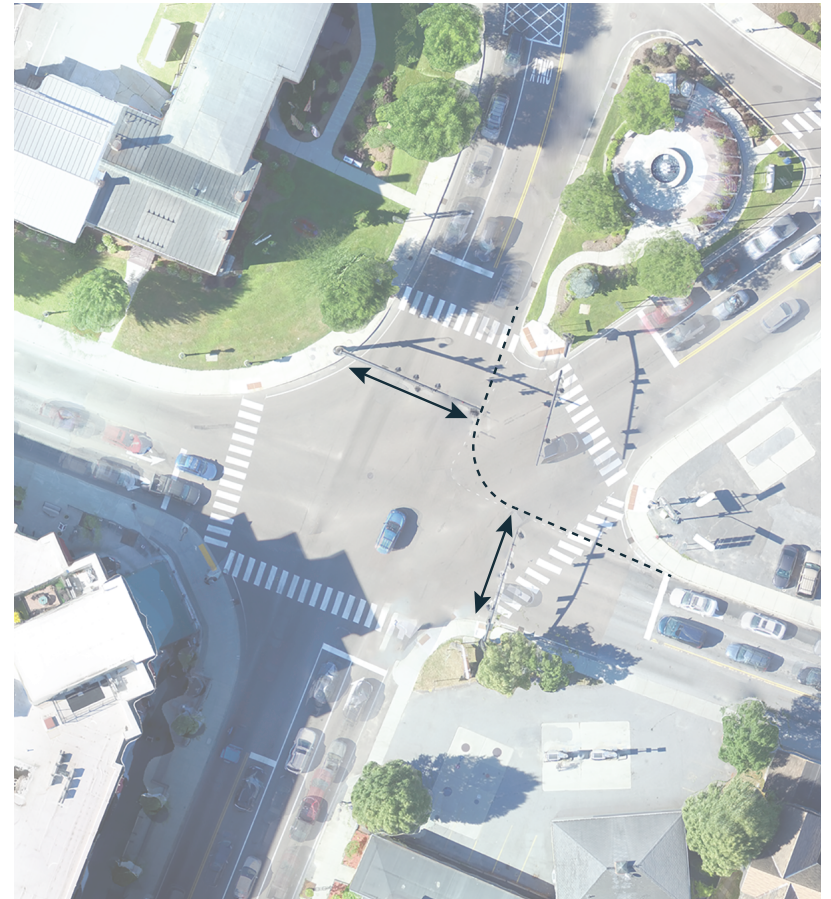
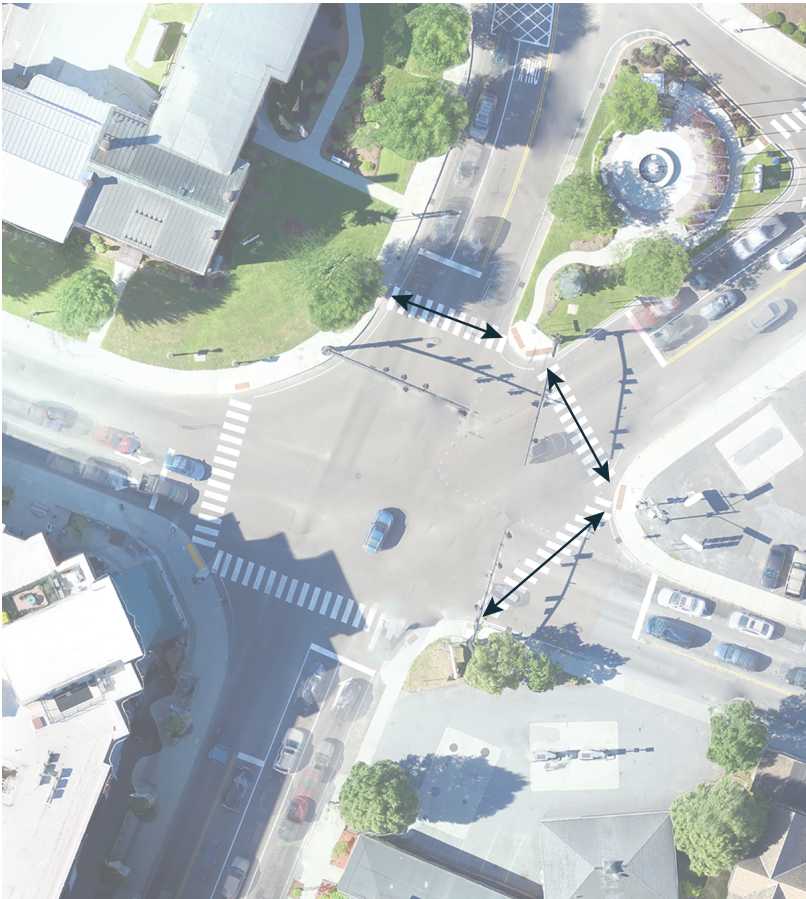
Safer Pedestrian Crossings at
5 Corners

More Street Trees

Pedestrianized Main Street

Pedestrian Improvements

Design 5 Corners + The Plan



Goal 2

Create **urban open spaces**. (Recreation & Natural Resources)

Objective 2.1

Encourage the provision of **plazas and other urban outdoor areas** in major redevelopment projects in the Village Center and Transit Oriented Development Districts. (Recreation & Natural Resources)

Objective 2.3

Consider the development of a **village green within the Village Center District**. (Recreation & Natural Resources)

Pedestrianized
Main Street

More Street Trees

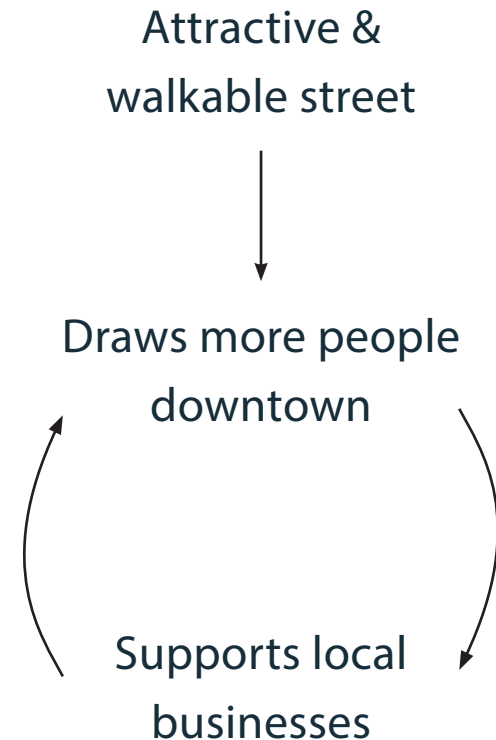
Central Village
Green

Green Stormwater
Infrastructure

Goal 2: Increase the **Village's relationship with the local business community.** (Business/Economic Development)

Goal 4: **Preserve and enhance the appearance and historical character** of the Village of Essex Junction. (Business/Economic Development)

Objective 4.5: Continue **streetscape and landscaping** efforts to **attract private sector investment.**



Green Infrastructure

Design 5 Corners + The Plan

Main Street & 1 Main Street Lot

Existing Impervious Area
17,915 SF



Green Infrastructure

Design 5 Corners + The Plan

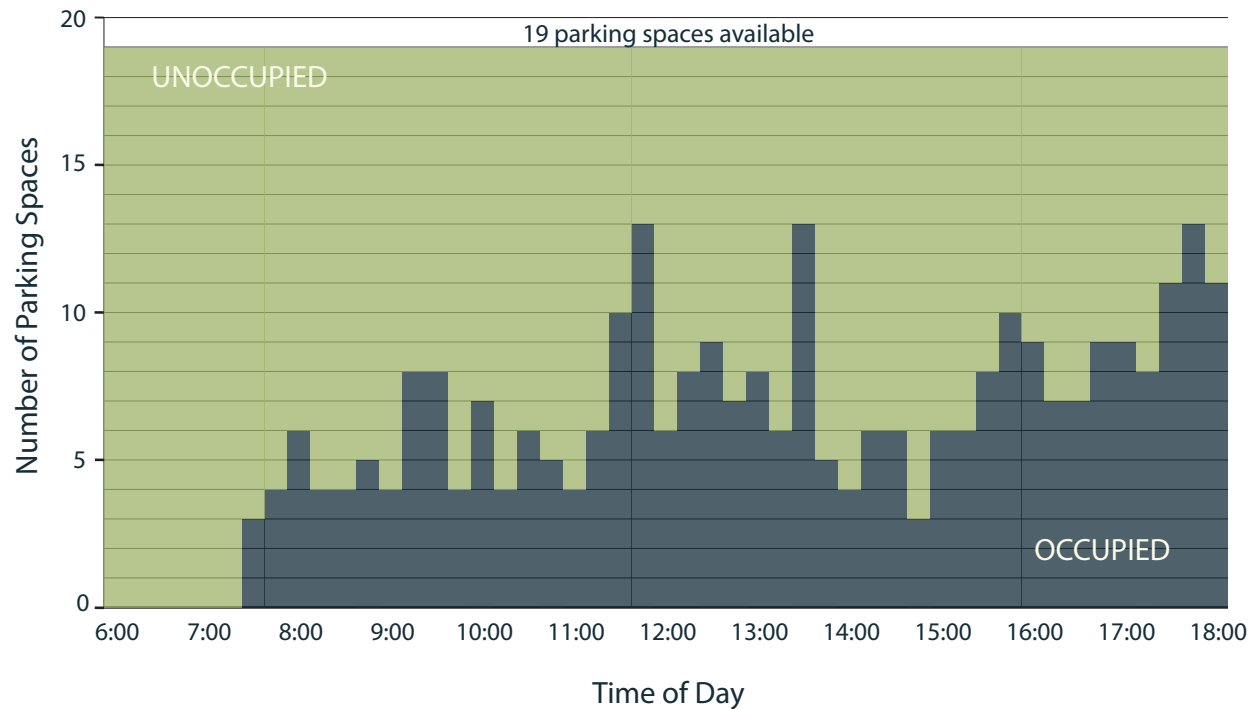
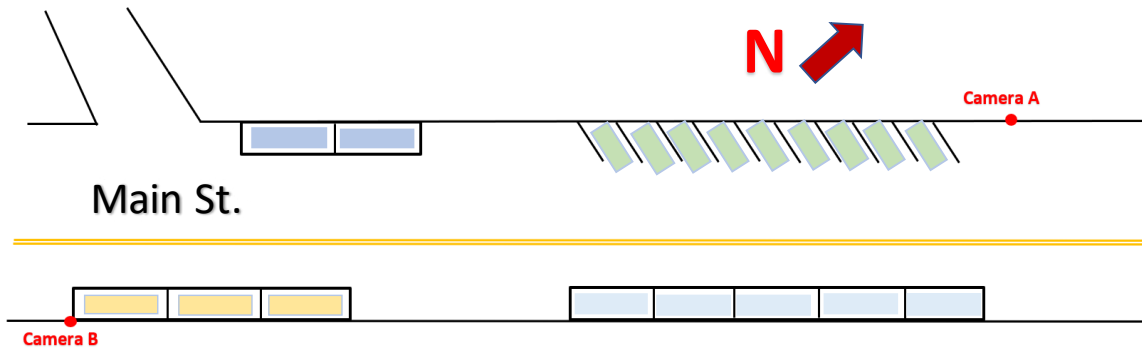
Main Street & 1 Main Street Lot

Future Impervious Area
10,335 SF

- 42% reduction in impervious area
- 7,580 SF new greenspace
 - 2,000 SF Rain Gardens
 - 5,580 SF Village Green



Parking Impact



Main Street Parking Occupancy

Implementation

Demonstration Project

Implementation

Image courtesy of Julie Campoli



Update the Comprehensive Plan

Implementation

The Municipal Plan is a key tool for implementing important projects.

The Goals, Policies and Action Items should reflect what a **community is trying to achieve in the next 8 years**

To properly reflect the changes proposed by Design 5 Corners, **the Plan will need to be updated.**

Update Narrative

Update Goals

Update Policies

Update Actions

- Complete Crescent Connector and monitor traffic
- Consider a demonstration project for a pedestrian Main Street
- Coordinate with VTrans to re-designate Route 15 and the Amtrak Connector
- Reconstruct Main Street and re-program the 5 Corners Signal
- Build the Village Green



Thank you!