

May 9, 2016

Waterville Downtown Transportation Study Public Presentation



In Association With:

BFJ Planning

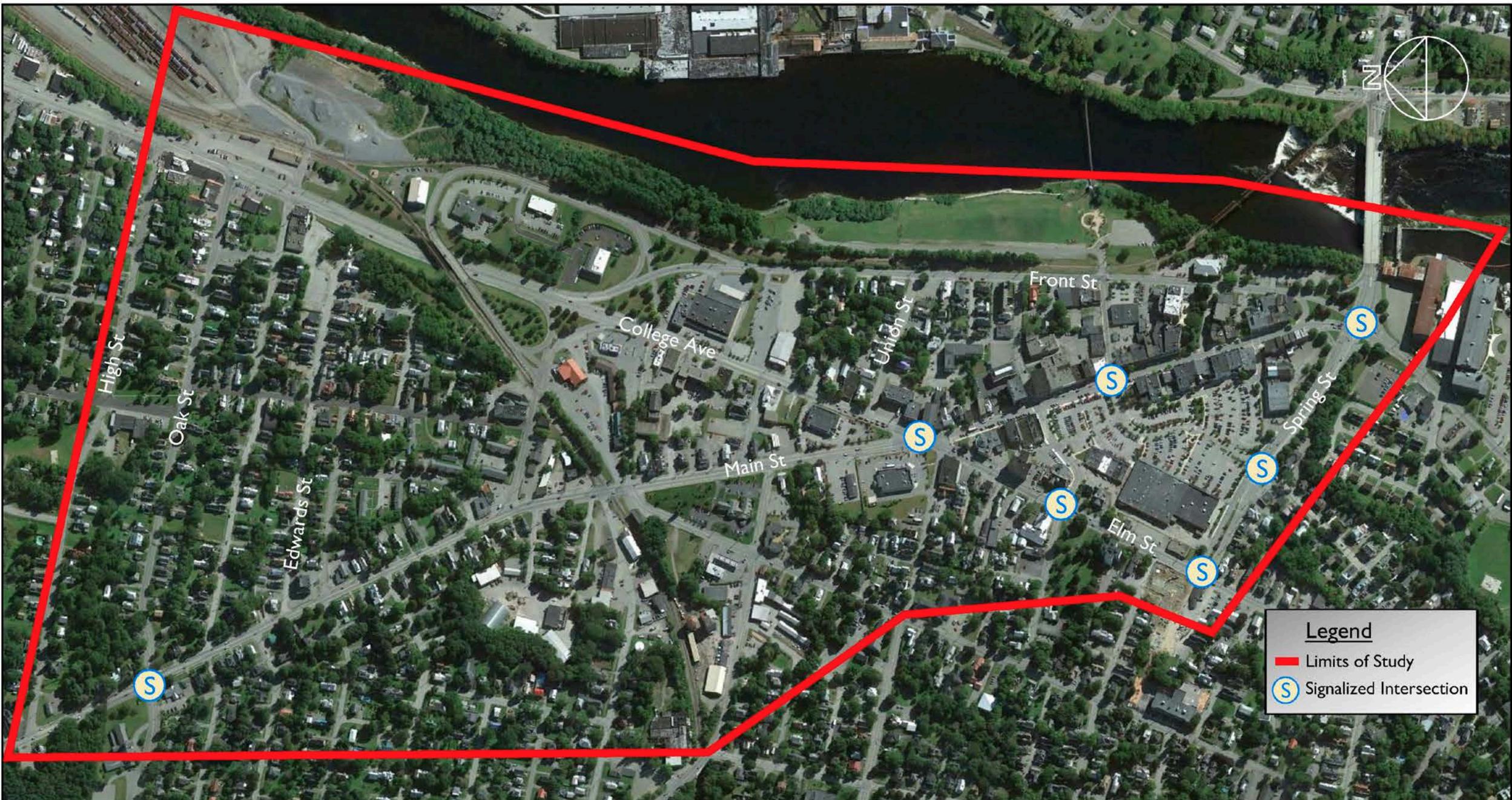
Mitchell
& Associates
LANDSCAPE ARCHITECTS

Purpose and Need

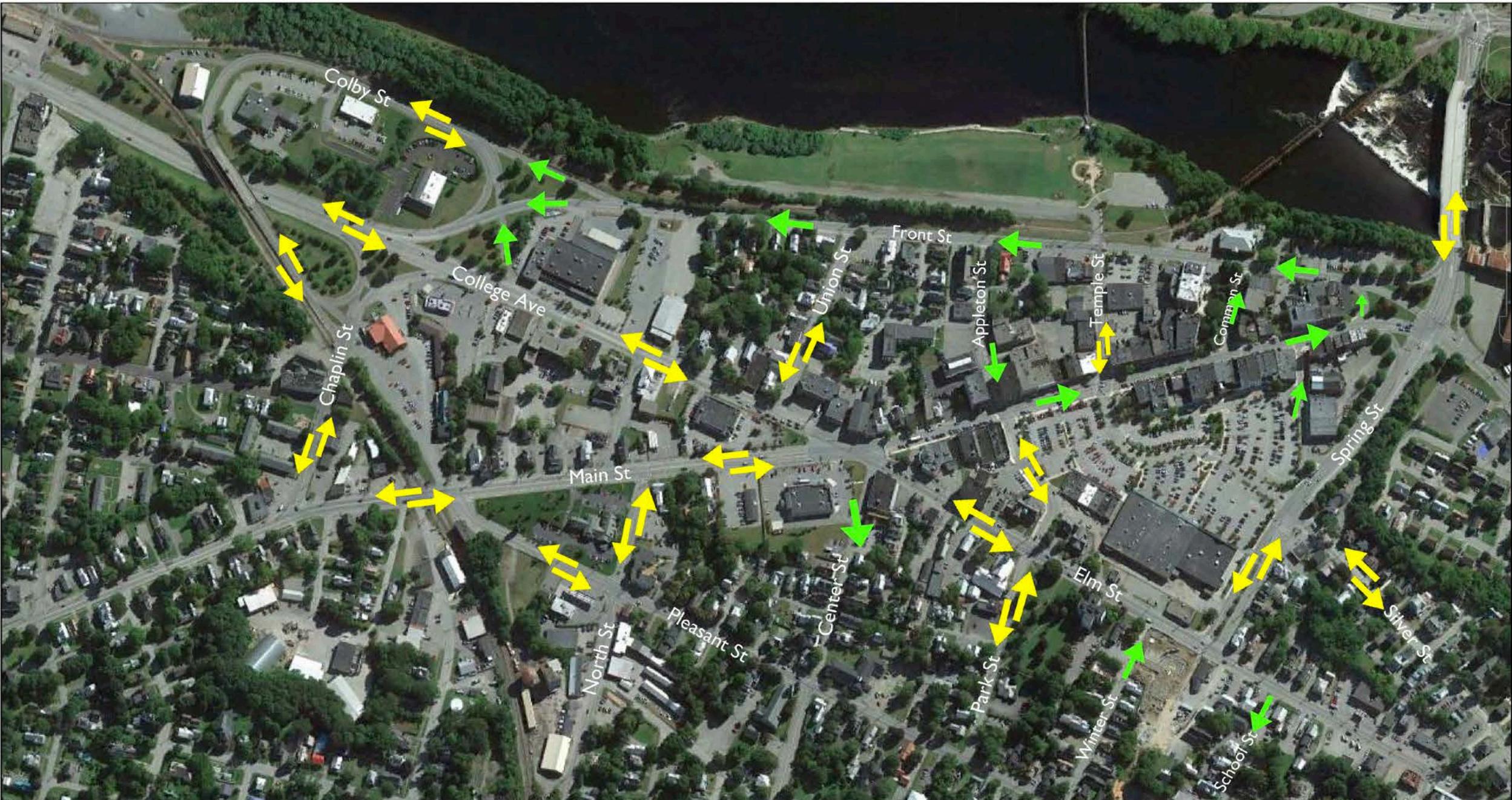
- Revitalize the Downtown to improve the aesthetics, support existing businesses and encourage economic growth, improve pedestrian and bicycle accommodations and maintain adequate parking while maintaining vehicular capacity and safety in the overall area.



Downtown Waterville Transportation Study

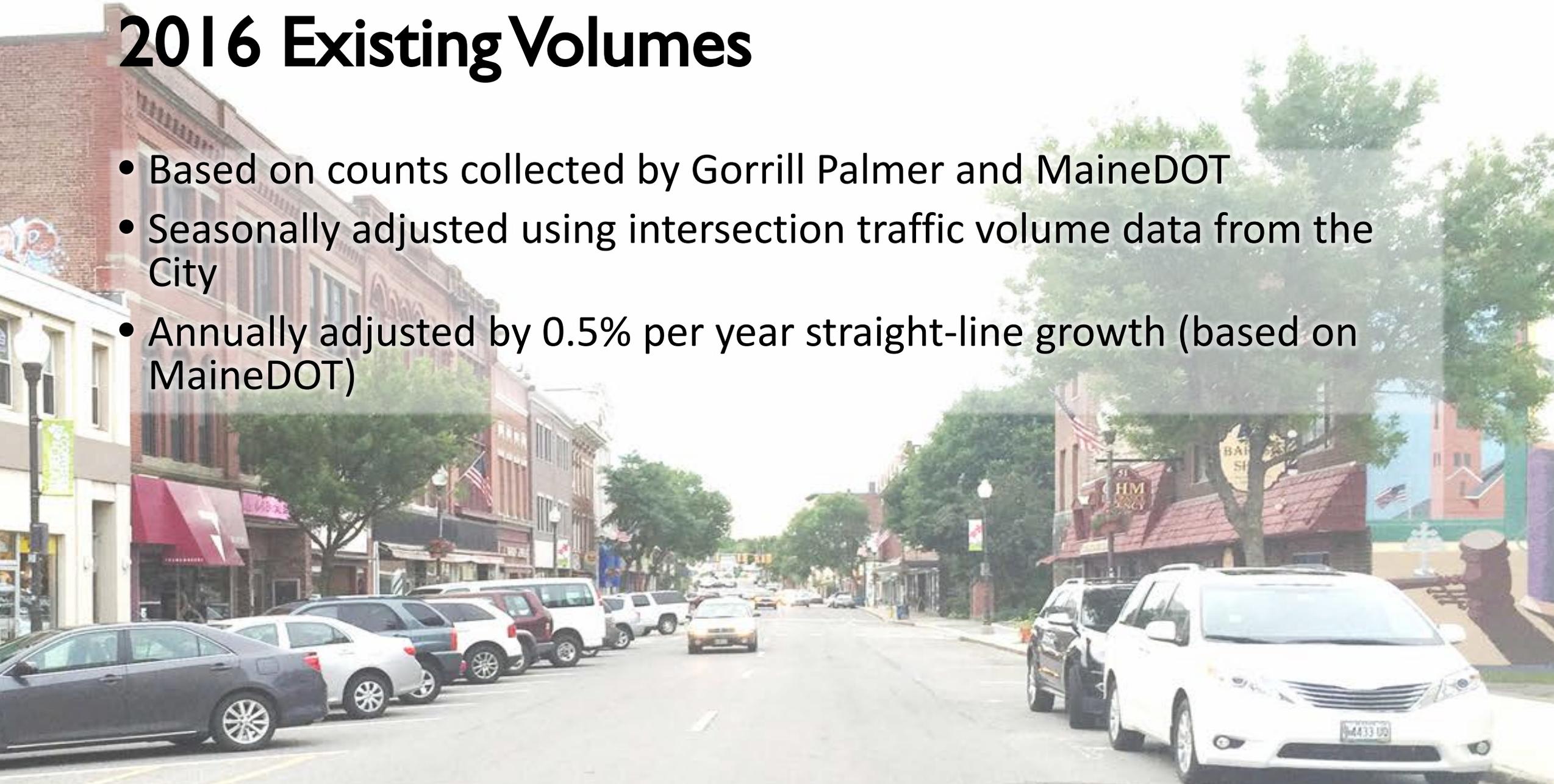


Existing Traffic Circulation

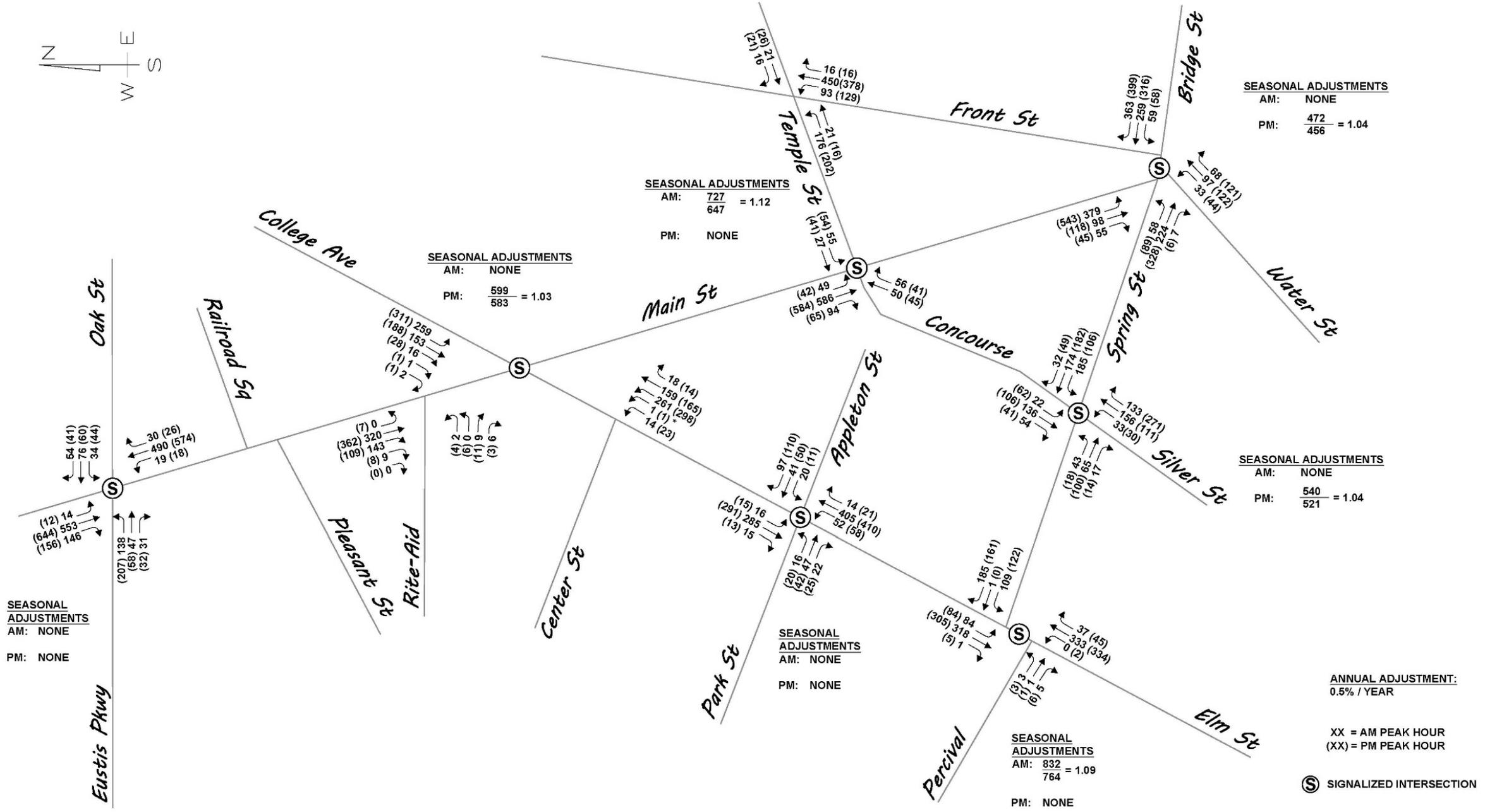
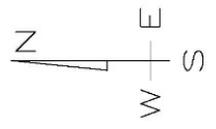


2016 Existing Volumes

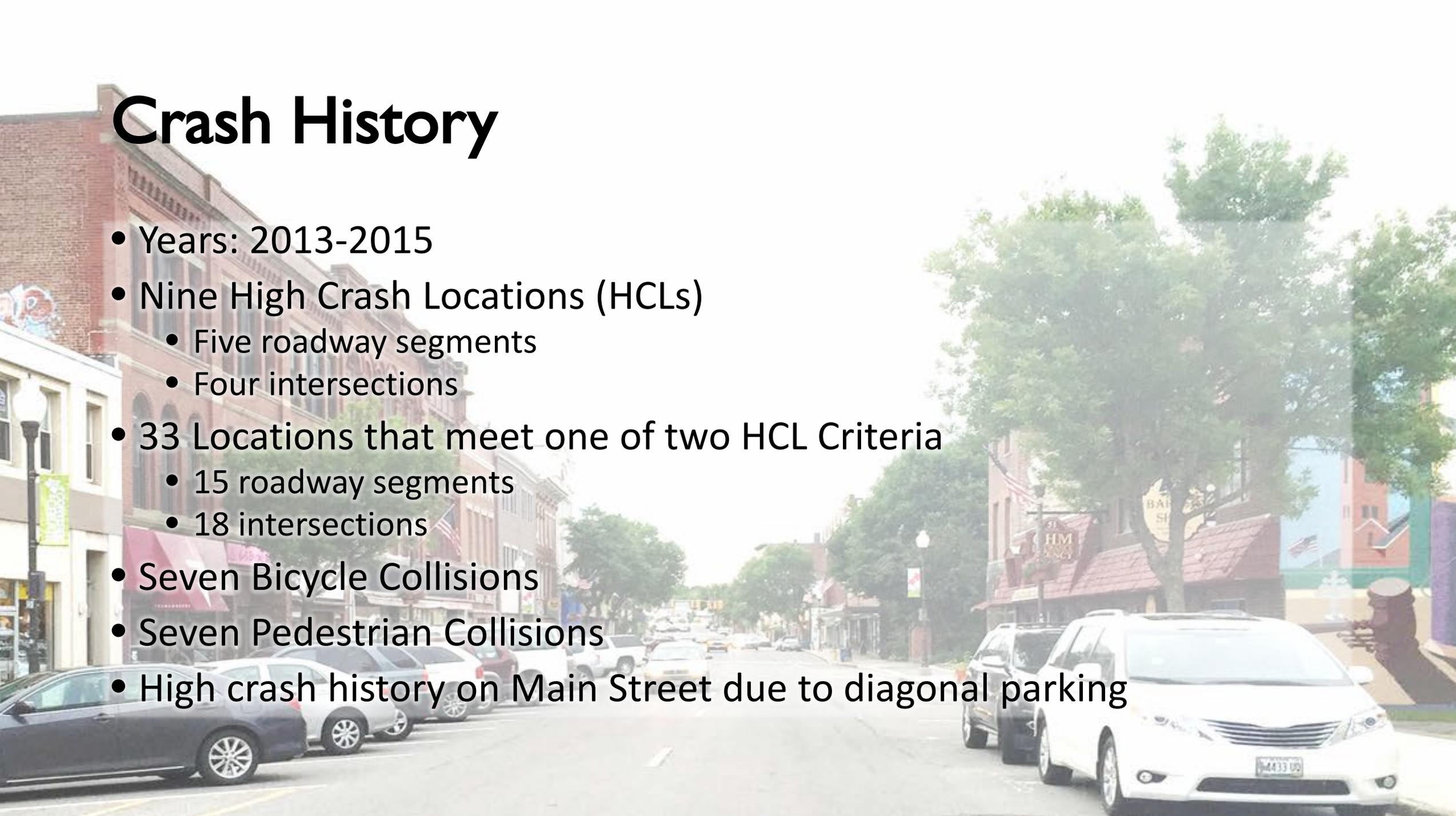
- Based on counts collected by Gorrill Palmer and MaineDOT
- Seasonally adjusted using intersection traffic volume data from the City
- Annually adjusted by 0.5% per year straight-line growth (based on MaineDOT)



2016 Existing Volumes



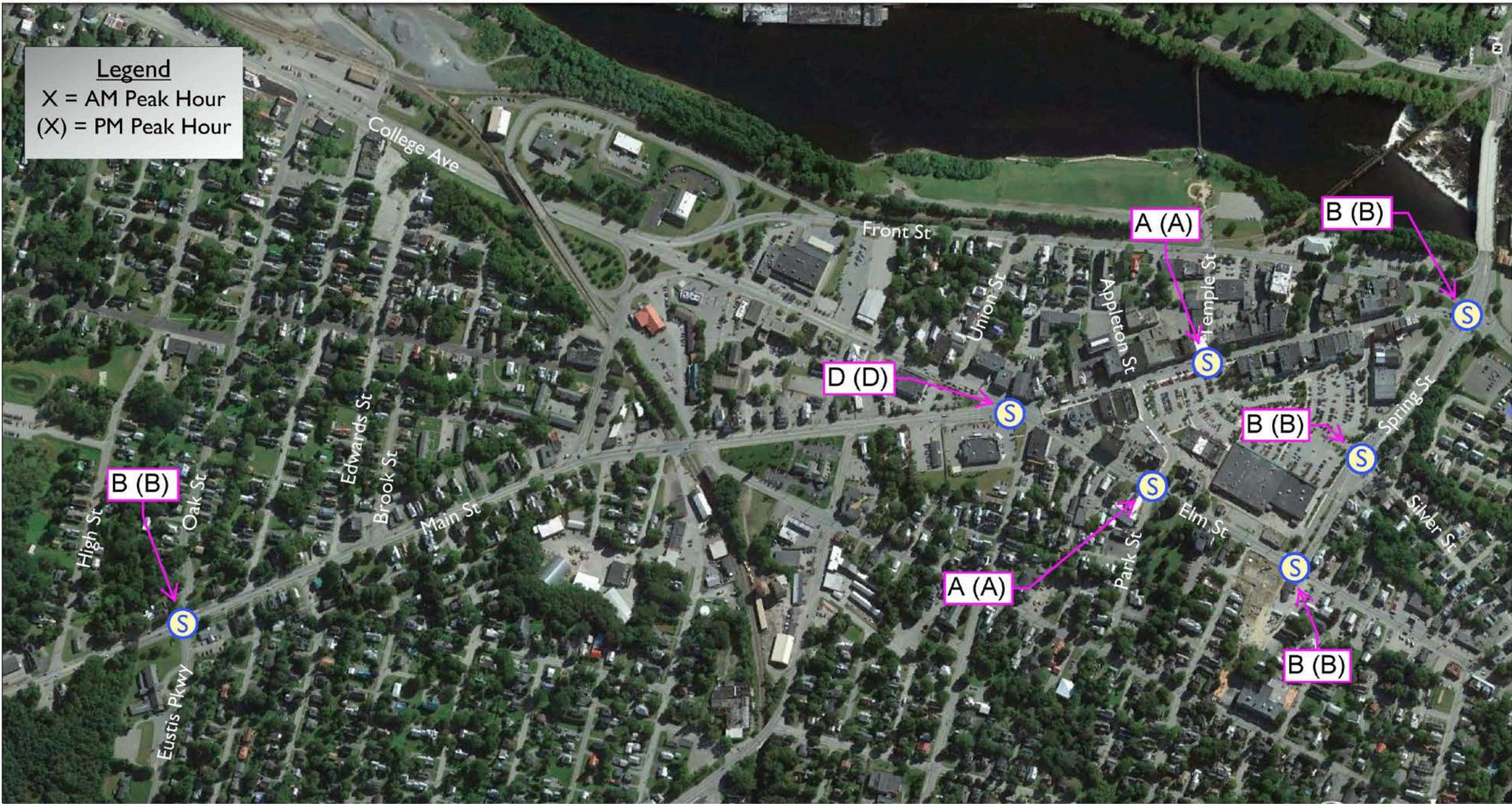
Crash History

The background image shows a street scene with multi-story brick buildings on the left, trees on the right, and several cars parked along the street. A white SUV is prominent in the foreground on the right side.

- Years: 2013-2015
- Nine High Crash Locations (HCLs)
 - Five roadway segments
 - Four intersections
- 33 Locations that meet one of two HCL Criteria
 - 15 roadway segments
 - 18 intersections
- Seven Bicycle Collisions
- Seven Pedestrian Collisions
- High crash history on Main Street due to diagonal parking

2037 Predevelopment Level of Service

Legend
X = AM Peak Hour
(X) = PM Peak Hour



2037 Predevelopment Level of Service

- Overall acceptable Levels of Service
- Lowest Level of Service at Post Office Square



Bicycle and Pedestrian Accommodations



Legend

- Crosswalk
- Sidewalk
- Bicycle Lane

Note: This figure does not reflect that some sidewalks and crosswalks do not meet current standards

Current and Future Parking Capacities

Includes all parking spaces available for general public parking

Parking Area	Current Capacity	Future Capacity
Concourse	610	520
Main Street	148	148
Upper Main St.	67	67
Lower Main St.	81	81
Side Streets	68	68
Front St. Lot	60	60
Head of Falls South	66	66
Head of Falls North	141	186
Total	1093	1048
Practical Capacity (85%)	929	891

Friday Summary



Greater than 85% Occupancy



Between 50% and 85% Occupancy



Less than 50% Occupancy

Parking Area	Capacity	Occupied Spaces (# and %)																			
		11AM		12PM		1PM		2PM		3PM		4PM		5PM		6PM		7PM *		Average	
Concourse	610	355	58%	376	62%	360	59%	344	56%	312	51%	319	52%	270	44%	294	48%	365	60%	333	55%
Short Term	445	246	55%	265	60%	254	57%	243	55%	213	48%	232	52%	222	50%	238	53%	274	62%	243	55%
Long Term	165	109	66%	111	67%	106	64%	101	61%	99	60%	87	53%	48	29%	56	34%	91	55%	90	54%
Main Street	148	81	55%	93	63%	80	54%	78	53%	68	46%	56	38%	78	53%	100	68%	134	91%	85	58%
Upper Main St.	67	30	45%	37	55%	33	49%	20	30%	27	40%	21	31%	40	60%	47	70%	59	88%	35	52%
Lower Main St.	81	51	63%	56	69%	47	58%	58	72%	41	51%	35	43%	38	47%	53	65%	75	93%	50	62%
Side Streets	68	25	37%	27	40%	22	32%	28	41%	22	32%	29	43%	25	37%	26	38%	36	53%	27	39%
Front St. Lot	60	18	30%	18	30%	19	32%	19	32%	21	35%	17	28%	10	17%	3	5%	8	13%	15	25%
Total	886	479	54%	514	58%	481	54%	469	53%	423	48%	421	48%	383	43%	423	48%	543	61%	460	52%
Short Term	661	352	53%	385	58%	356	54%	349	53%	303	46%	317	48%	325	49%	364	55%	444	67%	355	54%
Long Term	225	127	56%	129	57%	125	56%	120	53%	120	53%	104	46%	58	26%	59	26%	99	44%	105	46%

*Full occupancy at Opera House

Saturday Summary

Parking Area	Capacity	Occupied Spaces (# and %)																			
		11AM		12PM		1PM		2PM		3PM		4PM		5PM		6PM		7PM		Average	
Concourse	610	183	30%	198	32%	204	33%	192	31%	177	29%	148	24%	131	21%	222	36%	198	32%	184	30%
Short Term	475	156	33%	163	34%	144	30%	157	33%	144	30%	117	25%	109	23%	193	41%	169	36%	150	32%
Long Term	135	27	20%	35	26%	60	44%	35	26%	33	24%	31	23%	22	16%	29	21%	30	22%	34	25%
Main Street	148	58	39%	59	40%	54	36%	49	33%	45	30%	48	32%	45	30%	57	39%	58	39%	53	36%
Upper Main St.	67	19	28%	29	43%	32	48%	17	25%	18	27%	14	21%	13	19%	25	37%	28	42%	22	32%
Lower Main St.	81	39	48%	30	37%	22	27%	32	40%	27	33%	34	42%	32	40%	32	40%	30	37%	31	38%
Side Streets	68	18	26%	10	15%	4	6%	11	16%	10	15%	23	34%	27	40%	14	21%	11	16%	14	21%
Front St. Lot	60	1	2%	0	0%																
Total	886	260	29%	267	30%	262	30%	252	28%	232	26%	219	25%	203	23%	293	33%	267	30%	251	28%
Short Term	661	232	35%	232	35%	202	31%	217	33%	199	30%	236	36%	181	27%	264	40%	238	36%	222	34%
Long Term	225	28	12%	35	16%	60	27%	35	16%	33	15%	24	11%	22	10%	29	13%	30	13%	33	15%

Friday, June 26 2015

Parking Area	Capacity	Vacant Spaces									
		11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM*	Average
Concourse	610	255	234	250	266	298	291	340	316	245	277
Main Street	148	67	55	68	70	80	92	70	48	14	63
Upper Main St.	67	37	30	34	47	40	46	27	20	8	32
Lower Main St.	81	30	25	34	23	40	46	43	28	6	31
Side Streets	68	43	41	46	40	46	39	43	42	32	41
Front St. Lot	60	42	42	41	41	39	43	50	57	52	45
Total	886	407	372	406	417	463	465	503	463	343	427

Saturday, June 27 2015

 Lowest Vacancy

Parking Area	Capacity	Vacant Spaces									
		11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	Average
Concourse	610	427	412	406	418	433	462	479	388	412	426
Main Street	148	90	89	94	100	103	100	103	91	90	96
Upper Main St.	67	48	38	35	50	49	53	54	42	39	45
Lower Main St.	81	42	51	59	50	54	47	49	49	51	50
Side Streets	68	50	58	64	57	58	45	41	54	57	54
Front St. Lot	60	59	60	60	60	60	60	60	60	60	60
Total	886	626	619	624	635	655	667	683	593	619	636



GOALS for Downtown Waterville Parking

- Ensure ample and convenient parking for existing businesses
- Improve parking efficiency
- Make parking user-friendly to downtown destinations
- Develop short-term and long-term parking strategies that are supportive of the streetscape, gateway, and redevelopment goals of the City



General Parking Principles

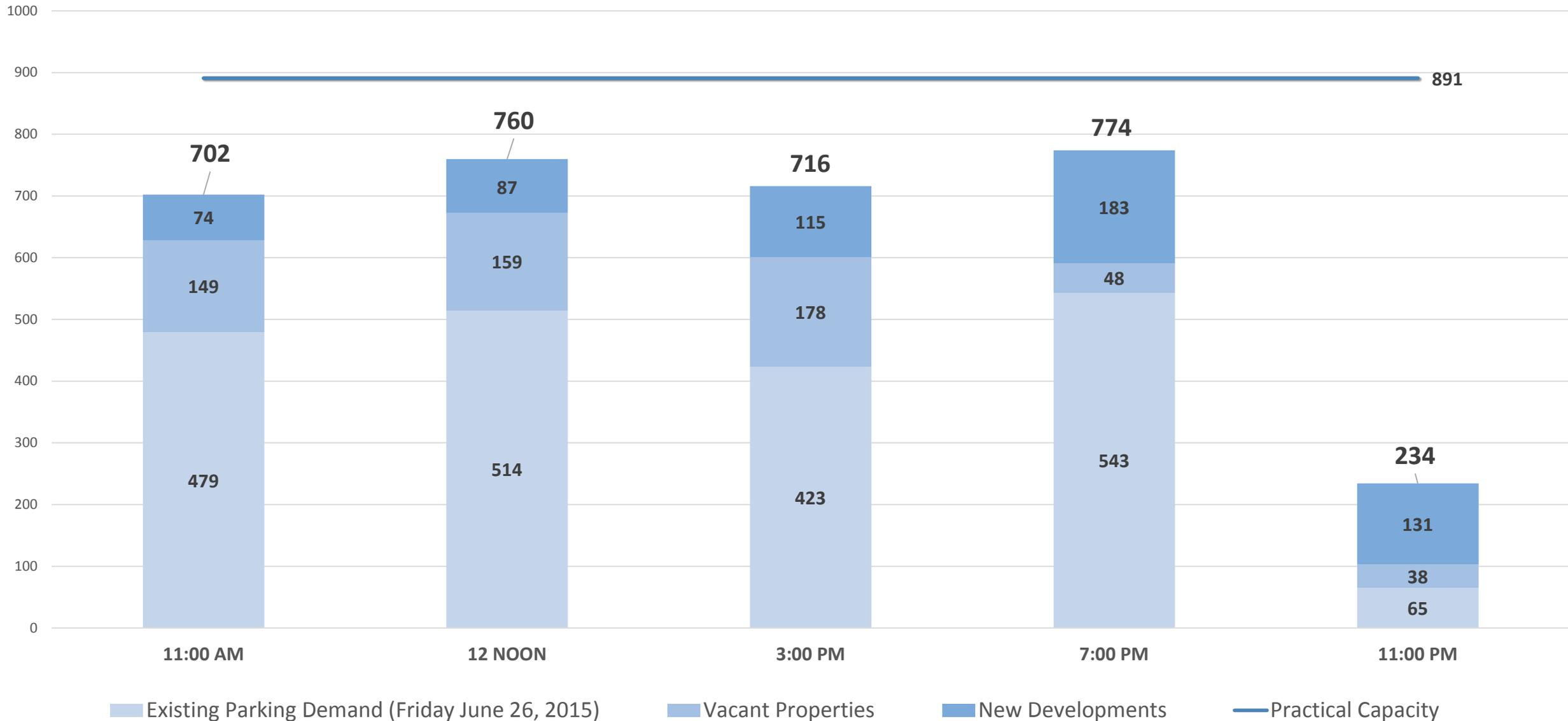
- Continue the practice of municipal / shared parking
- Provide customer parking closest to businesses and employee / resident parking farther away
- Encourage park-and-walk behavior
- Improve parking efficiency



Downtown Waterville Parking Projections for a Summer Friday

							11:00 AM		12 NOON		3:00 PM		7:00 PM		11:00 PM			
							Cars		Cars		Cars		Cars		Cars			
Existing Parking Demand (Friday June 26, 2015)							479		514		423		543		65			
Future Demand from Vacant Properties																		
	Number	Units	Max Occupancy	Peak Ratio	Peak Spaces	Percent Presence	Cars	Percent Presence	Cars	Percent Presence	Cars	Percent Presence	Cars	Percent Presence	Cars			
Retail	39.946	1,000 SF	80%	3	96	40%	38	60%	58	80%	77	15%	14	0%	0			
Restaurant	0.000	1000 SF	80%	10	0	40%	0	75%	0	60%	0	100%	0	0%	0			
Office	34.157	1,000 SF	80%	3.5	96	100%	96	90%	86	90%	86	5%	5	0%	0			
Apartments	28	Apartmt	90%	1.5	38	40%	15	40%	15	40%	15	75%	28	100%	38			
Subtotal for Vacant Properties							149		159		178		48		38			
New Development																		
Apartments	64	Apartmt	90%	1.5	86	40%	35	40%	35	40%	35	75%	65	100%	86			
Cultural Sp	350	seats	80%	0.26	73	0%	0	10%	7	50%	36	100%	73	0%	0			
Retail	4.000	1,000 SF	80%	3	10	40%	4	50%	5	80%	8	15%	1	0%	0			
Restaurant	2.000	1000 SF	80%	10	16	40%	6	70%	11	60%	10	80%	13	0%	0			
Hotel	50	rooms	90%	1	45	65%	29	65%	29	60%	27	70%	32	100%	45			
Subtotal for New Development							74		87		115		183		131			
Total Future Parking Demand in Study Area							702		760		716		774		234			
Maximum Capacity:							1048 spaces											
Practical Capacity:							85%		891 spaces									
Parking Excess (+) or Shortage (-)							189		131		175		117		657			

Downtown Waterville Parking Projections for a Summer Friday



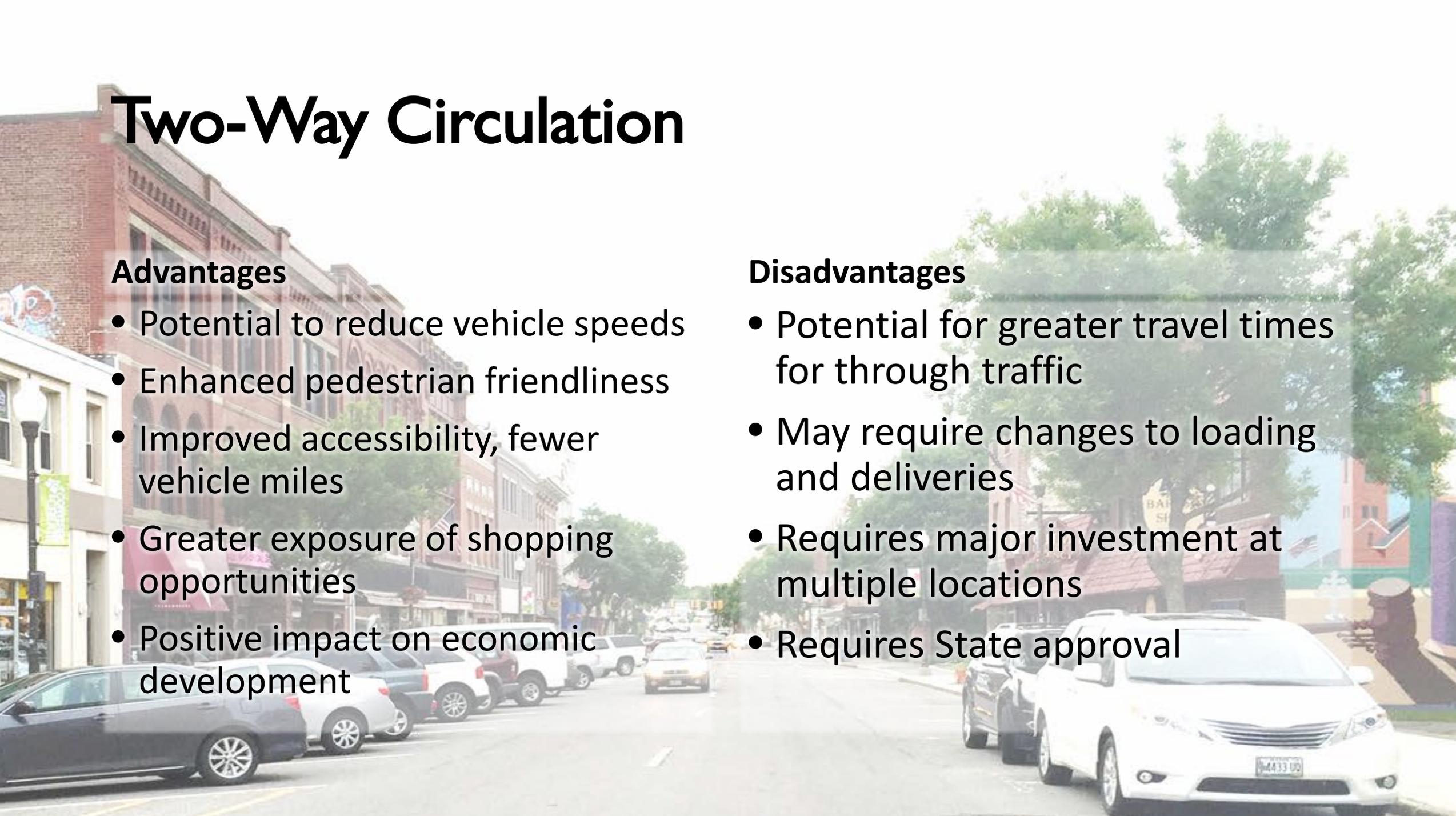


GOALS for Circulation:

- Safety for all modes
- Pedestrian friendliness
- Economic well being
- Enhance rather than detract from urban design quality



Two-Way Circulation



Advantages

- Potential to reduce vehicle speeds
- Enhanced pedestrian friendliness
- Improved accessibility, fewer vehicle miles
- Greater exposure of shopping opportunities
- Positive impact on economic development

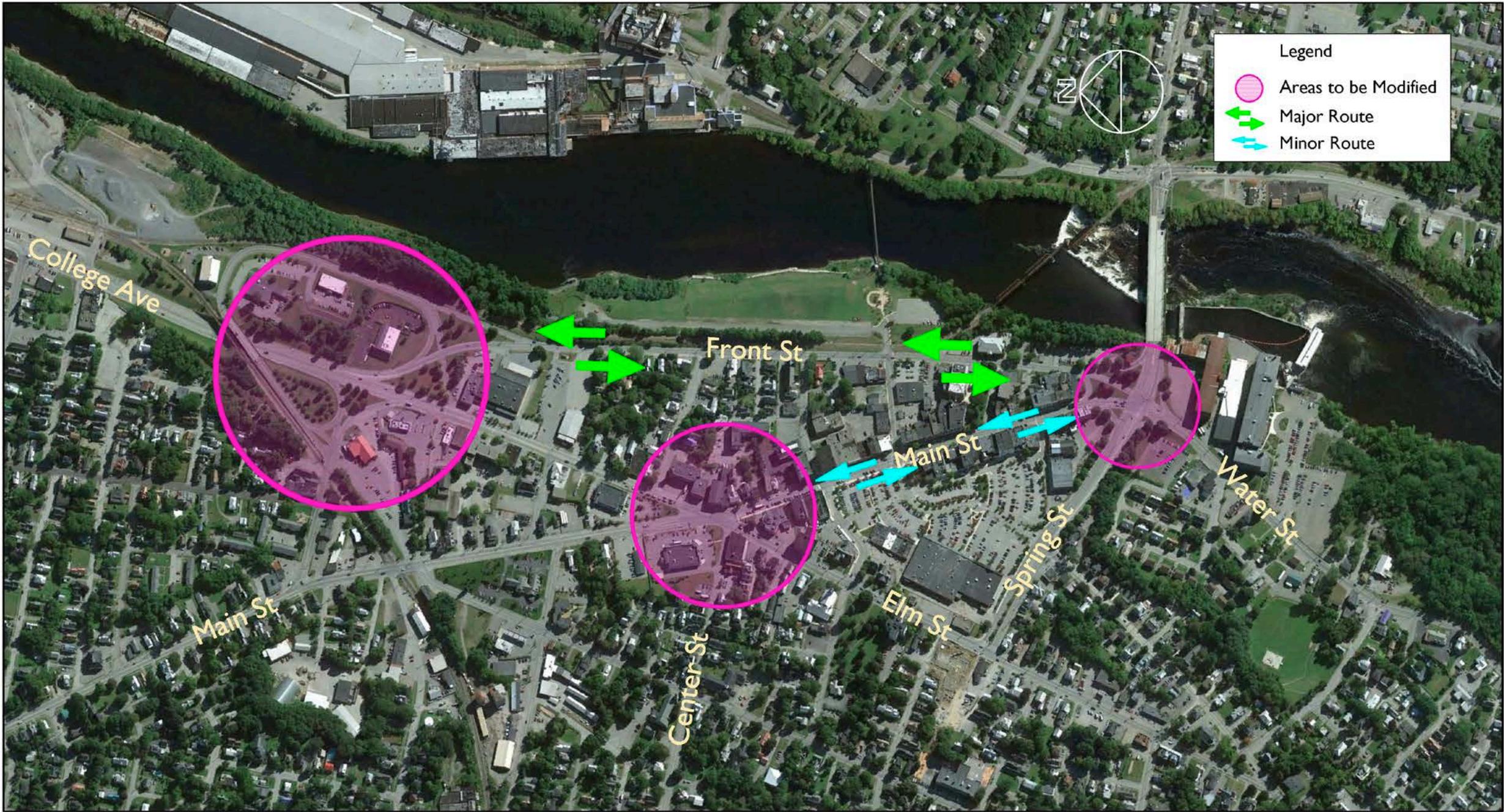
Disadvantages

- Potential for greater travel times for through traffic
- May require changes to loading and deliveries
- Requires major investment at multiple locations
- Requires State approval

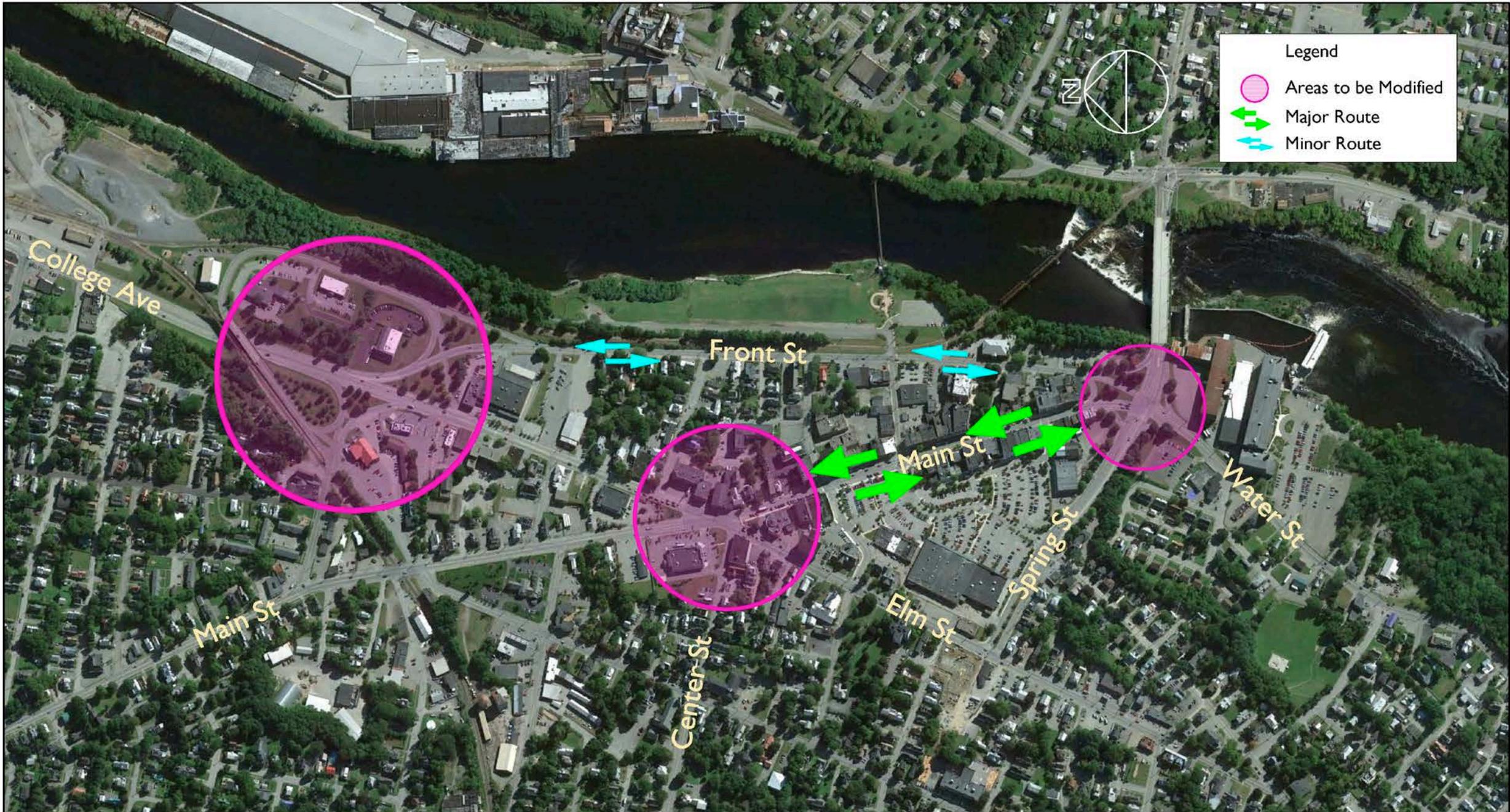
Potential Two-Way Traffic Functions

- Front Street NB
 - Accommodate NB Route 201 traffic
- Front Street SB
 - Design SB Front for SB through traffic
 - Provide SB Route 201 access to downtown only, not for through traffic
- Main Street NB
 - Some NB traffic shifts from NB Front and Elm to NB Main Street primarily traffic with Downtown destinations
- Main Street SB
 - One SB lane could lead to some SB traffic shifting to Front Street and Elm Street
- Spring Street / Elm Street
 - No major change in function

Downtown Traffic Flow - Front Street Major



Downtown Traffic Flow - Front Street Minor



REVISED - Project Schedule for Waterville Downtown Study



Task #	Task																					Team Members Involved						
		2/1/2016	2/8/2016	2/15/2016	2/22/2016	2/29/2016	3/7/2016	3/14/2016	3/21/2016	3/28/2016	4/4/2016	4/11/2016	4/18/2016	4/25/2016	5/2/2016	5/9/2016	5/16/2016	5/23/2016	5/30/2016	6/6/2016	6/13/2016	6/20/2016	6/27/2016	GP	BFJ	M&A	M&M	
1	Project Kick Off																								X		X	
2	Review Available Data																								X	X		
3	Assessment of Study Area, Exist.																								X	X		
4	Assessment of Future Scenarios																								X	X	X	X
5	Pedestrian / Bicycle																								X	X	X	
6	Transit Analysis																								X	X	X	
7	Preliminary Recommendations																								X	X	X	X
8	Final Report																								X	X	X	

Questions or Comments

