NH 12 SOUTH CORRIDOR STUDY

Keene Swanzey Marlborough Troy Fitzwilliam

Maps & Technical Appendix

2015




PREPARED BY SOUTHWEST REGION PLANNING COMMISSION

with assistance from the NH 12 South Advisory Committee

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New Hampshire DOT
Department of Transportation

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- Controlled Access
- Limited Access

- Mile Marker
- Traffic Count Location
- NHDOT Facility
- Stream Crossing
- Abandoned Railroad
- Traffic Signal
- Street Lighting
- Guardrail
- Corridor Study Boundary
- Urbanized Area

Bridge
- Not on the Redlist
- Closed Bridge
- Historic or Bypassed
- State Redlist
- Municipal Redlist

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

BUTLER CT
WYMAN WAY
ADAMS ST
EASTERN AVE
BEAVER BROOK
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
OPTICAL AVE
MARLBORO ST
Cheshire Rail Trail
GUARDMAN RD
PLEASANT HILL RD
CRANE RD
MARTELL CT
LANDFILL RD
NHRT 101
KEENE BY-PASS
MAIN ST
SILENT WAY
EDGEWOOD AVE
ROSE LN
SWANZEY FACTORY RD
AIRPORT RD
PARK ST
SYLVAN WAY
LAKE ST
Wilson Pond
PASTURE RD
WILSON POND RD
M HIGGINS DR
JOSLIN RD
RIDGE RD
RUST WAY
LONGWOOD DR
JAMES RD
MONADNOCK HWY
ARROWCREST DR
MARGY HILL RD
LAUREL ST
DILLANT-HOPKINS AIRPORT
OLD HOMESTEAD HWY
CAUSEWAY RD
GREENVIEW DR
SUGAR HILL RD
FOX RUN RD
MASSEY HILL RD
OLIVER HILL RD
WHITCOMB RD
PAGE CT
SAFFORD DR
FLAT ROOF MILL RD
WOODLAWN HEIGHTS
G L LN
TIC S HIGH
FORBUSH LN
Forbush Brook
South Branch Ashuelot River
MARLBOROUGH
SWANZEY
TROY
KEENE
Brnger Junkyard

82237042 82237112 82237070 82237052 82237118 143/066 82237012 141/063 82237072 82237055 82237027 82237015 82237014 82237016 132/060 82237031 S-237-03 22237056 138/060 137/059 82237013 82237083 Ref 17.8 138/056 Ref 17.6 82237085 S-237-04 82237075 Ref 17.4 Ref 17.2 82237120 Ref 17.0 82237073 82237054 82441055 82441056 Ref 16.8 82441051 167/175 82441069 Ref 16.6 166/171 82441053 Ref 16.4 Ref 16.2 Ref 16.0 Ref 15.8 Ref 15.6 Ref 15.4 Ref 15.2 Ref 15.0 Ref 14.8 Ref 14.6 Ref 14.4 Ref 14.2 Ref 14.0 82441057 Ref 13.8 82287001 192/123 Ref 13.6 Ref 13.4 82441058 82441054 146/129

TRANSPORTATION
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Highways
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NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

Cheshire Rail Trail
FORBUSH LN
SWANZEY
MARLBOROUGH
DEPOT RD
SANDY WAY
THATCHER HILL RD
WEBB RD
Ref 13.8
Ref 13.6
Ref 13.4
Ref 13.2
Ref 13.0
Ref 12.8
Ref 12.6
Ref 12.4
Ref 12.2
Ref 12.0
Ref 11.8
Ref 11.6
Ref 11.4
Ref 11.2
Ref 11.0
Ref 10.8
Ref 10.6
Ref 10.4
Ref 10.2
Ref 10.0
Ref 9.8
Ref 9.6
Ref 9.4
Ref 9.2
Ref 9.0
Ref 8.8
Ref 8.6
Ref 8.4
824-1057
192/123
02287001
067/084
066/080
Patrol Shed 411 (Old TROY)
072/075
NH ROUTE 12
077/065
82287052
NORTH MAIN ST
080/134
082/128
South Branch Ashuelot River
087/116
Closed 411 OLD
089/114
LAWRENCE RD
OLD ICELAND RD
097/108
OLD WHITCOMB RD
MARLBORO RD
82453053
K
TROY RD
Brandy Brook
TOLMAN RD
Corey Pond
TROY
SWANZEY
WEST HILL RD
MACKEY RD
DORT ST
COLONIAL DR
PIGEON HILL RD
MILLIKEN LN
HIGH ST
SCHOOL ST
DERBY LN
096/091
82453054
MILL ST
101/088
104/088
82453050
GOSLANT
094/086
82453052
098/086
MONADNOCK ST
GRANITE ST
RICHMOND RD
Nester Brook
BROOK ST
82453051
093/084
PROSPECT ST
MORSE ST
MEMORIAL DR
SOUTH ST
SOUTH MAIN ST
Quarry Brook
QUARRY RD
FITZWILLIAM RD

TRANSPORTATION
MAP 2 OF 4

TRANSPORTATION
MAP 3 OF 4

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1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

Ref 8.8
Ref 8.6
Ref 8.4
Ref 8.2
Ref 8.0
Ref 7.8
Ref 7.6
Ref 7.4
Ref 7.2
Ref 7.0
Ref 6.8
Ref 6.6
Ref 6.4
Ref 6.2
Ref 6.0
Ref 5.8
Ref 5.6
Ref 5.4
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6

62157052
82157013
82157054
82157053
82157011
82157055
82157057
82157058
82157059
156/115
155/094
151/085
147/080

QUARRY RD
FITZWILLIAM RD
FERN HILL RD
SOUTH MAIN ST
GAP MOUNTAIN RD
TROY
FITZWILLIAM
UPPER GAP MOUNTAIN RD
BOWKER HILL RD
SOUTH ST
ROCKWOOD POND RD
NH ROUTE 119 E
SUNSET RD
Bowker Pond
Rockwood Pond
UPPER TROY RD
ROBBINS RD
LOWER TROY RD
JAFFREY
FITZWILLIAM
GAP MTN RD
SCOTT POND RD
JOHNSON RD
PINE RD
DR
HEMLOCK
Scott Pond
Ghoshie Rail Trail
OLD GOAGH RD
RHODODENDRON RD
MATHEWS RD
DOUBLE GT
Scott Brook
Cheshire Rail Trail
R GREENWAY
OLD GOAGH RD
RICHMOND RD
ANGER RD
COLUMBIA RD
NH ROUTE 119 W
TEMPLETON TPKE
COLLINS POND RD
WEBBER RD
WEBB HILL RD
E LAKE RD
W LAKE RD
NUMBER 4 RD
Stone Pond
BALDWIN RD
WHITCOMB RD
ROYALSTON RD
Horseshoe Pond
E LAKE RD

TRANSPORTATION
MAP 4 OF 4

Highways
- Class I
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Date: 12/23/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

OLD RINDGE RD
NH ROUTE 119 E
DOUBLE GR
156/115
82157054
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
155/094
82157059
Ref 3.8
Ref 3.6
Ref 3.4
Ref 3.2
Ref 3.0
Ref 2.8
Ref 2.6
Ref 2.4
Ref 2.2
Ref 2.0
Ref 1.8
Ref 1.6
Ref 1.4
Ref 1.2
Ref 1.0
Ref 0.8
Ref 0.6
Ref 0.4
Ref 0.2
Ref 0.0
192/037
191/037
62157051
Scott Brook
Stone Pond
151/085
82157058
NUMBER 4 RD
Cheshire Rail Trail
BALDWIN
147/080
82157057
WILLCOMB RD
DUNTON RD
TEMPLETON RD
147/054
150/033
SANDY HOLLOW RD
NEW HAMPSHIRE
MASSACHUSETTS
Sip Pond
Sip Pond Brook
Spud Brook
Robbins Brook
Tarbell Brook
CRANE RD
ABEL RD
FULLAM HILL RD
WARREN HILL RD
FIRE LN 102
WOODBROOK DR
ANDERSON RD
SIP POND RD
CROSS RD
OLD TURNPIKE RD
DAMON RD
RINDGE
FITZWILLIAM
BOWERS HILL RD
K

Safety

SAFETY (ALL CRASHES)
MAP 1 OF 4

All Crashes (2002-2013)

- Killed
- Incapacitating
- Other

Notes: Crashes occuring within the corridor study area only. Dispersed points are for illustrative purposes and do not reflect actual crash locations. Location precision varies with crash severity. All crash data provided by New Hampshire Department of Safety. "Other" injury status includes "Suspected Minor Injury", "Possible Injury", "No Apparent Injury", and "Injury Unknown" categories.

Southwest Region Planning Commission

Date: 3/23/2015

NORTH

1:20,000

1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

WINCHESTER ST
BUTLER CT
WYMAN WAY
ADAMS ST
BAKER ST
Beaver Brook
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
EASTERN AVE
MARLBORO ST
PLEASANT HILL RD
CRANE RD
FIRST RD
CHAPMAN RD
Cheshire Rail Trail
OPTICAL AVE
MARTEL CT
Ref 17.8
LANDFILL RD
NHRT 101
MAIN ST
Ref 17.6
SILENT WAY
Ref 17.4
KEENE BY-PASS
Chesham Rail
ROSE LN
Ref 17.2
EDGEWOOD AVE
GREENWOOD AVE
Ref 17.0
SWANZEY FACTORY
MIRPORT RD
Ref 16.8
PARK ST
JOSLIN RD
RIDGE RD
Ref 16.6
RUSTWAY
LONGWOOD DR
SYLVAN WAY
LAKE ST
Ref 16.4
PARTRIDGE RD
Ref 16.2
M HUGGINS DR
Wilson Pond
DILLANT - HOPKINS AIRPORT
WILSON POND RD
Ref 16.0
Ref 15.8
JAMES RD
PAGE CT
SAFFORD DR
MONADNOCK HWY
Ref 15.6
Ref 15.4
Ref 15.2
ARROW CREST DR
MARGY HILL RD
Ref 15.0
MARGY HILL RD
Ref 14.8
Cheshire Rail Trail
SUGAR HILL RD
Ref 14.6
FOX RUN RD
Forbush Brook
Ref 14.4
MASSEY HILL RD
Ref 14.2
Forbush Brook
Ref 14.0
OLIVER HILL RD
Ref 13.8
FORBUSH LN
Ref 13.6
Ref 13.4
South Branch Ashuelot River
WHITCOMB RD
FLAT ROOF MILL RD
WOODLAND HEIGHTS DR
GLEN
CAUSEWAY RD
GENTER VIEW DR
LAUREL ST
MARLBOROUGH
SWANZEY
SWANZEY
TROY

SAFETY (ALL CRASHES)
MAP 2 OF 4

All Crashes (2002-2013)

- Killed
- Incapacitating
- Other

Notes: Crashes occuring within the corridor study area only. Dispersed points are for illustrative purposes and do not reflect actual crash locations. Location precision varies with crash severity. All crash data provided by New Hampshire Department of Safety. "Other" injury status includes "Suspected Minor Injury", "Possible Injury", "No Apparent Injury", and "Injury Unknown" categories.

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NORTH

1:20,000

1 in = 1,667 feet

Miles

0 ¼ ½

Kilometers

0 ¼ ½

Ref 13.8
Ref 13.6
Ref 13.4
Ref 13.2
Ref 13.0
Ref 12.8
Ref 12.6
Ref 12.4
Ref 12.2
Ref 12.0
Ref 11.8
Ref 11.6
Ref 11.4
Ref 11.2
Ref 11.0
Ref 10.8
Ref 10.6
Ref 10.4
Ref 10.2
Ref 10.0
Ref 9.8
Ref 9.6
Ref 9.4
Ref 9.2
Ref 9.0
Ref 8.8
Ref 8.6
Ref 8.4

Cheshire Rail Trail
NH ROUTE 12
MONADNOCK HWY
PORCUPINE LN
DEPOT RD
SANDY WAY
THATCHER HILL RD
SWANZEY
MARLBOROUGH
TROY
JOLMAN RD
Corey Pond
WEST HILL RD
MACKEY RD
South Branch Ashuelot River
Brandy Brook
LAWRENCE RD
OLD KEENE RD
OLD WHITCOMB RD
MARLBORO RD
TROY RD
DOLL ST
COLONIAL DR
BIGELOW HILL RD
MILLIN D LN
HIGH ST
DERBY LN
MAIN ST
SCHOOL ST
MILL ST
MONADNOCK ST
Nester Brook
BROOK ST
GRANITE ST
Quarry Brook
QUARRY RD
FITZWILLIAM RD
PROSPECT ST
MORSE ST
MEMORIAL DR
SOUTH ST
SOUTH MAIN ST
RICHMOND RD

SAFETY (ALL CRASHES)
MAP 3 OF 4

All Crashes (2002-2013)

- Killed
- Incapacitating
- Other

Notes: Crashes occuring within the corridor study area only. Dispersed points are for illustrative purposes and do not reflect actual crash locations. Location precision varies with crash severity. All crash data provided by New Hampshire Department of Safety. "Other" injury status includes "Suspected Minor Injury", "Possible Injury", "No Apparent Injury", and "Injury Unknown" categories.

Southwest Region Planning Commission

Date: 3/23/2015

NORTH

1:20,000

1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

Ref 8.8
Ref 8.6
Ref 8.4
Ref 8.2
Ref 8.0
Ref 7.8
Ref 7.6
Ref 7.4
Ref 7.2
Ref 7.0
Ref 6.8
Ref 6.6
Ref 6.4
Ref 6.2
Ref 6.0
Ref 5.8
Ref 5.6
Ref 5.4
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6

QUARRY RD
FITZWILLIAM RD
FERN HILL RD
GAP MOUNTAIN RD
SOUTH MAIN ST
TROY
FITZWILLIAM
UPPER GAP MOUNTAIN RD
BOWKERVILLE RD
SOUTH ST
NH ROUTE 12N
ROCKWOOD POND RD
Bowker Pond
Rockwood Pond
SUNSET RD
UPPER TROY RD
ROBBINS RD
LOWER TROY RD
JAFFREY
FITZWILLIAM
PINE RD
JOHNSON RD
SCOTT POND RD
Scott Pond
NH ROUTE 119 E
DOYLE CT
Scott Brook
RHODODENDRON RD
RICHMOND RD
OLD GOAGH RD
Cheshire Rail Trail
MATHEWS RD
ANGIER RD
COLUMBIA RD
GOLLINS POND RD
TEMPLETON DIVSF
WEBBER LN
WEBB HILL RD
E LAKE RD
W LAKE RD
CREAMERY RD
NH ROUTE 119 W
ROYALSTON RD
Horseshoe Pond
BALDWIN CT
Stone Pond
NUMBER 4 RD
WHITCOMB RD
DUNTON RD
ScottBrook

SAFETY (ALL CRASHES)
MAP 4 OF 4

All Crashes (2002-2013)

- Killed
- Incapacitating
- Other

Notes: Crashes occuring within the corridor study area only. Dispersed points are for illustrative purposes and do not reflect actual crash locations. Location precision varies with crash severity. All crash data provided by New Hampshire Department of Safety. "Other" injury status includes "Suspected Minor Injury", "Possible Injury", "No Apparent Injury", and "Injury Unknown" categories.

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NORTH

1:20,000

1 in = 1,667 feet

Miles: 0 ¼ ½

Kilometers: 0 ¼ ½

Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6
Ref 3.4
Ref 3.2
Ref 3.0
Ref 2.8
Ref 2.6
Ref 2.4
Ref 2.2
Ref 2.0
Ref 1.8
Ref 1.6
Ref 1.4
Ref 1.2
Ref 1.0
Ref 0.8
Ref 0.6
Ref 0.4
Ref 0.2
Ref 0.0

OLD RINDGE RD
DOTTLE CT
NH ROUTE 119 E
BOWERS HILL RD
Scott Brook
Stone Pond
BALDWIN CT
NUMBER 4 RD
WELLCOMB RD
DUNTON RD
TEMPLETON TPKE
Cheshire Rail Trail
CRANE RD
ABEL RD
FULLAM HILL RD
Tarbell Brook
FIRE LN 102
WARREN HILL RD
WOODBROOK DR
Sip Pond
ANDERSON RD
SIP POND RD
CROSS RD
OLD TURNPIKE RD
DAMON RD
Sip Pond Brook
RINDGE
FITZWILLIAM
SANDY HOLLOW RD
Spud Brook
Robbins Brook

SAFETY (BICYCLE & PEDESTRIAN)
MAP 1 OF 2

Bicycle & Pedestrian Crashes (2002-2013)

- Bicycle/Pedal Cycle Fatality
- Bicycle/Pedal Cycle Incapacitating
- Bicycle/Pedal Cycle Other
- Pedestrian Fatality
- Pedestrian Incapacitating
- Pedestrian Other

Southwest Region Planning Commission

Date: 12/30/2014

NORTH

1:20,000

1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

WINCHESTER ST
BUTLER CT
WYMAN WAY
ADAMS ST
BAKER ST
BEAVER BROOK
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
EASTERN AVE
Cheshire Rail Trail
MARLBORO ST
CHAPMAN RD
PLEASANT HILL RD
CRANE RD
MARTELL CT
Ref 17.8
NHRT 101
LANDFILL RD
MAIN ST
Ref 17.6
OPTICAL AVE
Ref 17.4
KEENE BY-PASS
SILENT WAY
Ref 17.2
ROSE LN
EDGEWOOD AVE
GREENWOOD AVE
Ref 17.0
SWANZEY FACTORY
MIRPORT RD
Ref 16.8
PARK ST
Ref 16.6
JOSLIN RD
RIDGE RD
LONGWOOD DR
RUSTWAY
SYLVAN WAY
LAKE ST
Ref 16.4
PASTURE RD
Ref 16.2
M HUGGINS DR
Wilson Pond
SWANZEY KEENE
DILLANT - HOPKINS AIRPORT
Ref 16.0
LAUREL ST
JAMES RD
Ref 15.8
PAGE CT
SAFFORD DR
Ref 15.6
MONADNOCK HWY
Ref 15.4
Ref 15.2
MARLBOROUGH SWANZEY
ARROWCREST DR
Cheshire Rail Trail
MARGY HILL RD
Ref 15.0
Ref 14.8
CAUSEWAY RD
OLD HOMESTEAD HWY
MARGY HILL RD
Ref 14.6
SUGAR HILL RD
FOX RUN RD
Forbush Brook
Ref 14.4
CENTERVIEW DR
MASSEY HILL RD
Cheshire Rail Trail
Ref 14.2
Forbush Brook
OLIVER HILL RD
Ref 14.0
Ref 13.8
FORBUSH LN
Ref 13.6
Ref 13.4
South Branch Ashuelot River
WHITCOMB RD
FLAT ROOF MILL RD
TG-S HIGH
WOODLAND
G-L LN
G-L LN
Forbush Brook
WHITCOMB RD
SWANZEY
TROY

SAFETY (BICYCLE & PEDESTRIAN)
MAP 2 OF 2

Bicycle & Pedestrian Crashes (2002-2013)

- Bicycle/Pedal Cycle Fatality
- Bicycle/Pedal Cycle Incapacitating
- Bicycle/Pedal Cycle Other
- Pedestrian Fatality
- Pedestrian Incapacitating
- Pedestrian Other

Southwest Region Planning Commission

Date: 12/30/2014

NORTH

1:20,000

1 in = 1,667 feet

Miles

0 ¼ ½

Kilometers

0 ¼ ½

Cheshire Rail Trail

Ref 13.8

PORCUPINE LN

Ref 13.6

Ref 13.4

Ref 13.2

South Branch Ashuelot River

Ref 13.0

Ref 12.8

NH ROUTE 12

Ref 12.6

Ref 12.4

Ref 12.2

Ref 12.0

MARLBOROUGH TROY

Ref 11.8

Ref 11.6

Ref 11.4

Ref 11.2

Ref 11.0

Ref 10.8

Ref 10.6

Ref 10.4

Ref 10.2

Ref 10.0

Ref 9.8

Ref 9.6

Ref 9.4

Ref 9.2

Ref 9.0

Ref 8.8

Ref 8.6

Ref 8.4

SWANZEY MARLBOROUGH

TROY SWANZEY

DEPOT RD

SANDY WAY

THATCHER HILL RD

WEBB RD

HOLMAN RD

Corey Pond

WEST HILL RD

MACKEY RD

TROY RD

Brandy Brook

LAWRENCE RD

OLD KEENE RD

NORTH MAIN ST

OLD WHITCOMB RD

MARLBORO RD

FOREST

COLONIAL DR

BIGELOW HILL RD

MONADNOCK ST

SCHOOL ST

MILL ST

DERBY LN

MILLIND LN

HIGH ST

RICHMOND RD

Nester Brook

BROOK ST

PROSPECT ST

MORSE ST

GRANITE ST

MEMORIAL DR

SOUTH ST

SOUTH MAIN ST

QUARRY RD

FITZWILLIAM RD

Quarry Brook

SAFETY (BICYCLE & PEDESTRIAN)
MAP 2 OF 2

SAFETY (MOTOR VEHICLE)
MAP 1 OF 4

Fatal and Incapacitating Crashes (2002-2013)

- Fatal
- Incapacitating

Southwest Region Planning Commission

Date: 3/23/2015

NORTH

1:20,000

1 in = 1,667 feet

Miles: 0 ¼ ½

Kilometers: 0 ¼ ½

Fatalities: 000
Injuries: 002

Fatalities: 000
Injuries: 002

Ref 17.8

Ref 17.6

Ref 17.4

Fatalities: 000
Injuries: 003

Ref 17.2

Ref 17.0

Fatalities: 000
Injuries: 001

Ref 16.8

Fatalities: 000
Injuries: 001

Ref 16.6

Ref 16.4

Ref 16.2

Ref 16.0

Ref 15.8

Ref 15.6

Ref 15.4

Ref 15.2

Ref 15.0

Fatalities: 000
Injuries: 001

Fatalities: 002
Injuries: 001

Ref 14.8

Ref 14.6

Ref 14.4

Ref 14.2

Ref 14.0

Fatalities: 000
Injuries: 003

Ref 13.8

Ref 13.6

Ref 13.4

Fatalities: 000
Injuries: 002

Fatalities: 000
Injuries: 000

WINCHESTER ST
BUTLER CT
WYMAN WAY
ADAMS ST
BAKER ST
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
EASTERN AVE
Beaver Brook
MARTELL CT
LANDFILL RD
NHRT 101
MAIN ST
SILENT WAY
OPTICAL AVE
MARLBORO ST
CHAPMAN RD
Cheshire Rail Trail
PLEASANT HILL RD
CRANE RST RD
KEENE BY-PASS
EDGEWOOD AVE
ROSE LN
GREENWOOD AVE
SWANZEY FACTORY
MIRROR RD
PARK ST
SYLVAN WAY
LAKE ST
RUSTWAY
LONGWOOD DR
JOSLIN RD
RIDGE RD
MCHUGGINS DR
PASTURE RD
Wilson Pond
WILSON POND RD
DILLANT - HOPKINS AIRPORT
PAGE CT
SALFORD DR
JAMES RD
MONADNOCK HWY
ARROW CREST DR
MARGY HILL RD
OLD HOMESTEAD HWY
CAUSEWAY RD
GREENVIEW DR
SUGAR HILL RD
FOX RUN RD
MASSEY HILL RD
OLIVER HILL RD
WHITCOMB RD
WOODLAND HEIGHTS DR
C L LN
FLAT ROOF MILL RD
Forbush Brook
FORBUSH LN
South Branch Ashuelot River
LAUREL ST
MARLBOROUGH
SWANZEY
SWANZEY
TROY

SAFETY (MOTOR VEHICLE)
MAP 2 OF 4

Fatal and Incapacitating Crashes (2002-2013)

- Fatal
- Incapacitating

Southwest Region Planning Commission

Date: 12/30/2014

NORTH

1:20,000

1 in = 1,667 feet

Miles: 0 ¼ ½

Kilometers: 0 ¼ ½

Fatalities: 000
Injuries: 003
Ref 13.8
Ref 13.6
Ref 13.4
Ref 13.2
Ref 13.0
Ref 12.8
Ref 12.6
Ref 12.4
Ref 12.2
Ref 12.0
Ref 11.8
Ref 11.6
Ref 11.4
Ref 11.2
Ref 11.0
Ref 10.8
Ref 10.6
Ref 10.4
Ref 10.2
Ref 10.0
Ref 9.8
Ref 9.6
Ref 9.4
Ref 9.2
Ref 9.0
Ref 8.8
Ref 8.6
Ref 8.4

Fatalities: 001
Injuries: 000

Fatalities: 000
Injuries: 002

Fatalities: 001
Injuries: 001

Fatalities: 001
Injuries: 003

Fatalities: 000
Injuries: 003

Fatalities: 000
Injuries: 001

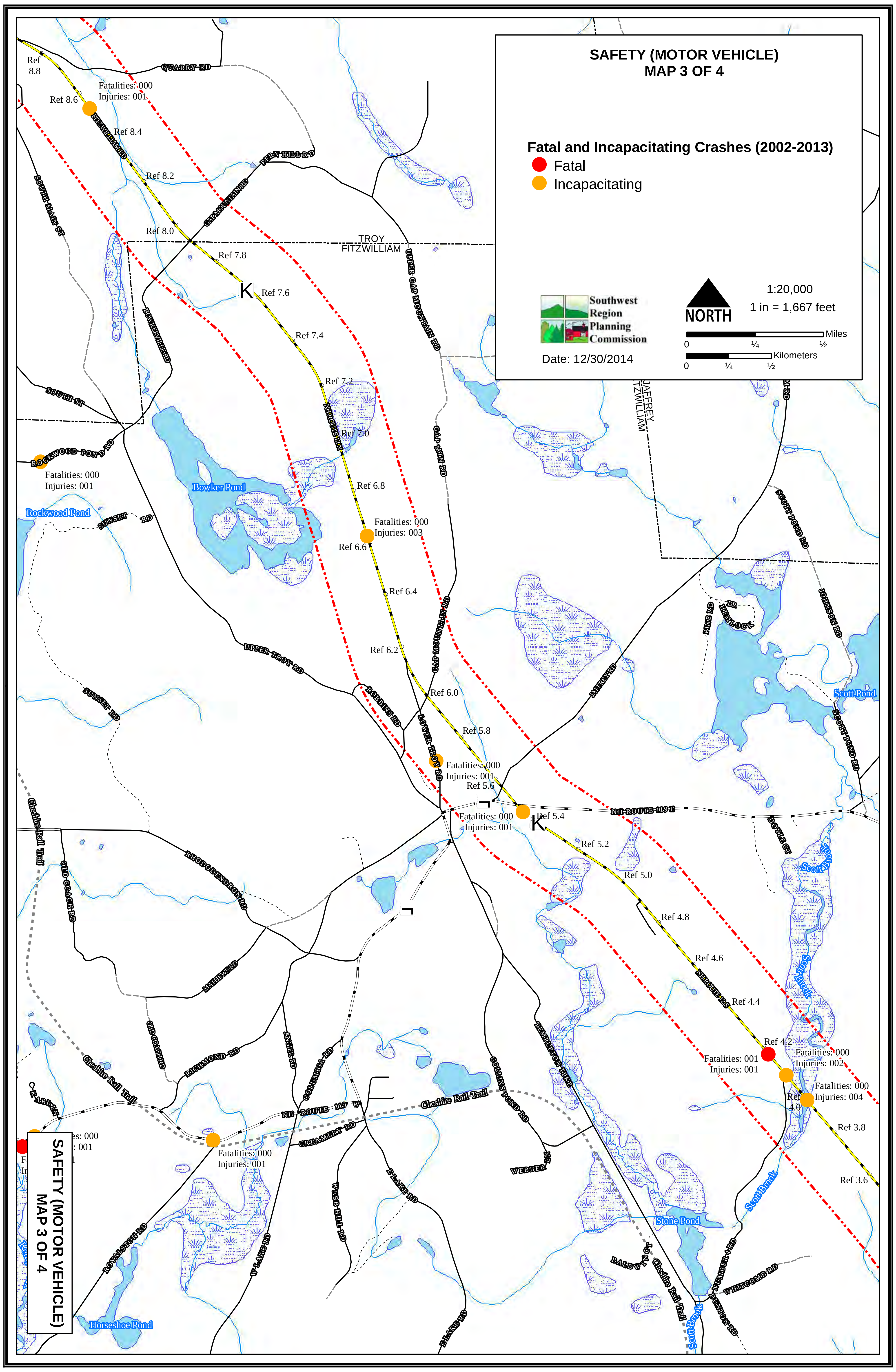
Fatalities: 000
Injuries: 002

Fatalities: 000
Injuries: 001

Cheshire Rail Trail
South Branch Ashuelot River
Corey Pond
Nester Brook
Brandy Brook
Quarry Brook

PORTUGUESE LN
SWANZEY
MARLBOROUGH
TROY
WEBB DEPOT RD
SANDY WAY
THATCHER HILL RD
TROY RD
JOLMAN RD
WEST HILL RD
MACKEY RD
MARLBORO TROY
LAWRENCE RD
OLD KEENE RD
NORTH MAIN ST
OLD WHITCOMB RD
MARLBORO RD
FOREST
COLONIAL DR
PIGEON HILL RD
MILLIKIN LN
HIGH ST
DERBY LN
SCHOOL ST
MILL ST
CENTER ST
MONADNOCK ST
GRANITE ST
RICHMOND RD
BROOK ST
PROSPECT ST
MORSE ST
MEMORIAL DR
SOUTH ST
SOUTH MAIN ST
QUARRY RD
FITZWILLIAM RD

SAFETY (MOTOR VEHICLE)
MAP 2 OF 4


SAFETY (MOTOR VEHICLE)
MAP 3 OF 4
Fatal and Incapacitating Crashes (2002-2013)
Fatal
Incapacitating
Southwest Region Planning Commission
Date: 12/30/2014
NORTH
1:20,000
1 in = 1,667 feet
Miles
0
¼
½
Kilometers
0
¼
½
TROY
FITZWILLIAM
JAFFREY
FITZWILLIAM
QUARRY RD
FERN HILL RD
CAP MOUNTAIN RD
SOUTH MAIN ST
FITZWILLIAM RD
UPPER GAP MOUNTAIN RD
BOWKERVILLE RD
SOUTH ST
ROCKWOOD POND RD
NH ROUTE 12 N
GAP MTN RD
GAP MOUNTAIN RD
JAFFREY RD
SCOTT POND RD
JOHNSON RD
PINE RD
HEMLOCK DR
SUNSET RD
UPPER TROY RD
ROBBINS RD
LOWER TROY RD
NH ROUTE 119 E
DOYLE CT
RHODODENDRON RD
OLD COACH RD
MATHEWS RD
RICHMOND RD
ANGIER RD
COLUMBIA RD
NH ROUTE 119 W
CREAMERY RD
KARI LN
ROYALSTON RD
W LAKE RD
WEBB HILL RD
E LAKE RD
TEMPLETON TPKE
COLLINS POND RD
WEBBER LN
BALDWIN CT
NUMBER 4 RD
DUNTON RD
WHITCOMB RD
NH ROUTE 12 S
Cheshire Rail Trail
Bowker Pond
Rockwood Pond
Scott Pond
Scott Brook
Stone Pond
Horseshoe Pond
Ref 8.8
Ref 8.6
Ref 8.4
Ref 8.2
Ref 8.0
Ref 7.8
Ref 7.6
Ref 7.4
Ref 7.2
Ref 7.0
Ref 6.8
Ref 6.6
Ref 6.4
Ref 6.2
Ref 6.0
Ref 5.8
Ref 5.6
Ref 5.4
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6
Fatalities: 000
Injuries: 001
Fatalities: 000
Injuries: 001
Fatalities: 000
Injuries: 003
Fatalities: 000
Injuries: 001
Fatalities: 000
Injuries: 001
Fatalities: 001
Injuries: 001
Fatalities: 000
Injuries: 002
Fatalities: 000
Injuries: 004
Fatalities: 000
Injuries: 001
SAFETY (MOTOR VEHICLE)
MAP 3 OF 4

SAFETY (MOTOR VEHICLE)
MAP 4 OF 4

Fatal and Incapacitating Crashes (2002-2013)

- Fatal
- Incapacitating

Southwest Region Planning Commission

Date: 12/30/2014

NORTH

1:20,000

1 in = 1,667 feet

Miles: 0 ¼ ½

Kilometers: 0 ¼ ½

OLD RINDGE RD
DOTTLE CR
NH ROUTE 119 E
BOWERS HILL RD
Scott Brook
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Fatalities: 001
Injuries: 001
Fatalities: 000
Injuries: 002
Fatalities: 000
Injuries: 004
Ref 4.0
Ref 3.8
Ref 3.6
Ref 3.4
Ref 3.2
Ref 3.0
Ref 2.8
Ref 2.6
Ref 2.4
Fatalities: 000
Injuries: 001
Ref 2.2
Ref 2.0
Ref 1.8
Ref 1.6
Ref 1.4
Ref 1.2
Ref 1.0
Fatalities: 000
Injuries: 002
Ref 0.8
Ref 0.6
K
Ref 0.4
Fatalities: 000
Injuries: 000
Ref 0.2
Ref 0.0
Stone Pond
BALDWIN
Cheshire Rail Trail
NUMBER 4 RD
WELLCOMB RD
DUNTON RD
DUNTON RD
TEMPLETON TPKE
Cheshire Rail Trail
Scott Brook
Scott Brook
Scott Brook
CRANE RD
ABEL RD
FULLAM HILL RD
Tarbell Brook
Tarbell Brook
FIRE LN 102
WARREN HILL RD
WOODBROOK DR
Sip Pond
ANDERSON RD
SIP POND RD
Cheshire Rail Trail
SANDY HOLLOW RD
OLD TURNPIKE RD
Sip Pond Brook
CROSS RD
DeMON RD
Cheshire Rail Trail
Tarbell Brook
Spud Brook
RINDGE
FITZWILLIAM
Robbins Brook

SAFETY (MOTOR VEHICLE)
MAP 4 OF 4

Development Constraints

DEVELOPMENT CONSTRAINTS
MAP 1 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private
- Mile Marker

- Corridor Study Boundary
- Abandoned Railroad
- Shallow to Water Table (Less than 1.5')
- Special Flood Hazard Area
- Steep Slope (> 25%)
- Shallow to Bedrock (Less than 40")
- Conservation Land
- River or Stream
- Lake or Pond
- Reservoir
- Swamp or Marsh

Southwest Region Planning Commission

Date: 12/22/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

WINCHESTER ST
MAIN ST
BUTLER CT
WYMAN WAY
ADAMS ST
Beaver Brook
BAKER ST
MARLBORO ST
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
EASTERN AVE
Beech Hill Conservation Area
Cheshire Rail Trail
PLEASANT HILL RD
CHAPMAN RD
OPTICAL AVE
KING CT
MARTELL CT
NH RT 101
City of Keene Land
Ref 17.8
LANDFILL RD
Ref 17.6
Ref 17.4
Ref 17.2
Ref 17.0
Ref 16.8
Ref 16.6
Ref 16.4
Ref 16.2
Ref 16.0
Ref 15.8
Ref 15.6
Ref 15.4
Ref 15.2
Ref 15.0
Ref 14.8
Ref 14.6
Ref 14.4
Ref 14.2
Ref 14.0
Ref 13.8
Ref 13.6
Ref 13.4
KEENE BY-PASS
Cheshire Rail Road
THOMPSON RD
SILENT WAY
EDGEWOOD AVE
ROSE LN
GREENWOOD AVE
SWANZEY FACTORY RD
Edgewood Civic Association Parcel
YOUNG CT
AIRPORT RD
NORTH PINE ST
PARK ST
LAKE ST
SYLVAN WAY
JOSLIN RD
RIDGE RD
RUSTWAY
LONGWOOD DR
SWANZEY
KEENE
M HUGGINS DR
PASTURE RD
Wilson Pond
SUNSET RD
DILLANT - HOPKINS AIRPORT
JAMES RD
PAGE CT
SAFFORD DR
LAUREL ST
Forbush Brook
Page Mountain Meadow
Anderson's Ravine
MARLBOROUGH
SWANZEY
ARROWCREST DR
MONADNOCK HWY
MARGY HILL RD
SUGAR HILL RD
FOX RUN RD
Northcott
CAUSEWAY RD
GLENDERVIEW DR
OLD HOMESTEAD HWY
MASSEY HILL RD
OLIVER HILL RD
WHITCOMB RD
FORBUSH LN
FLAT ROOF MILL RD
TG & F RR
WOODLAWN
G-L-LN
SWANZEY
TROY
South Branch Ashuelot River
Conservation Land, Sawmill Rd.
Town of Swanzey Land
Town of Swanzey Land

DEVELOPMENT CONSTRAINTS
MAP 2 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private
- Mile Marker

- Corridor Study Boundary
- Abandoned Railroad
- Shallow to Water Table (Less than 1.5')
- Special Flood Hazard Area
- Steep Slope (> 25%)
- Shallow to Bedrock (Less than 40")
- Conservation Land
- River or Stream
- Lake or Pond
- Reservoir
- Swamp or Marsh

Southwest Region Planning Commission

Date: 3/23/2015

NORTH

1:20,000
1 in = 1,667 feet

Miles
0 ¼ ½

Kilometers
0 ¼ ½

MONADNOCK HWY
PORCUPINE LN
SWANZEY
MARLBOROUGH
Ref 13.8
Ref 13.6
Ref 13.4
Ref 13.2
Ref 13.0
Ref 12.8
Ref 12.6
Ref 12.4
Ref 12.2
Ref 12.0
Ref 11.8
Ref 11.6
Ref 11.4
Ref 11.2
Ref 11.0
Ref 10.8
Ref 10.6
Ref 10.4
Ref 10.2
Ref 10.0
Ref 9.8
Ref 9.6
Ref 9.4
Ref 9.2
Ref 9.0
Ref 8.8
Ref 8.6
Ref 8.4
South Branch Ashuelot River
Cheshire Rail Trail
NH ROUTE 12
MARLBOROUGH RD
Cheshire Rail Trail
Cheshire Rail Trail
Cheshire Rail Trail
DUDLEY BROOK
SANDY WAY
THATCHER HILL RD
MAPLE LN
TROY RD
Brandy Brook
LAWRENCE RD
OLD KEENE RD
NORTH MAIN ST
OLD WHITCOMB RD
MARLBORO RD
TOWN ST
COLONIAL DR
BIGELOW HILL RD
WEST HILL RD
MACKEY RD
TOLMAN RD
Corey Pond
TROY
SWANZEY
MILLIND LN
DERBY LN
SCHOOL ST
HIGH ST
MILL ST
MONADNOCK ST
GRANITE ST
SOUTH MAIN ST
BROOK ST
PROSPECT ST
MORSE ST
MEMORIAL DR
SOUTH ST
SOUTH MAIN ST
QUARRY RD
FITZWILLIAM RD
Quarry Brook
Nester Brook
Nester Brook
Nester Brook
RICHMOND RD
Rhododendron State Park
Rhododendron State Park
School

DEVELOPMENT CONSTRAINTS
MAP 3 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private
- Mile Marker

- Corridor Study Boundary
- Abandoned Railroad
- Shallow to Water Table (Less than 1.5')
- Special Flood Hazard Area
- Steep Slope (> 25%)
- Shallow to Bedrock (Less than 40")
- Conservation Land
- River or Stream
- Lake or Pond
- Reservoir
- Swamp or Marsh

Southwest Region Planning Commission

Date: 12/22/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

Ref 8.8
Ref 8.6
Ref 8.4
Ref 8.2
Ref 8.0
Ref 7.8
Ref 7.6
Ref 7.4
Ref 7.2
Ref 7.0
Ref 6.8
Ref 6.6
Ref 6.4
Ref 6.2
Ref 6.0
Ref 5.8
Ref 5.6
Ref 5.4
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6

QUARRY RD
FITZWILLIAM RD
FERN HILL RD
SOUTH MAIN ST
GAP MOUNTAIN RD
TROY
FITZWILLIAM
UPPER GAP MOUNTAIN RD
GOBLEIGH HILL RD
BOWKER HILL RD
SOUTH ST
NH ROUTE 119 E
JAFFREY
FITZWILLIAM
ROCKWOOD POND RD
Bowker Pond
Bowker Pond Woodlands
Rockwood Pond
SUNSET RD
SCOTT POND RD
JOHNSON RD
PINE RD
HEMLOCK DR
UPPER TROY RD
ROBBINS RD
LOWER TROY RD
GAP MOUNTAIN RD
JAFFREY RD
Scott Pond
SCOTT POND RD
Piper Hill
Cheshire Rail Trail
Schupack Easement
RHODODENDRON RD
OLD COACH RD
DOYLE CT
Scott Brook
MATHEWS RD
RICHMOND RD
ANGIER RD
OLD COACH RD
COLUMBIA RD
TEMPLETON HILL RD
COLLINS POND RD
WEBBER LN
WEBB HILL RD
BLAKE RD
ROYALSTON RD
W LAKE RD
B LAKE RD
Stone Pond
BALDWIN CT
NUMBER 4 RD
WHITCOMB RD
DUNTON RD
Horseshoe Pond
CREAMERY RD

DEVELOPMENT CONSTRAINTS
MAP 4 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private
- Mile Marker

- Corridor Study Boundary
- Abandoned Railroad
- Shallow to Water Table (Less than 1.5')
- Special Flood Hazard Area
- Steep Slope (> 25%)
- Shallow to Bedrock (Less than 40")
- Conservation Land
- River or Stream
- Lake or Pond
- Reservoir
- Swamp or Marsh

Southwest Region Planning Commission

Date: 12/22/2014

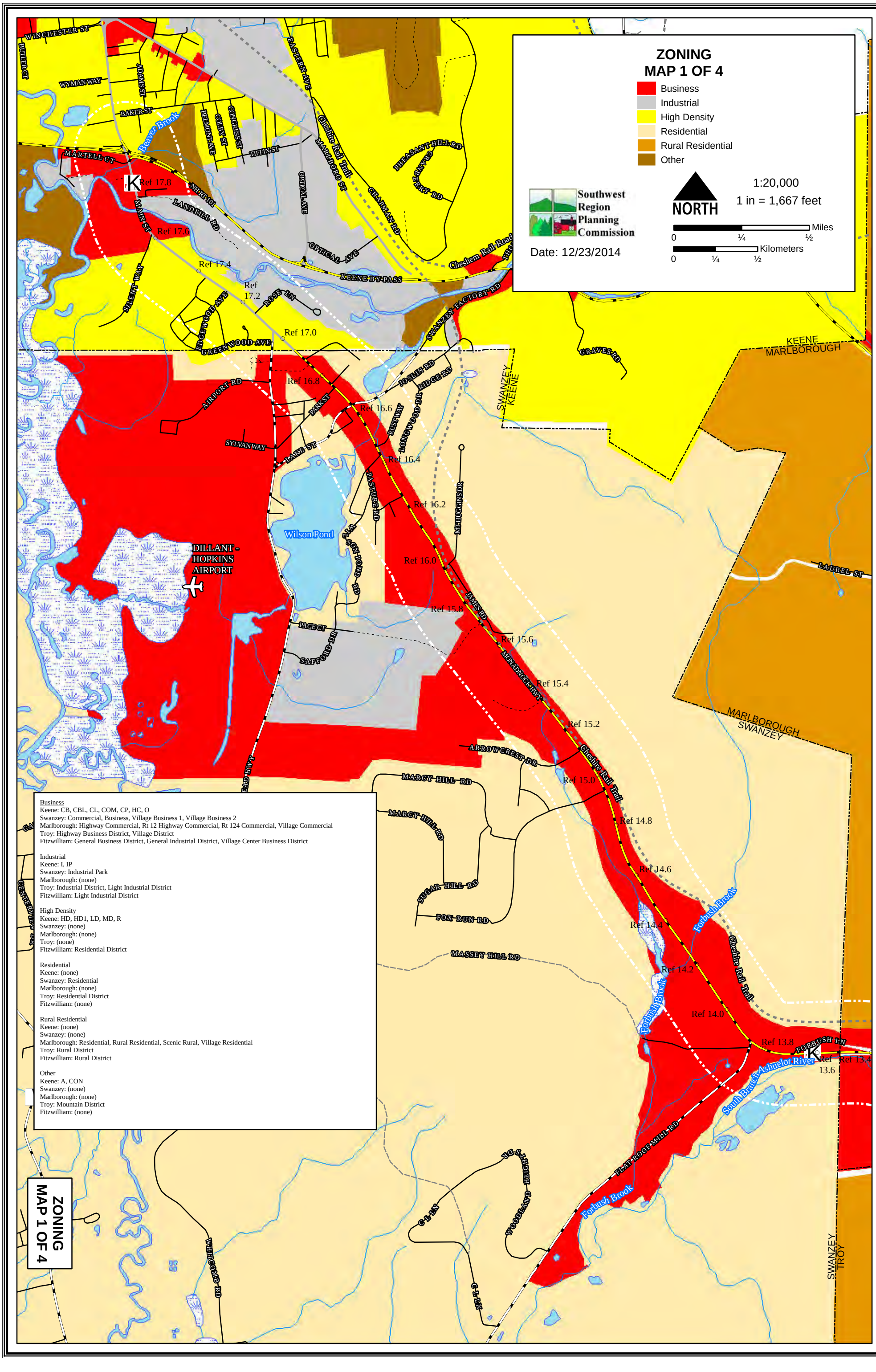
NORTH

1:20,000
1 in = 1,667 feet

Miles
0 ¼ ½
Kilometers
0 ¼ ½

Tracie's Community Farm
OLD RINDGE RD
DOYLE CT
NH ROUTE 119 E
POWERS HILL RD
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6
Ref 3.4
Ref 3.2
Ref 3.0
Ref 2.8
Ref 2.6
Ref 2.4
Ref 2.2
Ref 2.0
Ref 1.8
Ref 1.6
Ref 1.4
Ref 1.2
Ref 1.0
Ref 0.8
Ref 0.6
Ref 0.4
Ref 0.2
Ref 0.0
Scott Brook
Stone Pond
Cheshire Rail Trail
BALDWIN RD
NUMBER 4 RD
WHITCOMB RD
DUNTON RD
Rine
TEMPLETON TPKE
Scott Brook
Sip Pond
ANDERSON RD
SIP POND RD
OLD TURNPIKE RD
CROSS RD
CRANE RD
ABEL RD
FULLAM HILL RD
Tarbell Brook
FIRE LN 102
WARREN HILL RD
WOODBROOK DR
RINDGE FITZWILLIAM
DAMON RD
SANDY HOLLOW RD
Sip Pond Brook
Spud Brook
Robbins Brook
K

Zoning


ZONING
MAP 1 OF 4
Business
Industrial
High Density
Residential
Rural Residential
Other
Southwest Region Planning Commission
Date: 12/23/2014
NORTH
1:20,000
1 in = 1,667 feet
Miles
0 ¼ ½
Kilometers
0 ¼ ½
Business
Keene: CB, CBL, CL, COM, CP, HC, O
Swanzey: Commercial, Business, Village Business 1, Village Business 2
Marlborough: Highway Commercial, Rt 12 Highway Commercial, Rt 124 Commercial, Village Commercial
Troy: Highway Business District, Village District
Fitzwilliam: General Business District, General Industrial District, Village Center Business District
Industrial
Keene: I, IP
Swanzey: Industrial Park
Marlborough: (none)
Troy: Industrial District, Light Industrial District
Fitzwilliam: Light Industrial District
High Density
Keene: HD, HD1, LD, MD, R
Swanzey: (none)
Marlborough: (none)
Troy: (none)
Fitzwilliam: Residential District
Residential
Keene: (none)
Swanzey: Residential
Marlborough: (none)
Troy: Residential District
Fitzwilliam: (none)
Rural Residential
Keene: (none)
Swanzey: (none)
Marlborough: Residential, Rural Residential, Scenic Rural, Village Residential
Troy: Rural District
Fitzwilliam: Rural District
Other
Keene: A, CON
Swanzey: (none)
Marlborough: (none)
Troy: Mountain District
Fitzwilliam: (none)
ZONING
MAP 1 OF 4
WINCHESTER ST
BUTLER CT
WYMAN WAY
ADAMS ST
BAKER ST
Beaver Brook
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
EASTERN AVE
Cheshire Rail Trail
MARLBORO ST
CHAPMAN RD
PLEASANT HILL RD
GRANITE RY RD
MARTELL CT
NHRT 101
LANDFILL RD
MAIN ST
OPTICAL AVE
KEENE BY-PASS
Cheshem Rail Road
SILENT WAY
ROSE LN
EDGEWOOD AVE
GREENWOOD AVE
SWANZEY FACTORY RD
GRAVES RD
KEENE
MARLBOROUGH
SWANZEY
KEENE
AIRPORT RD
PARK ST
SYLVAN WAY
LAKE ST
RUSTWAY
LONGWOOD DR
JOSLIN RD
RIDGE RD
PASTURE RD
Wilson Pond
WILSON POND RD
M HUGGINS DR
DILLANT - HOPKINS AIRPORT
PAGE CT
SAFFORD DR
JAMES RD
MONADNOCK HWY
LAUREL ST
MARLBOROUGH
SWANZEY
ARROWCREST DR
Cheshire Rail Trail
MARCY HILL RD
MARCY HILL RD
SUGAR HILL RD
FOX RUN RD
MASSEY HILL RD
Forbush Brook
Cheshire Rail Trail
Forbush Brook
FORBUSH LN
South Branch Ashuelot River
FLAT ROOF MILL RD
Forbush Brook
G L LN
WOODLAND HEIGHTS
G L LN
WHITCOMB RD
SWANZEY
TROY
Ref 17.8
Ref 17.6
Ref 17.4
Ref 17.2
Ref 17.0
Ref 16.8
Ref 16.6
Ref 16.4
Ref 16.2
Ref 16.0
Ref 15.8
Ref 15.6
Ref 15.4
Ref 15.2
Ref 15.0
Ref 14.8
Ref 14.6
Ref 14.4
Ref 14.2
Ref 14.0
Ref 13.8
Ref 13.6
Ref 13.4

ZONING
MAP 2 OF 4

Business
Industrial
High Density
Residential
Rural Residential
Other

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles
0 ¼ ½ Kilometers

Business
Keene: CB, CBL, CL, COM, CP, HC, O
Swanzey: Commercial, Business, Village Business 1, Village Business 2
Marlborough: Highway Commercial, Rt 12 Highway Commercial, Rt 124 Commercial, Village Commercial
Troy: Highway Business District, Village District
Fitzwilliam: General Business District, General Industrial District, Village Center Business District

Industrial
Keene: I, IP
Swanzey: Industrial Park
Marlborough: (none)
Troy: Industrial District, Light Industrial District
Fitzwilliam: Light Industrial District

High Density
Keene: HD, HD1, LD, MD, R
Swanzey: (none)
Marlborough: (none)
Troy: (none)
Fitzwilliam: Residential District

Residential
Keene: (none)
Swanzey: Residential
Marlborough: (none)
Troy: Residential District
Fitzwilliam: (none)

Rural Residential
Keene: (none)
Swanzey: (none)
Marlborough: Residential, Rural Residential, Scenic Rural, Village Residential
Troy: Rural District
Fitzwilliam: Rural District

Other
Keene: A, CON
Swanzey: (none)
Marlborough: (none)
Troy: Mountain District
Fitzwilliam: (none)

ZONING
MAP 2 OF 4

ZONING
MAP 3 OF 4

- Business
- Industrial
- High Density
- Residential
- Rural Residential
- Other

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

TROY
FITZWILLIAM

JAFFREY
FITZWILLIAM

QUARRY RD
FITZWILLIAM RD
FERN HILL RD
GAP MOUNTAIN RD
SOUTH MAIN ST
UPPER GAP MOUNTAIN RD
GOBLIE
BOWKERVILLE RD
SOUTH ST
ROCKWOOD POND RD
NH ROUTE 12N
GAP MTN RD
SUNSET RD
UPPER TROY RD
ROBBINS RD
LOWER TROY RD
JAFFREY RD
GAP MOUNTAIN RD
PINE RD
HEMLOCK DR
JOHNSON RD
SCOTT POND RD
NH ROUTE 119 E
DOYLE CT
NH ROUTE 12S
TEMPLETON TPKE
COLLINS POND RD
WEBBER LN
WEBB HILL RD
E LAKE RD
W LAKE RD
ROYALSTON RD
BALDWIN CT
NUMBER 4 RD
WHITCOMB RD
DUNTON RD

Bowker Pond
Rockwood Pond
Scott Pond
Stone Pond
Horseshoe Pond
Cheshire Rail Trail
Scott Brook

Ref 8.8
Ref 8.6
Ref 8.4
Ref 8.2
Ref 8.0
Ref 7.8
Ref 7.6
Ref 7.4
Ref 7.2
Ref 7.0
Ref 6.8
Ref 6.6
Ref 6.4
Ref 6.2
Ref 6.0
Ref 5.8
Ref 5.6
Ref 5.4
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6

K

Business
Keene: CB, CBL, CL, COM, CP, HC, O
Swanzey: Commercial, Business, Village Business 1, Village Business 2
Marlborough: Highway Commercial, Rt 12 Highway Commercial, Rt 124 Commercial, Village Commercial
Troy: Highway Business District, Village District
Fitzwilliam: General Business District, General Industrial District, Village Center Business District

Industrial
Keene: I, IP
Swanzey: Industrial Park
Marlborough: (none)
Troy: Industrial District, Light Industrial District
Fitzwilliam: Light Industrial District

High Density
Keene: HD, HD1, LD, MD, R
Swanzey: (none)
Marlborough: (none)
Troy: (none)
Fitzwilliam: Residential District

Residential
Keene: (none)
Swanzey: Residential
Marlborough: (none)
Troy: Residential District
Fitzwilliam: (none)

Rural Residential
Keene: (none)
Swanzey: (none)
Marlborough: Residential, Rural Residential, Scenic Rural, Village Residential
Troy: Rural District
Fitzwilliam: Rural District

Other
Keene: A, CON
Swanzey: (none)
Marlborough: (none)
Troy: Mountain District
Fitzwilliam: (none)

ZONING
MAP 3 OF 4

ZONING
MAP 4 OF 4

Business
Industrial
High Density
Residential
Rural Residential
Other

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles
0 ¼ ½ Kilometers

Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6
Ref 3.4
Ref 3.2
Ref 3.0
Ref 2.8
Ref 2.6
Ref 2.4
Ref 2.2
Ref 2.0
Ref 1.8
Ref 1.6
Ref 1.4
Ref 1.2
Ref 1.0
Ref 0.8
Ref 0.6
Ref 0.4
Ref 0.2
Ref 0.0

OLD RINDGE RD
DOYLE CT
NH ROUTE 119 E
BOWERS HILL RD
Scott Brook
Stone Pond
Cheshire Rail Trail
BALDWIN LN
NUMBER 4 RD
WHITCOMB RD
DUNTON RD
TEMPLETON TPKE
CRANE RD
ABEL RD
FULLAM HILL RD
NH ROUTE 12 S
Tarbell Brook
WARREN HILL RD
FIRE LN 102
WOODBROOK DR
Sip Pond
RINDGE
FITZWILLIAM
ANDERSON RD
SIP POND RD
CROSS RD
OLD TURNPIKE RD
Sip Pond Brook
DAMON RD
Spud Brook
Robbins Brook

K

Business
Keene: CB, CBL, CL, COM, CP, HC, O
Swanzey: Commercial, Business, Village Business 1, Village Business 2
Marlborough: Highway Commercial, Rt 12 Highway Commercial, Rt 124 Commercial, Village Commercial
Troy: Highway Business District, Village District
Fitzwilliam: General Business District, General Industrial District, Village Center Business District

Industrial
Keene: I, IP
Swanzey: Industrial Park
Marlborough: (none)
Troy: Industrial District, Light Industrial District
Fitzwilliam: Light Industrial District

High Density
Keene: HD, HD1, LD, MD, R
Swanzey: (none)
Marlborough: (none)
Troy: (none)
Fitzwilliam: Residential District

Residential
Keene: (none)
Swanzey: Residential
Marlborough: (none)
Troy: Residential District
Fitzwilliam: (none)

Rural Residential
Keene: (none)
Swanzey: (none)
Marlborough: Residential, Rural Residential, Scenic Rural, Village Residential
Troy: Rural District
Fitzwilliam: Rural District

Other
Keene: A, CON
Swanzey: (none)
Marlborough: (none)
Troy: Mountain District
Fitzwilliam: (none)

ZONING
MAP 4 OF 4

Land Use

LAND USE
MAP 1 OF 4

- No Data
- Residential
- Commercial
- Industrial, Manufacturing
- Public, Utility, Forest, and Exempt

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000

1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

WINCHESTER ST
BUTLER CT
WYMAN WAY
ADAMS ST
BAKER ST
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
Beaver Brook
MARTELL CT
NHRT 101
LANDFILL RD
MAIN ST
OPTICAL AVE
EASTERN AVE
Cheshire Rail Trail
MARLBORO ST
CHAPMAN RD
PLEASANT HILL RD
CRANE RY RD
Ref 17.8
Ref 17.6
Ref 17.4
Ref 17.2
Ref 17.0
Ref 16.8
Ref 16.6
Ref 16.4
Ref 16.2
Ref 16.0
Ref 15.8
Ref 15.6
Ref 15.4
Ref 15.2
Ref 15.0
Ref 14.8
Ref 14.6
Ref 14.4
Ref 14.2
Ref 14.0
Ref 13.8
Ref 13.6
Ref 13.4
KEENE BY-PASS
Cheshire Rail Road
SILENT WAY
ROSE LN
EDGEWOOD AVE
GREENWOOD AVE
AIRPORT RD
PARK ST
SYLVAN WAY
LAKE ST
SWANZEY FACTORY RD
JOSLIN RD
RIDGE RD
RUSTWAY
LONGWOOD DR
GRAVES RD
KEENE
SWANZEY
KEENE
MARLBOROUGH
Wilson Pond
PASTURE RD
WILSON POND RD
MT HUGGINS DR
JAMES RD
LAUREL ST
DILLANT - HOPKINS AIRPORT
PAGE CT
SAFFORD DR
MONADNOCK HWY
ARROWCREST DR
MARGY HILL RD
OLD HOMESTEAD HWY
CAUSEWAY RD
CENTERVIEW DR
SUGAR HILL RD
FOX RUN RD
MASSEY HILL RD
OLIVER HILL RD
WHITCOMB RD
T.G.S. HIGGINS
WOODLAND
G L LN
FLAT ROOF MILL RD
Forbush Brook
FORBUSH LN
South Branch Ashuelot River
MARLBOROUGH
SWANZEY
SWANZEY
TROY

LAND USE
MAP 1 OF 4

LAND USE
MAP 2 OF 4

- No Data
- Residential
- Commercial
- Industrial, Manufacturing
- Public, Utility, Forest, and Exempt

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000

1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

Cheshire Rail Trail
Ref 13.8
Ref 13.6
DORBUSH LN
Ref 13.4
Ref 13.2
South Branch Ashuelot River
Ref 13.0
Ref 12.8
Ref 12.6
Ref 12.4
Ref 12.2
Ref 12.0
Ref 11.8
Ref 11.6
Ref 11.4
Ref 11.2
Ref 11.0
Ref 10.8
Ref 10.6
Ref 10.4
Ref 10.2
Ref 10.0
Ref 9.8
Ref 9.6
Ref 9.4
Ref 9.2
Ref 9.0
Ref 8.8
Ref 8.6
Ref 8.4
SWANZEY
MARLBOROUGH
WEBB DEPOT RD
SANDY WAY
THATCHER HILL RD
NH ROUTE 12
MAPLE LN
TROY
MARLBOROUGH
TROY RD
Brandy Brook
HOLMAN RD
Corey Pond
TROY
SWANZEY
WEST HILL RD
MACKEY RD
LAWRENCE RD
OLD KEENE RD
NORTH MAIN ST
OLD WHITCOMB RD
MARLBORO RD
PIGEON HILL RD
DORR ST
COLONIAL DR
MONADNOCK ST
MILL ST
SCHOOL ST
DERBY LN
MILLIND LN
HIGH ST
CENTER ST
GRANITE ST
BROOK ST
PROSPECT ST
MORSE ST
MEMORIAL DR
SOUTH ST
SOUTH MAIN ST
QUARRY RD
FITZWILLIAM RD
RICHMOND RD
Nester Brook
Quarry Brook
K

LAND USE
MAP 3 OF 4

- No Data
- Residential
- Commercial
- Industrial, Manufacturing
- Public, Utility, Forest, and Exempt

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000

1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

Ref 8.8
Ref 8.6
Ref 8.4
Ref 8.2
Ref 8.0
Ref 7.8
Ref 7.6
Ref 7.4
Ref 7.2
Ref 7.0
Ref 6.8
Ref 6.6
Ref 6.4
Ref 6.2
Ref 6.0
Ref 5.8
Ref 5.6
Ref 5.4
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6

QUARRY RD
FITZWILLIAM RD
FERN HILL RD
SOUTH MAIN ST
GAP MOUNTAIN RD
TROY
FITZWILLIAM
UPPER GAP MOUNTAIN RD
BOWKERVILLE RD
SOUTH ST
NH ROUTE 119
ROCKWOOD POND RD
Bowker Pond
Rockwood Pond
SUNSET RD
UPPER TROY RD
ROBBINS RD
LOWER TROY RD
JAFFREY
FITZWILLIAM
JAFFREY RD
SCOTT POND RD
JOHNSON RD
PINE RD
HEMLOCK DR
Scott Pond
Cheshire Rail Trail
OLD COACH RD
RHODODENDRON RD
MATHEWS RD
RICHMOND RD
ANGER RD
COLUMBIA RD
NH ROUTE 119 W
CREAMERY RD
WEBB HILL RD
BLAKE RD
ROYALSTON RD
Horseshoe Pond
COLLINS POND RD
TEMPLETON TPKE
WEBBER LN
NH ROUTE 119 E
DOYLE GT
Scott Brook
BALDWIN GT
NUMBER 4 RD
WHITCOMB RD
DUNTON RD
Stone Pond

LAND USE
MAP 3 OF 4

LAND USE
MAP 4 OF 4

- No Data
- Residential
- Commercial
- Industrial, Manufacturing
- Public, Utility, Forest, and Exempt

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000

1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6
Ref 3.4
Ref 3.2
Ref 3.0
Ref 2.8
Ref 2.6
Ref 2.4
Ref 2.2
Ref 2.0
Ref 1.8
Ref 1.6
Ref 1.4
Ref 1.2
Ref 1.0
Ref 0.8
Ref 0.6
Ref 0.4
Ref 0.2
Ref 0.0
K

OLD RINDGE RD
NH ROUTE 119 E
DOYLE CT
Scott Brook
BOWERS HILL RD
BAGGART CIR
Stone Pond
Cheshire Rail Trail
BALDWIN LN
NUMBER 4 RD
WILLCOMB RD
DUNTON RD
HEMPLETON TPKE
NH ROUTE 12 S
CRANE RD
ABEL RD
FULLAM HILL RD
Tarbell Brook
FIRE LN 102
WARREN HILL RD
WOODBROOK DR
Sip Pond
ANDERSON RD
SIP POND RD
RINDGE
FITZWILLIAM
SANDY HOLLOW RD
CROSS RD
OLD TURNPIKE RD
Sip Pond Brook
DAMON RD
Spud Brook
Robbins Brook

CULTURAL AND HISTORIC MAP 1 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private

- Metacomet Monadnock Trail
- Corridor Study Boundary
- Mile Marker
- Abandoned Railroad
- Cultural Resource Building Point
- Cultural Resource Structure Point
- Open Bridge
- Closed Bridge
- Historic or Bypassed Bridge

Southwest Region Planning Commission

Date: 12/23/2014

NORTH

1:20,000
1 in = 1,667 feet

0 ¼ ½ Miles

0 ¼ ½ Kilometers

WINCHESTER ST
BUTLER CT
Dinsmoor--Hale House
Fiske, Catherine, Seminary For Young Ladies
Elliot Mansion
WYMAN WAY
Wyman Tavern
Adams, Dr. Daniel, House
ADAMS ST
BAKER ST
Beaver Brook
132/060 Built: 1961
138/060 Built: 1964
MARTELL CT
137/059 Built: 1961
Ref 17.8
Lt. Col. Ganley Bridge 138/056 Built: 1994
Ref 17.6
MAIN ST
Ref 17.4
SILENT WAY
Ref 17.2
ROSE LN
EDGEWOOD AVE
GREENWOOD AVE
Ref 17.0
AIRPORT RD
Ref 16.8
PARK ST
SYLVAN WAY
LAKE ST
166/171 Built: 1970
Ref 16.4
Ref 16.6
143/066 Built: 1978
141/063 Built: 1978
BELMONT AVE
COLBY ST
CONGRESS ST
TIFFIN ST
OPTICAL AVE
EASTERN AVE
Cheshire Rail Trail
MARLBORO ST
GUILDMAN RD
PLEASANT HILL RD
CRANE RD
KEENE BY-PASS
NHRT 101
LANDFILL RD
Chesham Rail Road
THOMPSON RD
166/050 Built: 1933
Stone Arch Bridge
SWANZEY FACTORY RD
JOSLIN RD
RIDGE RD
LONGWOOD DR
RUSTWAY
SWANZEY
KEENE
Wilson Pond
PASTURE RD
WILSON POND RD
Beach/Ramp
Ref 16.2
Ref 16.0
MT HIGHLAND DR
JAMES RD
Ref 15.8
Ref 15.6
PAGE CT
SAFFORD DR
MONADNOCK HWY
Ref 15.4
Ref 15.2
ARROWCREST DR
Cheshire Rail Trail
Ref 15.0
MARCY HILL RD
Ref 14.8
Ref 14.6
DILLANT-HOPKINS AIRPORT
LAUREL ST
MARLBOROUGH
SWANZEY
CAUSEWAY RD
OLD HOMESTEAD HWY
CENTERVIEW DR
SUGAR HILL RD
FOX RUN RD
Forbush Brook
Ref 14.4
Ref 14.2
Ref 14.0
MASSEY HILL RD
146/129 Built: 2002
OLIVER HILL RD
Golden Rod Grange No. 114
WHITCOMB RD
Ref 13.8
FORBUSH LN
192/123 Built: 1951
Ref 13.6
Ref 13.4
FLAT ROOF MILL RD
G L LN
WOODLAND HEIGHTS DR
South Branch Ashuelot River
SWANZEY
TROY

CULTURAL AND HISTORIC
MAP 2 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private
- Metacomet Monadnock Trail
- Corridor Study Boundary
- Mile Marker
- Abandoned Railroad
- Cultural Resource District Polygon
- Open Bridge
- Closed Bridge
- Historic or Bypassed Bridge

Southwest Region Planning Commission

Date: 3/23/2015

NORTH

1:20,000
1 in = 1,667 feet

Miles
0 ¼ ½

Kilometers
0 ¼ ½

MONADNOCK HWY
PORCUPINE LN
Ref 13.8
Ref 13.6
192/123 Built: 1951
Ref 13.4
Cheshire Rail Trail
Ref 13.2
067/084 Built: 1936
DEPOT RD
SANDY WAY
THATCHER HILL RD
Ref 13.0
066/080 Built: 1962
SWANZEY
MARLBOROUGH
Ref 12.8
072/075 Built: 1962
Ref 12.6
NH ROUTE 12
Ref 12.4
Fishing Access
Ref 12.2
077/065 Built: 1962
Ref 12.0
MARLBOROUGH
TROY
Ref 11.8
080/134 Built: 1983
Ref 11.6
082/128 Built: 1983
Ref 11.4
Ref 11.2
NORTH MAIN ST
Cheshire Rail Trail
Ref 11.0
087/116 Built: 1941
089/114 Built: 1941
Ref 10.8
LAWRENCE RD
OLD HOMER RD
Ref 10.6
097/108 Built: 1933
Ref 10.4
Ref 10.2
OLD WHITCOMB RD
MARLBORO RD
Ref 10.0
MACKEY RD
Ref 9.8
Ref 9.6
SCHOOL ST
DERBY LN
MIDLAND LN
HIGH ST
096/091 Built: 1957
MILL ST
Ref 9.4
Troy Village Historic District
094/086 Built: 1953
098/086 Built: 1928
093/084 Built: 1940
BROOK ST
GRANITE ST
Ref 9.2
Ref 9.0
Ref 8.8
PROSPECT ST
MORSE ST
MEMORIAL DR
QUARRY RD
FITZWILLIAM RD
Ref 8.6
Ref 8.4
SOUTH ST
SOUTH MAIN ST
Beach
101/088 Built: 1936
104/088 Built: 1930
MONADNOCK ST
DUTTON ST
COLONIAL DR
RIDGELOW HILL RD
TROY RD
Brandy Brook
Quarry Brook
Nester Brook
Nester Brook
Nester Brook
RICHMOND RD
WEST HILL RD
TOLMAN RD
Corey Pond
TROY
SWANZEY
MAPLE LN
South Branch Ashuelot River

CULTURAL AND HISTORIC
MAP 2 OF 4

CULTURAL AND HISTORIC
MAP 3 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private

- Metacomet Monadnock Trail
- Corridor Study Boundary
- Mile Marker
- Abandoned Railroad
- Cultural Resource Building Point
- Cultural Resource District Polygon
- Open Bridge
- Closed Bridge
- Historic or Bypassed Bridge

Southwest Region Planning Commission

Date: 3/23/2015

NORTH

1:20,000
1 in = 1,667 feet

Miles
0 ¼ ½
Kilometers
0 ¼ ½

Ref 8.8
Ref 8.6
Ref 8.4
Ref 8.2
Ref 8.0
Ref 7.8
Ref 7.6
Ref 7.4
Ref 7.2
Ref 7.0
Ref 6.8
Ref 6.6
Ref 6.4
Ref 6.2
Ref 6.0
Ref 5.8
Ref 5.6
Ref 5.4
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
Ref 4.0
Ref 3.8
Ref 3.6

QUARRY RD
FITZWILLIAM RD
SOUTH MAIN ST
FERN HILL RD
GAP MOUNTAIN RD
TROY
FITZWILLIAM
UPPER GAP MOUNTAIN RD
GOBLEIGH HILL RD
BOWKER HILL RD
SOUTH ST
ROCKWOOD POND RD
NH ROUTE 12N
GAP MAIN RD
JAFFREY
FITZWILLIAM
FAIRVIEW HILL
SCOTT POND RD
Bowker Pond
Rockwood Pond
SUNSET RD
JOHNSON RD
PINE RD
UPPER TROY RD
ROBBINS RD
LOWER TROY RD
JAFFREY RD
Scott Pond
Fitzwilliam Common Historic District
Third Fitzwilliam Meetinghouse
NH ROUTE 119 E
156/115 Built: 1941
DOUBLE GT
RHODODENDRON RD
RICHMOND RD
OLD COACH RD
Scott Brook
Cheshire Rail Trail
MATHEWS RD
ANGIER RD
COLUMBIA RD
TEMPLETON DIST
GOLLINS POND RD
WEBBER LN
CREAMERY RD
NH ROUTE 119 W
E LAKE RD
WEBB HILL RD
W LAKE RD
ROYALSTON RD
Horseshoe Pond
Stone Pond
BALDWIN CT
147/080 Built: 1984
NUMBER 4 RD
WHITCOMB RD
DUNTON RD
155/094 Built: 1992
151/085 Built: 1994
NH ROUTE 12S

CULTURAL AND HISTORIC
MAP 3 OF 4

CULTURAL AND HISTORIC
MAP 4 OF 4

Highways
- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private

- Metacomet Monadnock Trail
- Corridor Study Boundary
- Mile Marker
- Abandoned Railroad
- Open Bridge
- Closed Bridge
- Historic or Bypassed Bridge

Southwest Region Planning Commission

NORTH

1:20,000
1 in = 1,667 feet

Miles
0 ¼ ½

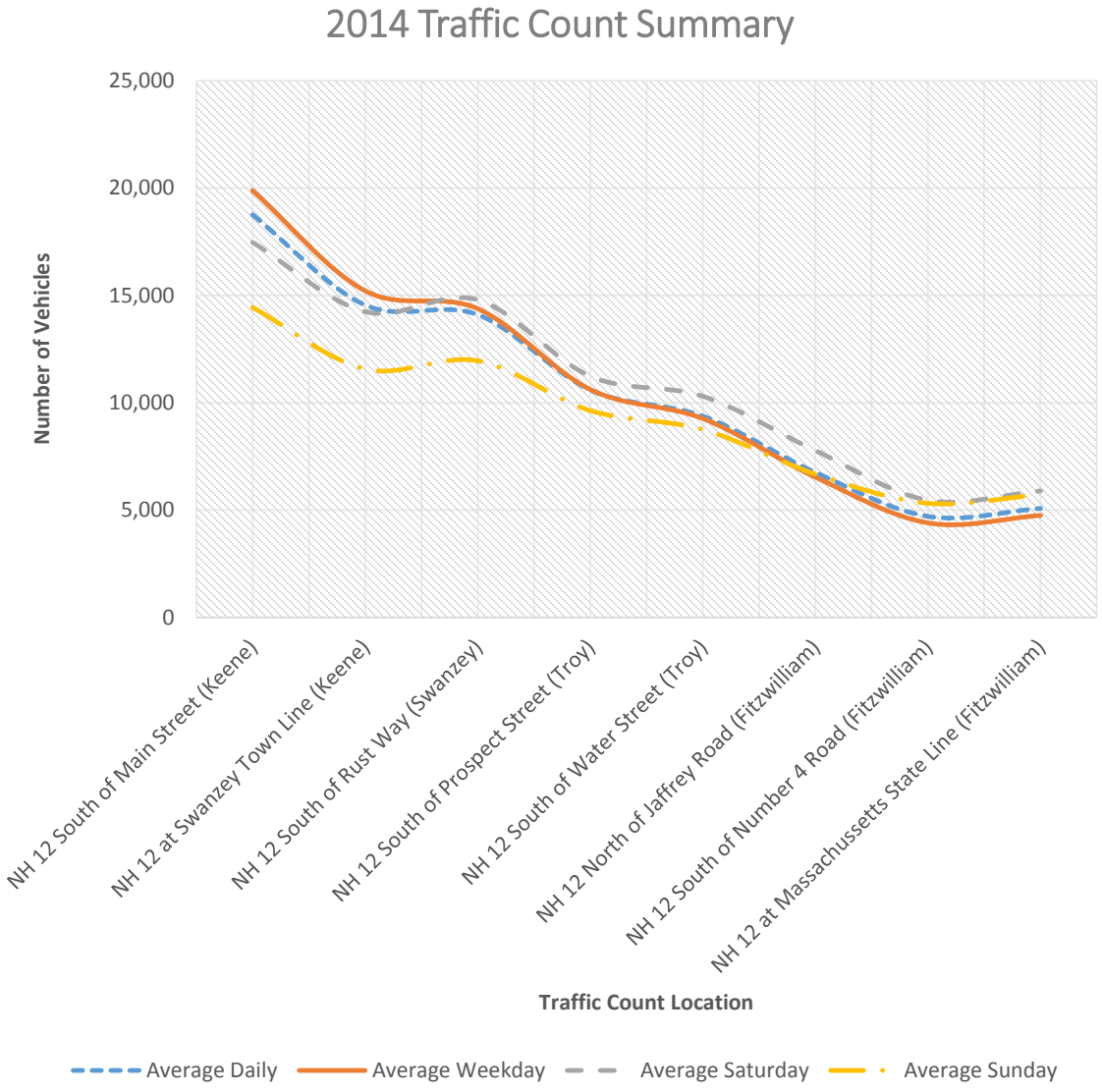
Kilometers
0 ¼ ½

Date: 12/23/2014

OLD RINDGE RD
156/115 Built: 1941
DOTTLE CR
NH ROUTE 119 E
BOWERS HILL RD
Scott Brook
Ref 5.2
Ref 5.0
Ref 4.8
Ref 4.6
Ref 4.4
Ref 4.2
155/094 Built: 1992
Ref 4.0
Ref 3.8
Ref 3.6
Ref 3.4
Ref 3.2
Ref 3.0
Ref 2.8
Ref 2.6
Ref 2.4
Ref 2.2
Ref 2.0
Ref 1.8
Ref 1.6
Ref 1.4
Ref 1.2
Ref 1.0
Ref 0.8
Ref 0.6
Ref 0.4
Ref 0.2
Ref 0.0
NUMBER 4 RD
151/085 Built: 1994
Stone Pond
Cheshire Rail Trail
BALDWIN
147/080 Built: 1984
WELLCOMB RD
DUNTON RD
HEMPHILL PKWY
147/054 Built: 1987
CRANE RD
ABEL RD
FULLAM HILL RD
Tarbell Brook
FIRE LN 102
WARREN HILL RD
WOODBROOK DR
RINDGE FITZWILLIAM
Sip Pond
ANDERSON RD
SIP POND RD
CROSS RD
OLD TURNPIKE RD
192/037 Built: 1925
191/037 Built: 1958
K
DeMON RD
Sip Pond Brook
SANDY HOLLOW RD
150/033 Built: 2005
Spud Brook
Robbins Brook

Traffic Counts

2014 Traffic Count Summary



By Time of Day and Day of Week

Tips on interpreting this section:

- All numbers below represent a count of *vehicles* during the study period

- Counts are divided into days (1-7 with Monday being 1), and hours (there are 24 1-hour counts for each day)

- The morning and evening peak hour vehicle count for each day is in **bold**

- An asterisk (*) indicates that data was not collected for the complete 1-hour period, these periods are excluded from the averages

- The figures below are not directly comparable to Average Annual Daily Traffic figures, because they have not been seasonally adjusted.

9:39 Friday, September 05, 2014 => 10:21 Friday, September 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	55.0	65.0	84.0	56.0	104.0	116.0	110.0	72.8	84.3
0100-0200	41.0	60.0	58.0	45.0	66.0	90.0	93.0	54.0	64.7
0200-0300	39.0	47.0	43.0	51.0	70.0	68.0	61.0	50.0	54.1
0300-0400	39.0	58.0	38.0	55.0	55.0	42.0	35.0	49.0	46.0
0400-0500	145.0	146.0	150.0	152.0	127.0	80.0	48.0	144.0	121.1
0500-0600	342.0	327.0	359.0	347.0	358.0	145.0	81.0	346.6	279.9
0600-0700	804.0	808.0	787.0	839.0	815.0	363.0	193.0	810.6	658.4
0700-0800	**1404.0**	**1411.0**	**1379.0**	**1405.0**	**1357.0**	700.0	345.0	**1391.2**	1143.0
0800-0900	1354.0	1320.0	1278.0	1233.0	1303.0	933.0	557.0	1297.6	1139.7
0900-1000	1035.0	1033.0	1070.0	1034.0	1068.0	1245.0	858.0	1048.0	1049.0
1000-1100	1107.0	973.0	1103.0	1032.0	835.5	1382.0	1134.0	981.0	1050.3
1100-1200	1116.0	1198.0	1192.0	1193.0	1271.0	**1541.0**	**1253.0**	1194.0	**1252.0**
1200-1300	1267.0	1281.0	1334.0	1359.0	1402.0	**1520.0**	**1405.0**	1328.6	1366.9
1300-1400	1244.0	1243.0	1325.0	1249.0	1415.0	1427.0	1220.0	1295.2	1303.3
1400-1500	1310.0	1326.0	1341.0	1382.0	1489.0	1326.0	1102.0	1369.6	1325.1
1500-1600	1429.0	1540.0	1602.0	1554.0	1697.0	1227.0	1113.0	1564.4	1451.7
1600-1700	**1650.0**	1680.0	**1853.0**	**1680.0**	1777.0	1090.0	1179.0	**1728.0**	**1558.4**
1700-1800	1591.0	**1693.0**	1792.0	1649.0	**1900.0**	1080.0	954.0	1725.0	1522.7
1800-1900	1046.0	1062.0	1271.0	1125.0	1381.0	863.0	867.0	1177.0	1087.9
1900-2000	700.0	799.0	905.0	795.0	1056.0	712.0	713.0	851.0	811.4
2000-2100	541.0	572.0	614.0	649.0	774.0	582.0	510.0	630.0	606.0
2100-2200	322.0	370.0	387.0	403.0	539.0	440.0	314.0	404.2	396.4
2200-2300	159.0	187.0	202.0	239.0	338.0	290.0	194.0	225.0	229.9
2300-2400	125.0	147.0	156.0	135.0	173.0	198.0	103.0	147.2	148.1
Totals									
0700-1900	15553.0	15760.0	16540.0	15895.0	16895.5	14334.0	11987.0	16099.6	15250.0
0600-2200	17920.0	18309.0	19233.0	18581.0	20079.5	16431.0	13717.0	18795.4	17722.3
0600-0000	18204.0	18643.0	19591.0	18955.0	20590.5	16919.0	14014.0	19167.6	18100.3
0000-0000	18865.0	19346.0	20323.0	19661.0	21370.5	17460.0	14442.0	19884.0	18750.4
AM Peak	0700	0700	0700	0700	0700	1100	1100		
	1404.0	1411.0	1379.0	1405.0	1357.0	1541.0	1253.0		
PM Peak	1600	1700	1600	1600	1700	1200	1200		
	1650.0	1693.0	1853.0	1680.0	1900.0	1520.0	1405.0		

NH 12 at Keene/Swanzey Town Line

9:40 Friday, September 05, 2014 => 10:20 Friday, September 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	50.0	52.0	64.0	40.0	71.0	80.0	87.0	55.4	63.4
0100-0200	35.0	49.0	41.0	39.0	51.0	67.0	88.0	43.0	52.9
0200-0300	29.0	42.0	36.0	42.0	55.0	55.0	53.0	40.8	44.6
0300-0400	30.0	54.0	39.0	49.0	50.0	37.0	26.0	44.4	40.7
0400-0500	117.0	120.0	126.0	126.0	104.0	72.0	41.0	118.6	100.9
0500-0600	276.0	266.0	276.0	271.0	295.0	135.0	70.0	276.8	227.0
0600-0700	658.0	639.0	648.0	651.0	629.0	311.0	170.0	645.0	529.4
0700-0800	**1071.0**	**1075.0**	**1054.0**	**1104.0**	**1068.0**	561.0	265.0	**1074.4**	885.4
0800-0900	1027.0	996.0	967.0	945.0	1010.0	764.0	435.0	989.0	877.7
0900-1000	778.0	798.0	765.0	788.0	548.5	997.0	658.0	704.3	735.1
1000-1100	859.0	758.0	848.0	793.0	603.0	1098.0	893.0	744.0	806.9
1100-1200	876.0	930.0	850.0	922.0	1046.0	**1219.0**	**977.0**	924.8	**974.3**
1200-1300	990.0	983.0	985.0	1014.0	1140.0	**1232.0**	**1112.0**	1022.4	1065.1
1300-1400	951.0	959.0	1003.0	981.0	1104.0	1215.0	977.0	999.6	1027.1
1400-1500	1009.0	1022.0	1020.0	1057.0	1197.0	1085.0	877.0	1061.0	1038.1
1500-1600	1115.0	1159.0	1204.0	1246.0	1308.0	1042.0	911.0	1206.4	1140.7
1600-1700	**1287.0**	**1291.0**	**1394.0**	**1314.0**	1402.0	919.0	939.0	**1337.6**	**1220.9**
1700-1800	1205.0	1272.0	1305.0	1295.0	**1511.0**	867.0	796.0	1317.6	1178.7
1800-1900	784.0	777.0	904.0	864.0	1082.0	715.0	707.0	882.2	833.3
1900-2000	540.0	589.0	676.0	630.0	842.0	550.0	585.0	655.4	630.3
2000-2100	417.0	425.0	445.0	494.0	591.0	462.0	414.0	474.4	464.0
2100-2200	252.0	297.0	289.0	310.0	408.0	354.0	255.0	311.2	309.3
2200-2300	125.0	149.0	158.0	186.0	265.0	235.0	148.0	176.6	180.9
2300-2400	97.0	119.0	128.0	103.0	135.0	161.0	88.0	116.4	118.7
Totals									
0700-1900	11952.0	12020.0	12299.0	12323.0	13019.5	11714.0	9547.0	12263.3	11783.4
0600-2200	13819.0	13970.0	14357.0	14408.0	15489.5	13391.0	10971.0	14349.3	13716.4
0600-0000	14041.0	14238.0	14643.0	14697.0	15889.5	13787.0	11207.0	14642.3	14016.0
0000-0000	14578.0	14821.0	15225.0	15264.0	16515.5	14233.0	11572.0	15221.3	14545.4
AM Peak	0700	0700	0700	0700	0700	1100	1100		
	1071.0	1075.0	1054.0	1104.0	1068.0	1219.0	977.0		
PM Peak	1600	1600	1600	1600	1700	1200	1200		
	1287.0	1291.0	1394.0	1314.0	1511.0	1232.0	1112.0		

NH 12 South of Rust Way, Swanzey

17:00 Monday, May 05, 2014 => 11:19 Monday, May 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	34.0	44.0	56.0	62.0	62.0	91.0	105.0	51.6	64.9
0100-0200	25.0	33.0	44.0	50.0	51.0	56.0	61.0	40.6	45.7
0200-0300	34.0	40.0	44.0	47.0	41.0	46.0	44.0	41.2	42.3
0300-0400	34.0	38.0	32.0	45.0	42.0	32.0	28.0	38.2	35.9
0400-0500	103.0	105.0	92.0	104.0	104.0	56.0	39.0	101.6	86.1
0500-0600	249.0	229.0	223.0	235.0	210.0	122.0	85.0	229.2	193.3
0600-0700	603.0	620.0	572.0	595.0	593.0	264.0	179.0	596.6	489.4
0700-0800	**1068.0**	**1093.0**	**1064.0**	**1012.0**	**1034.0**	517.0	291.0	**1054.2**	**868.4**
0800-0900	873.0	919.0	864.0	851.0	886.0	690.0	444.0	878.6	789.6
0900-1000	724.0	751.0	715.0	785.0	747.0	858.0	721.0	744.4	757.3
1000-1100	818.0	730.0	785.0	793.0	839.0	1185.0	887.0	793.0	862.4
1100-1200	168.0	830.0	866.0	893.0	1013.0	**1244.0**	**994.0**	754.0	858.3
1200-1300	*	918.0	902.0	977.0	1111.0	**1275.0**	1023.0	977.0	1034.3
1300-1400	*	819.0	918.0	901.0	1006.0	1136.0	**1057.0**	911.0	972.8
1400-1500	*	893.0	969.0	1056.0	1185.0	1131.0	1053.0	1025.8	1047.8
1500-1600	*	1036.0	1146.0	1221.0	1328.0	1123.0	944.0	1182.8	1133.0
1600-1700	*	1197.0	**1291.0**	**1339.0**	**1362.0**	1218.0	996.0	**1297.3**	**1233.8**
1700-1800	1150.0	**1267.0**	1223.0	1227.0	1332.0	931.0	862.0	1239.8	1141.7
1800-1900	726.0	753.0	811.0	840.0	893.0	853.0	724.0	804.6	800.0
1900-2000	472.0	552.0	612.0	607.0	725.0	685.0	544.0	593.6	599.6
2000-2100	372.0	378.0	467.0	453.0	525.0	520.0	391.0	439.0	443.7
2100-2200	233.0	287.0	313.0	249.0	360.0	320.0	251.0	288.4	287.6
2200-2300	124.0	161.0	171.0	197.0	237.0	252.0	156.0	178.0	185.4
2300-2400	101.0	109.0	103.0	127.0	155.0	181.0	80.0	119.0	122.3
Totals									
0700-1900	*	11206.0	11554.0	11895.0	12736.0	12161.0	9996.0	11662.4	11499.5
0600-2200	*	13043.0	13518.0	13799.0	14939.0	13950.0	11361.0	13579.9	13319.8
0600-0000	*	13313.0	13792.0	14123.0	15331.0	14383.0	11597.0	13876.9	13627.5
0000-0000	*	13802.0	14283.0	14666.0	15841.0	14786.0	11959.0	14379.4	14095.7
AM Peak	0700	0700	0700	0700	0700	1100	1100		
	1068.0	1093.0	1064.0	1012.0	1034.0	1244.0	994.0		
PM Peak	*	1700	1600	1600	1600	1200	1300		
	*	1267.0	1291.0	1339.0	1362.0	1275.0	1057.0		

*** - No data.**

16:00 Monday, May 05, 2014 => 10:51 Monday, May 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	35.0	40.0	42.0	47.0	57.0	71.0	82.0	44.2	53.4
0100-0200	14.0	27.0	43.0	40.0	29.0	47.0	43.0	30.6	34.7
0200-0300	23.0	35.0	27.0	33.0	34.0	28.0	25.0	30.4	29.3
0300-0400	21.0	28.0	24.0	38.0	32.0	38.0	13.0	28.6	27.7
0400-0500	78.0	86.0	72.0	77.0	73.0	35.0	25.0	77.2	63.7
0500-0600	191.0	199.0	197.0	193.0	191.0	86.0	65.0	194.2	160.3
0600-0700	565.0	519.0	511.0	512.0	497.0	201.0	144.0	520.8	421.3
0700-0800	822.0	**805.0**	**796.0**	**763.0**	**743.0**	359.0	216.0	**785.8**	643.4
0800-0900	656.0	652.0	633.0	617.0	621.0	536.0	338.0	635.8	579.0
0900-1000	478.0	501.0	516.0	508.0	547.0	640.0	545.0	510.0	533.6
1000-1100	420.0	453.0	523.0	547.0	626.0	**926.0**	686.0	513.8	597.3
1100-1200	*	534.0	572.0	592.0	679.0	922.0	**786.0**	594.3	**680.8**
1200-1300	*	525.0	561.0	592.0	717.0	908.0	825.0	598.8	688.0
1300-1400	*	535.0	603.0	607.0	733.0	722.0	**852.0**	619.5	675.3
1400-1500	*	562.0	699.0	731.0	841.0	817.0	807.0	708.3	742.8
1500-1600	*	771.0	857.0	820.0	975.0	848.0	770.0	855.8	840.2
1600-1700	883.0	**884.0**	899.0	965.0	987.0	**910.0**	771.0	923.6	**899.9**
1700-1800	812.0	876.0	**934.0**	**974.0**	**1091.0**	726.0	736.0	**937.4**	878.4
1800-1900	538.0	624.0	626.0	737.0	750.0	710.0	629.0	655.0	659.1
1900-2000	431.0	451.0	474.0	525.0	545.0	560.0	477.0	485.2	494.7
2000-2100	311.0	333.0	357.0	388.0	402.0	423.0	380.0	358.2	370.6
2100-2200	187.0	250.0	236.0	230.0	296.0	282.0	224.0	239.8	243.6
2200-2300	123.0	141.0	141.0	171.0	217.0	270.0	143.0	158.6	172.3
2300-2400	84.0	93.0	96.0	92.0	119.0	164.0	58.0	96.8	100.9
Totals									
0700-1900	*	7722.0	8219.0	8453.0	9310.0	9024.0	7961.0	8337.9	8417.9
0600-2200	*	9275.0	9797.0	10108.0	11050.0	10490.0	9186.0	9941.9	9948.0
0600-0000	*	9509.0	10034.0	10371.0	11386.0	10924.0	9387.0	10197.3	10221.2
0000-0000	*	9924.0	10439.0	10799.0	11802.0	11229.0	9640.0	10602.5	10590.3
AM Peak	*	0700	0700	0700	0700	1000	1100		
	*	805.0	796.0	763.0	743.0	926.0	786.0		
PM Peak	*	1600	1700	1700	1700	1600	1300		
	*	884.0	934.0	974.0	1091.0	910.0	852.0		

*** - No data.**

15:00 Monday, May 05, 2014 => 10:33 Monday, May 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	35.0	35.0	39.0	43.0	46.0	66.0	82.0	39.6	49.4
0100-0200	17.0	23.0	37.0	45.0	25.0	37.0	36.0	29.4	31.4
0200-0300	20.0	35.0	20.0	31.0	36.0	23.0	28.0	28.4	27.6
0300-0400	16.0	22.0	22.0	33.0	25.0	26.0	15.0	23.6	22.7
0400-0500	76.0	82.0	63.0	68.0	70.0	34.0	22.0	71.8	59.3
0500-0600	179.0	185.0	179.0	176.0	174.0	72.0	58.0	178.6	146.1
0600-0700	476.0	454.0	436.0	433.0	426.0	184.0	128.0	445.0	362.4
0700-0800	670.0	**655.0**	**672.0**	**606.0**	**603.0**	302.0	181.0	**641.2**	527.0
0800-0900	547.0	585.0	556.0	533.0	547.0	464.0	302.0	553.6	504.9
0900-1000	445.0	454.0	466.0	487.0	490.0	600.0	480.0	468.4	488.9
1000-1100	251.0	415.0	466.0	491.0	550.0	837.0	629.0	434.6	519.9
1100-1200	*	486.0	521.0	531.0	579.0	**865.0**	**714.0**	529.3	**616.0**
1200-1300	*	478.0	482.0	518.0	653.0	**846.0**	**771.0**	532.8	624.7
1300-1400	*	468.0	512.0	566.0	657.0	701.0	757.0	550.8	610.2
1400-1500	*	503.0	579.0	623.0	745.0	769.0	748.0	612.5	661.2
1500-1600	626.0	642.0	722.0	711.0	868.0	808.0	683.0	713.8	722.9
1600-1700	761.0	**797.0**	797.0	829.0	863.0	840.0	743.0	809.4	**804.3**
1700-1800	715.0	779.0	**797.0**	**858.0**	**970.0**	697.0	672.0	**823.8**	784.0
1800-1900	484.0	533.0	554.0	650.0	673.0	632.0	554.0	578.8	582.9
1900-2000	367.0	410.0	404.0	479.0	480.0	505.0	422.0	428.0	438.1
2000-2100	272.0	269.0	300.0	319.0	349.0	394.0	354.0	301.8	322.4
2100-2200	158.0	233.0	192.0	212.0	257.0	252.0	198.0	210.4	214.6
2200-2300	100.0	128.0	124.0	147.0	198.0	211.0	124.0	139.4	147.4
2300-2400	73.0	75.0	85.0	72.0	97.0	133.0	58.0	80.4	84.7
Totals									
0700-1900	*	6795.0	7124.0	7403.0	8198.0	8361.0	7234.0	7248.9	7446.6
0600-2200	*	8161.0	8456.0	8846.0	9710.0	9696.0	8336.0	8634.0	8784.1
0600-0000	*	8364.0	8665.0	9065.0	10005.0	10040.0	8518.0	8853.8	9016.3
0000-0000	*	8746.0	9025.0	9461.0	10381.0	10298.0	8759.0	9225.2	9352.9
AM Peak	*	0700	0700	0700	0700	1100	1100		
	*	655.0	672.0	606.0	603.0	865.0	714.0		
PM Peak	*	1600	1700	1700	1700	1200	1200		
	*	797.0	797.0	858.0	970.0	846.0	771.0		

*** - No data.**

14:00 Monday, May 05, 2014 => 10:16 Monday, May 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	33.0	19.0	27.0	27.0	34.0	43.0	53.0	28.0	33.7
0100-0200	13.0	16.0	24.0	27.0	21.0	23.0	24.0	20.2	21.1
0200-0300	17.0	24.0	17.0	20.0	21.0	16.0	17.0	19.8	18.9
0300-0400	13.0	21.0	18.0	20.0	26.0	22.0	9.0	19.6	18.4
0400-0500	59.0	51.0	47.0	43.0	38.0	32.0	17.0	47.6	41.0
0500-0600	126.0	132.0	134.0	143.0	137.0	50.0	43.0	134.4	109.3
0600-0700	350.0	315.0	283.0	295.0	308.0	145.0	83.0	310.2	254.1
0700-0800	495.0	**450.0**	**447.0**	**416.0**	422.0	246.0	140.0	**446.0**	373.7
0800-0900	378.0	413.0	390.0	365.0	405.0	370.0	237.0	390.2	365.4
0900-1000	346.0	357.0	343.0	355.0	397.0	454.0	382.0	359.6	376.3
1000-1100	72.0	308.0	360.0	398.0	420.0	**693.0**	491.0	311.6	391.7
1100-1200	*	361.0	374.0	379.0	**434.0**	659.0	**542.0**	387.0	**458.2**
1200-1300	*	349.0	352.0	418.0	478.0	624.0	590.0	399.3	468.5
1300-1400	*	356.0	368.0	446.0	489.0	504.0	**603.0**	414.8	461.0
1400-1500	360.0	368.0	356.0	473.0	566.0	579.0	573.0	424.6	467.9
1500-1600	435.0	449.0	484.0	520.0	620.0	588.0	547.0	501.6	520.4
1600-1700	488.0	531.0	549.0	**602.0**	647.0	**649.0**	569.0	563.4	**576.4**
1700-1800	460.0	**542.0**	**550.0**	584.0	**738.0**	513.0	524.0	**574.8**	558.7
1800-1900	316.0	354.0	355.0	459.0	527.0	490.0	415.0	402.2	416.6
1900-2000	233.0	230.0	239.0	318.0	345.0	367.0	308.0	273.0	291.4
2000-2100	160.0	157.0	202.0	200.0	258.0	286.0	255.0	195.4	216.9
2100-2200	103.0	172.0	145.0	158.0	181.0	168.0	141.0	151.8	152.6
2200-2300	70.0	83.0	81.0	107.0	151.0	154.0	88.0	98.4	104.9
2300-2400	47.0	47.0	64.0	46.0	70.0	92.0	35.0	54.8	57.3
Totals									
0700-1900	*	4838.0	4928.0	5415.0	6143.0	6369.0	5613.0	5175.0	5434.8
0600-2200	*	5712.0	5797.0	6386.0	7235.0	7335.0	6400.0	6105.4	6349.8
0600-0000	*	5842.0	5942.0	6539.0	7456.0	7581.0	6523.0	6258.6	6512.0
0000-0000	*	6105.0	6209.0	6819.0	7733.0	7767.0	6686.0	6528.2	6754.4
AM Peak	*	0700	0700	0700	1100	1000	1100		
	*	450.0	447.0	416.0	434.0	693.0	542.0		
PM Peak	*	1700	1700	1600	1700	1600	1300		
	*	542.0	550.0	602.0	738.0	649.0	603.0		

*** - No data.**

NH 12 South of Number 4 Road, Fitzwilliam

13:00 Monday, May 05, 2014 => 9:51 Monday, May 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	27.0	19.0	21.0	16.0	20.0	32.0	42.0	20.6	25.3
0100-0200	15.0	13.0	17.0	18.0	16.0	25.0	21.0	15.8	17.9
0200-0300	13.0	17.0	17.0	15.0	16.0	7.0	11.0	15.6	13.7
0300-0400	14.0	19.0	14.0	14.0	17.0	15.0	8.0	15.6	14.4
0400-0500	48.0	51.0	44.0	46.0	25.0	21.0	14.0	42.8	35.6
0500-0600	110.0	105.0	102.0	112.0	112.0	37.0	29.0	108.2	86.7
0600-0700	227.0	207.0	199.0	213.0	202.0	104.0	58.0	209.6	172.9
0700-0800	306.0	**275.0**	**268.0**	266.0	253.0	171.0	113.0	**273.6**	236.0
0800-0900	243.0	256.0	239.0	247.0	248.0	237.0	182.0	246.6	236.0
0900-1000	189.0	203.0	246.0	241.0	261.0	366.0	299.0	228.0	257.9
1000-1100	*	185.0	249.0	**272.0**	297.0	**484.0**	367.0	250.8	309.0
1100-1200	*	246.0	252.0	270.0	**299.0**	466.0	**469.0**	266.8	**333.7**
1200-1300	*	221.0	256.0	292.0	317.0	418.0	445.0	271.5	324.8
1300-1400	229.0	231.0	242.0	300.0	360.0	350.0	**485.0**	272.4	313.9
1400-1500	236.0	227.0	243.0	311.0	371.0	396.0	456.0	277.6	320.0
1500-1600	268.0	282.0	323.0	375.0	443.0	388.0	437.0	338.2	359.4
1600-1700	322.0	299.0	373.0	382.0	449.0	**443.0**	457.0	365.0	**389.3**
1700-1800	305.0	**342.0**	**374.0**	**401.0**	**490.0**	353.0	405.0	**382.4**	381.4
1800-1900	210.0	238.0	238.0	312.0	358.0	371.0	350.0	271.2	296.7
1900-2000	171.0	153.0	164.0	196.0	246.0	271.0	260.0	186.0	208.7
2000-2100	100.0	92.0	112.0	140.0	194.0	213.0	189.0	127.6	148.6
2100-2200	82.0	111.0	105.0	96.0	119.0	116.0	116.0	102.6	106.4
2200-2300	43.0	58.0	57.0	80.0	110.0	107.0	79.0	69.6	76.3
2300-2400	34.0	31.0	44.0	36.0	50.0	65.0	35.0	39.0	42.1
Totals									
0700-1900	*	3005.0	3303.0	3669.0	4146.0	4443.0	4465.0	3444.0	3758.1
0600-2200	*	3568.0	3883.0	4314.0	4907.0	5147.0	5088.0	4069.8	4394.6
0600-0000	*	3657.0	3984.0	4430.0	5067.0	5319.0	5202.0	4178.4	4513.1
0000-0000	*	3881.0	4199.0	4651.0	5273.0	5456.0	5327.0	4397.0	4706.6
AM Peak	*	0700	0700	1000	1100	1000	1100		
	*	275.0	268.0	272.0	299.0	484.0	469.0		
PM Peak	*	1700	1700	1700	1700	1600	1300		
	*	342.0	374.0	401.0	490.0	443.0	485.0		

*** - No data.**

NH 12 at New Hampshire/Massachussetts State Line

13:00 Monday, May 05, 2014 => 9:30 Monday, May 12, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	31.0	13.0	21.0	21.0	25.0	35.0	40.0	22.2	26.6
0100-0200	18.0	12.0	19.0	19.0	20.0	25.0	19.0	17.6	18.9
0200-0300	13.0	21.0	19.0	16.0	17.0	9.0	12.0	17.2	15.3
0300-0400	17.0	23.0	20.0	21.0	18.0	17.0	9.0	19.8	17.9
0400-0500	47.0	49.0	49.0	45.0	26.0	19.0	14.0	43.2	35.6
0500-0600	108.0	113.0	91.0	118.0	123.0	43.0	31.0	110.6	89.6
0600-0700	237.0	227.0	204.0	231.0	197.0	107.0	61.0	219.2	180.6
0700-0800	315.0	**293.0**	265.0	266.0	266.0	203.0	132.0	281.0	248.6
0800-0900	267.0	269.0	274.0	262.0	274.0	248.0	178.0	269.2	253.1
0900-1000	64.0	245.0	242.0	273.0	291.0	387.0	311.0	223.0	259.0
1000-1100	*	202.0	250.0	295.0	**333.0**	**537.0**	393.0	270.0	335.0
1100-1200	*	245.0	**284.0**	**296.0**	320.0	504.0	**486.0**	**286.3**	**355.8**
1200-1300	*	246.0	274.0	286.0	335.0	450.0	509.0	285.3	350.0
1300-1400	263.0	257.0	267.0	326.0	396.0	407.0	513.0	301.8	347.0
1400-1500	269.0	253.0	299.0	338.0	386.0	414.0	502.0	309.0	351.6
1500-1600	294.0	304.0	360.0	383.0	475.0	442.0	463.0	363.2	388.7
1600-1700	335.0	334.0	**411.0**	417.0	468.0	**456.0**	**514.0**	393.0	**419.3**
1700-1800	354.0	**357.0**	386.0	**430.0**	**550.0**	393.0	448.0	**415.4**	416.9
1800-1900	258.0	278.0	282.0	345.0	401.0	366.0	386.0	312.8	330.9
1900-2000	207.0	204.0	184.0	221.0	283.0	303.0	294.0	219.8	242.3
2000-2100	116.0	122.0	143.0	160.0	217.0	240.0	186.0	151.6	169.1
2100-2200	80.0	103.0	100.0	93.0	121.0	116.0	121.0	99.4	104.9
2200-2300	45.0	67.0	61.0	76.0	115.0	103.0	79.0	72.8	78.0
2300-2400	34.0	36.0	42.0	40.0	57.0	68.0	29.0	41.8	43.7
Totals									
0700-1900	*	3283.0	3594.0	3917.0	4495.0	4807.0	4835.0	3709.9	4055.8
0600-2200	*	3939.0	4225.0	4622.0	5313.0	5573.0	5497.0	4399.9	4752.7
0600-0000	*	4042.0	4328.0	4738.0	5485.0	5744.0	5605.0	4514.5	4874.4
0000-0000	*	4273.0	4547.0	4978.0	5714.0	5892.0	5730.0	4745.1	5078.1
AM Peak	*	0700	1100	1100	1000	1000	1100		
	*	293.0	284.0	296.0	333.0	537.0	486.0		
PM Peak	*	1700	1600	1700	1700	1600	1600		
	*	357.0	411.0	430.0	550.0	456.0	514.0		

*** - No data.**

Additional Counts

Martell Court West of NH 12, Keene

10:00 Tuesday, July 08, 2014 => 9:46 Monday, July 14, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	2.0	*	1.0	5.0	2.0	6.0	3.0	2.5	3.2
0100-0200	1.0	*	0.0	0.0	0.0	2.0	0.0	0.3	0.5
0200-0300	0.0	*	0.0	0.0	0.0	10.0	3.0	0.0	2.2
0300-0400	0.0	*	0.0	0.0	0.0	0.0	2.0	0.0	0.3
0400-0500	2.0	*	0.0	0.0	0.0	2.0	0.0	0.5	0.7
0500-0600	2.0	*	1.0	0.0	0.0	0.0	0.0	0.8	0.5
0600-0700	8.0	*	10.0	13.0	14.0	2.0	0.0	11.3	7.8
0700-0800	23.0	*	17.0	24.0	25.0	5.0	1.0	22.3	15.8
0800-0900	47.0	*	67.0	81.0	51.0	39.0	8.0	61.5	48.8
0900-1000	59.0	*	75.0	77.0	91.0	56.0	46.0	75.5	67.3
1000-1100	*	101.0	**107.0**	105.0	77.0	105.0	59.0	**97.5**	92.3
1100-1200	*	87.0	78.0	**108.0**	**100.0**	**106.0**	**95.0**	93.3	**95.7**
1200-1300	*	105.0	99.0	**121.0**	111.0	96.0	**105.0**	109.0	**106.2**
1300-1400	*	70.0	85.0	91.0	98.0	**103.0**	52.0	86.0	83.2
1400-1500	*	95.0	90.0	85.0	107.0	84.0	86.0	94.3	91.2
1500-1600	*	**108.0**	**134.0**	116.0	120.0	78.0	72.0	**119.5**	104.7
1600-1700	*	92.0	77.0	113.0	**133.0**	69.0	20.0	103.8	84.0
1700-1800	*	82.0	116.0	75.0	102.0	74.0	15.0	93.8	77.3
1800-1900	*	19.0	23.0	32.0	29.0	15.0	17.0	25.8	22.5
1900-2000	*	18.0	15.0	10.0	24.0	14.0	3.0	16.8	14.0
2000-2100	*	7.0	11.0	8.0	8.0	6.0	6.0	8.5	7.7
2100-2200	*	9.0	6.0	5.0	11.0	0.0	2.0	7.8	5.5
2200-2300	*	2.0	2.0	4.0	9.0	5.0	4.0	4.3	4.3
2300-2400	*	2.0	3.0	4.0	11.0	5.0	1.0	5.0	4.3
Totals									
0700-1900	*	*	968.0	1028.0	1044.0	830.0	576.0	982.0	889.0
0600-2200	*	*	1010.0	1064.0	1101.0	852.0	587.0	1026.3	924.0
0600-0000	*	*	1015.0	1072.0	1121.0	862.0	592.0	1035.5	932.7
0000-0000	*	*	1017.0	1077.0	1123.0	882.0	600.0	1039.5	940.0
AM Peak	*	*	1000	1100	1100	1100	1100		
	*	*	107.0	108.0	100.0	106.0	95.0		
PM Peak	*	1500	1500	1200	1600	1300	1200		
	*	108.0	134.0	121.0	133.0	103.0	105.0		

*** - No data.**

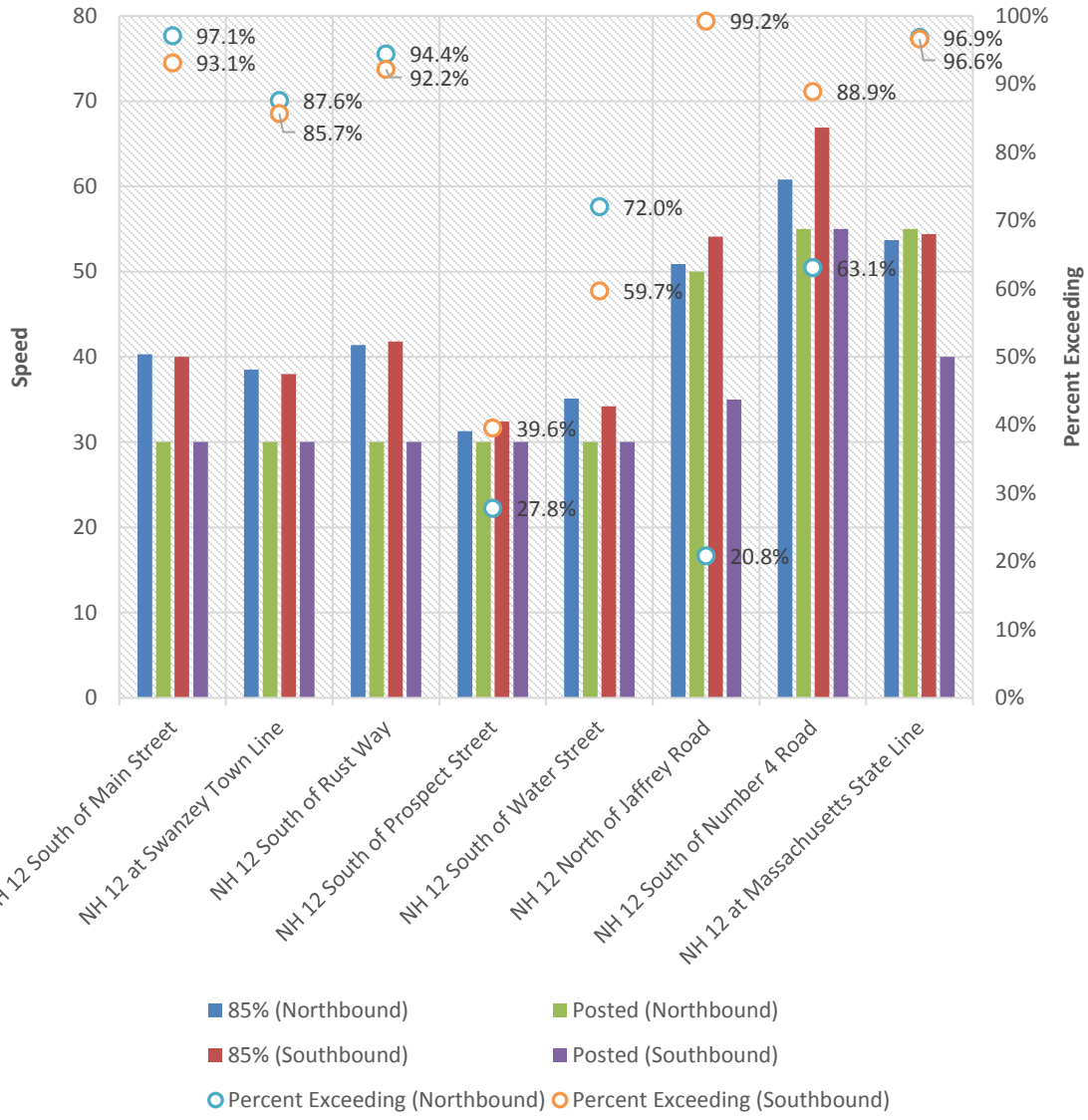
Greenwood Avenue West of NH 32, Keene

14:00 Monday, April 14, 2014 => 8:44 Monday, April 21, 2014

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0100-0200	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.2	0.3
0200-0300	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.2	0.1
0300-0400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0400-0500	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.4
0500-0600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0600-0700	1.0	2.0	3.0	1.0	2.0	1.0	0.0	1.8	1.4
0700-0800	14.0	**23.0**	7.0	4.0	13.0	2.0	1.0	**12.2**	9.1
0800-0900	15.0	18.0	7.0	4.0	14.0	7.0	5.0	11.6	10.0
0900-1000	*	7.0	3.0	2.0	5.0	6.0	11.0	4.3	5.7
1000-1100	*	6.0	3.0	**12.0**	**16.0**	13.0	11.0	9.3	10.2
1100-1200	*	9.0	**7.0**	8.0	11.0	**17.0**	**18.0**	8.8	**11.7**
1200-1300	*	11.0	9.0	4.0	19.0	**21.0**	11.0	10.8	12.5
1300-1400	*	7.0	5.0	9.0	**22.0**	9.0	16.0	10.8	11.3
1400-1500	21.0	10.0	4.0	5.0	19.0	12.0	10.0	11.8	11.6
1500-1600	18.0	9.0	5.0	8.0	11.0	17.0	**18.0**	10.2	12.3
1600-1700	20.0	16.0	**10.0**	**11.0**	19.0	13.0	10.0	**15.2**	**14.1**
1700-1800	15.0	**17.0**	9.0	6.0	19.0	15.0	9.0	13.2	12.9
1800-1900	17.0	4.0	3.0	7.0	12.0	10.0	10.0	8.6	9.0
1900-2000	10.0	4.0	7.0	1.0	4.0	11.0	10.0	5.2	6.7
2000-2100	2.0	1.0	2.0	1.0	9.0	4.0	5.0	3.0	3.4
2100-2200	3.0	0.0	1.0	1.0	5.0	1.0	1.0	2.0	1.7
2200-2300	0.0	1.0	1.0	2.0	2.0	0.0	0.0	1.2	0.9
2300-2400	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.6	0.4
Totals									
0700-1900	*	137.0	72.0	80.0	180.0	142.0	130.0	126.6	130.3
0600-2200	*	144.0	85.0	84.0	200.0	159.0	146.0	138.5	143.6
0600-0000	*	147.0	87.0	86.0	202.0	159.0	146.0	140.3	144.9
0000-0000	*	147.0	89.0	86.0	202.0	161.0	148.0	140.7	145.8
AM Peak	*	0700	1100	1000	1000	1100	1100		
	*	23.0	7.0	12.0	16.0	17.0	18.0		
PM Peak	*	1700	1600	1600	1300	1200	1500		
	*	17.0	10.0	11.0	22.0	21.0	18.0		

*** - No data.**

2014 Vehicle Speed Summary



Tips on interpreting this section:

- Posted speeds are speed limits posted by NHDOT for each location

- The 85% or 85th percentile speed is listed in miles per hour (mph) and means that 85% of vehicles were traveling at or below this speed during the study period (generally one week). An alternate interpretation is that 15% of vehicles exceeded the 85th percentile speed. The date of each speed study corresponds to the traffic count study dates and times in the previous section.

- Tables below display the 85% speed, 95% speed, average (mean) speed, median speed, and the percentage of vehicles exceeding the posted speed.

NHDOT Bureau of Traffic Speed Limit Signage

TOWN	DIRECTION	MILE POINT	CONCURRENT HIGHWAYS	NORTH COORD	WEST COORD	SPEED	DESCRIPTION	DATE ERECTED
KEENE	South	18.5	NH101	42.92219	-72.28763	40	500 feet east of Winchester St	3/16/1995
KEENE	North	18.4	NH101	42.92201	-72.28454	40	1000 Feet west of Main St (NH 12)	3/16/1995
KEENE	North	18.2	NH101	42.92170	-72.27975	40	300 feet west of Main St (NH 12)	
SWANZEY	South	17.0		42.91107	-72.26368	30	At the Swanzey/Keene Town Line (Urban Compact Line)	10/30/1970
SWANZEY	North	16.1		42.90111	-72.25356	30	0.10 mile north of Mt. Huggins Rd	10/22/1986
SWANZEY	South	16.1		42.90102	-72.25366	40	0.10 mile north of Mt. Huggins Rd	10/22/1986
SWANZEY	North	15.8		42.89761	-72.25087	40	800 feet south of Mt. Huggins Rd	5/2/1967
SWANZEY	North	13.9		42.87497	-72.23072	40	350 feet north of Flat Roof Mill Rd	12/18/1973
SWANZEY	South	13.7		42.87355	-72.22605	55	930 feet south of Flat Roof Mill Rd	10/31/1983
SWANZEY	North	13.7		42.87371	-72.22665	40	900 feet south of Flat Roof Mill Rd	12/18/1973
TROY	South	11.2		42.85001	-72.19296	35	1900 feet north of Old Keene Rd	7/2/2001
TROY	North	11.2		42.85020	-72.19293	55	1900 feet north of Old Keene Rd	7/2/2001
TROY	North	10.9		42.84668	-72.19076	35	550 feet north of Old Keene Rd	7/2/2001
TROY	North	10.6		42.84173	-72.18900	35	130 feet south of Old Keene Rd	12/27/1977
TROY	South	10.2		42.83572	-72.18820	30	200 feet south of Old Whitcomb Rd	7/1/1967
TROY	North	10.2		42.83594	-72.18807	35	230 feet south of Old Whitcomb Rd	5/2/1967
TROY	North	9.8		42.83104	-72.18606	30	300 feet north of Marlborough St	6/10/2002
TROY	South	9.7		42.82988	-72.18528	30	144 feet south of Marlborough St	3/20/2000
TROY	North	9.2		42.82294	-72.18052	30	At South Main St intersection	3/20/2000
TROY	South	9.2		42.82338	-72.18126	30	50 feet north of South Main St	6/10/2002
TROY	North	8.8		42.82057	-72.17449	30	500 feet south of Quarry Road	7/1/1967
TROY	South	8.8		42.82042	-72.17448	35	500 feet south of Quarry Road	9/18/1961
TROY	North	8.6		42.81867	-72.17210	35	1440 feet south of Quarry Road	9/18/1961
TROY	South	8.6		42.81865	-72.17236	50	1440 feet south of Quarry Road	6/22/1967
FITZWILLIAM	South	5.8		42.78374	-72.14356	35	1320 feet north of NH 119	1/10/1952
FITZWILLIAM	North	5.8		42.78390	-72.14347	50	1320 feet north of NH 119	6/22/1967
FITZWILLIAM	North	5.3		42.77905	-72.13661	35	1200 feet south of NH 119	1/10/1952
FITZWILLIAM	South	5.3		42.77885	-72.13656	55	1200 feet south of NH 119	12/13/1973
FITZWILLIAM	North	0.1		42.71702	-72.08187	55	300 feet north of the NH/MA State Line	

NH 12 South of Main Street, Keene

	Northbound	Southbound	Combined
Posted Speed Limit	30	30	-
Exceeding	97.11%	93.14%	95.10%
Mean	36.7	36	36.3
85% Speed	40.3	40	40.3
95% Speed	42.7	42.7	42.7
Median	36.5	36	36.2

NH 12 at Keene/Swanzey Town Line

	Northbound	Southbound	Combined
Posted Speed Limit	30	30	-
Exceeding	87.61%	85.70%	86.67%
Mean	34.4	33.9	34.1
85% Speed	38.5	38	38.3
95% Speed	40.9	40.5	40.7
Median	34.7	34.2	34.4

NH 12 South of Rust Way, Swanzey

	Northbound	Southbound	Combined
Posted Speed Limit	30	30	-
Exceeding	94.43%	92.17%	93.31%
Mean	37.4	37	37.2
85% Speed	41.4	41.8	41.6
95% Speed	43.8	44.5	44.3
Median	37.6	37.4	37.4

NH 12 South of Prospect Street, Troy

	Northbound	Southbound	Combined
Posted Speed Limit	30	30	-
Exceeding	27.82%	39.58%	33.63%
Mean	28.4	29.2	28.8
85% Speed	31.3	32.4	32
95% Speed	33.3	34.9	34.2
Median	28.2	29.1	28.6

NH 12 South of Water Street, Troy

	Northbound	Southbound	Combined
Posted Speed Limit	30	30	-
Exceeding	72.02%	59.70%	65.56%
Mean	31.5	30.5	31
85% Speed	35.1	34.2	34.7
95% Speed	37.4	36.5	36.9
Median	32	30.6	31.3

NH 12 North of Jaffrey Road, Fitzwilliam

	Northbound	Southbound	Combined
Posted Speed Limit	50	35	-
Exceeding	20.84%	99.22%	-
Mean	46.1	48.7	47.2
85% Speed	50.9	54.1	52.5
95% Speed	53.9	57.2	55.7
Median	46.1	48.7	47.1

NH 12 South of Number 4 Road, Fitzwilliam

	Northbound	Southbound	Combined
Posted Speed Limit	55	55	-
Exceeding	63.08%	88.90%	75.92%
Mean	56.4	61.3	58.9
85% Speed	60.8	66.9	64.6
95% Speed	64.2	70.9	68.7
Median	56.4	61.1	58.6

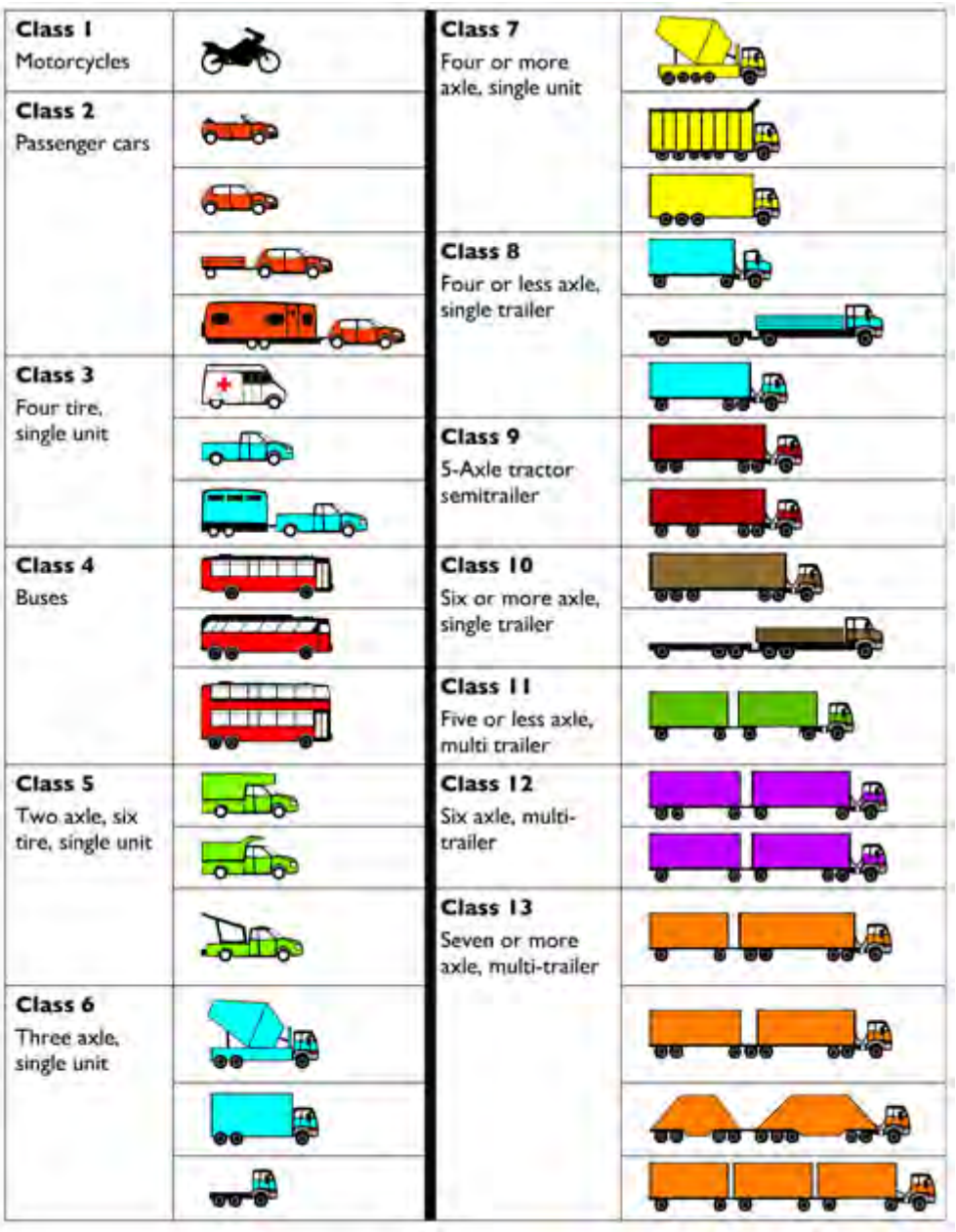
NH 12 at New Hampshire/Massachusetts State Line

	Northbound	Southbound	Combined
Posted Speed Limit	55	40	-
Exceeding	96.85%	96.62%	-
Mean	49.3	49.5	49.4
85% Speed	53.7	54.4	54.1
95% Speed	56.6	57.3	56.8
Median	49.4	49.7	49.4

Vehicle Classification

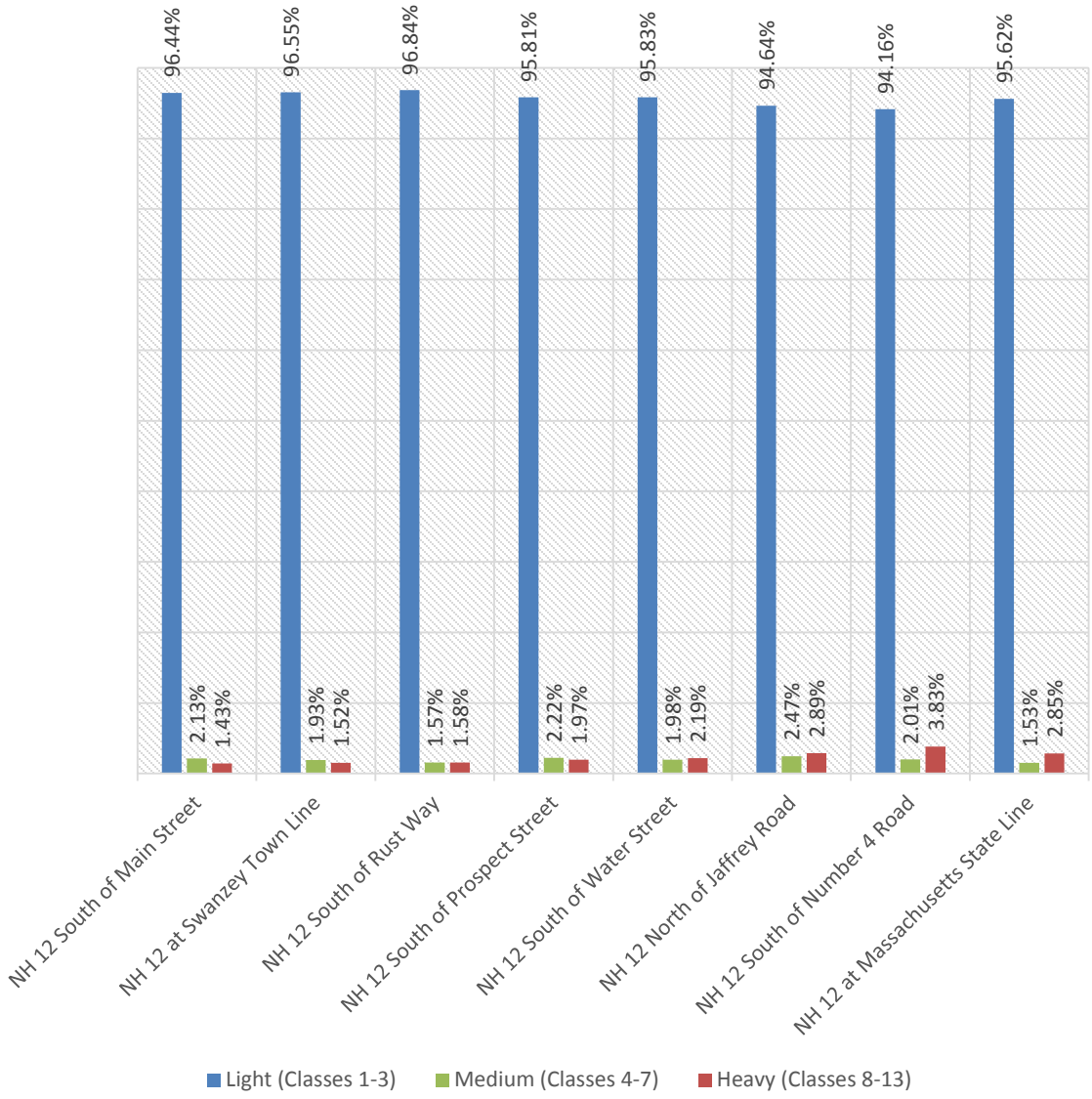
Collecting traffic volume data by vehicle classification differs from simple volume counting in that each vehicle is not only recognized as a vehicle, but that vehicle is also classified into one of several defined categories. Adding to the difficulty of categorizing vehicles is the fact that different users have different definitions into which they would like vehicles classified. In traffic monitoring, the most commonly used vehicle classification system is the 13 vehicle category classification system developed by Federal Highway Administration (FHWA) and is used in New Hampshire's Highway Performance Monitoring System (HPMS) submittal. The figure below provides representative examples that depict the 13 vehicle categories.[1]

Figure 1 - FHWA Vehicle Classification System



[1] Source: http://www.fhwa.dot.gov/policyinformation/tmguide/tmg_2013/traffic-monitoring-theory.cfm

Vehicle Classification Summary



NH 12 South of Main Street, Keene

Class 1 – 1,796 (1.36%)	Light – 127,588 (96.44%)
Class 2 – 96,852 (73.20%)	
Class 3 – 28,940 (21.87%)	
Class 4 - 934 (0.71%)	Medium – 2,819 (2.13%)
Class 5 - 672 (0.51%)	
Class 6 - 891 (0.67%)	
Class 7 - 322 (0.24%)	
Class 8 - 429 (0.32%)	Heavy – 1,896 (1.43%)
Class 9 – 1,189 (0.90%)	
Class 10 - 240 (0.18%)	
Class 11 - 34 (0.03%)	
Class 12 - 0 (0.00%)	
Class 13 - 4 (0.00%)	

NH 12 at Keene/Swanzey Town Line

Class 1 – 1,532 (1.48%)	Light – 99,795 (96.55%)
Class 2 – 78,760 (76.20%)	
Class 3 – 19,503 (18.87%)	
Class 4 - 728 (0.70%)	Medium – 1,999 (1.93%)
Class 5 - 542 (0.52%)	
Class 6 - 618 (0.60%)	
Class 7 - 111 (0.11%)	
Class 8 - 321 (0.31%)	Heavy – 1,566 (1.52%)
Class 9 – 1,101 (1.07%)	
Class 10 - 110 (0.11%)	
Class 11 - 26 (0.03%)	
Class 12 - 0 (0.00%)	
Class 13 - 8 (0.01%)	

NH 12 South of Rust Way, Swanzey

Class 1 – 1,525 (1.64%)	Light – 90,305 (96.84%)
Class 2 – 69,133 (74.14%)	
Class 3 – 19,647 (21.07%)	
Class 4 - 582 (0.62%)	Medium – 1,467 (1.57%)
Class 5 - 452 (0.48%)	
Class 6 - 382 (0.41%)	
Class 7 - 51 (0.05%)	
Class 8 - 337 (0.36%)	Heavy – 1,476 (1.58%)
Class 9 – 1,024 (1.10%)	
Class 10 - 89 (0.10%)	
Class 11 - 19 (0.02%)	
Class 12 - 1 (0.00%)	
Class 13 - 6 (0.01%)	

NH 12 South of Prospect Street, Troy

Class 1 - 925 (1.31%)	Light – 67,551 (95.81%)
Class 2 – 50,760 (71.99%)	
Class 3 – 15,866 (22.50%)	
Class 4 - 529 (0.75%)	Medium – 1,562 (2.22%)
Class 5 - 341 (0.48%)	
Class 6 - 625 (0.89%)	
Class 7 - 67 (0.10%)	
Class 8 - 258 (0.37%)	Heavy – 1,392 (1.97%)
Class 9 - 975 (1.38%)	
Class 10 - 105 (0.15%)	
Class 11 - 37 (0.05%)	
Class 12 - 0 (0.00%)	
Class 13 - 17 (0.02%)	

NH 12 South of Water Street, Troy

Class 1 - 868 (1.38%)	Light – 60,333 (95.83%)
Class 2 – 46,417 (73.73%)	
Class 3 – 13,048 (20.72%)	
Class 4 - 489 (0.78%)	Medium – 1,245 (1.98%)
Class 5 - 298 (0.47%)	
Class 6 - 388 (0.62%)	
Class 7 - 70 (0.11%)	
Class 8 - 262 (0.42%)	Heavy – 1,380 (2.19%)
Class 9 – 1,001 (1.59%)	
Class 10 - 91 (0.14%)	
Class 11 - 20 (0.03%)	
Class 12 - 0 (0.00%)	
Class 13 - 6 (0.01%)	

NH 12 North of Jaffrey Road, Fitzwilliam

Class 1 - 632 (1.38%)	Light – 43,432 (94.64%)
Class 2 – 34,075 (74.25%)	
Class 3 – 8,725 (19.01%)	
Class 4 - 417 (0.91%)	Medium – 1,134 (2.47%)
Class 5 - 248 (0.54%)	
Class 6 - 403 (0.88%)	
Class 7 - 66 (0.14%)	
Class 8 - 280 (0.61%)	Heavy – 1,327 (2.89%)
Class 9 - 902 (1.97%)	
Class 10 - 106 (0.23%)	
Class 11 - 20 (0.04%)	
Class 12 - 1 (0.00%)	
Class 13 - 18 (0.04%)	

NH 12 South of Number 4 Road, Fitzwilliam

Class 1 - 455 (1.42%)	Light – 30,110 (94.16%)
Class 2 – 22,994 (71.90%)	
Class 3 – 6,661 (20.83%)	
Class 4 - 273 (0.85%)	Medium - 644 (2.01%)
Class 5 - 191 (0.60%)	
Class 6 - 160 (0.50%)	
Class 7 - 20 (0.06%)	
Class 8 - 237 (0.74%)	Heavy – 1,225 (3.83%)
Class 9 - 816 (2.55%)	
Class 10 - 117 (0.37%)	
Class 11 - 13 (0.04%)	
Class 12 - 0 (0.00%)	
Class 13 - 42 (0.13%)	

NH 12 at New Hampshire/Massachusetts State Line

Class 1 - 556 (1.61%)	Light – 32,995 (95.62%)
Class 2 – 24,837 (71.98%)	
Class 3 – 7,602 (22.03%)	
Class 4 - 237 (0.69%)	Medium - 528 (1.53%)
Class 5 - 164 (0.48%)	
Class 6 - 116 (0.34%)	
Class 7 - 11 (0.03%)	
Class 8 - 201 (0.58%)	Heavy - 983 (2.85%)
Class 9 - 686 (1.99%)	
Class 10 - 70 (0.20%)	
Class 11 - 11 (0.03%)	
Class 12 - 2 (0.01%)	
Class 13 - 13 (0.04%)	

Historic Traffic Counts (1990-2013)

Tips on interpreting this section:

- NHDOT and all regional planning commissions collect traffic volume data at specific sites on a routine basis with pneumatic tubes or other equipment. The figures below come from this program.

- All traffic counter locations within the corridor study area were included.

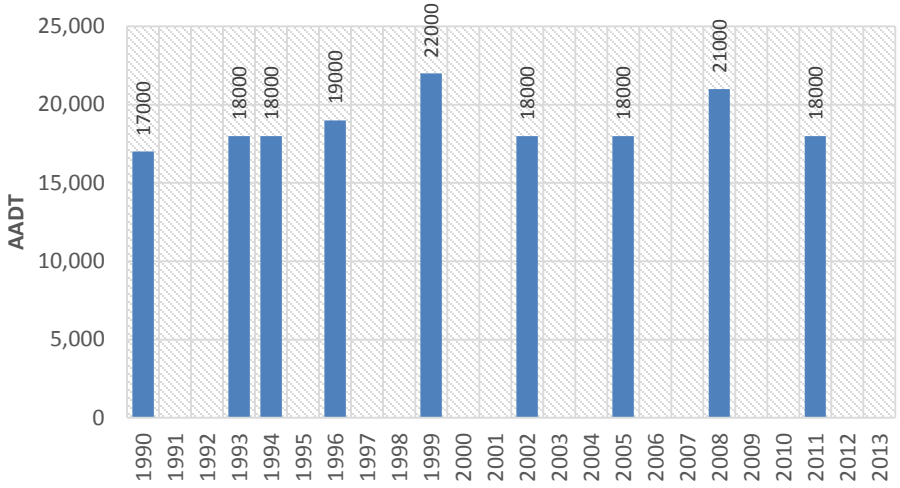
- Figures below are referred to as Average Annual Daily Traffic or AADT.

- One site, at the Marlborough/Swanzey town line, is a permanent monitoring station, so data is provided for each year based on a continuous tabulation of vehicles as opposed to a shorter duration study.

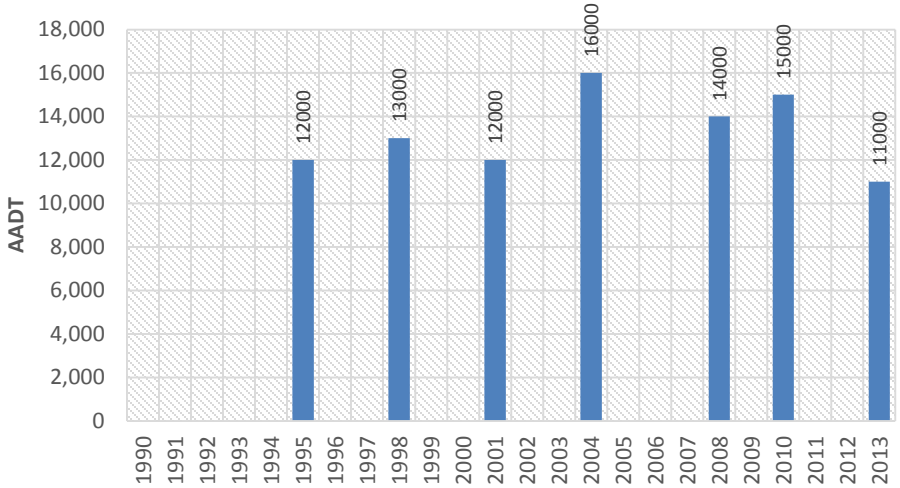
Keene

Station	237013	237031	237054	237056	237073	237083
Location	NH 12 SOUTH OF MARTELL COURT	MAIN ST SOUTH OF APPLETON ST	NH 32 AT SWANZEY TL	NH 12 & 101 OVER ASHUELOT RIVER	NH 12 AT SWANZEY TL	NH 101 EAST OF NH 12
1990	17000	*	*	16000	12000	9400
1991	*	*	*	17800	*	*
1992	*	*	*	19000	*	10000
1993	18000	*	3700	18000	13000	11000
1994	18000	*	*	*	11000	*
1995	*	12000	4800	18000	13000	10000
1996	19000	*	*	*	*	10000
1997	*	*	4000	19000	*	*
1998	*	13000	*	18000	*	*
1999	22000	*	*	*	14000	*
2000	*	*	4000	18000	*	*
2001	*	12000	*	19000	*	*
2002	18000	*	*	*	13000	11000
2003	*	*	3900	20000	*	*
2004	*	16000	*	*	*	*
2005	18000	*	*	*	15000	11000
2006	*	*	4200	21000	*	*
2007	*	*	*	*	*	*
2008	21000	14000	*	*	14000	11000
2009	*	*	4900	22000	*	*
2010	*	15000	*	*	*	*
2011	18000	*	*	*	18000	12000
2012	*	*	3500	22000	*	*
2013	*	11000	*	*	*	*

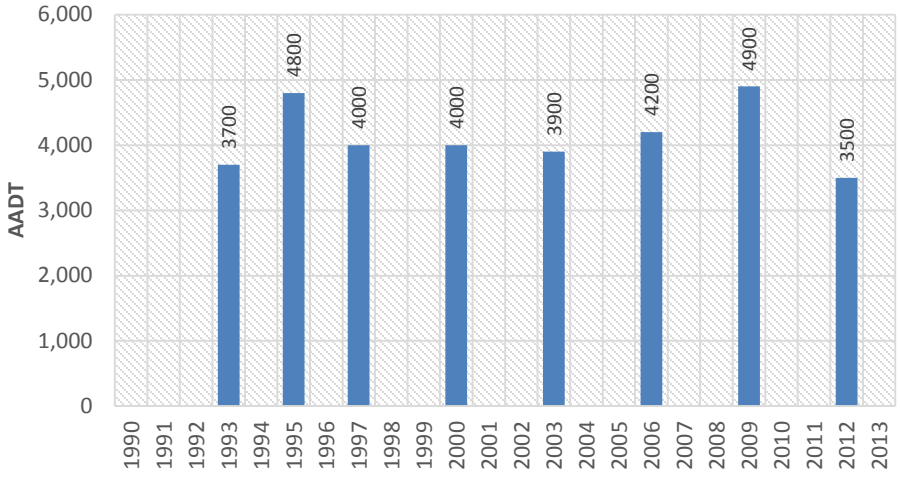
NH 12 SOUTH OF MARTELL COURT



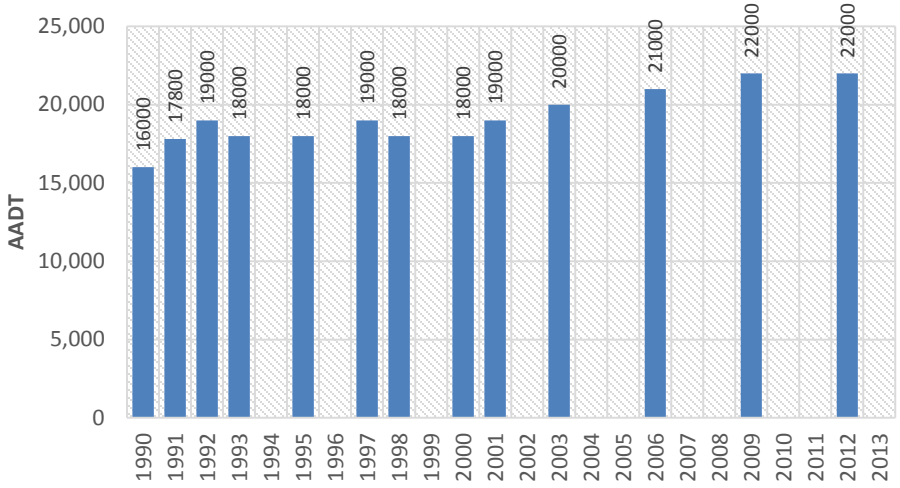
MAIN ST SOUTH OF APPLETON ST



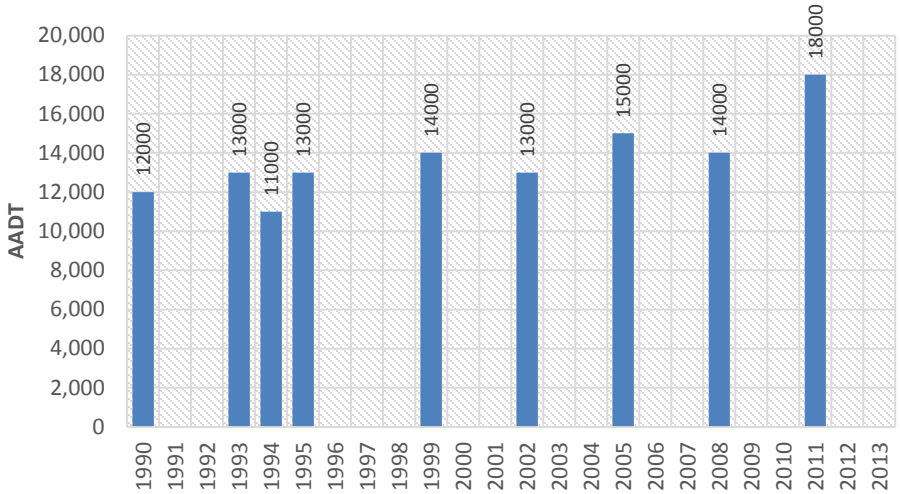
NH 32 AT SWANZEY TL



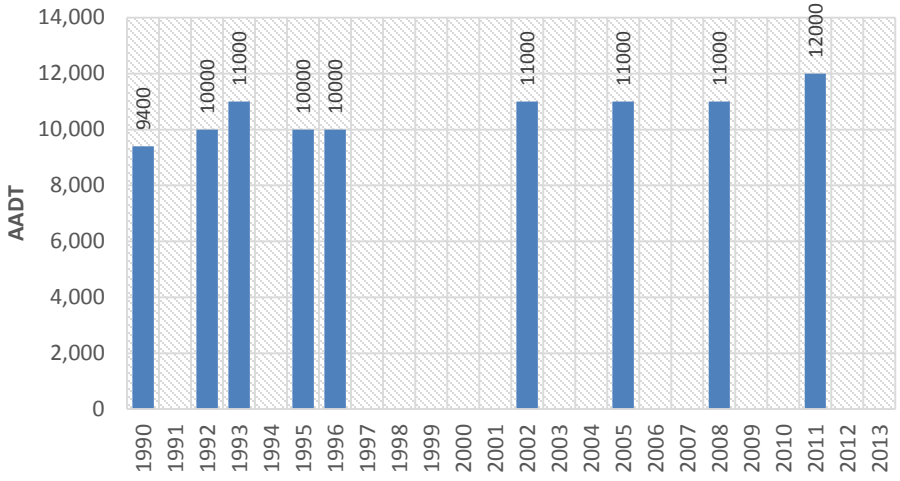
NH 12 & 101 OVER ASHUELOT RIVER



NH 12 AT SWANZEY TL

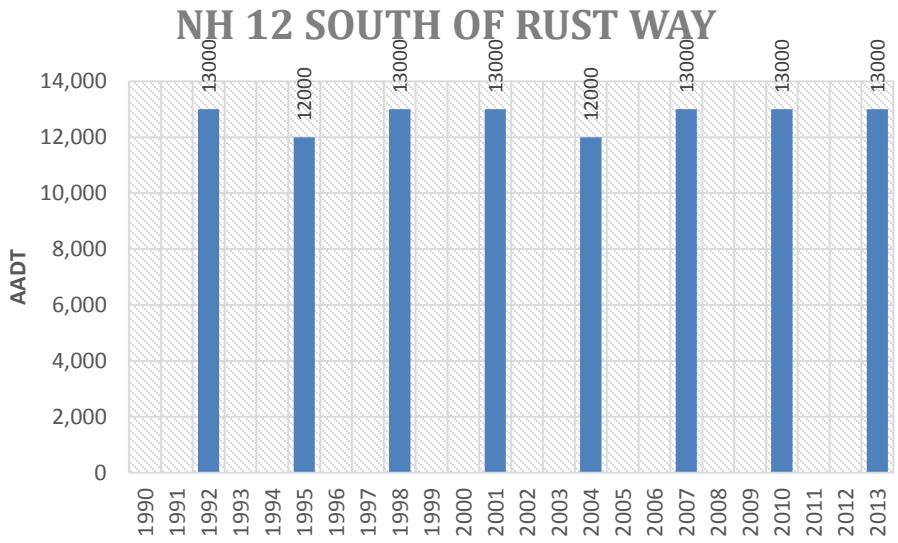


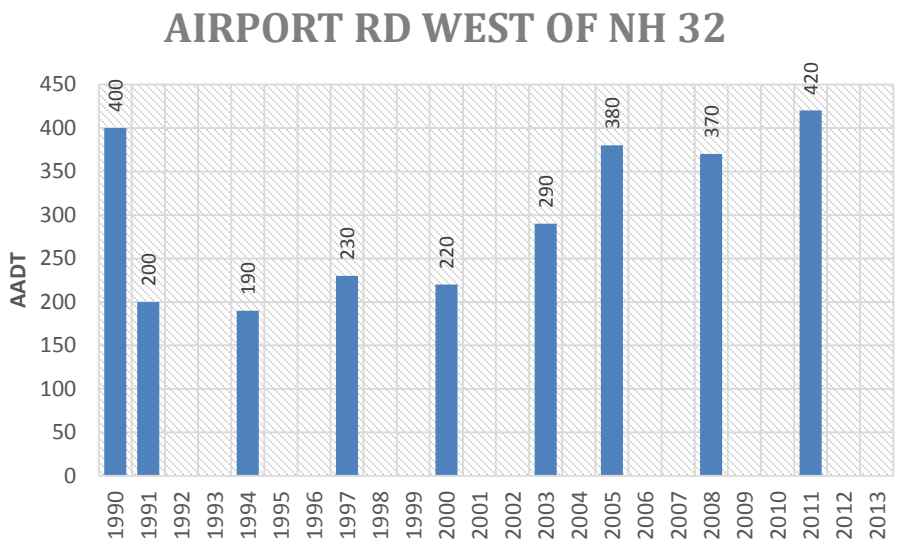
NH 101 EAST OF NH 12

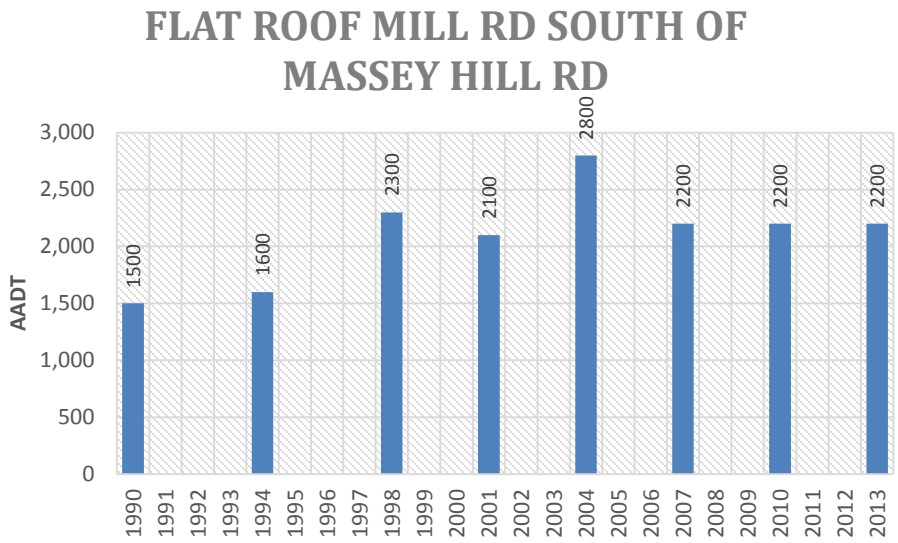


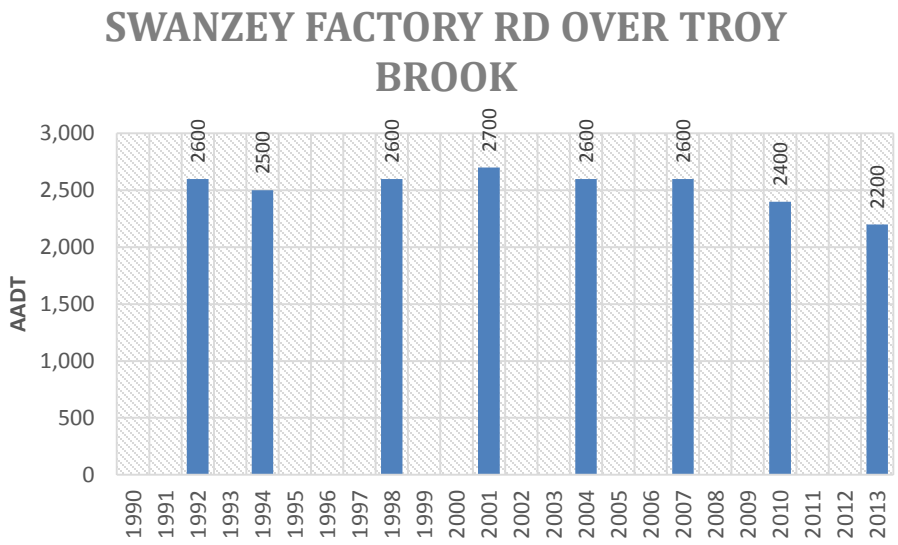
Swanzey

Station	441053	441056	441058	441069
Location	NH 12 SOUTH OF RUST WAY	AIRPORT RD WEST OF NH 32	FLAT ROOF MILL RD SOUTH OF MASSEY HILL RD	SWANZEY FACTORY RD OVER TROY BROOK
1990	*	400	1500	*
1991	*	200	*	*
1992	13000	*	*	2600
1993	*	*	*	*
1994	*	190	1600	2500
1995	12000	*	*	*
1996	*	*	*	*
1997	*	230	*	*
1998	13000	*	2300	2600
1999	*	*	*	*
2000	*	220	*	*
2001	13000	*	2100	2700
2002	*	*	*	*
2003	*	290	*	*
2004	12000	*	2800	2600
2005	*	380	*	*
2006	*	*	*	*
2007	13000	*	2200	2600
2008	*	370	*	*
2009	*	*	*	*
2010	13000	*	2200	2400
2011	*	420	*	*
2012	*	*	*	*
2013	13000	*	2200	2200


NH 12 SOUTH OF RUST WAY
AADT
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
13000
12000
13000
13000
12000
13000
13000
13000
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013


AIRPORT RD WEST OF NH 32
AADT
450
400
350
300
250
200
150
100
50
0
400
200
190
230
220
290
380
370
420
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013

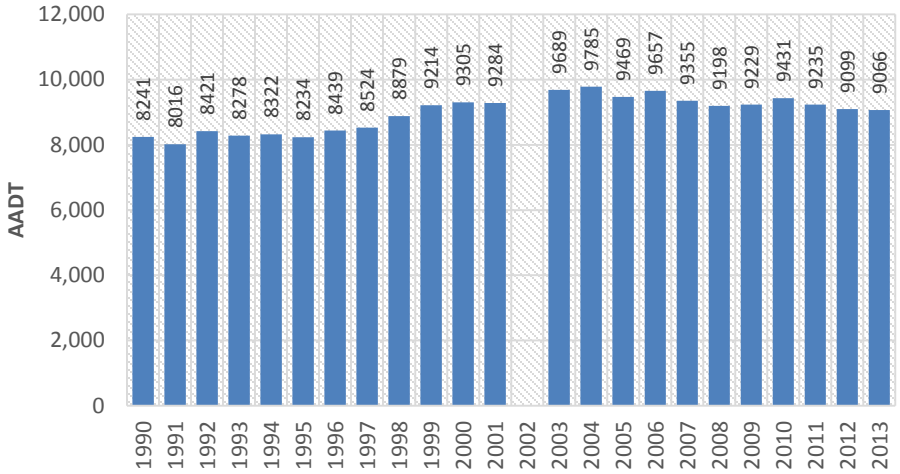

FLAT ROOF MILL RD SOUTH OF MASSEY HILL RD
AADT
3,000
2,500
2,000
1,500
1,000
500
0
1500
1600
2300
2100
2800
2200
2200
2200
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013


SWANZEY FACTORY RD OVER TROY BROOK
AADT
3,000
2,500
2,000
1,500
1,000
500
0
2600
2500
2600
2700
2600
2600
2400
2200
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013

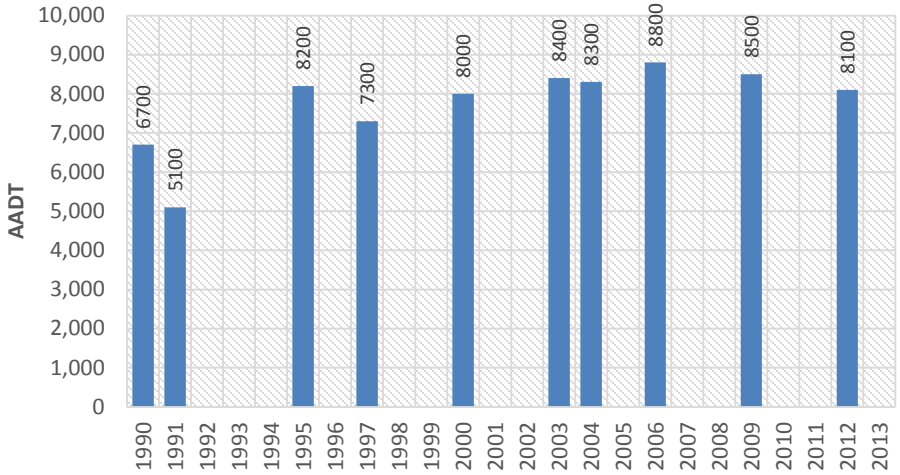
Marlborough

Station	287001	287052
Location	NH 12 AT SWANZEY TL	NH 12 AT TROY TL
1990	8241	6700
1991	8016	5100
1992	8421	*
1993	8278	*
1994	8322	*
1995	8234	8200
1996	8439	*
1997	8524	7300
1998	8879	*
1999	9214	*
2000	9305	8000
2001	9284	*
2002	*	*
2003	9689	8400
2004	9785	8300
2005	9469	*
2006	9657	8800
2007	9355	*
2008	9198	*
2009	9229	8500
2010	9431	*
2011	9235	*
2012	9099	8100
2013	9066	*

NH 12 AT SWANZEY TL



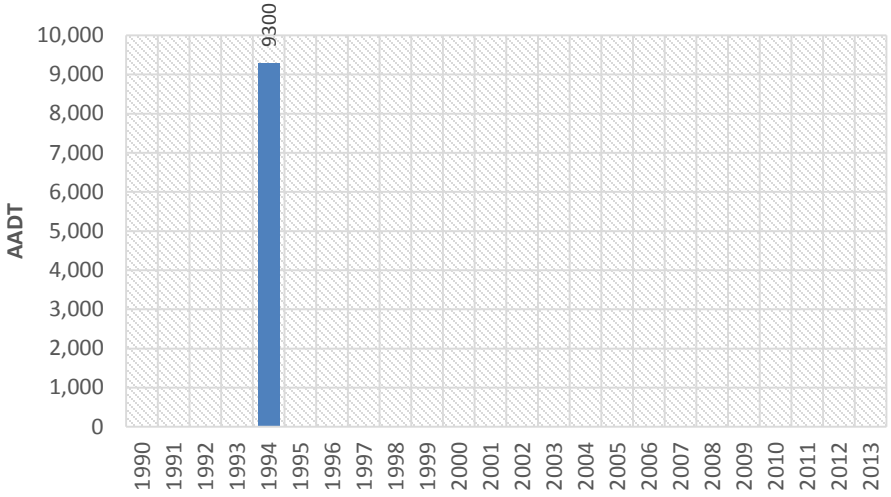
NH 12 AT TROY TL



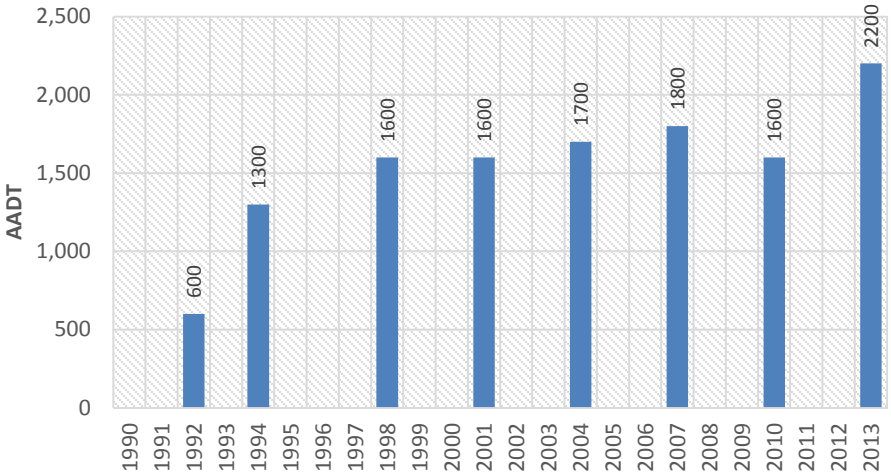
Troy

Station	453011	453050	453051	453052
Location	NH 12 SOUTH OF RAILROAD TRACKS	MONADNOCK ST AT QUARRY BROOK	PROSPECT ST SOUTH OF BROOK ST	HIGH ST OVER STATE OF NH RAILROAD
1990	*	*	*	*
1991	*	*	*	*
1992	*	600	*	*
1993	*	*	*	*
1994	9300	1300	290	1200
1995	*	*	*	*
1996	*	*	*	*
1997	*	*	*	*
1998	*	1600	500	1400
1999	*	*	*	*
2000	*	*	*	*
2001	*	1600	260	1300
2002	*	*	*	*
2003	*	*	*	*
2004	*	1700	300	1500
2005	*	*	*	*
2006	*	*	*	*
2007	*	1800	410	1500
2008	*	*	*	*
2009	*	*	*	*
2010	*	1600	400	1300
2011	*	*	*	*
2012	*	*	*	*
2013	*	2200	370	1800

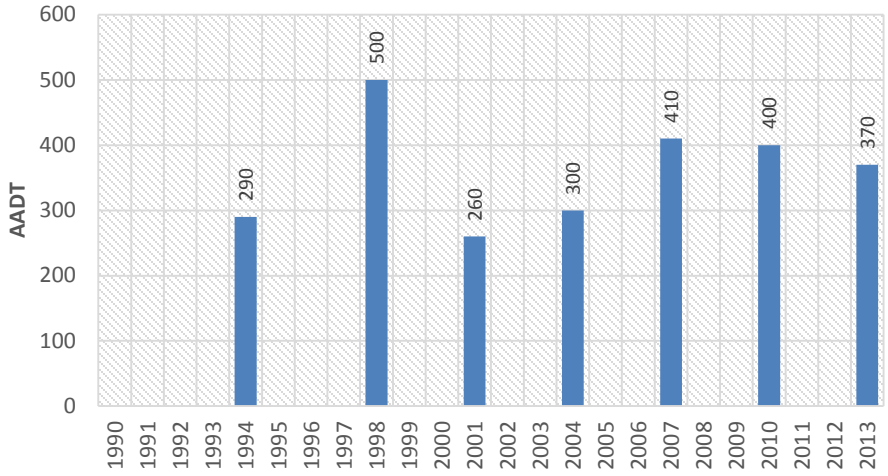
NH 12 SOUTH OF RAILROAD TRACKS

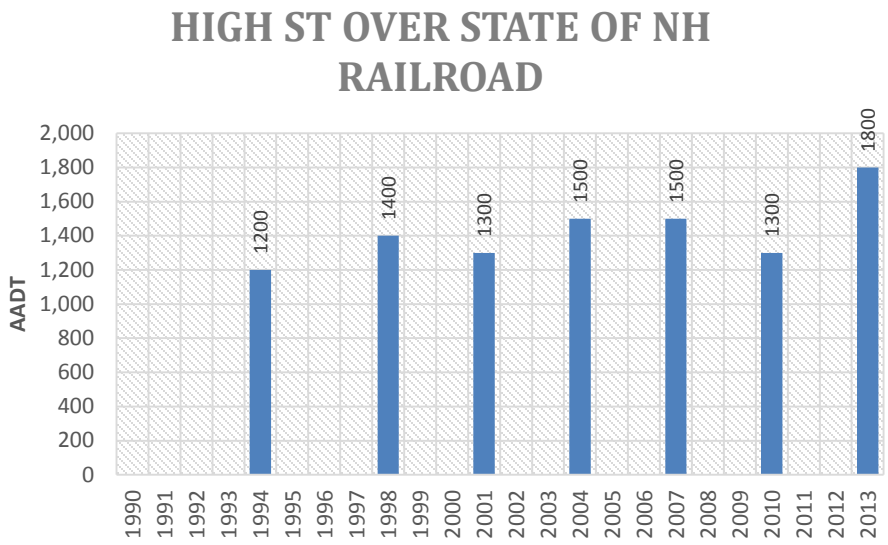


MONADNOCK ST AT QUARRY BROOK



PROSPECT ST SOUTH OF BROOK ST

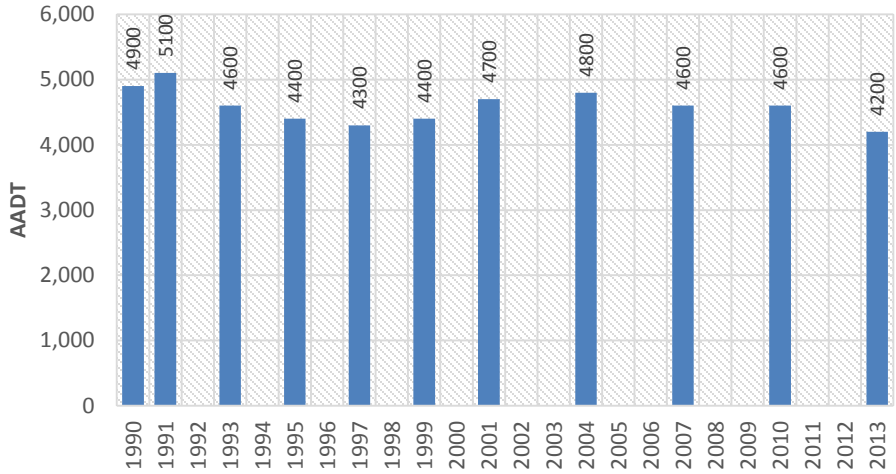



HIGH ST OVER STATE OF NH RAILROAD
AADT
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
1200
1400
1300
1500
1500
1300
1800
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013

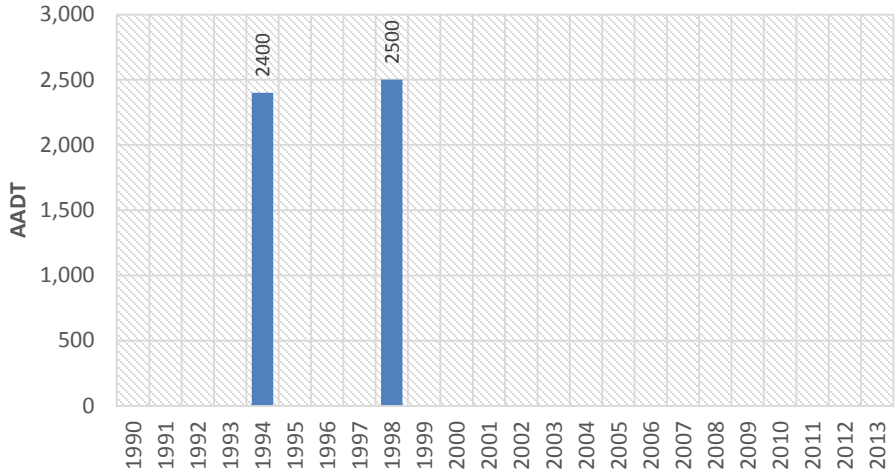
Fitzwilliam

Station	157051	157013	157052	157053	157054	157059	157058
Location	NH 12 AT MASSACHUSETTS SL	NH 119 WEST OF NH 12	NH 12 AT TROY TL	NH 119 WEST OF TEMPLETON RD	NH 119 EAST OF NH 12	NH 12 OVER SCOTT BROOK	NO. 4 RD OVER SCOTT BROOK
1990	4900	*	6800	*	*	*	*
1991	5100	*	7400	*	*	*	*
1992	*	*	*	*	*	*	*
1993	4600	*	6500	*	3100	4400	*
1994	*	2400	*	3000	*	4200	*
1995	4400	*	6300	*	*	*	*
1996	*	*	*	*	*	*	*
1997	4300	*	6500	*	3300	*	160
1998	*	2500	*	3000	*	4300	*
1999	4400	*	7100	*	*	*	*
2000	*	*	*	*	3800	*	180
2001	4700	*	6600	3100	*	4700	*
2002	*	*	*	*	*	*	*
2003	*	*	*	*	3800	*	240
2004	4800	*	7100	3600	4300	4500	100
2005	*	*	*	*	*	*	*
2006	*	*	*	*	*	*	*
2007	4600	*	6800	4100	4400	4500	125
2008	*	*	*	*	*	*	*
2009	*	*	*	*	*	*	*
2010	4600	*	7100	3100	4000	4500	125
2011	*	*	*	*	*	*	*
2012	*	*	*	*	*	*	*
2013	4200	*	7100	3000	4100	4000	330

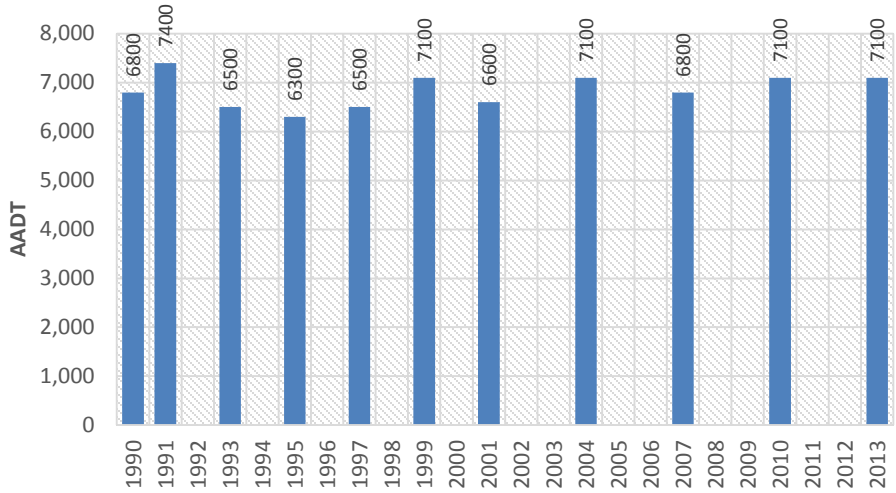
NH 12 AT MASSACHUSETTS SL



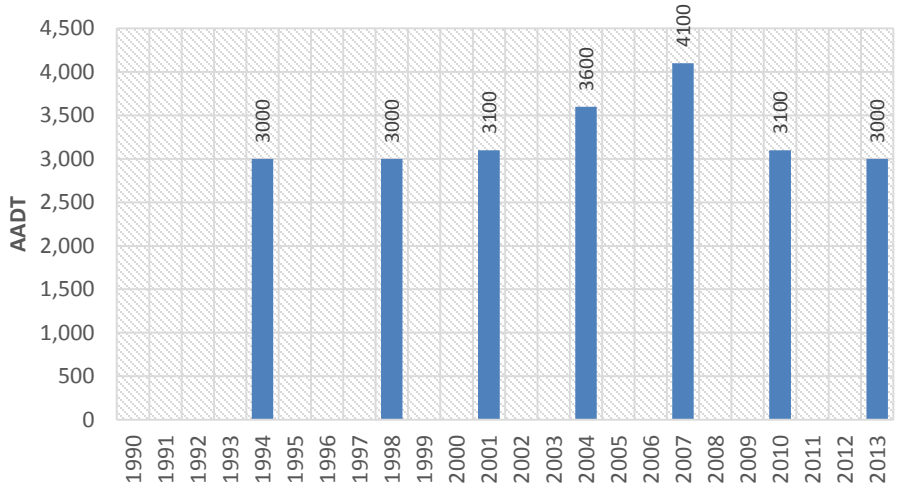
NH 119 WEST OF NH 12



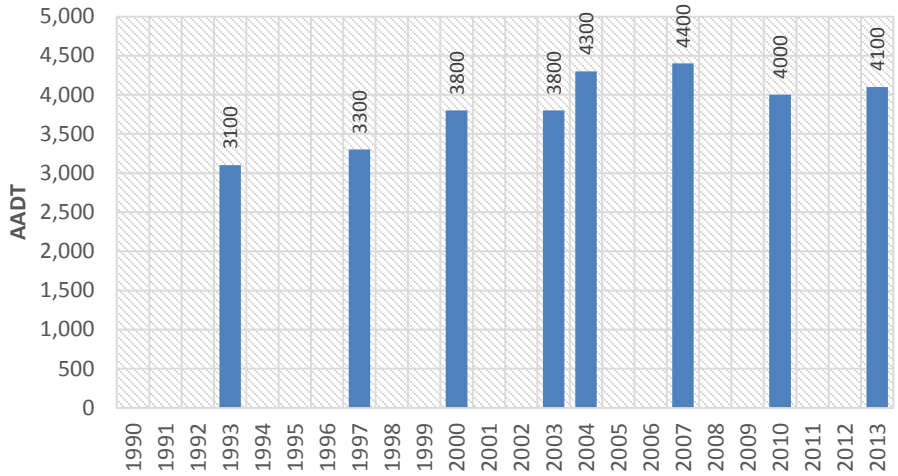
NH 12 AT TROY TL



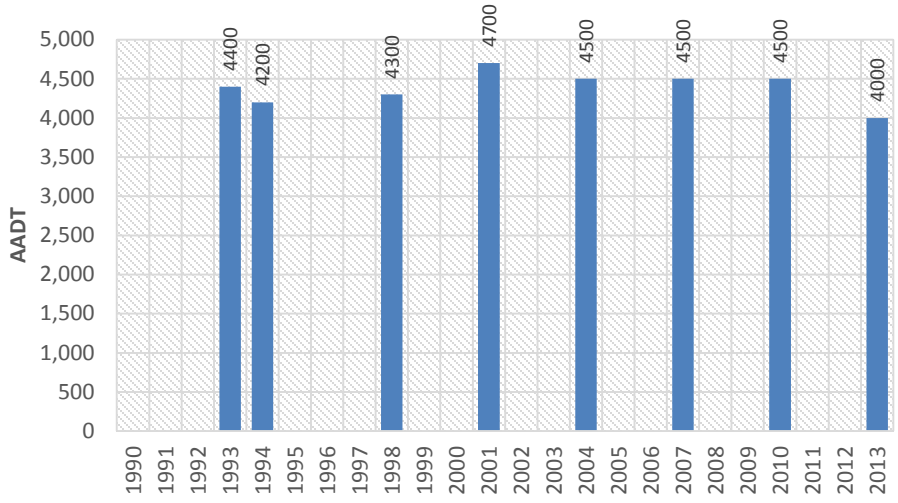
NH 119 WEST OF TEMPLETON RD



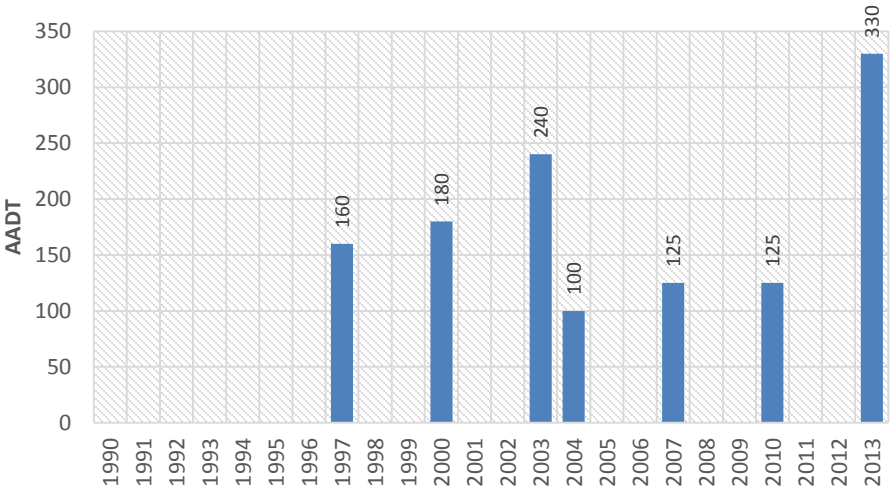
NH 119 EAST OF NH 12



NH 12 OVER SCOTT BROOK



NO. 4 RD OVER SCOTT BROOK



Turning Movement Counts by Location

Tips on interpreting this section:

- Turning movement counts were conducted by SWRPC at key intersections throughout the corridor. The decisions of each vehicle approaching the intersection were recorded during the morning and evening peak hour periods, and one hour before and after.

- The reports below include an aerial photo of each site, variable width diagrams for the morning and evening peak hour periods, and detailed sheets showing the number of turning movements and pedestrian crossings for each intersection approach in 15-minute intervals. Note that a time interval listed as 8:15 would represent the period 8:15 to 8:30. The detail sheets include the following reports for both morning and evening studies:

    Page 1: Turning movement volumes by approach in 15-minute intervals

    Page 2: Diagram of total turning movements by approach for the complete morning or evening period

    Page 3: Peak hour and peak 15-minute turning movements by approach for the morning or evening period

    Page 4: Diagram of turning movements by approach for the morning or evening peak hour period

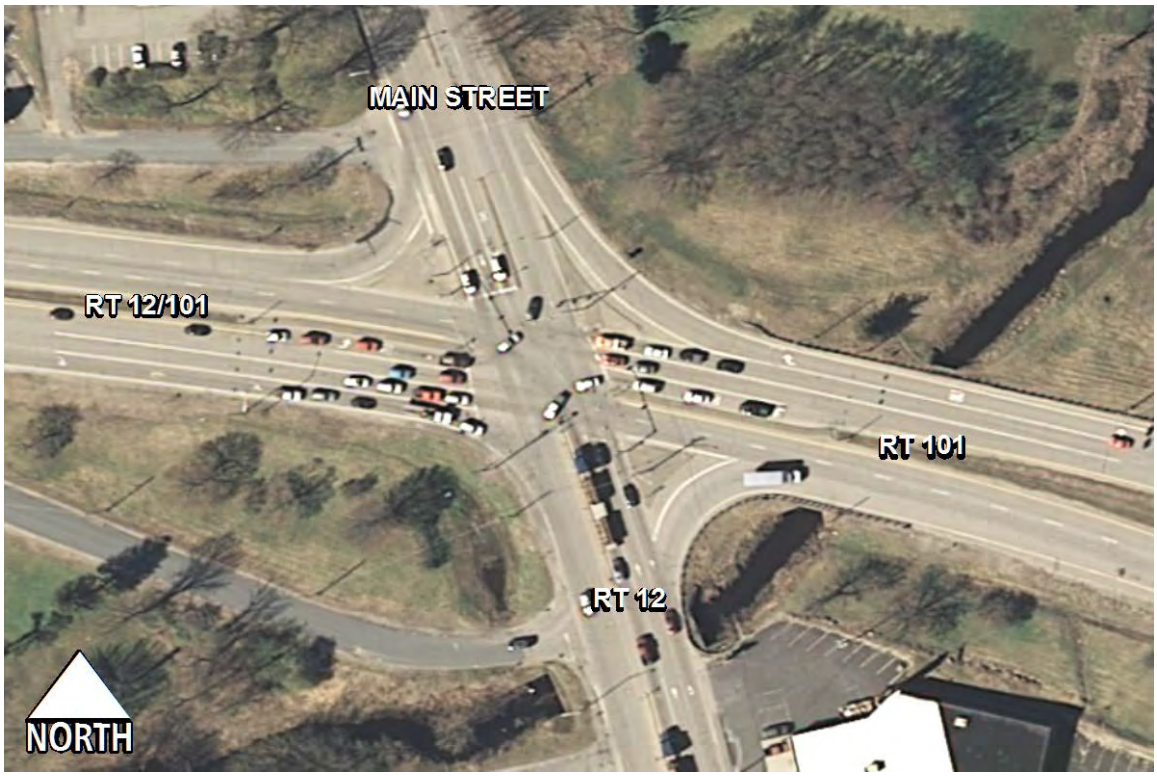
- Each variable width plot is oriented north and all approaches and directions of travel are noted. They provide a quick way to interpret traffic patterns and driver decisions for each intersection approach and direction in a certain period of time. The thickness of the line is adjusted proportionately to the number of vehicles turning left, turning right, or continuing straight through. For each approach (north, south, east, west), both entering and exiting traffic flows are represented by these variable width lines. Take the AM variable width plot on the following page as an example and look to the bottom right side. This flow represents all northbound traffic on Route 12 between 7:30 and 8:30 a.m. During this time period, 71 vehicles turned right onto NH 101 (eastbound), 556 vehicles continued north onto Main Street, and 400 vehicles turned left onto NH 101 (westbound). The total number of northbound vehicles at this approach was 1,027.

- During each study, heavy duty vehicle classes were collected separately for inputs into intersection level of service calculations.

- Data for the Swanzey Factory Road/Lake Street intersection was collected and provided by NHDOT.

NH 12 at NH 101 & Main Street

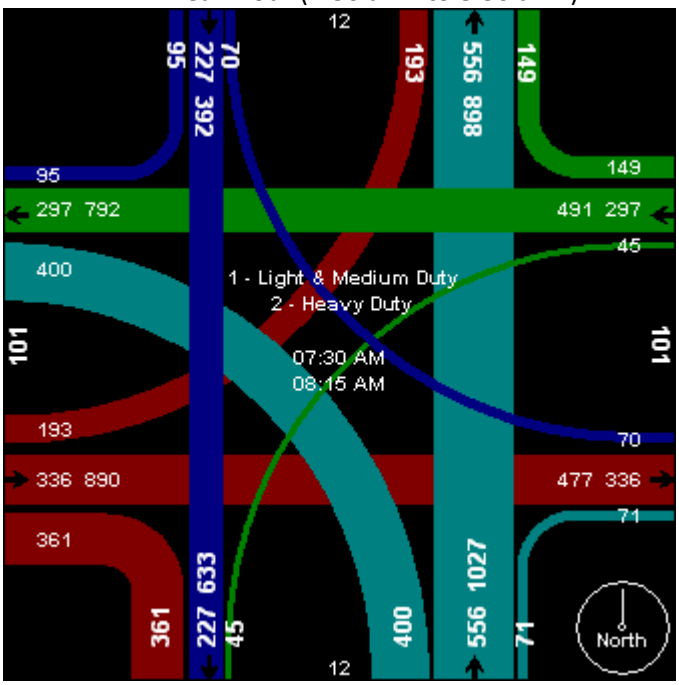
Aerial View



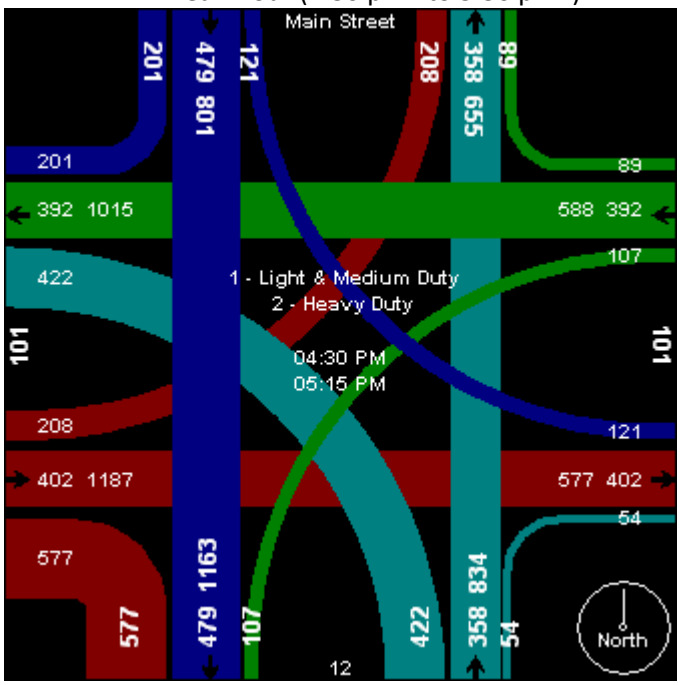
Source: Spring 2010 Color Aerial Photo, NH Department of Transportation

Variable Width Plot

AM – Peak Hour (7:30 a.m. to 8:30 a.m.)



PM – Peak Hour (4:30 p.m. to 5:30 p.m.)



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

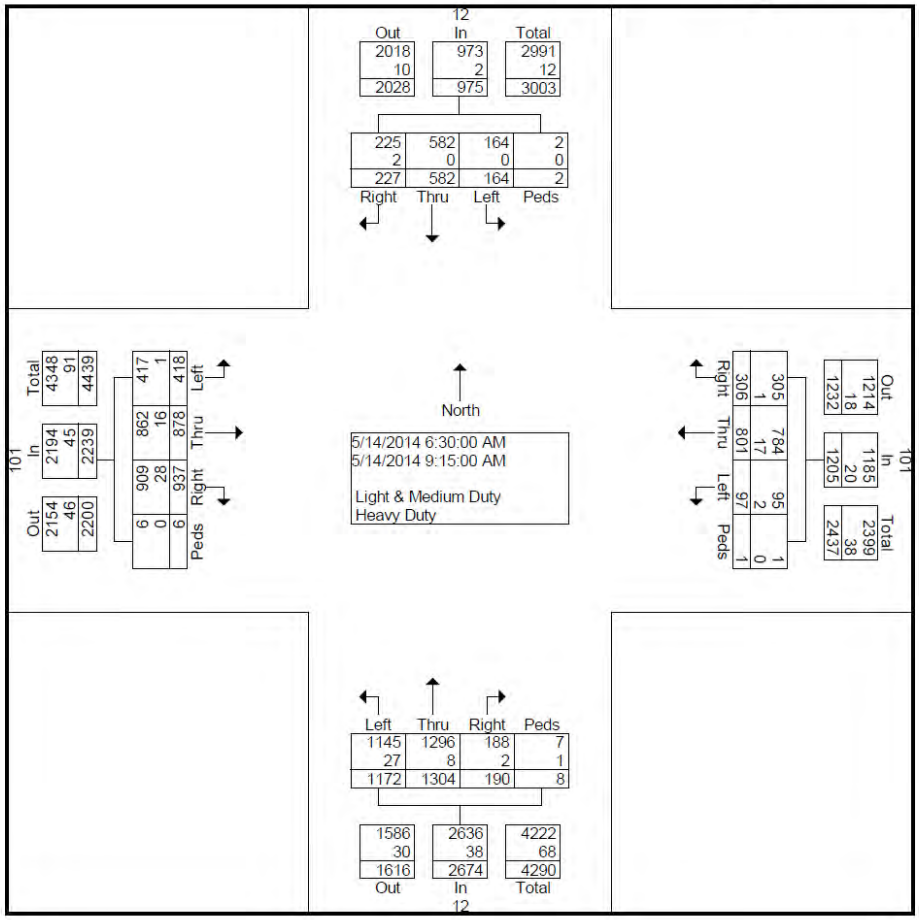
File Name : RT12_RT101_AM_MERGE
Site Code : 00000000
Start Date : 5/14/2014
Page No : 1

Groups Printed- Light & Medium Duty - Heavy Duty

	12 From North					101 From East					12 From South					101 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30 AM	8	25	7	0	40	22	60	2	0	84	16	75	107	1	199	50	54	17	1	122	445
06:45 AM	16	56	20	0	92	26	89	3	0	118	25	88	106	0	219	73	72	20	0	165	594
Total	24	81	27	0	132	48	149	5	0	202	41	163	213	1	418	123	126	37	1	287	1039
07:00 AM	25	54	21	0	100	14	83	7	0	104	11	68	93	1	173	64	61	31	0	156	533
07:15 AM	26	51	9	0	86	26	80	14	0	120	18	123	114	1	256	63	78	36	0	177	639
07:30 AM	30	55	19	1	105	35	70	16	1	122	17	119	107	1	244	98	94	27	0	219	690
07:45 AM	24	64	17	0	105	53	87	10	0	150	17	177	109	0	303	99	78	46	2	225	783
Total	105	224	66	1	396	128	320	47	1	496	63	487	423	3	976	324	311	140	2	777	2645
08:00 AM	19	53	19	0	91	32	71	6	0	109	17	112	82	1	212	79	84	51	0	214	626
08:15 AM	22	55	15	0	92	29	69	13	0	111	20	148	102	2	272	85	80	69	0	234	709
08:30 AM	22	50	12	0	84	27	56	10	0	93	15	116	109	1	241	68	90	45	0	203	621
08:45 AM	20	57	15	0	92	24	72	7	0	103	15	107	84	0	206	86	65	29	2	182	583
Total	83	215	61	0	359	112	268	36	0	416	67	483	377	4	931	318	319	194	2	833	2539
09:00 AM	15	62	10	1	88	18	64	9	0	91	12	88	81	0	181	99	76	29	0	204	564
09:15 AM	0	0	0	0	0	0	0	0	0	0	7	83	78	0	168	73	46	18	1	138	306
Grand Total	227	582	164	2	975	306	801	97	1	1205	190	1304	1172	8	2674	937	878	418	6	2239	7093
Apprch %	23.3	59.7	16.8	0.2		25.4	66.5	8.0	0.1		7.1	48.8	43.8	0.3		41.8	39.2	18.7	0.3		
Total %	3.2	8.2	2.3	0.0	13.7	4.3	11.3	1.4	0.0	17.0	2.7	18.4	16.5	0.1	37.7	13.2	12.4	5.9	0.1	31.6	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : RT12_RT101_AM_MERGE
Site Code : 00000000
Start Date : 5/14/2014
Page No : 2



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : RT12_RT101_AM_MERGE
Site Code : 00000000
Start Date : 5/14/2014
Page No : 3

	12 From North					101 From East					12 From South					101 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	95	227	70	1	393	149	297	45	1	492	71	556	400	4	1031	361	336	193	2	892	2808
Percent	24.2	57.8	17.8	0.3		30.3	60.4	9.1	0.2		6.9	53.9	38.8	0.4		40.5	37.7	21.6	0.2		
07:45 Volume	24	64	17	0	105	53	87	10	0	150	17	177	109	0	303	99	78	46	2	225	783
Peak Factor																					0.897
High Int.	07:30 AM					07:45 AM					07:45 AM					08:15 AM					
Volume	30	55	19	1	105	53	87	10	0	150	17	177	109	0	303	85	80	69	0	234	
Peak Factor					0.936					0.820					0.851					0.953	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : RT12_RT101_PM_MERGE
Site Code : 00000000
Start Date : 5/13/2014
Page No : 1

Groups Printed- Light & Medium Duty - Heavy Duty

	Main Street From North					101 From East					12 From South					101 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:30 PM	32	97	42	0	171	19	74	19	2	114	8	82	76	0	166	143	80	50	0	273	724
03:45 PM	42	87	29	0	158	20	80	10	0	110	16	87	105	0	208	144	94	44	0	282	758
Total	74	184	71	0	329	39	154	29	2	224	24	169	181	0	374	287	174	94	0	555	1482
04:00 PM	56	99	28	0	183	20	122	33	0	175	8	83	124	1	216	166	74	42	1	283	857
04:15 PM	71	113	23	0	207	16	84	8	0	108	12	86	99	1	198	173	106	30	0	309	822
04:30 PM	62	122	28	0	212	18	83	33	0	134	12	86	104	1	203	140	77	47	2	266	815
04:45 PM	30	120	26	0	176	14	84	21	0	119	13	93	101	0	207	145	91	54	0	290	792
Total	219	454	105	0	778	68	373	95	0	536	45	348	428	3	824	624	348	173	3	1148	3286
05:00 PM	57	115	37	0	209	33	128	25	0	186	16	100	118	0	234	153	116	51	1	321	950
05:15 PM	52	122	30	0	204	24	97	28	0	149	13	79	99	0	191	139	118	56	0	313	857
05:30 PM	34	93	20	1	148	21	101	15	0	137	12	95	94	0	201	113	91	40	1	245	731
05:45 PM	44	80	17	0	141	17	71	17	0	105	15	96	131	0	242	115	84	36	0	235	723
Total	187	410	104	1	702	95	397	85	0	577	56	370	442	0	868	520	409	183	2	1114	3261
06:00 PM	21	55	38	0	114	9	63	14	0	86	4	88	114	0	206	121	73	33	0	227	633
06:15 PM	0	0	0	0	0	0	0	0	0	0	7	43	61	0	111	99	52	26	0	177	288
Grand Total	501	1103	318	1	1923	211	987	223	2	1423	136	1018	1226	3	2383	1651	1056	509	5	3221	8950
Apprch %	26.1	57.4	16.5	0.1		14.8	69.4	15.7	0.1		5.7	42.7	51.4	0.1		51.3	32.8	15.8	0.2		
Total %	5.6	12.3	3.6	0.0	21.5	2.4	11.0	2.5	0.0	15.9	1.5	11.4	13.7	0.0	26.6	18.4	11.8	5.7	0.1	36.0	

Southwest Region Planning Commission
37 Ashuelot Street
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File Name : RT12_RT101_PM_MERGE
Site Code : 00000000
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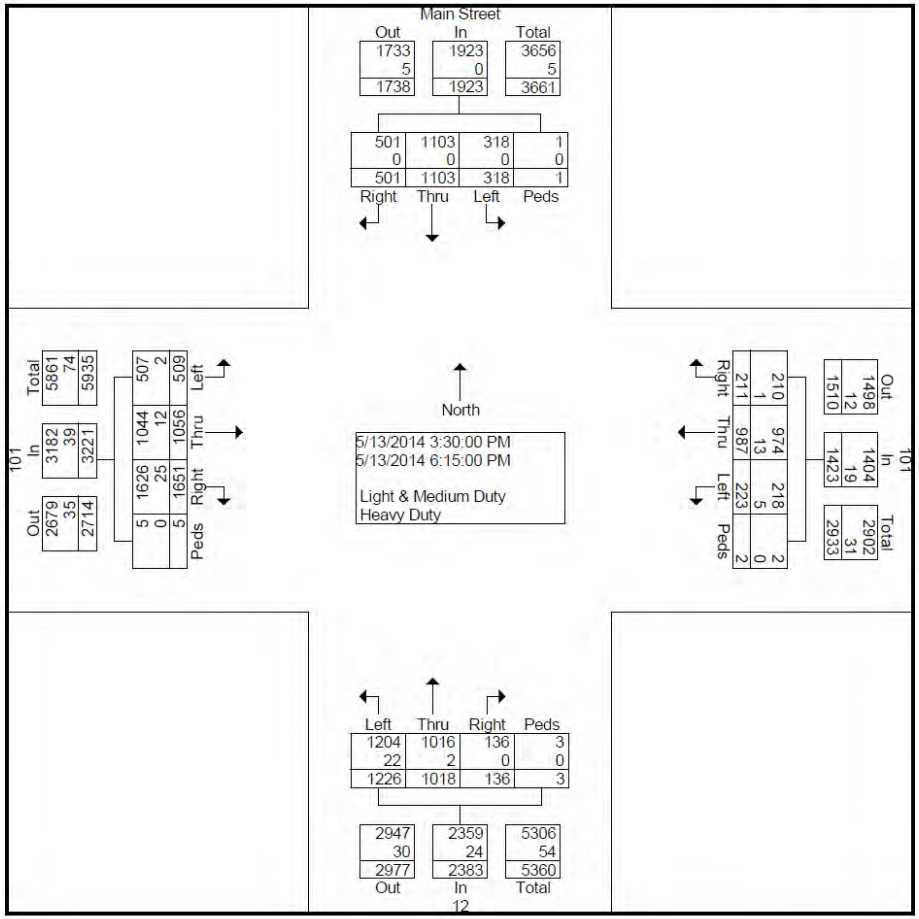


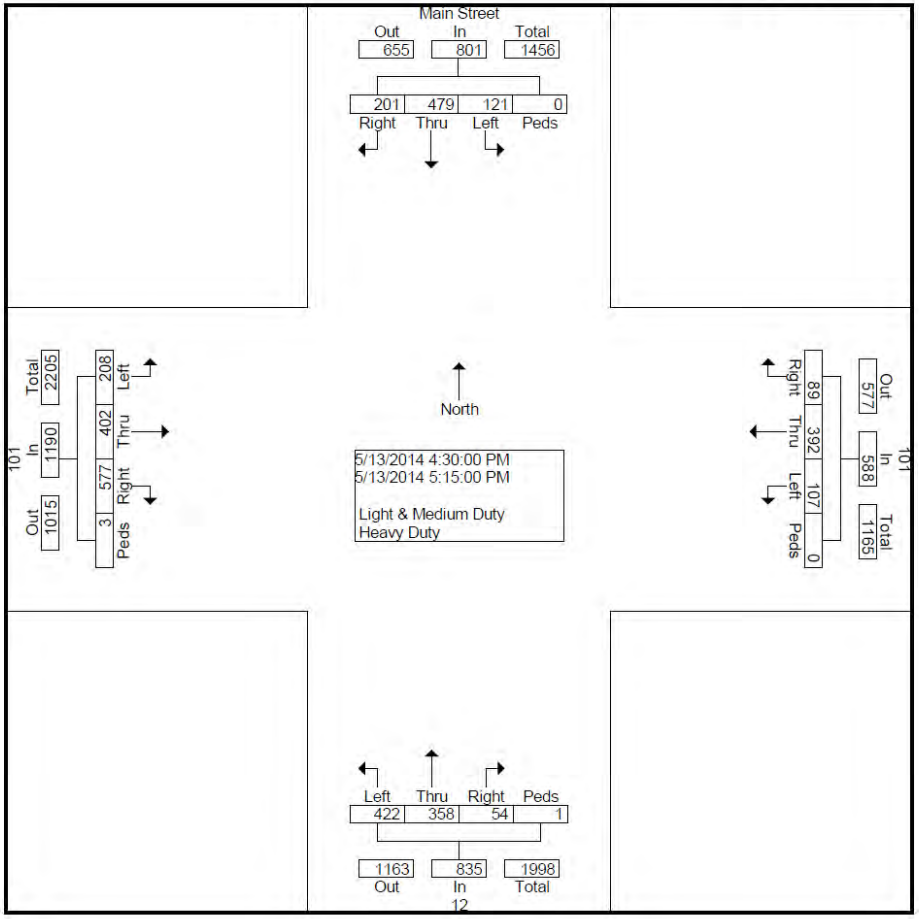
Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : RT12_RT101_PM_MERGE
Site Code : 00000000
Start Date : 5/13/2014
Page No : 3

	Main Street From North					101 From East					12 From South					101 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 03:30 PM to 06:15 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	201	479	121	0	801	89	392	107	0	588	54	358	422	1	835	577	402	208	3	1190	3414
Percent	25.1	59.8	15.1	0.0		15.1	66.7	18.2	0.0		6.5	42.9	50.5	0.1		48.5	33.8	17.5	0.3		
05:00 Volume	57	115	37	0	209	33	128	25	0	186	16	100	118	0	234	153	116	51	1	321	950
Peak Factor																					0.898
High Int.	04:30 PM					05:00 PM					05:00 PM					05:00 PM					
Volume	62	122	28	0	212	33	128	25	0	186	16	100	118	0	234	153	116	51	1	321	
Peak Factor					0.945					0.790					0.892					0.927	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : RT12_RT101_PM_MERGE
Site Code : 00000000
Start Date : 5/13/2014
Page No : 4



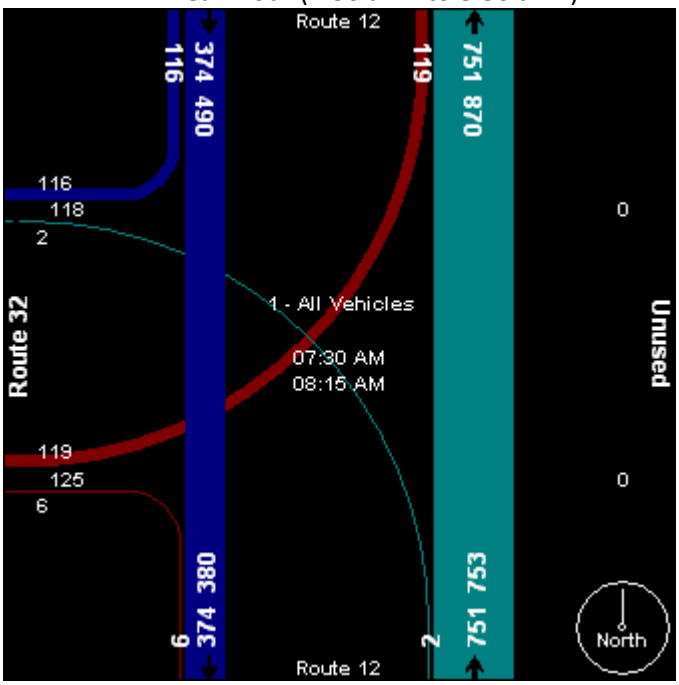
NH 12 at NH 32, Keene

Aerial View

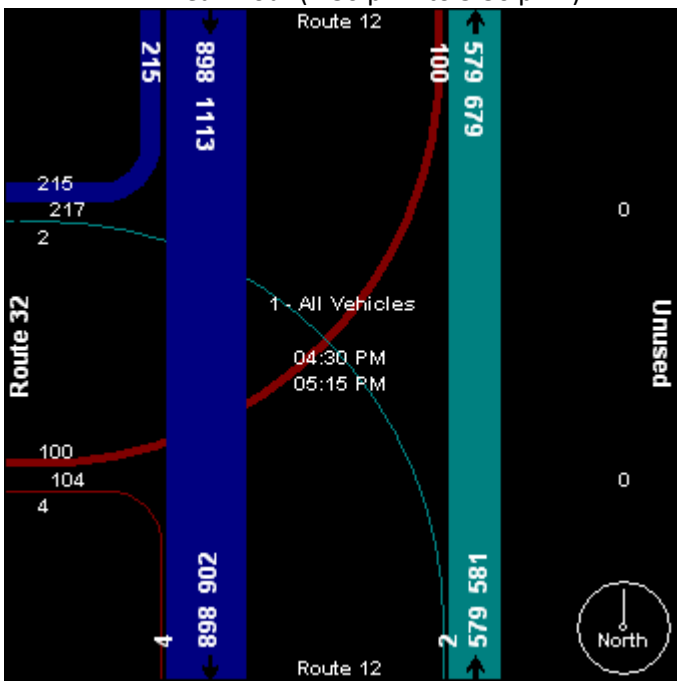
Source: Spring 2010 Color Aerial Photo, NH Department of Transportation

Variable Width Plot

AM – Peak Hour (7:30 a.m. to 8:30 a.m.)



PM – Peak Hour (4:30 p.m. to 5:30 p.m.)



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

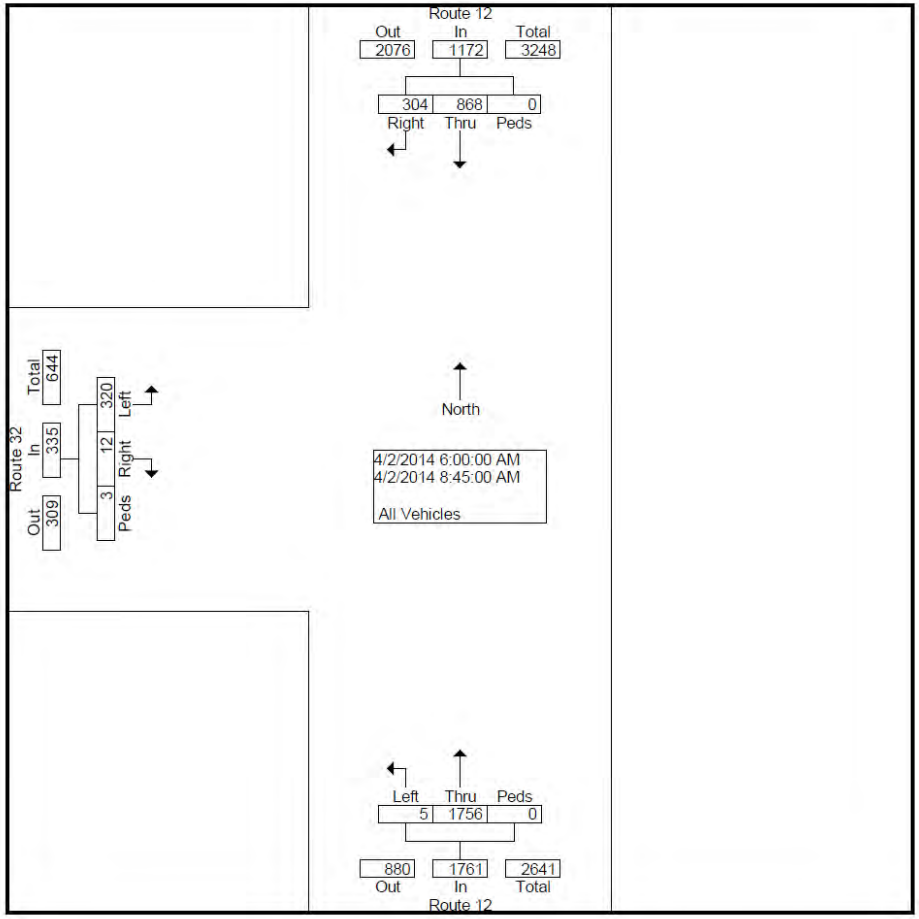
File Name : 040214_AM
Site Code : 00000000
Start Date : 4/2/2014
Page No : 1

Groups Printed- All Vehicles

	Route 12 From North					Unused From East					Route 12 From South					Route 32 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 AM	8	35	0	0	43	0	0	0	0	0	0	57	0	0	57	1	0	6	0	7	107
06:15 AM	15	33	0	0	48	0	0	0	0	0	0	74	0	0	74	0	0	14	0	14	136
06:30 AM	15	46	0	0	61	0	0	0	0	0	0	131	1	0	132	0	0	26	0	26	219
06:45 AM	32	46	0	0	78	0	0	0	0	0	0	161	1	0	162	0	0	33	0	33	273
Total	70	160	0	0	230	0	0	0	0	0	0	423	2	0	425	1	0	79	0	80	735
07:00 AM	29	74	0	0	103	0	0	0	0	0	0	137	0	0	137	1	0	23	0	24	264
07:15 AM	21	88	0	0	109	0	0	0	0	0	0	145	0	0	145	1	0	33	0	34	288
07:30 AM	31	95	0	0	126	0	0	0	0	0	0	214	0	0	214	1	0	34	0	35	375
07:45 AM	30	110	0	0	140	0	0	0	0	0	0	220	0	0	220	1	0	31	3	35	395
Total	111	367	0	0	478	0	0	0	0	0	0	716	0	0	716	4	0	121	3	128	1322
08:00 AM	27	97	0	0	124	0	0	0	0	0	0	130	1	0	131	1	0	21	0	22	277
08:15 AM	28	72	0	0	100	0	0	0	0	0	0	187	1	0	188	3	0	33	0	36	324
08:30 AM	31	83	0	0	114	0	0	0	0	0	0	161	1	0	162	2	0	35	0	37	313
08:45 AM	37	89	0	0	126	0	0	0	0	0	0	139	0	0	139	1	0	31	0	32	297
Total	123	341	0	0	464	0	0	0	0	0	0	617	3	0	620	7	0	120	0	127	1211
Grand Total	304	868	0	0	1172	0	0	0	0	0	0	1756	5	0	1761	12	0	320	3	335	3268
Apprch %	25.9	74.1	0.0	0.0		0.0	0.0	0.0	0.0		0.0	99.7	0.3	0.0		3.6	0.0	95.5	0.9		
Total %	9.3	26.6	0.0	0.0	35.9	0.0	0.0	0.0	0.0	0.0	0.0	53.7	0.2	0.0	53.9	0.4	0.0	9.8	0.1	10.3	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 040214_AM
Site Code : 00000000
Start Date : 4/2/2014
Page No : 2



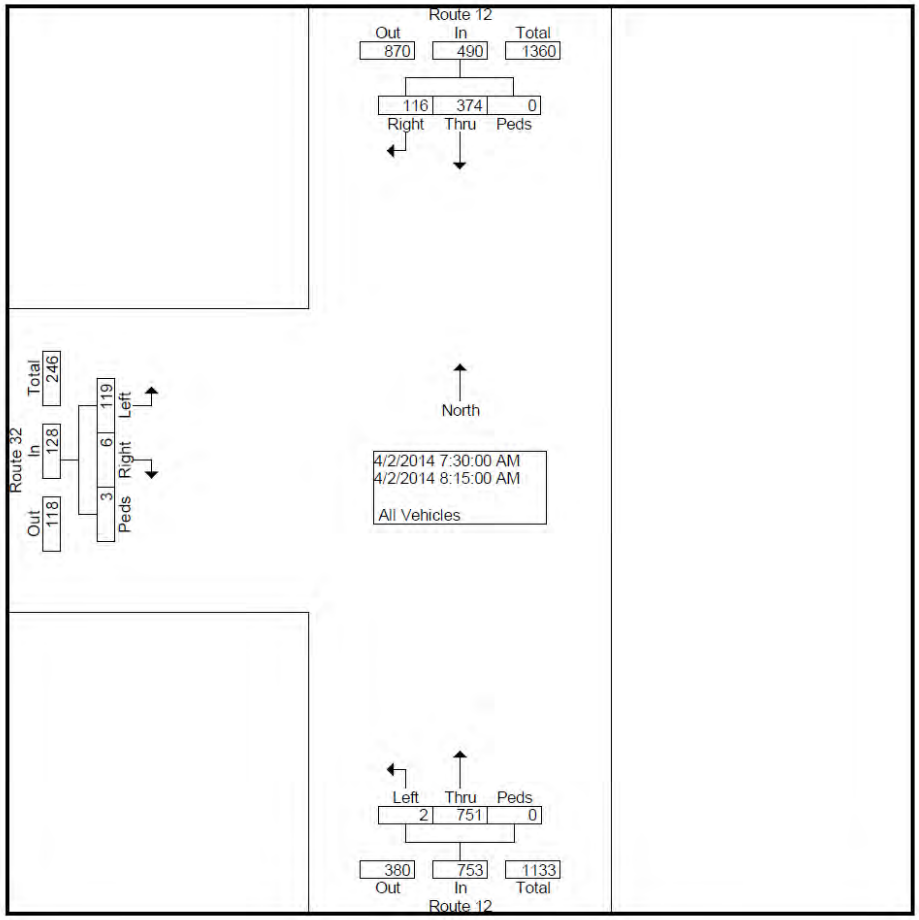
Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 040214_AM
Site Code : 00000000
Start Date : 4/2/2014
Page No : 3

	Route 12 From North					Unused From East					Route 12 From South					Route 32 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	116	374	0	0	490	0	0	0	0	0	0	751	2	0	753	6	0	119	3	128	1371
Percent	23.7	76.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	99.7	0.3	0.0		4.7	0.0	93.0	2.3		
07:45 Volume	30	110	0	0	140	0	0	0	0	0	0	220	0	0	220	1	0	31	3	35	395
Peak Factor																					0.868
High Int.	07:45 AM					5:45:00 AM					07:45 AM					08:15 AM					
Volume	30	110	0	0	140	0	0	0	0	0	0	220	0	0	220	3	0	33	0	36	
Peak Factor					0.875										0.856					0.889	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 040214_AM
Site Code : 00000000
Start Date : 4/2/2014
Page No : 4



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 040314_PM
Site Code : 00000000
Start Date : 4/3/2014
Page No : 1

Groups Printed- All Vehicles

	Route 12 From North					Unused From East					Route 12 From South					Route 32 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:00 PM	48	164	0	0	212	0	0	0	0	0	0	122	1	0	123	3	0	40	0	43	378
03:15 PM	53	164	0	0	217	0	0	0	0	0	0	132	0	0	132	2	0	30	0	32	381
03:30 PM	47	171	0	0	218	0	0	0	0	0	0	160	1	0	161	2	0	35	0	37	416
03:45 PM	49	153	0	0	202	0	0	0	0	0	0	127	0	0	127	2	0	29	0	31	360
Total	197	652	0	0	849	0	0	0	0	0	0	541	2	0	543	9	0	134	0	143	1535
04:00 PM	70	176	0	0	246	0	0	0	0	0	0	139	1	0	140	4	0	33	0	37	423
04:15 PM	53	175	0	0	228	0	0	0	0	0	0	166	0	0	166	4	0	34	0	38	432
04:30 PM	54	221	0	0	275	0	0	0	0	0	0	169	0	0	169	1	0	23	0	24	468
04:45 PM	34	203	0	0	237	0	0	0	0	0	0	134	2	0	136	1	0	24	0	25	398
Total	211	775	0	0	986	0	0	0	0	0	0	608	3	0	611	10	0	114	0	124	1721
05:00 PM	52	256	0	0	308	0	0	0	0	0	0	153	0	0	153	0	0	26	0	26	487
05:15 PM	75	218	0	0	293	0	0	0	0	0	0	123	0	0	123	2	0	27	0	29	445
05:30 PM	58	194	0	0	252	0	0	0	0	0	0	120	4	0	124	2	0	25	0	27	403
05:45 PM	52	159	0	0	211	0	0	0	0	0	0	102	1	0	103	3	0	24	0	27	341
Total	237	827	0	0	1064	0	0	0	0	0	0	498	5	0	503	7	0	102	0	109	1676
Grand Total	645	2254	0	0	2899	0	0	0	0	0	0	1647	10	0	1657	26	0	350	0	376	4932
Apprch %	22.2	77.8	0.0	0.0		0.0	0.0	0.0	0.0		0.0	99.4	0.6	0.0		6.9	0.0	93.1	0.0		
Total %	13.1	45.7	0.0	0.0	58.8	0.0	0.0	0.0	0.0	0.0	0.0	33.4	0.2	0.0	33.6	0.5	0.0	7.1	0.0	7.6	

Southwest Region Planning Commission
37 Ashuelot Street
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File Name : 040314_PM
Site Code : 00000000
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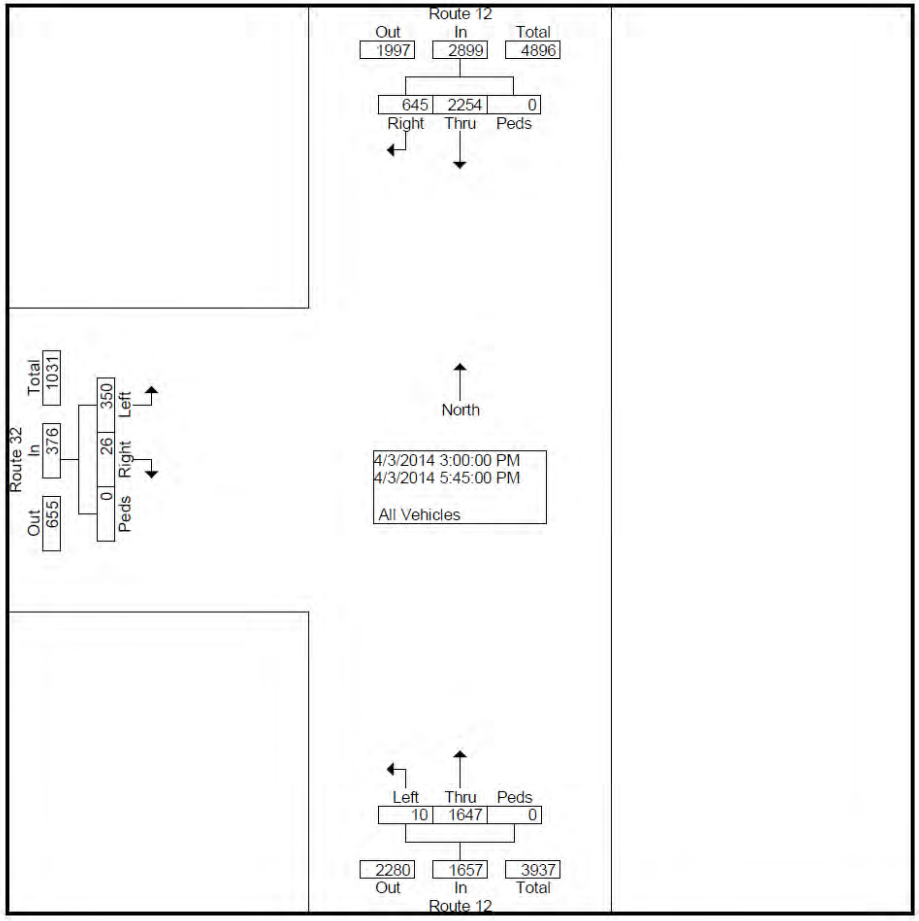


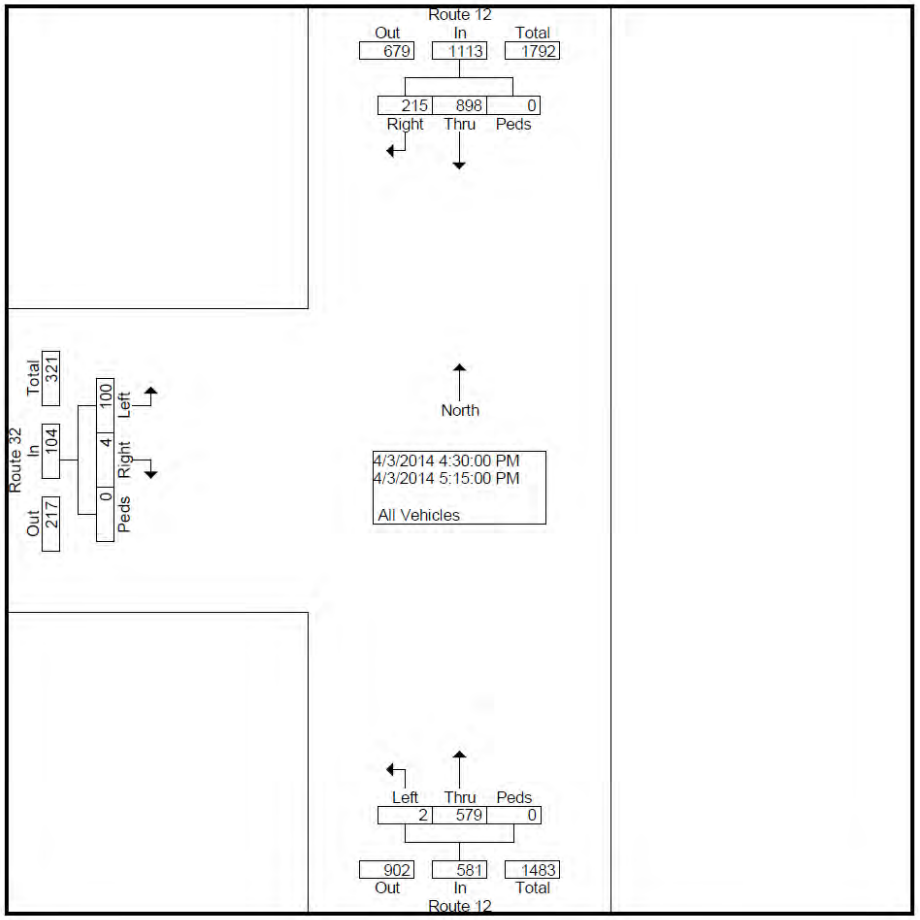
Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 040314_PM
Site Code : 00000000
Start Date : 4/3/2014
Page No : 3

	Route 12 From North					Unused From East					Route 12 From South					Route 32 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	215	898	0	0	1113	0	0	0	0	0	0	579	2	0	581	4	0	100	0	104	1798
Percent	19.3	80.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	99.7	0.3	0.0		3.8	0.0	96.2	0.0		
05:00 Volume	52	256	0	0	308	0	0	0	0	0	0	153	0	0	153	0	0	26	0	26	487
Peak Factor																					0.923
High Int.	05:00 PM					2:45:00 PM					04:30 PM					05:15 PM					
Volume	52	256	0	0	308	0	0	0	0	0	0	169	0	0	169	2	0	27	0	29	
Peak Factor					0.903										0.859					0.897	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 040314_PM
Site Code : 00000000
Start Date : 4/3/2014
Page No : 4



NH 12 at Swanzey Factory Road & Lake Street, Swanzey

Aerial View

Source: Spring 2010 Color Aerial Photo, NH Department of Transportation

STATE OF NEW HAMPSHIRE

-INTRA-DEPARTMENT COMMUNICATION-

FROM: Robert E. Bollinger, P.E., PTOE

DATE: May 13, 2014

AT OFFICE:
Department of Transportation
Bureau of Traffic

SUBJECT: Traffic Data

TO: Lucas A. Siik
Bureau of Highway Design

The following traffic data is provided per your request of: April 15, 2014

I. PROJECT INFORMATION

A. Town: Swanzey

B. Project No. 15697

C. Locations: NH 12 at Swanzey Factory Rd. & Lake St.

D. Growth Rate: 1.0% per year

II. TRAFFIC INFORMATION

A. [X] See attached sheet(s)

B. Mean Year ADL =

350 at Location: NH 12 at Swanzey Factory Rd. & Lake St. # Lanes = 2

C. Percent Trucks:

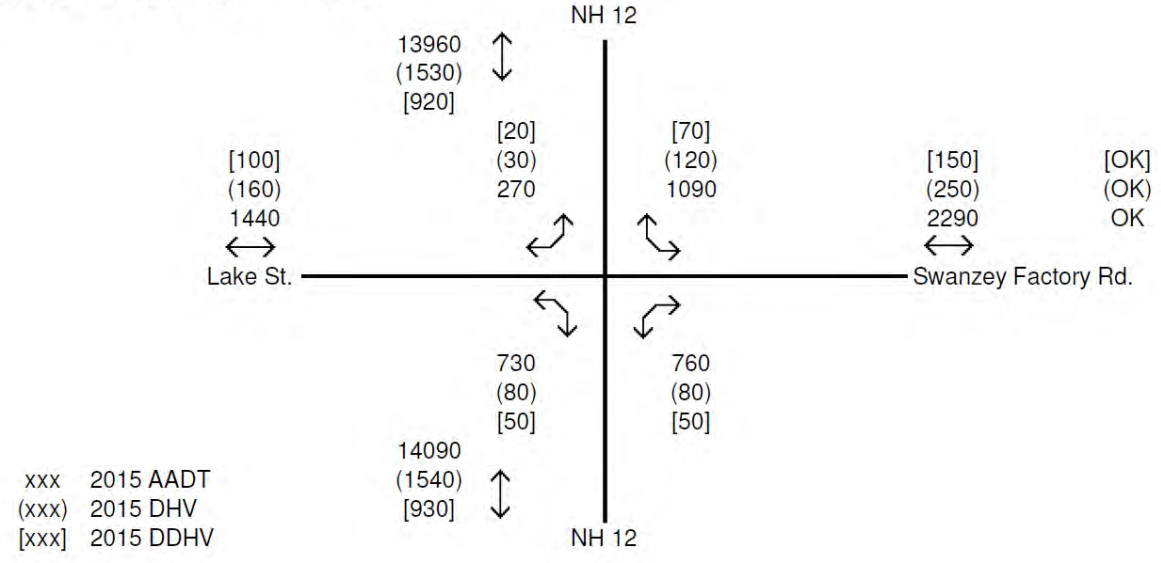
2.2 % DHV; 7.3 % AADT at Location: NH 12 at Swanzey Factory Rd. & Lake St.

Calculations by: REB
Checked by: _____

Fcst Years

Swanzey - 15697

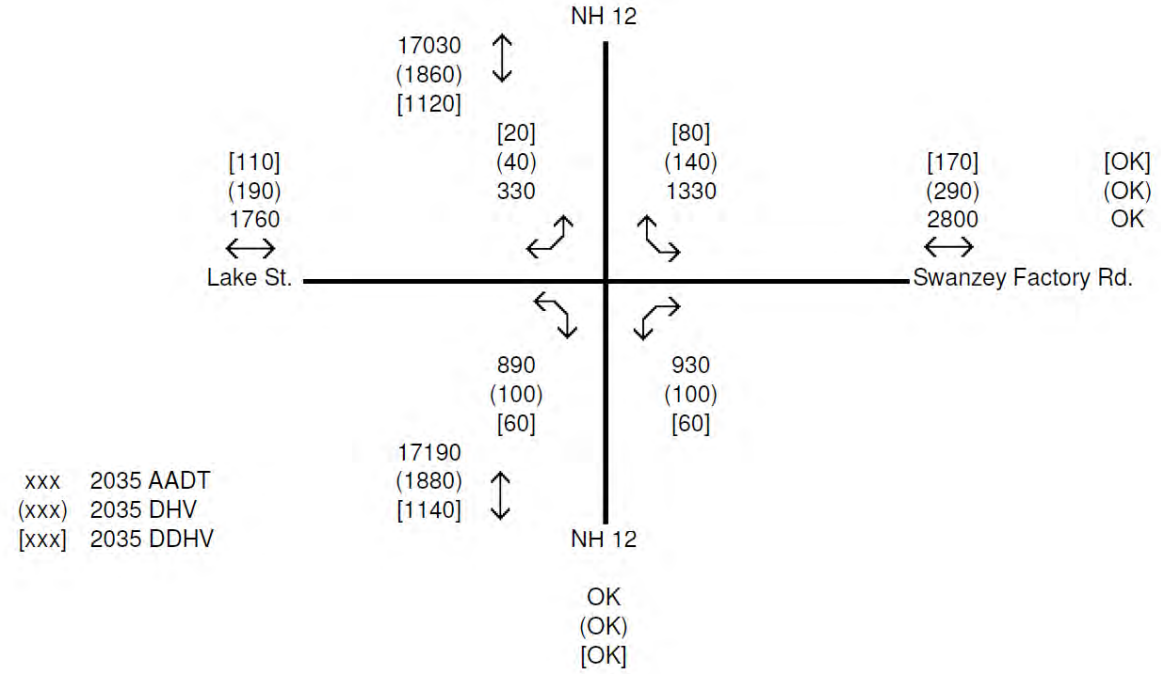
FORECAST VOLUMES **2015**



xxx 2015 AADT
(xxx) 2015 DHV
[xxx] 2015 DDHV

OK
(OK)
[OK]

FORECAST VOLUMES **2035**



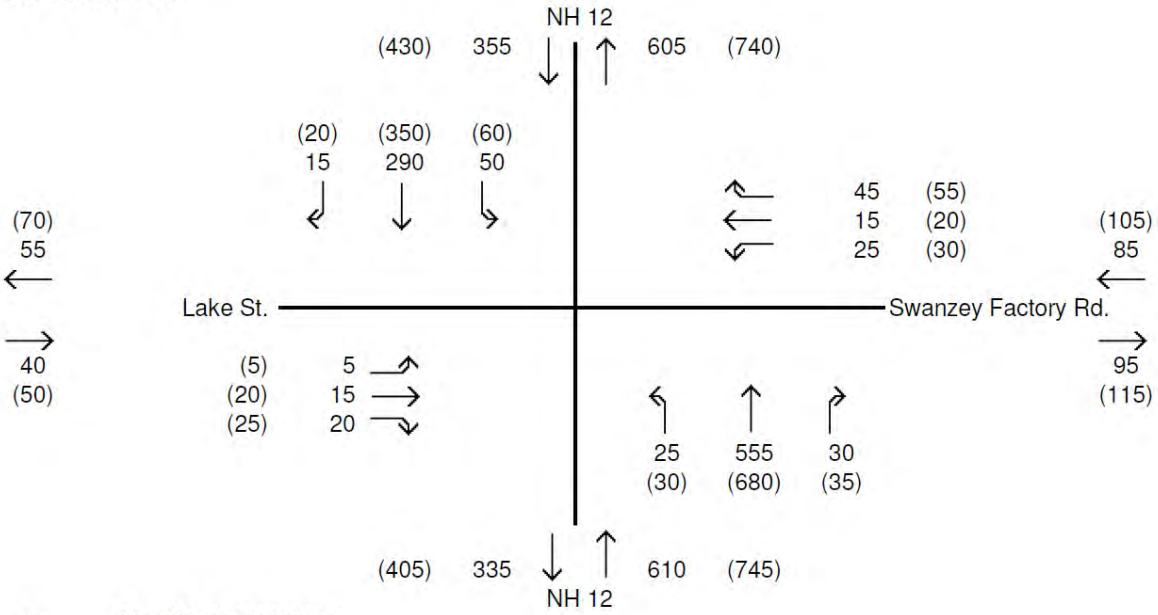
xxx 2035 AADT
(xxx) 2035 DHV
[xxx] 2035 DDHV

OK
(OK)
[OK]

AM Pk Fcst

Swanzey - 15697

AM PEAK HOUR

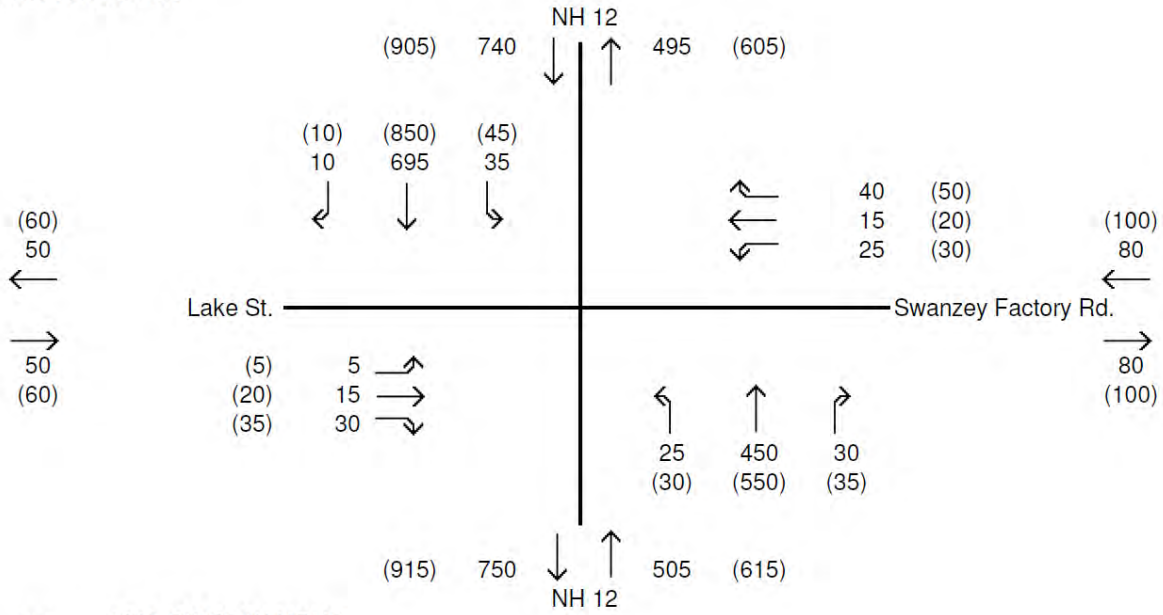


xxx 2015 AM PEAK HOUR
(xxx) 2035 AM PEAK HOUR

PM Pk Fcst

Swanzey - 15697

PM PEAK HOUR



xxx 2015 PM PEAK HOUR
(xxx) 2035 PM PEAK HOUR

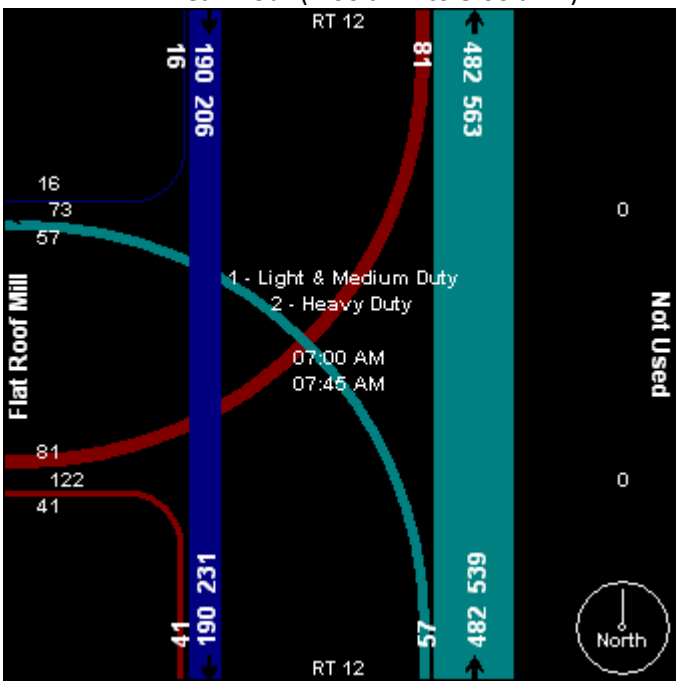
NH 12 at Flat Roof Mill Road, Swanzey

Aerial View

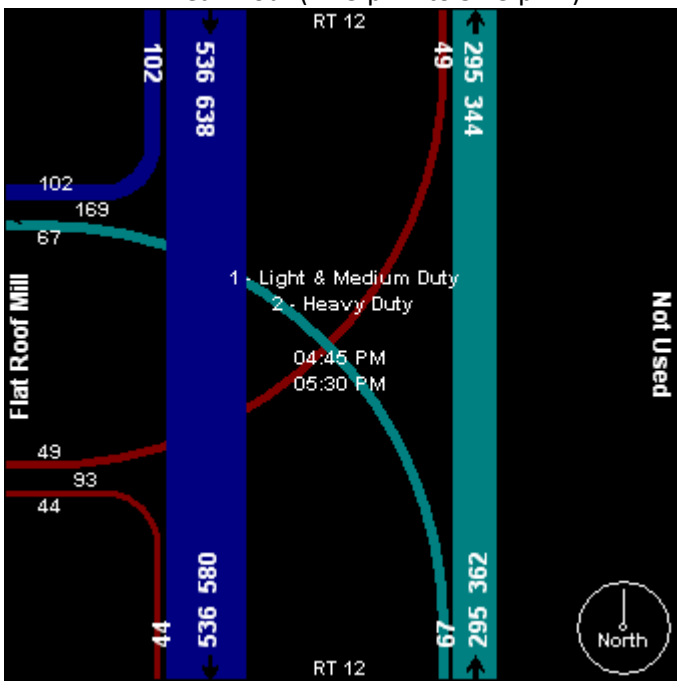
Source: Spring 2010 Color Aerial Photo, NH Department of Transportation

Variable Width Plot

AM – Peak Hour (7:00 a.m. to 8:00 a.m.)



PM – Peak Hour (4:45 p.m. to 5:45 p.m.)



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

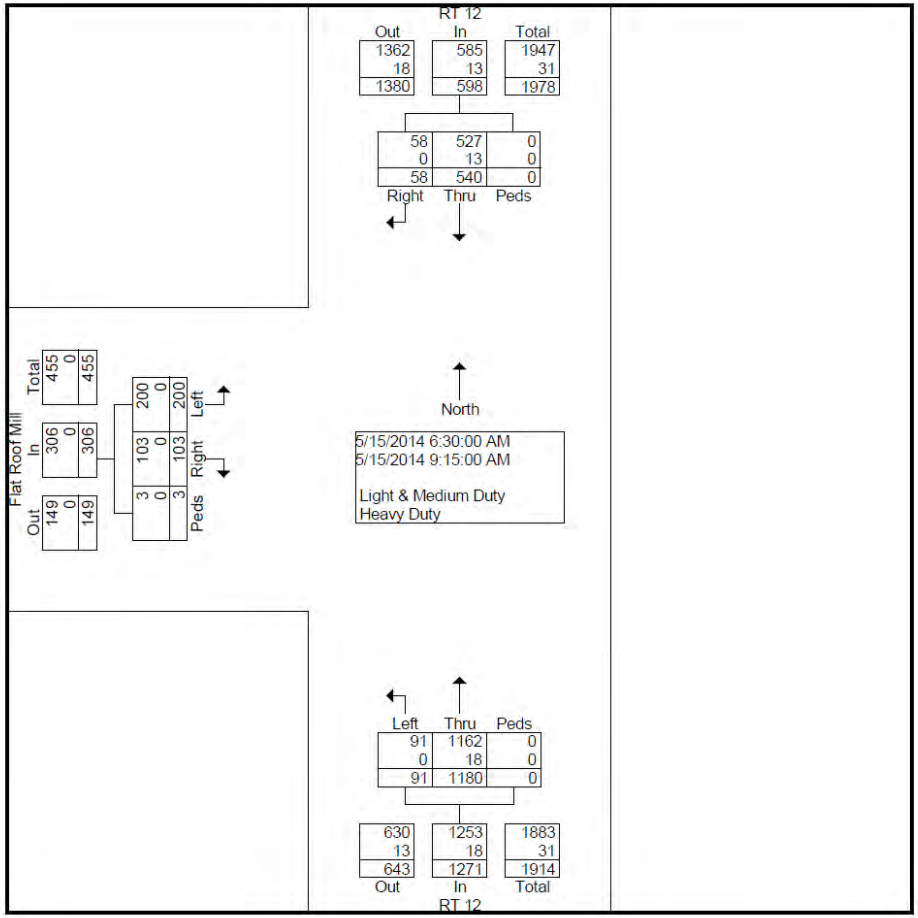
File Name : 051514AM
Site Code : 00000000
Start Date : 5/15/2014
Page No : 1

Groups Printed- Light & Medium Duty - Heavy Duty

	RT 12 From North					Not Used From East					RT 12 From South					Flat Roof Mill From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	3	34	0	0	37	0	0	0	0	0	0	100	7	0	107	7	0	19	0	26	170
06:45 AM	2	31	0	0	33	0	0	0	0	0	0	99	6	0	105	9	0	20	0	29	167
Total	5	65	0	0	70	0	0	0	0	0	0	199	13	0	212	16	0	39	0	55	337
07:00 AM	2	43	0	0	45	0	0	0	0	0	0	109	21	0	130	12	0	17	1	30	205
07:15 AM	4	60	0	0	64	0	0	0	0	0	0	121	11	0	132	9	0	21	1	31	227
07:30 AM	4	43	0	0	47	0	0	0	0	0	0	133	13	0	146	13	0	22	1	36	229
07:45 AM	6	44	0	0	50	0	0	0	0	0	0	119	12	0	131	7	0	21	0	28	209
Total	16	190	0	0	206	0	0	0	0	0	0	482	57	0	539	41	0	81	3	125	870
08:00 AM	5	56	0	0	61	0	0	0	0	0	0	102	6	0	108	7	0	21	0	28	197
08:15 AM	6	44	0	0	50	0	0	0	0	0	0	108	3	0	111	15	0	17	0	32	193
08:30 AM	5	49	0	0	54	0	0	0	0	0	0	103	4	0	107	7	0	13	0	20	181
08:45 AM	5	42	0	0	47	0	0	0	0	0	0	74	5	0	79	4	0	14	0	18	144
Total	21	191	0	0	212	0	0	0	0	0	0	387	18	0	405	33	0	65	0	98	715
09:00 AM	8	43	0	0	51	0	0	0	0	0	0	63	2	0	65	7	0	7	0	14	130
09:15 AM	8	51	0	0	59	0	0	0	0	0	0	49	1	0	50	6	0	8	0	14	123
Grand Total	58	540	0	0	598	0	0	0	0	0	0	1180	91	0	1271	103	0	200	3	306	2175
Apprch %	9.7	90.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	92.8	7.2	0.0		33.7	0.0	65.4	1.0		
Total %	2.7	24.8	0.0	0.0	27.5	0.0	0.0	0.0	0.0	0.0	0.0	54.3	4.2	0.0	58.4	4.7	0.0	9.2	0.1	14.1	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 051514AM
Site Code : 00000000
Start Date : 5/15/2014
Page No : 2



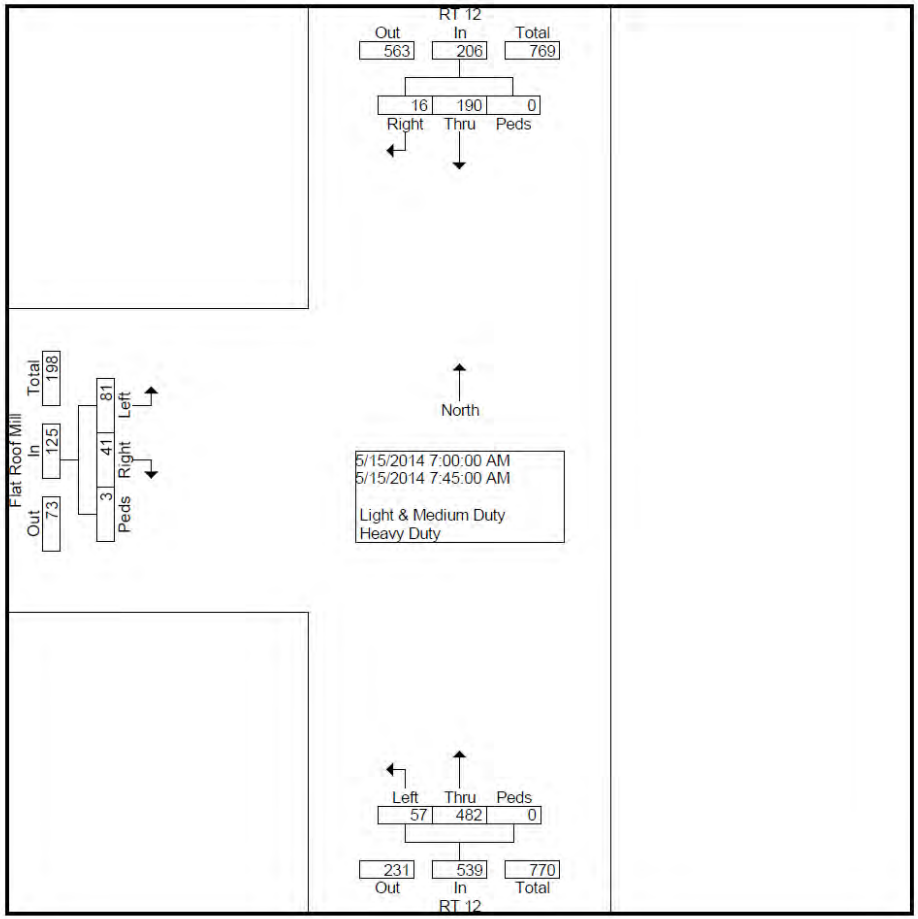
Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 051514AM
Site Code : 00000000
Start Date : 5/15/2014
Page No : 3

	RT 12 From North					Not Used From East					RT 12 From South					Flat Roof Mill From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	16	190	0	0	206	0	0	0	0	0	0	482	57	0	539	41	0	81	3	125	870
Percent	7.8	92.2	0.0	0.0		0.0	0.0	0.0	0.0		0.0	89.4	10.6	0.0		32.8	0.0	64.8	2.4		
07:30 Volume	4	43	0	0	47	0	0	0	0	0	0	133	13	0	146	13	0	22	1	36	229
Peak Factor																					0.950
High Int.	07:15 AM					6:15:00 AM					07:30 AM					07:30 AM					
Volume	4	60	0	0	64	0	0	0	0	0	0	133	13	0	146	13	0	22	1	36	
Peak Factor					0.805										0.923					0.868	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 051514AM
Site Code : 00000000
Start Date : 5/15/2014
Page No : 4



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 051514PM
Site Code : 00000000
Start Date : 5/15/2014
Page No : 1

Groups Printed- Light & Medium Duty - Heavy Duty

	RT 12 From North					Not Used From East					RT 12 From South					Flat Roof Mill From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:00 PM	15	82	0	0	97	0	0	0	0	0	0	60	7	0	67	10	0	8	0	18	182
03:15 PM	17	100	0	0	117	0	0	0	0	0	0	75	9	0	84	8	0	7	0	15	216
03:30 PM	11	89	0	0	100	0	0	0	0	0	1	77	7	0	85	7	0	13	0	20	205
03:45 PM	12	116	0	0	128	0	0	0	0	0	0	85	8	0	93	8	0	10	0	18	239
Total	55	387	0	0	442	0	0	0	0	0	1	297	31	0	329	33	0	38	0	71	842
04:00 PM	19	118	0	0	137	0	0	0	0	0	0	89	15	0	104	7	0	9	0	16	257
04:15 PM	26	138	0	0	164	0	0	0	0	0	0	77	9	0	86	5	0	14	0	19	269
04:30 PM	24	119	0	0	143	0	0	0	0	0	0	97	17	1	115	5	0	2	0	7	265
04:45 PM	26	120	0	0	146	0	0	0	0	0	0	79	21	0	100	9	0	14	0	23	269
Total	95	495	0	0	590	0	0	0	0	0	0	342	62	1	405	26	0	39	0	65	1060
05:00 PM	31	127	0	0	158	0	0	0	0	0	0	70	15	0	85	6	0	9	0	15	258
05:15 PM	27	147	0	0	174	0	0	0	0	0	0	72	14	0	86	13	0	14	0	27	287
05:30 PM	18	142	0	0	160	0	0	0	0	0	0	74	17	0	91	16	0	12	0	28	279
05:45 PM	23	98	0	0	121	0	0	0	0	0	0	52	18	0	70	9	0	17	0	26	217
Total	99	514	0	0	613	0	0	0	0	0	0	268	64	0	332	44	0	52	0	96	1041
Grand Total	249	1396	0	0	1645	0	0	0	0	0	1	907	157	1	1066	103	0	129	0	232	2943
Apprch %	15.1	84.9	0.0	0.0		0.0	0.0	0.0	0.0		0.1	85.1	14.7	0.1		44.4	0.0	55.6	0.0		
Total %	8.5	47.4	0.0	0.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	30.8	5.3	0.0	36.2	3.5	0.0	4.4	0.0	7.9	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 051514PM
Site Code : 00000000
Start Date : 5/15/2014
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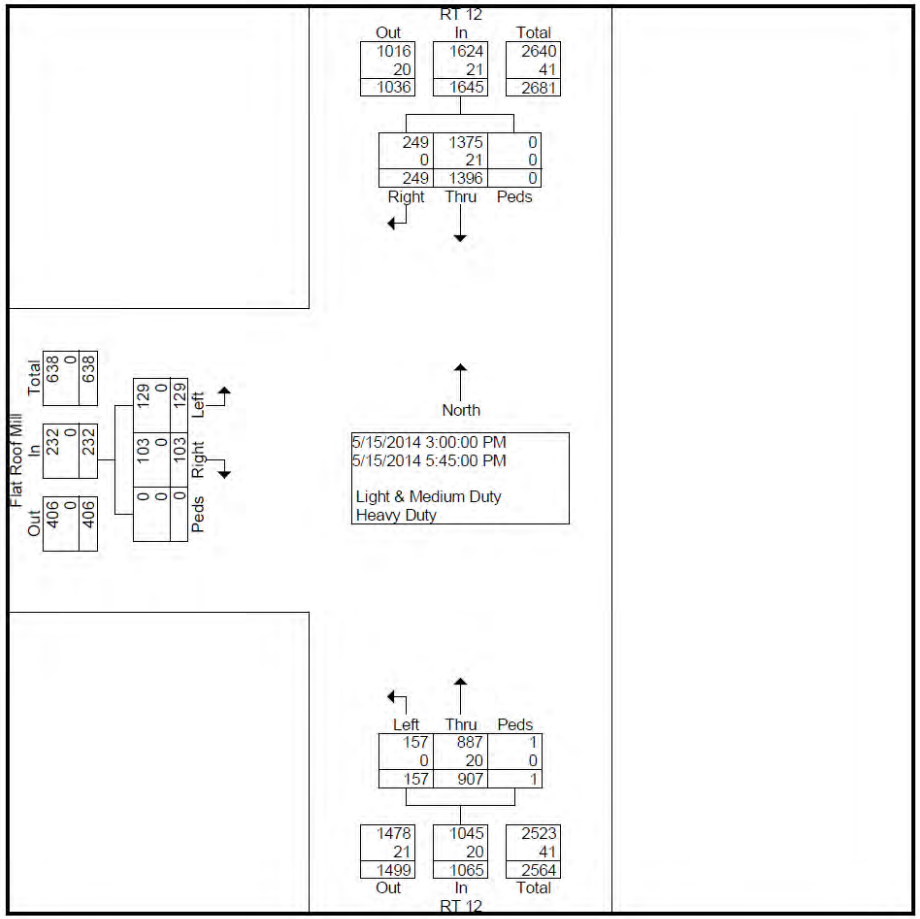


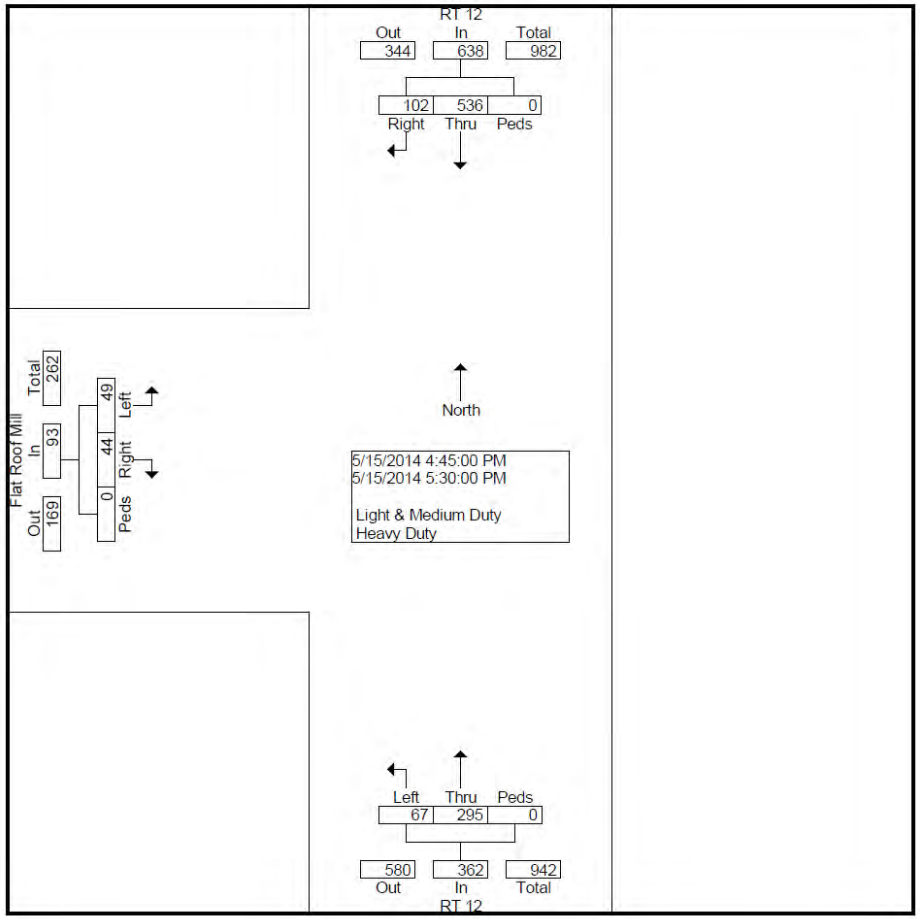
Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 051514PM
Site Code : 00000000
Start Date : 5/15/2014
Page No : 3

	RT 12 From North					Not Used From East					RT 12 From South					Flat Roof Mill From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection 04:45 PM																					
Volume	102	536	0	0	638	0	0	0	0	0	0	295	67	0	362	44	0	49	0	93	1093
Percent	16.0	84.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	81.5	18.5	0.0		47.3	0.0	52.7	0.0		
05:15 Volume	27	147	0	0	174	0	0	0	0	0	0	72	14	0	86	13	0	14	0	27	287
Peak Factor																					0.952
High Int.	05:15 PM					2:45:00 PM					04:45 PM					05:30 PM					
Volume	27	147	0	0	174	0	0	0	0	0	0	79	21	0	100	16	0	12	0	28	
Peak Factor					0.917										0.905					0.830	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 051514PM
Site Code : 00000000
Start Date : 5/15/2014
Page No : 4



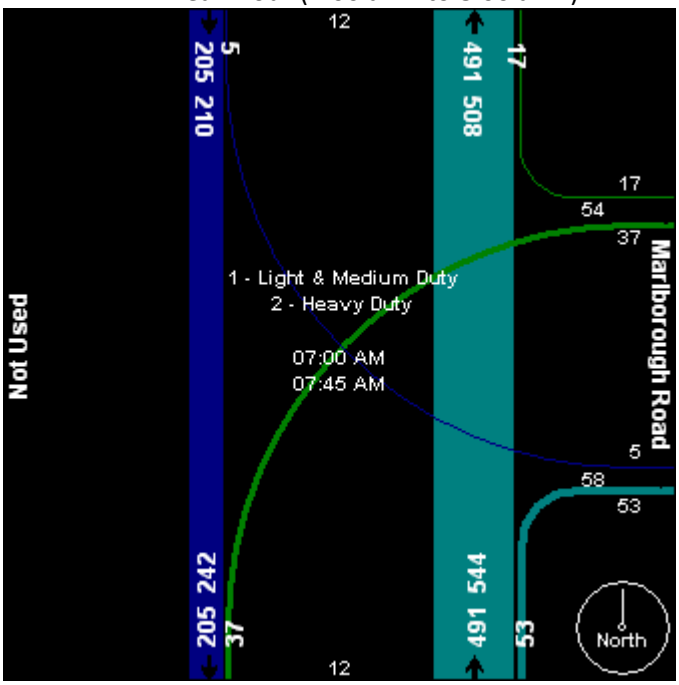
NH 12 at Marlborough Road, Troy

Aerial View

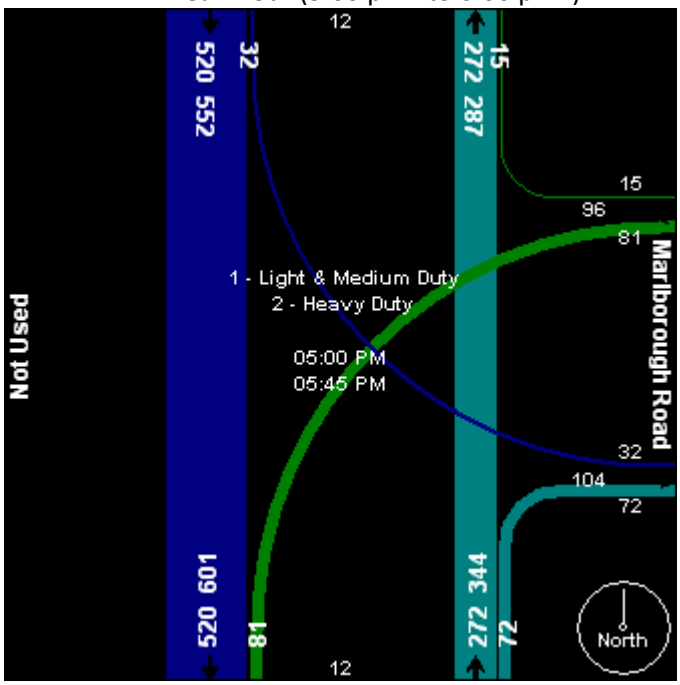
Source: Spring 2010 Color Aerial Photo, NH Department of Transportation

Variable Width Plot

AM – Peak Hour (7:00 a.m. to 8:00 a.m.)



PM – Peak Hour (5:00 p.m. to 6:00 p.m.)



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

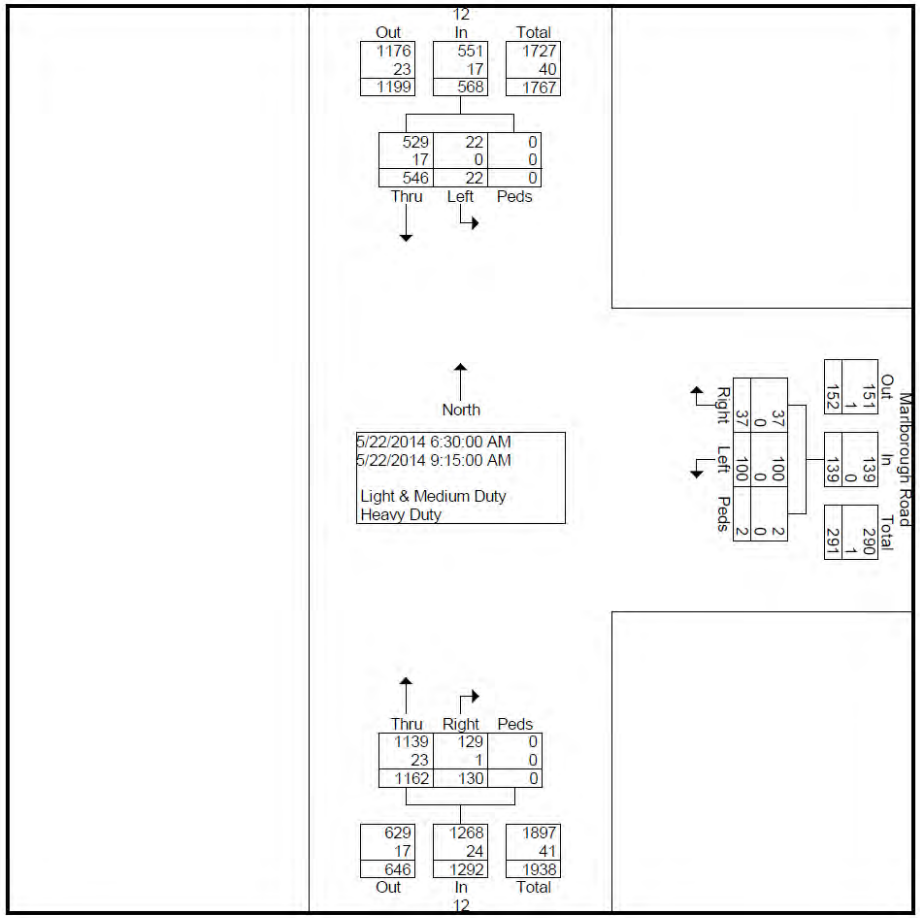
File Name : 052214
Site Code : 00000000
Start Date : 5/22/2014
Page No : 1

Groups Printed- Light & Medium Duty - Heavy Duty

	12 From North					Marlborough Road From East					12 From South					Not Used From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	0	34	4	0	38	5	0	8	0	13	9	111	0	0	120	0	0	0	0	0	171
06:45 AM	0	28	4	0	32	2	0	9	1	12	7	90	0	0	97	0	0	0	0	0	141
Total	0	62	8	0	70	7	0	17	1	25	16	201	0	0	217	0	0	0	0	0	312
07:00 AM	0	35	1	0	36	3	0	6	0	9	15	128	0	0	143	0	0	0	0	0	188
07:15 AM	0	62	1	0	63	4	0	10	0	14	19	118	0	0	137	0	0	0	0	0	214
07:30 AM	0	48	2	0	50	8	0	9	0	17	12	143	0	0	155	0	0	0	0	0	222
07:45 AM	0	60	1	0	61	2	0	12	0	14	7	102	0	0	109	0	0	0	0	0	184
Total	0	205	5	0	210	17	0	37	0	54	53	491	0	0	544	0	0	0	0	0	808
08:00 AM	0	53	2	0	55	2	0	12	0	14	7	98	0	0	105	0	0	0	0	0	174
08:15 AM	0	45	3	0	48	1	0	4	0	5	13	93	0	0	106	0	0	0	0	0	159
08:30 AM	0	42	2	0	44	4	0	9	1	14	9	90	0	0	99	0	0	0	0	0	157
08:45 AM	0	45	1	0	46	5	0	9	0	14	11	72	0	0	83	0	0	0	0	0	143
Total	0	185	8	0	193	12	0	34	1	47	40	353	0	0	393	0	0	0	0	0	633
09:00 AM	0	36	0	0	36	0	0	6	0	6	10	60	0	0	70	0	0	0	0	0	112
09:15 AM	0	58	1	0	59	1	0	6	0	7	11	57	0	0	68	0	0	0	0	0	134
Grand Total	0	546	22	0	568	37	0	100	2	139	130	1162	0	0	1292	0	0	0	0	0	1999
Apprch %	0.0	96.1	3.9	0.0		26.6	0.0	71.9	1.4		10.1	89.9	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	27.3	1.1	0.0	28.4	1.9	0.0	5.0	0.1	7.0	6.5	58.1	0.0	0.0	64.6	0.0	0.0	0.0	0.0	0.0	

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 052214
Site Code : 00000000
Start Date : 5/22/2014
Page No : 2



Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 052214
Site Code : 00000000
Start Date : 5/22/2014
Page No : 3

	12 From North					Marlborough Road From East					12 From South					Not Used From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	0	205	5	0	210	17	0	37	0	54	53	491	0	0	544	0	0	0	0	0	808
Percent	0.0	97.6	2.4	0.0		31.5	0.0	68.5	0.0		9.7	90.3	0.0	0.0		0.0	0.0	0.0	0.0		
07:30 Volume	0	48	2	0	50	8	0	9	0	17	12	143	0	0	155	0	0	0	0	0	222
Peak Factor																					0.910
High Int.	07:15 AM					07:30 AM					07:30 AM					6:15:00 AM					
Volume	0	62	1	0	63	8	0	9	0	17	12	143	0	0	155						
Peak Factor					0.833					0.794					0.877						

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 052214
Site Code : 00000000
Start Date : 5/22/2014
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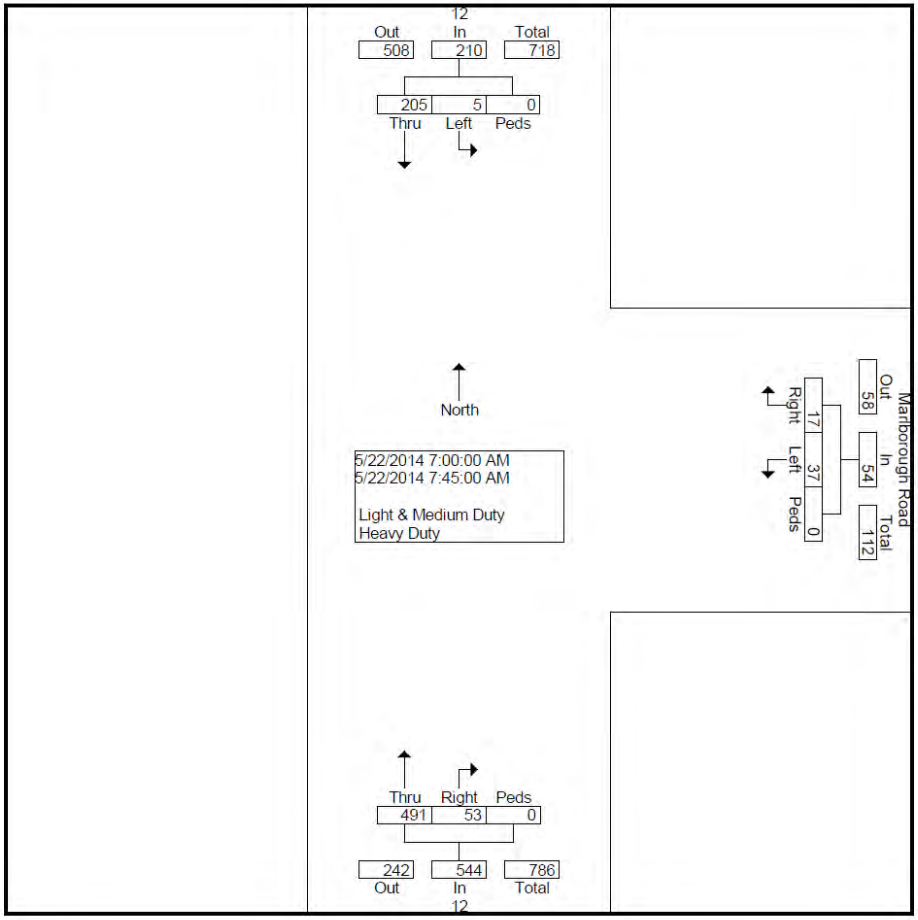

Southwest Region Planning Commission
37 Ashuelot Street
Keene, NH 03431

File Name : 052014PM
Site Code : 00000000
Start Date : 5/20/2014
Page No : 1

Groups Printed- Light & Medium Duty - Heavy Duty

	12 From North					Marlborough Road From East					12 From South					Not Used From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:30 PM	0	103	3	0	106	4	0	17	0	21	23	82	0	0	105	0	0	0	0	0	232
03:45 PM	0	106	4	0	110	4	0	14	0	18	12	73	0	0	85	0	0	0	0	0	213
Total	0	209	7	0	216	8	0	31	0	39	35	155	0	0	190	0	0	0	0	0	445
04:00 PM	0	89	4	0	93	5	0	17	0	22	12	72	0	0	84	0	0	0	0	0	199
04:15 PM	0	129	5	0	134	2	0	15	0	17	10	62	0	0	72	0	0	0	0	0	223
04:30 PM	0	114	9	0	123	4	0	30	0	34	20	63	0	0	83	0	0	0	0	0	240
04:45 PM	0	114	5	0	119	6	0	17	0	23	17	63	0	0	80	0	0	0	0	0	222
Total	0	446	23	0	469	17	0	79	0	96	59	260	0	0	319	0	0	0	0	0	884
05:00 PM	0	120	6	0	126	6	0	15	0	21	15	83	0	0	98	0	0	0	0	0	245
05:15 PM	0	134	12	0	146	3	0	17	0	20	21	73	0	0	94	0	0	0	0	0	260
05:30 PM	0	139	9	0	148	4	0	28	1	33	17	54	0	0	71	0	0	0	0	0	252
05:45 PM	0	127	5	0	132	2	0	21	0	23	19	62	0	0	81	0	0	0	0	0	236
Total	0	520	32	0	552	15	0	81	1	97	72	272	0	0	344	0	0	0	0	0	993
06:00 PM	0	97	8	0	105	1	0	11	0	12	13	53	0	0	66	0	0	0	0	0	183
06:15 PM	0	90	2	0	92	1	0	15	0	16	9	51	0	0	60	0	0	0	0	0	168
Grand Total	0	1362	72	0	1434	42	0	217	1	260	188	791	0	0	979	0	0	0	0	0	2673
Apprch %	0.0	95.0	5.0	0.0		16.2	0.0	83.5	0.4		19.2	80.8	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	51.0	2.7	0.0	53.6	1.6	0.0	8.1	0.0	9.7	7.0	29.6	0.0	0.0	36.6	0.0	0.0	0.0	0.0	0.0	

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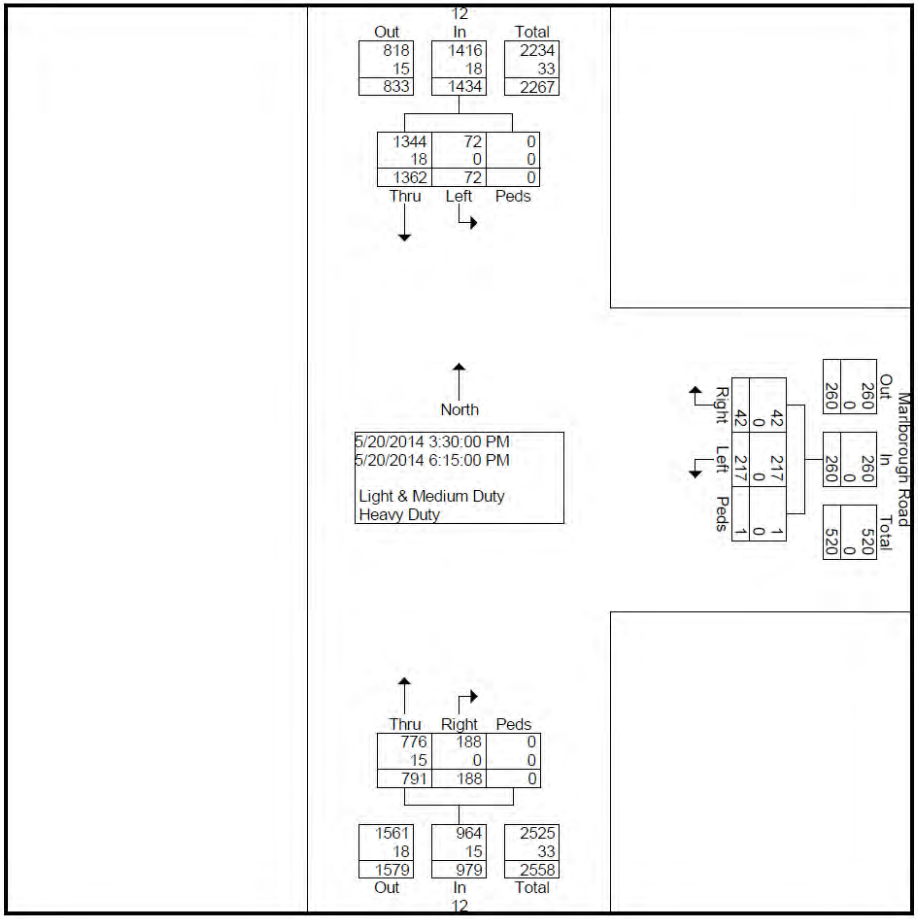

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	12 From North					Marlborough Road From East					12 From South					Not Used From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 03:30 PM to 06:15 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	0	520	32	0	552	15	0	81	1	97	72	272	0	0	344	0	0	0	0	0	993
Percent	0.0	94.2	5.8	0.0		15.5	0.0	83.5	1.0		20.9	79.1	0.0	0.0		0.0	0.0	0.0	0.0		
05:15 Volume	0	134	12	0	146	3	0	17	0	20	21	73	0	0	94	0	0	0	0	0	260
Peak Factor																					0.955
High Int.	05:30 PM					05:30 PM					05:00 PM					3:15:00 PM					
Volume	0	139	9	0	148	4	0	28	1	33	15	83	0	0	98						
Peak Factor					0.932					0.735					0.878						

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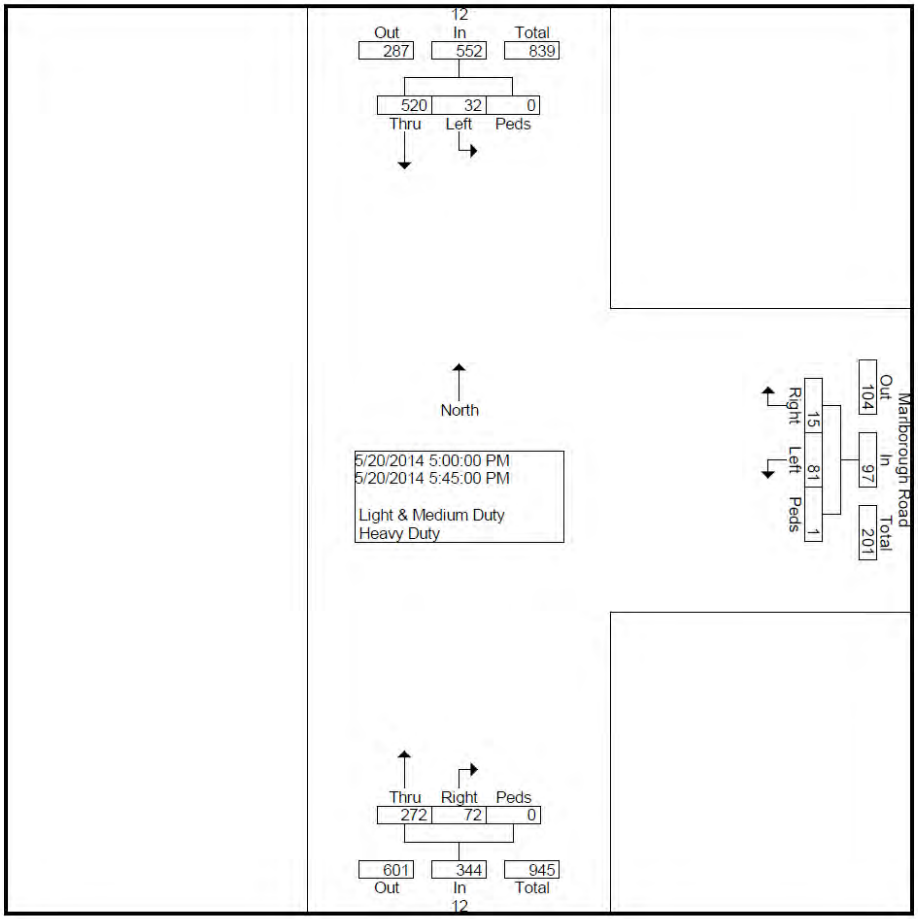
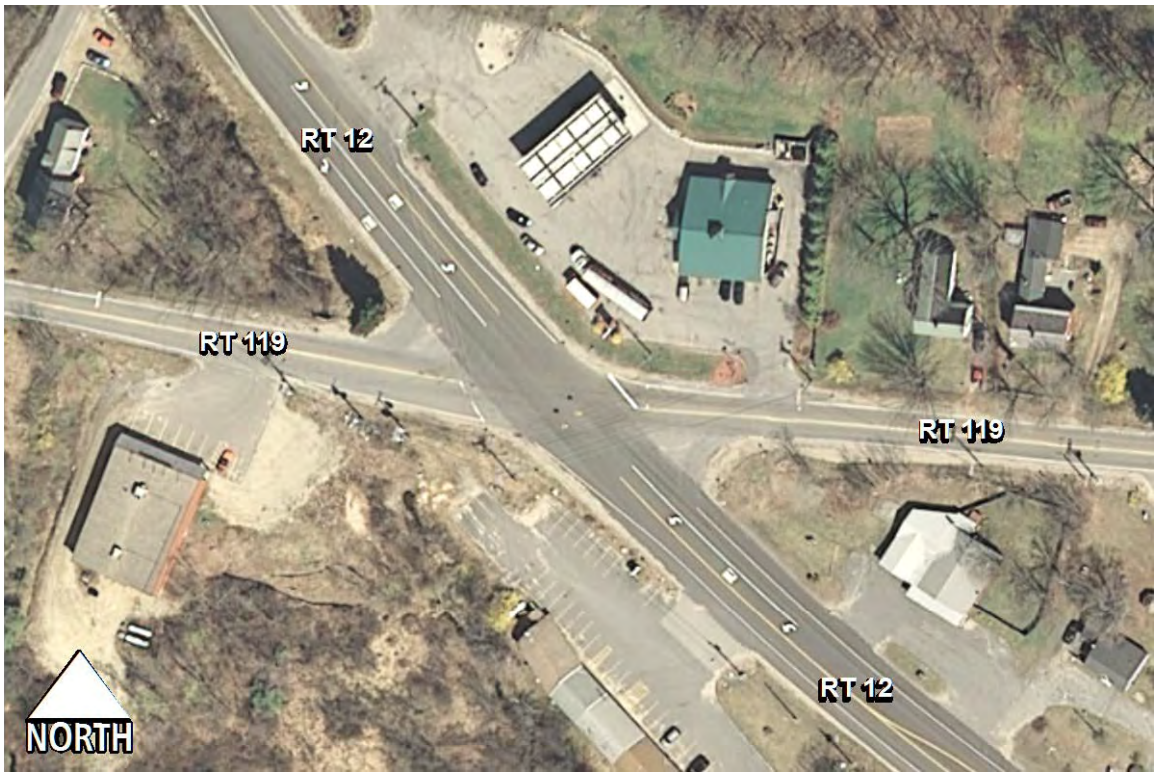


NH 12 at NH 119, Fitzwilliam

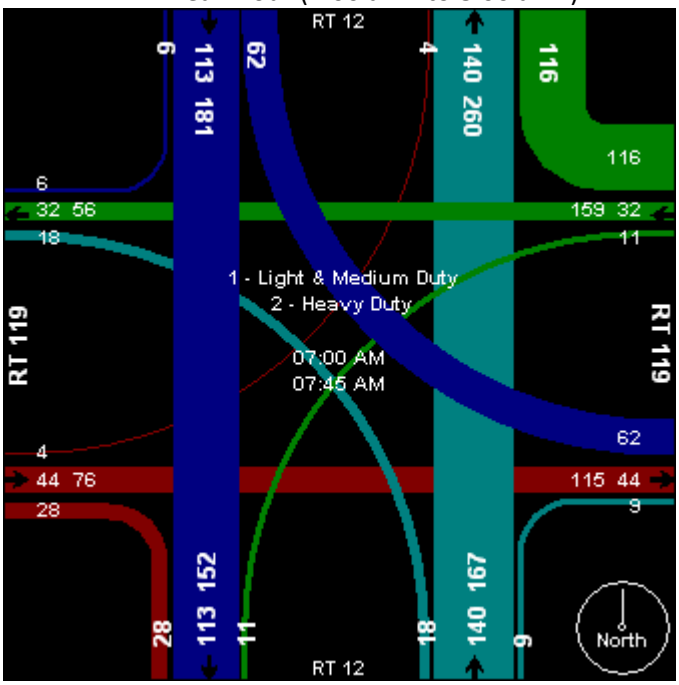
Aerial View



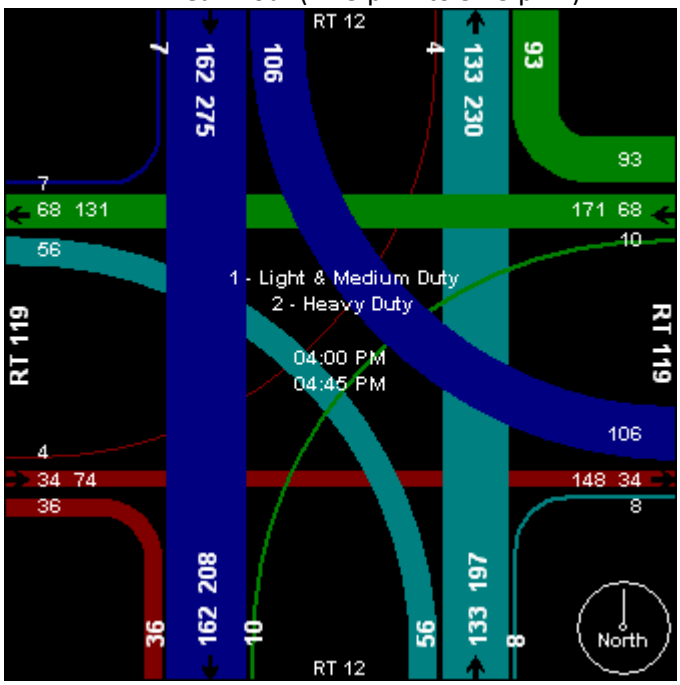
Source: Spring 2010 Color Aerial Photo, NH Department of Transportation

Variable Width Plot

AM – Peak Hour (7:00 a.m. to 8:00 a.m.)



PM – Peak Hour (4:45 p.m. to 5:45 p.m.)



Southwest Region Planning Commission
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File Name : 052914_RT12_RT119_AM
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Groups Printed- Light & Medium Duty - Heavy Duty

	RT 12 From North					RT 119 From East					RT 12 From South					RT 119 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	0	21	7	0	28	18	9	1	1	29	3	28	3	0	34	5	12	0	0	17	108
06:45 AM	1	20	8	0	29	25	6	4	0	35	0	24	1	0	25	6	14	1	0	21	110
Total	1	41	15	0	57	43	15	5	1	64	3	52	4	0	59	11	26	1	0	38	218
07:00 AM	1	28	16	0	45	24	11	3	0	38	2	40	3	0	45	6	13	0	0	19	147
07:15 AM	1	26	15	0	42	30	8	1	0	39	4	33	2	0	39	4	14	3	0	21	141
07:30 AM	0	40	18	0	58	36	5	4	0	45	0	33	4	0	37	9	9	0	0	18	158
07:45 AM	4	19	13	0	36	26	8	3	0	37	3	34	9	0	46	9	8	1	0	18	137
Total	6	113	62	0	181	116	32	11	0	159	9	140	18	0	167	28	44	4	0	76	583
08:00 AM	4	19	13	0	36	21	6	4	0	31	4	38	7	0	49	10	10	0	0	20	136
08:15 AM	1	22	9	0	32	13	7	2	0	22	1	35	7	0	43	9	17	4	0	30	127
08:30 AM	1	15	10	0	26	21	6	5	0	32	6	24	3	0	33	3	6	1	0	10	101
08:45 AM	2	28	9	0	39	14	7	2	0	23	2	31	6	0	39	7	7	0	0	14	115
Total	8	84	41	0	133	69	26	13	0	108	13	128	23	0	164	29	40	5	0	74	479
09:00 AM	3	28	15	0	46	10	5	3	0	18	3	29	6	0	38	6	6	3	0	15	117
09:15 AM	4	18	13	0	35	16	5	3	0	24	2	27	2	0	31	4	11	1	0	16	106
Grand Total	22	284	146	0	452	254	83	35	1	373	30	376	53	0	459	78	127	14	0	219	1503
Apprch %	4.9	62.8	32.3	0.0		68.1	22.3	9.4	0.3		6.5	81.9	11.5	0.0		35.6	58.0	6.4	0.0		
Total %	1.5	18.9	9.7	0.0	30.1	16.9	5.5	2.3	0.1	24.8	2.0	25.0	3.5	0.0	30.5	5.2	8.4	0.9	0.0	14.6	

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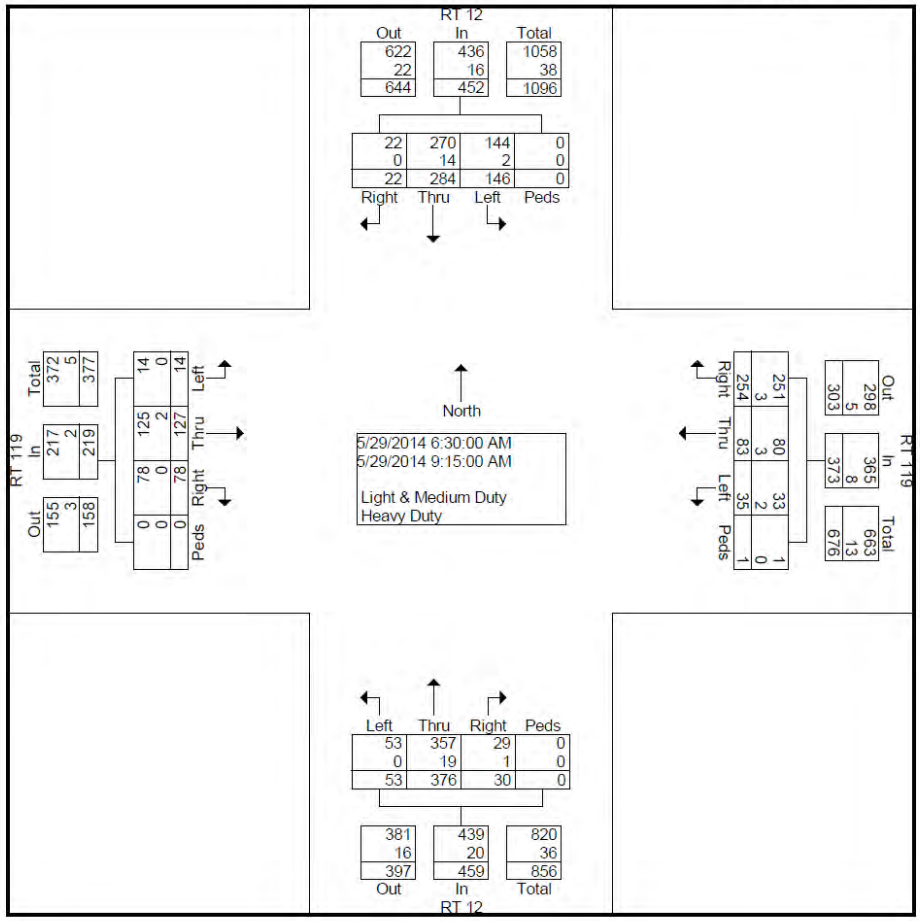

Southwest Region Planning Commission
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File Name : 052914_RT12_RT119_AM
Site Code : 00000000
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	RT 12 From North					RT 119 From East					RT 12 From South					RT 119 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:30 AM to 09:15 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	6	113	62	0	181	116	32	11	0	159	9	140	18	0	167	28	44	4	0	76	583
Percent	3.3	62.4	34.3	0.0		73.0	20.1	6.9	0.0		5.4	83.8	10.8	0.0		36.8	57.9	5.3	0.0		
07:30 Volume	0	40	18	0	58	36	5	4	0	45	0	33	4	0	37	9	9	0	0	18	158
Peak Factor																					0.922
High Int.	07:30 AM					07:30 AM					07:45 AM					07:15 AM					
Volume	0	40	18	0	58	36	5	4	0	45	3	34	9	0	46	4	14	3	0	21	
Peak Factor					0.780					0.883					0.908					0.905	

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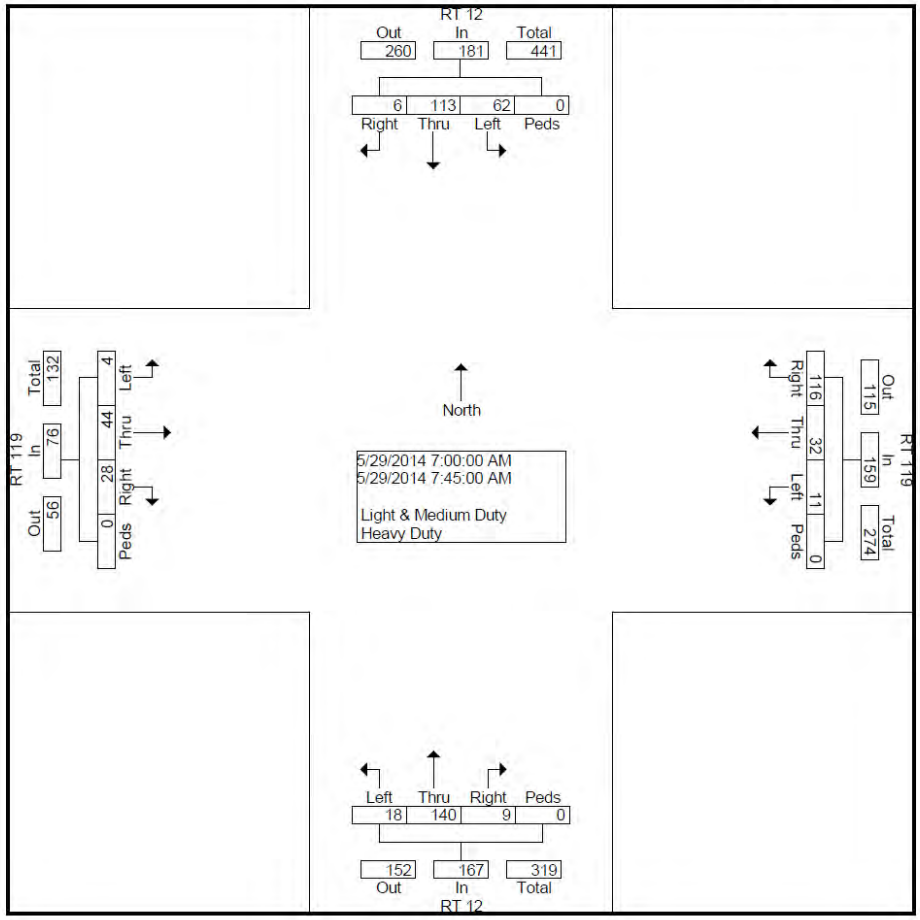

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Site Code : 00000000
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Groups Printed- Light & Medium Duty - Heavy Duty

	RT 12 From North					RT 119 From East					RT 12 From South					RT 119 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:30 PM	3	36	23	0	62	20	11	6	0	37	4	39	8	0	51	7	14	1	0	22	172
03:45 PM	2	37	22	0	61	13	11	8	0	32	2	37	8	0	47	12	14	2	0	28	168
Total	5	73	45	0	123	33	22	14	0	69	6	76	16	0	98	19	28	3	0	50	340
04:00 PM	4	33	32	0	69	19	18	4	0	41	3	31	19	0	53	11	10	1	0	22	185
04:15 PM	0	41	23	0	64	24	18	0	0	42	2	34	12	0	48	10	11	1	0	22	176
04:30 PM	2	53	23	0	78	28	21	3	0	52	1	26	10	0	37	9	7	1	0	17	184
04:45 PM	1	35	28	0	64	22	11	3	0	36	2	42	15	0	59	6	6	1	0	13	172
Total	7	162	106	0	275	93	68	10	0	171	8	133	56	0	197	36	34	4	0	74	717
05:00 PM	4	38	22	0	64	23	10	1	0	34	2	42	6	0	50	5	8	2	0	15	163
05:15 PM	2	40	27	0	69	25	18	2	0	45	1	39	7	0	47	4	9	0	1	14	175
05:30 PM	1	36	25	0	62	22	24	2	0	48	2	30	6	0	38	5	8	2	0	15	163
05:45 PM	0	36	27	0	63	11	24	0	0	35	2	30	9	0	41	3	14	1	0	18	157
Total	7	150	101	0	258	81	76	5	0	162	7	141	28	0	176	17	39	5	1	62	658
06:00 PM	2	15	16	0	33	15	19	4	0	38	1	18	6	0	25	4	4	2	0	10	106
06:15 PM	4	20	23	0	47	9	14	2	0	25	3	22	8	0	33	2	8	0	0	10	115
Grand Total	25	420	291	0	736	231	199	35	0	465	25	390	114	0	529	78	113	14	1	206	1936
Apprch %	3.4	57.1	39.5	0.0		49.7	42.8	7.5	0.0		4.7	73.7	21.6	0.0		37.9	54.9	6.8	0.5		
Total %	1.3	21.7	15.0	0.0	38.0	11.9	10.3	1.8	0.0	24.0	1.3	20.1	5.9	0.0	27.3	4.0	5.8	0.7	0.1	10.6	

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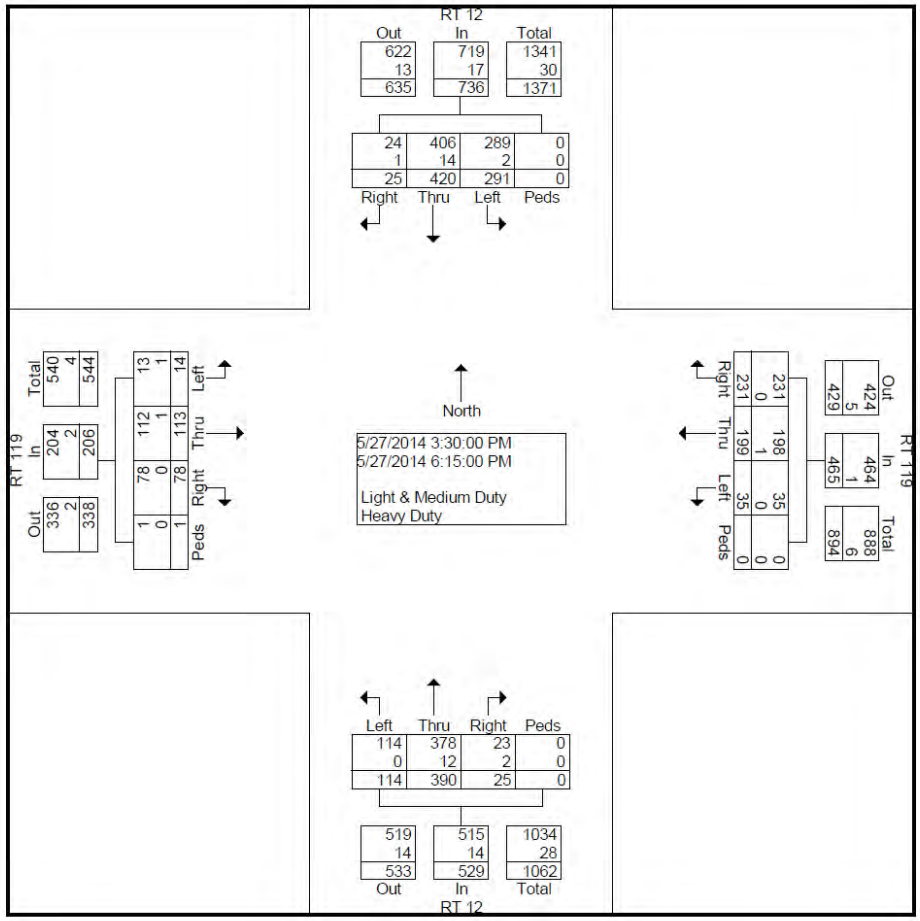

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	RT 12 From North					RT 119 From East					RT 12 From South					RT 119 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 03:30 PM to 06:15 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	7	162	106	0	275	93	68	10	0	171	8	133	56	0	197	36	34	4	0	74	717
Percent	2.5	58.9	38.5	0.0		54.4	39.8	5.8	0.0		4.1	67.5	28.4	0.0		48.6	45.9	5.4	0.0		
04:00 Volume	4	33	32	0	69	19	18	4	0	41	3	31	19	0	53	11	10	1	0	22	185
Peak Factor																					0.969
High Int.	04:30 PM					04:30 PM					04:45 PM					04:00 PM					
Volume	2	53	23	0	78	28	21	3	0	52	2	42	15	0	59	11	10	1	0	22	
Peak Factor					0.881					0.822					0.835					0.841	

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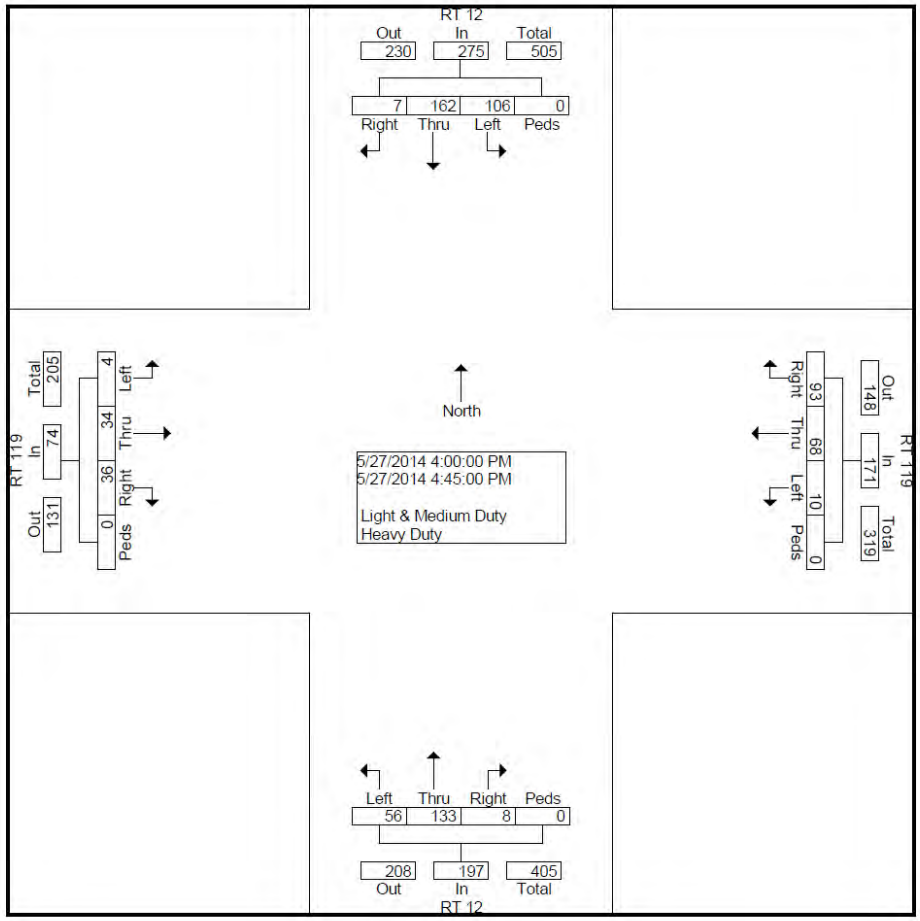


Intersection Level of Service

The two primary user-perceived performance measures used to evaluate the performance of individual intersections are delays and queues. Delay is defined as any additional travel time experienced and can be divided into a number of components. The total delay can be defined as the difference between the travel time actually experienced and the reference travel time that would result in the absence of traffic control, changes in speed due to geometric conditions, and the interaction with any other road users. Control delay is the portion of delay that is attributable to a traffic signal or other control, plus the time decelerating to a queue, waiting in queue, and accelerating from a queue. Along with observations about turning movements, specialized software can estimate these wait times, which are referred to as intersection level of service (LOS).

LOS	Control Delay per Vehicle (seconds per vehicle)
A	≤ 10
B	> 10-20
C	> 20-35
D	> 35-55
E	> 55-80
F	> 80

There are a number of known limitations of the Transportation Research Board Highway Capacity Manual (HCM) analysis procedures for *signalized* intersections, which could not be taken into account:

- The effect of queues that exceed the available storage bay length is not treated in much detail;
- Driveways located within the influence area of signalized intersections are not recognized;
- The effect of coordinated signalized systems is recognized, but only in terms of a coarse approximation;
- Dynamics of individual lanes within a multi-lane group are not recognized;
- The procedure accounts for right turns on red by reducing the right-turn volume without regard to when the turns can actually be made within the signal cycle.

Tips on interpreting this section:

- Both morning and evening intersection level of service calculations were performed using the weekday peak hour turning movement volumes and peak hour factor (PHF) values included in this appendix.

- For the signalized intersection calculations, signal timing was obtained from NHDOT Bureau of Traffic

- Approach and intersection delay (in seconds) and level of service (A-F) can be found at the bottom of each report.

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	Henry Underwood	Intersection	Route 12 @ Route 101
Agency or Co.	SWRPC	Area Type	All other areas
Date Performed	5/14/2014	Jurisdiction	Keene
Time Period	AM Peak 7:30 a.m. to 8:30 a.m.	Analysis Year	2014
		Project ID	Route 12 South Corridor Study

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	1	1	2	1	1	2	1	1	2	1
Lane group	L	T	R	L	T	R	L	LT	R	L	T	R
Volume, V (vph)	193	336	361	45	297	149	400	556	71	70	227	90
% Heavy vehicles, %HV	0	2	2	2	2	0	2	0	0	0	0	1
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of effective green, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival type, AT	3	3	3	3	3	3	3	3	3	3	3	3
Unit extension, UE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Filtering/metering, I	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Initial unmet demand, Q_b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped / Bike / RTOR volumes	0		180	0		75	0		35	0		45
Lane width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Parking / Grade / Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0	0	0	0	0	0	0	0	0	0	0
Min. time for pedestrians, G_p	33.2											

Phasing	Excl. Left	Thru & RT	03	04	NB Only	SB Only	07	08
Timing	G = 20.0	G = 20.0	G =	G =	G = 40.0	G = 20.0	G =	G =
	Y = 6	Y = 6	Y =	Y =	Y = 6	Y = 6	Y =	Y =
Duration of Analysis, T = 0.25						Cycle Length, C = 124.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	214	373	201	50	330	82	222	840	40	78	252	50
Lane group capacity, c	291	572	255	285	572	260	571	1146	521	291	584	258
v/c ratio, X	0.74	0.65	0.79	0.18	0.58	0.32	0.39	0.73	0.08	0.27	0.43	0.19
Total green ratio, g/C	0.16	0.16	0.16	0.16	0.16	0.16	0.32	0.32	0.32	0.16	0.16	0.16
Uniform delay, d_1	49.5	48.7	50.0	44.9	48.1	46.0	32.5	37.3	29.2	45.6	46.9	45.0
Progression factor, PF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Delay calibration, k	0.29	0.23	0.33	0.11	0.17	0.11	0.11	0.29	0.11	0.11	0.11	0.11
	9.4	2.7	15.2	0.3	1.4	0.7	0.4	2.5	0.1	0.5	0.5	0.4

Incremental delay, d_2												
Initial queue delay, d_3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control delay	58.8	51.4	65.1	45.2	49.5	46.7	33.0	39.7	29.2	46.1	47.4	45.4
Lane group LOS	E	D	E	D	D	D	C	D	C	D	D	D
Approach delay	56.9			48.6			38.0			46.9		
Approach LOS	E			D			D			D		
Intersection delay	46.5			X_C = 0.68			Intersection LOS			D		

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	Henry Underwood	Intersection	Route 12 @ Route 101
Agency or Co.	SWRPC	Area Type	All other areas
Date Performed	5/13/2014	Jurisdiction	Keene
Time Period	PM Peak 4:30 a.m. to 5:30 a.m.	Analysis Year	2014
		Project ID	Route 12 South Corridor Study

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	1	1	2	1	1	2	1	1	2	1
Lane group	L	T	R	L	T	R	L	LT	R	L	T	R
Volume, V (vph)	208	402	577	107	392	89	422	358	54	121	479	201
% Heavy vehicles, %HV	1	1	2	1	1	1	1	0	0	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of effective green, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival type, AT	3	3	3	3	3	3	3	3	3	3	3	3
Unit extension, UE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Filtering/metering, I	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Initial unmet demand, Q_b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped / Bike / RTOR volumes	0		290	0		45	0		25	0		100
Lane width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Parking / Grade / Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0	0	0	0	0	0	0	0	0	0	0
Min. time for pedestrians, G_p	33.2			3.2			3.2			3.2		

Phasing	Excl. Left	Thru & RT	03	04	NB Only	SB Only	07	08
Timing	G = 20.0	G = 20.0	G =	G =	G = 40.0	G = 20.0	G =	G =
	Y = 6	Y = 6	Y =	Y =	Y = 6	Y = 6	Y =	Y =
Duration of Analysis, T = 0.25						Cycle Length, C = 124.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	231	447	319	119	436	49	469	398	32	134	532	112
Lane group capacity, c	288	578	255	288	578	258	576	1167	521	291	584	260
v/c ratio, X	0.80	0.77	1.25	0.41	0.75	0.19	0.81	0.34	0.06	0.46	0.91	0.43
Total green ratio, g/C	0.16	0.16	0.16	0.16	0.16	0.16	0.32	0.32	0.32	0.16	0.16	0.16
Uniform delay, d_1	50.1	49.8	52.0	46.7	49.7	45.0	38.6	32.0	29.0	47.1	51.1	46.9
Progression factor, PF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Delay calibration, k	0.35	0.32	0.50	0.11	0.31	0.11	0.36	0.11	0.11	0.11	0.43	0.11
	15.0	6.5	141.1	1.0	5.6	0.4	8.8	0.2	0.0	1.2	18.6	1.1

Incremental delay, d_2												
Initial queue delay, d_3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control delay	65.1	56.3	193.1	47.7	55.3	45.4	47.4	32.1	29.1	48.3	69.7	48.0
Lane group LOS	E	E	F	D	E	D	D	C	C	D	E	D
Approach delay	102.1			53.0			40.0			62.9		
Approach LOS	F			D			D			E		
Intersection delay	66.7			X_C = 0.92			Intersection LOS			E		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Route 32*
Agency/Co.	*SWRPC*	Jurisdiction	*Keene*
Date Performed	*4/2/14*	Analysis Year	*2014*
Analysis Time Period	*6:00 a.m. to 9:00 a.m.*		
Project Description	*Route 12 South Corridor Study*		
East/West Street:	*Route 32/Old Homestead Highway*	North/South Street:	*Route 12*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*2*	*751*	*0*	*0*	*374*	*116*
Peak-Hour Factor, PHF	*0.87*	*0.87*	*0.87*	*0.87*	*0.87*	*0.87*
Hourly Flow Rate, HFR	*2*	*863*	*0*	*0*	*429*	*133*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*119*	*0*	*6*
Peak-Hour Factor, PHF	*0.87*	*0.87*	*0.87*	*0.87*	*0.87*	*0.87*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*136*	*0*	*6*
Percent Heavy Vehicles	*0*	*0*	*0*	*2*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*2*						*142*	
C (m) (vph)	*1004*						*166*	
v/c	*0.00*						*0.86*	
95% queue length	*0.01*						*5.95*	
Control Delay	*8.6*						*91.1*	
LOS	*A*						*F*	
Approach Delay	--	--				*91.1*		
Approach LOS	--	--				*F*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Route 32*
Agency/Co.	*SWRPC*	Jurisdiction	*Keene*
Date Performed	*4/3/2014*	Analysis Year	*2014*
Analysis Time Period	*3:00 p.m. to 6:00 p.m.*		
Project Description	*Route 12 South Corridor Study*		
East/West Street:	*Route 32/Old Homestead Highway*	North/South Street:	*Route 12*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*2*	*579*	*0*	*0*	*889*	*215*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*2*	*629*	*0*	*0*	*966*	*233*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*100*	*0*	*4*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*108*	*0*	*4*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*2*						*112*	
C (m) (vph)	*587*						*101*	
v/c	*0.00*						*1.11*	
95% queue length	*0.01*						*7.20*	
Control Delay	*11.2*						*200.7*	
LOS	*B*						*F*	
Approach Delay	--	--				*200.7*		
Approach LOS	--	--				*F*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Lake Street*
Agency/Co.	*SWRPC*	Jurisdiction	*Swazney*
Date Performed	*2015 Forecast Volumes*	Analysis Year	*2014*
Analysis Time Period	*AM Peak*		
Project Description	*Route 12 South Corridor Study*		
East/West Street:	*Lake St./Swanzey Factory Rd.*	North/South Street:	*Route 12/Monadnock Highway*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*25*	*555*	*30*	*50*	*290*	*15*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*25*	*555*	*30*	*50*	*290*	*15*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LTR*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*45*	*15*	*25*	*5*	*15*	*20*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*45*	*15*	*25*	*5*	*15*	*20*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*Y*			*Y*	
Storage		*1*			*1*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LTR*	*LTR*		*LTR*			*LTR*	
v (vph)	*25*	*50*		*85*			*40*	
C (m) (vph)	*1267*	*1000*		*268*			*406*	
v/c	*0.02*	*0.05*		*0.32*			*0.10*	
95% queue length	*0.06*	*0.16*		*1.32*			*0.33*	
Control Delay	*7.9*	*8.8*		*26.6*			*17.3*	
LOS	*A*	*A*		*D*			*C*	
Approach Delay	--	--	*26.6*			*17.3*		
Approach LOS	--	--	*D*			*C*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Lake Street*
Agency/Co.	*SWRPC*	Jurisdiction	*Swazney*
Date Performed	*2015 Forecast Volumes*	Analysis Year	*2014*
Analysis Time Period	*PM Peak*		
Project Description	*Route 12 South Corridor Study*		
East/West Street:	*Lake St./Swanzey Factory Rd.*	North/South Street:	*Route 12/Monadnock Highway*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*25*	*450*	*30*	*35*	*695*	*10*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*25*	*450*	*30*	*35*	*695*	*10*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LTR*			*LTR*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*40*	*15*	*25*	*5*	*15*	*30*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*40*	*15*	*25*	*5*	*15*	*30*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*Y*			*Y*	
Storage		*1*			*1*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LTR*	*LTR*		*LTR*			*LTR*	
v (vph)	*25*	*35*		*80*			*50*	
C (m) (vph)	*902*	*1093*		*166*			*345*	
v/c	*0.03*	*0.03*		*0.48*			*0.14*	
95% queue length	*0.09*	*0.10*		*2.30*			*0.50*	
Control Delay	*9.1*	*8.4*		*45.4*			*22.4*	
LOS	*A*	*A*		*E*			*C*	
Approach Delay	--	--	*45.4*			*22.4*		
Approach LOS	--	--	*E*			*C*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Flat Roof Mill Road*
Agency/Co.	*SWRPC*	Jurisdiction	*Swanzey*
Date Performed	*5/15/2014*	Analysis Year	*2014*
Analysis Time Period	*6:30 a.m. to 9:30 a.m.*		

Project Description	*Route 12 South Corridor Study*
East/West Street:	*Flat Roof Mill Road*
North/South Street:	*Route 12/Monadnock Highway*
Intersection Orientation:	*North-South*
Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*57*	*482*	*0*	*0*	*190*	*16*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR	*60*	*507*	*0*	*0*	*200*	*16*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*1*
Configuration	*L*	*T*			*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*81*	*0*	*41*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*85*	*0*	*43*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*						*LR*	
v (vph)	*60*						*128*	
C (m) (vph)	*1359*						*411*	
v/c	*0.04*						*0.31*	
95% queue length	*0.14*						*1.31*	
Control Delay	*7.8*						*17.7*	
LOS	*A*						*C*	
Approach Delay	--	--					*17.7*	
Approach LOS	--	--					*C*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Flat Roof Mill Road*
Agency/Co.	*SWRPC*	Jurisdiction	*Swanzey*
Date Performed	*5/15/2014*	Analysis Year	*2014*
Analysis Time Period	*3:00 p.m. to 6:00 p.m.*		

Project Description	*Route 12 South Corridor Study*
East/West Street: *Flat Roof Mill Road*	North/South Street: *Route 12/Monadnock Highway*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*67*	*295*	*0*	*0*	*536*	*102*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR	*70*	*310*	*0*	*0*	*564*	*107*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*1*
Configuration	*L*	*T*			*T*	*R*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*49*	*0*	*44*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*51*	*0*	*46*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*						*LR*	
v (vph)	*70*						*97*	
C (m) (vph)	*929*						*331*	
v/c	*0.08*						*0.29*	
95% queue length	*0.24*						*1.19*	
Control Delay	*9.2*						*20.3*	
LOS	*A*						*C*	
Approach Delay	--	--					*20.3*	
Approach LOS	--	--					*C*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Marlborough Road*
Agency/Co.	*SWRPC*	Jurisdiction	*Troy*
Date Performed	*5/22/2014*	Analysis Year	*2014*
Analysis Time Period	*6:30 a.m. to 9:30 a.m.*		

Project Description *Route 12 South Corridor Study*

East/West Street: *Marlborough Road* | North/South Street: *Route 12/North Main Street*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*491*	*53*	*5*	*205*	*0*
Peak-Hour Factor, PHF	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
Hourly Flow Rate, HFR	*0*	*539*	*58*	*5*	*225*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*37*	*0*	*17*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*	*0.91*
Hourly Flow Rate, HFR	*40*	*0*	*18*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*Y*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*5*		*58*				
C (m) (vph)		*989*		*393*				
v/c		*0.01*		*0.15*				
95% queue length		*0.02*		*0.51*				
Control Delay		*8.7*		*15.7*				
LOS		*A*		*C*				
Approach Delay	--	--		*15.7*				
Approach LOS	--	--		*C*				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Marlborough Road*
Agency/Co.	*SWRPC*	Jurisdiction	*Troy*
Date Performed	*5/20/2014*	Analysis Year	*2014*
Analysis Time Period	*3:30 p.m. to 6:30 p.m.*		

Project Description	*Route 12 South Corridor Study*
East/West Street: *Marlborough Road*	North/South Street: *Route 12/North Main Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*272*	*72*	*32*	*520*	*0*
Peak-Hour Factor, PHF	*0.96*	*0.96*	*0.96*	*0.96*	*0.96*	*0.96*
Hourly Flow Rate, HFR	*0*	*283*	*75*	*33*	*541*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*81*	*0*	*15*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.96*	*0.96*	*0.96*	*0.96*	*0.96*	*0.96*
Hourly Flow Rate, HFR	*84*	*0*	*15*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*Y*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*33*		*99*				
C (m) (vph)		*1210*		*321*				
v/c		*0.03*		*0.31*				
95% queue length		*0.08*		*1.28*				
Control Delay		*8.1*		*21.1*				
LOS		*A*		*C*				
Approach Delay	--	--	*21.1*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Route 119*
Agency/Co.	*SWRPC*	Jurisdiction	*Fitzwilliam*
Date Performed	*5/29/2014*	Analysis Year	*2014*
Analysis Time Period	*6:30 a.m. to 9:30 a.m.*		
Project Description	*Route 12 South Corridor Study*		
East/West Street:	*Route 119*	North/South Street:	*Route 12*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*18*	*140*	*9*	*62*	*113*	*6*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*19*	*152*	*9*	*67*	*122*	*6*
Percent Heavy Vehicles	*0*	--	--	*3*	--	--
Median Type	*Two Way Left Turn Lane*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*0*
Configuration	*L*		*TR*	*L*		*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*11*	*32*	*116*	*4*	*44*	*28*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*11*	*34*	*126*	*4*	*47*	*30*
Percent Heavy Vehicles	*18*	*3*	*2*	*0*	*2*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (vph)	*19*	*67*		*171*			*81*	
C (m) (vph)	*1470*	*1412*		*795*			*713*	
v/c	*0.01*	*0.05*		*0.22*			*0.11*	
95% queue length	*0.04*	*0.15*		*0.81*			*0.38*	
Control Delay	*7.5*	*7.7*		*10.8*			*10.7*	
LOS	*A*	*A*		*B*			*B*	
Approach Delay	--	--	*10.8*			*10.7*		
Approach LOS	--	--	*B*			*B*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Henry Underwood*	Intersection	*Route 12 @ Route 119*
Agency/Co.	*SWRPC*	Jurisdiction	*Fitzwilliam*
Date Performed	*5/27/14*	Analysis Year	*2014*
Analysis Time Period	*3:30 p.m. to 6:30 p.m.*		
Project Description	*Route 12 South Corridor Study*		
East/West Street:	*Route 119*	North/South Street:	*Route 12*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

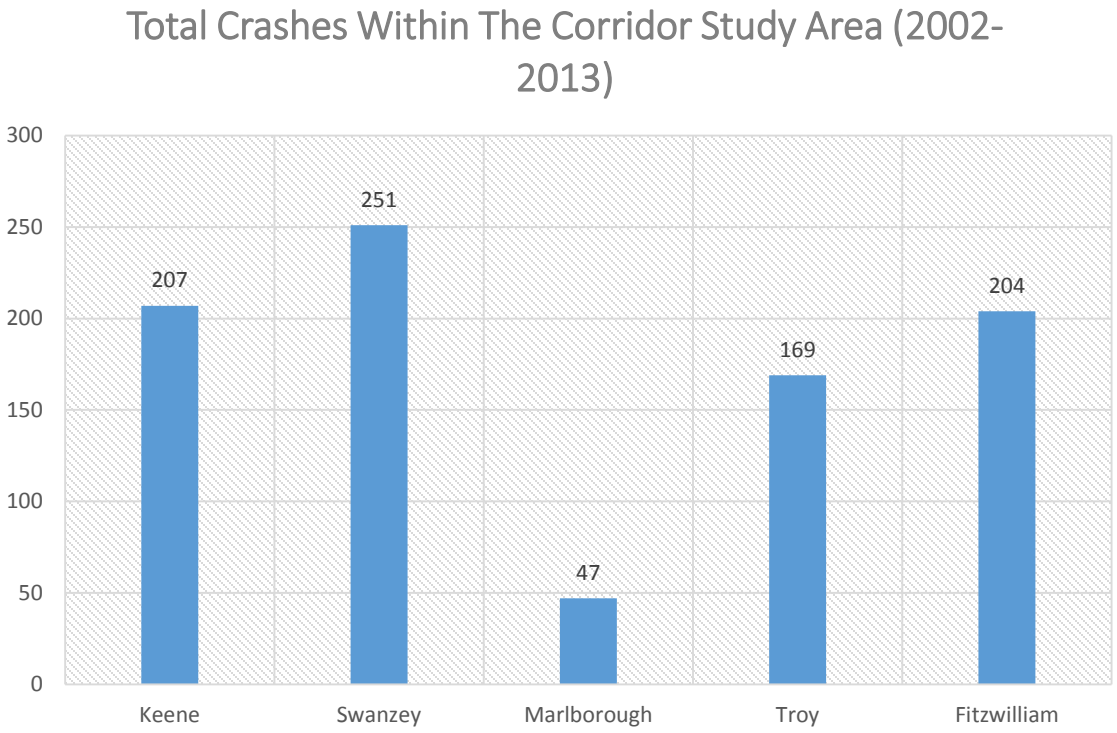
Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*56*	*133*	*8*	*106*	*162*	*7*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*57*	*137*	*8*	*109*	*167*	*7*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Two Way Left Turn Lane*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*1*	*1*	*0*
Configuration	*L*		*TR*	*L*		*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*10*	*68*	*93*	*4*	*34*	*36*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*10*	*70*	*95*	*4*	*35*	*37*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (vph)	*57*	*109*		*175*			*76*	
C (m) (vph)	*1415*	*1450*		*660*			*650*	
v/c	*0.04*	*0.08*		*0.27*			*0.12*	
95% queue length	*0.13*	*0.24*		*1.06*			*0.40*	
Control Delay	*7.7*	*7.7*		*12.4*			*11.3*	
LOS	*A*	*A*		*B*			*B*	
Approach Delay	--	--	*12.4*			*11.3*		
Approach LOS	--	--	*B*			*B*		

Crash Data (2002-2013)



Tips on interpreting this section:

- Crash data provided by NHDOT through accident reports obtained by the Department of Safety

- Crash locations spatially assigned by NHDOT

- Crash severity per Model Minimum Uniform Crash Criteria (MMUC) refers to the highest severity injury occurring at the crash. For example, if there were 1 fatality and 3 non-incapacitating injuries reported during an incident, the crash would be assigned the severity of “Killed”.

- Tables of crashes by severity are listed below according to the type of crash (other vehicle, bicyclist, fixed object, etc.) and the location of the crash (intersection, along the road, etc.)

Keene

Table 1 - Keene Crash Severity by Crash Type

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Crash Type	Bicyclist				2			2
	Fixed Object			6	8		1	15
	Motor Vehicle Xing Median			1				1
	Other				1			1
	Other Motor Vehicle	1		102	42	25	8	178
	Overturn					1	1	2
	Parked Motor Vehicle			1				1
	Pedal Cycle/Moped		1		2	1		4
	Spill (2 Wheel Vehicle)				1			1
	Not Specified			2				2
	Grand Total	1	1	112	56	27	10	207

Table 2 - Keene Crash Severity by Location of First Harmful Event

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Location of First Harmful Event	Along Road at Driveway Access			13	2	1		16
	Along the Road			42	22	10	1	75
	At Intersection		1	24	16	13	6	60
	Intersection Related			14	8	2	1	25
	Off Roadway beyond Shoulder			1	1			2
	Other			3	1		1	5
	Ramp/Rotary	1		9	3	1		14
	Unknown			6	3		1	10
	Grand Total	1	1	112	56	27	10	207

Swanzey

Table 3 - Swanzey Crash Severity by Crash Type

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Crash Type	Animal			5	1			**6**
	Bicyclist	1						**1**
	Fixed Object	1		15	10	1	2	**29**
	Other			1	1	1		**3**
	Other Motor Vehicle	2	1	110	56	17	14	**200**
	Other Object			1				**1**
	Overturn			2	1	1		**4**
	Parked Motor Vehicle				2	1		**3**
	Pedestrian				1			**1**
	Thrown or Falling Object			2				**2**
	Not Specified			1				
	Grand Total	**4**	**1**	**137**	**72**	**21**	**16**	**251**

Table 4 - Swanzey Crash Severity by Location of First Harmful Event

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Location of First Harmful Event	Along Road at Driveway Access	2		20	5	4	6	**37**
	Along the Road	1	1	67	36	9	5	**119**
	At Intersection			27	14	7	4	**52**
	In a Parking Lot				2			**2**
	Intersection Related			11	6			**17**
	Off Roadway beyond Shoulder			7	8		1	**16**
	Off Roadway on Shoulder/Median	1		5	1			**7**
	Other					1		**1**
	Grand Total	**4**	**1**	**137**	**72**	**21**	**16**	**251**

Marlborough

Table 5 - Marlborough Crash Severity by Crash Type

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Crash Type	Animal			3				**3**
	Fixed Object		1	7	3	3		**14**
	Other	1						**1**
	Other Motor Vehicle		1	11	6	3	1	**22**
	Other Object						1	**1**
	Overturn			1	3			**4**
	Spill (2 Wheel Vehicle)				1			**1**
	Thrown or Falling Object				1			**1**
	Grand Total	**1**	**2**	**22**	**14**	**6**	**2**	**47**

Table 6 - Marlborough Crash Severity by Location of First Harmful Event

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Location of First Harmful Event	Along Road at Driveway Access			1				**1**
	Along the Road	1	1	18	7	5	1	**33**
	At Intersection				1	1		**2**
	In a Driveway				1			**1**
	Intersection Related			1	2			**3**
	Off Roadway beyond Shoulder		1		2			**3**
	Off Roadway on Shoulder/Median				1			**1**
	Other						1	**1**
	Unknown			2				**2**
	Grand Total	**1**	**2**	**22**	**14**	**6**	**2**	**47**

Troy

Table 7 - Troy Crash Severity by Crash Type

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Crash Type	Animal			7	1			**8**
	Bicyclist				1			**1**
	Fixed Object			28	7		6	**41**
	Other	1		1				**2**
	Other Motor Vehicle	2	1	61	15	9	17	**105**
	Other Object						1	**1**
	Overturn			2		1	1	**4**
	Parked Motor Vehicle			2				**2**
	Pedal Cycle/Moped						1	**1**
	Pedestrian	1				1		**2**
	Thrown or Falling Object			1	1			**2**
	(Not Specified)			1	1			**2**
	Grand Total	**4**	**1**	**103**	**26**	**11**	**26**	**171**

Table 8 - Troy Crash Severity by Location of Frist Harmful Event

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Location of First Harmful Event	Along Road at Driveway Access			8	1	1	2	**12**
	Along the Road	2	1	40	5	3	9	**60**
	At Intersection	1		10	6	2	3	**22**
	Intersection Related			12	1	1		**14**
	Off Roadway beyond Shoulder			1			1	**2**
	Off Roadway on Shoulder/Median	1		3	1			**5**
	Other			2				**2**
	Unknown			27	12	4	11	**54**
	Grand Total	**4**	**1**	**103**	**26**	**11**	**26**	**171**

Fitzwilliam

Table 9 - Fitzwilliam Crash Severity by Crash Type

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Crash Type	Animal			22	4		1	**27**
	Fixed Object	3		38	21	3	2	**67**
	Other			3				**3**
	Other Motor Vehicle	4	1	43	18	8	4	**78**
	Other Object			1	2	1		**4**
	Overturn			8	5	1	1	**15**
	Parked Motor Vehicle			1				**1**
	Thrown or Falling Object			3				**3**
	Not Specified	1		3	1		1	**6**
	Grand Total	**8**	**1**	**122**	**51**	**13**	**9**	**204**

Table 10 - Fitzwilliam Crash Severity by Location of First Harmful Event

		Crash Severity						
		Incapacitating	Killed	No Apparent Injury	Non-Incapacitating	Possible	Unknown	Grand Total
Location of First Harmful Event	Along Road at Driveway Access	1		7	4			**12**
	Along the Road	5	1	78	30	6	7	**127**
	At Intersection	1		13	7	4		**25**
	In a Driveway				1			**1**
	Intersection Related			4	2	1	1	**8**
	Off Roadway beyond Shoulder	1		7	3	1		**12**
	Off Roadway on Shoulder/Median			11	4	1		**16**
	Unknown			2			1	**3**
	Grand Total	**8**	**1**	**122**	**51**	**13**	**9**	**204**

Photos of Conditions

Swanzey, near Mt Huggins Road- poor sight line entering onto NH 12 from senior living complex.

Swanzey, Flat Roof Mill Road-Northbound at the intersection with Flat Roof Mill Road, left turn lane is short with reduced time to slow down and can cause the driver to overshoot the turn onto Flat Roof Mill Road.

Marlborough- Invasive species on right side of photo; unimproved Rail Trail on left side of photo.

Marlborough, Webb Depot Road- Y- intersection. Consider realigning to a T-intersection.

Troy, Water Street- Business sign obstructs view of drivers entering onto NH 12.

Troy- Unlimited curb cuts along NH 12. Access management needed.

Fitzwilliam: Northbound approach to NH 119 intersection. Access management techniques needed to reduce the points of conflict and reduce driver confusion. There is also a lack of signage and pavement markings to alert drivers of the upcoming intersection.

Fitzwilliam- Southbound approach to NH119 intersection. Pedestrians crossing NH 12 to access businesses. No designated crosswalk and large area to cross reduces the safety of pedestrians.

Fitzwilliam: Near intersection of NH12/NH119. Pavement markings are fading; large curb cut into businesses. Signs can cause a distraction to drivers. Sandwich board sign is a sightline hazard for drivers leaving the businesses.

Fitzwilliam: Northbound approach to NH 119 intersection- large area of pavement. Difficult for pedestrians to cross safely and quickly to business. Pavement markings and signs could enhance driver ability to understand turning options.

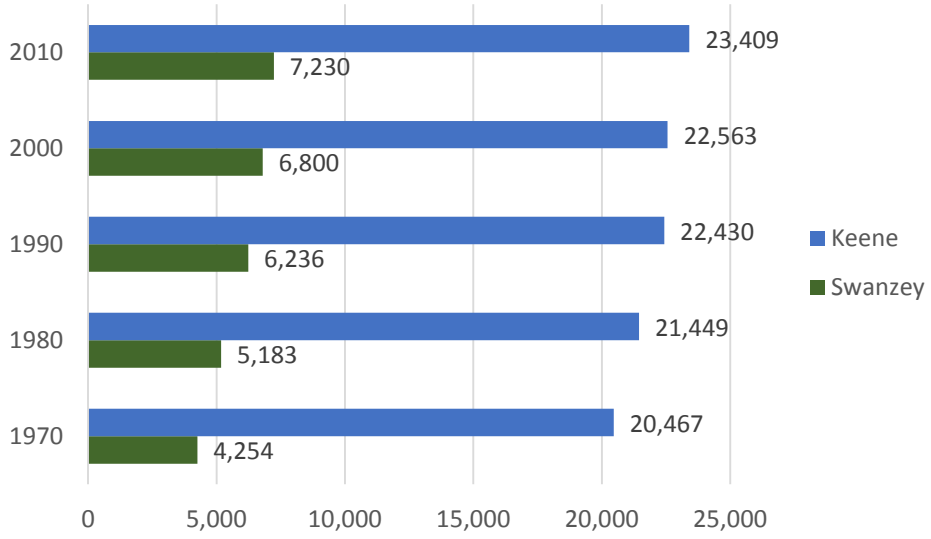
Rail Trail, Fitzwilliam- This is an unimproved section of the Rail Trail in Fitzwilliam

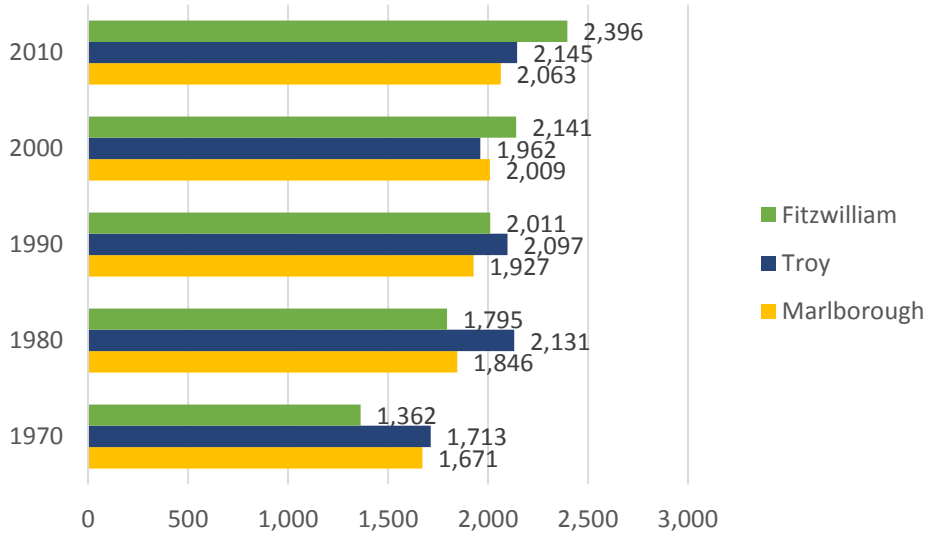
Socioeconomic Data

Population

Population (1970-2010)

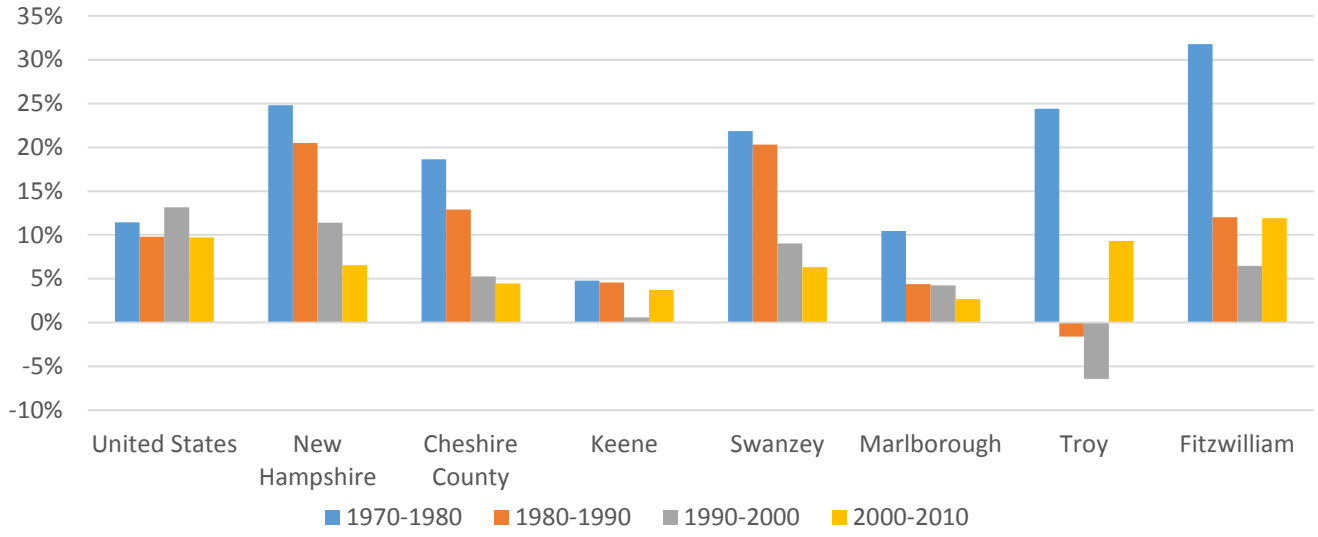
	1970	1980	1990	2000	2010	Change 1970-2010	Change 2000-2010
United States	203,302,031	226,542,199	248,709,873	281,421,906	308,745,538	52%	10%
New Hampshire	737,681	920,610	1,109,252	1,235,786	1,316,470	78%	6.5%
Cheshire County	52,364	62,116	70,121	73,825	77,117	47%	4.5%
Southwest Region	65,771	78,910	91,721	97,391	102,313	56%	5.1%
Fitzwilliam	1,362	1,795	2,011	2,141	2,396	76%	11.9%
Keene	20,467	21,449	22,430	22,563	23,409	14%	3.7%
Marlborough	1,671	1,846	1,927	2,009	2,063	24%	2.7%
Swanzey	4,254	5,183	6,236	6,800	7,230	70%	6.3%
Troy	1,713	2,131	2,097	1,962	2,145	25%	9.3%





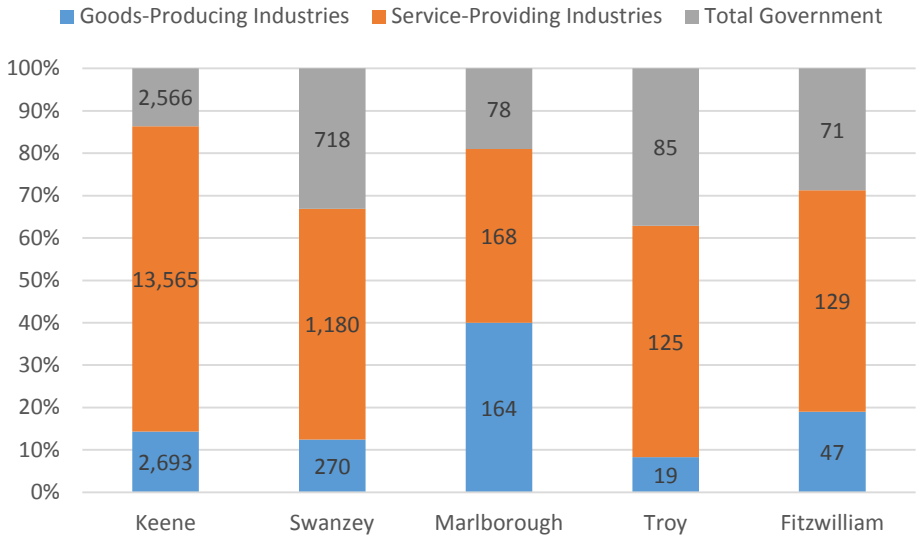
Population Change by Decade (1970-2010)

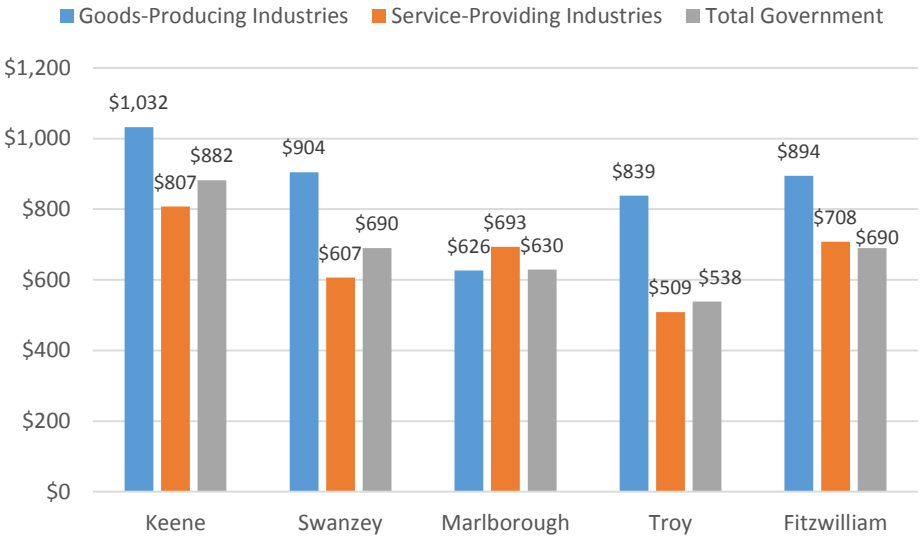
	1970-1980	1980-1990	1990-2000	2000-2010
United States	11.4%	9.8%	13.2%	9.7%
New Hampshire	24.8%	20.5%	11.4%	6.5%
Cheshire County	18.6%	12.9%	5.3%	4.5%
Southwest Region	20.0%	16.2%	6.2%	5.1%
Fitzwilliam	31.8%	12.0%	6.5%	11.9%
Keene	4.8%	4.6%	0.6%	3.7%
Marlborough	10.5%	4.4%	4.3%	2.7%
Swanzey	21.8%	20.3%	9.0%	6.3%
Troy	24.4%	-1.6%	-6.4%	9.3%



Employment

Average Annual Employment & Weekly Wages Summary (2012)





Average Annual Employment & Weekly Wages by Industry (2012)

Keene

NAICS Code	Industry	Units	Annual Average Employment	Average Weekly Wage
	Total, Private plus Government	864	18,824	$849.65
	Total Private	831	16,258	$844.51
101	Goods-Producing Industries	78	2,693	$1,032.29
11	Agriculture/Forestry/Fishing	3	41	$226.99
21	Mining	0	0	$0.00
23	Construction	39	462	$937.07
31	Manufacturing	37	2,190	$1,067.50
102	Service-Providing Industries	752	13,565	$807.22
22	Utilities	n	n	n
42	Wholesale Trade	42	328	$1,117.35
44	Retail Trade	164	2,680	$549.10
48	Transportation and Warehousing	7	263	$598.92
51	Information	20	302	$791.43
52	Finance and Insurance	58	1,325	$1,208.85
53	Real Estate and Rental and Leasing	36	169	$677.01
54	Professional and Technical Service	86	440	$1,202.84
55	Management of Companies/Enterprises	n	n	n
56	Administrative and Waste Services	44	558	$985.22
61	Educational Services	10	312	$617.56
62	Health Care and Social Assistance	111	3,389	$817.00
71	Arts, Entertainment, and Recreation	n	n	n
72	Accommodation and Food Services	86	1,722	$333.27
81	Other Services Except Public Admin	66	930	$448.96
99	Unclassified Establishments	0	0	$0.00
	Total Government	33	2,566	$882.20
	Federal Government	4	69	$1,123.34
	State Government	20	1,068	$988.13
	Local Government	9	1,429	$791.42

n=not disclosable

Swanzey

NAICS Code	Industry	Units	Annual Average Employment	Average Weekly Wage
	Total, Private plus Government	149	2,168	$671.27
	Total Private	130	1,450	$662.09
101	Goods-Producing Industries	24	270	$904.36
11	Agriculture/Forestry/Fishing	0	0	$0.00
21	Mining	0	0	$0.00
23	Construction	15	139	$897.77
31	Manufacturing	9	131	$911.32
102	Service-Providing Industries	105	1,180	$606.71
22	Utilities	0	0	$0.00
42	Wholesale Trade	11	32	$1,068.65
44	Retail Trade	25	668	$647.39
48	Transportation and Warehousing	4	64	$385.11
51	Information	3	8	$567.81
52	Finance and Insurance	n	n	n
53	Real Estate and Rental and Leasing	6	19	$418.24
54	Professional and Technical Service	8	36	$938.42
55	Management of Companies/Enterprises	0	0	$0.00
56	Administrative and Waste Services	12	92	$725.23
61	Educational Services	n	n	n
62	Health Care and Social Assistance	5	37	$475.24
71	Arts, Entertainment, and Recreation	3	19	$200.13
72	Accommodation and Food Services	10	105	$254.32
81	Other Services Except Public Admin	15	76	$495.68
99	Unclassified Establishments	0	0	$0.00
	Total Government	19	718	$689.80
	Federal Government	2	3	$1,061.17
	State Government	10	21	$757.85
	Local Government	7	694	$686.08

n=not disclosable

Marlborough

NAICS Code	Industry	Units	Annual Average Employment	Average Weekly Wage
	Total, Private plus Government	54	410	$654.46
	Total Private	50	332	$660.35
101	Goods-Producing Industries	14	164	$626.34
11	Agriculture/Forestry/Fishing	n	n	n
21	Mining	0	0	$0.00
23	Construction	n	n	n
31	Manufacturing	n	n	n
102	Service-Providing Industries	36	168	$693.47
22	Utilities	0	0	$0.00
42	Wholesale Trade	5	25	$1,507.33
44	Retail Trade	11	60	$498.42
48	Transportation and Warehousing	0	0	$0.00
51	Information	0	0	$0.00
52	Finance and Insurance	0	0	$0.00
53	Real Estate and Rental and Leasing	n	n	n
54	Professional and Technical Service	5	12	$664.27
55	Management of Companies/Enterprises	0	0	$0.00
56	Administrative and Waste Services	3	22	$757.24
61	Educational Services	n	n	n
62	Health Care and Social Assistance	n	n	n
71	Arts, Entertainment, and Recreation	0	0	$0.00
72	Accommodation and Food Services	3	18	$204.93
81	Other Services Except Public Admin	6	21	$523.79
99	Unclassified Establishments	0	0	$0.00
	Total Government	4	78	$629.54
	Federal Government	1	1	$1,333.74
	State Government	1	5	$662.77
	Local Government	2	72	$613.20

n=not disclosable

Troy

NAICS Code	Industry	Units	Annual Average Employment	Average Weekly Wage
	Total, Private plus Government	28	229	$547.47
	Total Private	23	144	$552.93
101	Goods-Producing Industries	8	19	$838.56
11	Agriculture/Forestry/Fishing	0	0	$0.00
21	Mining	0	0	$0.00
23	Construction	n	n	n
31	Manufacturing	n	n	n
102	Service-Providing Industries	15	125	$508.91
22	Utilities	0	0	$0.00
42	Wholesale Trade	n	n	n
44	Retail Trade	n	n	n
48	Transportation and Warehousing	n	n	n
51	Information	0	0	$0.00
52	Finance and Insurance	n	n	n
53	Real Estate and Rental and Leasing	n	n	n
54	Professional and Technical Service	n	n	n
55	Management of Companies/Enterprises	0	0	$0.00
56	Administrative and Waste Services	n	n	n
61	Educational Services	0	0	$0.00
62	Health Care and Social Assistance	n	n	n
71	Arts, Entertainment, and Recreation	0	0	$0.00
72	Accommodation and Food Services	n	n	n
81	Other Services Except Public Admin	n	n	n
99	Unclassified Establishments	0	0	$0.00
	Total Government	5	85	$538.16
	Federal Government	1	1	$1,154.90
	State Government	1	5	$851.78
	Local Government	3	79	$512.51

n=not disclosable

Fitzwilliam

NAICS Code	Industry	Units	Annual Average Employment	Average Weekly Wage
	Total, Private plus Government	44	246	$738.45
	Total Private	41	175	$757.98
101	Goods-Producing Industries	9	47	$894.43
11	Agriculture/Forestry/Fishing	n	n	n
21	Mining	0	0	$0.00
23	Construction	n	n	n
31	Manufacturing	4	22	$758.77
102	Service-Providing Industries	32	129	$708.28
22	Utilities	n	n	n
42	Wholesale Trade	n	n	n
44	Retail Trade	10	57	$515.26
48	Transportation and Warehousing	n	n	n
51	Information	0	0	$0.00
52	Finance and Insurance	n	n	n
53	Real Estate and Rental and Leasing	0	0	$0.00
54	Professional and Technical Service	6	9	$3,277.45
55	Management of Companies/Enterprises	0	0	$0.00
56	Administrative and Waste Services	n	n	n
61	Educational Services	0	0	$0.00
62	Health Care and Social Assistance	n	n	n
71	Arts, Entertainment, and Recreation	0	0	$0.00
72	Accommodation and Food Services	4	37	$227.86
81	Other Services Except Public Admin	3	6	$442.51
99	Unclassified Establishments	0	0	$0.00
	Total Government	3	71	$689.93
	Federal Government	1	4	$985.64
	State Government	0	0	$0.00
	Local Government	2	67	$673.73

n=not disclosable

Average Annual Employment & Weekly Wages by Industry (1992, 2002, 2012)

	Keene			Swanzey		
	1992	2002	2012	1992	2002	2012
Total, Private plus Government	16,875	18,878	18,824	1,082	1,784	2,168
Total Private	15,158	16,517	16,258	811	1,083	1,450
Goods-Producing Industries	3,941	3,650	2,693	237	363	270
Agriculture/Forestry/Fishing	0	0	41	n	n	0
Mining	0	0	0	0	0	0
Construction	387	579	462	n	n	139
Manufacturing	3,555	3,071	2,190	163	200	131
Service-Providing Industries	11,216	12,868	13,565	574	720	1,180
Utilities	n	n	n	0	0	0
Wholesale Trade	423	373	328	23	22	32
Retail Trade	2,496	2,684	2,680	285	391	668
Transportation and Warehousing	219	307	263	n	n	64
Information	289	294	302	n	6	8
Finance and Insurance	1,627	1,833	1,325	14	n	n
Real Estate and Rental and Leasing	181	240	169	8	n	19
Professional and Technical Service	335	416	440	36	28	36
Management of Companies/Enterprises	227	234	n	0	0	0
Administrative and Waste Services	672	501	558	21	71	92
Educational Services	283	343	312	n	0	n
Health Care and Social Assistance	2,407	2,999	3,389	43	11	37
Arts, Entertainment, and Recreation	n	n	n	n	10	19
Accommodation and Food Services	1,242	1,581	1,722	87	112	105
Other Services Except Public Admin	583	846	930	25	50	76
Unclassified Establishments	n	n	0	n	0	0
Total Government	1,718	2,360	2,566	271	701	718
Federal Government	128	128	69	6	8	3
State Government	688	1,019	1,068	10	16	21
Local Government	901	1,214	1,429	255	677	694

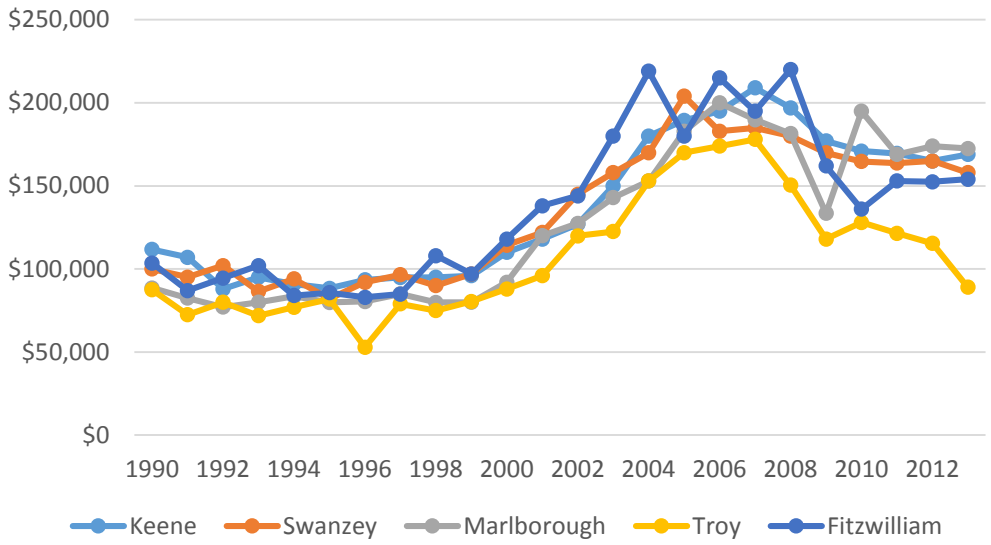
n=not disclosable

	Marlborough			Troy			Fitzwilliam		
	1992	2002	2012	1992	2002	2012	1992	2002	2012
Total, Private plus Government	309	593	410	614	326	229	720	441	246
Total Private	232	491	332	532	246	144	674	363	175
Goods-Producing Industries	107	282	164	n	78	19	539	191	47
Agriculture/Forestry/Fishing	0	0	n	n	n	0	0	0	n
Mining	0	0	0	0	0	0	0	0	0
Construction	40	n	n	18	n	n	95	n	n
Manufacturing	67	n	n	n	66	n	444	n	22
Service-Providing Industries	125	209	168	n	168	125	135	172	129
Utilities	0	0	0	0	0	0	0	0	n
Wholesale Trade	6	38	25	n	n	n	n	n	n
Retail Trade	n	71	60	25	33	n	17	31	57
Transportation and Warehousing	n	n	0	44	n	n	n	n	n
Information	n	0	0	0	0	0	n	n	0
Finance and Insurance	n	n	0	0	n	n	n	n	n
Real Estate and Rental and Leasing	n	0	n	n	n	n	n	n	0
Professional and Technical Service	10	23	12	n	n	n	n	6	9
Management of Companies/Enterprises	0	0	0	0	0	0	0	0	0
Administrative and Waste Services	n	n	22	n	n	n	n	0	n
Educational Services	n	n	n	0	0	0	0	0	0
Health Care and Social Assistance	n	n	n	n	16	n	n	0	n
Arts, Entertainment, and Recreation	0	0	0	0	0	0	0	0	0
Accommodation and Food Services	8	19	18	88	n	n	n	37	37
Other Services Except Public Admin	14	16	21	14	12	n	n	12	6
Unclassified Establishments	0	0	0	0	0	0	0	0	0
Total Government	77	102	78	82	80	85	46	78	71
Federal Government	7	6	1	3	2	1	2	3	4
State Government	9	6	5	5	5	5	3	4	0
Local Government	61	90	72	74	73	79	41	70	67

n=not disclosable

Median Home Purchase Price (1990-2013)

	Keene	Swanzey	Marlborough	Troy	Fitzwilliam
2013	$169,000	$158,000	$172,500	$89,000	$154,000
2012	$165,000	$165,000	$174,000	$115,423	$152,500
2011	$169,500	$163,800	$169,000	$121,500	$153,000
2010	$171,000	$164,700	$195,000	$128,000	$136,000
2009	$177,000	$169,900	$133,500	$118,000	$162,000
2008	$197,000	$180,000	$181,500	$150,500	$220,000
2007	$209,000	$184,900	$189,900	$178,000	$195,000
2006	$195,000	$182,900	$200,000	$174,000	$215,000
2005	$189,500	$204,000	$182,900	$170,000	$180,000
2004	$180,000	$169,900	$153,000	$153,000	$219,000
2003	$150,000	$158,000	$143,000	$122,500	$180,000
2002	$127,000	$145,000	$127,500	$119,950	$144,000
2001	$118,000	$122,000	$120,000	$96,000	$138,000
2000	$110,000	$114,400	$92,000	$88,000	$118,000
1999	$96,000	$97,000	$80,000	$80,437	$97,000
1998	$95,000	$90,000	$79,900	$75,000	$108,000
1997	$94,900	$96,500	$85,000	$79,000	$84,900
1996	$93,500	$92,000	$80,500	$52,900	$83,000
1995	$88,400	$82,000	$79,900	$81,900	$85,800
1994	$91,000	$94,000	$83,500	$77,000	$84,000
1993	$95,000	$86,500	$80,000	$71,900	$102,000
1992	$88,000	$102,000	$77,048	$80,000	$94,476
1991	$107,048	$95,048	$82,476	$72,476	$87,000
1990	$111,750	$100,000	$88,526	$87,500	$103,524



Cultural and Historic Resources

The following table includes the endangered, threatened plant and animal species that have been identified in the corridor communities as reported by the NH Natural Heritage Bureau. The Table also includes Exemplary Natural Communities.

Species	Classification	Status
Keene		
*** Silver maple - false nettle - sensitive fern floodplain forest	Nat. Communities Palustrine	
**American ginseng (*Panax quinquefolius*)	Plant	Threatened
Canada shore quillwort (*Isoetes riparia* var. *canadensis*)	Plant	Endangered
Dragon's-mouth (*Arethusa bulbosa*)	Plant	Endangered
**Greater fringed-gentian (*Gentianopsis crinita*)	Plant	Threatened
Houghton's Umbrella Sedge (*Cyperus houghtonii*)	Plant	Endangered
Incurved Umbrella Sedge (*Cyperus squarrosus*)	Plant	Endangered
Licorice goldenrod (*Solidago odora*)	Plant	Endangered
Long-headed windflower (*Anemone cylindrica*)	Plant	Endangered
* Narrow-leaved hawkweed (*Hieracium umbellatum*)	Plant	Endangered
Northern bog violet (*Viola nephrophylla*)	Plant	Endangered
Rock muhly (*Muhlenbergia sobolifera*)	Plant	Endangered
* Vasey's Pondweed (*Potamogeton vaseyi*)	Plant	Endangered
Common Nighthawk (*Chordeiles minor*)	Animal	Endangered
** Spotted Turtle (*Clemmys guttata*)	Animal	Threatened
** Wood Turtle (*Glyptemys insculpta*)	Animal	Special Concern
** Jefferson Salamander (*Ambystoma jeffersonianum*)	Animal	Special Concern
American Eel (*Anguilla rostrata*) --	Animal	Special Concern
** Dwarf Wedge Mussel (*Alasmidonta heterodon*)	Animal	Endangered
Eastern Pond Mussel (*Ligumia nasuta*) --	Animal	Special Concern
Swanzey		
*** Silver maple - false nettle - sensitive fern floodplain forest	Nat. Communities Palustrine	
Carolina Crane's-bill (*Geranium carolinianum*)	Plant	Endangered
Long-headed windflower (*Anemone cylindrica*)	Plant	Endangered
** Grasshopper Sparrow (*Ammodramus savannarum*)	Animal	Threatened
** Horned Lark (*Eremophila alpestris*)	Animal	Special Concern
** Vesper Sparrow (*Pooecetes gramineus*)	Animal	Special Concern
** Wood Turtle (*Glyptemys insculpta*)	Animal	Special Concern
** Northern Leopard Frog (*Rana pipiens*)	Animal	Special Concern
** American Eel (*Anguilla rostrata*)	Animal	Special Concern
** Spot-winged Glider (*Pantala hymenaea*)	Animal	----
** Dwarf Wedge Mussel (*Alasmidonta heterodon*)	Animal	Endangered
Marlborough		
Medium level fen system --	Nat. Communities Palustrine	
Greater fringed-gentian (*Gentianopsis crinita*)	Plant	Threatened
Long-headed windflower (*Anemone cylindrica*)	Plant	Endangered
* Wood Turtle (*Glyptemys insculpta*)	Animal	Special Concern
American Eel (*Anguilla rostrata*)	Animal	Special Concern
Troy		
** Rich Appalachian oak rocky woods	Nat. Communities Terrestrial	
** Rich mesic forest	Nat. Communities Terrestrial	
** Drainage marsh - shrub swamp system	Nat. Communities Palustrine	
Bur-reed sedge (*Carex sparganioides*)	Plant	Endangered
** Smooth black sedge (*Carex nigra*)	Plant	Endangered

Fitzwilliam		
** Drainage marsh - shrub swamp system	Nat. Communities Palustrine	
** Giant Rhododendron (*Rhododendron maximum*)	Plant	Threatened
Green adder's-mouth (*Malaxis unifolia*)	Plant	Threatened
Wild Lupine (*Lupinus perennis*) --	Plant	Threatened
** Blanding's Turtle (*Emydoidea blandingii*)	Animal	Endangered
** Wood Turtle (*Glyptemys insculpta*)	Animal	Special Concern

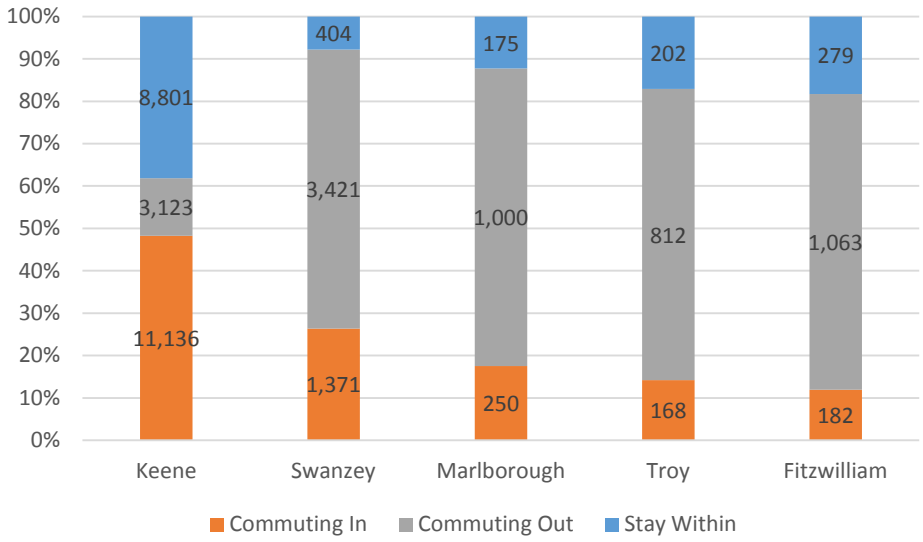
Source: NH Natural Heritage Bureau- July 2013

**** Extremely High- A good example of a global rarity or an excellent example of a state rarity*

*** Very High- A marginal example of a global rarity or a good example of a state rarity*

** High- A marginal example of a state rarity*

U.S. Census Bureau Journey to Work Commuting Patterns (2010)



OnTheMap Inflow/Outflow

Table 11 - Inflow/Outflow Report (2003, 2011)

Keene, Swanzey, Marlborough, Troy, and Fitzwilliam Combined Labor Market Size (Primary Jobs)

	2011		2003	
	Count	Share	Count	Share
Employed in the Selection Area	19,585	100.0%	19,623	100.0%
Living in the Selection Area	14,690	75.0%	17,794	90.7%
Net Job Inflow (+) or Outflow (-)	4,895	-	1,829	-

In-Area Labor Force Efficiency (Primary Jobs)

	2011		2003	
	Count	Share	Count	Share
Living in the Selection Area	14,690	100.0%	17,794	100.0%
Living and Employed in the Selection Area	8,065	54.9%	10,820	60.8%
Living in the Selection Area but Employed Outside	6,625	45.1%	6,974	39.2%

In-Area Employment Efficiency (Primary Jobs)

	2011		2003	
	Count	Share	Count	Share
Employed in the Selection Area	19,585	100.0%	19,623	100.0%
Employed and Living in the Selection Area	8,065	41.2%	10,820	55.1%
Employed in the Selection Area but Living Outside	11,520	58.8%	8,803	44.9%

Outflow Job Characteristics (Primary Jobs)

	2011		2003	
	Count	Share	Count	Share
External Jobs Filled by Residents	6,625	100.0%	6,974	100.0%
Workers Aged 29 or younger	1,662	25.1%	1,871	26.8%
Workers Aged 30 to 54	3,461	52.2%	3,990	57.2%
Workers Aged 55 or older	1,502	22.7%	1,113	16.0%
Workers Earning $1,250 per month or less	1,474	22.2%	1,801	25.8%
Workers Earning $1,251 to $3,333 per month	2,518	38.0%	3,218	46.1%
Workers Earning More than $3,333 per month	2,633	39.7%	1,955	28.0%
Workers in the "Goods Producing" Industry Class	1,133	17.1%	1,440	20.6%
Workers in the "Trade, Transportation, and Utilities" Industry Class	1,939	29.3%	2,095	30.0%
Workers in the "All Other Services" Industry Class	3,553	53.6%	3,439	49.3%

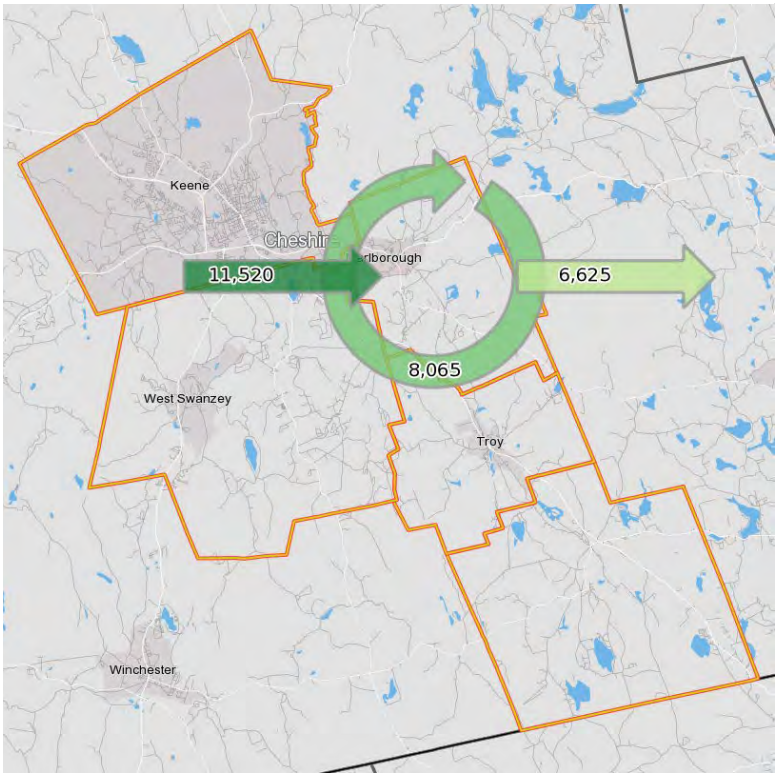
Inflow Job Characteristics (Primary Jobs)

	2011		2003	
	Count	Share	Count	Share
Internal Jobs Filled by Outside Workers	11,520	100.0%	8,803	100.0%
Workers Aged 29 or younger	2,796	24.3%	2,207	25.1%
Workers Aged 30 to 54	6,055	52.6%	5,198	59.0%
Workers Aged 55 or older	2,669	23.2%	1,398	15.9%
Workers Earning $1,250 per month or less	2,500	21.7%	2,533	28.8%
Workers Earning $1,251 to $3,333 per month	4,352	37.8%	3,797	43.1%
Workers Earning More than $3,333 per month	4,668	40.5%	2,473	28.1%
Workers in the "Goods Producing" Industry Class	1,841	16.0%	1,757	20.0%
Workers in the "Trade, Transportation, and Utilities" Industry Class	2,270	19.7%	1,758	20.0%
Workers in the "All Other Services" Industry Class	7,409	64.3%	5,288	60.1%

Interior Flow Job Characteristics (Primary Jobs)

	2011		2003	
	Count	Share	Count	Share
Internal Jobs Filled by Residents	8,065	100.0%	10,820	100.0%
Workers Aged 29 or younger	1,673	20.7%	2,493	23.0%
Workers Aged 30 to 54	4,304	53.4%	6,337	58.6%
Workers Aged 55 or older	2,088	25.9%	1,990	18.4%
Workers Earning $1,250 per month or less	1,673	20.7%	2,677	24.7%
Workers Earning $1,251 to $3,333 per month	3,188	39.5%	5,158	47.7%
Workers Earning More than $3,333 per month	3,204	39.7%	2,985	27.6%
Workers in the "Goods Producing" Industry Class	1,505	18.7%	2,685	24.8%
Workers in the "Trade, Transportation, and Utilities" Industry Class	977	12.1%	1,670	15.4%
Workers in the "All Other Services" Industry Class	5,583	69.2%	6,465	59.8%

Figure 2 - Inflow/Outflow Report (2011)



Development Constraints/Potential

An analysis of development potential, sometimes referred to as a build-out analysis, allows planners to estimate the amount and to some extent the location of permitted types of development for a given area. In conducting the Route 12 South Corridor Study, the build-out analysis utilized a Geographic Information System (GIS) to estimate the maximum capacity of development in a given area based on existing local land use regulations. The result answers the question: "how many buildings *could* be built in the area according to current land-use regulations?" It is neither a prediction of demand nor a forecast of how many buildings will actually be built in a given time period. The model did not take into account existing structures. In the context of the study, the goal is to compare the relative capacity for development between communities.

The land capacity with and without development constraints was calculated.. Specific development constraints included the following:

1. Shallow to water table (less than 1.5')
2. Special flood hazard area
3. Steep slopes (greater than 25%)
4. Shallow to bedrock (less than 40")
5. Conservation land (NH GRANIT Conservation/Public Lands)

Both capacities result in an area measurement (acreage) of a certain community's real estate in the vicinity of the corridor. Based on a given community's permitted zoning density, the holding capacity was calculated. For example, picture a community with a 10 acre residential district where the minimum lot size was 0.5 acres. As defined above, the holding capacity of the district would be a total of 20 units or lots. If in the same district, 5 acres of land was constrained due to severe environmental factors, the holding capacity of the same zone would be 10 units. Each calculation was performed on:

1. Existing tax parcel land areas located within *or partially within* the 1,000' corridor study area (determined by a 1,000' buffer from the highway centerline on each side).
2. Tax parcel land area within 1,000' feet of the highway centerline only. This selection is representative of past real estate market development and it ensures larger tracts of land, often without direct access to Route 12, are not included.

Keene

Land Supply

Table 12 - Parcels located within or partially within 1,000' of highway centerline (Keene)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Commerce	61	48	79%	13
Conservation	20	20	100%	0
High Density	147	49	33%	99
Industrial	263	216	82%	47
Rural	56	33	59%	23
Low Density	269	12	4%	257
Total	**816**	**378**	**46%**	**439**

Table 13 - Parcel area within 1,000' of highway centerline only (Keene)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Commerce	54	41	76%	13
Conservation	8	8	100%	0
High Density	76	5	6%	72
Industrial	50	27	54%	23
Rural	39	15	40%	23
Low Density	260	8	3%	252
Total	**488**	**105**	**22%**	**383**

Holding Capacity

Table 14 - Holding Capacity Calculations, Parcels located within or partially within 1,000' of highway centerline (Keene)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size
Commerce	178	38	15,000 square feet
Conservation	4	0	5 acres
High Density	1,070	717	6,000 square feet
Industrial	There is no minimum lot size in the Industrial Zone		
Rural	11	5	5 acres
Low Density	1,172	1,119	10,000 square feet
Total	**2,435**	**1,879**	

Table 15 - Holding Capacity Calculations, Parcel area within 1,000' of highway centerline only (Keene)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
Commerce	158	38	15,000 square feet
Conservation	2	0	5 acres
High Density	555	520	6,000 square feet
Industrial	There is no minimum lot size in the Industrial Zone		
Rural	8	5	w

Low Density	1,133	1,097	10,000 square feet
Total	**1,856**	**1,659**	

Swanzey

Land Supply

Table 16 - Parcels located within or partially within 1,000' of highway centerline (Swanzey)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Residential	136	28	21%	108
Business	398	109	27%	289
Industrial Park	50	15	30%	35
Rural/Agricultural	698	431	62%	266
Total	**1,282**	**584**	**46%**	**698**

Table 17 - Parcel area within 1,000' of highway centerline only (Swanzey)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Residential	91	16	18%	75
Business	345	104	30%	241
Industrial Park	15	8	51%	7
Rural/Agricultural	255	152	60%	102
Total	**705**	**280**	**40%**	**425**

Holding Capacity

Table 18 - Holding Capacity Calculations, Parcels located within or partially within 1,000' of highway centerline (Swanzey)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
Residential	136	108	1
Business	398	289	1
Industrial Park	25	18	2
Rural/Agricultural	233	89	3
Total	**792**	**503**	

Table 19 - Holding Capacity Calculations, Parcel area within 1,000' of highway centerline only (Swanzey)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
Residential	91	75	1
Business	345	241	1
Industrial Park	7	4	2
Rural/Agricultural	85	34	3
Total	**528**	**354**	

Marlborough

Land Supply

Table 20 - Parcels located within or partially within 1,000' of highway centerline (Marlborough)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Route 12 Commercial	226	188	83%	38
Rural Residential	667	506	76%	161
Total	**893**	**694**	**78%**	**199**

Table 21 - Parcels located within or partially within 1,000' of highway centerline (Marlborough)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Route 12 Commercial	175	137	79%	37
Rural Residential	217	165	76%	52
Total	**391**	**302**	**77%**	**89**

Holding Capacity

Table 22 - Holding Capacity Calculations, Parcels located within or partially within 1,000' of highway centerline (Marlborough)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
Route 12 Commercial	113	19	2
Rural Residential	133	32	5
Total	**246**	**51**	

Table 23 - Holding Capacity Calculations, Parcel area within 1,000' of highway centerline only (Marlborough)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
Route 12 Commercial	87	19	2
Rural Residential	43	10	5
Total	**131**	**29**	

Troy

Table 24 - Parcels located within or partially within 1,000' of highway centerline (Troy)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Highway Business District	207	105	50%	103
Mill District	22	9	42%	13
Light Industrial District	92	49	54%	42
Residential District	100	44	44%	56
Rural District	1202	877	73%	325

Village District	130	32	24%	99
Total	**1754**	**1116**	**64%**	**638**

Table 25 - Parcel area within 1,000' of highway centerline only (Troy)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
Highway Business District	207	105	50%	103
Mill District	15	6	44%	8
Light Industrial District	49	26	53%	23
Residential District	56	19	34%	37
Rural District	439	346	79%	93
Village District	114	20	17%	95
Total	**880**	**521**	**59%**	**359**

Holding Capacity

Table 26 - Holding Capacity Calculations, Parcels located within or partially within 1,000' of highway centerline (Troy)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
Highway Business District	104	51	2
Mill District	Development is restricted to existing structures		
Light Industrial District	46	21	2
Residential District	100	56	1
Rural District	601	163	2
Village District	261	197	0.5
Total	**1,111**	**489**	

Table 27 - Holding Capacity Calculations, Parcel area within 1,000' of highway centerline only (Troy)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
Highway Business District	158	38	2
Mill District	Development is restricted to existing structures		
Light Industrial District	25	12	2
Residential District	56	37	1
Rural District	219	47	2
Village District	229	189	0.5
Total	**632**	**336**	

Fitzwilliam

Table 28 - Parcels located within or partially within 1,000' of highway centerline (Fitzwilliam)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
General Business District	96	56	58%	40
General Industrial	790	439	56%	351

District				
Light Industrial District	190	101	53%	88
Residential District	93	9	10%	83
Rural District	2,216	1,127	51%	1,089
Village Center Business District	11	0	4%	10
Total	**3,395**	**1,733**	**51%**	**1,662**

Table 29 - Parcel area within 1,000' of highway centerline only (Fitzwilliam)

	Parcel Acres	Development Constrained Acres	Percent Constrained	Acres Remaining
General Business District	96	56	58%	40
General Industrial District	520	312	60%	207
Light Industrial District	190	101	53%	88
Residential District	80	7	9%	73
Rural District	881	536	61%	345
Village Center Business District	10	0	5%	9
Total	**1,776**	**1,013**	**57%**	**763**

Holding Capacity

Table 30 - Holding Capacity Calculations, Parcels located within or partially within 1,000' of highway centerline (Fitzwilliam)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
General Business District	104	44	0.918274
General Industrial District	215	96	3.673095
Light Industrial District	52	24	3.673095
Residential District	101	91	0.918274
Rural District	804	395	2.754821
Village Center Business District	There is no minimum lot size in the Village Center Business District		
Total	**1,276**	**649**	

Table 31 - Holding Capacity Calculations, Parcel area within 1,000' of highway centerline only (Fitzwilliam)

	Units on Parcel Acres	Units on Unconstrained Acres	Min. Lot Size (Acres)
General Business District	104	44	0.918274
General Industrial District	142	56	3.673095
Light Industrial District	52	24	3.673095
Residential District	87	79	0.918274
Rural District	320	125	2.754821
Village Center Business District	There is no minimum lot size in the Village Center Business District		
Total	**632**	**336**	

Permitted Uses by Zoning District

The Tables in this section show the permitted uses in the zoning districts within the corridor study area for each community. It also show the uses that are permitted by Special Exception approval.

Keene Districts	Permitted	Special Exception
Low Density	• Accessory Dwelling Unit • Single-family Dwelling • Historic Site- open to the public • Home Occupation (incidental to main residential use) • Noncommercial Raising of Farm Animals	• Group Home • Harvesting of Forestry Products • Institutional
High Density	• Duplex- Dwelling • Multi-family Dwelling • Single-family Dwelling • Group Home • Historic Site- open to the public • Home Occupation (incidental to main residential use w/ conditions) • Senior Center	• Bed and Breakfast with Meeting and Dining Facilities • Bed and Breakfast Inn/Tourist Home • Boarding House/Lodging House • Fraternity/Sorority • Neighborhood Grocery Stores
Conservation	• Cemeteries • Day Camp • Harvesting of Forestry Products • Hiking Trails • Historic Site- open to the public • Nature Study Area • Non-commercial Outdoor Recreational Activity • Recreation Area • Riding Trails	
Agriculture	• Agricultural-related Educational and Recreational Activity as a Business (specific list of uses in Zoning Ordinance) • Single-family Dwelling (conditional-10 acre minimum) • Farming (w/ accessory uses list in Zoning Ordinance) • Greenhouses or Nurseries • Harvesting of Forestry Products • Historic Site- open to the public • Home Occupation- incidental to the main residential use (conditional) • Non-commercial Greenhouses incidental to main use only • Noncommercial Outdoor Recreational Activity • Noncommercial Raising of Animals and/or Farm Products • Orchards and Vineyards • Outdoor Recreational Activity as a Business (conditional) • Raising and Selling of Farm Animals and/or Products	• Agricultural-related Educational and Recreational Activity as a Business • Bed and Breakfast Inn • Single-family Dwelling, Duplex as an Accessory Use to Farming • Institutional Use

Swanzey Districts	Permitted	Special Exception
Rural/Agricultural District	• One-family Dwelling • Veterinarian, Kennel or Stable • General Farming, including Horticulture, Dairying, Livestock and Poultry Raising and other Agricultural Enterprises or Uses • Roadside Stands (for the sale of home grown produce) • Home Occupation • Manufactured Housing on Individual Lots • Accessory Uses • Daycare or Kindergarten Facility • Hospital or Licensed Nursing Home	• Gift shop, antique shop or craft shop • Manufactured uses, corporate offices and industrial parks • The removal and processing of clay, sod, loam, crushed stone, sand or gravel for sale • Two-family dwelling • Septage lagoons • Bed and Breakfast Facilities • Educational or religious institution, club, or lodge when the primary function is indoors • Telecommunications Facility • Various recreation uses conducted as a business or by a private club or organization • Accessory buildings
Residence District	• One-family Dwelling • Veterinarian, Kennel or Stable • General Farming, including Horticulture, Dairying, Livestock and Poultry Raising and other Agricultural Enterprises or Uses • Roadside Stands (for the sale of home grown produce) • Home Occupation • Manufactured Housing on Individual Lots • Accessory Uses • Daycare or Kindergarten Facility • Customary Agricultural Uses including Gardens, Nurseries and Greenhouses • Home Occupation	• Two- family Housing • Multi-family Housing • Day Care Facility • Educational, Governmental, or Religious Facility • Rooming or Boarding House • Bed & Breakfast
Business District	• Restaurant • Educational, Governmental, or Religious Facility • Hotel, Motel, Inn or Bed and Breakfast Facility • Professional and Business Offices • Retail Sales, Services • Bank or Financial Institution • Funeral Home • Private Club or Lodge • Nursing Home • Commercial Greenhouse or Nursery • Home Occupation • Warehousing • Function Halls • Indoor Auctions • Accessory Uses	• Recreation Facility • Daycare Facility; • Gasoline Service Stations • Repair Garage or Body Shop • Motor Vehicle Dealership • Wholesale or Manufacturing • Industrial Park • Vehicle Wash Facility • One-family Dwelling • Two-family Dwelling • Multi-family Dwelling • Excavation Operations (removal, processing, sales) • Manufactured Housing on Individual Lots

Industrial Park District	• Manufacturing, Production, Fabrication, Processing, Packaging Assembly, Refurbishing and/or Repair of Goods • Research and Development • Bulk Storage and Distribution of Large Quantities of Material, Liquid, Solid, or Gaseous, Intended for Resale; excluding toxic, flammable or hazardous materials • Corporate Offices • Publishing Companies • Warehousing • Wholesaling • Recreation Facility Conducted as a Business • Child Care Facility	

Marlborough Districts	Permitted	Special Exception
Rural Residential (R-3) *	• One and Two-family Homes • Temporary Housing in Motorized Homes • Family Daycare • Commercial Agriculture • Farm Stands (for products raised on the premises) • Timber Removal • Accessory uses • Commercial Agriculture	• Multi-family Dwellings,Housing for the Elderly, Accessory Apartments, Manufactured Housing Parks, Cluster Housing, Planned Unit Developments (PUDs), Group Homes and Nursing Homes • Lodging, Rooming & Boarding Houses • Family Group Daycare • Educational Facilities (schools, libraries, museums) • Places of Worship, Cemeteries • Governmental Facilities • Outdoor Recreational Facilities, Campgrounds • Private, Non-profit Membership Club or Lodge • Home-based Business • Specialized Trade Establishments (ex. Plumbing, Welding, Dance Studio, etc.) • Sand & Gravel Operations • Commercial Greenhouses & Nurseries • Veterinarian (no outside boarding), Kennels, Stables, & Riding Academies • Cellular Towers, Wind Turbine Facilities • Saw Mills • Contiguous Structures & Parking (covering more than 10,000 sq. ft.)

Rt. 12 Commercial (C-4)*	• Lodging, Rooming & Boarding Houses • Hotels, Motels, & Bed and Breakfasts • Governmental Facilities • Hospitals • Private or Non-profit Membership Club or Lodge • Banks, Businesses, and Professional Offices • Professional Service Establishments (ex. Hair Salon, Laundry, Dry Cleaner, Funeral Service, etc.) • Restaurants • Retail Sales and Service • Medical, Dental, Pharmaceutical & Other Health Care Facilities • Home Based Business • Light Manufacturing, Wholesale Establishment • Self-storage Facility • Specialized Trade Establishments (ex. Plumbing, Welding, Dance Studio, etc.) • Auto Sales, Service, Repair, & Parts • Commercial Greenhouse & Nursery • Veterinarian • Retail Sales • Farm Stands (for products raised on the premises) • Timber Removal • Accessory Uses	• Housing for the Elderly • Accessory Apartments • Campgrounds • Family Group Daycare • Educational Facilities (Schools, Libraries, Museums) • Places of Worship • Indoor Recreational Facilities • Outdoor Recreational Facilities • Adult-oriented Businesses • Home-based Business • Wholesale Establishments • Self-storage Facilities • Light Manufacturing & Assembly • Recycling Business • Open Lot Storage/Sale of Junk or Salvaged Materials • Sand & Gravel Operations • Commercial Agriculture • Cellular towers • Trucking Terminals • Bulk Petroleum Storage Facilities • Saw Mills • Contiguous Structures & Parking (covering more than 10,000 sq. ft.) • Wind Turbine Facilities

Troy Districts	Permitted	Special Exception
Highway Busisness	• Any Principal Use authorized in the Village District • Restaurants and Other Eating Establishments • Wholesale or Retail Establishments • Commercial Amusement Establishments • Motels • Automotive Sales, Service, Parts and Repair Facilities • Sales and Service of Farm and Garden Supplies and Equipment • Greenhouses, Plant Nurseries • Self-storage Facilities • Any Use(s) Accessory to the Principal Uses above	
Light Industrial	• Self-storage Facilities • Electronics, Wood and Plastics Assembly • Mechanical Services, e.g.: Welding, Automotive Body Shops, Appliance Repairs • Publishing, Printing, and Bookbinding • Research and Development • Construction Establishments, such as Plumbing and Heating, Welding, Blacksmithing, Ventilation, Air Conditioning and Refrigeration, and Carpentry • Shops for Custom Work or Making of Articles • Any Use(s) Accessory to the Principal Uses Above	
Village	• One and Two-family Dwellings • Places of Worship • Governmental, Educational and Cultural Facilities	• Group Homes, Nursing Homes, Health Care Centers, Family Group Day Care and Group Childcare Centers

	• Banks, Business and Professional Offices • Personal Service Establishments, such as Beauty/ Barber Shops, Shoe Repair, Dry Cleaning and Laundry, and Funeral Services • Restaurants or Other Eating Places (not including fast-food or drive-through restaurants, or taverns) • Retail Establishments • Family Day Care • Medical/Dental/Pharmaceutical/Other Health Care Facilities • Veterinary Establishments- no outside boarding of animals • Lodging, Rooming and Boarding Houses, or Other Accommodations for Overnight Guests; and Hotels • Any Use(s) Accessory to the Principal Uses above	• Conversion of Single-family Residence into Mixed Commercial and Residential Uses • Accessory Apartments • Fraternal Organizations and Private Clubs • Housing for the Elderly • Sales of Farm Produce Grown on the Premises
Rural	• One and Two-family Dwellings • Agricultural Uses • Roadside Stands (for the sale of farm products raised on the premises) • Stables and Riding Academies • Plant Nurseries and Greenhouses • Veterinary Hospitals • Family Day Care • Sand and Gravel Excavation Operations • Any Use(s) Accessory to the Principal Uses above	• Accessory Apartments • Family Group Day Care and Group Childcare Centers
Residential	• One and Two-family Dwellings • Places of Worship • Sales of Farm Produce (grown on the premises) • Family Day Care • Any use(s) Accessory to the Principal Uses above	• Accessory Apartments • Family Group Day Care and Group Childcare Centers
Mill District/ Industrial	• Apartments/Condominium Units intended Primarily for Age-Restricted Housing • Retail Establishments • Personal Services • Banks, Business and Professional Offices • Restaurants/Cafes/Banquet Facilities • Movie Theaters/Indoor Entertainment/ Other Recreational Uses • Medical/Dental/Pharmacy/Health Club/Other Health Care Offices • The Making and Selling of Products by Artisans and Craftsmen • Light Industry, such as Storage/Warehouse Facilities, or Light Assembly Operations and Shops for Custom Work • Any Use(s) Accessory to the Principal uses above	

Fitzwilliam Districts	**Permitted**	**Special Exception**
Residential District	• Agriculture, Forestry, Conservation • Recreation • Keeping of Livestock • Single-family Dwelling, including Manufactured Housing • Home Occupation • Governmental, Educational, Religious • Day Care- 6 or < children	• Excavation – minor (10,000 c.y.or<) • Accessory Dwelling Units • Two-family Dwellings & Multi-family Dwellings • Dwelling Conversions • Nursing Home • Day Care- > 6 children • Day Care-accessory use for employees

	• Bed & Breakfast	• Retail Store • Business or Professional Office • Restaurant • Mixed-use- Business & Dwelling • Antique & Craft Shop
Rural District	• Agriculture, Forestry, Conservation • Governmental, Educational, Religious • Day Care- 6 or < children • Bed & Breakfast • Single-family Dwelling, including Manufactured Housing • Home Occupation • Recreation • Keeping of Livestock	• Excavation – minor (10,000 c.y.or<) • Accessory Dwelling Units, Two-family Dwellings & Multi-family Dwellings • Dwelling Conversions • Nursing Home • Day Care- > 6 children • Day Care- accessory use for employees • Business or Professional Office • Commercial Kennel
Village Center Business District	• Agriculture, Forestry, Conservation • Antique & Craft Shop • Day Care- 6 or < children • Business or Professional Office • Retail Store • Financial Institutions • Bed & Breakfast • Funeral Home • Personal Services • General Services • Studio • Building Trade Shop • Governmental, Educational, Religious • Public or Private Utility Facility • Single-family Dwelling, including Manufactured Housing • Home Occupation • Keeping of Livestock • Recreation	• Excavation – minor (10,000 c.y. or less) • Accessory Dwelling Units, Two-family Dwellings & Multi-family Dwellings • Dwelling Conversions • Motor Vehicle Service Station/ Car Wash • Day Care- > 6 children • Day Care- accessory use for employees • Restaurant • Hotel, Inn, or Motel • Mixed-use- Business & Dwelling • Lodge or Club • Nursing Home
General Business District	• Light Vehicular & Equipment Sales • Parking Facility • Antique &Craft Shop • Warehouse • Agriculture, Forestry, Conservation • Mini-warehouse • Day Care- 6 or < children • Business or Professional Office • Retail Store • Financial Institutions • Restaurant • Lodge or Club • Funeral Home • Personal Services • General Services • Studio • Building Trade Shop • Commercial and Trade School • Governmental, Educational, Religious • Public or Private Utility Facility • Single-family Dwelling, including Manufactured Housing • Home Occupation	• Amusement Facility • Motor Vehicle Service Station/ Car Wash • Heating Fuel Sales & Service • Excavation – minor (10,000 c.y.or<) • Accessory Dwelling Units, Two-family Dwellings & Multi-family Dwellings • Dwelling Conversions • Day Care- > 6 children • Day Care- accessory use for employees • Hotel, Inn, or Motel • Mixed-use- Business & Dwelling • Veterinary Care • Commercial Kennel • Commercial Recreation • Nursing Home

	• Recreation • Keeping of Livestock	
Light Industrial District	• Warehouse • Light Manufacturing • Auto Body & Repair • Agriculture, Forestry, Conservation • Business or Professional Office • Light Vehicular & Equipment Sales • Parking Facility • Light Manufacturing • Day Care- 6 or < children • Day Care- accessory use for employees • Financial Institutions • Building Trade Shop • Commercial and Trade School • Governmental, Educational, Religious • Public or Private Utility Facility • Recreation • Keeping of livestock	• Excavation – minor (10,000 c.y.or<) • Accessory Dwelling Units • Day Care- > 6 children • Woodworking
General Industrial District	• Auto Body & Repair • Light Vehicular & Equipment Sales • Parking Facility • Warehouse • Mini-warehouse • Construction Yard/ Lumberyard • Heavy Vehicular Repair or Sales Garage • Light Manufacturing • Woodworking • Day care- 6 or < children • Day Care, accessory use for employees • Business or Professional Office • Financial Institutions • Lodge or Club • Building Trade Shop • Commercial and Trade School • Governmental, Educational, Religious • Public or Private Utility Facility • Recreation • Keeping of Livestock	• Accessory Dwelling Units • Heating Fuel Sales & Service • Amusement Facility • Motor Vehicle Service Station/ Car Wash • Excavation – major (>10,000 c.y.) • Day Care- > 6 children • Veterinary Care • Commercial Kennel • Commercial Recreation

Future Land Use

The following section represents portions of the Master Plan of each community which specifically address NH 12 South or show the relationship between highways and development patterns.

Keene

Future Land Use: Comprehensive Master Plan: 2010

The future land use of Keene is regulated by the current Keene Zoning Ordinance, Site Plan and Subdivision Regulations, and is guided by the Keene Comprehensive Master Plan. A review of the land use regulations have been completed and consistency with the Master Plan was noted.

The Keene Comprehensive Master Plan acknowledges the significance of the NH 12 South corridor and makes reference to specific goals, policies, and recommendations that are applicable to the corridor as shown below:

Future Land Use: Economic Development Goals and Objectives (Pages 10-11)

Future Land Use and Policy (Pages 116 – 117)

In the most recent update of the Keene Comprehensive Master Plan (2010), the following excerpts were found regarding development and land use:

- Expansion of mixed- use areas for commercial and industrial economic development
- The Future Land Use Map shows the area on the Northeast side of the corridor as Manufacturing/ Industrial; Northwest section of the corridor as CRD/Rural/ Low Density Residential/ Agriculture/ TDR Sending Area and the area adjacent to the study area (Main Street & Route 101, as the Primary Growth area. This will likely have a fairly significant impact of the Rt. 12 South Corridor. The closest section of the Primary Growth Area anticipates that the land uses will be mix of Downtown Neighborhoods, Traditional Neighborhoods, and Mixed Uses.

Future Land Use & Policy, Strategic Planning Areas

South of 101 Strategic Planning Area (Page 120)

This area should receive a high level of planning and focus as it is an economic redevelopment area for commercial, manufacturing, and industrial uses. Focus on the provision of high quality, living wage industries should prevail over expansion of low-wage retail and service development. The city and community should explore ways to create a mixed-use area for these industries, in conjunction with managing appropriate access and providing community connections via sidewalk, pathway, bridges, and trails north towards downtown and south towards other regional trails or bicycle routes. A safe crossing for pedestrians and bicyclists at the intersection of Lower Main Street, Route 101 and Route 12 South is a high priority. A pedestrian or bicycle pathway within this strategic planning area is also planned for 2013 that will provide a safe crossing from the trail by the Keene State College fields across 101, to the other side of the regional trail. Preservation of an existing small neighborhood area for possible live/ work development should be considered. Balancing development of this area with the natural environmental features is also a high priority.

Swanzey

Future Land Use

The future land use of Swanzey is regulated by the current Swanzey Zoning Ordinance, Site Plan and Subdivision Regulations, and is guided by the Swanzey Master Plan. A review of the land use regulations have been completed and consistency with the Master Plan was noted.

The Swanzey Master Plan (2003) acknowledges the significance of the NH 12 South corridor and makes reference to specific goals, policies, and recommendations that are applicable to the corridor as shown below:

Future Land Use: Economic Development Goals and Objectives (Pages 10-11)

Land Use Section (Page 33)

Land Use Goal: It is the overall goal of the Town of Swanzey to develop and preserve a pleasant, attractive, healthy, safe, affordable and convenient environment for living, working, shopping and recreation.

Objective 5. Promote and encourage the development of commercial and retail growth along the existing corridors of Routes 10 and 12, the northerly section of Route 32 in the vicinity of the industrial park and the airport and in the Industrial Park. Such development will be undertaken in accordance with strict site plan review standards adopted by the Planning Board to minimize potential negative aspects of commercial and retail development.

Recommendations for Future Land Use (Page 36)

Strategy 3. Promote the construction of a new Town road between Route 32 and Route 12 in conjunction with the development of the Industrial Park.

Transportation Section (Page 71- 73)

The transportation system is a limited resource requiring careful management to preserve the significant public investment in system capacity, functionality and safety. While satisfying our societal needs for mobility and access, the transportation system superimposes a grid on the landscape that essentially determines the pattern of development in a community. The type and density of development adjacent to the roadways likewise determines how efficiently the system operates. Finding the appropriate balance in this complex relationship is vital to Swanzey's future character and its transportation system.

The Town of Swanzey also recognizes that a diversified transportation system has the power to influence the community's social, economic and natural characteristics - where a diversified system supports a variety of travel modes and provides links between modes. The more alternatives to the personal motor vehicle there are, the more efficient and effective the existing transportation system becomes - reducing the need for infrastructure expansion and empowering residents without personal vehicles to access employment, and cultural and social opportunities.

Swanzey's transportation system is an integral part of the larger regional system. The impacts of local land use decisions can extend beyond town boundaries, imparting significant regional consequences. The Town is sensitive to this relationship and strives for continued coordination and integration of the Town's transportation system and land use patterns with those of the Region.

Overall Goal: Provide for a safe, efficient and diversified transportation system that is sensitive to the Town's rural character.

Objectives

1) Minimize the need for extensive investments in roadway expansion by improving the efficiency of the existing transportation system;
2) Continue to coordinate land use and transportation decisions;
3) Enhance pedestrian, bicycle and public transit opportunities;
4) Preserve covered bridges and scenic roadside vistas that exemplify Swanzey's rural character; and
5) Coordinate and integrate the transportation systems of the Town with those of the Region.

Targets

- Develop an access management plan for residential, commercial and industrial land use districts, addressing such issues as minimum distances between driveways, corner lot access, number of driveways per lot, shared driveways, interconnections between developments, minimum driveway throat length, right turn deceleration/acceleration

lanes and tapers, left turn pockets, one-way in/one way out access, frontage/service roads, minimum turning radius, signs, minimum corner clearances, medians, and signalization/traffic control.

- Enter into a Memorandum of Agreement with the New Hampshire Department of Transportation (NH DOT) to ensure coordination between the Town's access management plan and the NH DOT driveway permitting process.
- Monitor the development of the City Express Transit System in the City of Keene and participate in any regional discussions regarding expanded service, the establishment of park and ride lots, or any other initiative that has the potential to provide viable options to the personal motor vehicle.
- Convene a committee to assess the existing sidewalk and trail network for adequacy, determine future needs, and identify appropriate ways of addressing these needs.
- Establish effective sidewalk and trail connections between residential areas, commercial nodes, and recreational activities within Town.
- Coordinate with adjacent towns to ensure inter-municipal pedestrian/trail system connections.
- Consider expanding the sidewalk and trail network by incorporating pedestrian facilities into projects involving reconstruction where feasible.
- Develop a local speed management program utilizing traffic "calming" techniques to address residents' concerns with excessive traffic speed.
- Submit a NH Route 32 Safety and Engineering Study proposal for consideration in the State's Ten Year Transportation Improvement Program.
- Participate in the update of the Dillant-Hopkins Airport Plan and any other discussions involving the Airport's development.
- Participate in regional transportation issues affecting the Town of Swanzey.

National Highway System (Page 74)

Highways classified as part of the National Highway System serve to connect population centers and inter-modal facilities by providing a continuous travel corridor from state to state. Route 12 is part of the National Highway System. Route 12 provides access to Keene and all points north, west and east, through its connection to the Region's other two National Highways - NH 9 and NH 101, and to all points south, through its connection to highways in Massachusetts. Given the important function of this highway, decisions regarding future land use should include consideration of potential impacts on the functionality and capacity of these roadways.

Development Potential - NH 32/NH 12 Link (Page 83)

Construction of a NH 32/NH 12 connector, continued conversion of uses from residential to commercial or from low density residential to high density residential, and the future development potential of Class VI roads, are all likely to have a profound impact on Swanzey's physical infrastructure and its natural environment. To maintain an effective and efficient transportation system and to safeguard Swanzey's rural character, a comprehensive road policy which addresses the potential impacts road improvements have on current and future land use and the impacts land use decision have on the road system should be developed.

Marlborough

Future Land Use

The future land use of Marlborough is regulated by the current Marlborough Zoning Ordinance, Site Plan and Subdivision Regulations, and is guided by the Marlborough Master Plan. A review of the land use regulations have been completed and consistency with the Master Plan was noted.

The Marlborough Master Plan (2013) acknowledges the significance of the NH 12 South corridor and makes reference to specific goals, policies, and recommendations that are applicable to the corridor as shown below:

Vision: Transportation (Page 12-Vision)

Encouraging businesses with frontage along NH Routes 101, 12, and 124 to participate in efforts to add an aesthetic uniqueness to help create a business friendly community. These can include: adding landscaping flowerbeds/planters, shade trees, and flowering shrubs; benches for sitting and socializing; bike racks to encourage an alternative to cars, etc.

The Commercial Pattern Route 12: (Page 18-Land Use)

Commercial development in Marlborough is found primarily along Route 101. To a lesser extent, Route 12 has become the site of several commercial operations; and, of course, there is a scattering of small home-based businesses around town.

Periodic reviews of the commercial and industrial uses that are currently permitted in the zoning ordinance should be done to determine if Marlborough's economic needs are being met. Developing an inventory of existing businesses can be a valuable tool in planning for future needs and can help to establish trends in the economic activity.

Route 12 is currently zoned for commercial/light industrial activities. This Plan recommends continuing to support this zoning arrangement and, in addition, make any adjustments to the zoning ordinance that would enhance opportunities along this corridor.

The Industrial Pattern (Page 19-Land Use)

Industrial development has been a challenge for the Town of Marlborough. In 1994 several large parcels of land in the southern part of town between Route 124 and the Troy Road were rezoned Light Industrial. The development of this land for commercial/industrial purposes was hindered by inadequate road access and the absence of on-site three-phase power and municipal water and sewer. Over the last several years, there continues to be very little interest on the part of the private sector to invest in this property.

As an alternative to this zoning scheme, this Plan is recommending the elimination of this district and instead offer more opportunities in the Highway Business District and the existing commercial district on Route 12. In addition, the Planning Board is exploring the feasibility of designating land on both sides of Route 101 on the Keene Town Line as a Light Industrial District. While there are some known obstacles to this approach, such as the proximity to the town wells and the underlying aquifer, land uses that generate discharge and potential pollutants should be discouraged. The proximity of the highway continues to be an advantage to be seriously considered.

Troy

Future Land Use

The future land use of Troy is regulated by the current Troy Zoning Ordinance, Site Plan and Subdivision Regulations, and is guided by the Troy Master Plan. A review of the land use regulations have been completed and consistency with the Master Plan was noted.

The Troy Master Plan (2007) acknowledges the significance of the NH 12 South corridor and makes reference to specific goals, policies, and recommendations that are applicable to the corridor as shown below:

Future Land Use: Economic Development Goals and Objectives (Pages 10-11)

Goals:

1. Develop and maintain an economic base in Troy that is diverse, stable and in keeping with the rural and residential character of Troy.
2. Ensure that zoning allows for the development of businesses and industries that will enhance the Town's tax base and provide a diversity of employment opportunities.

Objectives:

1. Evaluate alternatives to zoning along NH 12, outside the village, which is currently Highway Business District.
2. Ensure that zoning supports home occupation, home-based business and cottage industry throughout Troy, including agriculture and forest-based activity in appropriately zoned areas.
3. Support the redevelopment of Troy Mills for commercially viable/sustainable private use(s).
4. Develop a Pedestrian Access Plan for the Village and surrounding neighborhoods, including NH 12. The Plan will document existing access conditions and demand for access by residents and visitors. Present recommendations for maintenance and improvements regarding convenience and safety shall be incorporated along with a parking inventory and plan.
5. Ensure that areas zoned for industrial and commercial use are economically viable locations for those uses regarding access and utilities, and are compatible with existing and planned surrounding land uses.
6. Re-convene the Troy Industrial Development Authority to participate in the implementation of this Master Plan Update.

Future Land Use: Transportation Goals and Objectives (Pages 13-14)

Goal: Provide for the safe, efficient mobility and access of people and goods through and within Troy.

Objectives:

1. Convene a study and planning committee to develop strategies for traffic calming on NH 12 and other major streets and roads in Troy, in cooperation with Southwest Region Planning Commission and NH Department of Transportation, and submit by written report to the Board of Selectmen no later than December 30, 2007.
2. Incorporate Access Management standards in Troy's Zoning and Site Plan and Subdivision Review Regulations.
3. Develop a Pedestrian Access Plan for the Village and surrounding neighborhoods, including NH 12. The Plan will document existing access conditions and demand for access by residents and visitors, present recommendations for maintenance, improvements and expansions regarding convenience, safety and ADA compliance, and will include a parking inventory and plan, and recommend standards for pedestrian access for incorporation in Troy's Site Plan and Subdivision Review Regulations.
4. Adequately fund four-season maintenance of Troy's existing sidewalks to provide safe, convenient year-round access.
5. Explore the feasibility and costs of designating the Class VI (northern most) portions of West Hill Road to "Emergency Lane" pursuant to NH RSA 231:59-a in order to restore and maintain emergency access to and from NH 12 in Marlborough.
6. Explore the development of an Open Space Subdivision Regulation to minimize the development of new road mileage. The OSRD should be required for properties larger than 25 acres in the outlying areas. The OSRD can be optional for all properties in all areas of Town.
7. Monitor the status of the proposed NH 12 Troy Bypass in the NH Ten Year Transportation Improvement Program.
8. Monitor the policies and practices of neighboring communities regarding permitting of new development on Class VI roads.

Implementation Plan:

Economic Development (Page 22)

Objective 1: Evaluate alternatives to zoning all of NH 12 outside the Village as "roadside commercial".

Objective 4: Develop a Pedestrian Access Plan for the Village and surrounding neighborhoods, including NH 12. The Plan will document existing access conditions and demand for access by residents and visitors, present recommendations for maintenance and improvements regarding convenience and safety, and will include a parking inventory and plan.

Transportation (Pages 27-28)

Objective 1: Convene a study and planning committee to develop strategies for traffic calming on NH 12 and other major streets and roads in Troy, in cooperation with Southwest Region Planning Commission and NH Department of Transportation, and submit by written report to the Board of Selectmen no later than December 30, 2007.

Objective 2: Develop an Access Management Plan for the NH 12 corridor through Troy and Monadnock Street to manage the locations and design of new driveways and roads in cooperation with SWRPC and NH DOT. Incorporate Access Management standards in Troy's Zoning and Site Plan and Subdivision Review Regulations.

Objective 3: Develop a Pedestrian Access Plan for the Village and surrounding neighborhoods, including NH 12. The Plan will document existing access conditions and demand for access by residents and visitors, present recommendations for maintenance, improvements and expansions regarding convenience and safety, will include a parking inventory and plan, and recommend standards for pedestrian access for incorporation in Troy's Site Plan and Subdivision Review Regulations.

Objective 5:

Explore the feasibility and costs of designating the Class VI (northern most) portions of West Hill Road to "Emergency Lane" pursuant to NH RSA 231:59-a in order to restore and maintain emergency access to and from NH 12 in Marlborough.

Fitzwilliam

Future Land Use: 2012 Master Plan

The future land use of Fitzwilliam is regulated by the current Fitzwilliam Zoning Ordinance, Site Plan and Subdivision Regulations, and is guided by the Fitzwilliam Master Plan. A review of the land use regulations have been completed and consistency with the Master Plan was noted.

The Fitzwilliam Master Plan (2012) acknowledges the significance of the Rt. 12 south corridor and makes reference to specific goals, policies, and recommendations as shown below:

The 2004 and 2012 Master Plan both suggest that the regulations for the industrial districts on Route 12 south of Route 119 be reviewed.

Vision Statements: The facilitation of appropriate economic development is considered to be in the long-term interests of the overall health and well-being of the Town.

Goal 6- Support and Encourage Economic Development; Strategy- Review the provisions for Home Occupations and Businesses to ensure that they provide enough opportunity for the various types of home occupations and home-based businesses that reflect today's economy. (Page 26)

Advisory Committee

Meeting 1 – March 5, 2014

Agenda

Southwest Region Planning Commission

NH 12 South Corridor Advisory Committee

AGENDA

March 5, 2014
1:30 p.m.

Southwest Region Planning Commission
37 Ashuelot Street, Keene, NH

I. Welcome and Introductions

II. Project Overview

III. Project Timeline

IV. Role of the Committee

V. Review of Draft Materials

VI. Committee Discussion: Challenges and Opportunities

VII. Other Matters

VIII. Next Meeting

IX. Adjourn

Southwest Region Planning Commission

NH 12 South Corridor Advisory Committee Meeting

Meeting Minutes

March 5, 2014
1:30 p.m.

Southwest Region Planning Commission
37 Ashuelot Street, Keene, NH

Present: Kürt Blomquist, Public Works Director, *City of Keene;* Sara Carbonneau, Planner, *Town of Swanzey*; Nancy Carney, Board of Selectmen, *Town of Fitzwilliam*; Brian Costa, Captain, *City of Keene Police Department*; Lee Dunham, Public Works Director*, Town of Swanzey*; Brad Harris, Transportation Project Director, *Montachusett Regional Planning Commission*; Larry Robinson*,* Southwest Region Planning Commission (SWRPC) Board of Directors, *Town of Marlborough*; Bucky Sheats, *Town of Troy*; Kevin Stone, Officer, *Town of Fitzwilliam Police Department*.

SWRPC Staff Present: J. B. Mack, *Principal Planner*; Lisa Murphy, *Senior Planner*; Tim Murphy, *Executive* Director; Steve Waleryszak, *GIS Technician/Planner*; Henry Underwood, *Planning Technician.*

I. Welcome and Introductions

Tim Murphy started the meeting at 1:30 p.m. welcomed the group and introductions were made.

II. Project Overview

Tim Murphy introduced the corridor study project, which will include a series of meetings focusing on Route 12 south from the City of Keene to the Massachusetts state line. He summarized the Southwest Region Planning Commission work experience which accounts for over 20 years of land and transportation analysis from the standpoint of access, safety, and many other perspectives. The current study will be the fourth corridor study undertaken by SWRPC. Tim Murphy went on to describe previous corridor studies indicating that they explored the long term viability of transportation infrastructure investment and addressed numerous issues including the erosion of capacity.

Tim Murphy pointed out that corridor studies, which are data-intensive in nature, provide objective information about activity in the study area. He noted that road users rely on Route 12 for many requirements, including trips to work. The route also sustains many commercial activities. He continued, saying that as a shared facility, it is important to understand and monitor its safety and efficiency. He compared the corridors to a river system stating that a problem in one area, for example, can impact other users both upstream and downstream. He noted that Route 12 servers as "Main Street" for some towns, and this relationship needs to be taken into consideration. The corridor is also used heavily for freight movement.

Tim Murphy introduced staff member J. B. Mack who welcomed and thanked the committee members for attending. He noted that Route 12 is part of the National Highway System (NHS), one of three routes in our region that also includes Route 9 and Route 101. As part of the NHS, it is a priority corridor for the region in terms of interest and federal transportation funding. J. B. Mack highlighted that Route 12 south is an important corridor for freight destinations in New Hampshire, Massachusetts, and beyond. The study area is also adjacent to Dillant-Hopkins airport

which represents an important economic development asset. The Cheshire Rail Trail, which parallels the route is another important asset. J. B. Mack encouraged the committee to think about other assets in the study area. He provided an update on the status of the regional transportation plan update currently being completed by SWRPC. The updates discuss the evolving transportation concerns along eight highlighted corridors. The input from the advisory committee will be important to understand both the opportunities and challenges of this area. J. B. Mack summarized recent activity on the corridor which has included signalization and lane improvements in Keene, an upcoming roundabout project in Swanzey, upgraded sidewalk infrastructure in Troy, and a road safety audit in Fitzwilliam at the intersection of Route 12 and Route 119. In the past, a potential bypass of the Troy village area had been considered, but such a project appears unlikely today. There is also concern about urban compact zones and a shared arrangement of state highway maintenance, in the City of Keene. J. B. Mack continued, saying that Route 12 is a lifeline to a larger New England economy. It is important to review input from communities to make sure their goals are consistent with state and regional goals. J. B. Mack introduced staff member Lisa Murphy, who provided a detailed overview of the project, timeline, and function of the advisory committee.

III. Project Timeline

Lisa Murphy described that turning movement counts will be completed in May, with many other categories of data collection currently underway. She said that there would be between 4 and 7 advisory committee meetings and that attendance and participation of committee members will be helpful since the corridor study process requires coordination among community representatives. A final report will be completed towards the end of the calendar year following community meetings which should take place during September and October, 2014.

IV. Role of the Committee

In describing the corridor study, Lisa Murphy said that SWRPC would pull together the latest data and interpret it with the help of the committee. She noted that Route 12 south is an important housing and economic development asset to the region. The corridor study will examine recent trends, current conditions, and probable futures. As classified by previous studies, the Route 12 south study area includes property 1,000' on either side of the road centerline. Kürt Blomquist indicated that the City of Keene has participated in previous studies.

Henry Underwood presented the data analysis portion of the presentation which included a summary of traffic studies, accident data, and other sources used to describe housing and socioeconomic conditions. Steve Waleryszak described the cultural and natural resource mapping components of the corridor study area. Lisa Murphy noted that gathering information from population and housing patterns, projections, and other trends comes together to anticipate future growth potential on the corridor. Utilizing identified development constraints and available land area, a build-out analysis will provide an indication of future development. A business survey, currently under development, could benefit the study as well.

Lisa Murphy described the public involvement component of the corridor study, which includes the advisory committee. The advisory committee is needed to review the work for accuracy and assist SWRPC in selecting recommendations based on findings from other components of the process. When SWRPC meets with local officials, to present the draft plan, the advisory committee participants will be invited to attend.

Tim Murphy invited attendees to respond to the presentation and ask questions. He noted his appreciation for the attendance of busy people and said that SWRPC would attempt to make meeting times as convenient as possible. He reminded attendees that SWRPC is supported by the New Hampshire Department of Transportation (NH DOT), and they are supportive of the corridor study approach. As a participant in the advisory committee, attendees are part of a process to look at the shared facility. He also noted that SWRPC has no regulatory ability to require a community to make decisions based on the final report. The goal is to provide background information about the corridor in an effort to assist communities in making wise decisions.

J. B. Mack mentioned that when NH DOT looks at planning projects, they expect ideas are part of a thorough process. He noted that every other corridor study has spawned specific projects. The first step is to identify projects that are supported by the community. The second step is to present the information to the municipalities. These projects can address safety, speeding, maintenance issues, and other problems. Kürt Blomquist mentioned that planning documents can potentially have unintended consequences and participants should take the process seriously to avoid future conflicts. He encouraged representatives to consider the details of the study and speak with their selectboard members, especially if a particular item is controversial. Tim Murphy noted that it takes effort and time to get a project in the queue, and desires of communities can change over time.

Sara Carbonneau asked how the study would be affected by the 2015 construction of a roundabout at the intersection of Route 12, Swanzey Factory Road, and Lake Street. The impacts and change in dynamics is currently unknown. Lisa Murphy commented that the next meeting will be spent discussing "hotspots" along the corridor, including this location. J. B. Mack said he talked with Mike Dugas, NH DOT Chief of Preliminary Design and he has committed to coming in and describing for the committee the plans which are currently in preliminary design. Lee Dunham asked about Safford Drive, and its use as a shortcut to arrive at Nanotech and other industrial park businesses.

Lisa Murphy noted that many members of the community, including police, road agents, engineers, planners, boards of selectmen, and others can all be connected and involved with the corridor study process. At the regional planning commission, staff will examine different relationships on the corridor itself, including traffic, land use, zoning, development constraints, environmental impacts, historical resources, and many other perspectives. Lisa Murphy encouraged others from corridor communities to attend or contact her with questions about participation.

Brad Harris, transportation planner at Montachusett Regional Planning Commission (MRPC) in Massachusetts, described the boundaries, which include Fitchburg, Leominster, and other towns located on Route 12 south in Massachusetts. He described upcoming projects, which include resurfacing from the state line for approximately 2.5 miles. He described transportation safety issues, especially at intersections, on Route 12 in Massachusetts. One such project, supported under the recommendation of the MRPC includes a complete redesign of access to Route 12 from Route 2. Brad Harris also provided background on corridor studies led by the Massachusetts Department of Transportation, which include incorporating bicycle, pedestrian, and bus facilities into the design of roadway improvements. He noted the desire of communities to preserve their rural character and the difficulties balancing the desire for local character and control with state and federal requirements. J. B. Mack noted that although Massachusetts has a statewide Complete Streets policy, New Hampshire is not currently promoting this initiative to this same extent. Tim Murphy thanked Brad Harris for his participation and welcomed his attendance at future meetings of the advisory committee.

Steve Waleryszak introduced the Geographic Information System (GIS) components of the corridor study. The presentation included a map of generalized zoning boundaries which included summary tables describing road frontage and acreage of each generalized zoning category.

V. Review of Draft Materials

Lisa Murphy discussed zoning designations, permitted uses, and dimensional requirements for each community. A handout was provided and she requested that each community review and verify the information.

VI. Committee Discussion: Challenges and Opportunities

Corridor study advisory committee members edited and annotated study area maps to highlight the locations of specific concerns.

VII. Other Matters

There were no other matters discussed.

VIII. Next Meeting

The committee decided that the next meeting would be April 9, 2014 at 12:00 p.m. in the Southwest Region Planning Commission conference room located at 37 Ashuelot Street in Keene.

IX. Adjourn

The Meeting was adjourned at 3:30 p.m.

Respectfully Submitted,

Henry Underwood
Planning Technician

Southwest Region Planning Commission

NH 12 South Corridor Advisory Committee

AGENDA

April 9, 2014
12:00 p.m.

Southwest Region Planning Commission
37 Ashuelot Street, Keene, NH

I. Welcome and Introductions

II. Route 12 South - Areas of Potential Concern

A NH Department of Transportation representative will discuss the areas of potential concern along the Route 12 South corridor.

III. Traffic Analysis Update

SWRPC staff will give a brief overview and update of the traffic analysis that is being conducted for the study.

IV. Business Survey

SWRPC staff will discuss the business survey to be conducted and potential methods of reaching out to business owners.

V. Other Matters

VI. Next Meeting - suggested date: June 18, 2014 at 12:00 p.m.

VII. Adjourn

Southwest Region Planning Commission

NH 12 South Corridor Advisory Committee Meeting

Meeting Minutes

April 9, 2014
12:00 p.m.

Southwest Region Planning Commission
37 Ashuelot Street, Keene

Present: Sara Carbonneau, Planner, Ken Colby, Board of Selectmen, Lee Dunham, Public Works Director, *Town of Swanzey*; Jim Donison, City Engineer, *City of* Keene; Mike Dugas, Chief of Preliminary Design, *NH* DOT; Brad Harris, Transportation Project Director, *Montachusett Regional Planning Commission*; John Kallfelz, District Engineer, *NH DOT District* 4; Fenella Levick, Owner, *Monadnock Berries*; Larry Robinson, SWRPC Board of Directors, *Town of Marlborough*; Kevin Stone, Police Officer, *Town of Fitzwilliam*.

SWRPC Staff Present: J. B. Mack, *Principal Planner*; Lisa Murphy, *Senior Planner*; Steve Waleryszak, *GIS Technician/Planner*; Henry Underwood, *Planning Technician.*

I. Welcome and Introductions

Lisa Murphy started the meeting at 12:05 p.m. and introductions were made.

II. Areas of Potential Concern

Lisa Murphy introduced Mike Dugas who discussed upcoming state-funded Rt. 12 improvements as well as historical areas of concern. She invited attendees to add their own comments or concerns about each intersection or section of Rt. 12. Mike Dugas began his presentation at the northern extent of the corridor, at the intersection of Main Street, Rt. 101, and Rt. 12 in Keene. From north to south, the first project, administered by the City was Keene - Swanzey 10309K. This project was an outgrowth of the Keene – Swanzey Bypass Study. As a result of the previous study, the project was created as an interim improvement but dropped from the 10-year plan about 2 years ago. Jim Donison commented that there is currently a proposal to replace the metal arch culverts with box culverts. This intersection project was taken off the 10-year plan following signal and lane improvements. The bridge project is currently under study by Louis Berger.

Next, Mike Dugas mentioned access management just south of the intersection in question. Since this route falls within the urban compact, it is up to the City to make changes. Jim Donison noted that a pavement restoration and overlay for this section of Rt. 12 is planned in 1-2 years. No consolidation or elimination of driveways is planned. There is a plan, however, to look at the property located at 560 Main Street which could provide economic development opportunities in an area adjacent to Rt. 101. He also mentioned a connection from Rt. 12 through to Optical Avenue which was considered as part of the bypass project. He said there are currently no plans to move forward with this project. J. B. Mack added that there are properties on east side of Rt. 12 in Keene that are in a transition stage. He said there may be opportunities to work with new land owners on improvements or changes.

Mike Dugas moved onto the next area of potential concern, the intersection of Rt. 12 and Rt. 32. Mike Dugas said that safety funds were used to remove stockade fencing at this location, which impeded the sightlines of traffic joining Rt. 12 from Rt. 32. At this time no additional improvements are planned. Steve Waleryszak noted that traffic research conducted by SWRPC indicates that northbound drivers on Rt. 32 sometimes use the adjacent residential area

(Greenwood Avenue) to bypass queued cars waiting to make the left turn onto Rt. 12. Jim Donison noted that he has not received any recent complaints from property owners regarding any excess traffic on Greenwood Avenue. Others noted that Park Avenue is also used to access Rt. 12.

Mike Dugas moved to the Lake Street roundabout project in Swanzey, project 15697. He said the schedule is to advertise for construction in January, with construction to begin next spring. Mike Dugas said NH DOT anticipates drivers will use the roundabout to access Rt. 12 from Rt. 32. Construction is anticipated to take about 1 year. Mike Dugas noted that access management in the vicinity of this project is adequate.

The next location discussed by Mike Dugas and the committee was Safford Drive in Swanzey. Safford Drive, which currently leads east from Rt. 32 will be connected to Rt. 12 immediately north of the Cheshire Fairgrounds. Lee Dunham commented the town has put out a request for bids. Construction, including utility pole relocation by PSNH could start within a week. J. B. Mack asked if the route would be for industrial access as well as a through road. Ken Colby commented that this will provide better access for emergency services. Sara Carbonneau anticipates more traffic will utilize this route to reach the school as opposed to Flat Roof Mill Road. The committee learned that plans call for a 30-foot overall width, including 11-foot lanes and 4-foot shoulders. The committee also learned that the Swanzey Board of Selectmen still have to go through a public hearing process to acquire land parcels. Mike Dugas noted that the Town of Swanzey was required by DOT to obtain a driveway permit, and there has been DOT review of the project. Sara Carbonneau suggested another impact on traffic would occur during fair season.

Mike Dugas then noted a concern about speed limits in Troy. The committee learned that the former Town of Troy Chief of Police, Bucky Sheats, felt the limit was set to low. J. B. Mack described the flow of traffic heading southbound on Route 12, which is reduced from a posted speed limit of 55 miles per hour to a speed limit of 35 miles per hour. The committee learned that the posted speed limit in this area was previously higher. It was noted that the area coincides with a dip in the road, an intersection with Keene Road, and both commercial and residential properties. The area serves as a transition speed zone, before being further reduced to 30 miles per hour. The committee learned that Bill Lambert, NH DOT Traffic Operations Administrator could provide information about speed limits, signage, and pavement markings.

Mike Dugas discussed a proposed project at the intersection of Rt. 12 and Rt. 119, Fitzwilliam – project 16211. The intersection project had previously been in the State's 10-year Plan, but was eventually removed due to the plan being over-subscribed. Mike Dugas said that the project followed road safety audits, documented crashes and many near misses. The intent of changes to the intersection, he said, was to reduce impacts to the surrounding property. One concept included a traffic light but this was not well-received by the town. Mike Dugas said the primary issue at this location is the high speed of traffic. He said there is currently a committee working with Fitzwilliam on reducing vehicle speeds. To this end, he said, alternatives have been considered. Mike Dugas noted that a roundabout would be difficult to implement. Because of the sharp angle where the two roads meet, it was not possible to create a layout within the existing right of way that allowed for the turning movements of large vehicles. A second, lower cost roundabout alternative would not impact property to the extent of the first alternative. Mike Dugas said the design would be similar to the traffic calming islands on Rt. 101 in the Town of Dublin. He said that these features would reduce the speed of through traffic. Mike Dugas said that narrower shoulders, a median, or a two-way middle turn lane could be effective but less costly road treatments when compared to the roundabout alternatives. These features would also avoid impacts to private property. He said that crash records would be necessary to justify the expense of safety funds for improvements at this location. He said both the number of accidents and the severity were important factors.

Kevin Stone noted that a safety audit found that between 2006 and 2009 there were 19 crashes, of which 7 involved an injury. He said that since 2010, there have been another dozen crashes, many being rear-end collisions. Kevin Stone said that the intersection is visually deceptive and the speed limit changes from 55 to 35. He noted that when snow obscures turning arrows, drivers do not follow their lane assignment. Mike Dugas commented that changes to the appearance of the road will reduce the observed speeds. Fenella Levick said she has travelled the route for about 10 years. She often observes dangerous situations at the intersection. She said it is especially difficult to merge onto Rt. 12 from Rt. 119. There was a discussion about a traffic light at this location. Mike Dugas noted that traffic lights do not necessarily result

in fewer crashes, and they can increase the severity of crashes because they do not mitigate speed. He noted, however that a traffic signal would benefit certain turning movements. He also noted that many projects could not meet criteria for the installation of a traffic signal. Kevin Stone mentioned that stopping or reducing the speed at the intersection would interfere with northbound trucks due to the grade of the hill. Mike Dugas said that truck volume is not sufficient to widen the road for a truck lane. J. B. Mack mentioned to Kevin Stone that SWRPC can offer assistance with data collection.

Mike Dugas referenced another location near the transfer station in Fitzwilliam. Kevin Stone noted that the passing zone at this location creates a potential danger to vehicles entering and exiting the transfer station. It was noted that there is currently a flashing light to warn vehicles to use caution. J. B. Mack suggested contacting Bill Lambert regarding this issue.

Brad Harris mentioned that the intersection of Rt. 202 and Rt. 12 creates two difficult intersections in Winchendon. Signal warrant studies were conducted, but there is contention in the town about making any changes to the intersection. He stated that stakeholders were more concerned with Rt. 140. He noted that both locations feature difficult grades and alignments. Brad Harris also said that Massachusetts Department of Transportation looks to local communities for design, which can be difficult to fund.

Lisa Murphy asked attendees if there were other areas not yet discussed. Fenella Levik mentioned the Troy bypass project should be discussed. John Kallfelz noted that the State is in the process of selling back land that was originally purchased for the new alignment. J. B. Mack noted that there was dissention about the project which was relatively expensive. J. B. Mack also said that for Troy, Rt. 12 serves as the "Main Street" more so than other towns along the corridor. Fenella Levick noted that sidewalk projects and crossing guards have greatly improved the village center. She also commented that as a business owner, she desires vehicle traffic, however a bypass would also improve the village center by reducing traffic.

Sara Carbonneau noted that Flat Roof Mill Road suffers from a difficult left turn to head northbound on Rt. 12. Through traffic heading north travels at a high rate of speed. The issues can be exacerbated by the test drivers from nearby car dealerships. J. B. Mack also noted difficulty of traffic entering Rt. 12 from the plaza that includes the Salvation Army.

III. Traffic Analysis Update

Steve Waleryszak and Henry Underwood discussed the data collection methodology and locations of traffic volume and turning movement counts. Steve Waleryszak said that traffic counting along the corridor will continue. The rail trail was discussed as a barrier to property owners on the east side of Rt. 12.

IV. Business Survey

Lisa Murphy described an upcoming business survey and summarized the survey content. She noted surveys would be sent in the near future and would be used for discussion during a future meeting of the committee. Lisa Murphy said an August meeting will include discussion of proposed recommendations and priorities. In September, meetings will take place between SWRPC, advisory committee members and community planning boards and boards of selectmen. Steve Waleryszak requested assistance from meeting attendees to identify cultural facilities and structures, which will be presented at an upcoming meeting.

V. Other Matters

No other matters were brought before the committee.

VI. Next Meeting

The next meeting will be held June and an agenda will be sent in advance of the meeting.

VII. Adjourn

The meeting adjourned at 1:20 p.m.

Respectfully Submitted,

Henry Underwood
Planning Technician

NH 12 South Corridor Study
Transportation Advisory Committee

Meeting #3

AGENDA

June 18, 2014
12:00 to 2:00 p.m.

Southwest Region Planning Commission
37 Ashuelot Street, Keene

I. Welcome

II. Minutes of April 9, 2014 Meeting

III. Summary of Findings
   a. Report of traffic analysis to date
   b. Demographics and economics
   c. Community planning
   d. Future conditions

IV. Recommendations
   a. Discussion of preliminary recommendations based on the analysis to date

V. Committee Priorities
   a. Consideration of priorities in each community

VI. Other Matters

VII. Next Meeting

Southwest Region Planning Commission

NH 12 South Corridor Advisory Committee Meeting

Meeting Minutes

June 18, 2014

Present: Sara Carbonneau, *Town of Swanzey*; Nancy Carney, *Town of Fitzwilliam*; Ken Colby, *Town of Swanzey*; Brian Doherty, *Montachusett Regional Planning Commission;* Lee Dunham, *Town of Swanzey*; John Kallfelz, *NHDOT District 4;* Fanella Levick, *Monadnock Berries;* Larry Robinson*, Town of Marlborough*; Kevin Stone, *Town of Fitzwilliam*.

SWRPC Staff present were: Lisa Murphy, *Senior Planner*; Tim Murphy, *Executive* Director; Steve Waleryszak, *GIS Technician/Planner*; Henry Underwood, *Planning Technician.*

I. Welcome and Introductions

Lisa Murphy welcomed those in attendance and introductions were made.

II. Minutes of April 9, 2014

The minutes of April 9, 2014 were approved by unanimous vote.

III. Summary and Findings

Steve Waleryszak gave a presentation on transportation and traffic data collected along the NH Rt. 12 South corridor through the five communities of Keene, Swanzey, Marlborough, Troy, and Fitzwilliam. He provided statistics on traffic flow including directional volume, freight traffic, as well as speed for several locations along the corridor.

According to NH DOT, there have been eight fatalities along the corridor between 2002 and 2012. Steve Waleryszak discussed the turning movement counts that had been conducted at certain intersections along the corridor as well as those planned for the near future. He also went through some statistics on distance between vehicles for selected segments of the NH Rt. 12 South corridor.

Henry Underwood gave a presentation on the historical, current, and future population figures for the communities along the corridor. He explained how the demographics of the region have changed considerably since the 1970s. Henry Underwood also described socioeconomic characteristics such as unemployment, housing statistics, and commuting patterns for the municipalities along the corridor. Lisa Murphy discussed the various zoning and land use requirements and restrictions that each municipality enforces on the corridor.

A discussion followed focused on some of the problem areas and concerns based on the traffic, demographic, and zoning/land use information that was presented. One of the top concerns was related to the intersection of NH Rt. 12 and NH Rt. 119 in Fitzwilliam. Members of the group raised issues about speed coming into the intersection along NH

Rt. 12 from both directions. There is a perception that the intersection is dangerous in its current configuration. It was brought up that the blinking yellow light can cause confusion among drivers. It was mentioned that NH DOT is already researching ways to improve the intersection.

IV. Recommendations

The group discussed some potential recommendations. Some of the topics discussed included structural, regulatory, traffic calming, and access management. The main issues along the corridor are described below by town:

Fitzwilliam

NH Rt. 119/NH Rt. 12 Intersection:

- Continue to work with NH DOT on intersection improvements and alternative options
- Explore the need for pedestrian/bicycle safety improvements at intersection (through additional study or surveys)
- Consider posting signage to warn of slippery (icy) conditions; trim trees to allow sunlight to thaw ice on the roadway
- Consider traffic calming for southbound lane as vehicles are entering intersection
- With the amount of available land north of NH Rt. 119, access management should be a priority

Troy

- The speed limit is too restrictive in some areas
- Dangerous pedestrian crossing with vehicles entering/exiting near or at South Street
- Left turn onto NH Rt. 12 from Water Street is difficult because of a business sign
- NH Rt. 12/Old Keene Road (or Marlborough Rd.) – right sightline is compromised because of the location of a house
- Signage changes - tractor trailer turns from Troy Road to Old Keene Road

Marlborough

- Speed changes quickly from 50 mph to 35 mph
- Icing on ledges
- Webb Depot Road - Difficult to enter onto NH Rt. 12; must get speed up quickly

Swanzey

- Flat Roof Mill intersection - challenging to enter NH Rt. 12 during peak hours; some alignment may improve safety
- The rail-trail is in marginal condition
- Proposed curb-cut change for Clear Water Pool

- Planned through-road north of fairgrounds to connect NH Rt. 12 to NH Rt. 32 (Safford Drive)
- Difficult access to senior housing across from Mt. Huggins Dr.

Keene

- NH Rt. 32 (Old Homestead Highway)/NH Rt. 12 intersection-very difficult to enter onto NH Rt. 12 during peak hours and other times; poor sightline due to poor alignment
- Consider a Keene/Swanzey bypass from Optical Avenue to NH Rt. 12
- Landfill Road/NH Rt. 12 intersection - difficult turning movements due to volume and poor visibility
- Martell Court - difficult to make left turn onto NH Rt. 12
- Intersection with NH Rt. 101: northbound traffic backs up to Sheridan Lane during red traffic signal

V. Next Meeting

It was determined that the next NH Rt. 12 South Corridor Study Committee meeting would be held on August 20, 2014 at 12:00 p.m.

VI. Adjourn

The meeting was adjourned at 2:25 p.m.

Respectfully submitted,

Steve Waleryszak
GIS Technician/Planner

NH 12 South Corridor Study
Transportation Advisory Committee

Meeting #4

AGENDA

August 20, 2014
12:00 to 2:00 p.m.
SWRPC Office - 37 Ashuelot Street, Keene

I. Welcome and Introductions

II. Maps along the corridor

a. Access Control & Traffic Volume
b. Trails, Historic and Cultural Resources
c. Land Use and Zoning
d. Development Constraints

III. Recommendations

a. Continue discussion from the June 18th meeting and determine corridor recommendations for each community along the corridor.

IV. Committee Priorities

a. Determine the relative priorities of the recommendations identified in Item 3 above.

V. Discussion regarding meetings with Boards of Selectmen and Planning Boards of each community

VI. Next Meeting

Southwest Region Planning Commission

NH 12 South Corridor Advisory Committee Meeting

Meeting Minutes

August 20, 2014

Present: Sara Carbonneau, *Town of Swanzey*; Nancy Carney, *Town of Fitzwilliam*; Ken Colby, *Town of Swanzey*; Lee Dunham, *Town of Swanzey*; Fenella Levick, *Monadnock Berries;* Emerald Levick, *Monadnock Berries*; Larry Robinson, *Town of Marlborough*; Terry Silverman, *Town of Fitzwilliam*.

SWRPC Staff present were: J. B. Mack, *Principal Planner*; Lisa Murphy, *Senior Planner*; Steve Waleryszak, *GIS Technician/Planner*; Henry Underwood, *Planning Technician.*

Guest: Suzanne Gray, *Town of Fitzwilliam*; Chris Holman, *Town of Fitzwilliam*

I. Welcome and Introductions

The meeting was started at 12:11 p.m. and introductions were made.

II. Recommendations

Lisa Murphy commented that today's meeting will include review of comments and requesting some prioritizing for each community and for the corridor overall. She also said that SWRPC is in the process of scheduling joint meetings between the planning boards and selectmen in each of the five corridor communities. Lisa Murphy noted that we would deviate from the agenda due to time considerations. Lisa Murphy utilized a PowerPoint presentation to guide the discussion about the strategies in each community.

Since there was no representation from Keene, the Swanzey strategies were discussed first. Lisa noted that SWRPC and NHDOT are each looking for the advisory committee's local knowledge and input on issues and priorities to inform the final document.

a. Swanzey

Lisa Murphy summarized issue with Flat Roof Mill intersection and the options to consider. She reminded attendees to think about community-specific and corridor-wide priorities. Lisa Murphy summarized previous discussion about this intersection, including street lighting. It was the understanding of the group that NHDOT removed lighting due to funding. Pedestrian and bicyclist safety and the components of Complete Streets were summarized by J. B. Mack. The goal of these design modifications depends on existing and anticipated users and can include adding shoulders, bike lanes, and sidewalks. J. B. Mack described an access management plan, which could be attributed to subdividable or vacant land. A plan would address and optimize the location of curb cuts, medians, turn restrictions, and other design elements to address property access onto Route 12. Curb cut changes could potentially reduce driver confusion, increase or improve parking, and increase safety for all user. There was a question from the advisory committee regarding the existing permitting in place through NHDOT. J. B. Mack noted that an access management plan would be fairly involved. The municipality, NHDOT, and businesses would all work together to form consensus. Lisa Murphy discussed the sightline issues associated with the driveway of Page Homestead located at 185 Monadnock Highway. Lee Dunham commented that the high speed of traffic at this location contributes to difficulties leaving the facility. Access management at the former location of the Swanzey Diner was discussed. The property is currently for sale and Sara

Carbonneau noted that she expects changes would need to be made to the property to accommodate vehicle access and parking. She also commented that Swanzey has prioritized rail trail improvements along Route 10 and they will be completing upgrades to the Winchester town line before working on the rail trail adjacent to Route 12. The Southwest NH Enterprise Zone was discussed. Staff commented that there will be a need to follow up with additional traffic counts in this area to determine the impact of new development on the roadway. Sara Carbonneau noted that a citizen is looking into creating a connector between the Ashuelot and Cheshire rail trails.

b. Marlborough

Larry Robinson commented that Marlborough has considered improvements to the rail trail but it is not currently a priority. This may change if Swanzey their section of trail.

c. Troy

Attendees discussed the Marlborough Road intersection with Route 12 and the posted speed limit north of the intersection of Old Keene Road and Route 12. Lisa mentioned suggested options to address pedestrian safety and Fenella Levick spoke in favor of painted crosswalks. J. B. Mack commented that he spoke with the NHDOT District 4 engineer about bike lanes on state highways. He said that there is precedent, in Hanover, but DOT may expect the community to pay for painting. The pedestrian crossing at South Street, and the intersection of Route 12 and Water Street were both discussed. Issues with heavy vehicles overturning as they exit the town common near Water Street were mentioned. The group discussed potential sites to access the rail trail. It was noted that drivers sometimes favor Old Keene Road to reach the Minute Mart as opposed to Marlborough Road because of the difficult left turn as experienced by southbound traffic.

d. Fitzwilliam

The intersection of Route 12 and Route 119 was discussed. Lisa Murphy provided a summary of the presentation from NHDOT which outlined design alternatives at this location. She commented that although pedestrian crossings are rare, it may not be a possibility to add crossing infrastructure. A pedestrian tunnel was suggested. Terry Silverman commented that if pavement were reduced at the intersection, it may make it more difficult for vehicles to turn. He suggested that NHDOT improve delineation of lines, stop bars and other paint. He also felt that the current stop bars were not angled appropriately and that sightlines could be improved by removing brush in the area. He commented that there have been discussion about removing the Jaffrey Road extension, however this is convenient to many users. Rumble strips were discussed as a solution to speeding however the impact on plowing and noise would need to be considered. J. B. Mack noted that Highway Safety Improvement Program (HSIP) funds may be available for this project. He noted that NHDOT was waiting on more recent crash data. Enforcement and feedback on the posted speed were suggested as other ways of reducing vehicle speeds at this intersection. Nancy Carney commented that in her opinion the Troy town line is a larger generator of emergencies calls. The Mr. Mike's convenience store access to Route 119 was discussed, where there is a right turn restriction. Attendees described a concern over accidents in passing areas on Route 12. Chris Holman noted that motorcyclists frequently use the parking area near the Massachusetts state line to stop and remove their helmets. He also commented that road users also pull over to the side of the road to make phone calls. There was continued discussion about crosswalks. Attendees went on to discuss the condition of rail trails, which were noted to be in poor shape in the vicinity of Rockwood Pond. The use of the trails by motorized vehicles was also a concern. Nancy Carney noted that there was a database of gated rail trial crossings maintained by Monadnock Sno Moles. Attendees from Fitzwilliam expressed concern about accidents in passing areas and that good passing zones may be removed.

e. Keene

Attendees discussed the intersection of Route 32 and Route 12. The lack of a painted pedestrian crossing at this area was noted. Lisa Murphy pointed out that there are no stop signs at the residential outlets north of this intersection. Attendees discussed the quality of sidewalks in this area and when on to talk about a possible connection between

Route 12 and Optical Avenue at Route 101. The option of crossing Route 101 under a bridge was mentioned and it was pointed out that Keene State, the abutting property owners, are not comfortable making the crossing public. Martell Court was also highlighted as a concern.
Take advantage. J. B. Mack commented that Keene is perhaps the best opportunity in the region to provide a successful carpool facility.

Lisa Murphy requested that attendees follow up with any suggested changes and asked for assistance with prioritization. She commented that attendance from the advisory committee at upcoming meetings with municipal officials would be appreciated.

III. Maps

Steve Waleryszak and Henry Underwood presented draft development constraints, land use, natural resources, and other maps.

IV. Next Steps

Lisa Murphy summarized remaining work, including prioritization and suggest the next meeting would occur on a Tuesday or Thursday.

V. Adjourn

The meeting was adjourned at 2:15 p.m.

Respectfully Submitted,

Henry Underwood
Planning Technician

NH 12 South Corridor Study
Transportation Advisory Committee

Meeting #5

AGENDA

April 2, 2015
12:00 to 2:00 p.m.
SWRPC Office - 37 Ashuelot Street, Keene

I. Welcome and Introductions

II. Approval of Minutes of August 20, 2014

III. Review of Draft of NH 12 South Corridor Study Report

a. Overview of Community Meetings
b. Findings
c. Recommendations
d. Additional topics

IV. Appendices
a. Data Analysis
b. Maps

V. Next Steps

Southwest Region Planning Commission

NH 12 South Corridor Advisory Committee Meeting

Meeting Minutes

April 2, 2015

Present: Sara Carbonneau, *Town of Swanzey*; Nancy Carney, *Town of Fitzwilliam*; Ken Colby, *Town of Swanzey*; Frank Linnenbringer, *NH Dot District 4*; Fenella Levick, *Monadnock Berries, Troy;* Brad Harris, *Montachusett Regional Planning Commission*; Larry Robinson, *Town of Marlborough*; Jim Donison, *City of Keene*; Kevin Stone, *Town of Fitzwilliam;* Suzanne Gray, *Town of Fitzwilliam*

SWRPC Staff present were: J. B. Mack, *Principal Planner*; Lisa Murphy, *Senior Planner*; Henry Underwood, *GIS Technician/Planner*; Wendy Woodland, *Office Assistant.*

VI. Welcome and Introductions

The meeting was called to order at 12:00 p.m. and introductions were made. J.B. Mack gave an overview of the report and thanked the committee for their assistance with it. He referred to the report as a shared public resource and stated that SWRPC hopes the document can be used as guidance for local planning and grant applications, or to facilitate dialogue on planning issues of local concern. J.B. Mack also stated that the documents involved in creating the report have been useful in the Ten Year Plan nominations.

VII. Approval of Minutes of August 20, 2014

The motion to approve the minutes of August 20, 2014 was made by Larry Robinson and seconded by Sara Carbonneau. The minutes were passed by unanimous vote.

III. Review of Draft of NH 12 South Corridor Study Report

a. Overview of Community Meetings

Lisa Murphy reported that SWRPC staff met with all five communities listed in the report to discuss the committee's recommendations. She then summarized the discussions with the towns as follows:

f. Troy

Lisa Murphy stated that SWRPC staff met with the Town of Troy on September 17, 2014. Among the issues discussed were the connectivity issues regarding West Hill Road and the impact these issues have on emergency vehicle access. After some discussion, the committee agreed to place this project into the recommendations. Additionally, the suggestion of a possible study to determine the need for a traffic light at the NH 12 and Marlborough Road intersection was discussed and added to the recommendations.

g. Fitzwilliam

Lisa Murphy stated that SWRPC staff met with the Town of Fitzwilliam on September 29, 2014. She reported that attendees at this meeting paid particular attention to the recommendations regarding invasive species. The Board members present were in agreement with the draft recommendations of the advisory committee.

h. Swanzey

Lisa Murphy stated that SWRPC staff met with the Town of Swanzey on October 9, 2014. The need for bike lanes and better access management was discussed. The members present were interested in the data presented and agreed with the recommendations of the advisory committee.

i. Marlborough

Lisa Murphy stated that SWRPC staff met with the Town of Marlborough on October 22, 2014. She reported that the recommendation regarding invasive species was a main topic at the meeting as well as the potential for creating more business opportunities along the corridor. The Board members at the meeting agreed with the recommendations that were presented and had no further suggestions.

j. Keene

Lisa Murphy stated that SWRPC staff met with the City of Keene on two occasions. The first meeting was on November 12, 2014 and the second meeting was held on January 26th, 2015. During these meetings, Lisa Murphy reported that the intersection of NH 32 and 12 were discussed, as well as the creation of Park and Ride Zones. Members were interested in the data and the findings of the study. There were no additional suggestions made for the report's recommendations.

VIII.

b**. Findings**

Henry Underwood summarized the report findings. Although intersection improvements, pedestrian and bicycle safety, speed, and access management were common themes throughout the corridor, Henry Underwood highlighted some specific issues. He stated that the intersection at NH 12/NH 119 in Fitzwilliam was identified as a priority for safety improvements. The need for traffic calming at the site as well as the need for safe pedestrian crosswalks should be discussed between the Town and DOT.

Henry Underwood also reported that the proportion of vehicles found to be exceeding the posted speed limit in Keene and Swanzey was 90% or higher, while vehicles in Troy were significantly less likely to exceed the speed limit. He also drew attention to the need for stormwater management to maintain water quality along the corridor as well as the need for eradication of invasive species that are encroaching in the right-of-way on roads. Other items that Henry Underwood discussed were the need for drainage and surface condition improvements to rail trails as well as the trend of population stagnation in towns along the corridor.

c. **Recommendations**

Lisa Murphy stated that SWRPC took input from the Committee in order to consider the report recommendations. She briefly summarized recommendations for all five towns and noted that access management was a key concern for each town. She also specified that the goal to increase the availability of high-capacity broadband infrastructure and technology along the corridor had been added to all of the town recommendations. Committee members mentioned that they would like to add a recommendation that sewer and water infrastructure be added at the same time as broadband infrastructure. Lisa Murphy replied that she would add that into the recommendations. Sara Carbonneau mentioned that the roundabout at the intersection of NH 12/NH 32 in Keene went to bid in January and that it will be going to the Governor and Council next week. She asked the committee for support on this issue.

d. **Additional topics**

There was some Committee discussion about the restriping of pavement markings at the NH 12 and 119 intersection as a method of road calming. It was noted that striping is maintenance intensive and tends to be erased as a consequence of

plowing during the winter. The possibility of erecting overhead signage at that intersection was brought up and considered to be a good option.

IX. Appendices

a. Data Analysis

Henry underwood described how to read the maps and corresponding data. He mentioned that the traffic count summary includes notes on how to interpret data including peak periods and total volume of cars. He also went over vehicle classification, historic traffic counts, and turning movements.

b. Maps

Henry Underwood proceeded to discuss the maps and appendices that are included with the report. He noted that there are five maps, each dealing with a different aspect of the recommended work. There is a map for Transportation, Safety (including cycling accidents), Zoning, Development Constraints, and Cultural and Historic resources.

X. Next Steps

Lisa Murphy stated that SWRPC hopes that the data presented in this report will be used for grant applications, master plans and other projects. J.B. Mack stated that the goal is to have the report be formally accepted by the Committee. To this end, Lisa Murphy will send out updated reports to each of the Committee members to review and finalize. The Committee members will have ten days to look over and amend or approve the document.

VI. Adjourn

The meeting was adjourned at 1:45 p.m.

Respectfully Submitted,

Wendy Woodland
Office Assistant

Business Survey

Your participation in this survey is strictly voluntary. Information from the completed surveys will be compiled into a summary database without contact names, business names and addresses. Individual surveys will remain confidential.

1. Please provide your full name. _____
2. What is the name of your business?_____
3. What is your business address? _____
4. What is your position/title? _____

5. What type of business do you have?

What type of business do you have?

Answer Options	Response Percent	Response Count
Service Producing (ex. sales, office, medical, food service, banking)	92.1%	35
Goods Producing (manufacturing, construction, production of materials, etc.)	7.9%	3
Government (defense, administration of justice)	0.0%	0
Other (please specify)		8
answered question		38
skipped question		9

6. How many people are currently employed by your business at this location?

How many people are currently employed by your business at this location?

Answer Options	Response Percent	Response Count
1 - 4 employees	54.3%	25
5 - 9 employees	17.4%	8
10 - 23 employees	19.6%	9
24 - 49 employees	4.3%	2
50 - 100 employees	4.3%	2
Greater than 100 employees	0.0%	0
answered question		46
skipped question		1

7. What is the average commute time for you and your employees?

What is the average commute time for you and your employees?

Answer Options	Response Percent	Response Count
Less than 15 minutes	43.5%	20
15 - 30 minutes	50.0%	23
31 - 45 minutes	6.5%	3
Greater than 45 minutes	0.0%	0
	answered question	46
	skipped question	1

8. How do you and your employees arrive at work? (select all that apply)

How do you and your employees arrive at work? (select all that apply)		
Answer Options	**Response Percent**	**Response Count**
Personal automobile or motorcycle	97.7%	42
Carpool, vanpool or rideshare	7.0%	3
Bike	14.0%	6
Walk	14.0%	6
Other (please specify)		3
	answered question	43
	skipped question	4

9. What is the approximate square footage of your establishment?

What is the approximate square footage of your establishment?		
Answer Options	**Response Percent**	**Response Count**
Under 5,000 s.f.	54.8%	23
5,000 to 10,000 s.f.	28.6%	12
10,001 to 25,000 s.f.	7.1%	3
25,001 to 50,000 s.f.	7.1%	3
Greater than 50,000 s.f.	2.4%	1
	answered question	42
	skipped question	5

10. How many years has your business been at its current location?

How many years has your business been at its current location?		
Answer Options	**Response Percent**	**Response Count**
0 to 1 years	4.3%	2
2 to 4 years	15.2%	7
5 to 10 years	17.4%	8
11 to 20 years	13.0%	6
Greater than 20 years	50.0%	23
	answered question	46
	skipped question	1

11. On average, approximately how many shipments (out) does your business send in a week?

On average, approximately how many shipments (out) does your business send in a week?		
Answer Options	**Response Percent**	**Response Count**
0 - 2 shipments per week	71.1%	32
3 - 5 shipments per week	13.3%	6
6 - 10 shipments per week	6.7%	3
More than 10 shipments per week	8.9%	4
Please specify		1
answered question		45
skipped question		2

12. On average approximately how many deliveries (in) do you receive in a week?

On average, approximately how many deliveries (in) do you receive in a week?		
Answer Options	**Response Percent**	**Response Count**
0 - 2 deliveries per week	43.5%	20
3 - 5 deliveries per week	37.0%	17
6 - 10 deliveries per week	17.4%	8
More than 10 deliveries per week	2.2%	1
Please specify		1

13. What type of freight vehicle(s) delivers to your business? (select all that apply)

What type of freight vehicle(s) delivers to your business? (Select all that apply)		
Answer Options	**Response Percent**	**Response Count**
Passenger car/van	59.1%	26
Box truck/flat bed	68.2%	30
Tractor Trailer	36.4%	16
Other	4.5%	2

14. Is the level of activity at your business affected by the season of the year?

Is the level of activity at your business affected by the season of the year?		
Answer Options	**Response Percent**	**Response Count**
Yes	58.7%	27
No	41.3%	19

15. What season is the busiest?

What season is the busiest?

Answer Options	Response Percent	Response Count
Spring (March to May)	11.1%	3
Summer (June to August)	55.6%	15
Fall (September to November)	22.2%	6
Winter (December to February)	11.1%	3
Other (please specify)		3
answered question		27
skipped question		20

16. What are your busiest days of the week?

What are your busiest days?		
Answer Options	Response Percent	Response Count
Weekdays	37.0%	17
Weekends	34.8%	16
No noticeable difference	28.3%	13
answered question		46
skipped question		1

17. Is the level of activity at your business affected by the time of day?

Is the level of activity at your business affected by the time of day?		
Answer Options	Response Percent	Response Count
Yes	52.2%	24
No	47.8%	22
answered question		46
skipped question		1

18. Approximately how many customers visit your business in a day?

Approximately how many customers visit your business in a day?		
Answer Options	Response Percent	Response Count
Fewer than 10	45.7%	21
10 to 30 daily customers	10.9%	5
31 to 50 daily customers	21.7%	10
More than 50 daily customers	21.7%	10
answered question		46
skipped question		1

19. How many driveway entrances/exits does your business have?

How many driveway entrances/exits does your business have?

Answer Options	Response Percent	Response Count
None	0.0%	0
1 to 2	95.7%	44
3 or more	4.3%	2
	answered question	46
	skipped question	1

20. Does your business share a driveway/entrance with other businesses or residential users?

Does your business share a driveway/exit with other businesses or residential users?		
Answer Options	**Response Percent**	**Response Count**
Yes	52.3%	23
No	47.7%	21
	answered question	44
	skipped question	3

21. Please select all that apply.

Available Services and Parking Please select all that apply.			
Answer Options	**Yes**	**No**	**Response Count**
Is your business serviced by municipal water?	33	11	44
Is your business serviced by municipal sewer?	27	17	44
Does your business use 3 phase power?	11	20	31
Is there sufficient Broadband/Internet available?	32	10	42
Is there sufficient on-site parking?	34	7	41
		answered question	44
		skipped question	3

22. Over the past five years, has the size of your business changed in terms of the number of employees, production levels, floor space, or deliveries & pick-ups?

Over the past five years, has the size of your business changed in terms of the number of employees, production levels, floor space, or deliveries & pick-ups?		
Answer Options	**Response Percent**	**Response Count**
Yes	36.4%	16
No	63.6%	28
	answered question	44
	skipped question	3

23. Which of the following changed? Please choose increase or decrease.

Which of the following changed? Please choose increase or decrease.

Answer Options	Increase	Decrease	Response Count
Employees	8	6	14
Production	11	1	12
Floor Space	4	1	5
Deliveries - in	8	1	9
Shipments - out	6	2	8
Utility Demand	6	2	8
		answered question	16
		skipped question	31

24. Does your business have any plans for change during the next five years?

Does your business have any plans for change during the next five years?		
Answer Options	**Response Percent**	**Response Count**
Yes	36.4%	16
No	63.6%	28
	answered question	44
	skipped question	3

25. Which of the following do you expect to change? Please choose increase or decrease.

Which of the following do you expect to change? Please choose increase or decrease.			
Answer Options	**Increase**	**Decrease**	**Response Count**
Employees	12	1	13
Production	8	0	8
Floor Space	9	1	10
Deliveries - in	5	0	5
Shipments - out	3	0	3
Utility Demand	5	0	5
		answered question	16
		skipped question	31

26. Please provide your opinion to each statement in the chart below:

Please provide your opinion to each statement in the chart below.							
Answer Options	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Does Not Apply to My Business	Response Count
Rt. 12 is an excellent location for attracting customers.	12	16	11	3	0	3	45
Rt. 12 is an excellent location for ensuring timely freight pickups and deliveries.	12	17	8	2	0	6	45
Rt. 12 provides my business good access to Southern New England markets.	9	23	5	0	0	8	45
There are too many driveway and entrance curb cuts on Rt. 12.	1	3	18	10	4	4	40
I am concerned about motorist safety on Rt. 12.	6	14	12	5	5	2	44
I am concerned about pedestrian & bicycle safety on Rt. 12.	7	12	14	6	3	2	44
Rt. 12 is often congested.	4	7	17	12	3	1	44
Route 12's pavement is in good condition.	0	16	11	7	9	1	44
There are not enough passing opportunities on Rt. 12.	1	13	12	11	4	2	43
I am concerned how growth over time will affect congestion on Rt. 12.	2	15	15	8	2	2	44
I am concerned about the safety of entering/exiting Rt. 12 businesses in Northern Swanzey & Lower Main Street area in Keene.	9	15	9	5	0	5	43
The intersection of Rt. 12 and Martell Ct. in Keene is a problem that should be fixed.	10	8	9	4	0	9	40
The intersections of Rts. 12 and 32 is a problem that should be fixed.	21	12	2	3	0	7	45
The intersection of Rts. 12 and 119 is a problem that should be fixed.	11	9	10	10	0	4	44
						answered question	46
						skipped question	1