

# US 23 Business / South Main Street

Waynesville, NC

## Draft Corridor Report



LaQuatra Bonci Associates

JM Teague Engineering and Consulting

Brooks Engineering

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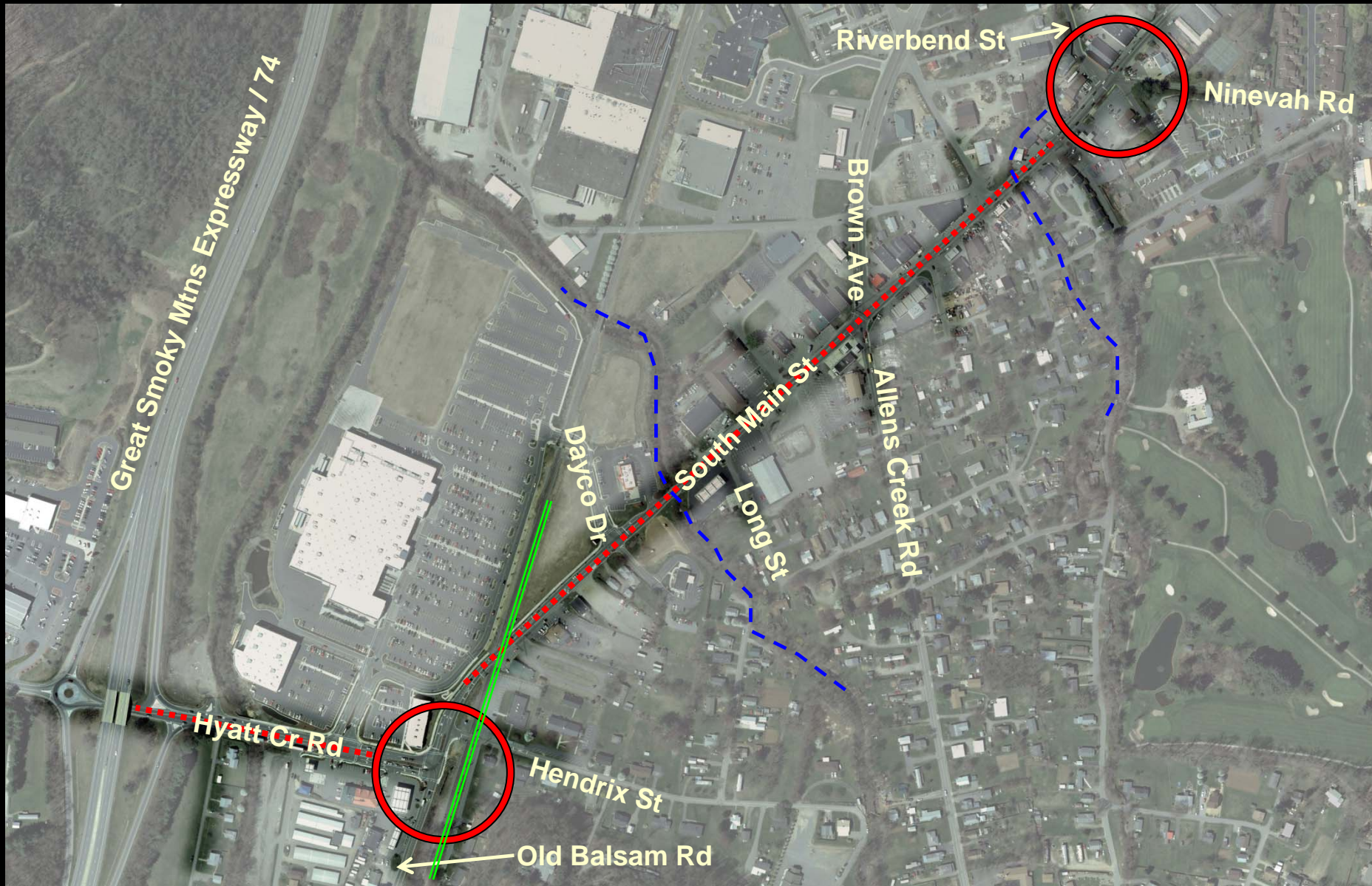
# PROJECT GOALS AND OBJECTIVES

- Analyze roadway capacity and future travel demand
- Analyze and design intersection improvements
- Analyze and design access from abutting parcels
- Analyze and design pedestrian and bicycle facilities
- Address aesthetics, gateway features
- Obtain community input
- Produce a document that can be used as a blueprint for public and private sector decisions





# CONTEXT





# THE PROCESS

- Develop a coherent plan for the entire corridor
- Develop a pedestrian-friendly environment
- Research traffic trends and develop a roadway system that accounts for pedestrian and vehicular safety and travel
- Develop principles for stormwater and infrastructure improvements
- Develop better neighborhood connectivity
- Develop a unique streetscape improving the current corridor aesthetic
- Incorporate “Complete Streets” measures



# BASIS FOR RECOMMENDATIONS

## TRAFFIC

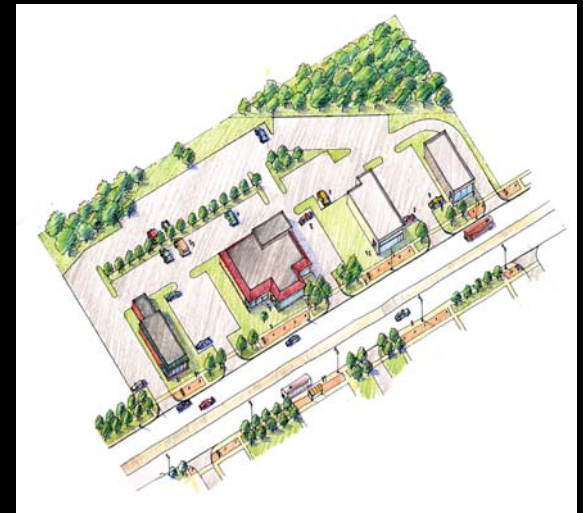
- Incorporate Left Turn Lanes
- Provide Medians and Safer Travel Lanes
- Street Alignment
- Improve Pedestrian Safety and Traffic Interactions
- Bicycle Lanes



# BASIS FOR RECOMMENDATIONS

## PARCELS

- Reconfigure to Compliment Recent LDS
- Consider Pedestrian Orientation
- Consumer – focused Retail and Business Opportunities
- Provide for Connectivity between Parcels
- Parcel Orientation Dedicated to Street





# BASIS FOR RECOMMENDATIONS

## PEDESTRIAN ACTIVITY

- Improve Edge Conditions
- Provide Sidewalks, Curb & Gutter
- At-Grade RR Crossing
- Sidewalk Planting Strip / Verge
- 2010 Waynesville Comprehensive Pedestrian Plan



# BASIS FOR RECOMMENDATIONS

## INFRASTRUCTURE

- Provide Curb and Gutter
- Stream Amenities & Protection
- Bridge Repair / Replacement
- Overhead Utility Coordination





# BASIS FOR RECOMMENDATIONS

## LAND USE & ECONOMICS

- Developable Parcel Configurations
- Mixed-Use Development In Alignment With LDS
- Generate Businesses to Support Surrounding Neighborhoods



# BASIS FOR RECOMMENDATIONS

## AESTHETICS

- Provide a Distinct Image - Placemaking
- Corridor & Town Gateway
- Uniform Landscape Elements
- Pedestrian Amenities



# DEVELOPMENT GUIDELINES

Town of Waynesville Land Development Standards - 2011

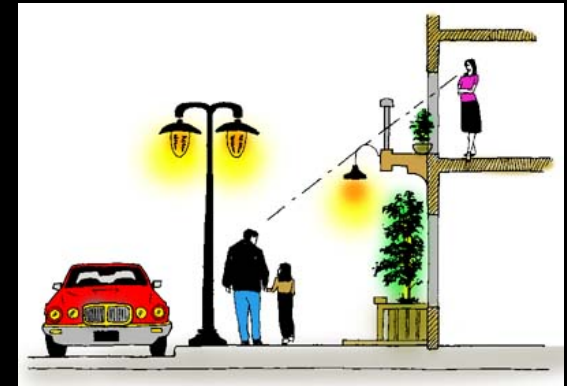
SHARED PARKING – Shared Parking to Reduce Curb Cuts

STREET FRONTAGE – Streetscape Success, Pedestrian Comfort

BICYCLE LANES – Provide Dedicated Travel Lanes

LANDSCAPE EASEMENT – Landscape Standards / Streetscape Pattern

PEDESTRIAN ELEMENTS – Pedestrian Amenities



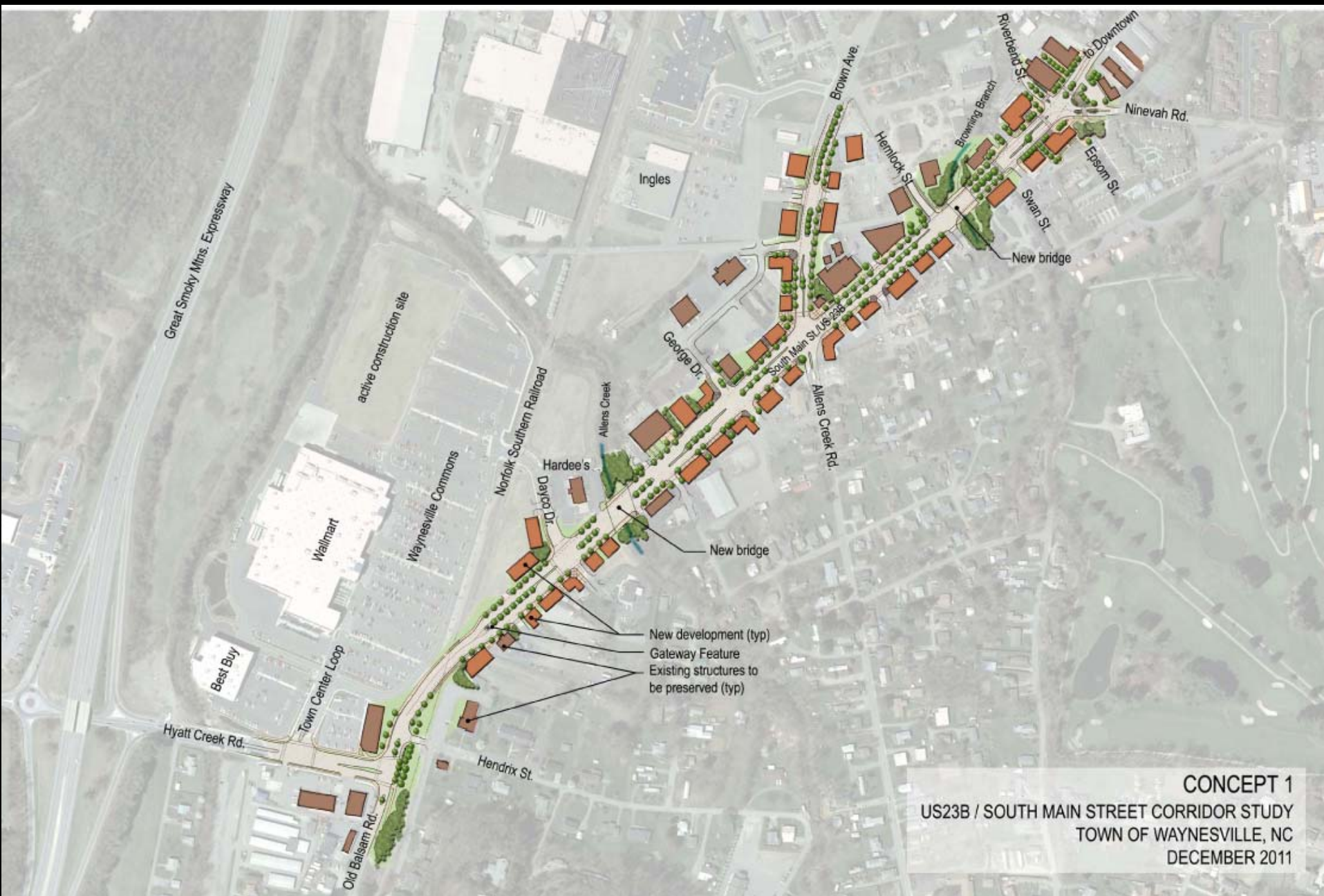


# CORRIDOR CONCEPTS

## GENERAL PARAMETERS

- 2035 Build-Out Year
- Used 2% Truck Percentage
- All Left & Right Turn Lanes – 100' Minimum Storage
- 11' Wide Travel Lanes
- 5' Bicycle Lanes
- 2' Curb & Gutter
- 14' Medians, 3' @ Turn Lanes
- ROW To Provide Minimum 5' Clear Space or 15' Pedestrian Zone
- No On-Street Parking
- Alignment With Town Street Classification & Design –  
Boulevard / Commercial Street

# CONCEPT 1



**CONCEPT 1**  
US23B / SOUTH MAIN STREET CORRIDOR STUDY  
TOWN OF WAYNESVILLE, NC  
DECEMBER 2011



# CONCEPT 2

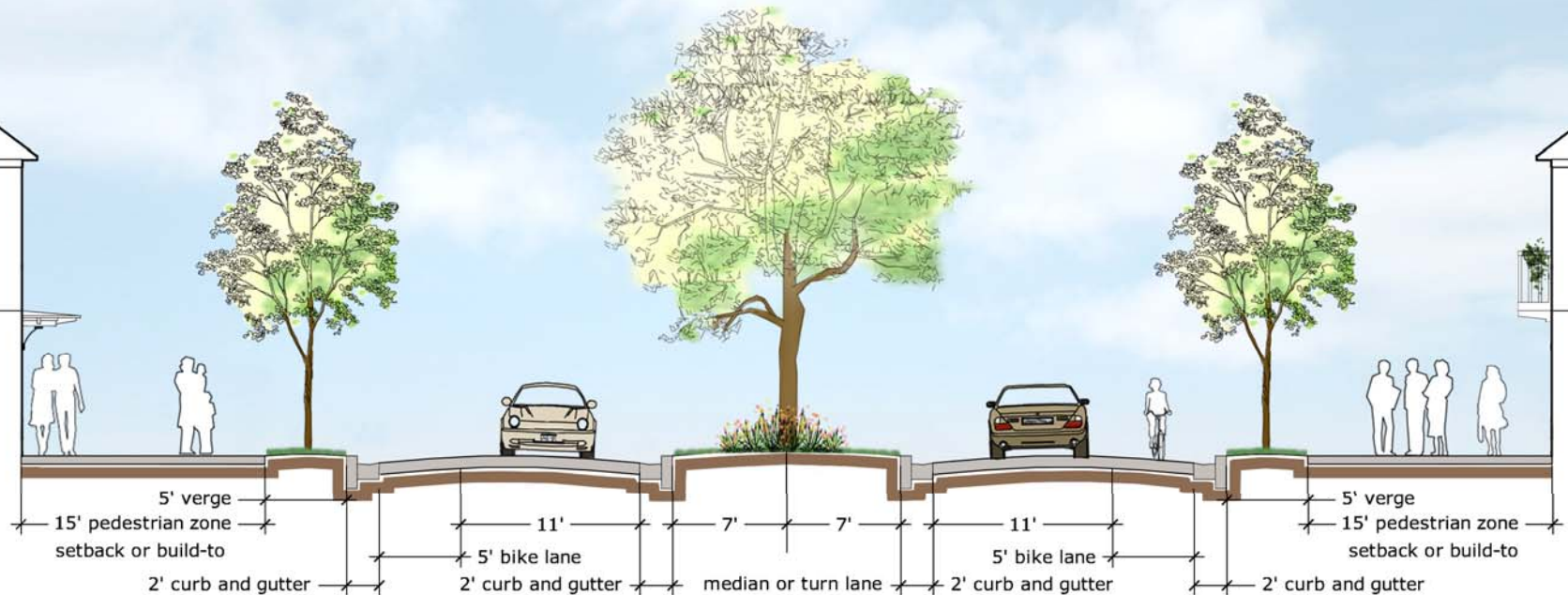




# CORRIDOR CONCEPTS

## STANDARD ROAD SECTIONS

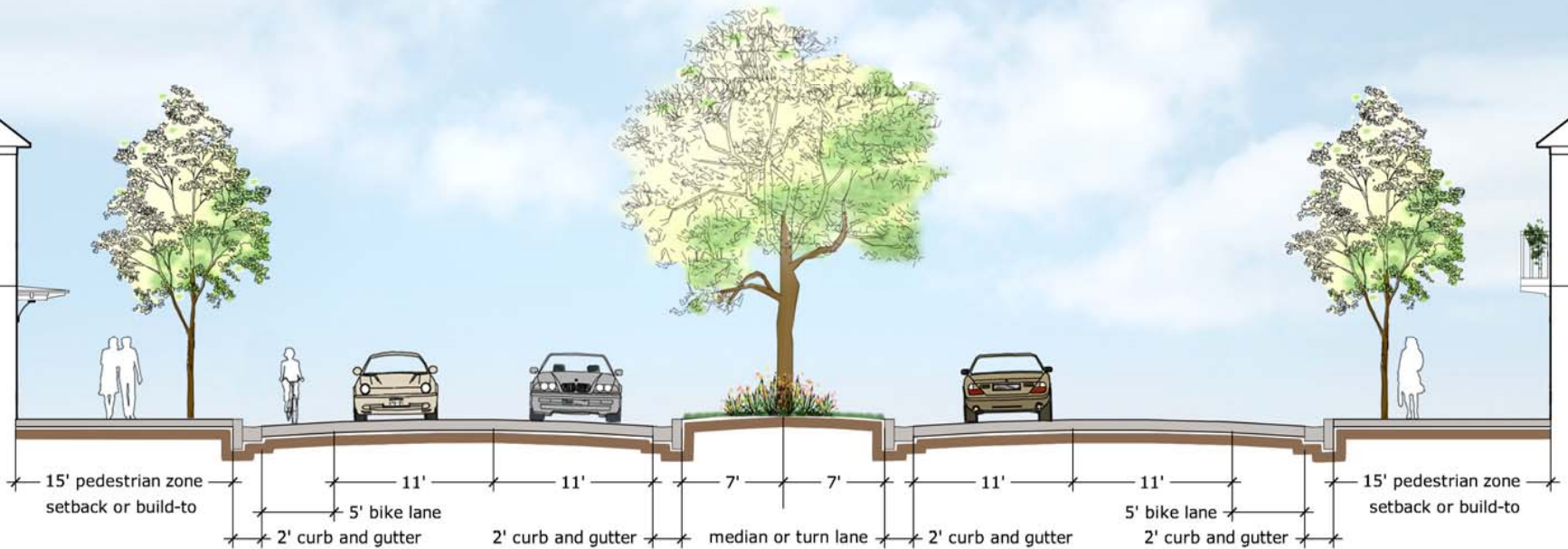
- 94' ROW, 2 Lanes, 2 Bike Lanes



# CORRIDOR CONCEPTS

## STANDARD ROAD SECTIONS

- 106' ROW, 4 Lanes, 2 Bike Lanes



# CORRIDOR CONCEPTS

## SOUTH MAIN STREET @ NINEVAH ROAD / RIVERBEND STREET

### EXISTING CONDITIONS



- South Main St. - ADT 11,500 vehicles
- Ninevah Rd. – ADT 2,000 vehicles
- Riverbend St. – ADT 500 vehicles
- Level of Service “B” (LOS)
- Volume To Capacity Ratio of Less Than 1 (VOC)
- Overall Intersection Operation
  - LOS A – AM Peak Hour
  - LOS A – PM Peak Hour





# CORRIDOR CONCEPTS

## CONCEPT 1

### South Main Street @ Ninevah Road / Riverbend Street



- LOS B, VOC < 1
- Traffic Signal Controlled
- Close Epsom St.
- NB S. Main St. – Lt., Single Thru / Rt.
- SB S. Main St. – Lt. / Single Thru / Rt.
- Ninevah Rd. – Lt. / Single Thru / Rt.
- Riverbend St. – Lt., Single Thru / Rt.
- Begin/End Designated Bike Lane



# CORRIDOR CONCEPTS

## CONCEPT 2

### South Main Street @ Ninevah Road / Riverbend Street



- LOS B, VOC > 1
- Roundabout Controlled
- Close Epsom St. Thru
- NB S. Main St. – Single
- SB S. Main St. – Single
- Ninevah Rd. – Single
- Riverbend St. – Single
- Begin/End Designated Bike Lane





# CORRIDOR CONCEPTS

## SOUTH MAIN STREET @ ALLENS CREEK ROAD / BROWN AVENUE

### EXISTING CONDITIONS



- South Main St. - ADT 12,000 vehicles
- Allens Creek Rd. – ADT 4,300 vehicles
- Brown Ave. – ADT 5,800 vehicles
- Level of Service “C” (LOS)
- Angled Intersection
- Volume To Capacity Ratio of Less Than 1 (VOC)
- Overall Intersection Operation
  - LOS B – AM Peak Hour
  - LOS C – PM Peak Hour



# CORRIDOR CONCEPTS

## CONCEPT 1

### South Main Street @ Allens Creek Rd / Brown Ave



- LOS B, VOC < 1
- Traffic Signal Controlled
- NB S. Main St. – Lt., Single Thru / Rt.
- SB S. Main St. – Lt., Single Thru / Rt.
- Brown Ave. – Lt., Single Thru, Rt.
- Allens Creek Rd. – Lt., Single Thru, Rt.





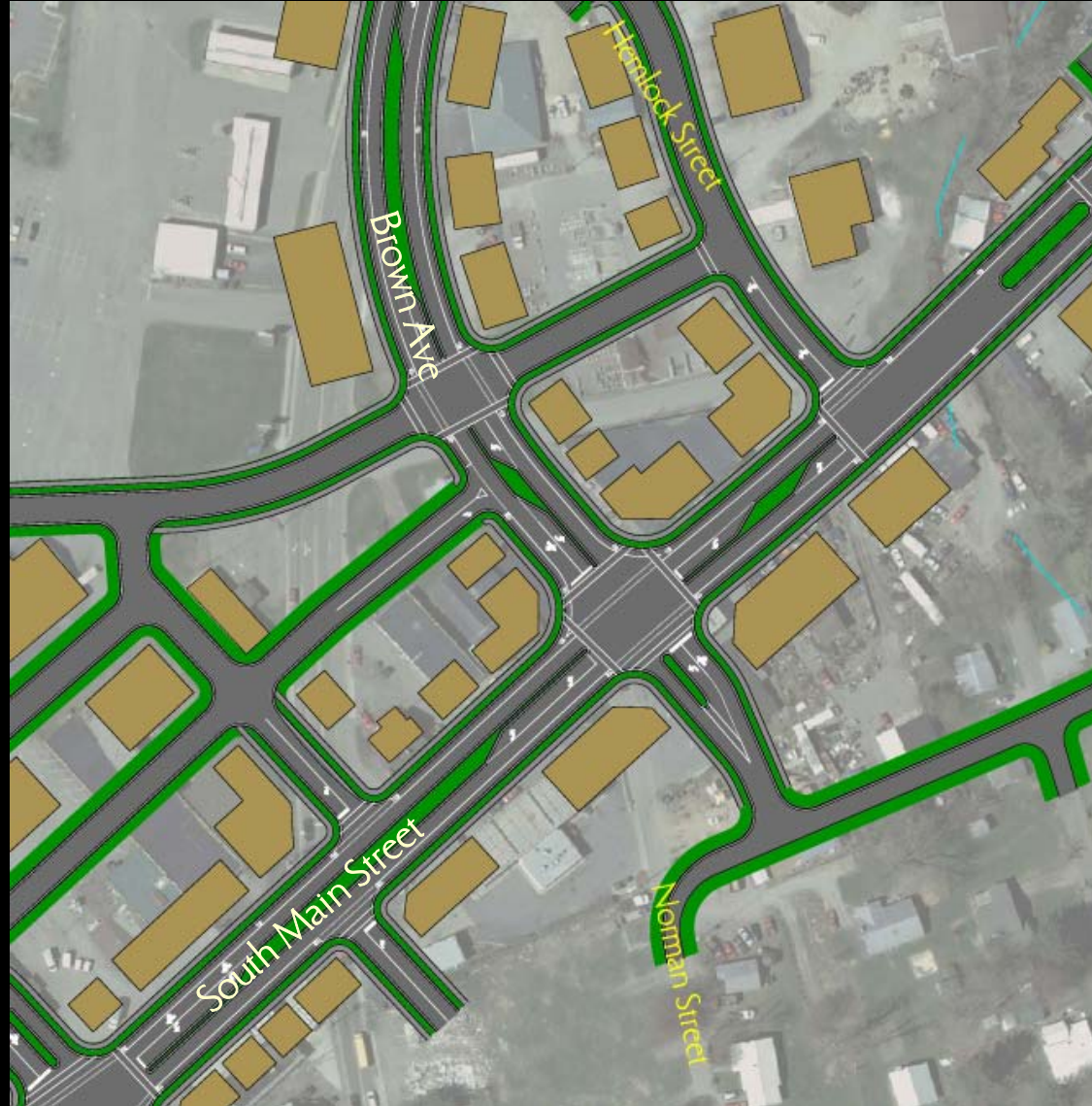
# CORRIDOR CONCEPTS

## CONCEPT 2

### South Main Street @ Brown Ave.



- LOS B / C
- Traffic Signal Controlled
- Shift Brown Ave. North 300', 90° Intersection
- NB S. Main St. – Lt. (200' Storage), Single Thru, Rt.
- SB S. Main St. – Lt., Single Thru / Rt.
- Brown Ave. – Lt., Potential Thru / Rt.
- Norman St. – New Connection / Development Rd.





# CORRIDOR CONCEPTS

## CONCEPT 2

### South Main Street @ Allens Creek Rd.



- LOS B / C
- Traffic Signal Controlled
- Shift Allens Creek Rd. South 300'
- NB S. Main St. – Lt., Single Thru, Rt.
- SB S. Main St. – Lt. (125' Storage), Single Thru
- Allens Creek Rd. – Lt., Thru / Rt.
- 90° Intersection Aligns with George Drive





# CORRIDOR CONCEPTS

## SOUTH MAIN STREET @ DAYCO DRIVE / HARDEE'S

### EXISTING CONDITIONS



- South Main St. - ADT 12,500 vehicles
- Old Town Bank – Private Development Road
- Level of Service “C” (LOS)
- Volume To Capacity Ratio of Less Than 1 (VOC)
- Overall Intersection Operation
  - LOS A – AM Peak Hour
  - LOS B – PM Peak Hour

# CORRIDOR CONCEPTS

## CONCEPT 1

### South Main Street @ Dayco Drive / Hardee's



- LOS B, VOC < 1
- Traffic Signal Controlled
- NB S. Main St. – Lt., Double Thru / Rt.
- SB S. Main St. – Lt. / Double Thru / Rt.
- Dayco Dr. – Lt. / Single Thru / Rt.
- Old Town Bank Access – Lt., Single Thru / Rt.





# CORRIDOR CONCEPTS

## CONCEPT 2

### South Main Street @ Dayco Drive / Hardee's



- LOS C, VOC < 1
- Roundabout Controlled
- NB S. Main St. – Double
- SB S. Main St. – Double
- Dayco Dr. – Double
- Old Town Bank Access – Double





# CORRIDOR CONCEPTS

## SOUTH MAIN STREET @ OLD BALSAM ROAD/HYATT CREEK ROAD

### EXISTING CONDITIONS



- South Main St. - ADT 14,500 vehicles
- Old Balsam Rd. – ADT 8,500 vehicles
- Hyatt Creek Rd. – ADT 14,800 vehicles
- Level of Service “B” (LOS)
- Volume To Capacity Ratio of Less Than 1 (VOC)
- Overall Intersection Operation
  - LOS B – AM Peak Hour
  - LOS B – PM Peak Hour

# CORRIDOR CONCEPTS

Concept 1 & 2

## South Main Street @ Hyatt Creek Rd



- LOS C , VOC < 1
- Traffic Signal Controlled
- SB S. Main St. – Rt., Single Thru / Rt.
- Old Balsam Rd. – Left, Single Thru
- Hyatt Creek Rd. – Double Left, Right  
(Each 200' Storage)
- Begin/End Designated Bike Lane

# CORRIDOR CONCEPTS

## HYATT CREEK ROAD @ TOWN CENTER LOOP

### EXISTING CONDITIONS



- Hyatt Creek Rd. - ADT 15,400 vehicles
- Level of Service “C” (LOS)
- Volume To Capacity Ratio of Less Than 1 (VOC)
- Overall Intersection Operation
  - LOS A – AM Peak Hour
  - LOS B – PM Peak Hour



# CORRIDOR CONCEPTS

Concept 1 & 2

## Hyatt Creek Rd @ Town Center Loop

- LOS B, VOC < 1
- Traffic Signal Controlled
- EB Hyatt Creek Rd. – Single Left (200' Storage), Single Thru / Right (DROP 1 LEFT LANE)
- WB Hyatt Creek Rd. – Left, Thru, Thru / Right
- Waynesville Commons Access – Left / Thru, Right
- Gas Station – Left, Thru / Right



# CORRIDOR CONCLUSIONS

## Project Schedule:

- ~~1. Project Interview, Kick-Off Meeting and Work Sessions – July 28, 2011~~
- ~~2. Site Analysis, Programming and Use Patterns – 6 Weeks~~
- ~~3. Work Session #1 – Charette #1 – September 21/22, 2011~~
- ~~4. Refinement of Alternatives – 5 Weeks~~
5. Stakeholder Meeting / Planning Board – End December
6. Preparation of Refined Master Plan and Corridor Study – 6 Weeks
7. Final Corridor Study Presentation – End February / Beginning March