Transportation and Land Use Forum:
Regional and Rural Strategies

A Shared Vision for the Route 29 Corridor Overlay District in Campbell County

June 2, 2016
Route 29: The Most Studied Route in the Commonwealth!

- 1997: Phase 1 corridor study
- 2003: Phase 2 and 3 statewide study
- 2005: Development of a corridor overlay
- 2009: Statewide blueprint (CTB Addendum)
- 2010: Roadway safety audit
Local Economic Development......

**ECONOMIC DEVELOPMENT GOALS & OBJECTIVES**

**GOAL 1:** Support existing industry expansion, the retention of existing businesses, the location of new industry within the County, and entrepreneurial activity.

Objective 1: Promote a skilled and trained work force in Campbell County through educational and workforce development.

Objective 2: Promote retail, commercial, and industrial growth throughout the County.

Objective 3: Develop marketable industrial and commercial properties.

Objective 4: Support entrepreneurship and encourage economic gardening.

Objective 5: Expand broadband access.

**GOAL 2:** Promote policies and practices that will support local economic development.

Objective 1: Support the maintenance and improvement of efficient transportation systems.

Objective 2: Raise awareness of state and local funding decisions and impacts.

Objective 3: Continue to invest resources into long-term planning.

**GOAL 3:** Promote local and regional tourism.

Objective 1: Work with tourism stakeholder groups to identify tourism issues and initiatives.

Objective 2: Collaborate with other organizations in the state and region to increase awareness of County points of interest.

Objective 3: Provide support for tourism-related businesses.

**COMMON THEMES**

From the Listening Tours and Leadership Planning Forums, a number of common themes emerged on potential strategies for dealing with concerns and taking proactive steps to address problems on the corridor.

These included:

**Access Control:**

For long-term planning, the minimum level of access control on the Route 29 corridor should be “managed” access (access only at designated secondary road intersections).

**Implementation:**

Steps should be taken to identify and implement alternative methods to manage access including:

- Purchase of development rights within the corridor
- Incentives for access to take place via secondary roads
- Purchase of limited access right of way
- Incentives to develop portions of grid system (parallel roads) in urbanizing portions of the corridor

**Congestion Mitigation:**

Corridor congestion should be mitigated through a variety of approaches (intersection improvements, signal coordination and re-timing, construction of interchanges) to reduce delays for both short- and long-distance trips.

**Corridor Planning:**

A corridor-wide master plan for transportation and corridor-adjacent land use through cooperative effort between VDOT, DPRT, and localities should be developed.

**Land Use and Transportation:**

Land use decisions should be better managed to minimize additional traffic congestion in the Route 29 corridor.

**Corridor Stewardship:**

VDOT’s role as the “owner/steward” of transportation resources in the corridor and its ability to maintain the value of the Commonwealth’s transportation investments along the Route 29 corridor should be increased.

**Multi-Modal:**

Capacity of the rail system through the corridor should be increased to better support effective passenger rail service. Also, implementation of improvements in the transportation system should be timed in order to enhance the competitive advantage of rail, transit, and other modes.

....and Statewide Mobility
What are we Coordinating?

- A joint state and local strategy to guide development and transportation decisions
- Route 29 between Route 460 and Callahan Road
- Local advice: "Consider everyone's viewpoint"
- Use the new FHWA PlanWorks tool to assist collaboration among Campbell County, VDOT and CVMPO.
What is PlanWorks?

- An agency’s “roadmap” for planning and implementing projects.

Corridor Planning (Steps 1-5)

<table>
<thead>
<tr>
<th>Step 1 (COR-1)</th>
<th>Step 2 (COR-2)</th>
<th>Step 3 (COR-3)</th>
<th>Step 4 (COR-4)</th>
<th>Step 5 (COR-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve Scope of Corridor Planning Process</td>
<td>Approve Problem Statements and Opportunities</td>
<td>Approve Goals for the Corridor</td>
<td>Reach Consensus on Scope of Environmental Review and Analysis</td>
<td>Approve Evaluation Criteria, Methods and Measures</td>
</tr>
</tbody>
</table>

Where is the study? What ideas are considered?

Example: identify areas of agreement (ROW preservation)

Example: decide on the analysis time frame (1 year)
**What is PlanWorks (cont’d)?**

- A web-based decision support tool showing the key steps in planning for projects

### Corridor Planning (Steps 6-9)

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>COR-6</td>
<td>Approve Range of Solution Sets</td>
</tr>
<tr>
<td>COR-7</td>
<td>Adopt Preferred Solution Set</td>
</tr>
<tr>
<td>COR-8</td>
<td>Approve Evaluation Criteria, Methods and Measures for Prioritization of Projects</td>
</tr>
<tr>
<td>COR-9</td>
<td>Adopt Priorities for Implementation</td>
</tr>
</tbody>
</table>

**Examples:**
- Maintain existing setback.
- Consolidate access points
- Other options
- Do nothing or combine the above

**Example:**
- Map projects to funding requirements.
Public Input (COR-1)
What large public landowner shown affects the corridor?
Public Education (COR-2): Which is NOT part of the Current Transportation Corridor Overlay District?

a) Increased road frontage requirements

b) 50 foot setbacks for "buildings and large structures"

c) Signs in the setback area must be less than 100 ft\(^2\) in area and 20 ft. in height

d) Signs on buildings outside the setback area are also restricted
Goals of the Corridor (COR-3)

- Support economic development and vitality of study area
- Maximize transportation system efficiency and safety
- Minimize public investment required to support local development goals

Goal: Safety

Objective: Reduce Motor Vehicle Crash Risk
- Performance Measures:
  - Crashes per mile
  - Crashes by type
  - Crashes involving trucks per mile
  - Crashes near spots of impaired visibility
  - Number of traffic lights

Objective: Reduce Non Motor Vehicle Crash Risk
- Performance Measures:
  - Bike Compatibility Index
  - Bike Level of Service
  - Pedestrian Access
  - Crashes in work zones

Data Needs:
- Crashes: type (i.e. rear-end), location, severity
- Volume: passenger car, heavy truck, bicycle, pedestrian
- Geometry: access point locations, signal spacing, locations of reduced visibility
- Operations: work zone location
Study Score (COR-4)
Roads Have Different Functions

- Travel involves movement through a network of roads
- Each road serves a distinct function
Evaluation Criteria (COR-5):
What is the impact on crash risk per million VMT?

Design 1
8.4 crashes

Design 2
1.4 crashes
Example of Possible Solution Sets (COR-6)
Plan Ahead—Reduce the Number of Access Points

How many connection points to Route 29 will we need?
Example of Possible Solution Sets (COR-6)
Plan Ahead—Reduce the Number of Access Points

- 1 Access point
- Notice channelization
Another Example of COR-6: Retrofits

Channelization

Full access
Potential Outcomes

- Land development plan (maybe a more complete plan for frontage roads and rear access.)
- Potential projects for submission
- However, at this point, this is just speculation—we are only at COR-3
Summary and Next Steps for Us

- With a professional facilitator and consultant, perform the remaining 6 steps of the corridor planning process in PlanWorks.
  - "Go slow to go fast"
  - "Build on what has been done"
- FHWA wants to see how to use this elsewhere—wants us to capture “lessons learned”
- Public meeting anticipated in June—much can change!

COR-3: Approve Goals for the Corridor
Maps for First Public Meeting

- Used ArcGIS to create maps of the Route 29 Assessment Study corridor area
- Broken into two segments so public could view the entire corridor easier (North and South)
- Indicated roads, driveways, crossovers, parcels
- Public attendees placed sticky notes with comments directly on the maps
Maps for First Public Meeting

- Sticky notes for public comment came in three color types:
  - Pink: What the public doesn’t like about specific points along the corridor
  - Yellow: What the public likes
  - White: General Comments about the corridor

- 71 total comments placed on the various maps of the corridor study area
Transferring comments into ArcGIS

- Created a new point features class in ArcGIS
- Plotted all 71 public comments in ArcGIS based on their locations on the public meeting maps
- Assigned Colors based on what color type of response was made in each individual comment
- In the attribute table, created a “Type” field and “Comment” field
<table>
<thead>
<tr>
<th>ID</th>
<th>Shape</th>
<th>OBJECTID</th>
<th>Color</th>
<th>Type</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Point</td>
<td>12</td>
<td>White</td>
<td>Access</td>
<td>Access roads need to go in before areas are developed (here and south).</td>
</tr>
<tr>
<td>23</td>
<td>Point</td>
<td>24</td>
<td>White</td>
<td>Access</td>
<td>Would access roads help eliminate stop lights and help traffic?</td>
</tr>
<tr>
<td>25</td>
<td>Point</td>
<td>20</td>
<td>Pink</td>
<td>Access</td>
<td>Access concern at Brannam Property</td>
</tr>
<tr>
<td>30</td>
<td>Point</td>
<td>31</td>
<td>Pink</td>
<td>Access</td>
<td>Access is difficult</td>
</tr>
<tr>
<td>31</td>
<td>Point</td>
<td>32</td>
<td>Pink</td>
<td>Access</td>
<td>Entrances with no turn lanes</td>
</tr>
<tr>
<td>45</td>
<td>Point</td>
<td>47</td>
<td>White</td>
<td>Access</td>
<td>Where businesses are built, consider requesting proctor of a turn lane on their property.</td>
</tr>
<tr>
<td>51</td>
<td>Point</td>
<td>52</td>
<td>Pink</td>
<td>Access</td>
<td>Access to Liberty property is currently extremely difficult as there is no turn going S.  and N. turns are prohibited.</td>
</tr>
<tr>
<td>53</td>
<td>Point</td>
<td>59</td>
<td>Pink</td>
<td>Access</td>
<td>No access from these properties onto 29. Want access.</td>
</tr>
<tr>
<td>64</td>
<td>Point</td>
<td>56</td>
<td>White</td>
<td>Access</td>
<td>Need to guide future development access to 29.</td>
</tr>
<tr>
<td>2</td>
<td>Point</td>
<td>6</td>
<td>White</td>
<td>Bypass</td>
<td>Possible location for a bypass here?</td>
</tr>
<tr>
<td>4</td>
<td>Point</td>
<td>4</td>
<td>White</td>
<td>Bypass</td>
<td>Local businesses have a local customer base. Less input from bypass</td>
</tr>
<tr>
<td>5</td>
<td>Point</td>
<td>5</td>
<td>White</td>
<td>Bypass</td>
<td>Is there possibility for a bypass.</td>
</tr>
<tr>
<td>14</td>
<td>Point</td>
<td>15</td>
<td>White</td>
<td>Bypass</td>
<td>Could you use an overspill for a bypass (like Richmond dr)?</td>
</tr>
<tr>
<td>17</td>
<td>Point</td>
<td>18</td>
<td>White</td>
<td>Bypass</td>
<td>Bypass connectivity to 29 at the James River. How does that fit in (didn't advance out of preliminary phase)?</td>
</tr>
<tr>
<td>18</td>
<td>Point</td>
<td>19</td>
<td>White</td>
<td>Bypass</td>
<td>Could bypass start at Suburban Rd and connect back with 501 (Campbell Ave)?</td>
</tr>
<tr>
<td>24</td>
<td>Point</td>
<td>25</td>
<td>Pink</td>
<td>Bypass</td>
<td>Concerned about bypass.</td>
</tr>
<tr>
<td>49</td>
<td>White</td>
<td>49</td>
<td>White</td>
<td>Capacity</td>
<td>Russell Woods Drive needs additional lane in - because of new Bojangles. At least couple hundred feet.</td>
</tr>
<tr>
<td>50</td>
<td>White</td>
<td>50</td>
<td>White</td>
<td>Capacity</td>
<td>On outgoing lane, need additional lane on right to prevent backups.</td>
</tr>
<tr>
<td>54</td>
<td>Point</td>
<td>55</td>
<td>Pink</td>
<td>Congestion</td>
<td>Turn lane 5B onto Lawyers RD has heavy truck traffic.</td>
</tr>
<tr>
<td>65</td>
<td>Point</td>
<td>66</td>
<td>Pink</td>
<td>Congestion</td>
<td>Too much congestion for existing traffic.</td>
</tr>
<tr>
<td>1</td>
<td>Point</td>
<td>2</td>
<td>Pink</td>
<td>Congestion/Corridor</td>
<td>Bottleneck starts here. Bed heading North in AM and bed heading South in PM.</td>
</tr>
<tr>
<td>13</td>
<td>Point</td>
<td>13</td>
<td>Pink</td>
<td>Congestion/Corridor</td>
<td>Traffic backup starts here.</td>
</tr>
<tr>
<td>55</td>
<td>Point</td>
<td>57</td>
<td>Pink</td>
<td>Congestion/Corridor</td>
<td>backups start here going north morning 7-8 AM.</td>
</tr>
<tr>
<td>32</td>
<td>Point</td>
<td>33</td>
<td>Pink</td>
<td>Congestion/Intersection</td>
<td>This intersection will become congested.</td>
</tr>
<tr>
<td>3</td>
<td>Point</td>
<td>3</td>
<td>White</td>
<td>Corridor Widening</td>
<td>Widening would only provide temporary relief. Would eventually get congested with continued future development.</td>
</tr>
<tr>
<td>8</td>
<td>Point</td>
<td>9</td>
<td>Pink</td>
<td>Corridor Widening</td>
<td>Concern frontage property if corridor widened.</td>
</tr>
<tr>
<td>60</td>
<td>Point</td>
<td>61</td>
<td>White</td>
<td>Corridor Widening</td>
<td>Think proactively and possible widening to 3 lanes starting here.</td>
</tr>
<tr>
<td>69</td>
<td>White</td>
<td>70</td>
<td>White</td>
<td>Design</td>
<td>Parallel road between English Tavern and Livestock Road would help.</td>
</tr>
<tr>
<td>15</td>
<td>Point</td>
<td>16</td>
<td>White</td>
<td>General Comment</td>
<td>People taking Atlanta Ave to Wards Ferry to avoid 29 South.</td>
</tr>
<tr>
<td>25</td>
<td>Point</td>
<td>27</td>
<td>White</td>
<td>General Comment</td>
<td>No real planning - what will happen?</td>
</tr>
<tr>
<td>27</td>
<td>Point</td>
<td>28</td>
<td>White</td>
<td>General Comment</td>
<td>They need a way to turn around.</td>
</tr>
<tr>
<td>34</td>
<td>Point</td>
<td>35</td>
<td>White</td>
<td>General Comment</td>
<td>How many people travelling to city vs going through?</td>
</tr>
<tr>
<td>82</td>
<td>Point</td>
<td>64</td>
<td>White</td>
<td>General Comment</td>
<td>Tractor trailer traffic 29 South. 9610 Wards Road, Rustburg, VA.</td>
</tr>
<tr>
<td>16</td>
<td>Point</td>
<td>17</td>
<td>Pink</td>
<td>Geometric</td>
<td>Crossing at 501 and Candlers is a problem. People going from one side of the road to other to get to 460 or mall.</td>
</tr>
</tbody>
</table>
Layer to KML Conversion

- Used Layer to KML tool in ArcGIS conversion tool

- Comments point file can now be opened in Google Earth
Google My Maps

- Used Google My Maps to import KML file to online map tool

- Free and open custom mapmaking tool available through Google

- Need Google Account Login

- [https://www.google.com/maps/d/](https://www.google.com/maps/d/)
Import the KML File

- Google My Maps allows users to import KML files directly to the New Custom Map
- All affiliating attribute data is imported as well
- Nine different base maps available through Google My Maps
- Various restriction levels for sharing maps can be set
Embedding the map

- Newly created interactive google map embedded to the VDOT Route 29 Assessment Study page
- Embedded with assistance from the VDOT Webmaster
- Public can now view public comment locations and bring up comment descriptions
Possible Funding Alternatives for Studies

- **Consult with your Planning District Commission (PDC)**

- **Contact your VDOT District Planner**
  - Strategically Targeted Area Roadway Solutions
    - Develop innovative, cost-effective solutions
    - Evaluate potential solutions more thoroughly
    - Identify potential project risks and costs
    - Build stakeholder consensus
    - Improve readiness for project implementation

- **VDOT – Transportation and Mobility Planning Division General On Call**

- **Arterial Management Plans**
Resources

- **Capacity Analysis for Planning of Junctions (Cap-X) Tool**
  

- **Alternative Intersections/Interchanges: Informational Report (AllR)**
  

- **Alternative Intersections**
  
For Additional Information

- http://www.virginiadot.org/info/access_management_regulations_and_standards.asp
- http://www.localgovernmentcouncil.org/transportation-lgc/urban-planning-cvmpo.html
- http://www.co.campbell.va.us/Pages/index.aspx
Institute for Environmental Negotiation

Empowering communities to create shared solutions