



DATE: April 26, 2005
TO: Rappahannock Rapidan Regional Commission
FROM: C. Richard Keller *CRK*
SUBJECT: Revised Draft Overview Of Future Traffic On The Route 211 Corridor
Between Sperryville And Warrenton

BACKGROUND

This technical memo was prepared for the Rappahannock Rapidan Regional Commission (RRRC) to provide a better understanding of the "global" long term transportation (and related land use) issues on the Route 211 corridor between Sperryville in Rappahannock County and Broadview Avenue in the Town of Warrenton. By identifying current as well as long term global transportation and land use issues along this important corridor, County, Town and RRRC officials will be able to prioritize the issues and develop a more detailed and coordinated strategic action plan for the corridor including the need for specific technical studies.

Exhibit 1 shows the regional location of the study corridor with respect to the Counties of Rappahannock, Culpeper and Fauquier. Note that the Route 211 corridor, in combination with a portion of the Route 29 corridor, creates a triangular roadway network with I-81 and I-66. Exhibit 2 shows the study corridor with respect to villages in Rappahannock County, Warrenton, Front Royal and I-66. This section of primary Route 211 is essentially a rural four lane divided roadway in rolling terrain with only occasional commercial/retail development and secondary road intersections to interfere with peak period traffic flow.

HISTORIC AND CURRENT TRAFFIC SITUATION ON THE ROUTE 211 STUDY CORRIDOR

This section describes the historic trend in Route 211 study corridor daily traffic between 1973 and 2003 and then focuses on specific 2003/2004 daily traffic on Route 211 and key secondary routes. The Route 211 corridor is then described within each County and key alternative secondary routes are identified.

HISTORIC TREND IN ROUTE 211 DAILY TRAFFIC: 1973-2003

Appendix A contains VDOT statewide planning system data provided by Mr. Marshall Barron. Exhibits A1-A4 document the trend in daily traffic for four sections of Route

211 in Rappahannock County. Exhibits A5/A6 show the trend for two sections of Route 211 in Culpeper County and A7/A8 show the trend for two sections in Fauquier County.

Also shown on these exhibits are the future 2030 VDOT projections which will be discussed later in this memo.

VDOT DAILY TRAFFIC VOLUMES: 2003/2004

Exhibits 3, 3a and 3b show the most recent 2003/2004 daily traffic as reported by VDOT for not only Route 211 but also important alternative secondary roads.

A brief description of Route 211 in each county is described below.

DESCRIPTION OF COUNTY/TOWN SECTIONS OF ROUTE 211 CORRIDOR

- The Rappahannock County section is the most rural with the least traffic and includes the intersection at Route 522 which provides access north to Front Royal, I-66 and greater Winchester.
- The Culpeper County section serves higher daily traffic because it includes an important intersection with the Route 229 corridor. This intersection of two corridors (Route 211 and Route 229) also is the location of a future village called Clevenger's Corner which has been in the adopted Culpeper County Comprehensive Plan for many years. In early 2005 Centex received approval to build a significant portion of the future village called Clevenger's Corner. There is now concern to the east in Fauquier County and the Town of Warrenton about increasing future traffic on Route 211 initially to be generated by the Centex project and later by the rest of Clevenger's Corner. Since a detailed traffic impact study was done (by KELLERCO) for the Centex site, which included the buildout of Clevenger's Corner by 2018, its traffic projections are a principal element of this memo and supplemental to any VDOT statewide planning traffic projections.
- The Fauquier County section of Route 211 is very rural at the current time with an important intersection with Route 688 east of the Culpeper County line. With rolling terrain and few intersections this section currently provides more efficient peak period traffic flow than along other sections of Route 211 which have more frequent secondary road intersections or commercial driveways which tend to interfere more with efficient corridor traffic.
- The Town of Warrenton section of Route 211 serves the highest daily traffic volumes and introduces commercial development on the north side of Frost Avenue between the Fauquier County line and the important signalized intersection at Broadview Avenue/Shirley Avenue/Waterloo Street. Most of the existing and future Route 211 commuter peak period traffic proceeds north on the six-lane flush median section of Broadview Avenue which is designated 29 BUS, 17 BUS and 211 BUS. Town officials are concerned about increasing peak period traffic congestion and accidents on Broadview Avenue. This section of roadway has a limited number of parallel access streets for local traffic to use to avoid Route 211 (Broadview Avenue).

ALTERNATIVE SECONDARY ROUTES TO ROUTE 211 CORRIDOR

Exhibit 4 shows how Route 647 in Rappahannock and Fauquier Counties can be used for access between Route 522 at Flint Hill and I-66 at Marshall. Also, Route 621 in Culpeper and Fauquier County can be used for access between Route 211 and Route 29/15 via Routes 802 and 687 in Fauquier County.

CURRENT COUNTY PLANNING SITUATION ALONG THE ROUTE 211 STUDY CORRIDOR

This section describes the status of current county planning in each county along the Route 211 corridor as solicited in separate meetings.

CULPEPER COUNTY (MEETING WITH THE PLANNING DIRECTOR MR. JOHN EGERTSON)

Exhibit 5 shows the current zoning for Clevenger's Corner, the new village surrounding the intersection of Routes 211 and 229. It is important to note that the recently approved Centex project, Clevenger's Village, is reflected on this zoning graphic. As finally approved, this planned unit development (PUD) would include the following.

- 774 residential units
- 144,000 SF retail
- 254,000 SF office

North of Clevenger's Village, accessed via Route 622, there would be 250 additional residential units. Then west of Clevenger's Village and south of Route 211 there would be an additional 150 residential units and commercial/retail space on the Epstein tract accessed via Route 229. South of the Epstein tract there are currently 343 occupied dwelling units.

This buildout density is conceptually confirmed and depicted in Exhibit 6 as areas A (north of Clevenger's Village), B (Epstein tract and existing dwellings) and C (Clevenger's Village).

As this new village development emerges, certain land uses such as a grocery store could capture trips which originate here and shop in Warrenton via access over Route 211 east of Route 229. When and if this occurs, it would tend to reduce daily traffic on Route 211 east. Then again, a new grocery store may also attract some trips from Warrenton which would add traffic to Route 211 east.

FAUQUIER COUNTY (MEETING WITH KRISTEN SLAWTER AND RICHARD CALDERON OF FAUQUIER COUNTY PLANNING STAFF)

Since the section of Route 211 between Culpeper County and the Town of Warrenton is currently so rural and undeveloped, the buildout situation was discussed. Route 211 is

bounded by two secondary roads, corridor Route 678/691 to the north and Route 802 to the south. Were new development to occur along the secondary roads and along Route 211 with interparcel access, there could be new intersections and possibly signals on Route 211 to serve future buildout generated traffic whenever it occurred. To verify this possibility, KELLERCO requested the buildout density for the areas shown on Exhibit 7.

According to Mrs. Slawter the following methodology was used: The 2003 dwelling unit estimate for the subject area was determined using tax assessment data.

The buildout dwelling unit estimate was determined using density guidelines in the Zoning Ordinance, without doing subdivision potential research on each parcel. Parcels zoned Rural Agricultural or Rural Conservation were given a density using the sliding scale standards for those categories without making adjustments due to subdivision activity as stipulated in the Zoning Ordinance. Parcels with conservation easements were given a future lot potential of zero while parcels within the Springs Valley Agricultural and Forestal District were given density estimates using the provisions in the Zoning Ordinance for family transfers and larger lot divisions. It should be noted that the following figures represent only an estimate and that the County would need to fund research for subdivision potential of each lot in the subject area to get a more accurate count of buildout.

2003 Dwelling Unit Estimate: ± 450

Buildout Dwelling Unit Estimate: ±1,750

The increase of 1,300 dwelling units would generate the following weekday AM/PM peak hour traffic accessed via Route 211 as well as the secondary routes 678/691 and 802.

Land Use	ITE 7 th Edition Category	Weekday Traffic	Weekday					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
1,300 dwelling units	210	11,010	230	690	920	679	399	1,078

Assuming that 70% of the new dwelling unit trips are directly accessed via the Route 211 corridor, this would create the following additional traffic on Route 211.

Land Use	ITE 7 th Edition Category	Weekday Traffic	Weekday					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
910 dwelling units	210	7,707	161	483	644	476	279	755

RAPPAHANNOCK COUNTY (MEETING WITH JOHN McCARTHY)

Exhibit 8 shows the County public facilities from the 2004 Comprehensive Plan including villages and schools. Note that most of the facilities are located on the Route 211 study corridor.

Annual Residential Permits Exceptionally Low

Between January 1990 and 2002, 728 new residential building permits were authorized in Rappahannock County. This is substantially fewer permits than were issued in some neighboring counties. Over the same period of time, over 8,000 permits were issued in Fauquier County while over 3,000 permits were issued in Culpeper County. The trend of residential building permits authorized for Rappahannock County by year from 1990-2002 is indicated below.

1990	62
1991	49
1992	48
1993	49
1994	58
1995	57
1996	48
1997	36
1998	50
1999	70
2000	70
2001	69
2002	62

Since these new dwelling units are dispersed throughout the County, the Route 211 study corridor would provide access for only a portion of the new units. This means that new dwelling units each year would not create a significant increase in daily or peak hour traffic.

For example, 70 new dwelling units would generate very little traffic as indicated below.

Land Use	ITE 7 th Edition Category	Weekday Traffic	Weekday					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
70 dwelling units	210	749	15	44	59	49	29	78

Since the new residential (and non-residential) building permits are so low in the County, increased traffic on the Route 211 corridor is created by external growth in areas like Luray (to the west) and neighboring counties.

Public Water/Sewer Limits Growth

New growth in the County will remain low since there are no public water systems in the County, except that which serves the Town of Washington. Water in the villages of Sperryville, Amissville, Flint Hill, Woodville and Chester Gap is supplied by individual wells. Rappahannock Lakes Subdivision, Wakefield Country Day School and the Rappahannock Elementary and High Schools have “public” water systems that supply the individual sites. These water systems are generally wells that, due to the institutional nature of the users, are classified as public within Health Department regulations.

The village of Sperryville has the County’s only public wastewater treatment facility. The system includes 131 on-lot septic tanks with effluent wet well pumps and approximately 27,090 linear feet of low-pressure sewer pipeline. The wastewater treatment plant, which is located on the discharges to the Thornton River, includes two packaged plant treatment units with a 55,000 gallon/day capacity. In addition to this public system, a small treatment plant is located at Aileen, Inc. in Flint Hill. This facility, when in operation, has an average daily flow of 1,500 gallons per day.

Transportation

While traffic is beginning to be an issue, there are no identified primary road construction projects identified in the County for the coming five years. Generally, minor secondary road projects are proposed. The completion of many of these smaller road projects is of great importance to the County.

The rural character of many of the County’s secondary roads is important to the County. Roads that lack hard surfaces, or which are narrow, or which meander over the landscape, or all three, are integral parts of the fabric of the County; they are valued by both residents and the tourism element of the local economy. Secondary road improvements in the County should be evaluated with regard to this sensibility always recognizing however the needs of public safety and convenience.

Some villages, expressing concern about through traffic, may be appropriate locations to consider various means of “traffic calming” that may include rumble strips, roundabouts, pavement elevations changes, differently colored crosswalks, etc.

Regional Visioning Initiative

The Rappahannock Rapidan Regional Commission sponsored a regional visioning initiative for their member jurisdictions of Rappahannock, Fauquier, Madison, Culpeper and Orange Counties in 2001. The process took the form of five local meetings followed by two regional meetings to combine and distill the results of the local efforts.

The following is a summary of the results and conclusions of Rappahannock's local meeting of the visioning process held on Tuesday, February 20, 2001 at the Rappahannock County Library near the Town of Washington attended by approximately 55 participants.

- Utilities and Transportation

- The region will work assertively with VDOT to develop corridors for through traffic that avoid significant historic and rural areas and that protect important vistas. Planning will respect local decision-making authority and incorporate all interests into the discussion.
- Regular pro-active regional planning will be initiated for the long-term, looking at employing trains and buses for commuters and expanding options for pedestrians and cyclists.
- Community trains, with one or two cars, and community busses will be employed to expand the transportation options available to commuters. Such a transportation system will be designed to be simple, not complex.
- Localities will work together on utility and transportation issues to understand the federal agencies and their requirements and to show the localities are behind regional projects.
- Localities will develop a 20-year plan for various aspects of the region's infrastructure including regional plans for telecommunications, water supply and funding, water and sewer, health systems, power companies, and transportation and airport development.

County officials visualize the County and communities as "places of service" where transportation and utilities support the needs, goals and values of the communities without compromising their natural resources or aesthetic character. Multiple modes of transportation will be available to residents including pedestrians, community busses, trains and bike routes. These systems will be simple and compatible with the scale and character of the communities. Telecommunications will be readily available throughout the County enabling entrepreneurial businesses and clean industry to develop in the communities. Water and power needs will be developed in a balanced and coordinated way for the communities in ways that do not compromise the air and water quality. To successfully manage these needs, the County will initiate collaborative and proactive long range planning among the localities for the purpose of rationalizing the County's infrastructure and obtaining regional funding.

Amissville will probably be the village most likely to experience growth in five years, but it will be very modest.

TOWN OF WARRENTON (MEETING WITH CHRIS MOTHERSEAD)

Mr. Mothersead advised that there were two new projects within the Town limits which would be developed on the north side of Route 211 and therefore add a modest amount of new traffic.

- The new recreational center is being built in two phases.

Phase 1: This phase is currently in process and involves new ball fields and a basketball court to be dedicated in May 2005 and a skate park with parking. These facilities will have access to Route 211 and to Waterloo Road.

Phase 2: An aquatic center with two pools will be built by 2007/2008.

- A new 41 single family residential development will be built west of the recreation center with access to be built by the developer to Waterloo Road. Later, a new road will be built between Route 211 and this new residential development which will create a new road between Route 211 and Waterloo Road. The new recreation center may have access to this new road between Route 211 and Waterloo Road.

As new traffic signals are installed on Broadview Avenue to deal with increasing traffic, there is concern about the need to interconnect all the signals and to provide supplemental access to Broadview Avenue using a collector road between Route 211 and Route 17. Town and Fauquier County officials are beginning to explore such solutions through meetings of the Warrenton Service District and better coordination of strategic and comprehensive transportation planning.

The new recreational center and residential projects will not have significant traffic impact on the Route 211 corridor, but they will create two new unsignalized intersections on Route 211.

VDOT 2018 (BUILDOUT OF CLEVINGER'S VILLAGE) AND 2028 ROUTE 211 DAILY TRAFFIC PROJECTIONS

This section documents VDOT daily traffic projections for two important time frames:

- 2018 when Clevenger's Village in Culpeper County would be built out
- 2028 ten years after the buildout of Clevenger's Village

It should be noted that the VDOT traffic projections for Route 211, as included in Appendix A and as displayed graphically in Exhibits 9, 9a and 9b, are based on the application of annual growth rates. These five year incremental daily traffic projections were not developed using a combination of annual growth rates and other approved new developments such as Clevenger's Village, so it is expected that both the 2018 and 2028

daily traffic projections will be lower than KELLERCO's daily traffic projections for 2018 and 2028.

VDOT 2018 DAILY TRAFFIC PROJECTIONS WHEN CLEVINGER'S VILLAGE WOULD BE BUILT OUT

To achieve 2018 daily traffic projections, the 2015 and 2020 projections shown for Route 211 in Exhibits 9, 9a and 9b were adjusted to reflect 2018 volumes. The resulting 2018 daily traffic volumes for key sections of Route 211, as well as Routes 522 and 229 are shown on Exhibit 10.

VDOT 2028 TRAFFIC PROJECTIONS TEN YEARS AFTER THE BUILDOUT OF CLEVINGER'S VILLAGE

To achieve 2028 daily traffic projections, the 2025 and 2030 projections shown for Route 211 in Exhibits 9, 9a and 9b were adjusted to reflect 2018 volumes. The resulting 2028 daily traffic volumes for key sections of Route 211, as well as Routes 522 and 229 are shown on Exhibit 10a.

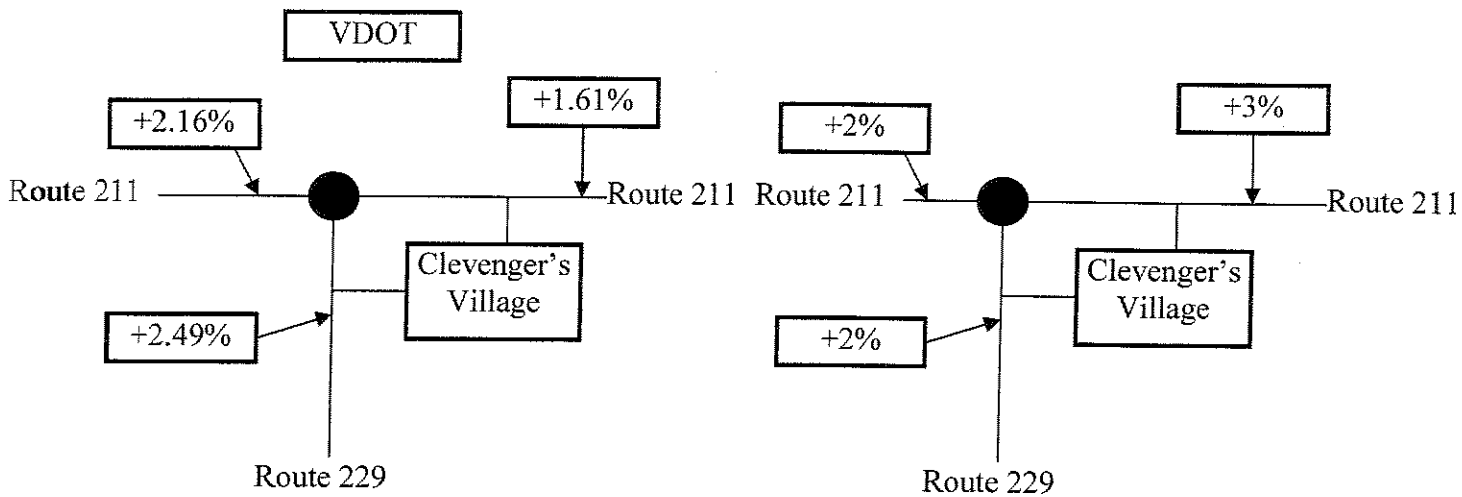
KELLERCO 2018 (BUILDOUT OF CLEVINGER'S VILLAGE) AND 2028 ROUTE 211 DAILY TRAFFIC PROJECTIONS PER CENTEX'S CLEVINGER'S VILLAGE TIS TRAFFIC IMPACT STUDY

This section documents the KELLERCO daily traffic projections for the same two timeframes as previously discussed for the VDOT traffic projections.

- 2018 when Clevenger's Village in Culpeper County would be built out
- 2028 ten years after the buildout of Clevenger's Village

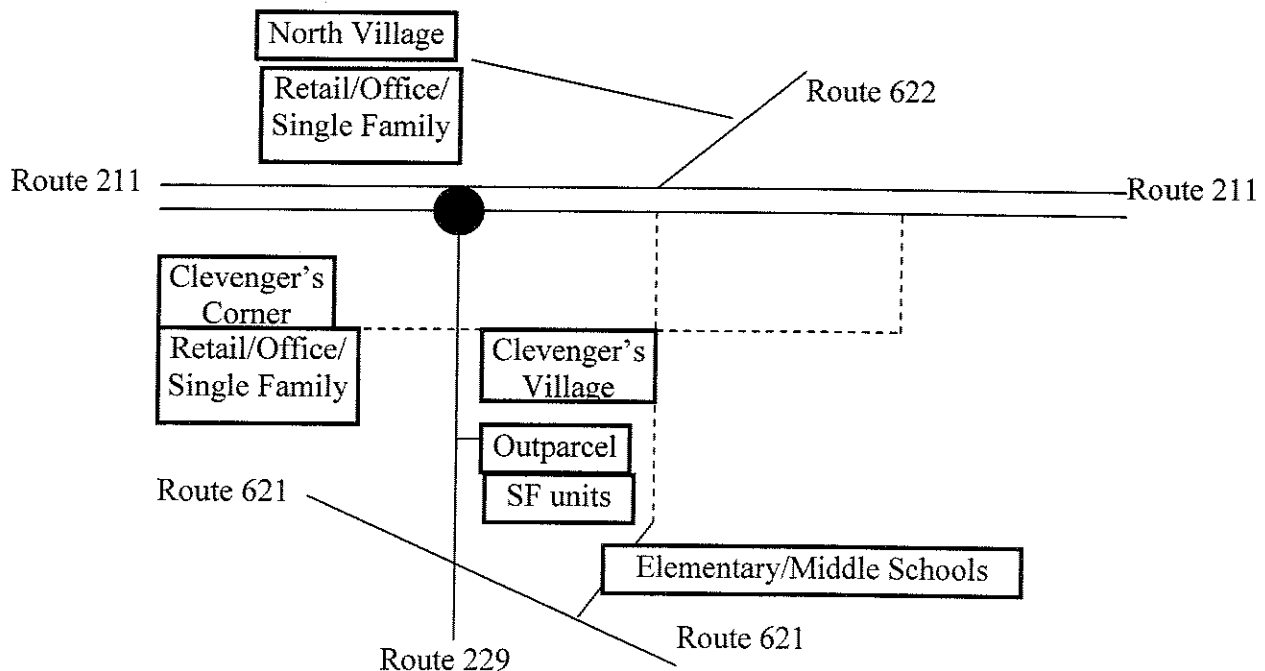
BACKGROUND

It is expected that the KELLERCO daily traffic projections will be higher than the VDOT traffic projections because they were developed using a combination of both compounded and higher annual growth rates and other new developments. The VDOT traffic projections and annual growth rates discussed earlier are included in Appendix A were not available to VDOT staff or KELLERCO when the September 2003 traffic impact study (TIS) for Clevenger's Village was prepared. Exhibit 11 shows the annual background growth rates used in this TIS. Note that annual growth rates applied decreased over time between 2002 (when the original data were collected) and 2028 (ten years after the buildout of Clevenger's Village). Only in the KELLERCO TIS 2010-2028 timeframe are the annual growth rates similar to the VDOT annual growth rates as compared below for Route 211 and Route 229 in Culpeper County.



This is important because the higher KELLERCO TIS compounded and decreasing overtime annual growth rates which were used between 2002 and 2010 and approved by VDOT at the time would tend to result in significantly higher 2018 and 2028 daily background traffic than were the lower VDOT annual rates used for the entire 2002-2028 timeframe.

A second reason why the KELLERCO 2018 and 2028 daily traffic projections would be higher than VDOT's is because significant other new development traffic in Clevenger's Corner beside Clevenger's Village was assumed to be built out by 2018. These other buildout uses are illustrated below.



A third reason why the KELLERCO 2018 and 2028 daily traffic projections would be higher than VDOT's is because the September 2003 TIS was not revised to reflect a significant final reduction in Clevenger's Village density in July 2004. Exhibit 12 shows the reductions in Clevenger's Village density which is summarized below.

- The buildout year would change to 2019
- Residential units were reduced by 3.25%
- Retail space was reduced by 26.2%
- Civic (Library) space was eliminated by 10,000 SF with only a site provided
- Daycare center space was eliminated by 5,000 SF with only a site provided
- Medical office space was eliminated by 15,000 SF
- General office space was reduced by 2.22%

This reduction, for all intents and purposes, reflects the final approval density for Clevenger's Village. VDOT did not require that the September 2003 TIS be updated probably because less site traffic could have changed (reduced) the proffered road improvements.

KELLERCO 2028 DAILY TRAFFIC PROJECTIONS WHEN CLEVENGER'S VILLAGE WOULD BE BUILT OUT

Exhibit 13 depicts the KELLERCO 2018 daily traffic projections for Clevenger's Village. Since the KELLERCO projections were made for the AM and PM peak hours to achieve daily traffic volumes, it was assumed that the PM peak hour would be 10% of the daily volumes. Route 229 projections were included since an increase in Route 229 volumes increases the Route 211 volumes. Also, since VDOT (Exhibit 10) reports that the 2018 Route 211 daily traffic between Fauquier County and Warrenton is 13% higher than Route 211 traffic between Route 229 and Fauquier County, the 36,580 volume was increased to 41,335 to reflect this factor.

KELLERCO 2028 DAILY TRAFFIC PROJECTIONS TEN YEARS AFTER THE BUILDOUT OF CLEVENGER'S VILLAGE

Exhibit 13a depicts the KELLERCO 2028 daily traffic projections for Clevenger's Village. Even though the daily volumes are significantly higher than in 2018, the 10% PM peak hour factor was used. Since VDOT (Exhibit 10a) reports the 2028 Route 211 daily traffic between Fauquier County and Warrenton is 14.5% higher than Route 211 traffic between Route 229 and Fauquier County, the 40,810 volume was increased to 46,727 to reflect this factor.

**COMPARISON OF VDOT AND KELLERCO ROUTE 211 AND ROUTE 229
DAILY TRAFFIC PROJECTIONS FOR 2018/2028 WITH NO KELLERCO
REDUCTIONS**

2018 COMPARISON

The VDOT and KELLERCO daily traffic projections are depicted on Exhibit 14. Note that the KELLERCO traffic projections on Route 211 (which represent the worse case since no reduction has been made for the final Clevenger's Village density reduction) are 106 to 117% higher than the VDOT projections. On Route 229 the KELLERCO projections are 125 to 150% higher than the VDOT projections.

2028 COMPARISON

The VDOT and KELLERCO daily traffic projections are depicted on Exhibit 14a. Note that the KELLERCO traffic projections on Route 211 (which represent the worse case since no reduction has been made for the final Clevenger's Village density reduction) are 95 to 114% higher than the VDOT projections. On Route 229 the KELLERCO projections are 110 to 135% higher than the VDOT projections.

**COMPARISON OF VDOT AND 10% LESS KELLERCO ROUTE 211/229 DAILY
TRAFFIC PROJECTIONS**

2018 COMPARISON WITH 10% KELLERCO REDUCTION

To account for 1) the final density reduction of Clevenger's Village and 2) a lower (less aggressive) annual growth rate than assumed to develop background traffic (see Exhibit 11); a 10% reduction was applied to the KELLERCO 2018 projections. The results are shown in Exhibit 15. The KELLERCO Route 211 daily traffic projections are 85 to 96% higher than VDOT projections on Route 229. The KELLERCO daily traffic projections are 103 to 130% higher than VDOT projections.

2028 COMPARISON WITH 10% KELLERCO REDUCTION

Exhibit 15a depicts the same 10% reduction in KELLERCO 2028 daily traffic projections. The KELLERCO Route 211 daily traffic projections are now 75 to 93% higher than VDOT projections. On Route 229 the KELLERCO daily traffic projections are 89 to 116% higher than VDOT projections.

CONCLUSIONS

Conclusions are summarized below.

This analysis has indicated that by 2018 and 2028 there will be a significant increase in daily and peak hour traffic on the Route 211 corridor, particularly as it enters the west side of Warrenton. This increased corridor traffic will probably create the need for new

signalized intersections at major existing intersections which are not signalized between Route 522 and Warrenton. Additional signalized intersections plus increased traffic will create longer 2028 vehicular corridor travel times in the AM and PM peak periods between Route 522 and Warrenton. Even if current travel times were known for 2005 AM and PM peak periods it is not possible to project the comparative 2018 and 2028 AM and PM peak period travel times in this type of study. Such comparisons could be made, however, were this corridor part of a regional travel demand modeling process like the one which VDOT has for Northern Virginia.

In order to provide a bench mark of the projected 10% less KELLERCO 2018 and 2028 daily traffic volumes to current 2003 VDOT reported daily traffic volumes near Warrenton. Exhibit 16 was prepared. Note that the 2018/2028 Route 211 KELLERCO 10% less projections are 1) significantly higher than the 2003 Route 211 volume of 26,000 and 2) are only slightly lower than the 2003 Route 211/15 bypass volumes of 46,000/48,000.

1) VDOT TRAFFIC PROJECTIONS ARE TOO LOW

The VDOT 2018 and 2028 daily traffic projections using established annual growth rates significantly underestimated future traffic on not only the Route 211 corridor but also the Route 229 corridor. This “basic” technique for projecting traffic is more applicable to rural highway corridors than corridors such as Route 229 and Route 211 which are experiencing accelerated growth in through traffic and local area development traffic.

2) KELLERCO TRAFFIC PROJECTIONS ARE MORE REASONABLE WITH A 10% REDUCTION

Since the original KELLERCO traffic projections used both compounded annual growth rates and traffic generated by the entire Clevenger’s Corner village, not just Clevenger’s Village, it represents a more realistic future situation than the VDOT projections. Since the annual growth rates may be too aggressive and the Clevenger’s Village density was reduced, a 10% reduction is a practical assumption.

Even with this 10% reduction, the 2018/2028 traffic projections reflect a significant increase in Route 211 corridor traffic and the need for more coordinated land use and transportation planning in all three Counties and the Town of Warrenton.

3) ROUTE 211 CORRIDOR ACCESS MANAGEMENT PLAN IS REQUIRED FOR 2028 AND POST 2028

A coordinated corridor land use and access management plan needs to be developed in detail for the 2028 AM and PM peak hours. The plan should incorporate interparcel access between adjacent parcels on each side of Route 211 to minimize the number of new major intersections along the entire Route 211 corridor from

Route 522 to Warrenton. It should also recognize the cost-effectiveness and primary need for upgrading and improving traffic flow efficiencies on existing roads such as, but not limited, to Broadview Avenue in Warrenton to supplement future corridor access demands. A new Route 211 to Route 17 local collector road with significant traffic calming features could also be evaluated to relieve local use of Broadview Avenue by providing alternative local access for communities west of Broadview Avenue to local points north and south should peak period traffic and accidents on Broadview Avenue become excessive.

This plan needs to be developed soon for all three Counties and coordinated with the Town of Warrenton. The final plan should be adopted in each County as well as the Town with a phased implementation strategy to fund specific projects.

- 4) A “POST” 2028 COMPREHENSIVE CORRIDOR PLAN NEEDS TO BE DEVELOPED AS AN ELEMENT OF EACH JURISDICTIONS COMPREHENSIVE PLAN

As the detailed 2028 corridor plan discussed in item 3 is being developed and adopted, a more longer range “post” 2028 conceptual corridor plan needs to be developed as an element of each jurisdiction’s comprehensive plan.

While “buildout” analyses are occasionally done for such conceptual planning, this technique usually requires a sub-regional travel demand modeling process like TModel2 and a special effort by the planning staff of each jurisdiction to develop “buildout” land use densities/types. Since this process is so complex and potentially controversial, usually several buildout scenarios are developed for detailed evaluation.

Most recently KELLERCO was involved in updating the City of Chesapeake’s Comprehensive Plan. This process involved the development of future land uses and transportation facilities by the city/consultant staff for three scenarios assuming a 50-year buildout: 1) compact 2) dispersed and 3) nodal. This was a costly, lengthy and complex process because each future scenario had to be politically rational.

For the Route 211 corridor, it is suggested that a less costly and complex process be used to conceive a conceptual land use and transportation plan for the corridor from Route 522 to Warrenton.