

## **Blueridge Road Traffic Calming Report**

Date: July 15, 2016

Bergen Watterson, Transportation Planner – Town of Carrboro

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Traffic calming requests in Carrboro are processed in accordance with the [Residential Traffic Management Plan](#) (RTMP), originally adopted by the Board of Aldermen in June 1996 and most recently revised in October 2006.

### **Request**

On August 14<sup>th</sup>, 2014, Town of Carrboro staff received a traffic calming request from Helene de Fays for Blueridge Road from Hillsborough Road to Spring Valley Road. Ms. de Fays serves as the neighborhood's primary contact person for the traffic calming process.

In the request Ms. de Fays reports that drivers exceed the speed limit on Blueridge Road and that it is the only street in the neighborhood that does not have speed bumps or stop signs to slow traffic. She notes that traffic is heavy in the mornings and afternoons and that many children walk and ride bicycles on the road. There are no sidewalks on Blueridge and the road goes downhill from Spring Valley Road to Hillsborough Road, further compounding the speeding problem. Ms. de Fays said that she has spoken with a number of families in the neighborhood and that they would like to have speed tables installed to slow traffic down.

### **Petition**

Town staff verified that Blueridge Road is a Town-maintained street and sent a petition packet to Ms. de Fays in July 2015. The petition packet included copies of the neighborhood petition form, an area-of-influence map, and a list of affected properties within the area-of-influence. Ms. de Fays delivered the signed petition papers in August 2015. There were 49 individual owners of properties listed in the area-of-influence and the petition contained 40 signatures – an 82% response.

### **Evaluation**

An evaluation of traffic on Blueridge Road was undertaken in February 2016.

#### *Traffic Volume and 85<sup>th</sup> Percentile Speed*

The traffic and speed counters were set out at three locations on Blueridge Road for a 48-hour period on February 9-11, a Tuesday through Thursday when both UNC and the local

schools were in session. The three locations were chosen to be consistent with the data collected for a previous traffic calming request made in 2005. The counters were set out to collect both directions of traffic at the following locations:

- 201 Blueridge Road
- 301 Blueridge Road
- 312 Blueridge Road

The speed limit on Blueridge Road is 25mph.

For each counter location the higher 85<sup>th</sup> percentile speed of the two traffic directions surveyed was used for the analysis. 85<sup>th</sup> percentile refers to the speed at or below which 85% of cars are travelling.

For this study, Blueridge Road was classified as a *subcollector*. None of the counters recorded traffic volumes in excess of the 800 expected vehicles per day threshold in the RTMP for *collector/subcollector* streets.

The results from the traffic counters are included in the attachments.

#### *Bicycle and Pedestrian Volumes*

On March 10, 2016 from 7:00am-9:00am, Town staff and a volunteer conducted two-hour pedestrian and bicycle counts at two locations on Blueridge Road. The 7:00am-9:00am period was chosen because it was the time of day that the traffic counters recorded the highest number of vehicles. Bicycles and pedestrians were counted at the following locations:

- 200 Blueridge Road
- 300 Blueridge Road

These two locations provided as large a stretch of road as possible to be visible, ideally catching the majority of people bicycling and walking along any part of the road.

The results from the bicycle and pedestrian counts are included in the attachments.

#### *Bus Stops*

Although the Chapel Hill Transit F route serves adjacent Hillsborough Road, there are no CHT bus stops on Blueridge Road itself.

Consulting a list of bus stops provided by Chapel Hill-Carrboro City Schools, there are 5 school bus stops on Blueridge Road:

- 1) Aberdeen Court (Carrboro Elementary)
- 2) Morningside Drive (Carrboro Elementary)
- 3) Morningside Drive (CHHS)
- 4) 103 Blueridge Road (CHHS)
- 5) Hillsborough Road (CHHS)

### *Pedestrian Generators*

This analysis, which applies to retail locations and parks, was conducted using ArcGIS Network Analyst. Blueridge Road is within .6 miles of Simpson Street Park and Martin Luther King Jr. Park.

### *Scoring Summary*

All three locations on Blueridge Road are eligible for Stage 2 traffic calming measures on the basis on the point criteria system.

<b>Location</b>	<b>Total Points</b>	<b>Vol/Spd Pts</b>	<b>Eligible Stage</b>
201 Blueridge	38	16	Stage 2
301 Blueridge	35	18	Stage 2
312 Blueridge	34	22	Stage 2

### **Recommendation**

In the discussion of staff review on page 4 of the RTMP, the process for recommending traffic calming measures is described as follows:

For streets eligible for both Stage 1 and Stage 2 traffic calming, town staff may recommend that Stage 1 traffic calming measures be implemented prior to implementing Stage 2 measures. Once Stage 1 traffic calming measures are implemented, town staff will wait approximately three to six months and collect traffic speed and volume data and evaluate other traffic conditions on the street. The data would then be analyzed using the Traffic Calming Criteria to determine if the Stage 1 traffic calming measures were successful. If the measures were successful, then the traffic calming process will end at this point. Otherwise, town staff will move on to analyze and recommend possible Stage 2 traffic calming methods.

This is the second traffic calming request that the Town has received from this neighborhood. Residents submitted a traffic calming request and signed petition for Blueridge Road in February 2006. Subsequent traffic counts for Blueridge Road, revealed that the 85<sup>th</sup> percentile speed was 34mph and the total points from the evaluation were 32, qualifying the location for Stage 2 traffic calming measures. At the time of the 2006 petition, however, residents conveyed their overwhelming preference for additional stop signs on Blueridge Road rather than for speed bumps. As a result, speed bumps were not pursued. Town staff discussed this history with Ms. de Fays upon submittal of the more recent petition, and she reported that her impression was that neighborhood sentiment had changed and that residents would be more amenable to various traffic calming strategies.

Given this information, it is recommended that Stage 1 traffic calming measures initially be considered on Blueridge Road, specifically:

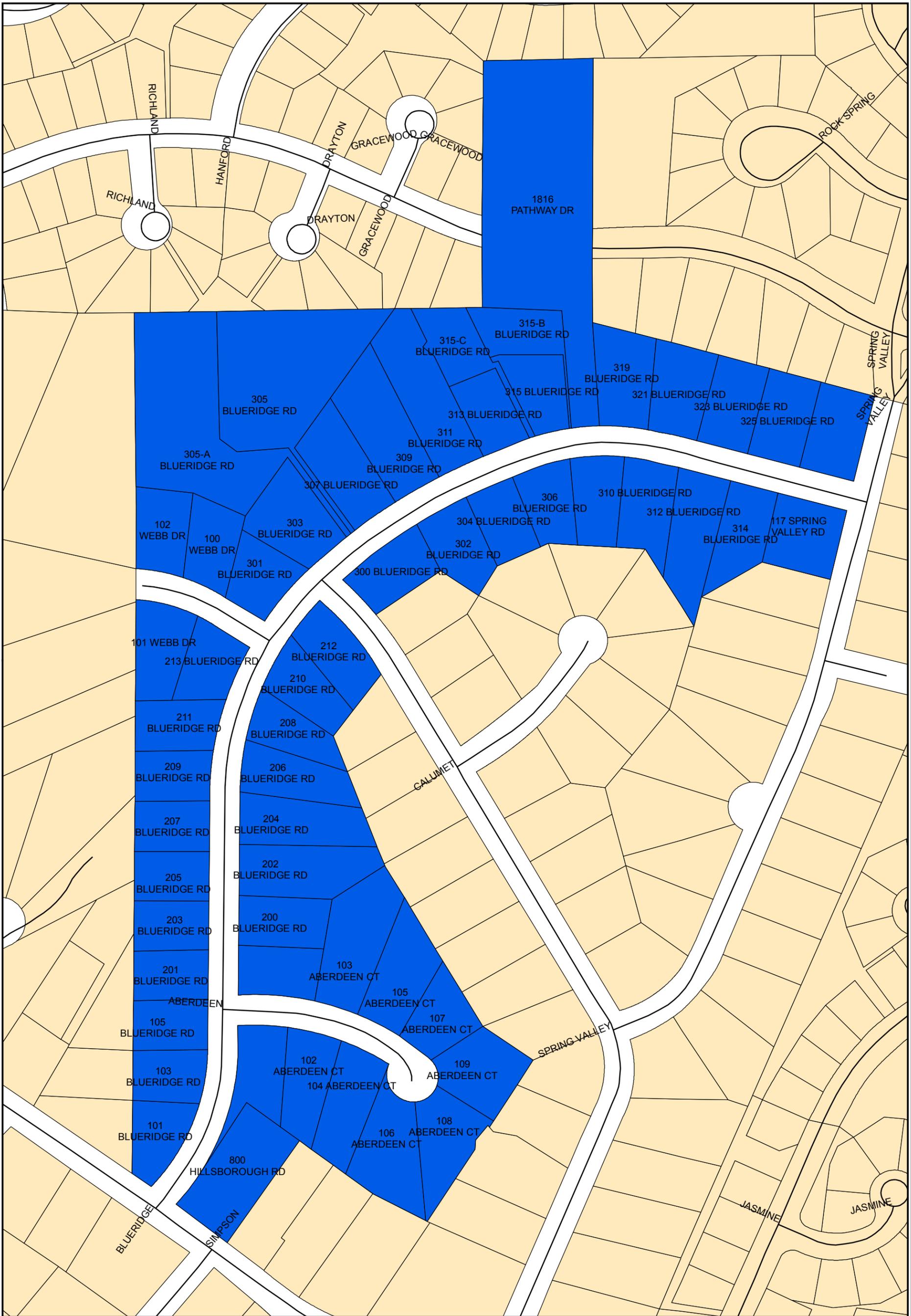
- Radar speed trailer deployment
- Traffic enforcement actions
- Neighborhood meetings to discuss the radar and enforcement efforts, and to gather feedback on possible Stage 2 measures if appropriate

### **Schedule**

- February 26, 2016: Traffic and Parking Committee consideration
- September 1, 2016: TAB consideration
- September 27, 2016: Board of Aldermen consideration

### **Additional Notes**

- Blueridge Road is .54 miles in length
- Blueridge Road connects Hillsborough Road to Spring Valley Road, with Morningside Drive intersecting midway
- Blueridge Road is the only access for two local streets:
  - Aberdeen Court
  - Webb Drive
- In total, Blueridge Road serves approximately 55 residential properties
- The road is approximately 30 ft. in width with no centerline, sidewalks, bike facilities, or curb. The road slopes up from Hillsborough Road to Spring Valley, and horizontal curves in the road limit sight distance.

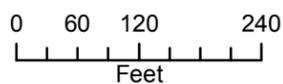


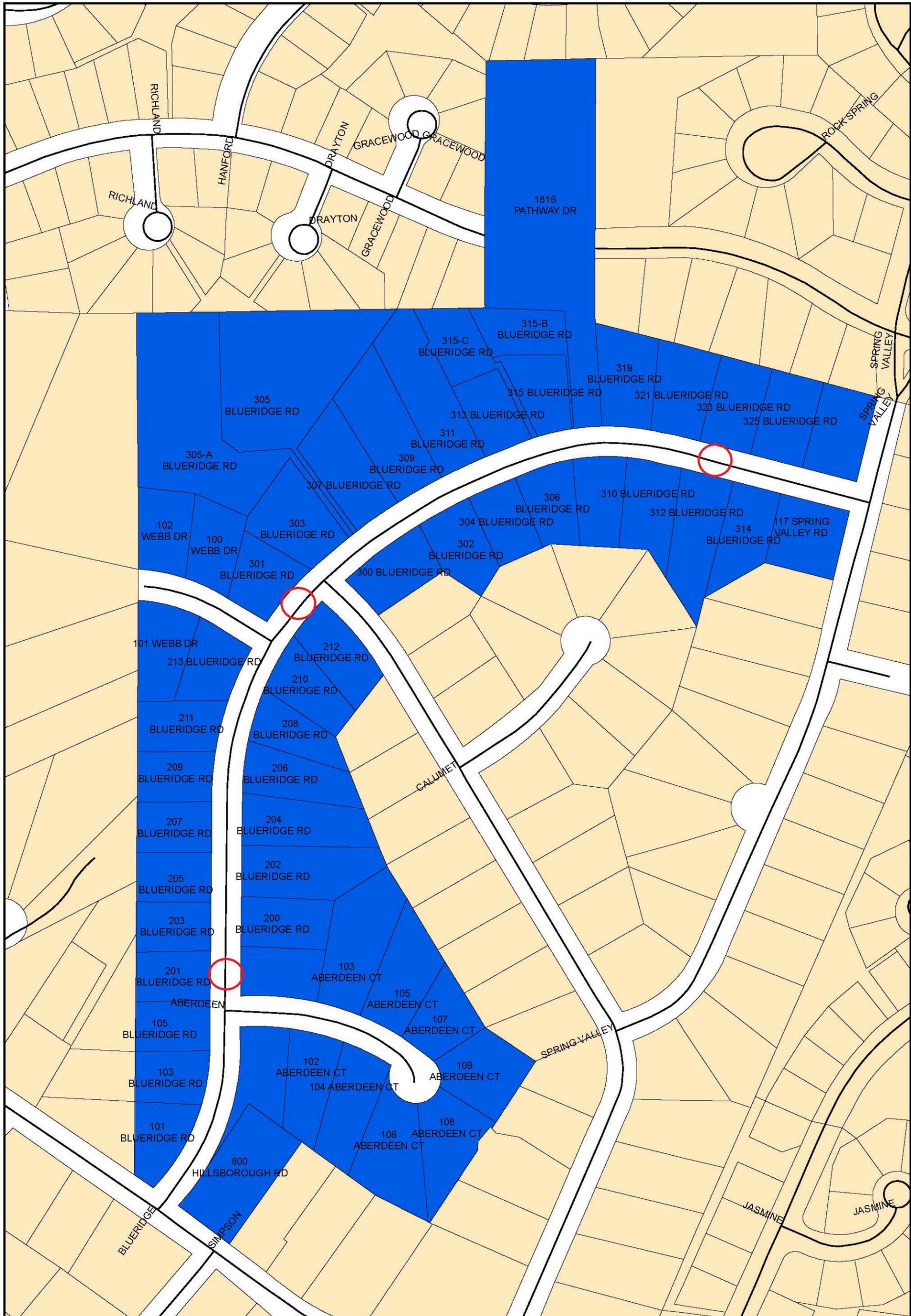
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 Created July 9, 2015

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■ Area of Influence  
 ■ Parcels

**Blueridge Road: Area of Influence**





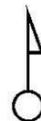
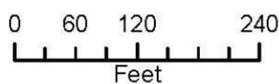
Blueridge Road: Area of Influence



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Criteria	Application	Points
<i>Traffic Volume</i>	<i>Criteria</i> - 5 points for every 20% of volume that exceeds the expected number of vehicles per day (vpd) on the street, based on the function of the street (75 vpd for minor streets, 200 vpd for local streets, and 800 vpd for subcollector and collector streets).	<b>0</b> - Blueridge Road is classified as a subcollector (286 vpd)
<i>85th Percentile Speed</i>	<i>Criteria</i> - 2 points for every mph that the 85th percentile speed exceeds the posted speed limit	<b>16</b> - 85th percentile = 33mph
<i>Pedestrian Volume</i>	<i>Criteria</i> - 1 point for every 10 pedestrians if the street has a sidewalk, 5 points per 10 pedestrians if no sidewalk. Counts are made in either the peak traffic hour or the hour wieh students are traveling to or from school	<b>10</b> - 22 pedestrians and no sidewalk
<i>Bicycle Volume</i>	<i>Criteria</i> - 1 point for every 10 cyclists if the street has bike lanes, 3 points per 10 cyclists if no bike lanes. Counts are made in either the peak traffic hour or the hour when students are traveling to or from school	<b>0</b> - 4 cyclists
<i>Bus Stops</i>	<i>Criteria</i> - 1 point for each transit stop and 2 points for each school bus stop on the street	<b>10</b> - 5 school bus stops
<i>Proximity to Pedestrian Generator (Retail and Parks)</i>	<i>Criteria</i> - 5 points if within .2 miles, 3 points if within .4 miles, 1 point if within .6 miles	<b>2</b> - within .6 miles of two parks
		<b>TOTAL POINTS: 38</b>

Criteria	Application	Points
<i>Traffic Volume</i>	<i>Criteria</i> - 5 points for every 20% of volume that exceeds the expected number of vehicles per day (vpd) on the street, based on the function of the street (75 vpd for minor streets, 200 vpd for local streets, and 800 vpd for subcollector and collector streets).	<b>0</b> - Blueridge Road is classified as a subcollector (183 vpd)
<i>85th Percentile Speed</i>	<i>Criteria</i> - 2 points for every mph that the 85th percentile speed exceeds the posted speed limit	<b>18</b> - 85th percentile = 34mph
<i>Pedestrian Volume</i>	<i>Criteria</i> - 1 point for every 10 pedestrians if the street has a sidewalk, 5 points per 10 pedestrians if no sidewalk. Counts are made in either the peak traffic hour or the hour when students are traveling to or from	<b>5</b> - 17 pedestrians and no sidewalk
<i>Bicycle Volume</i>	school <i>Criteria</i> - 1 point for every 10 cyclists if the street has bike lanes, 3 points per 10 cyclists if no bike lanes. Counts are made in either the peak traffic hour or the hour when students are traveling to or from school	<b>0</b> - 4 cyclists
<i>Bus Stops</i>	<i>Criteria</i> - 1 point for each transit stop and 2 points for each school bus stop on the street	<b>10</b> - 5 school bus stops
<i>Proximity to Pedestrian Generator (Retail and Parks)</i>	<i>Criteria</i> - 5 points if within .2 miles, 3 points if within .4 miles, 1 point if within .6 miles	<b>2</b> - within .6 miles of two parks
		<b>TOTAL POINTS: 35</b>

Criteria	Application	Points
<i>Traffic Volume</i>	<i>Criteria</i> - 5 points for every 20% of volume that exceeds the expected number of vehicles per day (vpd) on the street, based on the function of the street (75 vpd for minor streets, 200 vpd for local streets, and 800 vpd for subcollector and collector streets).	<b>0</b> - Blueridge Road is classified as a subcollector (137 vpd)
<i>85th Percentile Speed</i>	<i>Criteria</i> - 2 points for every mph that the 85th percentile speed exceeds the posted speed limit	<b>22</b> - 85th percentile = 36mph
<i>Pedestrian Volume</i>	<i>Criteria</i> - 1 point for every 10 pedestrians if the street has a sidewalk, 5 points per 10 pedestrians if no sidewalk. Counts are made in either the peak traffic hour or the hour when students are traveling to or from	no pedestrian counts at this location
<i>Bicycle Volume</i>	school <i>Criteria</i> - 1 point for every 10 cyclists if the street has bike lanes, 3 points per 10 cyclists if no bike lanes. Counts are made in either the peak traffic hour or the hour when students are traveling to or from school	no bicycle counts at this location
<i>Bus Stops</i>	<i>Criteria</i> - 1 point for each transit stop and 2 points for each school bus stop on the street	<b>10</b> - 5 school bus stops
<i>Proximity to Pedestrian Generator (Retail and Parks)</i>	<i>Criteria</i> - 5 points if within .2 miles, 3 points if within .4 miles, 1 point if within .6 miles	<b>2</b> - within .6 miles of two parks
		<b>TOTAL POINTS: 34</b>

Loc	AADT			Exp VPD	Pts	Limit	85th Percentile		Difference		Pts	
	NB	SB	Total				NB	SB	NB	SB	NB	SB
201	123	163	286	800	0	25	31.52	33.92	6.52	8.92	12	16
301	114	69	183	800	0	25	34.06	34.06	9.06	9.06	18	18
312	88	49	137	800	0	25	36.25	30	11.25	5	22	10

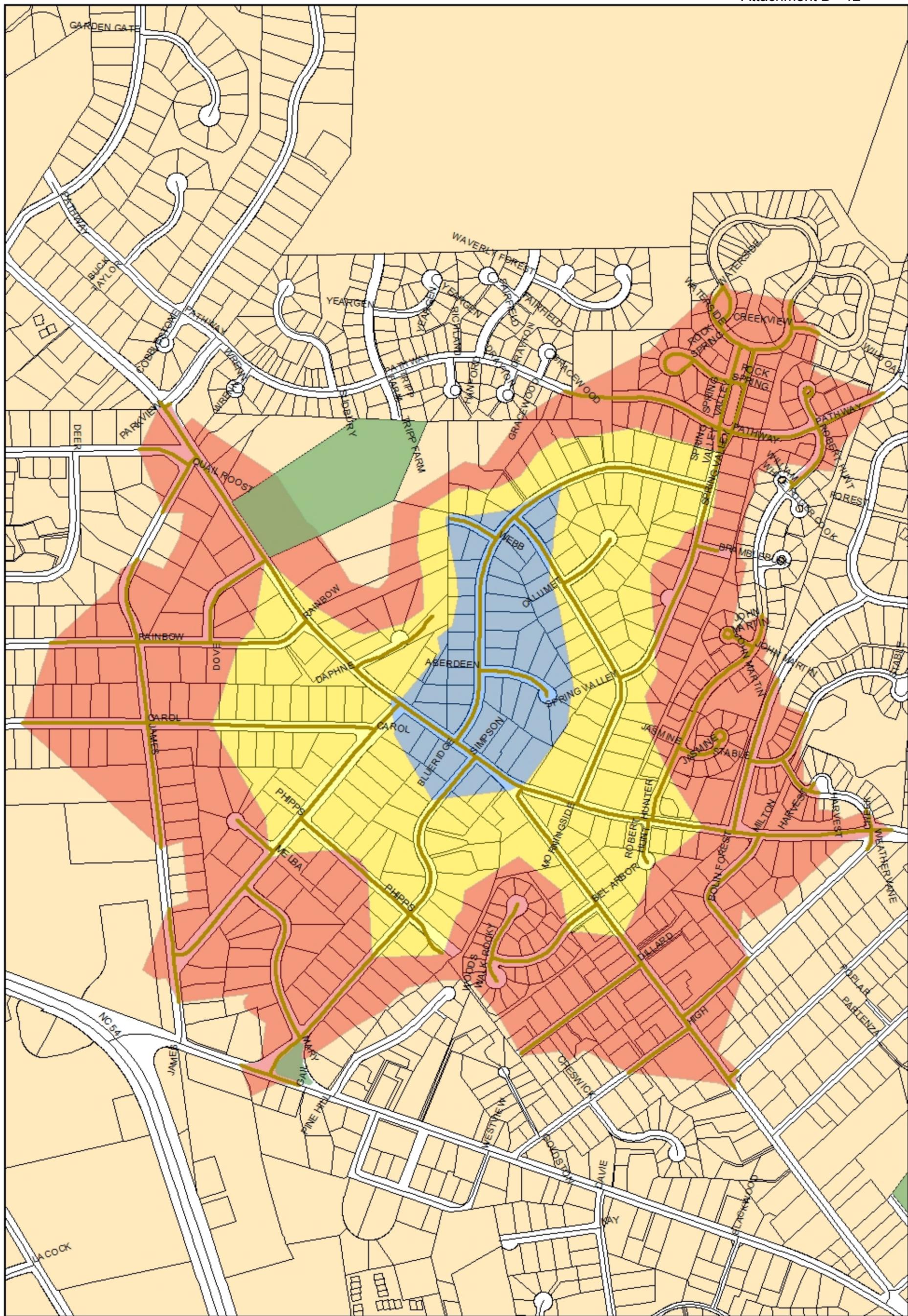
Blueridge Road  
Bicycle and Pedestrian Counts

Date: March 10, 2016  
Blueridge Road  
7:00am - 9:00am

	Peds	Bikes
201 Blueridge	22	4
301 Blueridge	17	4

**CHCCS Bus Stops**

Blueridge/Aberdeen (CE)  
Blueridge/Morningside (CE)  
Morningside/Blueridge (CHHS)  
103 Blueridge (CHHS)  
Blueridge/Hillsborough (CHHS)



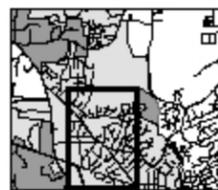
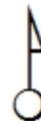
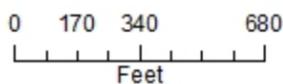
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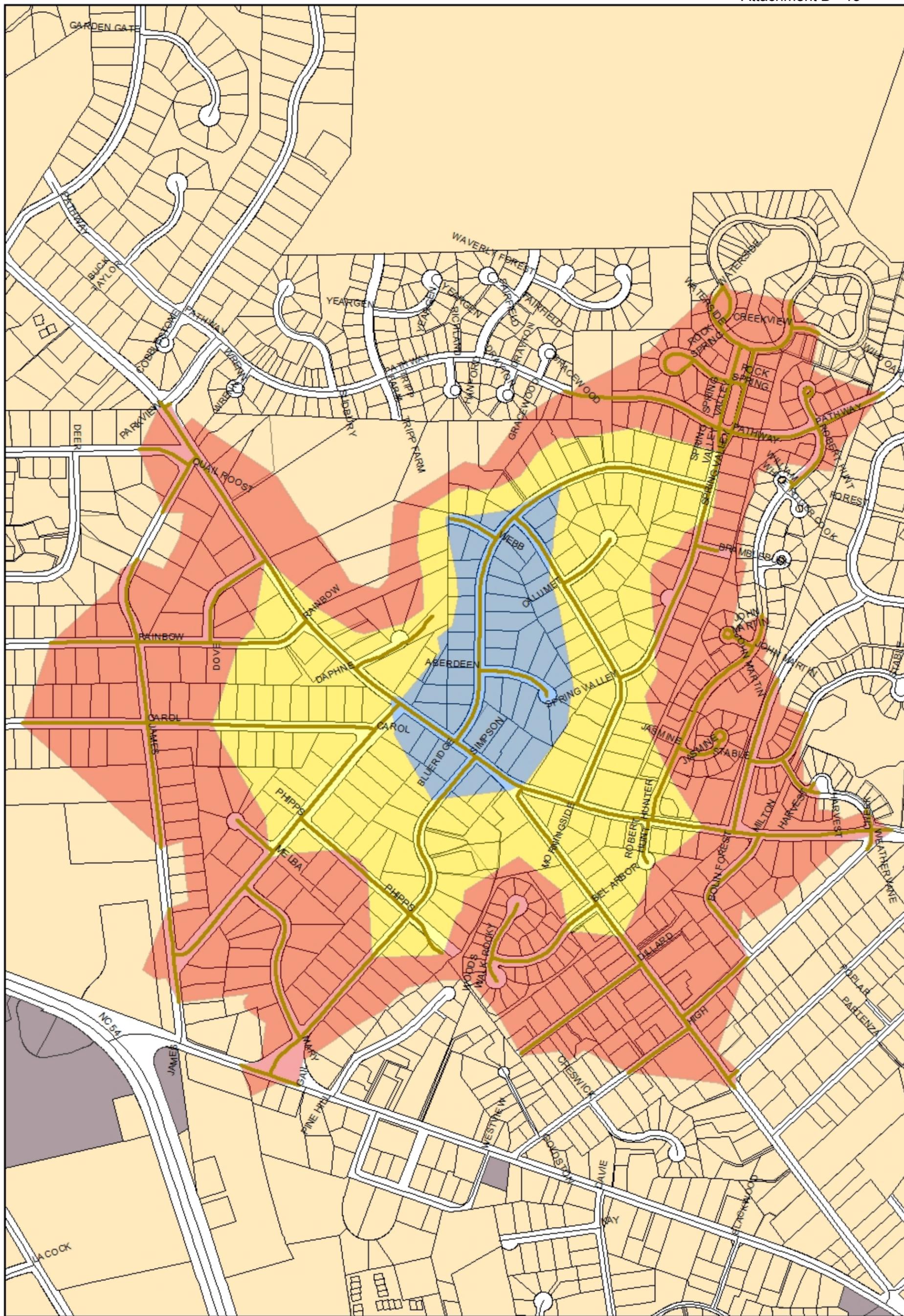
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**Blueridge Road: Pedestrian Generators Map-Parks**

**Distance**

- 2 miles
- 4 miles
- 6 miles
- parks





Blueridge Road: Pedestrian Generators Map-Retail



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**Distance**

- .2 miles
- .4 miles
- .6 miles
- Business/Retail

