

AGRICULTURAL ADVISORY BOARD

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218

AGENDA

6:30 PM, Monday August 12th, 2019
COUNCIL CHAMBERS
OCONEE COUNTY ADMINISTRATIVE COMPLEX

1. Call to Order
2. Public Comment (3- minutes per person)
3. Approval of Minutes
4. Agricultural Element of the Comprehensive Plan
 Public Comment (3-minutes per person)
 Discussion / Vote
5. Highway 123 Corridor Plan
6. Old Business
7. New Business
8. Adjourn

Anyone wishing to submit written comments to the Agricultural Advisory Board can send their comments to the Planning Department by mail or by emailing them to the email address below. Please Note: If you would like to receive a copy of the agenda via email please contact our office, or email us at achapman@oconeesc.com.

AGRICULTURAL ADVISORY BOARD

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218 FAX (864) 638-4168

AGENDA

6:30 PM, MONDAY, February 11, 2019
COUNCIL CHAMBERS
OCONEE COUNTY ADMINISTRATIVE COMPLEX

Draft Minutes – Monday, February 11, 2019

Members Present

Walker Rikard
Kerrie Roach
Edward Land
Rex Blanton
Doug Hollifield
Vickie Willoughby
Debbie Sewell

Staff Present

Adam Chapman

Media Present

None

1. **Call to Order** – Mr. Chapman called the meeting to order at 6:30pm
2. **Public Comment** - None
3. **Election of officers** – Mr. Land nominated Mr. Rex Blanton for Chairman, approved 4-2.
Mr. Land nominated Mr. Doug Hollifield for Vice Chairman, Mr. Rickard nominated Ms. Debbie Sewell for Vice Chairman. There was a tie vote 3-3 for both nominations. Ms. Roach nominated Mr. Adam Chapman as Secretary approved 4-2.
4. **Goals/Vision for the year**
 - 1) Long Creek Comprehensive Plan Meeting Agriculture people need to be present.
 - 2) Have listening sessions quarterly. Possibly have the SC Department of Agriculture person come to a listening session.
 - 3) Get the Farmers Market managers together.

- 4) Bring in marketing people to help farmers get the word out.
- 5) Federal guidelines now require a permit for Farmers Markets.
- 6) New Food Safety Act. The course is now mandatory and anyone that grows needs to take this course.
- 7) Someone from Ag Board show up at County Council meetings.
- 8) Work with Economic Development/Farm Center to get a commercial kitchen or processing area.
- 5. Comprehensive Plan** Mr. Chapman explained about the Agriculture Element and that it is currently in the Planning Commission hands to look over. Mr. Chapman also explained about the 123 corridor study. The Ag Commission also expressed concerns for the rural back roads in the county. These roads are in poor condition and farmers getting to their product to where they need to go is treacherous. Mr. Hollifield mentioned about the water/dam issues moving from DHEC to Department of Agriculture to inspect.
- 6. Old Business** - None
- 7. New Business** – Welcome Barry Rikard from Salem, Kerrie Rock from Clemson Extension.
- 8. Approval of Minutes** – Mr. Land made a motion to approve the minutes from the January 4, 2019 meeting with the change of the adjournment time to 6:42pm. Mr. Hollifield seconded and all approved.
- 9. Adjourn** – The meeting adjourned at 7:46pm

Anyone wishing to submit written comments to the Agricultural Advisory Board can send their comments to the Planning Department by mail or by emailing them to the email address below. Please Note: If you would like to receive a copy of the agenda via email please contact our office, or email us at achapman@oconeesc.com.

AGRICULTURAL ADVISORY BOARD

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218 FAX (864) 638-4168

AGENDA

6:30 PM, MONDAY, April 8, 2019

COUNCIL CHAMBERS

OCONEE COUNTY ADMINISTRATIVE COMPLEX

Draft Minutes – Monday, April 8, 2019

Members Present

Walker Rikard

Kerrie Roach

Edward Land

Rex Blanton

Doug Hollifield

Vickie Willoughby

Debbie Sewell

Staff Present

Adam Chapman

Media Present

Caitlin Herrington – The Journal

- 1. Call to Order** – Mr. Blanton called the meeting to order at 6:30pm
- 2. Public Comment** - None
- 3. Election of vice chairman** – Ed Land was voted in as vice chairman unanimously.
- 4. Produce safety coordinator** – Guest Speaker Brook Horton spoke about the Produce Safety Rule which is part of the Food Safety Modernization Act.
- 5. Coordination & Communication** – Ms. Sewell reiterated that we need more coordination and communication between the farmer’s markets.
- 6. Comprehensive Plan / Corridor Plan update** – Mr. Chapman explained about the Comprehensive Plan that it is currently in the Planning Commission hands to look over. It will include a new Agriculture Element that will be brought to the Board to look over. Mr. Chapman also explained about the 123 corridor study.

7. Goals/ Vision for the year -

- 1) Recipe contest.
- 2) Booth at the fair and other events.
- 3) A motion was made for Ms. Sewell to have a subcommittee and seconded by Mr. Land and approved by all.

6. Old Business - None

7. New Business – Agriculture Census should be out on the 19th of the month. This has a lot of great information to make up more cards to hand out at events.

8. Adjourn – The meeting adjourned at 7:49pm

Anyone wishing to submit written comments to the Agricultural Advisory Board can send their comments to the Planning Department by mail or by emailing them to the email address below. Please Note: If you would like to receive a copy of the agenda via email please contact our office, or email us at achapman@oconeesc.com.

415 South Pine Street Walhalla, South Carolina 29691 - Tel: 864-718-1005 - Fax: 864-638-4168 - www.oconeesc.com

AGRICULTURAL ADVISORY BOARD

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218 FAX (864) 638-4168

AGENDA

6:30 PM, MONDAY, July 8th, 2019
COUNCIL CHAMBERS
OCONEE COUNTY ADMINISTRATIVE COMPLEX

Draft Minutes – Monday, July 8, 2019

Members Present

Berry Rickard
Sandra Gray
Edward Land
Rex Blanton
Doug Hollifield
Debbie Sewell
Kerry Roach
Vickie Willoughby

Staff Present

Adam Chapman
Vivian Kompier

Media Present

Caitlin Herrington, The Journal

1. **Call to Order** – Mr. Blanton called the meeting to order at 6:30 pm
2. **Public Comment** - None
3. **Approval of Minutes** – Mr. Land made a motion to accept the minutes of May 13, 2019, seconded by Mr. Hollifield and approved by all.
4. **Oconee Food Summit** – Guest speaker Mandolin Bright spoke about the Oconee Food Summit Event that is in the process of being planned for a Friday in February of 2020. Ms. Bright is asking the board for input and help identifying people for the committees.

5. FARM center update – Stanley Gibson gave an update on removing trees to increase the parking area, tweaking the layout for the fairgrounds, installing a perimeter road to help with the traffic flow. Leadership Oconee chose them as their project giving them an arena drag, landscaping, and a new sign. The fair is scheduled for September 24-28. The farmers market is growing, produce is coming in. We need to find ways as to not have conflicts with the other markets in the county. We are also looking for grants and new events to have.

6. The State of Agriculture –

Mid-year report for Council – We will compile and get it back to Council.

Comprehensive Plan Agriculture Element – Mr. Chapman explained the Agriculture Element and asked them to read it and give their input on it.

7. Agriculture clearing house of information – Sandra Gray said that they are working on the document online with information on how new farmers can reach different entities in Oconee County. She will also forward that to staff so they can forward it on.

Clemson Extension established a blog scgrower.com. On that blog there are weekly updates and also an events tab. You can send your events to kwalker@clermson.edu and they will get posted on there.

8. Old Business – Ms. Sewell was happy that County Council presented her with Proclamation 2019-10 designating the week of June 17th as Pollinator week. She will bring it in to be posted.

9. New Business – Mr. Hollifield attended a training course for producers. He explained that there are new rules and regulations coming in the near future. Ms. Roach explained that the Food Safety Modernization Act is grower to table with the least amount of pathogens.

10. Adjourn – The meeting adjourned at 7:15pm

Anyone wishing to submit written comments to the Agricultural Advisory Board can send their comments to the Planning Department by mail or by emailing them to the email address below. Please Note: If you would like to receive a copy of the agenda via email please contact our office, or email us at achapman@oconeesc.com.

E. GOALS, OBJECTIVES AND STRATEGIES FOR IMPLEMENTATION

The table of goals, objectives and implementation strategies (GOIS) summarizes the actions that will be undertaken in the coming decade to achieve the goals and objectives identified in the Agriculture Element.

Goals/Objectives/Strategies	Accountable Agencies	Time Frame for Completion
Goal 8.1. Support and Protect the Agricultural Industry in Oconee County.		
Objective 8.1.1. Recognize important agricultural land as a valuable natural resource to protect for future generations.		
<p><u>Strategy 8.1.1.1.</u> Encourage use of “Best Management Practices” in farming and forestry operations.</p>	<ul style="list-style-type: none"> • Planning Commission; Soil & Water Conservation Commissions • Oconee County • Soil & Water Conservation 	<p>On-going</p>
<p><u>Strategy 8.1.1.2.</u> Encourage and support collaboration between landowners and public and private agencies in the development of</p>	<ul style="list-style-type: none"> • Oconee County 	<p>On-going</p>



<p>ecologically and economically sound plans for preservation and restoration of forests and farmland.</p>		
<p><u>Strategy 8.1.1.3.</u> Work with SCDOT and other state and regional agencies to ensure projects for infrastructure facility maintenance and expansion will not be detrimental to the continuation of agriculture and silviculture.</p>	<ul style="list-style-type: none"> • Oconee County • SCDOT • Oconee County Chamber of Commerce • ?? 	<p>On-going</p>
<p><u>Strategy 8.1.1.4.</u> Limit non-agricultural development in productive and prime agricultural areas to densities and development patterns that are consistent with the continuation of economically viable agriculture.</p>	<ul style="list-style-type: none"> • Oconee County • ?? 	<p>On-going</p>
<p><u>Strategy 8.1.1.5.</u> Support state legislation that links incentives to continue farming (such as state income tax credits or differential assessment for property taxes and affirmative supports for the business of agriculture) with controls preventing conversion of the recipient's agricultural land to non-farm uses.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Chamber of Commerce • ?? 	<p>On-going</p>
<p><u>Strategy 8.1.1.6.</u> Seek grants and take advantage of state and federal programs to assist with the purchase of development rights and agricultural easements on prime agricultural land.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Cooperative Extension Service 	<p>On-going</p>



	<ul style="list-style-type: none"> • Oconee County Chamber of Commerce • ?? 	
<p><u>Strategy 8.1.1.7.</u> Ensure that the impacts of proposed projects on surrounding farms is part of deliberation and decision-making for public projects.</p>	<ul style="list-style-type: none"> • Oconee County Cooperative Extension Service • Oconee County Chamber of Commerce • ?? 	On-going
<p><u>Strategy 8.1.1.8.</u> Require a farm disclosure process.</p>	<ul style="list-style-type: none"> • Oconee County • ?? 	On-going
<p>Objective 8.1.2. Enhance agricultural operations and opportunities.</p>		
<p><u>Strategy 8.1.2.1.</u> Work with state and federal agencies to attract agribusiness-related grants and revenue sources and support efforts to establish pilot programs related to new agricultural technologies and products.</p>	<ul style="list-style-type: none"> • Oconee County 	On-going
<p><u>Strategy 8.1.2.2.</u> Provide appropriate assistance to expand non- traditional and specialty agribusiness opportunities.</p>	<ul style="list-style-type: none"> • Oconee County 	On-going
<p><u>Strategy 8.1.2.3.</u> Ensure the ability of a</p>	<ul style="list-style-type: none"> • Oconee 	On-



<p>farm to have a farm-related business onsite.</p>	<ul style="list-style-type: none"> • County • ?? 	<p>going</p>
<p><u>Strategy 8.1.2.4.</u> Promote the establishment of new farm enterprises through support of training for interested persons.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Cooperative Extension Service • ?? 	<p>On-going</p>
<p>Goals/Objectives/Strategies</p>	<p>Accountable Agencies</p>	<p>Time Frame for Completion</p>
<p><u>Strategy 8.1.2.5.</u> Allow agricultural products processing facilities to locate in areas with convenient access to farms, but ensure that they do not negatively impact rural character or scenic vistas.</p>	<ul style="list-style-type: none"> • Oconee County • ?? 	<p>On-going</p>
<p><u>Strategy 8.1.2.6.</u> Support South Carolina right-to-farm laws and consider adopting a county right-to-farm policy.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Cooperative Extension Service • Oconee County Chamber of Commerce • ?? 	<p>On-going</p>



<p><u>Strategy 8.1.2.7.</u> Promote farm stands and farmers markets in rural and urban areas.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Cooperative Extension Service • ?? 	<p>On-going</p>
<p><u>Strategy 8.1.2.8.</u> Eliminate subdivisions that allow the division of important agricultural land into parcels that are too small to support commercial farming and businesses that do not serve the farming community.</p>	<ul style="list-style-type: none"> • Oconee County • ?? 	<p>On-going</p>
<p><u>Strategy 8.1.2.9.</u> Consider adopting a Voluntary Agricultural and Forestal Areas program.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Cooperative Extension Service • ?? 	<p>XXX</p>
<p><u>Strategy 8.1.2.10.</u> Encourage and support programs that educate and engage residents of all ages in aspects of farming and agriculture.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Cooperative Extension Service • Agriculture Advisory Board • Organizations such as FFA 	<p>On-going</p>



	and the Oconee Cultivation Project	
Goal 8.2. Protect Oconee County's Forest Resources.		
<u>Strategy 8.2.1.1.</u> Maintain an accurate inventory of important forestland.	<ul style="list-style-type: none"> • Oconee County • SC Forestry Commission • US Forest Service • ?? 	On-going
<u>Strategy 8.2.1.2.</u> Coordinate and plan infrastructure and development to protect forestland.	<ul style="list-style-type: none"> • Oconee County • SC Forestry Commission • SCDOT • ?? 	On-going
<u>Strategy 8.2.1.3.</u> Support efforts to permanently preserve important forestland.	<ul style="list-style-type: none"> • Oconee County • SC Forestry Commission • ?? 	On-going
<u>Strategy 8.2.1.4.</u> Work with the Forestry Commission to educate citizens about wildfire hazards.	<ul style="list-style-type: none"> • Oconee County • SC Forestry Commission • Rural fire departments • ?? 	On-going
<u>Strategy 8.2.1.5.</u> Consider adopting the International Wildland-Urban Interface	<ul style="list-style-type: none"> • Oconee County 	XXX



<p>Code, or relevant portions, to help mitigate wildfire risk.</p>	<ul style="list-style-type: none"> • Rural fire departments • ?? 	
<p>Goal 8.3. Ensure continuing access to healthy, fresh food.</p>		
<p>Objective 8.3.1. Eliminate food deserts and ensure access to healthy food.</p>		
<p><u>Strategy 8.3.1.1.</u> Integrate food system policies and planning into County land use, transportation, and capital improvement plans.</p>	<ul style="list-style-type: none"> • Oconee County • Local food banks • Oconee County Cooperative Extension Service • ?? 	<p>On-going</p>
<p><u>Strategy 8.3.1.2.</u> Encourage residents to supplement personal food sources with gardening and fresh food preservation.</p>	<ul style="list-style-type: none"> • Oconee County • Oconee County Cooperative Extension Service • ?? 	<p>On-going</p>
<p>Goals/Objectives/Strategies</p>	<p>Accountable Agencies</p>	<p>Time Frame for Completion</p>
<p><u>Strategy 8.3.1.3.</u> Recruit and support businesses that provide healthy food</p>	<ul style="list-style-type: none"> • Oconee County 	<p>On-going</p>



<p>choices in all areas of the County.</p>	<ul style="list-style-type: none"> • Oconee County Chamber of Commerce • ?? 	
<p><u>Strategy 8.3.1.4.</u> Revise land use policies to require healthy food access as a part of development standards and to discourage or prohibit regulations and private restrictions that limit gardens in residential areas.</p>	<ul style="list-style-type: none"> • Oconee County • Municipalities • ?? 	<p>XXX</p>
<p><u>Strategy 8.3.1.5.</u> Work collaboratively with non-profits and other entities to address the needs of vulnerable populations (e.g. elderly, children, homeless).</p>	<ul style="list-style-type: none"> • Oconee County • Municipalities • Local non-profits • Faith-based community • ?? 	<p>On-going</p>
<p><u>Strategy 8.3.1.6.</u> Support new opportunities for distribution of locally and regionally produced food.</p>	<ul style="list-style-type: none"> • Oconee County • ?? 	<p>On-going</p>
<p><u>Strategy 8.3.1.7.</u> Revise the zoning code to require healthy food access as a part of development standards and discourage or prohibit regulations and private restrictions that limit gardens in residential areas.</p>	<ul style="list-style-type: none"> • Oconee County • Municipalities • ?? 	<p>XXX</p>
<p><u>Strategy 8.3.1.8.</u> Work collaboratively to ensure that regional emergency preparedness programs include food access and distribution and are working</p>	<ul style="list-style-type: none"> • Oconee County • Municipalities • SC Emergency 	<p>On-going</p>



toward the goal of establishing regional capacity for feeding the population for 2-3 months in an emergency.	Management • ??	
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Note: GOIS are coded for ease of review

- **Black text is directly from the current comprehensive plan**
- *Blue text was developed per input from focus group meetings*
- *Red text was developed by consultants to address issues in background data*
- *Green text added per the Planning Commission*
- *Brown text from OEA/County plan, Upstate SC Alliance regional economic plan and ACOG CEDS*
- *Purple text derived from Appalachian Regional Commission (ARC)*
- *Time frames in yellow cells should be added by staff and PC*

*Some strategies are derived and consolidated from multiple sources

****Although all of the strategies noted for Goal 8.3 are indicated as consultant-created, concern was expressed about food deserts during stakeholder meetings.**

A. OVERVIEW

Agriculture and forestry are critical components of both the landscape and the economy of Oconee County. Based on Oconee County tax data, 51% of the County's land area is currently in use for agriculture or forestry. However, of County land that is not included in the Sumter National Forest, nearly two-thirds is in agriculture or forestry use.

According to the Oconee Economic Alliance, Oconee County has nearly 900 farms encompassing more than 67,000 acres of land. Together these farms have a market value in products worth more than 121 million dollars. In addition to the economic benefits of agriculture and forestry, both land uses can contribute social, environmental, and health benefits. These benefits are explored in more detail throughout this element.

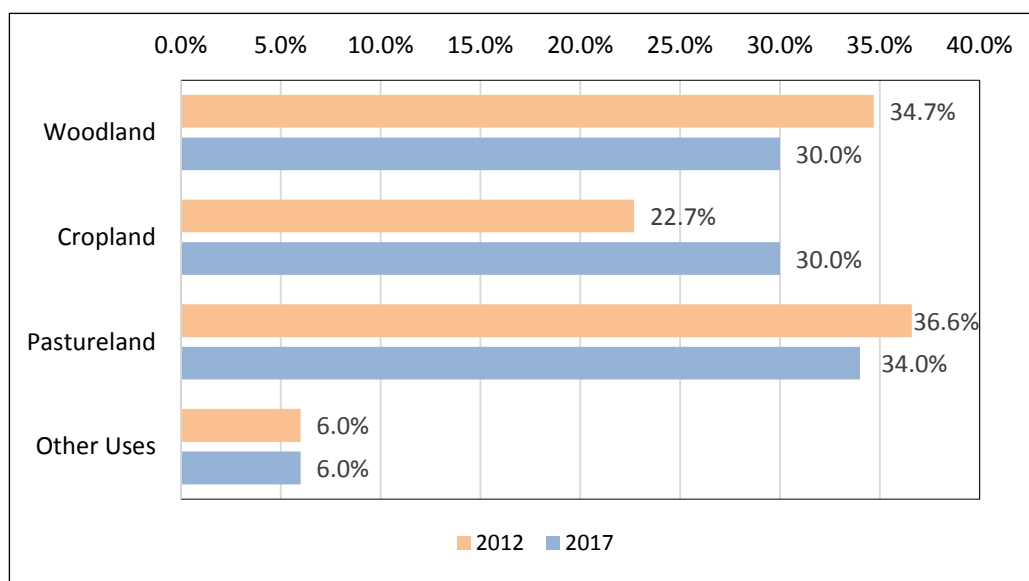


Figure 8-1. Oconee County Land in Farms by Land Use, 2012 and 2017

Source: U.S. Census of Agriculture

Forestlands are important to the economy, character, environment, and overall health of Oconee County. Agricultural and forested lands are home to many of the area's critical natural resources and provide valuable wildlife habitat, windbreaks, enhanced water quality, decreased ambient temperatures, groundwater recharge areas, mitigation of stormwater run-off and erosion, and open space. This link to natural resource protection should be respected and enhanced when possible through the use of easements, education, and value-added land use policies such as proper regulation, prevention and mitigation of incompatible land uses, and the appropriate location of public lands and infrastructure.

Farming and food security would appear to go hand in hand, but even counties with significant farm production can have areas where access to healthy foods is non-existent or challenging.

Reliable, convenient access to fresh fruit, vegetables, and proteins is a cornerstone of community sustainability and resilience. A healthy population contributes more to the local economy, uses fewer healthcare resources, and is central to community well-being and quality of life.

B. AGRICULTURE

Over the past century, agriculture in the U.S. has become more mechanized, industrialized, and dependent on and threatened by globalization. While much of the agriculture in the Upstate consists of relatively small farms, these trends have affected farming in Oconee County as well. More than half of Americans were farmers at the turn of the 20th century, and their farms typically were diverse in plants and animals, had a focus on family subsistence, and supported the local area. While this is still true on some small farms, the trend towards specialization and truck farming (producing products primarily for shipment often bypassing local markets) has had its impacts on the Upstate as well. However, a recent return to market-farming or direct-to-consumer farming is changing how some farmers do business.



Figure 8-2. Farming Operation Characteristics in Oconee

AGRICULTURAL LAND PROVIDES BENEFITS BEYOND FOOD



open space and scenic views



biodiversity and wildlife habitat



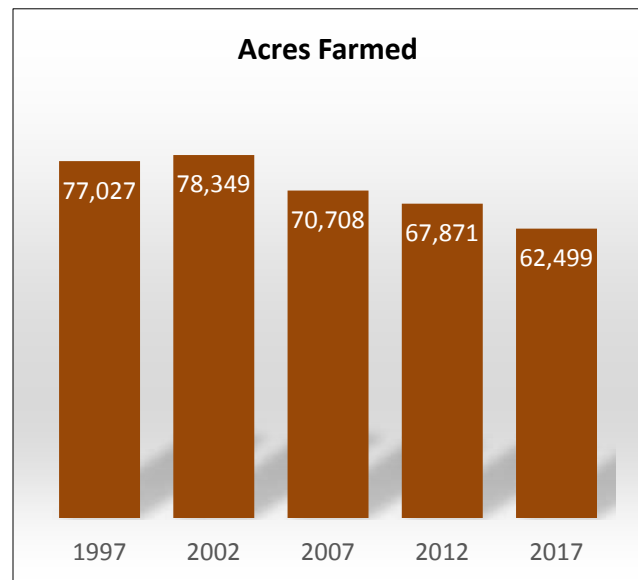
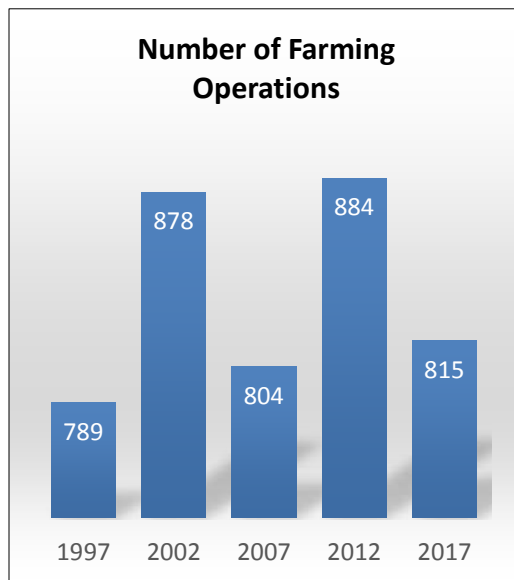
fire suppression, floodplain management, and carbon sequestration



recreation

Source: American Farmland Trust, "Farms Under Threat: The State of America's Farmland," May 9, 2018

County



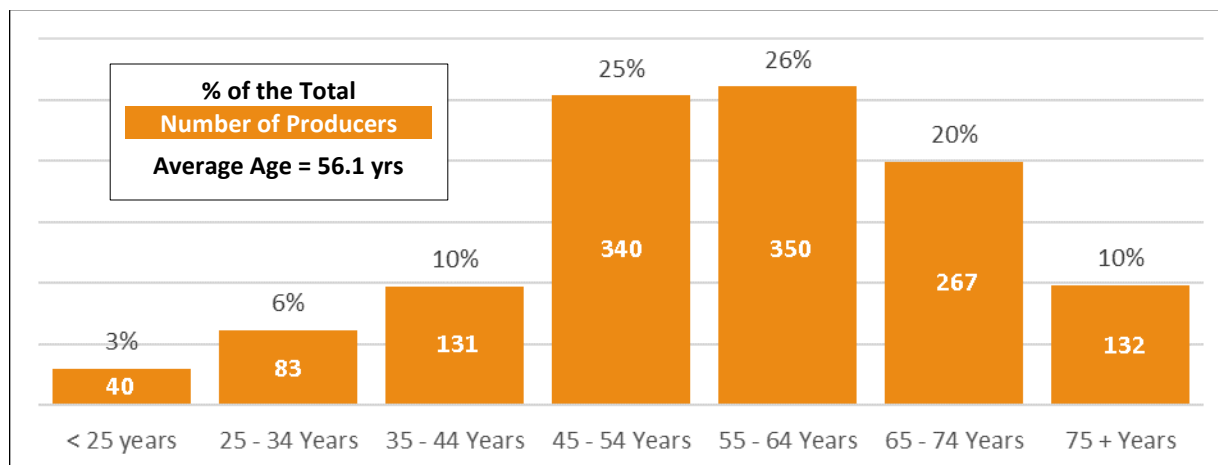
Source: 2017 Census of Agriculture

The number of farming operations in Oconee County has fluctuated over the past 30 years from a low of 789 in 1997 to a high of 884 in 2012. While the number of farm operations fell from 884 in 2012 to 815 in 2017, the average farm size remained 77 acres. In 2007 there were only 804 farms, but the average farm size was larger at 88 acres and the total acreage in farms was almost 71,000.

1. Producer and Income Characteristics

Commonly known as farmers, people who work on farms are called “producers” by the U.S. Census Bureau. The Census Bureau expanded its definition of producer in the 2017 Census to include anyone involved in making decisions for a farm. This change resulted in an increase in the number of people who were reported as producers as compared to previous years. The latest Census also collected information on young producers and new and beginning producers. These new data provide additional insight into the profile of farmers in Oconee County and should help to identify trends that might be significant in supporting local farming.

Figure 8-3. Age of Oconee County Producers, 2017

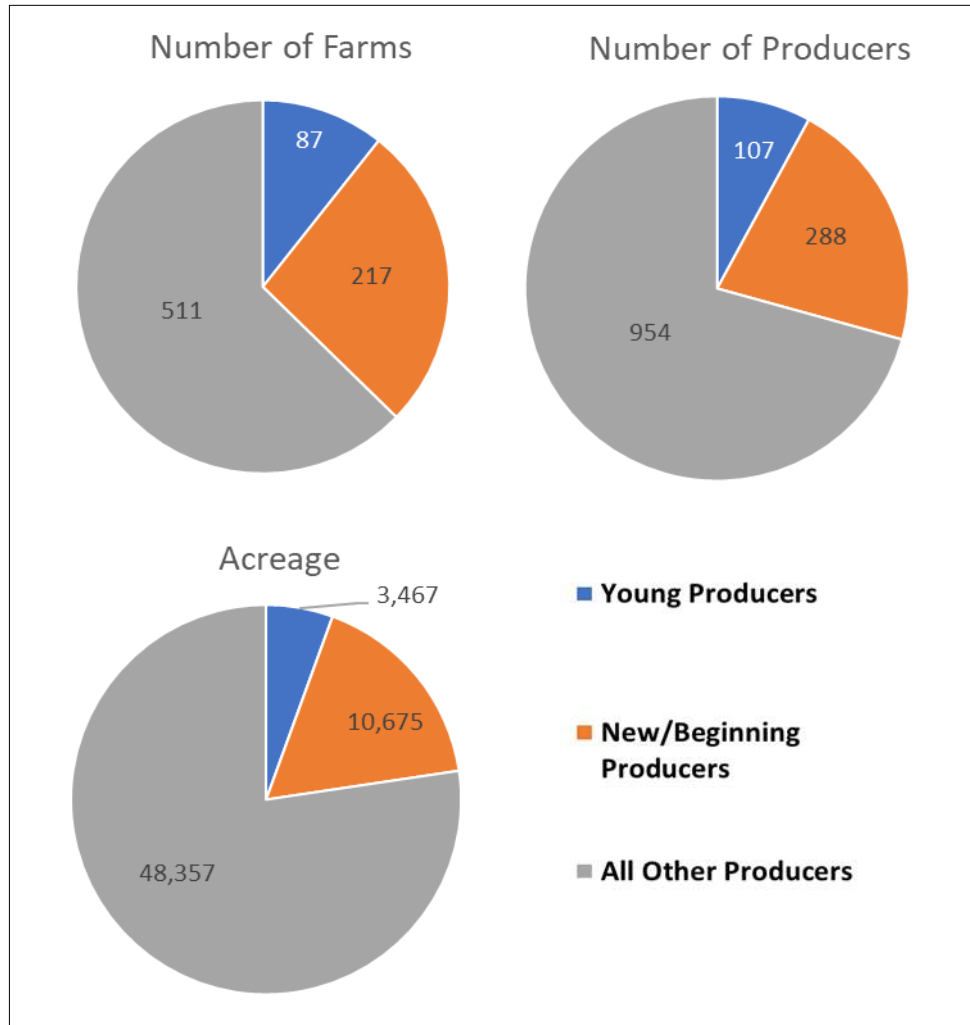


Source: 2017 Census of Agriculture

Of the 1,343 producers working Oconee County farms in 2017, 749 were aged 55 years or older. The average age for all producers is 56.1 years (Figure 8-3), slightly less than the U.S. average of 57.5 years. Fewer than one-third of all producers in Oconee County has been in operation less than 11 years and less than 40 percent indicated that farming was their primary occupation. The future of farming depends on the successful transition of farms from one producer to another, for young people to see value in the farming way of life, and on successfully supplementing farming income with diversification and non-farming related jobs that provide greater income stability. Only a small portion of the primary producers are young, aged 35 or less years, as characterized by the 2017 Census of Agriculture (Figure 8-4). A larger percentage of all producers were characterized as “new or beginning,” defined as no more than ten years of experience, which is a title irrespective of age.



Figure 8-4. Characteristics by Producer Type in Oconee County, 2017

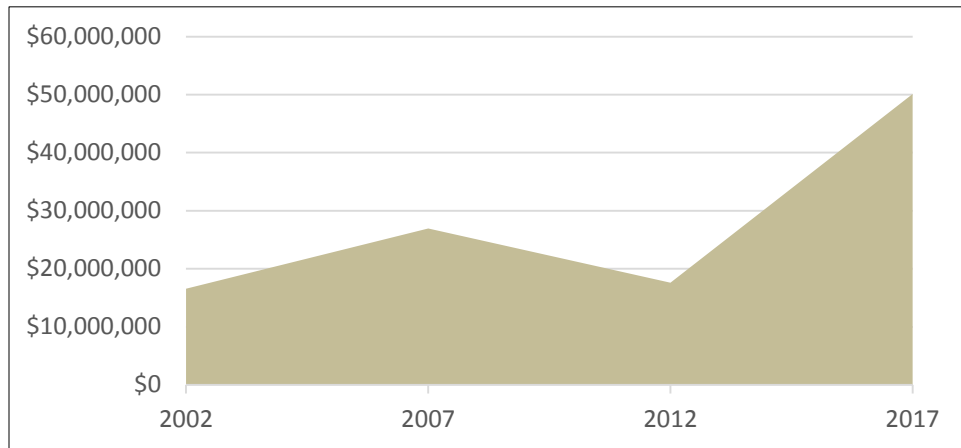


Source: 2017 Census of Agriculture

Although the number of acres farmed in the County is declining, the net income of farm operations has increased. The greatest increases in the number of farms by farm sales has been in categories with annual sales of \$50,000 or more.

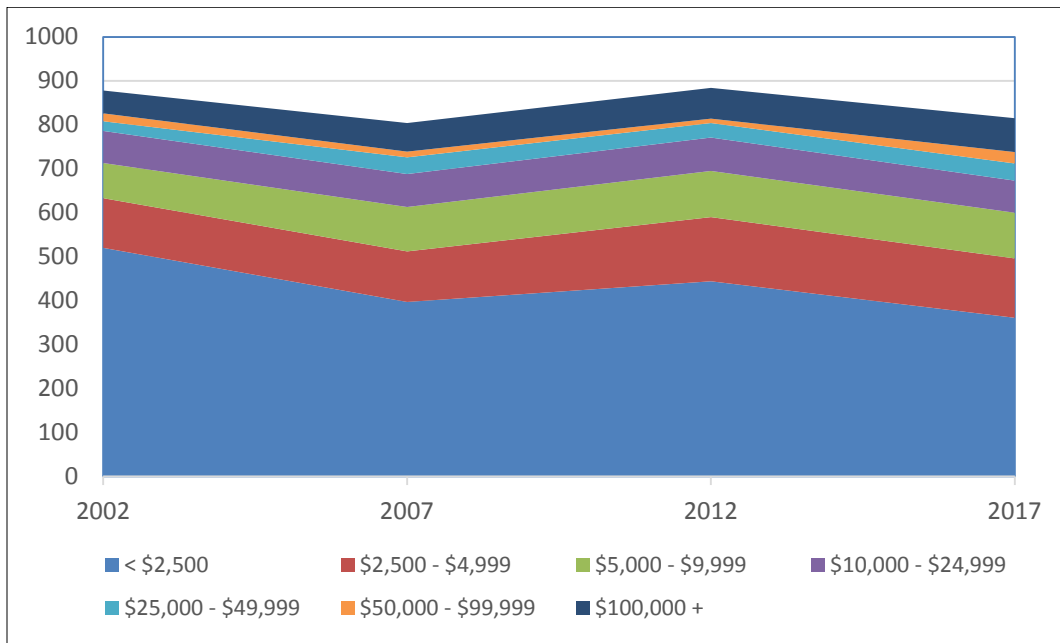


Figure 8-5. Net Farm Income in Oconee County



Source: 2017 Census of Agriculture

Figure 8-6. Number of Farm Operations by Sales in Oconee County



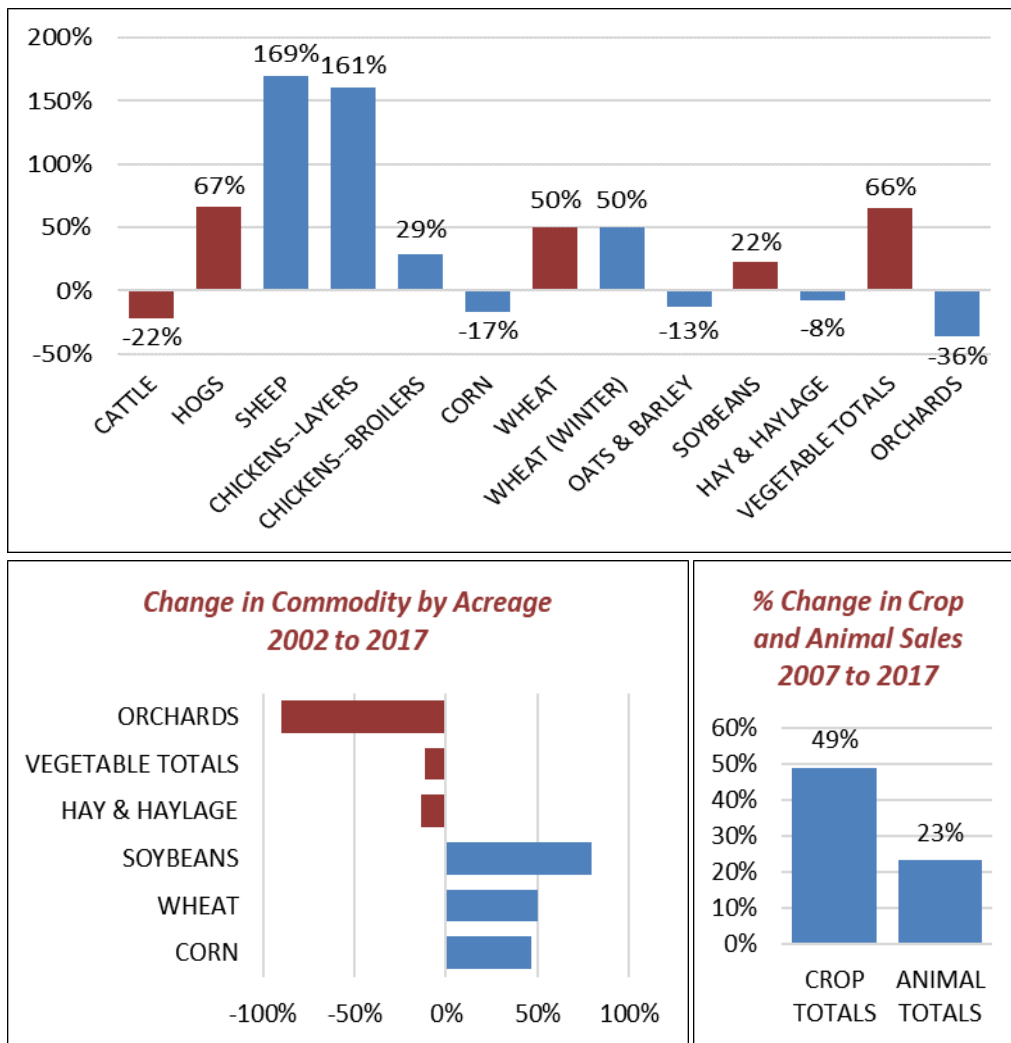
Source: 2017 Census of Agriculture

2. Commodities



A variety of vegetable, fruit, and animal products are produced on Oconee County farms, but livestock, poultry, and animal products represent 97 percent of the total share of farm sales. Oconee County is South Carolina’s number 1 poultry and egg-producing county. It ranks 77th nationwide out of 3007 counties. A distant second, in terms of sales and rank, is the production of cattle and calves, followed by milk, hogs and pigs, sheep and goats, equine, and aquaculture. As Figure 8-7 indicates, the number of sheep farms increased significantly between 2002 and 2012, but sheep remain a minor contributor to farm sales overall.

Figure 8-7. Changes in Farm Commodities



Source: 2017 Census of Agriculture



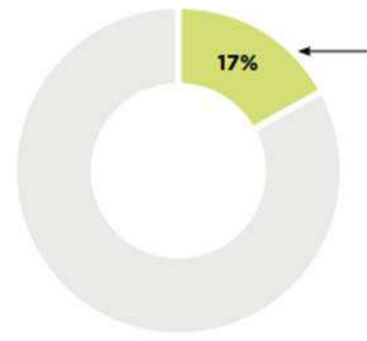
Agricultural Land

Soil data provided by the USDA reveals that only 7% of the County's land area (30,650 acres) is prime farmland. Prime farmland, as defined by the USDA, is "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses." Prime farmland soils produce the highest yields with minimal inputs of energy and economic resources and the least damage to the environment. Soils that have a high water table or are subject to flooding may also qualify as prime farmland if protected from flooding or not frequently flooded during growing season. These soils comprise 2.4% of the land area in Oconee County, encompassing 10,138 acres of land.

It is possible for states to define and delineate soils that, while not designated as prime farmlands, may be farmlands "of statewide importance" for the production of food, feed, fiber, forage, and oilseed crops. In general this land includes soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops – some as high as prime farmlands given favorable conditions – when treated and managed according to acceptable farming methods. Based on criteria set by the State of South Carolina, 10.4% of the land area of Oconee County (44,829 acres) is considered to have soils of statewide importance to agriculture.

Map 8-1 illustrates the location of prime and other important farmlands in Oconee County. Prime farmlands are located throughout the County but are sparser in the higher elevations in the Sumter National Forest.

U.S. AGRICULTURE RELIES ON HIGH-QUALITY FARMLAND

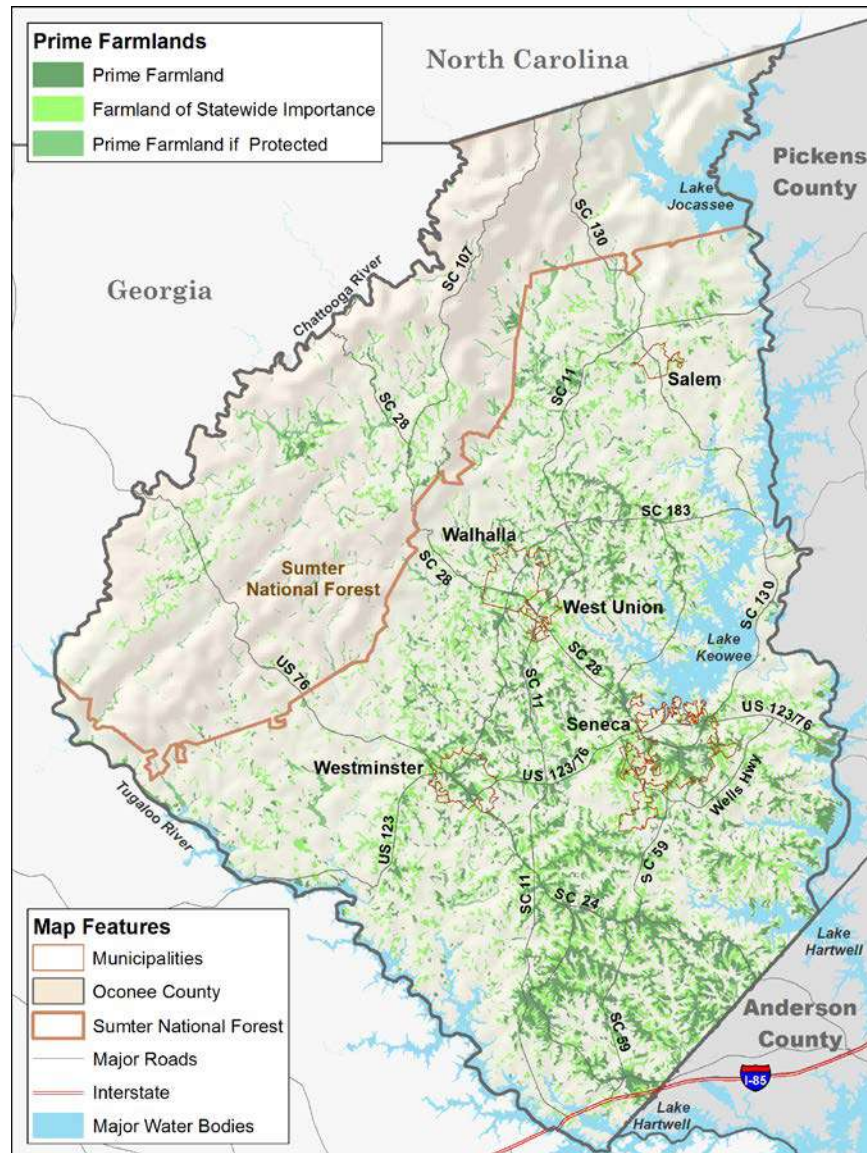


Only 17 percent of the land in the continental U.S. is agricultural land with the productivity, versatility, and resiliency (PVR) to produce a wide variety of crops with minimal environmental limitations.

Source: American Farmland Trust, "Farms Under Threat: The State of America's Farmland," May 9, 2018



Map 8-1. Prime Farmlands



Source: USDA NRCS Web Soil Survey, 2019



4. Threats to Prime Farmland

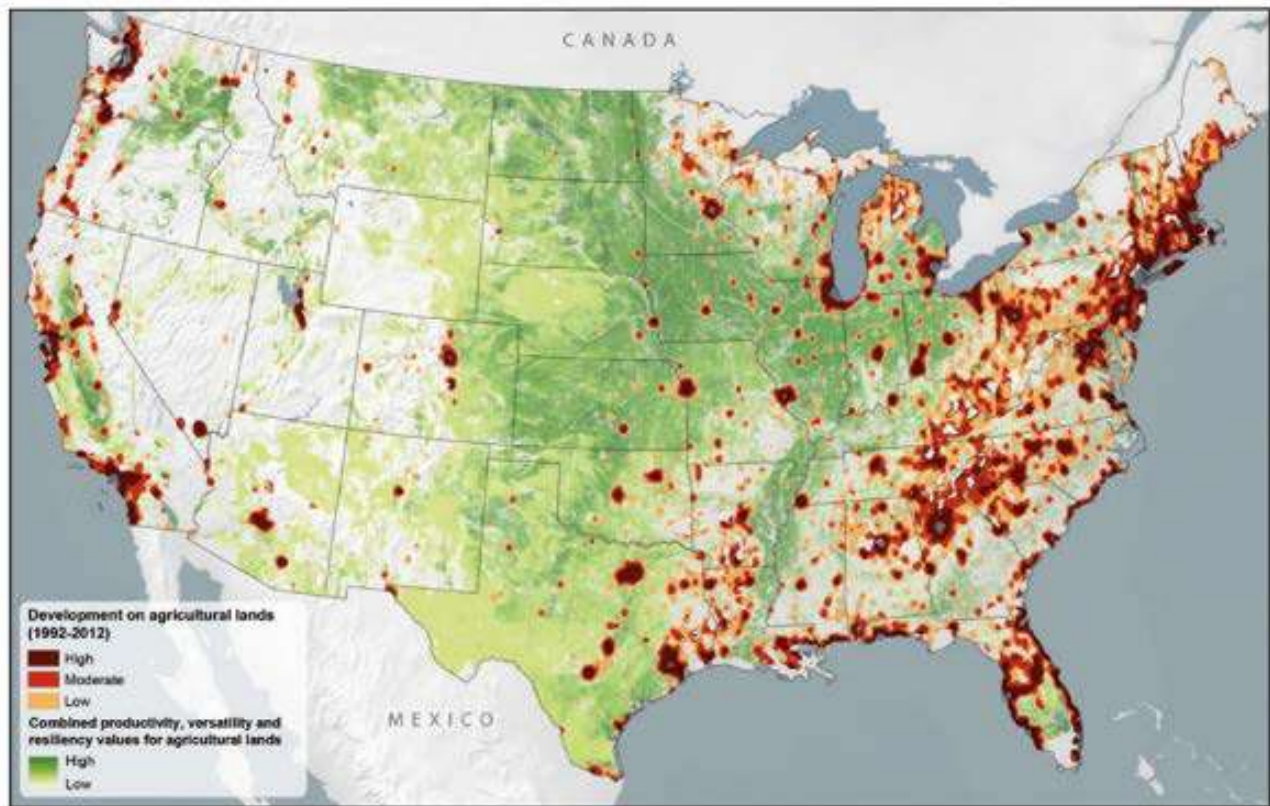
Prime farmland has been disappearing across America as urbanization has crept, leap-frogged, and in some cases, steamrolled across the landscape. The sharp increase in road and utility expansion in the 20th century divided many rural farms, opening vast areas for urban and suburban development. The relatively flat, cleared land preferred by farmers is also preferred by developers looking to minimize the cost of land preparation. However, the loss of farmland is not caused solely by the need for land to accommodate growth. It is also caused by the low relative value placed on farmland as compared to suburban and urban development.

Farm loss isn't just market economics at work, it also represents the collective valuation of farmland by the public. Studies conducted by the USDA Economic Research Service indicate that when people were asked to rank the appeal of various landscapes, farms, particularly cropland, received a low ranking. However, farms were ranked above developed sites in general. Their research provides some insight into the dynamics of farmland conversion, and perhaps is worth considering when crafting public education materials and arguments for farmland preservation.

Between 1982 and 2012, an estimated 395,900 acres of South Carolina's prime farmland were developed (*Farmland Information Center, 2016*). Conversion of prime farmlands to non-agricultural use is a concern, as the farming industry is forced to bring more marginal agricultural land into production. Marginal farmland has less productive and more erodible soil, often with irregular topography such as steeper slopes that require greater labor, equipment, and material costs. Map 8-2 indicates the entire Upstate experienced moderate to high rates of land conversion from 1992 to 2012.



Map 8-2. Conversion of U.S. Agricultural Land to Urban and Low-Density Residential Development Between 1992 and 2012



The development of agricultural land is shown in relationship to the low-to-high continuum of productive, versatile, and resilient values for agricultural land. The conversion of agricultural land to urban and low-density residential uses between 1992 and 2012 is shown as high (dark brown-red, > 25% conversion within a 10-kilometer (6.2 miles) radius), moderate (light brown-red, 10–25% conversion) and low (tan, 5–10% conversion). Urban areas are shown in gray.

Source: American Farmland Trust, "Farms Under Threat: The State of America's Farmland," May 9, 2018

An essential step in protecting valuable farmland is to ensure that policies on growth and development recognize the importance of local farming to the health, well-being, and economy of Oconee County. To accomplish this, the County will need to educate its citizens on the value of local farming activity, the need to promote and support local farmers through right-to-farm policies and similar measures, why it is necessary to allow value-added and farm-related land uses and activities in agricultural areas, and other topics that may arise that are central to preserving Oconee County's farmland. South Carolina has adopted laws to help protect farms from nuisance suits. These laws can be found in *Title 46, Chapter 45 of the S.C. Code of Laws §§ 46-45-10 to 46-45-70* (2004).

Farmers often need to diversify to stay in business. Diversification could mean using a part of the cornfield for a Halloween maze, turning raw products like grapes into other products like jelly, direct selling through farm stands, establishing restaurants and ice cream shops, or

inviting schools and tourists to tour or participate in farm life and production. Zoning that tightly separates land uses by type ignores the interdependence of different uses and synergies that these types of mixed uses can create. An example is a code that restricts agricultural land to primary production but not the processing of agricultural products. Policies that limit options may make farmland preservation very difficult.

The lack of policies to protect farming from the encroachment of inappropriate land uses can lead to additional problems. Agriculture can be noisy and smelly. Farmers often work in the very early morning hours and late evening hours. Farmland can require chemical application that non-farming residents find offensive or scary. For these reasons and many others, conventional residential subdivisions often do not make good farm neighbors. Clustering, buffering, and controlling residential density near farm borders are ways the County could help protect farmers from nuisance complaints. Another way to protect farmland and provide for residential growth is a new trend called “agrihoods.” These are subdivisions that integrate farmland into their overall design, making it a core feature much like golf courses have been in the past. Agrihoods appeal to people who want good, steady access to local farm produce. Agrihoods already exist in the Upstate, including one in the City of Greenville.

Land subdivision is a threat to many prime agricultural areas in the Upstate. Many communities have tried to deal with this through a policy of requiring very large minimum lot sizes, but is this right for agriculture? Just how small is too small for a legitimate farming enterprise? The answer to these questions has changed over time, especially with the recent emphasis on “eat local” and organic farming. Answers also vary by farming technique and product. For example, hydroponic greenhouses may only need an acre, while cattle farming can require more than 35 acres. Subdividing land into estate lots or gentleman farms and allowing land splits to accommodate family lots can eat away at Oconee County’s prime farmland over time. At the same time, it is crucial to permit subdivisions that support housing for farm laborers and businesses that provide goods and services to the farming community, issues that often are overlooked in local land use policies.

Some counties, such as Charleston County and Henderson County, N.C., have created or are in the process of creating Voluntary Agricultural and Forestal Areas programs. These programs seek to prevent the low-density sprawl development pattern and non-agricultural/forestal use encroachment that can lead to destruction of the agricultural and forestry industry.

C. FORESTRY

Roughly 63 percent of Oconee County’s land area is forested, totaling 251,354 acres (*S.C. Forestry Commission, www.state.sc.us/forest/oco.htm, 2019*). Much of the county’s forestland lies within the Sumter National Forest. Hardwoods and some pines are the dominant native trees (*USDA, Soil Survey of Oconee County, S.C., 1963*). While forestry is a key component of the economy in the state and region, Oconee County ranks 45th out of 46 counties in delivered

value of timber. This is at least partially due to the lack of major processing mills that exist in or near other counties.

Statewide, the total annual economic impact of South Carolina’s forest industry is over \$21 billion, employing over 84,000 residents (*S.C. Forestry Commission, Economic Contribution of South Carolina’s Forestry Sector, 2017*). Oconee County ranks 45st statewide in delivered value of timber sold, with a harvested timber delivery value exceeding \$4.7 million (*S.C. Forestry Commission, Value of SC’s Timber Delivered to Mills in 2017*). South Carolina forest products go to many places including international destinations.

Table 8-9. Top 10 S.C. Forest Products Markets, 2016*

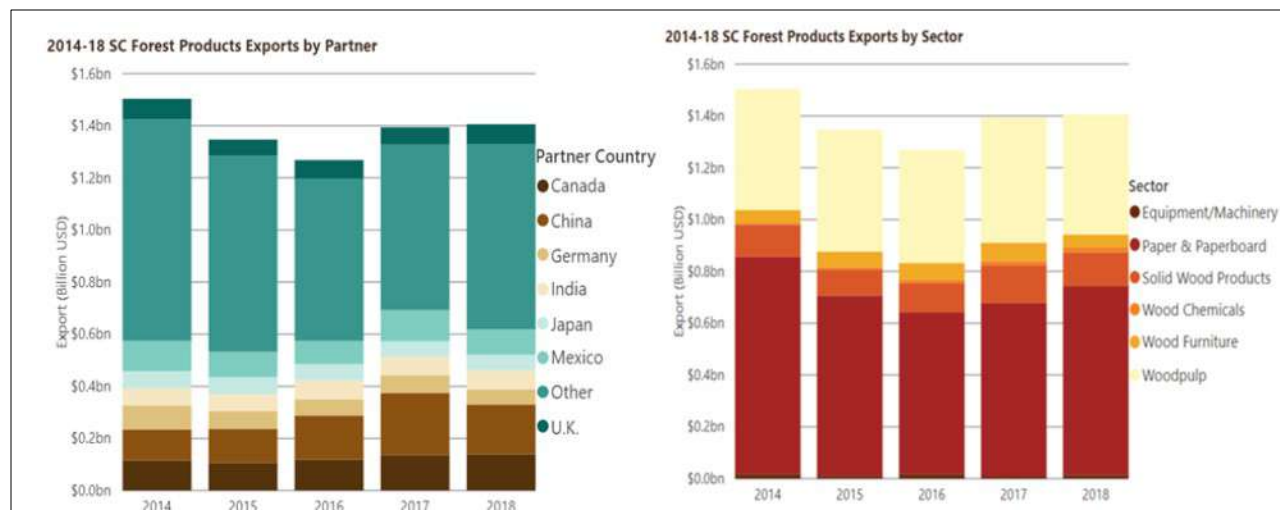
Rank	Wood-based chemical products	Solid wood products	Wood Pulp	Paper and paperboard	Paper manuf. machinery	Furniture	Prefabricated buildings
1	Finland (13)	China (0)	China (0)	Canada (0)	Poland (11)	Russia (0)	Chile (11)
2	Korea, South (1)	Canada (0)	India (2)	United Kingdom (2)	Canada (-1)	Thailand (3)	Spain (10)
3	China (-2)	India (0)	Japan (-1)	Germany (0)	Malaysia (0)	Canada (-1)	Canada (-1)
4	Brazil (-2)	Australia (0)	Mexico (3)	Mexico (-2)	Germany (0)	Egypt (2)	Bahamas (-1)
5	Canada (2)	Japan (1)	Korea, South (0)	China (0)	Argentina (11)	Germany (-1)	China (7)
6	Thailand (-2)	United Kingdom (2)	Italy (0)	Italy (0)	Mexico (-4)	Malaysia (2)	Romania (6)
7	Mexico (1)	Vietnam (0)	Colombia (3)	Ecuador (1)	Australia (2)	India (0)	Australia (5)
8	Kuwait (6)	Bangladesh (10)	Poland (-5)	India (1)	Colombia (-2)	China (3)	Korea, South (4)
9	India (-3)	Pakistan (1)	Netherlands (-1)	Netherlands (11)	Brazil (6)	Brazil (1)	Colombia (3)
10	Netherlands (-1)	Korea, South (2)	Belgium (1)	Egypt (9)	Netherlands (11)	Australia (19)	France (-6)

Legend: Asia | Europe | Central/South America & The Caribbean | North America | Oceania | Africa

* 2015-2016 ranking changes are shown in parentheses

Source: S.C. Forestry Commission, South Carolina Forest Products Industry Export Report: 2016

Figure 8-10. Forest Export by Partner and by Sector, 2014 to 2018



Source: S.C. Forestry Commission, South Carolina Forest Products Exports: 2018

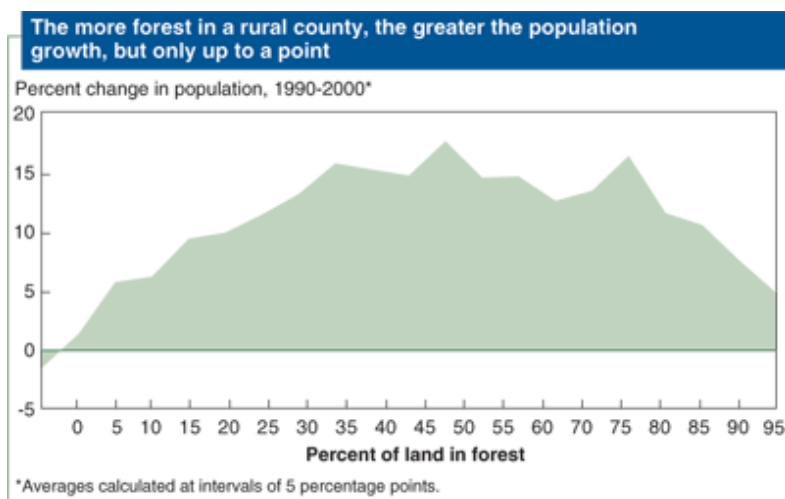


In addition to providing commercial wood-based products, forestland is productive in many other ways. It converts carbon dioxide into oxygen, provides shade to help mitigate hot summer temperatures, serves as critical habitat and food sources for many wildlife and plant species, lessens wind impacts, and conserves water and reduces stormwater impacts by filtering pollutants and aiding groundwater recharge. In light of these benefits, the South Carolina Forestry Commission works with communities across the state to develop urban forestry programs to promote the conservation and re-establishment of forests in developed areas.

Forestland and tree canopy also contribute significantly to the character of Oconee County. Studies conducted by the USDA Economic Research Service indicate that forestland is a compelling factor for where people choose to live.

Tree canopy has a positive impact on community appearance and forests are important recreational resources. State-level data recently released by the S.C. Forestry Commission indicate that forest-based recreation contributes \$1.6 billion annually to the state’s economy.



Figure 8-11. Relationship Between Forestland and Population Growth

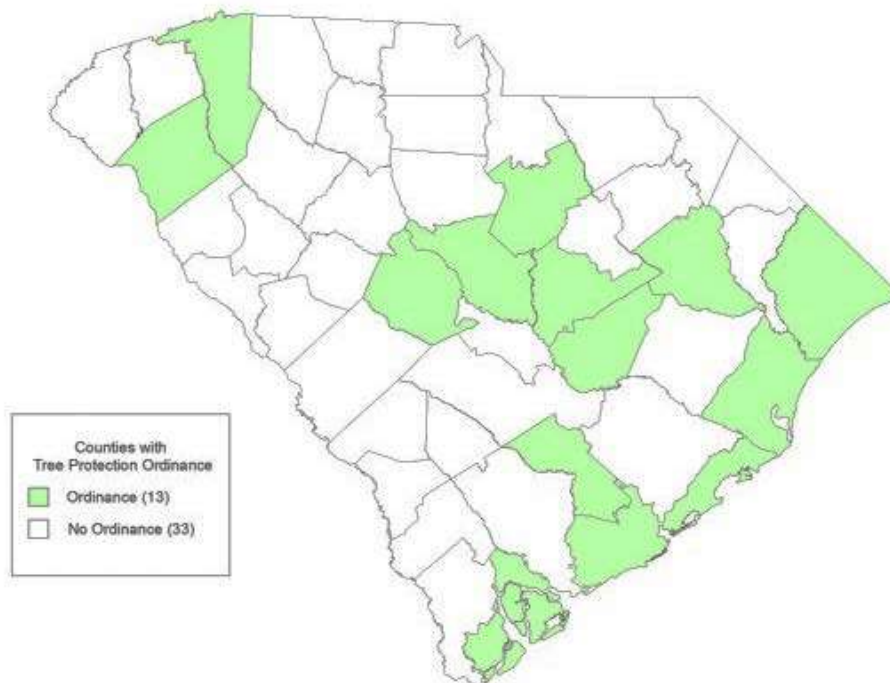
Source: USDA, Economic Research Service, "Farm Programs, Natural Amenities, and Rural Development," February 1, 2005

1. Threats to Forestry

There are many threats to forestlands such as clearing, grubbing, and grading for development, insect infestations and disease, invasive species, inadequate forestry management, and fire. Historically, the greatest loss in forestland occurred when land was cleared for farming. This trend reversed as a result of incentives that encourage the conversion of farmland into forests. Urbanization is now the primary cause of deforestation in South Carolina. The South Carolina Forestry Commission is working with communities across the state to develop urban forestry programs that protect remaining forestland and encourage the re-establishment of forests and tree canopies in urban areas.



Source: Clemson University

Map 8-2. Counties with Tree Protection Ordinances

Source: South Carolina's Forest Resource Assessment and Strategy (Forest Action Plan)
<http://www.trees.sc.gov/scfra.htm>

Wildfire is a threat to all South Carolina forestland and the urban areas which it abuts. On average, the South Carolina Forestry Commission fights 3,000 forest fires across the state each year. Nearly all are human-related, meaning that humans directly caused or indirectly contributed to fire creation or spread.

Forests contain “fuels” that are highly flammable, including any natural material, living or dead, that will burn. Common fuels include leaf litter, limbs, pine straw, and certain species of shrubs and trees that ignite easily. The greatest area of wildfire concern is in the wildland-urban interface, where development abuts forestland. Wildfires in and adjacent to developed areas present many challenges, not the least of which is access to the fire through developed sites. Business owners and residents often unwittingly provide fuel for fires by using of one or more of the fuels mentioned above in site landscaping. The South Carolina Forestry Commission works with communities to develop community wildfire protection plans to lessen risk to buildings and forestland. Plans provide an assessment of risk and a list of mitigation measures that can be undertaken to minimize wildfire risk. The goal of the Commission is to have as many “fire-adapted” communities in South Carolina as possible. A fire-adapted community is one in which the citizenry is informed, prepared, and taking action to reduce wildfire-related incidents.

South Carolina has many communities that are recognized nationally through the Firewise USA program established and managed by the National Fire Protection Association where residents are actively reducing wildfire risks. Ten of the 33 communities currently listed are in Oconee County including:

- Keowee Key (2006)
- Wynward Pointe (2007)
- Lake Yonah (2009)
- Keowee Harbours (2009)
- Chickasaw Point (2009)
- Waterford Pointe (2009)
- Waterford (2010)
- Beacon Shores (2015)
- Port Santorini (2016)
- Emerald Pointe (2017)



Funding for the USDA Forest Service's National Fire Plan is available through grants to communities wishing to implement a fuels mitigation and educational program. The International Code Council has also created an *International Wildland-Urban Interface Code* to assist communities interested in using regulation to help reduce wildfire risk.

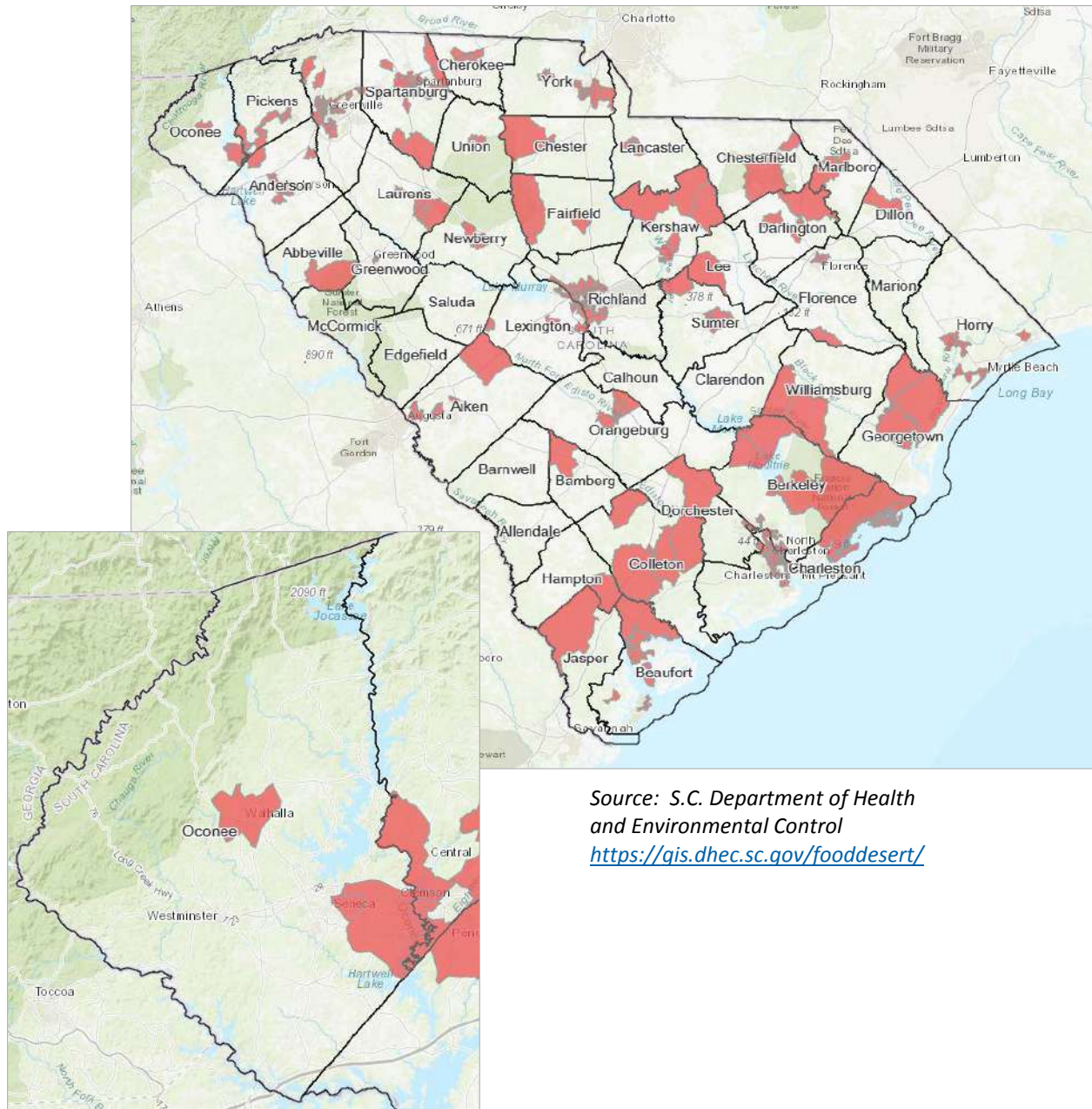
D. FOOD SECURITY

Food access is a critical element of community prosperity and security and should be an integral feature of planning at regional, county, community, and neighborhood levels. Successfully addressing food security requires cooperation and coordination from the public, private, and non-profit sectors, and collaboration with a variety of entities including retailers, transit services, and non-profits focused on healthy food education and childhood nutrition. Collaborative efforts to identify potential funding sources to address needs are also needed.

The lack of access to a variety of fresh and healthy foods can be a problem for many low-income and other transportation-challenged populations. The USDA Economic Research Service defines individuals lacking access as those who live more than one mile from a grocery store or supermarket. Low-income residents in areas without access to a grocery store who cannot raise their food and frequently lack reliable access to transportation often rely on neighborhood convenience stores which typically stock foods that are highly processed, high-caloric, and have a low-nutritional value. Children and the elderly are particularly vulnerable to food insecurity.

The USDA has mapped areas that lack access to fresh and healthy foods, known as food deserts. The S.C. Department of Health and Environmental Control has published the USDA map for the state. This map is shown in Map 8-3 along with a focused map of Oconee County.

Map 8-3. Food Deserts in South Carolina and Oconee County



Source: S.C. Department of Health and Environmental Control
<https://qis.dhec.sc.gov/fooddesert/>

Although these maps are based on 2015 data, there is little reason to believe food access has improved significantly since then. As the maps indicate, there are likely significant access issues around Walhalla and from Seneca to Pickens and Anderson counties.

Ensuring access to healthy food is both a land use and a transportation issue and requires a holistic approach to successfully address the problem. Such an approach can include increasing public transit; making sure land use policies allow a mix of uses in residential areas that allows grocery stores, farmers markets, and similar fresh food outlets; and educating citizens on



backyard gardening and food preservation to encourage a certain amount of self-sufficiency where possible. Land use policies that do not allow grocery stores and supermarkets in residential areas create food deserts. Being aware of where food deserts likely exist, as indicated by Map 8-3, and using that information to inform transit service routes is also vital since the market forces that drive retail location favor moderate and high-income areas over low-income communities.

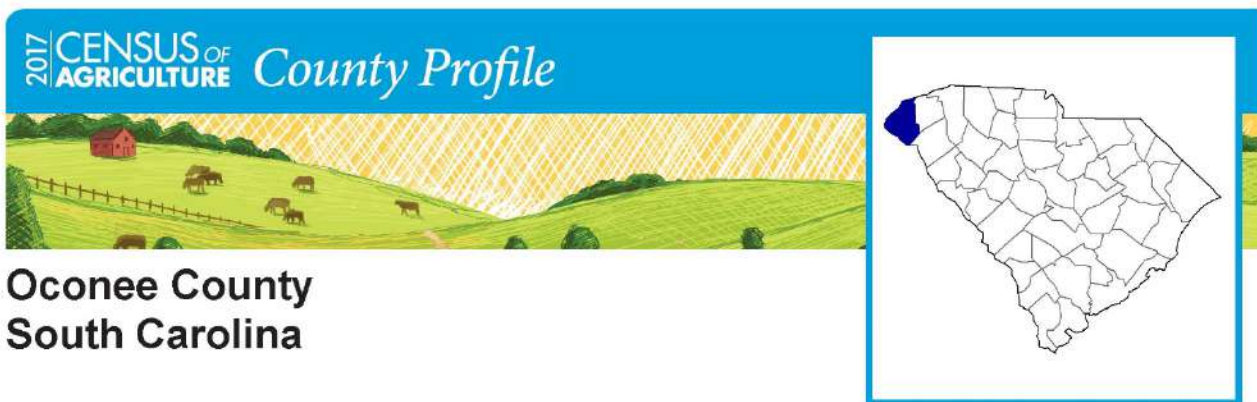
Many communities are turning to gardening as one solution for healthy food access. Backyard gardens may significantly improve healthy food choice. Community gardens are also becoming more popular across the country, as are subdivisions centered around gardens or small community farms, referred to as agrihoods. Some communities have also begun to plan edible gardens instead of ornamentals in public spaces. Gardening encourages physical activity and provides the benefits associated with other outdoor activities. The National Recreation and Park Association now offers advice on how to integrate gardening (backyard, community, public) into parks and recreation programs for children and adults. These programs teach important skills including food preservation.

There is a growing movement centered on eating locally grown and produced foods. To support this in Oconee County, the County should ensure it has no unnecessary barriers that restrict accessory processing on farms and in commercial areas (e.g. jams, jellies, wine, pickles), encourage farmer's markets and farm stands, work cooperatively to link producers with retail consumers (restaurants, bars, etc.) as part of a broader economic development strategy, and assist with marketing local farm products.

Food security can be a much larger problem and impact many more people than shown on Map 8-3 during natural disasters and other emergencies that affect transportation systems and food production. Few emergency management plans currently address food access and security, but more communities are beginning to add this very critical link. In 2010, the National Association of State Departments of Agriculture (NASDA), in cooperation with USDA's Food Safety Inspection Service (FSIS), the Food and Drug Administration (FDA), and the Department of Homeland Security (DHS) developed best practices and guidelines for state and local emergency response efforts for incidents involving the nation's food supply. Oconee County can request state assistance in developing a local food security and response element for the County's Emergency Preparedness Plan. It should also coordinate planning, prevention, and response efforts regionally since disasters and emergencies frequently affect multiple jurisdictions at one time.



Source: S.C. Farm Bureau



Oconee County South Carolina

Total and Per Farm Overview, 2017 and change since 2012

	2017	% change since 2012
Number of farms	815	-8
Land in farms (acres)	62,499	-8
Average size of farm (acres)	77	(Z)
Total	(\$)	
Market value of products sold	159,422,000	+31
Government payments	635,000	+66
Farm-related income	1,901,000	+34
Total farm production expenses	111,850,000	+6
Net cash farm income	50,107,000	+185
Per farm average	(\$)	
Market value of products sold	195,609	+42
Government payments (average per farm receiving)	4,736	-31
Farm-related income	10,562	+16
Total farm production expenses	137,240	+15
Net cash farm income	61,481	+209

5 Percent of state agriculture sales

Share of Sales by Type (%)

Crops	3
Livestock, poultry, and products	97

Land in Farms by Use (%)^a

Cropland	30
Pastureland	34
Woodland	30
Other	6

Acres irrigated: 390

1% of land in farms

Land Use Practices (% of farms)

No till	9
Reduced till	4
Intensive till	6
Cover crop	8

Farms by Value of Sales

	Number	Percent of Total ^a
Less than \$2,500	361	44
\$2,500 to \$4,999	135	17
\$5,000 to \$9,999	104	13
\$10,000 to \$24,999	73	9
\$25,000 to \$49,999	39	5
\$50,000 to \$99,999	26	3
\$100,000 or more	77	9

Farms by Size

	Number	Percent of Total ^a
1 to 9 acres	102	13
10 to 49 acres	378	46
50 to 179 acres	248	30
180 to 499 acres	74	9
500 to 999 acres	11	1
1,000 + acres	2	(Z)



United States Department of Agriculture
National Agricultural Statistics Service

www.nass.usda.gov/AgCensus



Oconee County
 South Carolina, 2017
 Page 2

2017 CENSUS OF AGRICULTURE *County Profile*

Market Value of Agricultural Products Sold

	Sales (\$1,000)	Rank in State ^b	Counties Producing Item	Rank in U.S. ^b	Counties Producing Item
Total	159,422	4	46	709	3,077
Crops	4,582	37	46	2,406	3,073
Grains, oilseeds, dry beans, dry peas	981	32	46	2,124	2,916
Tobacco	-	-	13	-	323
Cotton and cottonseed	-	-	31	-	647
Vegetables, melons, potatoes, sweet potatoes	470	26	46	986	2,821
Fruits, tree nuts, berries	745	11	45	548	2,748
Nursery, greenhouse, floriculture, sod	1,043	27	41	843	2,601
Cultivated Christmas trees, short rotation woody crops	26	16	31	452	1,384
Other crops and hay	1,316	29	46	1,625	3,040
Livestock, poultry, and products	154,840	1	46	286	3,073
Poultry and eggs	148,903	1	45	77	3,007
Cattle and calves	3,850	9	46	1,852	3,055
Milk from cows	(D)	18	26	(D)	1,892
Hogs and pigs	40	18	44	1,182	2,856
Sheep, goats, wool, mohair, milk	53	17	46	1,702	2,984
Horses, ponies, mules, burros, donkeys	674	5	46	307	2,970
Aquaculture	(D)	2	22	(D)	1,251
Other animals and animal products	42	13	45	1,056	2,878

Total Producers ^c	1,343
Sex	
Male	854
Female	489
Age	
<35	123
35 – 64	821
65 and older	399
Race	
American Indian/Alaska Native	6
Asian	4
Black or African American	25
Native Hawaiian/Pacific Islander	1
White	1,301
More than one race	6
Other characteristics	
Hispanic, Latino, Spanish origin	22
With military service	162
New and beginning farmers	377

Percent of farms that:	
Have internet access	75
Farm organically	(Z)
Sell directly to consumers	7
Hire farm labor	19
Are family farms	98

Top Crops in Acres ^d	
Forage (hay/haylage), all	11,240
Soybeans for beans	1,892
Wheat for grain, all	1,344
Corn for grain	601
Barley for grain	(D)
<hr/>	
Livestock Inventory (Dec 31, 2017)	
Broilers and other meat-type chickens	7,242,210
Cattle and calves	14,672
Goats	707
Hogs and pigs	404
Horses and ponies	950
Layers	49,766
Pullets	(D)
Sheep and lambs	356
Turkeys	21

See 2017 Census of Agriculture, U.S. Summary and State Data, for complete footnotes, explanations, definitions, commodity descriptions, and methodology.
^a May not add to 100% due to rounding. ^b Among counties whose rank can be displayed. ^c Data collected for a maximum of four producers per farm.
^d Crop commodity names may be shortened; see full names at www.nass.usda.gov/go/cropnames.pdf. ^e Position below the line does not indicate rank.
 (D) Withheld to avoid disclosing data for individual operations. (NA) Not available. (Z) Less than half of the unit shown. (-) Represents zero.

USDA is an equal opportunity provider, employer, and lender.





Additional Resources (If you are interested)

<http://www.healthyfoodaccess.org/node/46376>: has basic info and good links.

<https://www.carolinafarmstewards.org/>: organic farming info

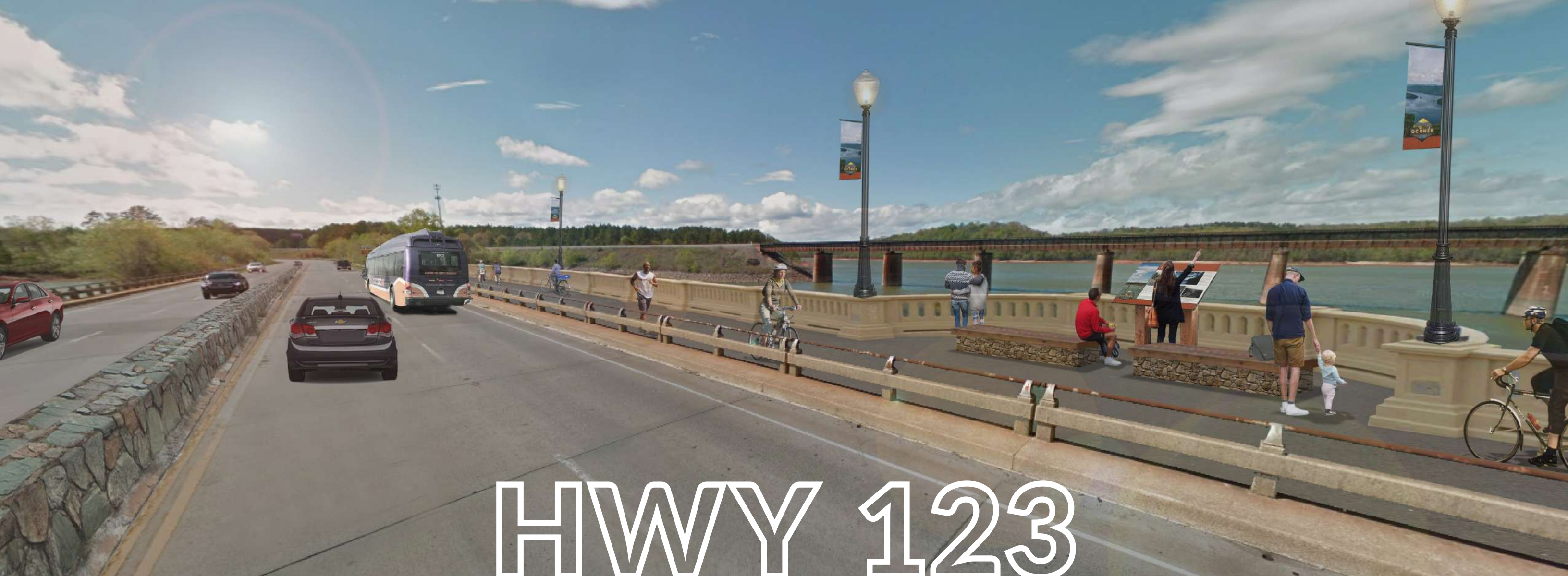
http://www.scfoodaccess.com/uploads/2/3/0/2/23029886/hffi_statewide_report.pdf: has some policies/actions that might be worth repeating, although there are many references to SNAP and I don't know how that will play in OC.

<http://newsstand.clemson.edu/mediarelations/clemson-extension-working-to-eliminate-food-deserts-through-feeding-innovation-program/>: very recent article

https://www.farmlandinfo.org/sites/default/files/Henderson_2020_Plan-13_Agriculture_Element_1.pdf: Henderson County (NC) ag element

<https://www.farmlandinfo.org/planning-agriculture/about-planning-agriculture>: Many links to other ag plans/elements

<https://www.farmlandinfo.org/policies-programs/protect-farm-and-ranch-land>: same website as above just different good info on easements etc.



HWY 123 CORRIDOR STUDY

OCONEE COUNTY
JUNE 2019



Acknowledgments

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Executive Summary

Highway 123 serves a multitude of roles for Oconee County. It is the primary connector between Seneca and Clemson, it is the gateway to both Oconee County and Clemson, and it has businesses that serve the residents and visitors to Oconee County and the Lake Hartwell and Lake Keowee area. Over time, the corridor has transitioned from this primary use to also being an extension of Clemson, with a growing number of projects for

student housing, hotels, and retail establishments on the eastern end of the corridor. In addition, there is much interest in development and redevelopment within the corridor all the way to Seneca. This change in context along the corridor requires that the County consider how the road needs to adapt to these changing uses.

This study examines opportunities along Hwy 123 between Seneca and Clemson. Hwy 123, also

known as Clemson Blvd, SC-28, and US-76, is a four-lane divided highway. Its original purpose was to provide a regional link between the activity hubs of Seneca and Clemson. The corridor has seen new development and redevelopment which has induced more trips to Hwy 123, rather than just *along* it. Understanding this coming growth can help Oconee County better prepare and have a say in how it manifests. There is

also demand for walking and biking infrastructure for people who wish to access transit, or the businesses along Hwy 123 on foot or bike. This study focuses on ways to maintain the easy regional connections the corridor is currently known for, while also supporting multimodal travel and making it easier and safer to access the destinations along Hwy 123.

The ideas presented here are the result of a visioning exercise that

included over 120 community members and stakeholders, including Hwy 123 property owners and residents, and several staff from organizations that have a stake in the success of Hwy 123. These individuals participated in a three-day design workshop that included a steering committee meeting, fieldwork, open studio hours, presentations to the County Council and the County Planning Commission, and a final design

pin-up. Over the course of these sessions, participants were asked to share their thoughts on the corridor, ranging from practical day-to-day concerns, to their “wild and crazy” ideas if their were not constraints. These concerns have been distilled into the desired outcomes listed above, which drive the infrastructure and policy recommendations in this report.

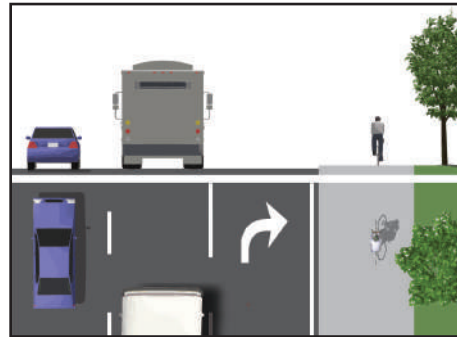
DESIRED OUTCOMES

The corridor has seen new development and redevelopment which has induced more trips to Hwy 123, rather than just along it. Understanding this growth can help Oconee County better prepare and have a say in how it manifests. These desired outcomes describe the future residents and visitors envision for Hwy 123.



Oconee County maintains and strengthens its identity as a rural, natural place

Gateway features at the county line and the Seneca city limits will reinforce local character.



It is easy to travel between Seneca and Clemson

Maintain Hwy 123’s role as the fastest route between Seneca and Clemson by implementing operational improvements and managing traffic impact of new development.



People feel safe using Hwy 123

Provide separated shared use path for people on foot or bike, and turn lanes or access roads for vehicles accessing adjacent parcels.



Ease of access to the businesses and neighborhoods along Hwy 123

Turning lanes and access roads will provide space for vehicles to transition from the 55-MPH roadway to adjacent parking and circulation for commercial activity. A streamlined signage policy could also improve legibility of the corridor.



People have several viable options of how to travel between Seneca and Clemson

Walking and biking options can be expanded with a shared use path along Hwy, a utility corridor greenway, and separated crossings at critical links. New designated bus stops will make transit service more intuitive and comfortable.

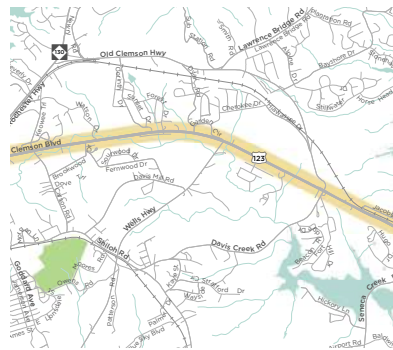
CHAPTER 1

The Process

This process was organized as a participatory design workshop focused on idea-sharing and empowering the local community to be the designer for the Highway 123 corridor. Over 120 people participated in this three-day workshop from March 18th - 20th to build a community-driven vision for improvements along Highway 123. The workshop focused on strategies to improve safety and mobility for all travel modes along Highway 123 between Seneca and Pickens County. The program included several opportunities for community members to share their ideas for the corridor, including a steering committee meeting, fieldwork, open studio hours, presentations to the County Council and the County Planning Commission, and a final design pin-up. This process created space for meaningful discussion about the role of the corridor and imagining how that role could shift with time and respond to the changes in context that have already and are expected to occur.

What we did

PRE-WORKSHOP



Research

The process began with researching the existing conditions along the corridor. This included compiling data, studying previous county plans, and conducting a remote analysis of the study extents.

DAY ONE



Fieldwork

A boots-on-the-ground analysis of existing conditions was conducted. Oconee County planning staff joined the consultant team to highlight recent and future change.



Stakeholder Workshop

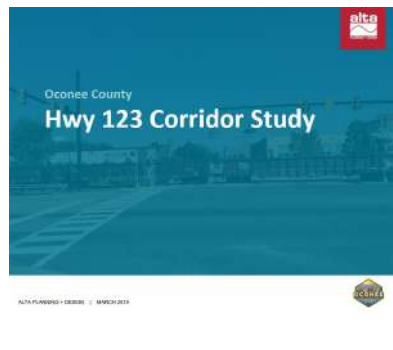
Twelve staff from Oconee County, its municipalities, surrounding municipalities, and other local agencies came together for a workshop to brainstorm strengths, weaknesses, opportunities and threats to the corridor. The Steering Committee also shared their “big ideas” for Hwy 123, which inspired discussion about meaningful change.



Planning Commission Workshop

The design team presented to the Planning Commission on the evening of day one. Roughly 50 members of the public attended the meeting to participate in the workshop that took place following the presentation. This group included residents of the neighborhoods around Hwy 123 and property and business owners who rely on the access Hwy 123 provides. Like the Steering Committee, the public shared their thoughts on strengths, weaknesses, opportunities, and threats to the corridor, as well as their “big ideas”.

DAY TWO



County Council Presentation

On the evening of day two, the design team presented the analysis done thus far and some potential solutions based on the community’s feedback. The County Council voiced their support for this kind of proactive assessment. The Council’s support for this plan is paramount in order to move forward with the recommendations.

DAY THREE



Open Design Studio

On both day two and day three, the team held open design studio hours from 10:00 am to 12:00 pm. The studio was open to the public to view the work that was done and in progress, and to have discussion about the corridor. Roughly 20 people attended the studio, with participants there for nearly the full two hours each day.



Open Design Pin-Up

The final program open to the public was a design pin-up, held on the evening of day three. The maps and workshop materials from the previous two days were presented, along with posters showing renderings of potential solutions. Community member attendance included Hwy 123 property and business owners, as well as citizens from around the county.



Left: Fliers were passed out and posted around the County for one month in advance of the workshop to let people know about the project.

Right: Local media were involved throughout the process, with coverage in the The Journal, online, and in both local radio stations.

Who we heard from

100+ residents and stakeholders, including:

- Oconee County staff
- Oconee County Council members
- Oconee County Planning Commission
- People who drive along Hwy 123 regularly
- Residents of the neighborhoods along Hwy 123
- Developers
- Property Owners
- Business owners
- CATbus transit staff
- City of Seneca
- South Carolina Department of Transportation
- City of Clemson
- Oconee County Economic Alliance

The workshop consisted of key County staff and the Alta team developing preliminary recommendations in an open studio environment. Staff and stakeholders were invited to provide input and participation at key meeting times and were able to actively participate or drop-in to the open studio work sessions.



What we heard

From Steering Committee

- Easy access between Seneca and Clemson
- Safety is a priority
- Too many curb cuts/ driveways
- Decelerating / stopped vehicles in the right lane cause safety concerns
- More multimodal options: potential for walking/ biking infrastructure; formalize bus stops
- Big ideas! Traffic circles, elevated crossings, express/local/HOV lanes, transit lanes in the median

From Planning Commission and Public

- Beautification
- Shortest trip between Seneca and Clemson
- Right turn lanes that have been put in help vehicular traffic – would like to see more
- Will development/growth bring increased traffic?
- Speeding is a concern. Speed limit is difficult to enforce.
- Bus stops
- Big ideas! Water taxis, elevated crossings, bypass, no left turns except at lights, flying cars



“Turning lanes for new development”

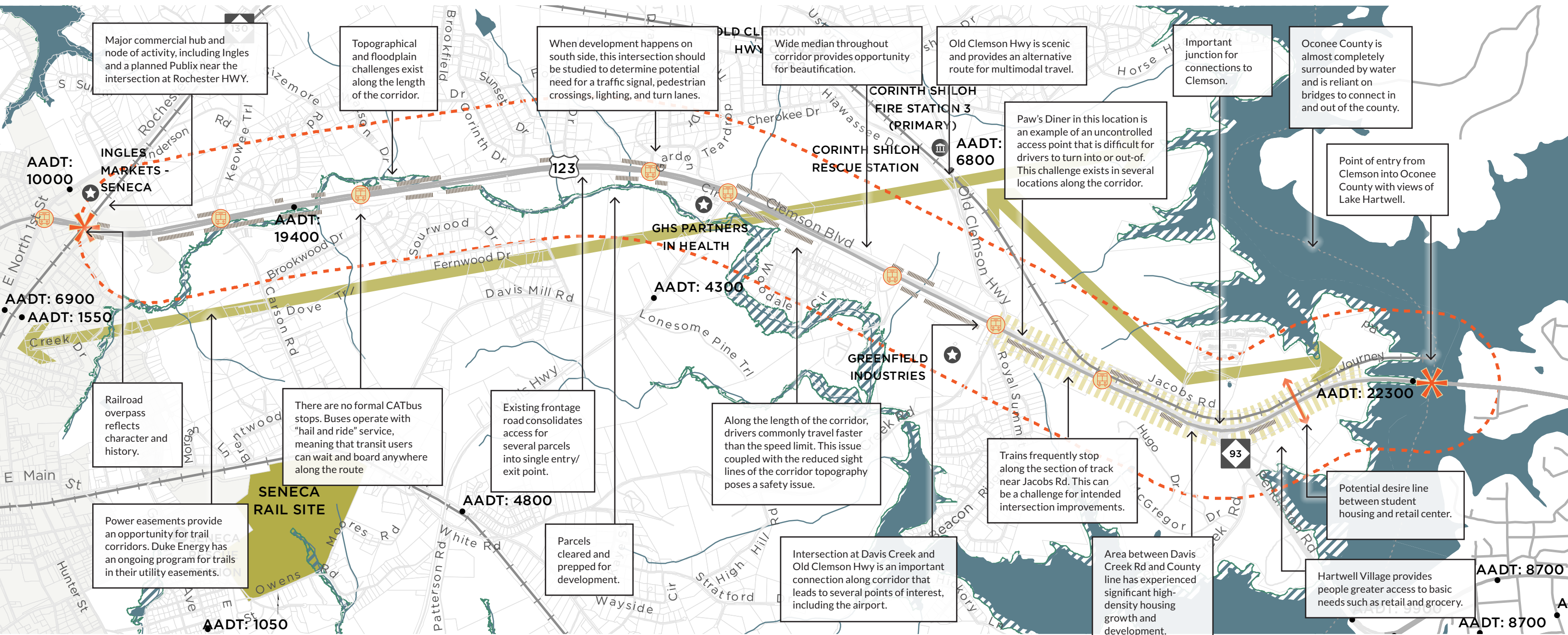
“Consolidate bus stops into safe locations”

CHAPTER 2

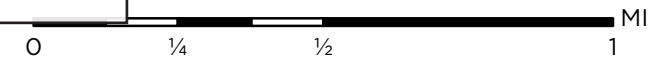
The Corridor

The study area for this project extends 4.86 miles from the eastern city limits of Seneca to the Pickens County line at Lake Hartwell. This is a highway that is a divided roadway, owned and maintained by the South Carolina Department of Transportation (SCDOT). SCDOT stated their willingness to work with the county to make Hwy 123 work at the local level, as well as at the regional level. The area historically has rural character and little development. The rural character remains, but growing development interest in the adjacent parcels will affect the way people use it.

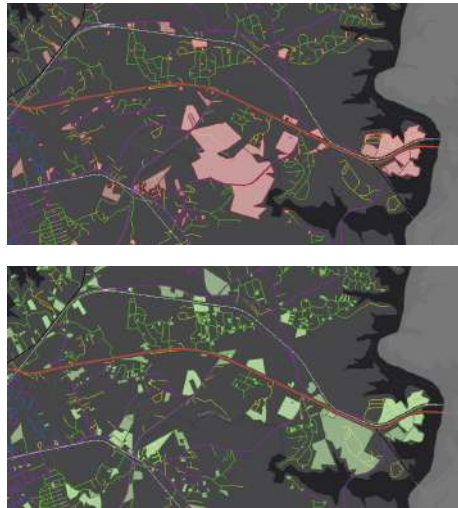
The Corridor Today



- ★ Top 20 Employers
- Ⓜ Government Facilities
- 🚗 Frequent pick up point for CATbus
- ↔ Utility Corridor
- ⋯ Approximate guard rail locations
- ↔ Important connection
- ⊞ Study Corridor - ¼ mi buffer
- ▨ 1% Annual Chance Floodzone
- ✳ Point of entry/exit
- ▨ Recent growth area; development anticipated to continue



Opportunities



Growth

The Hwy 123 corridor is one of the largest current growth areas for the county given its proximity to Clemson and the fact that there are very few development controls in this area. The maps above show the recently closed construction permits (top) and open construction permits (bottom) showing that the growth is concentrated in the east end of the corridor. Recent and imminent projects include Epoch, a student housing complex that will be home to nearly 1,000 students. Right across the street from Epoch, there is a new commercial development—Hartwell Village—that features a grocery store, clothing, fast food, a hotel, and other shops. **Understanding this coming growth can help Oconee County better prepare and have a say in how it manifests.**



Point of Entry/Exit for Oconee County

Because the County is almost completely surrounded by water, there are limited access points into the County; Hwy 123 is one of them. The corridor should welcome residents and visitors, letting them know that they are entering a place blessed with abundant natural resources and rural charm.



Parallel Utility Corridors

Two power easements run somewhat parallel to Hwy 123. Easements like these often make good candidates for greenways. Duke Energy, who owns these corridors in part, has a program for creating public facilities in their easements and has done this type of project elsewhere.



Right-of-way Space

The current paved roadway and median consume roughly 80 feet of the overall 260-foot right of way. SCDOT would not have to acquire right of way from private property owners if they wanted to do enhancements in that space.



Access to retail and healthy food options

Commercial centers along the corridor offer access to goods and services, including three major grocery stores with a fourth planned near Rochester Hwy in Seneca. This allows Oconee County residents and visitors to purchase affordable food, restaurants, major employers, and other retail. Hartwell Village opened in 2018, further expanding the retail near Lake Hartwell. Connecting these resources with facilities for walking and biking, of which there are currently none, could help improve access.

Constraints



Limited Travel Options

Hwy 123 currently works well for those driving vehicles, but it lacks accommodations for those on foot or bike. The corridor does have CATbus operating as hail-and-ride service, meaning that there are no dedicated bus stops and buses stop without significant warning to other drivers. Transit riders must wait in the grass shoulder and buses pull over wherever the riders are waiting, unless it is deemed unsafe due to grades or other factors.



Safety

Hwy 123 is one of the top 15 crash corridors in the County. The road has a 55 mph speed limit, and the lack of shoulders or turn lanes makes it difficult for drivers to pass buses slowing down to pick up passengers, or other vehicles slowing down to turn.



Environmentally Sensitive Areas & Topography

Although the right-of-way extends far beyond the edge of the existing roadway, there are many places where environmental and topographical constraints exist immediately adjacent to the road. This could also be considered a strength in terms of managing the pace of development and growth along the corridor.



Parallel Railroad

There is a Norfolk Southern rail line that runs parallel to Hwy 123 for a stretch between Clemson and the Old Clemson Hwy intersection. This poses a challenge to connecting to the north side of the corridor, and presents some safety concerns where those connections exist.



Game Day Traffic

Hwy 123 is one of the key routes used for people going to and leaving Clemson University football games. While this only occurs seven times per year, it is something to be considered with any potential changes.

CHAPTER 3

The Planning Context

This study does not exist in a vacuum. Oconee County has studied Hwy 123 and the area around it many times before. Previous plans relevant to Hwy 123 include the 2010 Comprehensive Plan, the ongoing Comprehensive Plan Update (2030), Oconee County Roadway Collision and Fatality Research (2018), and Destination Oconee (2016). This previous analysis informs the recommendations in this study.

2010 Comprehensive Plan

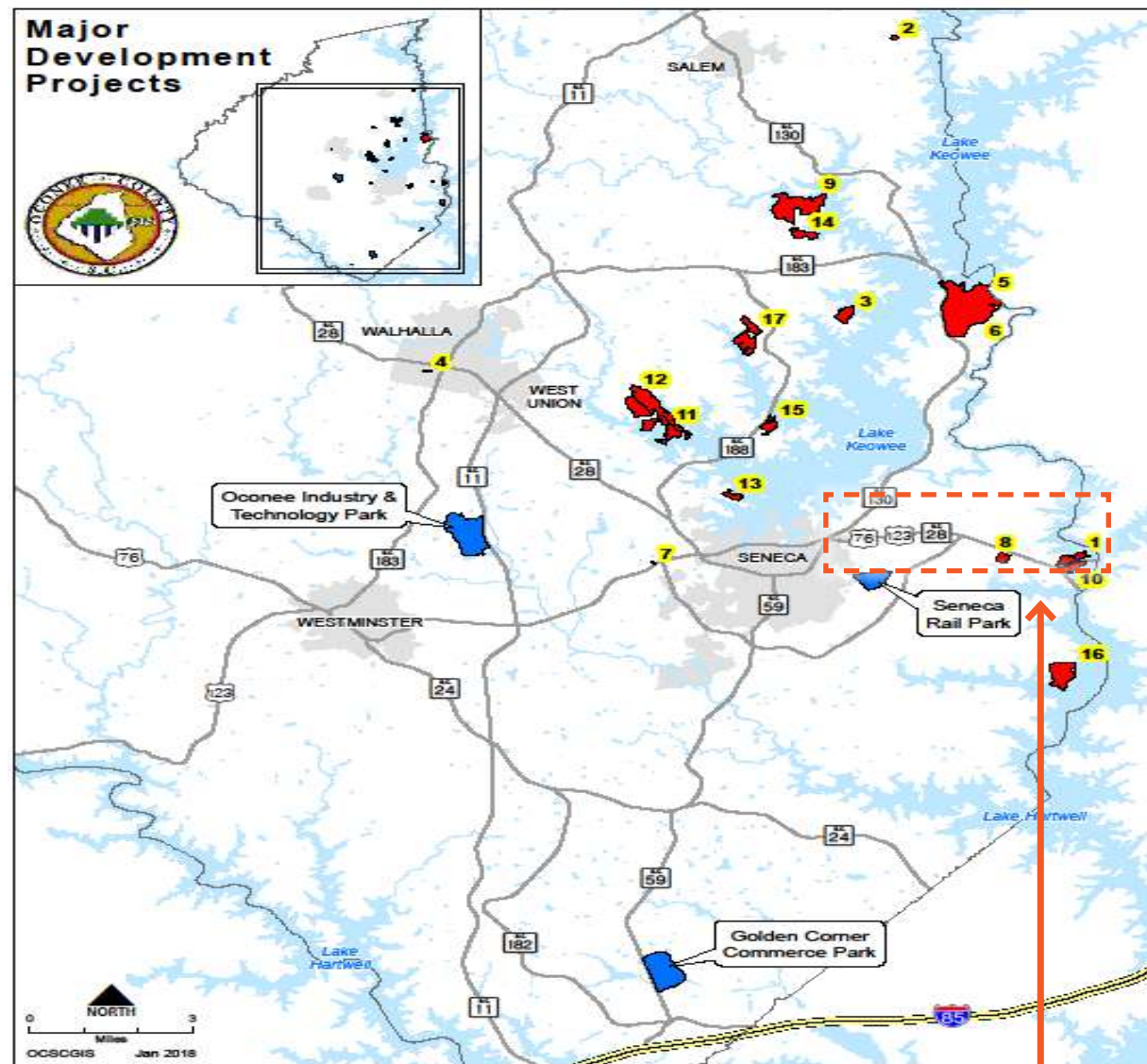
This Project presents an opportunity to further several of the transportation goals stated in the 2010 Comprehensive plan:

Work to upgrade road system in a manner that provides safe and efficient routes throughout the county, while limiting the negative impacts on sensitive areas.

Support the expansion of mass transit in Oconee County.

Encourage the expansion of bicycle and pedestrian routes in appropriate areas.

The Major Development projects map from the 2010 comprehensive Plan shows that even ten years ago, Hwy 123 had several major development projects planned.



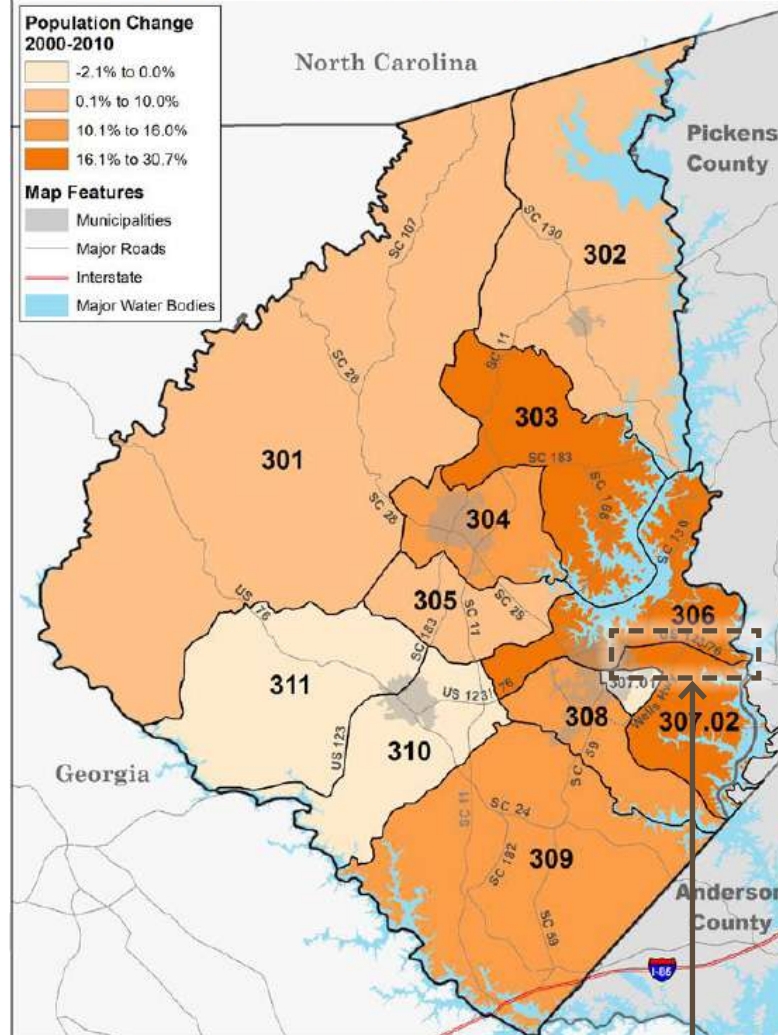
HWY 123
Study Area

2030 Comprehensive Plan

The Oconee Comprehensive Plan is currently being developed, with completion scheduled for late 2019. The Current draft of the Population analysis presents the following relevant findings:

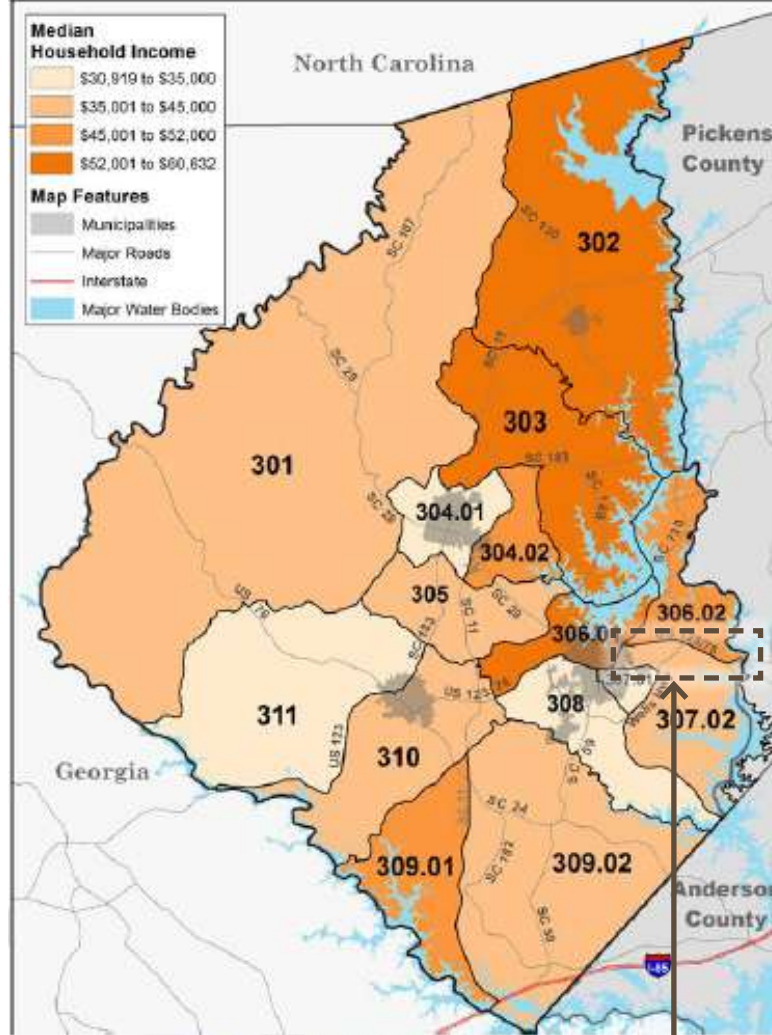
- Hwy 123 is one of the parts of the county that **experienced relatively high growth rates** from 2000-2010 (see map 2-2)
- Neighborhoods around Hwy 123, particularly in the western part of this study area, have **lower median income** (see map 2-6) and **higher minority populations** (see map 2-5) than other parts of the county. These findings prompt the necessity to understand the corridor based on the needs of the surrounding population.

Map 2-2. Population Change by Census Tract 2000 to 2010*



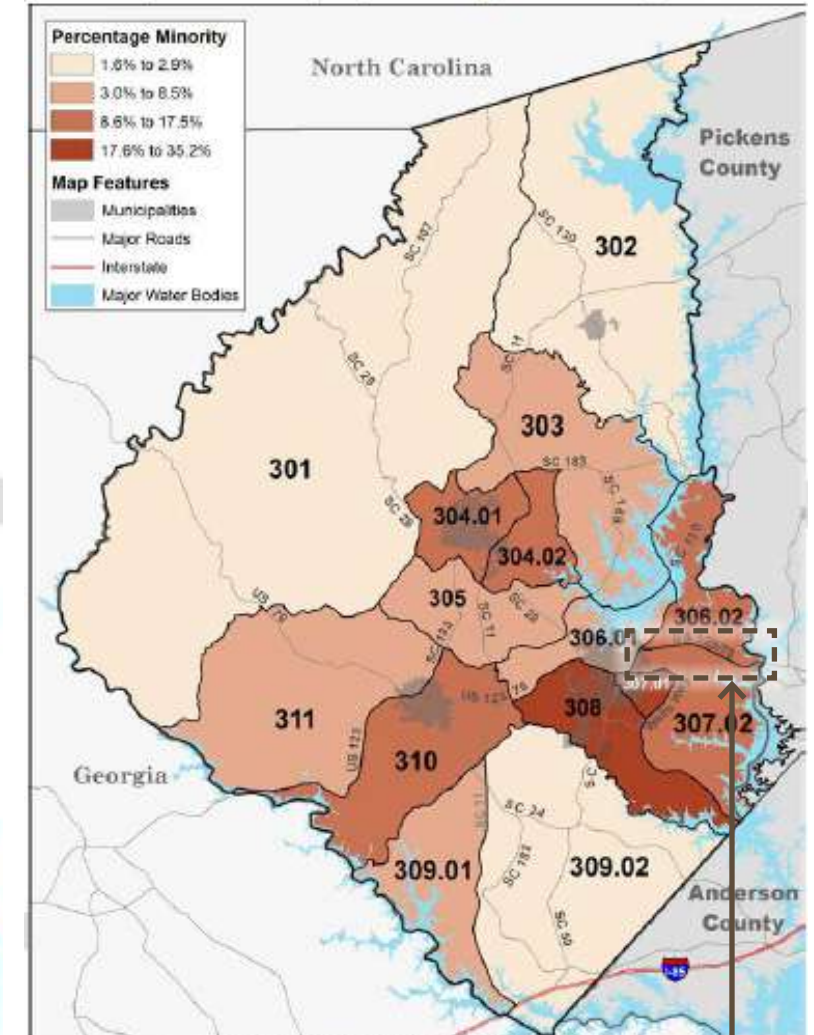
*Based on 2000 Census Tract Boundaries
Source: U.S. Census Bureau, 2000 and 2010

Map 2-6. Median Household Income by Census Tract, 2016



Source: U.S. Census Bureau, 2012-2016 ACS

Map 2-5. Minority Population by Census Tract, 2016



Source: U.S. Census Bureau, 2012-2016 ACS

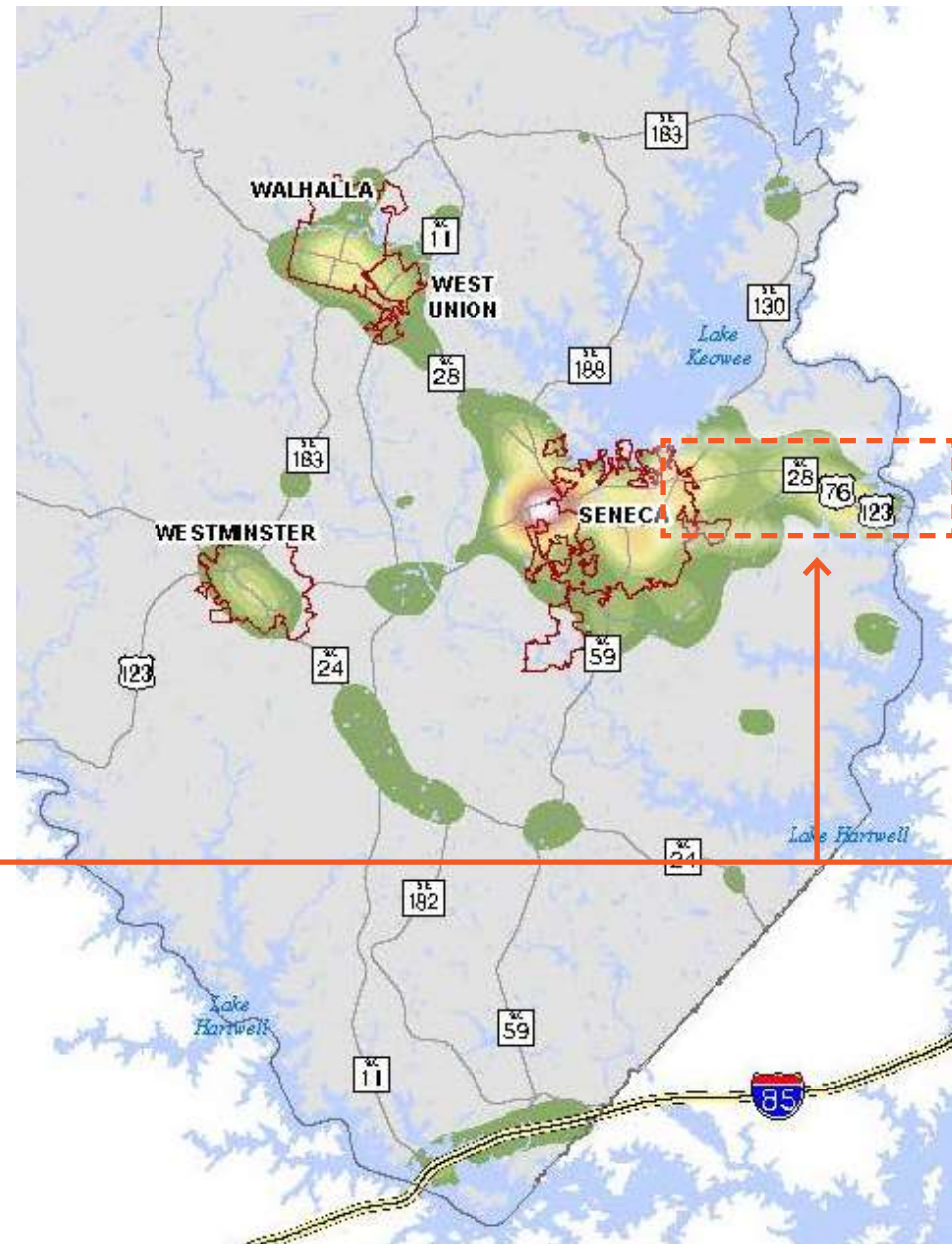
HWY 123
Study Area

Oconee County Roadway Collision and Fatality Research (2018)

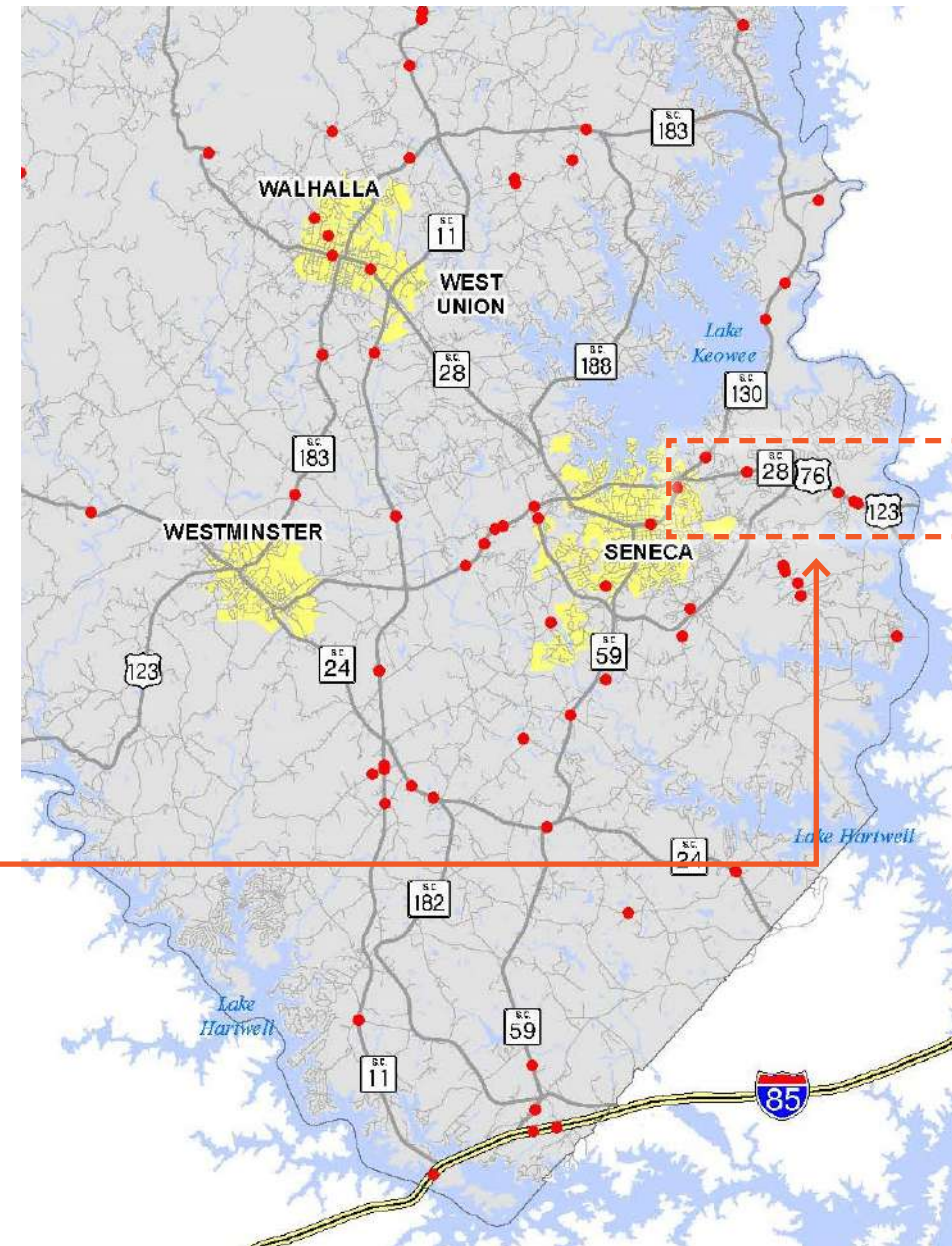
In 2018, Oconee County Planning Department undertook an internal crash analysis and identified Hwy 123/US-76/SC-28 as three of the top fifteen crash corridors in the county. This study focuses on the area where these routes all come together. The crash heat map is included to the right.

There have been several fatal crashes along the Corridor since 2015. This indicates the need to not only reduce the number of collisions, but the severity of those collisions.

HWY 123
Study Area



Collision Heat Map, January 2012 - December 2017
Source: SC Department of Public Safety



Fatal Collisions, January 2012 - December 2017
Source: SC Department of Public Safety

Destination Oconee (2016)

Destination Oconee describes a unified brand and identity for Oconee County. It also includes several signage concepts for Oconee County and its municipalities. These concepts could be used at the Oconee County and Seneca Gateways. Wayfinding signage could also be used to make new walking and biking infrastructure intuitive and to encourage use.



CHAPTER 4

Future Plan for Hwy 123 Corridor

The following infrastructure and policy concepts are born from the ideas and conversations shared during the workshop. They are a response to the community's concerns about how Hwy 123 is operating today, and how it will support the needs of the community in the future. These recommendations achieve the goals of improving safety, enabling a wider variety of transportation options, addressing critical links, and reflecting the character of Oconee County.

Infrastructure Recommendations



Corridorwide Improvements

INFRASTRUCTURE PROJECT A

Accessibility for Hwy 123 Corridor: Construct shared use path along one or both sides of Hwy 123)

INFRASTRUCTURE PROJECT B

Install right turn lanes to mitigate impact of new development



Potential Bus Stop Locations

INFRASTRUCTURE PROJECT C

Work with CATbus to identify locations for designated **bus stops** with pedestrian access



Potential Area for Frontage Roads with New Development

INFRASTRUCTURE PROJECT D

Village Centers and Future Development: Construct consolidated access/ frontage roads with new development



Walking and Biking Bridge

INFRASTRUCTURE PROJECT E

The Gateway to Oconee County: Work with SCDOT to create walking and biking connection across Lake Hartwell



Gateway

INFRASTRUCTURE PROJECT F

The Gateway to Seneca: Install signage at city limits



Walking and Biking Tunnel

INFRASTRUCTURE PROJECT G

Walking and biking tunnel underneath rail line



Utility Corridor Greenway

INFRASTRUCTURE PROJECT H

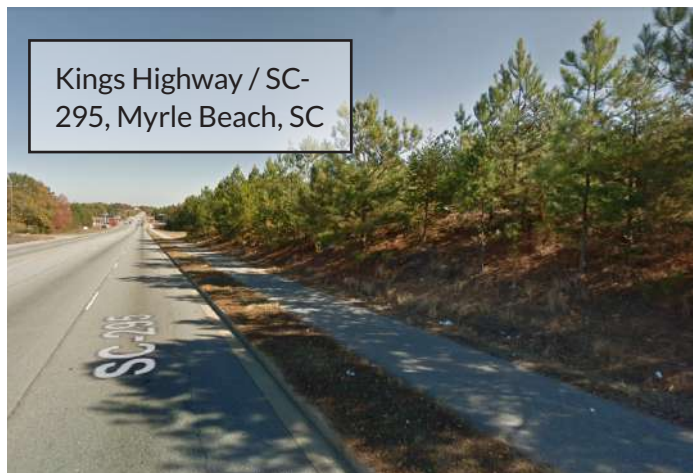
Utility Corridor Greenway: Work with Duke Energy to build greenway in power corridor



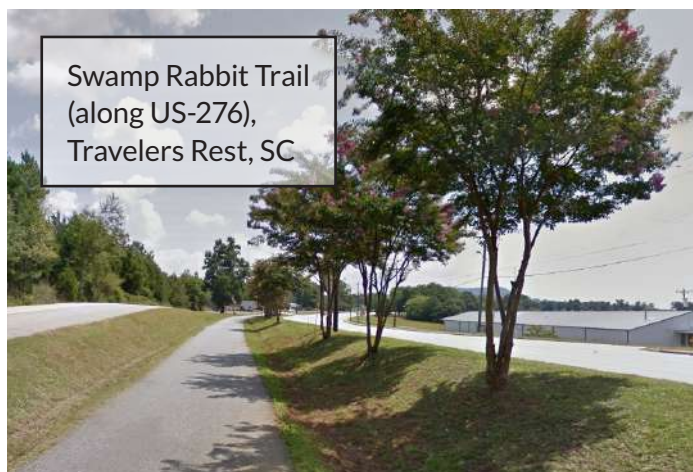
Accessibility for Hwy 123 Corridor

This design concept addresses one of the main concerns that were raised during the workshop: lack of dedicated infrastructure for people walking and biking. A shared use path could be construction on one or two sides of the street depending on destinations and topography.

Examples

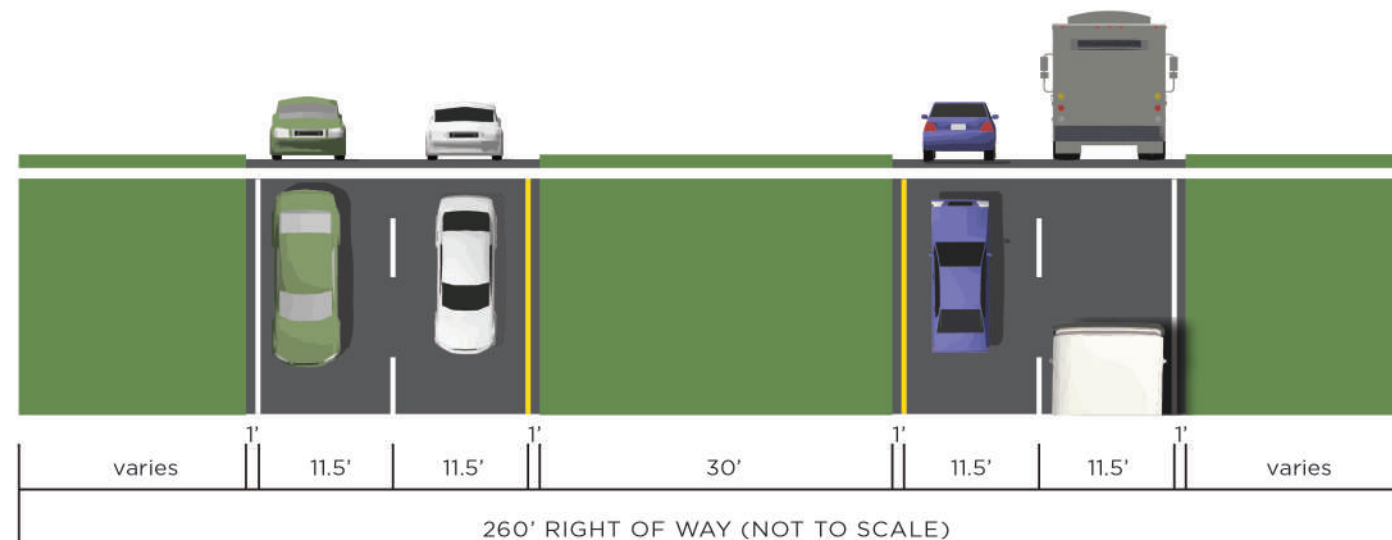


Kings Highway / SC-295, Myrtle Beach, SC

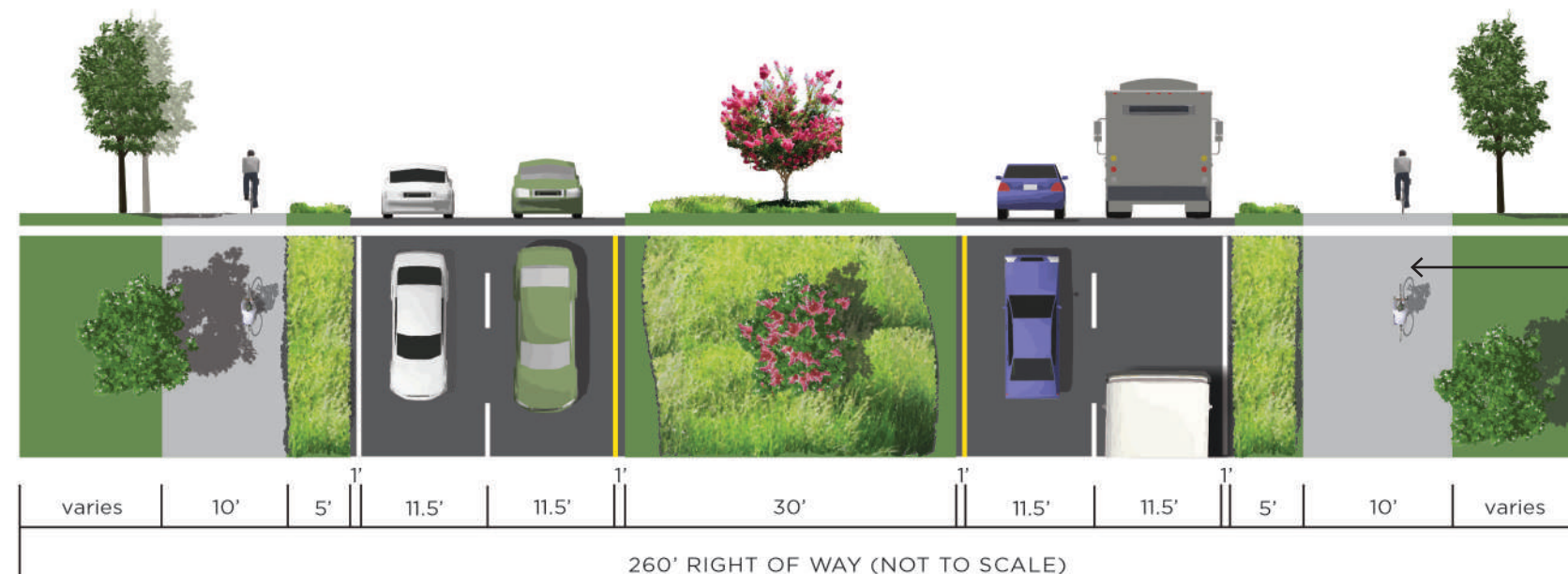


Swamp Rabbit Trail (along US-276), Travelers Rest, SC

Existing



Future Concept

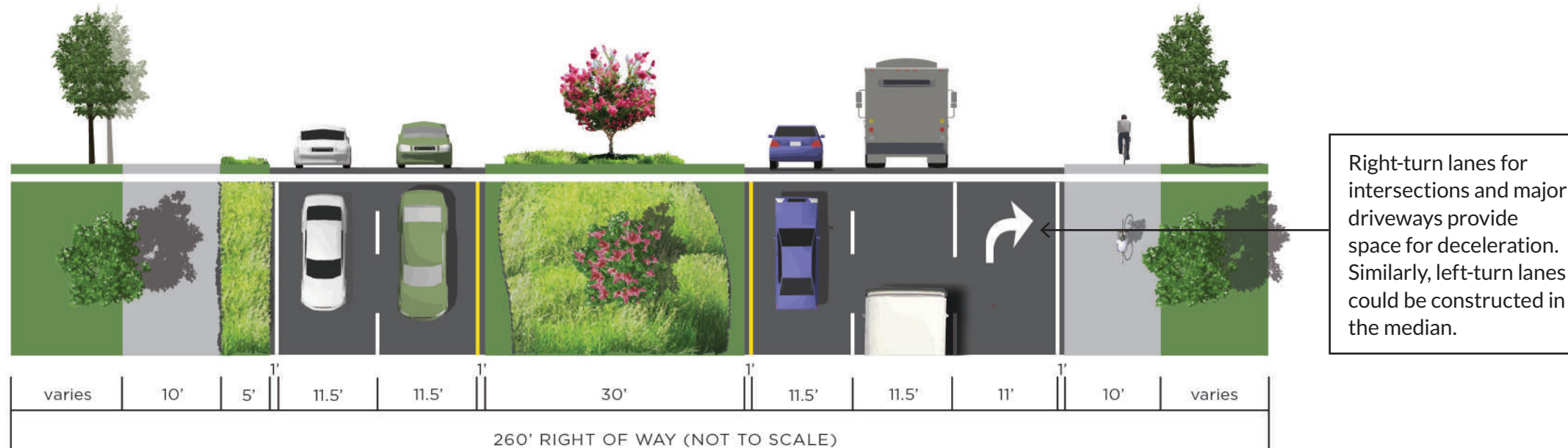


New separated path would offer transportation options for people who are interested in walking and biking. This improves safety for these people, and potentially may relieve congestion over the long term by reducing the proportion of trips that are made by vehicle.

Spot Treatments for Conflict Points

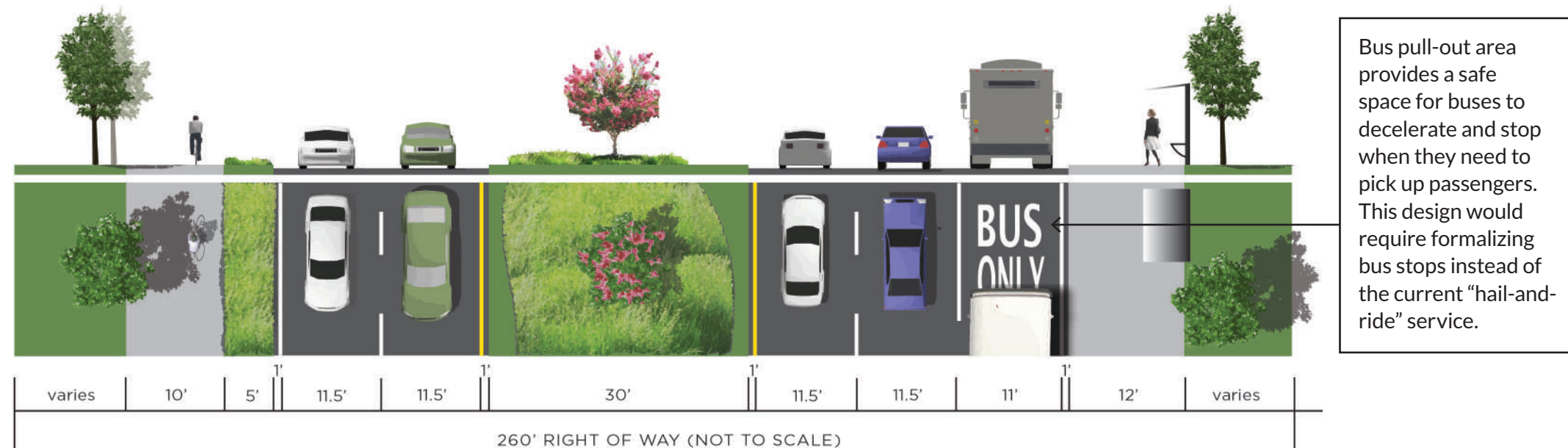
INFRASTRUCTURE PROJECT B

Install right turn lanes to mitigate impact of new development



INFRASTRUCTURE PROJECT C

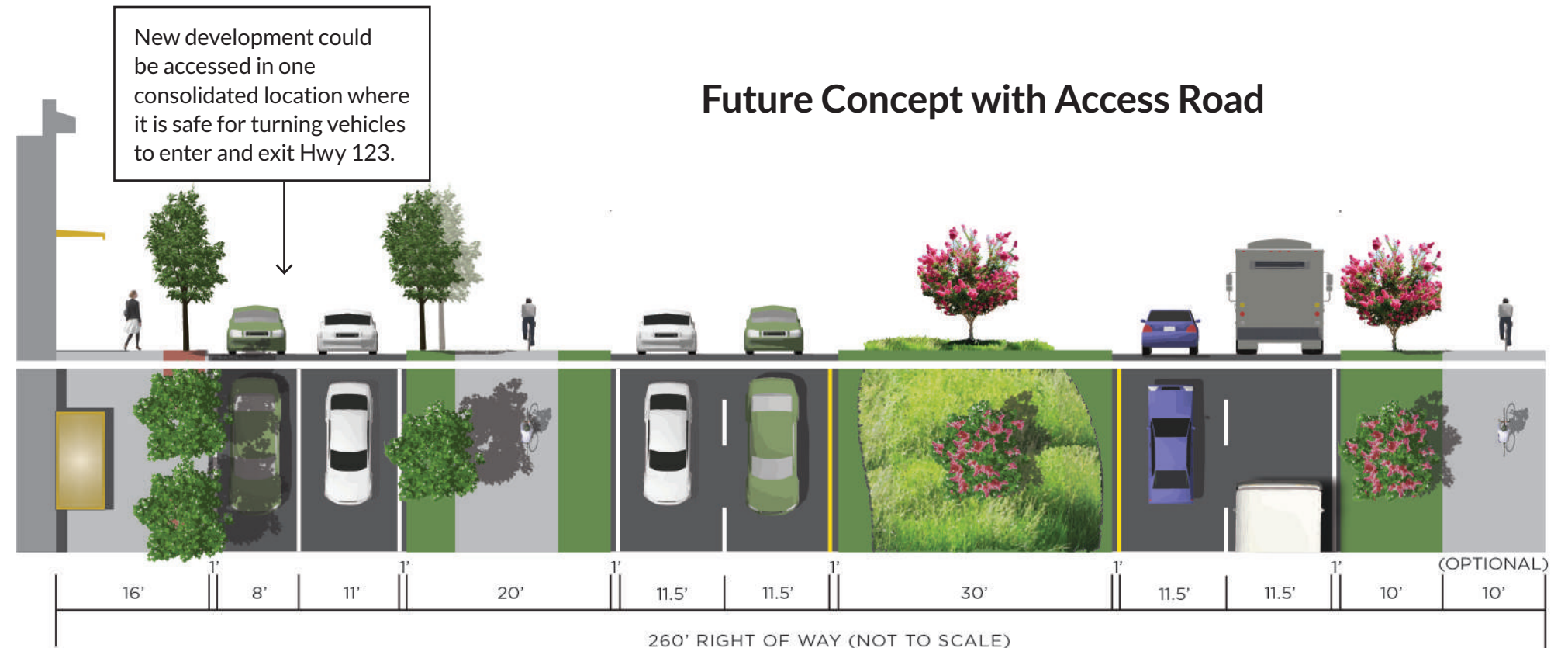
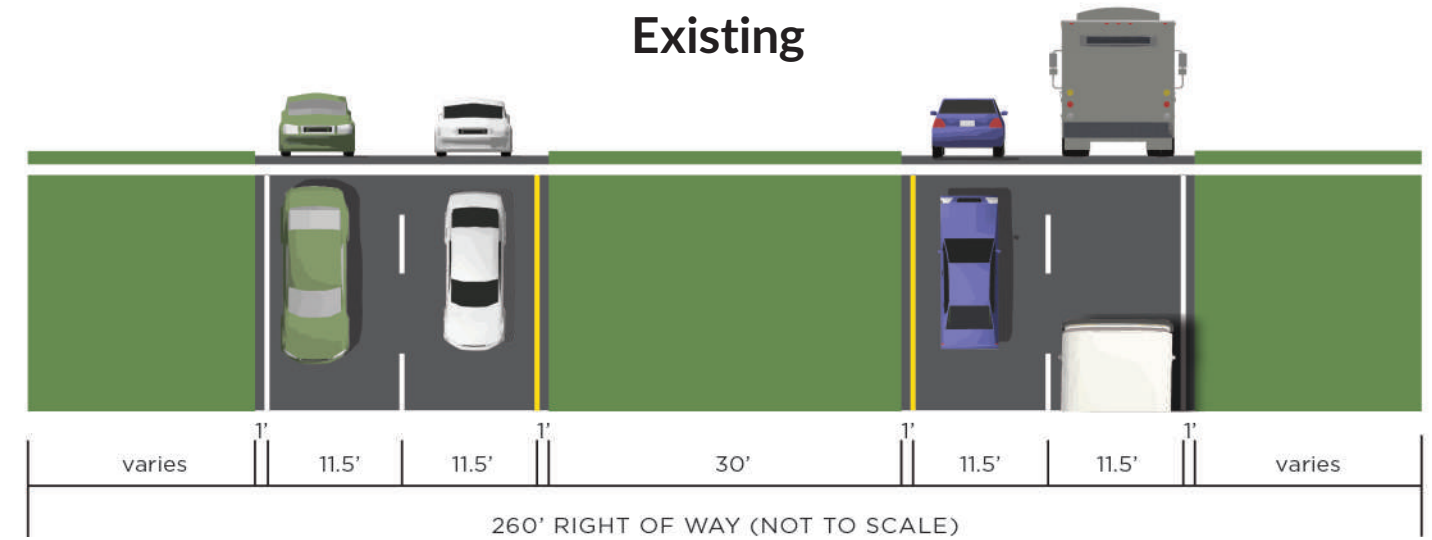
Work with CATbus to identify and create designated bus stops



Village centers and future development

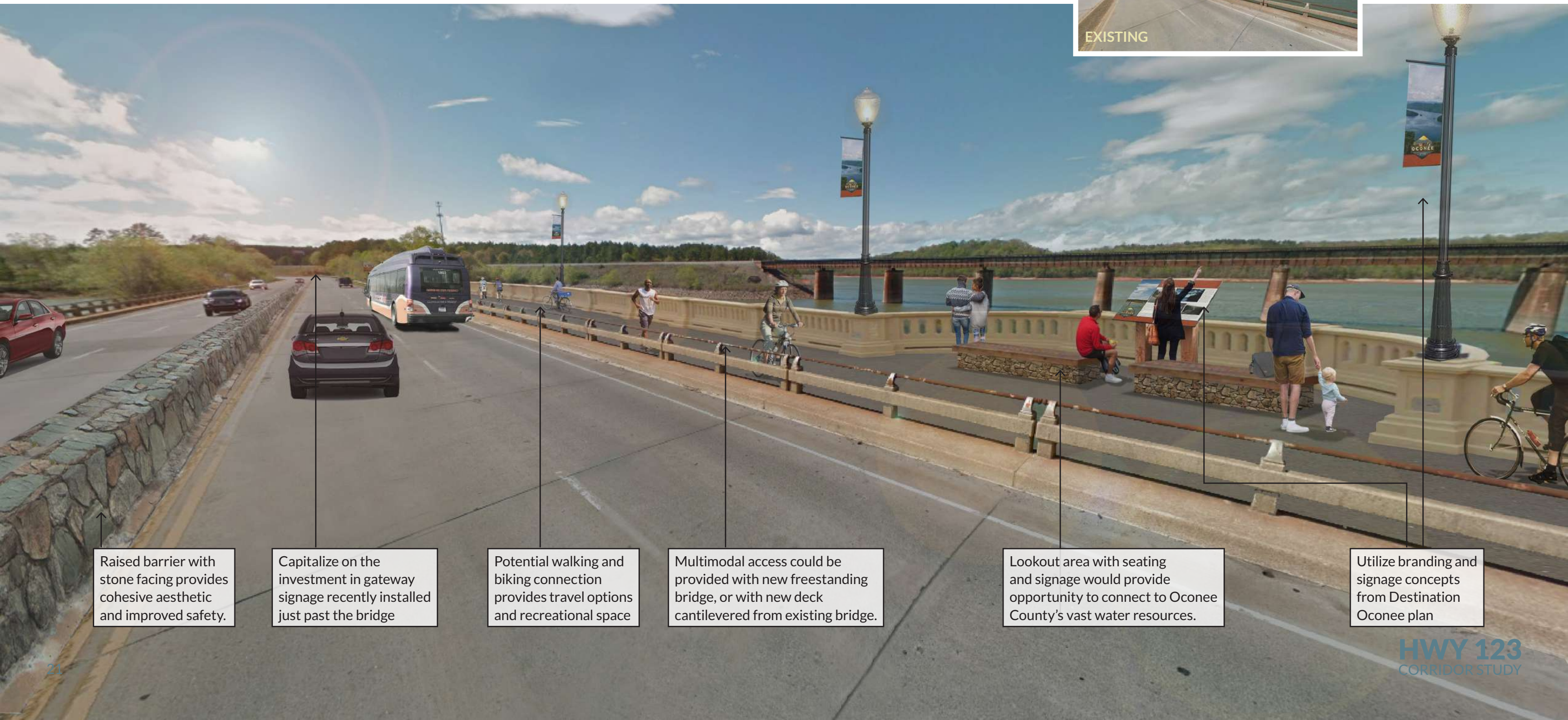
Community members shared they want to avoid a high concentration of curb cuts and driveways as new parcels get developed. A shared frontage or access road with accommodations for walking, biking, and parking would help alleviate these concerns and keep traffic moving smoothly through the middle of the corridor. Such a road exists along the corridor in Union Station. This strategy has been implemented successfully in many similar contexts.

Examples



Walking & Biking Bridge across Lake Hartwell

Oconee County relies heavily on bridges for regional connectivity because it is almost completely surrounded by water. The Hwy 123 bridge across Lake Hartwell to Clemson currently lacks accommodations for people on foot or bike. A multimodal connection would provide transportation options other than driving, potentially relieving congestion on the roadway itself.



Raised barrier with stone facing provides cohesive aesthetic and improved safety.

Capitalize on the investment in gateway signage recently installed just past the bridge

Potential walking and biking connection provides travel options and recreational space

Multimodal access could be provided with new freestanding bridge, or with new deck cantilevered from existing bridge.

Lookout area with seating and signage would provide opportunity to connect to Oconee County's vast water resources.

Utilize branding and signage concepts from Destination Oconee plan

The Gateway to Seneca

The railroad bridge across Hwy 123 already acts as a natural threshold into the City of Seneca. Formalizing this threshold as a gateway with signage, aesthetically cohesive materials, and intentional landscaping would reinforce the local brand and enhance sense of place.



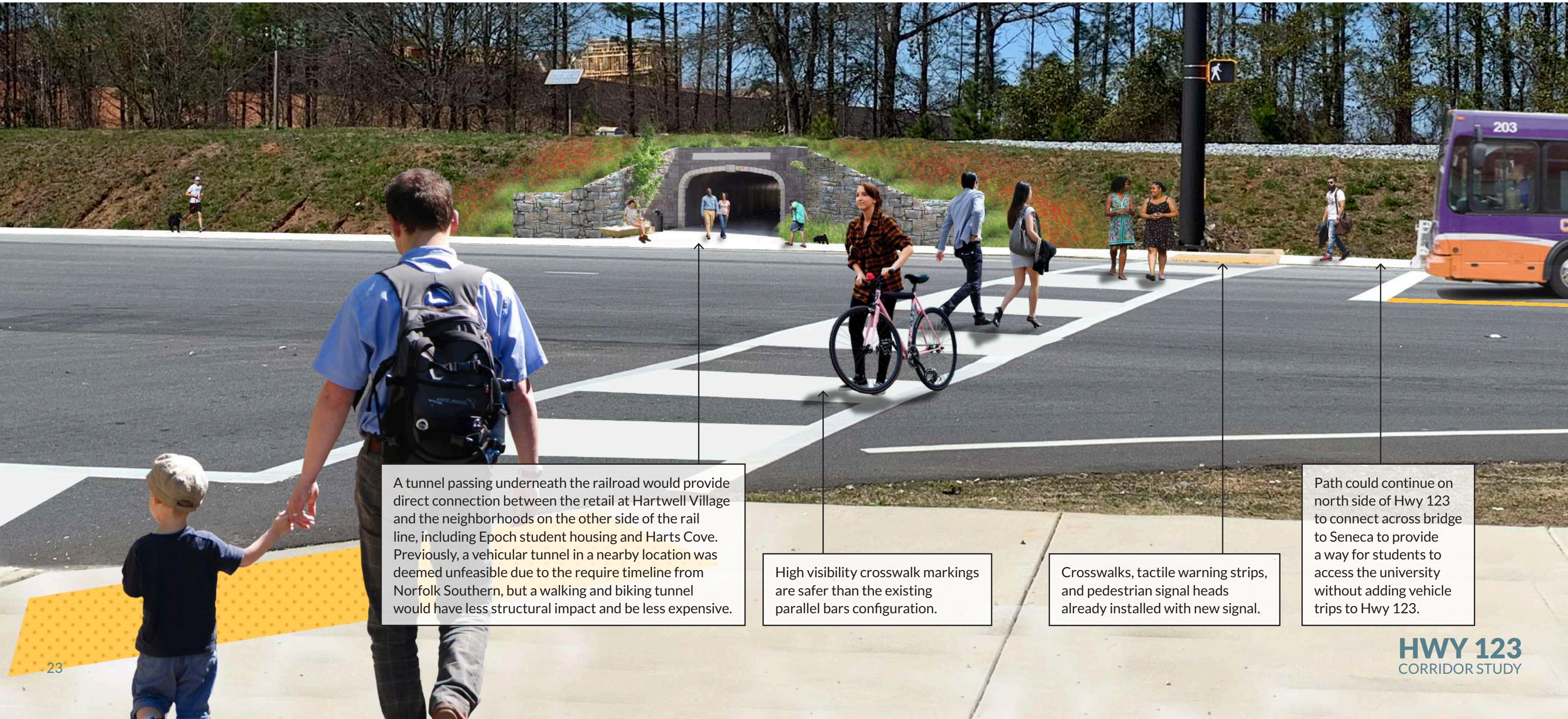
Utilize branding and signage concepts from Destination Oconee plan

Bridge face could be enhanced with simulated stone facing veneer with limited structural impact

Intentional landscaping to include native species and pollinators

Multimodal tunnel underneath rail line

Recent and ongoing development in the eastern end of the corridor continues to impact this area. New connections for people on foot and bike would relieve vehicular congestion on the Jacobs Rd intersection by allowing residents on the north side to access retail on the south side without driving.



A tunnel passing underneath the railroad would provide direct connection between the retail at Hartwell Village and the neighborhoods on the other side of the rail line, including Epoch student housing and Harts Cove. Previously, a vehicular tunnel in a nearby location was deemed unfeasible due to the require timeline from Norfolk Southern, but a walking and biking tunnel would have less structural impact and be less expensive.

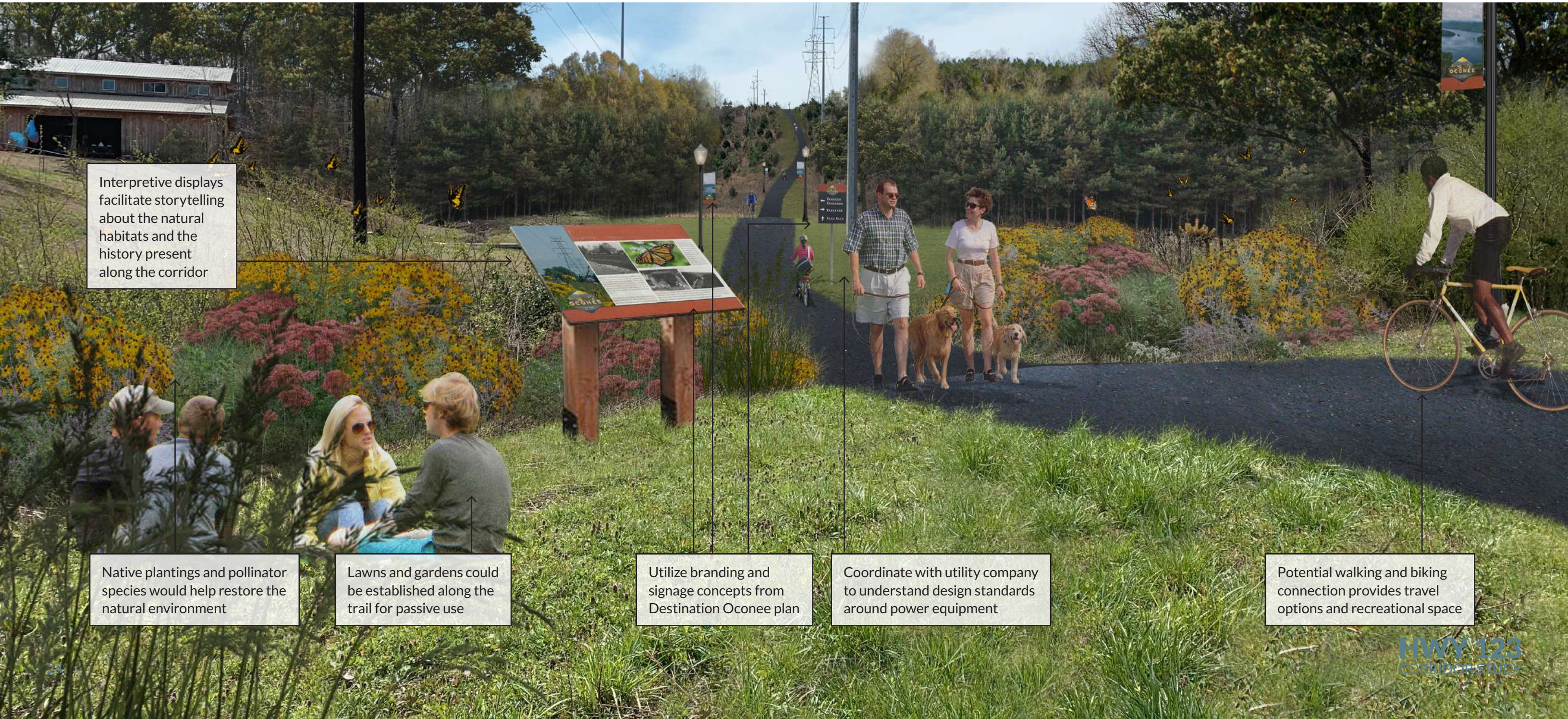
High visibility crosswalk markings are safer than the existing parallel bars configuration.

Crosswalks, tactile warning strips, and pedestrian signal heads already installed with new signal.

Path could continue on north side of Hwy 123 to connect across bridge to Seneca to provide a way for students to access the university without adding vehicle trips to Hwy 123.

Utility Corridor Greenway

Many examples across the Country highlight utility corridors being utilized for shared paths and green ways. An existing utility corridor runs more or less parallel to Hwy 123, ultimately connecting to the student housing development at Epoch. A potential shared use path in this corridor would provide transportation options away from the vehicular traffic on Hwy 123.



Interpretive displays facilitate storytelling about the natural habitats and the history present along the corridor

Native plantings and pollinator species would help restore the natural environment

Lawns and gardens could be established along the trail for passive use

Utilize branding and signage concepts from Destination Oconee plan

Coordinate with utility company to understand design standards around power equipment

Potential walking and biking connection provides travel options and recreational space

Policy Recommendations

	DESIRED OUTCOMES				
	It is easy to travel between Seneca and Clemson	Oconee County maintains and strengthens its identity as a rural, natural place	People feel safe using Hwy 123	Ease of access to the businesses and neighborhoods along Hwy 123	People have several viable options of how to travel between Seneca and Clemson
<p>POLICY PROJECT A Develop methodology to measure impacts of new development or redevelopment along corridor to establish thresholds where turn lanes/deceleration lanes would be required as a condition of development.</p>	Mitigates conflict between through traffic and others entering and exiting adjacent parcels		Slower traffic stays out of the through lane	Makes it easier to turn right or left into adjacent parcels	
<p>POLICY PROJECT B Look for opportunities to consolidate access through new or redevelopment by requiring or incentivizing sharing of driveways between adjacent parcels, or by implementing segments of access lane/frontage road to minimize new access points on Highway 123.</p>	Minimizes conflict points	Creates a “village center” environment, with slower access roads separate from the through lanes.	Minimizes conflict points	Creates a safe, intuitive and comfortable space to access adjacent parking and businesses.	Creates a safe place to walk and bike along new development
<p>POLICY PROJECT C Consider a corridor overlay district to allow architectural design standards, development review, and aggregation of density into clusters.</p>		Creates a framework for signage and other aesthetic elements for new development			Creates a policy framework to encourage pedestrian and bicycle facilities in new development
<p>POLICY PROJECT D Work with CATbus to transition from hail-and-ride service to formalized fixed route service with stops and pedestrian accommodations and access to facilities along the corridor.</p>	Allows buses to clear the through lane before slowing and stopping to load or unload passengers		Creates safer loading/unloading area for bus riders		Creates safer loading/unloading area for bus riders
<p>POLICY PROJECT E Develop a County policy stating the preferred or maximum number of allowable direct access points for parcels when they are submitted for development or redevelopment.</p>	Minimizes conflict points	Allows County to manage commercial growth	Minimizes conflict points		

Implementation Strategy

Infrastructure Implementation Strategy

INFRASTRUCTURE PROJECTS	Timeline	Lead agency	Partners	Cost estimate*
A Accessibility for Hwy 123: Construct shared use path along one or both sides of Hwy 123	5-10 yrs	SCDOT	Oconee County; adjacent property owners	\$\$\$
B Install right turn lanes to mitigate impact of new development	Incremental	Private property developers	Oconee County; SCDOT	\$
C Work with CATbus to identify locations for designated bus stops with pedestrian access (sidewalk or shared use path)	2-5 yrs	SCDOT	SCDOT	\$\$
D Construct consolidated access/frontage roads with new development	Incremental	Private property developers	Oconee County; SCDOT	\$\$
E Create multimodal connection across Lake Hartwell with Oconee County gateway	5-10 yrs	Oconee County	SCDOT; City of Seneca	\$\$\$
F Create gateway into Seneca	2-5 yrs	City of Seneca	Oconee County; Norfolk Southern; SCDOT	\$
G Construct walking and biking tunnel between Epoch/Harts Cove and Hartwell Village	5-10 yrs	Oconee County	Norfolk Southern; SCDOT; Epoch; Hartwell Village	\$\$\$

*Cost represents order-of-magnitude estimate relative to other projects in this study

Policy Implementation Strategy

POLICY PROJECTS	Timeline	Lead agency	Partners	Cost estimate*
A Develop methodology to measure impacts of new or redevelopment along corridor to establish thresholds where turn lanes/deceleration lanes would be required as a condition of development	1-3 yrs	SCDOT	Oconee County; private property owners/developers	\$
B Look for opportunities to consolidate access through new or redevelopment by requiring or incentivizing sharing of driveways between adjacent parcels, or by implementing segments of access lane/frontage road to minimize new access points on Highway 123	1-3 yrs	SCDOT	Oconee County; private property owners/developers; Oconee County Economic Alliance	\$
C Consider a corridor overlay district to allow architectural design standards, development review, and aggregation of density into nodes	2-5 yrs	Oconee County	Private property owners; Oconee County Economic Alliance	\$
D Work with CATbus to move from hail-and-ride service to formalized stops with pedestrian access facilities along corridor	2-5 yrs	Oconee County	CATbus City of Seneca; major employers	\$
E Develop a County policy stating the preferred or maximum number of allowable direct access points for parcels when they are submitted for development or redevelopment	1-3 yrs	Oconee County	SCDOT; private property owners/developers; Oconee County Economic Alliance	\$