

**Signage**

The Florida Department of Transportation and Chapter 479, Florida Statutes regulate the type and placement of signs within the right-of-way. Additionally, each governmental entity controls the number, size, legibility, functionality, safety, location, and character of all signs on properties located within their boundaries through their land development regulations. Below is a general summary of the signage ordinances for each governmental agency.

*Unincorporated Polk County*

Pursuant to Chapter 7, Section 760, Signs, all signs, including their supports, electrical parts, painted and display area must be installed and maintained in accordance with the building and electrical codes adopted by the County. No sign shall be placed or erected on a public right-of-way unless the County Transportation Department or the Florida Department of Transportation approves.

**On-premise signs**

Polk County permits on premise signs, which include freestanding, solid base, building mounted, and entrance signs within specific zoning districts. In no instance shall a sign exceed the maximum structure height as provided in *Table 3*.

**Off-premise signs**

Off-premise signs are permitted only in the Business-Park Center-1 (BPC-1), Business-Park Center-2 (BPC-2), Industrial (IND), Tourism-Commercial Center (TCC), Regional Activity Center (RCC), Community Activity Center (CAC), High-Impact Commercial Center (HIC), and Leisure/Recreation (L/R) land uses and in any of such land use districts located within the Green Swamp Area of Critical State Concern or a Special Protection Area overlay land use district, unless otherwise prohibited.

Minimum spacing between off-premise signs shall be no less than 1,000 feet apart, linearly. The county prohibits off-premise signs within less than 500 feet, measured radially, from a residential land use district. However, spacing may reduced to 250 feet, provided a landscaped

buffer is planted at the base of the sign. The Community Services Director or his designee must approve this variation. In the proximity of any public or private school or public park, off-premise signs must be spaced no less than 250 feet. Setbacks from the property line must be measured from the portion of the sign in closest proximity to the respective property line. Minimum setback from the front property line must be 50 feet and 10 feet from the side and rear property line.

*City of Frostproof*

Only signs erected by a government agency can be located in public right-of-way. On-site signs are limited to type and area. No variances from those standards shall be granted without due cause.

*Town of Hillcrest Heights*

Article 5, Chapter 2 of the Town of Hillcrest Heights Land Development Regulations establishes the regulations for the size, type, and location of signs within the town boundaries. Approval by the town commission is required to erect or replace any signs, unless specifically listed in section 1.02, Exempt sign. On-site signs are limited to type and area depending on number of dwelling units in residential zones and square footage in non-residential zones. No ground or projecting sign is allowed closer than five feet of public right-of-way, and no ground sign is to be higher than 25 feet above the crown of the adjacent street.



*In Frostproof, only signs erected by a government agency can be located in public right-of-way.*

*Village of Highland Park*  
Objective 1, Policy 1.1 of Highland Park’s Comprehensive Plan states that the Village of Highland Park shall regulate signage using the

Florida Department of Transportation signage standards and ensure the compatibility of adjacent land uses.

**Table 3: Unincorporated Polk County On-Premise Sign Standards**

| <b>Future Land Use Designation</b>   | <b>Max Square footage per face; Maximum of 2 faces</b> | <b>Max Sign Height</b> | <b>Minimum Setback to achieve maximum height (5’ min = 15’sign)</b> |
|--------------------------------------|--|------------------------|---|
| Regional Activity Centers (RAC)      | 300 square feet  | 40 feet                | 17.5 feet   |
| Industrial (IND)                     | Parcels < 5 acres                                      | Parcels < 5 acres      | 12.5 feet   |
| Phosphate Mining (PM)                | 200 square feet  | 30 feet                |   |
| Business-Park Center-1 (BPC-1)       | 250 square feet  | 30 feet                | 12.5 feet   |
| Business-Park Center-2 (BPC-2)       |  |                        |   |
| Community Activity Centers (CAC)     |  |                        |   |
| High-Impact Commercial Centers (HIC) | Parcels < 5 acres                                      | Parcels < 5 acres      | 7.5 feet  |
| Linear Commercial Corridor (LCC)     | 150 square feet  | 20 feet                |   |
| Tourism-Commercial Centers (TCC)     |  |                        |   |
| Neighborhood Activity Centers (NAC)  | 80 square feet   | 20 feet                | 7.5 feet  |
| Office Center (OC)                   | 50 square feet   | 12 feet                | 5 feet  |
| Rural-Clusters Centers (RCC)         |  |                        |   |
| Convenience Centers (CC)             |  |                        |   |
| Commercial Enclave (CE)              |  |                        |   |
| Leisure/Recreation (L/R)             | 80 square feet   | 15 feet                | 10 feet   |
| Institutional (INST)                 |  |                        |   |
| Recreation and Open Space (ROS)      | 40 square feet   | 8 feet                 | 10 feet   |
| Preservation Areas (PRESV)           |  |                        |   |
| Residential-Suburban (RS)            | 40 square feet   | 8 feet                 | 10 feet   |
| Residential-Low-1 (RL-1)             |  |                        |   |
| Residential-Low-2 (RL-2)             |  |                        |   |
| Residential-Low-3 (RL-3)             |  |                        |   |
| Residential-Low-4 (RL-4)             |  |                        |   |
| Residential-Medium (RM)              |  |                        |   |
| Residential-High (RH)                |  |                        |   |
| Agriculture/Residential Rural (A/RR) | 80 square feet   | 15 feet                | 10 feet   |

\*Sign area and height shall be reduced by 15 % in all Selected Area Plans that do not have adopted sign standards.  
Source: Polk County Land Development Code – Chapter 7, Section 760

*City of Lake Wales*  
Article II, Division 9 – Sign Regulations of the City of Lake Wales Code of Ordinances regulates the height, surface area, setback from public roads, lighting, movement, number and placement of signs which can be seen from the

right-of-way of any public street or highway, including permanent window signs. All signs or other advertising structures are required to have a permit from the enforcing official, the city manager, or his designated agent, prior to its construction, alteration, and/or installation. No

signs, except those erected by a public agency, are permitted within the public right-of-way. On-site signs are limited to type and area depending on the area classification and are as follows:

**Residential**

On-site signs that notify the location of home-based occupations may not exceed three square feet and must be mounted flat against the residence.

**Professional**

Each firm is entitled to one sign, not to exceed ten per firm, not to exceed ten square feet in area and ten feet in height. In cases where more than one firm occupies a single building, the building

is entitled to one directory sign, not to exceed twenty square feet.

**Industrial/Commercial**

Wall-mounted signs are permitted on any sidewall that faces a public street or open lot. The sign may occupy thirty percent of the signable area, which must be free of windows, doors, or any major architectural detail.

Ground-mounted signs are permitted if the nearest edge of the building is set back from the edge of the adjacent street by no less than thirty-five feet. The maximum allowable area for the signs depends on the driving lanes and the speed limit of the adjacent street. Please refer to *Table 4* for more detailed information.

**Table 4: City of Lake Wales Industrial Sign Standards**

| Speed Limit      | Allowable area (Two-lanes)        | Allowable Area (Four-lanes)        |
|------------------|-----------------------------------|------------------------------------|
| 35 mph or less   | (1) 42 square feet<br>(2) 20 feet | (1) 64 square feet<br>(2) 24 feet  |
| More than 35 mph | (1) 64 square feet<br>(2) 24 feet | (1) 108 square feet<br>(2) 26 feet |

- (1) Denotes the maximum allowable area for the face of the sign.
- (2) Denotes the maximum allowable area for the height of the sign.

*Town of Dundee*

The Town of Dundee’s Code of Ordinances, Article 4 – Sign Regulations, dictates the number, size, type, location, and other provisions relating to signs. The sign regulations regulate outdoor signs of all types, to provide fair and comprehensive regulations that will foster a good visual environment and to complement the requirements of the adopted building and electrical codes. Signs of a commercial or industrial nature are prohibited from land uses in which commercial or industrial activities are prohibited. On-site signs are limited to the size of the development site and no more than three one-site commercial signs are permitted. Billboards are permitted in areas zoned as Commercial or Industrial and shall not exceed 672 square feet.

*Town of Lake Hamilton*

Within C-1, C-2, and M-1 districts, districts located along the Ridge Scenic Highway, no advertising device can overhang or be located within the right-of-way. Along the Ridge Scenic Highway, advertising devices are limited to no more than 45 square feet and no higher than 20 feet. Advertising devices cannot contain blinking, flickering, or flashing lights.

*City of Haines City*

The intent of the regulations stated in the Haines City Land Development Regulation, Chapter 7 - Signs, is to regulate, under reasonable control, signs in certain areas of the City based on the number, sizes, location, and character. Signs or other advertising structures must be constructed and maintained in accordance with the building code, Land Development Regulations, and other applicable City codes and ordinances. Signs of a commercial or industrial nature are prohibited

from land uses in which commercial or industrial activities are prohibited. In most residential land uses, signs are limited to on-site and noncommercial signs. No signs, except those erected by a public agency, are permitted within the public right-of-way.

*Opportunities and Constraints*

Although the local government signage standards do not promote inappropriate signs, only one large sign can block a significant vista. Within the scenic highway designation, new outdoor advertising is prohibited by federal law. Title 23, United States code, Section 131 (s) mandates that states having a scenic byways program withhold the issuance of permits for new outdoor advertising signs on the Interstate, the National Highway System (NHS), and Federal Aid Primary (FAP) highways that are

designated as scenic highways or byways. The Florida Department of Transportation will not issue new outdoor advertising permits once it designates the scenic highway.

**Safety Issues**

During the three-year period from January 1, 1999 to December 31, 2001, 326 crashes occurred between MP 0.000 (US 27) and MP 34.807 (US 17). These crashes resulted in 6 fatalities and 419 injuries of varying degrees. The most predominant crash type found along the corridor are rear-end crashes, which account for close to one-half of all crashes. This is followed by angle, sideswipe, right-turn, and left-turn crashes. *Table 5* presents a summary of the crashes.

**Table 5: Crash Data Summary, January 1, 1999 – December 31, 2001**

| Harmful Event                        | Code | 1999 |        | 2000 |        | 2001 |        | Total |        |
|--------------------------------------|------|------|--------|------|--------|------|--------|-------|--------|
| Rear-end                             | 01   | 23   | 17.6%  | 91   | 85.8%  | 37   | 41.6%  | 151   | 46.3%  |
| Head-on                              | 02   | 3    | 2.3%   | 7    | 6.6%   | 2    | 2.2%   | 12    | 3.7%   |
| Angle                                | 03   | 40   | 30.5%  | 4    | 3.8%   | 0    | 0.0%   | 44    | 13.5%  |
| Left-turn                            | 04   | 15   | 11.5%  | 4    | 3.8%   | 0    | 0.0%   | 19    | 5.8%   |
| Right-turn                           | 05   | 1    | 0.8%   | 0    | 0.0%   | 22   | 24.7%  | 23    | 7.1%   |
| Sideswipe                            | 06   | 7    | 5.3%   | 0    | 0.0%   | 18   | 20.2%  | 25    | 7.7%   |
| Backed into                          | 07   | 1    | 0.8%   | 0    | 0.0%   | 1    | 1.1%   | 2     | 0.6%   |
| Collision with parked car            | 08   | 1    | 0.8%   | 0    | 0.0%   | 2    | 2.2%   | 3     | 0.9%   |
| Coll. w/MV on roadway                | 09   | 1    | 0.8%   | 0    | 0.0%   | 0    | 0.0%   | 1     | 0.3%   |
| Collision with pedestrian            | 10   | 1    | 0.8%   | 0    | 0.0%   | 0    | 0.0%   | 1     | 0.3%   |
| Collision with bicyclist             | 11   | 1    | 0.8%   | 0    | 0.0%   | 0    | 0.0%   | 1     | 0.3%   |
| Collision with bicyclist (bike lane) | 12   | 0    | 0.0%   | 0    | 0.0%   | 4    | 4.5%   | 4     | 1.2%   |
| Collision with animal                | 15   | 1    | 0.8%   | 0    | 0.0%   | 0    | 0.0%   | 1     | 0.3%   |
| Hit sign/sign post                   | 16   | 2    | 1.5%   | 0    | 0.0%   | 0    | 0.0%   | 2     | 0.6%   |
| Utility/light pole                   | 17   | 4    | 3.1%   | 0    | 0.0%   | 0    | 0.0%   | 4     | 1.2%   |
| Hit tree/shrubbery                   | 22   | 8    | 6.1%   | 0    | 0.0%   | 0    | 0.0%   | 8     | 2.5%   |
| Ran in ditch/culvert                 | 29   | 4    | 3.1%   | 0    | 0.0%   | 0    | 0.0%   | 4     | 1.2%   |
| Ran off road in water                | 30   | 2    | 1.5%   | 0    | 0.0%   | 0    | 0.0%   | 2     | 0.6%   |
| Overtuned                            | 31   | 6    | 4.6%   | 0    | 0.0%   | 0    | 0.0%   | 6     | 1.8%   |
| All other                            | 77   | 10   | 7.6%   | 0    | 0.0%   | 3    | 3.4%   | 13    | 4.0%   |
| Total                                |      | 131  | 100.0% | 106  | 100.0% | 89   | 100.0% | 326   | 100.0% |

Source: Florida Department of Transportation and Glattig Jackson

Figures 17 and 18 present the high crash locations along the Ridge Scenic Highway. The five locations with the highest number of crashes during the three-year period evaluated are the intersections of SR 17 with:

- CR 17A (Chalet Suzanne Road),
- Mountain Lake Cutoff Road,
- Seminole Avenue,
- CR 540 (Waverly Road), and
- CR 544 (Lake Marion Road).

### *Opportunities and Constraints*

To increase safety along the corridor, the Florida Department of Transportation and local government will regularly invest in intersection improvements. These improvements can represent both constraints and opportunities. A roadway improvement design may not adequately preserve the historic character of urban and rural areas. However, a safety investment provides an opportunity to improve safety for not only motorists, but for bicyclists and pedestrians as well.



SR 17 at CR 544 (Lake Marion Road) in Haines City

High Crash Locations Chart

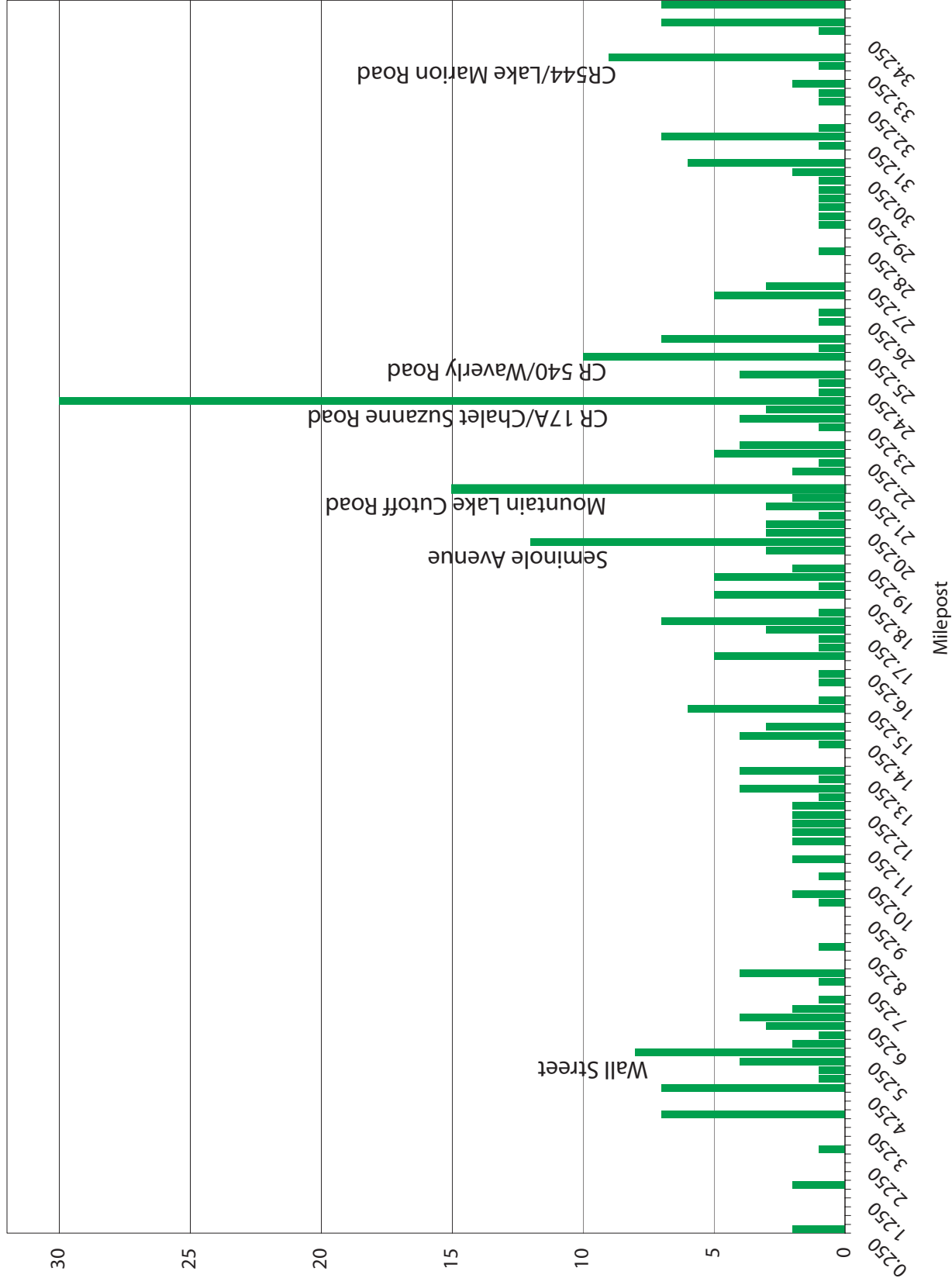
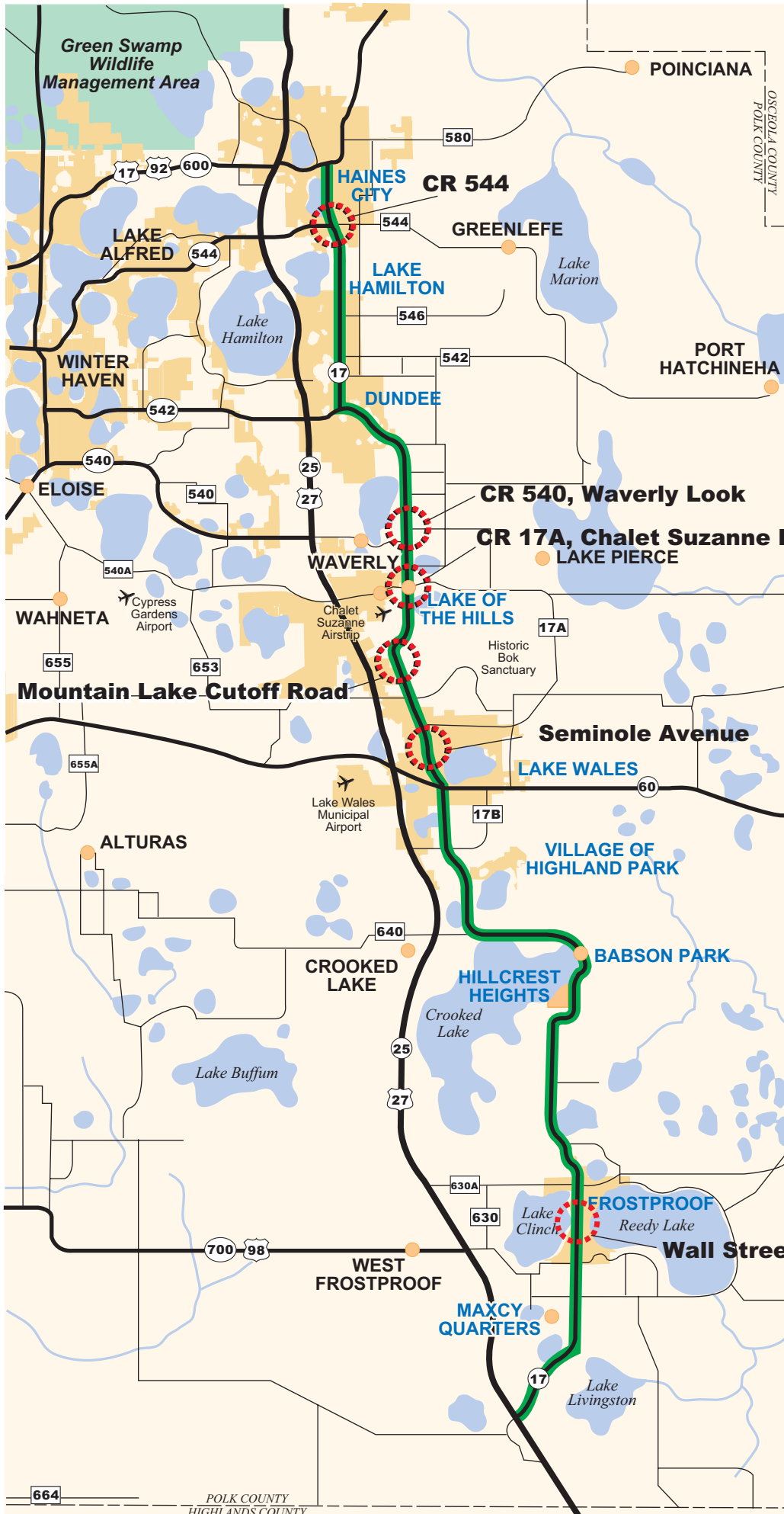
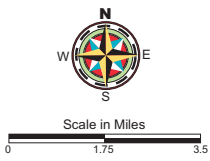


Figure 17  
High Crash Locations Chart





**LEGEND**

- SR 17 Scenic Highway
- 1999-2001 High Crash Locations

**Figure 18**  
High Crash Location Map

### Traffic Volumes/User Types

Traffic volumes along the Ridge Scenic Highway are consistent with those found on similar rural, two-lane, uninterrupted roadways. Higher volumes are generally located in more urban settings. Historic traffic volumes throughout the corridor have remained essentially the same with minor variances.

There are 15 traffic count stations maintained by the Florida Department of Transportation within the limits of the corridor. Volumes range from 2,700 Average Annual Daily Traffic (AADT) to 11,600 AADT.

Except for limited areas, non-motorized travel along the corridor is limited. The length of the corridor, rural land uses, and the lack of pedestrian facilities contribute to the low number of pedestrians. Bicyclists do make frequent use of the existing five-foot wide shoulders in rural areas, particularly south of SR 60. This route is popular with bicycle clubs from all over the state.

Sections of the corridor feature transit service. Polk County InterCity Transit currently operates two routes between Frostproof and Haines City, connected with a transfer at the Eagle Ridge Mall. Route 30N serves the Eagle Ridge Mall, Waverly, Dundee, Lake Hamilton, and Winter Haven. Route 30S serves Frostproof, Babson Park, Lake Wales and the Eagle Ridge Mall. Service is provided on these routes Monday through Friday from 6:00 a.m. to 6:00 p.m. The section of SR 17 between Highland Park and Haines City is included in the Urban Transit Service Area, an area defined as targeted and expected to have transit service with headways of one hour or less.

*Table 6* presents the AADT along the corridor and presented on *Figure 19*. Also shown are the K (the ratio of the traffic volume in the study hour to the annual average daily traffic), D (directional distribution factor, or proportion of an hour's total volume occurring in the higher volume direction), and T (truck factor, or the adjustment factor for heavy vehicles) factors, as well as traffic forecast for Year 2025. Truck traffic along the corridor is considerably higher than normal, possibly due to the agricultural land uses along the route.

#### *Opportunities and Constraints*

The agriculture vistas attract two types of road users that are frequently incompatible. SR 17 roadway design will need to balance the needs of both bicyclists and agricultural product distribution trucks.

As mentioned in the next section, the Polk Transportation Planning Organization has not determined a need for the widening of SR 17 through the year 2025. Forecasted 2025 traffic volumes are moderate, suggesting that widening of SR 17 will not be necessary for two decades.

### Levels of Service

*Table 7* contains the adopted levels of service (LOS), existing levels of service, and projected levels of service for the Ridge Scenic Highway. *Figure 20* graphically presents level of service information.

#### *Opportunities and Constraints*

Forecasted traffic levels are expected to meet Adopted Level of Service standards for most of the corridor. SR 17 in high growth areas in Lake Wales and Haines City will likely see increased congestion.



**Table 6: Existing and Forecasted Vehicle Volumes**

| Location  | AADT   | K%   | D%    | T%    | Forecast (2025)* |
|---|--------|------|-------|-------|------------------|
| Southwest of Livingston Lake Road                       | 2,700  | 9.81 | 56.11 | 17.42 | 4,007            |
| South of CR 630, Frostproof                             | 7,500  | 9.81 | 56.11 | 9.68  | 14,217           |
| Northwest of Libby Road, Babson Park                    | 6,400  | 9.81 | 56.11 | 6.08  | 9,210            |
| South of Belleview Drive, Lake Wales                    | 4,400  | 9.81 | 56.11 | 3.77  | 5,601            |
| Southeast of Polk Avenue, Lake Wales                    | 4,900  | 9.81 | 56.11 | 4.20  | 8,863            |
| Northwest of Polk Avenue, Lake Wales                    | 9,600  | 9.81 | 56.11 | 4.20  | 20,325           |
| North of Central Avenue, Lake Wales                     | 10,400 | 9.81 | 56.11 | 4.20  | 6,835            |
| South of Mountain Lake Cut-off Rd, Lake Wales           | 11,600 | 9.81 | 56.11 | 6.54  | 22,234           |
| South of CR 17A, Chalet Suzanne Road                    | 7,300  | 9.81 | 56.11 | 8.28  | 15,578           |
| South of Waverly Road                                   | 6,000  | 9.81 | 56.11 | 11.18 | 12,771           |
| East of Center Street, Dundee                           | 6,800  | 9.81 | 56.11 | 8.84  | 10,845           |
| Center Street, North of Main Street, Dundee             | 7,100  | 9.81 | 56.11 | 6.49  | 13,971           |
| 10 <sup>th</sup> Street, South of SR 544, Haines City   | 7,100  | 9.81 | 56.11 | 7.43  | 14,059           |
| 10 <sup>th</sup> Street, North of SR 544, Haines City   | 10,800 | 9.81 | 56.11 | 6.38  | 18,789           |
| 10 <sup>th</sup> Street, South of US 17/92, Haines City | 11,400 | 9.81 | 56.11 | 5.42  | 15,202           |

\* Forecast projected using straight-line linear interpolation of most recent historical count data.

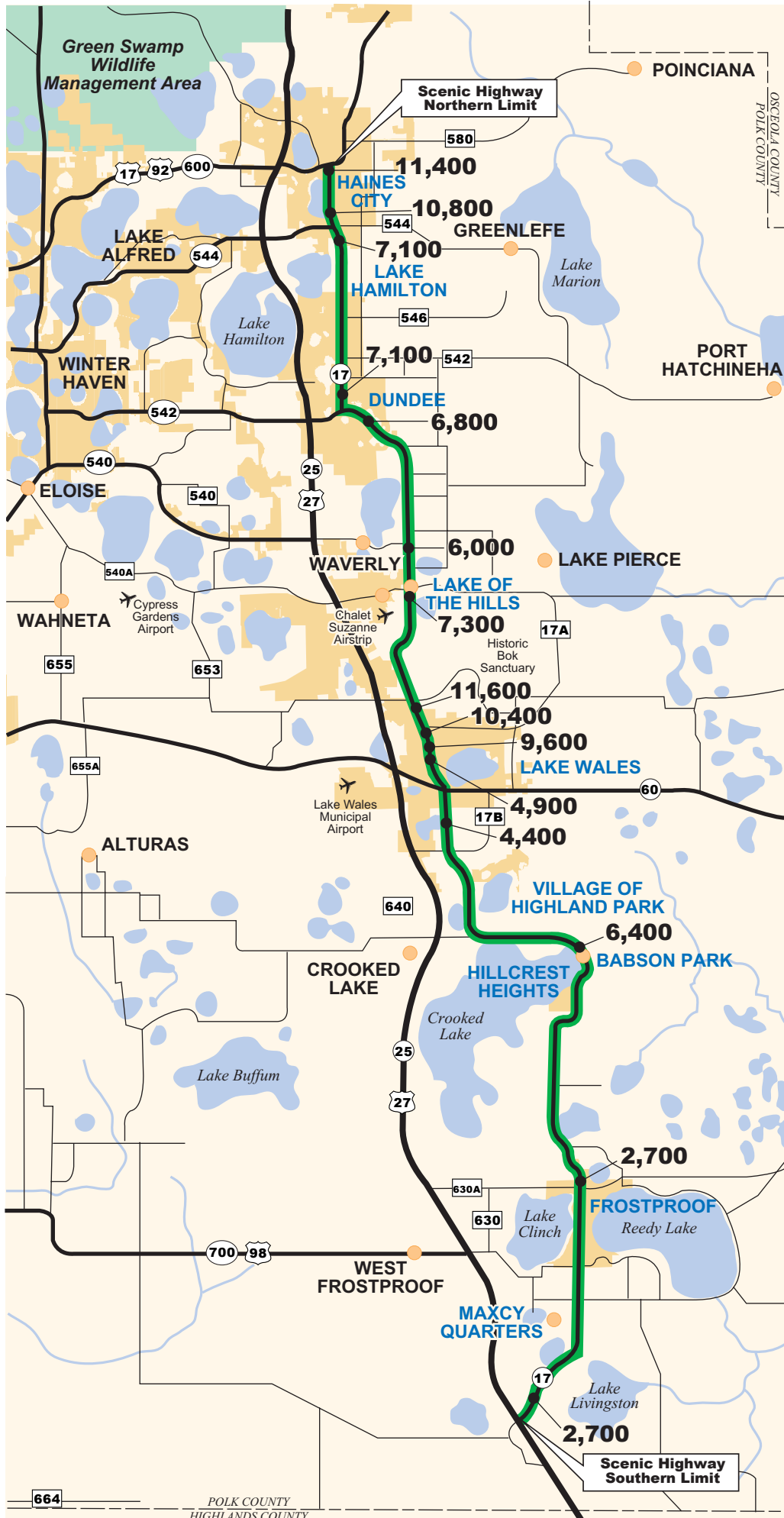
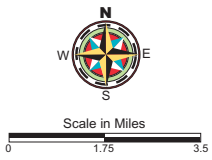
Source: Florida Department of Transportation

**Table 7: SR 17 Level of Service**

| Segment location  | Adopted LOS | Existing LOS | Projected LOS (Year 2025) * |
|---|-------------|--------------|-----------------------------|
| Southwest of Livingston Lake Road                       | C           | B            | B                           |
| South of CR 630, Frostproof                             | C           | B            | D                           |
| Northwest of Libby Road, Babson Park                    | D           | C            | D                           |
| South of Belleview Drive, Lake Wales                    | D           | B            | D                           |
| Southeast of Polk Avenue, Lake Wales                    | D           | C            | C                           |
| Northwest of Polk Avenue, Lake Wales                    | D           | C            | F                           |
| North of Central Avenue, Lake Wales                     | D           | C            | C                           |
| South of Mountain Lake Cut-off Rd, Lake Wales           | D           | C            | F                           |
| South of CR 17A, Chalet Suzanne Road                    | D           | C            | E                           |
| South of Waverly Road                                   | D           | C            | D                           |
| East of Center Street, Dundee                           | D           | C            | C                           |
| Center Street, North of Main Street, Dundee             | D           | C            | D                           |
| 10 <sup>th</sup> Street, South of SR 544, Haines City   | D           | C            | D                           |
| 10 <sup>th</sup> Street, North of SR 544, Haines City   | D           | C            | F                           |
| 10 <sup>th</sup> Street, South of US 17/92, Haines City | D           | C            | D                           |

\*Assumes existing roadway characteristics

Source: 2003 Polk County Roadway Network Database



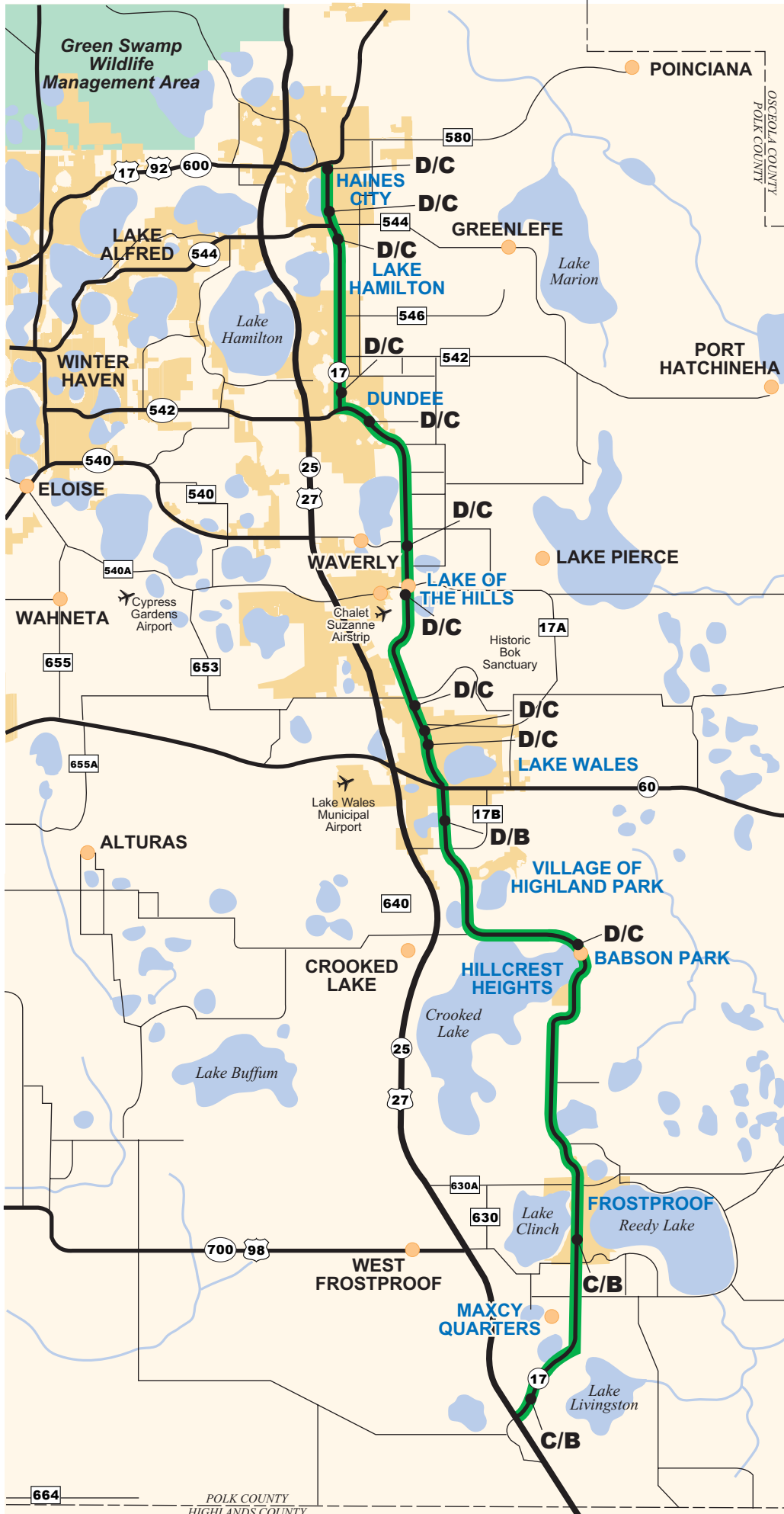
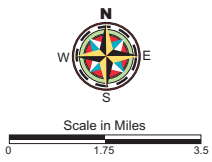
**LEGEND**

- SR 17 Scenic Highway
- Unincorporated Community
- City Limits Average Annual

**2,700** Daily Traffic (AADT), Year 2001

Source: FDOT

**Figure 19**  
Traffic Volumes



**LEGEND**

- SR 17 Scenic Highway
- Unincorporated Community
- City Limits
- C/B** Adopted LOS/ Existing LOS

Source: FDOT/Haines City/Lake Hamilton/Dundee/Lake Wales/Village of Highland Park/Hillcrest Heights/Frostproof

**Figure 20**  
**Levels of Service Map**

**Transportation Planning**

The Polk County Transportation Planning Organization is the lead transportation planning agency for Polk County. It is responsible for the development and implementation of the federal urban transportation process in Polk County.

In December 2000, the Transportation Planning Organization adopted the Polk County 2025 Long-Range Transportation Plan (LRTP). This plan represents an update to the previous long-range plan adopted in 1995 for the horizon year 2020. There are no proposed road improvements on SR 17 or immediately adjacent within the 2025 LRTP.

*Multi-Use Trails Master Plan*

The 2025 LRTP placed a strong emphasis not only on transportation improvements that will meet the community’s travel needs, but also on improving intermodal access, or connections between two or more modes of travel, and increasing the opportunities for non-motorized travel within the County. The Transportation Planning Organization is developing a countywide Multi-Use Trails Master Plan that will serve as a guide for local governments to identify potential corridors, potential costs, and funding sources. Furthermore, the Multi-Use Trail Master Plan will link existing trails with various city and county bicycle/pedestrian facilities, county and state parks, state forests, preserves, wildlife management areas, historic districts, downtown areas, neighborhoods, and multimodal access points.

Three multi-use trail projects are identified in the 2025 LRTP. One project is funded, while the others are proposed and unfunded.

**Lake Wales Trailways**

The City of Lake Wales has been successful in competing for and receiving federal transportation enhancement funds that are made available through the Transportation Equity Act for the 21st Century. The Lake Wales Trails has been programmed in the Florida Department of Transportation’s District One FY 2000/01 - 2004/05 Adopted Work Program, and is scheduled to be constructed in FY 2005/06. This

multi-use trail will cover 2.1 miles on abandoned CSX rail bed extending from SR 17 to Buck Moore Road with a linkage to the existing Lake Wales Trail. This trail will provide the residents of eastern Lake Wales with access to Downtown Lake Wales. The Lake Wales Trailways functions as an urban trail providing access to several city parks, recreational facilities, and community buildings. The trail is also in close proximity to the Polk County InterCity Transit Service, which operates a fixed-route through Lake Wales.

**Bartow-to-Lake Wales Trail**

This proposed trail would connect Bartow and the proposed Ft. Fraser Trail with Lake Wales and the Lake Wales Trailways multi-use trail. This trail transverses primarily agricultural lands in central Polk County and crosses the Peace River and Peace River Canal. Currently, most of this proposed rail-to-trail is still in operation; however, sections of this railroad are inactive in the Bartow area. This corridor needs to be examined further to determine if it would be feasible to covert to a rail-to-trail or if an alternate route would be more achievable. The trail planning and construction is unscheduled.

**Highlands County Connector**

Highlands County has identified and prioritized an abandoned rail line between Sebring and the Polk County line as a rail-to-trail conversion. This abandoned rail line continues north into Polk County ending in Frostproof. This corridor would provide a non-motorized corridor



*Abandoned CSX rail bed and planned location for Lake Wales Trailways*

between Highlands and Polk Counties and connect the “Ridge Cities” with Highlands County via the Ridge Scenic Highway. The trail planning and construction is unscheduled.

*Local Governments*

Local governments do not have roadway investments planned that may affect the scenic highway, but several municipalities are looking into other enhancements that would benefit the corridor. The Town of Hillcrest Heights is working to convert land owned in conjunction with Polk County into a hiking trail to access Crooked Lake (*Town of Hillcrest Heights Comprehensive Plan, p. 11*). The City of Lake Wales is planning to retrofit stormwater facilities on US 27, as outlined in the Envisors stormwater study (*City of Lake Wales Comprehensive Plan, p. 32*).

*Opportunities and Constraints*

The multi-use trail projects now scheduled for construction and other proposed trails directly support the Corridor Vision.

**Roadway Improvements**

The adopted five-year work programs of the Florida Department of Transportation and Polk Transportation Planning Organization identify improvements planned along the Ridge Scenic Highway. The projects identified include three resurfacing projects and one project to widen a narrow section of road to typical 12-foot lanes with shoulder. *Table 8* summarizes the projects programmed for construction within the next five years.

*Opportunities and Constraints*

During resurfacing projects, the Florida Department can designate shoulders as bike lanes for little cost.

**Table 8: Programmed Roadway Improvements**

| <b>Location</b>  | <b>Description</b>                                  | <b>Year</b> |
|--|---|-------------|
| CR 17B from US 27 to SR 60   | Widen existing to 12-foot lanes w/ 4-foot shoulders | 2002        |
| SR 544 from East of US 27 to SR 17, Haines City  | Resurfacing   | 2003        |
| SR 17 from US 27 to CR 630 and from CR 630 to North of Webber International University, Frostproof/Hillcrest Heights/Babson Park; Florida Department of Transportation will be designating the shoulders in this area as bike lanes, with marking and signage. | Resurfacing   | 2005        |
| SR 17 from Mountain Lake Cutoff Rd to N of Sixth Street, Lake Wales  | Resurfacing   | 2003        |

*Source: Polk Transportation Planning Organization’s Transportation Improvement Program, 2001*

**Protection Techniques**

*Environmental Protection*

Potential impacts to ecologically significant resources, such as rare wildlife species or wetlands, are subject to review by a variety of regulatory agencies. Regulatory review over environmental features occurs at the federal, state, and county levels. In addition, other conservation measures such as public and private conservation land acquisition programs are ongoing within the region surrounding the Ridge Scenic Highway. The following is a brief

description of the regulating agencies as well as a brief description of the land acquisition programs currently in place within the region.

**Federal**

The US Army Corps of Engineers (ACOE), under Section 404 of the Clean Water Act, exerts regulatory authority for dredge and fill activities over the “waters of the United States,” including wetlands. Applicants for impacts to wetlands are required to prepare one of several types of permits that generally includes the area of proposed wetland impacts, proposed



mitigation, a public interest review, avoidance and minimization and economic analyses. The US Environmental Protection Agency (EPA) and the US Fish and Wildlife Service (USFWS) may comment on an ACOE permit application. A recent Supreme Court decision has limited the regulatory authority of the ACOE over isolated wetlands, so that they are limited in scope to those wetlands that are connected to waters of the United States. Generally, mitigation is required for impacts to wetland systems, which can include the purchase of credits within a mitigation bank, protection, and/or enhancement of wetland systems on a project site, or off-site purchase of mitigation lands.

The USFWS, through the Endangered Species Act and other regulation, regulates potential impacts to species listed as threatened or endangered by the federal government. The USFWS can review an application for impacts to listed species or their habitat through one of two different processes, both of which require an application package that reviews the areas of proposed impacts, proposed mitigation, a public interest review, and an avoidance and minimization analysis. The first process consists of a Section 7 consultation on an ACOE permit application in which the USFWS provides a Biological Opinion on the proposed wildlife and/or plant species impacts, which is incorporated into the ACOE permit. The second process consists of a Section 10 Habitat Conservation Plan in which the USFWS is the sole federal permitting agency with purview over the project site. In either case, an Incidental Take Permit (ITP) or relocation permit may be authorized by the USFWS if the impact is deemed to not adversely affect the long-term survival of the species in question and/or the project provides a long-term benefit for the listed species (i.e. through the proposed mitigation).

The USFWS also protects listed species and their habitats through land acquisition efforts. In 1990, the USFWS established the Lake Wales Ridge National Wildlife Refuge (LWRNWR) in Polk and Highlands County, which included lands near the Ridge Scenic Highway. The USFWS targeted a large number of parcels for

acquisition and inclusion in the LWRNWR to protect the significant populations of rare and endangered plant species occurring on them. Only a few parcels have been acquired to date, of which none occur within the immediate vicinity of the Ridge Scenic Highway. The land acquisition program for the USFWS is ongoing, but a large portion of the land identified for inclusion in the LWRNWR have been acquired through other public (i.e. the State of Florida and Polk County – see below) and private land acquisition programs (i.e. Green Horizon Land Trust and The Nature Conservancy).

### State

The regulatory purview of the Southwest Florida Water Management District (SWFWMD), together with the ACOE, provides some protection to wetland areas in and around the Ridge Scenic Highway area. In association with stormwater permitting efforts, regulation of impacts to wetlands within the State of Florida has been delegated to water management districts, and the Ridge Scenic Highway is located within the boundaries of SWFWMD. The SWFWMD regulations for wetland delineation and review of proposed wetland impacts are included in the Environmental Resource Permitting Information Manual for Environmental Resource Permit (ERP) applications. Like the ACOE, mitigation is generally required for impacts to jurisdictional wetlands. As discussed for ACOE mitigation, several options including purchase of credits from a mitigation bank, off-site mitigation land purchase, and/or on-site wetland preservation, enhancement, or creation may be used as mitigation for wetland impacts.

The State of Florida has designated Crooked Lake, including Little Crooked Lake and the connecting waterway, as Outstanding Florida Waters (OFWs). This designation affords these areas with the highest degree of protection for surface waters. Generally, the Department of Environmental Protection (DEP) cannot issue permits for direct pollutant discharges to OFWs that would lower ambient water quality, or for indirect pollutant discharges that would degrade OFWs. Impacts to these systems must be shown to be in the public interest.



The Florida Fish and Wildlife Conservation Commission (FFWCC), through chapter 68 of the Florida Administrative Code and other regulations, regulate impacts to state-listed rare and endangered wildlife species. Prior to initiation of any proposed impacts to listed wildlife species, the FFWCC requires a permit application that documents the size of the wildlife population and extent of occupied habitat, type of impact, avoidance and minimization analysis and proposed mitigation. Potential mitigation measures include the avoidance of the listed species in question, the on-site preservation and management of suitable habitat, the purchase of off-site lands and/or relocation of the affected individuals of the species depending upon its listed status.

The State of Florida through the Department of Environmental Protection (DEP) has instituted a conservation land acquisition program that was historically funded through the Preservation 2000 funding structure and now is funded through the Florida Forever program. A variety of different programs such as the Save Our Rivers (SOR) program of the Water Management Districts in the state, the Conservation Area and Recreation Land (CARL) program, and the Florida Communities Trust program draw upon the Florida Forever funds to purchase conservation or recreation land. Lands identified for SOR or CARL acquisition typically include ecologically significant natural habitats.

**Local**

Through their comprehensive plans and land development regulations, local governments can protect the intrinsic resources within and immediately adjacent to their municipal boundaries.

***Polk County***

In 1994, Polk County voters approved an Environmental Lands Acquisition and Management Program. The purpose of the program is to acquire, preserve, protect, manage, and restore endangered and environmentally sensitive lands, water resources, and important wildlife habitat.

In its Comprehensive Plan, Polk County outlines activities and programs that protect the environmental features of the county. To protect the quality of its groundwater, the county will develop a groundwater protection program to be implemented through land development regulations. The Comprehensive Plan also calls for the protection of natural wetland systems and the conservation of wildlife and native vegetation communities. The land development regulations promote this goal by the establishment of specified buffers (25 foot average, 15 foot minimum), conservation of wetland areas unless permitted through another state or federal regulatory agency, the establishment of an on-site transfer of density rights program, and the avoidance of development within scrub areas. In addition, the comprehensive plan calls for the acquisition of a minimum of 200 acres annually for the protection of endangered species. This ongoing program is conducted in part by the Environmental Lands Acquisition and Management Program.

***City of Frostproof***

To protect the quality of its groundwater, the City of Frostproof will conduct a Cone of Influence study. The study will look to protect water wellfields from adverse impacts of development. Once this study is completed, the City will adopt a Wellfield Protection Ordinance for existing public potable waterwells. The City will also develop a Groundwater Protection Program that ensures that the quality and quantity of groundwater resources are not degraded.

In the Comprehensive Plan, the City of Frostproof outlines activities and programs to protect and improve the quality of Clinch Lake, Lake Reedy, and Lake Ida. The city will do so using a number of tools, including promoting the use of U.S. Department of Soil Conservation Service and Florida Department of Agriculture Best Management Practices to control sediment and erosion during construction and agricultural operations, establishing 25 foot wide buffer zones adjacent to lakes and wetland areas to

preserve natural vegetation wetland areas, and developing general design and construction standards for on-site stormwater management systems for new development.

***Village of Highland Park***

To protect the quality of its groundwater, the Village of Highland Park is implementing a comprehensive wellhead protection program, which will identify cones of influence and develop and implement protection strategies.

The Village of Highland Park is a designated bird and wildlife sanctuary. It is unlawful to kill or harm birds or wildlife within the Village of Highland Park.

***Haines City***

Through its land development regulations, Haines City protects all natural lakes and water bodies as fishery areas. This protection includes measures to ensure surface water quality, erosion control, and endangered or threatened species habitat preservation.

Haines City also protects native ecological communities through its land development regulations. Native ecological communities include sand scrub communities, climax coniferous and deciduous forest, and long-leaf pine flat woods. Ecological communities documented as existing in an ideal preservation condition by a qualified person are protected from development, if this protection is deemed to benefit the health, safety, and welfare of the community.

***Private Land Acquisition***

Several private non-profit conservation organizations, including The Nature Conservancy (TNC) and Green Horizon Land Trust (GHLT) are active in and around the Ridge Scenic Highway Corridor in the purchase of environmentally sensitive land for conservation purposes. These groups are active in fee-simple purchase of conservation lands, the purchase of conservation easements over significant parcels, and facilitation of state acquisition efforts. Conservation lands held by private conservation organizations within the

vicinity of the Ridge Scenic Highway include Hickory Lake Scrub (GHLT) and Tiger Creek Preserve (TNC).

***Historic Preservation Areas***

Land development regulations are one tool municipalities can implement to preserve historic structure and districts.

***City of Frostproof***

As stated in the Comprehensive Plan, the City of Frostproof will establish guidelines within its land development regulations for the alteration and demolition of historic structures. Frostproof will include a historic preservation evaluation within its development review process to ensure that development projects occur in a manner that minimizes impacts to historic resources.

***Lake Wales***

***Historic Preservation Board***

The Historic Preservation Board conducts ongoing surveys and inventory of historic buildings, areas and archaeological sites in the city and plans for their preservation.

***Historic Preservation Areas***

In its comprehensive plan, the City of Lake Wales looks to develop the historic preservation ordinance, which would enable the City Commission to designate sites, districts, and buildings as historic (Historic Preservation Element, Policy 1.03).



*The renovations to the gymnasium portion of the Lake Wales Recreational and Cultural Centers are complete.*

***Lake Wales Recreational and Cultural Center***

The City of Lake Wales is renovating this area, which consists of six historic buildings dating from 1919 to 1947, to serve as a recreational and cultural center. The Lake Wales Recreational and Cultural Center is located in the Lake Wales Historic Residential District, listed on the National Register of Historic Places. The area includes a 1919 school building, currently being restored to serve as a Performing Arts Center with a 500-seat auditorium. The 1920 Primary School is being restored to serve as a Boys and Girls Club for disadvantaged youth. The 1947 cafeteria is being restored as a community and activity center. In addition, the city recently received a grant to restore the 1920 agricultural facility into a Trail Head Center to serve the 2.3-mile Lake Wales Trailways.

***Olmsted Landscaping Grant***

The City of Lake Wales recently received a grant to implement the landscaping plan completed by Fredrick Law Olmsted Jr. and his firm, the Olmsted Brothers, for the City of Lake Wales in 1930.

***Lake-of-the-Hills/North Lake Wales Master Plan***

In its Comprehensive Plan, Lake Wales established the Lake-of-the-Hills/North Lake Wales Master Plan, designed to address development around this historic community in a comprehensive manner. The Plan intends to provide stability in the area and prevent hopscotch development, establishing a pattern of development consistent with the rural character of the area. The plan includes urban design standards for landscaping, setbacks, and signage. The plan also develops a vision for Route 17A, which includes sidewalks and bicycle lanes.

**Haines City**

***Central Business District***

Through zoning regulations, Haines City protects the character and historic structure and features of the downtown historic area (zoned Central Business District)

***Community Redevelopment Area***

Haines City established a citywide Community Redevelopment Area (CRA). The plan pools rising property tax revenues within the CRA and directs the money toward economic development-spurring public improvements. High-end properties are exempt from the ad valorem diversion plan. Haines City will develop a Master Plan that will look at opportunities to improve links between the city, Haines City Main Street and the Greater Haines City Chamber of Commerce and housing rehabilitation as the top issues before the CRA.

***Opportunities and Constraints***

A strong network of organizations dedicated to the preservation of the area’s environmental and historical resources already exists within the corridor. The Action Plan seeks to strengthen and expand these existing efforts.

**Environmental Conditions – The Unique Lake Wales Ridge**

The Ridge Scenic Highway is located in the central portion of an area known as the Lake Wales Ridge, which extends from southern Highlands County to rolling hills occurring just west of Lake Apopka in Lake County. The rolling topography and sandy soils of the Lake Wales Ridge formed approximately 2.5 million years ago during the late Pliocene era as a series of beach and dune formations (*Figure 21* presents SR 17 in relation to the topography of the Lake Wales Ridge). Over the next million years, multiple sea level fluctuations occurred, often resulting in dry, semi-arid conditions during low water periods and isolated sandy islands during high water periods for high sand dune areas like the Lake Wales Ridge. During low water periods, the vegetation communities in Florida were continuous with western North America, leading to an influx of western biota to Florida. The initial development of several xeric vegetation communities, such as sandhill and scrub forest systems, that characterized the Lake Wales Ridge until very recent times, began during these dry periods. Later high water periods isolated the developing xeric systems and the wildlife and plants which occurred



within these habitats to islands such as the Lake Wales Ridge, which evolved over time to form the rich endemic biota of the Lake Wales Ridge.

The Lake Wales Ridge area in which the study area occurs is comprised primarily of coarse to fine xeric, well-drained sands that occur on rolling to steeply sloping topography. Because of the composition of the soils (coarse, well drained) in this area, the depth of the sands, and the lack of a clay-confining layer under the sands, the Lake Wales Ridge area including the study corridor represent significant recharge areas for the underlying Florida aquifer. These soil characteristics also result in the formation of numerous cover-collapse sinkholes, which contribute to the formation of lakes and the significant slopes characteristic of the topography of the area. In addition to the significant slopes near SR 17, some of the highest elevations within the peninsula of Florida also occur. The highest point in Central Florida occurs on Iron Mountain within the Historic Bok Sanctuary, which occurs less than 2 miles from SR 17.

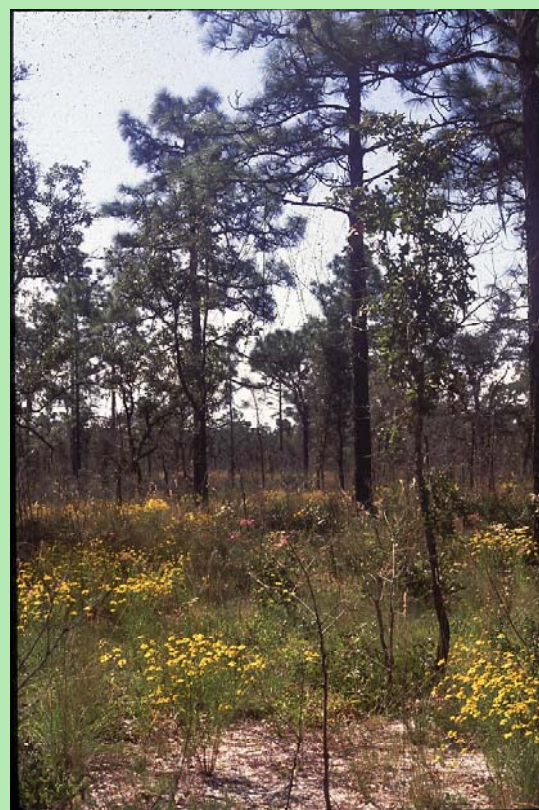
Before the rapid urbanization of Florida and the conversion of natural habitats to agriculture, the Lake Wales Ridge was composed of a mosaic of high pine, scrub, wet prairies, freshwater marshes, sinkhole lakes, and forested wetlands. The pyrogenic sandhills and scrub communities, and to a lesser extent freshwater marshes, were intricately connected within the landscape setting, which allowed fires to start in one habitat, typically the highly flammable sandhills, and burn into the adjacent communities. Lightning activity during late spring started the

majority of these fires, although Native Americans also conducted numerous burns. The fires maintained the open conditions favorable for the rare and endemic species occurring within these habitats. Following settlement, the majority of the natural vegetation communities was converted to agricultural uses, primarily citriculture within the region surrounding the Ridge Scenic Highway, or underwent development. The small patches of existing native vegetation, especially scrub and sandhill systems, typically occur in isolated areas that require intense management such as prescribed burning to mimic the historic natural disturbance of landscape level fire.

Numerous lakes occur adjacent to or within the viewshed of SR 17. The majority of these lakes occur within the basins created by one or more ancient to recent cover-collapse sinkholes. Because these lakes were located within sandy, low nutrient habitats common to the Lake Wales Ridge, the lakes historically occurred as highly oligotrophic, very clear lakes. However, the



*Scrub (photo provided by The Nature Conservancy)*



*Sandhill wildflowers (photo provided by The Nature Conservancy)*

water quality within some of these lakes has declined due to the leaching of nutrients applied to agricultural fields, citriculture groves, and/or residential lawns. Typically, a narrow littoral marsh fringe of vegetation surrounds the lakes, which provides limited habitat for young fish and prey species. Because the hydrology of the lakes is typically tied to groundwater levels, the water levels in the lakes, which can range from completely dry to many feet deep, can change dramatically over short periods.

The Lake Wales Ridge is home to one of the highest densities of different rare and endemic plant and wildlife species due primarily to the long isolation period imposed by fluctuating sea levels. The majority of these species are adapted to the extremely dry, sandy, and pyrogenic characteristics of the scrub and sandhill communities occurring on the Lake Wales Ridge. Plants such as the pygmy fringe-tree (*Chionanthus pygmaeus*), scrub plum (*Prunus geniculata*), sandlace (*Polygonella myriophyllum*), Lewton's polygala (*Polygala lewtonii*), pigeon-wings (*Clitoria fragrans*), scrub-buckwheat (*Eriogonum floridanum*), and wide-leaf warea (*Warea amplexifolia*) are known to occur in naturally vegetated habitats adjacent to the SR 17 corridor. Rare wildlife species primarily restricted to native habitat adjacent to the study corridor include the "sand swimming" sand skink (*Neoseps reynoldsi*), the blue-tailed mole skink (*Eumeces egregius lividus*), and the Florida scrub jay (*Aphelocoma caerulescens*). The gopher tortoise (*Gopherus polyphemus*) is a relatively common listed species that occurs in most altered or unaltered well-drained upland areas adjacent to the corridor. Because of the rarity of the habitat required for these species, state or federal agencies list many as endangered or threatened.

*Lands Identified as Naturally Significant*

While much of the natural vegetation communities were converted to agricultural uses, primarily citriculture within the region surrounding the Ridge Scenic Highway, or underwent development, many areas along and near the corridor still serve as significant wildlife habitat. State or local agencies own and manage many of these areas. Others, identified

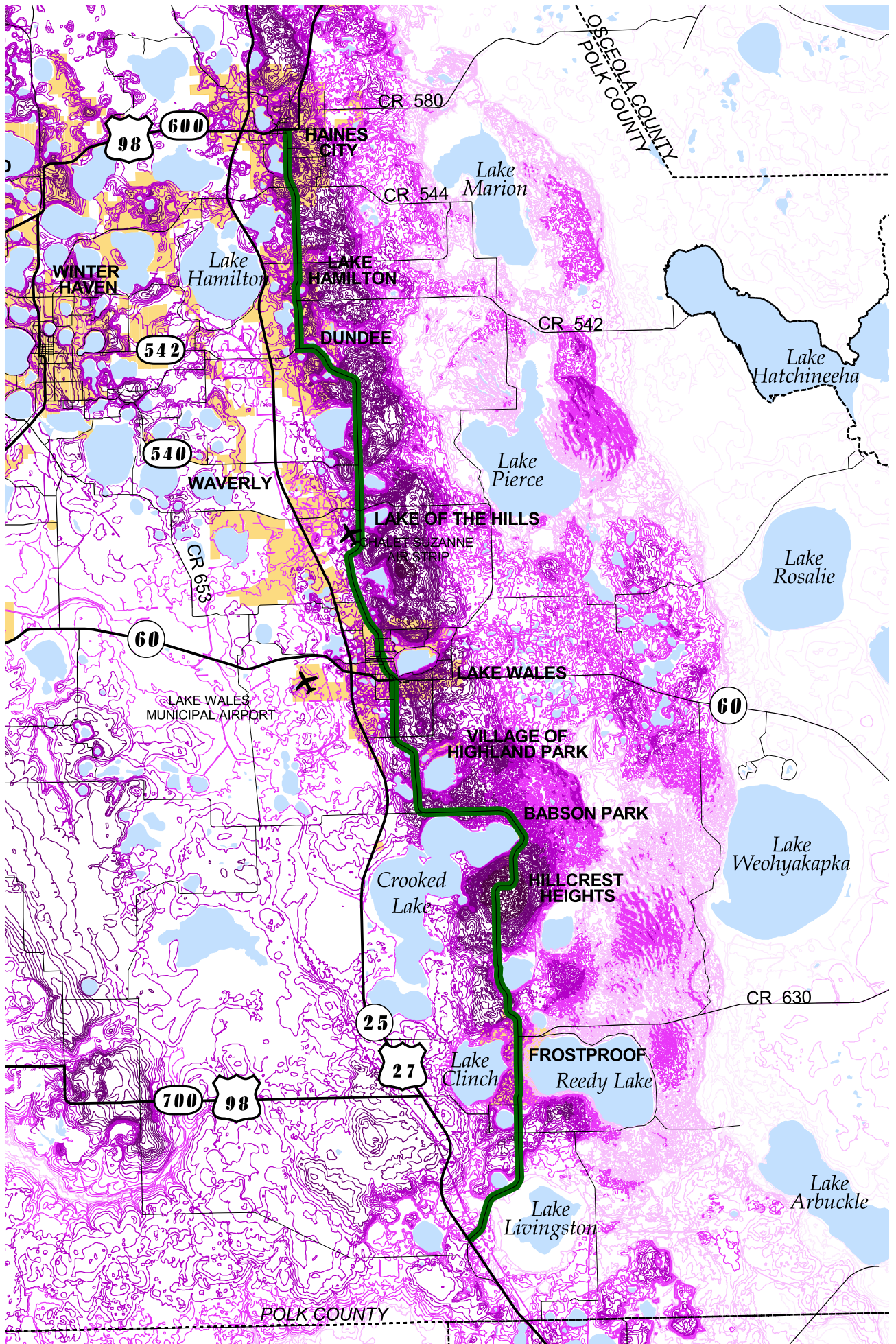
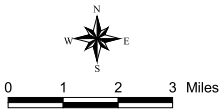
as significant by state agencies or environmental groups, remain in private ownership. *Figure 22* presents lands along and near the Ridge Scenic Highway that are currently in conservation or under public ownership. *Figure 22* also presents lands identified as significant by state agencies or environmental groups as significant natural areas, which remain under private ownership. These lands include:

- Proposed Conservation Lands (TNC and CARL,
- Wetlands (as listed by the Southwest Florida Water Management District and South Florida Water Management District),
- Naturally vegetated uplands (as listed by the Southwest Florida Water Management District and South Florida Water Management District), and
- Areas identified as containing seven or more target species, ranging from common large mammals to rare small creatures, occur (as listed by the Florida Fish and Wildlife Conservation Commission).



*A gopher tortoise (Gopherus polyphemus)*



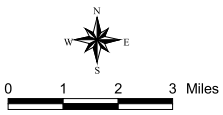


**LEGEND**










- Topography (in feet)
  - 0 - 70
  - 71 - 95
  - 96 - 120
  - 121 - 155
  - 156 - 236
  - 237 - 310
- SR 17 Scenic Highway
- City Limits

**Figure 21:**  
**Topography**



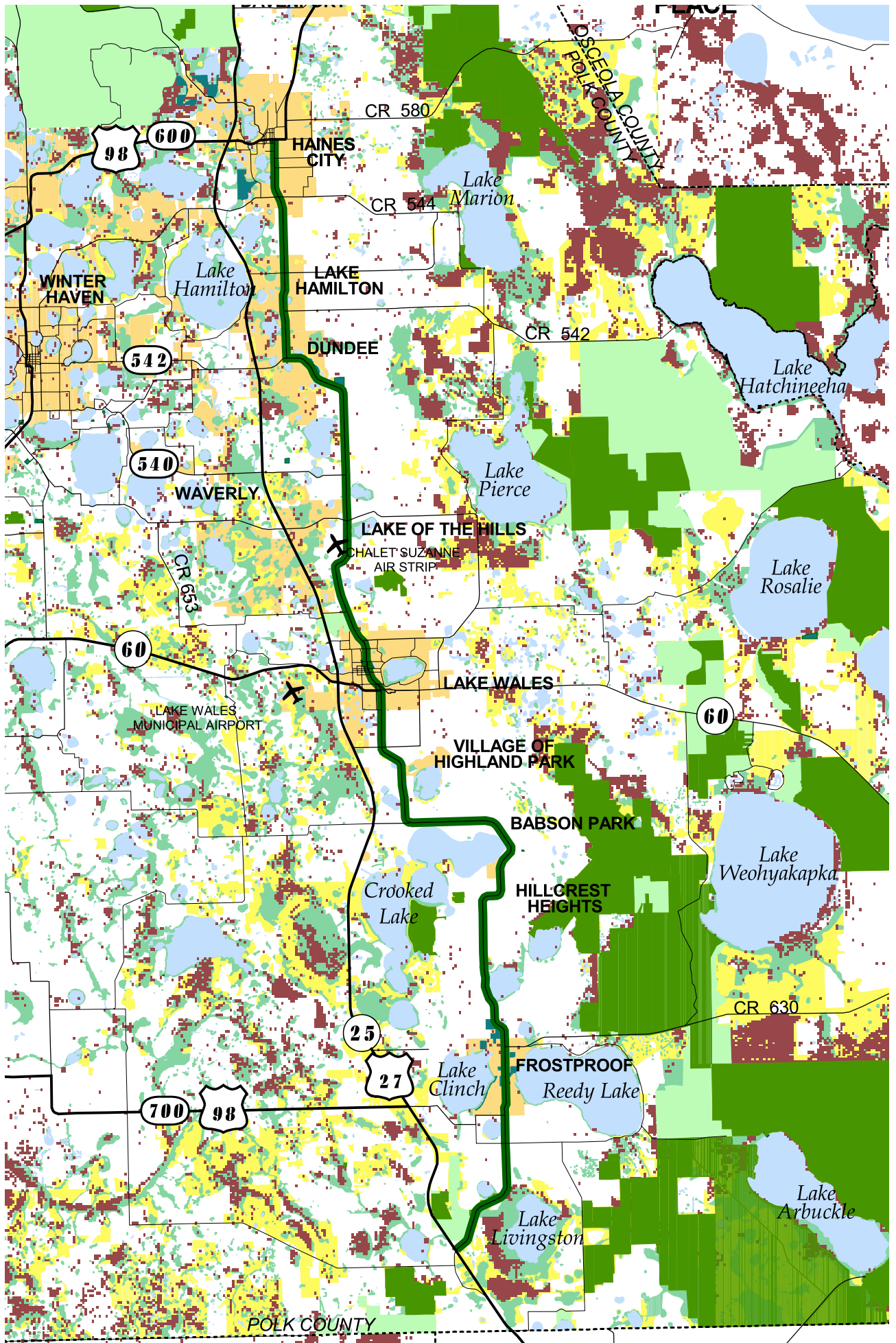


**LEGEND**

-  SR 17 Scenic Highway
-  Existing Conservation Lands (TNC & TPO)
-  Public Parks (Polk Co., City of Frostproof & Haines City)
-  Proposed Conservation Lands (TNC/CARL)
-  Target Species 7+ (FWC)
-  Open Water (SWFWMD & SFWMD)
-  Wetlands (SWFWMD & SFWMD)
-  Naturally Vegetated Upland (SWFWMD & SFWMD)
-  City Limits

**Source:**

- TNC The Nature Conservancy
- TPO Transportation Planning Organization
- SWFWMD Southwest Florida Water Management District
- SFWMD South Florida Water Management District
- FWC Florida Fish & Wildlife Conservation Commission
- CARL Conservation & Recreation Lands 1998



**Figure 22: Ecological Features**

### Other Programs

The programs identified in the Corridor Management Plan, in combination with public and non-profit beautification and economic development efforts, as well as the strong determination and commitment of local support, will result in a successful and prosperous scenic highway. The number of existing programs that would prove beneficial may include:

- Local Governments
- Chambers of Commerce
- Lake Wales Ridge Ecosystem Working Group
- Florida Department of Transportation Work Program
- Florida Economic Council, Inc.
- Central Florida Development Council
- Green Partners
- Central Florida Resource Conservation and Development Council, Inc.
- Polk County Nature Conservancy
- Ridge Audubon Society
- Polk Group – Sierra Club
- Polk County's Environmental Lands Program
- Ridge Rangers
- Polk County Historical Association
- Polk County Historical Museum
- Dundee Depot Museum
- Lake Wales Depot Museum
- Frostproof Historical Museum and Library
- Central Florida Historic Trails Association
- Keep Polk County Beautiful
- Central Florida's Polk County Visitors and Convention Bureau
- Polk County Tourism Board
- Murals