

#### SUSSEX COUNTY COMPREHENSIVE PLAN

**COUNTY COUNCIL WORKSHOP** 



January 31, 2018



#### MOBILITY ELEMENT

- Jan. 17 Workshop Follow-up Items
  - AADT explanation: 2006 2016 count comparison
  - Travel time reliability explanation: categories and color coding
  - Future traffic LOS explanation
  - Corridor Capacity Preservation Program (CCPP): corridor nomination process
- Goals, Objectives and Strategies Review
- Next Steps



#### **AADT EXPLANATION**

- Why use AADT for comparison?
  - To facilitate comparison with the 2008 Mobility Chapter data
  - Shows overall level of vehicular demand
- How are AADT volumes calculated?
  - Automatic Traffic Recorders (ATRs) or sample counts
  - Statistical analyses to generate an annual average of daily traffic
- Is the AADT data accurate?
  - Data is accurate based on comparable location to 2008 chapter
  - All roads in this table have some segments with an ATR
  - Many factors could influence an annual average

	2006 to 2016 Traffic Volume Comparison - Key Sussex County Corridors		
		2004-2006	2016
Highway or Roadway	Location	AADT	AADT
SR 1	Near Rehoboth Beach	60,000	65,500
US 13	Near Seaford	30,000	37,500
US 113	Near Millsboro	24,000	30,500
SR 404	Near Bridgeville	9,000*	11,500
US 9	Georgetown	16,000	16,500

38,000 near Georgetown

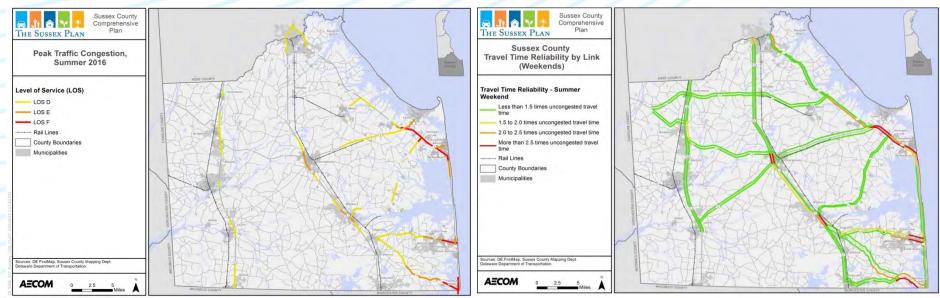
<sup>\*</sup>Note: The 2008 Mobility Element reported an AADT of 26,000 for SR 404 near Bridgeville, which was actually for the US 13 segment near Bridgeville. The accurate AADT for SR 404 near Bridgeville was 9,000.

THE SUSSEX PLAN



### TRAVEL TIME RELIABILITY

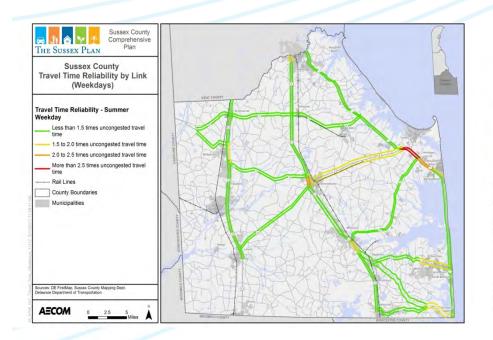
- What is travel time reliability (TTR)?
- How is TTR calculated?
- How are segments identified to establish TTR?
- What is the correlation between TTR and LOS?

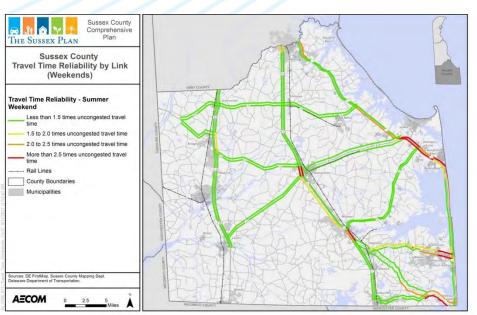




## TRAVEL TIME RELIABILITY (CONT.)

- What is the basis for TTR categories?
  - Why is TTR up to 1.5 is considered reliable?
  - Why TTR<1.5 is shown with green color that gives perception that operational conditions are acceptable?

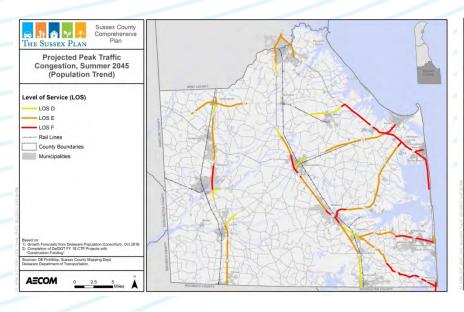


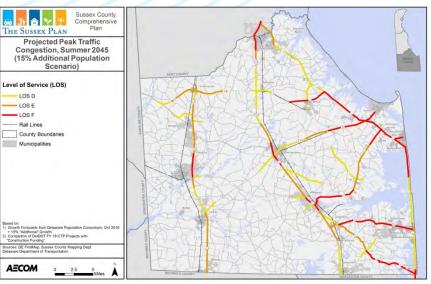




#### **FUTURE LOS EXPLANATION**

- How does travel demand forecasting work?
- How is future condition LOS determined?
- How do operational capacity improvements impact future LOS?







#### **CCPP PROCESS**

- What is the process to nominate a corridor to be included in the Corridor Capacity Preservation Program (CCPP)?
  - Every 3 years DelDOT opens up a re-designation process, where counties and municipalities can make requests
    - Last completed in 2016
    - Will be open again in 2019
- Funding is critical
  - The State needs funds to design and construct service roads, interchange projects, or buy down development rights if access isn't granted to a State-maintained road, an interconnecting road or cross-access easement.
- DelDOT receives about 200 corridor access inquiries annually.



# **CCPP PROCESS (CONT.)**

- What are the evaluation criteria?
  - Functional Class of the Road
  - Regional Connectivity
  - Existing Roadway Capacity
  - Volume of the Road
  - Road Location
    - · Within a growth zone
    - Investment area
    - Surrounding Land Use
  - Development Trends
  - Real Estate Costs
  - Public Input
  - Town and Municipality Support



- County Council recommendations addressed for Sections 13.1 through 13.5:
  - Forward-looking approach with emphasis on partnerships
  - Reorganization of sub-sections to align with appropriate main sections
  - Minor updates to sub-sections
  - Consistency with other chapters
  - Generalized description of a new county committee and a matching county fund
  - Elimination of formal alternate routes program and related way-finding



- ▶ 13.6 Mobility Goals, Objectives, and Strategies
- Suggested Revisions
  - Update and/or eliminate certain strategies as per the County Council guidance
  - Consolidate some goals; add and/or update some objectives
  - Add strategies related to land-use, alternative modes of travel, coordination and economic development
  - Closely link mobility strategies to the strategies in the land use chapter



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Goal 13.1:** Increase physical and operational capacity of the transportation system in the county.
  - Objective 13.1.1 Improve mobility for local residents and access to local businesses.
- Consider adding the following objectives under Goal 13.1:
  - Objective 13.1.2: Improve regional traffic flow and reduce impacts of seasonal population
  - Objective 13.1.3: Manage the existing system and demand to make travel more efficient



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Strategy 13.1.1.1 As a first priority, the County Council should appoint the MIC (Mobility Improvement Committee) to work with the state legislature and DelDOT to implement the Alternative Routes plan including the necessary wayfaring signage and possible mobile application function.
- ▶ Replacement strategy: Partner with the state legislature and DelDOT to establish a committee to advise County Council and DelDOT on recommended transportation improvements in the county.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Strategy 13.1.1.2 As a first priority, the MIC should verify both main routes and alternative routes capacity, identify any short term improvements needed and possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.
- Strategy 13.1.1.3 As a first priority, the MIC should verify both main routes and alternative routes capacity (including road classification and current traffic counts), identify any short term improvements needed as well as possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.
- Strategy 13.1.1.4 As a first priority, the MIC should work with the state legislature and DelDOT to implement the Alternative Routes plan including the necessary wayfaring signage and possible mobile application function.
- Replacement strategy: Establish appropriate roles and responsibilities for the committee for making recommendations to the Council on mobility improvement priorities and to track progress related to implementation of the 2018 mobility goals, objectives and strategies.





- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ Strategy 13.1.1.8 Ensure MIC partners with DelDOT to evaluate the recommendations in the Traffic Operations Management Plan (TOMP) for Sussex County, determine which recommendations should be implemented and report findings and its recommendations to Council.
- ▶ Strategy 13.1.1.8 Ensure the new committee partners with DelDOT to evaluate the recommendations in the Traffic Operations Management Plan (TOMP) for Sussex County, determine which recommendations should be implemented and report findings and its recommendations to Council.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Strategy 13.1.1.13** Partner with DelDOT to introduce and build early consensus on potential improvement concepts.
- Strategy 13.1.1.13 Explore the use of Strategic Working Groups to introduce and build early consensus on potential improvement concepts in partnership with DelDOT and the County.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Goal 13.1:** Increase physical and operational capacity of the transportation system in the county.
- Consider adding the following land use strategies under Goal 13.1 that are essential for integrated land-use and transportation approach related to capacity enhancement:
  - Strategy 13.1.x.x: Consider requiring new commercial developments to be connected to existing commercial land uses (connected to objective 4.1.3 in the land use chapter)
  - Strategy 13.1.x.x: Consider the requirement that all or some private subdivision streets be built to DelDOT standards
  - Strategy 13.1.x.x: Consider code changes to require sidewalks for all development projects



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Goal 13.2: Begin construction of limited access capacity expansion
- This is an implementation phase action and not an appropriate goal for a Comp Plan. Project development process is already in place and needs to be followed before "beginning construction".
- Recommendation: remove this goal; consolidate strategies under this goal as below and include that strategy under Goal 13.1:
  - Strategy 13.1.x.x: Work with DelDOT to ensure inclusion of appropriate limited access capacity expansion projects as per county identified priorities and an effective implementation of project development process leading to construction of these projects in a timely manner.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Goal 13.3:** Improve not only physical capacity of roadways, but also the operation capacity utilizing all means available.
  - Strategy 13.3.1.3 Partner with DelDOT to establish Alternate Routes in general accordance with the Alternate Routes Map including necessary wayfinding signage, possible mobile application functions and identify any short, medium and long term roadway capacity improvements and costs for purposes of implementation.
  - Strategy 13.3.1.3 Partner with DelDOT to evaluate capacity needs for alternate/secondary routes that are being more frequently used due to advancement of GPS technology resulting in live traffic updates and traffic rerouting to avoid congested primary corridors.



- 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Goal 13.4: Increase capacity on for Routes 113 and 16.
- Goal 13.5: Create limited access highways for Route 9, and Route 24.
- Goals 13.4 and 13.5 are corridor-specific actions related to Goals 13.1 and 13.3.
- Recommendation: Eliminate these goals. Repeated strategies under them should be consolidated as below and included under Goal 13.1:
  - Strategy 13.1.x.x: Increase capacity and/or limit access for key corridors such as US 113, SR 9, SR 16 and SR24 as per the identified corridor visions by increasing frontage setback requirements, purchasing easements, and promoting interconnectivity.
  - Strategy 13.1.x.x: Explore and identify future infrastructure and/or technology needs related to emerging technologies, such as connected and autonomous vehicles (CAV).



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ Goal 13.6: Improve evacuation effectiveness in anticipation of emergency weather.
- Consider expanding the language/scope of this goal to include safety, security and reliability aspects not just related to weather emergencies but all types of emergencies:
- Goal 13.6: Improve evacuation effectiveness in anticipation of emergency weather to enhance safety, security and reliability of the transportation system.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Objective 13.6.1 Create limited access evacuation corridors in the areas around: Route 26 east of Route 113, Route 54 east of Route 113, Increase frontage setbacks on Route 24 east of Route 113, Route 9, Route 16, Route 18 west of Route 113.
- ▶ This objective is related to general capacity improvement (Goal 13.1). Limited access corridors are not created for evacuation purpose only.
- Objective 13.6.1 Improve efficiency of evacuation routes by minimizing bottlenecks by creating limited access corridors in the areas around: Route 26 east of Route 113, Route 54 east of Route 113, Increase frontage setbacks on Route 24 east of Route 113, Route 9, Route 16, Route 18 west of Route 113.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Goal 13.6:** Improve evacuation effectiveness to enhance safety, security and reliability of the transportation system.
- Consider adding the following objective under Goal 13.6
  - Objective 13.6.2: Identify investments that improve safety and resiliency of the transportation system with improved methods to track and communicate capital improvement requests and safety issues.



- 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Goal 13.6:** Improve evacuation effectiveness to enhance safety, security and reliability of the transportation system.
- Strategy 13.6.1.4 Identify potential local routes that could serve as alternative or secondary evacuation routes which routs may coincide with those indicated in the Alternative Routes Map.
- Consider adding the following strategies under Goal 13.6:
  - Strategy 13.6.x.x: Continue coordination efforts with DelDOT, Maryland State Highway Administration (SHA), and surrounding counties to streamline evacuation across political boundaries.
  - Strategy 13.6.x.x: Work with municipalities on asset management plans for locally-maintained infrastructure.
  - Strategy 13.6.x.x: Consider new methods to monitor at-risk infrastructure or unsafe conditions.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Goal 13.7: Ensure adequate ease of movement for emergency vehicle response times.
- ▶ Combine with 13.6 (as a strategy under Goal 13.6 as below):
  - Strategy 13.6.x.x: Ensure adequate ease of movement using methods such as addition of multi-purpose and/or service lanes to achieve efficient emergency vehicle response times in areas where accessibility is difficult for first responders.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Goal 13.8: Consider transportation alternatives to improve overall mobility.
  - Objective 13.8.1 Reduce traffic on heavily utilized roadways by offering existing alternative routes based on Map 13.8-1 below.
  - Strategy 13.8.1.1 As a first priority, the MIC should verify both main routes and alternative routes capacity, identify any short-term improvements needed and possible costs, provide timing and possible costs of longer term improvements based on capacity and report findings and recommendations to the County Council and DelDOT.
  - Strategy 13.8.1.2 Partner with DelDOT to support the Byways Program and to implement the recommendations of the Corridor Management Plans (CMPs) for all scenic and historic byways in the County. Move this strategy under Goal 13.3.
  - Strategy 13.8.1.3 Based on the alternate routes indicated on Figure 13.4.1, work with\_DelDOT to develop and fund wayfaring signage for each intersection such that travelers can easily find their way around the County.





- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- Goal 13.8: Consider transportation alternatives to improve overall mobility.
  - Strategy 13.8.1.4 Encourage DelDOT to add a function to their mobile
    application allowing travelers to enter a destination and click "alt routes" or
    similar such that GPS devices can find and follow these routes.
  - Strategy 13.8.1.5 Request that DelDOT (or County consultant) provide data concerning the current capacity of the identified alternate routes and at what point in time improvements would be required to be made to roads and intersections based on added trips and monitor traffic annually such that improvements can be budgeted and funded.
  - Strategy 13.8.1.6 Identify specific bypass roads or routes for areas affected by heavy tourist and/or freight traffic and prioritize, schedule, and work with the State to fund and implement such improvements. Move this strategy under Goal 13.1.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ Goal 13.9: Facilitate freight movement throughout Sussex County.
  - Strategy 13.9.1.1 Adapt future infrastructure and/or technology needs related to emerging technologies, such as connected and autonomous vehicles (CAV). Recommended to be included under Goal 13.1. Remove from here.
  - Strategy 13.9.1.5 Partner Work with the Delmarva Central Railroad rail road partners to aid in their strategic planning efforts and to help identify potential rail customers.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ Goal 13.10: Facilitate alternative modes of transportation.
- Add the following objective and strategies related to encouraging use of alternative motorized modes:
  - Objective 13.10.x: Encourage strategies supporting mode share improvement for public transit, aviation and water transport.
  - Strategy 13.10.x.x: Partner with DelDOT and DART to strengthen outreach campaigns that encourage alternative forms of transportation, which could include incentives
  - Strategy 13.10.x.x: Encourage the development of general aviation and tourism at Laurel Airport.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Goal 13.11:** Explore fiscal and strategic solutions that complement state initiatives to promote economic development.
- Modify this goal to link fiscal and strategic solutions with economic development:
- Add another objective as follows:
  - Objective 13.11.2: Promote strategic solutions to encourage integrated land-use and transportation approach.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
  - Strategy 13.11.1.1 If DelDOT establishes a new matching funding mechanism such as a 90%DelDot/10% County ratio then the County should explore the possibility of establishing a new source of matching funds.
  - If state establishes a new matching funding mechanism then the County should explore the possibility of establishing a new source of matching funds.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ **Goal 13.11:** Explore fiscal and strategic solutions that complement state initiatives to promote economic development.
- Consider adding the following strategies:
  - Strategy 13.11.2.1: Consider code changes that will ensure development is concurrent with the availability of public services.
  - **Strategy 13.11.2.2:** Consider limiting new development in congested areas where it is not feasible to add physical capacity, due to constraints.
  - Strategy 13.11.2.3: Consistent with the Housing Element, create market incentives to expand workforce housing opportunities near employment centers.



- ▶ 13.6 Mobility Goals, Objectives, and Strategies (Cont.)
- ▶ Goal 13.12: Explore collaborative transportation solutions.
- Consider adding the following strategies:
  - Strategy 13.12.1.3: Partner with the Office of State Planning Coordination and other state officials to complete local master plans, which coordinate land use and transportation decisions.
  - Strategy 13.12.1.4: Improve methods to engage business owners in the planning process for any improvements that could impact their customer access.



#### **NEXT STEPS**

- Mark-up of Section 13.6 (Mobility Goals, Objectives, and Strategies) by 2/14/18
- Any follow-up items or additional strategies added
- Coordination with Land Use Chapter
- Final draft review by the County Council at a later workshop



**Pixabay** 







- What is the Future Land Use Plan?
  - The Future Land Use chapter is the centerpiece of the Comprehensive Plan. The chapter creates a framework for achieving the Plan's overall vision and determining future development priorities



- Designates what parts of the County are intended to be growth areas and rural areas
- Specifies the location and pace of development based on established goals
- Planning areas are <u>not</u> zoning districts
  - Zoning ordinance contains the detailed regulations for implementing the future land use plan policies on land development and conservation
     THE SUSSEX PLAN



- Why is the Future Land Use Plan Important?
  - The County is developing rapidly this is an opportunity to decide where that development will be located and how it will look
  - How and where land is developed shapes what the County will look like on the ground in the future
  - The Land Use Map guides updates to the County's zoning and subdivision codes
  - Land use decisions affect other Plan elements, just as other elements affect the Future Land Use Plan



- How does Land Use connect to the other Elements?
  - Mobility where to focus investments and options for how people will get around
  - Conservation, and Recreation and Open Space these elements direct where sensitive areas or open space is preserved
  - Community Design provides the character for the look and feel of the growth areas
  - Infrastructure investments ability to plan for investments based on growth plans and make efficient use of investments
  - Economic Development careful and deliberate future land use planning can help foster economic growth and development



#### Approach for Upcoming Council Workshops

#### February 21st

- Review the highlights of the element and connections to other elements and the 2008 Plan
- Present an overview chapter contents, including the draft Future Land Use Map
- Begin review of Goals, Objectives and Strategies

#### February 28th

- Complete review of Goals, Objectives and Strategies
- Review and discuss Draft Future Land Use Map