

City of Brookings Transportation System Plan

TAC PRESENTATION

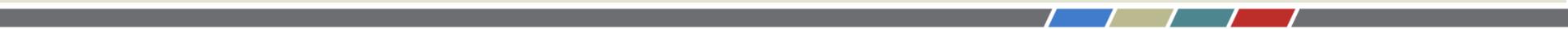
July 10, 2014

AGENDA



- Project Purpose
- Study Process
- Schedule
- Study Team
- Review of Tech Memo #1 – Policy Background, Goal Setting, and Evaluation Criteria
- Review of Tech Memo #2 – Existing Conditions Inventory
- Review of Tech Memo #3 – Existing Transportation System Operations

PURPOSE OF THE STUDY



- Update City of Brookings TSP
 - 20-year action plan for transportation improvements in the Brookings Urban Growth Boundary (UGB)

STUDY PROCESS

- The TSP will do the following for all modes:
 - Evaluate existing and future transportation conditions
 - Identify existing and future deficiencies
 - Develop transportation system alternatives
 - Prioritize realistic transportation project opportunities
 - Identify potential funding sources and implementation strategies
 - Update code changes and supporting ordinances for implementing the Plan

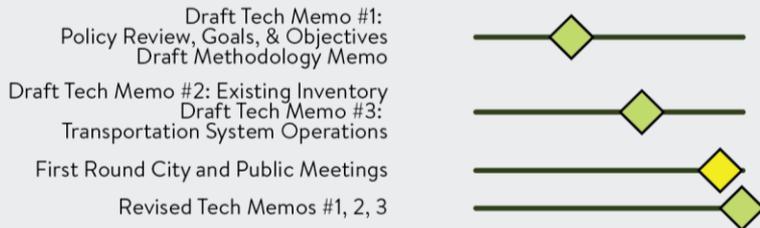
SCHEDULE

LEGEND

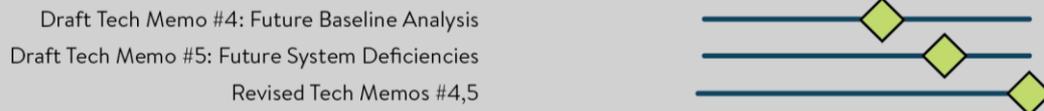
-  MEETING
-  DELIVERABLE



1. Policy Background, Goal Setting, Existing Conditions



2. Future Baseline Conditions, and Existing/Future Deficiencies



3. Alternatives Evaluation



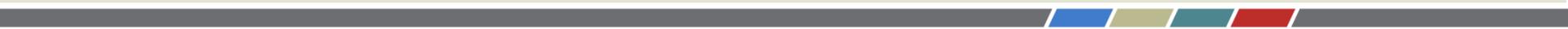
4. Preferred System Plan



5. Updated TSP Preparation



STUDY TEAM



- Technical Advisory Committee
- Citizen Advisory Committee
- Project Management Team
- Public

TECH MEMO #1

- State, Regional, and Local Plan and Policy Review
- Draft Goals
- Draft Objectives
- Draft Evaluation Criteria
- Study Area

TECH MEMO #1 – PLAN/POLICY REVIEW

- Provides a background for the Brookings TSP
- Outlines relevant plans and policies
 - State
 - County/Regional
 - Local Policy, Plans, and Standards
- State planning requires system plans for local jurisdictions

TECH MEMO #1 – DRAFT GOAL

- To provide a balanced, multi-modal, safe, convenient, economical, and efficient transportation system for Brookings.

TECH MEMO #1 – DRAFT OBJECTIVES

- **Develop a coordinated transportation system** that facilitates the mobility and accessibility of community residents in a safe and efficient manner, and encourages alternatives to and reduced reliance upon the single-occupant automobile.
- **Promote the development and maintenance of all transportation modes** including bikeways, pedestrian ways, and public transportation where appropriate to all planned land uses, while minimizing adverse environmental impacts.

TECH MEMO #1 – DRAFT OBJECTIVES, CNTD.

- **Cooperate with and support regional public transportation planning efforts**, including working with public and private agencies to promote the use of vanpools and park and ride.
- **Promote and give high priority to bike and pedestrian ways** in the downtown area, and in the vicinity of Kalmiopsis Elementary School and parks, including development of a Safe Routes to School Action Plan and the identification of locations where bicycle parking may be needed.

TECH MEMO #1 – DRAFT OBJECTIVES, CNTD.

- **Protect the function of the airport facilities** in the City and develop and implement strategies that minimize conflicts with other transportation modes and adjacent land uses.
- **Coordinate with the Oregon Department of Transportation and Curry County** in the planning and provision of transportation services and in the implementation of the ODOT State Transportation Improvement Program (STIP) and provisions of the Oregon Highway Plan (OHP).

TECH MEMO #1 – DRAFT OBJECTIVES, CNTD.

- **Utilize the Transportation System Plan** for guidance in all land use planning and project development activities.
- **Develop and regularly update, prioritize and maintain a Capital Improvements Program** that identifies streets, curbs, sidewalks, bikeways and pedestrian ways that need repair/construction.
- **Involve the public** in the transportation planning process to encourage community support for the TSP.

TECH MEMO #1 – DRAFT OBJECTIVES, CNTD.

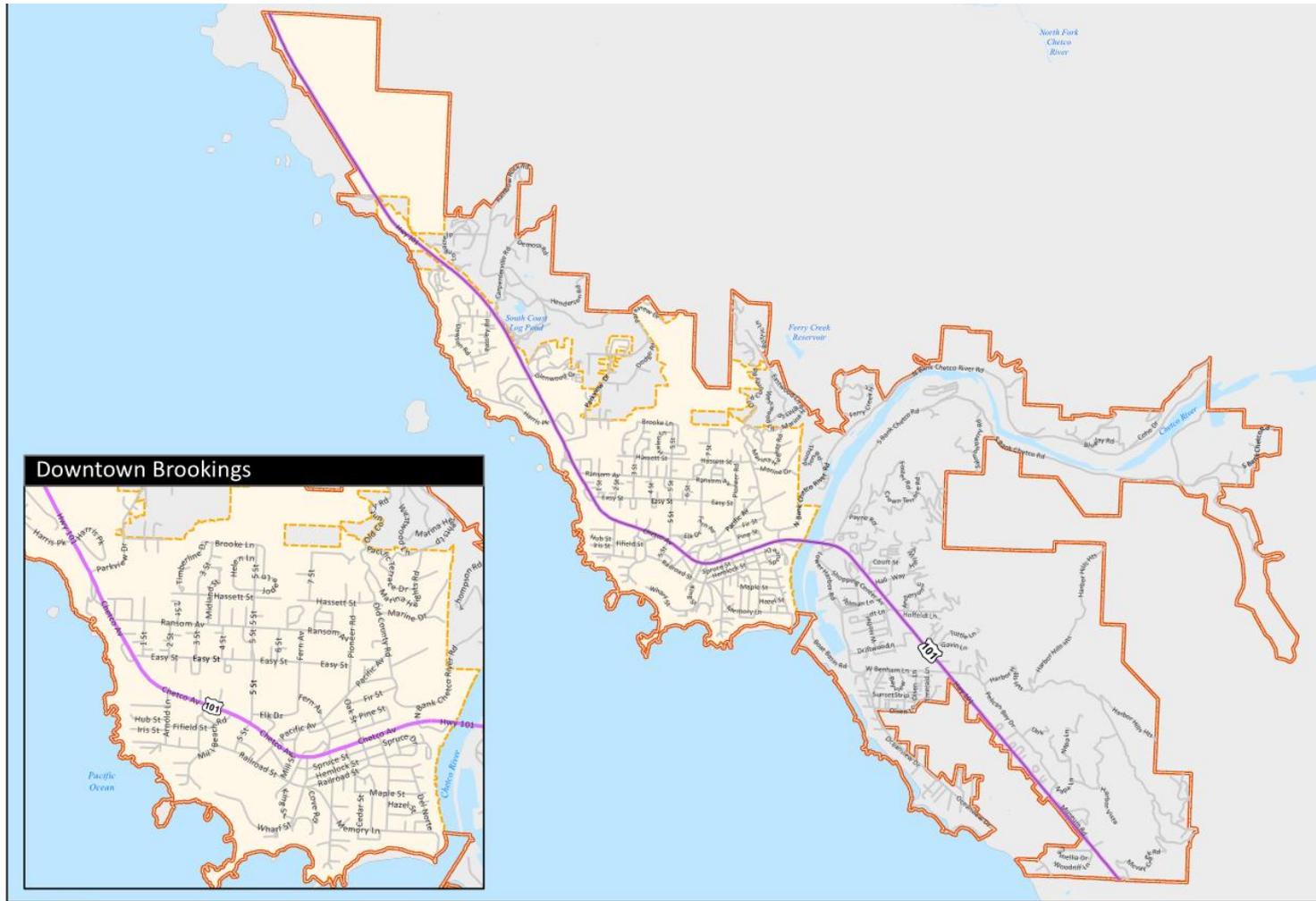
- **Identify projects for Railroad Street to serve as a parallel alternative to US 101**, to improve safety, and to reduce congestion of both streets.
- **Participate in regional efforts to expand bicycle facilities beyond city limits** to attract tourists to Downtown.

TECH MEMO #1 – DRAFT EVALUATION CRITERIA



- Criteria 1: Connectivity
- Criteria 2: Spot Improvement
- Criteria 3: Funding Likelihood
- Criteria 4: Safety
- Criteria 5: Land Use
- Criteria 6: Cost
- Criteria 7: Environmental Impact
- Criteria 8: Impact to Title V1 and Environmental Justice Populations

TECH MEMO #1 – STUDY AREA



Parametrix



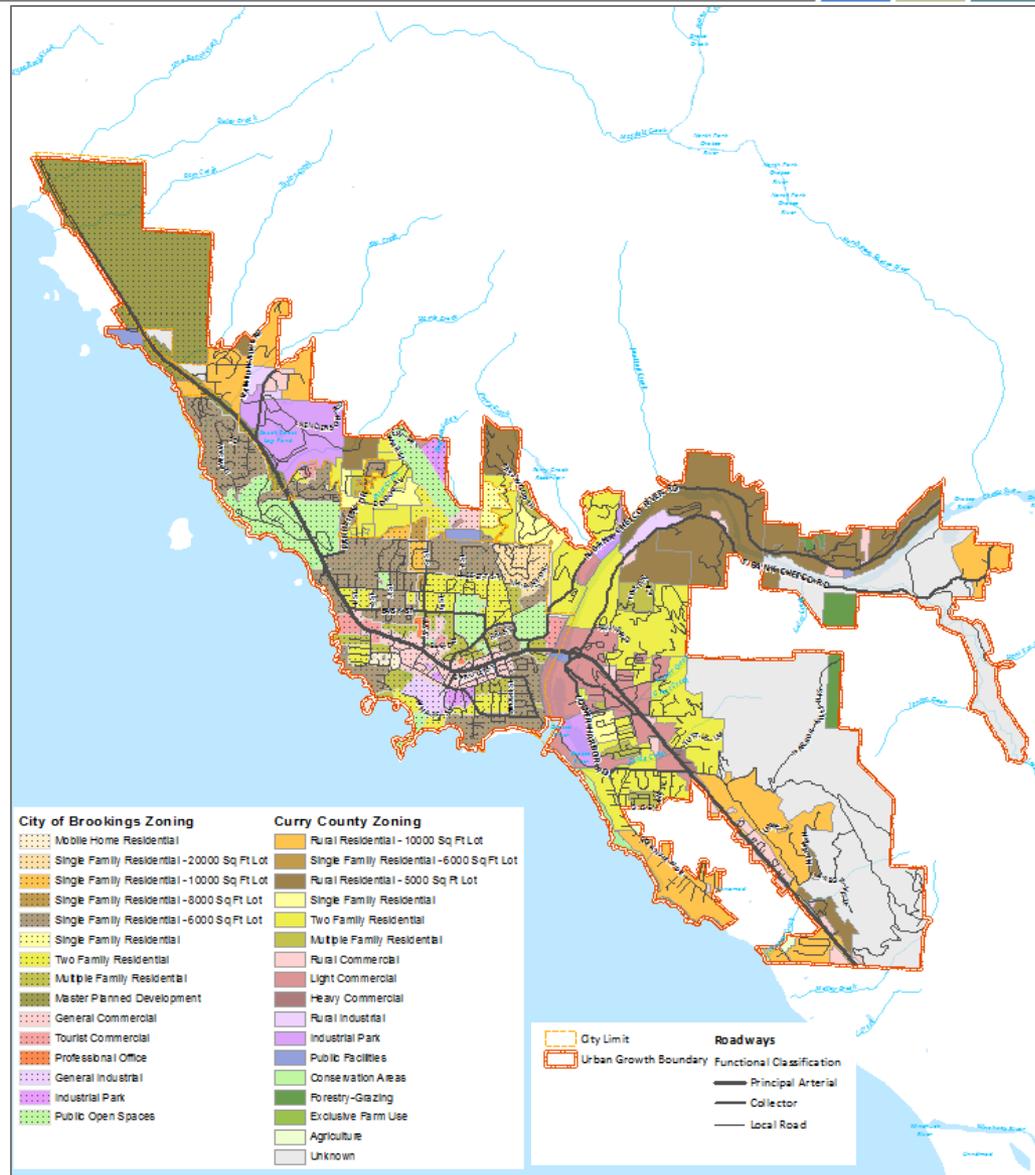
Highway 101 Roadways Urban Growth Boundary CityLimits

Brookings Street Map

TECH MEMO #2

- Land Use/Zoning
- Population & Employment
- Functional Classification
- Pedestrian and Bicycle Network
- Public Transportation
- Aviation
- Bridges and Culverts
- Natural Resources

TECH MEMO #2 – LAND USE/ZONING



TECH MEMO #2 – POPULATION & EMPLOYMENT

- Population grew 16% between 2000 and 2010
- Median age in Brookings is 46.9 years.
- US Census Bureau Business Survey indicated there were 700 businesses in Brookings in 2007
- Approximately 45% of Brookings residents are employed (sales & office are the major employment category)
- 78% of workers 16 years and older commute by SOV, 9% commute by carpool, 4% work at home, and less than 1% use public transportation
- 63% of employed population work within Brookings

TECH MEMO #2 – FUNCTIONAL CLASSIFICATION



TECH MEMO #2 – BICYCLE/PEDESTRIAN NETWORK



Parametrix and Alta Planning + Design

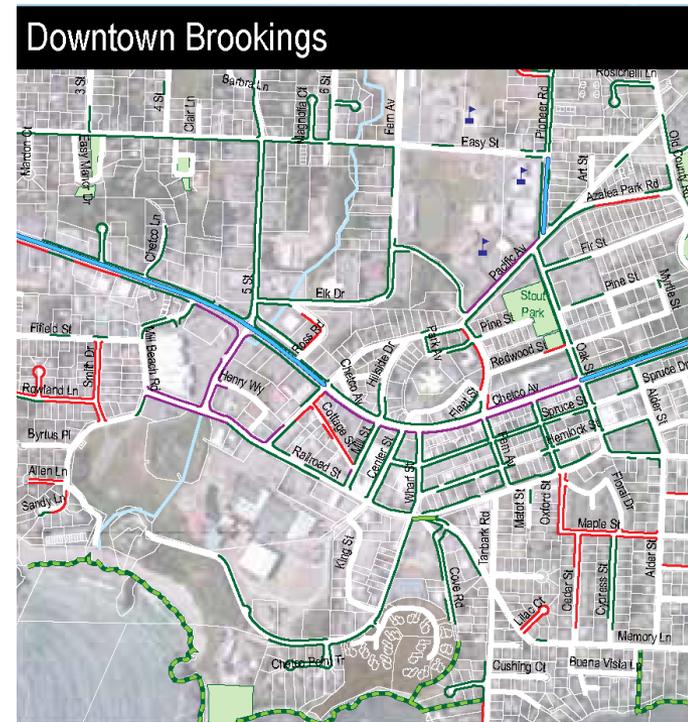
Source: Curry County, City of Brookings, US Census, Alta Planning + Design

Existing Bicycle and Pedestrian Network

Transportation System Plan
Brookings, Oregon

TECH MEMO #2 – PEDESTRIAN INVENTORY

- Well-connected existing sidewalk
- Highway 101/Chetco Avenue is a connectivity barrier
- Downtown has high-visibility continental crosswalks
- Harbor has few sidewalks, but low speed streets accommodate pedestrians on shoulders
- Rectangular Rapid Flashing Beacon on Railroad St at Wharf St



Existing Sidewalk

— < 5' wide

— 5' to 8' wide

— > 8' wide

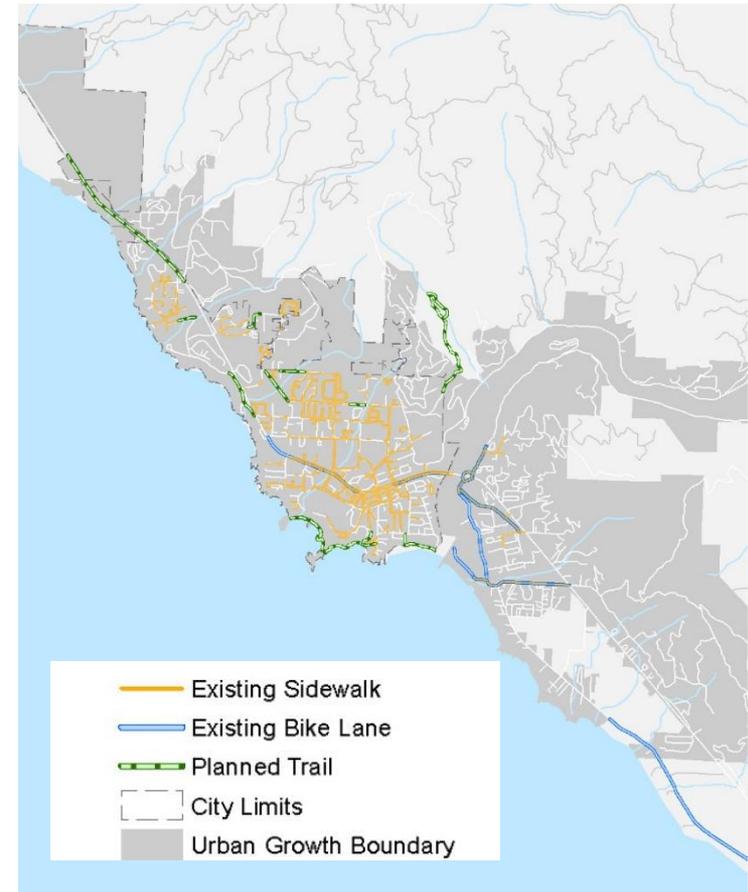
— Existing Bike Lane

— Existing Shared Use Path

— Proposed Shared Use Path

TECHNICAL MEMO #2 – BICYCLE INVENTORY

- Shared use paths
 - Railroad St
 - Harris Beach SP to Ransom St
- Bike lanes
- Potential for designating streets as part of the Oregon Coast Bike Route



TECH MEMO #2 – PUBLIC TRANSPORTATION



- Curry County Public Transit operates a Dial-A-Ride service and regional bus service called Coastal Express
- Brookings-Harbor School District provides bus service to all schools in Brookings
- Taxi service within Brookings is provided by three companies

TECH MEMO #2 - AVIATION

- Brookings State Airport is located in northeast Brookings south of Harris Creek.
- The airport is a public access, general aviation facility with no commercial service.
- The airport has one 2,900 foot asphalt runway with a wind indicator, runway lights, and beacon.
- Brookings State Airport accommodates approximately 22,600 landings and departures annually.
- Access to the Brookings State Airport is provided via Parkview Drive.

TECH MEMO #2 – BRIDGES AND CULVERTS

- The one bridge located within Brookings is the Chetco River Bridge (US 101 at MP 357.96)
- There are nine culverts within Brookings:
 - Ransom Creek Culvert (US 101 at MP 355.99)
 - Lone Ranch Creek Culvert (US 101 at MP 352.43)
 - Taylor Creek Culvert (US 101 at MP 354.06)
 - Harris Creek Culvert (US 101 at MP 355.19)
 - Shigh Creek Culvert (US 101 at MP 354.53)
 - Tuttle Creek Culvert (US 101 at MP 359.13)
 - Joe Hall Creek Culvert (N Bank Chetco River Road at MP 1.61)
 - Shigh Creek Culvert (Rainbow Rock Road at MP 0.29)
 - Ferry Creek Culvert (N Bank Chetco River Road at MP 0.89)

TECH MEMO #2 – NATURAL RESOURCES

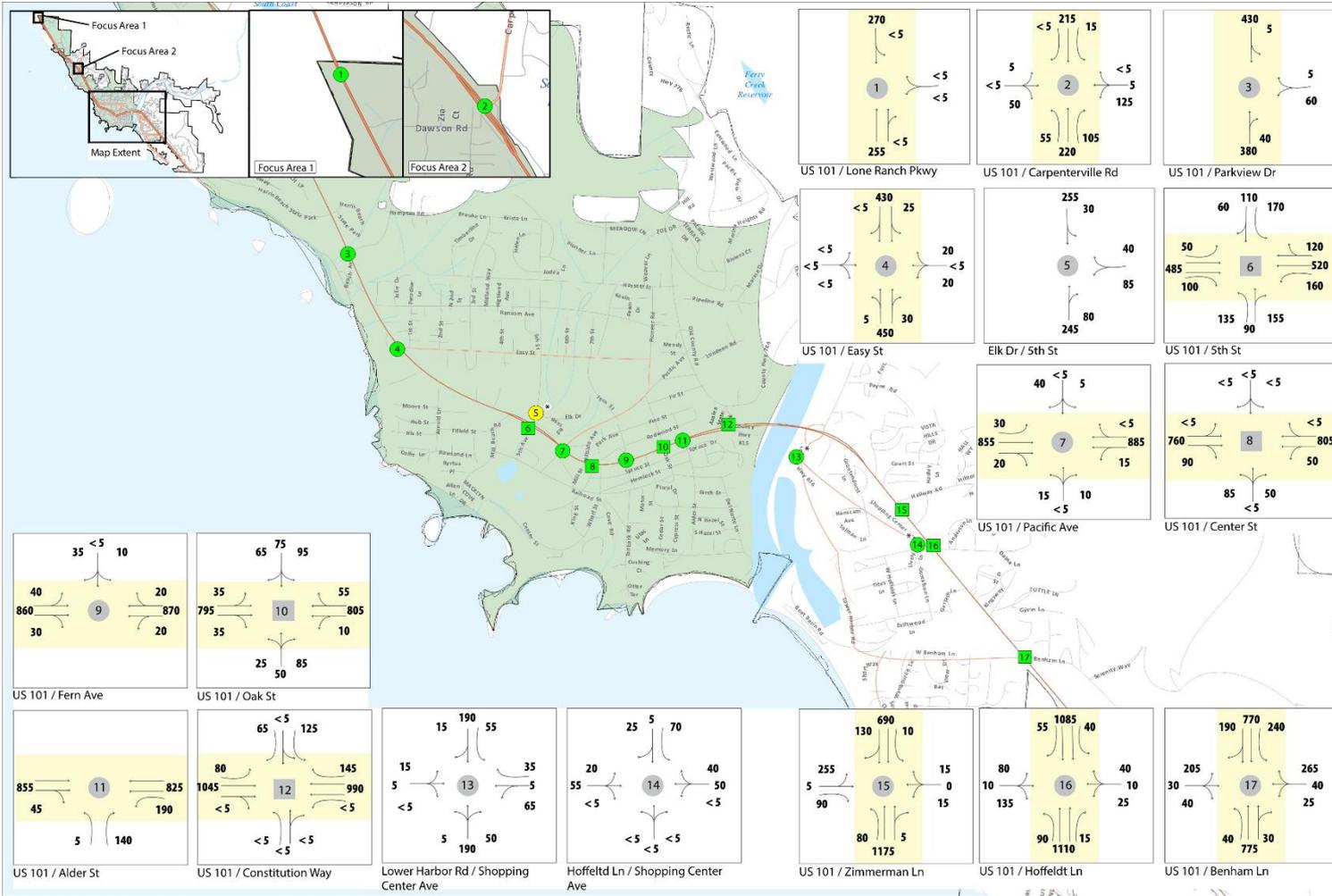


- Figures showing the FEMA 100 Year Flood Zones, Tsunami Inundation Zone, and Wetlands are included in the document.

TECH MEMO #3

- Traffic Volumes/Intersection Operations
- Nonmotorized Volumes
- Pedestrian Assessment
- Bicycle Assessment
- Transit Assessment
- Collision Analysis

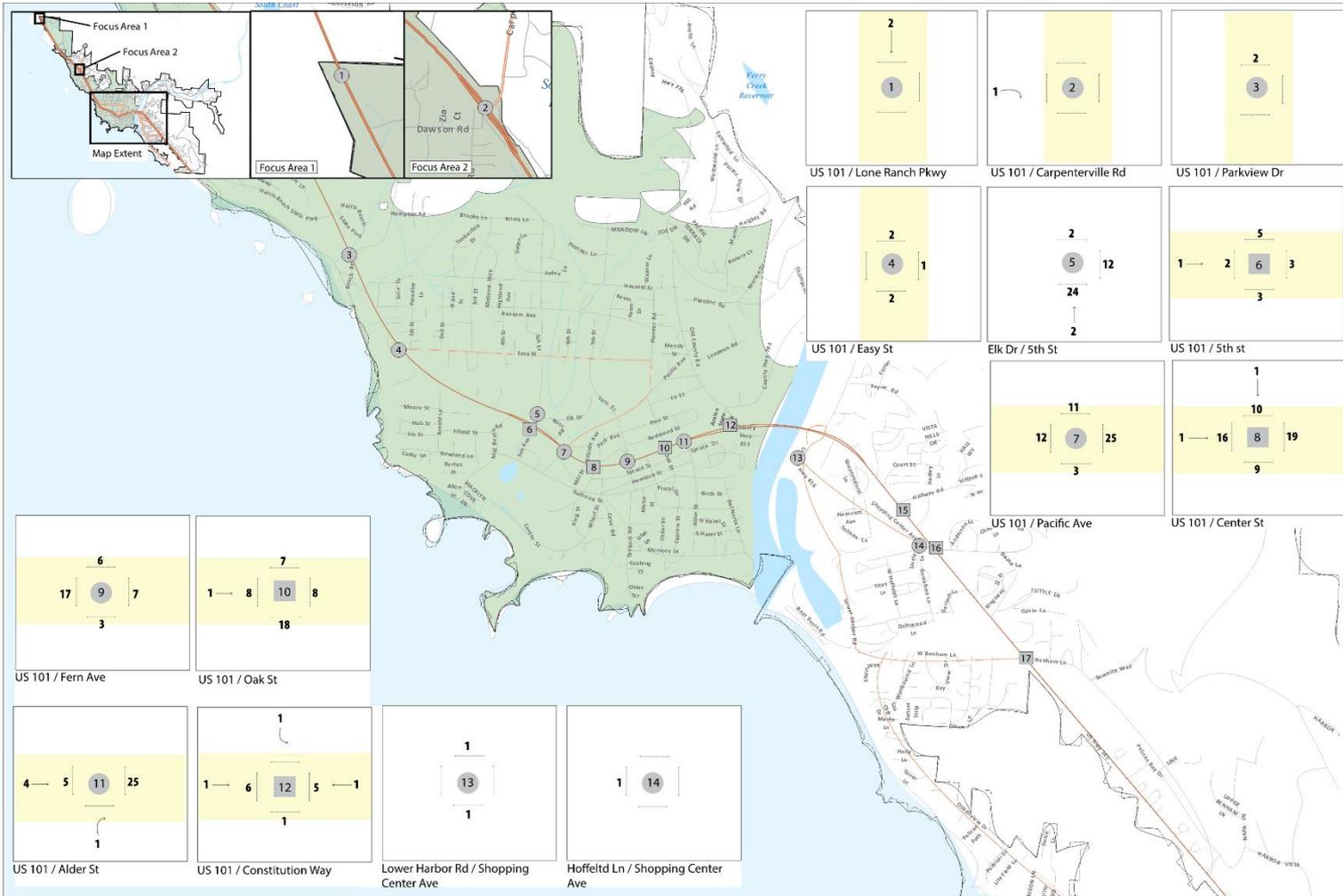
TECH MEMO #3 – TRAFFIC VOLUMES/OPERATIONS



- Urban Growth Boundary
- City Limits
- Orientation of US 101
- Unsignalized Intersection
- Signalized Intersection

- Mobility Standards
- V/C Ratios
- <math>< 0.5</math>
 - $0.5 - 0.7$
 - $0.7 - 0.9$
 - > 0.9
- Level of Service *
- A-B
 - C-D
 - E
 - F

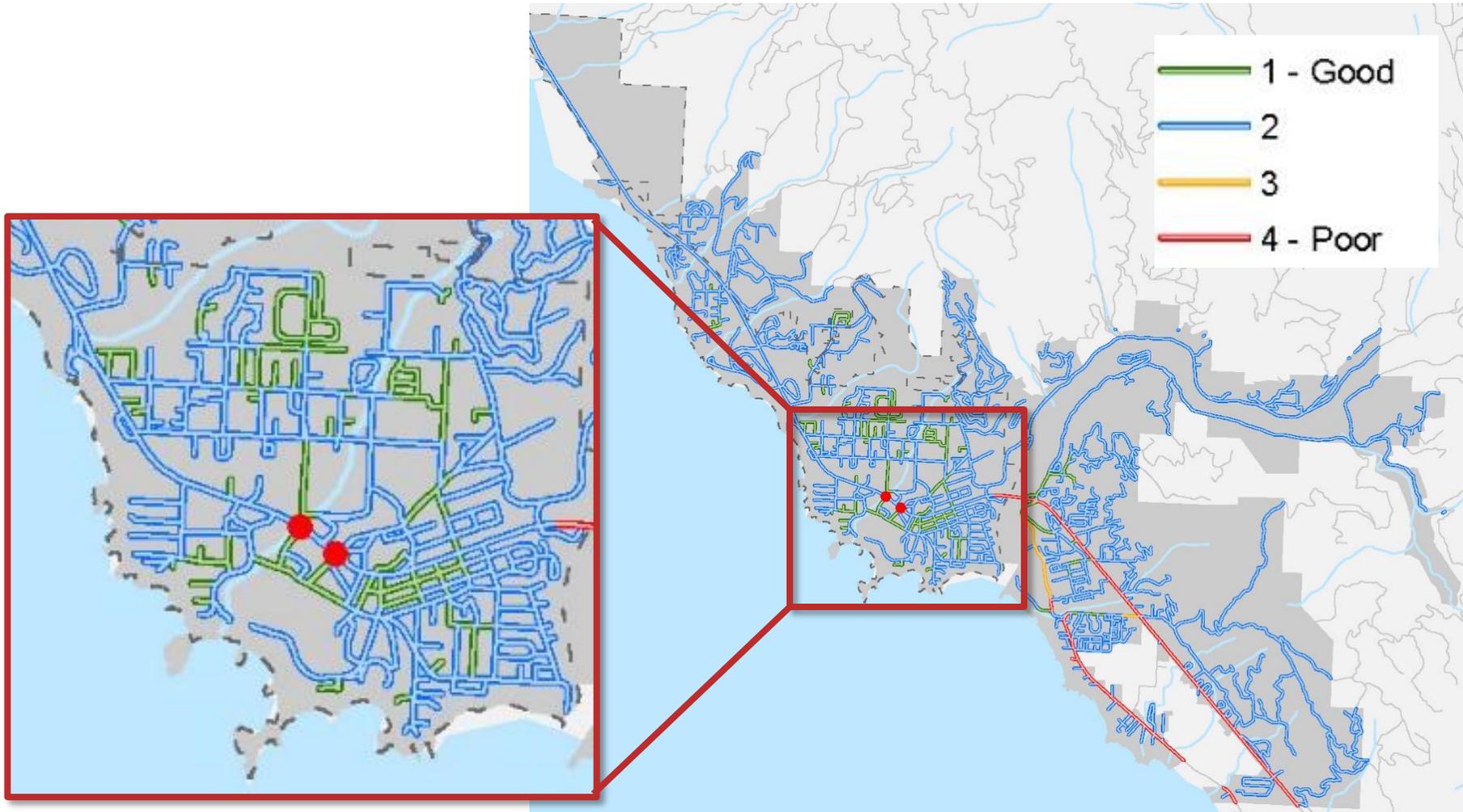
TECH MEMO #3 – NONMOTORIZED VOLUMES



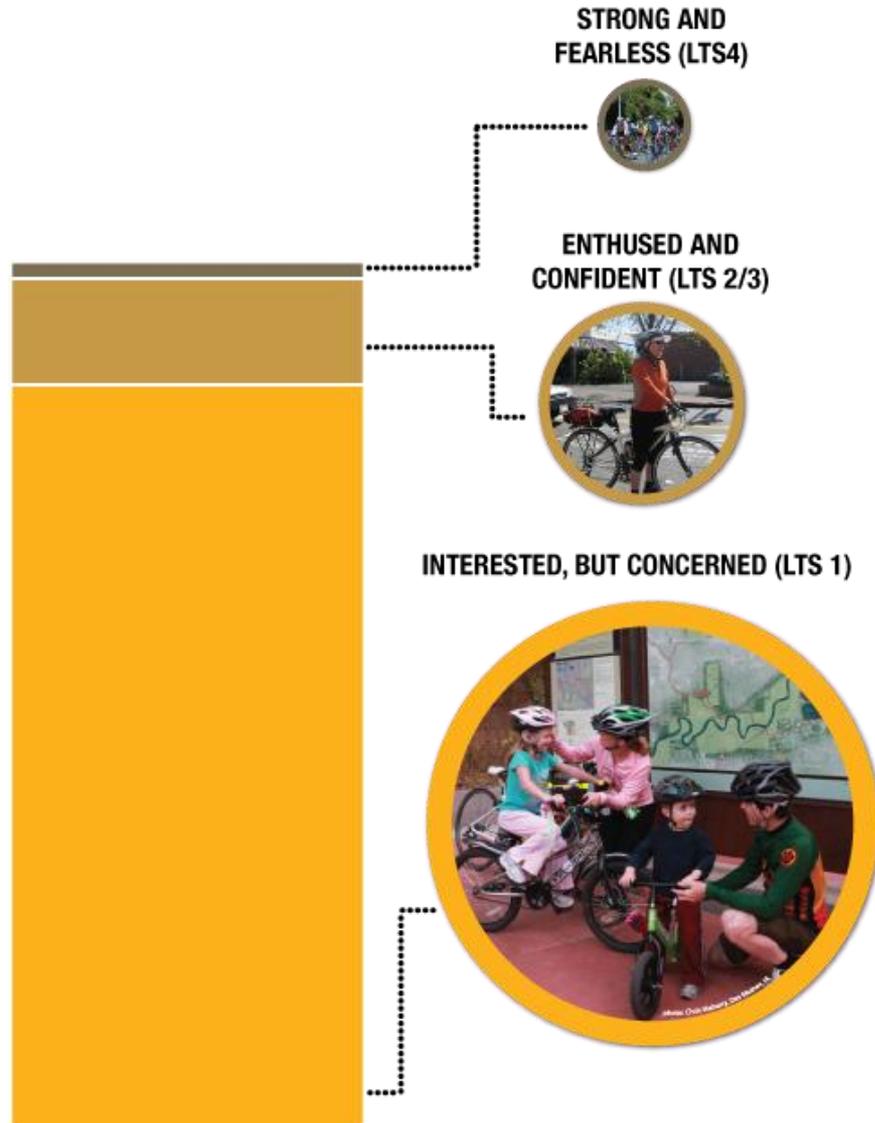
- Highways
- Major Road
- Local Road
- Urban Growth Boundary
- City Limits
- Orientation of US 101
- Unsignalized Intersection
- Signalized Intersection
- Bicycles
- Pedestrians

TECHNICAL MEMO #3 – PEDESTRIAN ASSESSMENT

- Pedestrian Level of Service (PLOS)

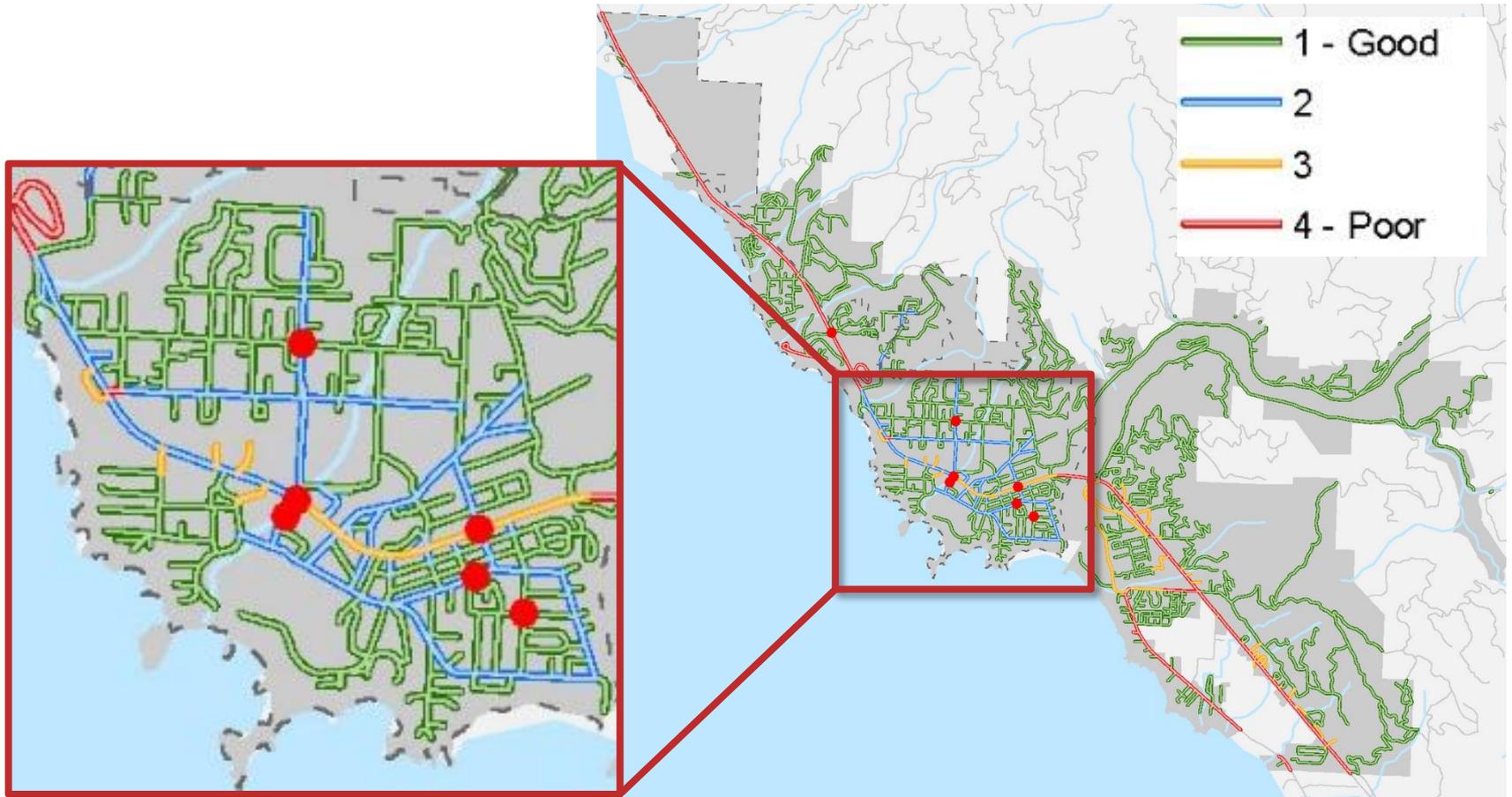


TECHNICAL MEMO #3 – BICYCLE LEVEL OF STRESS



TECH MEMO #3 – BICYCLE ASSESSMENT

- Bicycle Level of Stress



TECH MEMO #3 – TRANSIT ASSESSMENT

- The existing transit system in and throughout Brookings is “Poor” based on the existing frequency, schedule, speed/travel time, transit stop amenities, and connections to pedestrian/bicycle network.

TECH MEMO #3 – COLLISION ANALYSIS

- 169 crashes occurred between 2008 and 2012
- 101 crashes (60%) were property-damage only
- 98 crashes (58%) occurred at intersections
- Hwy 101 segment crash rates well below similar crash rates along other ODOT highways.
- ODOT's 2012 Safety Priority Index System (SPIS) analysis indicated 1 location in top 15% and 2 locations in top 10%
- 2 crashes involved pedestrians and 7 crashes involved bicyclists

NEXT STEPS

- Analyze future conditions for all modes (Summer 2014)
- Summarize existing and future transportation system deficiencies and needs for all modes (Fall 2014)
- Develop/evaluate system alternatives for all modes including cost estimates (Fall 2014)
- 2nd round of Committee and Public meetings (Winter 2014)
- Develop prioritized project list (Winter 2014)
- Draft implementing ordinances/code changes (Winter 2014)
- Draft Updated Brookings TSP (Winter 2014)
- 3rd round of Committee and Public meetings (Spring 2015)
- Adopt Updated Brookings TSP (Spring 2015)

QUESTIONS

