

Chapter 12

Transportation

Statewide Planning Goal 12 “Transportation” requires the Oregon Department of Transportation (ODOT) and each of Oregon’s counties and cities to develop and adopt coordinated transportation system plans and policies “*to provide and encourage a safe, convenient and economic transportation system.*” The purposes of Goal 12 are to

- Promote the development of multi-modal transportation systems to serve statewide, regional and local transportation needs of Oregon.
- Provide and maintain air, rail, marine and road networks to support the efficient and economic flow of freight, goods and services thereby enhancing the economic health of the state.
- Provide safe and convenient streets for vehicular traffic and transit systems.
- Provide safe and accessible facilities for bicycles and pedestrians.
- Meet the mobility needs of the transportation disadvantaged.

The Transportation Planning Rule (TPR), OAR 660-012, includes standards Oregon’s cities and counties must follow when preparing a county-wide or city-wide Transportation System Plan (TSP), updating comprehensive plan policies governing transportation system improvements and adopting development standards for streets, pedestrian, bikeway and other modes of transportation to serve the local community.

Specifically, the TPR requires:

- The Oregon Department of Transportation to prepare a TSP, referred to as the Oregon Transportation Plan (OTP); and
- Counties and cities to prepare local TSPs that are consistent with the OTP.

Counties and larger cities must adopt their TSP as a separate public facility element of the comprehensive plan. In April 2018, Linn County adopted the *Linn County Transportation System Plan*.¹

OAR 660-012-000(3) recognizes smaller communities may not need a comprehensive analysis of the City’s transportation facilities or a transportation system plan. Small cities, under 2,500 population, may adopt a more general plan to guide the development of transportation systems within the community. After consultation with the Oregon Department of Transportation planners, the City of Scio concludes a full TSP is not warranted for several reasons: (1) Linn County

¹ *2018 Linn County Transportation System Plan, Volumes 1 & 2*, April 2018. Prepared for Linn County and the Oregon Department of Transportation by DKS Associates.

completed its county-wide TSP in 2018, (2) the Linn County TSP applies to state and county roads inside each incorporated city and (3) the City of Scio is a small, rural community with minimal growth expected during the 20-year planning period through the year 2035. PSU's 2016 coordinated population forecast for Linn County estimates Scio will add fewer than 100 residents and reach a population of 1,027 residents by the year 2035. This small amount of growth will cause few impacts on the local transportation system in Scio.

12.1 City of Scio Transportation Chapter in lieu of TSP

In lieu of a city adopted TSP, the City of Scio will rely on the Linn County TSP for (1) the analysis of regional transportation needs and trends over the 20-year planning period through the year 2035, (2) the analysis and planning for regional transportation systems including air, rail, transit and road networks, (3) plans for improvements to Linn County roads inside the Scio UGB, and (4) for compliance with requirements to plan for and provide services for the transportation disadvantaged.

This chapter focuses on local streets, pedestrian and bicycle network inside the Scio UGB. It serves as the City of Scio Transportation Plan and, coupled with the Linn County TSP, complies with the requirements of Goal 12 and the TPR. It includes

- A brief analysis of the existing transportation services provided in the community,
- A list of problem areas where existing facilities are deficient,
- Identification of street, pedestrian and bicycle facility projects which are needed to serve local residents, and
- A prioritized list of recommended transportation system improvements.

Transportation goals and policies at the end of Chapter 12 are consistent with the Linn County TSP. The adopted policies and objectives can be used by the City staff, planning commission and elected officials as a guide for seeking outside grants, prioritizing use of limited city funds and for making investments in the prioritized list of transportation improvements.

12.2 Existing Transportation System

12.2.1 Functional Classification of Roads and Highways

ODOT and Linn County have established a functional classification system for the roadway network. They have classified roadways based on a hierarchy according to the intended purpose of each road. From highest to lowest intended usage, the classifications are arterials, collectors, and local streets. Roadways with a higher intended usage generally provide more efficient traffic movement (or mobility) through the county, while roadways with lower intended usage provide greater access for shorter trips to local destinations and residential neighborhoods.

ODOT Minor Arterial (OR-226). OR-226 is a state highway that connects OR-22 in Lyons to OR-20 and the I-5 corridor near Albany. OR-226 carries the highest volume of motor vehicle traffic in the City. It is the principal freight route for trucks carrying product from the wood product industries in Lyons, Mill City and the North Santiam Canyon to the I-5 corridor and the cities of Albany, Corvallis and Lebanon.

Rural Minor Arterials (North Main Street and Stayton-Scio Road). Minor arterials carry traffic to all parts of Linn County and serve traffic traveling to/from state highways. The N. Main Street/Stayton-Scio Road corridor connects Scio to Stayton and OR-22 and promotes efficient through traffic movements for local traffic.

Rural Collectors (Jefferson-Scio Road and Gilkey Road). Rural collectors serve farms and rural areas in Linn County. They connect smaller communities to each and provide farm-to-market roads to/from neighboring cities and industrial areas. Jefferson-Scio Road, Gilkey Road and Montgomery Drive are rural collectors in the Scio area.

Local Streets. Local city streets and small county roads provide direct access to neighborhoods and residences in the City of Scio and the rural areas on the edge of the City inside the UGB. Local streets are designed to serve low volumes of traffic.

Map T-1 shows the functional classification of all roadways inside the Scio UGB.

12.2.2 Roadway Jurisdiction

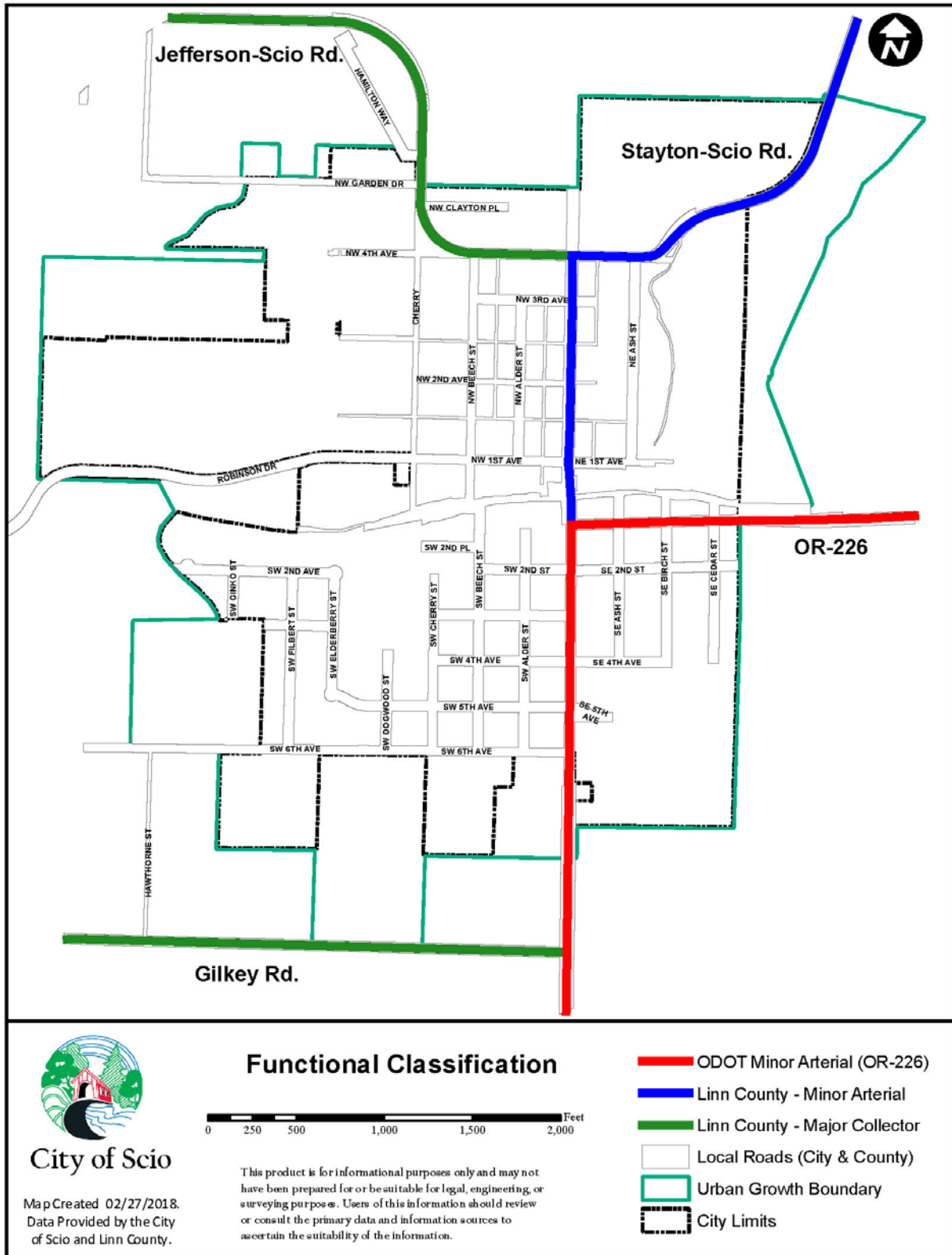
The City of Scio, Linn County and the Oregon Department of Transportation own and maintain streets and rights-of-way inside the City of Scio UGB. Each agency is responsible for the routine maintenance and improvement to roadways under their jurisdiction.

Table T-1
Roadway Jurisdiction inside the Scio UGB

Jurisdiction	Street Name	Minor Arterial	Rural Collector	Local Street
Oregon Department of Transportation				
	OR-226 (Non-Freight Route)	XX		
Linn County Roads Department				
	N. Main Street	XX		
	Stayton-Scio Road	XX		
	Jefferson-Scio Road & 4 th Street		XX	
	Gilkey Road		XX	
	Garden Drive			XX
	Hamilton Way			XX
	Robinson Drive			XX
	SW 6 th Avenue (split jurisdiction with City of Scio)			XX
City of Scio				
	All other streets inside the City of Scio city limits			XX

Map T-2 shows ODOT, Linn County and City jurisdiction for roadways inside the Scio UGB.

Map T-1
Functional Classification of Roads in the Scio UGB



Map T-2
Roadway Jurisdiction Inside the Scio UGB

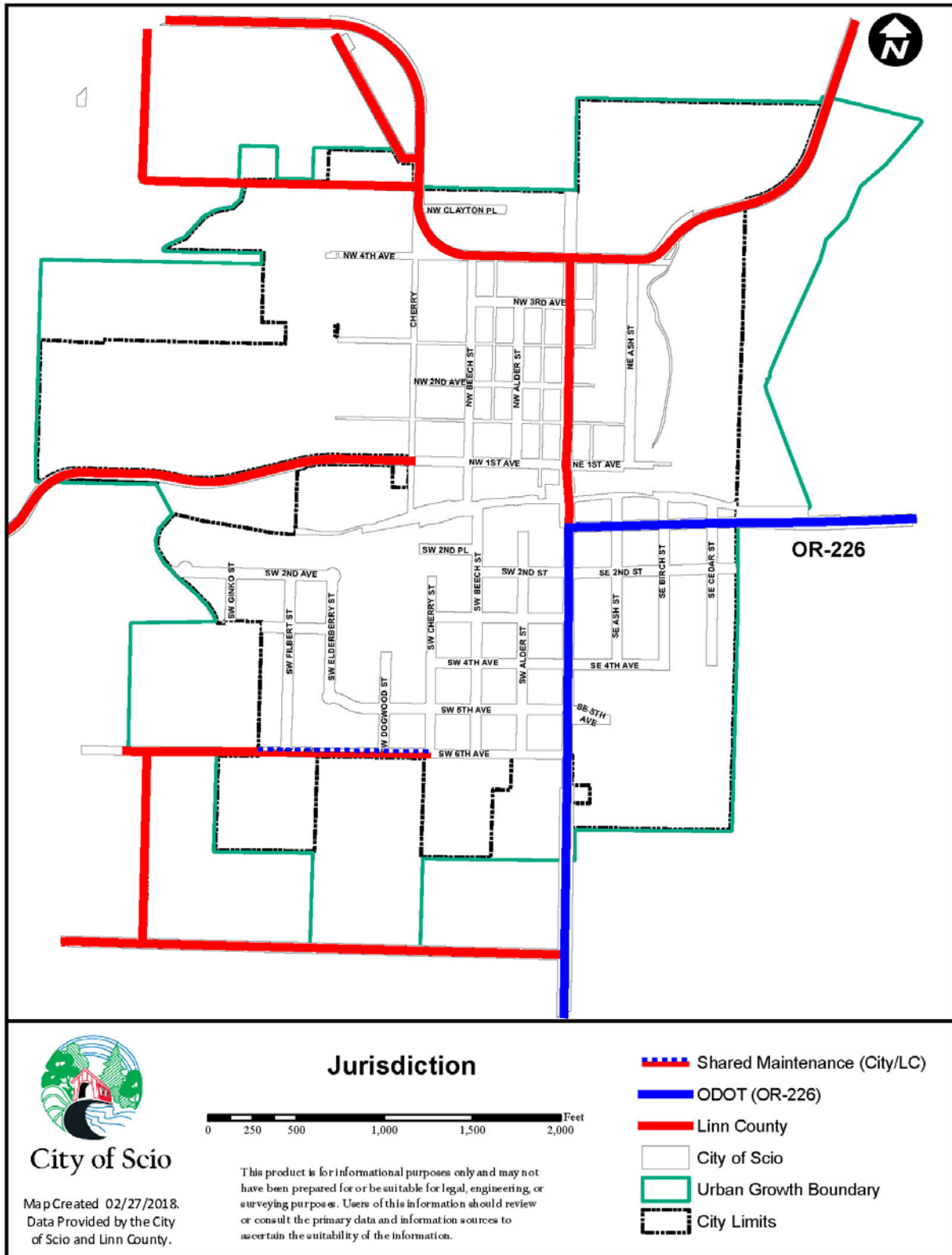


Table T-2 summarizes the total road miles inside the Scio UGB for each jurisdiction. The City of Scio totals include both streets and alleys. The City of Scio, Linn County and the Oregon Department of Transportation are responsible for maintenance and improvements to their roadway network.

Table T-2
Roadway Miles inside the Scio UGB

Road Type	City of Scio	Linn County	ODOT
Local	5.5	0.7	
Major Collector		0.2	
Minor Arterial		0.7	0.5
Total Road Miles	5.5	1.6	0.5

Source: Linn County Geographic Information System (Linn GIS), 2018.

12.2.3 Traffic Volumes and Crash Rates

ODOT and the Linn County Roads Department compile data on traffic volumes and crash rates on state highways and county roads.

Traffic Volumes

Table T-3 and Table T-4 summarize traffic volumes on OR-226 and Linn County roads within the Scio UGB. Traffic volumes on OR-226 are highest on the north-south section from the south city limits to the Thomas Creek Bridge. Annual average daily traffic (AADT) counts have ranged from 2916 vehicles per day in 2006, dropped to 2570 vehicles during the Great Recession and increased to a high of 3132 vehicles per day in 2015. Linn County has few traffic counts for roads inside the Scio UGB. Map T-3 shows the 2016 traffic volumes within the Scio UGB.

Table T-3
**Average Daily Traffic Counts - ODOT OR-226
Inside the Scio UGB²**

Annual Average Daily Traffic Count ODOT – OR-226 Corridor in the City of Scio			
	<i>Segment 1</i>	<i>Segment 2</i>	
Year	South CL to Main & 1st Ave	Main & 1st Ave to East CL	AADT for OR-226 in Scio
2007	3660	1883	2916
2008	3500	1827	2800
2009	3600	1827	2858
2010	3420	1855	2681
2011	3300	1555	2570
2012	3300	1555	2570
2013	3460	1655	2704
2014	3780	1827	2962
2015	4000	1927	3132
2016	3800	1927	3016
10-year Average	3582	1784	2830

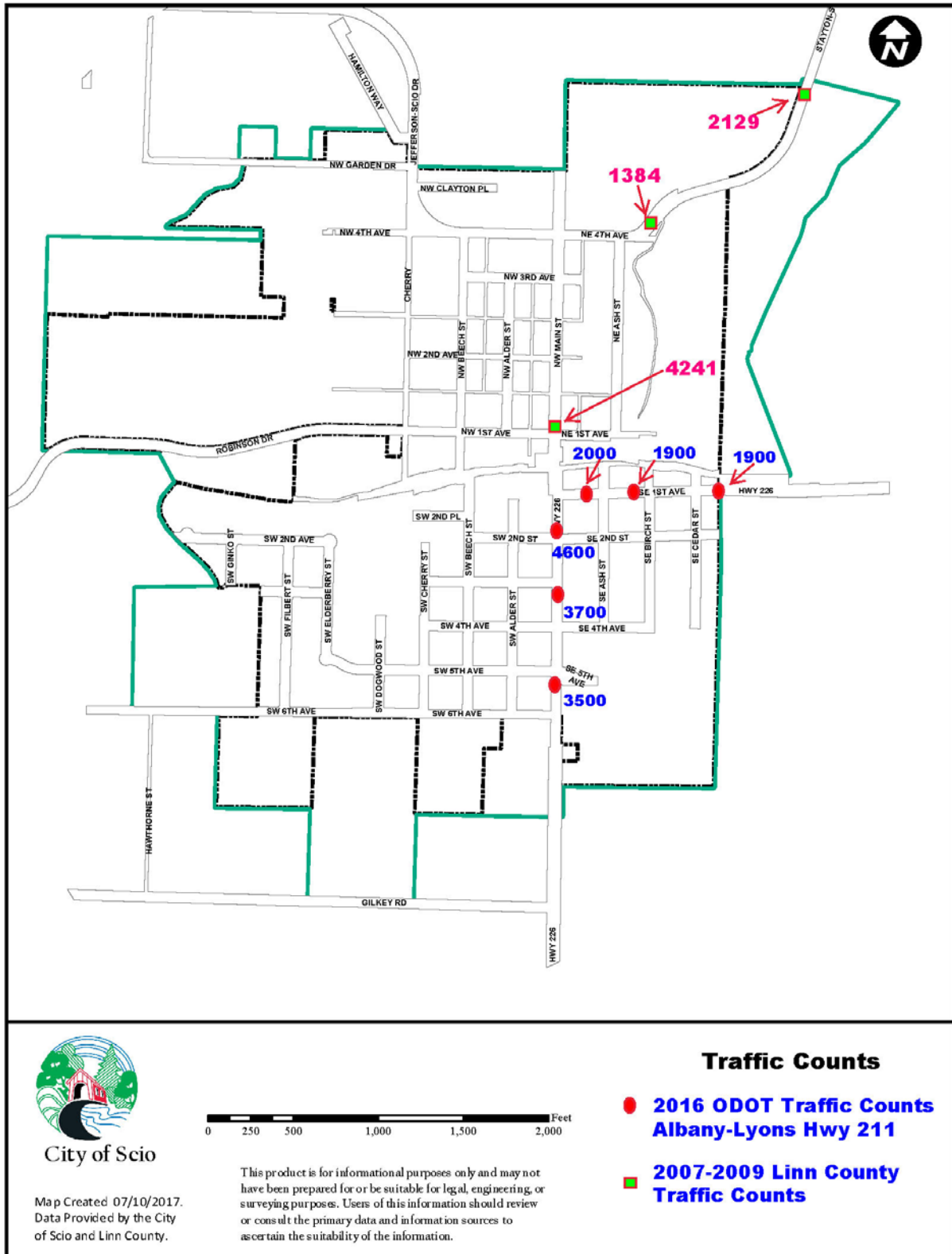
Table T-4
**Average Daily Traffic Counts – Linn County
Inside the Scio UGB³**

Annual Average Daily Traffic Count Linn County Roads in the Scio UGB		
Year	Stayton-Scio Rd. @ Scio City Limits	N. Main Street @ 1st Avenue
2006		
2007		4241
2008	1384	
2009	2129	
2010		
2011		
2012		
2013		
2014		
2015		

² 2007 to 2016 State Highway Crash Rate Tables. AADT information is included in the crash rate data tables. Published by Transportation Data Section, Crash Analysis and Reporting Unit, Transportation Development Division of the Oregon Department of Transportation. Refer to tables for Highway 211 “Albany-Lyons Highway”.

³ AADT data provided by the Linn County Roads Department. No traffic counts were conducted on Linn County Roads inside the Scio UGB from 2009 to 2018.

Map T-3
 ODOT and Linn County Traffic Counts inside the Scio UGB



Crash Rates and Crash Data

ODOT and Linn County track the number of vehicle accidents, including the location of the accident, number and type of vehicle involved, pedestrian or bicyclist involvement and if there were fatalities or injuries. The two crash tables show there have been few serious accidents inside the Scio UGB from 2007 to 2016.

Table T-5
**ODOT OR-226 Crash Rates and Crash Data
Inside the Scio UGB⁴**

OR-226 -- Crash Rate per Million Miles Driven				
Year	Segment Length	AADT	# Crashes	Crash Rate/ Million Miles
2007	0.43	2916	1	2.18
2008	0.43	2800	2	4.55
2009	0.43	2858	1	2.23
2010	0.43	2681	0	0.00
2011	0.43	2570	3	7.44
2012	0.43	2570	3	7.44
2013	0.43	2704	0	0.00
2014	0.43	2962	0	0.00
2015	0.43	3132	0	0.00
2016	0.43	3016	0	0.00
10-year Average	0.43	2821	1.18	2.38

Table T-6
**Linn County Roads Crash Rates and Crash Data
Inside the Scio UGB⁵**

Linn County Roads -- Crash Data Inside Scio City Limits				
Year	Jefferson- Scio Road	Stayton-Scio Road	NW 1st Ave Robinson	6th Avenue
2007	2			
2008				
2009		1		
2010 to 2015				
2016		1		
10-Year Totals	2	2	0	0

⁴ 2007 to 2016 State Highway Crash Rate Tables. Published by Transportation Data Section, Crash Analysis and Reporting Unit, Transportation Development Division of the Oregon Department of Transportation. Refer to tables for Highway 211 "Albany-Lyons Highway".

⁵ Crash Data provided by the Linn County Roads Department.

12.2.4 Existing Road Network

DKS Associates, the transportation planning consultants for Linn County, evaluated the overall health of the county-wide road network during the preparation of the Linn County TSP⁶. DKS consultants concluded the existing network of state, county and local roads in the Scio area is able to handle current peak-hour traffic demands in most locations. The Linn County TSP does not anticipate significant residential and employment growth, increased traffic volumes or increased travel in the rural communities in Linn County, including the City of Scio.⁷ This is consistent with the City of Scio population projections through the year 2040.⁸

Arterials and Collector Roads: OR-226 and Linn County Roads

Linn County analyzed major travel corridors throughout the county. This analysis included a corridor health assessment for OR-226, Stayton-Scio Road, Jefferson-Scio Road, Richardson Gap Road and other minor arterials/collector roads near Scio. Corridor health was evaluated based on an analysis of traffic safety, road geometry, traffic operations, pavement conditions and access spacing.⁹ The Linn County TSP reached several conclusions about the state and county roadways in the Scio area:

- *Design Standards (All referenced figures are found in the Linn County TSP, Volumes 1 and 2)*
 - Figure 4 –Roadway Design
 - OR-226 (Scio east to Lyons) does not meet ODOT minimum design standards.
 - OR-226 (inside City of Scio) does not meet ODOT urban design standards.
 - OR-226 (Scio south to Fish Hatchery Road) does not meet ODOT minimum design standards.
 - Pavement Condition Index (PCI) ratings for County Roads
 - Gilkey (very good)
 - Stayton-Scio (very good)
 - Jefferson-Scio (good)
 - No ratings were prepared for city-owned streets and low-volume county roads within the Scio UGB.
- *Roadway Operating Conditions*
 - Figure 4 – Vol. 1 - 2040 Motor Vehicle Operating Conditions (Peak Hour) – In 2040 OR-226 in the Scio area will continue to operate at an adequate level of service (LOS – A).
 - Figure 6 – Vol. 2 – Summer PM Peak Hour Motor Vehicle Operations – OR-226 operated at an adequate level of service (LOS-A) in 2017.

⁶ 2018 Linn County Transportation System Plan, Volumes 1 & 2, April 2018. (Linn County TSP) Prepared for Linn County and the Oregon Department of Transportation by DKS Associates.

⁷ Ibid., Linn County TSP, Volume 1, page 16.

⁸ See Chapter 3 “Population and Demographics” of the Scio Comprehensive Plan, April 2015.

⁹ Op cit., Linn County TSP Volume 1, page 16 and Figures 4, 5 and 6.

- *Figure 5 – Vol. 1 - High Collision Locations.*
 - OR-226 (east of Scio to Lyons) – higher than average crash rate
 - OR-226 (south of Scio to Hwy 20) – below target crash rates
- *Figure 6 – Vol. 1 - 2040 Corridor Health*
 - OR-226 (east of Scio to Lyons) – Poor corridor health. The roadway has narrow shoulders, needs additional guardrails,
 - OR-226 (south of Scio to Hwy 20) – Fair corridor health. The roadway has narrow shoulders and needs guardrails in a few locations.

City of Scio Local Streets

1. Existing Streets

The City of Scio owns and maintains 5.5 miles of local streets and alleys within the city limits. They carry low volumes of traffic and provide access to residential neighborhoods and commercial properties. Most city streets are turnpike style streets with an 18'-22' wide pavement section, gravel shoulders and no sidewalks. Streets in the Thomas Creek Estates subdivision, N. Main Street and 1st Avenue have urban level improvements with 32'-40' pavement sections, curbs, sidewalks and storm drainage facilities. The City has not completed corridor assessments or pavement condition index rating for local streets. Only a few alleys are paved. Most alleys are unopened, unimproved or gravel.

The City's road maintenance program is limited to pavement overlays, slurry seals, sign replacements, drainage system maintenance and minor patching activities. The City has limited financial resources available for annual maintenance and must rely on grants to finance street improvement projects. Since 2010, street improvement projects have been funded by federal stimulus funds (SW 1st Avenue) and Small City Allotment grants. Linn County has constructed overlays on Stayton-Scio Rd. and Jefferson-Scio Rd. within the Scio UGB.

2. Right-of-way (ROW) Deficiencies

The City's public works design standards require a 60' wide ROW to provide for urban streets with a 34'-40' pavement width, curbs, sidewalks and utilities. In 2018 the Scio Planning Commission performed a block-by-block analysis of existing rights-of-way, building locations and setbacks. They found 15 streets with deficient right-of-way widths ranging from 21' to 50' wide.

- A. *South of Thomas Creek:* Most streets south of Thomas Creek have existing ROW widths of 50' to 60'. Where there is a ROW deficiency, there are few buildings or obstacles which will prevent the city from acquiring full width ROW.
- B. *North of Thomas Creek:* Several streets north of Thomas Creek (1st Avenue, 2nd Avenue, NW Cherry Street, Garden Drive) have narrow ROW widths. Due to the location of existing buildings, it is not feasible for the City to acquire full-width ROW.

A table in the Scio Zoning Ordinance lists existing and future ROW widths for all streets and blocks with deficient ROW widths and the recommended ROW dedication requirements on each side of the street.

3. Development Standards

The City recognizes many local streets in existing residential neighborhoods will remain as rural turnpike style roadways with 18' to 24' wide AC pavement width, gravel shoulders, no sidewalks and limited storm drainage facilities. New streets, streets in the commercial zone and significant travel corridors are planned to meet urban design standards with full width AC pavement, curbs, gutters, sidewalks and storm drainage improvements.

Public improvement standards in Scio's development ordinances were updated in 2018. Maps in Chapter 13 of the Scio Zoning Ordinance identify which streets will be retained as rural turnpike style roadways and the streets the City plans to upgrade to urban design standards. The Zoning Ordinance includes street cross-sections drawings, access management requirements and design standards for streets, bike lanes, sidewalks and recreational trails. Public works standards were revised in 2019 to update storm drainage design and water quality requirements. Table T-7 summarizes the City of Scio street design standards.

Table T-7
Street Design Standards for Roads within the Scio UGB

Type of Street	Average Daily Trips	Right of Way Width	Pavement Width	Travel Lanes	Bike Lane	On-street Parking	Planting Strip	Sidewalks
Minor Arterial ODOT Hwy 226	>2,500	60'	36'	(2) 12' lanes	(2) 6' lanes	None	4'-8'	5'-8' Both sides
Linn County Minor Arterial	500-2,500	60'-70'	50'	(2) 12' lanes	(2) 6' lanes	(2) 7' lanes	5' both sides on 70' ROW	5' both sides
Linn County Collector Curbed	500-2,500	60'	41'-43'	(2) 11'-12' lanes	(2) 6' lanes	(1) 7' lane one side	3'-5' both sides	5' both sides
Linn County Collector Rural Turnpike	500-2,500	60'	36'	(2) 12' lanes	(2) 6' lanes	None	4'-8' grassy swale both sides	5' Both sides
Scio Collector Curbed	500-2,500	60'	32'-36'	(2) 9'-11' lanes	None	(2) 7' lanes	5'-7' both sides	5' Both sides
Scio Local Street Curbed	<1500	60'	28'-36'	(2) 7'-11' lanes	None	(2) 7' lanes	7'-11' both sides	5' Both sides
Scio Local Street Turnpike	<1000	50' - 60'	28'-32'	(2) 7'-9' lanes	None	7' lanes both sides	4'-11' grassy swale both sides	5' Both sides
Cul-de-sac	<1000	50'	32'-36' Bulb Radius = 48'	(2) 7'-10' lanes	None	7' lanes both sides	None	5' Both sides
Alleys	<250	20'	12'-16'	12'-16' Lane	None	None	None	None
Pathways / Recreational Trails	NA	20' - 30'	6'-12'	NA	NA	NA	NA	NA

All new site developments and subdivisions are required to construct needed street and drainage improvements in compliance with the design standards of the jurisdiction which owns the roadway, either the City of Scio, Linn County Road Department or the Oregon Department of Transportation (ODOT). applicant for a development on an existing street may request the City waive or defer street improvement improvements. The Planning Commission will evaluate each request, and decide whether or not to approve or deny the waiver/deferral request as part of the land use decision process.

12.2.5 Potential Transportation System Improvements

During the development of the Linn County TSP, the project consultant DKS Associates, conducted a needs assessment to identify deficiencies in the state and county roadway networks throughout Linn County. Input was solicited from Linn County Roads Department staff, citizens, interest groups, small cities and ODOT. Contributors identified safety issues, pedestrian and bicycle facility needs, maintenance problems, roadway deficiencies and future urban-level upgrades. In January 2017, the City of Scio submitted a list of proposed projects to DKS Associates and the Linn County Roads Department. Improvements to the arterial and collector road network in the Scio UGB were proposed for consideration and inclusion in the Linn County TSP. Pedestrian safety, crosswalk enhancements, elimination of Peters Ditch storm drainage obstructions and urban level roadway modernization projects on OR-226 and on N. 4th Avenue near Scio High School were high priorities of City of Scio officials.

Using input from all sources, DKS Associates developed an “Aspirational Project List” including:

- Projects listed in the *2015-2020 Linn County Capital Improvements Project Draft*.
- Projects listed in City and state transportation plans.
- New projects developed by DKS and the Linn County TSP project team.
- New projects proposed by the public and city officials throughout Linn County.
- New projects proposed by the Linn County Roads maintenance group.

Projects were assigned to five major categories:

- Bicycle-Pedestrian
- Bridge and Storm Drainage
- Corridor Improvements
- Road Modernization
- Systemic Safety Improvements

Table T-8 provides a summary of the aspirational projects in or near the Scio UGB that are included in the full aspirational project list included in the Linn County TSP, Volume 2, Section K, Technical Memo 10 dated June 2017.

All projects identified during the development of the Linn County TSP were included in the aspirational project list, regardless of their priority or the likelihood of being funded. Only a few of the listed projects were recommended as Priority 1 projects for funding and development during the 10-year period from 2018-2028.

Table T-8
Linn County Transportation System Plan
Proposed Transportation Improvement Projects in Scio¹⁰

Linn County TSP	Project Description	Jurisdiction
Bicycle & Pedestrian Projects		
BP-15	Crosswalk Safety Evaluation & Improvements at N. 1 st & N. Main St.	Linn County
BP-16	Crosswalk Safety Evaluation & Improvements at SE Ash & OR 226	ODOT
BP-17	Crosswalk Safety Evaluation & Improvements at SW 4 th & OR 226	ODOT
BP-18	Crosswalk Safety, Bike/Ped Crossing improvements at N Main St./Scio HS	Linn County
BP-42	Linn County Roads – Sidewalk Repairs & Infill	Linn County
Bridge and Storm Drainage Improvement Projects¹¹		
BR-01	SW 6 th Avenue – Peters Ditch Box Culvert Replacement ¹²	Linn County
BR-28	OR 226 – Storm Outlet to Thomas Creek @ east end of UGB	ODOT
BR-56	Thomas Creek Bridge – Streetscape & Lighting Enhancements	Linn County
Corridor Improvement Projects		
CI-24	NW 4 th Avenue Urban Upgrades: Curb, SW, AC and Drainage Improvements	Linn County
CI-25	OR 226 Urban Street Improvements – Curb, SW, AC and Drainage	ODOT
CI-29	Pavement Maintenance contract w/ LC Roads – striping, etc.	City/County
CI-30	Sidewalk repair and infill project on OR 226, N. Main St., NW/NE 4 th Avenue	ODOT/County
Road Modernization Projects		
RM-20	Shoulder / widening improvements on County roads inside city limits.	Linn County
RM-21	SW 6 th Street Urban Improvements on County road portion	Linn County
Systemic Safety Improvement Projects		
SS-30	N. Main/1 st Ave/OR 226 intersection – signage and safety improvements.	Linn County
SS-34	Gilkey Rd/OR 226 intersection – signage, rumble strips & safety	Linn County

¹⁰ *Linn County Transportation System Plan*, Volume 2, Section K, Technical Memo #10, “Aspirational Projects”, pp. 1 to 30.

¹¹ *Flooding Analysis on Roads within the Scio UGB*. The Linn County TSP did not include a thorough assessment of roads within the Scio UGB which may flood periodically. When completed by either Linn County or the City of Scio, this table may be updated with additional priority projects.

¹² *Project BR-01*. The Peters Ditch box culvert replacement on SW 6th Avenue is intended to improve upstream passage for anadromous fish (salmon/steelhead) and eliminate flooding. On January 2, 2019 Linn County Engineer Chuck Knoll provided a letter to the City of Scio. He stated flooding has not occurred on SW 6th Avenue from 2007 to 2019, since the Thomas Creek Bridge on Main Street was replaced in 2007. The bridge replacement increased hydraulic capacity for Thomas Creek which may have reduced flooding in Peters Ditch. Mr. Knoll recommends a drainage analysis of the Peters Ditch storm basin be completed prior to the box culvert replacement. The analysis will be used to identify any upstream obstructions (small culverts, channel restrictions, maintenance issues) which should be addressed by the City of Scio and Linn County prior to or concurrently with the box culvert replacement and storm drainage improvement project on SW 6th Avenue.

12.3 Bicycle & Pedestrian Facilities

Pedestrian and bicycle facilities provide residents with safe, accessible sidewalks, bike lanes, recreational trails, crosswalks and routes to school. A well-designed system encourages local residents and visitors to reduce the use of motor vehicles and use pedestrian/bicycle facilities to go to/from schools, businesses and community facilities.

12.3.1 Bicycle System

Due to the proximity of five covered bridges near Scio and the flat terrain of the Willamette Valley, the Scio area attracts a significant number of tourists, including recreational cyclists. Regional tourism officials actively promote cycling events. Scio's downtown business district, coffee shop and grocery store serve as a convenient stopping point for cyclists and support vehicles.

Linn County's arterial and collector roads and OR-226 serve as the bicycle network in the northern portion of Linn County. Bicycles share the road with motor vehicles. Neither Linn County or ODOT have developed an off-road bicycle path network and there are no designated bike lanes on the rural roads and OR-226. Inside the Scio city limits, there are no designated bike paths or bike lanes, with the exception of the Beech Street pedestrian bridge across Thomas Creek.

*Biking Needs – Linn County TSP Technical Memo #7 "Future Transportation Conditions and Needs"*¹³

- *"Bike accommodations along portions of OR 34, US 20 and other major roadways connecting to urban areas: Bicycle accommodations are limited along US 34, US 20, OR 99E and other arterial roadways throughout the county, with shoulders not meeting desired width for the existing traffic volume as documented in Technical Memorandum #5. These roadways form the backbone of the biking network in the county, linking many of the communities and recreational destinations throughout the county. With increased motor vehicle traffic expected along these roadways through 2040, providing accommodations for bicycle travel will be critical to ensuring a safe and complete transportation system."*
- *"Bicycle wayfinding signage: Biking routes can be enhanced in the county with signage to orient users and direct them to major destinations like communities, parks, schools, or other popular destinations. Residents or visitors may be unaware that they are within a reasonable bike ride to key destinations in the county or that a local biking route is nearby. Directional signage indicating locations of destinations and travel time/distance to those destinations increases users' comfort and accessibility to the pedestrian and bicycle systems, especially for bicyclists less familiar with the county's road network."*

The City concurs with the TSP findings. Wider road shoulders, off-road pathways and wayfinding signage are needed on the rural roads near Scio to improve safety and enhance the cycling experience.

¹³ *Linn County Transportation System Plan*, Volume 2, Section H, Technical Memo #7, "Future Transportation Conditions and Needs", p. 15.

12.3.2. Pedestrian System (Sidewalks & Trails)

Pedestrian facilities in Scio are the responsibility of the roadway jurisdiction: ODOT, Linn County and the City of Scio. The sidewalk network is partially developed. Overall, the system has a number of deficiencies that inhibit the ability of pedestrians to safely walk to/from schools, from homes to the downtown business district and within residential neighborhoods.

Technical Memo #7 in Volume 2 of the Linn County TSP discusses the pedestrian facility deficiencies on ODOT's and Linn County's rural roads, which include OR-226, Jefferson-Scio Road, Stayton-Scio Road, Gilkey Road and Robinson Drive inside the Scio UGB.

Walking/Pedestrian Needs: Linn County TSP Technical Memo #7 "Future Transportation Conditions and Needs"¹⁴

- *"Inadequate shoulders along rural roadways: Many high speed or limited visibility roadways throughout rural areas of the county lack shoulders with adequate width for safe pedestrian travel. These roadways, including portions of OR 226, OR 228, OR 99E, and US 20 near Albany, will need widened shoulders to allow for safe walking and provide connections to regional pedestrian facilities or public transportation."*
- *"Pedestrian facilities/crossings along routes that provide access to transit, schools, parks, and open space: Increased housing and shopping opportunities through 2040 means more people will be within walking distance of their destination. Additionally, improvements in recreational destinations throughout the county will continue to attract activity to rural areas. Much of the growth will require those walking to travel down roadways with existing pedestrian facility gaps and inconvenient roadway crossing opportunities. These roadways, including those near transit, schools, parks, and rural business areas, will need pedestrian facilities and enhanced roadway crossings (such as high visibility markings, increased roadway lighting, or active warning beacons) to encourage walking to these destinations."*

In 2018 the Scio Planning Commission inventoried local streets and sidewalks. They found only two areas of the city are adequately served by sidewalks.

1. Central Business District (N. Main St. and SW 1st Ave to Centennial Elementary School).
2. Thomas Creek Estates subdivision

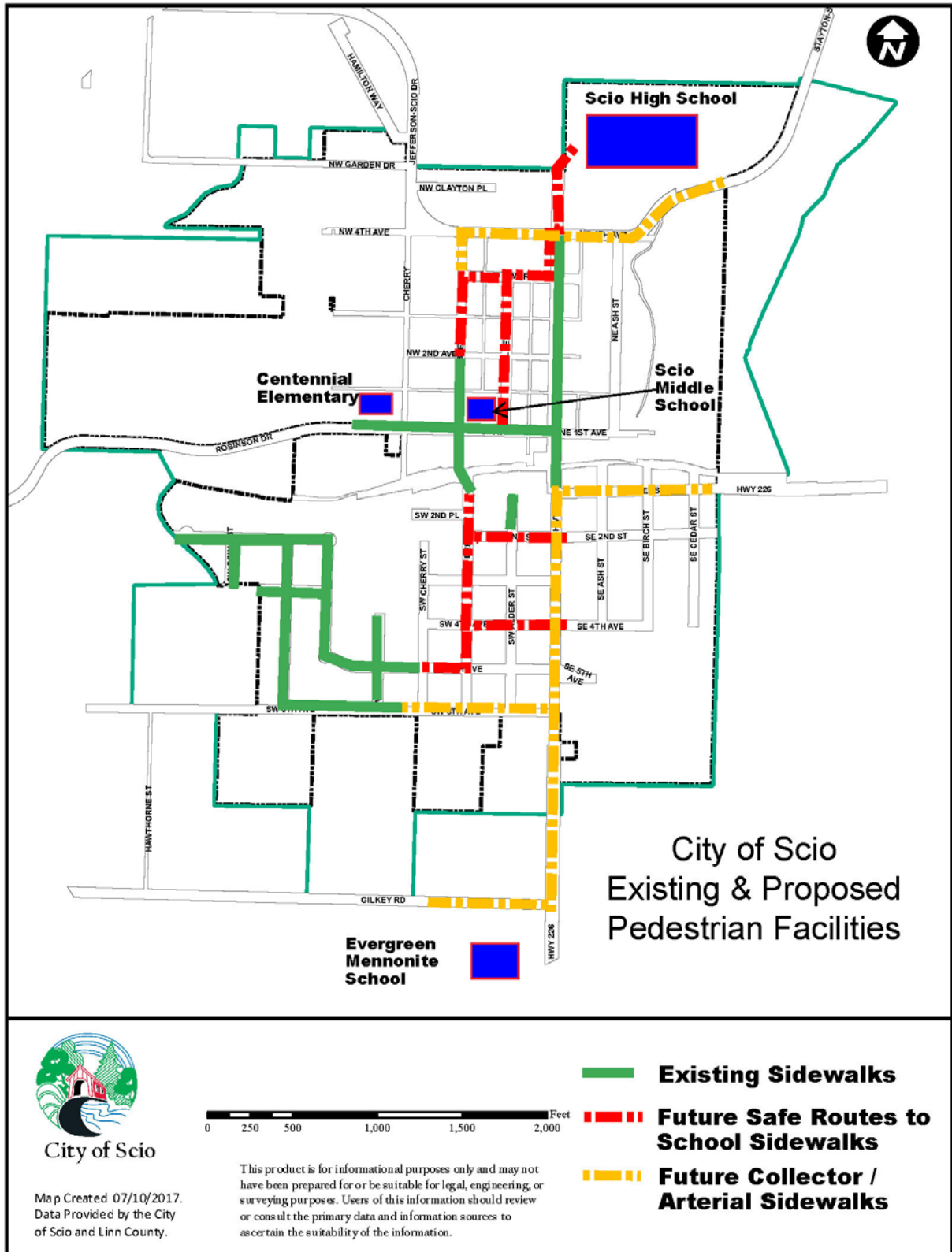
In all other sections of the City, sidewalks are sporadic or do not exist. Where sidewalks do exist, they are narrow, not constructed to the proper grade, broken or in disrepair and do not have ADA compliant crosswalks. Crosswalks near Scio High School, Centennial Elementary School and Scio Middle School are substandard and need to be improved to enhance student safety and eliminate vehicle/student conflicts.

The Linn County Roads Department has not completed an inventory or prioritized plan for ADA compliant sidewalk improvements on the Linn County road network in the City of Scio. In

¹⁴ Ibid, Linn County Transportation System Plan, Volume 2, Section H, Technical Memo #7, "Future Transportation Conditions and Needs", p. 14.

January 2019, County Engineer Chuck Knoll identified key collector and arterial streets in Scio which do not have ADA compliant sidewalks or pedestrian crossings. ADA improvements are recommended on N. First Avenue, North Main Street, Hwy 226 and Gilkey Roads to provide safe routes to public and private schools and safe pedestrian crossings within Scio's commercial district. The Linn County Roads Department recommends the City and County work together to complete an inventory of sidewalk/pedestrian facilities to address ADA requirements and adopt a prioritized list of sidewalk/pedestrian facility improvements.

Map T-4
Existing and Proposed Pedestrian Facilities



12.3.3 Safe Routes to School

The City of Scio is home to three public schools in the Scio School District. Scio's public schools educate approximately 785 K-12 students who live in Scio and the surrounding rural areas.

Centennial Elementary School	Grades K-5	NW 1 st Ave & Cherry St.
Scio Middle School	Grades 6-8	NW 1 st Ave & Beech St.
Scio High School	Grades 9-12	North end of Main Street

Centennial Elementary School and Scio Middle School are located on NW 1st Avenue within two blocks of each other. They have a combined enrollment of 450+/- students. Approximately 300 students live inside the City of Scio and within one mile of the schools. These students are not eligible to take school busses to/from school. The majority of these students walk to/from school. Map T-3 clearly shows that all of students who live within the Scio city limits are within a one-mile radius of local schools.

Due to the proximity of all three schools to each other, many students also walk from the Elementary/Middle School buildings to/from the Scio High School campus to attend sports activities, co-curricular programs and after-school activities. The City and School District officials recognize the City does not have sidewalk and bicycle facilities to serve students safely and avoid conflicts between busses, cars and students.

In the 2016-2017 school year, 42.17% of Centennial Elementary School students qualified for free and reduced lunches, making the City eligible for Safe Routes to School infrastructure grants from the Oregon Department of Transportation. However, the City and School District have not developed a Safe Routes to School Action Plan or completed any parent or student surveys which review the ways students go to/from school. An SRTS Action Plan is needed before the City of Scio applies for any SRTS infrastructure grants.

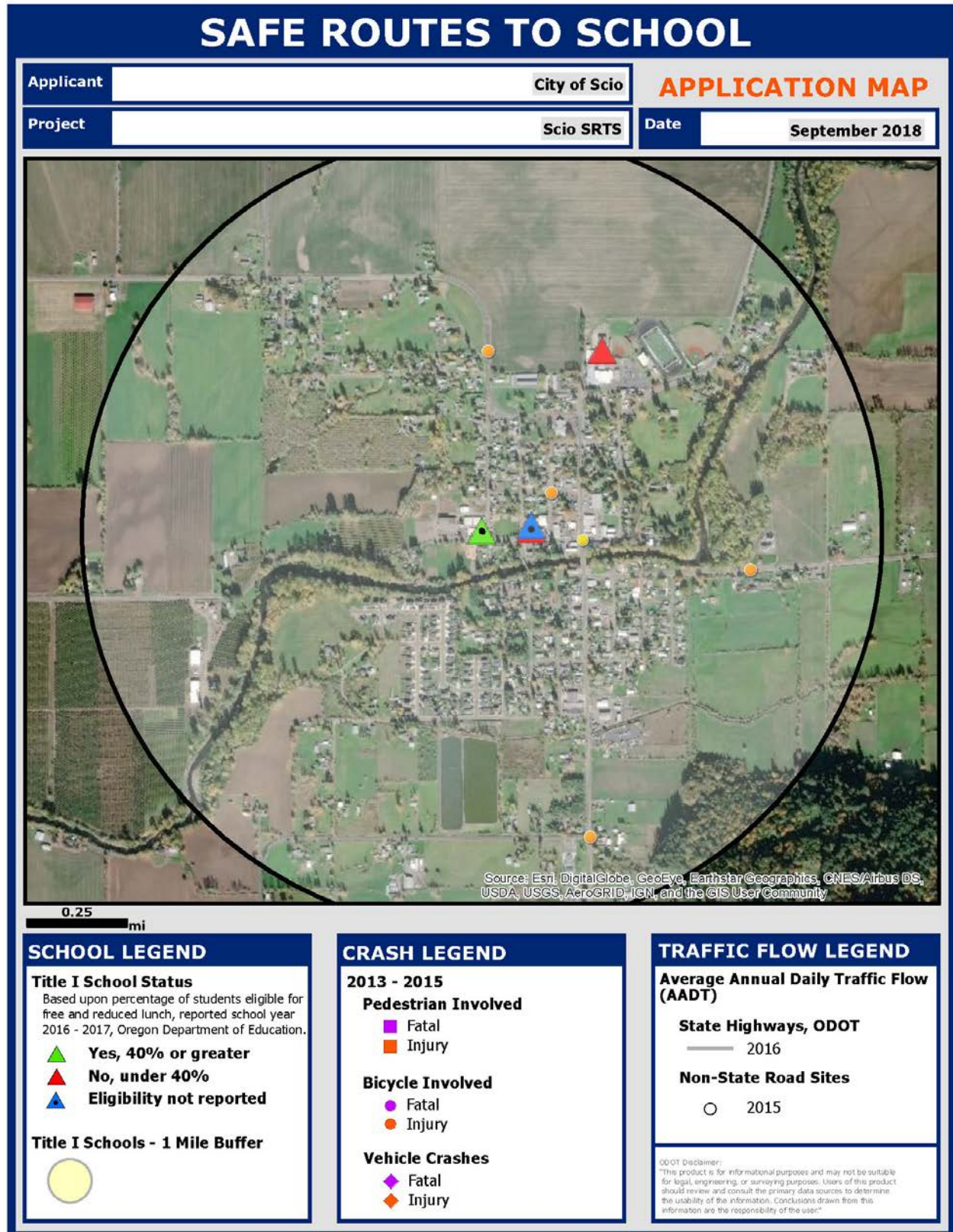
The City reviewed existing pedestrian and bicycle facilities near these two schools to identify physical barriers, conflict points between walking/biking students and vehicles, safety hazards and inadequate infrastructure. The City of Scio and School District officials have identified several priority projects to provide safe routes to schools. Table T-9 lists the identified hazards and priorities near the Scio Public Schools.

The Evergreen Mennonite School and Mennonite meeting house are located at the corner of Gilkey Rd. and Hwy 226, just outside the Scio UGB. The Linn County Roads Department recommends urban street improvements, including pedestrian and bicycle facilities, be extended south to Gilkey Rd. and west on Gilkey Rd. along the frontage of the school property to provide a safe route to school for students walking to/from the City of Scio. Map T-4 shows the extension of sidewalks to the Evergreen Mennonite school site.

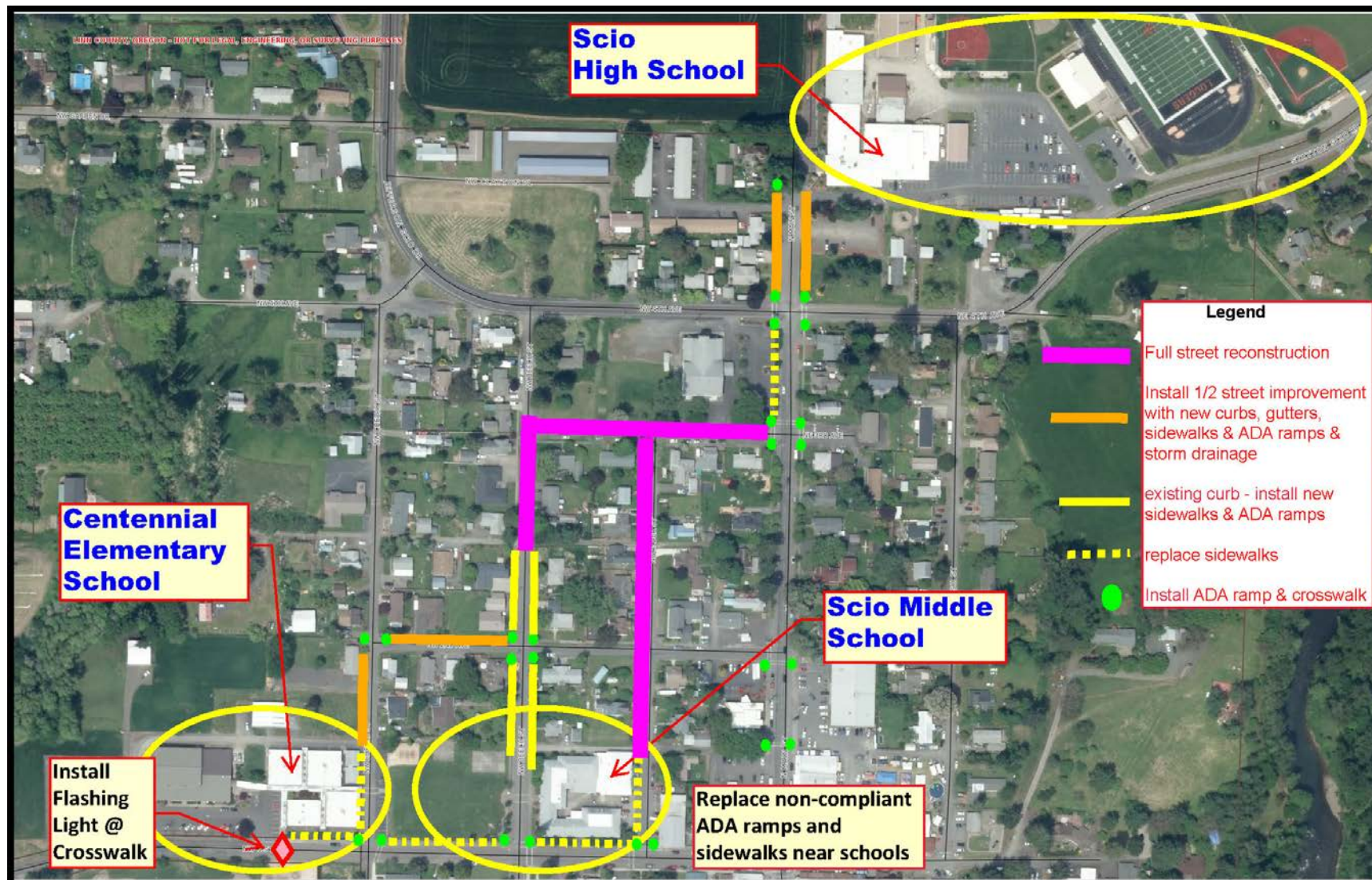
Table T-9
Physical Barriers and Safety Hazards
near Centennial Elementary School, Scio Middle School and Scio High School campus

	Finding	Safety Issue	Proposed Solution	Priority
Centennial Elementary & Scio Middle School (within 2 blocks of schools)				
1	Non-compliant crosswalk from Elementary School to playground & ballfields south of Robinson Drive. Crosswalk next to driveway entrance to Elementary School.	Student crossing guards. Minimum signage & no flasher to warn drivers - Robinson Dr.	Relocate playground to north side of the Elementary School. Install flashing light. Install ADA crosswalk. Install sidewalks-south side.	High
2	Sidewalks on Cherry Street are narrow, elevation too high, no ADA ramps, etc. No sidewalks north of school buildings	Student/vehicle conflicts at Elem doors and crosswalks. Students walk in streets.	Install new crosswalks and sidewalks north to 2 nd Ave.	Medium
3	Sidewalks on NW 1 st Avenue (City Hall west to Centennial Elementary) are deteriorated, have slopes exceeding ADA standards, are on angles across NW 1 st Ave or do not have ADA crosswalks.	Trip hazards. Unsafe crosswalks	Replace sidewalks as needed. Install new ADA compliant crosswalks on NW 1 st Ave.	Medium
4	Head-in on-street parking & no sidewalks on east side of Cherry Street.	Drivers back into street. No sidewalks refuge.	Install crosswalk & east side sidewalks.	Medium
Neighborhood North of Thomas Creek and along N. Main Street				
5	No sidewalks on Alder St. and Beech St. north of the Scio Middle School	Students walk in streets when going to/from homes and the high school.	Install new sidewalks and crosswalks from Middle School north to HS campus	High
6	Poor signage, non-compliant ADA ramps and wide (50') crosswalks N. Main Street	No flasher or bulb out refuges for pedestrians.	Install ADA compliant sidewalks and bulb outs.	High
Neighborhoods South of Thomas Creek				
7	No sidewalks from Beech Street Bridge south to SW 6 th Avenue & neighborhoods	Students walk in streets	Install sidewalks & crosswalks	High
8	No sidewalk connection from Thomas Creek Estates to Beech Street	Very narrow streets. Students walk in streets	Install sidewalk connection from Cherry to Beech St.	High
9	No safe pedestrian crossing on OR-226 at either the 2 nd or 4 th Ave crossings	Street lighting is poor. Crosswalks poorly define.	Ped activated flashing light. New crosswalks	Medium
Scio High School				
10	No sidewalks on N. Main Street from Stayton-Scio Rd. (4 th Ave) north to Scio High School. No ADA compliant crosswalks.	Students walk in the street, driveways and across parking lots. Multiple conflicts points between students/vehicles.	Install new sidewalks and crosswalks from 4 th Avenue to HS entries. Evaluate flasher w/ LC Roads	High
11	3'-4' sidewalks on N. Main St. south of Stayton-Scio/Jefferson-Scio Rd.		Replace sidewalks w/ 6' wide ADA compliant walks.	Medium

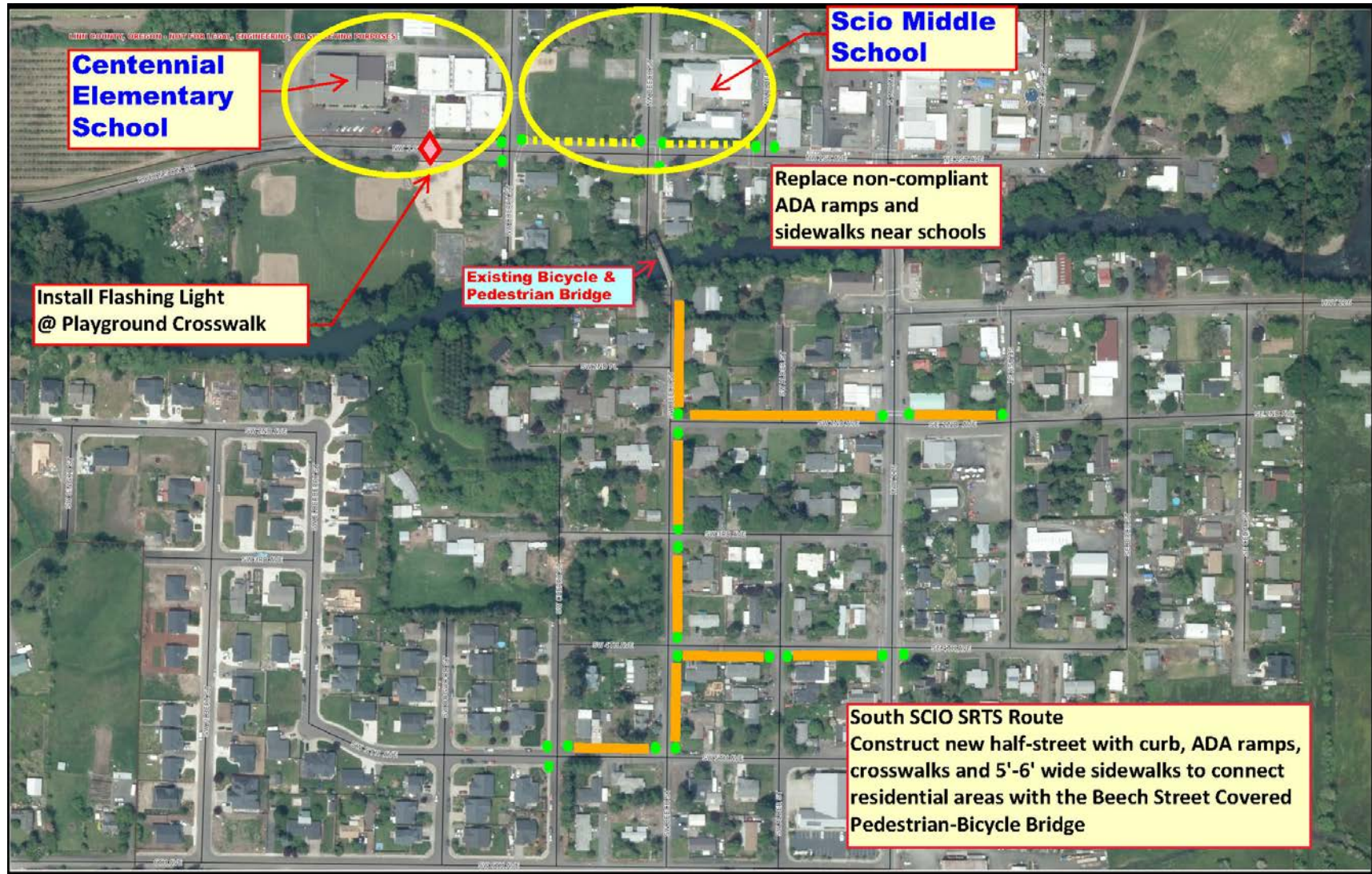
Map T-5
Safe Routes to School Map & School Eligibility (2018)



Map T-6
Proposed Safe Routes to School Map – North Scio
Connect Scio High School to Centennial Elementary & Scio Middle School



Map T-7
Proposed Safe Routes to School Map – South Scio
Connect Centennial Elementary & Scio Middle School to Residential Areas



12.4 Proposed Transportation System Improvements

12.4.1 City of Scio Transportation System Improvement Priorities

In 2017, the City of Scio updated the public facility improvement requirements that apply to new development, redevelopment of property and land divisions. Chapter 13 “Public Facilities” of the Scio Zoning Ordinance includes transportation development standards including access management, pedestrian facilities and street cross-section and improvement requirements for improvements for local, collector and arterial roads in the City of Scio.

As part of its review the Planning Commission concluded many local streets are unlikely to be improved to full urban design standards with curb, gutter, sidewalks, bike lanes and full 32’-40’ pavement widths. Turnpike style streets can continue to meet the transportation needs of Scio residents in older neighborhoods. The Scio Planning Commission adopted Map T-8 as part of the Scio Zoning Ordinance. The map shows future street improvements on all streets within the Scio UGB.

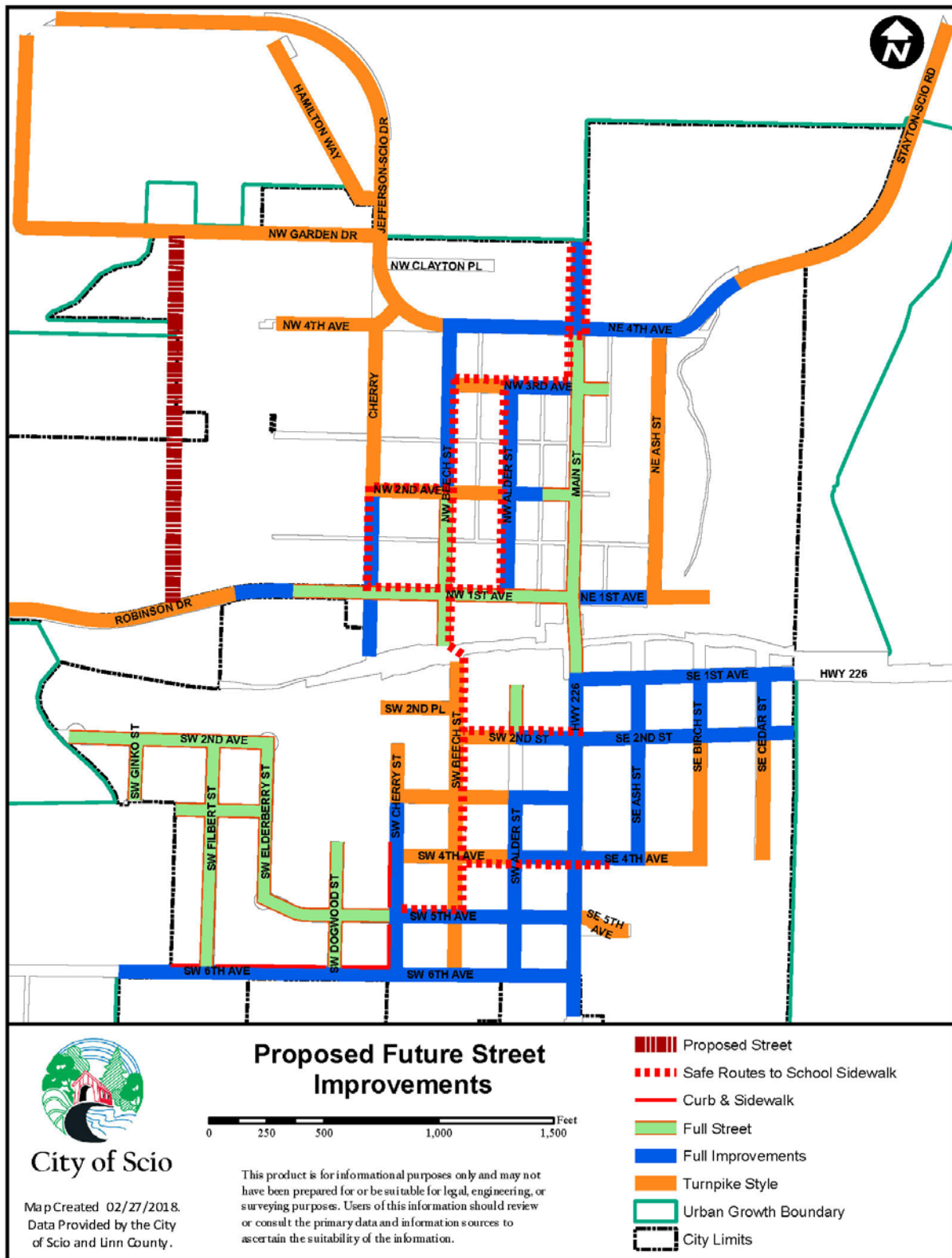
The Scio City Council concurs with the Planning Commission’s analysis. Limited City, Linn County and ODOT transportation system funding should be focused on the primary streets within the city, with emphasis on upgrading collector and arterial roads, improving safety, supporting business development and providing pedestrian and bicycle facilities to/from schools and key community facilities.

In developing a city list of priority transportation improvements, the Scio Planning Commission reviewed projects the City submitted to Linn County in 2017 as well as the sidewalk, pedestrian facility and safe routes to school projects listed in this Chapter. The City considered the following criteria when ranking its projects as community priorities:

1. Traffic safety
2. Bicycle and pedestrian safety
3. Community appearance / streetscape enhancement
4. Economic development benefit for future commercial/industrial development
5. Future residential growth areas within the Scio UGB
6. Priority rating in the *Linn County TSP*

Map T-8 shows Proposed Future Street Improvements on all streets within the Scio UGB. The map is intended to be used as a guide for use by the City planning for transportation system improvements and during its review of redevelopment and development proposals within the City.

Proposed Future Street Improvements



12.4.2 Linn County Transportation System Plan - Recommendations

Linn County included four projects within the Scio UGB in its list of high priority projects recommended for improvement during the 20-year planning period from 2018 to 2040. DKS prepared planning level cost estimates for each of the projects. Table T-9 shows these four projects.

Projects were evaluated and rated based on 10 evaluation criteria which ranged safety, maintenance/preservation, mobility, economy, accessibility to sustainability. The evaluation criteria and weighting factors, scores and discussion are included in Technical Memo #11 “Transportation System Recommendations” in Section L, Volume 2 of the Linn County TSP.

As discussed in Section 12.2.5, the City of Scio proposed a large number of projects located in the Scio UGB for inclusion in the Linn County TSP. These are listed in Table T-8 in Section 12.2.5 above. Only the four projects listed in Table T-10 were ranked highly enough by the Linn County’s technical review group to be included in Linn County’s list of high priority projects.

Table T-10
**Linn County Transportation System Plan (TSP)
Recommended Projects within the City of Scio¹⁵**

Linn County TSP Project #	Project Name	Agency	TSP Evaluation Score	Estimated Project Cost	Priority
BR-28	OR 226 – Storm Outlet to Thomas Creek @ east UGB	ODOT	82%	\$1,015,000	High
BR-42	Linn County Roads – Sidewalk Repairs & Infill	Linn County	79%	865,000	High
BR-01	SW 6 th Avenue Peters Ditch Box Culvert Replacement	Linn County	70%	645,000	High
CI-25	OR-226 Urban Improvements (South CL to East CL) – Bicycle and Pedestrian Improvements	ODOT	65%	2,030,000	High

¹⁵ Linn County Transportation System Plan, Volume 2, Section L, Tech Memo 11 dated October 2017.

Table 2a – “High Priority List for Linn County” and Table 3b – “High Priority Project List for Other Jurisdictions”

12.4.3 Priority Transportation System Improvements in the Scio UGB

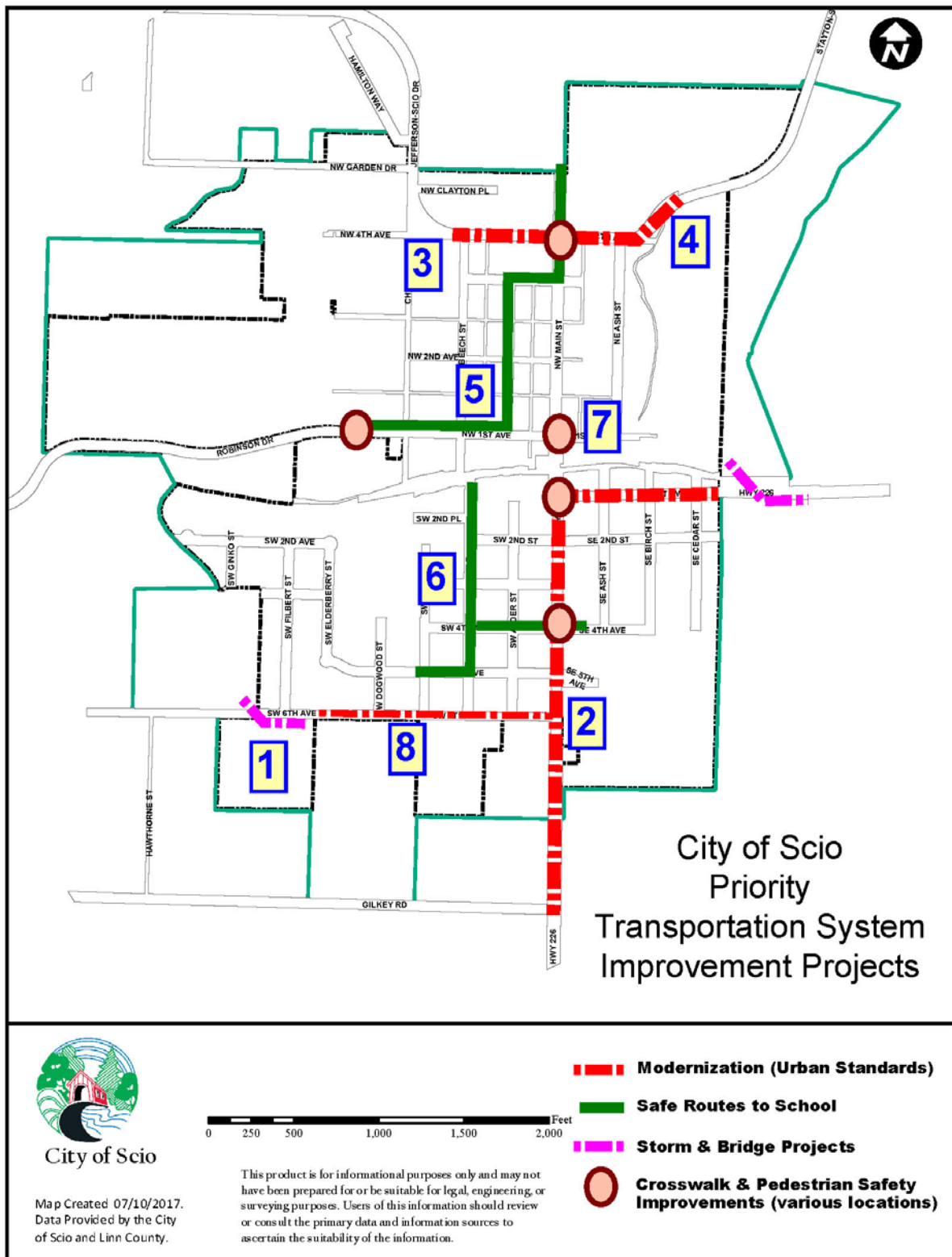
Table T-11 lists the highest priority transportation improvements developed by the City in 2018 for the 20-year planning period from 2018 to 2040. The City will work with both Linn County and ODOT to identify potential funding sources for these priority improvements.

Table T-11
City of Scio
Priority Transportation Improvement Projects

City Project #	City Priority	Linn County TSP Project #	Project Name	Responsible Jurisdiction
Bridge and Storm Drainage Improvements				
1	1	BR-01	SW 6 th Avenue–Peters Ditch Box Culvert Replacement	Linn County
Road Modernization: Widening, Curbs, Sidewalks, Bike Lanes & Storm Drainage				
2	2	CI-25	OR-226 Urban Improvements (South CL to East CL)	ODOT
3	3	CI-24	Jefferson-Scio Rd. Urban Upgrade (Main to NW Cherry)	Linn County
4	4	RM-20	Stayton-Scio Rd. Urban Upgrade (Main to SHS Drive)	Linn County
8	8	RM-21	SW 6 th Avenue (OR 226 to West CL)	City & Linn County
Safe Routes to School Projects				
5	5a		North Scio: North Main Street (Scio High School to 3 rd Avenue including crosswalks upgrade)	City
	5b		North Scio: 3 rd Avenue (Main to Alder) & NW Alder St. (3 rd Avenue to Scio Middle School)	City
	5c		North Scio: 3 rd Avenue (Alder to NW Beech) & NW Beech St. (3 rd Avenue to Scio Middle School)	City
	5d		North Scio: Centennial Elementary School Area & NW Cherry	City
6	6a		South Scio: Pedestrian Bridge @ Thomas Creek south to SW 5 th /Thomas Creek Estates	City
	6b		South Scio: SW 2 nd (SW Beech to SE Ash)	City
	6c		South Scio: SW 4 th (SW Beech to SE Ash)	City
Pedestrian Safety and Bicycle Path/Recreational Trail Improvements				
7	7a		Crosswalk Safety Evaluation & Improvements (OR 226 & N. Main St. – various intersections)	City & Linn County
	7b		OR 226 – 1 st Ave Intersection Widening, Crosswalks & Safety Upgrade	ODOT
	7c	CI-30	Sidewalk Repair / Infill on OR 226, N. Main, NW 4 th	Linn County

Map T-9 shows the location of the proposed priority transportation system improvements.

City of Scio Priority Transportation System Improvements



City of Scio

Transportation System Goals and Objectives

Goal 1: Streets and Highway System - Provide for efficient motor vehicle travel within and through the City of Scio.

- Objective 1a: Work with ODOT and Linn County to secure funding and then construct priority transportation improvements on OR-226 and Linn County roads within the Scio UGB.
- Objective 1b: Construct urban level improvements on OR 226 inside the City limits. Urban improvements include sidewalks, curbs, bike lanes, ADA improvements, lighting, and safety enhancements. These improvements will eliminate existing hazards, enhance safety, promote economic development and beautify the community.
- Objective 1c: Review land development proposals using the City's transportation development standards or the respective ODOT or Linn County standards for roadways under their jurisdiction.
- Objective 1d: Manage access to OR-226 and Linn County collectors to improve safety, and to reduce congestion and conflicting travel patterns.

Goal 2: Active Transportation - Increase the availability of pedestrian and bicycle facilities.

- Objective 2a: Identify bike lane, recreational trail and sidewalk projects that enhance pedestrian/cyclist safety and encourage use of these facilities in Scio, including streetscape amenities such as lighting, benches, banners, and signage.
- Objective 2b: Develop "Safe Routes to School" and walking / biking connections to public facilities, parks and covered bridges.
- Objective 2c: Install way-finding signage directing pedestrians and cyclists to nearby schools, parks, museum, covered bridges and local businesses.
- Objective 2d: Evaluate and improve existing sidewalks. Ensure pedestrian facilities and recreational trails are clear of obstacles and obstructions (e.g., posts, signs, utility poles, trees, noxious vegetation) and comply with applicable Americans with Disability Act (ADA) standards.
- Objective 2e: The Linn County Roads Department and the City of Scio will work together to complete an inventory of sidewalks in the Scio UGB and recommend priority ADA improvements.

Goal 3: Transit – Support regional efforts to provide transit service to Scio.

- Objective 3a: Support provision of countywide transit services, facilities, and improvements to serve residents of Linn County’s small cities and rural communities.

Goal 4: Access for All - Provide an equitable, balanced and connected multi-modal transportation system.

- Objective 4a: Work with county-wide providers to ensure transportation services are available and accessible to underserved and vulnerable populations (e.g. those who cannot are able to access transportation services due to a disability, age, or income).
- Objective 4b: Work with the Linn County Roads Department and Linn County Parks Department to provide interpretive and directional signage to covered bridges and Linn County Parks near Scio.

Goal 5: Safety - Enhance the safety of residents.

- Objective 5a: Identify improvements to address hazardous intersections and improve safety for vehicles, pedestrians and cyclists within the City, including the following high priority intersections:
- OR 226 / Main Street
 - North Main Street / Stayton-Scio Road intersection
- Objective 5b: Provide new crosswalks or improve existing highway crossings for pedestrians and cyclists within the City. Safe crossings on Linn County roads and along OR-226 are a major community priority.

Goal 6: Sustainability - Foster a sustainable transportation system.

- Objective 6a: Provide electric vehicle charging station(s) in Scio.
- Objective 6b: Maintain existing streets, bike lanes, sidewalks and recreational trails to preserve their intended function and maintain their useful life.
- Objective 6c: Identify local, state and federal revenue sources that may be leveraged when making transportation investments to meet the needs of the City.
- Objective 6d: Involve Scio residents when the City plans for transportation system investments as part of the City’s Capital Improvements Plan (CIP) and annual budgeting process.

Goal 7: Economy - Ensure the transportation system supports a prosperous and competitive economy.

- Objective 7a: Work with Linn County and ODOT to improve OR 226 and County roads inside Scio to improve roadway capacity for trucks and enhance system efficiency, access, capacity and reliability.

Goal 8: Coordination - Coordinate with local and state agencies and transportation plans.

- Objective 8a: Coordinate with Linn County Roads Department and Linn County Planning and Building Department when the County updates the Linn County Transportation System Plan.
- Objective 8b: Encourage ODOT to include OR-226 safety improvements and urban level roadway improvements in the Oregon Statewide Transportation Improvement Plan (STIP).
- Objective 8c: Coordinate City transportation system improvement projects with Linn County and ODOT when local projects impact county roads or state highways.
- Objective 8d: Coordinate with the City of Scio Parks plan and the Linn County Parks and Recreation Master Plan regarding trail guidelines and connections between parks, recreation areas, and trails.

RESERVED FOR FUTURE EXPANSION

Pages 252 to 254 Reserved for Expansion