



The Confederated Tribes
of the Umatilla Indian Reservation

TRANSPORTATION SYSTEM PLAN

Photo: Kittelson & Associates, Inc.

Volume II: Technical Appendix



FINAL
April 2023

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CTUIR TSP

DRAFT COMPREHENSIVE PLAN POLICY AND CODE AMENDMENTS

Date: March 20, 2023

Project #: 23021.005

To: Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

From: MIG | APG

Project: CTUIR Transportation System Plan

Subject: Implementing Policy and Code Language

INTRODUCTION

The purpose of this memorandum is to recommend amendments to the CTUIR Comprehensive Plan and Land Development Code (LDC) that will implement the 2023 Transportation System Plan (TSP) Update. The TSP update aims to foster cultural connectedness, deliver community-focused healthy lifestyle solutions, and prioritize safety for all modes of travel on the Umatilla Indian Reservation (Reservation).

Information about the TSP update and needed changes to the Comprehensive Plan and LDC are drawn from the following sources:

- Technical Memorandum #2 – Context and Site Analysis
- Technical Memorandum #5 – Revised Concept Design
- Discussions with the Project Management Team and Technical Advisory Committee

CTUIR COMPREHENSIVE PLAN AMENDMENTS

The CTUIR Comprehensive Plan was adopted in 2010 and most recently updated in 2018.¹ Chapter 5 of the document is titled Plan Elements: Goals & Objectives and addresses issues including land use and transportation.

Relevant policies and recommended amendments are shown in Table 1. New language is shown in underline and struck language shown in ~~strikeout~~.

¹ https://ctuir.org/media/sychezsg/2018updated-2010_comprehensiveplan-webversion.pdf

Table 1. Recommended CTUIR Comprehensive Plan Amendments

Comprehensive Plan Language with Recommended Amendments	Discussion
5.3 Land Base Restoration	This section describes CTUIR's land acquisition, management, and regulation, including the Comprehensive Plan Land Use Map. This section provides the basis for the Land Development Code. No changes recommended.
5.4 Work Force Development ... Objectives: .. <u>8. Utilize Land Use and Transportation Policies and Programs to Support Access to Employment Opportunities for Tribal Members</u>	New suggested language to tie work force development/unemployment policies to transportation (public transit in particular)
5.5 Community Development	Addresses a wide range of community development issues. The TSP is listed as an implementing document though there are no transportation-focused policies currently.
5.6 Natural Resources ... Objectives ... <u>10. Coordinate with property owners to explore options for safe and environmentally friendly public river access locations.</u> <u>11. Promote habitat connectivity and wildlife movement by providing fencing and crossing structures wherever transportation facilities interfere with migration paths or natural areas.</u>	Addresses natural resources on the reservation. Not currently linked to transportation issues (VMT, climate, runoff from impervious surfaces). Consider new language related to river access, here or elsewhere. Consider new language related to wildlife corridors and habitat connectivity.
5.7 Cultural Heritage	To the extent that transportation routes (walking and horse trails) are part of cultural heritage, consider policy linkage here.
5.11 Health and Human Services ...	Suggested new policy to support healthy lifestyle through active transportation.

<p>Objectives</p> <p>...</p> <p><u>6. Support an active and healthy lifestyle through land use and transportation planning to create opportunities to access housing, recreation, and employment by walking and biking.</u></p>	
<p>5.12 Community Facilities</p> <p>...</p> <p>Objectives</p> <p>...</p> <p><u>4. Create and sustain a CTUIR staff position to oversee and coordinate multi-use path maintenance and construction, park and river access, and park maintenance.</u></p> <p><u>5. Coordinate with Tribal and County partners to manage and minimize invasive species along roads and multi-use paths.</u></p>	<p>Addresses long range transportation planning.</p> <p>Suggested new objective and policy language to ensure staff availability for new and continued access to multi-use paths, parks, and river access points.</p> <p>Alternatively, these items could be added to the “Performance Indicators and Benchmarks” section.</p>
<p>5.13 Transportation</p> <p>1. Develop and maintain a transportation asset system that is safe, environmentally sensitive and economically sound and promotes the public health with future transportation in mind.</p> <p>2. Ensure public or personal transportation to meet cultural, economic, personal employment, <u>recreational, health and other needs for all residents, particularly at-risk populations.</u></p> <p>3. Ensure required road transportation and transit planning documents are completed accurately in a timely manner and implemented as appropriate.</p> <p>4. Work toward providing access throughout the ceded and traditional use areas through transportation infrastructure and transit options. As new development occurs, create a local street network that provides a high level of connectivity, pedestrian and bicycle facilities, and multiple alternative routes.</p> <p><u>5. Coordinate land use and transportation planning to create walkable neighborhoods that are safe for all road users and provides opportunities to access daily needs without relying on a private automobile.</u></p>	<p>1. Minor rewording, “transportation system” is generally sufficient,</p> <p>2. Add recreation.</p> <p>3. Removing “road” broadens this to apply to trails, etc.</p> <p>4. Replace with language from TSP update.</p> <p>5. New policies/objectives to coordinate with partner agencies on the following:</p> <ul style="list-style-type: none"> ■ Coordinate with the County and ODOT on how to address truck parking and routing when I-84 is closed. ■ Coordinate with ODOT and Umatilla County on regional connecting roadways (such as OR 331).

<p><u>6. Coordinate with Umatilla County, ODOT, and the Oregon Office of Emergency Management (OEM) to manage freight and passenger vehicle traffic and parking during Interstate 84 closures. Ensure traffic and parking management strategies are consistent with applicable strategies from the Umatilla County Emergency Operations Plan.</u></p>	
<p><u>7. Coordinate with Umatilla County and ODOT on maintenance, management, and operations of regional roadways.</u></p>	
<p><u>8. Promote the use of wildlife crossing facilities to prevent wildlife-vehicle collisions.</u></p>	
<p><u>9. Support the restoration of passenger rail from Portland to Boise</u></p>	

LAND DEVELOPMENT CODE (LDC) AMENDMENTS

The LDC² regulates development of all land on the Umatilla Indian Reservation, and also applies to off-reservation Trust lands. It establishes zoning designations, their allowed uses, and specific development standards. Table 2 identifies sections where changes are needed to implement the TSP. In some cases, specific edits are shown in underline and ~~strikeout~~, while in other cases general concepts are noted for further discussion.

Table 2. Recommended CTUIR LDC Amendments

LDC Code Section	Discussion
Section 3.025 – Uses Permitted (AG-1) - #9	<p>Recommend including standard language listing a transportation facility/improvement identified in the current TSP as a Permitted Use in all zones.</p>
Section 3.050 – Uses Permitted (AG-2) - #8	
Section 3.075 – Uses Permitted (AG-3) - #9	
Section 3.100 – Uses Permitted (AG-4) - #12	
Section 3.130 – Uses Permitted (R-1) - #9	
Section 3.155 – Uses Permitted (R-2) - #10	
Section 3.185 – Uses Permitted (I-D) - #26	
Section 3.210 – Uses Permitted (C-D) - #49	
Section 3.235 – Uses Permitted (P-1) - #15	
Section 3.2443 – Uses Permitted (P-1 Overlay) - #19	
Section 3.260 – Uses Permitted (F-2) - F	
Section 3.285 – Uses Permitted (G-1) - #5	
Section 3.415 – Permitted Uses (P-2) - #14	

² <https://ctuir.org/departments/office-of-legal-counsel/codes-statutes-laws/land-development-code/>

<p>Section 3.445 – Uses Permitted (CR-1) - <u>#13</u></p> <p>Section 3.520 – Uses Permitted (NR) - <u>#11</u></p> <p>Section 3.560 – Uses Permitted (NS) - <u>#14</u></p> <p>...</p> <p><u>xx. Transportation facilities, services, or improvements identified in the CTUIR Transportation System Plan.</u></p>	
<p>Chapter 7 – Planned Unit Developments</p> <p>Section 7.350 – Approval Criteria</p> <p>...</p> <p><u>6. The PUD must include any applicable transportation improvements (including bicycle and pedestrian improvements) identified in the CTUIR Transportation System Plan (TSP) to support a complete and cohesive multimodal network.</u></p> <p><u>7. The PUD must implement the spacing and connectivity requirements identified in the TSP. Proposed street design and location must not preclude future multimodal connections to adjacent properties.</u></p>	<p>Recommend adding approval criteria that requires consistency with the adopted TSP, including connectivity requirements, to ensure the desired multi-modal transportation network is built out.</p>
<p>Chapter 12 – Administrative Provisions</p> <p>[...]</p> <p><u>Section 12.065 – Street and Sidewalk Modifications</u></p> <ol style="list-style-type: none"> 1. <u>When allowing for modifications to street and sidewalk standards, the Comprehensive Planning Manager shall consider modifications of location, width, and grade of streets in relation to the following:</u> <ol style="list-style-type: none"> a. <u>Existing and planned streets</u> b. <u>Topography or other geological/environmental conditions</u> c. <u>Cultural heritage sites</u> d. <u>Public convenience and safety</u> e. <u>The proposed use of land to be served by the streets.</u> 2. <u>Modifications must maintain adequate traffic circulation with regard to intersection angles, grades, tangents, and curves. Where location is not shown in the Transportation System Plan (TSP), the arrangement of streets shall provide for the continuation of existing streets in surrounding areas</u> 3. <u>Modifications to half-street improvements, street widths, or right-of-way widths are</u> 	<p>Consider adding language in Chapter 12 related to roadway design that differs from the adopted TSP. This provision is intended to allow flexibility for half street improvements (when a property develops on one side of a road but will not fund the full street improvement), and other situations</p>

<p><u>allowed where it is impractical to meet the width requirements due to topography, geology, environmental constraints, or existing development patterns.</u></p>	
<p>Chapter 17 – Provisions applying to special uses</p> <p>Section 17.015 Streets and Pedestrian Access Ways</p> <p>1. Street Profiles. Where required within a zone, new streets shall conform to one of the following street cross sections.</p> <p><u>[see cross section table below]</u></p> <p>A. <u>Urban Local</u> – Minor Residential Street Cross Section...</p> <p><u>*update graphic to Figure 12 from TM5*</u></p> <p>B. Urban Local – Standard Residential Street Cross Section...</p> <p><u>*update graphic Figure 11 from TM5*</u></p> <p>C. <u>Urban Collector Street Cross Section. This cross section shall generally be used to accommodate higher traffic volumes than the Urban Local Street classifications. Urban collectors are intended to serve land uses that generate higher traffic volumes than low-density residential development, including high-density/multi-family residential, commercial, and institutional land uses. Collectors are often used to connect local streets and arterial streets.</u></p> <p><u>*new graphic – Figure 8 from TM5*</u></p> <p>D. <u>Arterial Roadway Cross Section (OR 331 or Mission Road). These cross sections shall serve as the roadway profile standards for OR 331 or Mission Road. This cross section is intended to support the highest traffic volumes in the CTUIR Reservation and these roads are designed to accommodate vehicles traveling at higher speeds. Design standards on OR 331 must be coordinated with ODOT. The Arterial Roadway cross section also has a multi-use path option.</u></p>	<p>Add a new table that summarizes the profile widths of each cross section or functional classification. Add cross section standards and diagrams for Arterial Roadways, Rural Collectors, Rural Collectors with a multi-use path, Rural Collectors with gravel surface, Urban Collectors, Rural Local, and a Rural Local with gravel option. Update existing street and pedestrian cross section names and diagrams.³ Update references in 3.505, 3.545, and elsewhere as needed.</p>

³ Note – the existing cross-section diagrams/figures do not have figure numbers.

<p><u>*new graphics for multiuse path and curb and gutter options – Figures 3 and 4 from TM5*</u></p> <p><u>E. Rural Local Street Cross Sections. These cross sections shall generally be used for rural roads with low traffic volumes. Rural local streets may have a paved surface or a gravel surface.</u></p> <p><u>*new graphics for rural local and rural local gravel option – Figures 9 and 10 from TM5*</u></p> <p><u>F. Rural Collector Street Cross Sections. These cross sections shall generally be used to support higher traffic volumes than Rural Local streets. Collectors are often used to connect local streets and arterial streets. Rural Collectors include a shoulder option and a multi-use path option.</u></p> <p><u>*new graphic – Figures 5, 6, and 7 from TM5 *</u></p> <p><u>G. Multi-Use Path Cross Section. This cross section shall be used for multi-use paths. Multi-use paths are intended to provide bicycle, pedestrian, and other non-vehicular forms of transportation.</u></p> <p><u>*new graphic – Figure 14 from TM5*</u></p> <p><u>H. Alley Cross Section. This cross section shall be used for alleyway access that serves driveways located behind primary uses.</u></p> <p><u>*new graphic – Figure 13 from TM5*</u></p>	
<p>Chapter 3 – Use Zones</p> <p>Section 3.200 Acreage-Dimensional Standards (C-D) - <u>#10</u></p> <p>Section 3.225 Acreage-Dimensional Standards (P-1) - <u>#3</u></p> <p>Section 3.430 Acreage-Dimensional Standards (CR-1) - <u>#4</u></p> <p>Section 7.500 Development Standards (PUD) - <u>#7'</u></p> <p>...</p>	<p>To implement the street grid in urbanized areas, consider adding block length/dimension standards consistent with the NR and NS zones. Apply the grid/block dimensions standards to PUDs to support a cohesive and connected street and block pattern between PUDs and adjacent urban areas. These standards should apply within the Community Water Sewer Service Area.</p>

<p><u>xx. Blocks, Streets and Alleys. Subdivisions [and PUDs] shall be planned with a maximum block length of 500 feet with a pedestrian access way provided every 250 feet along the block length. Streets within subdivisions [and PUDs] shall conform to one of the profiles in Section 17.015 as appropriate based on the use of the street. Pedestrian access shall be a dedicated pedestrian access way meeting the requirements of Section 17.015(2). These standards apply within the Community Water Service Area.</u></p>	
<p>Section 4.020 Subdivision Manual</p> <p>2.15 Minimum Standards: No proposed subdivision shall be approved unless it complies with the Comprehensive Plan for the reservation and the Land Development Code.</p> <p>[...]</p> <p>2.25 Subdivision Committee Review Factors: (1) In review of proposed subdivisions, the committee shall consider the following factors:</p> <p>...</p> <p>(B) Conformance to zoning and Comprehensive Plan</p> <p>...</p> <p>(D) Adequacy of public services, existing or committed and funded, in the area of the proposed development, such as schools, police and fire protection, health facilities, highway and arterial road networks and other transportation facilities, parks and other recreational facilities, to serve the increase in population expected to be created by the development.</p> <p>...</p> <p><u>(Q) Possible adverse impacts or conflicts with planned transportation facilities identified in the TSP.</u></p> <p>...</p> <p>3.05 Additional Findings for Approval</p>	<p>The Subdivision Manual includes provisions to ensure proposed developments comply with the Comprehensive Plan and LDC. Recommended amendments included in this memo are intended to implement and ensure consistency with the TSP. These amendments to the subdivision manual will help clarify transportation improvement requirements and standards associated with subdivisions.</p> <p>The street surface, right-of-way, and sidewalk dimensions (4.020.4.30(5)-(6)) are recommended for removal from this document but should be included in the CTUIR engineering standards or manual (if they are not already).</p>

1. Proposed transportation facilities or improvements are consistent with the adopted TSP Streets, alleys, and adjacent areas.

...

4.30 Improvements Required:

...

(5) Streets and Roads

Easements serving subdivisions shall conform to the Street and Pedestrian Access Way standards in the Section 17.015 of the Land Development Code. In addition to the standards in Section 17.015, streets that serve subdivisions with lots less than one acre must ensure road surface materials use a Class C asphalt mix. Extruded curbs are an acceptable design alternative to the curb specifications in Section 17.015. with lots of one acre or more shall conform to the following minimum specifications:

- a) ~~Right of Way or easement width shall be 30 feet.~~
- b) ~~Road surface shall be 20 feet.~~
- c) ~~Material s base 4" minus sub-base, 4 inch consisting of 1 1/2 " or 3/4 "minus.~~

~~6) Streets serving subdivisions with lots of less than an acre shall conform to the following minimum specifications for all weather roads:~~

- a) ~~Right of ways or streets shall be 40 feet.~~
- b) ~~Road surface shall be 24 feet.~~
- e) ~~Materials~~
 - (1) ~~Base 4" minus.~~
 - (2) ~~Sub- base 4 11 consisting of 1 1/2 " or 3/4 " minus.~~
 - (3) ~~Asphalt 2 inches.~~
 - (4) ~~Asphalt mix s hall be Class C.~~
 - (5) ~~Extruded curbs are considered acceptable.~~

~~7) Sidewalks: Pedestrian traffic shall be accommodated by sidewalks of lot less than 5 feet in width.~~

...

5.20 Improvement Requirements (partitions):

Language regarding asphalt mix and extended curbs added to this paragraph so it is not lost with the removal of subsequent text.

<p>...</p> <p>(2) Existing Streets. The dedication of additional right-of-way and widening of the existing roadway shall be required whenever existing streets adjacent to or within a tract area are inadequate to safely accommodate traffic anticipated by the Natural Resource Commission and the County Road Department. <u>Right-of-way improvements shall conform to the Street and Pedestrian Access Way standards in Section 17.015 of the Land Development Code.</u></p> <p>(3) Dedication of additional right-of-way widening shall be required where topography requires cut or fill slopes for roads under the criteria above, where state law requires rights-of-way for utilities to be dedicated or where a rationally supported traffic engineering study states that additional through lanes, lanes for turning, exits, bike paths, or walkways are needed for public safety or efficient traffic flow.</p>	
<p><u>Section 12.070 Right of Way Review</u></p> <ol style="list-style-type: none"> 1. <u>The right-of-way review evaluates conformance of an existing or proposed right-of-way cross section with the required right-of-way widths in LDC Section 17.015. A right-of-way review is triggered through the following:</u> <ol style="list-style-type: none"> a. <u>Any proposed development action that is anticipated to exceed 250 Average Daily Trips (ADT).</u> b. <u>A proposed development action that is anticipated to increase use by vehicles exceeding 20,000 pound gross vehicle weights by 10 or more vehicles a day.</u> 2. <u>Applicable land use proposals/actions (12.070.1) must provide improvements to the adjacent right-of-way to conform to right-of-way standards in LDC 17.015, which may include but is not limited to:</u> <ol style="list-style-type: none"> a. <u>Planned ROW improvements identified in the TSP</u> b. <u>Increased right-of-way width (dedication)</u> c. <u>Half-street improvements</u> d. <u>Construction of bike lanes, sidewalks, shoulders, vegetative buffers, and/or multi-use paths</u> 3. <u>Right-of-way review is exempt under the following circumstances:</u> 	<p>Recommend describing the “Right of Way Review Process” in code as referenced in this Section 17.015. “CTUIR Right of Way Policy” is mentioned in the comprehensive plan.</p>

<ul style="list-style-type: none">a. <u>The adjacent right-of-way conforms with the cross section requirements in LDC 17.015.</u>b. <u>It is impractical to meet the width requirements due to topography, geology, culturally significant sites, environmental constraints, or existing development patterns, as determined by the Comprehensive Planning Manager.</u>	
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Table 3. Functional Classification and Cross Sections Table

This new table provides dimensional standards for the cross sections within the TSP. The table is recommended for inclusion in Section 17.015 – STREETS AND PEDESTRIAN ACCESSWAYS along with new cross-section graphics.

Cross Section	Right-of-Way Width	Pavement or Gravel Width	# of Travel Lanes	Travel Lane	Shoulder	Bike Lane	Sidewalk (SW) or Multi-Use Path (MP)	Parking	Vegetated Buffer
Urban Local – Minor Residential	50'	28'	1	14'	N/A	N/A	SW: 5'	7'	6'
Urban Local – Standard Residential	60'	36'	2	11'	N/A	N/A	SW: 5'	7'	6'
Urban Collector	70'	46'-48'	2	10-11'	N/A	6'	SW: 5'	7'	6'
Arterial (multi-use path option)	80'	46'-54'	2 (plus center turn lane)	11'-12'; turn lane: 12-14'	6'-8'	N/A	MP: 10'	N/A	Remaining ROW - varies
Arterial (curb/gutter option)	60'	34-40'	2	11-12'	N/A	6-8'	SW: 6'	N/A	5'
Rural Local	50'	30'-32'	2	11'-12'	4'	N/A	N/A	N/A	10'
Rural Local (gravel)	50'	30'-32'	2	11-12'	4'	N/A	N/A	N/A	10'
Rural Collector (Shoulder)	60'	32'-40'	2	11-12'	5-8'	N/A	N/A	N/A	10'-13'
Rural Collector (Multi-Use Path)	60'	30'-32'	2	11'-12'	4'	N/A	MP: 10'	N/A	10'-14'
Rural Collector (Gravel)	60'	34'-36'	2	11-12'	6'	N/A	N/A	N/A	12-13'
Alleyway	16'	12'-16'	1	12'-16'	N/A	N/A	N/A	N/A	N/A