



**TRANSPORTATION TECHNICAL COMMITTEE
REGULAR MEETING
February 6, 2024 @ 9:30AM
212 SW 9TH STREET
CITY HALL- 3RD FLOOR CONFERENCE ROOM**

AGENDA

- 1. Call meeting to order and establish Quorum.**
- 2. Verify posting of meeting.**
- 3. Introductions.**

BUSINESS

- 4. Consider recommending to the Transportation Policy Board approval of a Resolution adopting Amendment No. 3 to the Fiscal Year 2024 Unified Planning Work Program for the Lawton Metropolitan Planning Organization.**
- 5. Consider recommending the Transportation Policy Board approve the updated amendment to the current Transit Master Plan contract with Hendrickson Transportation Group to reflect changes recommended by Legal.**
- 6. Receive a presentation of the draft final report for the Traffic Flow Study, consider recommending to the Transportation Policy Board acceptance of the draft final report, and provide feedback as necessary.**
- 7. Receive Kimley- Horn's Presentation of the project background and Public involvement plan for the 2050 Metropolitan Transportation Plan, answer discussion questions, and provide feedback.**
- 8. Receive information from staff regarding project cost expenses to date.**
- 9. Reports or Comments.**
- 10. Adjournment.**

“The City of Lawton encourages participation from all of its citizens. If individuals with disabilities who require accessible alternative formats of the agenda and related meeting materials and/or auxiliary aids/services to participate in the meeting, notification to the City Clerk at (580) 581-3305 at least 48 hours prior to the scheduled meeting is encouraged to make the necessary accommodations. The City may waive the 48-hour rule if interpreters for the deaf (signing) or translation services for LEP individuals are not the necessary accommodation.”

LMPO TRANSPORTATION TECHNICAL COMMITTEE AGENDA ITEM COMMENTARY

ITEM TITLE: Consider recommending to the Transportation Policy Board approval of a Resolution adopting Amendment No. 3 to the Fiscal Year 2024 Unified Planning Work Program for the Lawton Metropolitan Planning Organization.

INITIATOR: Charlotte Brown, LMPO Director

STAFF INFORMATION SOURCE: Charlotte Brown, LMPO Director
Jonathan Stone, Assistant LMPO Director

BACKGROUND: The Unified Planning Work Program (UPWP) outlines the objectives to be achieved and the products resulting from each work task as well as anticipated funding. The FY 2024 UPWP was approved on June 27, 2023, and last amended on November 14, 2023.

Amendment 3 to the FY24 UPWP includes the following changes:

1. Removed the Land Use Plan (LUP) from the UPWP
2. Reassigned funds for the consultant for the LUP to the Metropolitan Transportation Plan (MTP).
3. Removed personal hours from monitoring the LUP.
4. Removed personal hours from writing the MTP (consultant is writing the document)
5. Added hours to:
 - a. Training and Annual Documents
 - b. Downtown Parking Study
 - c. TIP amendments

The Transportation Policy Board will consider Amendment 3 to the FY 2024 UPWP at its meeting on February 6, 2024.

EXHIBITS: Resolution No. 24-_____
FY 2024 UPWP Amendment No. 3 Draft

KEY ISSUES:

FUNDING SOURCE: 80% ODOT/20% COL.

RECOMMENDED ACTION: Recommend to the Transportation Policy Board approval of Resolution No. 24-___ adopting Amendment No. 3 to the Fiscal Year 2024 Unified Planning Work Program for the Lawton Metropolitan Planning Organization

LMPO



FY 2024

DRAFT Amendment 3

**Unified
Planning
Work
Program**

This report was prepared by the Lawton Metropolitan Planning Organization (LMPO) and was financed in part through the United States Department of Transportation funds (Federal Highway Administration Planning and Federal Transit Administration Section 5303) and in part through local matching funds provided by the City of Lawton. The contents of this document are the responsibility of the LMPO. The United States Government and its agencies assume no liability for the content of this document or for the use of the contents.

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FY 2024 UPWP

I INTRODUCTION

The Unified Planning Work Program (UPWP) for the Lawton Metropolitan Area Transportation Study (LMATS) area identifies transportation planning activities to be undertaken during Fiscal Year (FY) 2024. The objective of the UPWP is to ensure the Lawton Metropolitan Planning Organization's (LMPO) transportation planning process meets 23 CFR Part 450 and 49 CFR Part 613. The UPWP is developed by the LMPO in collaboration with ODOT and LATS.

The Federal Highway Administration and Federal Transit Administration Offices of Planning have jointly issued Planning Emphasis Areas (PEAs) for MPOs to identify work tasks associated with planning emphasis areas:

- The LMPO has established performance measures for fatality rate, serious injury rate, and non-motorized fatality and serious injury rate; pavement condition, bridge condition, and system performance; and transit performance measures.
- The LMPO has recently conducted a study on zero emission transit vehicles that includes a transition plan for the Lawton Area Transit System.
- The LMPO has added Element 8 to the UPWP to cover complete streets planning activities, the project for FY24 will be to identify gaps in the existing and planned active transportation networks.
- Models of Regional Planning Cooperation – Promote cooperation and coordination across MPO boundaries where appropriate to ensure a regional approach to transportation planning.
- The LMPO has coordinated with the Lawton Economic Development Corporation to study the feasibility of a freight route connecting the West Lawton Industrial Park to US 62 and I-44. This connection is now planned to be constructed in FY25.
- Ladders of Opportunity – Promote access to essential services as part of the transportation planning process and identify transportation connectivity gaps which, when addressed, will improve access to essential services.

II MPO

Federal law requires the governor of each state to designate any urbanized areas within the state with a population of 50,000 or more as a Metropolitan Planning Organization (MPO). The Infrastructure Investment and Jobs Act (IIJA) required the membership of MPOs to consist entirely of local elected officials, officials of public agencies that administer or operate major modes of transportation in the metropolitan area, and appropriate State officials.

Transportation Technical Advisory Committee

The Transportation Technical Advisory Committee coordinates transportation issues at the technical level and provides technical advice to the Policy Board.

The functions of the Technical Advisory Committee include the following:

1. Present transportation agenda items to various agencies;
2. Receive presentations from various agencies;
3. Review the Transportation Improvement Program (TIP);

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4. Review transportation plans and studies;
5. Make recommendations to the Transportation Policy Board;
6. Review transportation issues at the request of the Policy Board; and
7. Review the UPWP.

Transportation Policy Board

The Transportation Policy Board (TPB) has been designated as the MPO for the Lawton metropolitan area and is the final approval authority for transportation planning. The Board reviews and approves the overall work program and makes policy determinations concerning the transportation plan and the transportation improvement program. The functions of the Policy Board include the following:

1. Develop and maintain a comprehensive transportation planning program in conformance with 23 CFR Part 450 and 49 CFR Part 613;
2. Develop and approve all policy procedures for transportation planning in the LMA;
3. Review and approve the Transportation Plan and the TIP;
4. Ensure that established Public Participation Process is carried out appropriately for all major transportation activities;
5. Establish and revise the metropolitan area boundary as required by law;
6. Prepare certifications; and
7. Review and approve the UPWP.

The current memberships of the Technical Advisory Committee and Policy Board are found in Appendix B.

Lawton Metropolitan Area Transportation Study Boundary

The Lawton Metropolitan Area Transportation Study (LMATS) area is the geographic area in which the metropolitan transportation planning process required by 23 CFR Part 450 and 49 CFR Part 613 must be carried out. The LMATS area is basically bounded to the north by Rogers Lane/US 62, to the east by 90th Street, to the south by Coombs Road and to the west by Deyo Mission Road. Appendix A provides a map illustrating the LMATS area.

III PLANNING FACTORS

The LMPO performs its activities under the guidance of federal planning factors. These planning factors are reflected in the tasks and work products listed under individual work elements of the UPWP.

Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law on July 6, 2012. MAP-21 created a streamlined, performance-based, and multi-modal program to address challenges such as improving safety, maintaining infrastructure, reducing traffic congestion, improving efficiency of the transportation system and freight movement, protecting the environment, and reducing delays in project delivery. MAP-21 enhanced the transportation planning process incorporating performance goals, measures, and targets into the process of identifying needed transportation improvements and project selection.

On December 4, 2015, Fixing American's Surface Transportation Act (FAST Act) was signed into law. FAST Act continued the provisions of MAP-21 and added two planning factors. FAST Act is the first law enacted in over ten years that provides long-term funding for surface transportation. FAST Act made changes and reforms to many Federal transportation programs, including streamlining the approval processes for new transportation projects, providing new safety tools, and establishing new programs to advance critical freight projects.

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The Infrastructure Investment and Jobs Act was signed into law on November 15, 2021. The IIJA mandates that MPOs must use 2.5% of their Planning grant funding to develop and adopt complete streets policies, active transportation plans, transit access plans, transit-oriented development plans, or regional intercity rail plans. The IIJA contains a new provision granting cities authority to apply an approved design guide of their choice to federally-funded projects on locally-owned streets.

IV TRANSPORTATION PLANNING PRODUCTS

The metropolitan transportation planning process results in the development of metropolitan planning products, including the UPWP, the MTP, the TIP, and the PPP. Details of these products are provided below.

Unified Planning Work Program (UPWP). The UPWP is one element of the transportation planning process that the LMPO is responsible for developing during each fiscal year. The purpose of the UPWP is to provide guidance for the comprehensive, continuing and coordinated approach to transportation planning. Each year, the UPWP is developed through a collaborative process involving LMPO staff, Lawton Area Transit System (LATS), Oklahoma Department of Transportation (ODOT), and the Oklahoma division of the Federal Highway Administration (FHWA). Before its submittal to the ODOT, the UPWP is reviewed by the TTC and adopted by the LMPO.

The UPWP is based on the transportation planning priorities of the area and also federal planning factors and federal emphasis areas. The UPWP lists all work to be addressed in a given fiscal year and identifies revenue sources. The FHWA, FTA, and the ODOT Planning Division must approve the budget and statement of work in the UPWP in writing by June 30th, before costs may be incurred for the new fiscal year.

Metropolitan Transportation Plan (MTP). The MTP is the centerpiece of the metropolitan transportation planning process. The LMPO has developed a number of long range transportation plans since its inception. The current MTP identifies transportation improvements through the year 2045 and articulates transportation goals, objectives and strategies. This Plan is financially constrained and reflects only funding that is currently available or can reasonably be expected to be available during the plan's time frame.

Transportation Improvement Program (TIP). The TIP is a prioritized list of transportation projects proposed for implementation during the next four years. ODOT and the MPO update the TIP in a collaborative effort. The TIP is important because no federally funded transportation project can be implemented unless it appears in the TIP and in the 2045 Metropolitan Transportation Plan. The TIP includes projects on the Interstate, Freeways, Arterials and Collectors. Also included are safety, transportation enhancement, and transit projects. Transit projects for FTA Section 5310 funding are submitted by the Oklahoma Department of Transportation Office of Mobility and Public Transit.

Projects included in the TIP must be consistent with the MTP, and the TIP is required to be financially constrained in each year of the program. This means that the funding identified for transportation projects in a given year must be equal to the amount reasonably expected to be available under existing federal, state and local programs. Prior to adoption of the TIP (or amendment) the LMPO provides an opportunity for public review and comment and holds a public hearing. A project utilizing federal transportation funds may not proceed unless it is included in the TIP. Amendments and revisions of the TIP may occur at any time during the fiscal year.

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Public Participation Process (PPP). The Infrastructure Investment and Jobs Act (IIJA) requires citizen participation to occur throughout all stages of federally funded projects. Public participation provides citizens, affected public agencies, private providers of transportation and other interested parties reasonable opportunity to comment, participate in goal-setting, problem solving, and expand the focus of transportation decision making. In addition, the IIJA requires transportation agencies to develop and implement a proactive approach to ensure that transportation services are extended to those traditionally underserved.

Private developers and other governmental entities such as Tribal and US Department of Defense play a major role in land use development and the transportation infrastructure. The LMPO recognizes this role and encourages private sector and governmental participation in MPO projects and programs as required by the IIJA. The LMPO encourages participation of projects under consideration by providing agenda notice to tribal governments. Secondly, the LMPO ensures that programmed projects, invitation to bid and requests for proposals are advertised in the local newspaper and on the website at www.lawtonmpo.org. Planning documents and LMPO meeting agendas and information are available at www.lawtonmpo.org.

V LMPO FY 2024 PLANNING PRIORITIES

As required in 23 CFR 450.308 (c), the MPO "...shall develop a UPWP that includes a discussion of the planning priorities facing the Metropolitan Planning Area (MPA)." The FY 2024 planning priorities are reflected in the various elements of this document. The major products or activities in this fiscal year will include:

1. Hire and monitor consultant for the travel demand model for the 2050 MTP;
2. Monitor consultant for a Transit Master Plan;
3. Analyze pedestrian facilities to include pedestrian crossings;
4. Study of parking in the downtown area;
5. Support ODOT performance measure targets;
6. Continue the public awareness campaign for air quality;
7. Monitor consultant for a Traffic Flow Improvement Study to include construction of improvements;
8. Continue the bicycle safety education campaign.

These activities will aid in addressing the transportation planning needs of the study area. The UPWP elements will address how these priorities will be accomplished.

Status of Transportation Planning Activities Update

In the past fiscal year, all federal and state transportation planning requirements applicable to the LMPO were met by the LMPO. In addition, a number of other projects that were essential to the transportation planning process were completed. These projects include:

- ✓ *Developed the Fiscal Year 2024 Unified Planning Work Program;*
- ✓ *Finished working with a consultant for a study on zero emission transit vehicles;*
- ✓ *Developed and executed the air quality education program in cooperation with local media and the LMPO Air Quality Stakeholders Advisory Committee;*
- ✓ *Continued the education program for bicycle safety;*
- ✓ *Coordinated with the LATS General Manager, the consultant, and the City Transit Trust on the design concept and construction plans for a multi-modal transportation center and hub;*
- ✓ *Continued working with a consultant for the Transit Master Plan*

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Funding

Funding of the transportation planning process for the LMATS is from three sources: FHWA PL fund, FTA Section 5303 fund, and the local match. Federal funds will reimburse up to 80% of eligible work effort (identified in the UPWP) and the remaining 20% of the funding is provided by the City of Lawton. Through FHWA, ODOT receives federal State Planning and Research (SPR) funds in the amount of \$15,000 for the LMATS area. Based on an agreed distribution formula involving ODOT, ACOG, and INCOG, the LMPO Fiscal Year 2024 PL funds are \$149,520 plus carryover from previous years in the amount of \$196,623 and an additional \$3,857 set aside for Safe and Accessible Transportation options that do not require a local match. For FY 2024 the LMPO is applying for \$350,000 in PL funds. Funding for Section 5303 transit planning for FFY23 is \$75,000, and we have budgeted \$50,000 for FFY24 out of the total \$188,754 allocated from the FFY20-23 apportionment. The LMPO also applied for \$150,000 in Congestion Mitigation and Air Quality (CMAQ) funds. Total federal funds applied for is \$550,000. Tables 1 and 2 illustrate the source of funding. There are Memoranda of Understanding (MOU) between the LMPO and the City of Lawton detailing the amount of local match and responsibilities.

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Table 1: FHWA PL & FTA Section 5303 & CMAQ Budget Summary

	PL Funds	5303 Funds	CMAQ Funds	City Match	SPR	TOTAL
Personnel	\$ 117,308	\$ 15,412	\$ 15,200	\$ 36,015	\$ 15,000	\$ 198,935
Equipment & Supplies	\$ 5,200	\$ 0	\$ 6,000	\$ 2,800	\$ 0	\$ 14,000
Printing, Media	\$ 31,600	\$ 0	\$ 24,800	\$ 14,100	\$ 0	\$ 70,500
Contractual	\$ 186,880	\$ 60,000	\$ 104,000	\$ 87,720	\$ 0	\$ 438,600
Travel & Training	\$ 8,400	\$ 1,600	\$ 0	\$ 2,500	\$ 0	\$ 12,500
TOTAL	\$ 349,388	\$ 77,012	\$ 150,000	\$ 143,135	\$ 15,000	\$ 734,535

Source: LMPO

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Table 2: Fiscal Year 2024 Total Budget, Including Federal, State and Local Sources

PL	5303	Project	PL Funds	5303 Funds	CMAQ	City Match	SPR*	TOTAL
1.0	44.21.00	Program Support & Administration	\$ 70,974	\$ 1,600	\$ 0	\$ 18,143	\$ 15,000	\$ 105,717
2.0	44.22.00	Data Collection & Information	\$ 14,650	\$ 0	\$ 0	\$ 3,662		\$ 18,312
3.0	44.24.00	Short Range Transit Planning – System	\$ 0	\$ 75,412	\$ 0	\$ 18,853		\$ 94,265
4.0		Long Range Transportation Planning	\$ 235,843	\$ 0	\$ 0	\$ 58,960		\$ 294,803
5.0	44.25.00	Transportation Improvement Program	\$ 5,192	\$ 0	\$ 0	\$ 1,298		\$ 6,490
6.0		Air Quality Program/ Projects	\$ 0	\$ 0	\$ 150,000	\$ 37,500		\$ 187,500
7.0	44.27.00	Public Participation	\$ 18,872	\$ 0	\$ 0	\$ 4,718		\$ 23,590
8.0		Complete Streets **	\$ 3,857	\$ 0	\$ 0	\$ 0		\$ 3,857
		TOTAL	\$ 349,388	\$ 77,012	\$ 150,000	\$ 143,135	\$ 15,000	\$ 734,535

Source: LMPO

*SPR - State Planning & Research Funds Included

** Element 8 "Complete Streets" is composed of the 2.5% of the PL funds that are set aside for Complete Streets Planning Activities and is funded at 100%

ELEMENT 1.0 - PROGRAM SUPPORT & ADMINISTRATION

OBJECTIVE: Management and monitoring of the transportation planning process. Compliance with administrative, financial, and legal requirements for maintaining a continuous, cooperative and comprehensive transportation planning process.

TASK DESCRIPTION: The purpose of this element is to ensure that the accounting and management functions necessary to maintain the efficient and effective planning activities outlined in the FY 2024 UPWP are carried out. Further, this element provides the administrative support needed to manage and coordinate day-to-day LMPO transportation planning activities at the program level such as supervision of LMPO staff persons and contracted services.

The following products or activities will be the responsibility of the LMPO staff in cooperation with ODOT.

Tasks:

- 1) **General Administration:** This task provides the basic framework for other tasks in the UPWP. Work items under this task include staffing, correspondence, record keeping, coordinating, providing technical support to the LMPO Policy Board and the Transportation Technical Committee, and serving as point of contact to FHWA, FTA, other agencies, and the local community. Activities include:
 - a) Prepare and submit monthly claims statement to ODOT,
 - b) Maintain financial records including an annual financial audit; the audit will be performed in accordance with 49 CFR 18.26, 49 CFR Part 90, OMB Circular A133,
 - c) Monitor Federal and State legislation related to transportation issues, analyze their impact on the LMATS area, respond to requirements, and provide pertinent information to the LMPO.
 - d) Prepare the annual agreements, memoranda of understanding, certification statements, Annual Listing of Federally Obligated Projects, etc., and coordinate with ODOT and LATS on the development of the UPWP.
 - e) Research and prepare grant applications.
- 2) **Training and Travel:** This task ensures adequate training of MPO staff using technical assistance available through the ODOT, National Highway Institute (NHI), FHWA, FTA, and other agencies.
- 3) **Supplies and Equipment:** Office supplies, equipment, and meeting room fees and supplies, website hosting.

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Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
FY 2024 UPWP, Memoranda of Understanding, Annual Funding Agreements, Certifications	3 rd Quarter	4 th Quarter	PD STP TP	180
Audit	1 st Quarter	2 nd Quarter	STP A	100
Annual Listing of Obligated Projects	2 nd Quarter	2 nd Quarter	TP	30
Grant Applications	1 st Quarter	4 th Quarter	STP TP	270
Administration tasks	1 st Quarter	4 th Quarter	PD STP TP A A3	935

*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

Table 3: Program Support & Administration Funding

FUNDING SOURCE	FUNDING AMOUNT
PL Funds	\$ 70,974
FTA Section 5303 Grant Funds	\$ 1,600
City Match	\$ 18,143
SPR* (ODOT)	\$ 15,000
TOTAL	\$ 105,717

Source: LMPO

ELEMENT 2 - DATA COLLECTION & INFORMATION

OBJECTIVE: Monitor changes in demographic characteristics and land use to ensure transportation projections are compatible with current patterns, local land use policies and provide required data for the transportation model.

GENERAL DESCRIPTION: This element provides for the collection and maintenance of data on metropolitan development patterns and demographic characteristics to support the long range planning process and the development of the transportation model; develop and maintain maps and database to support transportation planning activities. A database and map of transit shelters within the LMA will be completed. More data from the 2020 Census will become available over time which will require updating of databases.

The following products or activities will be the responsibility of the LMPO staff:

Tasks:

- 1) Data Collection & Maintenance.
 - a) Collect and maintain databases that support the transportation planning process.
 - (i) Building permit data by TAZ.
 - (ii) Traffic count data and accident data.
 - (iii) Socio-economic information.
 - (iv) Collect operational and performance data of the transit system.
 - (v) Collect data on non-motorized travel including bicycle and pedestrian facilities.
- 2) Create and maintain database of transit shelters.
- 3) 2020 Census
 - a) Update databases as information from the 2020 Census is released.
- 4) Mapping & Graphics.
 - a) Prepare visual aids to be incorporated into transportation plans, studies or reports to support the transportation planning process,
 - b) Maintain electronic maps showing: traffic counts, accident data, speed limits, number of lanes, signalized intersections, traffic control signs, transit routes, bus shelter locations, sidewalk locations, bicycle and pedestrian routes, and traffic generator locations.

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Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
Data Collection/ Maintenance/Mapping	1 st Quarter	4 th Quarter	PD STP TP	425
Transit Shelter map	1 st Quarter	4 th Quarter	TP	35
2020 Census	1 st Quarter	4 th Quarter	TP	30

*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

Table 4: Data Collection & Information Funding

FUNDING SOURCE	FUNDING AMOUNT
PL Funds	\$ 14,650
FTA Section 5303 Grant Funds	\$ 0
City Match	\$ 3,662
TOTAL	\$ 18,312

Source: LMPO

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ELEMENT 3 - SHORT RANGE TRANSIT PLANNING

OBJECTIVE: The objectives of this task are to assist the Lawton Area Transit System to monitor public transportation needs and to identify and improve locations with operational deficiencies .

GENERAL DESCRIPTION: This element involves coordination between the transit management consultant, transit trust and other agencies to provide transit service to the community.

In 2021 the Lawton MPO hired a consultant to create a Transit Master Plan. This contract is ongoing and will be completed once a location for the transit transfer center has been selected by the City.

A consultant has been hired to develop a design concept and construction plans for a multi-modal transit center. The Transit Trust is reviewing options on location of the transit center. Staff will be researching funding for the construction of the transfer center and hub.

Staff will work with LATS General Manager to ensure the requirements of the Public Participation Plan are met as progress is made on the transfer center and hub and any route changes.

The following products or activities will be the responsibility of the LMPO staff:

Tasks:

- 1) Public Transit System.
 - a) Coordinate with LATS General Manager to ensure the MPO Public Participation Process meets applicable FTA requirements for public involvement and participation.
 - b) Oversee the management of transit system.
 - c) Manage bus shelter/bus bench contract.
 - d) Manage contract for the design concept and construction plans for the transit center and operations/maintenance site.
 - e) Continue to monitor consultant for a Transit Master Plan
 - f) Amend Transit Master Plan contract to include planning micro-transit zones

Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
Oversight of transit system	1 st Quarter	4 th Quarter	PD STP TP	180
Bus Shelters/Benches	1 st Quarter	4 th Quarter	PD STP	60
Design concept for transfer center/hub**	1 st Quarter	4 th Quarter	PD STP TP	75
Coordination on public involvement	1 st Quarter	4 th Quarter	STP TP	53
Transit Master Plan**	1 st Quarter	2 nd Quarter	PD STP	10
Micro-transit zones plan	1 st Quarter	4 th Quarter	PD STP	60

*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

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Table 5: Short Range Transit Planning Funding

FUNDING SOURCE	FUNDING AMOUNT
PL Funds	\$ 0
FTA Section 5303 Grant Funds	\$ 75,412
City Match	\$ 18,853
TOTAL	\$ 60,500

Source: LMPO

DRAFT

ELEMENT 4 - LONG RANGE TRANSPORTATION PLANNING

OBJECTIVE: To develop policies and plans regarding transportation and transportation-related areas such as air quality, reducing congestion and preserving street network capacity.

GENERAL DESCRIPTION: The 2045 MTP was adopted in December 2019. Staff will monitor the implementation of the MTP. Staff will monitor a consultant for the 2050 MTP's travel demand model.

Staff has developed a bicycle safety education program targeted to adults and secondary school students. A bicycle safety education campaign directed toward all road users is ongoing. The media coverage of the new bicycle routes has been a success and will continue during this fiscal year.

The following products or activities will be the responsibility of the LMPO staff:

After the selection of a firm for the Land Use Plan the LMPO received a project budget that was much higher than anticipated, as such the Land Use Plan will not be completed in FY24 and the remaining personnel hours have been moved to other projects.

Tasks:

- 1) MTP Administration.
 - a) Monitor implementation of the 2045 MTP and identify projects which have been implemented.
 - b) Analyze pedestrian facilities to include studying locations where pedestrian improvements are needed.
 - c) Evaluate projects based on Environmental Justice and Title VI criteria for disproportionate impacts and distribution of benefits on low-income and minority projects.
 - d) Prepare RFQ and hire consultant to develop the travel demand model for the 2050 MTP; begin gathering data for the plan update.
- 2) Report performance measure targets.
- 3) Perform study of parking in the downtown area.
- 4) Development.
 - a) Review development proposals to assure consistency with established development and transportation plans and policies.
- 5) Bicycle and Pedestrian Planning.
 - a) Continue bicycle safety education program for adults and secondary school students.
- 6) Participate in transportation-related committees and provide updates to the TTC and TPB.
- 7) Issue RFQ and hire and monitor consultant for 2050 Land Use Plan

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Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
2045 MTP administration	1 st Quarter	4 th Quarter	PD STP TP	80
Monitor consultant for travel demand model and 2050 MTP	1 st Quarter	4 th Quarter	PD STP TP **	210
Downtown Parking Study	2 nd Quarter	3 rd Quarter	TP	270
Monitor and report performance measure targets	1 st Quarter	4 th Quarter	PD STP TP	80
Review firms and negotiate with consultant for Land Use Plan	1 st Quarter	N/A	PD STP TP **	50
Analysis of pedestrian facilities	1 st Quarter	4 th Quarter	TP	80
EJ reviews on developments	1 st Quarter	4 th Quarter	PD	15
Bicycle Safety Education Program	1 st Quarter	4 th Quarter	STP TP	90

*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

Table 6: Long Range Transportation Planning Funding

FUNDING SOURCE	FUNDING AMOUNT
PL Funds	\$ 235,843
FTA Section 5303 Grant Funds	\$ 0
City Match	\$ 58,960
TOTAL	\$ 294,803

Source: LMPO

ELEMENT 5 - TRANSPORTATION IMPROVEMENT PROGRAM

OBJECTIVE: To develop, prioritize and schedule a program of transportation projects.

GENERAL DESCRIPTION: Identify transportation improvement projects recommended for advancement during the program period, prioritize the projects, and include realistic estimates of costs and revenues for the program period. This will enable the MPO to prepare annual recommendations and a planned program of transportation improvements drawn from the Metropolitan Transportation Plan (MTP). The FFY 2022-2025 TIP was adopted in October 2021, and amended in January 2022. The FFY 2024-2027 TIP will be prepared and adopted. Amendments will be processed throughout the fiscal year, as needed.

The following products or activities will be the responsibility of the LMPO staff.

Tasks:

- 1) Transportation Improvement Program.
 - a) Review and process TIP amendments as necessary
- 2) Developing the 2024-2027 TIP

Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
TIP Amendments	1 st Quarter	4 th Quarter	PD STP	85
FFY 2024-2027 TIP	1 st Quarter	1 st Quarter	PD STP	65

*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

Table 7: TIP Funding

FUNDING SOURCE	FUNDING AMOUNT
PL Funds	\$ 5,192
FTA Section 5303 Grant Funds	\$ 0
City Match	\$ 1,298
TOTAL	\$ 6,490

Source: LMPO

ELEMENT 6 - CONGESTION MITIGATION AND AIR QUALITY

OBJECTIVE: To support the LMATS area air quality program and public awareness campaign.

GENERAL DESCRIPTION: Continue the air quality awareness program to include participation in public events, ads on television, radio, and newspaper, and a bus wrap. This year the LMPO will hire a consultant for a traffic flow study and conclude the study on alternative fuels for transit.

The Zero Emission transit vehicle study was finished in FY23.

The following products or activities will be the responsibility of the LMPO staff.

Tasks:

- 1) Public Awareness.
 - a) Increase public awareness utilizing various techniques and encouraging public participation.
 - b) Participate in local and national events (e.g. Open Streets, bike rides and bike rodeos, run/walk/bike events, Try Transit Week, Ride Your Bike to Work Day)
- 2) Ozone.
 - a) Review daily ozone readings and related meteorological data and maintain electronic summary of readings
 - b) Notify LATS and City departments when air quality action days are issued by ODEQ in accordance with the City of Lawton policy.
 - c) Coordinate with ODEQ and KSWO-TV to identify contacts for maintaining continuous flow of information.
 - d) Monitor EPA’s proposed regulations for primary and secondary ozone and its impact to the study area.
- 3) Air Quality Offset Fee. CMAQ funds will be used to reimburse LATS on Air Action Days.
- 4) Traffic Flow Improvement Study to include construction of identified needs.
 - a) Hire and monitor consultant.

Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
Electronic Summary of ozone readings	1 st Quarter	4 th Quarter	TP	25
Public Awareness	1 st Quarter	4 th Quarter	STP TP	272
Try Transit Week Promotion	3 rd Quarter	4 th Quarter	STP TP	65
Air Alert Days	1 st Quarter	4 th Quarter	TP	15
Traffic Flow Improvement Study	2 nd Quarter	4 th Quarter	PD/TP	130

*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

Table 8: CMAQ Funding

FUNDING SOURCE	FUNDING AMOUNT
CMAQ Funds	\$150,000
City Match	\$ 37,500
TOTAL	\$187,500

Source: LMPO

ELEMENT 7 - PUBLIC PARTICIPATION

OBJECTIVE: To provide opportunities to engage the public in the transportation planning process.

GENERAL DESCRIPTION: Identify and enhance techniques to enable proactive public participation by the community in the LMATS planning process.

The following products or activities will be the responsibility of the LMPO staff.

Tasks:

- 1) Meetings: schedule meetings, make presentations, attend meetings, and prepare supporting documents and distribute (i.e., agenda item commentary, agenda, etc.)
- 2) Update mailing lists every six months and provide updated information as requested.
- 3) Website: Update and maintain LMPO’s website to include new information as it becomes available.
 - a. Complete a redesign of the website
- 4) Public Participation Process: Update the Public Participation Process.

Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
Updated PPP	1 st Quarter	4 th Quarter	PD STP A3	105
Updated PPP mailing list	1 st Quarter	4 th Quarter	TP A3	30
Updated LMPO website and website redesign	1 st Quarter	4 th Quarter	PD STP TP	75
Public meetings on transportation-related issues – preparation and attendance	1 st Quarter	4 th Quarter	PD STP TP A A3	370

*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

Table 9: Public Participation Funding

FUNDING SOURCE	FUNDING AMOUNT
PL Funds	\$ 18,872
FTA Section 5303 Grant Funds	\$ 0
City Match	\$ 4,718
TOTAL	\$ 23,590

Source: LMPO

ELEMENT 8 - COMPLETE STREETS PLANNING ACTIVITIES

OBJECTIVE: To increase safe and accessible options for multiple travel modes for people of all ages and abilities.

GENERAL DESCRIPTION: Identify ways to increase safe and accessible options for all travelers, and ensure new transportation construction is safe and accessible for all.

The following products or activities will be the responsibility of the LMPO staff.

Tasks:

- 1) Identify gaps in active transportation networks to include infrastructure near transit stops.

Products and Schedule:

Product	Start	Complete	Staff Contact*	Estimated Hours
Identify gaps in active transportation networks	1 st Quarter	4 th Quarter	TP	111

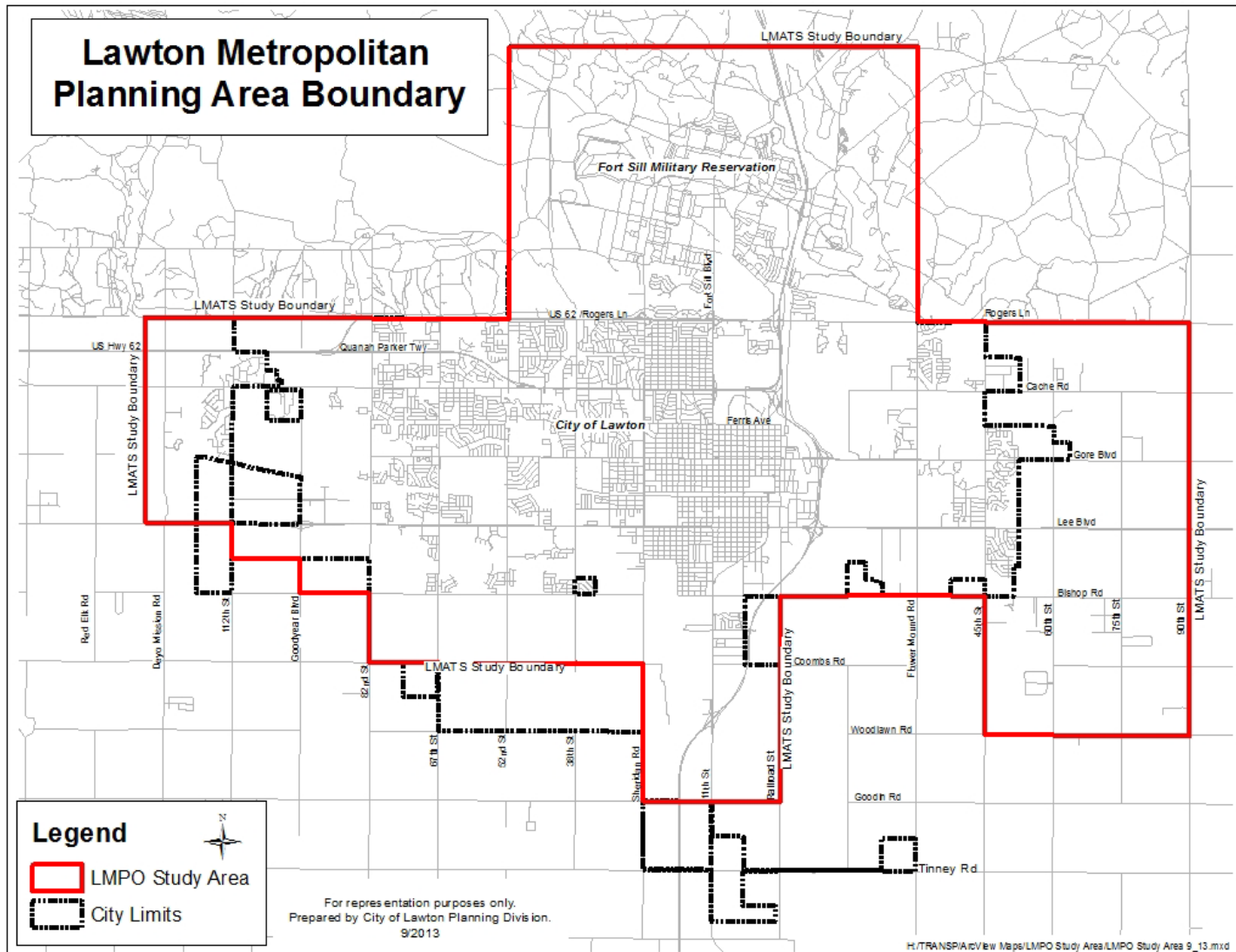
*PD – Planning Director; STP – Senior Transportation Planner; TP – Transportation Planner; A – Accountant, A3 – Admin Assistant 3, **Consultant

Table 10: Complete Streets Planning Activities Funding

FUNDING SOURCE	FUNDING AMOUNT
PL Funds	\$ 3,857
FTA Section 5303 Grant Funds	\$ 0
City Match	\$ 0
TOTAL	\$ 3,857

Source: LMPO

APPENDIX A: LMPO Boundary Map



APPENDIX B: LMPO Membership

TRANSPORTATION TECHNICAL ADVISORY COMMITTEE MEMBERSHIP

Voting:

City of Lawton, Director of Planning
City of Lawton, City Engineer
City of Lawton, Director of Public Works/Engineering
Oklahoma Department of Transportation, Strategic Asset and Performance Management Division
Oklahoma Department of Transportation, Division VII Engineer
Oklahoma Department of Transportation, Transit Programs Division Manager
Fort Sill, Director of Public Works
Association of South Central Oklahoma Governments, Executive Director
Lawton Area Transit System, General Manager
Lawton - Fort Sill Regional Airport, Airport Manager
Lawton Chamber of Commerce & Industry, Executive Director

Non-Voting:

Comanche Tribe, Transportation Director
Apache Tribe, Transportation Director
Kiowa Tribe, Transportation Director
Federal Highway Administration Oklahoma Division Administrator
Federal Transit Administration, Region VI

TRANSPORTATION POLICY BOARD MEMBERSHIP

Voting:

City of Lawton, Mayor
City of Lawton, Council (2 members)
City of Lawton Transit Trust member
Lawton - Fort Sill Regional Airport Authority, Chairman
Comanche County Commissioner, Central District
City Planning Commission, Chairman
Oklahoma Transportation Commission, District Transportation Commissioner
Oklahoma Department of Transportation, Division VII Engineer

Non-Voting:

Oklahoma Department of Transportation, Strategic Asset and Performance Management Division
Federal Highway Administration Oklahoma Division Administrator
State Senator, as determined by the State Senators representing Lawton
Member, Oklahoma House of Representative, as determined by those members representing the LMA
Federal Transit Administration Region VI
Fort Sill, Commanding General, U.S. Army Field Artillery Center and Fort Sill

List of Acronyms

3C	Continuing, Comprehensive, and Cooperative planning process
ADA	Americans with Disabilities Act
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality
CPC	City Planning Commission
FAST Act	Fixing America's Surface Transportation Act
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
IIJA	Infrastructure Investment and Jobs Act
LATS	Lawton Area Transit System
LMA	Lawton Metropolitan Area
LMATS	Lawton Metropolitan Area Transportation Study
LMPO	Lawton Metropolitan Planning Organization
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NHS	National Highway System
PL	Transportation Planning
PPP	Public Participation Process
ODEQ	Oklahoma Department of Environmental Quality
ODOT	Oklahoma Department of Transportation
SPR	State Planning and Research
TAZ	Transportation Analysis Zone
TIP	Transportation Improvement Program
TPB	Transportation Policy Board
TTC	Transportation Technical Committee
UPWP	Unified Planning Work Program

RESOLUTION NO. 2024-__

A RESOLUTION ADOPTING AMENDMENT NO. 3 TO THE FISCAL YEAR 2024 UNIFIED PLANNING WORK PROGRAM.

WHEREAS, the Fiscal Year 2024 Unified Planning Work Program was approved on June 27, 2023, and last amended on November 14, 2023; and

WHEREAS, the Fiscal Year 2024 Unified Planning Work Program is a detailed program of work to be carried out by the Lawton Metropolitan Planning Organization and identifies the funding for each work category; and

WHEREAS, the cost of the planned development of the 2030 Land Use Plan exceeds the funds available; and

WHEREAS, the funds planned for the 2030 Land Use Plan can be used to complete the 2050 Metropolitan Transportation Plan; and

WHEREAS, the Fiscal Year 2024 Unified Planning Work Program needs to be amended to reflect this change.

NOW, THEREFORE, BE IT RESOLVED by the LMPO Transportation Policy Board that:

1. Amendment No. 3 to the Fiscal Year 2024 Unified Planning Work Program be adopted, removing the 2030 Land Use Plan and adding funds to the 2050 Metropolitan Transportation Plan.

PASSED and APPROVED by the Transportation Policy Board this 6th day of February, 2024.

STANLEY BOOKER, CHAIRMAN

CHARLOTTE BROWN
MPO DIRECTOR

Approved as to form and legality this ____ day of _____, 2024.

City Attorney

ITEM NO. _____
MEETING DATE February 6, 2024

LMPO TRANSPORTATION TECHNICAL COMMITTEE AGENDA ITEM COMMENTARY

ITEM TITLE: Consider recommending the Transportation Policy Board approve the updated amendment to the current Transit Master Plan contract with Hendrickson Transportation Group to reflect changes recommended by Legal.

INITIATOR: Charlotte Brown, Director

STAFF INFORMATION SOURCE: Charlotte Brown, Director
Jonathan Stone, Assistant Director

BACKGROUND: On February 2, 2021, the Transportation Policy Board authorized the issuing of a Request for Qualifications for a Transit Master Plan that will provide short and long-term recommendations to address public transit needs, such as route structure, infrastructure, and overall improvements in service, in the Lawton Metropolitan Area.

On April 6, 2021, the Transportation Policy Board approved a contractor, Hendrickson Transportation Group (HTG).

On November 14th, 2023, the Transportation Policy Board gave their approval for the amendment to the existing Transit Master Plan contract with Hendrickson Transportation Group. During the legal review process, several changes were made to ensure compliance and thorough consideration.

EXHIBITS: Current Contract
Proposed Amendment
Updated Amendment with Legal Revisions

KEY ISSUES: N/A

FUNDING SOURCE: Section 5303 80%; LMPO 20%

RECOMMENDED ACTION: Recommend the Transportation Policy Board approve the updated amendment to the current Transit Master Plan contract with Hendrickson Transportation Group to reflect changes recommended by Legal.

STATE OF OKLAHOMA

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PROFESSIONAL SERVICES AGREEMENT

COUNTY OF COMANCHE

This HTG Services Agreement for Professional Services for the Development of a Transit Master Plan ("Agreement") is made by and between the Lawton Metropolitan Planning Organization ("LMPO") and Hendrickson Transportation Group LLC ("HTG"), (each a "Party" and collectively the "Parties"), acting by and through their authorized representatives.

Recitals:

WHEREAS, the LMPO desires to engage the services of HTG as an independent contractor and not as an employee in accordance with the terms and conditions set forth in this Agreement; and

WHEREAS, HTG desires to render advisory and evaluation of transit services for the LMPO by providing professional services relating in assisting the LMPO with the development of a transit master plan, as set forth in Exhibit "A" and Exhibit "B" attached hereto and made a part hereof, and in accordance with the terms and conditions set forth in this Agreement;

NOW THEREFORE, in exchange for the mutual covenants set forth herein and other valuable consideration, the sufficiency and receipt of which is hereby acknowledged, the Parties agree as follows:

**Article I
Term**

1.1 This Term of this Agreement shall commence on the last date of execution hereof (the "Effective Date") and shall continue until project as set forth herein is completed and accepted by the LMPO.

1.2 Either party may terminate this Agreement, with or without cause, by giving thirty (30) days prior written notice to the other Party. In the event of such termination, HTG shall be entitled to compensation for any services completed to the reasonable satisfaction of the LMPO in accordance with this Agreement prior to such termination.

**Article II
Contract Documents**

2.1 This Agreement consists of the following items:

- A. This Agreement; and
- B. RFQ issued February 2, 2021, "Professional Services for Development of Transit Master Plan (attached as Exhibit "A").

2.2 In the event there exists a conflict in interpretation, the documents shall control in the order listed above. These documents shall be referred to collectively as "Contract Documents".

Article III Scope of Work

3.1 HTG shall perform the services specifically set forth in Exhibit "A" or additional required services on an "as needed" basis.

3.2 HTG shall not have the authority to commit or bind the LMPO to any contractual or financial obligations without prior approval from the LMPO.

3.3 During the term of this Agreement, HTG shall not directly or indirectly disclose to an outside person or entity and shall not use for HTG's benefit or the benefit of others any material or information that LMPO deems "confidential".

3.4 HTG shall perform all duties outline in the scope of services in Exhibit "A", and Exhibit "B" in accordance with applicable industry standards.

3.5 HTG's Responsibilities:

- A. All services rendered by HTG shall be subject to reasonable supervision and control of the LMPO in regard to project plan development. Project Manager shall be directly supervised by a senior management executive of HTG.
- B. HTG shall be solely responsible for all matters relating to payment of its agents and employees, including compliance with social security, withholding, workers compensation, unemployment and all other regulations governing such matters.

**Article IV
Schedule of Work**

HTG agrees to commence the services upon a Notice to Proceed from the LMPO and to complete the required services in accordance with a work schedule mutually established by the LMPO and HTG. Any work performed or expenses incurred by HTG prior to HTG's receipt of a Notice to Proceed from the LMPO shall be entirely at HTG's own risk.

**Article V
Compensation and Method of Payment**

5.1 The LMPO shall compensate HTG for services performed under this Agreement in an amount not to exceed Ninety-Eight Thousand Dollars (\$98,000.00). HTG will submit regular invoices for the work it performs for the specific tasks set forth herein. The invoices for a task identified herein will be payable when the deliverable for the invoiced task is accepted. Again, in no event will the total amount of compensation HTG receives under this Agreement exceed \$98,000.00.

5.2 HTG shall invoice the LMPO for services performed within fifteen (15) days following the month's end or after task completion.

5.3 The LMPO shall pay HTG within thirty (30) days of the receipt of a proper invoice provided there are no errors or discrepancies and that all work noted on the invoice has been completed. Any errors, discrepancies or the invoicing of work not completed may result in a delay in payment.

5.4 HTG shall be responsible for all expenses related to services provided pursuant to this Agreement including, but not limited to all State and Federal applicable withholdings, telephone, internet and travel.

5.5 HTG shall submit invoices for services rendered under this Agreement to:

Lawton LMPO
City Hall
Attn: Planning Department
212 SW 9th Street
Lawton, OK 73501

**Article VI
Suspension of Work**

The LMPO shall have the right to immediately suspend work by HTG if it determines in its sole discretion that HTG has, or will fail to perform, in accordance with this Agreement. In such event, any payments due HTG shall be suspended until HTG has taken satisfactory corrective action.

Article VII
Devotion of Time; Personnel; and Equipment

7.1 HTG shall devote such time as reasonably necessary for the satisfactory performance of the work under this Agreement. Should the LMPO require additional services not included under this Agreement, HTG shall make reasonable efforts to provide such additional services at mutually agreed charges or rates, and within the time schedule prescribed by the LMPO, and without decreasing the effectiveness of the performance of services required under this Agreement.

7.2 To the extent reasonably necessary for HTG to perform the services under this Agreement, HTG shall be authorized to engage the services of any agents, assistants, persons, or corporations that HTG may deem proper to aid or assist in the performance of the services under this Agreement. The cost of such personnel and assistance shall be borne exclusively by HTG.

7.3 HTG shall furnish the facilities, equipment, telephones, facsimile machines, email facilities, and personnel necessary to perform the services required under this Agreement unless otherwise provided herein.

Article VIII
Relationship of Parties

It is understood and agreed by and between the Parties that in satisfying the conditions of this Agreement, HTG is acting independently, and that the LMPO assumes no responsibility or liabilities to any third party in connection with these actions. All services to be performed by HTG pursuant to this Agreement shall be in the capacity of an independent contractor, and not as an agent or employee of the LMPO.

Article IX
Availability of Funds

If monies are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal period, this Agreement shall be canceled, and HTG may only be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of services delivered under this Agreement or which are otherwise not recoverable. The cost of cancellation may be paid from any appropriations for such purposes.

Article X
Insurance

HTG shall provide and maintain for the duration of this Agreement, and for the benefit of the LMPO (naming the LMPO and its officers, agents and employees as additional insureds),

insurance coverage as set forth in Exhibit "B" attached hereto and incorporated herein. HTG shall provide signed Certificates of Insurance verifying that HTG has obtained the required insurance coverage for the LMPO prior to the Effective Date of this Agreement.

Article XI Miscellaneous

11.1 Entire Agreement. This Agreement constitutes the sole and only agreement between the Parties and supersedes any prior understandings, written or oral agreements between the Parties with respect to this subject matter.

11.2 Authorization. Each Party represents that it has full capacity and authority to grant all rights and assume all obligations granted and assumed under this Agreement.

11.3 Assignment. HTG may not assign this Agreement in whole or in part without the prior written consent of the LMPO. In the event of an assignment by HTG to which the LMPO has consented, the assignee shall agree in writing with the LMPO to personally assume, perform, and be bound by all the covenants, and obligations contained in this Agreement.

11.4 Successors and Assigns. Subject to the provisions regarding assignment, this Agreement shall be binding on and inure to the benefit of the Parties to it and their respective heirs, executors, administrators, legal representatives, successors and assigns.

11.5 Governing Law. The laws of the State of Oklahoma shall govern this Agreement; and venue for any action concerning this Agreement shall be in the State District Court of Comanche County, Oklahoma. The Parties agree to submit to the personal and subject matter jurisdiction of said court.

11.6 Amendments. This Agreement may be amended by the mutual written agreement of the Parties.

11.7 Severability. In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.

11.8 Independent Contractor. It is understood and agreed by and between the Parties that HTG, in satisfying the conditions of this Agreement, is acting independently, and that the LMPO assumes no responsibility or liabilities to any third party in connection with these actions. All services to be performed by HTG pursuant to this Agreement shall be in the capacity of an independent contractor, and not as an agent or employee of the LMPO. HTG shall supervise the performance of its services and shall be entitled to control the manner and means by which its services are to be performed, subject to the terms of this Agreement.

11.9 Survival of Covenants. Any of the representations, warranties, covenants, and obligations of the Parties, as well as any rights and benefits of the Parties, pertaining to a period of time following the termination of this Agreement shall survive termination.

11.10 Recitals. The recitals to this Agreement are incorporated herein.

11.11 Notice. Any notice required or permitted to be delivered hereunder may be sent by first class mail, overnight courier or by confirmed telefax or facsimile to the address specified below, or to such other Party or address as either Party may designate in writing, and shall be deemed received three (3) days after delivery set forth herein:

If intended for the LMPO:

Richard Rogalski
City of Lawton
Lawton LMPO,
City of Lawton City Hall
212 SW 9th Street
Lawton, OK 73501
Phone: 580-591-2545

If intended for HTG:

John L. Hendrickson
President
Hendrickson Transportation Group LLC
P. O. Box 2032
Waco, Texas 76703
Phone: 254-405-4200

11.12 Counterparts. This Agreement may be executed by the Parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of any number of copies hereof each signed by less than all, but together signed by all of the Parties hereto.

11.13 Exhibits. The exhibits attached hereto are incorporated herein and made a part hereof for all purposes.

11.14 Indemnification. **THE LMPO SHALL NOT BE LIABLE FOR ANY LOSS, DAMAGE, OR INJURY OF ANY KIND OR CHARACTER TO ANY PERSON OR PROPERTY ARISING FROM THE SERVICES OF THE HTG PURSUANT TO THIS AGREEMENT. HTG HEREBY WAIVES ALL CLAIMS AGAINST THE LMPO, ITS OFFICERS, AGENTS AND EMPLOYEES (COLLECTIVELY REFERRED TO IN THIS SECTION AS "LMPO") FOR DAMAGE TO ANY PROPERTY OR INJURY TO, OR DEATH OF, ANY PERSON ARISING AT ANY TIME AND FROM ANY CAUSE OTHER**

THAN THE NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LMPO. HTG AGREES TO INDEMNIFY AND SAVE HARMLESS THE LMPO FROM AND AGAINST ANY AND ALL LIABILITIES, DAMAGES, CLAIMS, SUITS, COSTS (INCLUDING COURT COSTS, ATTORNEYS' FEES AND COSTS OF INVESTIGATION) AND ACTIONS BY REASON OF INJURY TO OR DEATH OF ANY PERSON OR DAMAGE TO OR LOSS OF PROPERTY TO THE EXTENT CAUSED BY THE HTG'S NEGLIGENT PERFORMANCE OF SERVICES UNDER THIS AGREEMENT OR BY REASON OF ANY ACT OR OMISSION ON THE PART OF HTG, ITS OFFICERS, DIRECTORS, SERVANTS, AGENTS, EMPLOYEES, REPRESENTATIVES, CONTRACTORS, SUBCONTRACTORS, LICENSEES, SUCCESSORS OR PERMITTED ASSIGNS (EXCEPT WHEN SUCH LIABILITY, CLAIMS, SUITS, COSTS, INJURIES, DEATHS OR DAMAGES ARISE FROM OR ARE ATTRIBUTED TO SOLE NEGLIGENCE OF THE LMPO). IF ANY ACTION OR PROCEEDING SHALL BE BROUGHT BY OR AGAINST THE LMPO IN CONNECTION WITH ANY SUCH LIABILITY OR CLAIM, CONTRACTOR, ON NOTICE FROM THE LMPO, SHALL DEFEND SUCH ACTION OR PROCEEDINGS AT HTG'S EXPENSE, BY OR THROUGH ATTORNEYS REASONABLY SATISFACTORY TO THE LMPO. HTG'S OBLIGATIONS UNDER THIS SECTION SHALL NOT BE LIMITED TO THE LIMITS OF COVERAGE OF INSURANCE MAINTAINED OR REQUIRED TO BE MAINTAINED BY HTG UNDER THIS AGREEMENT. THIS PROVISION SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

HTG SHALL INDEMNIFY THE LMPO FOR ANY FINES AND LEGAL FEES INCURRED BECAUSE EMPLOYEES, AGENTS, OR WORKERS SUPPLIED BY CONTRACTOR ARE NOT AUTHORIZED TO WORK IN THE UNITED STATES.

11.15 Audits and Records. HTG agrees that during the term hereof the LMPO and its representatives may, during normal business hours and as often as deemed necessary, inspect, audit, examine and reproduce any and all of HTG's records relating to the services provided pursuant to this Agreement for a period of one year following the date of completion of services as determined by the LMPO or date of termination if sooner.

11.16 Conflicts of Interests. HTG represents that no official or employee of the LMPO has any direct or indirect pecuniary interest in this Agreement.

11.17 Compliance with Federal, State & Local Laws: HTG shall comply in performance of services under the terms of this Agreement with all applicable laws, ordinances and regulations, judicial decrees or administrative orders, ordinances, and codes of federal, state and local governments, including all applicable federal clauses.

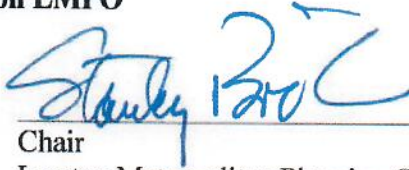
11.18 Force Majeure. No Party will be liable for any default or delay in the performance of its obligations under this Agreement if and to the extent such default or delay is caused, directly or indirectly, by fire, flood, earthquake, elements of nature or acts of God, riots, civil disorders, acts of terrorism or any similar cause beyond the reasonable control of such Party, provided that the non-performing Party is without fault in causing such default or delay. The non-performing

Party agrees to use commercially reasonable efforts to recommence performance as soon as possible.

(signature page to follow)

EXECUTED this _____ day of _____, 2021.

Lawton LMPO

By: 
Chair
Lawton Metropolitan Planning Organization

Approved as to form:

By: 
City Attorney

EXECUTED this 16TH day of April, 2021.

Hendrickson Transportation Group LLC


By: 
Name: Jordan L. Hendrickson
Title: PRESIDENT

EXHIBIT “B” Scope of Work

This scope of work documents the steps necessary to support the Lawton Area Transit System in the development of a Transit Master Plan for the next 5 years. It includes a robust public involvement/outreach element that prioritizes outreach at the beginning of the process to establish a clear vision for the plan based upon information that summarizes the planning context. The scope takes a strategic look at financial scenarios to understand the long-term financial environment and to ensure the plan is robust and sustainable. The scope also includes an evaluation of planning concepts in order to establish a preferred concept of the Downtown Transfer Center, Operations & Maintenance Facility and the development of service standards that will support the implementation of the Transit Master Plan. All of these elements will provide a clear vision and executable plan for Lawton Area Transit System’s future.

Overarching assumptions

- Duration of contract is approximately from April 2021 through December 2021.
- All public outreach and involvement strategies shall be cognizant of the current City Transit Trust’s Title VI Program.

The following project tasks are required to complete the work:

Task 1: Project Management and Outreach Strategy

This task encompasses the high-level management of the process, including meetings with MPO, LATS staff and operators, members from the City Council, and other City Stakeholders. Additionally, this task supports the development of the outreach strategy for the planning process.

- 1) Attend and facilitate a project kick-off meeting with Lawton MPO.
- 2) Submit monthly progress reports with invoices and coordinate scope of work execution on a weekly basis with LMPO staff.
- 3) Meet with LATS and City staff to develop a successful community engagement strategy, including identifying key stakeholder and neighborhood groups, partner agencies, engagement with the Transportation Technical Committee and internal staff. The strategy will identify the decision-making opportunities throughout the planning process, existing venues that can be leveraged, the role of social media and online platforms as well as detailing the responsibilities of the HTG and MPO staff.

Deliverables:

- Public involvement plan that outlines roles/responsibilities for LMPO and HTG
- A “toolkit” for Client distribution in direct neighborhood outreach, assumed to include a PowerPoint template and project fact sheet for general communications. Fact sheet development will also provide recommendations for translated content.

Due Date: May 1st, 2021

Task 2: Planning Context and Transit Trends Analysis

This task reviews existing and planned conditions (land use, transportation demand and capacity, demographics and planned capital investments) in order to understand how LATS fits within the City of Lawton’s network and the issues that should be considered in the planning process. The information from this task will be summarized in infographics that will be used for outreach purposes.

- 1) LATS Data Review - HTG will review all necessary existing conditions data provided by LATS, including but not limited to ridership, route structure, operational metrics, capital facilities (operations & maintenance), passenger amenities, administration services, and technology.
- 2) Local Data Review - HTG will review relevant plans and programs, including but not limited to: City of Lawton Comprehensive Plan and supplements, land use and transportation forecasts, subarea plans, and proposed transit plans (Micro transit, on-demand, and intercity services).
- 3) Transit Trends and Conceptual Infographics - Using the information generated from the planning context and financial analysis, HTG will develop infographics that detail how transit and transportation is trending and how LATS may provide mobility in the future. The infographics will convey high-level depictions of transit services and will highlight the inherent trade-offs between aspects such as frequency, coverage, speed, service span, private-public provision, and multimodal integration.

Deliverables:

- HTG will consolidate and develop necessary materials (website, boards, handouts, etc.) that will support the vision-setting outreach activities. Information presented will include a summary of the Transit Master Plan planning process, an overview of current agency and city plans, and other documentation of the planning context.

- Summary of trends in transit demand and service (fixed-route and paratransit) Identify anticipated/directed population and employment growth areas within the service area, to include potential areas of growth not currently in LATS service boundaries in order to account for future city expansion plans.

Due Date: June 30th, 2021

Task 3: Financial Scenario Analysis

This task provides the key financial scenario modeling in order to establish an understanding of the resources and issues that should be considered when developing the future service plan and supporting capital elements.

- 1) Data Needs: Historical financial data for LATS including revenue, service hours, wage and benefit rates, fleet purchases, any other current capital purchases.
- 2) Grant Opportunities Assessment – This task will research and assess the funding landscape for LATS’s capital needs over the long-term. HTG will research federal grant opportunities and trends for bus fleet replacement and other capital projects such as a Transfer center, Operations Facility, and Maintenance Facility located in the downtown area. HTG will also analyze the number and amount of funds received for past awards; both on the formula and competitive process. HTG will summarize key findings and implications for the City of Lawton’s long-range planning and assess the implications of future award amounts on funding capital projects under a baseline and downside scenario.
- 3) Financial Evaluation of Preferred Concept- This task will use the analysis and findings from Task 1 & 2 to evaluate financial implications of the Long-Range Plan’s preferred service plan. HTG’s evaluation will assess the potential for sales tax revenue, fares, grants, and other revenue sources to pay for the likely annual operating costs and needed capital improvements in the future. The evaluation will consider a number of scenarios assuming different growth in revenues and costs. The evaluation will identify any potential funding gaps and the funding options to supplement existing revenue sources if necessary.

Deliverables:

- Memorandum summarizing grant opportunities and competitiveness and overall long-term financial needs, which will serve as an appendix in the final plan.
- Presentation materials summarizing findings from each subtask.

Due Date: August 1st, 2021

Task 4: Vision Outreach

This task will present the material from Task 2 and Task 3 to gather public, agency and stakeholder input to develop the vision for LATS. It encompasses a comprehensive in-person and online presence to ensure all interested parties are able to participate in the process.

Internal and External Outreach - With material from all tasks, HTG will develop an outreach process to discuss and collect input to develop the long-term vision for LATS. The goal of the visioning exercise is to support discussion among the public, stakeholder groups, internal departments and partner agencies to inform the development of network scenarios that achieve the vision. The specific meetings, outreach and stakeholder groups will be determined in Task 1 during the outreach strategy development. The visioning outreach task will include:

- Plan logistics - provide on-site set up and facilitate two “visioning workshop” public meeting/workshops. One workshop during the day and one in the evening. HTG staff shall attend event to lead set-up and facilitation.
- Develop online survey to facilitate feedback process.
- Promote public outreach effort with online advertisements, including social media.
- Develop up to three additional notifications such as posters for on-board outreach, emails, press releases, and items that can placed inside the current fleet and transfer center.
- Notifications to business/employers assumed to be compiled and completed by LATS staff.
- Compile summary of engagement. For analysis purposes and budget assumptions, online survey assumed to not require narrative comment analysis (e.g., all choice or scale questions), and narrative comments.

Deliverables:

- Public comment period/meeting plan with roles and responsibilities
- Online survey content
- Online open house archive PDF
- Advertisements
- Summary memorandum and PPT slides of input received (1 draft, 1 final)

Due Date: September 1st, 2021

Task 5: Service Plan Concepts Evaluation and Outreach

This task will develop two distinct service plan concepts for evaluation and will seek public and stakeholder input on the concepts in order to guide the process towards a preferred service concept. An in-person and online public outreach effort is assumed for this task to gather feedback on the plan concepts.

Performance Measure Development – HTG will work with LATS staff to develop a set of performance measures that are aligned with the vision developed in Task 4 to use in the service plan evaluation process. The service plan concepts will encompass a set of service typologies to spatially represent key transit nodes and connections and the underlying land use and travel demand that necessitates those typologies. A combination of methodologies will be used to evaluate the service plan concepts in order to report high-level summaries of ridership, mode share, geographic coverage, multimodal integration and other performance metrics.

Deliverables:

- Memorandum detailing the chosen performance measures and the results of the service plan concept evaluation. Memorandum will serve as an appendix in the final plan.
- Necessary materials summarizing the service plan evaluation for outreach activities.

Due Date: September 15th, 2021

Task 6: Service Standards and Draft Plan Development

This task will incorporate the feedback from Task 5 to develop and evaluate a preferred service plan concept, determine a set of service standards, and to consolidate all supporting information into a draft Transit Plan document. Outreach will primarily be informative in nature, with updates detailing how the feedback from prior tasks led to the current draft planning document.

- 1) Preferred Service Plan Development and Evaluation - HTG will work with LMPO to incorporate the previously evaluated performance measures, and the feedback received on the service plan concepts in order to develop a preferred service concept for inclusion in the plan.
- 2) Service Standards Development – HTG will work with LMPO staff to develop the appropriate service standards and thresholds for measuring and implementing the Transit Master Plan. The standards will provide guidance for when operational or capital investments are needed based upon changes in demand or service operation characteristics and will be developed to allow LATS to monitor them periodically to

calibrate future service plans.

- 3) Preferred Service Plan Support Analysis – With an understanding of the preferred service plan, HTG will work with the LMPO to determine and document the capital and administrative support necessary to implement the plan. This includes fleet and maintenance base needs, passenger amenities, human resource requirements, and technology needs and the estimated high-level costs associated with these investments.
- 4) Draft Plan Development – HTG will incorporate the material generated in Task 2, Task 3 and Task 6 to develop a draft Long Range Planning document that provides a clear vision for transit in the LMPO study area with a summary of the financial and capital support needed to achieve that vision.

Deliverables:

- Memorandum documenting the preferred service plan development and evaluation, the service standards development process and the supporting analysis from all tasks identified.
- Draft Master Plan document, including necessary maps, graphics and

text.

Due Date: October 12th, 2021

Task 7: Final Plan Development

This task provides resources for the necessary modifications to the draft plan based in order to finalize the Transit Master Plan for adoption for the Lawton MPO.

- 1) Final Transit Master Plan – HTG will support the LMPO in finalizing the draft plan based on public, agency, and stakeholder feedback. The final Transit Master Plan document will leverage graphics and figures to convey the message of the plan, with more detailed information provided in the appendices developed in prior tasks.
- 2) Plan Adoption – HTG will provide support LMPO staff for up to one revision of the planning document during the plan adoption process.

Deliverables:

- Final Planning document, including necessary maps, graphics and text with supporting appendices.

Due Date: November 5th, 2021

**PROFESSIONAL SERVICES AGREEMENT
Contract Amendment #1**

THIS CONTRACT AMENDMENT, made and entered into on _____, by and between the Lawton Metropolitan Planning Organization (“LMPO”) and Hendrickson Transportation Group LLC (“HTG”), (each a “Party” and collectively the “Parties”), acting by and through their authorized representatives.

WITNESSETH

THAT WHEREAS, the LMPO and HTG have entered into an agreement dated April 16, 2021, for HTG to provide advisory and evaluation of transit services for the LMPO by providing professional services relating in assisting the LMPO with the development of a transit master plan.

NOW, THEREFORE, for and in consideration of the mutual promises to each other, as hereinafter set forth, the parties hereto do mutually agree to the additional services to the original stated contract as follows:

SCOPE OF WORK

Introduction

The Lawton Metropolitan Planning Organization (LMPO) is requesting HTG to conduct a Microtransit Study. The study is intended to determine how on-demand micro-transit solutions could be used to improve first mile, last mile mobility and fixed route transit ridership within the urbanized areas. The study will develop a vision for the implementation of a micro-transit pilot in the Lawton/Fort Sill area by researching best practices and lessons learned from other urbanized areas developing the service.

Scope of Services

- 1) Working with the project team (Staff and the transit operators), the consultant will convene a Stakeholder Committee that consists of transit operators, community groups, and other interested parties, including representation from those with disabilities. The Stakeholder Committee will provide input and feedback for deliverables throughout the entire process.
- 2) Analysis of existing socioeconomic and trip data from the travel demand model and evaluation of origins and destinations.
- 3) Conduct workshops to solicit public input on the proposed micro-transit opportunity zones both in Lawton city limits and Ft. Sill.
- 4) Develop a methodology to estimate the ridership, span of service, trip times, and operating costs for each of the identified micro-transit opportunity zones.
- 5) Determine opportunities to fill in service gaps and provide on-demand service.

- 6) Determine proper method to disseminate alternative mode information to riders.
- 7) Develop scope and potential key performance indicators (KPI's) for recommended program.
- 8) Provide cost analysis to determine if alternative funds would be needed or available outside the normal funding mechanisms.
- 9) Analysis and development of new transit software with micro transit capabilities.
- 10) Prepare a report outlining recommendations to the Transportation Technical Committee (TTC) and Policy Board.

Compensation and Method of Payment

In consideration of the additional services and obligations rendered by HTG, LMPO shall pay HTG in the amount of \$30,000.

Original contract - \$98,000

Amendment - \$30,000

Total - \$128,000

HTG shall invoice the LMPO for services performed within fifteen (15) days following the month's end or after task completion.

The LMPO shall pay HTG within thirty (30) days of the receipt of a proper invoice provided there are no errors or discrepancies and that all work noted on the invoice has been completed. Any errors, discrepancies or the invoicing of work not completed may result in a delay in payment.

All promises, requirements, terms, conditions, provisions, representations contained and specified in the original stated contract shall survive and become part of this Amendment unless specifically provided otherwise herein, or unless superseded by applicable Federal law or State statutes.

(Signature page to follow)

IN WITNESS THEREOF, the parties hereto, each acting under due and proper authority, have executed this Amendment as of the date written above.

EXECUTED this _____ day of _____, 2023.

Lawton LMPO

Lawton Metropolitan Planning Organization

By: _____

Name: _____

Title: _____

Approved as to form:

By: _____

City Attorney

EXECUTED this _____ day of _____, 2023.

Hendrickson Transportation Group LLC

By: _____

Name: _____

Title: _____

**PROFESSIONAL SERVICES AGREEMENT
Contract Amendment #1**

THIS CONTRACT AMENDMENT, made and entered into on _____, by and between the Lawton Metropolitan Planning Organization (“LMPO”) and Hendrickson Transportation Group LLC (“HTG”), (each a “Party” and collectively the “Parties”), acting by and through their authorized representatives.

WHEREAS, the LMPO and HTG have entered into an agreement dated April 16, 2021, for HTG to provide advisory and evaluation of transit services for the LMPO by providing professional services relating in assisting the LMPO with the development of a transit master plan.

NOW, THEREFORE, for and in consideration of the mutual promises to each other, as hereinafter set forth, the parties hereto do mutually agree to the amend the original agreement between the Lawton Metropolitan Planning Organization and Hendrickson Transportation Group LLC, signed by the parties on or about April 16, 2021, to include additional services to the original stated contract as follows:

Amendment 1

Article I Term is amended as follows:

1.1 The Term of this agreement shall commence on the last date of execution hereof (the “Effective Date”) and shall continue until project as set forth herein is completed and accepted by the LMPO, no later than <DATE>, subject to the availability and allocation of funds from the governing body.

Amendment 2

Exhibit B Scope of Work is amended to add:

The Lawton Metropolitan Planning Organization (LMPO) is requesting HTG to add a Microtransit Study compenent to the Transit Master Plan. The Microtransit study is intended to determine how on-demand micro-transit solutions could be used to improve first mile, last mile mobility and fixed route transit ridership within the urbanized areas. The study will develop a vision for the implementation of a micro-transit pilot in the Lawton/Fort Sill area by researching best practices and lessons learned from other urbanized areas developing the service.

Scope of Services

- 1) Working with the project team (Staff and the transit operators), the consultant will convene a Stakeholder Committee that consists of transit operators, community groups, and other interested parties, including representation from those with disabilities. The Stakeholder Committee will provide input and feedback for deliverables throughout the entire process.
- 2) Analysis of existing socioeconomic and trip data from the travel demand model and evaluation of origins and destinations.
- 3) Conduct workshops to solicit public input on the proposed micro-transit opportunity zones both in Lawton city limits and Ft. Sill.

- 4) Develop a methodology to estimate the ridership, span of service, trip times, and operating costs for each of the identified micro-transit opportunity zones.
- 5) Determine opportunities to fill in service gaps and provide on-demand service.
- 6) Determine proper method to disseminate alternative mode information to riders.
- 7) Develop scope and potential key performance indicators (KPI's) for recommended program.
- 8) Provide cost analysis to determine if alternative funds would be needed or available outside the normal funding mechanisms.
- 9) Analysis and development of new transit software with micro transit capabilities.
- 10) Prepare a report outlining recommendations to the Transportation Technical Committee (TTC) and Policy Board.

Due Date: ?

Amendment 3 Article V Compensation and Method of Payment is amended to add:

In consideration of the additional services and obligations rendered by HTG, LMPO shall pay HTG in the amount of \$30,000.

Original contract - \$98,000

Amendment - \$30,000

Total - \$128,000

HTG shall invoice the LMPO for services performed within fifteen (15) days following the month's end or after task completion.

The LMPO shall pay HTG within thirty (30) days of the receipt of a proper invoice provided there are no errors or discrepancies and that all work noted on the invoice has been completed. Any errors, discrepancies or the invoicing of work not completed may result in a delay in payment.

All promises, requirements, terms, conditions, provisions, representations contained and specified in the original stated contract shall survive and become part of this Amendment unless specifically provided otherwise herein, or unless superseded by applicable Federal law or State statutes.

Amendment 4

All references to Exhibit "A" will now refer to Exhibit "B"

All other terms and conditions in the original agreement remain in place.

(Signature page to follow)

IN WITNESS THEREOF, the parties hereto, each acting under due and proper authority, have executed this Amendment as of the date written above.

EXECUTED this _____ day of _____, 2023.

Lawton LMPO

Lawton Metropolitan Planning Organization

By: _____

Name: _____

Title: _____

Approved as to form:

By: _____

City Attorney

EXECUTED this _____ day of _____, 2023.

Hendrickson Transportation Group LLC

By: _____

Name: _____

Title: _____

LMPO TRANSPORTATION TECHNICAL COMMITTEE AGENDA ITEM COMMENTARY

ITEM TITLE: Receive a presentation of the draft final report for the Traffic Flow Study, consider recommending to the Transportation Policy Board acceptance of the draft final report, and provide feedback as necessary.

INITIATOR: Charlotte Brown, LMPO Director

STAFF INFORMATION SOURCE: Charlotte Brown, LMPO Director
Jonathan Stone, Assistant LMPO Director

BACKGROUND: At the February 1, 2022, meeting of the transportation technical committee, the committee authorized the issuing of the Request for Qualifications (RFQ) for a Traffic Flow Study and authorized a committee of Staff and Transportation Technical Committee members to select a firm and bring a contract to the transportation technical committee for approval. The firm selected was EST.

On November 7, 2022, representatives from the Oklahoma Department of Transportation met with MPO Staff to discuss changes that will be required for the UPWP including the Traffic Flow Study.

After further discussion and clarifications with ODOT Staff, MPO Staff recommended limiting the Traffic Flow Study to a section of Gore Boulevard between West 7th Street and Lawrie Tatum Road.

At the January 3, 2023, meeting the transportation technical committee authorized the Director to execute the contract with EST after legal review.

At the November 14, 2023 meeting EST presented a draft final report and received feedback from this committee.

EST is ready to present to the transportation technical committee the results of the study with included revisions made from prior recommendations.

EXHIBITS: Draft final report

KEY ISSUES: N/A

FUNDING SOURCE: 80% CMAQ Funds; 20% Local Match

RECOMMENDED ACTION: Receive a presentation of the draft final report for the Traffic Flow Study, recommend to the Transportation Policy Board acceptance of the draft final report, and provide feedback as necessary.

Memo # 3: Traffic Flow Improvement – Operational and Safety Analysis

To: Charlotte Brown
From: Hamideh Etemadnia, PE, PTOE
Date: October 25, 2023

Reference: **Gore Blvd. & 7th Street to Gore Blvd & Lawrie Tatum Street**
The City of Lawton, OK

1 Introduction

1.1 Study Area

The City of Lawton intends to improve intersections and corridor operations and safety along Gore Blvd. The study area is bounded by the intersection of Gore Blvd. & 7th Street to the west and by the intersection of Gore Blvd & Lawrie Tatum Street to the east, encompassing approximately 1.5 miles of Gore Blvd. **Figure 1** shows the study area boundaries.



Figure 1 - Map of Study Area

1.2 Study Purpose

The purpose of this study is to evaluate the need for traffic flow improvements through individual intersection improvement as well as corridor improvement.



2 Design Traffic Volume

The design traffic volumes were generated based on the adjusted 2023 traffic counts and received approval from the City of Lawton on 6/23/2023. The methodology to develop design traffic maps has been presented in a separate memorandum, Memo #2: Traffic Data Development and Design Traffic Data (see **Appendix A**). 2023 Design Traffic Volumes can be seen in **Figure 2 and Figure 3**; 2045 Design Traffic Volumes can be seen in **Figure 4 and Figure 5**.

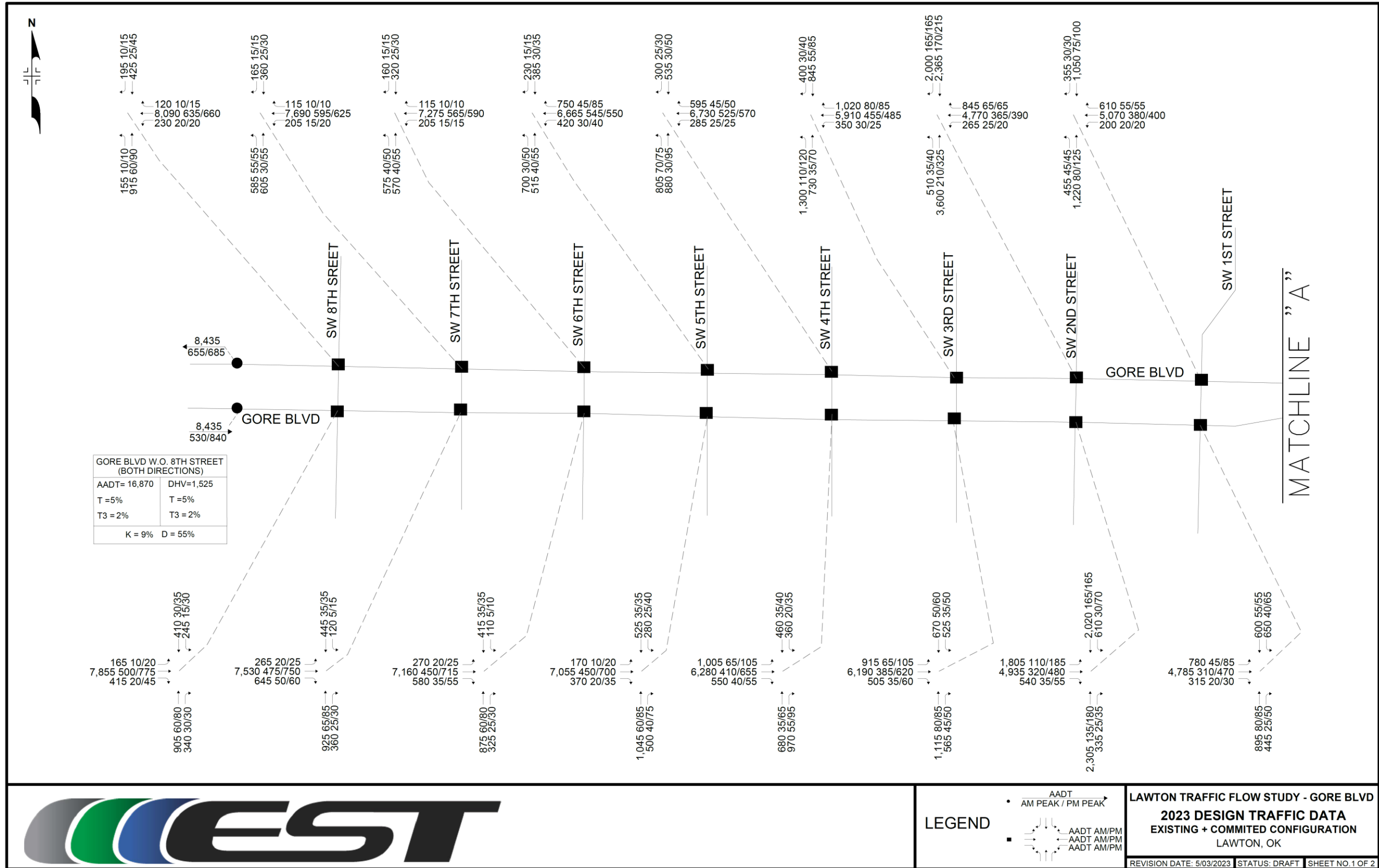


Figure 2 - 2023 Design Traffic Map (1/2)

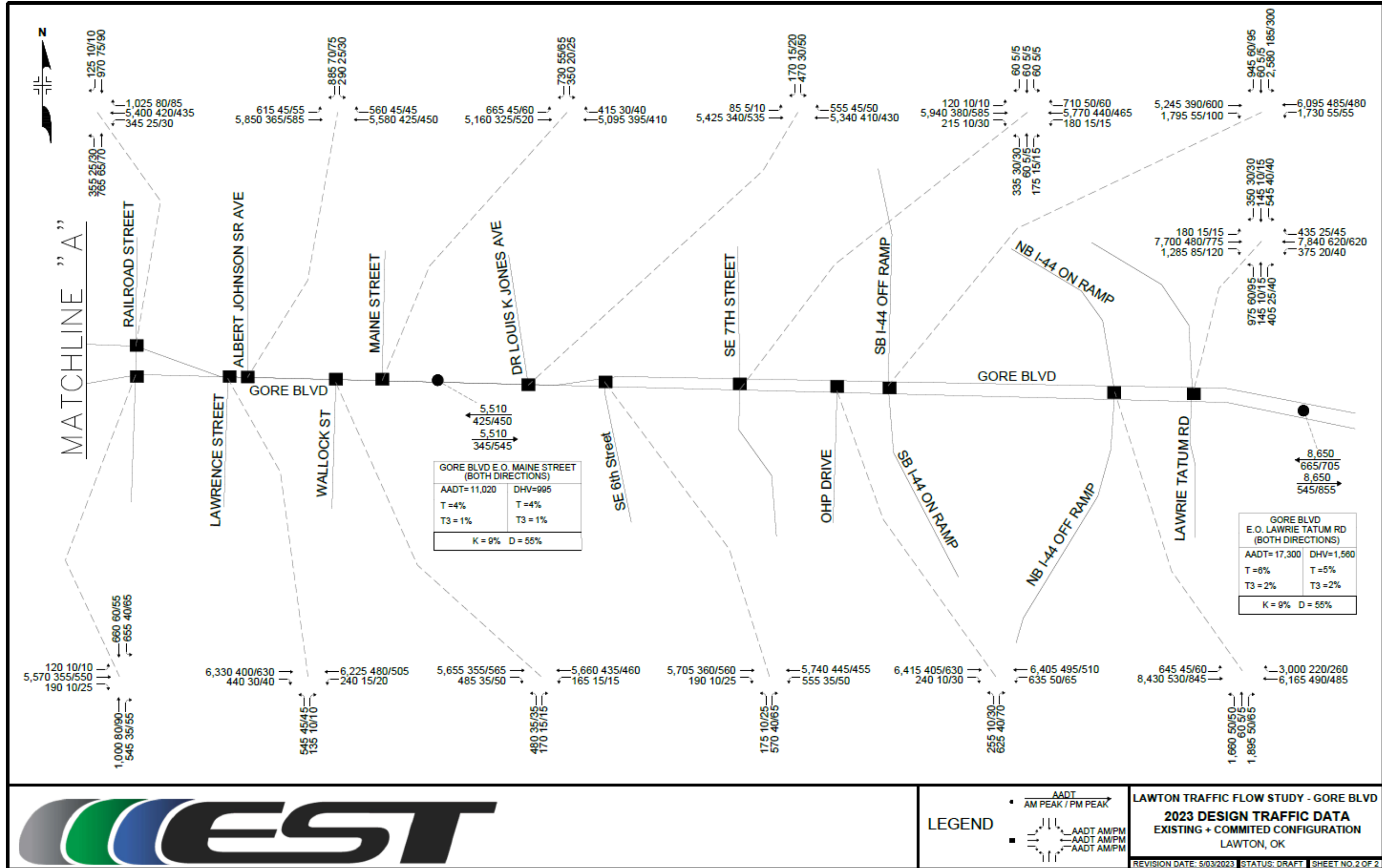


Figure 3 - 2023 Design Traffic Map (2/2)

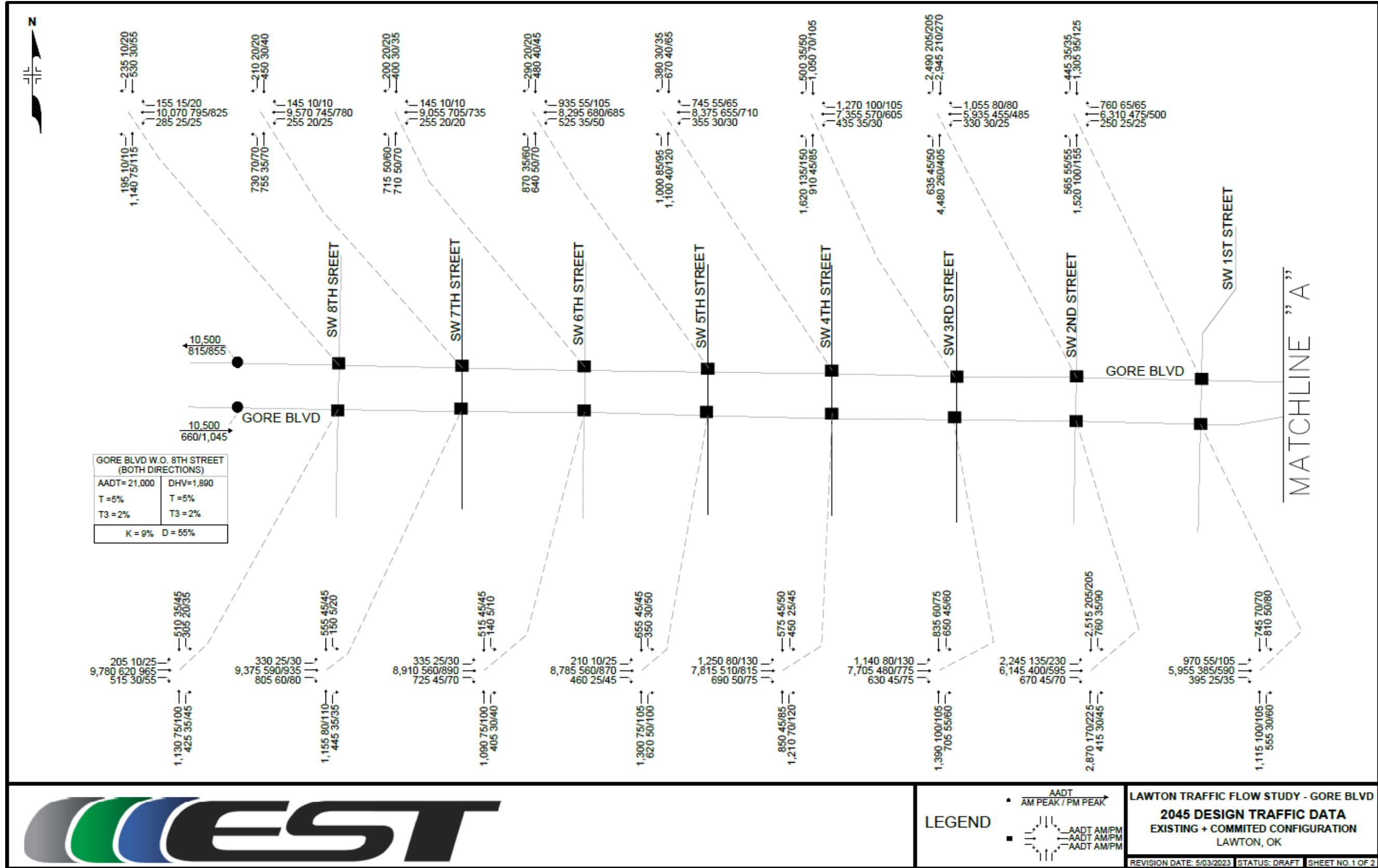


Figure 4 - 2045 Design Traffic Map (1/2)

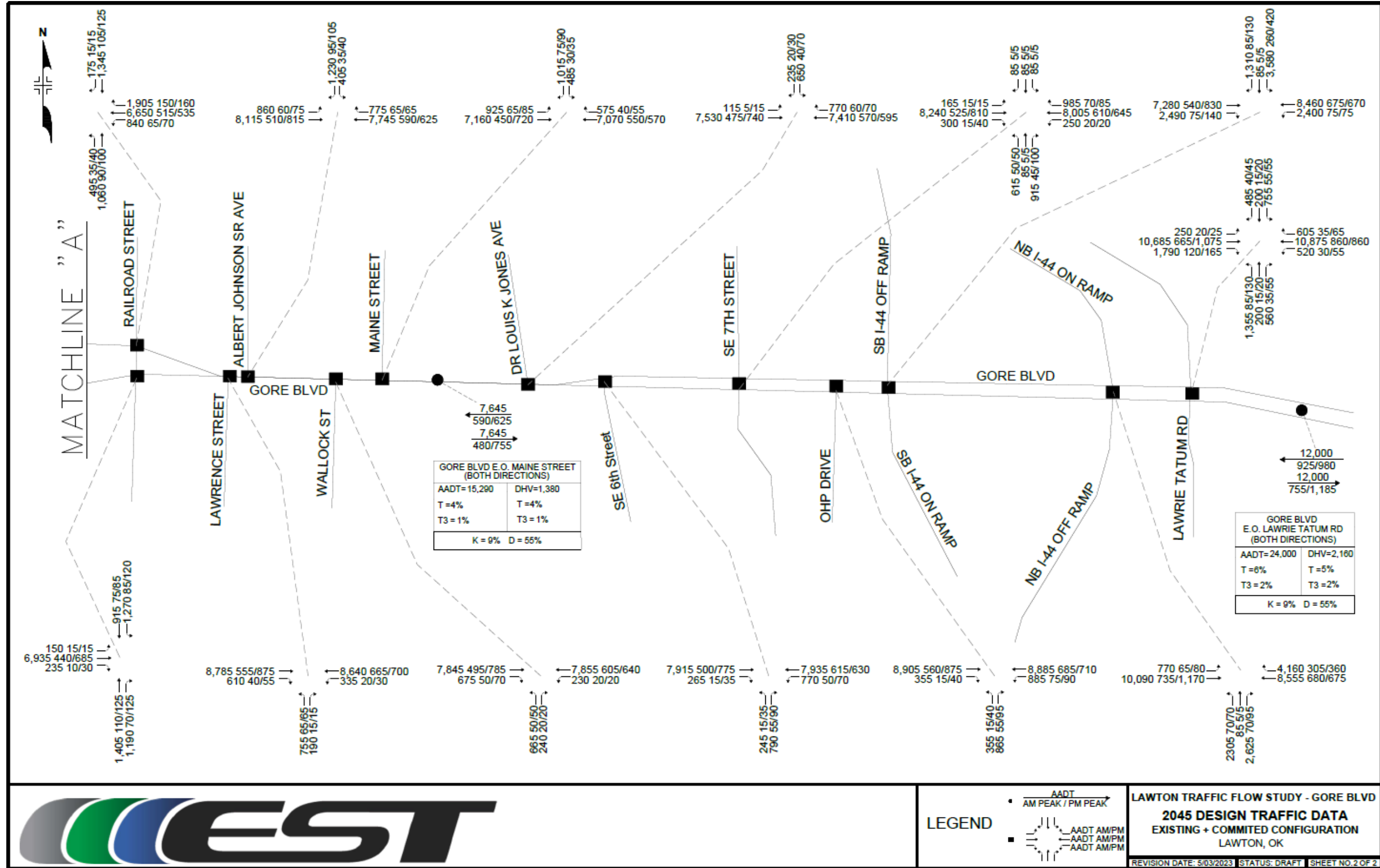


Figure 5 - 2045 Design Traffic Map (2/2)

3 Existing Condition

Gore Blvd. is divided between Railroad Street and 7th, with an approximately 145ft wide median. Currently, there are 7 signals along Gore Blvd. within the traffic study area. Among the signalized intersections, the intersections at 6th Street, 4th Street, 2nd Street, and Railroad Street (which intersects Gore Blvd at two intersections due to the wide median) are grouped as clustered intersections that operate under a single controller at each crossing. There are 11 unsignalized intersections with stop-controlled north/south traffic and free east/west traffic on Gore Blvd.

Based on our conversation with the City staff, and field engineer, and according to anecdotal information, it appears that under the current network conditions, along with the existing signal phasing and timing plans, there is a traffic congestion issue occurring on Gore Blvd at the intersection of Gore Blvd and Railroad Street, particularly for westbound traffic. This congestion results in a queue that stretches in the direction towards the I-44 ramp intersection to the east. **Figure 6** illustrates the type of traffic control devices currently utilized at each intersection.

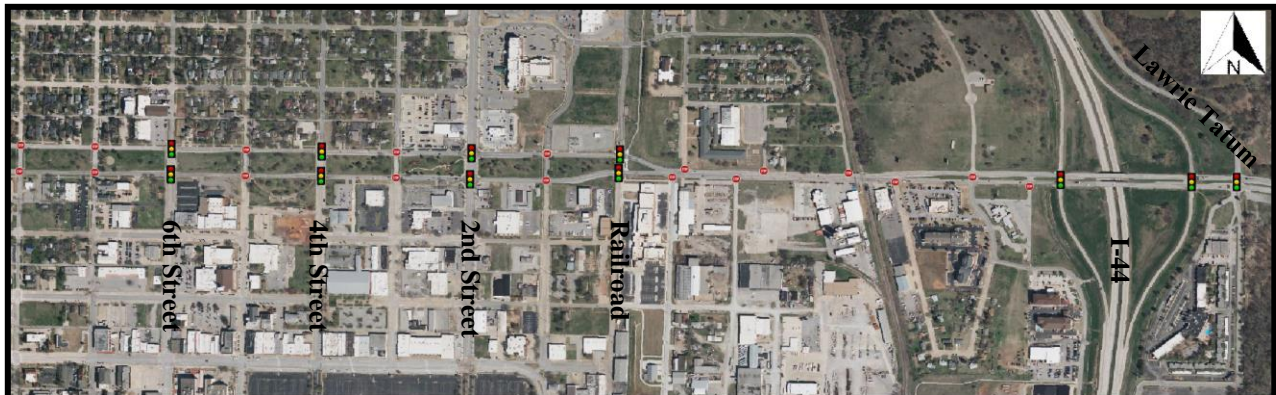


Figure 6 - Existing Traffic Control Types

The current signal phasing at the intersections of Gore Blvd at Lawrie Tatum, I-44 NB Ramps, I-44 SB Ramps, 4th Street, and 6th Street is conventional phasing. The signal phasing at the intersection of Gore Blvd & Railroad is a split phasing for EB/WB under two Barriers but the same ring and the NB/SB approaches go together under the same barrier but two different rings. The intersection of Gore Blvd & 2nd Street is split phasing on all approaches.

Table 1 shows the existing phasing and cycle length at the signal controllers in the study area.

Table 1 – Existing Signal Phasing and Cycle Length

Intersection Location	Cycle Length (Sec)	Phasing*
Gore Blvd. & Lawrie Tatum	120	Conventional
Gore Blvd. & I-44 NB Ramps	120	Conventional
Gore Blvd. & I-44 SB Ramps	120	Conventional
Gore Blvd. & Railroad	120	Split (EB/WB)
Gore Blvd. & 2nd	120	Split (All Approaches)
Gore Blvd. & 4th	100	Conventional
Gore Blvd. & 6th	100	Conventional

*Phasing Diagrams are shown in **Figure 7**

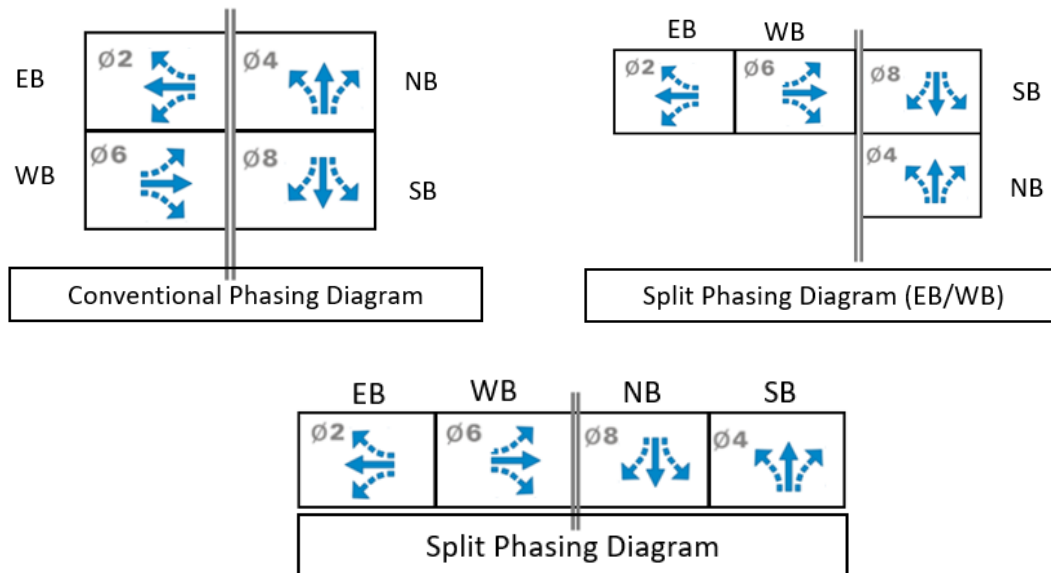


Figure 7 - Diagram Illustrating Split and Conventional Signal Phasing Schemes

Split phase signal timing refers to the division of the signal cycle into phases that give a green phase for all vehicle movements of one direction followed by a phase for all movements of the opposite direction. **Conventional phase** signal timing consists of having two opposite approaches with concurrent timing.

Issues Associated with Current Signal Phasing, Timing, and Operation

- Signal phasing inconsistency between intersections along Gore Blvd. (Conventional vs. Split)
- Lack of overlap phasing in split phasing intersections.
- Varied cycle lengths at different intersections within the corridor.
- Lack of signal coordination throughout the corridor.
- The Railroad crossing intersection lacks left-turn pockets for westbound and eastbound left-turn traffic movements in both directions.

3.1 Operational Analysis – 2023 Design Hour Volume

For the existing operational analysis, PM Peak Hour Volumes from the “2023 Design Traffic Data” (as shown in **Figure 2** and **Figure 3**) were used as the Design Hour Volume (DHV).

3.1.1 Intersection Analysis

The Level of Service (LOS) for movements at signalized and unsignalized intersections are determined by the amount of wait time or delay a vehicle experiences. The delay includes the time from when a vehicle joins a queue or is the first to start a queue, and the time stops when the vehicle can complete the movement. **Table 2** and **Table 3**, respectively summarize the LOS criteria for signalized and unsignalized intersections based on HCM 6th edition.

Table 2 – LOS Criteria for Signalized Intersections -Motorized Vehicle Mode

Control Delay(s/veh)	LOS by Volume-to-Capacity Ratio	
	≤ 1.0	>1.0
≤ 10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

Source: HCM 6th edition – Exhibit 19-8

Table 3 – LOS Criteria for Unsignalized Intersections -Motorized Vehicle Mode

Control Delay(s/veh)	LOS by Volume-to-Capacity Ratio	
	≤ 1.0	>1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

Source: HCM 6th edition – Exhibit 20-2

For intersection analysis along the study corridor, Synchro 11 software based on the Highway Capacity Manual (HCM), 6th Edition (Transportation Research Board [TRB], 2016) has been utilized for all signalized/unsignalized intersections except the clustered intersections at 6th, 4th, 2nd, and Railroad streets. Since HCM, 6th edition does not support analyzing clustered intersections in Synchro, HCM 2000 edition has been used for the operational analysis at those intersections. The results of the LOS analysis for the signalized intersections and approach LOS for unsignalized intersections are summarized in **Figure 8** and **Figure 9**. Detailed analysis of individual intersections and the Synchro Reports are documented in **Appendix B**.

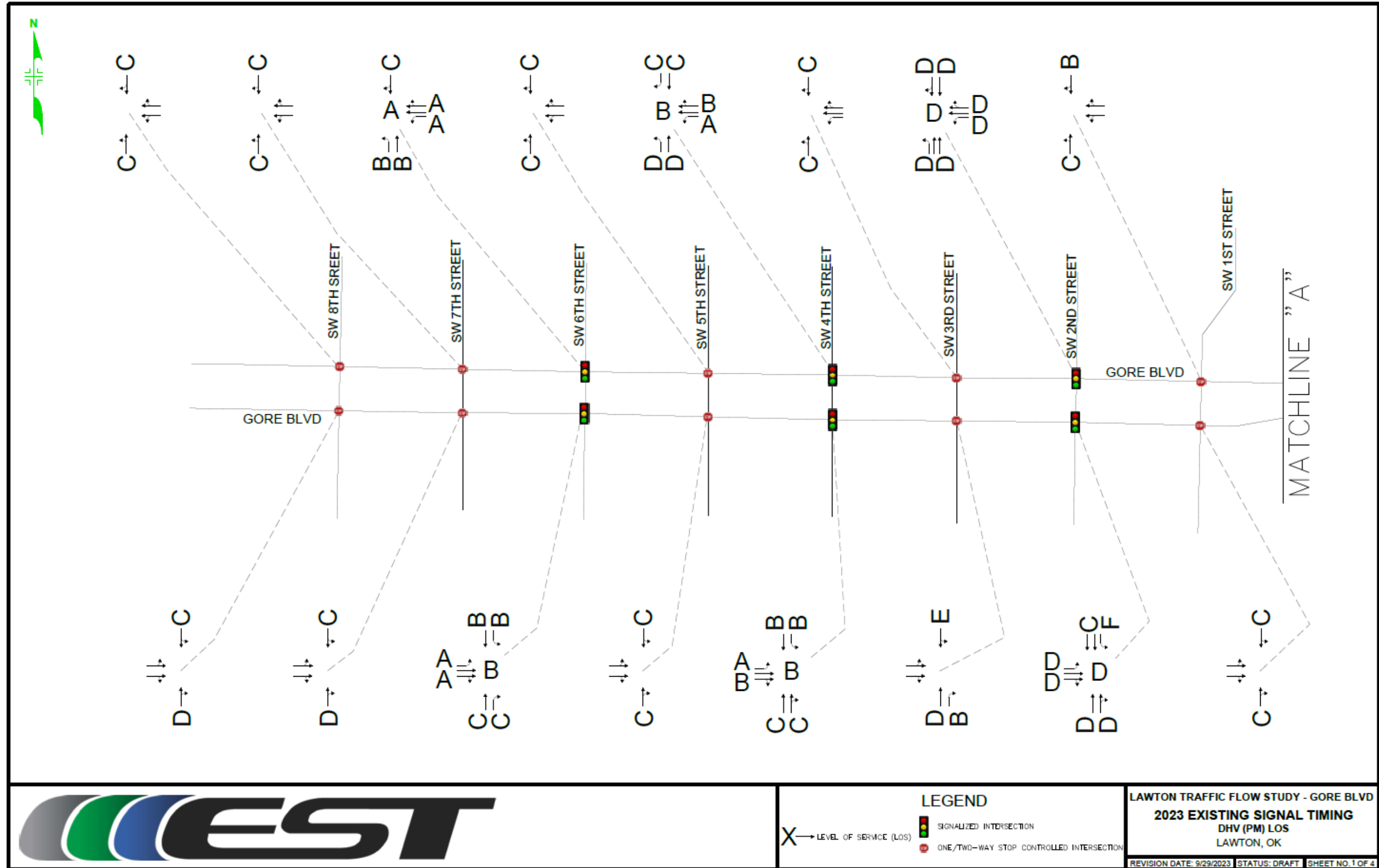


Figure 8 - 2023 LOS for DHV - Existing Conditions (1/2)

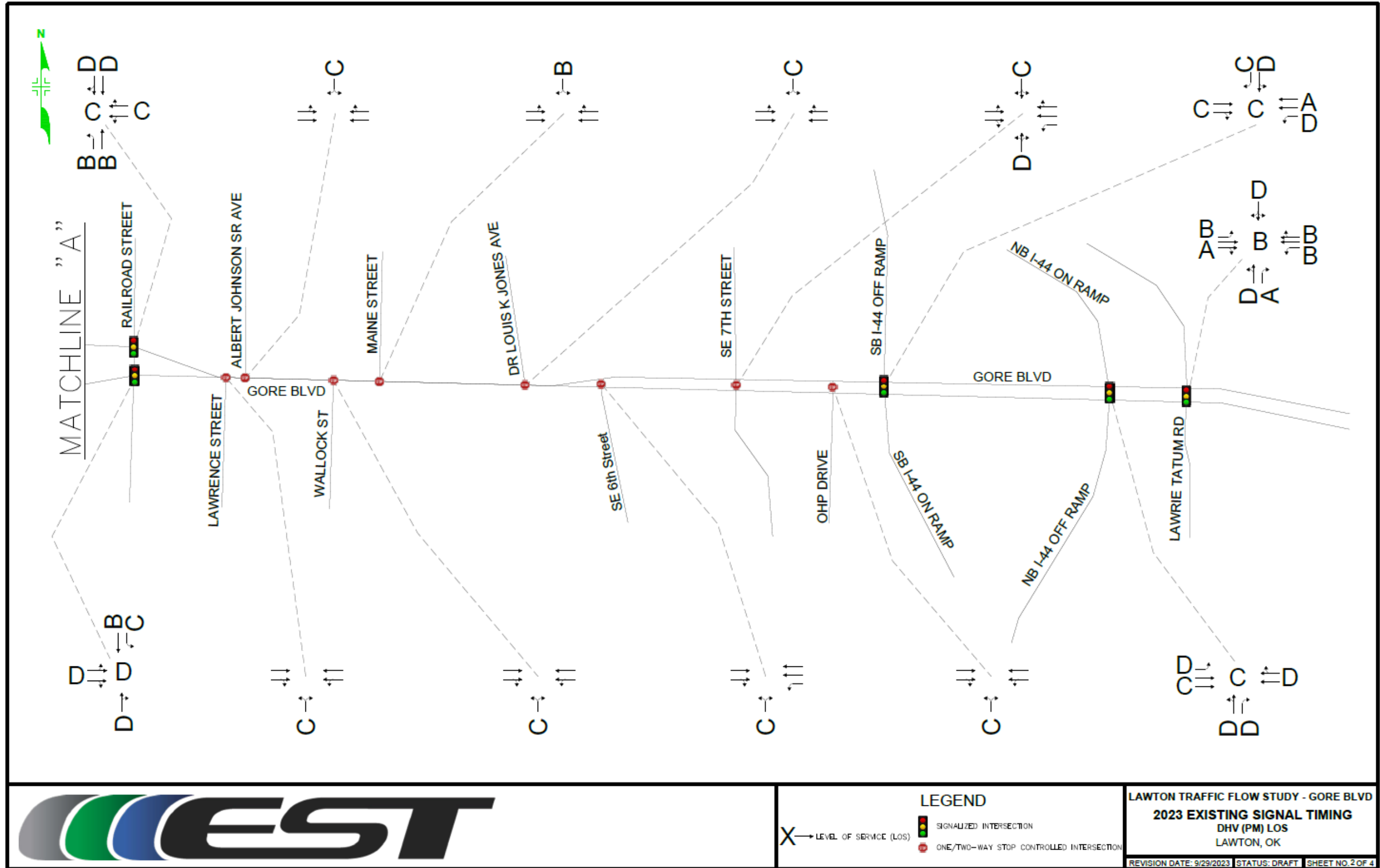


Figure 9 – 2023 LOS for DHV - Existing Conditions (Cont. 2/2)

3.1.2 Corridor Analysis

Sim Traffic 11 software based on the Highway Capacity Manual (HCM), 6th Edition (Transportation Research Board [TRB], 2016) has been utilized to analyze the corridor. **Table 4** shows Measures of Effectiveness (MOE) results for the existing corridor based on the Sim Traffic Analysis and considering 2023 design traffic volumes.

Table 4 – Sim Traffic Results (MOE) for the 2023 Existing Network– Sim Traffic Simulation Period (10 min)

2023 Network MOE Results (Peak Hour)	
Total Delay (Veh-hr.)	16.5
Total Del/Veh (s)	57.3
Stop Delay (hr.)	12.5
Stop Del/Veh (s)	43.3
Total Stops	1584
Stop/Veh	1.5
Travel Dist. (mi)	473.1
Travel Time (hr.)	31.8
Avg Speed (mph)	15
Network-wide Queuing Penalty	201

Note: Sim Traffic Results assumptions: Avg of 10 Run / Seeding Duration: 3 Min / Recording Duration: 10 Min

3.2 Safety/Crash Analysis of the Existing Condition - 2019-2023 (August)

The Lawton Police Department supplied nearly five years' worth of historical crash data on 08/15/2023, through the City of Lawton. However, the specific types of crashes were not included in the provided data. These data show the total number of Non-Injury, Injury, and Fatal crashes between 2019 to August 2023. There were a total of 118 crashes in the entire study area between 2019 and August 2023. There was only one fatal crash which happened at the intersection of 4th.

Table 5 shows Crash data from 2019 - 2023 (August). Based on the provided crash data, intersections of Gore Blvd. with 4th, 2nd, Railroad, and Lawrie Tatum are noted for having higher total crash numbers. It's important to note that these totals reflect the number of crashes over a period of nearly five years.

Table 5 – Crash data January 2019 -August 2023 (4 years & 8 months)

	Non-Injury	Injury	Police	Fatality	HitnRun	Total
W 7th	2	0	0	0	0	2
W 6th	3	3	0	0	0	6
W 5th	2	0	0	0	0	2
W 4th	4	3	0	1	2	10
W 3rd	7	0	1	0	0	8
W 2nd	6	2	0	0	5	13
W 1st	2	3	0	0	0	5
Railroad	8	8	0	0	2	18
Wallock	1	0	0	0	1	2
Louis K	5	0	0	0	1	6
E 6th	1	0	0	0	1	2
E 7th	7	1	0	0	1	9
Lawrie T.	9	6	0	0	4	19
i44	3	4	0	0	0	7
OHP Dr	1	1	0	0	1	3
Maine	4	1	0	0	0	5
Albert J.	1	0	0	0	0	1
Total Stop Controlled	33	6	1	0	5	45
Total Signalized	33	26	0	1	13	73
Total	66	32	1	1	18	118

Note:

- *The provided crash data does not specify the exact start date of the collected data in 2019 – January is assumed .*
- *There is a lack of detailed information on the crash patterns, hindering the ability to effectively address mitigation strategies.*
- *No safety/crash baseline data was provided by the City/ODOT in order to determine the significance of the crashes in comparison to the baseline.*

4 Recommended Operational Improvement Options

To enhance operational efficiency on Gore Blvd, several recommended improvement options were presented. All figures pertaining to these recommendation options show the modifications made to the intersection of Gore Blvd. & Railroad Street. This intersection is the focus of the operational enhancement. In each option explained below, signal phasing has been modified only for the section of Gore Blvd divided by the median. Signal phasing for intersections of Gore Blvd. with I-44 Ramps and with Lawrie Tatum Road has remained as existing phasing (conventional phasing) and only the signal timing, cycle length, and split phasing have been optimized and coordinated with the rest of the network.

Option 1 – Existing Network Configuration/ Split Phase Signal Timing on All Approaches (EB/WB/NB/SB) at the Clustered Signalized Intersections

This option recommends dividing the signal cycle at all clustered intersections into four distinct phases. **Figure 10** shows Signal Phasing at the Intersection of Gore Blvd. & Railroad. All other Clustered intersections in the study area follow the same signal-phasing diagram.

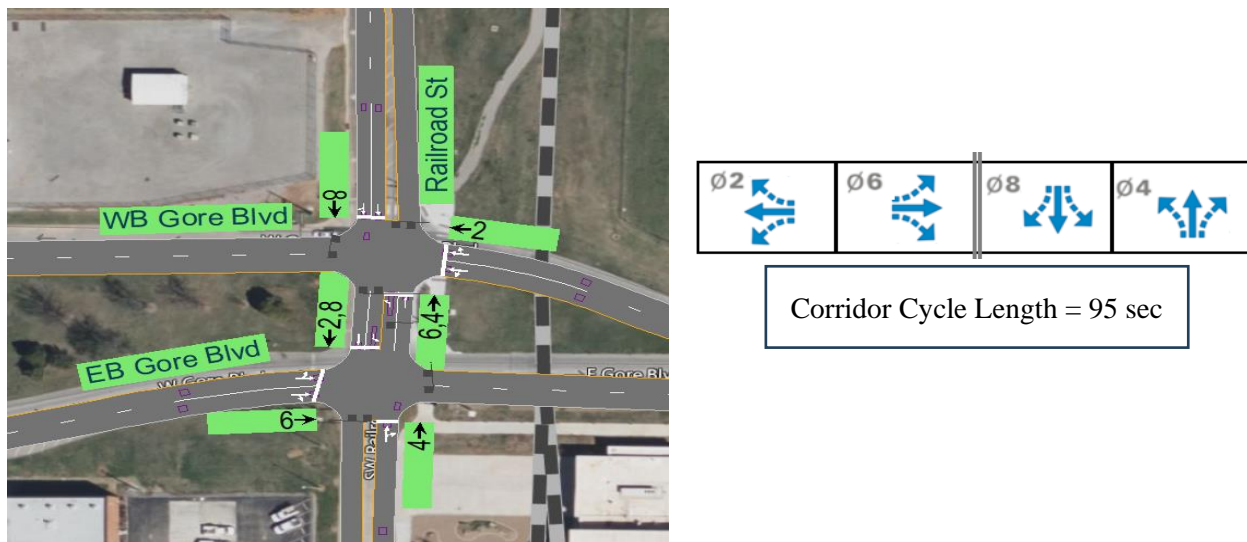
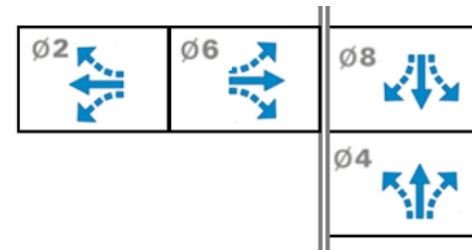


Figure 10 – Split Signal Phasing at the Intersection of Gore Blvd. & Railroad (Option 1)

Option 2 – Existing Network Configuration/ Split Phase Signal Timing on EB/WB Approaches of Clustered Signalized Intersections

Figure 11 shows the Signal Phasing at the Intersection of Gore Blvd. & Railroad. All other Clustered intersections in the study area follow the same signal-phasing diagram.



Corridor Cycle Length = 95 sec

Figure 11 - Split Signal Phasing on EB/WB at the Intersection of Gore Blvd. & Railroad (Option 2)

Option 3 – Close the Median at Gore Blvd. & Railroad Intersection/Traffic Redistribution/ Add Signal at Gore Blvd & 1st St. Intersection. Implement Split Phase Signal Timing on all Approaches of Clustered Signalized Intersections

Figure 12 shows all changes that have been proposed to the intersections of Gore Blvd. with Railroad, 1st, and Larrance streets. Changes to the crossing of Larrance Street are limited to traffic volume. The traffic at the crossing of Railroad St has been redistributed through 1st and Larrance crossings based on engineering judgment. The intersection of Gore Blvd and 1st Street has been equipped with a traffic signal controller to accommodate the added traffic redistributed from Railroad crossing to this intersection. All Clustered intersections in the study area follow split-phase signal timing. Accommodation of emergency vehicle access should be considered in the evaluation and design of this option.



Corridor Cycle Length = 95 sec

Figure 12 – Close the Median at Gore Blvd. & Railroad Intersection/Traffic Redistribution/ Add Signal at Gore Blvd & 1st St. Intersection with Split Phase Signal Timing (Option 3)

**Option 4 – Adding EB/WB Left Turn Pocket at the Intersection of Gore Blvd & Railroad/
Conventional Signal Timing at all of the Signalized Intersections.**

Figure 13 shows adding a left turn pocket and Conventional Signal Phasing at the Intersection of Gore Blvd. & Railroad. All other intersections in the study area follow the same signal-phasing diagram.

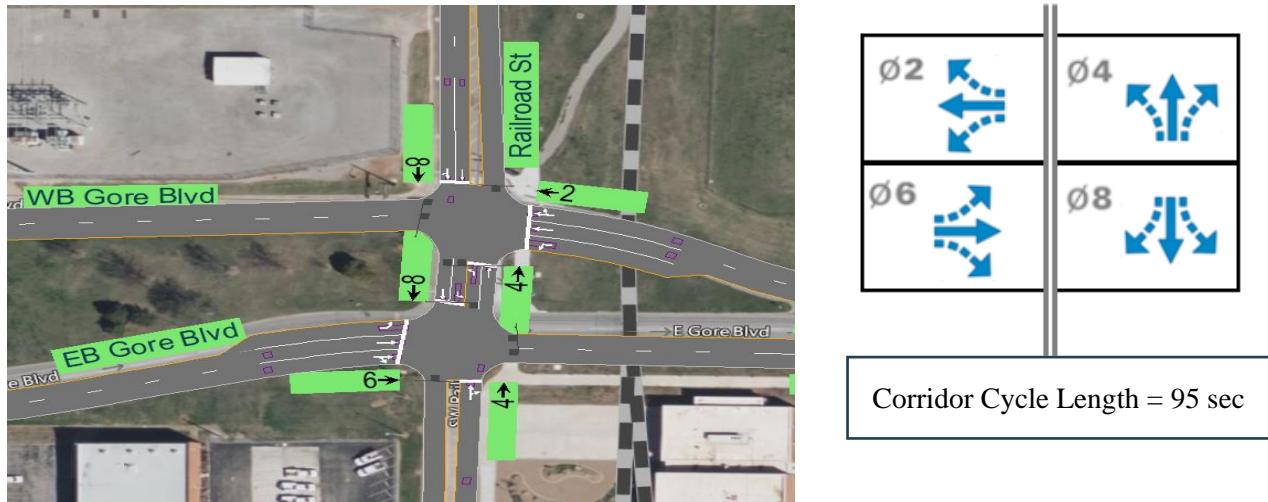


Figure 13 - Adding EB/WB Left Turn Pocket and Conventional Signal Timing at Intersection of Gore Blvd & Railroad (Option 4)

**Option 5 – Close the Median at Gore Blvd. & Railroad and Gore Blvd. & 1st Intersections/
Traffic Redistribution / Split Phase Signal Timing on all Approaches of Clustered Signalized
Intersections.**

Figure 14 shows all changes that have been proposed to the intersections of Gore Blvd. with Railroad, 1st, and Larrance Street. Changes to the crossing of Larrance Street are limited to traffic volume.

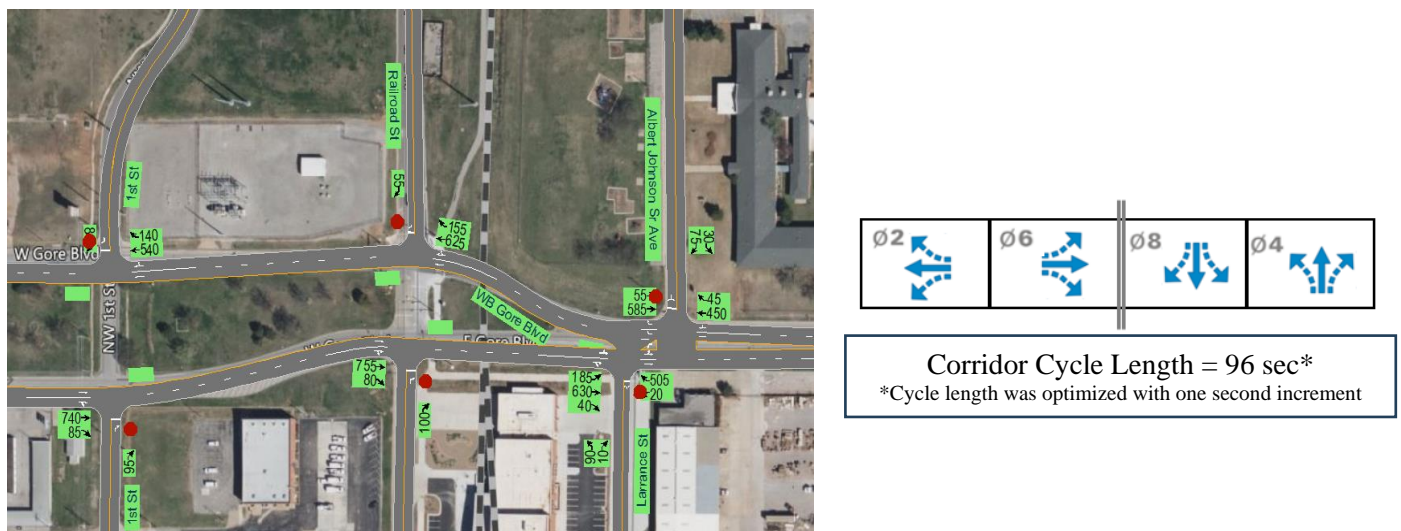
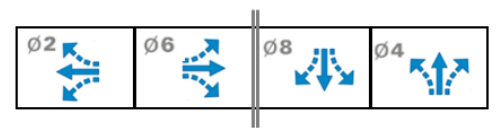
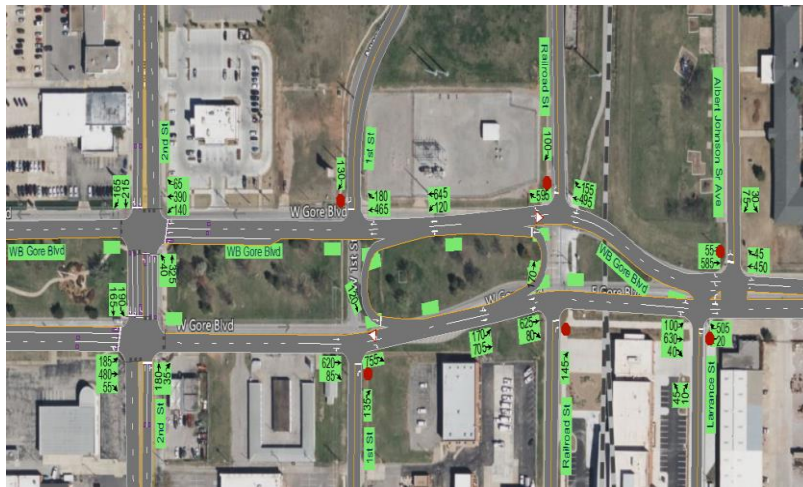


Figure 14 - Close the Median at Gore Blvd. & Railroad and Gore Blvd. & 1st Intersections/ Traffic Redistribution / Split Phase Signal Timing (Option 5)

Option 6 – Close the Median/Add EB U-Turn at Gore Blvd. & Railroad - Close the Median/Add WB U-Turn at Gore Blvd. & 1st -Split Phase Signal Timing on all Approaches of Clustered Signalized Intersections.

Figure 15 shows all changes that have been proposed to the intersections of Gore Blvd. with Railroad, 1st, and Larrance Street. Changes to the crossing of Larrance Street are limited to traffic volume. Accommodation of emergency vehicle access should be considered in the evaluation and design of this option.



Corridor Cycle Length = 96 sec*
*Cycle length was optimized with one second increment

Figure 15 - Close the Median/Add EB U-Turn at Gore Blvd. & Railroad - Close the Median/Add WB U-Turn at Gore Blvd. & 1st -Split Phase Signal Timing (Option 6)

5 Comparison of Recommended Operational Improvement Options

Synchro and Sim Traffic 11 software based on the Highway Capacity Manual (HCM), 6th Edition (Transportation Research Board [TRB], 2016) have been utilized to assess both individual intersections and the entire corridor within the study area except the clustered intersections at 6th, 4th, 2nd and Railroad crossings. Since HCM, 6th edition does not support analyzing clustered intersections in Synchro, HCM 2000 edition has been used for those intersections. The detailed results of Synchro analysis and Synchro reports are presented in Appendix B. The detailed results of SimTraffic analysis and SimTraffic reports are presented in Appendix C.

5.1 2023 Design Hour Volume

Intersection Analysis

Table 6 shows LOS and delay(sec/veh) for signalized intersections in the study area for the existing corridor vs. all recommended options considering the 2023 design hour volume (see **Figure 2** and **Figure 3**). As shown in this table, operational results of all recommended options show improvements for every intersection except the intersections of Gore Blvd with 6th & 4th Street and Lawrie Tatum Road. Based on the existing signal timing, these intersections are optimized individually without considering the impact on other intersections in the study area. They are not coordinated with the other signalized intersections along the corridor. These intersections operate individually as traffic is metered in other intersections which causes delays at those intersections as well as the network.

Network Analysis

Table 7 shows Network Operational Performance and “Total Dealy” during design hour volume for the existing corridor vs. all recommended options considering the 2023 design hour volume. As shown in this table all options improve the Measure of Effectiveness (MOE) significantly compared to the existing condition. Option 4 saves more in terms of delay with a higher average speed. However, it requires some geometry modifications to the existing network. Option 2 on the other hand only modifies the signal timing/phasing with no change to the existing geometry. This option also shows significant improvement compared to the existing condition.



Table 6 – Comparison of Signalized Intersection LOS & Delay during Desing Hour Traffic between the Existing Condition and the Recommended Options (2023)

2023 DHV		Existing		Option 1		Option 2		Option 3		Option 4		Option 5		Option 6							
		LOS	Delay(sec/veh)	LOS	Delay(sec/veh)		LOS	Delay(sec/veh)		LOS	Delay(sec/veh)		LOS	Delay(sec/veh)		LOS	Delay(sec/veh)				
					Delay	% Imp. *		Delay	% Imp.		Delay	% Imp. *		Delay	% Imp. *		Delay	% Imp. *	Delay	% Imp. *	
Gore Blvd & 6th St	N. Int.	A	9.9	C	21.6	No Improvement	C	23.3	No Improvement	C	29.9	No Improvement	B	12.4	No Improvement	C	30.5	No Improvement	C	30.5	No Improvement
	S. Int.	B	11.7	D	35.2	No Improvement	C	24.2	No Improvement	C	33.4	No Improvement	B	14	No Improvement	C	32.8	No Improvement	C	32.8	No Improvement
Gore Blvd & 4th St	N. Int.	B	17.2	C	40.8	No Improvement	C	38.8	No Improvement	C	27.2	No Improvement	B	12.4	0.28	C	26.9	No Improvement	C	36.9	No Improvement
	S. Int.	B	13.5	C	23.4	No Improvement	C	26.9	No Improvement	C	32	No Improvement	A	9.1	0.28	C	32.7	No Improvement	C	32.7	No Improvement
Gore Blvd & 2nd St	N. Int.	D	50.2	C	25	50%	C	21.2	58%	C	20.4	59%	B	17.5	65%	B	30.2	40%	C	28	44%
	S. Int.	D	47.5	C	32	33%	C	22.7	52%	C	32.1	32%	B	11.5	76%	C	29.2	39%	C	28.6	40%
Gore Blvd & 1st St	N. Int.	N/A		N/A		N/A		C	28.4	N/A	N/A		N/A		N/A		N/A				
	S. Int.	N/A		N/A		N/A		C	21.5	N/A	N/A		N/A		N/A		N/A				
Gore Blvd & Railroad	N. Int.	C	24.9	C	23	8%	B	16.7	33%	N/A		B	10.2	59%	N/A		N/A				
	S. Int.	D	39.4	D	35.5	10%	C	32	19%	N/A		B	12.8	68%	N/A		N/A				
Gore Blvd & I-44 SB Ramps		C	22.8	B	19.5	14%	B	19.5	14%	B	19.5	14%	B	19.5	14%	B	19.5	14%	B	19.5	14%
Gore Blvd & I-44 NB Ramps		C	32.6	A	5.1	0.84	A	5.1	0.84	A	5.1	0.84	A	5.1	0.84	A	5	0.85	A	5	0.85
Gore Blvd & Lawrie Tatum Road		B	12.9	C	23.3	No Improvement	C	23.3	No Improvement	C	23.3	No Improvement	C	23.3	No Improvement	C	23.7	No Improvement	C	23.7	No Improvement

* % Improvements compared to the existing network



Table 7 – Comparison of Network Operational Performance and “Total Dealy” during Desing Hour Traffic between the Existing Conditions and the Recommended Options (2023)

2023 Design Hour Volume	Network 1-Hour Result			Sim-Traffic 10 Min Run**					
	Network Delay(veh.hr) ***			Network Queuing Penalty			Avg Speed (mph)		
	Delay(veh.hr)	Ranking	% Imp. *	Queuing Penalty	Ranking	% Imp. *	Avg Speed(mph)	Ranking	% Imp. *
Option <ul style="list-style-type: none"> Network/Timing Modifications 									
<u>Existing</u>	110.51	-	-	201	-	-	15	-	-
Option 1 <ul style="list-style-type: none"> Split Phase Signal Timing on All Approaches 	100.22	4	5%	68	1	66%	16	3	7%
Option 2 <ul style="list-style-type: none"> Split Phase Signal Timing on EB/WB 	89.82	2	10%	87	2	57%	17	2	13%
Option 3 <ul style="list-style-type: none"> Close the Median at Gore Blvd. & Railroad Intersection Traffic Redistribution Add Signal at Gore Blvd & 1st Intersection. Split Phase Signal Timing on All Approaches 	94.86	3	8%	108	4	46%	16	3	7%
Option 4 <ul style="list-style-type: none"> Adding EB/WB Left Turn Pocket at the Intersection of Gore Blvd & Railroad Conventional Signal Timing on All Signalized Intersections 	66.21	1	22%	108	4	46%	19	1	27%
Option 5 <ul style="list-style-type: none"> Close the Median at Gore Blvd. & Railroad Intersection Close the Median at Gore Blvd. & 1st Intersection Traffic Redistribution Split Phase Signal Timing on All Approaches 	94.14	3	8%	94	3	53%	17	2	13%
Option 6 <ul style="list-style-type: none"> Close the Median/Add EB U-Turn at Gore Blvd. & Railroad Intersection Close the Median/ Add WB U-Turn at Gore Blvd. & 1st Intersection Traffic Redistribution Split Phase Signal Timing on All Approaches 	90.01	2	0.1	1122	5	No Improvement	14	4	No Improvement

* % Improvements compared to the existing network

**“Network Level” Sim Traffic Results

Sim Traffic Results assumptions for all models: Avg of 10 Run / Seeding Duration: 3Min / Recording Duration:10 Min

***Calculated based on avg movement delay for the total volume of 1 peak hour

5.2 2045 Design Hour Volume

Intersection Analysis

Table 8 shows LOS and delay (sec/veh) for signalized intersections in the study area for the existing geometry with optimized signal timing vs. options 2 & 4 considering the 2045 design hour volume (see **Figure 4 and Figure 5**). As shown in this table, option 4, shows significant improvements for intersections of Gore Blvd with 6th Street, 4th Street, 2nd Street, and Railroad. This option improves LOS from E to B at the intersection of Gore Blvd with 2nd Street, and from F to C, at the intersection of Gore Blvd with Railroad. Option 2 also improves delay and LOS in intersections of Gore Blvd with 2nd Street and Railroad. Option 2 improves LOS from E to C at the intersection of Gore Blvd with 2nd and from F to D at the intersection of Gore Blvd with Railroad.

Network Analysis

Table 9 shows Network Operational Performance and “Total Dealy” during design hour volume for the existing geometry with optimized signal timing vs. recommended options 2 & 4 considering the 2045 design hour volume. As shown in this table both options improve MOEs significantly compared to the existing condition.

Table 8 – Comparison of Signalized Intersection LOS & Delay during Desing Hour Traffic between the Existing Geometry (Optimized Timing) and the Recommended Options (2045)

2045 DHV		Existing		Option 2			Option 4		
		LOS	Delay(sec/veh)	LOS	Delay(sec/veh)		LOS	Delay(sec/veh)	
					Delay	% Imp.*		Delay	% Imp.*
Gore Blvd & 6th St	N. Int.	B	12.5	C	26.8	No Improvement	B	11.8	6%
	S. Int.	B	14.8	C	27.9		B	13.7	7%
Gore Blvd & 4th St	N. Int.	B	17.2	C	25.1	No Improvement	B	13.5	22%
	S. Int.	B	14.0	C	29.4		B	10.1	28%
Gore Blvd & 2nd St	N. Int.	E	59.3	C	24.2	59%	B	18.3	69%
	S. Int.	E	62.9	C	25.7	59%	B	12.3	80%
Gore Blvd & Railroad	N. Int.	C	25.8	C	22.3	14%	B	11.6	55%
	S. Int.	F	86.8	D	35.5	59%	C	29.9	66%
Gore Blvd & I-44 SB Ramps		C	27.0	C	28.1	No Improvement	C	28.5	No Improvement
Gore Blvd & I-44 NB Ramps		A	5.8	A	5.8	0%	A	5.8	0%
Gore Blvd & Lawrie Tatum Road		B	12.9	C	26.4	No Improvement	C	25.6	No Improvement

* % Improvements compared to the existing network (Optimized Timing)

Table 9 – Comparison of Operational Performance and “Total Dealy” during Desing Hour Traffic between the Existing Geometry (Optimized Timing) and the Recommended Options (2045)

2045 Design Hour Volume	Network 1-Hour Result			Sim-Traffic 10 Min Run**					
	Network Delay(veh.hr) ***			Network Queuing Penalty			Avg Speed (mph)		
	Delay(veh.hr)	Ranking	% Imp. *	Queuing Penalty	Ranking	% Imp. *	Avg Speed(mph)	Ranking	% Imp. *
Option <ul style="list-style-type: none"> Network/Timing Modifications**** 									
Existing Network (Optimized Timing) <ul style="list-style-type: none"> Optimized Signal Timing 	170.88	-	-	683	-	-	14	-	-
Option 2 <ul style="list-style-type: none"> Split Phase Signal Timing on EB/WB 	151.25	2	11%	303	1	56%	15	2	7%
Option 4 <ul style="list-style-type: none"> Adding EB/WB Left Turn Pocket at the Intersection of Gore Blvd & Railroad Split Phase Signal Timing on EB/WB 	124.13	1	27%	483	2	29%	17	1	21%

* % Improvements compared to the existing network (Optimized Timing)

**“Network Level” Sim Traffic Results

Sim Traffic Results assumptions for all models: Avg of 10 Run / Seeding Duration: 3Min / Recording Duration:10 Min

***Calculated based on avg movement delay for the total volume of 1 peak hour

6 Roadway Geometry, Multi-Modal, Signing and Striping, Network Improvement Recommendations

As we explored the comprehensive planning level evaluation of the challenges within the corridor and identified potential areas for improvement, it has become clear that addressing these concerns is essential to enhance the overall functionality and efficiency of the corridor. This section presents sketches of the specific issues that have emerged within the corridor, along with proposed enhancements to comprehensively address them as exhibited in **Figure 16 through Figure 20**. (high-level access management recommendations are provided in **Section 7**).

Below is the list of the identified issues that were observed along the corridor.

1. Poor Pedestrian Crossing Condition
2. No Pedestrian Crossing
3. Discontinued Sidewalk
4. No Stop Bar
5. Not ADA Compliant
 - No ADA Ramp
 - Poor ADA compliance – (One ADA ramp for both directions)
 - ADA Ramp on one side does not lead to another ramp on the other side.
 - ADA Ramps missing truncated domes.
6. Poor Pavement Marking Condition
7. Discontinued and shared bike lane
8. The sidewalk does not align with Pedestrian Crossing
9. Missing Pavement marking
10. Presence of a Pedestrian Crossing along with No Pedestrian Sign

Here is a summary of the recommended improvements for the identified issues listed above.

1. Paint Pedestrian Crossing
 - At signalized intersections: where pedestrian crossing is not prohibited.
 - At Stop Controlled intersections: Add Pedestrian Crossing Signs
2. Provide a connected sidewalk network throughout the corridor (The dashed line in the issue map shows missing sidewalks)
3. Increase the width of existing sidewalks and convert to shared bike + ped lane
4. Paint Stop Bars
5. Provide curb ramps following ADA standards wherever a sidewalk or other pedestrian walkway crosses a curb.
 - Curb ramps must follow the standard slope and width.
 - Ramps need to have a detectable warning device with a raised dome surface and contrasting color.
6. Repaint Pavement Marking
7. Provide a connected bike lane network throughout the entire corridor. The bike lane should be for exclusive use by bicyclists and physically separated from motor vehicle traffic with a vertical element (Recommended bike lane: green line in the issue map).



Ped and Bike Improvements

Gore Blvd, from Railroad to 7th Street

In line with the City's comprehensive citywide sidewalk enhancement initiative, which aims to promote a healthier and more active lifestyle while enhancing safety within the community, two recommendations have been made for bike and pedestrian facility improvements:

- 1- The expansion of existing sidewalks north and south of Gore Boulevard, including the sidewalks along the median, to a width of 10 feet to create a shared pathway that can accommodate both pedestrians and bikers.
- 2- To construct a new 10-foot lane dedicated to pedestrians and cyclists along the median, similar to the existing pedestrian lane between 2nd and 3rd streets, with connections at the crossroads.

Gore Blvd, East of Railroad to the east of NE Lawrie Tatum Road

Given the narrow bridge on I-44, currently it is advisable to prohibit pedestrian/bike crossing specially to access the Comanche Nation Casino. This would apply to three out of the four legs of each of the interchange and NE Lawrie Tatum Road Intersections at Gore Blvd. However; the City aims to improve pedestrian safety while crossing I-44, prompted by a history of fatalities and injuries. Construction plans are underway for a pedestrian bridge spanning I-44 and Gore Blvd, scheduled for the year 2024, and additional plans include the establishment of connecting sidewalks.

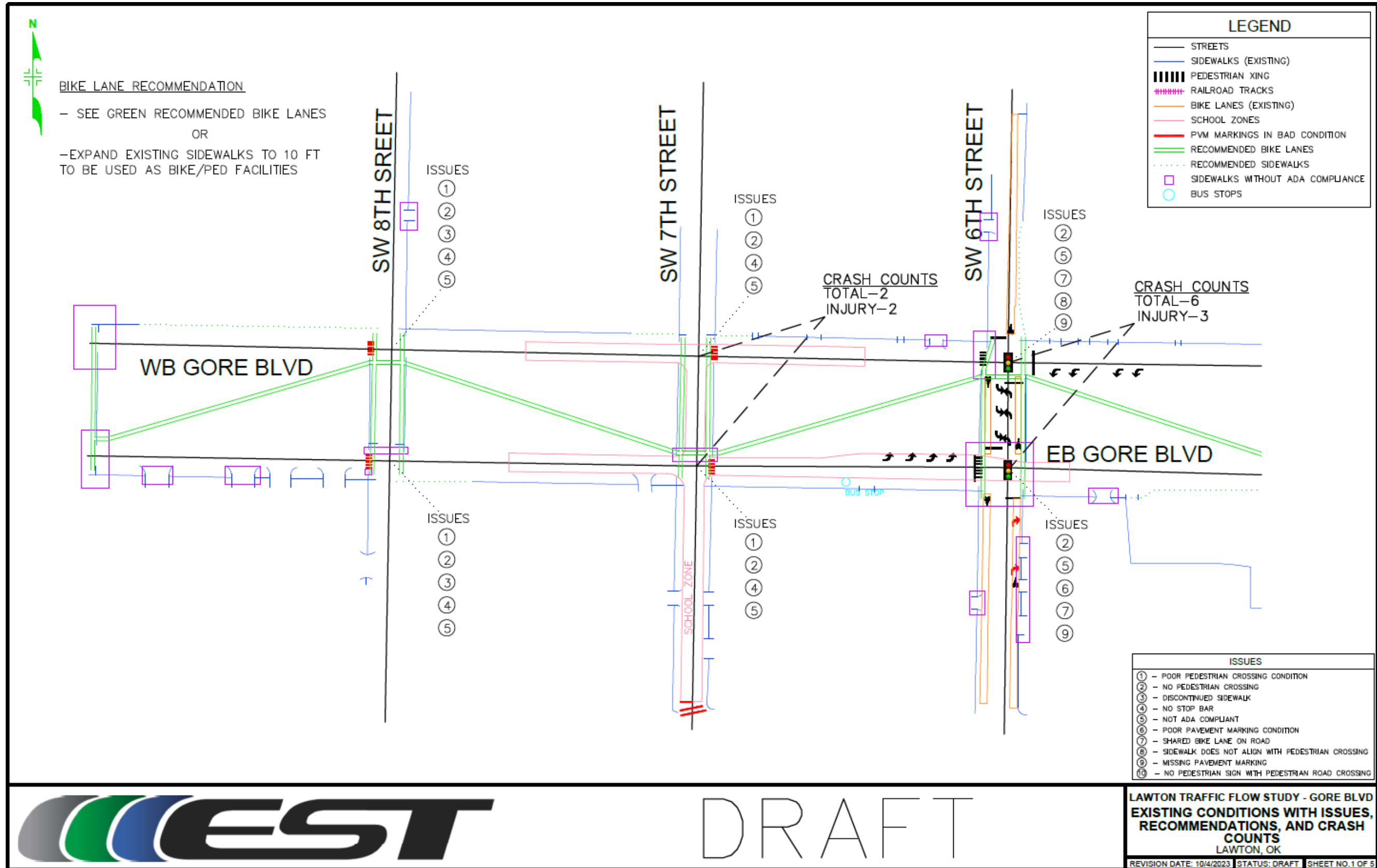


Figure 16 - Issues & Recommendations Along Corridor (page 1/5)

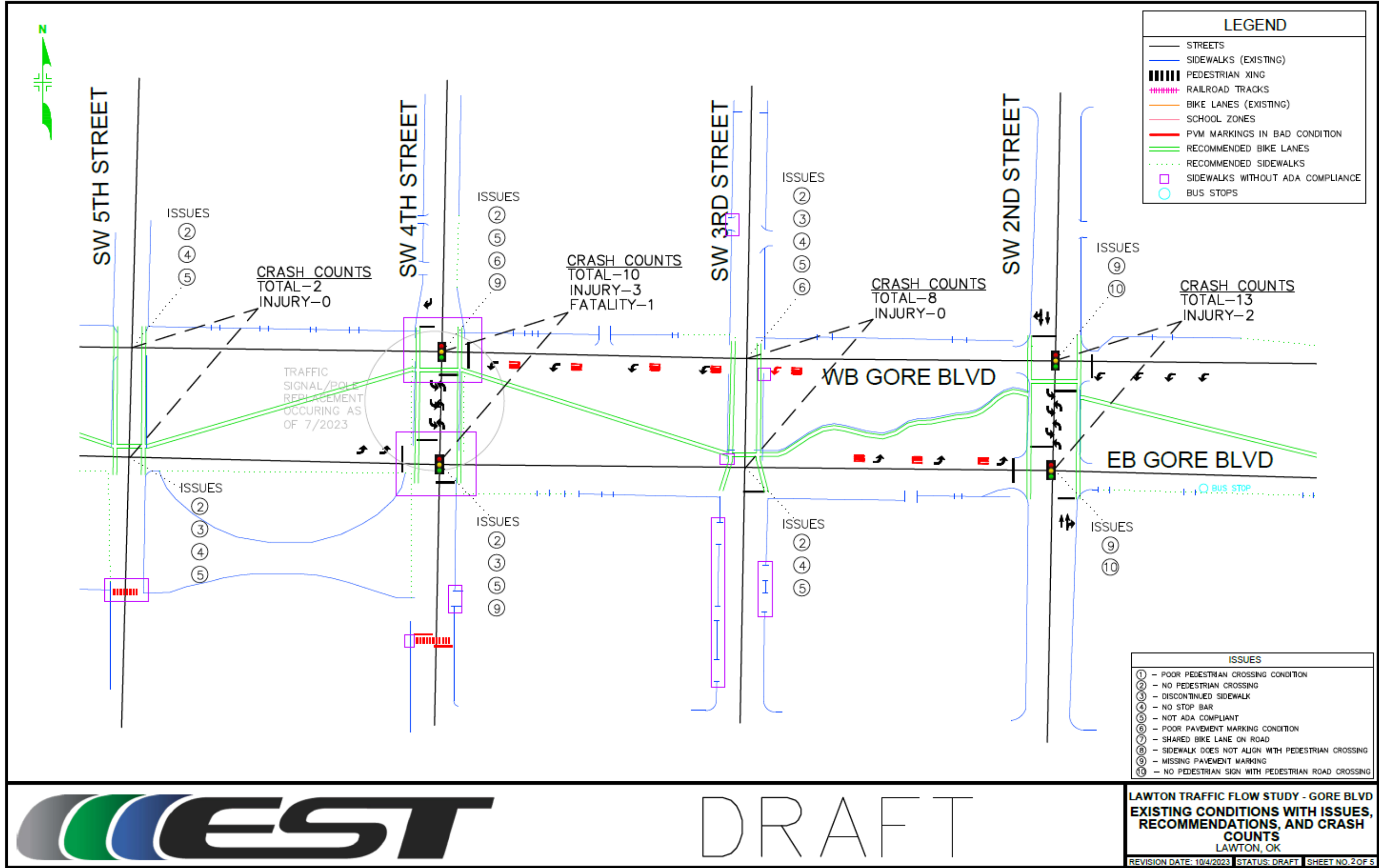


Figure 17 - Issues & Recommendations Along Corridor (page 2/5)

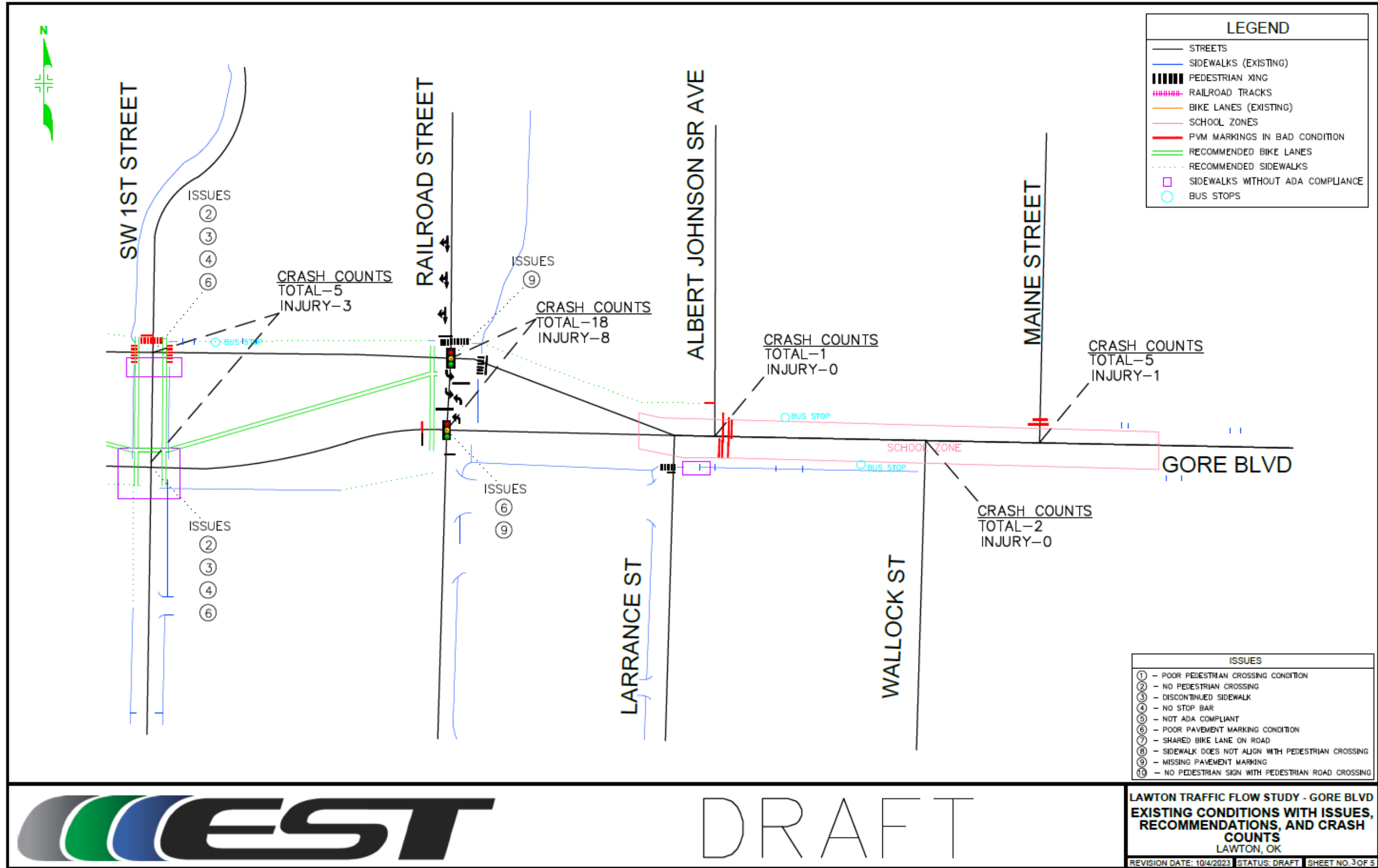


Figure 18 - Issues & Recommendations Along Corridor (page 3/5)

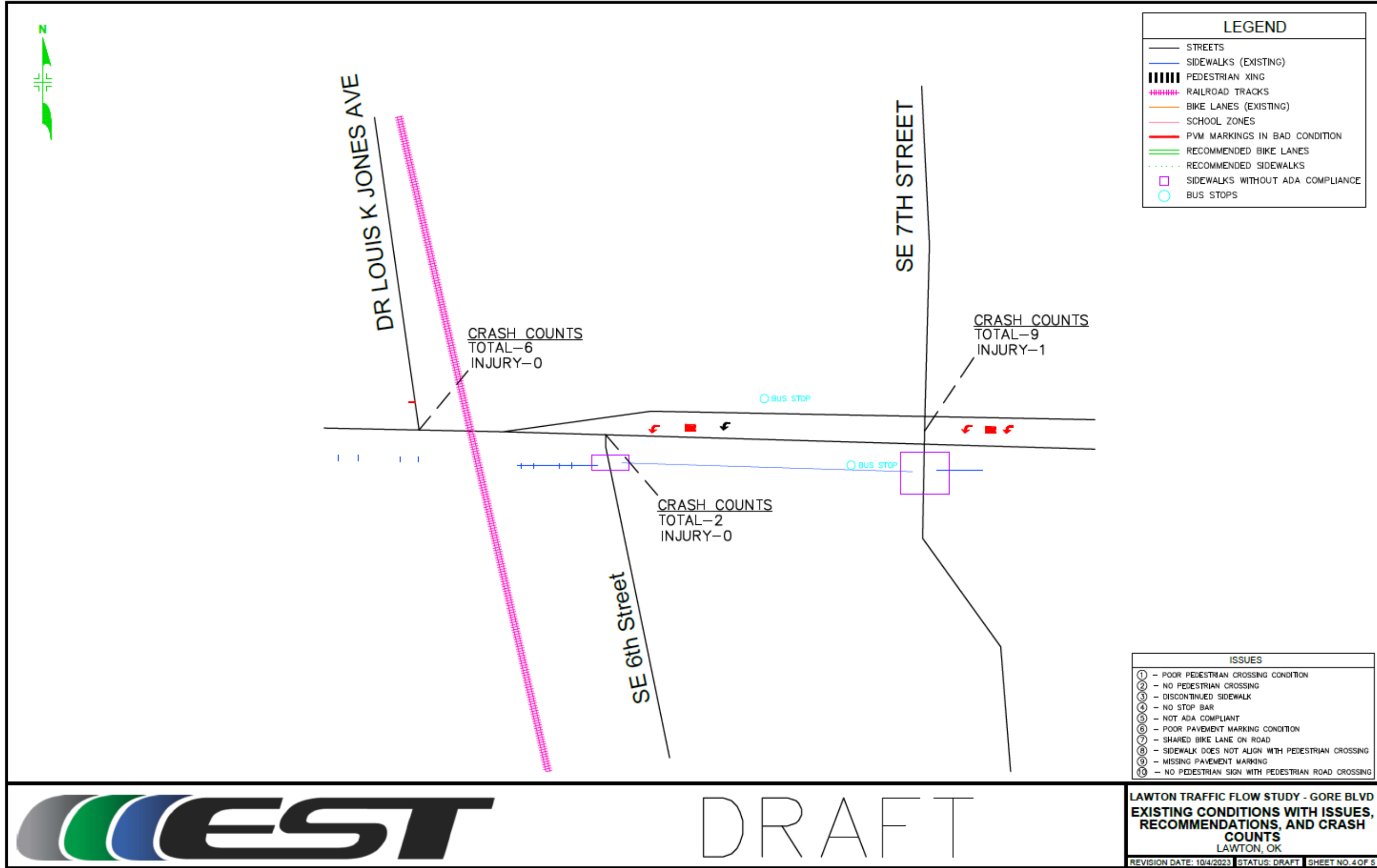


Figure 19 - Issues & Recommendations Along Corridor (page 4/5)

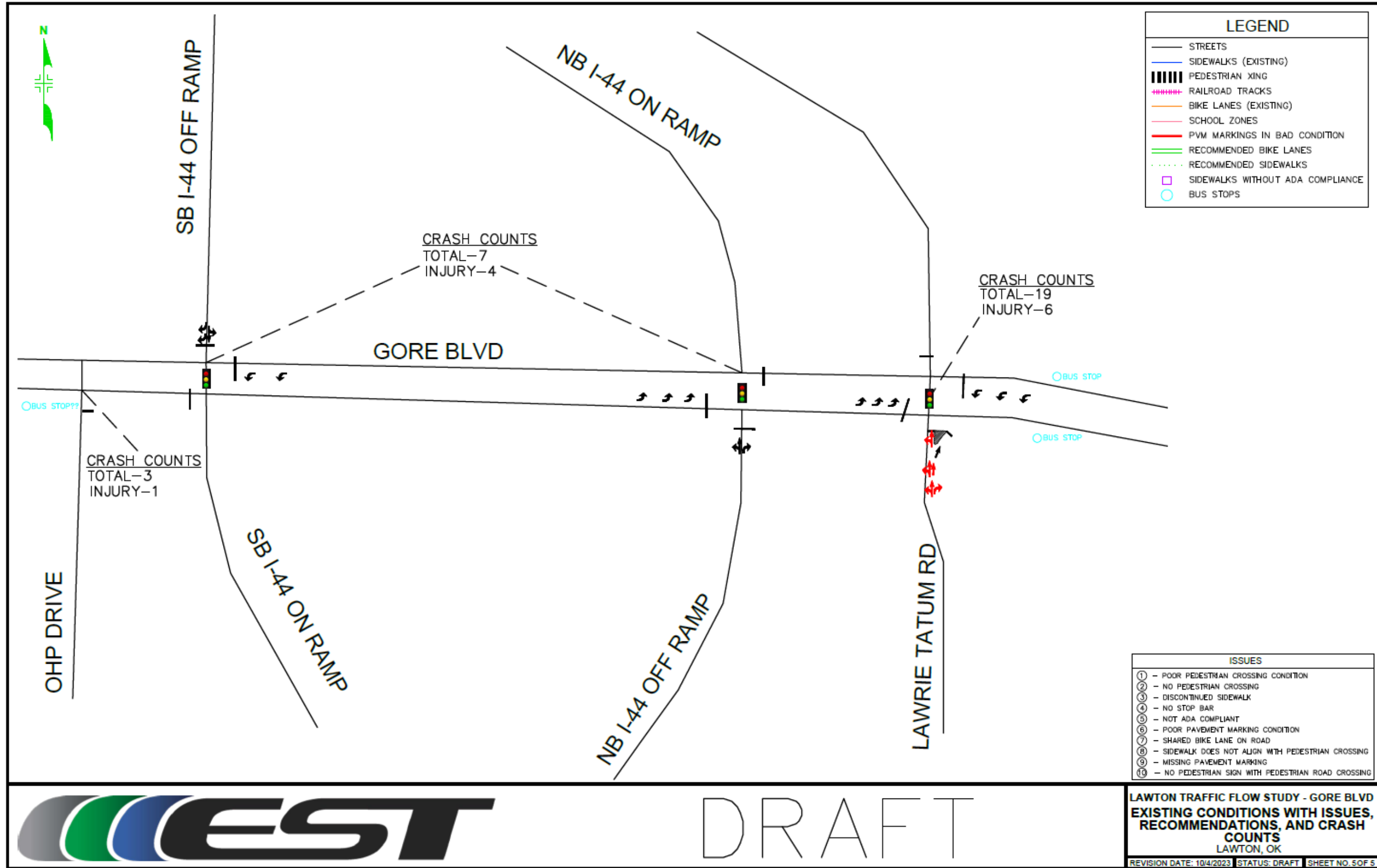


Figure 20 - Issues & Recommendations Along Corridor (page 5/5)

7 Access Management

A brief review of access frequency, spacing, and design was conducted. The following overall potential improvements were identified:

1. The construction of Auxiliary Lanes in both directions throughout the project corridor will substantially improve Safety, Mobility, and Capacity. This will accommodate turning movements (right in & right out) at all access points and intersections and provide an exclusive lane for bus stops and additional street parking.
2. Limited widening will accommodate turning movements (RI & RO) at selected feasible access locations (including intersections) and provide exclusive lanes for bus stops and additional street parking where space and roadway geometry would allow.
3. The damaged curb and gutters along the project corridor need to be repaired and reconstructed to eliminate all the unauthorized access locations.

See **Figure 21 through Figure 25** for access management recommendation locations on North Side Access points (NSA) and South Side Access points (SSA). If so decided, a comprehensive access review and analysis should be considered.

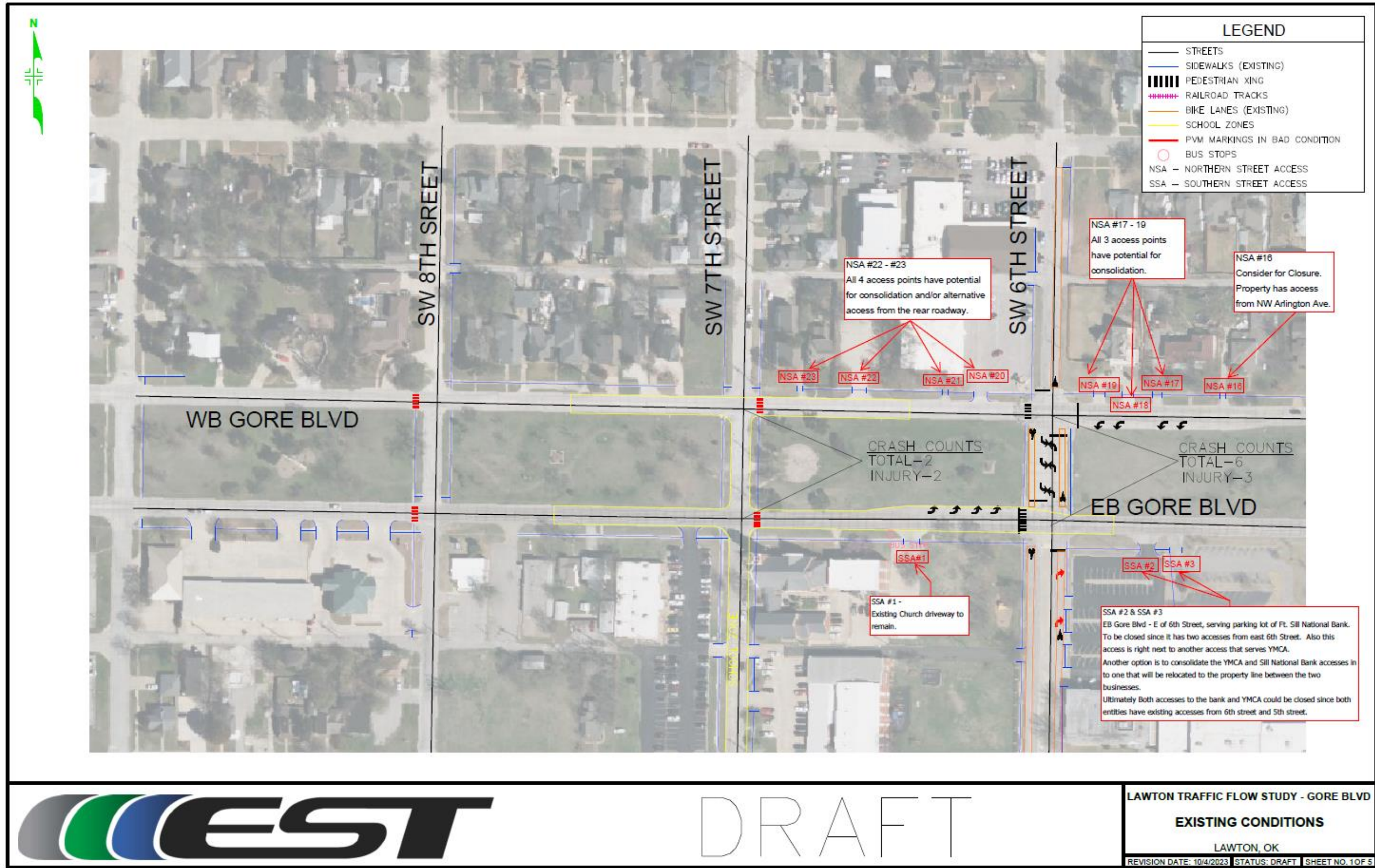


Figure 21 - Access Management Suggestions (page 1/5)

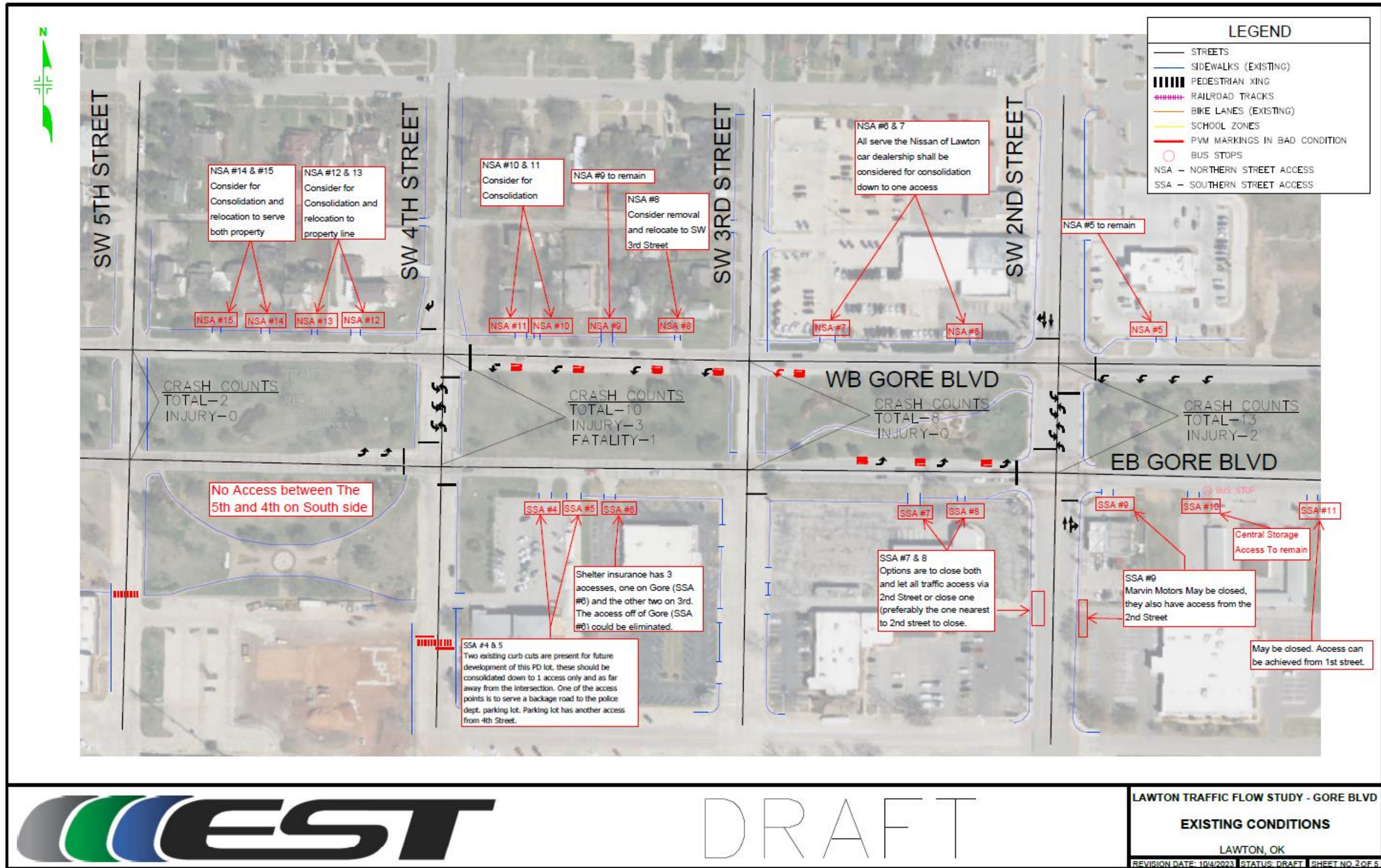


Figure 22 - Access Management Suggestions (page 2/5)

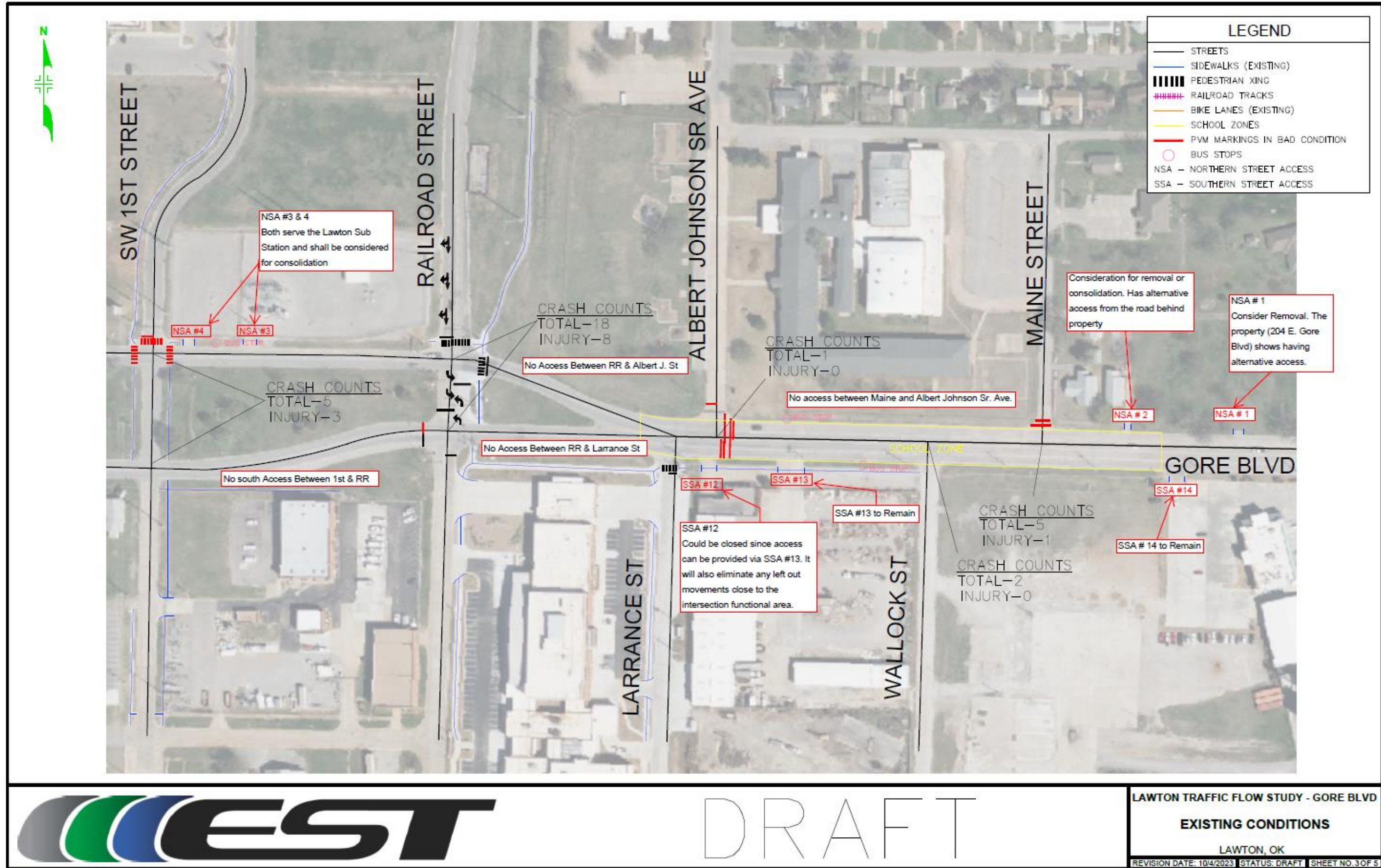


Figure 23 - Access Management Suggestions (page 3/5)

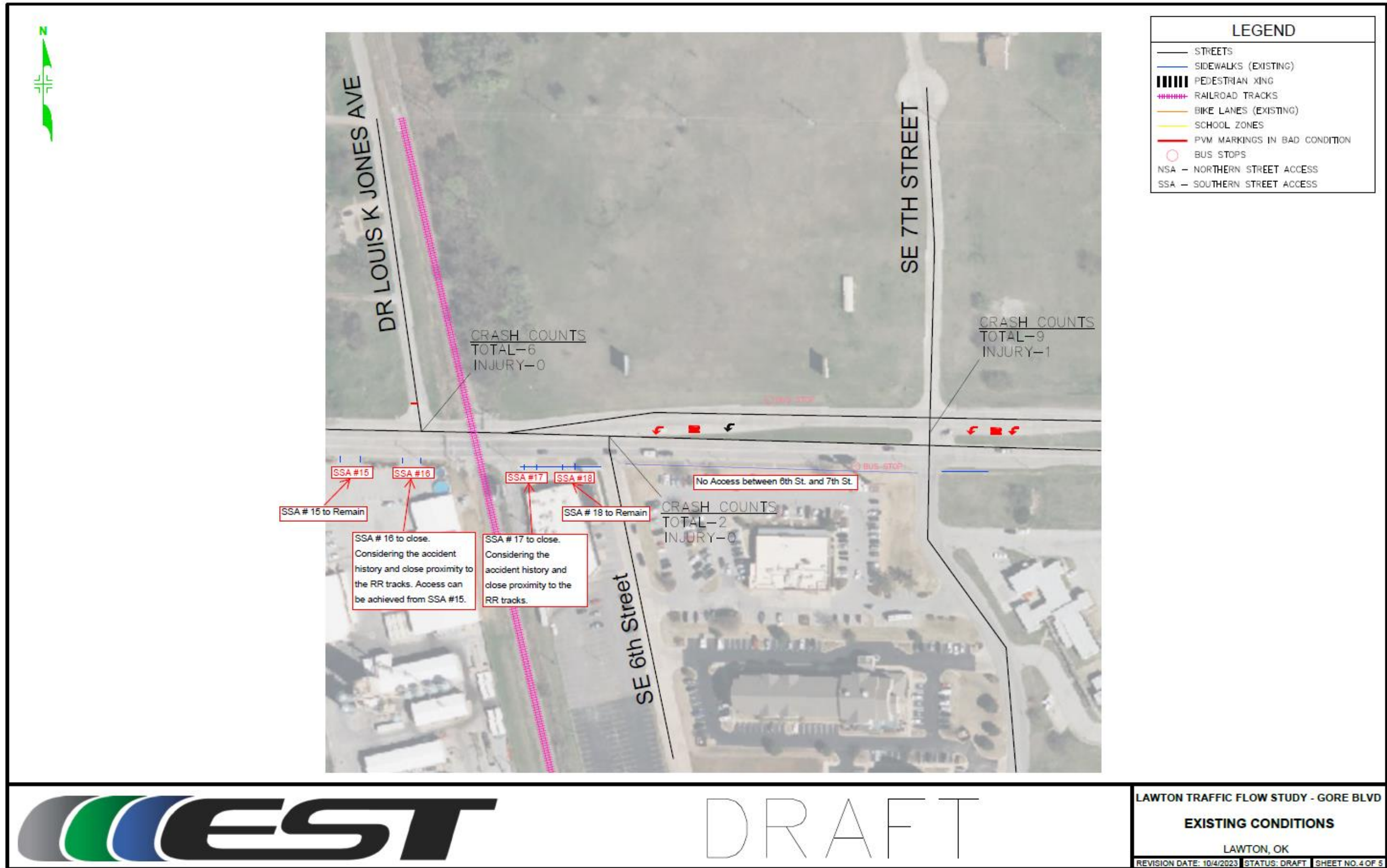


Figure 24 - Access Management Suggestions (page 4/5)



Figure 25 - Access Management Suggestions (page 5/5)

7.1 Specific Location Access Management Recommendations

7.1.1 Closures

SSA #2: Access to the parking lot of Ft. Sill National Bank to be closed. It has two accesses from East 6th Street. Another option is to consolidate the YMCA and Sill National Bank access into one that will be relocated to the property line between the two businesses. Both Accesses may be removed since YMCA traffic can access it via 5th Street.

SSA #6: Shelter Insurance has 3 accesses: one on Gore Blvd (SSA #6) and the other two are on 3rd Street. This access off Gore could be closed.

NSA #1 & NSA #2: These are both serving properties with available alternative access from the back road. These access locations could be considered for removal or consolidation.

NSA #8: Consider removal and relocate to SW 3rd Street.

NSA #16: Consider removal and provide access from rear access.

7.1.2 Consolidation

SSA #2 & SSA #3: Serving parking lot of Ft. Sill National Bank may be consolidated to one access.

SSA #4 & SSA #5: Two existing curb cuts are present for future development of this Police Department lot. these should be consolidated down to 1 access only and as far away from the intersection. One of the access points (SSA #5) is to serve as a back road to the police dept. parking lot. The parking lot has another access from 4th Street.

NSA #3 & NSA #4: Both serve the Lawton Sub Station and shall be considered for consolidation.

NSA #6 & NSA #7: Both serve the Nissan of Lawton car dealership and should be considered for consolidation down to one.

NSA #10 & NSA #11: Should be considered for consolidation.

NSA #12 & NSA #13: Should be considered for consolidation and relocation to the shared property line (Shared Access).

NSA #14 & NSA #15: Should be considered for consolidation and relocation to the shared property line (Shared Access).

NSA #17, #18, & #19: All three access points shall be considered for consolidation and/or alternative rear access.

NSA #20, #21, #22, & #23: All four access points shall be considered for consolidation and/or alternative rear access.



8 Cost Estimate

Table 10 below presents cost estimates for the suggested enhancements, categorized by the type of improvement. Unit prices are based on recently historically completed projects and need to be verified at the time of design. The overall cost includes a 40% contingency allowance and additional expenses.

It is recommended that the city regularly maintains and refurbishes striping and signage across the corridor.



Table 10 – Cost Estimate for the Recommended Improvements

No	Items	Description	Measurement	Quantity	Unit	Unit Cost	Cost**	Total Cost**		
1	Signal Timing	Optimized Coordinated Signal Timing/Phasing Implementation								
2	Railroad and Gore Blvd	Adding 175ft of 12ft Left Turn Lane Pockets on Gore Blvd-WB&EB	Pavement and Subgrade @ \$125/SY X 12/9 = \$170/LF	350	LF	\$170	\$83,300	\$83,300		
3	Ped/Bike Facility	Adding/removal of existing shared Bike/Ped Facility in the Median from Railroad to 8th Street (including bike/ped crossing at the median intersections)	2965 LF longitudinal	3294	SY	\$100	\$461,222	\$838,538		
			1890 LF widening existing sidewalk along median crossing *	2100	SY		\$294,000			
			415 LF widening existing 6 ft sidewalk on the median from 2nd to 3rd St. *	461	SY		\$64,556			
			Removal of existing facility (1890 ft of 4ft sidewalk and 415 ft of 6ft sidewalk)	1117	SY	\$12	\$18,760			
		Constructing missing section of sidewalk and widening (including removal of) the existing (avg. 5ft) sidewalk to a width of 10 feet on the north and south sides of Gore Blvd to create a shared bike and pedestrian facility (Railroad to 8th street)	2395 LF Northside: longitudinal *	2661	SY	\$100	\$372,556	\$1,381,840		
			1205 LF Northside: missing sidewalk segment	1339	SY		\$187,444			
			1714 LF Southside: longitudinal *	1904	SY		\$266,622			
			1342 LF Southside: missing existing sidewalk	1491	SY		\$208,756			
			1890 LF widening existing sidewalk along median crossing *	2100	SY		\$294,000			
			Removal of existing facility ((2395+1714) ft of 5ft sidewalk and 1895 ft of 6ft sidewalk)	3123	SY		\$12		\$52,463	
		4	Intersection	ADA	Total of 8 crossing with 2 intersection at each crossing on Gore Blvd	64	Each	\$15,000	\$1,344,000	\$1,689,174
				Crosswalk***	8 Intersections	1088	SF	\$14	\$21,569	
Stop Bar ***	8 Intersections			328	SF	\$14	\$6,502			
Sign Panel (No Ped X-ing / USE CROSSWALK	8 Intersections			120	SF	\$30	\$4,961			
Sign Panel Post (No Ped X-ing / USE CROSSWALK	8 Intersections			272	LF	\$28	\$10,841			
Sign Panel (Ped Xing Symbol)	8 Intersections			288	SF	\$32	\$13,027			
Sign Panel Post (For Ped Xing Symbol Sins)	8 Intersections			352	LF	\$28	\$14,030			
Pedestrian signal heads/Push buttons at signalized intersections	Push button pole			48	Each	\$2,485	\$166,992			
	Push button sign & push button			48	Each	\$775	\$52,080			
	Ped traffic signal heads			48	Each	\$821	\$55,171			

* Assumes removing and replacing sidewalk if less than 10 ft wide

** Including 40% other cost and contingency

*** Quantity and cost are based on durable (plastic) pavement marking

Note1: Intersection and ped/bike improvements are not included in this table for the section East of the Railroad to the east of NE Lawrie Tatum Road.

Note 2: This cost estimate does not include potential access improvement.

Note 3: installation or refurbishing pavement markings other than the items noted above are not included in the cost estimate.



List Of Appendixes

Appendix A: Memo #2: Traffic Data Development and Design Traffic Data

Appendix B: Detailed analysis of individual intersections and Synchro Reports

Appendix C: Detailed analysis of corridor and SimTraffic Reports

ITEM NO. _____
MEETING DATE February 6, 2024

LMPO TRANSPORTATION TECHNICAL COMMITTEE AGENDA ITEM COMMENTARY

ITEM TITLE: Receive Kimley- Horn’s Presentation of the project background and Public involvement plan for the 2050 Metropolitan Transportation Plan, answer discussion questions, and provide feedback.

INITIATOR: Charlotte Brown, Director

STAFF INFORMATION SOURCE: Charlotte Brown, Director
Jonathan Stone, Assistant Director

BACKGROUND: The FY 2024 Unified Planning Work Program includes the task to issue an RFQ to hire and monitor a consultant to develop the 2050 Metropolitan Transportation Plan’s Travel Demand Model.

At the Meeting of June 6th the Transportation Policy Board added the development of the Metropolitan Transportation Plan to the RFQ, authorized the issuing of the revised RFQ, and named the Transportation Technical Committee as the designated body to review the responses and make a recommendation to the Policy Board.

The Technical Committee at their August 1, 2023 meeting selected a subcommittee to review the responses and make a recommendation. Staff received two responses to the RFQ. The subcommittee of the Transportation Technical Committee reviewed the responses of the two responding firms and conducted interviews. The Transportation Policy Board at their October 3, 2023 meeting selected Kimley-Horn and authorized the Director to negotiate a contract.

The Director has negotiated a contract with Kimley-Horn.

EXHIBITS: N/A

KEY ISSUES: N/A

FUNDING SOURCE: Section 5303 80%; LMPO 20%

RECOMMENDED ACTION: Receive a presentation from Kimley-Horn and provide necessary feedback.

EST - Traffic Flow Study

Check 1796	\$11,979.75	JUL23
Check 1812	\$23,605.00	AUG23
Check 1812	\$3,124.10	SEP23
Check 1814	\$572.40	OCT23
Check 1819	<u>\$35,322.00</u>	NOV23
	<u>\$74,603.25</u>	