Dawson Road Feasibility Study

Submitted To:



Caddo Parish Public Works

Submitted By:



September 8, 2025



Table of Contents

Executive Summary	
Project Background	
Project Objectives	3
Study Area Overview	3
Traffic Analysis	3
Conceptual Design Alternatives	5
Utility & Infrastructure Impacts	5
Geotechnical and Drainage Considerations	7
Environmental Considerations	7
Preliminary Cost Estimates	7
Tax Benefits	9
Benefit-Cost Analysis (BCA)	10
Analysis and Recommendations	12
Project Phasing and Implementation Strategy	14

Feasibility Study for Dawson Road Extension

Executive Summary

This report provides a preliminary feasibility assessment for the proposed Dawson Road Extension in northwestern Caddo Parish. The project scope consists of two elements: (1) construction of approximately 5,300 LF of new roadway extending Dawson Road southward to Resilient Way, and (2) rehabilitation and overlay of approximately 4,800 LF of the existing Dawson Road segment north to Jefferson Paige Road. The study is intended only to evaluate order-of-magnitude costs, conceptual traffic effects, and potential tax revenue impacts under assumed development scenarios.

It is critical to note that this assessment is not based on engineering design, survey data, geotechnical investigations, or confirmed development plans. All roadway sections, construction costs, growth projections, and tax revenue estimates are assumed values developed for planning purposes only. No guarantees of accuracy or constructability can be made at this stage, and the actual feasibility and financial justification of the project will depend heavily on conditions not yet verified.

Summary of Assumptions and Findings

- **Traffic Conditions:** Volumes and levels of service are based on modeled scenarios prepared by Neel-Schaffer, Inc., using regional travel demand forecasting. These results assume the extension exists and apply traffic demand to the extension but do not reflect confirmed development or future land uses.
- Design Scenario: The typical section used for cost estimating is conceptual only. Pavement thicknesses, drainage sizing, and Right-of-Way (ROW) requirements are placeholders and may change substantially following geotechnical testing, survey, and design.
- Utilities: No water, sewer, or natural gas infrastructure is confirmed in the corridor. Short-term development assumptions rely on private wells and septic systems, while long-term viability would depend on major developer-funded or city-funded utility extensions. These have not been designed or estimated.
- Cost Estimates: Construction and soft costs totaling approximately \$3.78M are preliminary allowances only. No quantities, detailed takeoffs, or bid pricing have been developed. The costs assume conservative unit rates, contingency, and mobilization, but actual construction bids may vary significantly.
- Benefit-Cost Analysis (BCA): Property tax revenues were projected under three hypothetical scenarios: (a) one home per year, (b) ten homes per year, and (c) an industrial park of three parcels. These scenarios are not based on confirmed developer interest, land use entitlements, or zoning approvals. They are illustrative only to show financial sensitivity to growth rates.
 - Low-density residential does not justify the project.

- Steady residential growth (10 homes per year) could achieve breakeven at Year 15-16.
- The industrial scenario alone does not recover costs within 20 years but could generate broader economic benefits not captured in the tax-only analysis.

Recommendations (Preliminary and Conditional)

- 1. Do Not Treat These Results as Final: All findings in this report should be treated as conceptual and subject to major revision. No commitment to construction or ROW acquisition should be made until survey, geotechnical exploration, and preliminary design are completed.
- 2. Advance Survey and Geotechnical Work: These are the critical next steps to establish whether the assumed roadway section, ROW needs, and drainage solutions are realistic.
- 3. Phase the Project: Begin with rehabilitation of the existing Dawson Road segment to deliver early, lower-risk improvements. Defer the extension until development commitments or rezoning activity confirm the corridor's growth potential.
- 4. **Re-Evaluate Financials at 30% Design:** The BCA should be revisited once design, survey, and development commitments are in place to determine whether assumptions still hold.
- 5. Tie Investment to Growth: If actual development lags behind assumed scenarios, the project's financial justification weakens substantially. Conversely, larger or higher-density developments than assumed here could improve the benefit profile.

This feasibility assessment is intended only as a planning-level exercise. The roadway typical section, unit costs, development scenarios, and financial outcomes are assumed and illustrative, not engineered or verified. While the extension has potential to generate long-term community and fiscal benefits under certain growth conditions, those conditions are speculative at this stage. Advancement of the project should proceed only after survey, geotechnical, and preliminary engineering confirm feasibility, and after development commitments demonstrate that the assumed tax revenues are realistic.

Project Background

Dawson Road currently terminates into a dead end, limiting access to undeveloped land which could allow development of residential neighborhoods, single family residences, or re-zoned property for industrial or commercial developments. The area has presented opportunities for development and has prompted the need to evaluate the viability of extending the roadway.

Project Objectives

The extension is being proposed to:

- Improve north-south connectivity in northwestern Caddo Parish
- Reduce traffic on parallel routes such as Pines Road and Jefferson Paige Road
- Open access to future development parcels zoned R-A or re-zoning opportunities
- Improve emergency response routes

Study Area Overview

Existing Network:

The study area includes several roads such as US 79 (Greenwood Rd), Jefferson Paige Rd, Dawson Rd, and Resilient Way. Dawson Rd is functionally classified as a local road providing direct access to adjacent single-family residences and oil/gas well pads. It does not serve through traffic and connects only to the local road network. See project location exhibit in Appendix A.

Land Use:

The adjacent parcels include residential land, agricultural, and one commercial property. Zoning maps indicate future development is planned along the extension corridor.

Environmental Constraints:

- FEMA Flood Zones: Zone X Area of Minimal Flood Hazard
- Wetlands: None in proposed road extension limits

Traffic Analysis

Below is a summary of the findings based on the traffic analysis completed by Neel-Schaffer on August 19, 2025. The full technical memorandum with project outline, data, and figures can be found in Appendix B. See excerpt from traffic analysis below for a summary on how traffic volume projections were determined:

"Currently, NLCOG's 2018 Base and 2045 Staged Improvement Program (SIP) travel demand models do not show Dawson Road being extended to US 79 (Greenwood Road). Therefore, NSI had to add model links for this extension and re-run the models to generate traffic estimates for Dawson Road." - Neel-Schaffer, Inc. Memorandum dated 8/19/25

Existing Conditions:

- Average Daily Traffic (ADT): 4,798 (2018 Base year model near US 79 assuming extension was built. This was needed to show volume changes from existing to projected forecasts since the lack of extension would lead to no volume data.)
- Level(s) of Service (LOS):
 - Jefferson Paige Rd @ Dawson Rd
 - AM/PM Westbound Left A/A
 - AM/PM Northbound A/A
 - o US 79 @ Resilient Way
 - AM/PM Eastbound Left A/A
 - AM/PM Southbound B/B

Forecast Conditions (Build Scenario):

- Forecast horizon year: 2035
- Expected ADT on extension: 6,065
- Level(s) of Service (LOS):
 - Jefferson Paige Rd @ Dawson Rd
 - AM/PM Westbound Left A/A
 - AM/PM Northbound A/A
 - US 79 @ Resilient Way
 - AM/PM Eastbound Left A/A
 - AM/PM Southbound C/B

Below is an excerpt from the traffic analysis with concluding statements:

"Based on the limited information provided, it is assumed that if Dawson Road were to be extended southward to US 79 (Greenwood Road) via Resilient Way, the projected ADT along the Dawson Road extension would be approximately 6,065 in 2035. Based on the analyses, it is assumed the intersections of Jefferson Paige Road at Dawson Road and US 79 (Greenwood Road) at Resilient Way would operate at acceptable levels of service with minimal delays.

Conceptual Design Alternatives

Build Scenario – Extension from Dawson Rd to Resilient Way:

The below typical section (widths, thicknesses, etc.) were determined per discussions with Caddo Parish. The typical section will be evaluated in greater detail and possibly modified once a geotechnical engineer is engaged in the upcoming phases of work.

Typical Section:

- 2-lane asphalt road with 11' travel lanes
 - o Minimum 8.5" of stone on lime treated subgrade OR 12" Soil Cement
 - o 2" Base Course
 - 1.5" Wearing Course
- 1'shoulders
- Drainage ditches and cross drains
- 60' Right-of-Way
- Geogrid support for stone base included in pricing

No Build Alternative:

Maintains current roadway network. Development potential is limited without access improvements. Homeowners in adjacent areas continue to have risks of stranding during wet weather events per information provided by Caddo Parish.

Utility & Infrastructure Impacts

Currently, no utilities exist in the proposed extension limits. Utilities such as water, sewer, and power are not included in the scope used to develop preliminary construction costs. Other utilities such as telecommunications would be included by respective utility owners at Caddo Parish's discretion. The selected Right-of-Way width based on Caddo Parish development standards should provide adequate space for addition of these utilities.

The proposed 5,300 LF road extension is located within unincorporated Caddo Parish. Existing public utility availability in the immediate project area is limited, and no verified records of a gravity sewer network or municipal water distribution system have been identified at this time.

Water Supply

The most probable short-term service option for individual residential development is the use of private water wells.

If subdivision-scale growth occurs along the corridor, it may be feasible to extend and connect to the City of Shreveport's water distribution network, which has established infrastructure within several miles of the proposed project terminus. This would require coordination with the City and potentially the creation of a water district or developer-driven infrastructure extensions.

Sewer

- In the absence of a known gravity sewer network, on-site septic systems are assumed for individual homes in the near term.
- For larger-scale residential development, extension of Shreveport's gravity sewer or force main system may be possible. Connection would depend on available downstream capacity, permitting, and cost of extension. Alternatives such as community package plants could also be considered as an interim solution.

Other Utilities

- Electric power is expected to be available through existing overhead distribution lines serving the rural corridor, though extensions may be needed to reach new subdivisions.
- Natural gas service is not currently confirmed and may not be present; reliance on propane service is assumed unless developer-funded extensions occur.
- Telecommunications (fiber or cable) may be limited, though rural broadband initiatives may support future connectivity.

Summary

In the short term, individual development along the corridor would likely rely on wells and septic systems. For larger residential subdivisions or commercial activity, the viability of the road extension as a growth corridor will depend on utility expansions and connections to the City of Shreveport's water and sewer systems. These connections represent a significant cost but also enable higher-density, higher-value development that would maximize both community benefit and parish tax revenue.

Geotechnical and Drainage Considerations Soils:

- Based on NRCS/USDA data, soils consist of Eastwood fine sandy loam (1-5% slopes) and Keithville very fine sandy loam (1-5% slopes) through the proposed alignment.
- A geotechnical report with boring logs, groundwater table data, preliminary Rvalue/CBR, recommendations for pavement section alternatives, trench backfill, and embankment compaction/stabilization will be minimum scope required to perform engineering design for proposed road project and should be included in the next phase of development.
- Full Soil Resource Report for the project area can be found in Appendix C.

Drainage:

- Install roadside drainage ditches to appropriate outfalls with proposed roadway
- Utilize cross drains where needed to collect drainage and convey similar to existing drainage patterns
- Culverts sized based on existing drainage patterns and assumption that developments will detail stormwater runoff under no-impact conditions.

Environmental Considerations

An environmental study was completed during a previous assessment in 2015. The project area has not changed since this previous assessment. The study found no considerable concerns related to environmental impacts.

Preliminary Cost Estimates

A preliminary construction cost opinion has been prepared for the proposed roadway improvements. The estimate is based on a typical rural two-lane asphalt section with stabilization, shoulders, drainage ditches, and associated clearing, as well as a separate portion of existing roadway to be milled and overlaid. At this stage, no detailed design or quantity take-off has been performed; costs are order-of-magnitude only and intended for feasibility evaluation.

Estimated Construction Costs

New Construction (5,300 LF): Approximately \$413 per LF (\$2.19M total)

- Assumptions: 12" lime-treated subgrade with stone base, geogrid reinforcement, 2" asphalt base course, 1.5" asphalt wearing course, 1' shoulders, drainage ditches and cross-drains, full clearing and grubbing of wooded ROW, mobilization, and contingency.
- Mill & Overlay (4,800 LF): Approximately \$209 per LF (\$1.00M total)
 - Assumptions: mill 2" of existing asphalt, overlay with 3" hot-mix asphalt, minor shoulder tie-ins, striping, mobilization, and contingency.
- Combined Scope (10,100 LF): Approximately \$316 per LF (\$3.19M total).

Benchmarking

For comparison, recent Louisiana Department of Transportation and Development (LADOTD) bid tabs for similar rural roadway projects involving lime treatment, base course, and overlay have produced contract awards in the \$150-\$300 per LF range for new construction, and \$90-\$140 per LF for mill & overlay. National reports cite costs for new rural two-lane roads in the \$380–\$570 per LF range. The preliminary estimates used here fall within or below those ranges, indicating a conservative but realistic allowance for planning purposes. This estimate is preliminary in nature and based on generalized unit costs, typical roadway sections, and broad assumptions for mobilization, drainage, clearing, and contingency.

It is important to remember that the costs used to determine \$/LF costs are fully burdened and include 10% mobilization and 10% contingency assumptions to be conservative.

Additional Project Costs

No engineering design, detailed survey, or geotechnical analysis has been completed. Actual construction costs will vary depending on final design, site conditions, permitting requirements, market conditions, and contractor bids.

To estimate these costs for purpose of determining financial feasibility, some general assumptions were made about engineering design costs and supplemental surveys.

- Engineering (preliminary and final design, construction administration) = \$250,000
- Topographic & boundary surveys = \$50,000
- Geotechnical exploration & report = \$40,000
- ROW acquisition & closing/legal/appraisals (conservative) = \$250,000

These additional "soft costs" total \$590,000 and can be added to the construction costs for a total expected project cost of approximately \$3,780,000.

Tax Benefits

The proposed road extension is located outside municipal limits of the City of Shreveport but may connect into city limits near its terminus. Development along the corridor is expected to occur primarily as single-family residential subdivisions, generating additional property tax revenue for Caddo Parish and, if annexation occurs, potentially for the City of Shreveport as well.

For projection purposes, three development scenarios are considered:

- 1. 1 Home per Year conservative residential growth.
- 2. 10 Homes per Year moderate residential growth starting one year after road completion (continued to end of analysis period).
- 3. Industrial Park three moderate-sized properties generating \$50,000 per property per year.

Based on 2024 Caddo Parish millage rates (130.49 mills outside city limits):

- Owner-occupied homes: \$3,466/year for a \$340,750 home and \$4,356/year for a \$408,900 home
- Non-homestead homes: \$4,446/year for a \$340,750 home and \$5,338/year for a \$408,900 home

The projected tax revenue for each of the scenarios is calculated using the following formula and displayed in the table below.

Present worth converts future tax revenues to current value using a 5% discount rate:

$$PW = \sum_{n=1}^{N} rac{ ext{Annual Revenue}_n}{(1+i)^n}$$

where i = 0.05 and n = 1 to 10 years.

Projected Cumulative Tax Revenue (Present-Worth, Discount Rate 5%)									
Scenario	10-yr PW	15-yr PW	20-yr PW						
1 Home/Year (Owner-Occupied)	\$26,800	\$39,700	\$52,700						
1 Home/Year (Non-Homestead)	\$34,350	\$50,850	\$67,400						

Projected Cumulative Tax Revenue (Present-Worth, Discount Rate 5%)									
Scenario	10-yr PW	15-yr PW	20-yr PW						
10 Homes/Year (Owner-Occupied)	\$1,311,700	\$2,501,500	\$3,966,600						
10 Homes/Year (Non-Homestead)	\$1,421,790	\$2,718,000	\$4,298,900						
Industrial Park	\$1,077,000	\$1,518,000	\$1,917,000						

Tax revenues could vary significantly if development occurs at a larger scale than assumed in the base projection. Large single-family subdivisions could result in multiple homes constructed per year, which would multiply the annual and cumulative tax revenue proportionally. Similarly, if portions of the corridor are developed for industrial or commercial use rather than residential, assessed values and millage may differ from the residential assumptions. Industrial and commercial properties often have higher assessed values and different tax exemptions, which could lead to substantially higher annual revenues for the parish. Such development would also generate secondary economic benefits, including sales taxes, employment, and utility revenues, further enhancing the overall fiscal impact of the extension.

Based on the above analysis, incremental residential development along the proposed extension contributes to the parish tax base, while large subdivisions or commercial/industrial developments have the potential to generate substantial and sustained revenue increases for Caddo Parish.

Benefit-Cost Analysis (BCA)

The proposed road extension and overlay project involves 5300 linear feet of new construction along with an overlay of the existing roadway, with a total estimated construction cost of \$3.19 million. This section evaluates the economic justification of the project by comparing present-worth (discounted) benefits in property tax revenue to the estimated construction cost. This analysis is completed using the total project cost (Construction + Engineering/Survey/Geotech + ROW Acquisition) of \$3.78 million as well and follows.

Cost Comparison

The total estimated construction cost for the project is \$3.19 million. This value is used in the following formula to generate the Benefit-Cost ratio for each development scenario.

$$\mathrm{BCA} = \frac{\mathrm{PW}}{3,190,000}$$

The table below summarizes each development scenario and its associated BCA for each analysis period.

Benefit-Cost Table (Construction Costs Only)										
Scenario	10-yr PW	BCA (10-yr)	15-yr PW	BCA (15-yr)	20-yr PW	BCA (20-yr)				
1 Home/Year (Owner)	\$26,800	0.008	\$39,700	0.012	\$52,700	0.017				
1 Home/Year (Non-H)	\$34,350	0.011	\$50,850	0.016	\$67,400	0.021				
10 Homes/Year (Owner)	\$1,311,700	0.411	\$2,501,500	0.784	\$3,966,600	1.243				
10 Homes/Year (Non-H)	\$1,421,790	0.446	\$2,718,000	0.852	\$4,298,900	1.347				
Industrial Park (3 × \$50k/yr)	\$1,077,000	0.338	\$1,518,000	0.476	\$1,917,000	0.601				

The total estimated cost including construction costs and all supplemental design and land purchase costs for the project is \$3.78 million. This value is used in the following formula to generate the Benefit-Cost ratio for each development scenario.

$$BCA = \frac{PW}{3,780,000.000}$$

The table below summarizes each development scenario and its associated BCA for each analysis period.

Benefit-Cost Table (Total Project Costs)											
Scenario	10-yr PW	BCA (10-yr)	15-yr PW	BCA (15-yr)	20-yr PW	BCA (20-yr)					
1 Home/Year (Owner)	\$26,800	0.007	\$39,700	0.011	\$52,700	0.014					
1 Home/Year (Non-H)	\$34,350	0.009	\$50,850	0.013	\$67,400	0.018					
10 Homes/Year (Owner)	\$1,311,700	0.347	\$2,501,500	0.662	\$3,966,600	1.050					
10 Homes/Year (Non-H)	\$1,421,790	0.376	\$2,718,000	0.718	\$4,298,900	1.138					
Industrial Park (3 × \$50k/yr)	\$1,077,000	0.285	\$1,518,000	0.402	\$1,917,000	0.507					

Interpreting the above data, the incremental revenue from a conservative residential approach does not yield enough property tax revenue to justify the project. Steady residential growth accumulates substantial revenue and exceeds project cost around Years 15-16. However, the industrial park scenario with three moderate sized properties only yields a .507 BC ratio at Year 20 if total project costs are considered.

Additional Considerations

- i. Property tax revenue is only one measure of project benefits. Additional benefits include improved connectivity, public safety, increased sales and utility taxes, and enhanced economic activity along the corridor.
- ii. Larger or higher-value subdivisions, or commercial/industrial development, would further increase the present-worth of revenues and the economic return.
- Even under the moderate growth scenario, the project represents a long-term iii. investment that supports both fiscal and community benefits for Caddo Parish.

Analysis and Recommendations

The financial analysis indicates that the proposed 5,300 LF road extension along with existing roadway rehabilitation with an estimated project cost of \$3.78 million can generate measurable long-term benefits for Caddo Parish through increased property tax revenues. The benefit-cost analysis (BCA) demonstrates the following outcomes:

One home per year scenario: Property tax revenues grow slowly, with a present worth of \$492,000 to \$631,000 over 20 years. This falls well short of breakeven,

- indicating that very low-density residential growth alone cannot financially justify the project.
- Steady residential growth (10 homes per year): Revenues increase substantially, with present worth values of \$2.5M (owner-occupied) to \$2.7M (non-homestead) over 15 years and up to \$4.0M-\$4.3M by 20 years. Under this scenario, breakeven occurs around Year 15-16, demonstrating that the road extension can be financially justified if consistent subdivision growth materializes.
- Industrial development scenario: With three moderate-sized industrial properties generating an estimated \$50,000 in annual tax revenue each, cumulative revenues yield a present worth of approximately \$1.1M at 10 years, \$1.5M at 15 years, and \$1.9M at 20 years. This scenario approaches breakeven but does not surpass the \$3.78M cost within 20 years, although ancillary job creation and sales tax revenue (not included here) would strengthen the overall case.

Conclusions:

- The project is financially justified under steady residential subdivision growth, with a clear breakeven within 15–16 years and strong long-term returns beyond 16 years.
- The project is not justified under the industrial scenario based solely on property tax, but likely favorable when factoring in economic development multipliers such as employment, sales tax, and regional competitiveness. If the assumed development rate is accurate, then this ratio drops significantly when total project costs are evaluated.
- Mixed-use outcomes, combining residential and commercial development, would improve the revenue profile and reduce breakeven risk.

Recommendations:

- 1. Proceed with project planning if land use and development potential supports steady residential or mixed-use growth. The financial data demonstrates a positive long-term return under these conditions.
- 2. Consider phased implementation or complementary infrastructure planning to align capital costs with confirmed development commitments.
- 3. Monitor tax base growth and revisit financial assumptions at 5-year intervals to confirm that projected development is occurring and that the project continues to yield the expected return.

4. If growth projections remain limited to low-density housing, the project should not move forward on financial grounds alone, as the BCA would remain negative.

In summary, the proposed extension represents a strategic long-term investment in Caddo Parish's transportation and development network. Its financial viability is contingent on achieving moderate to strong growth along the corridor, particularly in the form of residential subdivisions or commercial/industrial sites. With these conditions in place, the project is expected to deliver sustained tax base growth and incremental economic benefits well beyond the initial investment horizon.

Project Phasing and Implementation Strategy

Given the \$3,780,000 total project cost (construction + engineering, survey, geotechnical, ROW acquisition), a phased approach can be utilized to reduce upfront financial risk while aligning infrastructure spending with confirmed development activity.

Phase 1 – Preliminary Engineering, Survey, and Geotechnical Work (Year 1–2)

- Complete topographic and boundary survey of the corridor (temporary access agreements can be used).
- Perform geotechnical borings and soils report.
- Develop preliminary (30%) roadway and drainage design.
- Estimated Phase 1 cost: Approximately \$165,000 (partial engineering + full survey/geotech, no ROW acquisition).

Phase 2 – Existing Dawson Road Rehabilitation (Year 2–3)

- Mill and overlay the existing 4,800 LF roadway segment.
- Improves safety, accessibility, and public perception with a lower-cost intervention (Approximately \$1,000,000).
- Provides a visible early benefit independent of new subdivision development.

Phase 3 – Dawson Road Extension (Year 4–6)

- Acquire full ROW for the 5,300 LF extension and complete remaining 70% of roadway design.
- Construct the new road segment after firm development commitments are made (e.g., subdivision plats filed or commercial parcels rezoned).

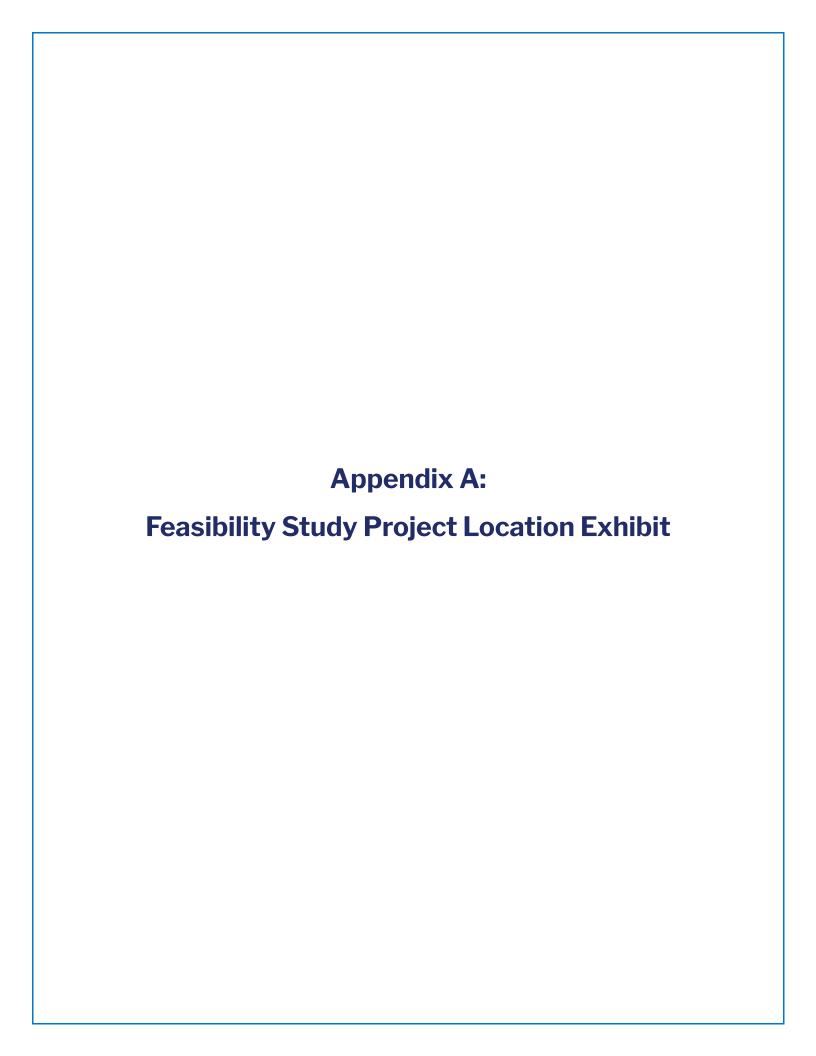
- Coordinate construction with utility providers to allow concurrent trenching for water/sewer if extensions are required by developers or the City of Shreveport.
- Construction cost: Approximately \$2,190,000
- Remaining design + ROW acquisition cost: Approximately \$175,000 (engineering) + \$250,000 (ROW) = \$425,000

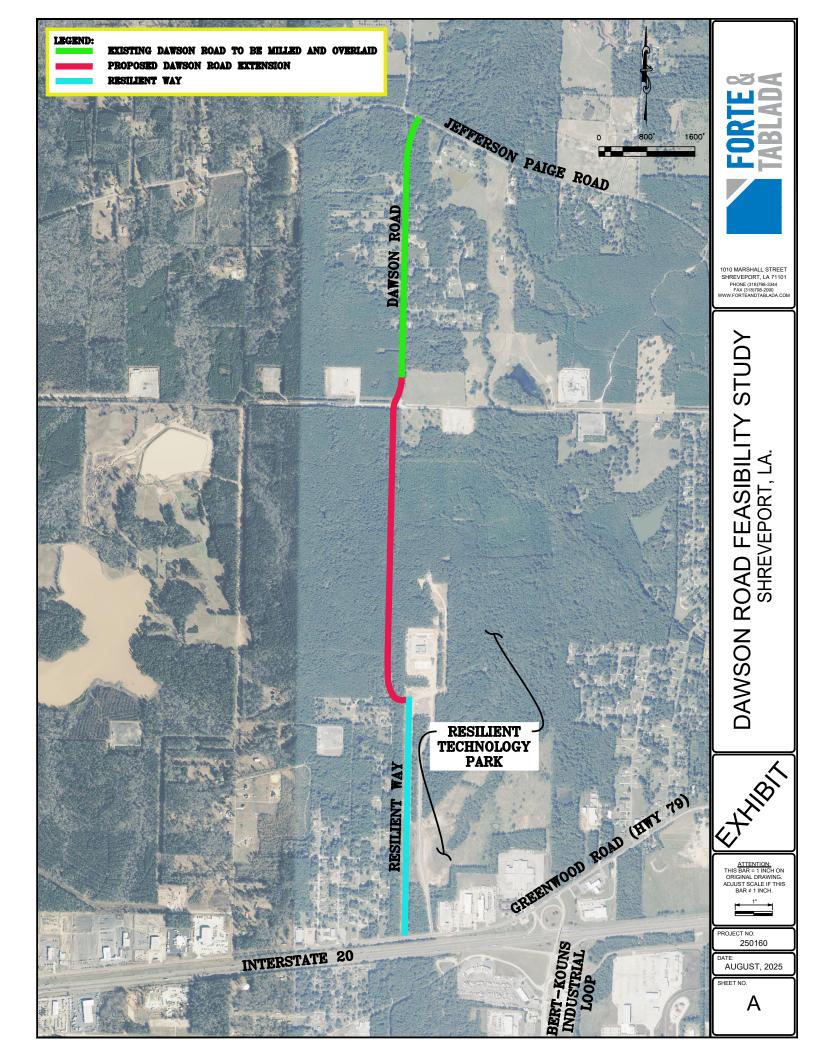
Phase 4 – Monitoring and Future Utility Integration (Year 6+)

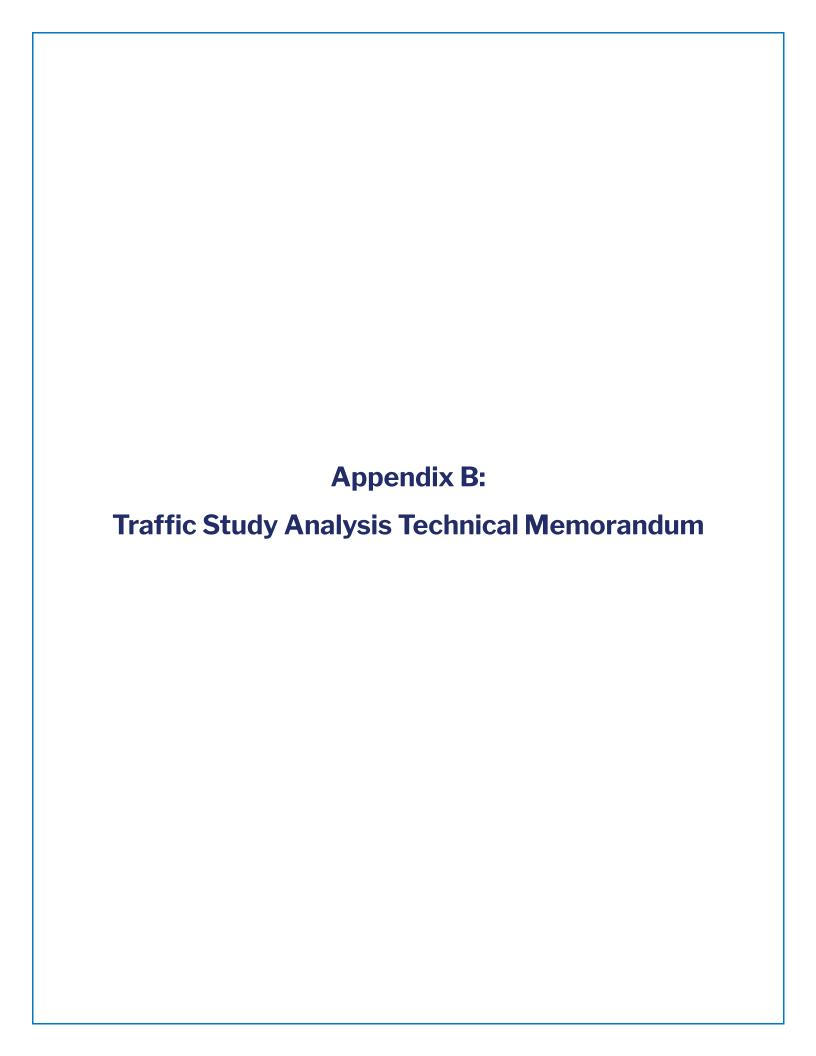
- Track subdivision build-out, property tax receipts, and utility expansion.
- If growth exceeds projections, evaluate adding turn lanes, signalization, or widening shoulders to accommodate higher traffic volumes.

Summary:

This phased approach spreads the \$3,780,000 total project cost over time, reduces upfront exposure, delivers early benefits through rehabilitation, and ties the larger investment in the new road extension to actual development. Delaying ROW acquisition and the majority of design until Phase 3 keeps capital aligned with confirmed development, minimizing financial risk.







NEEL-SCHAFFER

Technical Memorandum

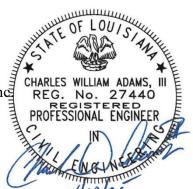
To: Jordan Pearson, P.E., Forte & Tablada

To: Jordan Pearson, P.E., Forte & Tablada

From: Charles Adams, P.E., PTOE, Neel-Shaffer, Inc.

Data: August 19, 2025

Re: Traffic Study for Dawson Road Extension



Purpose

Caddo Parish is exploring the feasibility of extending Dawson Road southward from its current terminus to US 79 (Greenwood Road) via Resilient Way. In an effort to assist the Parish in planning, NSI was tasked with developing volumes for the extension of Dawson Road and performing analyses at the intersections of Jefferson Paige Road and Dawson Road and at US 79 (Greenwood Road) and Resilient Way.

Existing Conditions

Dawson Road is currently a two-lane rural parish road that extends southward from Jefferson Paige Road for approximately 0.9 of a mile. Dawson Road primarily serves as a residential street; however, it is also used by oil and gas personnel to access wells. The posted speed limit along Dawson Road is 25 mph. Jefferson Paige Road is a two-lane parish road that extends generally east and west with a posted speed limit of 55 mph.

Resilient Way is a new two-lane road that extends northward from US 79 (Greenwood Road) for approximately 0.8 of a mile. Resilient Way serves the new Resilient Technology Park. Currently, the only development located within the Technology Park is the AEP Transmission Control Center. US 79 (Greenwood Road) is a two-lane state-maintained highway that extends east and west and has a posted speed limit of 45 mph.

Traffic Projection

Currently, NLCOG's 2018 Base and 2045 Staged Improvement Program (SIP) travel demand models do not show Dawson Road being extended to US 79 (Greenwood Road). Therefore, NSI had to add model links for this extension and re-run the models to generate traffic estimates for Dawson Road.

Both the 2018 Base Year and 2045 models were run to determine the expected traffic volumes on the extension of Dawson Road for each year. The volume plots are shown in Figure 1.





P: 225.924.0235 | F: 225.208.1132

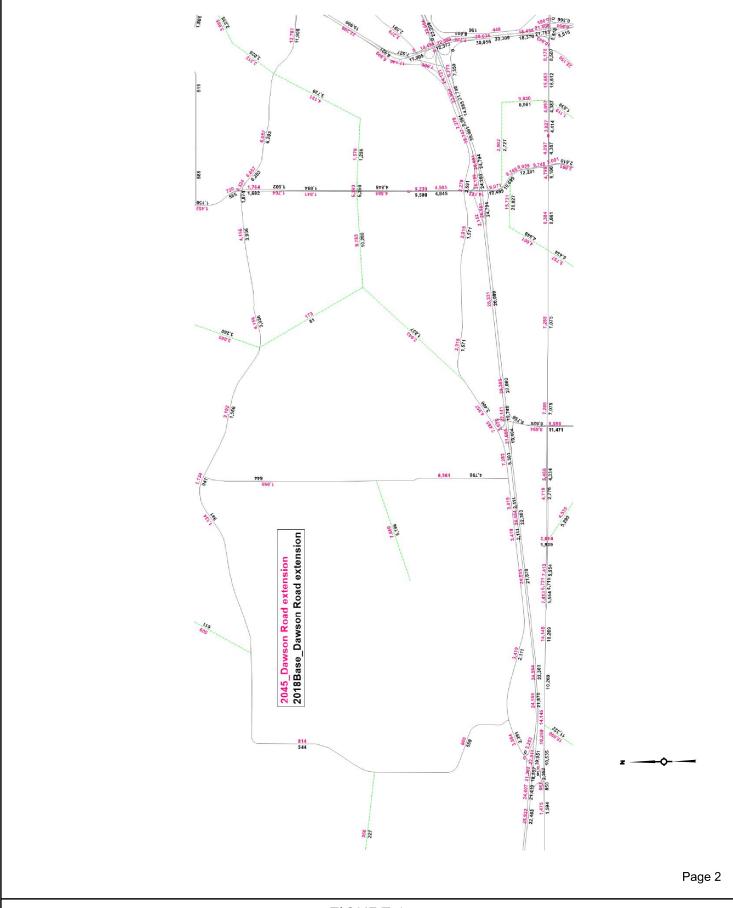


FIGURE 1
DAWSON ROAD EXTENSION
2018 BASE YEAR AND 2045 SIP

CADDO PARISH



Forecasted daily traffic volumes for the Dawson Road extension were extracted from both the 2018 and 2045 model runs. Since the extension does not currently exist, there are no actual traffic counts to validate against. Therefore, the model volumes were used directly for growth estimation.

Using the volumes from the 2018 and 2045 models, a compound growth rate was calculated for the Dawson Road extension to US 79 (Greenwood Road). The compound growth rate was calculated as follows:

Growth Rate =
$$\left(\frac{V_{future}}{V_{hase}}\right)^{\frac{1}{N}} - 1$$

where:

- V_{future} = future year volume from the modified model
- V_{base} = base year volume from the modified model
- N = number of years between base and future year

The 2018 Base year model volume for the Dawson Road Extension near US 79 (Greenwood Road) is 4,798 vehicles/day.

The 2045 SIP model volume for the Dawson Road Extension near US 79 (Greenwood Road) is 6,961 vehicles/day.

The growth rate was then calculated as follows:

Dawson Road Extension Growth Rate =
$$\left(\frac{6,961}{4,798}\right)^{\frac{1}{27}} - 1 = 1.388\%$$

Using the growth rate of 1.388%, volumes for 2035 were calculated.

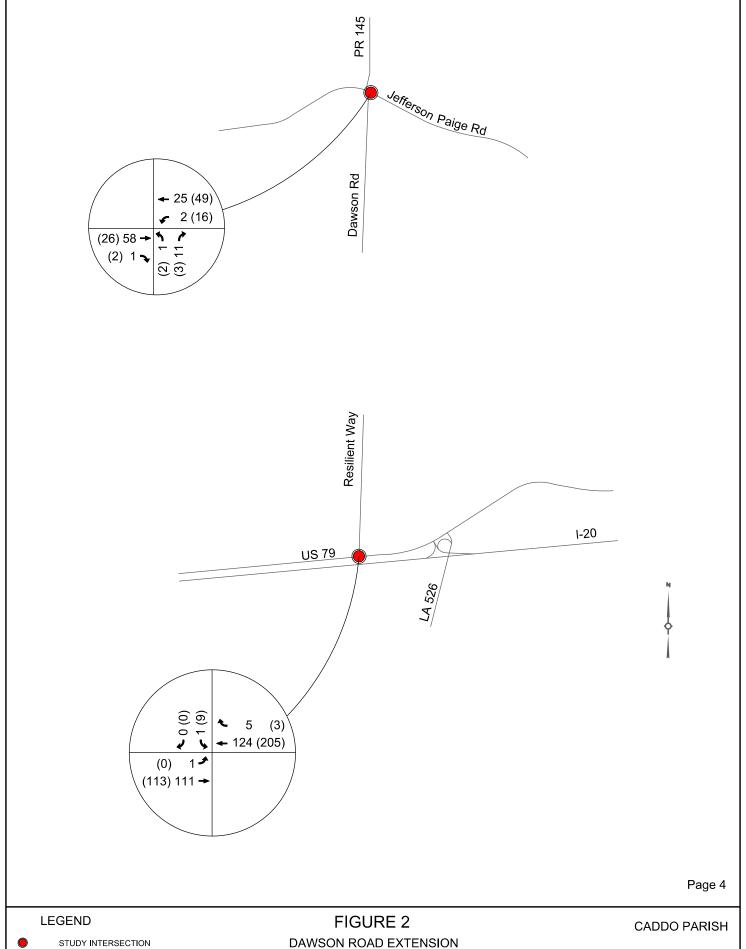
2035 Volume on Dawson Road Extension = $4,798*(1.01388^17) = 6,065$ vehicles/day

Analyses

Typically, the peak hour volumes range between 8-12% of the projected ADT. In order to estimate the 2035 peak hour volumes for the Dawson Road extension, NSI assumed the peak hour volumes would be 10% of the estimated 2035 volumes. The existing 2025 peak hour volumes are shown in **Figure 2**, and the projected 2035 peak hour volumes are shown in **Figure 3**.

Assuming the intersections of Jefferson Paige Road at Dawson Road and US 79 (Greenwood Road) at Resilient Way would be stop controlled intersections and the approaches would remain as a single lane, McTrans HCS 2024 software was used to perform Two Way Stop Control (TWSC) analyses for 2025 existing conditions and 2035 build conditions. The results of the TWSC analyses are shown in **Tables 1 & 2**.

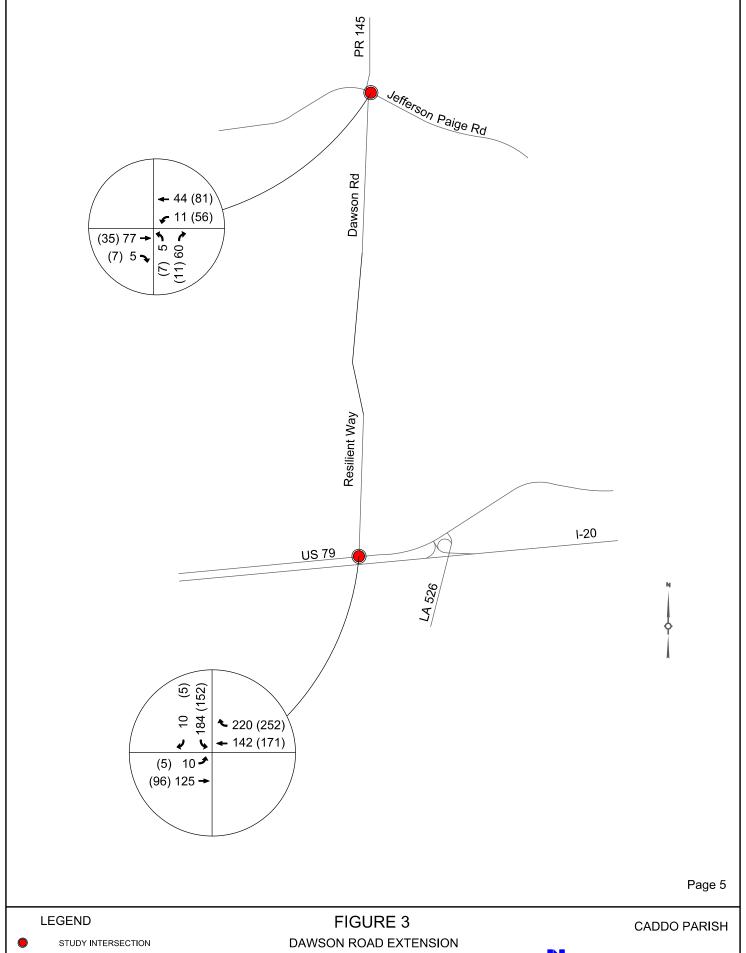




XX (XX) - AM (PM)

DAWSON ROAD EXTENSION **EXISTING PEAK HOUR VOLUMES**





XX (XX) - AM (PM)

2035 PEAK HOUR VOLUMES



Jefferson Paige Road at Dawson Road

The Level-of-Service (LOS) analysis for this intersection under existing and build conditions are presented in **Table 1**. The full analysis is presented in the **Appendix**.

Table 1: Jefferson Paige Road at Dawson Road

		\	WBL	NB			
Hour	Phase	LOS	Delay (s/veh)	LOS	Delay (s/veh)		
AM	2025 Existing	Α	7.3	Α	8.7		
Peak	2035 Build	Α	7.4	Α	9.1		
PM	2025 Existing	Α	7.3	Α	8.9		
Peak	2035 Build	Α	7.4	Α	9.3		

The results show that once Dawson Road is extended to US 79 (Greenwood Road), the intersection approaches should continue to operate at current levels of service during the peak hours.

US 79 (Greenwood Road) at Resilient Way

The Level-of-Service (LOS) analysis for this intersection under existing and build conditions are presented in **Table 2**. The full analysis is presented in the **Appendix**.

Table 2: US 79 (Greenwood Road) at Resilient Way

	21		EBL	SB			
Hour	Phase	LOS	Delay (s/veh)	LOS	Delay (s/veh)		
AM	2025 Existing	Α	7.5	В	10.3		
Peak	2035 Build	Α	8.4	С	18.3		
PM	2025 Existing	Α	7.7	В	10.8		
Peak	2035 Build	Α	8.4	В	14.9		

The results show that SB approach will experience a slight increase in delays during the peak hours; however, the intersection is expected to operate at acceptable levels of service.

Conclusion

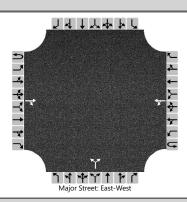
Based on the limited information provided, it is assumed that if Dawson Road were to be extended southward to US 79 (Greenwood Road) via Resilient Way, the projected ADT along the Dawson Road extension would be approximately 6,065 in 2035. Based on the analyses, it is assumed the intersections of Jefferson Paige Road at Dawson Road and US 79 (Greenwood Road) at Resilient Way would operate at acceptable levels of service with minimal delays.



Appendix

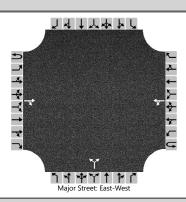


HCS Two-Way Stop-Control Report									
General Information		Site Information							
Analyst	C Adams	Intersection	Jefferson Paige Road at Dawson Road						
Agency/Co.	NSI	Jurisdiction	Caddo						
Date Performed	8/18/2025	East/West Street	Jefferson Paige Road						
Analysis Year	2025	North/South Street	Dawson Road						
Time Analyzed	AM Existing	Peak Hour Factor	0.85						
Intersection Orientation	East-West	East-West Analysis Time Period (hrs)							
Project Description	NS.19639 Dawson Road Extension								



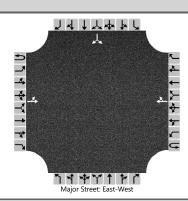
Vehicle Volumes and Adj	justme	nts														
Approach		Eastb	ound			Westl	oound		Northbound					South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			58	1		2	25			1		11				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										()					
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)						2					14					
Capacity, c (veh/h)						1544					991					
v/c Ratio						0.00					0.01					
95% Queue Length, Q ₉₅ (veh)						0.0					0.0					
95% Queue Length, Q ₉₅ (ft)						0.0					0.0					
Control Delay (s/veh)						7.3	0.0				8.7					
Level of Service (LOS)						А	Α				А					
Approach Delay (s/veh)						0.6			8.7							
Approach LOS							4			,	4					

HCS Two-Way Stop-Control Report									
General Information		Site Information							
Analyst	C Adams	Intersection	Jefferson Paige Road at Dawson Road						
Agency/Co.	NSI	Jurisdiction	Caddo						
Date Performed	8/18/2025	East/West Street	Jefferson Paige Road						
Analysis Year	2025	North/South Street	Dawson Road						
Time Analyzed	PM Existing	Peak Hour Factor	0.88						
Intersection Orientation	East-West	East-West Analysis Time Period (hrs)							
Project Description	NS.19639 Dawson Road Extension								



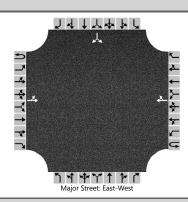
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			Westl	oound			North	bound		Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			26	2		49	16			2		3				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										()					
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)						56					6					
Capacity, c (veh/h)						1594					936					
v/c Ratio						0.03					0.01					
95% Queue Length, Q ₉₅ (veh)						0.1					0.0					
95% Queue Length, Q ₉₅ (ft)						2.5					0.0					
Control Delay (s/veh)						7.3	0.3				8.9					
Level of Service (LOS)						А	Α				Α					
Approach Delay (s/veh)						5	.6		8.9							
Approach LOS							4			-	4					

HCS Two-Way Stop-Control Report								
General Information		Site Information						
Analyst	C Adams	Intersection	US 79/80 at Resilient Way					
Agency/Co.	NSI	Jurisdiction	Caddo					
Date Performed	8/18/2025	East/West Street	US 79/80					
Analysis Year	2025	North/South Street	Resilient Way					
Time Analyzed	AM Existing	Peak Hour Factor	0.77					
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25					
Project Description	NS.19639 Dawson Road Extension							



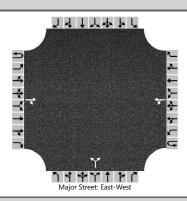
Vehicle Volumes and Ad	justme	nts														
Approach	T	Eastb	ound			Westl	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		1	111				124	5						1		0
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30
Delay, Queue Length, an	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)		1													1	
Capacity, c (veh/h)		1423													685	
v/c Ratio		0.00													0.00	
95% Queue Length, Q ₉₅ (veh)		0.0													0.0	
95% Queue Length, Q ₉₅ (ft)		0.0													0.0	
Control Delay (s/veh)		7.5	0.0												10.3	
Level of Service (LOS)		А	А												В	
Approach Delay (s/veh)		0	.1			•		•					10.3			
Approach LOS	A B							В								

HCS Two-Way Stop-Control Report											
General Information Site Information											
Analyst	C Adams	Intersection	US 79/80 at Resilient Way								
Agency/Co.	NSI	Jurisdiction	Caddo								
Date Performed	8/18/2025	East/West Street	US 79/80								
Analysis Year	2025	North/South Street	Resilient Way								
Time Analyzed	PM Existing	Peak Hour Factor	0.85								
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25								
Project Description NS.19639 Dawson Road Extension											



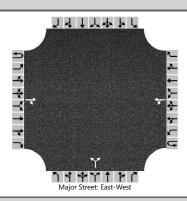
Vehicle Volumes and Ad	justme	nts														
Approach	T	Eastb	ound			Westl	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		0	113				205	3						9		0
Percent Heavy Vehicles (%)		3												0		3
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.40		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.50		3.33
Delay, Queue Length, an	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)		0													11	
Capacity, c (veh/h)		1316													629	
v/c Ratio		0.00													0.02	
95% Queue Length, Q ₉₅ (veh)		0.0													0.1	
95% Queue Length, Q ₉₅ (ft)															2.5	
Control Delay (s/veh)		7.7	0.0												10.8	
Level of Service (LOS)		А	А												В	
Approach Delay (s/veh)		0	.0			•							10.8			
Approach LOS	A B								В							

HCS Two-Way Stop-Control Report										
General Information		Site Information								
Analyst	C Adams	Intersection	Jefferson Paige Road at Dawson Road							
Agency/Co.	NSI	Jurisdiction	Caddo							
Date Performed	8/18/2025	East/West Street	Jefferson Paige Road							
Analysis Year	2035	North/South Street	Dawson Road							
Time Analyzed	AM Build	Peak Hour Factor	0.85							
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25							
Project Description	NS.19639 Dawson Road Extension									



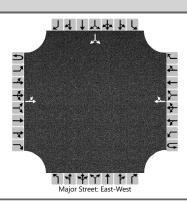
Vehicle Volumes and Adj	ustme	nts															
Approach	Eastbound					Westl	oound			North	bound			South	bound		
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0	
Configuration				TR		LT					LR						
Volume (veh/h)			77	5		11	44			5		60					
Percent Heavy Vehicles (%)						3				3		3					
Proportion Time Blocked																	
Percent Grade (%)										()						
Right Turn Channelized																	
Median Type Storage				Undi	vided												
Critical and Follow-up He	eadwa	ys															
Base Critical Headway (sec)						4.1				7.1		6.2					
Critical Headway (sec)						4.13				6.43		6.23					
Base Follow-Up Headway (sec)						2.2				3.5		3.3					
Follow-Up Headway (sec)						2.23				3.53		3.33					
Delay, Queue Length, an	d Leve	l of S	ervice														
Flow Rate, v (veh/h)						13					76						
Capacity, c (veh/h)						1491					947						
v/c Ratio						0.01					0.08						
95% Queue Length, Q ₉₅ (veh)						0.0					0.3						
95% Queue Length, Q ₉₅ (ft)						0.0					7.7						
Control Delay (s/veh)						7.4	0.1				9.1						
Level of Service (LOS)						A A			A								
Approach Delay (s/veh)							1.5			9.1							
Approach LOS	A A							Α									

HCS Two-Way Stop-Control Report											
General Information Site Information											
Analyst	C Adams	Intersection	Jefferson Paige Road at Dawson Road								
Agency/Co.	NSI	Jurisdiction	Caddo								
Date Performed	8/18/2025	East/West Street	Jefferson Paige Road								
Analysis Year	2035	North/South Street	Dawson Road								
Time Analyzed	PM Build	Peak Hour Factor	0.88								
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25								
Project Description NS.19639 Dawson Road Extension											



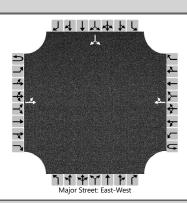
Vehicle Volumes and Adj	justme	nts														
Approach	Eastbound					Westl	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0					0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			35	7		56	81			7		11				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										()					
Right Turn Channelized																
Median Type Storage	Undivided															
Critical and Follow-up H	Headways															
Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				
Delay, Queue Length, an	d Leve	l of S	ervice	,												
Flow Rate, v (veh/h)						64					20					
Capacity, c (veh/h)						1553					863					
v/c Ratio						0.04					0.02					
95% Queue Length, Q ₉₅ (veh)						0.1					0.1					
95% Queue Length, Q ₉₅ (ft)						2.6					2.6					
Control Delay (s/veh)						7.4	0.3				9.3					
Level of Service (LOS)					A A			А								
Approach Delay (s/veh)						3	.2		9.3							
Approach LOS							Α			,	Α					

HCS Two-Way Stop-Control Report										
General Information		Site Information								
Analyst	C Adams	Intersection	US 79/80 at Resilient Way							
Agency/Co.	NSI	Jurisdiction	Caddo							
Date Performed	8/18/2025	East/West Street	US 79/80							
Analysis Year	2035	North/South Street	Resilient Way							
Time Analyzed	AM Build	Peak Hour Factor	0.77							
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25							
Project Description	NS.19639 Dawson Road Extension									



Vehicle Volumes and Adj	ustme	nts														
Approach	Eastbound				Westl	oound			North	bound			South	bound		
Movement	U	L	Т	R	U	L	Т	R	U	L	Ţ	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		10	125				142	220						184		10
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														(0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33
Delay, Queue Length, and	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)		13													252	
Capacity, c (veh/h)		1086													518	
v/c Ratio		0.01													0.49	
95% Queue Length, Q ₉₅ (veh)		0.0													2.6	
95% Queue Length, Q ₉₅ (ft)		0.0													66.6	
Control Delay (s/veh)		8.4	0.1												18.3	
Level of Service (LOS)		А	А												С	
Approach Delay (s/veh)	0.7												18.3			
Approach LOS	A												С			

HCS Two-Way Stop-Control Report										
General Information		Site Information								
Analyst	C Adams	Intersection	US 79/80 at Resilient Way							
Agency/Co.	NSI	Jurisdiction	Caddo							
Date Performed	8/18/2025	East/West Street	US 79/80							
Analysis Year	2035	North/South Street	Resilient Way							
Time Analyzed	PM Build	Peak Hour Factor	0.85							
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25							
Project Description	NS.19639 Dawson Road Extension									



Vehicle Volumes and Adj	ustme	nts															
Approach		Eastbound				Westl	bound			North	bound			South	bound		
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0	
Configuration		LT						TR							LR		
Volume (veh/h)		5	96				171	252						152		5	
Percent Heavy Vehicles (%)		3												3		3	
Proportion Time Blocked																	
Percent Grade (%)														(0		
Right Turn Channelized																	
Median Type Storage				Undi	vided												
Critical and Follow-up He	eadwa	ys															
Base Critical Headway (sec)		4.1												7.1		6.2	
Critical Headway (sec)		4.13												6.43		6.23	
Base Follow-Up Headway (sec)		2.2												3.5		3.3	
Follow-Up Headway (sec)		2.23											3.53				
Delay, Queue Length, and	d Leve	l of Se	ervice														
Flow Rate, v (veh/h)		6													185		
Capacity, c (veh/h)		1061													548		
v/c Ratio		0.01													0.34		
95% Queue Length, Q ₉₅ (veh)		0.0													1.5		
95% Queue Length, Q ₉₅ (ft)		0.0													38.4		
Control Delay (s/veh)		8.4	0.0												14.9		
Level of Service (LOS)		А	А											В			
Approach Delay (s/veh)	0.5												14.9				
Approach LOS	A												В				

Your Company Name Street Address

Location, Zip or Postal Code

Change These in File > Preferences > Titles

Site Code: NS19639 Station ID: DAWSON RD.
JEFFERSON PAIGE RD.
Latitude: 0' 0.0000 Undefined

Start Time	11-Jun-25 Wed	NB	SB	Total
12:00 AM		0	0	0
12:15		0	0	0
12:30		0	1	1
12:45		0	0	0
01:00		2	0	2
01:15		0	0	2
01:30		0	0	0
01:45		0	0	0
02:00		0	0	0
02:15		0	0	0
02:30		0	Ö	0
02:45		0	0	0
03:00		Ö	Ö	0
03:15		1	0	1
03:30		0	0	0
03:45		0	ő	0
04:00		1	0	1
04:15		0	0	0
04:30		2	ő	2
04:45		1	Ö	2 1
05:00		Ö	0	
05:15		0	ő	0
05:30		1	0	1
05:45		1	0	1
06:00		0	0	0
06:15		1	3	4
06:30		3	0	
06:45		3	3	3 6 5
07:00		5	0	5
07:00		4	0	
07:13		3	0	4 3 4
07:30		3	1	J
08:00		1	0	1
08:15		2	1	3
08:30		3		J
08:45		3 1	1 3	4
08.45		1		
09:00		1	0	1 2
09:30		0	1 0	1
09:45		1		I
10:00		2	2	7
10:15		0	1	1
10:30		0	2	2 4
10:45		3	1	4
11:00		4	1	5 4
11:15		1	3	
11:30		1	0	1
11:45		1	0	1
Total		53	25	78
Percent		67.9%	32.1%	
Peak	-	06:30	10:30	 06:15
Vol.	-	15	7	 18
P.H.F.		0.750	0.583	0.750

Your Company Name Street Address

Location, Zip or Postal Code

Change These in File > Preferences > Titles

Site Code: NS19639 Station ID: DAWSON RD.
JEFFERSON PAIGE RD.
Latitude: 0' 0.0000 Undefined

Start Time	11-Jun-25 Wed	NB	SB	Total
12:00 PM	1100	0	0	0
12:15		1	5	6
12:30		2	2	4
12:45		2	2	4
01:00		4	4	8
01:15		3	4	7
01:30		5	3	8
01:45		1	1	7 8 2
02:00		5	4	9
02:15		0	1	1
02:30		3	2	5
02:45		0	0	5 0 3 3
03:00		0	3	3
03:15		1	2	3
03:30		1	3	4 3
03:45		0	3	3
04:00		2	2	4
04:15		1	2	3
04:30		1	1	4 3 2 2
04:45		0	2	2
05:00		2	4	6 5
05:15		1	4	5
05:30		2	8	10
05:45		1	1	2 2 1
06:00		0	2	2
06:15		1	0	
06:30		2	1	3 1 2 4 2 2
06:45		0	1	1
07:00		0	2	2
07:15		0	4	4
07:30		1	1	2
07:45		1	1	
08:00		0	1	1
08:15		2	0	2
08:30		0	1	1
08:45		2	1	3
09:00		0	0	0
09:15		2	0	2
09:30		1	0	1
09:45		0	3	3
10:00		0	1	1
10:15		1	0	1
10:30		3	1	4
10:45		1	0	1
11:00		1	1	2
11:15		0	1	
11:30		0	1	1
11:45		3	0	3
Total		59	86	145
Percent		40.7%	59.3%	
Peak	-	12:45	16:45	12:45
Vol.	-	14	18	27
P.H.F.		0.700	0.563	0.844

Your Company Name Street Address

Location, Zip or Postal Code

Change These in File > Preferences > Titles

Site Code: NS19639 Station ID: DAWSON RD.
JEFFERSON PAIGE RD.
Latitude: 0' 0.0000 Undefined

Start Time	12-Jun-25 Thu	NB	SB	Total
12:00 AM		0	0	0
12:15		0	1	1
12:30		0	0	0
12:45		0	0	0
01:00		0	2	2
01:15		0	0	2
01:30		0	0	0
01:45		2	0	0 2
02:00		0	0	0
02:15		0	1	1
02:30		0	0	0
02:45		0	0	0
03:00		0	0	0
03:15		0	0	0
03:30		0	0	0
03:45		0	0	0
04:00		1	0	1
04:15		0	0	0
04:30		2	0	2
04:45		0	0	2
05:00		0	0	0
05:15		0	0	0
05:30		1	2	3
05:45		1	0	1
06:00		2	1	3
06:15		2	3	5
06:30		7	1	5 8
06:45		0	0	0
07:00		2	2	4
07:15		3	1	4
07:30		3	0	3 3 4 3
07:45		1	2	3
08:00		2	2	4
08:15		3	0	3
08:30		2	0	2 4
08:45		4	0	4
09:00		0	2	2 1
09:15		0	1	1
09:30		3 2	0	3 4
09:45		2	2	4
10:00		1	3	4
10:15		2	2	4
10:30		1	0	1
10:45		1	0	1
11:00		1	3	4 7
11:15		3	4	
11:30		0	1	1
11:45		2	3	5
Total		54	39	93
Percent		58.1%	41.9%	
Peak	-	05:45	11:00	 05:45
Vol.	-	12	11	 17
P.H.F.		0.429	0.688	0.531

Your Company Name Street Address

Location, Zip or Postal Code

Change These in File > Preferences > Titles

Site Code: NS19639 Station ID: DAWSON RD.
JEFFERSON PAIGE RD.
Latitude: 0' 0.0000 Undefined

Start Time	12-Jun-25 Thu	NB	SB	Total
12:00 PM	iiiu	1 1	0	
12:15		2	0	
12:30		2	3	
12:45		2 3	3	
01:00		2	3	
01:15		2 2	2	
01:30		1	0	
01:45		3	3	
02:00		4	0	
02:00		0	1	
02:30		1	3	
02:45		0	2	
03:00		3	2	
03:15		3	1	
03:13		1	1	
03:45		4	3	
04:00		1	2	
04:00		3	5	
04.13		0	3	
04:30		0	1	
05:00			3	
05:00		1		
			9	
05:30		6	5	1
05:45		2	5	
06:00		0 2	4	
06:15			1	
06:30		0	1	
06:45		0	0	
07:00		1	3	
07:15		1	3	
07:30		2	2	
07:45		1	0	
08:00		0 2	1	
08:15			3	
08:30		2	1	
08:45		1	2	
09:00		0	0	
09:15		4	1	
09:30		1	3	
09:45		0	2	
10:00		3	2	
10:15		0	1	
10:30		1	1	
10:45		0	0	
11:00		0	0	
11:15		0	0	
11:30		0	2	
11:45		0	0	
Total		67	93	16
Percent		41.9%	58.1%	
Peak	-	15:00	17:15	 17:0
Vol.	-	11	23	 3
P.H.F.		0.688	0.639	 0.72
Grand	·			
Total		233	243	47
· Otal		48.9%	51.1%	

10000 Perkins Rowe, Suite G360 **Baton Rouge, LA 70810**

Solutions You Can Build Upon

File Name: Dawson Rd at Jefferson Paige Rd

Site Code: NS19369 Start Date : 6/11/2025

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles
JEFFERSON RD DAWSON RD

	_									senger \				hicles							1
			ON RD			JI		RSON				AWSO				JE		RSON F			
Start Time	Left	Thru	Right	Peds	App. Total	Left		Vestbo Right			Left	Thru	orthbou Right	Peds		Left	Thru	astbou Right	Peds		Int. Total
06:00 AM	0	0	0	0	App. Total	0	3	0	0	App. Total	0	0	0	0	App. Total	0	2	0	0	App. Total	5
06:15 AM	0	0	0	0	0	3	3	0	0	6	0	0	1	0	1	0	9	0	0	9	16
06:30 AM	0	0	0	0	0	1	8	0	0	9	0	0	3	0	3	0	5	0	0	5	17
06:45 AM	0	0	0	0	0	1	2	0	0	3	0	0	3	0	3	0	5	0	0	5	11
Total	0	0	0	0	0	5	16	0	0	21	0	0	7	0	7	0	21	0	0	21	49
07:00 AM	0	0	0	0	0	1	4	0	0	5	0	0	5	0	5	0	12	0	0	12	22
07:15 AM	0	0	0	0	0	0	7	0	0	7	1	0	4	0	5	0	10	0	0	10	22
07:30 AM	0	0	0	0	0	0	6	0	0	6	0	0	2	0	2	0	14	0	0	14	22
07:45 AM	0	0	0	0	0	1	6	0	0	7	0	0	4	0	4	0	17	1	0	18	29
Total	0	0	0	0	0	2	23	0	0	25	1	0	15	0	16	0	53	1	0	54	95
08:00 AM	0	0	0	0	0	1	6	0	0	7	0	0	1	0	1	0	17	0	0	17	25
08:15 AM	0	0	0	0	0	1	3	0	0	4	0	0	2	0	2	0	5	0	0	5	11
08:30 AM	0	0	0	0	0	1	2	0	0	3	2	0	2	0	4	0	15	1	0	16	23
08:45 AM	0	0	0	0	0	1	7	0	0	8	1	0	0	0	1	0	4	1	0	5	14
Total	0	0	0	0	0	4	18	0	0	22	3	0	5	0	8	0	41	2	0	43	73
*** BREAK **	*																				
04:00 PM	0	0	0	0	0	3	8	0	0	11	0	0	2	0	2	0	5	0	0	5	18
04:15 PM	0	0	0	0	0	1	7	0	0	8	0	0	1	0	1	0	7	0	0	7	16
04:30 PM	0	0	0	0	0	1	14	0	0	15	0	0	2	0	2	0	7	0	0	7	24
04:45 PM	0	0	0	0	0	2	10	0	0	12	0	0	0	0	0	0	6	0	0	6	18
Total	0	0	0	0	0	7	39	0	0	46	0	0	5	0	5	0	25	0	0	25	76
05:00 PM	0	0	0	0	0	4	14	0	0	18	0	0	2	0	2	0	7	0	0	7	27
05:15 PM	0	0	0	0	0	3	13	0	0	16	1	0	0	0	1	0	7	1	0	8	25
05:30 PM	0	0	0	0	0	7	12	0	0	19	1	0	1	0	2	0	6	1	0	7	28
05:45 PM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	3	1	0	4	10
Total	0	0	0	0	0	14	45	0	0	59	2	0	3	0	5	0	23	3	0	26	90
06:00 PM	0	0	0	0	0	1	11	0	0	12	0	0	1	0	1	0	4	1	0	5	18
06:15 PM	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	8	0	0	8	13
*** BREAK **		^	^	^	^	00	450	^	^	400	_	^	0.7	^	40	^	475	7	^	400	444
Grand Total Apprch %	0	0	0 0	0	0	33 17.5	156 82.5	0	0	189	6 14	0	37 86	0	43	0	175 96.2	7 3.8	0	182	414
Total %	0	0	0	0	0	8	37.7	0	0	45.7	1.4	0	8.9	0	10.4	0	42.3	1.7	0	44	
	I				ļ																I

10000 Perkins Rowe, Suite G360

Baton Rouge, LA 70810

Solutions You Can Build Upon

File Name: Dawson Rd at Jefferson Paige Rd

Site Code: NS19369 Start Date : 6/11/2025

Page No : 2
Groups Printed- Passenger Vehicles - Heavy Vehicles

						_							~.,								
)AWS	ON RD)		JE	EFFER	RSONI	RD)AWS	ON RD)		JE	FFER	SON I	RD		
		Sc	outhbo	und			W	/estbo	und			N	orthbo	und			E	astbou	und		
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Passenger Vehicles	0	0	0	0	0	32	146	0	0	178	5	0	37	0	42	0	168	6	0	174	394
% Passenger Vehicles	0	0	0	0	0	97	93.6	0	0	94.2	83.3	0	100	0	97.7	0	96	85.7	0	95.6	95.2
Heavy Vehicles	0	0	0	0	0	1	10	0	0	11	1	0	0	0	1	0	7	1	0	8	20
% Heavy Vehicles	0	0	0	0	0	3	6.4	0	0	5.8	16.7	0	0	0	2.3	0	4	14.3	0	4.4	4.8

10000 Perkins Rowe, Suite G360 Baton Rouge, LA 70810

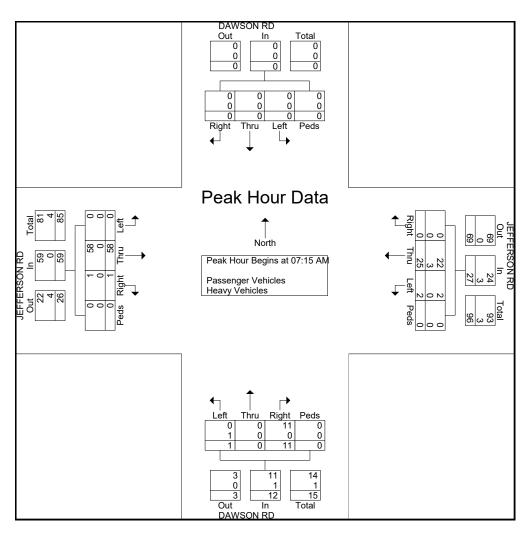
Solutions You Can Build Upon

File Name: Dawson Rd at Jefferson Paige Rd

Site Code : NS19369 Start Date : 6/11/2025

Page No : 3

	С	AWSO	ON RD			JE	FFER	SON F	RD		С	AWS	ON RD)		JI	EFFER	RSON I	RD		
		Sc	outhbo	und			W	estbou	und			N	orthbo	und			Е	astbou	ınd		
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From (06:00 A	M to 0	8:45 AN	1 - Pea	k 1 of 1														
Peak Hour fo	r Entire	Inters	ection	Begins	at 07:1	5 AM															
07:15 AM	0	0	0	0	0	0	7	0	0	7	1	0	4	0	5	0	10	0	0	10	22
07:30 AM	0	0	0	0	0	0	6	0	0	6	0	0	2	0	2	0	14	0	0	14	22
07:45 AM	0	0	0	0	0	1	6	0	0	7	0	0	4	0	4	0	17	1	0	18	29
08:00 AM	0	0	0	0	0	1	6	0	0	7	0	0	1	0	1	0	17	0	0	17	25
Total Volume	0	0	0	0	0	2	25	0	0	27	1	0	11	0	12	0	58	1	0	59	98
% App. Total	0	0	0	0		7.4	92.6	0	0		8.3	0	91.7	0		0	98.3	1.7	0		
PHF	.000	.000	.000	.000	.000	.500	.893	.000	.000	.964	.250	.000	.688	.000	.600	.000	.853	.250	.000	.819	.845
Passenger Vehicles	0	0	0	0	0	2	22	0	0	24	0	0	11	0	11	0	58	1	0	59	94
% Passenger Vehicles	0	0	0	0	0	100	88.0	0	0	88.9	0	0	100	0	91.7	0	100	100	0	100	95.9
Heavy Vehicles	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	4
% Heavy Vehicles	0	0	0	0	0	0	12.0	0	0	11.1	100	0	0	0	8.3	0	0	0	0	0	4.1



10000 Perkins Rowe, Suite G360 Baton Rouge, LA 70810

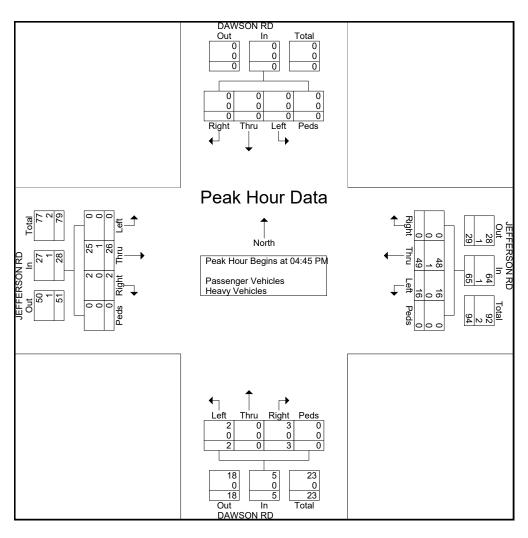
Solutions You Can Build Upon

File Name: Dawson Rd at Jefferson Paige Rd

Site Code : NS19369 Start Date : 6/11/2025

Page No : 4

	С	AWSO	ON RD			JE	FFER	SON F	₹D			AWS	ON RD)		JE	EFFER	RSON I	RD		
		Sc	outhbo	und			W	estbou	und			N	orthbo	und			Е	astbou	ınd		
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From (04:00 F	PM to 0	6:15 PM	1 - Pea	k 1 of 1														
Peak Hour fo	r Entire	Inters	ection	Begins	at 04:4	5 PM															
04:45 PM	0	0	0	0	0	2	10	0	0	12	0	0	0	0	0	0	6	0	0	6	18
05:00 PM	0	0	0	0	0	4	14	0	0	18	0	0	2	0	2	0	7	0	0	7	27
05:15 PM	0	0	0	0	0	3	13	0	0	16	1	0	0	0	1	0	7	1	0	8	25
05:30 PM	0	0	0	0	0	7	12	0	0	19	1	0	1	0	2	0	6	1	0	7	28
Total Volume	0	0	0	0	0	16	49	0	0	65	2	0	3	0	5	0	26	2	0	28	98
% App. Total	0	0	0	0		24.6	75.4	0	0		40	0	60	0		0	92.9	7.1	0		
PHF	.000	.000	.000	.000	.000	.571	.875	.000	.000	.855	.500	.000	.375	.000	.625	.000	.929	.500	.000	.875	.875
Passenger Vehicles	0	0	0	0	0	16	48	0	0	64	2	0	3	0	5	0	25	2	0	27	96
% Passenger Vehicles	0	0	0	0	0	100	98.0	0	0	98.5	100	0	100	0	100	0	96.2	100	0	96.4	98.0
Heavy Vehicles	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% Heavy Vehicles	0	0	0	0	0	0	2.0	0	0	1.5	0	0	0	0	0	0	3.8	0	0	3.6	2.0



10000 Perkins Rowe, Suite G360 **Baton Rouge, LA 70810**

Solutions You Can Build Upon

File Name: US 79 at Resilient Way

Site Code: NS19639 Start Date : 6/11/2025

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles
US 79 RESILIENT WAY

									d- Pass	senger \											1
	R	ESILIE					US 7				R		ENT W				US 7				
Start Time	Left		outhbo			Left	Thru	/estbou	und Peds		Left		orthbou	und Peds		Left		astbou Right	ınd Peds		
06:00 AM	Leit	Thru 0	Right 0	Peas	App. Total	Leit 0	1 mru 8	Right	Peds 0	App. Total	Leit	Thru 0	Right 0	Peas 0	App. Total	Leit	Thru 8	Right 0	Peas	App. Total	Int. Total
06:15 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	8	0	0	8	12
06:30 AM	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	1	10	0	0	11	18
06:45 AM	0	0	0	0	0	0	13	4	0	17	0	0	0	0	0	2	23	0	0	25	42
Total	0	0	0	0	0	0	31	5	0	36	0	0	0	0	0	3	49	0	0	52	88
07:00 AM	0	0	0	0	0	0	22	4	0	26	0	0	0	0	0	0	16	0	0	16	42
07:15 AM	1	0	0	0	1	0	23	3	0	26	0	0	0	0	0	0	19	0	0	19	46
07:30 AM	0	0	0	0	0	0	21	1	0	22	0	0	0	0	0	0	33	0	0	33	55
07:45 AM	1	0	0	0	1	0	47	3	1	51	0	0	0	0	0	1	27	0	0	28	80
Total	2	0	0	0	2	0	113	11	1	125	0	0	0	0	0	1	95	0	0	96	223
08:00 AM	o	0	0	0	0	0	32	2	0	34	0	0	0	0	0	0	28	0	0	28	62
08:15 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	23	0	0	23	45
08:30 AM	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	33	0	2	35	58
08:45 AM	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	0	17	0	1	18	43
Total	0	0	0	0	0	0	102	2		104	0	0		0	0	0	101		3	104	208
*** BREAK **	ı	•		•	0		50		•	50			•		۰		4.4	•			ا م
04:00 PM	1	0	1	0	2	0	52	0	0	52	0	0	0	0	0	0	41	0	0	41	95
04:15 PM	2	0	1	0	3	0	30	0	0	30	0	0	0	0	0	0	25	0	0	25	58
04:30 PM	4	0	0	0	4	0	60	2	0	62	0	0	0	0	0	0	31	0	0	31	97
04:45 PM	2	0	0	0	2	0	40	0	0	40	0	0	0	0	0	0	27	0	0	27	69
Total	9	0	2	0	11	0	182	2	0	184	0	0	0	0	0	0	124	0	0	124	319
05:00 PM	0	0	0	0	0	0	48	0	0	48	0	0	0	0	0	0	30	0	0	30	78
05:15 PM	3	0	0	0	3	0	57	1	0	58	0	0	0	0	0	0	25	0	0	25	86
05:30 PM	2	0	0	0	2	0	31	1	0	32	0	0	0	0	0	0	21	0	0	21	55
05:45 PM	2	0	0	0	2	0	42	0	0	42	0	0	0	0	0	0	21	0	0	21	65
Total	7	0	0	0	7	0	178	2	0	180	0	0	0	0	0	0	97	0	0	97	284
06:00 PM	0	0	0	0	0	0	32	0	1	33	0	0	0	0	0	0	14	0	0	14	47
06:15 PM	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	22	0	0	22	45
Grand Total	18	0	2	0	20	0	661	22	2	685	0	0	0	0	0	4	502	0	3	509	1214
Apprch %	90	0	10	0		0	96.5	3.2	0.3		0	0	0	0		0.8	98.6	0	0.6		
Total %	1.5	0	0.2	0	1.6	0	54.4	1.8	0.2	56.4	0	0	0	0	0	0.3	41.4	0	0.2	41.9	1000
Passenger Vehicles	18 100	0	2 100	0	20 100	0	599 90.6	22 100	2 100	623 90.9	0	0	0 0	0	0	100	448 89.2	0 0	3 100	455 89.4	1098 90.4
% Passenger Vehicles		U	.00	0	,00		55.5	.00	. 50	50.0		9	0	0	9		55.2	0		507	50.∓

10000 Perkins Rowe, Suite G360 Baton Rouge, LA 70810

Solutions You Can Build Upon

File Name: US 79 at Resilient Way

Site Code : NS19639 Start Date : 6/11/2025

Page No : 2

Groups Printed- Passenger Vehicles - Heavy Vehicles

						_							,								
	R	ESILIE	ENT W	'AY			US 7	'9			R	ESILIE	ENT W	'AY			US 7	9			
		Southbound					W	/estbo	und			N	orthbo	und			Е	astbou	ınd		
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Heavy Vehicles	0	0	0	0	0	0	62	0	0	62	0	0	0	0	0	0	54	0	0	54	116
% Heavy Vehicles	0	0	0	0	0	0	9.4	0	0	9.1	0	0	0	0	0	0	10.8	0	0	10.6	9.6

10000 Perkins Rowe, Suite G360 Baton Rouge, LA 70810

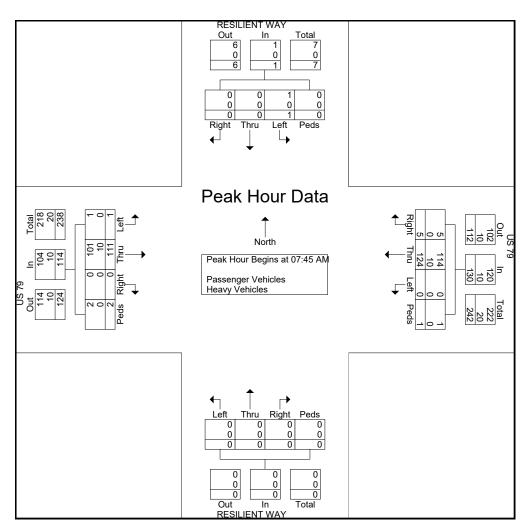
Solutions You Can Build Upon

File Name: US 79 at Resilient Way

Site Code : NS19639 Start Date : 6/11/2025

Page No : 3

	R	ESILIE	ENT W	ΆΥ			US 7	9			R	ESILIE	ENT W	'AY			US 7	'9			
		Sc	outhbo	und			W	estbou	und			N	orthbo	und			Е	astbou	ınd		
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From (1 - Pea	k 1 of 1														
Peak Hour for	r Entire	Inters	ection	Begins	at 07:4	5 AM															
07:45 AM	1	0	0	0	1	0	47	3	1	51	0	0	0	0	0	1	27	0	0	28	80
08:00 AM	0	0	0	0	0	0	32	2	0	34	0	0	0	0	0	0	28	0	0	28	62
08:15 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	23	0	0	23	45
08:30 AM	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	33	0	2	35	58
Total Volume	1	0	0	0	1	0	124	5	1	130	0	0	0	0	0	1	111	0	2	114	245
% App. Total	100	0	0	0		0	95.4	3.8	8.0		0	0	0	0		0.9	97.4	0	1.8		l
PHF	.250	.000	.000	.000	.250	.000	.660	.417	.250	.637	.000	.000	.000	.000	.000	.250	.841	.000	.250	.814	.766
Passenger Vehicles	1	0	0	0	1	0	114	5	1	120	0	0	0	0	0	1	101	0	2	104	225
% Passenger Vehicles	100	0	0	0	100	0	91.9	100	100	92.3	0	0	0	0	0	100	91.0	0	100	91.2	91.8
Heavy Vehicles	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	20
% Heavy Vehicles	0	0	0	0	0	0	8.1	0	0	7.7	0	0	0	0	0	0	9.0	0	0	8.8	8.2



10000 Perkins Rowe, Suite G360 Baton Rouge, LA 70810

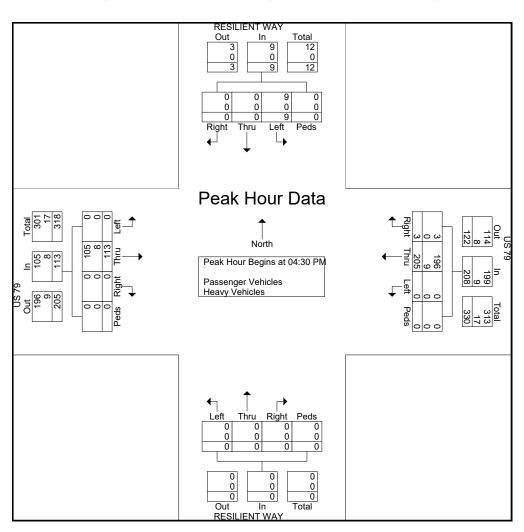
Solutions You Can Build Upon

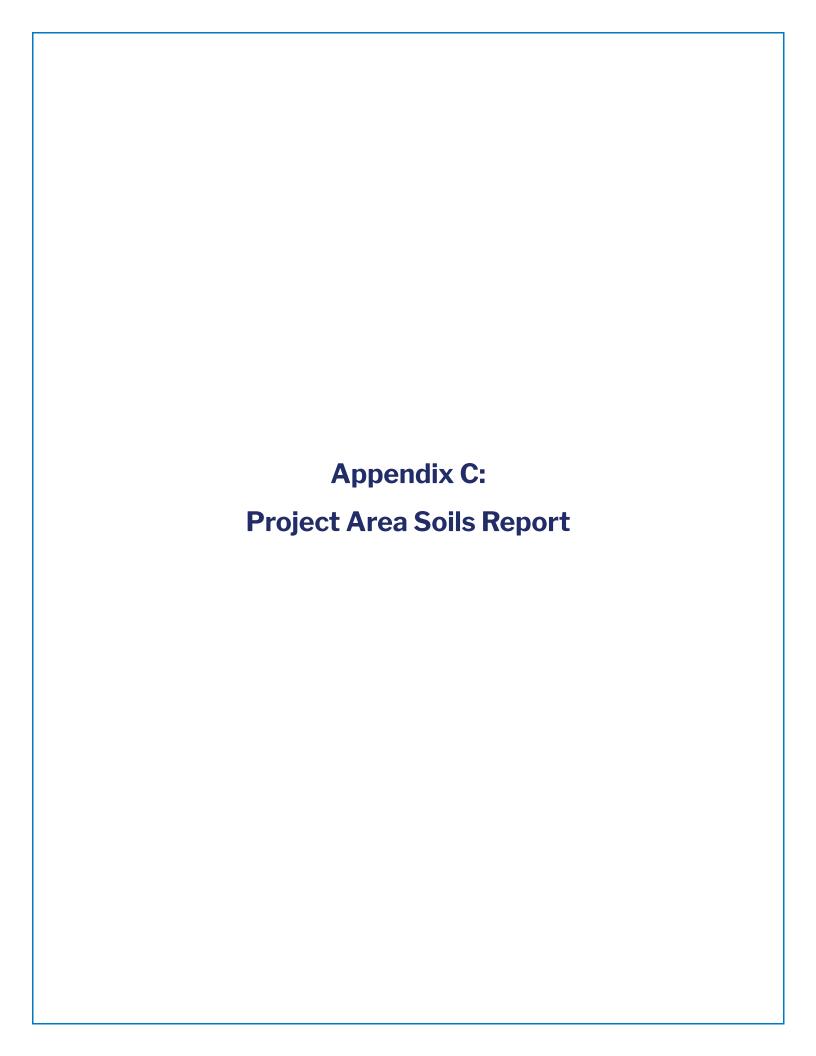
File Name: US 79 at Resilient Way

Site Code : NS19639 Start Date : 6/11/2025

Page No : 4

	R	ESILIE	NT W	AY			US 7	9			R	ESILIE	ENT W	'AY			US 7	' 9			
		Sc	uthbo	und			W	estbou	und			No	orthbo	und			Е	astbou	ınd		
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Ar	nalysis	From ()4:00 F	PM to 0	6:15 PN	l - Peal	k 1 of 1														
Peak Hour fo	r Entire	Inters	ection	Begins	at 04:30) PM															
04:30 PM	4	0	0	0	4	0	60	2	0	62	0	0	0	0	0	0	31	0	0	31	97
04:45 PM	2	0	0	0	2	0	40	0	0	40	0	0	0	0	0	0	27	0	0	27	69
05:00 PM	0	0	0	0	0	0	48	0	0	48	0	0	0	0	0	0	30	0	0	30	78
05:15 PM	3	0	0	0	3	0	57	1	0	58	0	0	0	0	0	0	25	0	0	25	86
Total Volume	9	0	0	0	9	0	205	3	0	208	0	0	0	0	0	0	113	0	0	113	330
% App. Total	100	0	0	0		0	98.6	1.4	0		0	0	0	0		0	100	0	0		
PHF	.563	.000	.000	.000	.563	.000	.854	.375	.000	.839	.000	.000	.000	.000	.000	.000	.911	.000	.000	.911	.851
Passenger Vehicles	9	0	0	0	9	0	196	3	0	199	0	0	0	0	0	0	105	0	0	105	313
% Passenger Vehicles	100	0	0	0	100	0	95.6	100	0	95.7	0	0	0	0	0	0	92.9	0	0	92.9	94.8
Heavy Vehicles	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	8	0	0	8	17
% Heavy Vehicles	0	0	0	0	0	0	4.4	0	0	4.3	0	0	0	0	0	0	7.1	0	0	7.1	5.2







NRCS

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Caddo Parish, Louisiana



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map (Dawson Road Feasibility Study Area)	9
Legend	10
Map Unit Legend (Dawson Road Feasibility Study Area)	11
Map Unit Descriptions (Dawson Road Feasibility Study Area)	11
Caddo Parish, Louisiana	13
EaC—Eastwood fine sandy loam, 1 to 5 percent slopes	13
EaG—Eastwood fine sandy loam, 5 to 15 percent slopes	14
GYA—Guyton-Iulus complex, 0 to 1 percent slopes, frequently flooded	15
KeC—Keithville very fine sandy loam, 1 to 5 percent slopes	18
MEA—Metcalf-Timpson complex, 0 to 2 percent slopes	19
W—Water	21
References	22

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

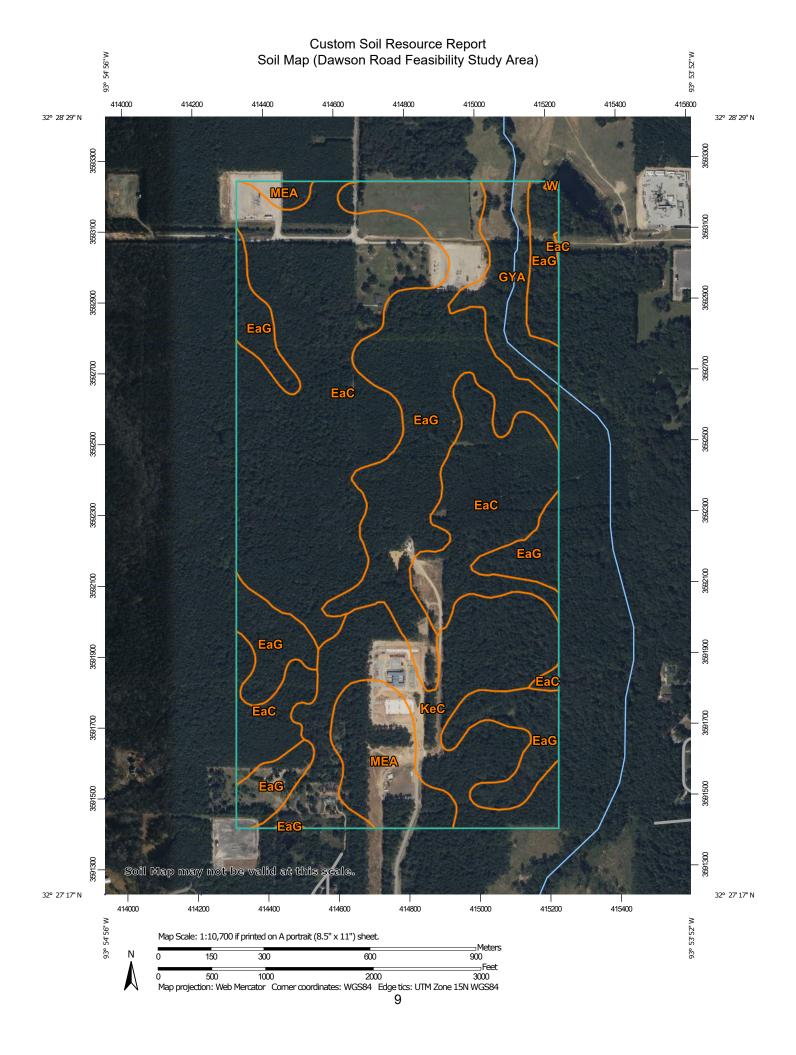
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

-

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

(o)

Blowout

 \boxtimes

Borrow Pit

Ж

Clay Spot

 \Diamond

Closed Depression

Ċ

Gravel Pit

.

Gravelly Spot

0

Landfill Lava Flow

٨

Marsh or swamp

尕

Mine or Quarry

9

Miscellaneous Water
Perennial Water

0

Rock Outcrop

+

Saline Spot

. .

Sandy Spot

. .

Severely Eroded Spot

_

Sinkhole

50

Slide or Slip

Ø

Sodic Spot

LLGLIND

8

Spoil Area Stony Spot



Very Stony Spot



Wet Spot



Other

*

Special Line Features

Water Features

_

Streams and Canals

Transportation

ransp

Rails

~

Interstate Highways

_

US Routes

~

Major Roads

~

Local Roads

Background

Marie Contract

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Caddo Parish, Louisiana Survey Area Data: Version 18, Sep 5, 2024

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Oct 9, 2022—Feb 3, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Dawson Road Feasibility Study Area)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EaC	Eastwood fine sandy loam, 1 to 5 percent slopes	166.6	40.2%
EaG	Eastwood fine sandy loam, 5 to 15 percent slopes	133.4	32.2%
GYA	Guyton-lulus complex, 0 to 1 percent slopes, frequently flooded	20.7	5.0%
KeC	Keithville very fine sandy loam, 1 to 5 percent slopes	67.1	16.2%
MEA	Metcalf-Timpson complex, 0 to 2 percent slopes	26.3	6.4%
W	Water	0.2	0.1%
Totals for Area of Interest		414.2	100.0%

Map Unit Descriptions (Dawson Road Feasibility Study Area)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a

given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Caddo Parish, Louisiana

EaC—Eastwood fine sandy loam, 1 to 5 percent slopes

Map Unit Setting

National map unit symbol: 30d19

Elevation: 150 to 400 feet

Mean annual precipitation: 41 to 61 inches Mean annual air temperature: 50 to 75 degrees F

Frost-free period: 196 to 249 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Eastwood and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Eastwood

Setting

Landform: Interfluves

Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Clayey marine deposits

Typical profile

A - 0 to 3 inches: fine sandy loam E - 3 to 6 inches: fine sandy loam

Bt - 6 to 44 inches: clay

BCt - 44 to 69 inches: clay loam C - 69 to 80 inches: clay loam

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to slightly saline (0.1 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: F133BY003TX - Loamy Over Clayey Upland

Hydric soil rating: No

Minor Components

Bowie

Percent of map unit: 10 percent

Landform: Interfluves

Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve

Down-slope shape: Linear Across-slope shape: Concave

Ecological site: F133BY005TX - Loamy Upland

Hydric soil rating: No

Keithville

Percent of map unit: 5 percent

Landform: Interfluves

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, tread

Down-slope shape: Convex Across-slope shape: Linear

Ecological site: F133BY005TX - Loamy Upland

Hydric soil rating: No

EaG—Eastwood fine sandy loam, 5 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2ssx3

Elevation: 150 to 410 feet

Mean annual precipitation: 40 to 62 inches Mean annual air temperature: 52 to 77 degrees F

Frost-free period: 200 to 260 days

Farmland classification: Not prime farmland

Map Unit Composition

Eastwood and similar soils: 75 percent

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Eastwood

Setting

Landform: Interfluves

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Clayey marine deposits

Typical profile

A/E - 0 to 11 inches: fine sandy loam

Bt - 11 to 41 inches: clay

B/Ct - 41 to 65 inches: sandy clay loam *C - 65 to 80 inches:* sandy clay loam

Properties and qualities

Slope: 5 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Gypsum, maximum content: 5 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 8.0

Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D

Ecological site: F133BY003TX - Loamy Over Clayey Upland

Hydric soil rating: No

Minor Components

Keithville

Percent of map unit: 13 percent Landform: Marine terraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Linear

Ecological site: F133BY005TX - Loamy Upland

Hydric soil rating: No

Bowie

Percent of map unit: 12 percent

Landform: Interfluves

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Linear

Ecological site: F133BY005TX - Loamy Upland

Hydric soil rating: No

GYA—Guyton-lulus complex, 0 to 1 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 2ssx9 Elevation: 140 to 360 feet

Mean annual precipitation: 40 to 62 inches
Mean annual air temperature: 52 to 77 degrees F

Frost-free period: 200 to 350 days

Farmland classification: Not prime farmland

Map Unit Composition

Guyton and similar soils: 45 percent lulus and similar soils: 35 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Guyton

Setting

Landform: Drainageways

Landform position (three-dimensional): Dip

Down-slope shape: Linear Across-slope shape: Concave Parent material: Loamy alluvium

Typical profile

A/Eg - 0 to 28 inches: silt loam

B/Etg - 28 to 64 inches: silty clay loam Btg - 64 to 80 inches: silty clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr) Depth to water table: About 0 to 18 inches

Frequency of flooding: Frequent Frequency of ponding: None

Gypsum, maximum content: 5 percent

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 10.0

Available water supply, 0 to 60 inches: Very high (about 12.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: C/D

Ecological site: F133BY017TX - Loamy Bottomland

Hydric soil rating: Yes

Description of lulus

Setting

Landform: Drainageways

Landform position (three-dimensional): Dip

Down-slope shape: Linear Across-slope shape: Concave Parent material: Loamy alluvium

Typical profile

A - 0 to 6 inches: loam

Bw - 6 to 27 inches: fine sandy loam Bg - 27 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: About 18 to 48 inches

Frequency of flooding: Frequent Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: C

Ecological site: F133BY014TX - Creek Bottomland

Hydric soil rating: No

Minor Components

Eastwood

Percent of map unit: 10 percent

Landform: Interfluves

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Linear Across-slope shape: Linear

Ecological site: F133BY003TX - Loamy Over Clayey Upland

Hydric soil rating: No

Keithville

Percent of map unit: 10 percent Landform: Marine terraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Linear

Ecological site: F133BY005TX - Loamy Upland

Hydric soil rating: No

KeC—Keithville very fine sandy loam, 1 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2r7r9

Elevation: 160 to 560 feet

Mean annual precipitation: 48 to 55 inches Mean annual air temperature: 63 to 64 degrees F

Frost-free period: 215 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Keithville and similar soils: 90 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Keithville

Setting

Landform: Interfluves

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, tread

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Loamy alluvium over clayey fluviomarine deposits

Typical profile

A - 0 to 3 inches: very fine sandy loam E - 3 to 11 inches: very fine sandy loam

Bt - 11 to 22 inches: clay loam Bt/E - 22 to 28 inches: clay loam 2Bt/E - 28 to 51 inches: silty clay 2Bt - 51 to 81 inches: silty clay

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to

0.06 in/hr)

Depth to water table: About 24 to 36 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.1 to 1.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: F133BY005TX - Loamy Upland

Hydric soil rating: No

Minor Components

Metcalf

Percent of map unit: 5 percent

Landform: Interfluves

Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve

Down-slope shape: Convex Across-slope shape: Linear

Ecological site: F133BY002TX - Seasonally Wet Upland

Hydric soil rating: No

Eastwood

Percent of map unit: 5 percent

Landform: Interfluves

Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve

Down-slope shape: Convex Across-slope shape: Linear

Ecological site: F133BY003TX - Loamy Over Clayey Upland

Hydric soil rating: No

MEA—Metcalf-Timpson complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2ssxh

Elevation: 150 to 350 feet

Mean annual precipitation: 40 to 62 inches Mean annual air temperature: 51 to 75 degrees F

Frost-free period: 200 to 270 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Metcalf and similar soils: 55 percent Timpson and similar soils: 35 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Metcalf

Setting

Landform: Terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Loamy alluvium over clayey residuum weathered from sandstone and shale

Typical profile

A/E - 0 to 10 inches: silt loam

B/Et - 10 to 46 inches: silty clay loam 2Btg - 46 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C

Ecological site: F133BY002TX - Seasonally Wet Upland

Hydric soil rating: No

Description of Timpson

Setting

Landform: Terraces

Landform position (three-dimensional): Talf Microfeatures of landform position: Mounds

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Loamy alluvium over clayey residuum weathered from sandstone

and shale

Typical profile

A/E - 0 to 21 inches: silt loam Bt - 21 to 56 inches: loam

2Btg - 56 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20

to 0.57 in/hr)

Depth to water table: About 30 to 42 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B

Ecological site: F133BY013TX - Terrace

Hydric soil rating: No

Minor Components

Eastwood

Percent of map unit: 10 percent

Landform: Interfluves

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Linear Across-slope shape: Linear

Ecological site: F133BY003TX - Loamy Over Clayey Upland

Hydric soil rating: No

W-Water

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf