

City of Tontitown, Arkansas Transportation and Public Safety Impact Fee Study



duncan | associates

March 2024

Table of Contents

EXECUTIVE SUMMARY	1
LEGAL FRAMEWORK	3
METHODOLOGY	7
TRANSPORTATION.....	9
PUBLIC SAFETY.....	17
APPENDIX A: EXISTING LAND USE	23
APPENDIX B: LAND USE DEFINITIONS.....	25
APPENDIX C: ARKANSAS DEVELOPMENT IMPACT FEES ACT.....	27

List of Tables

Table 1. Potential Transportation and Public Safety Impact Fees	1
Table 2. Level of Service Standards	4
Table 3. Existing Major Roadway System	10
Table 4. Current Major Roadway System Level of Service.....	11
Table 5. Average Trip Length by Trip Purpose	12
Table 6. Expected Vehicle-Miles of Travel.....	13
Table 7. Local Travel Demand Adjustment Factor	13
Table 8. Travel Demand by Land Use.....	14
Table 9. Transportation Cost per Vehicle-Mile.....	15
Table 10. Transportation Net Cost Schedule	15
Table 11. Transportation Capital Plan	16
Table 12. Time Usage Survey Data	18
Table 13. Residential Functional Population Multipliers	18
Table 14. Nonresidential Functional Population Multipliers	19
Table 15. Existing Functional Population.....	19
Table 16. Public Safety Building and Land Cost.....	20
Table 17. Public Safety Vehicle Cost	21
Table 18. Public Safety Net Cost per Service Unit	21
Table 19. Public Safety Net Cost Schedule	22
Table 20. Public Safety Capital Plan.....	22
Table 21. Existing Housing Units by Type, 2023	23
Table 22. Average Household Size by Housing Type	23
Table 23. Existing Nonresidential Building Square Feet.....	24

prepared by
Duncan Associates

Clancy Mullen, Project Manager
17409 Rush Pea Circle, Austin, TX 78738
(512) 423-0480
clancy@duncanassociates.com

EXECUTIVE SUMMARY

Impact fees are a way for local governments to require new developments to pay a proportionate share of the infrastructure costs they impose on the community. In contrast to traditional “negotiated” developer exactions, impact fees are charges that are assessed on new development using a standard formula based on objective characteristics, such as the number and type of dwelling units constructed. The fees are one-time up-front charges, with the payment usually made at the time of building permit issuance. Essentially, impact fees require that each new development project pay its pro-rata share of the cost of new capital facilities required to serve that development. This study calculates potential transportation and public safety impact fees for the City of Tontitown.

Overview of Report

This summary of the study’s conclusions is followed by two chapters on the legal framework for impact fees in Arkansas and an explanation of the methodologies used to calculate impact fees. The next two chapters calculate the fees that the City could assess for improvements to transportation and public safety facilities. It concludes with appendices on existing land use, definitions of land use categories used in the fee schedules, and the full text of the Arkansas Development Impact Fees Act.

Developer Credits

Developers may be required to make improvements or offer to contribute funding for eligible improvements that facilitate their projects. This is most likely to occur for transportation improvements. If the City adopts transportation impact fees, it may need to provide credits to developers for the value of such contributions. The criteria for eligibility and procedures for obtaining and applying developer credits against their fees will be spelled out in the impact fee ordinance.

Summary of Maximum Fees

The potential transportation and public safety impact fees calculated in this study are summarized in Table 1. These represent the maximum fees the City could adopt based on the data, analysis, and recommendations in this study.

Table 1. Potential Transportation and Public Safety Impact Fees

Land Use Type	Unit	Transportation	Public Safety	Total
Single-Family Detached*	Dwelling	\$3,397	\$2,399	\$5,796
Multi-Family	Dwelling	\$2,432	\$1,933	\$4,365
Retail/Commercial	1,000 sq. ft.	\$4,455	\$3,115	\$7,570
Office	1,000 sq. ft.	\$3,677	\$1,772	\$5,449
Industrial	1,000 sq. ft.	\$1,331	\$376	\$1,707
Warehouse	1,000 sq. ft.	\$674	\$304	\$978
Mini-Warehouse	1,000 sq. ft.	\$570	\$161	\$731
Public/Institutional	1,000 sq. ft.	\$1,637	\$841	\$2,478

* includes mobile or manufactured home
Source: Fees from Table 10 (transportation), and Table 19 (public safety); definitions of land use types are provided in Appendix B.

Implementation Options

The City could adopt the fees at less than the maximum amounts, but if it does so it should adopt them at the same percentage for all land use types to ensure that the fees stay proportional to the demand generated by the land use. The City could also phase in the fees over a period of time – for example, adopt them initially at 50%, increase them to 75% after a year, and then to 100% in another year.

LEGAL FRAMEWORK

The legal framework for impact fees for Tontitown consists of both Arkansas statutes and national impact fee case law.

Arkansas Statutes

Municipalities in Arkansas are authorized by state law to enact impact fee ordinances, provided that they follow the requirements of Arkansas Statutes § 14-56-103, Development Impact Fees. This section provides a brief summary of those requirements most relevant to the City of Tontitown. The full text of the act is provided in Appendix C.

An impact fees is a one-time charge that is only assessed on new development. While other types of impact fees must be assessed at the time of issuance of the certificate of occupancy, a municipal water or wastewater utility may assess them “in connection with and as a condition of the installation of the water meter,” per Section 14-56-103(f)(2). The amount of impact fees paid for a newly-constructed building must be separately itemized on the closing statement at the time the property is sold. The City can allow the fee to be paid in installments.

Impact fees must be spent for capital improvements that provide benefit to the fee-paying development. This can include existing improvements with excess capacity that were built to accommodate future growth. Section 14-56-103(c)(1) provides that the fees can only be used for:

... the planning, design and construction of new public facilities or of capital improvements to existing public facilities that expand its capacity or for the recoupment of prior capital improvements to public facilities that created capacity that is available to serve new development.

Impact fees can be pledged to repay bonds that have been issued to fund growth-related capital improvements. However, they cannot be used to pay for:

... the operation or maintenance of any public facility, or for the construction or improvement of public facilities, that does not create additional capacity. (Section 14-56-103(c)(3))

In Arkansas, impact fees can only be adopted to fund certain types of public facilities. Section 14-56-103(b) limits the use of impact fees to “providing necessary public facilities,” and Section 14-56-103(a)(7) defines “public facilities” to include only the following:

- (A) Water supply, treatment, and distribution, for either domestic water or for suppression of fires;*
- (B) Wastewater treatment and sanitary sewerage;*
- (C) Stormwater drainage;*
- (D) Roads, streets, sidewalks, highways and public transportation;*
- (E) Library;*
- (F) Parks, open space, and recreation areas;*
- (G) Police or public safety;*
- (H) Fire protection; and*
- (I) Ambulance or emergency medical transportation and response.*

To assess impact fees, a city must first adopt an ordinance. The ordinance must be preceded by the development of a capital plan and level of service standards for the types of facilities for which the impact fees are to be imposed. The capital plan must include:

... a description of new public facilities or of new capital improvements to existing public facilities or of previous capital improvements to public facilities that continue to provide capacity available for new development that includes cost estimates, and capacity available to serve new development ... (Section 14-56-103(1)(1))

This report is intended to meet the State law requirements for levels of service and capital plans for transportation and public safety impact fees for the City of Tontitown. The capital plans are presented in Table 11 for transportation and Table 20 for public safety. The level of service standards used in this study are summarized in Table 2.

Table 2. Level of Service Standards

Transportation:	2.00 Vehicle-Miles of Capacity per Vehicle-Mile of Travel
Public Safety:	\$1,790 in Net Replacement Cost per Functional Population

Note: see Table 4 and Table 18.

The consultant will also prepare a draft impact fee ordinance for transportation and public safety that will meet state law requirements. Pursuant to Section 14-56-103(e)(3), the impact fee ordinance must contain the following:

- (A) *A statement of the new public facilities and capital improvements to existing public facilities that are to be financed by impact fees and the level of service standards included in the capital plan for the public facilities that are to be financed with impact fees;*
- (B) *The actual formula or formulas for assessing the impact fee, which shall be consistent with the level of service standards;*
- (C) *The procedure by which impact fees are to be assessed and collected; and*
- (D) *The procedure for refund of excess impact fees, in accordance with subsection (b) of this section.*

Case Law Requirements

Impact fees were pioneered by local governments long before state legislatures passed explicit enabling acts. The authority to adopt such fees was found in local government’s “police power” to regulate development so as to protect the health, safety and welfare of its citizens. Developers challenged early impact fees, and state court decisions gradually developed a body of case law setting out the standards that should govern impact fees.

Some of these principles, such as that impact fees should be designed to cover capital costs attributable to growth, should be proportional to the impact of a development, should be earmarked to be spent on the types of facilities for which they were collected, and should be spent in a reasonable period of time so as to provide reasonable benefit to fee payers, are embodied in the Arkansas statute. However, some other principles are not explicitly spelled out, but can be inferred from the general statement that the fees must be “reasonably attributable” to the impact of the proposed development. This section describes our understanding of the general principles of impact fee case law and some implications for calculating Tontitown’s transportation and public safety fees.

A fundamental principle of impact fees, rooted in both case law and norms of equity, is that impact fees should not charge new development for a higher level of service than is currently provided to existing development. Another key principle is that new development should not be required to pay twice for the cost to mitigate its impact on the need for new infrastructure through the combination of both impact fees and required developer exactions or future tax payments. This second principle is generally addressed by reductions of the fees, either for particular developers on a case-by-case basis (referred to as “developer credits”) or to new development generally in the calculation of the fees (referred to as “revenue credits”). The Arkansas impact fee statute is one of only three of the 29 state impact fee enabling acts that does not explicitly address either of these key case law principles.

Developer Credits

Developers may be required to make improvements or offer to contribute funding for improvements that facilitate their projects. This is most likely to occur for transportation improvements. If the City adopts transportation impact fees, it may need to provide credits to developers for the value of such contributions. The specific provisions governing developer credits will be set out in the impact fee ordinance. In general, the costs directly attributable to accommodating entry and egress from the development would not be eligible for credit against the impact fees, and the project would need to be included in the City’s capital plan.

Revenue Credits

As noted above, impact fees should not charge new development for a higher level of service than is provided to existing development. While the impact fees could be based on a higher level of service than the one existing at the time of the adoption of the fees, two things are required if this is done. First, another source of funding other than impact fees must be identified and committed to fund the capacity deficiency created by the higher level of service. Second, the impact fees must generally be reduced to ensure that new development does not pay twice for the same level of service, once through impact fees and again through general taxes that are used to remedy the capacity deficiency for existing development. In order to avoid these complications, the general practice is to base the impact fees on the existing level of service.

A similar situation arises when there is outstanding debt on facilities included in the existing level of service. Outstanding debt on existing facilities that are counted in the existing level of service will be retired, in part, by revenues generated from new development that will also pay impact fees to maintain the existing level of service. Consequently, impact fees should be reduced to account for future tax payments that will retire outstanding debt on existing facilities.

In general, credit against impact fees is not required for other types of funding that have historically been used for growth-related, capacity-expanding improvements. While new development may contribute toward such funding, so does existing development, and both existing and new development benefit from the higher level of service that the additional funding makes possible. To insist that historical capital funding patterns must be continued after the adoption of impact fees, and that new development is entitled to a credit for its contribution to those funding sources, would be to argue that local governments cannot require “growth to pay for growth” unless they have always done so. Local funding that is committed to be used for capacity expansion in the future needs to be taken into account only in cases where there is no reasonable need for or benefit from higher levels of service than the existing level of service embodied in the impact fee calculations. As long as the fees are based on new development paying to maintain existing levels of service that have been paid for in full by existing development, and additional funding can reasonably be used to raise the level of service for existing and new development alike, no additional revenue credits are warranted.

METHODOLOGY

A wide range of methodologies have been developed to calculate impact fees, consistent with the legal requirements and guidelines described in the previous chapter. Despite variations, there are two primary types of methodologies, which can be referred to as “standards-based” and “plan-based.” Standards-based methodologies use a system-wide level of service standard, such as the system-wide ratio of road capacity to demand, the number of park acres per 1,000 residents, or the existing capital investment per service unit.

Plan-based methodologies are generally based on modeling and geographically-specific level of service standards (e.g., “all road segments and intersections shall function at level of service D or better”), and rely on a facility master plan to create the nexus between the cost of planned improvements and the projected growth over a defined time period. In general, the standards-based approach provides greater flexibility in expenditures (a plan-based approach requires a master plan update when planned projects change). The two approaches are described in more detail below.

Standards-Based

The “standards-based” methodology uses a generalized level-of-service standard to determine the costs to accommodate new development. This approach does not require that there be a master plan, or even a list of specific planned projects that will be funded with the impact fees.

Most often, the standards-based approach uses the actual level of service (LOS) that exists at the time the study is prepared. This LOS standard can be expressed in terms of a physical ratio (e.g., park acres per 1,000 population), or in dollar terms (e.g., park cost per person). When based on the existing LOS, this approach is sometimes referred to as “incremental expansion.” The basic assumption is that it will be necessary to expand capital facilities proportional to growth. Basing the fees on the existing LOS assumes that there is little or no excess capacity in existing facilities to accommodate future growth. However, a standards-based methodology can also be based on a LOS that is lower or higher than the current existing LOS. When there is a significant amount of excess capacity, a lower-than-existing LOS may be used.

For transportation, the most common standards-based approach is often referred to as the “consumption-based” methodology. This methodology charges a new development the cost required to replace the capacity it will consume in the major roadway system. In other words, if a development will generate 100 vehicle-miles of travel (VMT) per day, it is charged impact fees based the average cost to create 100 vehicle-miles of capacity (VMC). Most well-functioning roadway systems have considerably more than one VMC for each VMT, but at least a portion of this surplus represents excess capacity. While this is the most common standards-based approach for roads, some transportation impact fees use a VMC/VMT ratio higher than 1.0, but less than the existing ratio. This is referred to as the modified consumption-based methodology. The existing ratio is seldom used, because growing communities tend to have major roads in areas that are not fully developed, and as they approach build-out are unlikely to be able to maintain the current ratio.

Plan-Based

In contrast to standards-based methodologies, which rely on generalized, system-wide LOS standards, plan-based methodologies rely on a specific list of planned improvements. A plan-based methodology basically divides the cost of planned improvements over a fixed time period by the anticipated growth in service units over the same time period. The least defensible of these approaches are those based on a short-term capital improvements plan, because there is not necessarily any strong correlation between short-term planned improvement costs and long-term costs to accommodate new development. Much more defensible are those based on a long-range master plan or build-out plan.

As discussed above, plan-based methodologies seldom account for the cost of existing excess capacity. Instead, they focus solely on future costs to be incurred, and generally exclude any future costs to retire debt on existing capacity.

Regardless of the methodology used, an impact fee calculation must comply with the legal principles established by impact fee case law, as described earlier. The most fundamental principle is that impact fees should only charge new development for the costs attributable to growth, and should not charge for the correction of existing capacity deficiencies. In addition, the fees should be proportional to the impact of the development. Finally, new development should not be required to pay twice for the same improvements through other taxes and fees.

Plan-based approaches are not exempt from the fundamental requirement that the fees do not exceed the existing level of service. For example, a transportation fee based on a master plan that determines the cost to maintain LOS D on all roadways over the next 20 years should identify any existing roadways that currently function at a LOS worse than D and develop a funding plan to remedy the deficiencies. Because new development will generally contribute toward whatever funding source is used for this purpose, it is usually necessary to calculate a revenue credit that accounts for such contribution. Many impact fee studies that use the plan-based approach omit this critical component.

Recommendation

The consultant's recommendation is to use a standards-based methodology. The plan-based approach requires a current master plan that identifies the improvements that will be needed to serve anticipated development over a long term, such as 20 years. The standards-based approach allows the City to adjust its capital improvements plan to respond to changing development patterns without triggering the need for an impact fee and master plan update.

Two types of standards-based methodologies are recommended for this study. For the transportation impact fees, the modified consumption-based is used. For public safety, the incremental expansion approach is used.

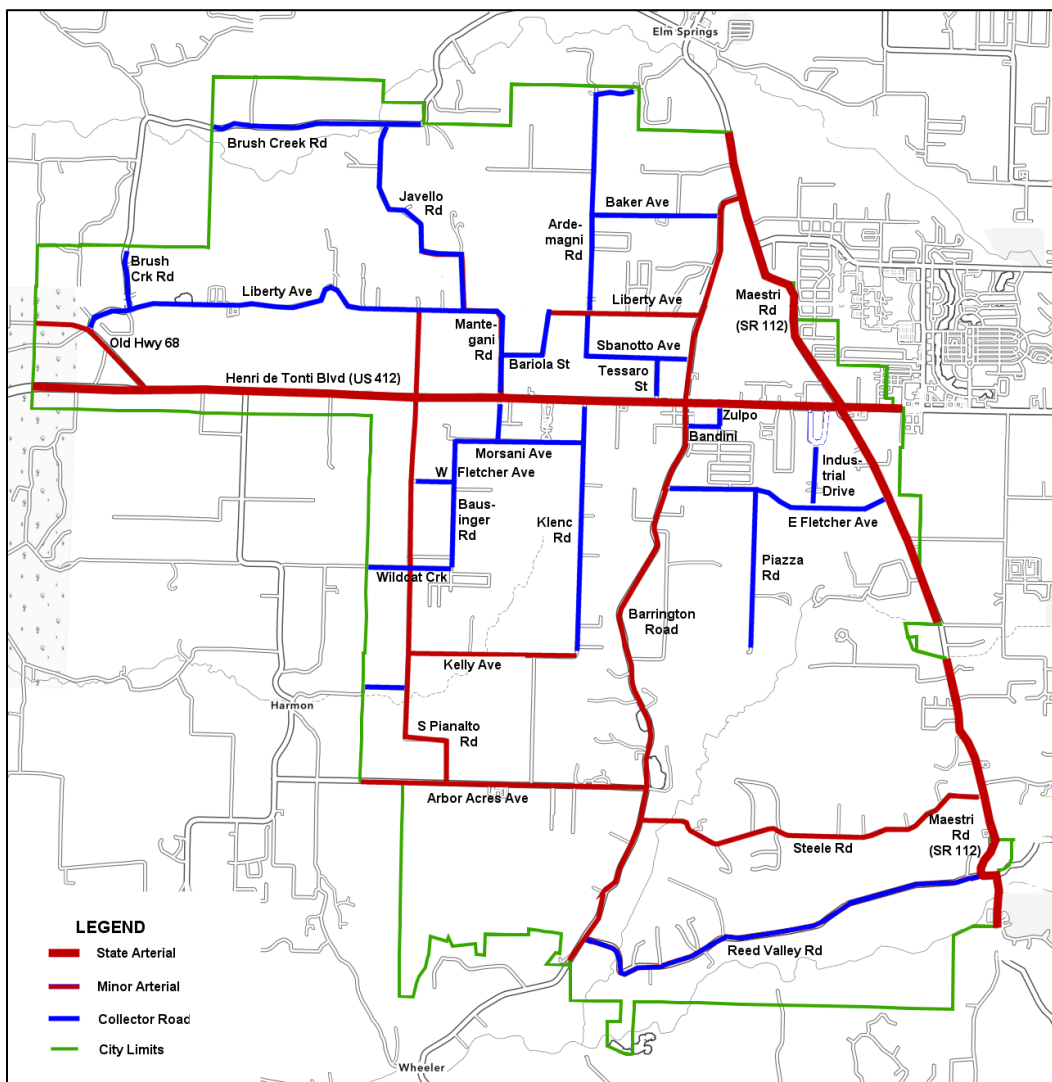
TRANSPORTATION

This chapter calculates potential transportation impact fees based on current data and costs. The transportation impact fees are designed to recover the costs of design, right-of-way and construction for capacity improvements to the major roadway system necessitated by growth. In an attempt to make the fee calculations easier to follow, numbers in a table that are inputs into another table are highlighted in red.

Major Roadway System

A transportation impact fee study should clearly identify the network of roads that the fees are designed to improve. For the purposes of this study, the major road system includes roads classified as arterials or collectors (see Figure 1).

Figure 1. Map of Existing Major Roads



The major road system includes two Federal/State highways - Henri De Tonti Boulevard (US 412) and Maestri Road ((SR 112) – because they are essential east-west and north-south arteries in the city and share intersections with City roads that the City will need to help fund. The City may also need to contribute to other improvements to these roadways. However, funding major improvements to these roads is not primarily the City’s responsibility, and the majority of the traffic on them is through traffic unrelated to development in the city. For these reasons, they are excluded from the calculations of the transportation impact fees.

A detailed inventory of the City roads in major roadway system in Tontitown is provided in Table 3. It shows the street name, segment description, functional classification, jurisdictional ownership, segment length in miles, average daily volume, daily vehicle-miles of travel VMT, daily capacity, and daily vehicle-miles of capacity VMC).

Table 3. Existing Major Roadway System

Street Name	Segment	Class	Lns	Miles	ADT	VMT	Capacity	VMC
Ardemagni Rd	Sbanotto Ave - N city limit	Collector	2	2.22	220	488	14,100	31,302
Baker Ave W	Ardemagni-Barrington Rd	Collector	2	0.76	605	460	14,100	10,716
Bandini Ave E	Barrington Rd - Zulpo St	Collector	2	0.20	740	146	14,100	2,774
Bariola St	Mantegani Rd - Liberty Ave	Collector	2	0.48	740	355	14,100	6,768
Bausinger Rd	Wildcat Crk - Morsani Ave	Collector	2	0.75	740	555	14,100	10,575
Brush Creek Rd	Liberty Ave - N city limit	Collector	2	0.58	650	377	14,100	8,178
Brush Creek Rd	W city limit - E city limit	Collector	2	1.25	650	813	14,100	17,625
Fletcher Ave E	SR 112 - Barrington Rd	Collector	2	1.25	1,982	2,478	14,100	17,625
Fletcher Ave W	Bausinger - Pianalto Rd	Collector	2	0.26	740	192	14,100	3,666
Industrial Drive	E Fletcher Ave - Indust Ctr	Collector	2	0.38	740	281	14,100	5,358
Javello Rd	Brush Crk Rd - Liberty Ave	Collector	2	1.36	740	1,006	14,100	19,176
Kenneth Price Rd	Brush Crk Rd - N city limit	Collector	2	0.29	740	215	14,100	4,089
Klenc Rd	SR 412 - Kelly Ave	Collector	2	1.50	1,413	2,120	14,100	21,150
Liberty Ave	Old Hwy 68 - Javello Rd	Collector	2	2.39	966	2,309	14,100	33,699
Mantegani Rd N	SR 412 - Javello Rd	Collector	2	0.72	740	533	14,100	10,152
Mantegani Rd S	SR 412 - Morsani Ave	Collector	2	0.25	740	185	14,100	3,525
Morsani Ave	Klenc Rd - Bausinger Rd	Collector	2	0.74	740	548	14,100	10,434
Piazza Rd	E Fletcher Ave - end	Collector	2	0.95	740	703	14,100	13,395
Reed Valley Rd	S Barrington Rd - SR 112	Collector	2	2.57	1,300	3,341	14,100	36,237
Sbanotto Ave	Barrington - Ardemagni Rd	Collector	2	0.87	740	644	14,100	12,267
Tessaro St	SR 214 - Sbanotto Ave	Collector	2	0.25	740	185	14,100	3,525
Wildcat Creek Blvd	Bausinger Rd - W city limit	Collector	2	0.50	740	370	14,100	7,050
Zulpo St SE	SR 412 - Bandini Ave	Collector	2	0.14	740	100	14,100	1,908
Subtotal, City Collector Roads				20.65		18,404		291,194
Arbor Acres Ave	Barrington Rd - W city limit	Minor Art	2	1.65	1,788	2,950	14,100	23,265
Barrington Rd N	SR 112-SR 412	Minor Art	2	1.22	4,900	5,978	14,100	17,202
Barrington Rd S	SR 412-S city limit	Minor Art	2	3.56	4,300	15,308	14,100	50,196
Kelly Ave	Pianalto Rd - Klenc Rd	Minor Art	2	0.99	2,810	2,782	14,100	13,959
Liberty Ave	Bariola St - Barrington Rd	Minor Art	2	0.89	966	860	14,100	12,549
Old Highway 68	SR 412 - W city limit	Minor Art	2	0.84	2,810	2,360	14,100	11,844
Pianalto Rd N	Liberty Ave - SR 412	Minor Art	2	0.50	2,810	1,405	14,100	7,050
Pianalto Rd S	SR 412 - Arbor Acres Ave	Minor Art	2	2.49	2,810	6,997	14,100	35,109
Steele Rd	Barrington Rd - SR 112	Minor Art	2	2.19	4,800	10,512	14,100	30,879
Subtotal, City Minor Arterials				14.33		49,152		202,053
Total, City Major Roads				34.98		67,556		493,247

Source: Functional classification from City of Tontitown Major Street Plan, updated May 23, 2021; length and number of lanes from City street inventory; average daily trips (ADT) are combination of recent City counts and 2022 counts from Northwest Arkansas Regional Planning website (ADTs in italics are estimates based on 75% of average volumes with counts); VMT is product of miles and ADT; capacities are generalized maximum capacity at LOS D from Florida Department of Transportation, *Quality/Level of Service Handbook*, January 2023 (non-State roads is 80% of maximum volume); VMC)is product of miles and capacity.

The methodology used in this study for transportation is the standards-based approach known as “consumption-based.” The typical consumption-based approach uses a system-wide ratio of capacity to demand (vehicle-miles of capacity to vehicle-miles of travel, or VMC/VMT). A VMC/VMT ratio of one-to-one is the level of service typically used in the consumption based approach, because as the jurisdiction builds out, this approach recognizes that there is a significant amount of excess capacity in the existing major roadway system, and that the capacity/demand ratio will tend to fall closer to 1.00 as the city approaches build-out.

It should be noted that a one-to-one ratio of capacity to demand means that every road is at maximum capacity. Traffic on a major road network is never evenly distributed in proportion to the available capacity. If one road has some excess capacity, some other road must be over capacity.

Total demand and capacity from the major roadway inventory is summarized in Table 4, which demonstrates that the city’s existing major roadway system currently has a level of service of more than seven-to-one VMC per VMT. The recommended level of service is a two-to-one ratio. Because the fees are based on a level of service that is still much lower than the current level of service, there are no existing deficiencies in the context of the modified consumption-based methodology.

Table 4. Current Major Roadway System Level of Service

	1
Existing Vehicle-Miles of Capacity (VMC)	493,247
÷ Existing Vehicle-Miles of Travel (VMT)	67,556
Existing VMC/VMT Ratio	7.30
Recommended VMC/VMT Ratio	2.00

Source: Table 3.

Service Units

Service units create the link between demand (traffic generated by new development) and supply (roadway capacity). An appropriate service unit basis for road impact fees is vehicle-miles. Vehicle-miles is a combination of the number of vehicles traveling during a given time period and the distance (in miles) that those vehicles travel.

The two time periods most often used in traffic analysis are the 24-hour day (average daily trips or ADT) and the single hour of the day with the highest traffic volume (peak hour trips or PHT). Average daily trips are used in this study.

On the demand side, this update uses average daily trip generation, new trip factors (which account for pass-by and diverted trips), and average trip lengths. The product of these three factors is the average daily vehicle-miles of travel (VMT) associated with a unit of development for various land use types.

The service unit on the supply side is average daily vehicle-miles of capacity (VMC). VMC is calculated as the product of the length and capacity of each roadway. System-wide VMC is the sum of the VMC for all major roadways. Capacity is measured in terms of the generalized maximum daily volume that can be accommodated on the roadway at Level of Service “D.”

The travel demand generated by specific land use types is a product of three factors: 1) trip generation, 2) percent new trips and 3) average trip length. The first two factors are well documented in the professional literature. In contrast, trip lengths are much more likely to vary between communities, depending on the geographic size and shape of the community and its major roadway system.

Trip Generation

Trip generation rates represent trip ends, or driveway crossings. A one-way trip from home to work counts as one trip end for the residence and one trip end for the workplace, for a total of two trip ends. To avoid over-counting, all trip rates have been divided by two. This splits the travel demand equally between the origin and destination of the trip, and avoids double-charging. The trip generation rates are based on information published in the most recent edition of the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual*.

New Trip Factor

Trip rates also need to be adjusted by a “new trip factor” to exclude pass-by and diverted trips. This adjustment is intended to reduce the possibility of over-counting travel induced by the new development. Pass-by trips are those trips that are already on a particular route for a different purpose and simply stop at a development on that route. For example, a stop at a convenience store on the way home from the office is a pass-by trip for the convenience store. A pass-by trip does not create an additional burden on the street system and therefore should not be counted in the assessment of impact fees. A diverted-linked trip is similar to a pass-by trip, but a diversion is made from the regular route to make an interim stop. The reductions for pass-by and diverted trips utilized in this study were drawn from the ITE handbook and Florida origin and destination studies.

Average Trip Length

The average trip length is the most difficult travel demand factor to determine. In the context of a road impact fee using a consumption-based methodology, the relevant input is the average length of a trip on the major roadway system. The starting point is national data on average trip lengths for specific land uses and trip purposes, which is summarized in Table 5.

Table 5. Average Trip Length by Trip Purpose

Trip Purpose	Trip Travel Miles	Number of Trips	Miles/ Trip
To/From Work	676,353,464,343	57,322,960,727	11.80
Shopping	469,238,803,438	61,185,371,064	7.67
Other Family/Personal Business	405,141,121,686	57,674,398,928	7.02
School/Church	213,274,822,176	28,516,835,291	7.48
Medical/Dental	79,667,227,640	7,887,828,511	10.10
Visit Friends/Relatives	340,437,097,061	20,629,292,825	16.50
Other Social/Recreational	569,053,744,937	57,378,787,883	9.92
Work-Related Business	78,257,248,513	5,017,642,723	15.60
Unknown Trip Purpose	215,546,882,104	12,820,536,853	16.81
Total*	3,046,970,411,898	308,433,654,805	9.88

* excludes the following travel modes: bike/ped., golf cart, mass transit, airplane, boat
 Source: Federal Highway Administration, *National Household Travel Survey*, 2017.

While national average trip lengths provide reasonable estimates of relative magnitudes associated with different land use types, the actual distances are likely to be unrepresentative of travel on the City’s major roadway system. An adjustment factor can be derived by dividing the VMT actually observed on the major roadway system by the VMT that would be expected using state-wide travel demand characteristics.

The first step in developing the adjustment factor is to estimate the total VMT that would be expected on the major roadway system based on state and national travel demand characteristics. Existing land uses are multiplied by trip generation rates, percent new trips and average trip lengths and summed to estimate total VMT. As shown in Table 6, existing land uses within the city, using state and national trip data, would be expected to generate 192,677 VMT per day.

Table 6. Expected Vehicle-Miles of Travel

Land Use	ITE Code	Unit	Existing Units	Trip Rate	% New Trips	Avg. Trip Miles	Expected VMT
Single-Family Detached*	210	Dwelling	2,138	4.71	100%	9.88	99,491
Multi-Family	220	Dwelling	202	3.37	100%	9.88	6,726
Retail/Commercial	820	1,000 sf	741	18.50	43%	7.67	45,212
Office	710	1,000 sf	373	5.42	92%	10.10	18,785
Industrial	130	1,000 sf	125	1.68	92%	11.80	2,280
Warehouse	150	1,000 sf	1,827	0.85	92%	11.80	16,859
Mini-Warehouse	151	1,000 sf	164	0.72	92%	11.80	1,282
Public/Institutional	620	1,000 sf	91	3.37	89%	7.48	2,042
Total							192,677

* existing units includes mobile homes

Source: Existing city-wide units from Table 21 and Table 23 in Appendix A; trip rates and percent new trips from Table 8; average trip length in miles from Table 5; expected VMT is product of existing units, trip rate, % new trips, and average trip length.

The final step in developing the local adjustment factor is to compare the expected VMT using Florida and national trip characteristics to actual daily VMT on the major roadway system, as shown in Table 7. Expected VMT based on existing land uses and travel demand characteristics significantly over-estimates VMT actually observed on the city’s existing major roadway system. This is not surprising, because the major roadway system does not account for travel on local streets or roads outside the city limits. Consequently, the travel demand based on state-wide and national data will be adjusted downward by multiplying by the local adjustment factor of 0.351, as calculated in Table 7.

Table 7. Local Travel Demand Adjustment Factor

Actual Daily Vehicle-Miles of Travel (VMT)	67,556
÷ Expected Daily Vehicle-Miles of Travel (VMT)	192,677
Ratio of Actual to Expected VMT	0.351

Source: Actual VMT from Table 4; expected VMT from Table 6.

Travel Demand Summary

The result of combining trip generation rates, new trip factors, average trip lengths and the local adjustment factor is a travel demand schedule that establishes the vehicle-miles of travel (VMT) generated on the major roadway system during the average weekday by various land use types per unit of development. The recommended travel demand schedule is presented in Table 8.

Table 8. Travel Demand by Land Use

Land Use Type	ITE Code	Unit	Trip Rate	Percent New	Avg. Trip Miles	Adjust. Factor	VMT/Unit
Single-Family Detached	210	Dwelling	4.71	100%	9.88	0.351	16.33
Multi-Family	220	Dwelling	3.37	100%	9.88	0.351	11.69
Retail/Commercial	820	1,000 sq. ft.	18.50	43%	7.67	0.351	21.42
Office	710	1,000 sq. ft.	5.42	92%	10.10	0.351	17.68
Industrial	130	1,000 sq. ft.	1.68	92%	11.80	0.351	6.40
Warehouse	150	1,000 sq. ft.	0.85	92%	11.80	0.351	3.24
Mini-Warehouse	151	1,000 sq. ft.	0.72	92%	11.80	0.351	2.74
Public/Institutional	620	1,000 sq. ft.	3.37	89%	7.48	0.351	7.87

Source: Trip rates are ½ of average daily trip ends on a weekday from Institute for Transportation Engineers (ITE), *Trip Generation Manual*, 11th edition, 2021; percent new trips for retail from ITE *Trip Generation Handbook* 3rd edition, 2017 for shopping center, other nonresidential from a summary of Florida origin and destination studies presented in Tindale Oliver, *Volusia County Impact Fee Study*, July 2022, Appendix C; average trip length in miles from Table 5 for the following trip purposes: residential is average of all local trips, retail/commercial is shopping, office is medical/dental, industrial/warehouse is home to work, and public/institutional is school/church; local adjustment factor from Table 7; daily VMT is product of trip rate, percent new trips, average trip length and local adjustment factor.

Cost per Service Unit

Expanding the capacity of the City’s major roadway system is primarily accomplished by widening existing roadway cross-sections to accommodate additional through lanes and by building new roads. The transportation impact fee is designed to cover the cost of adding capacity to the roadway system. All of the normal components of a roadway expansion project are eligible for impact fee funding, including engineering and design, right-of-way acquisition, construction of new lanes, reconstruction of existing lanes and relocation of utilities where necessary as part of a widening project, and installation of sidewalks, street lighting and landscaping as part of an improvement project. Intersection improvements, signalization and timing, and similar types of improvements also expand roadway capacity and are eligible improvements, but the additional capacity is harder to quantify.

The cost to add roadway capacity to the City’s major roadway system is estimated based on two new 2-lane road projects that were completed in 2021. The combined cost of these projects is \$104 per vehicle-mile of capacity (VMC) added. Using the recommended level of service under the modified consumption-based methodology of a VMC/VMT ratio of two-to-one, the cost is \$208 per VMT.

Table 9. Transportation Cost per Vehicle-Mile

	Miles	Cost	Cost/Mi.
Fletcher Ave, Piazza Rd-Hwy 112	0.81	n/a	n/a
Industrial/Agnes Dr 2-In extensions	0.48	n/a	n/a
Total	1.29	\$1,899,242	\$1,472,281
÷ Capacity at LOS D			14,100
Cost per Vehicle-Mile of Capacity (VMC)			\$104
x Recommended VMC/VMT Ratio			2.00
Cost per Vehicle-Mile of Travel (VMT)			\$208

Source: Projects, costs, and miles from City of Tontitown, September 11, 2023; capacity from Table 3; recommended VMC/VMT ratio from Table 4.

Net Cost per Service Unit

As described in the Legal Framework chapter, impact fees should be reduced for new development’s contribution toward funding existing deficiencies or retiring outstanding debt for existing facilities that are included in the existing level of service on which the fees are based. The transportation impact fees are based on a level of service that is actually lower than the existing LOS, so no deficiency credit is warranted. The City does not have any outstanding debt attributable to transportation improvements.

Net Cost Schedule

The transportation impact fees are based on the daily vehicle-miles of travel (VMT) on the major roadway system generated by a development. The VMT per development unit is multiplied by the net cost per VMT to determine the maximum fee per unit. The updated transportation impact fees are presented in Table 10.

Table 10. Transportation Net Cost Schedule

Land Use Type	Unit	VMT/Unit	Net Cost per VMT	Net Cost per Unit
Single-Family Detached*	Dwelling	16.33	\$208	\$3,397
Multi-Family	Dwelling	11.69	\$208	\$2,432
Retail/Commercial	1,000 sq. ft.	21.42	\$208	\$4,455
Office	1,000 sq. ft.	17.68	\$208	\$3,677
Industrial	1,000 sq. ft.	6.40	\$208	\$1,331
Warehouse	1,000 sq. ft.	3.24	\$208	\$674
Mini-Warehouse	1,000 sq. ft.	2.74	\$208	\$570
Public/Institutional	1,000 sq. ft.	7.87	\$208	\$1,637

* includes mobile or manufactured home

Source: VMT per unit from Table 8; net cost per VMT is the same as cost per VMT from Table 9; net cost/unit is product of VMT/unit and net cost/VMT.

Capital Plan

The City plans to make significant, capacity-enhancing improvements to its major road system over the next six years, as summarized in Table 11.

Table 11. Transportation Capital Plan

Planned Improvement	Years	Capacity Type	City Cost
Traffic Signal, Barrington at Henri De Tonti Blvd	2024-2028	Intersection Improvement	\$720,000
Fletcher Ave Extension, Barrington to Klenc	2025	New Road	\$1,500,000
Wildcat Ck Blvd Extension, Klenc to Bausinger	2027	New Road	\$2,000,000
Liberty Ave Extension, Barrington to US 112	2026-2030	New Road	\$1,000,000
Barrington Rd, Add Lane, US 112 to SR 412	2028	Roadway Expansion	\$3,000,000
Barrington Rd, Add Lane, SR 412 to Tuscan	2030	Roadway Expansion	\$2,000,000
Total Plan Cost			\$10,220,000

Source: City of Tontitown, February 28, 2024.

PUBLIC SAFETY

The proposed public safety impact fees are intended to cover the capital costs required to provide fire and police protection to new development at the same level of service provided to existing development in the city.

Service Units

In impact fee analysis, disparate types of development must be translated into a common unit of measurement that reflects the impact of new development on the demand for new facilities. This unit of measurement is called a “service unit.” There are two generally-accepted ways to measure the demand for police: calls-for-service and functional population.

Calls-for-service per development unit by land use is not as precise a measure of demand for public safety as it might appear. A significant percentage of calls occur on roadways and cannot be attributed to a land use. The land use categories used are not well-defined and may not be consistent with the impact fee categories. In addition, calls per unit of development for various land use types are subject to rather extreme fluctuations over time. Even when averaged over a number of years, the number of calls attributed to the various land uses tends to change significantly. This volatility in call-for-service rates is even greater in smaller jurisdictions like Tontitown.

Functional population represents the number of full-time equivalent people at a land use, based on the observation that demand for public safety facilities tends to be proportional to the number of people present at the site of a land use. The inputs into the functional population methodology, such as average household size, trip generation rates, average vehicle occupancy, and employment density are much more stable over time, and are not affected by the current mix of land uses. This makes the functional population a better predictor of long-term demand, and less likely to change dramatically between periodic impact fee updates. For these reasons, it is used as the service unit for the public safety impact fees.

Residential Service Units by Housing Type

For residential land uses, the impact of a dwelling unit on the need for capital facilities is proportional to the number of persons residing in the dwelling unit. The first step is to determine the percentage of time people spend at their place of residence versus away from home during their daily waking hours. In 2021, the U.S. Bureau of Labor Statistics interviewed one person each from 9,600 randomly-selected households to determine how people spent their time during a recent day. Survey respondents were limited to persons aged 15 or older in the civilian population. The survey determined the average number of waking hours spent on various types of activities.

While it did not itemize where the activities occurred, reasonable assumptions have been made about which activities were more likely to take place at the place of residence or away from home. The results, summarized in Table 12, indicate that people spend an average of 45% of their time not sleeping at their place of residence.

Table 12. Time Usage Survey Data

Primary Activity	Waking Hrs. per Day	At Home	Away
Personal care activities (other than sleeping)	0.76	0.76	–
Eating and drinking*	1.14	0.86	0.28
Household activities	1.80	1.80	–
Purchasing goods and services	0.65	–	0.65
Caring for and helping household members	0.48	0.48	–
Caring for and helping non-household members	0.18	–	0.18
Working and work-related activities	4.45	–	4.45
Educational activities	0.51	–	0.51
Organizational, civic and religious activities	0.17	–	0.17
Watching television	2.57	2.57	–
Other leisure and sports	2.16	–	2.16
Telephone, mail and email	0.22	0.22	–
Other activities	0.20	0.20	–
Total Hours	15.29	6.89	8.40
Percent of Time	100%	45%	55%

* assumed 3/4 of meals eaten at home

Source: U.S. Dept. of Labor, Bureau of Labor Statistics, *American Time Use Survey*, Table 2: Time spent in primary activities per weekday, civilian population 15 years or older, 2021 annual averages, June 23, 2022.

Functional population per dwelling unit by housing type is calculated in Table 13. Because the methodology for determining nonresidential functional population does not account for vacant buildings, residential functional population should also be based on the assumption of full occupancy for all buildings for consistency. For this reason, average household size is the most appropriate.

Table 13. Residential Functional Population Multipliers

Housing Type	Unit	Average HH Size	% of Waking Hours at Home	Func. Pop. per Unit
Single-Family Detached	Dwelling	2.98	0.45	1.34
Multi-Family	Dwelling	2.39	0.45	1.08

Source: Average household size per unit from Table 22 in Appendix A; occupancy factor from Table 12.

Nonresidential Service Units by Land Use

The functional population methodology for nonresidential uses starts with trip generation rates. The number of daily trips is multiplied by the average vehicle occupancy to determine the total number of persons going to the site each day. The number of employees is estimated from average employee densities. Non-employees (“visitors”) are the remaining persons going to the site. Employees are estimated to spend eight hours per day at their place of employment, and visitors are estimated to spend one hour per visit.

Functional population per 1,000 square feet is derived by dividing the total number of hours spent by employees and visitors during a weekday by 24 hours. The formula used to derive the nonresidential functional population estimates is summarized in Figure 2.

Figure 2. Nonresidential Functional Population Formula

FUNCPOP/UNIT	=	(employee hours/1000 sf + visitor hours/1000 sf) ÷ 24 hours/day
<u>Where:</u>		
Employee hours/1000 sf	=	employees/1000 sf x 8 hours/day
Visitor hours/1000 sf	=	visitors/1000 sf x 1 hour/visit
Visitors/1000 sf	=	weekday ADT/1000 sf x avg. vehicle occupancy – employees/1000 sf
Weekday ADT/1000 sf	=	one-way avg. daily trips (total trip ends ÷ 2)

Using the formula above and trip generation rates from the *Trip Generation Manual*, vehicle occupancy rates from the *National Household Travel Survey*, and employee densities from the U.S. Department of Energy, nonresidential functional population estimates are calculated per 1,000 square feet of gross floor area. Table 14 presents the results of these calculations for the nonresidential land use categories.

Table 14. Nonresidential Functional Population Multipliers

Land Use	Unit	Trip Rate	Persons/ Trip	Workers/ Unit	Visitors/ Unit	Functional Pop./Unit
Retail/Commercial	1,000 sq. ft.	18.50	1.95	0.82	35.26	1.74
Office	1,000 sq. ft.	5.42	1.86	1.97	8.11	0.99
Industrial	1,000 sq. ft.	1.68	1.28	0.41	1.74	0.21
Warehouse	1,000 sq. ft.	0.85	1.28	0.41	0.68	0.17
Mini-Warehouse	1,000 sq. ft.	0.72	2.07	0.10	1.39	0.09
Public/Institutional	1,000 sq. ft.	3.37	2.62	0.36	8.47	0.47

Source: Trip rates are one-half daily trip ends from Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th edition, 2021; persons/trip is average vehicle occupancy from Federal Highway Administration, *National Household Travel Survey*, 2017 data from Florida; employees/unit from U.S. Department of Energy, *Commercial Buildings Energy Consumption Survey*, 2018; visitors/unit is trips times persons/trip minus employees/unit; functional population/unit calculated according to formula in Figure 2.

Existing Service Units

Total existing functional population in the police service area (unincorporated area) is shown in Table 15.

Table 15. Existing Functional Population

Land Use type	Unit	Existing Units	Func. Pop./ Unit	Functional Population
Single-Family Det.	Dwelling	2,138	1.34	2,865
Multi-Family	Dwelling	202	1.08	218
Retail/Commercial	1,000 sq. ft.	741	1.74	1,289
Office	1,000 sq. ft.	373	0.99	369
Industrial	1,000 sq. ft.	125	0.21	26
Warehouse	1,000 sq. ft.	1,827	0.17	311
Mini-Warehouse	1,000 sq. ft.	164	0.09	15
Public/Institutional	1,000 sq. ft.	91	0.47	43
Total				5,136

Source: Existing units from Table 21 (residential) and Table 23 (nonresidential) in Appendix A; functional population per unit from Table 13 (residential) and Table 14 (nonresidential); functional population is units times functional population per unit.

Cost per Service Unit

The public safety impact fee is based on the existing level of service provided by fire and police facilities, land, vehicles and capital equipment. The level of service is based on the total current replacement value of existing public safety capital assets that have been fully paid for by existing development and are currently providing service to existing development.

Table 16 calculates the replacement cost of fire and police buildings and land. It includes the cost of the existing fire station, as well as the land for the new fire station purchased in 2021. It does not include the cost for the construction new fire station on that land, which was funded with debt and so has not been paid for by existing development. It includes the share of the cost of the current city hall/police station built in 2018 and land attributable to police, as well as the cost of the 2022 purchase of the house and land that is occupied by the police CID office. The total net replacement value of existing public safety buildings and land is estimated to be about \$3.1 million.

Table 16. Public Safety Building and Land Cost

Facility	Address	Building (sq.ft.)	Land (acres)	Cost/Unit	Total Cost
Fire					
Fire Station 33 building	165 Zulpo St	3,125	n/a	\$424	\$1,325,000
Fire Station 33 land	165 Zulpo St	n/a	1.00	\$187,805	\$187,805
Fire Station 1 building	199 E. Bandini Ave	12,500	n/a	\$424	\$5,300,000
Fire Station 1 land	199 E. Bandini Ave	n/a	2.05	\$187,805	\$385,000
– Outstanding Debt on Fire Station 1 Building					-\$5,300,000
Total Net Fire Building and Land Cost					\$1,897,805
Police					
City Hall	235 E Henri De Tonti Blvd	9,907	1.10	n/a	n/a
x Police Share (based on building sq. ft. occupied)		40.4%	40.4%	n/a	n/a
Police Station building	235 E Henri De Tonti Blvd	4,000	n/a	\$204	\$816,000
Police Station land	235 E Henri De Tonti Blvd	n/a	0.44	\$187,805	\$82,634
Police CID Office	581 S Barrington Rd	1,624	0.98	n/a	\$275,510
Total Police Building and Land Cost					\$1,174,144
Total					
Total Public Safety Net Building and Land Cost					\$3,071,949

Source: Building square feet and acres of land from City, October 18, 2023; fire station cost per sq. ft. based on cost for new fire station completed in 2024 (\$5.3 million divided by 12,500 sq. ft.); police station cost per sq. ft. based on original 2018 construction cost for current city hall/police station of \$1.5 million increased by the 35.1% increase in the Engineering News-Record Building Cost index from 2018 to 2023 annual average; fire and police station land cost based on the cost of land purchased in 2021 for new fire station; police CID office and land cost is 2022 purchase price.

Vehicle costs are based on the number of vehicles in the current fleet and current unit cost to purchase new vehicles. There are some outstanding lease/purchase payments for vehicles in the existing public safety fleet, and these have been excluded. The net replacement value of public safety vehicles that have been paid for by existing development totals approximately \$6.1 million, as shown in Table 17 on the next page.

Table 17. Public Safety Vehicle Cost

Vehicle Type	Number	Unit Cost	Total Cost
Fire			
Pumper	2	\$832,000	\$1,664,000
Tanker	1	\$450,000	\$450,000
Ladder Truck	2	\$1,400,000	\$2,800,000
Brush Truck	1	\$200,000	\$200,000
Command Vehicle	2	\$30,000	\$60,000
Total Fire Vehicle Cost			\$5,174,000
– Remaining Lease/Purchase Payments for Fire Truck			-\$250,000
Net Fire Vehicle Cost			\$4,924,000
Police			
Patrol Vehicles	20	\$80,000	\$1,600,000
– Remaining Lease/Purchase Payments for Patrol Cars			-\$400,000
Net Police Vehicle Cost			\$1,200,000
Total			
Total Public Safety Net Vehicle Cost			\$6,124,000

Source: Fire Department, January 4, 2024 and Police Department, September 18, 2023; outstanding lease/purchase payments from City, December 8, 2023.

The cost per service unit is determined by dividing the replacement cost of existing public safety facilities, land, and vehicles and equipment by the total number of police service units. As shown in Table 18, dividing the net replacement cost by the existing service units yields a cost of \$1,790 per functional population.

Table 18. Public Safety Net Cost per Service Unit

Buildings and Land	\$3,071,949
Vehicles	\$6,124,000
Total Net Replacement Cost	\$9,195,949
÷ Existing Service Units	5,136
Net Cost per Service Unit	\$1,790

Source: Building and land cost from Table 16; vehicle cost from Table 17; existing service units from Table 15.

Net Cost per Service Unit

As described in the Legal Framework chapter, impact fees should be reduced for new development's contribution toward the cost of remedying existing deficiencies or retiring outstanding debt for existing facilities that are included in the existing level of service. However, this study bases the public safety fees on the existing level of service, so there are no deficiencies, and the debt for the new fire station and the outstanding lease/purchase payments public safety vehicles have been excluded, so no additional credits are warranted.

Net Cost Schedule

The maximum public safety police fees that can be adopted by the City based on this study are derived by multiplying the number of service units (functional population) associated with each land use type by the net cost per service unit, as shown in Table 19.

Table 19. Public Safety Net Cost Schedule

Land Use type	Unit	Func. Pop./ Unit	Net Cost per Unit	Net Cost/ Func. Pop.
Single-Family Detached*	Dwelling	1.34	\$1,790	\$2,399
Multi-Family	Dwelling	1.08	\$1,790	\$1,933
Retail/Commercial	1,000 sq. ft.	1.74	\$1,790	\$3,115
Office	1,000 sq. ft.	0.99	\$1,790	\$1,772
Industrial	1,000 sq. ft.	0.21	\$1,790	\$376
Warehouse	1,000 sq. ft.	0.17	\$1,790	\$304
Mini-Warehouse	1,000 sq. ft.	0.09	\$1,790	\$161
Public/Institutional	1,000 sq. ft.	0.47	\$1,790	\$841

*includes mobile or manufactured home

Source: Functional population per unit from Table 13 (residential) and Table 14 (nonresidential); net cost per functional population from Table 18.

Capital Plan

The City plans to make significant, capacity-enhancing improvements to its public safety system over the next six years, as summarized in Table 20.

Table 20. Public Safety Capital Plan

Planned Improvement	Years	Capacity Type	Est. Cost
Retire Debt for New Fire Station 1 Construction	2024-2034	New Fire Station	\$5,300,000
Purchase Land and Construct New Police Station	2024-2034	New Police Station	\$6,000,000
Total Plan Cost			\$11,300,000

Source: City of Tontitown, February 28, 2024.

APPENDIX A: EXISTING LAND USE

The amount of existing residential and nonresidential development is an important input into an impact fee analysis, because it is critical to determining the existing levels of service for the various types of facilities.

Residential

The most reliable estimates of existing residential development can be developed from Census data and building permit records. The estimates are derived by adding the number of building permits issued in the last three years to the 2020 census counts.

The total number of housing units in Tontitown in 2020 is available from 2020 Census 100% counts. The distribution of those units by housing type is estimated from the American Community Survey (ACS) conducted by the Census Bureau. Combining the 2020 housing unit estimates with the new units permitted in the last three years yields the estimates of current housing units by type and jurisdiction presented in Table 35.

Table 21. Existing Housing Units by Type, 2023

Housing Type	2017-2021 Sample Data	Housing Share	Est. 2020 Units by Type	2020-22 Permits	Est. 2023 Units
Single-Family Detached*	1,660	89.4%	1,455	683	2,138
Multi-Family	197	10.6%	172	30	202
Total	1,857	100.0%	1,627	713	2,340

* includes mobile homes (accounts for roughly 7% of combined category)

Source: Housing type distribution from U.S. Census, American Community Survey 2017-2021 5% sample tabular data; total 2020 units from 2020 decennial census, 2020 units by type based on 2017-2021 distribution; new units permitted in 2020-2022 calendar years from City of Tontitown, August 24, 2023; estimated 2023 units is sum of 2020 units and units permitted over last three years.

Five percent sample data for average household size by housing type for a small jurisdiction like Tontitown has margins of error too large to yield reliable results. It is necessary to use data for a larger area like the county. The county data is calibrated using the ratio of city average household size for all housing types for 2020 census 100% counts to county average household size, and applying this factor to the county average household size for each housing type. The estimated average household sizes for the city are calculated in Table 22

Table 22. Average Household Size by Housing Type

Housing Type	County-wide 2017-2021 Sample Data			Calibration Factor	City Average HH Size
	Household Population	Occupied Units	Average HH Size		
Single-Family Detached	169,942	62,812	2.71	1.0984	2.98
Multi-Family	62,124	28,450	2.18	1.0984	2.39
Total	232,066	91,262	2.54	1.0984	2.79

Source: County-wide data is Washington County, Arkansas sample microdata from US Census Bureau; City average household size (AHHS) for all housing types from 2020 redistricting 100% enumeration for city of Tontitown; calibration factor is ratio of city to county AHHS for all housing types; city AHHS by housing type is product of county AHHS and calibration factor.

Nonresidential

Estimates of existing nonresidential building floor area, in square feet, were derived from current Washington County Property Assessor records by jurisdiction for the six generalized nonresidential land use categories, as summarized in Table 23.

Table 23. Existing Nonresidential Building Square Feet

Land Use Type	Sq. Feet	Sq. Ft. (000s)
Retail/Commercial	740,934	741
Office	372,885	373
Industrial	124,592	125
Warehouse	1,827,399	1,827
Mini-Warehouse	164,193	164
Public/Institutional	90,793	91
Total	3,320,796	3,321

Source: Washington County Assessor records, December 8, 2023 (public/ institutional supplemented with square footage estimates from aerial photography of government buildings, churches, and schools by Duncan Associates, December 21, 2023.

APPENDIX B: LAND USE DEFINITIONS

Definitions for the land use categories used in this study are provided below. These definitions are intended to assist City staff in classifying proposed developments and assessing appropriate impact fees. If these definitions are adopted by ordinance or resolution, they should be accompanied by a disclaimer that they only apply to interpretation of the impact fee schedule.

Single-Family Detached means a building containing only one dwelling unit, including a mobile or manufactured home.

Multi-Family means a building containing two or more dwelling units. It includes duplexes, apartments, residential condominiums, townhouses, and timeshares.

Retail/Commercial means an integrated group of commercial establishments planned, developed, owned or managed as a unit, or a free-standing retail or commercial use. A retail or commercial use shall mean the use of a building or structure primarily for the sale to the public of nonprofessional services, or goods or foods that have not been made, assembled or otherwise changed in ways generally associated with manufacturing or basic food processing in the same building or structure. This category includes but is not limited to all uses located in shopping centers and the following typical types of free-standing uses: amusement park, bank, camera shop, car wash, convenience store, department store, discount store, florist shop, health or fitness club, hobby/toy/game shop, hotel, laundromat, laundry or drycleaning, lawn and garden supply store, motel, movie theater, music store, newsstand, racetrack, recreation facility, restaurant, service station, spa, specialty retail shop, used merchandise store, variety store, or vehicle and equipment rental.

Office means a building exclusively containing establishments providing executive, management, administrative, financial, medical or professional services, and which may include ancillary services for office workers, such as a restaurant, coffee shop, newspaper or candy stand, or childcare facilities. It may be the upper floors of a multi-story office building, excluding ground floor retail uses. Typical uses include offices for medical services, real estate, insurance, property management, investment, employment, travel, advertising, secretarial, data processing, telephone answering, telephone marketing, music, radio and television recording and broadcasting studios; professional or consulting services in the fields of law, architecture, design, engineering, accounting and similar professions; interior decorating consulting services; and business offices of private companies, utility companies, trade associations, unions and nonprofit organizations. This category does not include an administrative office that is ancillary to the primary use of the site.

Public/Institutional means a governmental, quasi-public or institutional use, or a non-profit recreational use, not located in a shopping center or separately listed in the impact fee schedule. Typical uses include schools, colleges, day care centers, hospitals, nursing homes, churches, prisons, city halls, courthouses, post offices, jails, libraries, fire stations, museums, military bases, airports, bus stations, parks and playgrounds.

Industrial means a facility primarily intended for the production or assembly of goods, processing of foods, mining of raw materials, or similar activities. Typical uses include factories, welding shops, wholesale bakeries, and water and wastewater treatment plants.

Warehouse means an establishment primarily engaged in the display, storage and sale of goods to other firms for resale, as well as activities involving significant movement and storage of products or equipment. Typical uses include wholesale distributors, storage warehouses, moving and storage firms, trucking and shipping operations and major mail processing centers.

Mini-warehouse means an enclosed storage facility containing independent, fully enclosed bays that are leased to persons for storage of their household goods or personal property.

APPENDIX C: ARKANSAS DEVELOPMENT IMPACT FEES ACT

TITLE 14, Arkansas Code CHAPTER 56, SUBCHAPTER 1

SB 620 passed by legislature 4/16/2003
signed by Governor as Act 1719, 4/22/2003

Underline/strike-out are changes made by SB 298
passed by legislature 3/14/2007
signed by Governor as Act 310, 3/19/2007

Section 2 of SB 298: This act shall be applied retroactively to July 16, 2003. Any municipality or municipal service agency that, on or after July 16, 2003, collected a utility hookup fee or access fee that fits the definition of development impact fee as defined in § 14-56-103(a)(3) shall refund any portion of the fee or fees that were not levied for making the physical connection for utility services or to recover the construction costs of the line to which the connection is made.

14-56-103. Development impact fees.

(a) As used in this section:

(1) “Capital plan” means a description of new public facilities or of new capital improvements to existing public facilities or of previous capital improvements to public facilities that continue to provide capacity available for new development that includes cost estimates and capacity available to serve new development;

(2) “Development” means any residential, multifamily, commercial, or industrial improvement to lands within a municipality or within a municipal service agency's area of service;

(3) (A) “Development impact fee” means a fee or charge imposed by a municipality or by a municipal service agency upon or against a development in order to generate revenue for funding or for recouping expenditures of the municipality or municipal service agency that are reasonably attributable to the use and occupancy of the development. A fee or charge imposed for this purpose is a “development impact fee” regardless of what the fee or charge is called.

(B) “Development impact fee” shall not include:

(i) Any ad valorem real property taxes;

(ii) Any special assessments for an improvement district;

(iii) Any ~~utility hookup fees or access fees~~ fee for making the physical connection for utility services, or any fee to recover the construction costs of the line to which the connection is made; or

(iv) Any fees for filing development plats or plans for building permits or for construction permits assessed by a municipality or a municipal service that are approximately equal to the cost of the plat, plan, or permit review process to the municipality or the municipal service agency; or

(v) Any fee paid according to a written agreement between a municipality or municipal service agency and a developer for payment of improvements contained within the agreement.

(4) “Municipality” means:

- (A) A city of the first class;
- (B) A city of the second class; or
- (C) An incorporated town;

(5) “Municipal service agency” means:

- (A) Any department, commission, utility, or agency of a municipality, including any municipally owned or controlled corporation;
- (B) Any municipal improvement district, consolidated public or municipal utility system improvement district, or municipally owned nonprofit corporation that owns or operates any utility service;
- (C) Any municipal water department, waterworks or joint waterworks, or a consolidated waterworks system operating under the Consolidated Waterworks Authorization Act, §§ 25-20-301 et seq.;
- (D) Any municipal wastewater utility or department;
- (E) Any municipal public facilities board; or
- (F) Any of these municipal entities operating with another similar entity under an interlocal agreement in accordance with §§ 25-20-101 et seq. or §§ 25-20-201 et seq.;

(6) “Ordinance” means a municipal impact fee ordinance of a municipality or an authorizing rate resolution by a board of commissioners of a consolidated waterworks system authorized to set rates for its customers under the Consolidated Waterworks Authorization Act, §§ 25-20-301 et seq.; and

(7) “Public facilities” means publicly owned facilities that are one (1) or more of the following systems or a portion of those systems:

- (A) Water supply, treatment, and distribution for either domestic water or for suppression of fires;
- (B) Wastewater treatment and sanitary sewerage;
- (C) Storm water drainage;
- (D) Roads, streets, sidewalks, highways, and public transportation;
- (E) Library;
- (F) Parks, open space, and recreation areas;
- (G) Police or public safety;
- (H) Fire protection; and
- (I) Ambulance or emergency medical transportation and response.

(b) A municipality or a municipal service agency may assess by ordinance a development impact fee to offset costs to the municipality or to a municipal service agency that are reasonably attributable to providing necessary public facilities to new development.

(c) (1) A municipality or municipal service agency may assess, collect, and expend development impact fees only for the planning, design, and construction of new public facilities or of capital improvements to existing public facilities that expand its capacity or for the recoupment of prior capital improvements to public facilities that created capacity available to serve new development.

(2) The development impact fee may be pledged to the payment of bonds issued by the municipality or municipal service agency to finance capital improvements or public facilities for which the development impact fee may be imposed.

(3) No development impact fee shall be assessed for or expended upon the operation or maintenance of any public facility or for the construction or improvement of public facilities that does not create additional capacity.

(d) (1) A municipality or a municipal service agency may assess and collect impact fees only from new development and only against a particular new development in reasonable proportion to the demand for additional capacity in public facilities that is reasonably attributable to the use and occupancy of that new development.

(2) The owner, resident, or tenant of a property that was assessed an impact fee and paid it in full shall have the right to make reasonable use of all public facilities that were financed by the impact fee.

(e) (1) A municipality or municipal service agency may assess, collect, and expend impact fees only under a development impact fee ordinance adopted and amended under this section.

(2) A development impact fee ordinance shall be adopted or amended by the governing body of a municipality or municipal service agency only after the municipality or municipal service agency has adopted a capital plan and level of service standards for all of the public facilities that are to be so financed.

(3) The development impact fee ordinance shall contain:

(A) A statement of the new public facilities and capital improvements to existing public facilities that are to be financed by impact fees and the level of service standards included in the capital plan for the public facilities that are to be financed with impact fees;

(B) The actual formula or formulas for assessing the impact fee, which shall be consistent with the level of service standards;

(C) The procedure by which impact fees are to be assessed and collected; and

(D) The procedure for refund of excess impact fees in accordance with subsection (h) of this section.

(f) (1) The municipality or municipal service agency shall collect the development impact fee at the time and manner and from the party as prescribed in the ordinance and shall collect the fee separate and apart from any other charges to the development.

(2) (A) A development impact fee shall be collected at either the closing on the property by the owner or the issuance of a certificate of occupancy by the municipality.

(B) However, a municipal water or wastewater department, waterworks, joint waterworks, or consolidated waterworks system operating under the Consolidated Waterworks Authorization Act, §§ 25-20-301 et seq., may collect a development impact fee in connection with and as a condition to the installation of the water meter serving the property.

(3) At closing, the development impact fee that has been paid or will be paid for the property shall be separately enumerated on the closing statement.

(4) The ordinance may include that the development impact fee may be paid in installments at a reasonable interest rate for a fixed number of years or that the municipality or municipal service agency may negotiate agreements with the owner of the property as to the time and method of paying the impact fee.

(g) (1) The funds collected under a development impact fee ordinance shall be deposited into a special interest-bearing account.

(2) The interest earned on the moneys in the separate account shall be credited to the special fund and the funds deposited into the special account and the interest earned shall be expended only in accordance with this section.

(3) No other revenues or funds shall be deposited into the special account.

(h) (1) The municipality or municipal service agency shall refund the portion of collected development impact fees, including the accrued interest, that has not been expended seven (7) years from the date the fees were paid.

(2) (A) A refund shall be paid to the present owner of the property that was the subject of new development and against which the fee was assessed and collected.

(B) Notice of the right to a refund, including the amount of the refund and the procedure for applying for and receiving the refund, shall be sent or served in writing to the present owners of the property no later than thirty (30) days after the date on which the refund becomes due.

(C) The sending by regular mail of the notices to all present owners of record shall be sufficient to satisfy the requirement of notice.

(3) (A) The refund shall be made on a pro rata basis and shall be paid in full not later than ninety (90) days after the date certain upon which the refund becomes due.

(B) If the municipality or municipal service agency does not pay a refund in full within the period set in subdivision (h)(3)(A) of this section to any person entitled to a refund, that person shall have a cause of action against the municipality for the refund or the unpaid portion in the circuit court of the county in which the property is located.

(i) (1) (A) On and after July 16, 2003, a municipality or municipal service agency shall levy and collect a development impact fee only if levied and collected under ordinances enacted in compliance with this section.

(B) Beginning January 1, 2004, a municipality or municipal service agency shall collect development impact fees under ordinances enacted before July 16, 2003, or under ordinances amended after July 16, 2003, only if collected in compliance with subsections (f)-(h) of this section.

(2) However, except for the compliance with the collection requirements under subsections (f)-(h) of this section, this section does not invalidate any development impact fee or a similar fee adopted by a municipality or municipal service agency before July 16, 2003, nor does this section apply to funds collected under any development impact fee or similar fee adopted July 16, 2003.

(3) In addition, a municipality with a park land or green space ordinance that has been in existence for ten (10) years on July 16, 2003, and any amendments to the ordinance, which allows the option to pay a fee or to dedicate green space or park land in lieu of a fee, may continue to be administered under the existing ordinance.