



**CITY OF JUSTIN
PLANNING AND ZONING COMMISSION AGENDA
JUNE 17, 2025
415 N. COLLEGE AVE.
6:30 PM**

1. WORK SHOP SESSION AGENDA (6:30 PM)

- A. Call to Order and Roll Call.
- B. Briefing regarding the May 22nd Council Meeting.
 - a. Cuesta 2nd Reading
 - b. Historical Preservation District 2nd Reading
 - c. Grapes to Wine Plus 1st Reading
- C. Discuss 112 W 4th Street
- D. Discuss Old Town Phase III Preliminary Schedule
- E. Discuss Capital Improvement Plan
- F. Discuss regular agenda items.
- G. Adjourn.

2. CONVENE INTO REGULAR SESSION AT 7:30 PM

3. CALL TO ORDER AND ROLL CALL

4. PLEDGE OF ALLEGIANCE

5. PUBLIC COMMENT:

In order to the business flow and provide all citizens the opportunity to speak, the Planning & Zoning Commission Chair may impose a three-minute limit on any person addressing the Commission. Speaker slips must be completed prior to speaking. To allow the public the ability to participate in the public comment portion and not attend the meeting in person, the City allows the following: email comments may be submitted with name and address to the Director of Planning and Development Services by 5:00 pm on the day of the meeting, to meyr@cityofjustin.com. Staff will read any received email to Commission during the discussion of this item. **Please identify the agenda item to discuss.**

6. ACTION ITEMS:

- A. Consider and act upon a recommendation to City Council for a Planned Development Amendment to reduce roadway impact fees at LaDera Timberbrook legally described as A0439A M. GARNETT, TR 3, 53.182 ACRES, OLD DCAD TR 2 and A0439A M. GARNETT, TR 3D, 6.483 ACRES.

7. FUTURE AGENDA ITEMS:

8. DEVELOPMENT UPDATE:

- A. Development Update

9. EXECUTIVE SESSION :

Any item on this posted agenda could be discussed in Executive Session as long as it is within one of the permitted categories under sections 551.071 through 551.076 and Section 551.087 of the Texas Government Code.

10. ADJOURNMENT:

I, the undersigned authority, do hereby certify that the above notice of the meeting of the City Planning & Zoning Commission of the City of Justin, Texas, is a true and correct copy of the said notice that I posted on the official bulletin board at Justin Municipal Complex, 415 North College Street, Justin, Texas, a place of convenience and readily accessible to the general public at all times.

Said notice has been posted this 12th of June by 5:00 p.m., at least 72 hours preceding the scheduled meeting time.

Matthew Cyr

Matthew Cyr, Director of Development Services and Economic Development

NOTE: THE CITY OF JUSTIN COUNCIL CHAMBERS ROOM IS ACCESSIBLE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY WILL PROVIDE SIGN LANGUAGE INTERPRETERS FOR THE HEARING IMPAIRED, IF REQUESTED AT LEAST 48 HOURS IN ADVANCE OF THE SCHEDULED MEETING. PLEASE CALL THE CITY DEVELOPMENT SERVICES DEPARTMENT



Planning and Zoning Commission Coversheet
June 17, 2025
415 N. COLLEGE AVE.

Agenda Item: D. (WORK SHOP SESSION AGENDA (6:30 PM))

Title: Discuss Old Town Phase III Preliminary Schedule

Department: Administration

Contact: Matthew Cyr, Director of Planning and Development

Recommendation:

Review the timeline as presented.

Background:

City Council has directed Staff to move forward with the Old Town Phase III plan along with FM 156 Corridor planning. The official Notice to Proceed will take place on May 8th for approval from City Council. The schedule below is tentative and will be proposed to City Council. Please provide any feedback on this schedule.

Justin Area Plans Timeline

May 8th - City Council Meeting

- Notice to Proceed

May 15th - Internal Kickoff

- Initial Study Area
- Public Engagement Strategy
- Data Collection

June 13th - Existing Conditions Report and Committee Meeting

June 13th - Project Site and Interactive Map

June 20th - Old Town Regional Tour

- Celina
-

- Mckinney
- TBD

July 29-31 - Charrette Week

August - Master Plan and Code Refinement

September - Old Town Draft, Committee Meeting and Open House

October/November - Old Town Plan/Code Public Hearing and Adoption

December/January - Master Plan and Code Refinement

February - 156 Corridor Draft, and Committee Meeting

March/April - 156 Corridor Plan/Code Public Hearings and Adoption

City Attorney Review: No

Attachments:

None



Planning and Zoning Commission Coversheet
June 17, 2025
415 N. COLLEGE AVE.

Agenda Item: A. (ACTION ITEMS:)

Title: Consider and act upon a recommendation to City Council for a Planned Development Amendment to reduce roadway impact fees at LaDera Timberbrook legally described as A0439A M. GARNETT, TR 3, 53.182 ACRES, OLD DCAD TR 2 and A0439A M. GARNETT, TR 3D, 6.483 ACRES.

Department: Administration

Contact: Matthew Cyr, Director of Planning and Development

Recommendation:

Staff recommends consideration based upon the request.

Background:

The LaDera Timberbrook development was approved in 2022 by the Commission and City Council. The subdivision is an *Active Adult (age-restricted)* development that will have approximately 157 units. There have been 2 building permits issued and under construction with more to come over the next few months. These permits have been paid in full and have paid the current roadway impact fees. Currently, the roadway impact fees are charged at a rate of \$3,771.29 per a dwelling unit. The purpose of roadway impact fees are to help fund new street projects which is created by the new growth. The City adopted a new impact fee schedule in 2023, which projected out the new roads demanded and broke down the capital expenditures into a projected per unit or dwelling cost.

The applicant is requesting consideration of a reduced roadway impact fee for an *Active Adult (age-restricted)* residential development compared to traditional single-family housing.

Key Points:

- Data from multiple traffic engineers and the City of Fort Worth's 2022 Land Use Study has been provided.
 - Vehicle-miles per development unit for Active Adult housing is substantially lower than standard single-family housing:
 - **Standard Single-Family Detached:** 4.61 vehicle-miles/unit
-

- **Senior Adult Housing (Detached):** 1.47 vehicle-miles/unit
- This represents approximately **32%** of the traffic impact compared to traditional single-family units.
- Peak hour trip generation rates follow the same trend:
 - 0.94 for Single-Family Detached vs. 0.30 for Senior Adult housing (31.9% ratio).

Request:

The applicant is asking the City to apply a significantly reduced roadway impact fee to the proposed Active Adult development based on the lower trip generation and traffic impact data.

PZ Recommendation:

On May 20, 2025, the Planning and Zoning Commission recommended to table the item to provide local site data.

City Attorney Review: No

Attachments:

1. Fort Worth Impact Fee Worksheet_box
2. 2022 Study -LandUseRates of 02.28.25
3. 2022 Study -LandUseDescription 02.28.25
4. Roadway Impact Active Adult
5. Impact Fee Scheudle
6. Ladera Timberbrook Traffic Memo



THIS WORKSHEET IS FOR ESTIMATION PURPOSES ONLY
ACTUAL FEES WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT

Transportation Impact Fee Estimator Worksheet
City of Fort Worth, Texas

<https://www.fortworthtexas.gov/impact-fees/transportation/fee-information>

Development Name:
Applicant:
Legal Description (Lot, Block):
Case Number: Date: Publish Date: 2-28-2025 Version 12
Date of Final Plat Approval: 3/10/2025 Study Year: 2022
Date of Building Permit Application Acceptance: 3/10/2025
Service Area (select from list): Z

- Notes: (1) Enter dates in XX/XX/XXXX format
(2) Impact fees are not collected within the nine (9) "no fee" service areas (H, I, J, K, L, P, Q, R and W) and for qualified Neighborhood Empowerment Zone (NEZ) projects

Land Use Selection Note: The land use categories are based on the descriptions contained within the ITE Trip Generation Manual. Questions regarding the appropriate category for a particular use may be directed to Development Services Department staff.

NON-RESIDENTIAL ONLY					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [1]* [5]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.					Sub-Total			\$0.00		

RESIDENTIAL ONLY					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [5]* [1]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
Single-Family Detached Housing	Dwelling Unit	157.00	4.61	723.77						
Senior Adult Housing-Single-Family	Dwelling Unit	157.00	1.47	230.79						
Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.					Sub-Total					

MAXIMUM ASSESSABLE TRANSPORTATION IMPACT FEE:

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT:

If a transportation impact fee is still due following the calculation of credits, a development may qualify for any of the four (4) available transportation impact fee discounts (as defined by Section 1-14D of the ordinance). Discounts are cumulative, so that a development that qualifies for the maximum discount under each provision may reduce impact fees otherwise due up to 100%.

Adequate Public Facilities Discount:
Mixed-use/ Multi-Modal Development Discount:
Extraordinary Investment Discount:
Small Business Discount:
Total Transportation Impact Fee Discounts (Max 100%): 0%

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE AFTER DISCOUNTS: \$ -

Credit Agreement Number: Transportation Impact Fee Credits (for construction, contribution, or dedication towards the Master Thoroughfare Plan):

TOTAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT AFTER CREDITS AND DISCOUNTS:

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (Peak Hour)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
PORT AND TERMINAL											
Intermodal Truck Terminal	030	1,000 SF GFA	1.97			1.97	10.02	50%	5.01	5.01	9.87
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.74			0.74	10.02	50%	5.01	5.01	3.71
Manufacturing (Sq. Ft.)	140	1,000 SF GFA	0.74			0.74	10.02	50%	5.01	5.01	3.71
Manufacturing (Acres)	140	Acres	4.99			4.99	10.02	50%	5.01	5.01	25.00
Warehousing	150	1,000 SF GFA	0.18			0.18	10.02	50%	5.01	5.01	0.90
High-Cube Fulfillment Center Warehouse (Non-Sort)	155	1,000 SF GFA	0.16			0.16	10.02	50%	5.01	5.01	0.80
High-Cube Fulfillment Center Warehouse (Sort)	155	1,000 SF GFA	1.20			1.20	10.02	50%	5.01	5.01	6.01
High-Cube Transload and Short-Term Storage Warehouse	154	1,000 SF GFA	0.17			0.17	10.02	50%	5.01	5.01	0.85
Data Center	160	1,000 SF GFA	0.13			0.13	10.02	50%	5.01	5.01	0.65
Mini-Warehouse	151	1,000 SF GFA	0.15			0.15	10.02	50%	5.01	5.01	0.75
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.94			0.94	9.79	50%	4.90	4.90	4.61
Single-Family Attached Housing (Incl. Multifamily Detached Housing)	215	Dwelling Unit	0.57			0.57	9.79	50%	4.90	4.90	2.79
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.51			0.51	9.79	50%	4.90	4.90	2.50
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.39			0.39	9.79	50%	4.90	4.90	1.91
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.32			0.32	9.79	50%	4.90	4.90	1.57
Affordable Housing	223	Dwelling Unit	0.50			0.50	9.79	50%	4.90	4.90	2.45
Mobile Home Park	240	Dwelling Unit	0.58			0.58	9.79	50%	4.90	4.90	2.84
Senior Adult Housing-Single-Family	251	Dwelling Unit	0.30			0.30	9.79	50%	4.90	4.90	1.47
Senior Adult Housing-Multifamily	252	Dwelling Unit	0.25			0.25	9.79	50%	4.90	4.90	1.23
Assisted Living	254	1,000 SF GFA	0.48			0.48	9.79	50%	4.90	4.90	2.35
LODGING											
Hotel	310	Rooms	0.59			0.59	6.43	50%	3.22	3.22	1.90
All Suites Hotel	311	Rooms	0.36			0.36	6.43	50%	3.22	3.22	1.16
Motel / Other Lodging Facilities	320	Rooms	0.36			0.36	6.43	50%	3.22	3.22	1.16
RECREATIONAL											
Recreational Community Center	495	1,000 SF GFA	2.50			2.50	7.86	50%	3.93	3.93	9.83
Health/Fitness Club	492	1,000 SF GFA	3.45			3.45	7.86	50%	3.93	3.93	13.56
Miniature Golf Course	431	Hole	0.33			0.33	7.86	50%	3.93	3.93	1.30
Campground/Recreational Vehicle Park	416	Acres	0.98			0.98	9.79	50%	4.90	4.90	4.80
Movie Theater	445	Movie Screens	13.96			13.96	15.77	50%	7.89	6.00	83.76
Soccer Complex	488	Fields	16.43			16.43	7.86	50%	3.93	3.93	64.57
Racquet / Tennis Club	491	Courts	3.82			3.82	7.86	50%	3.93	3.93	15.01
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.49			0.49	8.31	50%	4.16	4.16	2.04
Fire and Rescue Station	575	1,000 SF GFA	0.48			0.48	3.00	50%	1.50	1.50	0.72
Day Care Center	565	1,000 SF GFA	11.12	44%	B	6.23	3.49	50%	1.75	1.75	10.90
Private School (K-12)*	532	1,000 SF GFA	0.00			0.00	3.49	50%	1.75	1.75	0.00
Charter School (K-12)*	538	1,000 SF GFA	0.00			0.00	3.49	50%	1.75	1.75	0.00
Elementary School	520	Students	0.00			0.00	3.49	50%	1.75	1.75	0.00
Middle School/Junior High School	522	Students	0.00			0.00	3.49	50%	1.75	1.75	0.00
High School	525	Students	0.00			0.00	3.49	50%	1.75	1.75	0.00
Junior / Community College	540	Students	0.11			0.11	10.44	50%	5.22	5.22	0.57
University / College	550	Students	0.15			0.15	10.44	50%	5.22	5.22	0.78
MEDICAL											
Clinic	630	1,000 SF GFA	3.69			3.69	9.85	50%	4.93	4.93	18.19
Hospital	610	1,000 SF GFA	0.86			0.86	9.85	50%	4.93	4.93	4.24
Nursing Home	620	Beds	0.14			0.14	9.85	50%	4.93	4.93	0.69
Free-Standing Emergency Room	650	1,000 SF GFA	1.52			1.52	9.85	150%	14.78	6.00	9.12
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.64	30%	B	2.55	9.85	50%	4.93	4.93	12.57
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.45			1.45	14.65	50%	7.33	6.00	8.70
General Office Building	710	1,000 SF GFA	1.52			1.52	14.65	50%	7.33	6.00	9.12
Medical-Dental Office Building	720	1,000 SF GFA	3.93			3.93	9.85	50%	4.93	4.93	19.37
Single Tenant Office Building	715	1,000 SF GFA	1.85			1.85	14.65	50%	7.33	6.00	11.10
Office Park	750	1,000 SF GFA	1.33			1.33	14.65	50%	7.33	6.00	7.98
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	4.45	50%	2.23	2.23	4.17
Automobile Parts Sales	843	1,000 SF GFA	4.90	43%	A	2.79	4.45	50%	2.23	2.23	6.22
Gasoline/Service Station	944	Vehicle Fueling Position	13.91	42%	A	8.07	1.20	50%	0.60	0.60	4.84
Convenience Store/Gas Station (2-8 fueling positions)	945	1,000 SF GFA	48.48	56%	B	21.33	1.20	50%	0.60	0.60	12.80
Convenience Store/Gas Station (9-15 fueling positions)	945	1,000 SF GFA	56.52	75%	B	14.13	1.20	50%	0.60	0.60	8.48
Convenience Store/Gas Station (> 15 fueling positions)	945	1,000 SF GFA	91.35	75%	B	22.84	1.20	50%	0.60	0.60	13.70
Automobile Sales (New)	840	1,000 SF GFA	2.42	20%	B	1.94	4.45	50%	2.23	2.23	4.33
Automobile Sales (Used)	841	1,000 SF GFA	3.75	20%	B	3.00	4.45	50%	2.23	2.23	6.69
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	4.45	50%	2.23	2.23	6.49
Automated Car Wash	948	1,000 SF GFA	14.20	40%	B	8.52	1.20	50%	0.60	0.60	5.11
Tire Store	848	1,000 SF GFA	3.75	28%	A	2.70	4.45	50%	2.23	2.23	6.02
Dining											
Fast Casual Restaurant	930	1,000 SF GFA	12.55	43%	A	7.15	6.07	50%	3.04	3.04	21.74
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	44.61	50%	A	22.31	5.64	50%	2.82	2.82	62.91
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	43.18	50%	B	21.59	5.64	50%	2.82	2.82	60.88
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.57	43%	A	5.45	6.07	50%	3.04	3.04	16.57
Fine Dining Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	6.07	50%	3.04	3.04	13.28
Drinking Place	975	1,000 SF GFA	11.36	44%	A	6.36	6.07	50%	3.04	3.04	19.33
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	85.88	70%	A	25.76	4.53	50%	2.27	2.27	58.48
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	4.86	30%	C	3.40	5.60	50%	2.80	2.80	9.52
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	5.60	50%	2.80	2.80	13.61
Home Improvement Superstore	862	1,000 SF GFA	2.29	48%	A	1.19	5.60	50%	2.80	2.80	3.33
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.51	53%	A	4.00	5.60	50%	2.80	2.80	11.20
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.25	49%	A	5.23	5.60	50%	2.80	2.80	14.64
Shopping Center (greater than 150,000 square feet)	820	1,000 SF GLA	3.40	34%	A	2.24	5.60	50%	2.80	2.80	6.27
Shopping Plaza (between 40,000 -150,000 square feet)	821	1,000 SF GLA	5.19	34%	A	3.43	5.60	50%	2.80	2.80	9.60
Strip Retail Plaza (less than 40,000 square feet)	822	1,000 SF GLA	6.59	34%	A	4.35	5.60	50%	2.80	2.80	12.18
Supermarket	850	1,000 SF GFA	8.95	36%	A	5.73	5.60	50%	2.80	2.80	16.04
Toy/Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	5.60	50%	2.80	2.80	9.80
Liquor Store	899	1,000 SF GFA	16.62	30%	B	11.63	5.60	50%	2.80	2.80	32.56
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	5.60	50%	2.80	2.80	3.84
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	4.45	50%	2.23	2.23	16.23
Drive-In Bank	912	Drive-in Lanes	21.01	47%	A	11.14	4.45	50%	2.23	2.23	24.84
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	6.41	50%	3.21	3.21	3.27

*Custom trip rate (trips per 1,000 SF GFA) estimated by Kimley-Horn using ITE trip rate (trips per student) and recent Fort Worth School Data.

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 3rd Edition (August 2014)

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: ITE rate adjusted upward by KHA based on logical relationship to other categories

Land Use Category	ITE Land Use Code	Land Use Description
PORT AND TERMINAL		
Intermodal Truck Terminal	030	Point of good transfer between trucks or between trucks and rail
INDUSTRIAL		
General Light Industrial	110	Emphasis on activities other than manufacturing; typically employing fewer than 500 workers
Manufacturing	140	Primary activity is conversion of raw materials or parts into finished products. Can be calculated based on Square Feet of Building or Acreage of Site.
Warehousing	150	Devoted to storage of materials but may include office and maintenance areas
High-Cube Fulfillment Center Warehouse (Non-Sort)	155	Storage and consolidation of automatically-sorted manufactured goods prior to their distribution. Typically 200k+ sq. ft.
High-Cube Fulfillment Center Warehouse (Sort)	155	Storage and consolidation of manually-sorted manufactured goods prior to their distribution. Typically 200k+ sq. ft.
High-Cube Transload and Short-Term Storage Warehouse	154	Short term storage and high throughput of large volumes of manufactured goods. Typically 200k+ sq. ft.
Data Center	160	A free-standing warehouse type of facility that is primarily used for off-site storage of computer systems and associated components including applications and secure data. Data centers typically have a small number of employees and visitors.
Mini-Warehouse	151	Facilities with a number of units rented to others for the storage of goods
RESIDENTIAL		
Single-Family Detached Housing	210	Single-family detached homes on individual lots
Single-Family Attached Housing (Incl. Multifamily Detached Housing)	215	1-4 rental dwelling units and one or two levels (floors) per building. Includes duplexes, condos, and townhomes
Multifamily Housing (Low-Rise)	220	At least 4 rental dwelling units (Apartments) and two or three levels (floors) living space per building
Multifamily Housing (Mid-Rise)	221	At least 4 rental dwelling units (Apartments) and between four and ten levels (floors) living space per building
Multifamily Housing (High-Rise)	222	At least 4 rental dwelling units (Apartments) and more than ten levels (floors) living space per building
Affordable Housing	223	Multifamily housing that is rented at below market rate to households that include at least one employed member
Mobile Home Park	240	Manufactured homes that are installed on permanent foundations
Senior Adult Housing-Single-Family	251	Consists of detached independent living developments that include amenities such as golf courses and swimming pools
Senior Adult Housing-Multifamily	252	Consists of attached independent living developments that include limited social or recreation services
Assisted Living	254	Residential settings that provide either routine general protective oversight or assistance with activities.
LODGING		
Hotel	310	Lodging facilities that typically have on-site restaurants, lounges, meeting and/or banquet rooms, or other retail shops and services
All Suites Hotel	311	Lodging facilities that may have small on-site restaurant and lounge, and small amounts of meeting space. Each suite includes a sitting room and separate bedroom.
Motel / Other Lodging Facilities	320	Lodging facilities that may have small on-site restaurant or buffet area but little or no meeting space
RECREATIONAL		
Recreational Community Center	495	Category includes racquet clubs, health/fitness clubs, can include facilities such as YMCA's
Health/Fitness Club	492	A privately-owned facility that primarily focuses on individual fitness or training. These membership clubs that may allow access to the general public for a fee.
Miniature Golf Course	431	One or more individual putting courses; category should not be used when part of a larger entertainment center(with batting cages, video game centers, etc)
Bowling Alley	437	A recreational facility that includes bowling lanes. A small lounge, restaurant and/or snack bar, video games, and pool tables may also be available.
Movie Theater	445	Movie theater with audience seating, minimum of ten screens, lobby, and refreshment area.
Soccer Complex	488	An outdoor facility that is used for non-professional soccer games. May include a fitness trail, aquatic center, or other sport courts/fields.
Racquet / Tennis Club	491	Indoor or outdoor facilities specifically designed for playing tennis
INSTITUTIONAL		
Church	560	Churches and houses of worship
Fire and Rescue Station	575	Station for conducting Fire and Rescue operations and the storage of emergency response vehicles
Day Care Center	565	Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds
Private School (K-12)*	532	Private education institution serving K-12 students
Charter School (K-12)*	538	Publicly funded and privately managed school serving K-12 students
Elementary School	520	Serves students who have not yet entered middle/junior high school
Middle School/Junior High School	522	Service students who have completed elementary school
High School	525	Serves students who have completed middle or junior high school
Junior / Community College	540	Two-year junior, community, or technical colleges
University / College	550	Four-year universities or colleges that may or may not offer graduate programs
MEDICAL		
Clinic	630	Facilities with limited diagnostic and outpatient care
Hospital	610	Medical and surgical facilities with overnight accommodations
Nursing Home	620	Rest and convalescent homes with residents who do little or no driving
Free-Standing Emergency Room	650	Facility that specializes in personal medical care and treatment of people
Animal Hospital/Veterinary Clinic	640	Animal hospital or veterinary clinic that specializes in the treatment of animals
OFFICE		
Corporate Headquarters Building	714	Office building housing corporate headquarters of a single company or organization
General Office Building	710	Office buildings which house multiple tenants
Medical-Dental Office Building	720	Multi-tenant building with offices for physicians and/or dentists
Single Tenant Office Building	715	Single tenant office buildings other than corporate headquarters
Office Park	750	Office buildings (typically low-rise) in a campus setting and served by a common roadway system
COMMERCIAL		
Automobile Related		
Automobile Care Center	942	Automobile repair and servicing including stereo installations and upholstery
Automobile Parts Sales	843	Retail sale of auto parts but no on-site vehicle repair
Gasoline/Service Station	944	Gasoline sales without convenience store or car wash; may include repair
Convenience Store/Gas Station (2-8 fueling positions)	945	Gasoline sales with convenience store and car washes where the primary business is gasoline sales (<4.5k)
Convenience Store/Gas Station (9-15 fueling positions)	945	Gasoline sales with convenience store and car washes where the primary business is gasoline sales (>4.5k)
Convenience Store/Gas Station (>15 fueling positions)	945	Gasoline sales with convenience store and car washes where the primary business is gasoline sales (>4.5k)
Automobile Sales (New)	840	New car dealerships, typically with automobile servicing, part sales, and used car sales
Automobile Sales (Used)	841	Car dealership specializing in the sale of used cars
Quick Lubrication Vehicle Shop	941	Primary business is to perform oil changes and fluid/filter changes with other repair services not provided
Automated Car Wash	948	Has stalls for driver to park and wash the vehicle
Tire Store	848	Primary business is sales and installation of tires; usually do not have large storage or warehouse area
Dining		
Fast Casual Restaurant	930	Sit-down restaurant with no (or very limited) wait staff or table service. Orders off a menu board, pays for food before the food is prepared, and seats themselves
Fast Food Restaurant with Drive-Thru Window	934	High-turnover fast food restaurant for carry-out and eat-in customers with a drive-thru window
Fast Food Restaurant without Drive-Thru Window	933	High-turnover fast food restaurant for carry-out and eat-in customers, but without a drive-thru window
High Turnover (Sit-Down) Restaurant	932	Restaurants with turnover rates less than one hour; typically includes moderately-priced chain restaurants
Fine Dining Restaurant	931	Restaurants with turnover rates of one hour or longer; typically require reservations
Drinking Place	975	Contains a bar where alcoholic beverages and food are sold, and possibly some type of entertainment
Coffee/Donut Shop without Drive-Thru Window	936	Coffee and Donut restaurants without drive-through windows, hold long store hours and have limited indoor seating
Coffee/Donut Shop with Drive-Thru Window	937	Coffee and Donut restaurants with drive-through windows, hold long store hours and have limited indoor seating
Other Retail		
Free-Standing Discount Store	815	Category includes free-standing stores with off-street parking; typically offer a variety of products and services with long store hours
Nursery (Garden Center)	817	Building with a yard of planting or landscape stock; may have office, storage, shipping or greenhouse facilities
Home Improvement Superstore	862	Warehouse-type facilities offering a large variety of products and services including lumber, tool, paint, lighting, and fixtures, among other items.
Pharmacy/Drugstore w/o Drive-Thru Window	880	Facilities that primarily sell prescription and non-prescription drugs without a drive-through window
Pharmacy/Drugstore w/ Drive-Thru Window	881	Facilities that primarily sell prescription and non-prescription drugs with a drive-through window
Shopping Center (greater than 150,000 square feet)	820	Integrated group of commercial establishments; planning, owned, and managed as a unit (>150k)
Shopping Plaza (between 40,000 -150,000 square feet)	821	Integrated group of commercial establishments; planning, owned, and managed as a unit (40-150k)
Strip Retail Plaza (less than 40,000 square feet)	822	Integrated group of commercial establishments; planning, owned, and managed as a unit (<40k)
Supermarket	850	Primary business is sale of groceries, food, and household cleaning items; may include photo, pharmacy, video rental, and/or ATM
Toy/Children's Superstore	864	Businesses specializing in child-oriented merchandise
Department Store	875	Free-standing stores that specialize in the sale of apparel, footwear, bedding, home products, jewelry, etc.
Liquor Store	899	A liquor store specializes in the sale of prepackaged alcoholic beverages intended to be consumed off the store's premises.
SERVICES		
Walk-In Bank	911	Banks with their own parking lots, no drive-in lanes but contain non-drive-through ATMs
Drive-In Bank	912	Banking facilities to conduct financial transactions from the vehicle; also usually apart of walk-in bank
Hair Salon	918	Facilities that specialize in cosmetic and beauty services including hair cutting and styling

From: [John Delin](#)
To: [Matthew Cyr](#)
Subject: Roadway Impact Active Adult
Date: Tuesday, April 22, 2025 4:32:52 PM
Attachments: [image002.png](#)
[Fort Worth Impact Fee Worksheet_box.pdf](#)
[2022 Study -LandUseRates of 02.28.25.pdf](#)
[2022 Study -LandUseDescription 02.28.25.pdf](#)

Matt,

Attached is the information condensed from the findings from 2 different traffic engineers. We used Westwood and primarily for this request GM Civil, Matt Baacke & Eddie Eckart. Additionally, we also used the City of Ft. Worth Worksheet to “estimate” traffic counts for traditional single family vs Active Adult. All were relatively close to each other with the City of Ft. Worth’s data being the most comprehensive and assembled into actual use.

As you will see on the Ft. Worth Impact Fee Worksheet, the “Vehicle-Miles per Dev. Unit” comes from a 2022 Study Land Use Rate guide, which shows in a typical Single Family Detached Housing Unit, they allow for 4.61miles/unit and they allow for 1.47miles/unit for SF Active Adult, basically 1/3 of the miles/unit. They have a peak our trip generation rate of 0.94 for SF Detached and 0.30 for Senior Adult Single-Family. $0.3/0.94 = 31.9\%$ same ratio. If you look at the line for each of those land uses, you can see how they come up with 4.61 vehicle-miles per unit for SFD and 1.47 for Active Adult. This data ties in with Matt Baacke’s information.

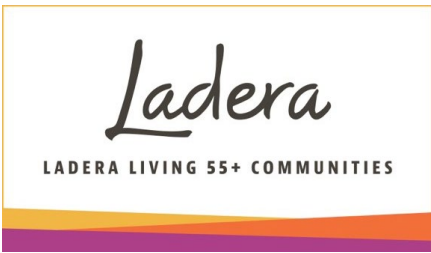
Additionally, these also coincide with other cities information such as below from Mansfield,

RESIDENTIAL		
Single Family Detached Housing	Dwelling Unit	4,900
Single Family Attached Housing	Dwelling Unit	2,971
Multifamily Housing (Low Rise)	Dwelling Unit	2,659
Multifamily Housing (Mid-Rise)	Dwelling Unit	2,033
Multifamily Housing (High-Rise)	Dwelling Unit	1,668
Mobile Home Park/Manufactured Housing	Dwelling Unit	3,023
Senior Adult Housing - Detached	Dwelling Unit	1,564
Senior Adult Housing - Attached	Dwelling Unit	1,303
Assisted Living	Dwelling Unit	1,251
LODGING		

Thank you sir and let me know any questions.

Best,

John Delin
CEO
361 W. Byron Nelson Blvd, Suite 104
Roanoke, TX 76262
Office: 817.252.4281 **Cell:** 817-919.8111
LaderaLiving.com



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XII. ROADWAY RELATED

Roadway Impact Fees

Development Type	Assessable Fee	
Single Family	\$3,771.29	/Dwelling Unit
Multi-Family	\$2,396.92	/Dwelling Unit
Retail	\$1,889.89	/1,000 SQFT
Light Industrial	\$303.87	/1,000 SQFT
General Business	\$1,700.98	/1,000 SQFT

No. 475, § 1, 8-10-09; Ord. No. 492, § 2, 7-12-10)



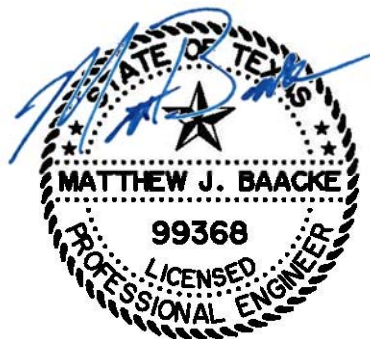
MEMO

May 29, 2025

To: City of Justin
Engineering Department

From: Matt Baacke, P.E.
GMcivil

Subject: Traffic Statement – Ladera Timberbrook



The purpose of this memo is to provide a traffic statement for the Ladera Timberbrook development in Justin, Texas as it relates to trip generation and vehicle-miles per development unit. The City of Justin adopted a new impact fee schedule in 2023 which includes the same vehicle-miles for active adult residential as traditional single-family residential.

Proposed Development

The Ladera Timberbrook development is an active adult (age-restricted) single-family residential community consisting of 157 units. It was approved by the P&Z Commission and City Council in 2022 and development work was completed in 2024. There have been two (2) building permits issued with those homes currently under construction.

Trip Generation

Projected traffic volumes for development projects are conventionally established according to land use using the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation*. The data provided in this document has been obtained from actual traffic count surveys of similar developments and is universally recognized as the standard manual for trip generation. The applicable ITE land use for this development is land use code 251 (Senior Adult Housing (Single-Family)). The following table summarizes the Ladera development trip generation according to the ITE.

Senior Adult Single Family Housing Trip Generation

Land Use/ITE Code	Units	Daily	Weekday AM Peak			Weekday PM Peak		
		Trips	Enter	Exit	Hourly Trips	Enter	Exit	Hourly Trips
150	157	677	12	26	38	28	18	47

For a comparison between the senior adult land use and the traditional single family detached housing land use, the following table summarizes the expected trip generation for the single family alternative which is ITE land use code 210. From an average daily traffic (ADT) perspective, the active adult housing is expected to generate approximately 45.7% of the traffic of the single family detached housing. The AM/PM peak hour trip generation is 34.5%/**31.9%** respectively.

Single Family Detached Housing Trip Generation

Land Use/ITE Code	Units	Daily	Weekday AM Peak			Weekday PM Peak		
		Trips	Enter	Exit	Hourly Trips	Enter	Exit	Hourly Trips
210	157	1,481	27	83	110	93	55	148

Roadway Impact Fees in Fort Worth & Mansfield

The City of Fort Worth and the City of Mansfield both have roadway impact fees on a variable scale based on land use category. In Fort Worth, the PM peak hour adjacent street traffic trip generation rate is used to compute vehicle-miles for each land use. This rate is 0.30/unit for active adult and 0.94/unit for single-family as shown in the table below which includes the ITE Land Use Codes and corresponding trip generation rates. As the attached Fort Worth impact fee estimator worksheet shows, the single-family land use is expected to generate 4.61 vehicle-miles per dwelling unit and the senior adult land use is expected to generate 1.47 vehicle-miles per dwelling unit. In other words, the senior adult land use is **31.9%** of the roadway impact compared to traditional single-family residential.

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (Peak Hour)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
PORT AND TERMINAL											
Intermodal Truck Terminal	030	1,000 SF GFA	1.97			1.97	10.02	50%	5.01	5.01	9.87
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.74			0.74	10.02	50%	5.01	5.01	3.71
Manufacturing (Sq. Ft.)	140	1,000 SF GFA	0.74			0.74	10.02	50%	5.01	5.01	3.71
Manufacturing (Acres)	140	Acres	4.99			4.99	10.02	50%	5.01	5.01	25.00
Warehousing	150	1,000 SF GFA	0.18			0.18	10.02	50%	5.01	5.01	0.90
High-Cube Fulfillment Center Warehouse (Non-Sort)	155	1,000 SF GFA	0.16			0.16	10.02	50%	5.01	5.01	0.80
High-Cube Fulfillment Center Warehouse (Sort)	155	1,000 SF GFA	1.20			1.20	10.02	50%	5.01	5.01	6.01
High-Cube Transload and Short-Term Storage Warehouse	154	1,000 SF GFA	0.17			0.17	10.02	50%	5.01	5.01	0.85
Data Center	160	1,000 SF GFA	0.13			0.13	10.02	50%	5.01	5.01	0.65
Mini-Warehouse	151	1,000 SF GFA	0.15			0.15	10.02	50%	5.01	5.01	0.75
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.94			0.94	9.79	50%	4.90	4.90	4.61
Single-Family Attached Housing (Incl. Multifamily Detached Housing)	215	Dwelling Unit	0.57			0.57	9.79	50%	4.90	4.90	2.79
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.51			0.51	9.79	50%	4.90	4.90	2.50
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.39			0.39	9.79	50%	4.90	4.90	1.91
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.32			0.32	9.79	50%	4.90	4.90	1.57
Affordable Housing	223	Dwelling Unit	0.50			0.50	9.79	50%	4.90	4.90	2.45
Mobile Home Park	240	Dwelling Unit	0.58			0.58	9.79	50%	4.90	4.90	2.84
Senior Adult Housing-Single-Family	251	Dwelling Unit	0.30			0.30	9.79	50%	4.90	4.90	1.47
Senior Adult Housing-Multifamily	252	Dwelling Unit	0.25			0.25	9.79	50%	4.90	4.90	1.23
Assisted Living	254	1,000 SF GFA	0.48			0.48	9.79	50%	4.90	4.90	2.35

In Mansfield, the table below shows single-family residential at 4,900/dwelling unit and senior adult at 1,564/dwelling unit. The ratio equates to the same **31.9%** as seen in Fort Worth and the PM peak hour of the ITE manual trip generation.

RESIDENTIAL		
Single Family Detached Housing	Dwelling Unit	4,900
Single Family Attached Housing	Dwelling Unit	2,971
Multifamily Housing (Low Rise)	Dwelling Unit	2,659
Multifamily Housing (Mid-Rise)	Dwelling Unit	2,033
Multifamily Housing (High-Rise)	Dwelling Unit	1,668
Mobile Home Park/Manufactured Housing	Dwelling Unit	3,023
Senior Adult Housing - Detached	Dwelling Unit	1,564
Senior Adult Housing - Attached	Dwelling Unit	1,303
Assisted Living	Dwelling Unit	1,251

Roadway Impact Fees in Justin

In January 2022, the City of Justin published the *City of Justin Water, Wastewater and Roadway Impact Fee Study*. Within this study the City of Justin recognizes that multi-family residential uses have less vehicle-miles than single-family residential as the tables from the study below show that low rise multi-family residential impact fee per dwelling unit are approximately 64% of the single-family residential impact fees (\$4,793.84/\$7,542.57 = 64%). Note that the ITE trip generation rate and City of Fort Worth relationship between single-family and low rise multi-family is approximately 54% (0.51/0.94 = 54%) which also corresponds with the City of Mansfield table above (2,659/4,900 = 54%).

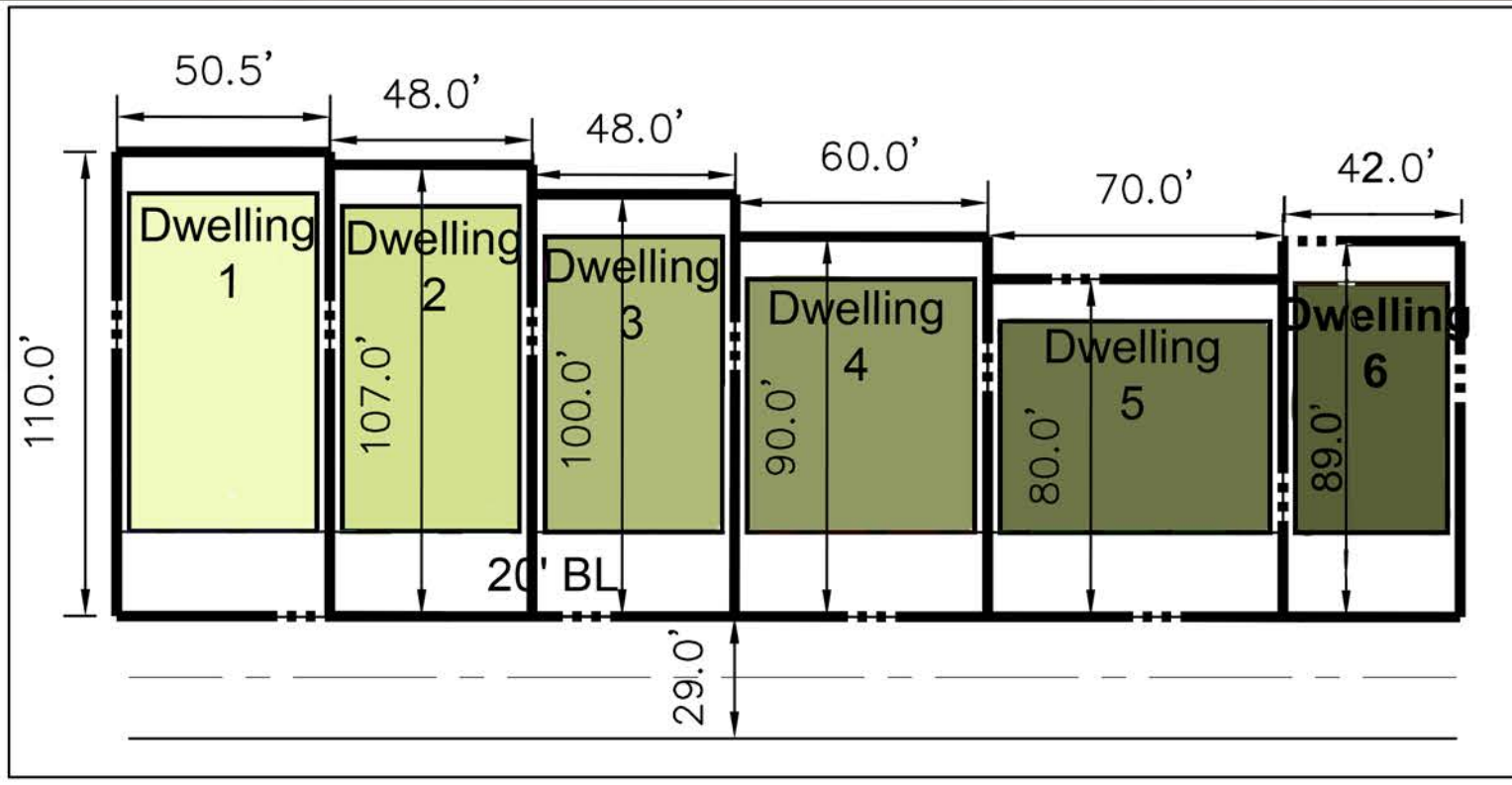
CITY OF JUSTIN ROADWAY IMPACT FEES		
Development Type	Maximum Fee	
Single Family	\$ 7,542.57	/Dwelling Unit
Multi Family	\$ 4,793.84	/Dwelling Unit
Retail	\$ 3,779.78	/1,000 SQFT
Light Industrial	\$ 607.74	/1,000 SQFT
General Business	\$ 3,401.97	/1,000 SQFT

CITY OF JUSTIN ROADWAY IMPACT FEES		
Development Type	MAXIMUM ASSESSABLE IMPACT FEE	
Single Family	\$ 3,771.29	/Dwelling Unit
Multi Family	\$ 2,396.92	/Dwelling Unit
Retail	\$ 1,889.89	/1,000 SQFT
Light Industrial	\$ 303.87	/1,000 SQFT
General Business	\$ 1,700.98	/1,000 SQFT

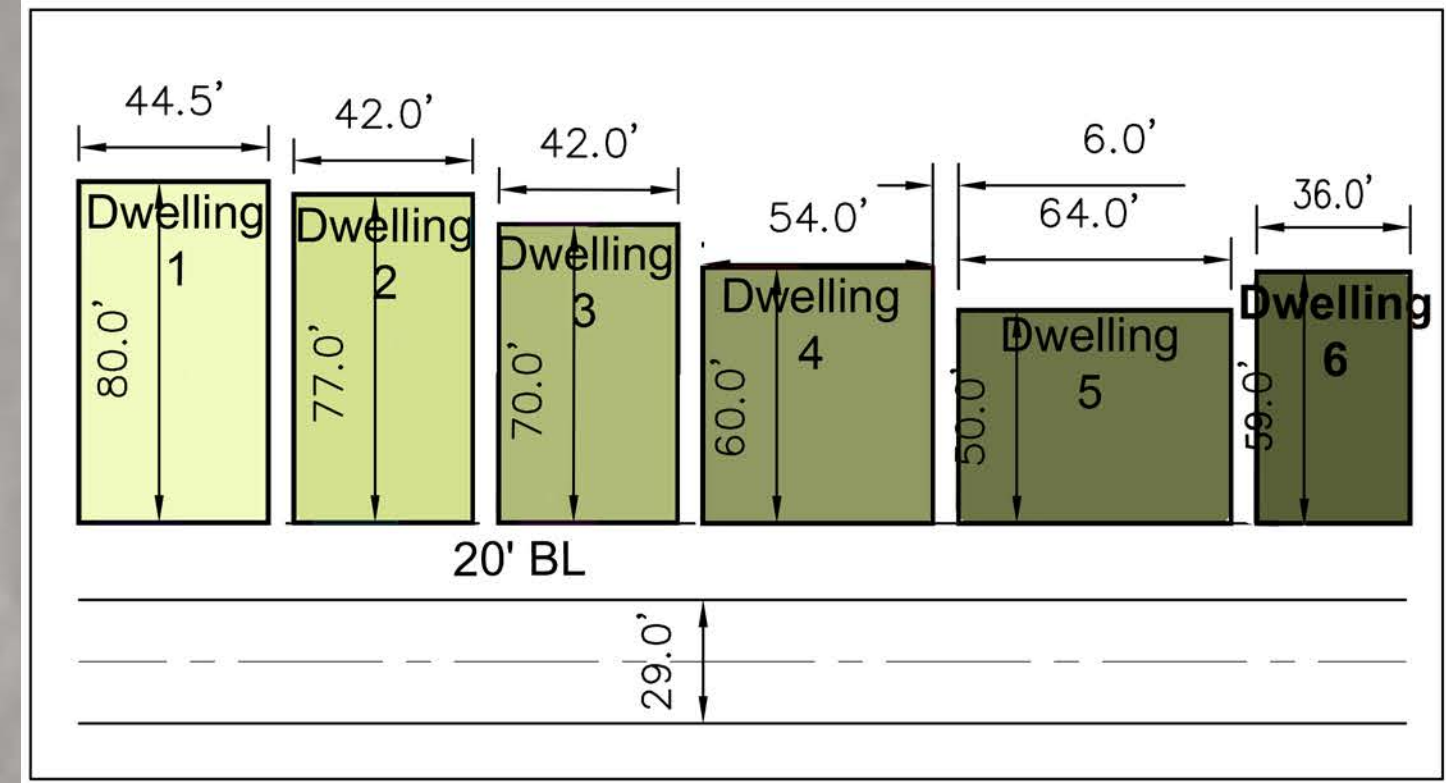
Conclusion

According to the ITE trip generation data for each land use, there is a significant reduction in vehicle trips of a senior adult residential development compared to a traditional single-family residential development. Other cities such as Fort Worth and Mansfield also recognize that an active adult development unit will not impact their roadways with as many vehicle-miles so impact fees are assessed accordingly. The City of Justin recognizes a difference in vehicle-miles and impact fees between single-family residential and multi-family residential, but does yet have a sub-category for other types of single family such as an active adult development. Based on the data presented, it appears reasonable for the City of Justin to consider a impact fee rate for senior adult housing at a rate of **31.9%** of the traditional single-family detached roadway impact fee.

Church Summary				
BLDG 1	Number of Seats	Parking Ratio	Parking Required	Parking Provided
47,306 SF	800	One space for each 3 seats	267	611
Gross Acreage	10.50 AC.			
Net Acreage	10.50 AC.			



Lot Detail



Dwelling Detail



Residential Summary				
Dwelling Type	Dwelling Dimensions	Max Height	Dwellings	% of Dwellings
1	44.5'X80'	2 Stories/35'	5	3%
2	42'X77'	2 Stories/35'	53	34%
3	42'X70'	2 Stories/35'	43	27%
4	54'X60'	2 Stories/35'	8	5%
5	64'X50'	2 Stories/35'	4	3%
6	36'X59'	2 Stories/35'	44	28%
Total			157	100%
* Dwelling Count and placement is subject to change.				
** Model Home Designation				
Gross Density	4.82 du/ac			
Gross Acreage	32.60			
Net Density	5.45 du/ac			
Net Acreage	28.82			



The John R. McAdams
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201 Country View Drive
Roanoke, Texas 76262
940.240.1012
TBP#: 19762 TBP#: 10194440
www.gacon.com
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Ladera Timberbrook
Concept Rendering B
+/- 32.6 AC.
City of Justin
Denton County, Texas

80 0 80 160 240 Feet

Job No: 2021310647 Date: July 06, 2021 By: PF
M:\Projects\IntegrityGrp\2021\2021310647 Timberbrook\04-Production\Planning and
LA\Exhibits\Planning\2021.07.20 Concept B.dwg
This concept plan is intended for conceptual
developmental use and shall not be interpreted
as an official or submitted document. All aerial
and map images were obtained from best
available information. This plan is subject to
change.



THIS WORKSHEET IS FOR ESTIMATION PURPOSES ONLY
ACTUAL FEES WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT

Transportation Impact Fee Estimator Worksheet City of Fort Worth, Texas

<https://www.fortworthtexas.gov/impact-fees/transportation/fee-information>

Development Name:
Applicant:
Legal Description (Lot, Block):
Case Number: Date: Publish Date: 2-28-2025 Version 12
Date of Final Plat Approval: 3/10/2025 Study Year: 2022
Date of Building Permit Application Acceptance: 3/10/2025
Service Area (select from list): Z

- Notes: (1) Enter dates in XX/XX/XXXX format
(2) Impact fees are not collected within the nine (9) "no fee" service areas (H, I, J, K, L, P, Q, R and W) and for qualified Neighborhood Empowerment Zone (NEZ) projects

Land Use Selection Note: The land use categories are based on the descriptions contained within the ITE Trip Generation Manual. Questions regarding the appropriate category for a particular use may be directed to Development Services Department staff.

NON-RESIDENTIAL ONLY					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [1]* [5]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.					Sub-Total			\$0.00		

RESIDENTIAL ONLY					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [5]* [1]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
Single-Family Detached Housing	Dwelling Unit	157.00	4.61	723.77						
Senior Adult Housing-Single-Family	Dwelling Unit	157.00	1.47	230.79						
Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.					Sub-Total					

MAXIMUM ASSESSABLE TRANSPORTATION IMPACT FEE:

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT:

If a transportation impact fee is still due following the calculation of credits, a development may qualify for any of the four (4) available transportation impact fee discounts (as defined by Section 1-14D of the ordinance). Discounts are cumulative, so that a development that qualifies for the maximum discount under each provision may reduce impact fees otherwise due up to 100%.

Adequate Public Facilities Discount:
Mixed-use/ Multi-Modal Development Discount:
Extraordinary Investment Discount:
Small Business Discount:
Total Transportation Impact Fee Discounts (Max 100%): 0%

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE AFTER DISCOUNTS: \$ -

Credit Agreement Number: Transportation Impact Fee Credits (for construction, contribution, or dedication towards the Master Thoroughfare Plan):

TOTAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT AFTER CREDITS AND DISCOUNTS:

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (Peak Hour)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
PORT AND TERMINAL											
Intermodal Truck Terminal	030	1,000 SF GFA	1.97			1.97	10.02	50%	5.01	5.01	9.87
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.74			0.74	10.02	50%	5.01	5.01	3.71
Manufacturing (Sq. Ft.)	140	1,000 SF GFA	0.74			0.74	10.02	50%	5.01	5.01	3.71
Manufacturing (Acres)	140	Acres	4.99			4.99	10.02	50%	5.01	5.01	25.00
Warehousing	150	1,000 SF GFA	0.18			0.18	10.02	50%	5.01	5.01	0.90
High-Cube Fulfillment Center Warehouse (Non-Sort)	155	1,000 SF GFA	0.16			0.16	10.02	50%	5.01	5.01	0.80
High-Cube Fulfillment Center Warehouse (Sort)	155	1,000 SF GFA	1.20			1.20	10.02	50%	5.01	5.01	6.01
High-Cube Transload and Short-Term Storage Warehouse	154	1,000 SF GFA	0.17			0.17	10.02	50%	5.01	5.01	0.85
Data Center	160	1,000 SF GFA	0.13			0.13	10.02	50%	5.01	5.01	0.65
Mini-Warehouse	151	1,000 SF GFA	0.15			0.15	10.02	50%	5.01	5.01	0.75
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.94			0.94	9.79	50%	4.90	4.90	4.61
Single-Family Attached Housing (Incl. Multifamily Detached Housing)	215	Dwelling Unit	0.57			0.57	9.79	50%	4.90	4.90	2.79
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.51			0.51	9.79	50%	4.90	4.90	2.50
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.39			0.39	9.79	50%	4.90	4.90	1.91
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.32			0.32	9.79	50%	4.90	4.90	1.57
Affordable Housing	223	Dwelling Unit	0.50			0.50	9.79	50%	4.90	4.90	2.45
Mobile Home Park	240	Dwelling Unit	0.58			0.58	9.79	50%	4.90	4.90	2.84
Senior Adult Housing-Single-Family	251	Dwelling Unit	0.30			0.30	9.79	50%	4.90	4.90	1.47
Senior Adult Housing-Multifamily	252	Dwelling Unit	0.25			0.25	9.79	50%	4.90	4.90	1.23
Assisted Living	254	1,000 SF GFA	0.48			0.48	9.79	50%	4.90	4.90	2.35
LODGING											
Hotel	310	Rooms	0.59			0.59	6.43	50%	3.22	3.22	1.90
All Suites Hotel	311	Rooms	0.36			0.36	6.43	50%	3.22	3.22	1.16
Motel / Other Lodging Facilities	320	Rooms	0.36			0.36	6.43	50%	3.22	3.22	1.16
RECREATIONAL											
Recreational Community Center	495	1,000 SF GFA	2.50			2.50	7.86	50%	3.93	3.93	9.83
Health/Fitness Club	492	1,000 SF GFA	3.45			3.45	7.86	50%	3.93	3.93	13.56
Miniature Golf Course	431	Hole	0.33			0.33	7.86	50%	3.93	3.93	1.30
Campground/Recreational Vehicle Park	416	Acres	0.98			0.98	9.79	50%	4.90	4.90	4.80
Movie Theater	445	Movie Screens	13.96			13.96	15.77	50%	7.89	6.00	83.76
Soccer Complex	488	Fields	16.43			16.43	7.86	50%	3.93	3.93	64.57
Racquet / Tennis Club	491	Courts	3.82			3.82	7.86	50%	3.93	3.93	15.01
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.49			0.49	8.31	50%	4.16	4.16	2.04
Fire and Rescue Station	575	1,000 SF GFA	0.48			0.48	3.00	50%	1.50	1.50	0.72
Day Care Center	565	1,000 SF GFA	11.12	44%	B	6.23	3.49	50%	1.75	1.75	10.90
Private School (K-12)*	532	1,000 SF GFA	0.00			0.00	3.49	50%	1.75	1.75	0.00
Charter School (K-12)*	538	1,000 SF GFA	0.00			0.00	3.49	50%	1.75	1.75	0.00
Elementary School	520	Students	0.00			0.00	3.49	50%	1.75	1.75	0.00
Middle School/Junior High School	522	Students	0.00			0.00	3.49	50%	1.75	1.75	0.00
High School	525	Students	0.00			0.00	3.49	50%	1.75	1.75	0.00
Junior / Community College	540	Students	0.11			0.11	10.44	50%	5.22	5.22	0.57
University / College	550	Students	0.15			0.15	10.44	50%	5.22	5.22	0.78
MEDICAL											
Clinic	630	1,000 SF GFA	3.69			3.69	9.85	50%	4.93	4.93	18.19
Hospital	610	1,000 SF GFA	0.86			0.86	9.85	50%	4.93	4.93	4.24
Nursing Home	620	Beds	0.14			0.14	9.85	50%	4.93	4.93	0.69
Free-Standing Emergency Room	650	1,000 SF GFA	1.52			1.52	9.85	150%	14.78	6.00	9.12
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.64	30%	B	2.55	9.85	50%	4.93	4.93	12.57
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.45			1.45	14.65	50%	7.33	6.00	8.70
General Office Building	710	1,000 SF GFA	1.52			1.52	14.65	50%	7.33	6.00	9.12
Medical-Dental Office Building	720	1,000 SF GFA	3.93			3.93	9.85	50%	4.93	4.93	19.37
Single Tenant Office Building	715	1,000 SF GFA	1.85			1.85	14.65	50%	7.33	6.00	11.10
Office Park	750	1,000 SF GFA	1.33			1.33	14.65	50%	7.33	6.00	7.98
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	4.45	50%	2.23	2.23	4.17
Automobile Parts Sales	843	1,000 SF GFA	4.90	43%	A	2.79	4.45	50%	2.23	2.23	6.22
Gasoline/Service Station	944	Vehicle Fueling Position	13.91	42%	A	8.07	1.20	50%	0.60	0.60	4.84
Convenience Store/Gas Station (2-8 fueling positions)	945	1,000 SF GFA	48.48	56%	B	21.33	1.20	50%	0.60	0.60	12.80
Convenience Store/Gas Station (9-15 fueling positions)	945	1,000 SF GFA	56.52	75%	B	14.13	1.20	50%	0.60	0.60	8.48
Convenience Store/Gas Station (> 15 fueling positions)	945	1,000 SF GFA	91.35	75%	B	22.84	1.20	50%	0.60	0.60	13.70
Automobile Sales (New)	840	1,000 SF GFA	2.42	20%	B	1.94	4.45	50%	2.23	2.23	4.33
Automobile Sales (Used)	841	1,000 SF GFA	3.75	20%	B	3.00	4.45	50%	2.23	2.23	6.69
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	4.45	50%	2.23	2.23	6.49
Automated Car Wash	948	1,000 SF GFA	14.20	40%	B	8.52	1.20	50%	0.60	0.60	5.11
Tire Store	848	1,000 SF GFA	3.75	28%	A	2.70	4.45	50%	2.23	2.23	6.02
Dining											
Fast Casual Restaurant	930	1,000 SF GFA	12.55	43%	A	7.15	6.07	50%	3.04	3.04	21.74
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	44.61	50%	A	22.31	5.64	50%	2.82	2.82	62.91
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	43.18	50%	B	21.59	5.64	50%	2.82	2.82	60.88
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.57	43%	A	5.45	6.07	50%	3.04	3.04	16.57
Fine Dining Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	6.07	50%	3.04	3.04	13.28
Drinking Place	975	1,000 SF GFA	11.36	44%	A	6.36	6.07	50%	3.04	3.04	19.33
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	85.88	70%	A	25.76	4.53	50%	2.27	2.27	58.48
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	4.86	30%	C	3.40	5.60	50%	2.80	2.80	9.52
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	5.60	50%	2.80	2.80	13.61
Home Improvement Superstore	862	1,000 SF GFA	2.29	48%	A	1.19	5.60	50%	2.80	2.80	3.33
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.51	53%	A	4.00	5.60	50%	2.80	2.80	11.20
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.25	49%	A	5.23	5.60	50%	2.80	2.80	14.64
Shopping Center (greater than 150,000 square feet)	820	1,000 SF GLA	3.40	34%	A	2.24	5.60	50%	2.80	2.80	6.27
Shopping Plaza (between 40,000 -150,000 square feet)	821	1,000 SF GLA	5.19	34%	A	3.43	5.60	50%	2.80	2.80	9.60
Strip Retail Plaza (less than 40,000 square feet)	822	1,000 SF GLA	6.59	34%	A	4.35	5.60	50%	2.80	2.80	12.18
Supermarket	850	1,000 SF GFA	8.95	36%	A	5.73	5.60	50%	2.80	2.80	16.04
Toy/Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	5.60	50%	2.80	2.80	9.80
Liquor Store	899	1,000 SF GFA	16.62	30%	B	11.63	5.60	50%	2.80	2.80	32.56
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	5.60	50%	2.80	2.80	3.84
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	4.45	50%	2.23	2.23	16.23
Drive-In Bank	912	Drive-in Lanes	21.01	47%	A	11.14	4.45	50%	2.23	2.23	24.84
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	6.41	50%	3.21	3.21	3.27

*Custom trip rate (trips per 1,000 SF GFA) estimated by Kimley-Horn using ITE trip rate (trips per student) and recent Fort Worth School Data.

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 3rd Edition (August 2014)

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: ITE rate adjusted upward by KHA based on logical relationship to other categories

Land Use Category	ITE Land Use Code	Land Use Description
PORT AND TERMINAL		
Intermodal Truck Terminal	030	Point of good transfer between trucks or between trucks and rail
INDUSTRIAL		
General Light Industrial	110	Emphasis on activities other than manufacturing; typically employing fewer than 500 workers
Manufacturing	140	Primary activity is conversion of raw materials or parts into finished products. Can be calculated based on Square Feet of Building or Acreage of Site.
Warehousing	150	Devoted to storage of materials but may include office and maintenance areas
High-Cube Fulfillment Center Warehouse (Non-Sort)	155	Storage and consolidation of automatically-sorted manufactured goods prior to their distribution. Typically 200k+ sq. ft.
High-Cube Fulfillment Center Warehouse (Sort)	155	Storage and consolidation of manually-sorted manufactured goods prior to their distribution. Typically 200k+ sq. ft.
High-Cube Transload and Short-Term Storage Warehouse	154	Short term storage and high throughput of large volumes of manufactured goods. Typically 200k+ sq. ft.
Data Center	160	A free-standing warehouse type of facility that is primarily used for off-site storage of computer systems and associated components including applications and secure data. Data centers typically have a small number of employees and visitors.
Mini-Warehouse	151	Facilities with a number of units rented to others for the storage of goods
RESIDENTIAL		
Single-Family Detached Housing	210	Single-family detached homes on individual lots
Single-Family Attached Housing (Incl. Multifamily Detached Housing)	215	1-4 rental dwelling units and one or two levels (floors) per building. Includes duplexes, condos, and townhomes
Multifamily Housing (Low-Rise)	220	At least 4 rental dwelling units (Apartments) and two or three levels (floors) living space per building
Multifamily Housing (Mid-Rise)	221	At least 4 rental dwelling units (Apartments) and between four and ten levels (floors) living space per building
Multifamily Housing (High-Rise)	222	At least 4 rental dwelling units (Apartments) and more than ten levels (floors) living space per building
Affordable Housing	223	Multifamily housing that is rented at below market rate to households that include at least one employed member
Mobile Home Park	240	Manufactured homes that are installed on permanent foundations
Senior Adult Housing-Single-Family	251	Consists of detached independent living developments that include amenities such as golf courses and swimming pools
Senior Adult Housing-Multifamily	252	Consists of attached independent living developments that include limited social or recreation services
Assisted Living	254	Residential settings that provide either routine general protective oversight or assistance with activities.
LODGING		
Hotel	310	Lodging facilities that typically have on-site restaurants, lounges, meeting and/or banquet rooms, or other retail shops and services
All Suites Hotel	311	Lodging facilities that may have small on-site restaurant and lounge, and small amounts of meeting space. Each suite includes a sitting room and separate bedroom.
Motel / Other Lodging Facilities	320	Lodging facilities that may have small on-site restaurant or buffet area but little or no meeting space
RECREATIONAL		
Recreational Community Center	495	Category includes racquet clubs, health/fitness clubs, can include facilities such as YMCA's
Health/Fitness Club	492	A privately-owned facility that primarily focuses on individual fitness or training. These membership clubs that may allow access to the general public for a fee.
Miniature Golf Course	431	One or more individual putting courses; category should not be used when part of a larger entertainment center(with batting cages, video game centers, etc)
Bowling Alley	437	A recreational facility that includes bowling lanes. A small lounge, restaurant and/or snack bar, video games, and pool tables may also be available.
Movie Theater	445	Movie theater with audience seating, minimum of ten screens, lobby, and refreshment area.
Soccer Complex	488	An outdoor facility that is used for non-professional soccer games. May include a fitness trail, aquatic center, or other sport courts/fields.
Racquet / Tennis Club	491	Indoor or outdoor facilities specifically designed for playing tennis
INSTITUTIONAL		
Church	560	Churches and houses of worship
Fire and Rescue Station	575	Station for conducting Fire and Rescue operations and the storage of emergency response vehicles
Day Care Center	565	Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds
Private School (K-12)*	532	Private education institution serving K-12 students
Charter School (K-12)*	538	Publicly funded and privately managed school serving K-12 students
Elementary School	520	Serves students who have not yet entered middle/junior high school
Middle School/Junior High School	522	Service students who have completed elementary school
High School	525	Serves students who have completed middle or junior high school
Junior / Community College	540	Two-year junior, community, or technical colleges
University / College	550	Four-year universities or colleges that may or may not offer graduate programs
MEDICAL		
Clinic	630	Facilities with limited diagnostic and outpatient care
Hospital	610	Medical and surgical facilities with overnight accommodations
Nursing Home	620	Rest and convalescent homes with residents who do little or no driving
Free-Standing Emergency Room	650	Facility that specializes in personal medical care and treatment of people
Animal Hospital/Veterinary Clinic	640	Animal hospital or veterinary clinic that specializes in the treatment of animals
OFFICE		
Corporate Headquarters Building	714	Office building housing corporate headquarters of a single company or organization
General Office Building	710	Office buildings which house multiple tenants
Medical-Dental Office Building	720	Multi-tenant building with offices for physicians and/or dentists
Single Tenant Office Building	715	Single tenant office buildings other than corporate headquarters
Office Park	750	Office buildings (typically low-rise) in a campus setting and served by a common roadway system
COMMERCIAL		
Automobile Related		
Automobile Care Center	942	Automobile repair and servicing including stereo installations and upholstery
Automobile Parts Sales	843	Retail sale of auto parts but no on-site vehicle repair
Gasoline/Service Station	944	Gasoline sales without convenience store or car wash; may include repair
Convenience Store/Gas Station (2-8 fueling positions)	945	Gasoline sales with convenience store and car washes where the primary business is gasoline sales (<4.5k)
Convenience Store/Gas Station (9-15 fueling positions)	945	Gasoline sales with convenience store and car washes where the primary business is gasoline sales (>4.5k)
Convenience Store/Gas Station (>15 fueling positions)	945	Gasoline sales with convenience store and car washes where the primary business is gasoline sales (>4.5k)
Automobile Sales (New)	840	New car dealerships, typically with automobile servicing, part sales, and used car sales
Automobile Sales (Used)	841	Car dealership specializing in the sale of used cars
Quick Lubrication Vehicle Shop	941	Primary business is to perform oil changes and fluid/filter changes with other repair services not provided
Automated Car Wash	948	Has stalls for driver to park and wash the vehicle
Tire Store	848	Primary business is sales and installation of tires; usually do not have large storage or warehouse area
Dining		
Fast Casual Restaurant	930	Sit-down restaurant with no (or very limited) wait staff or table service. Orders off a menu board, pays for food before the food is prepared, and seats themselves
Fast Food Restaurant with Drive-Thru Window	934	High-turnover fast food restaurant for carry-out and eat-in customers with a drive-thru window
Fast Food Restaurant without Drive-Thru Window	933	High-turnover fast food restaurant for carry-out and eat-in customers, but without a drive-thru window
High Turnover (Sit-Down) Restaurant	932	Restaurants with turnover rates less than one hour; typically includes moderately-priced chain restaurants
Fine Dining Restaurant	931	Restaurants with turnover rates of one hour or longer; typically require reservations
Drinking Place	975	Contains a bar where alcoholic beverages and food are sold, and possibly some type of entertainment
Coffee/Donut Shop without Drive-Thru Window	936	Coffee and Donut restaurants without drive-through windows, hold long store hours and have limited indoor seating
Coffee/Donut Shop with Drive-Thru Window	937	Coffee and Donut restaurants with drive-through windows, hold long store hours and have limited indoor seating
Other Retail		
Free-Standing Discount Store	815	Category includes free-standing stores with off-street parking; typically offer a variety of products and services with long store hours
Nursery (Garden Center)	817	Building with a yard of planting or landscape stock; may have office, storage, shipping or greenhouse facilities
Home Improvement Superstore	862	Warehouse-type facilities offering a large variety of products and services including lumber, tool, paint, lighting, and fixtures, among other items.
Pharmacy/Drugstore w/o Drive-Thru Window	880	Facilities that primarily sell prescription and non-prescription drugs without a drive-through window
Pharmacy/Drugstore w/ Drive-Thru Window	881	Facilities that primarily sell prescription and non-prescription drugs with a drive-through window
Shopping Center (greater than 150,000 square feet)	820	Integrated group of commercial establishments; planning, owned, and managed as a unit (>150k)
Shopping Plaza (between 40,000 -150,000 square feet)	821	Integrated group of commercial establishments; planning, owned, and managed as a unit (40-150k)
Strip Retail Plaza (less than 40,000 square feet)	822	Integrated group of commercial establishments; planning, owned, and managed as a unit (<40k)
Supermarket	850	Primary business is sale of groceries, food, and household cleaning items; may include photo, pharmacy, video rental, and/or ATM
Toy/Children's Superstore	864	Businesses specializing in child-oriented merchandise
Department Store	875	Free-standing stores that specialize in the sale of apparel, footwear, bedding, home products, jewelry, etc.
Liquor Store	899	A liquor store specializes in the sale of prepackaged alcoholic beverages intended to be consumed off the store's premises.
SERVICES		
Walk-In Bank	911	Banks with their own parking lots, no drive-in lanes but contain non-drive-through ATMs
Drive-In Bank	912	Banking facilities to conduct financial transactions from the vehicle; also usually apart of walk-in bank
Hair Salon	918	Facilities that specialize in cosmetic and beauty services including hair cutting and styling