

CITY OF ARLINGTON

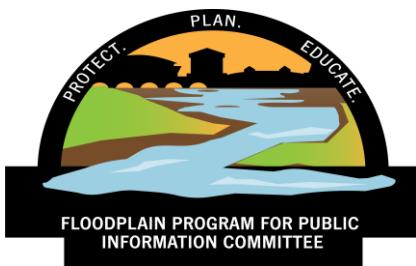
Floodplain Program for Public
Information and Flood Insurance
Coverage Improvement
2026-2031 Edition





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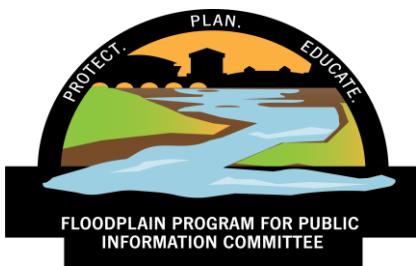
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About the Floodplain Program for Public Information and the Community Rating System

Flooding is the most common natural hazard in the United States. More than 20,000 communities experience floods and this hazard accounts for more than 70 percent of all Presidential Disaster Declarations. In the United States, over 8 million residential and commercial structures are currently built in areas at risk of flooding. The cost of recovery shared by local, state, and federal governments, along with the flood victims themselves.

The National Flood Insurance Program (NFIP) is based on a cooperative agreement between FEMA and local governments. FEMA underwrites flood insurance policies within a community, while the local community agrees to regulate development to reduce flooding. While participation in the NFIP is voluntary, communities will join the program so their property owners, residents, and tenants are eligible to purchase federally backed flood insurance. Non-participating communities will not receive federal aid for damages to insurable buildings in the floodplain.

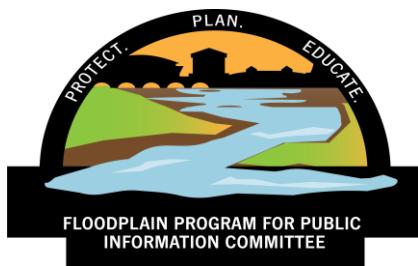
The City of Arlington has participated in the regular phase of the NFIP since December 31, 1974. This allows all homeowners, renters, and business owners within the City to purchase flood insurance.

The NFIP Community Rating System (CRS) Program recognizes community floodplain management activities that exceed the minimum FEMA standards and help reduce the risk of flooding. Communities participating in the CRS Program can earn discounts on flood insurance premium rates as a reward for actions that meet the three goals of the CRS, which are:

- (1) reduce flood damage to insurable property.
- (2) strengthen and support the insurance aspects of the NFIP.
- (3) encourage a comprehensive approach to floodplain management.

In addition to meeting the basic requirements of the NFIP, Arlington has adopted additional regulations and procedures to earn a CRS Class 5 rating. This allows all flood insurance policyholders in the City to receive a twenty-five percent (25%) reduction in their flood insurance premiums. The City of Arlington has participated in the CRS program since October 1, 1991.

The City follows the Floodplain Program for Public Information (PPI) process as outlined in the 2017 CRS Coordinator's Manual to evaluate floodplain education outreach efforts and identify ways to diversify and improve messaging to residents, visitors, and business operators within the City. The PPI process includes a flood insurance coverage assessment, coverage improvement plan, review of all floodplain education and outreach materials, review of outreach efforts by other agencies, and discussion of the flooding issues that Arlington experiences. This review and discussion helps identify additional target audiences and topics to add to the City's educational



outreach efforts. Educational program goals and outcomes are also identified for each outreach project.

City Council Priorities are also considered during the PPI Process, which helps incorporate a more comprehensive approach to floodplain education in Arlington. The Priorities were updated for FY2026 to include Enhance Mobility, Grow Our Economy, Preserve Financial Stability and Resilience, and Strengthen Our Communities.

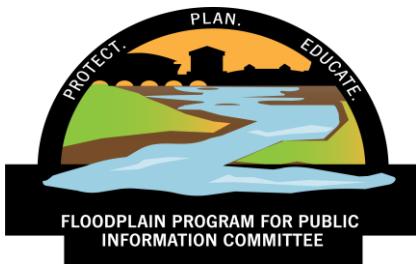
Floodplain Program for Public Information Committee

The development of the Floodplain PPI Plan and its associated outreach activities is accomplished through the Floodplain Program for Public Information Committee (FPPIC). The committee is comprised of residents, business owners, a real estate agent, an insurance agent, a Public Information Officer from the Office of Communication, and City Stormwater staff. This diverse committee assesses different perspectives within the City to develop outreach projects for each part of the community. City staff provides insight on other outreach activities the City performs and provides expertise on the flood hazards that Arlington experiences.

The FPPIC was formed by City Council Resolution No. 19-111 on April 23, 2019. An application for residents to participate on the FPPIC was posted on the City's website. Members were selected based upon committee membership criteria outlined in the 2017 CRS Coordinator's Manual. Since forming over five years ago, several original members have moved out of the area, and new volunteers have joined the mission to provide quality floodplain education to our community. Current FPPIC members are listed in Table 1.

Table 1. FPPIC Members and Backgrounds

Name	Background
Randy Hendricks	Active Retired Citizen; Community Advocate; Volunteer; WeCan and Rotary Club Member
Jolanda Hendricks	Active Retired Citizen; Community Advocate, Volunteer
Phyllis Hunter	DFW Texas Homes Real Estate Agent; Arlington Resident
Dale Sharpe-Jenkins	Arlington Business Owner and Resident; Community Advocate; Insurance Agent
Alicia Gray	Active Retired Citizen; Community Advocate; Volunteer
Amberley Shelby	Resident; Community Advocate
Coy Garrett	Resident; Business Owner
Susan Schrock	City of Arlington Communications Coordinator
Melissa Walker	City of Arlington Stormwater Education Specialist



On November 20, 2024, the FPPIC began the process of reviewing and updating the 2020-2025 PPI Plan and Coverage Improvement Plan. The result of that process was this document, the 2026-2031 Floodplain Program for Public Information and Flood Insurance Coverage Improvement Plan. This plan will be sent to City Council for adoption by Resolution in September 2025. FPPIC meetings and the topics discussed in each are in Table 2. Any updates and changes from the 2020-2025 PPI Plan are documented in Appendix C.

Table 2. FPPIC Meeting Information

FPPIC Meeting Date	Agenda Topics
September 4, 2024	<ul style="list-style-type: none">• FY2024 Project Updates• Substantial Damage Plan Review• FY2024 Annual Report and Evaluation• FY2026-2031 PPI Plan development timeline (Step 1)
November 20, 2024	<ul style="list-style-type: none">• Community Assessment (Step 2)• Review/Identify Priority Areas (2a)• Assessment of Flood Insurance (FIA) and Current Coverage Improvement Plan (CP) (2b)• Inventory of other Public Information Efforts (2d)• FY2025 Project Update
March 6, 2025	<ul style="list-style-type: none">• Review Community Assessment 2a, 2c and 2d for new committee members.• 2025 Repetitive Loss Area Analysis Plan Update and Timeline for comments (2b)• Review FIA and CP for new committee members. (CP and 2b)• Review/Update Outreach Messages (Step 3)• FY2025 Project Update
June 11, 2025	<ul style="list-style-type: none">• Review/Identify Outreach Projects (Step 4)• Review/Examine/Update Other Public Information Initiatives (Step 5)• FY2025 Project Update



Current Program and Outreach Efforts

Effective floodplain management is essential to dealing with the City's flooding issues. Through the City's permitting process and development requirements, flood risks are reduced throughout the City. Development permits are reviewed by the Planning and Development Services department, which is responsible for ensuring permit applications within the City adhere to the Unified Development Code and Design Criteria Manual. Permits for developments within a floodplain receive additional review by the Public Works Floodplain Management team. These permits are required to adhere to the City's Flood Damage Prevention Ordinance (FDPO), which incorporates NFIP requirements and higher regulatory standards for development.

Public Works Stormwater Management is comprised of two divisions – Stormwater CIP (Capital Improvements Program) and Floodplain Management. The Stormwater CIP division manages drainage infrastructure projects that reduce flooding.

The Floodplain Management division is generally responsible for administering the provisions of the FDPO, operating the City's flood monitoring (rain and stream gauge) network, performing comprehensive watershed planning, maintaining floodplain maps and associated information, and providing comprehensive floodplain information to the public. The division also manages a voluntary flood mitigation buyout program to demolish homes with repetitive flooding issues as part of the overall flood mitigation strategy.

The 2020 Arlington Annex to the Tarrant County Hazard Mitigation Action Plan (see Appendix D) was created by the City's Office of Emergency Management, in consultation with other departments. The annex ranks flooding as the highest risk natural hazard in Arlington and outlines the potential impacts to the community following a flood event. The Office of Emergency Management provided a list of Critical and Vulnerable Facilities/Assets (Appendix D pgs. A-12 to A-14) and a map of low water crossing locations (Map 1 Appendix A, or Appendix D pg. A-26). Mitigation projects and education programs targeting these areas will help reduce flood risks and the associated potential harm to life and property.

The CRS Program recognizes community efforts to provide the public with information that increases flood hazard awareness, motivates actions to reduce flood damage, encourages flood insurance coverage, and protects natural functions of the floodplain. The current floodplain outreach program meets the criteria outlined in the 2017 CRS Coordinator's Manual. Table 3 lists the public information efforts performed by the City of Arlington prior to the 2020-2025 PPI Plan. These outreach projects were evaluated by the FPPIC during the Floodplain PPI Process to identify updates and new projects that better convey floodplain and stormwater messaging to the community. These projects were reviewed and updated during the 2026-2031 PPI Plan update process. Appendix C outlines PPI plan projects implemented between 2020-2025 with updates from the 2026-2031 PPI plan review process.

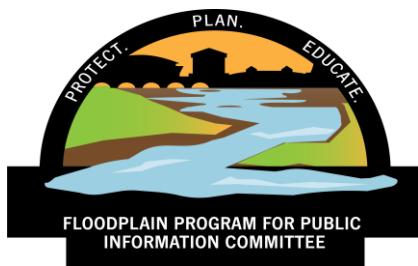


Table 3. Public Information Efforts

Organization	Project	Subject Matter	Frequency
Department of Public Works - Stormwater	Website/Social Media	<ul style="list-style-type: none"> Flood Information Services All Floodplain Topics/Messages Watersheds Storm Drain Infrastructure Stormwater Pollution Prevention 	Annual
Department of Public Works - Stormwater	Repetitive Loss Areas	<ul style="list-style-type: none"> Get a Flood Insurance Policy Prepare for Flooding Assess Your Property's Drainage or Flooding Issues Get a Building Permit Financial Assistance Advice Flood Brochure: 9 CRS Topics and Weather Warning Information 	Annual Mailout to Owners and Tenants
Department of Public Works - Stormwater	Utility Bill Inserts	<ul style="list-style-type: none"> Flood Information Services Report Illegal Dumping 	2 times per year
Department of Public Works - Stormwater	School Program	<ul style="list-style-type: none"> Journey Through the Storm Drain/TADD Be Flood Prepared 	Presentations are given throughout the year when requested. Annual 3 rd – 5 th grade Turn Around Don't Drown (TADD) annual art contest.
Department of Public Works - Stormwater	Community Events	<ul style="list-style-type: none"> All Floodplain Topics/Messages 	Community events occur throughout the year and are sponsored by various

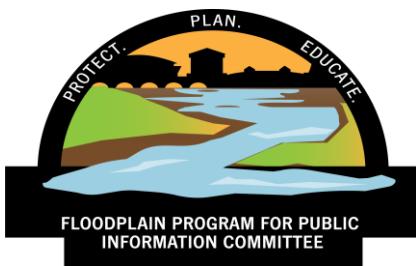


		<ul style="list-style-type: none"> • Stormwater Pollution messages 	groups such as UTA, TCC, the City and River Legacy.
Department of Public Works - Stormwater	Community Presentations	<ul style="list-style-type: none"> • Know Your Flood Risk • Be Flood Prepared • Build Responsibly • Stormwater Pollution and Prevention 	Presentations are given to community groups when requested throughout the year.
Department of Public Works—Stormwater Field Operations	Inlet Decal Program	No Dumping Drains to Creek	350 placed adjacent to Problem Site Maintenance Areas, linear parks, critical facilities or at City facilities each year.

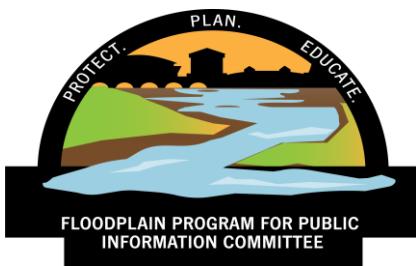
The FPPIC reviewed outreach efforts that are managed by other City departments or agencies to identify other floodplain educational opportunities and note any best practices to incorporate into the outreach projects identified by the FPPIC during the Floodplain PPI Process. These outside public information efforts are shown in Table 4.

Table 4. Outside Public Information Efforts

Organization	Project	Subject Matter	Frequency
City of Arlington Fire Department	Know What to Do Campaign; Stay Safe Webpage	Know how to prepare for Floods; What to do after a flood and Floods Vs Flash Floods	Posted on Website under Community Services and Stay Safe Tabs; Community Events throughout the year; Social media as needed
Tarrant County Transportation Department	Website and Social Media	Floodplain Development Permits; Flood Assistance 2-1-1 Information; Flood Damage Assessments	Year-round
River Legacy Living Science Center	Let's Explore Freshwater Ecology Kids Summer Camp	Exploration of water quality through an interactive watershed model demonstration	1 or 2 times a year



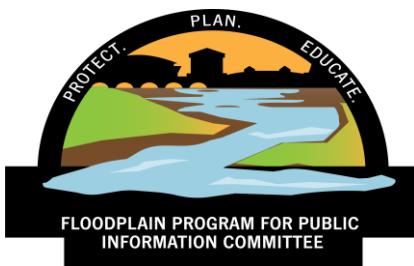
Texas Floodplain Managers Association	Outreach and website on flood training, flood preparedness; Student coloring book - Texana Tadpole. TADD Art Contest and Calendar	CFM and NFIP training; TADD coloring book message; Flood safety and preparedness	Training at least once a year; Coloring books given out at schools or community events. Website annually; social media as needed. Annual TADD art contest for grades 3 rd – 5 th Grade. Calendar with winners printed each year.
City of Arlington Office of Communications	News Stories; Social Media	Flood Safety and Preparedness Topics including Flood Warnings, After Flood Response	As Needed
City of Arlington Police Department	News Stories; Social Media	Flooded Roadway alerts	As Needed
City of Arlington Office of Emergency Management	News Stories, Website and Social Media	Flood Watches and Warnings; Flooded Roadways; After Flood Response	As Needed; Website information provide throughout the year
Texas Department of Public Safety Emergency Management Office	Electronic Signs; Website; Social Media	Flooded Roadways; Flood Safety and Preparedness messages; After flood response	As needed; Website information provided throughout the year
American Red Cross North Texas Chapter	Website, Social Media and Training	Emergency Preparedness and Safety Education along with First Aid, CPR and AED Training	Website information provided throughout the year. Training provided when requested.
North Central Texas Council of Governments	Community Cleanup Challenge; Website and Social Media	Natural Floodplain Functions, Emergency Preparedness Website and Know What to Do Campaign Website	Annual cleanup challenge. Website/Social Media information provided throughout the year.
USGS Oklahoma-Texas Water Science Center	Stream Gauge data, Gauge Station Webcams, Website publications	Natural Floodplain Functions, flood safety information, water quality publications.	Stream gauge data is found on their Water Dashboard link. Stream data is updated every minute.



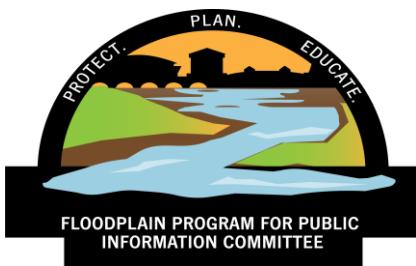
The FPPIC reviewed and updated current CRS educational activities based on the nine outreach topics during the 2020-2025 PPI plan. On June 11, 2025, the FPPIC reviewed these activities and made additional updates to 332 FRP, 350 WEB and 540 SDR. Table 5 summarizes Other CRS Public Information Activities.

Table 5. Other CRS Public Information Activities

Element	Current Activity	Committee Review of Activity	Qualify/Credit
320 MI	Our map information services are promoted through our annual Flood Information Services (FIS) water bill insert sent to all water account holders. The same information is posted on the Stormwater Management's Floodplain Administration pages. The insert is also printed and handed out at community events. There is an FIS webpage that provides more information on MI topics as well.	The Committee reviewed the FIS insert and made no changes.	Yes
330 OP	Outreach material for presentations and projects cover outreach topics A-I. This includes the school program, adult presentation program and the public event outreach program.	Committee reviewed outreach projects and made several changes which can be found in Table 14 PPI projects and Initiatives, Table 15 FRP projects, and Table 16 CP projects. Appendix C chronicles changes to the PPI plan.	Yes
332 FRP	The current outreach packet includes a resident or owner letter, Citizen's Guide to Flood Safety and Awareness Brochure (Outreach Topics A-I) and the My Property Flooded Flyer	Committee Reviewed the current FRP Packet and Social Media PSA's. The Committee	Yes



	(Outreach Topic I). Flood Friday PSA's were developed covering before, during and after the flood topics.	recommend more PSA development.	
350 WEB	The City of Arlington's Website was updated in April of 2025. The Stormwater Management website under the Floodplain Administration page covers Outreach Topics A-I. The new website can be translated into Spanish and Vietnamese.	The Committee reviewed the website content and would still like to see more downloadable material for residents and business owners.	Yes
360 PPA, PPV, and FAA	The FIS annual water bill insert promotes PPA, PPV and FAA. The FIS webpage promotes this information as well and the printed insert is handed out at community events.	Committee reviewed the FIS insert and made no changes.	Yes
370 CP	Flood Insurance postcards signed by the City's Mayor are mailed out annually to our mapped Non-SFHA flood prone areas. A Flood Insurance/Flood Safety Preparedness poster is handed out to Apartment Complex managers at their annual city sponsored workshop. The Stormwater Educator also attends the Tarrant County Insurance Agents biennial convention to hand out the Flood Insurance Flyers and FEMA booklets.	Committee reviewed the postcard, poster and handouts. The committee would like to see a different design for the postcard.	Yes
540 SDR	"No Dumping, Drains to Creek" inlet decals are placed by city staff in flood prone areas near barricade locations or Problem Site Maintenance Areas. They are also placed adjacent to city parks and facilities along with School district properties. "Report Illegal Dumping" signs are being placed along stream	Committee reviewed these projects and made no changes.	Yes



	crossings within our watersheds.		
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Community Public Information Needs Assessment

The City of Arlington covers an area of 99.5 sq. miles, with a census-estimated 2024 population of approximately 403,672. The City of Arlington is in Tarrant County and is the third largest city in the Dallas-Fort Worth Metroplex.

Flood Hazards

The City of Arlington has 129 stream miles across ten major Watersheds: Trinity River and Tributaries, Upper Village Creek, Lower Village Creek, Rush Creek, Johnson Creek, Cottonwood Creek, Fish Creek, Lynn Creek, Bowman Branch Creek, and Walnut Creek. The West Fork of the Trinity River flows through North Arlington.

The City of Arlington primarily experiences three types of flooding. Flash flooding results from heavy rainfall in a short amount of time that causes sudden flooding. Localized flooding generally occurs because of poor grading, inadequate storm drainage infrastructure, or trash and debris blocking a storm drain. Riverine flooding is typically caused by heavy and prolonged rainfall within a watershed that causes a river to exceed its storage capacity.

Arlington has a long history of flooding around Johnson Creek, Rush Creek, and the West Fork of the Trinity River. There are also areas of the City that have experienced flooding from undersized storm drain infrastructure or in areas located near low water crossings.

Approximately 14.9% of the total City area lies within the Special Flood Hazard Area (SFHA) on the FEMA flood maps. There are currently 1,810 building footprints partially or fully within the SFHA, which account for 2.0% of the total buildings in the City.

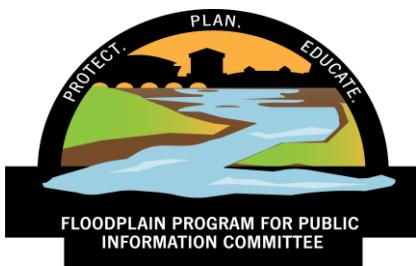
Social and Economic Needs

The demographic composition of the City of Arlington is an important consideration when developing outreach material. In the 2024 census estimate, 31.0% of the City's population was Hispanic and 7.3% was Asian. To help overcome potential obstacles associated with language barriers, the committee recognizes that we must effectively distribute messages that utilize community resources and specific communication tools that reach all residents. Therefore, the City provides written flood information in English, Spanish, and Vietnamese.

Approximately 13.1% of the population falls below the federal poverty line. These populations are unlikely to purchase flood insurance and many times these populations live in floodplain areas due to lower housing costs.

Repetitive Flooding

A repetitive loss (RL) property is any insurable structure which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling 10-year



period since 1978. Severe repetitive loss (SRL) properties are insurable structures that either have four or more claims of \$5,000 or more or have at least two claims that cumulatively exceed the building's value. Repetitive loss areas identify locations with at least one RL or SRL property.

In 2025, the City of Arlington updated its Repetitive Loss Area Analysis. 35 unmitigated Repetitive Loss Areas were identified within the City of Arlington in accordance with CRS guidelines. The 35 Repetitive Loss areas included 47 unmitigated repetitive loss properties plus an additional 838 properties that are subject to similar flooding conditions.

The City of Arlington works with property owners when undertaking flood mitigation measures such as buyouts, relocations, structure elevating, or other improvements that can reduce or eliminate repetitive flood damage.

Flood Insurance Coverage Assessment

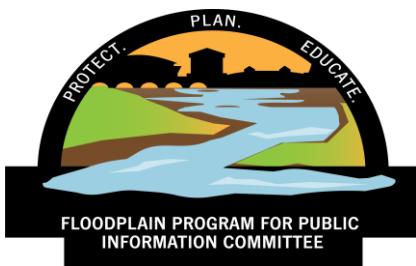
In addition to the PPI, specific outreach to improve flood insurance coverage in the community is needed. Activity 370 of the CRS focuses on improving flood insurance coverage by assessing the current level of flood insurance coverage through a "Flood Insurance Coverage Assessment" (FIA). The results of the FIA are then incorporated into a "Coverage Improvement Plan" (CP) to identify where coverage needs to be improved. The CP was developed by the PPI Committee to determine the most effective ways to increase the total active policies across the City.

Using the FEMA effective SFHA and aggregated insurance data provided by FEMA in November 2024, current active insurance policies in Arlington were assessed. Table 6 shows the total number of active policies in the City of Arlington and information regarding the insurance policies. The Total Premium and Insurance in Force dollar values are yearly sums and the amount (\$) of Closed Paid Losses is the total payout value to the policies since the City of Arlington entered in the National Flood Insurance Program (NFIP) in 1974.

This assessment of insurance data has been prepared to examine the current level of flood insurance coverage in the City of Arlington. This data assessment provides comparisons to determine the gaps in insurance coverage and identify the community's public information needs.

Table 6. General Policy Data

	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses
A01-30 & AE Zones	386	\$310,095	\$131,520,795	432	\$14,587,954.00
A Zones	82	\$76,213	\$21,790,713	45	\$150,805.00
B, C & X Zone	409	\$282,816	\$325,373,316	511	\$ 6,437,250.00
Total	877	\$669,124	\$478,684,824	988	\$21,176,009.00



Post FIRM Minus Rated Policies

A Zone Minus Rated Policies	5
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Community	Arlington
County	Tarrant
State	Texas
CID	485454

Flood Insurance Coverage by Occupancy

When a home is flooded from a source coming from outside the home, standard homeowner's or building insurance policies will not cover the damages. Owners must carry flood insurance for coverage toward such events. NFIP policies are purchased as a separate insurance policy and are required for all structures in the SFHA with a federally backed mortgage. However, if a structure is within a Zone X (non-floodplain area), they are generally considered to have a lower flood risk and are not required to purchase a flood insurance policy. These Zone X structures typically have a lower premium than the structures in an SFHA.

In Arlington, there are 1,810 total structures in the SFHA. For this assessment, structures less than 500 square feet were not counted, as they are typically sheds or other storage buildings. 1,700 structures of the 1,810 structures are residential, making up 94% of the structures in the SFHA. Table 6 shows that roughly 95.1% of the active flood policies throughout the City are for residential structures.

Table 7. Insurance Coverage by Occupancy

	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses
All Residential	832	\$581,619	\$443,782,119	676	\$19,016,109.00
Non-Residential	45	\$ 87,505	\$34,902,705	70	\$ 2,688,458.00
Total	877	\$669,124	\$478,684,824	746	\$21,704,567.00

Flood Insurance by Flood Zone and Watershed

The number of structures in the SFHA compared to active insurance policies in the SFHA helps to determine the shortage of insurance coverage. Policies are written to cover one structure each. Table 7 shows that there are 468 active insurance policies in the SFHA (both AE and A zones), meaning that only 25.8% of all insurable structures in the SFHA have insurance policies. The remaining active policies are for structures in Zone X. These policies generally have a lower premium than those in Zone A or AE. Zone X is any area outside the SFHA.

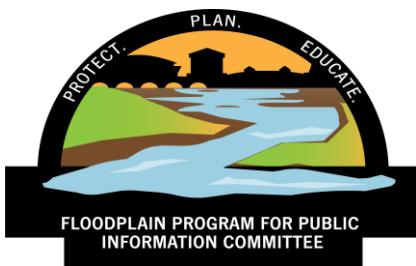


Table 8. Flood Insurance Coverage by Flood Zone

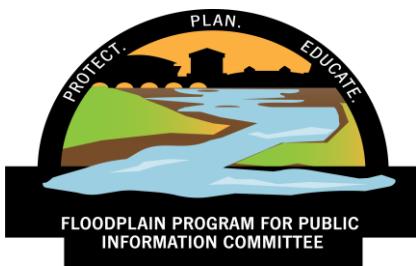
	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses
A01-30 & AE Zones	386	\$310,095	\$131,520,795	432	\$14,587,954.00
A Zones	82	\$ 76,213	\$21,790,713	45	\$150,805.00
B, C & X Zone	409	\$282,816	\$325,373,316	511	\$ 6,437,250.00
Total	877	\$669,124.00	\$478,684,824	988	\$21,176,009.00

There are 10 major Watersheds in the Arlington (Appendix A, Map 2), but most of the policies are within the Rush Creek Watershed. Cottonwood Creek, Johnson Creek and Lower Village Creek have the least active insurance policies at 4.4%, 5.6%, and 4.1% respectively. Walnut Creek has 0% coverage however only a small portion of this watershed is in the Arlington city limits. Insurance Coverage by watershed is shown in Table 8, with policies broken down to show active policies in the SFHA.

Table 9. Flood Insurance Coverage by Watershed

	# of Insurance Policies per Watershed	Insurance Premiums Totals	Structures in the SFHA	Policies in the SFHA	% of Structures in the SFHA with Flood Insurance
Bowman Branch	7	\$ 3,444	13	2	15.4%
Cottonwood Creek	12	\$11,758	113	5	4.4%
Fish Creek	42	\$36,172	182	16	8.8%
Johnson Creek	99	\$72,790	555	31	5.6%
Lower Village Creek	92	\$64,047	365	15	4.1%
Lynn Creek	24	\$12,332	114	12	10.5%
Rush Creek	361	\$292,247	997	230	23.1%
Trinity Tributaries	151	\$118,254	402	90	22.4%
Upper Village Creek	83	\$49,328	383	67	17.5%
Walnut Creek	6	\$8,752	5	0	0%
Total	1,598	\$669,124	3129	468	

Flood Insurance in Pre-FIRM and Post-FIRM Buildings



It can also be helpful to look at the insurance policies on homes built before the initial Flood Insurance Rate Map (FIRM) was adopted in 1974 (Pre-FIRM) for Arlington and after the FIRMs were issued (Post-FIRM). As seen below, roughly 80.6% of active policies are on Post-FIRM structures.

A FIRM is a regulatory map where FEMA has delineated both the SFHA and other at-risk zones in a community. These maps are the official source of the floodplain that is used to determine flood insurance requirements. Pre-FIRM homes will generally have a subsidized insurance rate because they may have been built without any flood data available.

Table 10. Pre-FIRM Policy Data

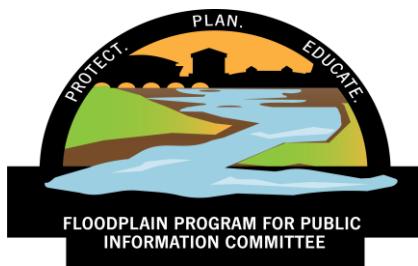
	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses
A01-30 & AE Zones	75	\$ 81,858	\$25,033,758	271	\$325,950.24
A Zones	0	---	\$2,646,600	4	\$ 69,621.00
B, C, & X Zones	68	\$ 38,390	\$58,726,190	228	\$3,732,311.00
Total	143	\$120,248	\$86,286,300	496	\$512,528.36

Table 11. Post-FIRM Policy Data

	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses
A01-30 & AE Zones	311	\$228,237.00	\$106,487,037	99	\$1,981,158.00
A Zones	82	\$76,213.00	\$190,755,213	41	\$81,184.00
B, C & X Zones	341	\$244,426.00	\$266,647,126	283	\$2,704,939.00
Total	734	\$548,876.00	\$563,889,376	423	\$4,767,281.00

Flood Insurance in Repetitive Loss Areas

A repetitive loss (RL) property is any insurable structure which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period since 1978. Severe repetitive loss (SRL) properties are insurable structures that either have four or more claims of \$5,000 or more or have at least two claims that cumulatively exceed the building's value. Repetitive loss areas identify locations with at least one RL or SRL property. Additional structures with insurance claims can be included a RL area depending on the proximity to the RL or SRL property.



There are 47 unmitigated RL properties identified in 35 different RL areas across Arlington. There are a total of 59 active insurance policies in the repetitive loss areas. Of the approximately 838 properties identified in the Repetitive Loss Areas, using the data provided in Table 12, 7.0% of the properties in the repetitive loss areas are insured. Repetitive losses have a significant impact on the amounts paid. Over \$9 million of the \$21 million have been paid to repetitive loss areas. This accounts for 43.4% of total claims in the City of Arlington.

Table 12. Flood Insurance Coverage in Repetitive Loss Areas

	Total Number of Repetitive Loss Areas	Total Number of RL Properties in Repetitive Loss Areas	Total Number of Insurance Policies in Repetitive Loss Areas	Premium Totals in Repetitive Loss Areas	\$ of Paid Losses in Repetitive Loss Areas
Total	35	47	59	\$12,978.00	\$9,194,654.23

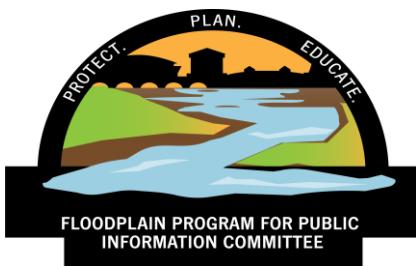
Flood Insurance Assessment Summary

Based on the 2024 flood insurance policy information provided by FEMA, approximately 74.6% of structures in the SHFA are uninsured. Zone A and AE coverage accounts for only 25.8% of the active insurance policies. Only 7.0% of the structures in all repetitive loss areas have active insurance policies. When assessing the structures in the SFHA, the second largest watershed in the City of Arlington, Johnson Creek, has only 5.6% of structures with active insurance policies. The map of active insurance policies (Map 3 in Appendix A) also shows a significant decrease in overall flood insurance policies since 2020 and there is still lower flood insurance coverage in East Arlington areas such as Fish and Cottonwood Creek.

By completing this assessment, it illustrates the lack of insurance coverage in the City of Arlington that, allows the Program for Public Information (PPI) to target various audiences. Due to the lower percentages of insurance coverage referenced above, it is recommended that outreach initiatives are implemented to inform Fish and Cottonwood Creek residents (East Arlington), RL areas, residents in the SFHA, Non-SFHA flood prone area residents, and general public.

Recommendations

After reviewing the City's current floodplain education and outreach programs, the FPPIC recommended minor changes for the PPI plan's priority areas, target audiences, Flood Response Plan and the Flood Insurance Coverage Improvement Plan to continue increasing awareness of flood risks in the City and educating residents, business owners, and visitors on ways to protect themselves from these risks.



Priority Areas

The Floodplain PPI Committee understands that the entire community can be affected by flooding. The Committee recognizes that property owners can take measures to protect their property from flood damage, while the City can help educate residents through a flood protection outreach program that helps residents identify ways to minimize or eliminate flooding on their property. Therefore, broad outreach through online articles, videos, and social media posts along with public outreach presentations and public events should continue throughout the year. City Staff and the Committee reviewed the current priority areas and made one change to priority areas for the 2026 – 2031 PPI plan. The Downtown Arlington Business District was added to the scope of priority area # 5.

1. Non-SFHA Flood-prone Areas – Include locations that receive a high volume of drainage complaints due to minor flooding or ongoing drainage issues that are outside of the SFHA. This will also include areas with low insurance policy counts. The low policy count areas will be addressed in the Flood Insurance Coverage Improvement Plan.
2. Repetitive Loss Areas – Citizens living in a RL property or a defined repetitive loss area will continue to receive an annual letter and brochure mailout. These areas are outlined in the 2025 Repetitive Loss Area Analysis.
3. Low Water Crossing and Barricade Location Areas – During high-flow conditions, water runs over these roadways blocking vehicular and pedestrian traffic. These crossings are extremely dangerous when flooded. These mapped locations are monitored for flood conditions by Stormwater Maintenance staff and Emergency Management staff. Arlington Police Department is notified when closures occur (see Map 1 in Appendix A).
4. Critical and Vulnerable Facility Areas located within or near a Special Flood Hazard Area and facilities near low water crossings – This list can include government owned buildings, hospitals and other medical facilities, and commercial or retail properties where the public assembles.
5. Entertainment District and Downtown Business District – The Entertainment District includes AT&T Stadium, Globe Life Field, Globe Life Park, Texas Live! Entertainment Center, Live! by Loews Hotel, Six Flags Over Texas, Hurricane Harbor, and Esports Stadium and Expo Center. The Downtown Arlington Business District encompasses Levitt Pavilion, City Hall, Arlington Downtown Library and multiple retail spaces along Abram Street, Front Street, and Main Street.
6. University of Texas at Arlington Campus and Tarrant County Community College Southeast Campus – UTA is adjacent to the Downtown area of the City of Arlington. The Campus covers 420 acres which includes education buildings, residential halls, recreation facilities, central library and many more structures. There are also privately-owned apartment complexes adjacent to the campus that house UTA students. The TCC-SE Campus covers a 123-acre area in southeast Arlington. This campus has multiple buildings and is adjacent to the 360 Hwy corridor.

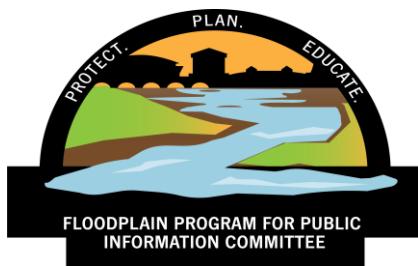


7. Residents and businesses located in Special Flood Hazard Areas – There are currently 1,810 structures in the SFHA. Currently only 25.8% of these structures have flood insurance policies. These areas are addressed in the Flood Insurance Coverage Improvement Plan.
8. City of Arlington linear parks, park facilities and public open space areas – The City of Arlington has over 90 park facilities. This includes recreation buildings, golf courses, aquatic centers and public open spaces or linear park areas. Many of the Arlington parks focus on the interaction with the natural ecosystem. There are approximately 466 linear miles of walking trails. Lake Arlington provides kayaking and fishing opportunities.
9. Arlington Independent School District – AISD is the 11th largest school district in the State of Texas and is one of the largest employers in the City of Arlington. This includes 13 high schools, 10 junior high schools and 55 elementary schools. Approximately 62,000 students and over 8,500 employees utilize these facilities every day.

Target Audiences

After reviewing the above priority areas, The FPPIC made changes to target audience list below. Changes include the addition of the Downtown Arlington Business District to Audience #9; Changed “Via” drivers to reflect the new company, “On-Demand” drivers in Audience #6; added non-English speaking residents and visitors as Audience #12; added HOAs and Neighborhood Associations as Audience #14. The 2026-2031 PPI plan target audiences are as follows:

1. The City at large
2. All property owners in the floodplain
3. Repetitive Flood Loss Areas
4. Non-SFHA flood-prone area residents and business owners
5. Low water crossing and barricade location area residents and business owners
6. AISD bus drivers, City of Arlington Handi-Tran drivers, and On Demand drivers
7. Students, faculty, and staff at UTA, TCC, and AISD Campuses. (This may include outreach to other school districts with campuses inside the City limits of Arlington)
8. City of Arlington Parks and Recreation Facility visitors and park patrons
9. Entertainment District visitors, Short-term rental property owners, Downtown Arlington Business District
10. City employees and volunteers



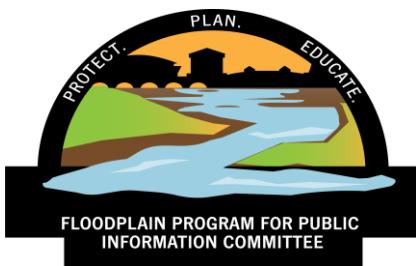
11. Hospitals, nursing homes, gas well operators, and industrial businesses
12. Non-English-speaking residents and visitors.
13. Prospective buyers, lenders, real estate agents, mortgage agencies
14. HOAs and Neighborhood Associations

Outreach Topics

The CRS Program currently requires six outreach topics to develop educational materials and messages for the City. In the 2020-2025 PPI plan the FPPIC identified four additional outreach topics and messages. For the 2026-2031 PPI plan *Topic J Diverse Populations* was removed as an outreach topic, bringing the total to 9 Outreach Topics and Messages.

Table 13. Outreach Topics/Messages

Outreach Topic	Outcome	Messages
A. Know Your Flood Hazard	Increase flood information inquiries to the Stormwater Department	Know Your Flood Hazard
B. Promote Flood Insurance	Increase Flood Insurance Policy Coverage Community Wide. Refer to Flood Insurance Coverage Plan	Protect and Insure your structure; Get Flood Insurance; Get flood Insurance, It's Good Business, Get Flood Insurance, It's For Everyone.
C. Protect People from flood hazards	Increase in the number and types of distribution of flood safety messages	Be Stormwater Savvy; Safeguard Your Patients/Guests/Visitors/Tourists
D. Protect Property from flood hazards	Reduction of property damage by increased messaging	Protect Your Assets; Protect Your Home/Property From Rising Water
E. Build Responsibly	Reduction of Flood Damage Prevention and Stormwater Pollution ordinance violations.	Get A Permit; Keep Your Site Clean
F. Protect Natural Floodplain Functions	Reduce trash, litter, debris and contaminants that are dumped into creeks, streams, rivers and lakes	Protect Arlington's Waterways; Report Illegal Dumping; Keep Waterways Clean
G. Storm Drain Infrastructure	Increased awareness of the storm drainage system and its function.	Get to Know Your storm drain
H. Arlington Watersheds	Increased awareness of City of Arlington	Know Your Watershed; Protect Your Watershed



	Watersheds and how they function	
I. Guidelines on what to do after a flood	Increase in reporting of flood damage to structures in the city and awareness of flood safety after a flood	Keep You and Your Family Safe After a Flood; Stay Out of Toxic Floodwaters; Watch Out for Animals Their Homes Flooded Too.

Outreach Projects

Table 14 provides a comprehensive list of program activities, which includes various public information tasks, website information, and other social media efforts. These projects are scheduled to be implemented between the fiscal years of 2026-2031.

The FPPIC recognizes that awareness of a potential flood hazards is not typically enough to motivate people to take action to protect themselves and their property. The Committee recommends that repeating and distributing messages multiple times and in a variety of forms will increase the effectiveness of flood messages.

Table 14. PPI Projects and Initiatives

OP	Target Audience	Topics Messages	Proposed Projects	Outcome	Assignment	Schedule
1	AISD Bus Drivers; City's Handitran and On Demand Drivers	Topics C	Creation of Flood Safety Signage, Training Flyer, Email Blast list and webpage.	Increased awareness of Low Water Crossings and Flood Safety	Stormwater Education Specialist develops presentation/flyer and coordinates training when requested.	Annual
2	Low Water Crossing and Barricade location residents; Community at Large; Floodplain Residents and Businesses	Topics F, G and H	Illegal Stream Dumping Signs	Increased Awareness of Arlington's Watersheds and the effects of illegal dumping	Stormwater Education Specialist creates sign location map annually. Also inspects installed signs each year.	Installation of 10 new stream dumping signs each year.
3	Visitors and Residents	Topics F, G and H	Flyer/pledge given to Pavilion Renters	Increased awareness of illegal dumping and trash and	Stormwater Education Specialist reviews pavilion pledge annually.	Year Round



				debris effects on our watersheds	Provides the number of pledges in the annual report.	
4	Entertainment District, Commercial Businesses, Short Term Rentals; Downtown Business District	Topics A, C, F, G, H and I	Flyer and/or poster provided to property owners in the Entertainment District and Downtown Business District on website to disseminate to their renters and visitors.	Increase awareness of Rush Creek and Johnson Creek flooding issues and how to prepare for a flood when visiting the City	Stormwater Education Specialist creates mailout list and designs postcard directing them to the website content.	Postcard mailout once per year.
5	Critical and Vulnerable Facilities/Assets	Topics A, C, D, G, H and I	Create training flyer and flood safety poster Provide on website.	Increase flood safety and preparedness	Stormwater Specialist creates training flyer and flood safety poster. Create mailout list and postcard directing them to the website	Postcard mailout once per year.

Flood Response Plan

Flood Response Plan (FRP) is a collection of outreach projects prepared prior to a flood event but not delivered until a flood occurs. In 2025, the FPPIC reviewed the City's current Flood Response Program and recommended the removal of one project. The CERT teams are no longer active in the City, therefore outreach to that audience is not possible. Table 15 outlines three FRP projects, their target audiences, and message topics. These projects are continually reviewed and updated when it is appropriate.

Table 15. Flood Response Preparation Projects

FRP#	Target Audience	Topic	Project	Outcome	Assignment
1	Homes and Businesses which have flooded	Topics C, D, and I	Door Packets	Increase in reporting of flood damage	Review/update current door packet annually.



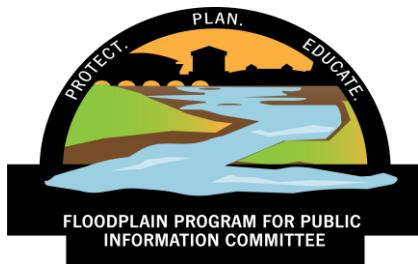
2	Homes and Businesses which have flooded	Topics C, D, and I	Flood Damage/Clean-up fact sheet	Increased awareness of what to do after a flood	Review Fact Sheet annually.
3	Local Media and City Communications Employees	Topics C, D, and I	Media Packet	Increased awareness by City staff and local media on "What to do after a flood"	Media packet includes social media posts, PSAs for the City's Office of Communication employees to utilize before, during and after a flood.

Flood Insurance Coverage Improvement Plan

The Flood Insurance Assessment completed by City Staff provided the FPPIC information and data to develop projects intended to improve policy coverage in critical areas throughout the City that will be included in the Flood Insurance Coverage Improvement Plan. Table 16 shows the FPPIC Coverage Improvement Projects and their target audiences.

Table 16. Coverage Improvement Plan Projects

OP	Target Audience	Topics/ Messages	Specific Project	Assignment	Schedule
1	Non-SFHA Flood-prone Areas	Topics A-I	Mayor "Get Flood Insurance" Post Card	Stormwater Engineering Staff; Stormwater Education Specialist	Annual Review and Mailout
2	Repetitive Loss Areas	Topics A-I	Letter and Citizens Guide to Flood Safety annual mailout	Stormwater Education Specialist	Annual Review and Mailout
3	Local Insurance Agents and Lenders	Topics A, B and D	Postcard Mailout/ Website Page and presentations for local insurance agents and mortgage lenders when requested	Stormwater Education Specialist; Office of Communication	Create postcard/ website material in FY 2026. .
4	Community-Wide	Topics A-I	PSA Development for City communication channels and local media	City's Office of Communication; Stormwater	Development of insurance specific PSA



				Education Specialist	beginning in 2026.
5	SFHA Multi-Family Renters	Topics A and B	Flood Insurance/Flood Safety Posters	Stormwater Engineering Staff; Stormwater Education Specialist	Given out at Code Enforcement Annual workshops

Annual Evaluation

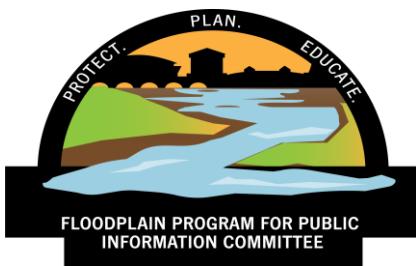
The Public Works Stormwater Management Division will monitor the PPI outreach projects as they are developed and disseminated. They will document the results and revise projects as needed with input from the Floodplain PPI committee members and suggestions from other City employees and/or stakeholders participating in the activities.

The FPPIC will meet twice a year or as needed to evaluate implementation of outreach projects and provide an annual review of the goals and objectives of this updated PPI plan. A report documenting progress, changes, and other updates will be prepared annually and provided to City Council.

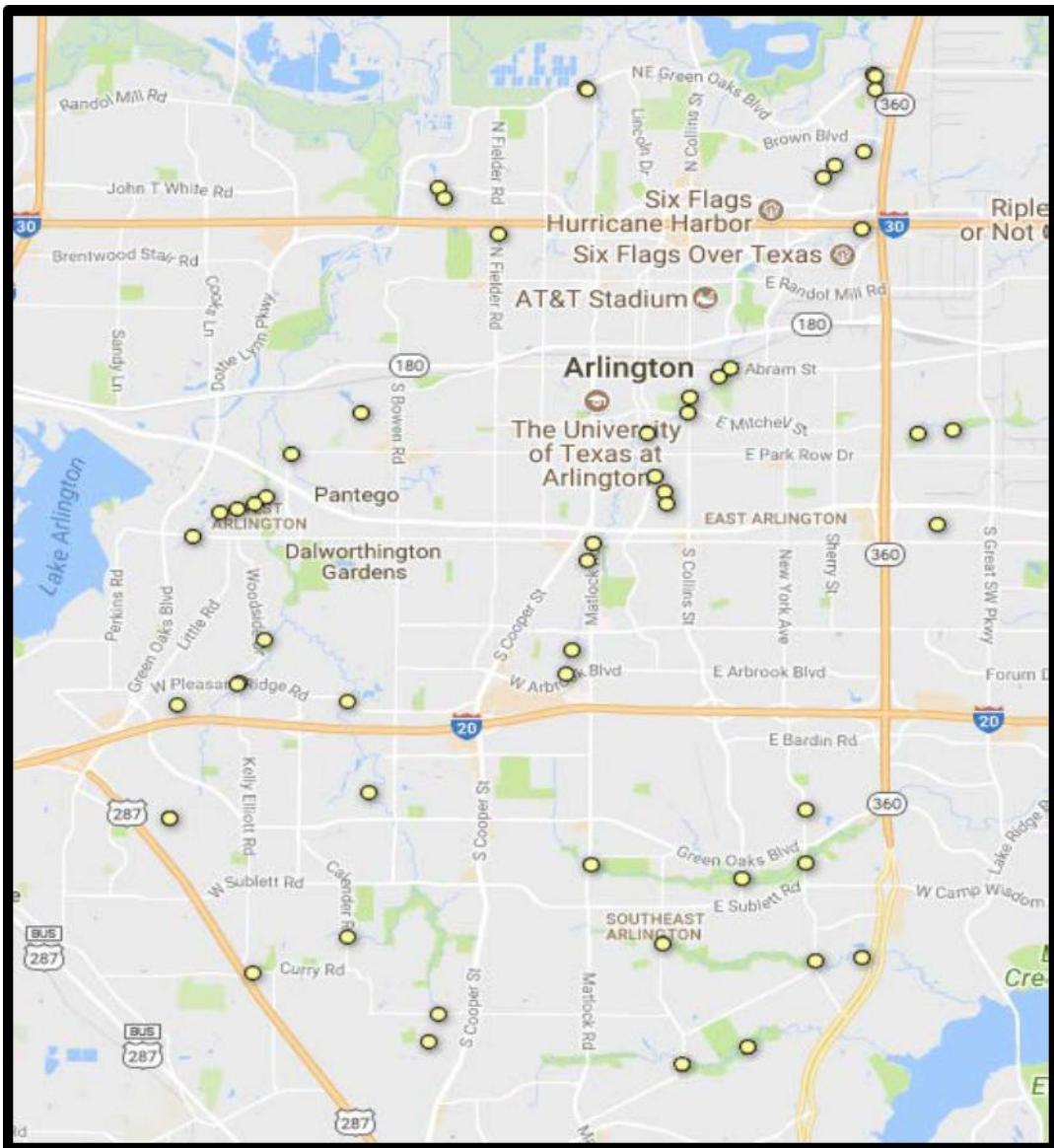
Plan Adoption

This document will become effective upon adoption by the Arlington City Council. The anticipated approval is in September 2025.

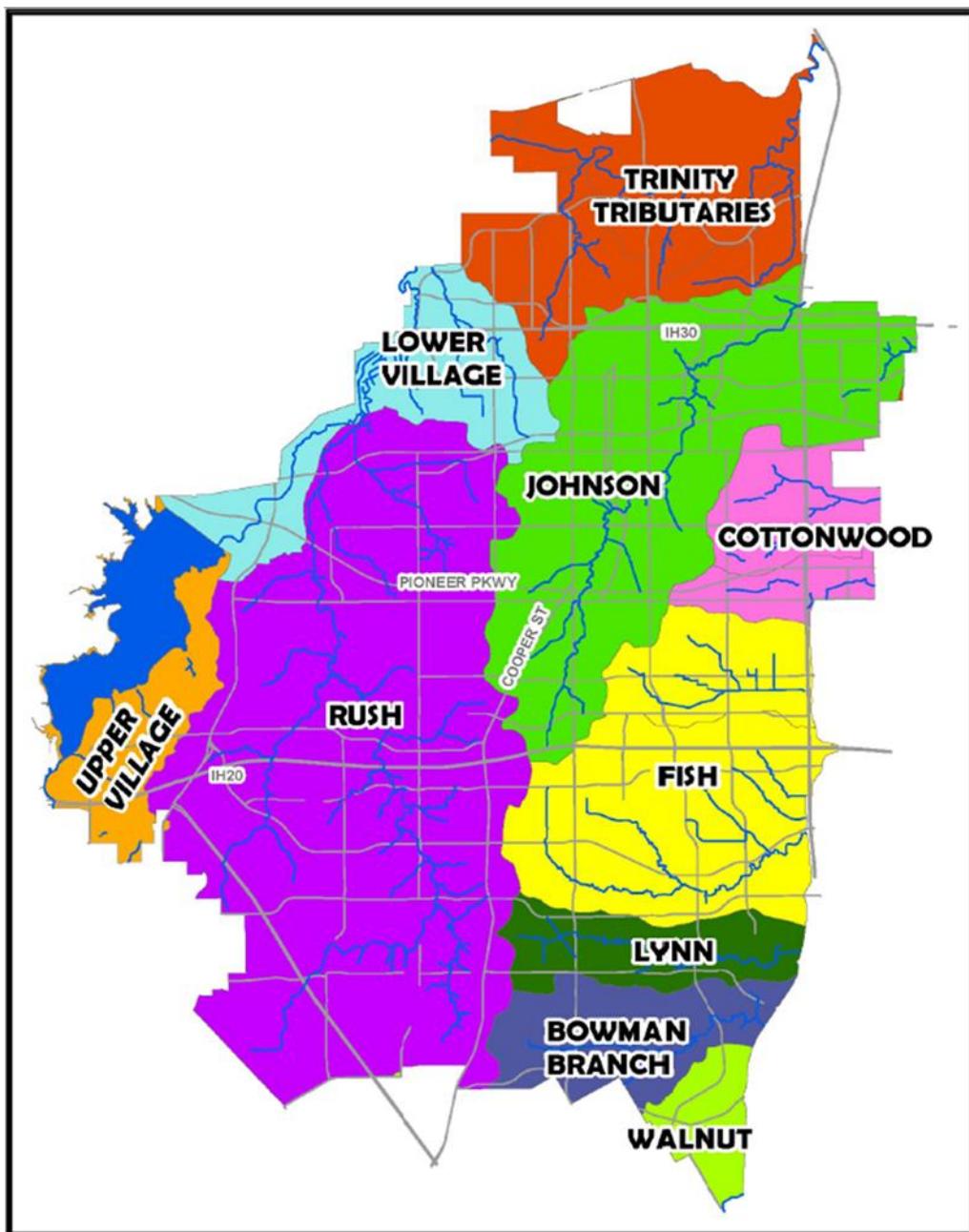
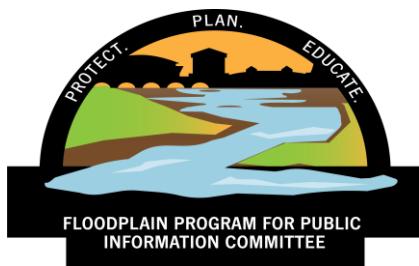
The final draft of the CP document will be sent to Gilbert Giron, Flood Insurance Liaison for FEMA Region 6 for review in August 2025.



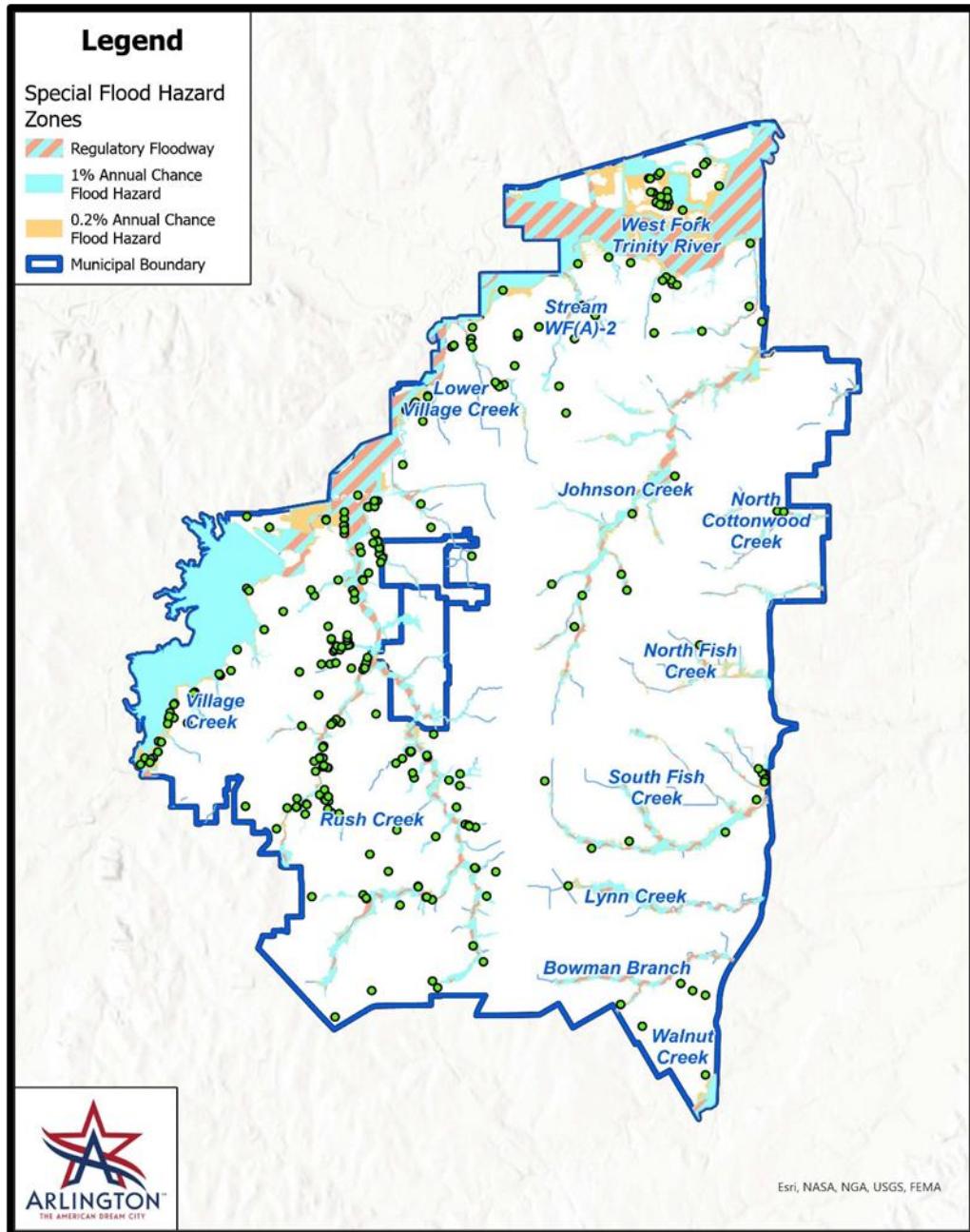
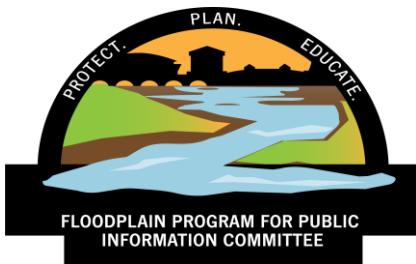
Appendix A: Mapping Information



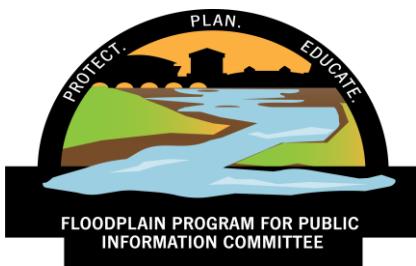
Map 1 – Low Water Crossing Locations (2020 Arlington Annex to the Tarrant County HazMAP)



Map 2 – City of Arlington Watersheds

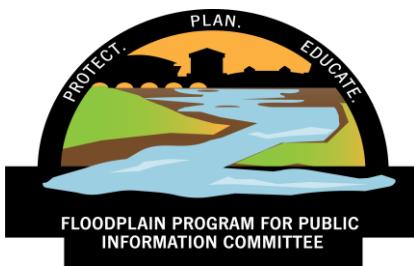


Map 3 – 2024 Insurance Policy Coverage

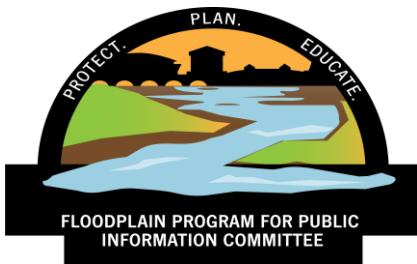


Appendix B: Synopsis of Current and Proposed Projects and Audience Table

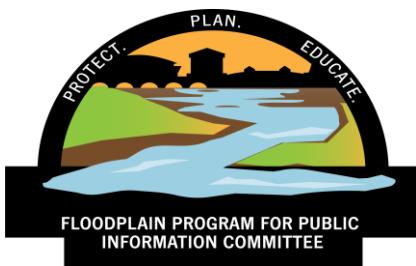
Audience	Current Outreach Project	Proposed Outreach Project
Community Wide	<ul style="list-style-type: none"> • Annual Utility Inserts • Community/Public Events • Presentations when requested • Website/Social Media/News Articles • Community Cleanup Events such as Annual Fish Creek Cleanup or Neighborhood Services Community Cleanup Events 	<ul style="list-style-type: none"> • PSA Development for website, social media and radio • FRP Media packet that includes social media posts, PSA's and written material for distribution by local media and City Office of Communications Employees after a flood.
Non-SFHA Floodprone Area Residents and Business Owners	<ul style="list-style-type: none"> • Mayor Flood Insurance Postcard • FRP Door Packets with after flood clean up sheet. 	<ul style="list-style-type: none"> • Annual Review Mayor Letter/Post Card for Flood Insurance Coverage Improvement • Annual Review of FRP Flood Damage and Clean Up Sheet
Low Water Crossing and Barricade Location area Residents and Business Owners	<ul style="list-style-type: none"> • Report Illegal Stream Dumping Signs • Flood Safety annual Postcard Mailout • Flood Insurance annual Postcard Mailout 	
AISD Bus Drivers and City of Arlington Handi-Tran drivers and Via drivers		<ul style="list-style-type: none"> • Develop TADD Flyer for Bus Driver Training • Create postcard and mailout list. • Website page creation



Students, Faculty and Staff at UTA, TCC and AISD Campuses.	<ul style="list-style-type: none"> • Journey Through the Storm Drain/TADD • Be Flood Prepared • TCC Arbor Day Event • UTA Celebrating People and the Planet Event 	
City of Arlington Park Facility Visitors and Park Patrons	<ul style="list-style-type: none"> • Pavilion Pledge • Parks Community Events 	<ul style="list-style-type: none"> • Annual review of pavilion pledge
Entertainment District Visitors, Short Term rental property owners, Businesses, Chamber of Commerce	<ul style="list-style-type: none"> • Flood Safety Posters and Tabletop displays available online • Flood Safety Presentations provided when requested 	<ul style="list-style-type: none"> • Create postcard and mailout list • Provide link to website page for optional posters and displays.
City Employees and Volunteers		<ul style="list-style-type: none"> • Create new employee and volunteer flood information handout.
Hospitals, Nursing homes, Gas Well Operators/ Industrial businesses	<ul style="list-style-type: none"> • Flood Safety Posters and Tabletop displays available online • Flood Safety Presentations provided when requested 	<ul style="list-style-type: none"> • Create Critical and Vulnerable Facilities postcard and mail list • Provide link to website page for optional posters and displays.
Non-English-speaking residents	<ul style="list-style-type: none"> • Flood Brochure and Stormwater Pollution Brochures are provided in Spanish and Vietnamese when requested • Spanish Language Facebook • Website information can be translated into multiple languages 	<ul style="list-style-type: none"> • PSA Development
Prospective buyers, Lenders, real estate agents, mortgage agencies		<ul style="list-style-type: none"> • Create flood insurance webpage • Postcard and mail list

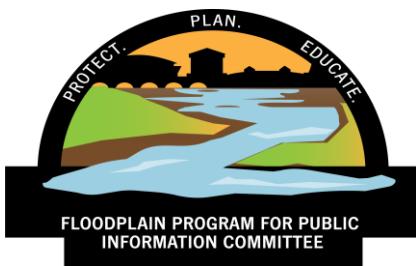


SFHA Residents and Business Owners	<ul style="list-style-type: none">• FRP Door Packets• Watershed studies/map updates/public meetings• Flood Insurance Multi-Family Building Posters	
Repetitive Loss Properties	<ul style="list-style-type: none">• Annual Repetitive Loss Mailout• Repetitive Loss Area Analysis Plan and annual review	

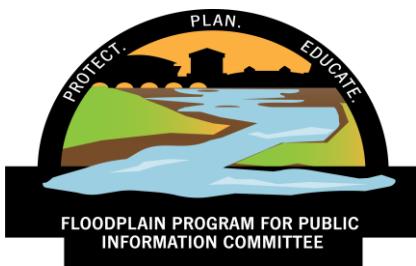


Appendix C: Timeline of PPI Plan Projects, Updates and Changes

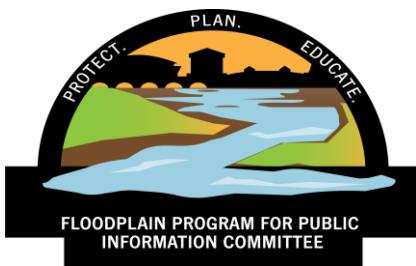
Project	FPPIC Plan Project or Update/Change Description	Date
Floodplain Program for Public Information Plan 2020-2025	FPPIC Committee reviewed and updated the current 2020-2025 plan during meetings in 2025. The result is an updated 5-year plan for 2026-2031	Adopted by City Council on January 28, 2020 Adopted by City Council on xx, xx, 2025
FPPIC Plan – Appendix C: Other CRS Public Information Activities	Table outlining the FPPIC review of CRS outreach projects prior to the FPPIC Plan. This includes description of CRS projects and the committee's updated recommendations. July 2025 - During the 2026-2031 PPI Plan update, this table was moved into the main body of the plan as Table 5.	Submitted to council as an update to the FPPIC Plan on October 13, 2020.
Apartment Complex Flood Insurance and Flood Safety Posters	Poster highlighting flood insurance for renters and basic flood safety and preparedness.	Poster created and approved by the committee in August of 2021. Due to covid, posters were not printed and disseminated until 2023. In 2024 and 2025, Posters were given out to Apartment Managers at the Annual Code Multi-Family Workshop Days.
My Property Flooded Flyer	Flyer focuses on what residents should do after a flood. Flyer was added to the Flood Response Preparation	Developed in FY2020. Added to the FRP packet and to the Stormwater Management website.



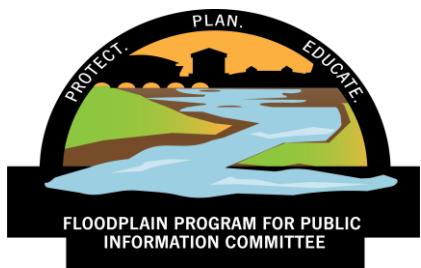
	<p>(FRP) packet which is handed out to residents when a flood has occurred.</p> <p>2025 - Flyer was reviewed by the committee during the 2026-2031 PPI Plan review/update process. No changes were made.</p>	
Mayor's Non-SHFA Flood Insurance Postcard	<p>Flood Insurance postcards were created to mail to non-SHFA flood prone areas throughout the City. They were designed to have the Mayor's signature to show that elected officials support the work of the FPPIC.</p> <p>In FY2022, Addresses from the Stormwater Comprehensive Plan were added to the mailout. These are areas where drainage projects are scheduled over the next 10 years. Postcards are mailed to both the property owner and tenant each year.</p>	<p>Date and Number of Postcards</p> <ul style="list-style-type: none">September 29, 2020 – 1,330September 9, 2021 – 1,330September 30, 2022 – 4,622August 29, 2023 – 4,669August 29, 2024 – 4,671August 22, 2025 - 4, 741
Low Water Crossing/Barricade Location "Flood Safety" Postcard	Flood Safety postcards were created to mail to residents and business adjacent to low water crossing areas and flood barricade locations.	<p>Date and Number of Postcards Mailed</p> <ul style="list-style-type: none">April 7, 2021 - 902July 7, 2022 – 1,294May 9, 2023 – 1,297April 24, 2024 – 2,740April 2, 2025 – 2, 698
Pavilion Rental Agreement Pledge	Pavilion pledge was created to increase awareness of illegal dumping and trash and debris from parks property and its effects on our local watersheds. Pledge was originally going to be a flyer but updated project to be a	<p>In FY2022, Changed Pollution Prevention Pledge to an online format from printed checklist. Parks and Recreation approved the addition on 8.12.2022. Spanish translation completed in fall of 2022.</p>



	statement added to the online pavilion rental agreement in FY2022.	Pledge was added to online pavilion reservation February 2023.
Alternative Language Translations	The committee determined that written material should be translated into Spanish and Vietnamese. Written material in alternative languages will be provided upon request and/or in person at education events.	The Citizen's Guide to Flood Safety and Awareness was translated into Spanish and Vietnamese in 2020. The brochure and translations were updated in August of 2023. In FY2022, the Low Water/Barricade Flood Safety and the Mayor's Flood Insurance postcards were translated. The material for the FRP packet was translated in August of 2023 as well and will be available for distribution after a flood event.
Report Illegal Stream Dumping Signs	Creation of new illegal stream dumping signs for outreach to the community at large and more specifically to residents and businesses in the floodplain.	The FPPIC approved the final sign designs at the 8.30.2023 meeting. Location maps are being developed by staff and placement of signs will begin in FY2024. Location and Date Installed <ul style="list-style-type: none">Johnson Creek – Apr.2024 – 10Fish Creek – Aug. 2025 - 14
Flood Response Preparation (FRP) - PSA/Social Media Kit	PSAs and Social Media posts for distribution before, during and after a flood event.	Turn Around Don't Drown social media post on April 26, 2023; Other messages along with Instagram reels are being prepared for FY2024. Posts will be in English and Spanish. April 2024 – Flood Friday Reels for before, during and after a flood were released on the City's Social Media accounts. These will be used



		when flood watches are issued in the future
Flood Safety PSAs/Social Media Posts		
Insurance Agent Flood Insurance Education	<p>Presentations for local insurance agents with an emphasis on the changes to the NFIP with Risk Rating 2.0.</p> <p>During the 2026-2031 PPI Plan update, This project will change to online material with a mailout to local insurance agents each year. The Stormwater Educator will still provide presentations when requested and attend the annual Tarrant County Independent Insurance Agents Trade show.</p>	<p>Presentation given to the Independent Insurance Agents of Tarrant County on January 11, 2022</p> <p>Stormwater Education Specialist attended the Tarrant County Independent Insurance Agents Trade Show on April 17, 2024.</p>
TADD AISD, Via and Handitran Bus Driver Education	<p>Presentations covering low water crossings, barricade locations and other non-SFHA related flood prone areas will be offered to AISD Transportation staff and City of Arlington On-Demand (formerly VIA) and Handitran Drivers.</p> <p>During the 2026-2031 PPI Plan review process, this project was updated to include a postcard mailout directing entities to the Flood Safety website. Presentations will be made upon request.</p>	<p>Director of AISD Transportation and the Stormwater Educator are working on a schedule to provide training to 300 bus drivers and other transportation employees for the FY2024 school year.</p>
Entertainment District/Downtown Business District/Short Term Rentals		



Appendix D: Arlington Annex - Tarrant County Hazard Mitigation Action Plan



City of Arlington

JURISDICTIONAL ANNEX WITHIN THE TARRANT COUNTY
HAZARD MITIGATION ACTION PLAN

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5.4 Plan Incorporation into Existing Planning Mechanisms.....	- A-72 -

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Chapter 1: Introduction

1.1 Planning Process Point of Contact

The point of contact during the Tarrant County Hazard Mitigation Action Plan (HazMAP) planning process for the City of Arlington was the Emergency Management Coordinator.

1.2 Annex Organization

This annex has five chapters that satisfy mitigation requirements in 44 CFR Part 201:

- Chapter 1:** Introduction
- Chapter 2:** Planning Process
- Chapter 3:** Hazard Identification and Risk Assessment
- Chapter 4:** Capabilities Assessment
- Chapter 5:** Mitigation Strategy

The information provided in this annex is for the City of Arlington alone. All pertinent information that is not identified in this annex is identified in the other sections of this HazMAP or within the respective appendices.

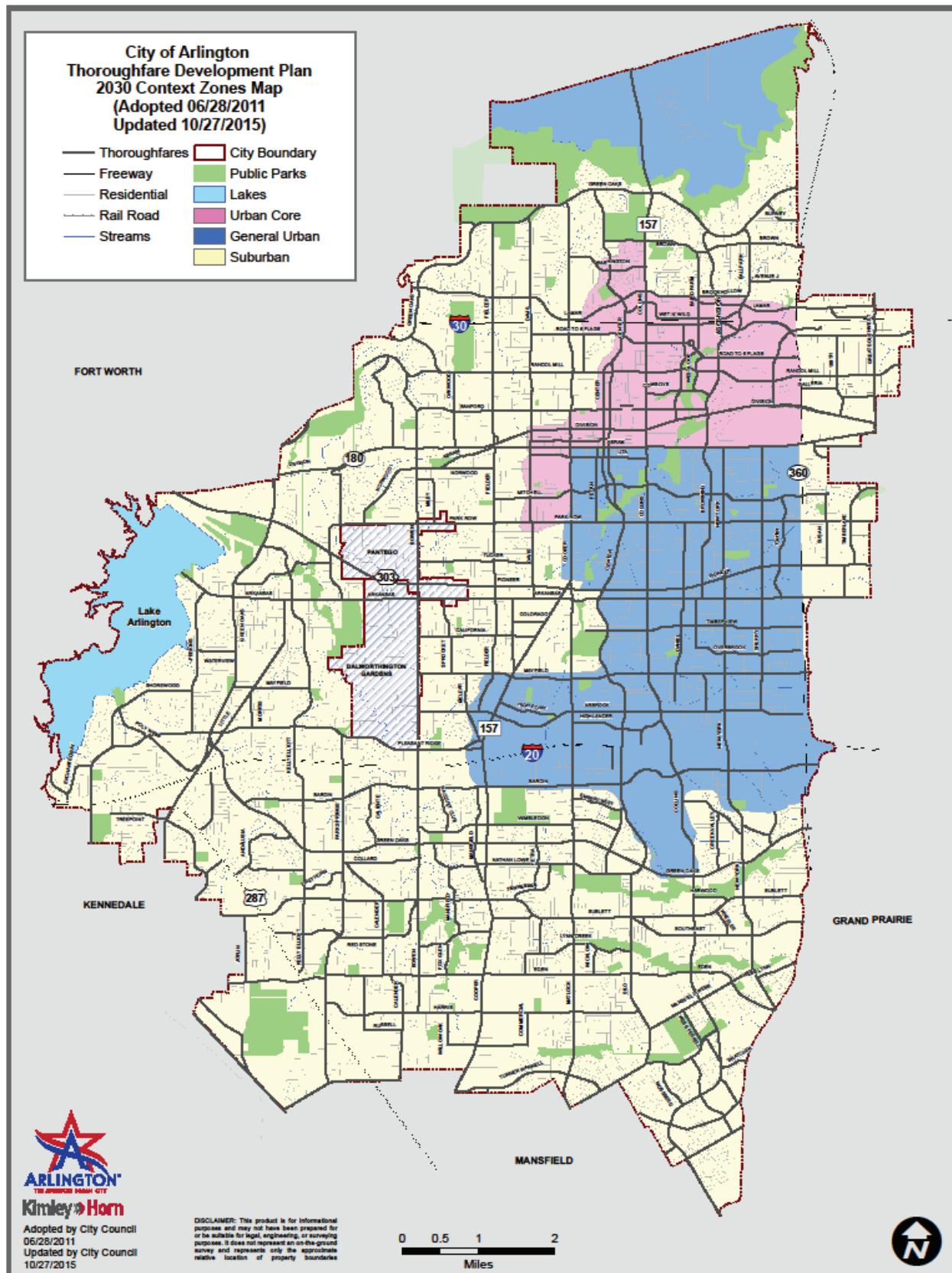
1.3 Hazard Mitigation Action Plan (HazMAP) Adoption

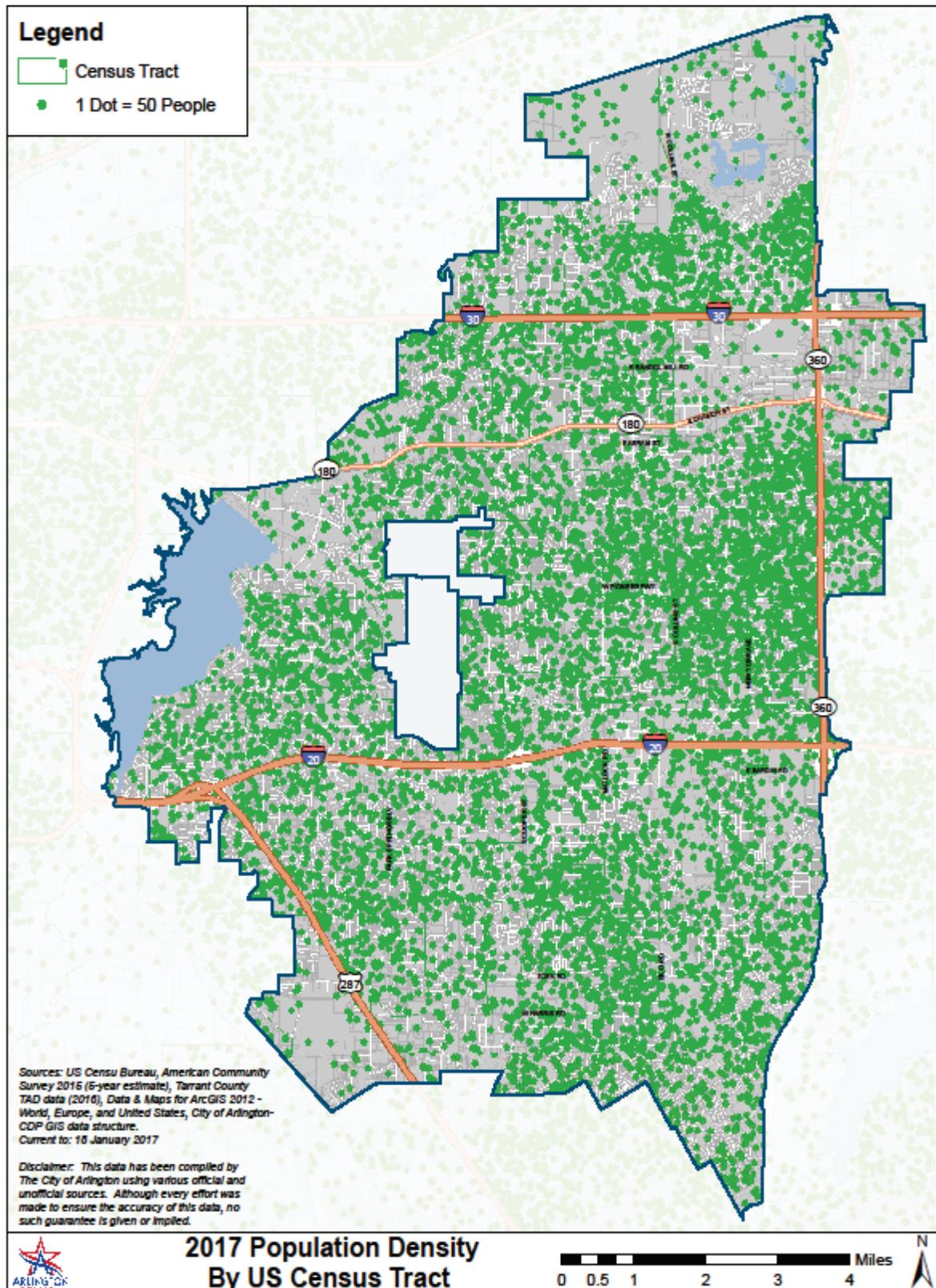
Once the Tarrant County HazMAP has received the designation “Approved Pending Local Adoption” from the Federal Emergency Management Agency (FEMA), the City of Arlington will take the HazMAP to City Council for final public comment and local adoption. A copy of the resolution will be inserted into the HazMAP and held on file at the North Central Texas Council of Governments (NCTCOG).

1.4 Supporting Maps

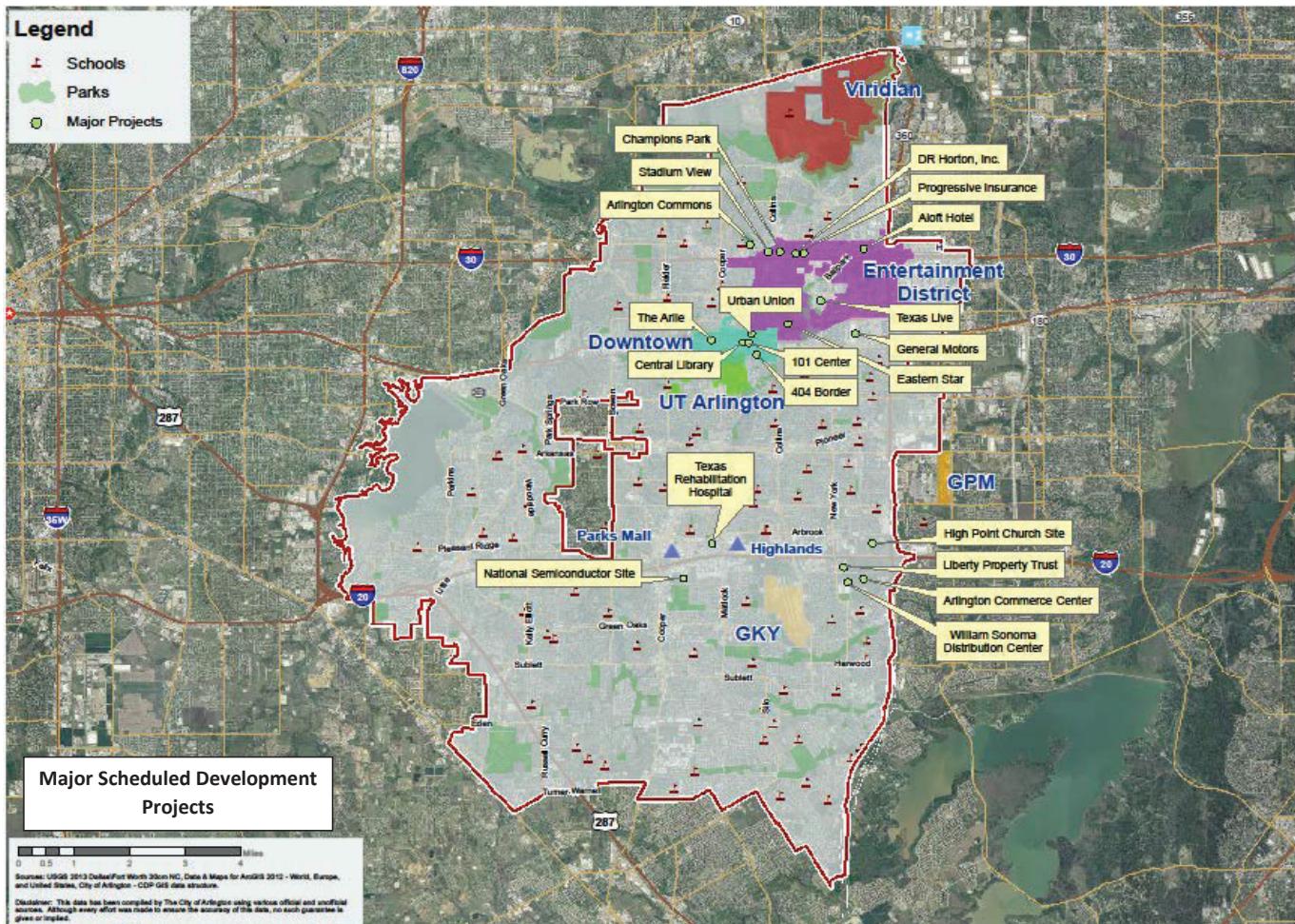
The following maps provide an overview of the City of Arlington:

- Thoroughfare Development Plan 2030 Context Zones Map
- Population Density Map
- Major Projects Map





Tarrant County Hazard Mitigation Action Plan



Chapter 2: Planning Process

(In compliance with 201.6(c)(1))

2.1 Development and Adoption Process

To apply for federal aid for technical assistance and post-disaster funding, local jurisdictions must comply with Part 201.3 of the Disaster Mitigation Act of 2000 (DMA 2000) implemented in the Federal Code of Regulations 44 CFR Part 201.6. While the City of Arlington has historically implemented measures to reduce vulnerability to some hazards, passage of DMA 2000 helped city officials recognize the benefits of a long-term approach to hazard mitigation. This approach is achieved by a gradual decrease of hazard-associated impacts through the implementation of a hazard mitigation action plan (HazMAP). The city's involvement in the Tarrant County HazMAP represents the collective efforts of the Hazard Mitigation Planning Team (HMPT) members, all participating Local Planning Team (LPT) members, the public, and stakeholders.

The city developed this annex in accordance with Part 201.6(c)(5) of DMA 2000. This HazMAP and annex identifies hazards and mechanisms to minimize damages associated with these hazards.

2.2 Organizing the Planning Effort

A comprehensive approach was taken in developing the HazMAP. An open involvement process was established for the public and all stakeholders, which provided an opportunity for everyone to be involved in the planning process and make their views known. The public meeting was advertised with notices in the local newsletter and on social media.

Two teams worked simultaneously on this Tarrant County HazMAP:

1. **Hazard Mitigation Planning Team (HMPT):** This team consisted of points of contact from each participating jurisdiction. The HMPT met to discuss county-wide topics, including hazards and mitigation strategies. The points of contact were the leads of their Local Planning Team (LPT).
2. **Local Planning Team (LPT):** Each jurisdiction had a LPT that consisted of the Emergency Management Coordinator for that jurisdiction as well as designated representatives from within the jurisdiction. This team met to assess capabilities, hazards, and mitigation strategies within the jurisdiction.

2.2.1 Local Planning Team (LPT)

This annex within the Tarrant County HazMAP was developed by the City of Arlington's Local Planning Team (LPT), with support from the North Central Texas Council of Governments (NCTCOG). The efforts of the LPT were led by the city's Emergency Management Coordinator.

The LPT was assembled in 2017 with representatives from the City of Arlington. The city acted as the plan development consultant, providing hazard mitigation planning services.

City of Arlington Local Planning Team (LPT) Members for the HazMAP

Jurisdiction	Agency/Organization	Position	Role in LPT
City of Arlington	Fire / Office of Emergency Management	Emergency Management Coordinator	General oversight, hazard identification, and plan development
City of Arlington	Public Works and Transportation Department	Director	Hazard identification and plan development
City of Arlington	Community Development and Planning Department	Director	Hazard identification and plan development
City of Arlington	Water Utilities Department	Director	Hazard identification and plan development
City of Arlington	Police Department	Chief	Hazard identification and plan development
City of Arlington	Environmental Services Department	Director	Hazard identification and plan development

In addition, NCTCOG's Emergency Preparedness Department participated in the following activities associated with development, approval, and adoption of the plan:

1. Prepared, based on community input and LPT direction, the first draft of the plan and provided technical writing assistance for review, editing, and formatting.
2. Submitted proposed plan to the Texas Division of Emergency Management (TDEM) and the Federal Emergency Management Agency (FEMA) for review and approval and completed any edits requested by these organizations.
3. Coordinated plan adoption processes with the city, TDEM, and FEMA.

Chapter 3: Hazard Identification and Risk Assessment

(In compliance with 201.6(c)(2)(i), 201.6(c)(2)(ii), 201.6(c)(2)(ii)(A), 201.6(c)(2)(ii)(B), 201.6(c)(2)(ii)(C), 201.6(c)(2)(iii), and 201.6(c)(3)(ii))

The following information serves to assist the city in determining and prioritizing appropriate mitigation action items to reduce losses from identified hazards.

3.1 Changes in Development since 2015

(In compliance with 201.6(d)(3))

Increasing Vulnerability				
New development in hazard-prone areas:				
There is new development across the city as more residents, students, employers, and entertainment move to the city. Although none of these developments are in particularly hazard-prone areas, they are susceptible to identified city wide hazards such as tornadoes/severe weather.				
Decreasing Vulnerability				
Mitigation actions implemented to reduce risk or adopted codes to protect future development:				
A full list of completed mitigation action items are described in Chapter 5 of this annex. The City of Arlington adopted a strategy that would either prevent development in flood zones or require adequate mitigation activities on the part of the developer. The overall intent was to improve the city's Community Rating and, therefore, reduce National Flood Insurance Program (NFIP) premiums. The strategy has resulted in continuous improvement in Arlington's NFIP rating.				

Declared Disaster Code	Incident Period	Date Declared	Description	Impact
DR-4223	May 4-June 23, 2015	May 29, 2015	Severe storms, tornadoes, straight-line winds, and flooding.	The City of Arlington sustained over \$3,000,000 in damages to public property that were submitted to the state for public assistance.

FEMA Floodplain Insurance Rate Map Revisions

The City of Arlington submitted the Fish Creek and Cottonwood Creek watershed study to Federal Emergency Management Agency (FEMA) in 2014 in order to incorporate the new technical data into the Flood Insurance Rate Map (FIRM) and the Flood Insurance Study (FIS) data. FEMA has developed preliminary FIRM and FIS data for the Fish Creek and Cottonwood Creek watersheds using the information developed in the city's study of those creeks.

Changes to the floodplain maps will include:

- Addition or modification of Base Flood Elevations
- Special Flood Hazard Area boundary changes
- Changes to flood zone designations
- Revisions to the floodway boundaries

3.2 Community Profile

The following tables reflect the community profile, vulnerable facilities in the jurisdiction, and the critical facilities and infrastructure that are exposed to the identified hazards and have the potential to be impacted. This information was gathered from the United States Census and from the City of Arlington.

Community Profile from US Census Bureau Quick Facts (Source- www.census.gov)	
Population Estimates (V2016)	392,772
Persons under 5 years (%)	7.2
Persons 65 years and over (%)	9.6
Language other than English spoken at home (%)	32.8
With a disability, under age 65 (%)	7.7
Persons without health insurance, under age 65 (%)	22.3
Persons in poverty (%)	16.6
Median household income	\$53,574
Households, 2012-2016	134,846
Median value of owner-occupied housing units, 2012-2016	\$137,900

The critical and vulnerable facilities listed below are in the hazard area for all or some of the hazards identified in the City of Arlington.

City of Arlington Critical and Vulnerable Facility/Asset Inventory				
Facility/Asset Name or Description and Address	Type of Asset	Capacity	Square Feet	Structure Value
U.S. Fish and Wildlife Service	Government Facility	500 people	Unknown	Unknown
Texas Health Resource (THR)	Medical	10,000 employees 3,800 beds	Unknown	Unknown
General Motors Processing Plant	Transportation	2,900 employees	3,750,000	Unknown
The Parks at Arlington	Retail Facility (Mall)	7,000+ people	1,500,000	Unknown
Entertainment District	Commercial (Public Assembly)	20,000 people	3,700,000	Unknown
AT&T Stadium	Commercial (Public Assembly)	4,000 employees 100,000 seats	2,300,000	\$1,600,000,000

Tarrant County Hazard Mitigation Action Plan

Facility/Asset Name or Description and Address	Type of Asset	Capacity	Square Feet	Structure Value
Nuclear Regulatory Commission (NRC) Region (IV)	Government Facility	Unknown	Unknown	Unknown
Lake Arlington Dam (Village Creek Supplying Lake Arlington)	Dams	N/A	6,482	\$5,000,000
Arlington Public Safety Building	Emergency Services (Law Enforcement, Fire, Emergency Services command and control)	500 people	88,000	\$4,800,000
Arlington City Hall	Government Facility	200 employees 800 occupants	48,600	\$3,700,000
Social Security Administration	Government Facility	300 people	Unknown	Unknown
National Transportation and Safety Board	Government Facility	500 people	Unknown	Unknown
Department of Agriculture	Government Facility	300 people	Unknown	Unknown
United States Government Probation Office	Government Facility	Unknown	Unknown	Unknown
U.S. Southwest Field Office of Defense Criminal Investigation	Government Facility	Unknown	Unknown	Unknown
U.S. Department of Commerce	Government Facility	Unknown	Unknown	Unknown
Office of Inspector General	Government Facility	Unknown	Unknown	Unknown
National Semiconductor Corporation	Commercial-IT	Unknown	Unknown	Unknown

Facility/Asset Name or Description and Address	Type of Asset	Capacity	Square Feet	Structure Value
Arlington Independent School District	Education	8,000 employees 65,000 students	Unknown	Unknown
Globe Life Park	Commercial (Public Assembly)	1,881 staff 49,170 seats	1,400,000	Unknown
University of Arlington (UTA)	Education	40,000 people	1,900,000	Unknown
Six Flags Over Texas	Commercial (Public Assembly)	3,800 people 35,000 max capacity	9,280,000	Unknown

City of Arlington Fire Stations	
Station #1 – 401 West Main Street	Station #10 – 3205 Southwest Green Oaks Boulevard
Station #2 – 1727 Sherry Street	Station #11 – 2204 Ball Park Way
Station #3 – 1820 South Fielder Road	Station #12 – 5050 South Collins Street
Station #4 – 1733 West Randol Mill Road	Station #13 – 7100 Russell Curry Road
Station #5 – 2921 East Randol Mill Road	Station #14 – 5501 Ron McAndrew Drive
Station #6 – 2620 South Collins Street	Station #15 – 906 Eden Road
Station #7 – 4000 Little Road	Station #16 – 1503 Mansfield Webb Road
Station #8 – 2020 Madison Drive	Station #17 – 4016 North Collins
Station #9 – 909 Wimbleton Drive	

3.3 Hazard Profiles

In addition to identifying hazards, both natural and man-made, the city conducted a risk assessment to determine the potential impacts of the hazards. A risk assessment is the process of measuring the potential loss of life, personal injury, economic injury, and property damage resulting from potential hazards. The focus of the risk assessment process is to identify what hazards are present in the city and the potential impacts of those hazards and threats.

For the Emergency Management Accreditation Program:

Each hazard was evaluated individually and given a weighted numerical value to assess and quantify the hazard as part of the hazard mitigation planning process. The parameters and numerical value for each response is listed below.

To meet requirements for the Emergency Management Accreditation Program, natural hazards and man-made hazards must be ranked in a combined scale.

Tarrant County Hazard Mitigation Action Plan

Parameter	Definition	One (1)	Two (2)	Three (3)	Four (4)	Five (5)
Frequency	How often has the hazard occurred in the past?	Never occurred locally	Once in past thousand years	Once in past hundred years	Once in past 50 years	Nearly every decade
Geographic Extent	Size of the affected area. Includes areas not damaged, but strongly affected by the incidents. For example, areas backed up by a transportation accident.	Single site. One or two blocks.	Single site/ multiple blocks	Community specific (ex. Downtown)	City-wide	Regional
Duration	How long does the acute crisis part of the disaster last?	Less than 24 hours	1-3 days	4-7 days	7-30 days	30+ days
Environment	How damaging is the disaster for the natural environment?	No damage/ temporary minor damage	Degradation of the ecosystem that will repair itself	Degradation of ecosystem that requires intervention	Functional loss of ecosystem, but restoration possible	Permanent loss of ecosystem
Health Effects	How dangerous is the hazard to human health and safety?	No deaths or injuries	1-10 deaths and/or 1-100 injuries	11-50 deaths and/or 101-500 injuries	51-500 deaths and/or 501-1500 injuries	over 501 deaths and/or 1501 injuries
Displacement	How likely is the hazard to negatively impact the exposed population in terms of displacement and personal property loss?	No displaced people/ minor inconveniences	Displaced people. Vulnerable populations begin to have problems with access to essential supplies	Displaced people. Vulnerable populations have serious difficulties. General population starting to have problems	251-1000 people displaced. 5-30% of population experiencing acute shortages of supplies	1000+ displaced people. More than 30% of population facing acute shortages of basic supplies and access to services

Tarrant County Hazard Mitigation Action Plan

Parameter	Definition	One (1)	Two (2)	Three (3)	Four (4)	Five (5)
Economic Impacts	How does the hazard affect the local economy?	No measurable impacts	No impacts to overall economy, but isolated businesses experience hardships	Entire sectors experiencing loss of revenue and capital	Sectors of economic base affected & unable to generate revenue; Losses range between 1-10% of assessed value.	Physical losses equal to 10% of assessed value. Loss of ability to generate revenue.
Built Environment (Property, Facilities, and Infrastructure)	How does the hazard affect buildings and physical infrastructure this includes utilities?	No effects.	1-10 structures damaged. Up to 25% loss of one utility	11-250 structures damaged. Multiple utilities affected up to 25% loss	251-1000 structures damaged. Multiple utilities affected 25-50% loss	1000+ structures damaged. At least two major utilities degraded by 50%+loss
Transportation	How does the hazard affect the ability of residents and workers to access the resources they need?	No effects on mobility	All critical services accessible, but delays reaching work or non-essential services	One critical service inaccessible. Major corridors open, but minor streets degraded or impassable	Many critical services inaccessible. One major corridor inoperable	Most critical services inaccessible. Most major corridors impassable
Critical Services (Includes COOP and Responders)	How likely is the hazard to reduce the ability of government business to provide critical services?	Little impairment on critical services	Temporary degradation of 1 critical service	Temporary degradation of multiple critical services. Long-term degradation of 1 critical service	Temporary degradation of most critical services. Long-term degradation of multiple services	Unable to deliver the most critical services

Tarrant County Hazard Mitigation Action Plan

Parameter	Definition	One (1)	Two (2)	Three (3)	Four (4)	Five (5)
Confidence in Government	Would public's confidence in government be shaken?	No		Somewhat		Yes
Cascading Effects	How severe and complex will the secondary effects be?	Hazard unlikely to cause secondary hazards, and if they occur are minor	Secondary hazards may occur, but are likely to be minor compared to primary hazard	Secondary hazards occur that extend the impact of the disaster and hamper response, but are not considered disasters	Secondary effects generated that significantly increase the magnitude of the disaster. Secondary impacts would be considered disasters if they occurred by themselves	Secondary effects generated and rival or exceed primary hazard. Secondary impacts would be disasters if they occurred by themselves
Future Emphasis	How much is the level of emphasis in mitigating, planning for, and preparing for this hazard changed based on trends, increasing understanding of the hazard, and changing underlying conditions that give rise to the hazard?	Decreasing Emphasis		Emphasis Unchanged		Increasing Emphasis

Tarrant County Hazard Mitigation Action Plan

Hazard Identification and Risk Assessment (HIRA)																
Identified Hazards	Geographic Scope	Duration	Health Effects	Displacement	Economy	Environment	Built Environment	Transportation	Critical Services	Confidence in Government	Base Score	Frequency	Cascading Effects	Multiplier	Subtotal	
Tornado	5	1	4	4	4	3	5	4	5	5	4	5	5	10	40	
Flooding	5	4	2	5	4	3	4	4	4	3	3.8	5	5	10	38	
Thunderstorm (includes Hail, Wind, Lightning)	5	2	5	3	3	3	5	3	3	5	3.7	5	5	10	37	
Infectious Disease Outbreak	5	5	5	5	5	2	1	1	5	5	3.9	5	3	8	31.2	
Wildfire	4	3	3	4	3	4	5	3	3	5	3.7	5	3	8	29.6	
National Security Hazard	4	4	5	5	5	5	5	4	5	5	4.7	1	5	6	28.2	
Winter Storms	5	4	3	3	3	2	4	4	3	3	3.4	5	3	8	27.2	
Hazardous Materials (HAZMAT) Event	3	3	3	5	3	3	2	3	2	5	3.2	5	3	8	25.6	
Power Failure	5	4	2	4	3	1	2	3	4	3	3.1	5	3	8	24.8	
Extreme Heat	5	5	3	3	2	3	1	1	1	1	2.5	5	2	7	17.5	
Drought	5	5	1	1	3	3	1	1	1	1	2.2	5	2	7	15.4	
Nuclear Accident	5	2	2	5	3	5	1	1	3	3	3	1	2	3	9	
Expansive Soils	4	1	3	1	2	1	1	3	3	5	2.4	1	2	3	7.2	
Telecommunications Failure	4	3	1	1	3	1	2	1	3	5	2.4	1	2	3	7.2	
Earthquake	2	1	1	2	2	1	2	1	1	1	1.4	1	2	3	4.2	

Impact Rating

Substantial	35+	Minor	21-29
Major	30-34	Limited	20-

The City of Arlington's Local Planning Team (LPT) ranked Tarrant County hazards in order of risk, with 1 being the highest. Risk, for the purposes of hazard mitigation planning, is the potential for damage or loss created by the interaction of hazards with community assets.

Rank of Risk	Hazard
1	Tornado
2	Flooding
3	Thunderstorm (Includes Hail, Wind, Lightning)
4	Infectious Disease Outbreak
5	Wildfire
6	National Security Hazard
7	Winter Storms
8	Hazardous Materials (HAZMAT) Event
9	Power Failure
10	Extreme Heat
11	Drought
12	Nuclear Accident
13	Expansive Soils
14	Telecommunications Failure
15	Earthquake

The following terms are used to describe the geographic area affected, probability of future occurrence, and the maximum probable extent of the hazards.

Geographic Area Affected

- Negligible: Less than 10 percent of planning area.
- Limited: 10 to 25 percent of planning area.
- Significant: 25 to 75 percent of planning area.
- Extensive: 75 to 100 percent of planning area.
 - Planning area refers to the entire City of Arlington.

Probability of Future Occurrence

- Unlikely: Event possible in next 10 years.
- Occasional: Event possible in next 5 years.
- Likely: Event probable in next 3 years.
- Highly Likely: Event probable in next year.

Maximum Probable Extent (Magnitude/Strength of Hazard using the following extent scale)

- Minor: Limited classification on scientific scale, slow speed of onset or short duration of event.
- Medium: Moderate classification on scientific scale, moderate speed of onset or moderate duration of event.
- Major: Severe classification on scientific scale, fast speed of/immediate onset or long duration of event.

Extent Scale			
	Minor	Medium	Major
Drought	PDSI -1.99 to 1.99+	PDSI -2.00 to -2.99	PDSI -3.00 to -5.00
Earthquake	Mercalli Scale: I-V Richter Scale: 0-4.8	Mercalli Scale: VI-VII Richter Scale: 4.9-6.1	Mercalli Scale: VIII-XII Richter Scale: 6.2-8.1+
Expansive Soils	EI Expansion Potential: 21-50 (Low) EI Expansion Potential: 0-21 (Very Low)	EI Expansion Potential: 51-90 (Medium)	EI Expansion Potential: 91-130 (High) EI Expansion Potential: >130 (Very High)
Extreme Heat	Heat Index 80F-105F	Heat Index 105F-129F	Heat Index >130F
Flooding	Outside of 100yr and 500yr Flood Zones, Zone A, AE, X	500yr Flood Zone, Zone X	100yr Flood Zone, Zone AE, A
Thunderstorm	Hail: H0-H4, 5-40mm Wind Force: 0-3 Knots: <1-10 LAL: 1-2	Hail: H5-H6, 30-60mm Wind Force: 4-6 Knots: 11-27 LAL: 3-4	Hail: H7-H10, 50->100mm Wind Force: 8-12 Knots: 28-64+ LAL: 5-6
Tornado	EF0	EF1-EF2	EF3-EF5
Wildfire	KBDI 0-200	KBDI 200-400	KBDI 600-800
Winter Storms	Temperatures 40F to 35F Wind chill 36F to 17F	Temperatures 30F to 20F Wind chill 25F to -4F	Temperatures 15F to -45F Wind chill 7F to -98F

The full description of each hazard identified is provided in Section 3 of this HazMAP.

Location: Drought, earthquakes, expansive soils, extreme heat, thunderstorms, tornadoes, and winter storms do not have geographic boundaries and can impact the entire county equally, which includes all participating jurisdictions. Wildfires can be expected to threaten rural and urban jurisdictions with undeveloped land. Flooding is a severe threat to jurisdictions containing 100-year floodplains or bodies of water.

The following hazards are listed in alphabetical order, separated by natural hazards and man-made hazards, and describe the extent of each hazard, details of previous occurrences, probability data on future events, and vulnerability to each hazard.

3.3.1 Drought

Hazard Profile: Drought	
Category	Response
Risk Ranking	11
Geographic Area Affected	Significant
Probability of Future Occurrence	Occasional
Maximum Probable Extent	Medium
Potential Impact	Property damage Loss of water supply Increase of grassfire potential and intensity Negative impact on citizens, to include water restrictions and lack of drinkable water supply Impact on car washes, parks, and pools
Vulnerabilities	There is no historical data for drought damage in the city. All populations, economy, structures, improved property, critical facilities and infrastructure, and natural environments are exposed to this hazard, though impacts are considered minimal overall. The city is home to a large water park and a natural grass professional baseball field that would be affected. The water park already has measures in place to reduce water consumption to the greatest extent possible. However, a severe drought may cause more drastic measures to be implemented which could result in a significant economic impact on the venue and the Arlington tourist industry.

Jurisdiction's ground-water supply: Lake Arlington.

Any zoning districts which allow for agricultural uses such as commercial stables and barns, farms, and animal lots, which could be impacted by drought: No parcels zoned as D2 (Farm and Ranch Improvements on Qualified Open-space Land) in Arlington.

Describe any water restrictions used in your jurisdiction: Lawn watering is restricted when available water resources reach established thresholds.

3.3.2 Earthquake

Hazard Profile: Earthquake	
Category	Response
Risk Ranking	15
Geographic Area Affected	Negligible
Probability of Future Occurrence	Occasional
Maximum Probable Extent	Minor
Potential Impact	Injury or death Property and infrastructure damage Water contamination or loss via broken pipes Transportation and communication disruption or damage Increase in traffic accidents Building collapse Natural gas leak Misplaced residents Power outages Natural environments damage, to include protected species and critical habitats
Vulnerabilities	All populations, economy, structures, improved property, critical facilities and infrastructure, and natural environments are exposed to this hazard, though impacts are undetermined due the lack of historical data.

Past damage done to jurisdictional roads and critical infrastructure due to earthquakes, including where the damage occurred and how much it cost to fix: No prior earthquakes reported.

3.3.3 Expansive Soils

Hazard Profile: Expansive Soils	
Category	Response
Risk Ranking	13
Geographic Area Affected	Limited
Probability of Future Occurrence	Likely
Maximum Probable Extent	Minor
Potential Impact	Property damage due to foundation damage Water contamination or loss via broken pipes Building and infrastructure damage Road damage Transportation delays due to road condition Damage to utility lines
Vulnerabilities	Because of the manner in which data for expansive soils is collected, the amount of damages in the city was unavailable. Expansive soils are a major consideration to all existing and future structures as most legacy structures eventually require maintenance to foundations to remain habitable. Approximately 220,000 city residents live in owner occupied residents and will likely have to implement individual mitigation strategies aimed at countering the effects of expansive soils.

Past damage done to jurisdictional roads and critical infrastructure due to expansive soils, including in what part of your jurisdiction the damage occurred: Unknown. The Department of Public Works does not track road damage caused by expansive soils.

3.3.4. Extreme Heat

Hazard Profile: Extreme Heat	
Category	Response
Risk Ranking	10
Geographic Area Affected	Extensive
Probability of Future Occurrence	Highly Likely
Maximum Probable Extent	Minor
Potential Impact	Heatstroke or death. People should stay indoors to prevent heatstroke; elderly people who cannot afford air conditioning are at greatest risk Property damage Loss of water supply Increases grassfire potential and intensity Impact on logistics Power outages Road buckling Disruption in critical infrastructure operations Vehicle engine failure
Vulnerabilities	While extreme temperatures pose a serious threat to any population, the elderly, homeless, and outdoor laborers need to take proper precautions. People should stay indoors to prevent heatstroke; the elderly who cannot afford air conditioning are at greatest risk.

Most vulnerable populations to extreme heat in your jurisdiction and their location within your jurisdiction: Elderly populations and those with medical conditions that are complicated by extreme heat. The city only has access to the potential locations of these individuals through the State of Texas Emergency Assistance (STEAR) program. Spectators and visitors to our outdoor entertainment venues and sporting events need to take proper precautions during the summer months.

Are there cases of extreme heat exposure resulting from special events held in your jurisdiction? The City of Arlington Fire and Police Departments provide service to the Texas Rangers Organization during home games. The primary service provided during support to Texas Rangers home games is medical attention related to heat exposure. Six Flags over Texas and Hurricane Harbor staff their own response teams, thus we do not have data from their activities.

Have any critical facilities in your jurisdiction experienced any impacts from extreme heat (e.g., power failure due to heat)? No.

3.3.5 Flooding

Hazard Profile: Flooding	
Category	Response
Risk Ranking	2
Geographic Area Affected	Significant
Probability of Future Occurrence	Occasional
Maximum Probable Extent	Medium
Potential Impact	Loss of electricity Loss of, or contamination of, water supply Loss of property Structure and infrastructure damage – flooded structures and eroded roads Misplaced residents Snakes migrate and mosquitoes increase Fire – as a result of loss of water supply Debris in transportation paths Emergency response delays Disruption of traffic can lead to impacts to the economy Natural environments damage, to include protected species and critical habitats
Vulnerabilities	Based on historical data, flooding has caused zero injuries and fatalities per year and is expected to have the same results in the future. Commuters and any buildings in a floodplain are considered most at risk.

Past damage done to jurisdictional roads and critical infrastructure due to flooding, including where in your jurisdiction the damage occurred: Though various flooding occurs within the city, there has been no damage reported since 2015. Flooding is more of a threat to the population, as there was one fatality reported in 2017 due to flooded roads. According to the National Weather Service, flash flooding after a severe thunderstorm led to a man being swept away near the railroad tracks.

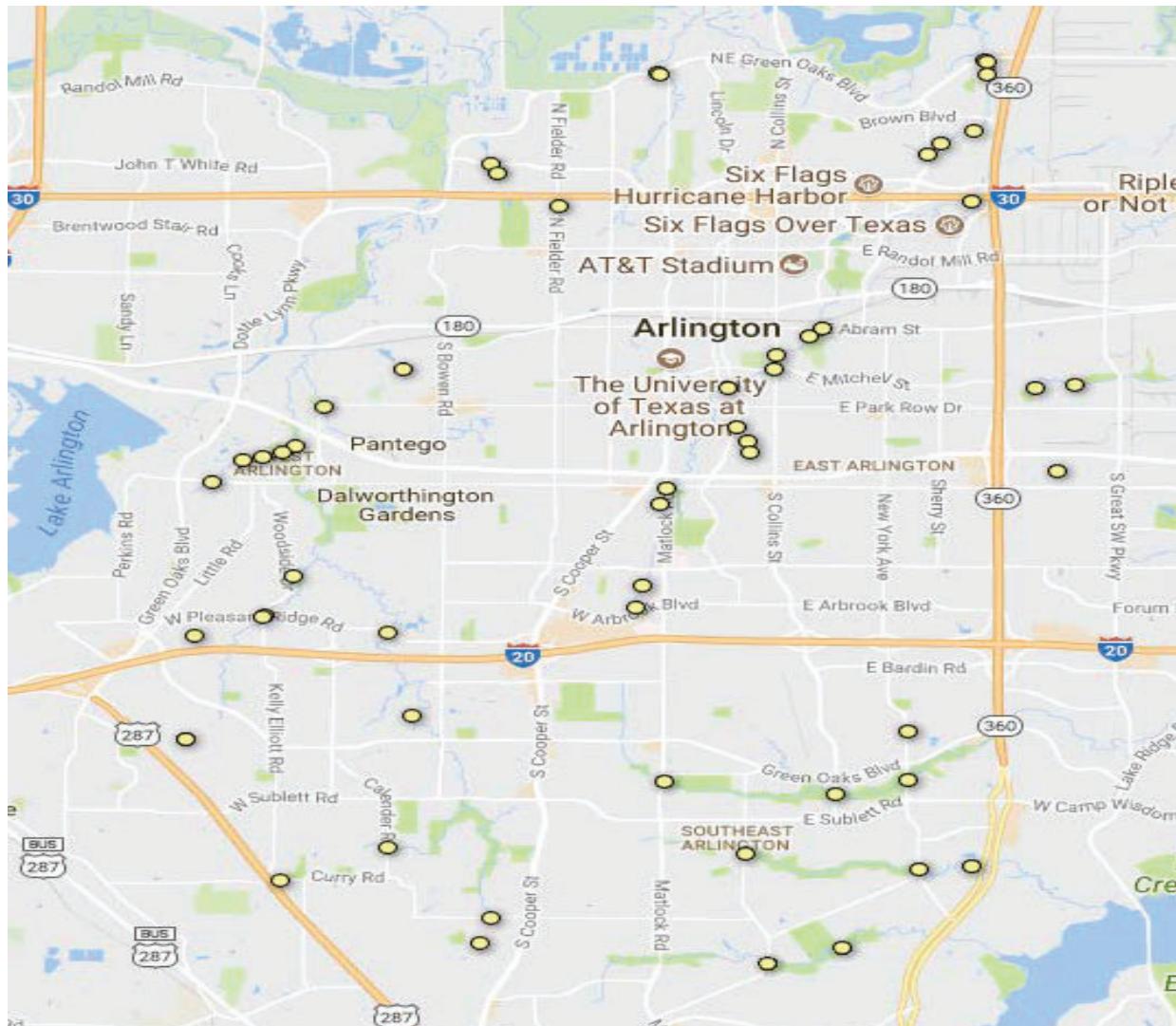
Does your jurisdiction require a permit for foundation repairs? If so, approximately how much money has been spent by citizens to repair properties damaged by flooding? No.

Intersections or traffic routes impacted by flooding: See low water crossings below. These roads have the potential to flood.

Names of any creeks or rivers that flood: Rush Creek.

Names of any dams within the city: Lake Arlington Dam, Prestonwood Lake Dam, Rush Creek Lake Dam, Arlington Southwest Nature Preserve Dam, and Alan Saxe Pond. Details are described in Section 3.

Low Water Crossings: A low water crossing provides a type of bridge when water flow is low. Under high-flow conditions, water runs over the roadway and precludes vehicular and pedestrian traffic. These crossings can be dangerous when flooded. Crossings are identified with a yellow dot.



Road	Flooding Source	Low Water Crossing Type
Pleasant Ridge Road (0.5 miles east of Park Springs Drive)	Rush Creek	Bridge Class
Hidden Oaks Lane (0.5 miles south of Green Oaks Boulevard)	Kee Branch	Bridge Class
Webb Ferrell Road	Bowman Branch	Vented Ford
Mansfield-Webb Road	Bowman Branch	Vented Ford

Road	Flooding Source	Low Water Crossing Type
Timberlake Drive	Cottonwood Creek	Vented Ford
Susan Drive	Cottonwood Creek	Vented Ford
Forum Drive	Cottonwood Creek South Fork	Vented Ford
New York Avenue	Fish Creek	Bridge Class
South Collins Street	Fish Creek	Bridge Class
Matlock Road	Fish Creek	Vented Ford
New York Avenue	Fish Creek, TRIB Stream F-1	Vented Ford
Copeland Road	Johnson Creek	Bridge Class
East Abram Street	Johnson Creek	Vented Ford
Dugan Street	Johnson Creek	Bridge Class
Collins Street	Johnson Creek	Bridge Class
East Mitchell Street	Johnson Creek	Vented Ford
Center Street	Johnson Creek	Bridge Class
Waverly Drive	Johnson Creek	Vented Ford
High Point Road	Johnson Creek	Vented Ford
South Center Street	Johnson Creek, TRIB Stream JC-2	Vented Ford
Inwood Drive	Johnson Creek, TRIB Stream JC-2	Vented Ford
East Tucker Boulevard	Johnson Creek, TRIB Stream JC-2	Vented Ford
Matlock Rd And Arkansas Lane	Johnson Creek, TRIB Stream JC-2	Vented Ford
Secretary Drive	Johnson Creek, TRIB Stream JC-2	Vented Ford
Mayfield Road	Kee Branch	Bridge Class
Woodside Drive	Kee Branch	Bridge Class
Pleasant Ridge Road	Kee Branch	Bridge Class
Hidden Oaks Lane	Kee Branch	Vented Ford
Oak Springs Drive	Kee Branch, TRIB Stream KB-1	Vented Ford
Webb Lynn Road	Lynn Creek	Vented Ford
Arlington Webb Britton Road (New York Avenue)	Lynn Creek	Vented Ford
Silo Road	Lynn Creek	Vented Ford
Park Row Drive	Pantego Branch	Vented Ford
Mandy Way	Rush Creek	Vented Ford
Woodland Park Boulevard	Rush Creek	Bridge Class
Harris Road	Rush Creek	Vented Ford
Willow Oak Lane	Rush Creek	Vented Ford
Norwood Lane	Rush Creek, TRIB Stream RC-1	Vented Ford
Creekside Drive	Rush Creek, TRIB Stream RC-2	Vented Ford
Woodside Drive	Rush Creek, TRIB Stream RC-2	Vented Ford
Creekside Drive	Rush Creek, TRIB Stream RC-2	Vented Ford
Arkansas Lane	Rush Creek, TRIB Stream RC-2	Vented Ford
Calender Road	Sublett Creek	Vented Ford

Road	Flooding Source	Low Water Crossing Type
Eden Road	Sublett Creek	Vented Ford
West Lamar Boulevard	Village Creek, TRIB Stream VC(A)-1	Vented Ford
Parkhill Drive	Village Creek, TRIB Stream VC(A)-1	Vented Ford
Fielder Road	Village Creek, TRIB Stream VC(A)-1	Vented Ford
Green Oaks Boulevard West Bound	Trinity River West Fork, TRIB Stream WF(A)-1	Vented Ford
Green Oaks Boulevard East Bound	Trinity River West Fork, TRIB Stream WF (A)-1	Vented Ford
Heather Ridge Lane	Trinity River West Fork, TRIB Stream WF (A)-1	Vented Ford
Forest Oak Lane	Trinity River West Fork, TRIB Stream WF (A)-1	Vented Ford
Friendly Village Drive	Trinity River West Fork, TRIB Stream WF (A)-1	Vented Ford
Ball Park Way	Trinity River West Fork, TRIB Stream WF (A)-1	Vented Ford
Green Oaks Boulevard East Bound	Trinity River West Fork, TRIB Stream WF (A)-2	Vented Ford
Green Oaks Boulevard West Bound	Trinity River West Fork, TRIB Stream WF (A)-2	Vented Ford

Low Water Crossing Types Defined:

Bridges are open-bottom structures with elevated decks. They may be designed with one or several piers. Low water bridges generally have greater capacity and are able to pass higher flows underneath the driving surface than most vented and unvented fords.

Vented fords have a driving surface elevated some distance above the streambed with culverts (vents) that enable low flows to pass beneath the roadbed. The vents can be one or more pipes, box culverts, or open-bottom arches. In streams carrying large amounts of debris, the driving surface over the vent may be removable, permitting debris to be cleared after a large flow event.

According to Arlington's Office of Emergency Management, there are five dams, one water treatment facility, and one wastewater treatment facility in the 100-year floodplain.

Land Cover Type	Total Area in Jurisdiction (Acres)	Total Area in the 100-year Floodplain (Acres)	Percentage (%) of Area in the 100-year Floodplain
Commercial	15,082.82	4,464.79 ¹	29.6%
Industrial	686.53	24.53	3.57%
Residential	45,833.08	8,149.6	17.78%
Total	61,602.43	12,638.92	20.5%

Source: Arlington Office of Emergency Management.

¹ Most of commercial acreage located in the 100 year floodplain is comprised of golf courses.

National Flood Insurance Program Compliance

Participation in the National Flood Insurance Program (NFIP) is based on a voluntary agreement between a community and the Federal Emergency Management Agency (FEMA). For communities that adopt a floodplain management ordinance to reduce flood risks to new construction, federally backed flood insurance is made available to property owners in the community. Compliance with the NFIP, however, extends beyond mere participation in the program. The three basic components of the NFIP include: 1) floodplain identification and mapping risk, 2) responsible floodplain management, and 3) flood insurance. The City of Arlington is a participant in the NFIP and provides details about the community and their participation below. The following information was requested:

CID	485454#
Community Name	City of Arlington
County	Tarrant County
Initial FHBM Identified	08/07/70
Initial FIRM Identified	12/31/74
Current Effective Map Date	09/25/09
Reg-Emer Date	12/30/70
Tribal	No

Source: <http://www.fema.gov/cis/TX.html>.

Who acts as your floodplain administrator/manager? Director of Public Works.

What specific flooding ordinances and plans does your jurisdiction have? Flood Damage Prevention Ordinance last revised January 12, 2010 by Ordinance No. 10-011.

What are the building requirements for properties located in a Special Flood Hazard Area (SFHA)? New construction must conform to the standards outlined in Section 5.01 of the above-mentioned Ordinance.

What building restrictions, in regards to floodplains, does your jurisdiction enforce? A permit is required prior to commencing construction. Prior to the issuance of a permit, building engineers must show conformity with the standards outlined on Section 5.01. Variances may be approved by the City Council based on a case by case basis when extraordinary situations exist.

Repetitive and Severe Repetitive Loss Properties: There are currently 40 residential and 6 non-residential repetitive loss properties and 1 residential severe repetitive loss property within the City of Arlington. **Repetitive loss properties** are those for which two or more losses of at least \$1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10-year period since 1978. **Severe repetitive loss properties** are residential properties that have at least four NFIP payments over \$5,000 each and the cumulative amount of such claims exceeds \$20,000, or at least two separate claims payments with the cumulative amount exceeding the market value of the building.

Residential Parcels Located in 100-year Floodplain	Percentage of Total Residential Parcels Located in 100-year Floodplain	Commercial and Industrial Parcels in 100-year Floodplain	Percentage of Commercial and Industrial Parcels in 100-year Floodplain
4,082	4.37%	4,400	7.36%

Source: Arlington Office of Emergency Management.

The following National Flood Insurance Program (NFIP) questions were answered to the best of the City of Arlington's ability.

Insurance Summary		
NFIP Topic	Source of Information	Comments
How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator or FEMA NFIP Specialist	Policies in-force: 1,539 Insurance in-force: \$450,219,300 Written premium in-force: \$973,990
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	FEMA NFIP or Insurance Specialist	Since 1978: Around 888 claims have been filed, but 219 of the claims closed without payment. \$18,679,502.23 have been paid.
Staff Resources		
NFIP Topic	Source of Information	Comments
How many structures are exposed to flood risk within the community?	Community Floodplain Administrator (FPA)	Approximately 47 properties.
Describe any areas of flood risk with limited NFIP policy coverage.	Community FPA and FEMA Insurance Specialist	Data not available.
Compliance History		
NFIP Topic	Source of Information	Comments
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, community records	Yes.

Are there any outstanding compliance issues (i.e. current violations)?		No.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?		Data not available.
Is a CAV or CAC scheduled or needed?		Data not available.
Regulation		
NFIP Topic	Source of Information	Comments
When did the community enter the NFIP?	Community Status Book https://www.fema.gov/national-flood-insurance-program-community-status-book	1991
Are the FIRMs digital or paper?	Community FPA	Digital.
Do floodplain development regulations meet or exceed FEMA or state minimum requirements? If so, in what ways?	Community FPA	Yes.
Provide an explanation of the permitting process.	Community FPA, State, FEMA NFIP Flood Insurance Manual: https://www.fema.gov/flood-insurance-manual . Community FPA, FEMA CRS Coordinator, ISO representative	(1) Application for a Floodplain Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required: (a) After forms are set for the lowest floor, a letter completed by a licensed engineer or

	CRS Manual: https://www.fema.gov/media-library/assets/documents/8768?id=2434	surveyor indicating the proposed lowest floor elevation (in relation to mean sea level), including basement and finished garage of all new and substantially improved structures; (b) After construction and before final inspection, an elevation certificate completed by a licensed engineer or surveyor; (c) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed; (d) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of Section 5.02 (2); (e) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development; (f) Maintain a record of all such information in accordance with Section 4.02(1).
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Community Rating System (CRS)

NFIP Topic	Source of Information	Comments
Does the community participate in CRS?	Community FPA, State, FEMA NFIP	Yes.
What is the community's CRS Class Ranking?	Flood Insurance Manual: https://www.fema.gov/flood-insurance-manual	7.
Does your flood management plan or hazard mitigation plan include CRS planning requirements?	Community FPA, FEMA CRS Coordinator, ISO representative. CRS Manual: https://www.fema.gov/media-library/assets/documents/8768?id=2434	Yes.

The City of Arlington will continue to address the gaps in data over the next five years and expand the capabilities of the NFIP program by implementing NFIP-related mitigation actions identified in Chapter 5 of this annex.

3.3.6 Thunderstorm

Hazard Profile: Thunderstorm	
Category	Response
Risk Ranking	3
Geographic Area Affected	Extensive
Probability of Future Occurrence	Highly likely
Maximum Probable Extent	Medium
Potential Impact	Property damage to fences, vehicles, equipment, and roofs Transportation delays Injuries and deaths Debris from trees and damaged property Electrical grid problems Communication problems – phone and internet lines down Natural environments damage, to include protected species and critical habitats
Vulnerabilities	All populations, economy, structures, improved property, critical facilities and infrastructure, and natural environments are exposed to this hazard.

Past damage due to thunderstorms, and specifically, which hazard within the thunderstorm (hail, high wind, and lightning): Since 2015, the city experienced around \$1.5 million in damages related to high winds and hail in thunderstorms, including roof, vehicle, and tree damage.

Number of homes lost due to lightning-induced fires: None.

3.3.7 Tornado

Hazard Profile: Tornado	
Category	Response
Risk Ranking	1
Geographic Area Affected	Significant
Probability of Future Occurrence	Occasional
Maximum Probable Extent	Major
Potential Impact	Injury or death Power outage Blocked roadways from trees and damaged property Natural gas pipeline breaks – fire injuries, possible deaths Transportation disruption Rerouting traffic Loss of property Structure and infrastructure damage Misplaced residents Natural environments damage, to include protected species and critical habitats
Vulnerabilities	All populations, economy, structures, improved property, critical facilities and infrastructure, and natural environments are exposed to this hazard. The economic impact on the City of Arlington could reach billions of dollars if a large tornado impacted critical facilities and major entertainment district venues.

Past damage done to your jurisdiction's roads and critical infrastructure due to tornadoes, including where the damage occurred and how much it cost to repair: There have been no reports of a tornado since 2015.

3.3.8 Wildfire

Hazard Profile: Wildfire	
Category	Response
Risk Ranking	5
Geographic Area Affected	Negligible
Probability of Future Occurrence	Occasional
Maximum Probable Extent	Medium
Potential Impact	Injury or death Property and fence damage Road closure Traffic accidents Loss of power – burning utility poles Loss of property Structure and infrastructure damage Misplaced residents Loss of resources Natural environments damage, to include protected species and critical habitats
Vulnerabilities	Given the dynamic nature of wildfires, all populations, economy, structures, improved property, critical facilities and infrastructure, and natural environments in the city are exposed to this hazard.

Most vulnerable location (North, East, South, West) of your jurisdiction? Northeast and north side of town is most vulnerable due to the greenbelt.

3.3.9 Winter Storm

Hazard Profile: Winter Storm	
Category	Response
Risk Ranking	7
Geographic Area Affected	Extensive
Probability of Future Occurrence	Occasional
Maximum Probable Extent	Minor
Potential Impact	Structural damage Injuries or death Power outages Loss of ability to use roads for driving Increased traffic accidents Loss of heat Stranded travelers / motels at full capacity Tree debris create fuel load for fire hazard Delayed emergency response time Frozen/ busted pipes leading to loss of water Disruption of traffic Impacts to the economy Communication capabilities decrease
Vulnerabilities	Given the dynamic nature of winter storms, all populations, economy, structures, improved property, critical facilities and infrastructure, and natural environments in the city are exposed to this hazard. Winter storms tend to have a severe impact on both local and intrastate commerce as two major interstates as well as several major highways traverse the city that would likely be significantly impacted.

Bridges and overpasses that can be impacted by a winter storm, including street names and their location within your jurisdiction: No bridges or overpasses are impacted by winter storms, as sanding techniques are adequate.

What impacts are caused when these bridges and/or overpasses are impacted by winter storms? Minor traffic issues due to having to slow down to navigate iced over bridges, potential traffic accidents.

3.4 Historical Events

The following, taken from the National Centers for Environmental Information, are natural hazard events that occurred within the City of Arlington between 2015 and 2017. The material is organized by location and date.

Historical Events (Since 2015) from the National Centers for Environmental Information (www.ncdc.noaa.gov)								
Location	Date	Event Type	Magnitude	Deaths	Injuries	Property Damage	Crop Damage	Magnitude Type
Arlington	5/24/2015	Flash Flood		0	0	\$0	\$0	
Arlington	5/24/2015	Flash Flood		0	0	\$0	\$0	
Arlington	5/26/2015	Thunderstorm Wind	60	0	0	\$10,000	\$0	MG
Arlington	5/28/2015	Flash Flood		0	0	\$0	\$0	
Arlington	12/27/2015	Hail	1	0	0	\$0	\$0	
Arlington	3/17/2016	Hail	2.5	0	0	\$400,000	\$0	
Arlington	3/17/2016	Hail	0.75	0	0	\$0	\$0	
Arlington	1/15/2017	Flood		1	0	\$0	\$0	
Arlington	5/19/2017	Thunderstorm Wind	39	0	0	\$5,000	\$0	EG
Arlington Municipal Airport	4/24/2015	Thunderstorm Wind	56	0	0	\$15,000	\$0	EG
Arlington Municipal Airport	5/26/2015	Hail	1	0	0	\$0	\$0	
Arlington Municipal Airport	11/17/2015	Thunderstorm Wind	51	0	0	\$5,000	\$0	MG
Arlington Municipal Airport	3/17/2016	Hail	1.75	0	0	\$1,000,000	\$0	
Arlington Municipal Airport	3/17/2016	Hail	1	0	0	\$0	\$0	
Arlington Municipal Airport	3/29/2017	Thunderstorm Wind	60	0	0	\$5,000	\$0	EG
Arlington Municipal Airport	3/29/2017	Thunderstorm Wind	65	0	0	\$10,000	\$0	EG
Arlington Pylon Airport	3/17/2016	Hail	1.5	0	0	\$2,000	\$0	
Total				1	0	\$1,452,000	\$0	

*MG- Measured Wind Gusts

*EG-Wind Estimated Gusts

3.5 Man-made Hazards Profiles

The City of Arlington has identified the following man-made hazards that have affected or could affect the local planning area.

3.5.1 Hazardous Materials (HAZMAT) Event

Hazard Profile: Hazardous Materials Event	
Category	Response
Risk Ranking	8
Geographic Area Affected	Significant
Probability of Future Occurrence	Likely
Maximum Probable Extent	Medium
Potential Impact	Injury or death Power outage Blocked roadways from spills Natural gas pipeline breaks – fire injuries, possible deaths Transportation disruption Rerouting traffic Loss of property Misplaced residents
Vulnerabilities	Because of the several highways that pass through Arlington, as well as the many industrial organizations that use hazardous materials in their processes, the entire city can be considered to be vulnerable to a hazardous materials release or spill. However, the exact vulnerability is largely dependent on the chemical, weather, and location of the release.

What type of hazardous materials affect your jurisdiction, and how much of that type? The City of Arlington is the subject of several interstate and intrastate thoroughfares that transport an incalculable amount of hazardous materials ranging from precursors to household chemicals to nuclear waste.

What types of HAZMAT releases could happen? The vulnerability to hazardous materials release comes from traffic accidents, train derailments, and end-user accidents at industrial facilities.

What are the health effects from the exposure to each material? The health threats that would arise from a hazardous materials release runs the full spectrum of possibilities and is highly dependent on the hazards presented in the material released. Effects could range from respiratory problems to death.

How current is your jurisdiction's Tier 2 reports? The City of Arlington Tier 2 reports are updated annually.

Where are Tier 2 reports stored? The City of Arlington Tier 2 reports are stored at Fire Station #6 which is home to the HAZMAT response team for the Arlington Fire Department.

How is HAZMAT routed throughout your jurisdiction? Hazardous materials are continuously moving through the various thoroughfares including Interstate 20, Interstate 30, State Highway 360, and the major rail line that runs through the town.

Historical Events: No hazardous materials event has been recorded since 2015.

3.5.2 Infectious Disease Outbreak

Hazard Profile: Infectious Disease Outbreak	
Category	Response
Risk Ranking	4
Geographic Area Affected	Negligible
Probability of Future Occurrence	Occasional
Maximum Probable Extent	Minor
Potential Impact	Injury or death Hospitals are overwhelmed Short supply of medical resources
Vulnerabilities	The entire human and animal population is at risk to an infectious disease outbreak, but children, the elderly, and those with immune system disorders are at a greater risk.

What types of infectious disease are a concern in your jurisdiction and why? Influenza remains the most significant concern to the City of Arlington. As was witnessed during the last “flu season,” an influx of influenza patients not only presents a significant threat to the health of citizens, it also presents a dangerous stressor to the ability of the hospitals in the City to provide services in response to other emergencies.

What are the health effects from each infectious disease exposure? The two most realistic infectious disease sources are influenza and West Nile Virus. Both initially present as “flu like” symptoms. West Nile Virus is particularly dangerous to those with preexisting health issues which makes discerning between influenza and West Nile Virus more important.

What are potential sources of an infectious disease outbreak in your jurisdiction? As with most infectious diseases, contact with other humans is a significant factor in the spread of the disease. This concern becomes exacerbated in Arlington due to the multiple major athletic and entertainment venues within the city. Additionally, the lakes and streams in Arlington present possible breeding sites for West Nile Virus particularly where stagnant water exists.

Historical Events:

Date	Location within Jurisdiction	Type of Disease	Deaths	Cases
2017	Throughout	Influenza	0	288

3.5.3 National Security Hazard

Hazard Profile: National Security Hazard	
Category	Response
Risk Ranking	6
Geographic Area Affected	Limited
Probability of Future Occurrence	Unlikely
Maximum Probable Extent	Major
Potential Impact	Injury or death Power outage Transportation disruption Loss of property Structure and infrastructure damage
Vulnerabilities	Approximately 100,000 spectators could be affected by an attack on AT&T Stadium. Many thousands more would be indirectly affected. AT&T Stadium, Globe Life Park, and Texas Live are the largest sporting venues in the city. Interstate 30 runs nearly adjacent to the most likely terrorist targets. An attack may affect traffic along this thoroughfare, resulting in the disruption of interstate commerce.

What types of national security hazards does your jurisdiction face? Arlington is a member of the Urban Area Security Initiative due to the presence of two major sporting venues and two major amusement parks.

Past damage done to your jurisdiction's critical infrastructure and facilities due to a national security hazard, including where the damage occurred: None

Historical Events: No national security event has been recorded since 2015.

3.5.4 Nuclear Accident

Hazard Profile: Nuclear Accident	
Category	Response
Risk Ranking	12
Geographic Area Affected	Negligible
Probability of Future Occurrence	Unlikely
Maximum Probable Extent	Minor
Potential Impact	Injury or death Power outage Transportation disruption Loss of property Structure and infrastructure damage Misplaced residents and livestock
Vulnerabilities	Due to lack of historical data and the many variables involved, there is not enough information to determine the effect on the population due to a nuclear accident. The entire city is potentially exposed to this hazard.

What type of radioactive material is in your jurisdiction and how much of each type? Nuclear waste, in the form of garments and safety equipment used in the production of nuclear material, is transported through Arlington to the facility where the waste will be processed. Radioactive material in the form of construction and medical equipment is also located within the city at hospitals and construction sites.

Where is the nearest source of nuclear power? Comanche Peak Nuclear Power Plant in Glen Rose, Texas (75 miles south).

What are the shipping/transportation routes for nuclear material in your jurisdiction? Interstate 30 and Interstate 20.

Historical Events: No nuclear accident event has been recorded since 2015.

3.5.5 Power Failure

Hazard Profile: Power Failure	
Category	Response
Risk Ranking	9
Geographic Area Affected	Extensive
Probability of Future Occurrence	Likely
Maximum Probable Extent	Medium
Potential Impact	Injury or death Power outage Transportation disruption Loss of critical services Loss of communications
Vulnerabilities	Due to the extensive need for electricity by all sectors of society, it is reasonable to estimate that the entire city is vulnerable to this hazard.

What are the potential sources of power failure? Downed power lines, damaged transformers, and cut power lines from digging.

How many people have been impacted by power failure, including any populations that are specifically vulnerable? As many as 40,000 homes were impacted by the most recent power failure. Failures of this nature place people of advanced age, compromised health, and social vulnerability at increased risk due to their inability to react appropriately to power failures.

How many people could be impacted by power failure? The entire city population is vulnerable to power failure.

Historical Events:

Date	Location within Jurisdiction	Time	Magnitude	Deaths	Injuries
3/19/2017	Citywide	0215	38,783 Customers	0	0

3.5.6 Telecommunications Failure

Hazard Profile: Telecommunications Failure	
Category	Response
Risk Ranking	14
Geographic Area Affected	Significant
Probability of Future Occurrence	Unlikely
Maximum Probable Extent	Medium
Potential Impact	Disruption in emergency services Loss of communication for all critical entities
Vulnerabilities	The entire city is vulnerable to this hazard, but critical services would be impacted the most.

What are the potential sources of telecommunication failure? Damage to cell towers. Extremely high call volumes in the aftermath of a disaster that would overwhelm the network and render it unusable.

Who has been impacted by telecommunication failure? The City of Arlington has not experienced a significant telecommunications failure.

What has been impacted by telecommunication failure? The City of Arlington has not experienced a significant telecommunications failure.

Historical Events: No telecommunication failure event has been recorded since 2015.

3.6 Overall Vulnerability

The City of Arlington identified their greatest vulnerabilities and concerns:

- The Village Creek Waste Water Treatment Plan lies in the 100-year floodplain. While there is no record of previous damage due to flooding, it remains a concern.
- Lake Arlington Dam presents a continuous vulnerability that would cost nearly \$5 billion in damages to improved property and displace nearly 500,000 people throughout the Metroplex if it were to fail.
- The entertainment district of Arlington is home to the Dallas Cowboys, the Texas Rangers, Six Flags over Texas, and Six Flags Hurricane Harbor and is a significant target for terrorism and is vulnerable to natural hazards. As Globe Life Park is upgraded and Texas Live is completed, this threat is expected to increase.

The City of Arlington continues to monitor the mitigation strategies that were implemented during the construction of the Viridian housing development. The site was previously within the 100-year floodplain. However, mitigation actions were undertaken to divert the flow of water and modify the floodplain in that area.

Chapter 4: Capabilities Assessment

(In compliance with 201.6(c)(3))

The following capability assessment examines the ability of the city to implement and manage a comprehensive mitigation strategy. Strengths, weaknesses, and resources of the jurisdiction are identified as a means to develop an effective Hazard Mitigation Action Plan (HazMAP). The capabilities identified in this assessment were evaluated collectively to develop feasible recommendations, which support the implementation of effective mitigation activities.

A questionnaire was distributed to the City of Arlington's Local Planning Team (LPT) to initiate this assessment. The survey included questions regarding existing plans, policies, and regulations that contribute to or hinder the ability to implement hazard mitigation activities, including: legal and regulatory capabilities; administrative and technical capabilities; and fiscal capabilities.

Planning and Regulatory Assessment		
Type of Plans	Have capability?	Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Yes	Yes; Yes; Yes
Capital Improvement Plan (CIP)	Yes	No; No; Yes
Economic Development Plan	Yes	Yes; Yes; Yes
Local Emergency Operations Plan	Yes	Yes ; Yes; Yes
Continuity of Operations Plan	Yes	Yes; Yes; Yes
Transportation Plan	Yes	Yes; Yes; Yes
Stormwater Management Plan	Yes	Yes; Yes; Yes
Community Wildfire Protection Plan	Yes	Yes; Yes; Yes
Other Plans (e.g., disaster recovery, climate change adaptation)	No	
Land Use Planning and Ordinances		
Have capability?		
Zoning Ordinance	Yes	Yes; Yes
Subdivision Ordinance	Yes	Yes; Yes
Floodplain Ordinance	Yes	Yes; Yes
Flood Insurance Rate Maps	Yes	Yes; Yes
Natural Hazard Specific Ordinance (e.g., stormwater, wildfire)	Yes	Yes; Yes

Acquisition of land for open space and public recreation uses	Yes	Yes; Yes
Building Code, Permitting, and Inspections	Have capability?	
Building Code	Yes	Version/Year: ICC 2013
Building Code Effectiveness Grading Schedule (BGEGS) Score	No	
Fire Department ISO Rating	Yes	Rating: 1
Site Plan Review Requirements	Yes	Type(s) of requirement: Based on four criteria in the city's building code.
Administrative and Technical Assessment		
Administration	Have capability?	Describe capability. Is coordination effective?
Planning Commission	Yes	Commission is appointed by the Mayor and Council and serve two-year terms; Yes
Mitigation Planning Committee	Yes	Planning and Hazard Assessment; Yes
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Yes	Members of the Public Works and Transportation Department are tasked with this mission; Yes
Mutual Aid Agreements	Yes	Arlington has adopted the statewide mutual aid system; Yes
Staff	Have capability? FT/PT*	Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official	FT	Yes; Yes; Yes
Floodplain Administrator	FT	Yes; Yes; Yes
Emergency Manager	FT	Yes; Yes; Yes
Community Planner	FT	Yes; Yes; Yes
Civil Engineer	FT	Yes; Yes; Yes
GIS Coordinator	FT	Yes; Yes; Yes
Other:	No	
*Full-time (FT) or part-time (PT) position		
Technical	Have capability?	Describe capability. Has capability been used to assess or mitigate risk in the past?
Warning Systems/Services (e.g., Reverse 911, outdoor warning signals)	Yes	Outdoor Warning System, Mass Notification System (Everbridge); Yes
Hazard data and information	Yes	Mapping; Yes
Grant writing	Yes	Use outside contractor; No
HaZUS analysis	No	
Other	No	

Education and Outreach Assessment		
Program or Organization	Have capability?	Describe program or organization and how it relates to disaster resilience and mitigation. Could the program or organization help implement future mitigation activities?
Local citizen groups or Non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	Community Emergency Response Team (CERT), Arlington Christian Disaster Network (nationally awarded) - citizens are trained on local hazards. Yes, but these organizations would Not likely be used for mitigation activities.
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	CERT continuing education, social media posts, and public presentations about local hazards; Yes
Natural disaster or safety related school programs	Yes	Programs managed by Arlington Independent School District; Yes
StormReady certification	Yes	<p>StormReady communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. To be officially StormReady, a community must:</p> <ul style="list-style-type: none"> • Establish a 24-hour warning point and emergency operations center. • Have more than one way to receive severe weather warnings and forecasts and to alert the public. • Create a system that monitors weather conditions locally. • Promote the importance of public readiness through community seminars. • Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises. <p>Yes</p>
Firewise Communities Certification	No	
Public/private partnership initiatives addressing disaster-related issues	Yes	We have initiatives with several of the gas-well operators in the city for hazard mitigation activities; Yes
Other	No	

Financial Assessment		
Funding Resources	Have capability?	Has the funding resource been used in past? If Yes, for what type of activities? Could the resource be used to fund future mitigation actions?
Capital Improvements project funding	Yes	No
Authority to levy taxes for specific purposes	Yes	No
Fees for water, sewer, gas, and/or electric services	Yes	No
Impact fees for new development	Yes	No
Stormwater utility fee	Yes	Yes, for installation and maintenance of stormwater mitigation activities; Yes.
Incurrence of debt through general obligation bonds and/or special tax bonds	Yes	No
Incur debt through private activities	No	No
Community Development Block Grant	Yes	No
Other federal funding programs	Yes	Yes, many of Arlington's public safety programs are funded through federally administered grants; Yes.
State funding programs	No	No
Other	No	

How can any of these capabilities be expanded and improved to reduce risk?

Actions that can expand and improve existing authorities, plans, policies, and resources for mitigation include: budgeting for mitigation actions; passing policies and procedures for mitigation actions; adopting and implementing stricter mitigation regulations; approving mitigation updates, and additions to existing plans as new needs are recognized.

Chapter 5: Mitigation Strategy

(In compliance with 201.6(c)(3)(i), 201.6(c)(3)(ii), 201.6(c)(3)(iii), and 201.6(c)(4)(ii))

The mitigation strategy serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The Stafford Act directs local mitigation plans to describe hazard mitigation action and establish a strategy to implement those actions.² Therefore, all other requirements for a local mitigation plan (or hazard mitigation action plan) lead to and support the mitigation strategy.

5.1 Mitigation Goals

The Tarrant County Hazard Mitigation Planning Team (HMPT) collectively reviewed the extensive list of mitigation goals of the 2015 Hazard Mitigation Action Plan (HazMAP) and unanimously chose to streamline the mitigation goals for this update. Therefore, the new goals are to protect life and reduce bodily harm from natural hazards, and to lessen the impacts of natural hazards on property and the community through hazard mitigation.

5.2 2015 Action Items

The City of Arlington's action items in the 2015 Tarrant County HazMAP were determined by the 2015 Local Planning Team (LPT). Below are the action items from the 2015 plan and the status of each action.

² Section 322(b), Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. 5165.

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
Severe Thunderstorms and High Winds, Tornadoes, Hail, Lightning, Winter Storms, Flooding, Dam Failure, Wildfires	Continue to test the emergency warning system in the City of Arlington regularly and upgrade equipment as appropriate.	Perform a sound reflective study on the emergency siren system. Upgrade and expand the siren system.	Within 2 years	Office of Emergency Management	\$100,000 for the sound reflective study plus \$300,000 for 12 to 15 additional sirens (including installation).	Unknown	General funds, grants
		STATUS: Deferred to 2020 HzMAP					
		Develop a program to distribute weather radios at a reduced rate.	3-4 years	Office of Emergency Management	Unknown	Unknown	General funds, grants
		STATUS: Completed and ongoing					
Severe Thunderstorms and High Winds, Tornadoes, Hail, Lightning, Winter Storms, Flooding	Mitigate damage to existing structures as a result of natural hazards using cost effective approaches in the City of Arlington.	Provide awnings as a cover for emergency response vehicles located outside.	5 or more years	Public Safety	Unknown	Unknown	To be determined

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
STATUS: Deferred to 2020 HazMAP							
Flooding	Educate the public regarding the natural hazards present in the City of Arlington.	<p>Continue to promote public education/hazard mitigation programs, including:</p> <ul style="list-style-type: none"> • flood insurance through the National Flood Insurance Program (NFIP) • flood hazard information • potential mitigation measures • “KnoWhat2Do” campaign • other information related to flood hazard 	Currently implementing	Office of Emergency Management, Public Works and Transportation Department	\$10,000	\$40,000	General fund, grants
STATUS: Completed and ongoing							

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
Severe Thunderstorms and High Winds, Tornadoes	Enact and enforce City of Arlington ordinances to minimize the impact of natural threats to people or property.	Review, update, and enforce city ordinances, as appropriate, to address wind damage.	3-4 years	Community Development and Planning Department, Building Inspection Department, Code Compliance	Unknown	Unknown	General fund, grants
STATUS: Completed and ongoing							
Flooding	Maximize flood insurance coverage of property owners as a mitigation measure in the City of Arlington.	Continue to implement programs and take action to improve the city's Community Rating System (CRS) rating, including opportunities to reduce flood insurance premiums through NFIP activities.	3 or more years	Public Works and Transportation Department	Unknown	Unknown	To be determined, grants
STATUS: In progress							
Flooding	Continue to reduce repetitive flooding losses	Identify the most appropriate mitigation measure, structural or non-structural, for each	Within 2 years	Public Works and Transportation Department	\$6,000,000 (assuming \$75,000 per structure and	\$24,000,000	Hazard Mitigation Grant Program (HMGP),

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
	in the City of Arlington.	repetitive flood loss structure. Establish a priority system that ranks each repetitive loss structure in order of priority for mitigation activity. Address each structure in the order in which it was ranked.			80 known structures).		stormwater utility fees for the 25% match, grants
STATUS: In progress							
Dam Failure	Protect critical facilities and services in the City of Arlington from flooding.	Undertake a comprehensive facility review of Lake Arlington Dam and implement recommend improvements.	3-4 years	Public Works and Transportation Department	Approximately \$10,000	\$40,000	To be determined
		STATUS: Completed					
		Address infrastructure in developing/updating roadways.	3-4 years	Public Works and Transportation Department	Unknown	Unknown	To be determined
STATUS: Completed and ongoing							
Flooding	Incorporate hazard	Develop, review, update and enforce					

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
	mitigation in long-range planning and development in the City of Arlington.	city ordinances to address activities that impact flooding, including: <ul style="list-style-type: none">• Runoff associated with construction projects.					
		STATUS: Completed and ongoing					
		• Wet-flood proofing in existing commercial structures.	3-4 years	Public Works and Transportation Department	Unknown	Unknown	General fund, grants
		STATUS: In progress					
		• Compensation for partial rights, such as an easement, to prevent property from being developed contrary to a community's plan to maintain open spaces.	3-4 years	Public Works and Transportation Department	Unknown	Unknown	General fund, grants
		STATUS: Deferred to 2020 HazMAP					
Terrorism	Train first responders to locate	Train officers who locate suspicious devices.	Complete	Police Department	Unknown	Unknown	General funds

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
	suspicious devices in the City of Arlington.						
		STATUS: Completed and ongoing					
Terrorism	Preserve crime scene integrity in the City of Arlington.	Train all officers on importance of scene management for further criminal investigation.	Complete	Police Department	Unknown	Unknown	General funds
		STATUS: Completed and ongoing					
Terrorism	Train on suspicious activity reporting in the City of Arlington.	Establish suspicious activity reporting procedures.	Complete	Police Department	Unknown	Unknown	General funds
		STATUS: Completed and ongoing					
Lightning	Prioritize hazard mitigation projects to best utilize available City of Arlington and non-city funding.	Install lightning rods on existing and future communication infrastructure and other critical facilities, including City Hall, the elevated storage tanks, emergency	3-4 years	Office of Emergency Management	Unknown	Unknown	Enterprise funds, grants

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
		management operations facility (public safety building), fueling facilities for city vehicles, fire stations, police stations, power facilities, and the water treatment plants. The lightning rods will provide additional protection against damage to these facilities if struck by lightning.					
STATUS: In progress							
Extreme Temperatures	Ensure City of Arlington has an extreme heat plan in place.	Open cooling centers and provide public information.	6 months	Office of Emergency Management	\$10,000	Increased public safety.	General fund, grants
STATUS: Completed and ongoing							
Extreme Temperatures	Identify extreme heat mitigation plans for critical infrastructure	Develop extreme heat mitigation program to ensure essential functions continue in the event of high temperatures.	1 year	Office of Emergency Management	\$20,000	Increased public safety.	General fund, grants

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
	in City of Arlington.						
STATUS: In progress							
Extreme Temperatures	Develop an extreme heat outreach program for City of Arlington citizens.	Develop an extreme heat outreach program that provides tips and pertinent information for ensuring the health and safety of citizens during extreme heat.	1 year-ongoing	Public Information Office, Office of Emergency Management	\$30,000	Increased public knowledge of various forms of assistance; increased public health and safety.	General fund
STATUS: Completed and ongoing							
Extreme Temperatures	Distribute extreme heat information to City of Arlington citizens.	Provide extreme heat information to Arlington citizens through a social media campaign.	6 month-ongoing	Public Information Office, Fire Department	\$15,000	Increased public knowledge of various forms of assistance; increased public health and safety.	General fund
STATUS: Completed and ongoing							
		Provide extreme heat information through the Arlington website.	6 month-ongoing	Public Information Office, Fire Department	\$15,000	Increased public knowledge of various forms of assistance;	General fund

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
						increased public health and safety.	
STATUS: Completed and ongoing							
Tornado	Support the construction of safe rooms in the City of Arlington.	Promote the North Central Texas Safe Room Rebate Program to increase number of participants in the City of Arlington.	Annually	Office of Emergency Management	\$50,000	\$180,000	General fund, HMGP
STATUS: Completed and ongoing							
Flooding	Conduct drainage improvements to Little Creek Court location in Arlington.	Promote the North Central Texas Safe Room Rebate Program to increase number of participants in the City of Arlington.	Annually	Office of Emergency Management	\$50,000	\$180,000	General fund, HMGP
STATUS: Completed and ongoing							
Hail	Provide educational materials on the hazards associated with hail to the	Research existing public information material on hail available.	6 months	Office of Emergency Management	\$1,000	\$3,000,000	Department of Homeland Security (DHS) funds, general fund

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
	citizens of Arlington.	STATUS: Completed Provide public education materials to public.	1 year	Office of Emergency Management	\$800	\$4,000,000	DHS funds, general fund
		STATUS: Completed and ongoing Promote the North Central Texas Safe Room Rebate Program to increase number of participants in the City of Arlington.	Annually	Office of Emergency Management	\$50,000	\$180,000	General fund, HMGP
		STATUS: Completed and ongoing					
Lightning	Enhance current public education program in the City of Arlington to include information on surge protectors, lightning rods, safe rooms, safety tips, "KnoWhat2Do"	Conduct public education campaign on the hazards associated with lighting hazards and protective measures.	1 year	Office of Emergency Management	\$800	\$1,000,000	DHS funds, general fund

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
	campaign and other elements.						
		STATUS: Completed and ongoing					
Winter Storms	Provide education materials to Arlington citizens on the hazards of winter storms and effective mitigation activities.	Conduct public education campaign on mitigating the hazards associated with winter storms.	6 months	Office of Emergency Management	\$5,000	\$80,000	General fund, HMPG, DHS
		STATUS: Completed and ongoing					
Drought	Continue to update and implement the City of Arlington water conservation and drought contingency plans.	In 2015, Arlington Water Utility (AWU) will install 9,000 meters and meter interface units (MIUs) through an ongoing meter replacement program and water line renewals.	2 years	Water Department	\$5,289,000	\$12,000,000	General and capitol project funds
		STATUS: Completed and ongoing					
		Create Water Conservation	6 months	Water Department	\$98,000	\$1,000,000	General fund

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
		Specialist/Leak Detection Position.					
		STATUS: Completed					
		Create a comprehensive water conservation program.	1 year	Water Department	\$100,000	\$20,000,000	General fund
		STATUS: Completed and ongoing					
Wildfire	Protect the City of Arlington critical facilities and vulnerable populations from the effects of wildfire incidents.	Ordinances will be followed to maintain minimum distances from fuels.	Continuously	Community Development and Planning, Building Inspection and Code Compliance	\$150,000	\$500,000	General fund
		STATUS: Completed					
Wildfire	Increase public awareness of mitigating activities to prevent and safeguard property from wildfires.	Increase distribution of public information about wildfires.	6 months	Office of Emergency Management/Fire Department	\$25,000	\$80,000	General fund, DHS, HMPG
		STATUS: Completed and ongoing					

Tarrant County Hazard Mitigation Action Plan

Hazard Addressed	Objective	Action/Project Description	Projected Time to Completion	Department or Agency Responsible	Estimated Cost	Estimated Benefit	Funding Sources
Extreme Temperatures	Improve extreme heat public education distribution in the City of Arlington.	Use multiple modes of communication to distribute extreme heat information to the public.	6 months	Office of Emergency Management	\$500	\$100,000	DHS and city general funds
STATUS: Completed and ongoing							
Expansive Soils	Mitigate against expansive soils in the City of Arlington.	Continue to research and incorporate subgrade stabilization methods on street projects such as street reclamation and repairs.	Ongoing	Public Works and Transportation Department	\$4,000,000	\$100,000,000	Streets maintenance fund
		STATUS: Completed and ongoing					
		Distribute broadly homeowner information brochures on the do's and don'ts of maintaining constant moisture around residential foundations.	1 year	Office of Emergency Management	\$800	\$120,000	DHS funds
STATUS: Completed and ongoing							

5.3 New Action Items

The City of Arlington's action items were determined by the Local Planning Team for the 2020 Hazard Mitigation Action Plan (HazMAP). These actions include mitigation actions that qualify for mitigation funding as well as enforcement, maintenance, and response actions that the city has identified as opportunities to increase their resiliency to hazards.

During the capabilities assessment and hazard analysis, previously impacted assets and populations were analyzed to determine the highest probability of damage and potential of loss of life per hazard. As \$1 spent in mitigation saves a community an average of \$6 in recovery,³ we used this data to develop a cost-benefit analysis: *Estimated Cost x 6 = Estimated Benefit*.

Priority will go towards projects with the highest positive impact on community resilience, including life safety and property protection, by reviewing the scope of work, benefit-cost analysis, timeframe, and ease of implementation were also taken into account. Below are the action items for this HazMAP.

Hazard(s) Addressed	Drought, Earthquake, Expansive Soils, Extreme Heat, Flooding, Thunderstorm, Tornado, Wildfire, Winter Storm, Infectious Disease
Enhance and provide public education material about mitigation techniques for these hazards to public.	
Participating Jurisdiction:	City of Arlington
Priority:	1
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	12 months

Hazard(s) Addressed	Drought
Develop water conservation information packets for vendors to deliver to new customers.	
Participating Jurisdiction:	City of Arlington
Priority:	2
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Water Department
Implementation Schedule:	12 months

³ Natural Hazard Mitigation Saves: 2017 Interim Report. National Institute of Building Science. <<https://www.nibs.org/page/mitigationsaves>>

Hazard(s) Addressed	Flooding, Winter Storm, Infectious Disease
Evaluate the effectiveness of past mitigation projects to determine if follow up on actions are necessary.	
Participating Jurisdiction:	City of Arlington
Priority:	3
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	City general fund, city funds for staff time
Lead Agency/Department Responsible:	Office of Emergency Management, Public Works and Transportation Department
Implementation Schedule:	12 months

Hazard(s) Addressed	Tornado, Thunderstorm, Earthquake
Encourage participation in the NCT Safe Room Rebate Program if/when the program is open and assist current participants.	
Participating Jurisdiction:	City of Arlington
Priority:	4
Estimated Cost:	\$50,000
Estimated Benefit:	\$3000,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	12 months

Hazard(s) Addressed	Wildfire
Have fire districts patrol their area to ensure fuel loads are controlled according to existing ordinances in order to mitigate the potential of and damage from a wildfire.	
Participating Jurisdiction:	City of Arlington
Priority:	5
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Fire Department
Implementation Schedule:	2 months

Hazard(s) Addressed	Power Failure, Telecommunications Failure
Review emergency procedures with service providers to ensure viability of current plans.	
Participating Jurisdiction:	City of Arlington
Priority:	6
Estimated Cost:	\$1,000
Estimated Benefit:	\$6,000
Potential Funding Source(s):	City general fund
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	12 months

Hazard(s) Addressed	National Security Incident
Work with local stakeholders to ensure coordination policies are adequate.	
Participating Jurisdiction:	City of Arlington
Priority:	7
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	City general fund, Homeland Security Grant Program
Lead Agency/Department Responsible:	Office of Emergency Management, Police Department, Fire Department
Implementation Schedule:	24 months

Hazard(s) Addressed	National Security Incident
Ensure public safety elements are equipped to respond to national security incidents.	
Participating Jurisdiction:	City of Arlington
Priority:	8
Estimated Cost:	\$1,000,000
Estimated Benefit:	\$6,000,000
Potential Funding Source(s):	Homeland Security Grant Program
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Earthquake
Map and assess community vulnerability to seismic hazards in order to address data deficiencies.	
Participating Jurisdiction:	City of Arlington
Priority:	9
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	City general fund
Lead Agency/Department Responsible:	Office of Emergency Management, Public Works and Transportation Department
Implementation Schedule:	12 months

Hazard(s) Addressed	Expansive Soils
Assess and map the City's vulnerability to expansive soils in order to address data deficiencies.	
Participating Jurisdiction:	City of Arlington
Priority:	10
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	City general fund
Lead Agency/Department Responsible:	Office of Emergency Management, Public Works and Transportation Department
Implementation Schedule:	12 months

Hazard(s) Addressed	Expansive Soils
Develop expansive soils information and mitigation packets for distribution to stakeholders.	
Participating Jurisdiction:	City of Arlington
Priority:	11
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management, Public Works and Transportation Department, Community Development and Planning Department
Implementation Schedule:	24 months

Hazard(s) Addressed	Expansive Soils
Study the effectiveness of current city practices and building codes and update where needed.	
Participating Jurisdiction:	City of Arlington
Priority:	12
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Community Development and Planning Department
Implementation Schedule:	12 months

Hazard(s) Addressed	Drought
Install 9,000 meters and Meter Interface Units (MIUs) through an ongoing meter replacement program and water line renewals in order to mitigate leaks and loss of water.	
Participating Jurisdiction:	City of Arlington
Priority:	13
Estimated Cost:	\$5,289,000
Estimated Benefit:	\$12,000,000
Potential Funding Source(s):	City general fund, capital project funds
Lead Agency/Department Responsible:	Water Department
Implementation Schedule:	24 months

Hazard(s) Addressed	Drought
Create a Water Conservation Specialist/ Leak Detection Specialist position.	
Participating Jurisdiction:	City of Arlington
Priority:	14
Estimated Cost:	\$98,000
Estimated Benefit:	\$588,000
Potential Funding Source(s):	City general fund
Lead Agency/Department Responsible:	Water Department
Implementation Schedule:	6 months

Hazard(s) Addressed	Flooding
Research and distribute to all stakeholders current data related to the condition of and hazards associated with the city's dams.	
Participating Jurisdiction:	City of Arlington
Priority:	15
Estimated Cost:	\$1,000
Estimated Benefit:	\$6,000
Potential Funding Source(s):	City general fund
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Extreme Heat
Incorporate “heat island” countermeasures, such as cooling centers, public awareness, and cool pavements within the city.	
Participating Jurisdiction:	City of Arlington
Priority:	16
Estimated Cost:	\$50,000
Estimated Benefit:	\$300,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Community Development and Planning Department
Implementation Schedule:	24 months

Hazard(s) Addressed	Nuclear Accident, Hazardous Material Spill
Conduct training on nuclear material accident response.	
Participating Jurisdiction:	City of Arlington
Priority:	17
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	City general fund, Homeland Security Grant Program
Lead Agency/Department Responsible:	Fire Department, Police Department
Implementation Schedule:	12 months

Hazard(s) Addressed	Earthquake, Extreme Heat, Flooding, Thunderstorm, Tornado, Wildfire, Winter Storm, Power Failure, Telecommunications Failure
Encourage residents to take advantage of the Texas Emergency Preparedness Tax Holiday to buy supplies to enhance their mitigation efforts.	
Participating Jurisdiction:	City of Arlington
Priority:	18
Estimated Cost:	\$1,000
Estimated Benefit:	\$6,000
Potential Funding Source(s):	City general fund
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	6 months

Hazard(s) Addressed	Nuclear Accident, Hazardous Material Spill
Develop a notification system for all stakeholders when nuclear material is being transported through the city.	
Participating Jurisdiction:	City of Arlington
Priority:	19
Estimated Cost:	\$1,000
Estimated Benefit:	\$6,000
Potential Funding Source(s):	City general fund
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	6 months

Hazard(s) Addressed	Flooding
Schedule a Community Assistance Visit (CAV) by FEMA or a State agency on behalf of FEMA to assure that the city is adequately enforcing its floodplain management regulations.	
Participating Jurisdiction:	City of Arlington
Priority:	20
Estimated Cost:	\$1,000
Estimated Benefit:	\$6,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Flooding
Work with the Stormwater Department and Floodplain Manager to create a document to track progress on repetitive loss and severe repetitive loss properties.	
Participating Jurisdiction:	City of Arlington
Priority:	21
Estimated Cost:	\$100
Estimated Benefit:	\$600
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Flooding
Conduct NFIP community workshops to provide information and incentives for property owners to acquire flood insurance.	
Participating Jurisdiction:	City of Arlington
Priority:	22
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Flooding
Remove existing structures from flood-prone areas to minimize future flood losses by acquiring and demolishing or relocating structures from voluntary property owners and preserving land subject to repetitive flooding.	
Participating Jurisdiction:	City of Arlington
Priority:	23
Estimated Cost:	\$1,000,000
Estimated Benefit:	\$6,000,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Flooding
Use bioengineered bank stabilization techniques and revetments to protect against flooding.	
Participating Jurisdiction:	City of Arlington
Priority:	24
Estimated Cost:	\$1,000,000
Estimated Benefit:	\$6,000,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Earthquake, Thunderstorm, Tornado, National Security Incident
Require construction of safe rooms in new schools, daycares, and nursing homes.	
Participating Jurisdiction:	City of Arlington
Priority:	25
Estimated Cost:	\$1,000,000
Estimated Benefit:	\$6,000,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Wildfire
Promote conservation of open space or wildland-urban interface boundary zones to separate developed areas from high-hazard areas.	
Participating Jurisdiction:	City of Arlington
Priority:	26
Estimated Cost:	\$100
Estimated Benefit:	\$600
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Flooding, Thunderstorm, Tornado, Wildfire, Winter Storm
To protect power lines, either bury overhead power lines, ensure ordinances for proper vegetation management practices, replace wood poles with steel or composite ones, or reinforce utility poles with guy wires.	
Participating Jurisdiction:	City of Arlington
Priority:	27
Estimated Cost:	\$300,000,000
Estimated Benefit:	\$1,200,000,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

Hazard(s) Addressed	Flooding
Work with the state to conduct a study that will fill data deficiency including inundation zones, vulnerability to, and potential impacts of a dam failure.	
Participating Jurisdiction:	City of Arlington
Priority:	28
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	City general fund, hazard mitigation grants
Lead Agency/Department Responsible:	Office of Emergency Management
Implementation Schedule:	24 months

5.4 Plan Incorporation into Existing Planning Mechanisms

Based on Requirement 201.6(c)(4)(ii) and the State of Texas Mitigation Plan, the vulnerability and capabilities assessment for the city were carefully reviewed and considered when developing the mitigation actions for this plan. The Local Planning Team (LPT) will establish a process in which the mitigation strategy, goals, objectives, and actions outlined in this plan will be incorporated into the existing local planning strategies.

Once the plan is adopted, the LPT will coordinate implementation with the responsible parties in the city, as well as external stakeholders as needed.

The following steps will be taken in implementing this HazMAP into local plans:

1. Change is proposed by an elected official or other interested party.
2. Proposal is placed on the local agenda of the governing body.
3. Agenda is published at least 10 days in advance of the meeting at which it will be discussed, so members of the public have an opportunity to attend the discussion meeting. Publication may be made by posting the agenda on the city's website, in the city newsletter, or on a public bulletin board.
4. Proposal is discussed at the public meeting, including any comments by members of the public attendance.

5. Proposal is voted on by the governing body.
6. If the proposal is passed, the change is implemented by the appropriate local authority.

Existing planning mechanisms in which the HazMAP will be integrated are listed below.

Type of Plan or Activity	Department Responsible	Update Schedule	Actions to be Integrated	Integration Method
Zoning Ordinances	Community Development and Planning Department	Every 5 years	Reference this HazMAP when developing the plan.	When reviewing Zoning Ordinances, the leadership team will review the HazMAP to see which action items can be addressed with the fiscal and administrative capabilities of the city.
Strategic Plan updates	Community Development and Planning Department, Public Works and Transportation Department, Transportation Department, Office of Emergency Management	Annually	Reference this HazMAP when developing the plans for critical infrastructure and resources.	The plan development team will reference the HazMAP when updating this plan, in such areas as strengthening critical infrastructure and key resources based on HazMAP hazard analysis, incorporating vulnerability data, and action items.
Capital Improvement Plan	Community Development and Planning Department, Public Works and Transportation Department	Every 5 Years	Reference this HazMAP when developing the plans for critical infrastructure and resources.	The planning team, city leadership, and city staff will review mitigation action items considering plan revision as necessary, and implement actions based on priority given to project over other projects that are also already funded. Projects approved by departments, city engineers, and city management are presented to city council for final approval to begin project.

Although it is recognized that there are many possible benefits to integrating components of this Hazard Mitigation Action Plan (HazMAP) into other planning mechanisms, the LPT considers this HazMAP, including development and maintenance, to be the primary vehicle to ensure implementation of local hazard mitigation actions.

This completes the annex for the City of Arlington. For additional information, see Appendices A and B.