

CHAPTER 17

CAPITAL IMPROVEMENT PROGRAM

In addition to an Annual Operating Budget, the City of Benbrook prepares a Capital Improvement Program (CIP) each year. The CIP is a listing of planned capital projects for the upcoming five-year period together with the expected costs and anticipated methods of financing. The CIP includes projects relating to Community Facilities, Streets, Drainage Facilities as well as the acquisition of larger or specialized equipment.

To be included in the CIP, expenditures must meet all of the following general criteria:

1. Qualify as a capital project.
2. Have a useful life of not less than five years.
3. Exceed \$25,000.

Many CIP projects have ongoing costs for staffing and maintenance well beyond its initial purchase and/or construction. Therefore, it is important to note that once a project is approved, the entire project, not just the first year's portion, may be bid out and awarded. For projects that span multiple years, this may create a future obligation to complete the project. For this and other reasons, the CIP must be viewed from a multi-year perspective.

Funding for CIP comes from several sources including:

1. Transfers from the Operating Budget
2. Transfers from reserves
3. Economic Development Corporation
4. Tax Increment Financing District
5. Stormwater Utility Fund
6. Grants or other outside contributions

17.1 Project Summaries

Based on an analysis of needs and available funding, Table 17.1, as well as Sections 17.1.1 Community Facilities and Equipment, 17.1.2 Streets, and 17.1.3 Drainage Facilities provides a summary and description of the City of Benbrook's five-year CIP.

Table 17.1
Five-Year Capital Improvement Plan (CIP)
As of December 31, 2018

Fiscal Year	Category	Project	Project Budget	Status	Funding Source
Current Year 2018-19	Community Facilities and Equipment	Park Shade Structures	\$80,000	Council Approved FY 2018-19 Budget	Parkland Dedication Fund
		800 MHz Radio System	\$920,000* (*\$560,000 after applying \$360,000 grant award)	Council Approved FY 2018/19 Budget	General Fund
		Jail Renovation	\$175,000	Council Approved FY 2018/19 Budget	Capital Facilities Fund
		Replace 1997 Pumper Fire Truck (order truck in Current Year, but due to manufacturing lead time the City won't take delivery until Year 1)	\$700,000* (*Likely \$525,000 pending grant approval – payment due on delivery)	PROPOSED	Capital Asset Replacement Fund
Year 1 2019-20		Replace 1997 Pumper Fire Truck (carryover from FY 2018-19)	See above	See above	See above
Year 2 2020-21		NO PROJECTS PROPOSED IN YEAR 2	N/A	N/A	N/A
Year 3 2021-22		NO PROJECTS PROPOSED IN YEAR 3	N/A	N/A	N/A
Year 4 2022-23		City Hall/Police Station	TBD	PROPOSED	General Fund
		Replace 1999 Quint Fire Truck (order truck in Year 4, but due to manufacturing lead time the City won't take delivery until Year 5)	\$1,300,000 (payment due on delivery)	PROPOSED	Capital Asset Replacement Fund
Year 5 2023-24		City Hall/Police Station (carryover from Year 4)	See above	See above	See above
	Replace 1999 Quint Fire Truck (carryover from Year 4)	See above	See above	See above	
	Pedestrian Tunnel under Benbrook Boulevard/U.S. 377 @ Overcrest	\$2,507,129	PROPOSED	NCTCOG/ Up To 20% City Match	

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Fiscal Year	Category	Project	Project Budget	Status	Funding Source
Current Year 2018-19	Street Improvements	Benbrook Boulevard	City share \$2,822,353	Scheduled Completion February 2019	Core Value Fund
		Utility Relocation on Benbrook Boulevard	\$2,930,000	Scheduled Completion February 2019	Core Value Fund
		Irrigation on Benbrook Boulevard	\$395,000	Scheduled Completion August 2019	Landscaping Fund/EDC
		Landscaping on Benbrook Boulevard	\$130,000	Engineering	Landscaping Fund/EDC
		Monument and Way finding Signs on Benbrook Boulevard	\$76,000	Engineering	EDC
		Vista Way Extension (Mercedes to IH-20 Service Road)	\$2,334,233	Scheduled Completion October 2019	Tax Increment Financing District Fund
		Benbrook Field Drive Traffic Signal	\$125,000	Scheduled Completion February 2019	Tax Increment Financing District Fund
		Clear Fork Emergency Access Bridge	\$1,600,000	Engineering	General Fund
		43 rd CDBG Project Bellaire Drive Streetlight Installation	\$108,281	Engineering	Community Development Block Grant
		2019 Annual Street Overlay Program	\$450,000	City Council Approved Oct. 18, 2018	General Fund/Road Damage Fund
Year 1 2019-20		Vista Way Extension (Mercedes to IH-20 Service Road) (carryover from FY 2018-19)	See above	See above	See above
		Clear Fork Emergency Access Bridge (carryover from FY 2018-19)	See above	See above	See above

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Fiscal Year	Category	Project	Project Budget	Status	Funding Source
Year 1 2019-20	Street Improvements	45 th CDBG Project Crosslands Road Streetlight Installation	\$150,000	Proposed	Community Development Block Grant
		2020 Annual Street Overlay Program	\$450,000	Proposed	General Fund
Vista Way to Benbrook Boulevard Connection and I-20 Service Road Two-Way Conversion		\$1,410,000* *does not include ROW acquisition costs	Proposed	Tax Increment Financing District Fund	
2021 Annual Street Overlay Program		\$450,000	Proposed	General Fund	
Vista Way to Benbrook Boulevard Connection and I-20 Service Road Two-Way Conversion (carryover from Year 2)		See above	See above	See above	
Year 3 2021-22		47 th CDBG Project Bellaire Drive Sidewalk Installation	\$100,000	Proposed	Community Development Block Grant
		2022 Annual Street Overlay Program	\$450,000	Proposed	General Fund
		Year 4 2022-23	2023 Annual Street Overlay Program	\$450,000	Proposed
Year 5 2023-24			49 th CDBG Project Crosslands Road Sidewalk Installation	\$85,000	Proposed
		2024 Annual Street Overlay Program	\$450,000	Proposed	General Fund
Current Year 2018-19	Drainage Facilities	Chapin Road Cross Culvert Replacement and Drainage Improvements	N/A	N/A	N/A

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Fiscal Year	Category	Project	Project Budget	Status	Funding Source
Year 1 2019-20	Drainage Facilities	Chapin Road Cross Culvert Replacement and Drainage Improvements (carry over from Current Year)	\$327,000	Engineering	Storm Water Utility Fund
		Van Deman Drive Drainage Improvements	\$181,000	Engineering	Storm Water Utility Fund
Year 2 2020-21		Westerly Ditch Drainage Improvements	\$150,000	Proposed	Storm Water Utility Fund
Year 3 2021-22		Southside/Dawn Plantation West Drainage Improvements	\$300,000	Proposed	Storm Water Utility Fund
Year 4 2022-23		Dutch Branch Park Low Water Crossing Improvements	\$320,000	Proposed	Storm Water Utility Fund
Year 5 2023-24		Dutch Branch Park Drainage Improvements	\$250,000	Proposed	Storm Water Utility Fund

17.1.1 Community Facilities and Equipment

Park Shade Structures - The park equipment at South Benbrook, Twilight and Timber Creek Parks do not have shade structures, causing the equipment to become hot during the day. The proposed shade structures will fully cover the equipment, providing relief from the direct sun for children and families using the equipment. The cost of the equipment was approved in the FY 2018-19 budget.

800 MHz Radio System - The City's existing UHF emergency radio system, used by emergency responders and field service staff, is no longer an effective communication system. The new 800 MHz radio system allows for interagency communication (Fort Worth and most other local agencies), eliminates dead spots and is generally more reliable. The cost of the equipment was approved in the FY 2018-19 budget.

Jail Renovation - The Police Department's electronic jail-cell-door operating system and manual override system are at the end of their respective life cycles. Replacement parts and technical support are no longer available. While City crews have been able to repair mechanical problems, the system is subject to further breakdown and possible failure. The cost of the equipment replacement was approved in the FY 2018-19 budget.

Pumper Fire Truck - The Fire Department's 1997 Pumper Fire Truck is nearing the end of its scheduled 25-year life cycle and is scheduled for replacement at the beginning of the 2019-20 budget year. The National Fire Protection Association (NFPA, 1911 Annex D) recommends replacing fire trucks after 25 years of service. The lead time from purchase to delivery of a new fire truck is approximately 12 - 18 months.

City Hall and Police Station - City Hall was constructed in 1976 and housed City Council meetings, city management staff, city support staff, and the Police Department. In 1986, a new police station was built allowing the Police Department to relocate from City Hall. In 1987, City Hall was remodeled to better accommodate staff and citizen needs. Unfortunately, the police station no longer meets the needs of the growing Police Department and City Hall is in need of significant renovations. The City has retained an architect to review the City's existing and future building needs.

Quint Fire Truck - The Fire Department's 1999 Quint "ladder" Fire Truck is 20 years old. The National Fire Protection Association (NFPA, 1911 Annex D) recommends replacing fire trucks after 25 years of service. The lead time for fire truck design and construction is approximately 12-18 months. The CIP recommends the City order the replacement fire truck in early FY 2022-23 and take delivery in FY 2023-24.

Pedestrian Tunnel - The Dutch Branch Park Pedestrian/Bicycle Access project will connect the western portion of the City to the eastern portion of the City in a safe manner. The project includes construction of an access tunnel under Benbrook Boulevard (U.S. 377), a six (6) lane arterial, near Overcrest Drive in the southwest part of the City near Dutch Branch Park. The proposed access way allows pedestrians/bicyclists to safely cross under Benbrook Boulevard without having to cross the street in heavy traffic. This project also allows students (an elementary, middle and high school are within walking distance of the park) to safely travel to Dutch Branch Park to enjoy the various amenities. Fort Worth ISD has entered into agreements with the City allowing use of the tennis courts for their tennis teams, the baseball/softball fields for practice and construction a new baseball field for the high school.

17.1.2 Streets

Benbrook Boulevard - The Texas Department of Transportation (TxDOT) reconstruction of Benbrook Boulevard from IH-820 to Winscott/Lakeside Drive is substantially complete. Crews continue to finalize installation of the remaining hardscape (curbs, ramps, sidewalks, etc.) adjacent to the main lanes. The City's local project match was funded utilizing the Core Value Fund.

Benbrook Boulevard Utility Relocation - Utility relocation and the removal of utility poles along the corridor is expected to be completed in February 2019.

Benbrook Boulevard Landscaping and Irrigation - Crews will begin installation of the irrigation system and landscaping along the length of the corridor once all the underground utilities and remaining hardscape projects are complete.

Benbrook Boulevard Monument and Way Finding Signs - Crews will begin installation of the monument and way finding signs along the length of the corridor once the underground utilities and hardscape projects are complete.

Vista Way Extension Project - The engineering design for the extension of Vista Way began in April 2016 and construction began in September 2018. The project extends Vista Way from Mercedes Street to the I-20 Service Road. The project also includes extending water, sanitary sewer, storm drains and sidewalks. The project is funded through the Tax Increment Finance District.

Benbrook Field Drive Traffic Signal Project - The traffic signal on Benbrook Boulevard at Benbrook Field Drive is expected to be installed and operational by February 2019. The traffic signal will allow traffic on Benbrook Boulevard to more safely enter the ATT store on the east side of the highway and the future development near McDonalds on the west side of the highway.

Clear Fork Emergency Access Bridge Project - The Clear Fork Emergency Access Bridge interlocal agreement with Fort Worth was approved by both City Councils in 2018. The gated, one lane emergency access bridge will span the Clear Fork Trinity River within TxDOT right-of-way just north of where the river intersects with I-20 and will connect to Bellaire Drive. Engineering design of the emergency access bridge is approximately 60% complete and expected to be 100% complete by spring 2019. Construction of the emergency access bridge is expected to begin by fall 2019 and completed by fall 2020.

Bellaire Streetlight Installation - Streetlights will be installed on the 5600-5700 blocks of Bellaire Drive between Crosslands Road and Watercourse Drive in 2019. Funding of the project is from the 43rd Year Community Development Block Grant program administered by Tarrant County.

Crosslands Road Streetlight Installation - Streetlights are proposed to be installed along Crosslands Road between Bellaire Drive and approximately 420 feet north of Southwest Boulevard in 2020. Funding of the project is expected to come from the 45th Year Community Development Block Grant program administered by Tarrant County.

Vista Way Connection to Benbrook Boulevard and I-20 Service Road Two-Way Conversion Project - The CIP includes a new roadway and utility project that connect Vista Way to Benbrook Boulevard and further provides for the two-way conversion of a

portion of the I-20 Service Road. The project is proposed to be funded through the Tax Increment Finance District.

Bellaire Drive Sidewalk Installation - Sidewalk installation is proposed along the north side of Bellaire Drive between Crosslands Road and Watercourse Drive in 2022. Funding of the project is expected to come from the 47th Year Community Development Block Grant program administered by Tarrant County.

Crosslands Road Sidewalk Installation - Sidewalk installation is proposed along the east side of Crosslands Road between Bellaire Drive and approximately 420 feet north of Southwest Boulevard in 2024. Funding of the project is expected to come from the 49th Year Community Development Block Grant program administered by Tarrant County.

Annual Street Overlay Program - The CIP includes an annual expenditure of \$450,000 to fund the street overlay program. Tarrant County furnishes all equipment and labor necessary to overlay the street segments provided the City pays the cost of all necessary materials and traffic control.

17.1.3 Drainage Facilities

Chapin Road Cross Culvert Replacement and Drainage Project - During routine inspection, deterioration of the corrugated metal pipe was found in the flowlines and roofs of the culvert pipes. The structural integrity of the pipes will continue to decrease, eventually leading to road surface damage and ultimate failure. This project will include replacing the existing double 48-inch corrugated metal arch pipe cross culvert with a reinforced concrete box cross culvert system.

Van Deman Drainage Project - The intersection of Van Deman and Chapin Road experiences flooding during relatively light rain events. This project includes constructing storm drain inlets and routing the stormwater to existing drainage structures. The project will reduce the flooding of the intersection and improve traffic safety.

Westerly Ditch Drainage Project - The drainage ditch between Chapin Road and Circle S Road needs to be reshaped and armored to allow stormwater to more freely flow down the ditch. The ditch, both upstream and downstream of this location, has been improved allowing for greater flow capacities. However, the stormwater bottlenecks at this ditch section and must be reshaped and armored with geogrid matting and vegetation to function properly.

Southside/Dawn Plantation West Drainage Project - This drainage project is a continuation of the previous Plantation West Drainage Improvement project. The previous project made improvements upstream of the Dawn Street bridge and this project proposes improvements on the downstream side of the bridge.

Dutch Branch Park Low Water Crossing Project - The low water crossing on Lake Shore is a hazard to vehicles and bicycles when water overtops the road during heavy rains. City crews have to shut gates to keep drivers from traveling across the flooding road during heavy rains. Improvements may include a bridge structure or reinforced box culvert design. The crossing would also include railings to keep drivers from leaving the road, whereas the current low water crossing has very little barriers to keep vehicles from leaving the road.

Dutch Branch Park Drainage Improvements Project - During heavy rains, stormwater flows across ball fields and the running track damaging infrastructure and ponding in low areas creating mosquito traps. The project would regrade the park as needed to allow water to flow through the park without damaging infrastructure. The project will evaluate the drainage patterns in the park and recommend grading improvements that minimizes disturbances to the existing infrastructure while allowing water to safely flow through the park.