



*** PUBLIC NOTICE ***

**NOTICE OF A CITY COUNCIL REGULAR SESSION IMMEDIATELY FOLLOWING
A WORKSHOP SESSION
OF THE CITY OF CORINTH**

**Thursday, April 4, 2019, 5:45 P.M.
CITY HALL - 3300 CORINTH PARKWAY**

CALL TO ORDER:

WORKSHOP BUSINESS AGENDA

1. Hold a discussion and provide staff direction on a City Logo.
2. Receive a report, hold a discussion, and give staff direction on the Water and Wastewater Rates.
3. Discuss Regular Meeting Items on Regular Session Agenda, including the consideration of closed session items as set forth in the Closed Session agenda items below.

ADJOURN WORKSHOP SESSION

***NOTICE IS HEREBY GIVEN** of a Regular Session of the Corinth City Council to be held at Corinth City Hall located at 3300 Corinth Parkway, Corinth, Texas. The agenda is as follows:

**7:00 p.m. CALL TO ORDER, INVOCATION, PLEDGE OF ALLEGIANCE & TEXAS PLEDGE:
"Honor the Texas Flag: I pledge allegiance to thee, Texas, one state under God, one and indivisible".**

PRESENTATION:

1. Formal presentation by the Texas Police Chiefs Association to issue the Corinth Police Department its "Re-Recognized" Status for the Best Practices accreditation program.

CONSENT AGENDA

All matters listed under the Consent Agenda are considered to be routine and will be enacted in one motion. Should the Mayor, a Councilmember, or any citizen desire discussion of any Item that Item will be removed from the Consent Agenda and will be considered separately.

2. Consider and act on the minutes from the March 7, 2019 Workshop Session.

3. Consider and act on minutes from the March 7, 2019 Regular Session.
4. TXDOT Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signals Amendment 3.
5. Consider and Act on a proposal from ABM Industries, Inc. to provide custodial services for City facilities.
6. Adoption of the Asset Management Plan as prepared by Public Sector Digest for the City of Corinth.
7. Consider and act on a contract for service between Brittan & Crawford LLC and the Corinth Economic Development Corporation for surveying and preparing acquisition documents for surplus right-of-way to be acquired from the Texas Department of Transportation, including legal descriptions and drawing exhibits, for an amount not to exceed \$20,000.00.

CITIZENS COMMENTS

In accordance with the Open Meetings Act, Council is prohibited from acting on or discussing (other than factual responses to specific questions) any items brought before them at this time. Citizen's comments will be limited to 3 minutes. Comments about any of the Council agenda items are appreciated by the Council and may be taken into consideration at this time or during that agenda item. Please complete a Public Input form if you desire to address the City Council. All remarks and questions addressed to the Council shall be addressed to the Council as a whole and not to any individual member thereof. Section 30.041B Code of Ordinance of the City of Corinth.

BUSINESS AGENDA

8. Consider and act upon a request from the applicant, Lawrence Holdorf, authorized representative for the property owner, Markwardt Investment Holdings LLC, for a Major Subdivision Waiver to the City of Corinth Access Management Standards out of the City's Unified Development Code (UDC) to allow a reduction in the minimum required distance between driveways along a major arterial street for the proposed driveway on property legally described as A0915A MEP & PRR, TR 10(PT), 2.031 ACRES, OLD DCAD TR #3A(2), A0833A E. MARSH, TR 27, .443 ACRES, OLD DCAD TR #8A(1D), and A0153A BBB & CRR, TR 2, .401 ACRES, OLD DCAD TR #10A (FM 2181 Commercial Development)

COUNCIL COMMENTS & FUTURE AGENDA ITEMS

The purpose of this section is to allow each councilmember the opportunity to provide general updates and/or comments to fellow councilmembers, the public, and/or staff on any issues or future events. Also, in accordance with Section 30.085 of the Code of Ordinances, at this time, any Councilmember may direct that an item be added as a business item to any future agenda.

CLOSED SESSION

The City Council will convene in such executive or (closed session) to consider any matters regarding any of the above agenda items as well as the following matters pursuant to Chapter 551 of the Texas Government Code.

Section 551.071. (1) Private consultation with its attorney to seek advice about pending or contemplated litigation; and/or settlement offer; and/or (2) a matter in which the duty of the attorney to the government body under the Texas Disciplinary Rules of Professional Conduct of the State of Texas clearly conflicts with chapter 551.

Section 551.072. To deliberate the purchase, exchange, lease or value of real property if deliberation in an open meeting would have a detrimental effect on the position of the governmental body in negotiations with a third

person.

Section 551.074. To deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; or to hear a complaint or charge against an officer or employee.

Section 551.087. To deliberate or discuss regarding commercial or financial information that the governmental body has received from a business prospect that the governmental body seeks to have locate, stay, or expand in or near the territory of the governmental body and with which the governmental body is conducting economic development negotiations; or to deliberate the offer of a financial or other incentive to a business prospect.

After discussion of any matters in closed session, any final action or vote taken will be in public by the City Council. City Council shall have the right at any time to seek legal advice in Closed Session from its Attorney on any agenda item, whether posted for Closed Session or not. **Closed Session may happen at any time during the Workshop Session and before the start of a City Council Regular Session.**

RECONVENE IN OPEN SESSION TO TAKE ACTION, IF NECESSARY, ON CLOSED SESSION ITEMS.

ADJOURN:

Posted this 29th day of March, 2019 at 11:30 a.m. on the bulletin board at Corinth City Hall.

Kimberly Pence
Kimberly Pence, City Secretary
City of Corinth, Texas

WORKSHOP BUSINESS ITEM 1.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: City Logo
Submitted For: Bob Hart, City Manager **Submitted By:** Kim Pence, City Secretary
City Manager Review: Approval: Bob Hart, City Manager
Strategic Goals: Economic Development
Citizen Engagement &
Proactive Government
Regional Cooperation

AGENDA ITEM

Hold a discussion and provide staff direction on a City Logo.

AGENDA ITEM SUMMARY/BACKGROUND

The communication consulting firm, Slate Communications, will participate in the meeting through a conference call. Based on prior discussions, Slate Communications will present four logos for council consideration.

RECOMMENDATION

Reach a consensus of the preferred logo.

Attachments

Presentation

CITY OF CORINTH

LOGO
DESIGN
OPTIONS

DIRECTION

Build upon the current brand by creating a unique and timeless logo honoring the City and Texas that also resonates with the wide demographic and close-knit community.

PAIN POINTS

Current logo is dated

Brand is not versatile for different communication media

Logo appears to resemble a sports team's logo

Current logo speaks more to Texas than the City

CREATIVE DIRECTION

COMMUNITY
PRIDE

SAFE

BOLD

VIBRANT

MULTI-
GENERATIONAL

EMERGING
CITY

STABLE

QUALITY

BEDROOM
COMMUNITY

TRADITIONAL

COLORS

ENERGY
•
STRENGTH

TRUST
•
STABILITY

COMFORTABLE
•
NATURAL



CORINTH

T E X A S



CORINTH
T E X A S



CORINTH
T E X A S





CORINTH
T E X A S







CORINTH

TEXAS







CORINTH
T E X A S







WORKSHOP BUSINESS ITEM 2.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: Water Rate Study
Submitted For: Bob Hart, City Manager **Submitted By:** Lee Ann Bunselmeyer, Director
City Manager Review: Approval: Bob Hart, City Manager
Strategic Goals: Citizen Engagement &
Proactive Government

AGENDA ITEM

Receive a report, hold a discussion, and give staff direction on the Water and Wastewater Rates.

AGENDA ITEM SUMMARY/BACKGROUND

The City retained Carolyn M. Marshall, CPA to perform a cost of service and rate design study for the City's water and wastewater utility. The study's intent is to achieve a water and wastewater structure that will assure equitable and adequate revenues for operations, debt service retirement, capital improvements and bond covenant requirements. The analysis examined revenue requirements for a five-year period beginning with fiscal year 2019-2020.

RECOMMENDATION

PRESENTATION ITEM 1.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: TPCA Best Practices Re-Recognition Presentation
Submitted For: Jerry Garner, Police Chief **Submitted By:** Jimmie Gregg, Lieutenant
City Manager Review: Approval: Bob Hart, City Manager
Strategic Goals: Citizen Engagement & Proactive
Government
Organizational Development

AGENDA ITEM

Formal presentation by the Texas Police Chiefs Association to issue the Corinth Police Department its "Re-Recognized" Status for the Best Practices accreditation program.

AGENDA ITEM SUMMARY/BACKGROUND

Formal presentation from the Texas Police Chiefs Association and members of the Corinth Police Department Command Staff.

RECOMMENDATION

N/A

Attachments

Media Release

Corinth Police Department
Press Release
3/22/19

Corinth Police Department Receives “Recognized Law Enforcement Agency” from the Texas Law Enforcement Recognition Program

On **January 6, 2019**, the Corinth Police Department received the award of “Recognized Law Enforcement Agency” from the Texas Police Chiefs Association Law Enforcement Recognition Program. Begun in 2006, the Recognition Program evaluates a Police Department’s compliance with over 168 Best Business Practices for Texas Law Enforcement. These Best Practices were carefully developed by Texas Law Enforcement professionals to assist agencies in the efficient and effective delivery of service and the protection of individual’s rights. These Best Practices cover all aspects of law enforcement operations including use of force, protection of citizen rights, vehicle pursuits, property and evidence management, and patrol and investigative operations.

The Corinth Police Department was originally recognized by the Texas Police Chiefs Association Law Enforcement Recognition Program in January of 2011. Police agencies recognized by the TPCA must undergo an onsite inspection every 4th year and this makes the third successful onsite inspection by the Corinth Police Department.

This voluntary process required the Corinth Police Department to conduct a critical self-review of the agency’s policies, procedures, facilities and operations. Beginning in the Summer of 2018, the department begin the lengthy process to become a “Recognized” Law Enforcement Agency” by preparing proofs of compliance for each of the Texas Law Enforcement Best Business Practices. Upon completion of the internal review, an outside audit and review was requested. This final on-site review took place February 21-22, 2019. The on-site review is conducted by trained Police Chiefs from other areas of our state. The result of this review was then sent to the Texas Police Chiefs Association’s Recognition Committee for final analysis and decision to award “Recognized” status.

On March 13th, the department was notified that it had been awarded the coveted “Recognized Law Enforcement Agency” award. The Corinth Police Department has always considered itself to be one of the best in the state. This process provided for an independent review of the department’s operations and should assure the citizens of Corinth that its Police Department is conforming to the current state of the art in law enforcement.

The actual presentation of the award will take place at Corinth City Hall on April 4, 2019 at 7pm. The department will also be recognized at the Texas Police Chiefs Association annual conference in April.

More information a description of the program may be viewed on the Texas Police Chiefs Association website at <http://www.texaspolicechiefs.org>.

CONSENT ITEM 2.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: March 7, 2019 Workshop Session
Submitted For: Kim Pence, City Secretary
City Manager Review: Approval: Bob Hart, City Manager
Strategic Goals: Citizen Engagement & Proactive Government

Submitted By: Kim Pence, City Secretary

AGENDA ITEM

Consider and act on the minutes from the March 7, 2019 Workshop Session.

AGENDA ITEM SUMMARY/BACKGROUND

Attached are the minutes from March 7, 2019 Workshop Session. The minutes are in draft form and are not considered official until formally approved by the City Council.

RECOMMENDATION

Staff recommends approval of the March 7, 2019 Workshop Session minutes.

Attachments

Minutes

**STATE OF TEXAS
COUNTY OF DENTON
CITY OF CORINTH**

On this the 7th day of March 2019 the City Council of the City of Corinth, Texas met in Workshop Session at the Corinth City Hall at 5:45 P.M., located at 3300 Corinth Parkway, Corinth, Texas. The meeting date, time, place and purpose as required by Title 5, Subtitle A, Chapter 551, Subchapter C, Section 551.041, Government Code, with the following members to wit:

Members Present:

Mayor Heidemann
Sam Burke, Mayor Pro-Tem
Don Glockel, Council Member
Tina Henderson, Council Member
Lowell Johnson, Council Member

Members Absent:

Scott Garber, Council Member

Others Present

Tom Winterburn, DCTA Representative and Ethics Committee Member
Ryan Burk, Founder of Slate Communications
Liz Cassi, Slate Communications Project Manager

Staff Members Present

Bob Hart, City Manager
Kim Pence, City Secretary
Patricia Adams, Messer, Rockefeller, & Fort
Helen-Eve Liebman, Planning and Development Director
Lee Ann Bunselmeyer, Finance Director
Jason Alexander, Director of Economic Development
Shea Rodgers, Technology Services Manager
Chris Rodriguez, Assistant Finance Director
Jerry, Garner, Police Chief

CALL TO ORDER:

Mayor Heidemann called the meeting to order at 5:45 p.m.

WORKSHOP BUSINESS AGENDA:

1. Hold a discussion and provide staff direction on a City Logo.

Bob Hart, City Manager – This is a follow up from a couple of week ago. Liz Cassi and Ryan Burk with Slate Communications are on the phone from Colorado.

Ryan Burk, founder of Slate Communications – Thank you for having us. I have Liz Cassi Communication Specialist with Slate here with me. We would like to review initially what we talked about and discuss the logo revision. We tried to make sure we created a versatile logo that is not dated and can be used upon many different applications; from vehicles to apparel, and does not look like a sports team logo. We want to showcase Texas and bring that into the Logo. The

design team tried to take the elements that are descriptive of the City of Corinth; a community that stays, is vibrant, is multigenerational, has quality of life should be illustrated within the logo ensuring all of this is showcased and come up with a sophisticated logo that still shows the character. The colors are representative of the character; red shows a measure of strength and energy: blue shows stability: lighter blue is more comfortable in nature and represents a bedroom community. The first logo was shown previously, with a swoosh of the “C”, the team wanted to make it more solid, rounded and aggressive. This wasn’t as light as the previous one and has a lot more strength to it. Option two is the illustrative version of the window at city hall. The team wanted to ensure it was a mark that was easy to reproduce, so they pulled some of the color from it. It is unique and original just as Corinth is to the rest of Texas. I believe this will definitely stand out from your neighbors. The third option brings in the column feature at city hall by bringing in the Corinthian column. We are addressing several things; such as the illustrative column that is a very versatile and a re-producible mark. Option four is a new option with the intention of refreshing the original Corinth Logo making it more versatile. It is more timeless and easily recognizable from afar. This one looks more professional and official and not like a sports team logo. We would appreciate some feedback from Council on their direction for the logos.

Several Councilmembers agreed they do not like the last logo option.

Councilmember Henderson – I dislike the changes to the second logo, too squatty and a lot of color, maybe make the second and the third logo with two colors, all the different colors make it look cheap. It looks crisper and fresher without the light blue.

Councilmember Glockel - if those are the only four we have to choose from, I agree with Councilmember Henderson. None of the other three have a message or are distinguishable on the trucks just a glob of paint without a distinguishable design and meaning. The star reminds me of a sports team, but I like it better than number four. What does the other two represent to others at trade shows, just a window of our building?

Mayor Heidemann – reminded Council the objective is to get the Corinthian look into our logo which represents our city.

Councilmember Glockel – number two is the window above the main entry of this building. We have bought signs with a more Corinthian and blocky look than this dome, so all of our signs so far are not this dome.

Bob Hart, City Manager – That is the face of city hall and that is the architectural element tying them together.

Mayor Pro-Tem Burke – likes option one and three, but agrees number one does look like the Houston Texans star, but feels they both look better than the current logo.

Councilmember Henderson – would like to see the column logo without the light blue, the whole column in one color, navy, and make the name Corinth in red. I like the look on the trucks a lot.

Mayor Pro-Tem Burke - Council agreed to hold onto option three and take a look at more adaptations of option three. Then come back and look at the adaptations.

Ryan Burk, founder of Slate Communications – further pursue option three. Was there any additional thoughts on the mark about three or any other additional detail?

Mayor Pro-Tem Burke – forget about options two and four and leave option one for comparison. On option three work with the colors. Councilmember Henderson wanted to see one with only red and navy no light blue and work with some variation of that. We are either going with something based off the star or column theme not the window or the adaptation of the current logo.

Liz Cassi, Communication Specialist – agreed to work on the logo more and bring it back for Council to review other adaptations of options one and three.

2. Discuss Regular Meeting Items on Regular Session Agenda, including the consideration of closed session items as set forth in the Closed Session agenda items below.

Consent Item #5 Discussion:

5. Consider and act on a Resolution adopting the City of Corinth’s Early Model Home policy.

Councilmember Glockel – the first page, center paragraph, stated the early model homes will be prohibited from connecting to the city water and wastewater facilities until the entire subdivision has been inspected. I find this inclusive, the entire subdivision has to be complete. Then on page 88, paragraph 8, it states all city ordinance requirements and requirements of this policy shall be met and the proposed development must receive final acceptance of public improvements serving the subdivision land prior to the city building inspection department issuing a temporary certificate to occupy the model homes. The two areas are in conflict, does this mean the entire subdivision must be completed?

Helen-Eve Liebman, Planning and Development Director – clarified with Councilmember Glockel where the exact locations of these two areas of concern are within the policy.

Councilmember Glockel – does this mean until the entire water and sewer infrastructure has been accepted, is that all we are talking about?

Helen-Eve Liebman, Planning and Development Director – Yes sir.

Bob Hart, City Manager – Yes, the city wants to make sure the water and sewer system meets all of our standards and we have accepted it.

Helen-Eve Liebman, Planning and Development Director – the resolution is written correctly. The whole thought is for the developer to begin constructing homes before the entire infrastructure is installed and inspected allowing the developer to sell lots and get them all going at the same time. When the full subdivision is accepted they can begin selling homes as quickly as possible.

Councilmember Glockel – on page 87, it states model homes shall remain as it was created for one year before they can be changed to a residential home. What if it is a smaller subdivision? Just food for thought. Also, on page 87 the roads adjacent to the model home, last sentence, roads not adjacent to the model home shall be closed to thru non-emergency traffic. I am thinking back to a previous situation where there was a street that tied two subdivisions and there was a lot of traffic. Council discussed speed bumps and other preventative measures. This subdivision wasn’t built and that street was used as a through street. So now, if you have another road that ties two subdivisions together, what is the policy, is that road not going to be open until everything is built or will it be open upon passing the inspection?

Helen-Eve Liebman, Planning and Development Director – Yes, sir after inspection.

Consent Item #4 Discussion:

4. Consider and act on a Joint Election Agreement and Contract for Election Services with Denton County for the May 4, 2019 General and Special Election.

Councilmember Henderson – If the Denton ISD and the Lake Dallas ISD are able to cancel their election, then the city has to pay the entire cost of this. How much is this?

Kim Pence, City Secretary – The cost is roughly \$6,000 to \$7,000.

Bob Hart, City Manager – Denton ISD is not having an election. What about Lake Dallas?

Councilmember Henderson – Lake Dallas is having a bond election.

Bob Hart, City Manager – so we will share the cost with them.

Kim Pence, City Secretary – stated that item shares the ballot.

Councilmember Henderson – what about the cost for staff, last year they did not charge?

Kim Pence, City Secretary – that is for if they have to provide temporary staff, then they will charge a prorated costs for them.

Councilmember Henderson – You normally get the staff for that, right?

Kim Pence, City Secretary – no, they do. I have had the same staff for years.

Mayor Pro-Tem Burke – Is this driven by the fact that they had such a large turnout last time?

Kim Pence, City Secretary – I think so. They have been wanting to add this and have had to have extra people, so they gave the city a year to prepare and budget for it. Now, if it is needed they will be charging.

3. Hold a discussion and provide staff direction concerning the creation of a TIRZ, transit Oriented Development (TOD), and DCTA rail station analysis letter.

Bob Hart, City Manager – I would like to talk through the basics of what a TIF/TIRZ looks like to ensure the city council has a solid base of understanding before moving forward by explaining the structure, financing, management, incentives, and a draft map. When the Tax Increment Financing concept began it was called a TIF. Sometime in the last several years, the legislature changed the name to a Tax Increment Reinvestment Zone (TIRZ). They are the same thing.

This is an economic development tool that has been successful. There are 313 TIF's around the state of Texas. They create a base value of a defined geographical area that cannot be more than 20% of the city limits and is restricted on the amount of residential property allowed in the zone at the time of creation. When a zone is created with a defined geographical area, we add up all the total value of all the property within the zone, this is our base value. As new development occurs, then the value of the property increases, as this happens the incremental value from the base to the new value will not go to the general fund for city operations, but instead will go to a TIRZ fund. These funds are used to make public improvements, to have incentives, and to encourage economic

development to occur. City's will do this when there is a need for infrastructure, or targeted areas for development, sometimes around transit oriented development or create shopping centers or professional sports fields or stadium, and colleges. Anything that can be used as a catalyst to encourage other development to occur.

When the Zone ends all the new value becomes part of the overall tax base and goes into the general fund. Other taxing jurisdictions can join the zone. Here we are talking about Corinth and Denton County, schools are not allowed to participate. The city can decide the amount to place into the TIRZ fund and can place sales tax or other revenue sources. There is a lot of flexibility and creativity in this organization. This is not an abatement. Typically this goes back into infrastructure.

Mayor Heidemann – When we start talking about TIRZ and Ad Valorem taxes and the area is identified; how is that affected with the talk of the 2.5% cap?

Bob Hart, City Manager – How I understand the way the legislation is written, you are calculating your affected rate on which the 2.5% cap is based, a TIF is exempt from that calculation. I cannot stand here and tell you that I completely understand all of this. I am following the logic, but not a complete understanding of the formulas.

Mayor Pro-Tem Burke – Why is this better than having the money in the general fund?

Bob Hart, City Manager – The advantage to having a TIF is getting other tax jurisdictions to join in on the costs; you can take the money from the general fund and slide it over. You can get some county participation.

Mayor Pro-Tem Burke – what happens to the funds when they are not used?

Bob Hart, City Manager – They are kept in a segregating account and if not used then it rolls back into the taxing jurisdictions.

Councilmember Glockel - I understand you can create this after the fact and still have the same benefit? Talking about the House Bill with the 2.5% , that is probably going to happen before this is.

Bob Hart, City Manager – This is created by ordinance by the City Council. This is a twostep process; create the TIF by ordinance, then ask Denton County to join it. Then create a financing plan and adopt that. The city and county will sign off and all of this will occur in 2019.

Councilmember Glockel – So there is no property owner participation on this?

Bob Hart, City Manager – No, for a property owner their tax stays the same regardless. When the tax is paid the base rate will go into the city/county fund and the increment will go into the TIF fund.

Councilmember Henderson – the TIF could help pay for the rail stop?

Bob Hart, City Manager – Yes that was the initial emphasis for this. Some of the really good ones operating right now is in Arlington Downtown and Arlington Live entertainment area around the stadiums. The drawback and reason for being careful with the way you put the financing plan together, is it focuses on commercial development and is limited to the geographical area. This is a signal to the development community that the city is serious about economic development and

making something different happen.

Council will have a public hearing, designate the boundaries, and create a TIF Board with anywhere from 5-15 members. Whatever the TIF board does has to go to City Council for approval. It is a recommending body. However, when you have other taxing jurisdictions involved they are entitled to have members on the board. NCTC would not necessarily have any money in it but you may want to have them involved. This can be discussed in a few month from now. The financial plan is the crucial component. Incentives are usually the infrastructure, loans or grants for façade improvements, to put in sidewalks, or to rebuild the streets or utilities. The next step is to get DCTA to do the preliminary engineering analysis and determine if these sites would actually work and their cost. This data is needed to make a decision to move forward. It takes a letter from Council to trigger that analysis. I have it with me for Council to sign.

Mayor Pro-Tem Burke – does the City pay for the initial analysis?

Bob Hart, City Manager – We will pay for the engineers. They will pick two or three potential sites and provide options and recommendations. The boundaries shown and discussed this evening are not recommendations, but talking points for Council to see options and demonstrations of allowable TIF boundaries. Council will need to get together and decide on the boundaries of the TIF after giving some thought to the future development that is wanted and needed. Remember 30% or less of current use Single Family residents is allowed in the initial TIF.

In moving forward, we want to hire Paris Rutherford to develop the master plan for the zone. They do a lot of work with DCTA and Transit Orient Development. They have already been playing with some concepts for the plan. Based on his master plan, we would hire David Pettit to create the Financial Plan to be used for the Council decision making and involving Denton County. These are the two contractors that are driving the one in Arlington. Paris is well connected in the development community; as well as David Pettit. NTCOG has already begun the ridership study for us. This was done collectively with the four cities. Then to get DCTA to perform the engineering analysis. After the completion of these items, we begin looking at the feasibility and sit down to have a real serious conversation of where to go from here. Everything done today is how we finance the city five to ten years from now to make the community successful long term.

Council agreed to sign the letter for DCTA to begin the engineering analysis.

4. Summary discussion on the Joint City Council meeting with the Lake Cities held on February 25, 2019 and the joint meeting with the NCTC Board of Regents held on March 4, 2019.

Bob Hart, City Manager – I am looking for subject items that Council heard that needs further discussing and what emphasis does Council want staff to address at the next joint meeting.

Councilmember Lowell - Has NCTC made a stronger commitment regarding if they are or are not going to stay here in Corinth long term?

Bob Hart, City Manager – I believe they are committed to this campus long term. A lot of their commitment and ability to grow is tied to the transit stop. There has been some conversation on bringing in Texas Women’s University (TWU) into the mix and their involvement is directly tied to the transit stop.

Councilmember Lowell – is NCTC willing to share some of their transportation money towards that stop? I am already hearing from the community that this entire TIRZ looks like a way to skirt

the elections that occurred a few years ago in regards to Corinth's participation and one of the big questions was if this is going to be for NCTC are they going to help?

Bob Hart, City Manager – they are already putting money into it and at the end of the day the money needs to be kept in it. There has not been any conversations other than they have money in it. They have not signed anything or made commitments, nor have we pushed them for this yet. There has been conversations with the Chief of Staff at TWU who stated they are not interested in Corinth until there is a rail stop.

Councilmember Henderson – Monday night Dr. Wallace specifically discussed their involvement and from the Chambers point TWU has never been a part of the Chamber and is showing interest because they just signed up to be a member this week.

Mayor Heidemann – there was a request for all four City's need to get someone to coordinate a calendar for us in terms of special events. I was wondering if there was a way to get this done and if there has been some dialogue on this?

Bob Hart, City Manager – There has been some dialogue on this but we meet a week from Monday and this is one of about ten items on the list to discuss. I think the Chamber is going to be an integral part of this, along with Lake Dallas ISD. We are still in the accommodation period where we are finding things that we can agree on and it will take a while longer to build the trust that is needed to get to the partner model.

ADJOURN:

Mayor Heidemann adjourned the meeting at 7:05 p.m.

AYES: All

Meeting adjourned.

Approved by Council on the _____ day of _____, 2019.

Kimberly Pence, City Secretary
City of Corinth, Texas

CONSENT ITEM 3.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: March 7, 2019 Regular Session
Submitted For: Kim Pence, City Secretary
City Manager Review: Approval: Bob Hart, City Manager
Strategic Goals: Citizen Engagement & Proactive Government

Submitted By: Kim Pence, City Secretary

AGENDA ITEM

Consider and act on minutes from the March 7, 2019 Regular Session.

AGENDA ITEM SUMMARY/BACKGROUND

Attached are the minutes from the March 7, 2019 Regular Session. The minutes are in draft form and are not considered official until formally approved by the City Council.

RECOMMENDATION

Staff recommends approval of the March 7, 2019 Regular Session minutes.

Attachments

Minutes

**STATE OF TEXAS
COUNTY OF DENTON
CITY OF CORINTH**

On this the 7th day of March 2019 the City Council of the City of Corinth, Texas met in Regular Session at the Corinth City Hall at 7:00 P.M., located at 3300 Corinth Parkway, Corinth, Texas. The meeting date, time, place and purpose as required by Title 5, Subtitle A, Chapter 551, Subchapter C, Section 551.041, Government Code, with the following members to wit:

Members Present:

Bill Heidemann, Mayor
Sam Burke, Mayor Pro-Tem
Lowell Johnson, Council Member
Tina Henderson, Council Member
Don Glockel, Council Member

Members Absent:

Scott Garber, Council Member

Staff Members Present

Bob Hart, City Manager
Jerry Garner, Chief of Police
Shea Rodgers, Technology Services Manager
Helen-Eve Liebman, Planning and Development Director
Lee Ann Bunselmeyer, Finance and Administrative Services Director
Chris Rodriguez, Finance Manager
Jason Alexander, Economic Development Corporation Director
Patricia Adams, Messer, Rockefeller, & Fort
Kim Pence, City Secretary

CALL TO ORDER, INVOCATION, PLEDGE OF ALLEGIANCE & TEXAS PLEDGE:

"Honor the Texas Flag: I pledge allegiance to thee, Texas, one state under God, one and indivisible".

Mayor Heidemann called the meeting to order at 7:15 p.m. City Manager, Bob Hart delivered the invocation and led in the Pledge of Allegiance.

CONSENT AGENDA

All matters listed under the Consent Agenda are considered to be routine and will be enacted in one motion. Should the Mayor, a Councilmember, or any citizen desire discussion of any Item that Item will be removed from the Consent Agenda and will be considered separately.

1. Consider and act on minutes from the February 7, 2019 Workshop Session.
2. Consider and act on minutes from the February 7, 2019 Regular Session.

MOTION made by Councilmember Henderson to approve the Consent Agenda as presented. Seconded by Councilmember Burke.

AYES: Burke, Johnson, Henderson, Glockel
NOES: None
ABSENT: Garber

MOTION CARRIED

CITIZEN'S COMMENTS:

In accordance with the Open Meetings Act, Council is prohibited from acting on or discussing (other than factual responses to specific questions) any items brought before them at this time. Citizen's comments will be limited to 3 minutes. Comments about any of the Council agenda items are appreciated by the Council and may be taken into consideration at this time or during that agenda item. Please complete a Public Input form if you desire to address the City Council. All remarks and questions addressed to the Council shall be addressed to the Council as a whole and not to any individual member thereof. Section 30.041B Code of Ordinance of the City of Corinth.

Jane Sawyer, 1415 Hidden Oak Circle - would like to ask Council to consider revising the trash Ordinance to include specific times for trash to be placed out on the street for pick up and also when to be removed so that we have some guidelines to follow.

Over the past few years I have noticed people placing their trash out whenever they want to and what is happening is it is starting to look trashy. I have looked in the Code and could not find anything regarding the times trash should be placed out. You may think that the POA's and HOA's have control over this but not all of Corinth is in a POA and/or HOA's

BUSINESS AGENDA:

- 3. Consider and adopt an Ordinance authorizing the issuance and sale of combination tax and limited surplus revenue certificates of obligation to provide funds for street, waterworks and sewer system and municipal drainage improvements; levying an annual ad valorem tax and providing for the security for and payment of said certificates; approving the official statement; providing an effective date; and enacting other provisions relating to the subject.

Boyd London, Managing Director, Hilltop Securities - the following bids were submitted with Raymond James & Associates, Inc. being the best bid at 2.999570.

Bid Award	Bidder Name	TIC
Reoffering	Raymond James & Associates, Inc.	2.999570
	FTN Financial Capital Markets	3.026509
	Robert W. Baird & Co., Inc.	3.072503
	Bank of America Merrill Lynch	3.084455
	Piper Jaffray	3.091401
	J.P. Morgan Securities, L.L.C	3.160718

The stable outlook reflects our opinion that Corinth will continue to maintain very strong budgetary flexibility with reserves above 20% consistent with policy targets, and adequate to strong budgetary performance with at least breakeven operating results in the general fund, supported by strong management policies and practices. Further rating stability is provided by the city's participation in the Dallas MSA, which we consider to be broad and diverse. We do not expect to change the rating within the two-year outlook period.

Corinth is a well rated city and recommend to the Council approval of this.

MOTION made by Councilmember Johnson to adopt the Ordinance authorizing the issuance and sale of combination tax and limited surplus revenue certificates of obligation to provide funds for street, waterworks and sewer system and municipal drainage improvements; levying an annual ad valorem tax and providing for

the security for and payment of said certificates; approving the official statement; providing an effective date of March 7, 2019; and enacting other provisions relating to the subject. Seconded by Councilmember Glockel.

AYES: Burke, Johnson, Henderson, Glockel
NOES: None
ABSENT: Garber

4. Consider and act on a Joint Election Agreement and Contract for Election Services with Denton County for the May 4, 2019 General and Special Election.

Bob Hart, City Manager - this is the contract for Denton County to conduct the General and Special Election that will be held on May 4, 2019.

MOTION made by Councilmember Burke to approve the Joint Election Agreement and Contract for Election Services with Denton County. Seconded by Councilmember Henderson

AYES: Burke, Johnson, Henderson, Glockel
NOES: None
ABSENT: Garber

5. Consider and act on a Resolution adopting the City of Corinth's Early Model Home policy.

Helen Eve Liebman, Planning and Development Director - due to requests that we have received from developers and homebuilders staff has identified the need to adopt a policy regarding the construction of model homes prior to the acceptance of a subdivisions public infrastructure.

The proposed policy will ensure that paved access and water infrastructure is available to the fire hydrants in the area that the model home(s) are to be built prior to beginning construction. The early model homes will be prohibited from connecting the City's water and waste water facilities until the entire subdivision has been inspected and accepted by the City.

This will provide homebuilders the opportunity to construct up to two model homes per builder and the intent is for these homes to be nearing completion at the same time that the subdivision as a whole is being completed. This will ensure that builders are able to begin selling homes to future residents as quickly as possible.

The Planning and Zoning Commission recommended approval unanimously at their February 25th meeting and staff is also recommending approval.

MOTION made by Councilmember Henderson to approve the Resolution adopting the City of Corinth's Early Model Home policy. Seconded by Councilmember Johnson.

AYES: Burke, Johnson, Henderson, Glockel
NOES: None
ABSENT: Garber

COUNCIL COMMENTS & FUTURE AGENDA ITEMS

The purpose of this section is to allow each councilmember the opportunity to provide general updates and/or comments to fellow councilmembers, the public, and/or staff on any issues or future events. Also, in accordance with Section 30.085 of the Code of Ordinances, at this time, any Councilmember may direct that an item be added as a business item to any future agenda.

Councilmember Henderson - being out and about in the community a lot, I have heard a lot of kudo's for our social media and the way it has been vamped up and I want to say thank you for that. It has really been noticed by our citizens.

Councilmember Glockel - I attended a meeting today called Lake Cities Serve, this is just being put together. This is about serving the communities and it includes several of the churches and all four (4) of the cities have gotten together on this and on May 18 is a full day of projects in the Lake Cities area. This work can be on Public Right-of-Way or someone's house needs to be fixed, it can be to pick up trash etc. We are trying to get a list of things that need to be done and a list of volunteers that we can match up with that. We can work this in and coincide with Keep Corinth Beautiful? They have people providing food and it is just a work in progress. I will try to get this written up and give to Bob Hart so we can get some help from Corinth.

Bob Hart, City Manager - we had our Upper Trinity Board meeting today and I just wanted to let everyone know Ralph Hall passed away this morning. The Reservoir is being built today that is named after him for our future water supply.

Mayor Heidemann - welcomed the new Chief of Police, Jerry Garner to the City of Corinth. Thanked Lee Ann Bunselmeyer and Michael Ross for attending the Legislation in Austin and making a presentation for the City on the Fire Bill. You both did a great job.

There was no Closed Session

CLOSED SESSION

The City Council will convene in such executive or (closed session) to consider any matters regarding any of the above agenda items as well as the following matters pursuant to Chapter 551 of the Texas Government Code.

Section 551.071, (1) Private consultation with its attorney to see advice about pending or contemplated litigation; and/or settlement offer; and/or (2) a matter in which the duty of the attorney to the government body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act.

Section 551.074, to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; or to hear a complaint or charge against an officer or employee.

After discussion of any matters in closed session, any final action or vote taken will be in public by the City Council. City Council shall have the right at any time to seek legal advice in Closed Session from its Attorney on any agenda item, whether posted for Closed Session or not, pursuant to Section 551.071 of the Texas Government Code, Consultation with City Attorney.

RECONVENE IN OPEN SESSION - In accordance with Texas Government Code, Chapter 551 the City Council will reconvene into Special Session to consider action, if any, on matters discussed in Executive Session.

ADJOURN:

Mayor Heidemann adjourned the meeting at 7:45 P.M.

AYES: All

Meeting adjourned.

Approved by Council on the _____ day of _____, 2019.

Kimberly Pence, City Secretary
City of Corinth, Texas

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: TXDOT Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signals Amendment 3
Submitted For: Helen-Eve Liebman, Director
Submitted By: Brett Cast, Engineering Services Coordinator
Finance Review: N/A **Legal Review:** Yes
City Manager Review:
Strategic Goals: Regional Cooperation

AGENDA ITEM

TXDOT Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signals Amendment 3.

AGENDA ITEM SUMMARY/BACKGROUND

Texas Department of Transportation (TxDOT) traffic signal maintenance crews are unable to provide sufficient response times for maintenance issues associated with every traffic signal on TxDOT roadways within the City of Corinth. TxDOT does not allow municipalities with a population of less than 50,000 to maintain the traffic signals on the TxDOT system. In 2009 Corinth, Coppell, The Colony, Lake Dallas, Hickory Creek, Lewisville and TxDOT entered into an agreement whereby Lewisville would maintain 16 traffic signals outside of the City of Lewisville. In 2012, amendment #1 added one more signal at the intersection of FM2181 and FM 2499 to Lewisville’s maintenance responsibilities. In 2016 amendment #2 added two additional intersections in The Colony to Lewisville’s maintenance responsibilities. The proposed amendment #3 will add two more signals to the Agreement. The intersection are I35 E and Oak Dr/Lake Dallas Dr within the city of Hickory Creek and the intersection of I35 E and Turbeville Rd/ Lake Dallas Dr. in Hickory Creek and Lake Dallas.

RECOMMENDATION

The Engineering Division recommends approval of the entering into this agreement.

Attachments

- Amendment 3 Resolution
- Amendment 3
- Amendment 3 Memorandum

City of Corinth

Resolution NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CORINTH, TEXAS, AUTHORIZING THE CITY MANAGER TO ENTER INTO A VOLUNTARY INTERLOCAL COOPERATION AGREEMENT FOR THE PERFORMANCE, ADMINISTRATION AND MAINTENANCE OF TRAFFIC SIGNALS' AUTHORIZING THE REIMBURSEMENT OF FUNDS THEREFORE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the State, the Cities of The Colony, Coppell, Corinth, Lake Dallas, and the Town of Hickory Creek (Local Governments) and the City of Lewisville (Administrator) wish to cooperate and coordinate their efforts to operate an efficient traffic signal system with optimum progression of traffic light synchronization across each jurisdiction, consistent with the authority and purposes of the Texas Government code Chapter 790 relating to Interlocal cooperation agreement the Texas Transportation Code Section 221.002 relating to agreement with municipalities; and

WHEREAS, in accordance with Texas Administrative Code, Title 43, Section 25.5, the State is responsible for maintaining and operation traffic signals on IH-35E, FM 2499 and FM 2181 within the City limits of the Local Governments; and

WHEREAS, the State, the Local Governments and the Administrator agree that, in order to improve response time, to repair malfunctioning traffic signals and to improve traffic signals and to improve traffic signal progression, the Administrator shall be authorized to supervise and be responsible for the operating performance, administration and maintenance of the State's traffic signals on the subject highway within the Local Government's city limit and law enforcement jurisdiction, but outside the Administrator's city limit and law enforcement jurisdiction; and

WHEREAS, the Voluntary Interlocal Cooperation Agreement for Operation and Maintenance of Traffic Signals, Contract # 18-0XXM5003 (the "Agreement"), was approved by City Council on October 7, 1993, as amended, defines the annual reimbursement rate, for all traffic signal locations included in the Agreement; and

WHEREAS, amendment number 1 added one more signal at the intersection of FM2181 and FM 2499 to Lewisville's maintenance responsibilities, and amendment #2 added two additional intersections in The Colony to Lewisville's maintenance responsibilities

WHEREAS, the purpose of Amendment #3 is to add traffic signals that do not fall within the City of Corinth the city council would like to amend the Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signals provided to the City by the Texas Department of Transportation ("TxDOT").

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CORINTH, TEXAS:

SECTION 1

THAT, the above findings are hereby found to be true and correct and are incorporated Herein in their entire.

SECTION 2

THAT, the City Council of the City of Corinth, Texas hereby approves the Amendment to Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signal Amendment Number3, as submitted by TxDOT.

SECTION 3

THAT, the City Council authorizes the City Manager to execute the Amendment to Voluntary Interlocal Agreement for the Operation and Maintenance of Traffic Signals Amendment Number 3 on behalf of the City of Corinth and to exercise the rights and duties of the city there under.

SECTION 4

THAT, this Resolution shall be in full force and effect from and after its passage and it is so resolved.

PASSED AND APPROVED ON THIS ____ DAY OF APRIL, 2019

Mayor, Bill Heidemann
City of Corinth, Texas

ATTEST:

City Secretary
City of Corinth, Texas

(SEAL)

APPROVED AST TO FORM:

City Attorney, City of Corinth, Texas

THE STATE OF TEXAS §

THE COUNTY OF TRAVIS §

**AMENDMENT TO VOLUNTARY INTERLOCAL COOPERATION AGREEMENT
FOR THE OPERATION AND MAINTENANCE OF TRAFFIC SIGNALS
Amendment Number 3**

It is mutually understood and agreed by and between the undersigned contracting parties to the above numbered Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signals to amend said Agreement as follows:

Article 4 – Compensation (a) shall be voided in its entirety and replaced with the following:

Article 4 – Compensation (a) The maximum amount payable under this Agreement is \$89,945 per year.

Exhibit 1-A shall be voided in its entirety and replaced with the attached EXHIBIT 1-C to add IH 35E at Turbeville Rd/Hundley Dr and IH 35E at Oak Dr/Lake Dallas Dr.

This amendment shall become effective when fully executed. All other terms and conditions of the above numbered Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signals not hereby amended remain in full force and effect.

ADMINISTRATOR—CITY OF LEWISVILLE

By *Donna Barron* Date 11-16-18
AUTHORIZED SIGNATURE

Donna Barron
TYPED OR PRINTED NAME AND TITLE

Title City Manager

LOCAL GOVERNMENT—CITY OF COPPELL

By _____ Date _____
AUTHORIZED SIGNATURE

TYPED OR PRINTED NAME AND TITLE

Title _____

LOCAL GOVERNMENT—CITY OF CORINTH

By _____ Date _____
AUTHORIZED SIGNATURE

TYPED OR PRINTED NAME AND TITLE

Title _____

CITY SECRETARY OFFICE
OFFICIAL FILE COPY

LOCAL GOVERNMENT—CITY OF THE COLONY

By _____ Date _____
AUTHORIZED SIGNATURE

TYPED OR PRINTED NAME AND TITLE

Title _____

LOCAL GOVERNMENT—TOWN OF HICKORY CREEK

By Lynn C. Clark Date 01/15/2019
AUTHORIZED SIGNATURE

Lynn C. Clark, Mayor
TYPED OR PRINTED NAME AND TITLE

Title Mayor

LOCAL GOVERNMENT—CITY OF LAKE DALLAS

By Michael D. Brenhart Date 02/14/2019
AUTHORIZED SIGNATURE

Michael D. Brenhart
TYPED OR PRINTED NAME AND TITLE

Title Mayor

FOR THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By _____ Date _____
James K. Selman, P.E.
Dallas District Engineer

CITY SECRETARY OFFICE
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EXHIBIT 1-C

Signalized intersections with one (1) controller on State Highways located within the Local Government of The Colony.

- SH 121 at Standridge
- SH 121 at FM 423/Crider
- SH 121 at Paige/Plano Parkway
- FM 423 at Lake Highlands
- FM 423 at Lone Star Ranch Parkway
- FM 423 at Memorial Drive
- FM 423 at Cougar Alley
- FM 423 at South Colony
- FM 423 at North Colony
- FM 423 at Quick Trip Driveway

Signalized intersections with one (1) controller on State Highways located within the Local Government of Coppell.

- SH 121 at Denton Tap Road

Signalized intersections with one (1) controller on State Highways located within the Local Governments of Corinth, Hickory Creek and Lake Dallas.

- IH35E at FM 2181 (Swisher)

Signalized intersections with one (1) controller on State Highways located within the Local Governments of Corinth and Hickory Creek.

- FM 2181 (Teasley Drive) at Hickory Creek Blvd.
- FM 2181 (Teasley Drive) at Town Hall/Garrison
- FM 2181 (Teasley Drive) at Parkridge/Sycamore Bend

Signalized intersections with one (1) controller on State Highways located within the Local Government of Corinth.

- FM 2181 at Post Oak
- FM 2181 at FM 2499

Signalized intersections with one (1) controller on State Highways located within the Local Government of Corinth.

- IH35E at Corinth Parkway
- IH 35E at Post Oak

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Contract # 18-0XXM5003

Signalized intersections with two (2) controllers on State Highways located within the Local Governments of Hickory Creek and Lake Dallas.

IH35E at Turbeville Rd/Hundley Dr

Signalized intersections with one (1) controller on State Highways located within the Local Government of Hickory Creek.

IH35E at Oak Dr/Lake Dallas Dr

CITY SECRETARY OFFICE
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MEMORANDUM

TO: City of Corinth City Council

FROM: George Marshall, P.E. C.F.M

DATE: April 4, 2019

SUBJECT: TXDOT Voluntary Interlocal Cooperation Agreement for the Operation and Maintenance of Traffic Signals Amendment 3

- **Traffic Signals on TxDOT's system are maintained by municipalities throughout Texas and are reimbursed by TxDOT.**
- **In 2009 Corinth, TxDOT, and a collection of other cities in surrounding area enter into an agreement with the city of Lewisville to maintain the traffic signals along I35 E at FM 2181, Corinth Parkway and Post Oak Dr as well as the intersection of FM 2181 at Post Oak Dr, Hickory Creek Blvd., Garrison St and Parkridge Dr.**
- **In 2012 Amendment #1 was entered into to add the intersection of FM 2181 and FM 2499 to the agreement.**
- **In 2016 Amendment #2 was entered into in order to add two additional signals outside of the City of Corinth.**

Introduction:

Texas Department of Transportation (TxDOT) traffic signal maintenance crews are unable to provide sufficient response times for maintenance issues associated with every traffic signal on TxDOT roadways within the City of Corinth. TxDOT does not allow municipalities with a population of less than 50,000 to maintain the traffic signals on the TxDOT system. In 2009 Corinth, Coppell, The Colony, Lake Dallas, Hickory Creek, Lewisville and TxDOT entered into an agreement whereby Lewisville would maintain 16 traffic signals outside of the City of Lewisville. In 2012, amendment #1 added one more signal at the intersection of FM2181 and FM 2499 to Lewisville's maintenance responsibilities. In 2016 amendment #2 added two additional intersections in The Colony to Lewisville's maintenance responsibilities. The proposed amendment #3 will add two more signals to the Agreement. The intersection are

I35 E and Oak Dr/Lake Dallas Dr within the city of Hickory Creek and the intersection of I35 E and Turbeville Rd/ Lake Dallas Dr. in Hickory Creek and Lake Dallas.

Analysis:

This proposed amendment has little impact on traffic within the City of Corinth.

Legal Review:

Agenda Item did not require legal review.

Fiscal Impact:

The fiscal impact of this Agenda Item is \$0.00.

Recommendation:

The Engineering Division recommends approval of the entering into this agreement.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: Custodial Contract
Submitted For: Lee Ann Bunselmeyer, Director
Submitted By: Shea Rodgers, Technology Services Manager
Finance Review: Yes **Legal Review:** Yes
City Manager Review: **Approval:** Bob Hart, City Manager
Strategic Goals: Organizational Development

AGENDA ITEM

Consider and Act on a proposal from ABM Industries, Inc. to provide custodial services for City facilities.

AGENDA ITEM SUMMARY/BACKGROUND

The City contracts out custodial services to five separate facilities: City Hall, the Public Safety Center, Public Works, the Woods Building, and the Parks restrooms. With recent additions to services needed (specifically in the Public Safety Center), the projected cost has risen.

The services that the City is looking to add or expand is as follows:

City Hall: Routinely clean/vacuum the Council Chambers and Work Session Room, along with cleaning the lobby and vacuuming hallways.

Public Safety: Increasing Suite B (Fire) cleaning from once per week to twice, increasing the cleaning of all restrooms to five days per week instead of three, and cleaning the large meeting rooms weekly. The proposed contract is looking to increase staff assigned to expedite the cleaning process in the larger building to alleviate long cleaning times or incomplete cleanings.

Parks Restrooms: Increasing the cleaning schedule from April to October to a new schedule of March to November.

After reaching out to various potential contractors, City staff selected ABM Industries, Inc. as the proposed vendor for this project, whose quote is \$75,715.92, recurring annually (attached: ABM PROPOSAL). ABM Industries, Inc. offers these services on the IGPA cooperative purchasing contract (Contract #: 16-08PV-01), and as such, no further bidding was necessary.

ABM's services came recommended from other cities employing them, namely the City of Richardson. If approved, the contract (attached: ABM CONTRACT) would begin on May 1, 2019.

RECOMMENDATION

It is the recommendation of Staff that the City Council approve the proposal from ABM Industries, Inc. in the amount of \$75,715.92 to provide custodial services for City facilities.

Attachments

ABM PROPOSAL
ABM CONTRACT



ABM Response

Cleaning Services Proposal

City of Corinth

3300 Corinth Parkway

Corinth, TX

Presented to:

Shea Rodgers
Technology Services Manager
City of Corinth

Presented by:

ABM
Kevin Thomas
Business Development Manager
Kevin.thomas@abm.com
972-839-9948

February 22nd 2019

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Executive Overview

Building Value for City of Corinth

City of Corinth needs a facilities partner who builds value for you by reducing operating expenses while keeping your building safe, clean, comfortable and energy efficient. With our people and our technology, we'll preserve your assets and increase their performance—maximizing their value for you.

Service excellence and industry expertise

To deliver you a quality, cost-effective uniform standard of service, we use our own highly qualified employees. We have the expertise to understand your industry and empower our workforce to provide you with reliable, high-quality service specific to your needs. Plus, with our nationwide presence, we've got local experts who understand the unique needs of your area.

Breadth of services

In addition to the services proposed here, you can rely on ABM for virtually all of your facility needs. We offer you simplified support for all of our solutions, whether stand-alone or integrated.

Technology-enabled workforce

In addition to intensive training, the workforce serving your facility will use our award-winning, innovative technology to drive efficiencies, lower costs and ensure compliance. We streamline service delivery with the technological tools that allow both City of Corinth and ABM to have greater access and transparency to your account.

Guaranteed energy and sustainability solutions

City of Corinth's sustainability objectives will become ours. We'll help you meet short-term goals, like green cleaning, and we can help you establish and meet long-term goals for water efficiency, energy consumption, materials and resources. We have a Director of Sustainability and certified LEED APs who are ready to work with you on specific plans to update your systems and increase efficiencies to meet your sustainability goals.

We encourage you to call the clients listed in this proposal that are currently benefitting from our solutions.



Planning for a Seamless Transition

Our **GoodStart Transition** program is fully customized for each of our clients to ensure the project's start-up goes smoothly and is free from time-consuming miscommunications and disruptions. On contract award, our transition team's initial activities will be to set up a kick off meeting to identify City of Corinth's service needs, review roles and responsibilities, select the appropriate personnel, create a detailed communications and implementation plan, and share it with the City of Corinth and ABM transition teams.

Our transition efforts customarily takes anywhere from four- to six-weeks and typically starts within thirty days of contract award. Having reviewed the number and location of the sites, scope of work and requirements, we estimate the transition will take approximately 30 days, but less if needed.

Importance of ongoing communication

In our many years of experience transitioning tens of thousands of clients, whether we are transitioning services from an incumbent provider or starting up services for the first time, we have learned that the key to a successful implementation is clear, ongoing communication of expectations, objectives and outcomes with all parties involved, particularly with management at all levels on both sides.

From the beginning, ABM will hold regular meetings with the City of Corinth team to discuss all phases of the transition, identify best practices and implement them, as needed. We will survey everyone on your team who will be affected by the transition in order to address key concerns before they can become bigger issues.

Benefits of our Transition Process:

- Clear assignment of accountability at each stage – getting off on the right foot, right from the start
- Presentation of key contractual compliance requirements to the local management team
- Development of a centralized repository of all transition documents made accessible to all ABM stakeholders



Support and Coordination

We will establish a dedicated team to implement City of Corinth's program. The transition team will remain in place until the planned level of service is achieved and contractual objectives are met.

We work collaboratively with the City of Corinth team every step of the way to ensure the project's success. With guidance from our Center of Excellence, which houses pertinent information regarding the best in industry practices, the transition team will develop a plan based on our understanding of the scope of work, contractual requirements, performance and quality goals, sustainability requirements and other client requirements. At the same time, we begin the process of recruiting, hiring, training, setting up technological tools, verifying legal requirements and qualifying subcontractors (if applicable).

Prior to the official start of service, the transition team will ensure that the City of Corinth team has clear lines of communication with their ABM counterparts. All information related to the transition and implementation of services will be contained in a standard operating procedures manual, as part of the **ABMWay**. This manual will be centrally stored on a secured SharePoint® website so the appropriate ABM personnel can access, review and update program information in a way that ensures everyone has access to updated information in real-time.

Once the program is up and running, we will follow up with the City of Corinth team to identify any outstanding issues, address any pending concerns, if any, and ensure City of Corinth's complete satisfaction with the transition.



Sample Transition Plan

After we are selected as the supplier, we will provide a customized and detailed transition plan based on your specific requirements. We provide the following sample transition plan, showing the typical key milestones and timelines for the implementation of a Janitorial program:

Task	Week 4	Week 3	Week 2	Week 1	Post Start Up
Initial Activities	[Task bar spanning Week 4 to Week 1]				
<ul style="list-style-type: none"> Kick-off meeting - transition team Assign roles & responsibilities Finalize and review contract and specifications Review current situation with incumbent Create stakeholder register 					
Key Start Up Activities & Discussion Topics	[Task bar spanning Week 4 to Week 2]				
<ul style="list-style-type: none"> Transition plan and timeline Client involvement in transition process Reporting requirements Special facility needs and considerations Waste management and recycling procedures Uniform requirements Develop and document schedules 					
Human Resources Process	[Task bar spanning Week 4 to Week 1]				
<ul style="list-style-type: none"> Assign management team and review current personnel Conduct interviews, background checks & drug testing (as applicable) Setup time recording and payroll procedures Complete training Distribute uniforms and badges to employees 					
Site Setup	[Task bar spanning Week 3 to Week 1]				
<ul style="list-style-type: none"> Site location verification Identify and document janitor closets Location access - receipt of keys and/ or alarm codes 					
Equipment and Supplies	[Task bar spanning Week 4 to Week 1]				
<ul style="list-style-type: none"> Determine equipment/supply needs & procurement process Order equipment, supplies and communication devices Set up equipment, supplies, communication devices, and inventory control processes 					
Billing and Accounting	[Task bar spanning Week 4 to Week 1]				
<ul style="list-style-type: none"> Review billing and accounting requirements & set up procedures Test procedures 					
Quality Control Program	[Task bar spanning Week 4 to Week 1]				
<ul style="list-style-type: none"> Communicate customer requirements to Quality Control Implementation team Problem resolution and escalation procedures Develop Quality Control program (inspections, surveys & KPIs) Train field/customer on communication devices, work order system & QMS inspection systems 					
Work Order/Call Center Management Program	[Task bar spanning Week 4 to Week 2]				
<ul style="list-style-type: none"> Define overall process & call center interaction Upload periodic task schedule into QMS WO Management System 					
Risk Management	[Task bar spanning Week 3 to Week 2]				
<ul style="list-style-type: none"> Order and distribute customer & landlord COIs 					
Service Partner Management (if applicable)	[Task bar spanning Week 3 to Week 2]				
<ul style="list-style-type: none"> Review sites and areas to self perform and where to subcontract Review selection of subcontractors and hire as necessary 					
Finalize Transition	[Task bar spanning Week 1 to Week 1]				
<ul style="list-style-type: none"> Identify outstanding tasks & verify completion of all transition tasks 					
Post Start Up	[Task bar spanning Post Start Up to Post Start Up]				
<ul style="list-style-type: none"> Confirm start ups and review transition issues & successes 					



Pricing Summary

We'll help you create new efficiencies to improve your bottom line

To build value for your facilities, we focus on new, efficient methods and management of labor and technology to eliminate unnecessary costs and maintain quality.

Prepared for: City of Corinth

Location: **City Hall** - 3300 Corinth Parkway
Police Department - 3501 FM 2181, Suite A
Fire Department - 3501 FM 2181, Suite B
Police and Fire Department Restrooms - 3501 FM 2181, Suites A and B
Public Works - 1200 N. Corinth St.
Woods Building - 1128 Postwood Dr.
Ball fields - 3700 Corinth Parkway

Services: Night Cleaning

Monthly Base Pricing: = \$6,309.66

Total Annual Cost: \$1.4274 annual per sq. ft. for night cleaning x 53,042 = \$75,715.92

Consumables will be supplied by the City of Corinth
Additional Option-Consumables Supplies are supplied at cost plus 10%

**Following terms of the 1GPA contract ABM has in place,
 RFP 16-08PV Custodial Services – Contract 16-08PV-01**

Included in Our Price - Notes: Prices include all labor, benefits, payroll taxes and insurance, supervision, uniforms, cleaning equipment and cleaning chemicals. Pricing does not include sales tax. If a smart cell phone is required for the Supervisor position, there is an additional charge of \$125/month pass-thru fee for the smart cell service.



Pricing Schedule

Area	Sq. Ft.	Total Monthly Cost	Total Annual Cost
<i>City Hall</i>	<i>25,298</i>	<i>\$2,870.95</i>	<i>\$34,451.40</i>
<i>Police Department</i>	<i>13,578</i>	<i>\$1,287.38</i>	<i>\$15,448.57</i>
<i>Fire Department</i>	<i>9,751</i>	<i>\$924.53</i>	<i>\$11,094.35</i>
<i>PD & FD Restrooms</i>	<i>--</i>	<i>--</i>	<i>**Included with PD and FD cost</i>
<i>Public Works</i>	<i>3,698</i>	<i>\$601.67</i>	<i>\$7,220.04</i>
<i>Ball Fields</i>	<i>8 Restrooms</i>	<i>\$486.00</i>	<i>\$5,832.00</i>
<i>Woods Building</i>	<i>1,230</i>	<i>\$254.76</i>	<i>\$3,057.12</i>
<i>Total Buildings</i>	<i>53,555</i>	<i>\$6,425.29</i>	<i>\$77,103.48</i>



General Office Cleaning Specifications

(These specifications can be customized) See attached Recommended Frequency Chart, TBD by best practice of ABM:

<i>Area/Building</i>	<i>Sq. Ft.</i>	<i>Frequency</i>
<i>City Hall</i>	<i>25,298</i>	<i>M-F</i>
<i>Police Department</i>	<i>13,578</i>	<i>M,W,F</i>
<i>Fire Department</i>	<i>9,751</i>	<i>T, Th</i>
<i>PD & FD Restrooms</i>	<i>--</i>	<i>M-F</i>
<i>Public Works</i>	<i>3,698</i>	<i>M-F</i>
<i>Ball Fields</i>	<i>8 Restrooms</i>	March 1 – May 31: M-F June 1 – July 31: M,W, F August 1 – November 30: M-F
<i>Woods Building</i>	<i>1,230</i>	<i>1X per month & as needed by request</i>

LOBBIES:

DAILY SERVICES

- Empty all waste receptacles.
- Dust all horizontal surfaces.
- Dust all furniture, fixtures, equipment and accessories.
- Clean and polish all drinking fountains.
- Vacuum walk-off mats.
- Fully vacuum all carpets from wall to wall.
- Dust mop all hard surface floors with treated dust mop.
- Dust all low reach areas.
- Spot clean all horizontal and vertical surfaces removing fingerprints, smudges and stains.



OFFICE AREAS:

DAILY SERVICES

- Empty wastebaskets, replacing liners if necessary. Remove to customer designated area for disposal.
- Dust tops of all desks, credenzas, files, fixtures, windowsills, and all other horizontal surfaces (within reach). Papers on desktops will not be moved.
- Remove fingerprints, smudges, etc. from doors, doorframes, partition glass, sidelights, walls and around light switches.
- Vacuum all rugs and edge vacuum carpet unobstructed by furniture, replacing chairs to their original positions. Spot clean minor stains as necessary. Spot clean 10 spots per week which the locations are determined by the City of Corinth
- Spot mop all spills on hard surface floors as necessary.
- Dust all doorjamb.
- Vacuum or dust all return air vents.

RESTROOMS

DAILY SERVICES

- Empty and sanitize all trash receptacles and sanitary napkin disposal units. Replace waste bags and liners.
- Wash, disinfect all basins, bowls, both sides of toilet seats and urinals (including tile walls near urinals). Damp wipe all partitions, clean flushometers, piping, toilet seat hinges and other metal surfaces. Clean undersides of rim on urinals and bowls. Toilet seats are to be left in an upright position.
- Wash and polish all mirrors, powder shelves, bright work (including exposed piping below wash basins), towels dispensers, receptacles and any other metal surfaces.
- Spot wash walls and doors.
- Dust all ledges and tops of partitions.
- Fill toilet tissue, soap, paper towels and sanitary dispensers.
- Sweep all hard surface floors.
- Damp mop hard surface floor areas with germicidal solution.

HALLWAYS & COMMON AREAS

DAILY SERVICES

- Empty all waste receptacles.
- Dust all horizontal surfaces.
- Dust all furniture, fixtures, equipment and accessories.
- Clean and polish all drinking fountains.

- Vacuum walk-off mats.
- Fully vacuum all carpets from wall to wall. . Spot clean minor stains as necessary. Spot clean 10 spots per week which the locations are determined by the City of Corinth
- Dust mop all hard surface floors with treated dust mop.

MONTHLY SERVICES

- Dust all low reach areas.
- Spot clean all horizontal and vertical surfaces removing fingerprints, smudges and stains.

KITCHENS/BREAK AREAS

DAILY SERVICES

- Remove trash and place for disposal. Change all liners nightly.
- Wipe tables, chairs and countertops.
- Wash and polish kitchen sink.
- Wipe front of oven, refrigerator and dishwasher.
- Sweep and spot mop floor.

HARD SURFACE FLOORING STRIP & SEAL

Charged at an additional price per request.

CONCRETE OR STONE SURFACE FLOORING SCRUB & RINSE

Charged at an additional price per request.

WASH INTERIOR & EXTERIOR OF TRASH RECEPTACLES

Charged at an additional price per request.

DEEP CLEAN OFFICE & PARTITION GLASS & WINDOWS

Charged at an additional price per request.

WASH & DRY HVAC VENTS

Charged at an additional price per request.



CARPET SHAMPOOING

Charged at an additional price per request.

TOTAL CLEAN OF DRY MARKER BOARDS

Charged at an additional price per request.

FULL CLEAN OF BLINDS

Charged at an additional price per request.

WOOD DESK & COMPUTER STATIONS DEEP SURFACE CLEAN

Charged at an additional price per request.

DUST ALL DUCT WORK, PIPING AND EXPOSED CEILING (Service Center 1st Floor)

Charged at an additional price per request

DUST ALL EXPOSED LIBRARY SHELVING

Charged at an additional price per request.

JANITOR CLOSETS

DAILY SERVICES

- Clean sink or basin.
- Remove all waste and place for disposal.
- Sweep and damp mop floor as required.
- All janitorial supplies and equipment to be kept clean and orderly at all times.



ABM Service Agreement

This Facility Service Agreement (the "Agreement") is made April 4, 2019, between ABM Industry Groups, LLC ("Contractor") and the City of Corinth, Texas ("Client").

1. Services. Contractor will provide the Services at the locations listed as 1260 Columbia Drive; Corinth, Texas (the "Services"). Contractor may perform the Services by any reasonable means and shall not be responsible for delays in performance beyond its control.

2. Term. This Agreement shall be in effect for 1 year, commencing May 1, 2019 and shall continue thereafter for successive periods of twelve months, unless terminated earlier as provided herein.

3. Termination. If Client is dissatisfied with the quality of the Services, Client may inform Contractor in writing of the specific areas of dissatisfaction, and if Contractor shall fail to correct the deficiencies within thirty (30) days ("Cure Period"), Client may then terminate this Agreement upon the date specified in the written notice for Contractor's failure to correct the deficiency during the Cure Period. Client may terminate this Agreement at any time upon thirty (30) days' written notice if Client vacates the premises; if funds for payment under this Agreement are not appropriated by Client's governing body for any given fiscal year of Client (Client's fiscal year begins on October 1, and ends on September 30 the following year); or if Client determines that termination serves its interests. Contractor may terminate this Agreement by thirty (30) days' written notice to Client and may terminate services at any time with thirty (30) days' prior written notice to Client for nonpayment; provided, however, if Client shall make payment within ten (10) days of receipt of notice, the Agreement shall not terminate. Notwithstanding the foregoing, in order to assure WARN Act compliance, the Client shall provide at least seventy-five (75) days' prior written notice of cancellation, only if the number of Contractor's employees assigned to Client's account is equal to or exceeds fifty (50) employees at any time during the six month period prior to the notice of termination, unless the premises is destroyed or otherwise rendered uninhabitable due to unforeseen circumstances. All property furnished by Contractor under this contract shall remain its property. Upon the termination of this contract, Contractor shall have a reasonable time to remove its property from Client's premises.

4. Price. Client agrees to pay Contractor on a monthly basis for the Services: Please see attached Pricing Summary. Payment shall be due within twenty (20) days from the earlier of the date of invoice or the last day of each month for which Services were performed. A late charge of the lesser of (a) 1.5% per month or (b) the maximum rate permitted by law, shall be paid by Client to Contractor on any past due payment not received within fifteen (15) days after the payment due date. The price is based upon the service area and frequency of services in the attached specifications. If there is any change in either, Client and Contractor agree to negotiate a reasonable price adjustment. Notwithstanding the foregoing, if the parties are unable to reach agreement regarding a price adjustment, this Agreement may be terminated by either party upon thirty (30) days' written notice to the other party.

5. Extraordinary Cost Changes. If any extraordinary event affects Contractor's costs, upon notice to Client the parties agree to negotiate a reasonable adjustment. Notwithstanding the foregoing, if the parties are unable to reach agreement regarding a price adjustment, this Agreement may be terminated by either party upon thirty (30) days' written notice to the other party. Such events shall include armed hostilities,

riots, strikes, picketing, boycott, acts of God, national financial or economic disturbances, epidemics, and other events not reasonably foreseeable or against which Contractor reasonably cannot protect itself.

6. Holidays. Contractor is not obligated to perform the Services on the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. Services on holidays, when requested, shall be charged on an over-time basis. A holiday on the sixth or seventh day of the work week shall be subject to additional charge of a full day at straight time if wages are required to be paid for that day.

7. Indemnification. Contractor shall release, indemnify, defend and hold harmless Client from loss, liability, cost, or expense (including reasonable attorneys' fees) for bodily injury, death and property damage (hereinafter referred to as "Claims(s)") but only to the extent same are caused by the partial or sole negligence, misconduct or other fault of Contractor, its agents and employees, and which arise out of, relate to, or are caused by work performed under this Agreement. The foregoing provision shall only benefit Client if Client notifies Contractor in writing of such Claim within five (5) business days of same being reported to Client or its representative or discovered by Client or its representatives. Contractor shall not be liable for delay, loss or damage caused by warfare, riots, strikes, boycotts, criminal acts, acts or omissions of others, fire, water damage, natural calamity, or causes beyond Contractor's reasonable control. Contractor shall not be liable for disposal of documents or valuable items, other than office furnishings, left on floors, and only to the extent allowed by law, Client shall indemnify and hold harmless Contractor from claims for such disposal. Client agrees to keep its facilities in a safe condition and in conformance with federal, state, and local laws, ordinances and regulations.

8. Insurance and Taxes. Contractor agrees to maintain in full force and effect during the term of this agreement the following insurance coverages with regard to the work performed for Client under this Agreement: 1) Commercial General Liability insurance with limits for bodily injury and property damage of not less than \$1,000,000 per occurrence; 2) Commercial Automobile Liability insurance with limits of liability for bodily injury and property damage of not less than \$1,000,000 per occurrence; and 3) Workers' Compensation insurance with statutory limits and with an employer's liability limit of at least \$500,000 or other comparable employer coverage providing a minimum of equivalent amounts and as allowed by law. Contractor has the right to be self-insured where permitted by state law or to provide such coverage subject to a deductible or self-insured retention. Upon request, Contractor will provide Client with a certificate of insurance describing the coverage provided in accordance with these provisions. Contractor's insurer shall waive all rights of subrogation against Client for property damage claims. Contractor shall be responsible for paying all payroll-based taxes affecting its employees. Client shall be listed as an additional insured on Contractor's commercial general liability and automobile liability insurance.

9. Independent Contractor. Contractor is an independent contractor and all persons employed to furnish services hereunder are employees of Contractor and not of Client. Contractor will pay for all wages, expenses, federal and state payroll taxes and any similar tax relating to such employees, and will provide uniforms in accordance with Contractor's established standards. Client agrees not to hire any employees or former employees of Contractor or its affiliates during the term of this Agreement or within 90 days after its termination.

10. Employees. Upon written request by Client, Contractor will remove from service any employee assigned to Client's premises who has engaged in improper conduct, including without limitation, a breach

of Client policies or failure to perform the duties herein, provided such request is in accordance with the law. Contractor shall supervise its employees through Contractor's designated personnel.

11. Keys. Contractor shall not be provided master keys to any property. Should access to a master key be required, Client will provide a key box or lock box for such master key(s) at the property.

12. Notices. Notices, requests, demands, etc., shall be written and delivered or mailed with postage prepaid

to Client at:
City of Corinth
3300 Corinth Parkway
Corinth, TX 76208
ATTN: Purchasing Department

to Contractor at:
ABM Industries Groups, LLC

ATTN: _____

With a copy to:
ABM Legal Department

13. Entire Agreement. This Agreement contains the entire agreement between the parties. All prior negotiations between the parties are merged in this Agreement, and there are no understandings or agreements other than those incorporated herein. This Agreement may not be modified except by written instrument signed by both parties. In the event of conflict between any of the foregoing provisions of this Agreement and any other contract, purchase order, agreement or specification between the parties, this Agreement shall be controlling. This Agreement shall inure to and bind the successors, assigns, agents and representatives of the parties. Exclusive venue shall be in Denton County, Texas.

14. Assignment. The Contractor may not assign this Agreement without the prior written consent of Client. In the event of an assignment by the Contractor to which the Client has consented, the assignee shall agree in writing with the Client to personally assume, perform, and be bound by all the covenants and obligations contained in this Agreement.

15. Successors and Assigns. Subject to the provisions regarding assignment, this Agreement shall be binding on and inure to the benefit of the parties to it and their respective heirs, executors, administrators, legal representatives, successors and assigns.

16. Severability. In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.

17. Counterparts. This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of any number of copies hereof each signed by less than all, but together signed by all of the parties hereto.

18. Exhibits. The exhibits attached hereto are incorporated herein and made a part hereof for all purposes.

19. Conflict of Interest. Contractor covenants and agrees that Contractor and its associates and employees will have no interest, and will acquire no interest, either direct or indirect, which will conflict in any manner with the performance of the services called for under this Agreement. All activities, investigations and other efforts made by Contractor pursuant to this Agreement will be conducted by employees, associates or subcontractors of Contractor.

20. No Third-Party Beneficiary. For purposes of this Agreement, including its intended operation and effect, the parties (Contractor and Client) specifically agree and contract that: (1) the Agreement only affects matters/disputes between the parties to this Agreement, and is in no way intended by the parties to benefit or otherwise affect any third person or entity notwithstanding the fact that such third person or entity may be in contractual relationship with Contractor or Client or both; and (2) the terms of this Agreement are not intended to release, either by contract or operation of law, any third person or entity from obligations owing by them to either Contractor or Client.

21. Prohibition regarding Israel. Pursuant to the requirements of Texas Government Code Chapter 2270, Contractor verifies that it does not boycott Israel, and it will not boycott Israel during the term of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

Client:
City of Corinth
By: _____
Name: _____
Title: _____

Contractor:
ABM Industries Groups, LLC
By: _____
Name _____
Title: _____

ABM CMS#441923

Our People

Our promise to you is fulfilled by our people. Your expectations need to be met by employees who are willing and able to **make a difference**, every day—which ABM's employees have demonstrated consistently.

We attract, select and retain employees who will exemplify our core values—respect, integrity, collaboration, innovation and excellence—at every job site. We hire superior employees from diverse backgrounds, give them thorough training, encourage them to be accountable for their work and reward them for exceptional performance.

With well-managed people in the right jobs, City of Corinth benefits in many ways:

- Higher quality service
- Increased productivity and reliability
- Professional interaction with tenants
- Reduced turnover, resulting in more familiar faces and more consistent service
- Lower costs as a result of a safer workplace

Attract and Recruit

Recruiting the best

Your facilities will be staffed by highly qualified professionals who were attracted to ABM because of our strong reputation for employee development and retention.

Your building requires personnel who are able to adapt to your culture and present themselves in a friendly, professional manner. That is why we make great efforts to recruit employees who don't just match the job profile, but also will adapt to meet your facility's needs and ABM's culture of learning, teamwork and providing high-quality service.

Screen and Select

Careful selection to ensure safety and quality

Through professional interviewing and selection processes, we select quality candidates who meet your needs. To ensure the safety of your customers, employees and business assets, we provide a range of employee screening packages. We will conduct tiered screening based on your industry's best practices and your business' requirements.



Our screening packages can include any of the following:

- Standard background checks
- Criminal/sex offender background checks (CORI/SORI)
- Credit checks
- Drug screening (upon contract requirement)
- Professional certification checks
- Additional reference checks

Train and Develop

An emphasis on safety and training

To deliver you the reliable, high-quality service that you expect, we develop training programs at the national and regional level, and emphasize best practices and safety. For more detailed information, see the section titled “Training Program” in this proposal.

Retain

Employee benefits and incentives attract and keep good people

Maintaining a broad, competitive benefits program enables us to keep well-trained, experienced employees who are committed to your building and ABM. We provide you with the flexibility to personalize a benefit package that meets your cost objectives while still achieving a work/life balance for the employees.

Based on the terms of your contract or collective bargaining agreement requirements, the service workers staffing your facilities will be offered a selection of benefits that can include the following:

F/T Salaried Personnel

- Health and Dental
- Life Insurance
- Accidental Death and Dismemberment
- Paid Vacation
- Paid Holidays

Salaried & Hourly Personnel

- 401 (k)
- Anniversary Awards
- Workers’ Compensation
- Employee Stock Purchase Plan
- Additional Health Insurance Plans are available based on contract negotiations

Grow

Encouraging professional growth

Another component of our retention program is the support we provide to employees as they grow in their careers. Your building will be serviced by employees who are allowed to grow, which typically results in higher productivity and better service quality. Our culture encourages each employee to openly communicate with his or her manager to develop a career path that builds on individual strengths. The quality of each individual employee’s service continually improves because of the ongoing coaching facilitated by regular performance reviews.



Training Program

We provide you with employees that have the training they need to successfully perform janitorial services in your building, improve efficiency, and develop new skills. Every ABM employee meets the following criteria:

- Technically proficient with chemicals, equipment and methods
- Familiar with the rules and regulations of your building
- Thoroughly trained in job safety
- Committed to providing outstanding client service

New Hire Orientation and Training

During the start-up phase, ABM Project Managers and Supervisors conduct employee training sessions at one of your locations in a classroom setting. These sessions include site-specific rules and regulations, ABM policies and procedures and basic job training.

Training for service workers concentrates on specific work tasks. Our Supervisors demonstrate each task step-by-step, detailing the importance of each step along the way, and train them to perform visual inspections before completing work. The Supervisors also provide guidance to the service workers as they work.

Once initial training is complete, Supervisors perform recurring reviews to make sure that they are maintaining City of Corinth's and ABM's standards. By empowering our employees with comprehensive training, we are able to minimize deficiencies and quickly identify opportunities for improvement.

Recurrent Training Sessions

Our managers conduct recurrent training sessions for current and replacement employees at your site(s). These sessions are more technical in nature and concentrate on specific job tasks and duties, such as specialized certifications and interdisciplinary training. Employees are trained in groups specific to their function. Compliance is measured and tracked by attendance, job performance, tests, etc. to ensure all employees are receiving the proper level of training.



Managing Risk through Safety Programs

Safety is the cornerstone of ABM's operations. As part of the **ABMWay**, our documented processes around ensuring our customers, our employees, and our company's success, we are committed to fostering a safe working environment for every employee at all City of Corinth locations, every day. It is our responsibility to embrace the ABM **ThinkSafe** culture and proactively prevent, detect and correct any safety or risk concern that may arise.

ThinkSafe is an ABM program that promotes the idea that almost all workplace accidents are preventable – if you make focusing on safety an integral part of your day. At ABM, we are striving to create a world-class culture in all we do and safety is a large part of that objective.



ThinkSafe™
People. Materials. Environment.

At ABM, risk management consists of both Safety and Claims Management, working jointly with operations, to ensure the safety and well-being of our customers and our customers' clients.

It is ABM's policy to:

- maintain a safe workplace for its employees
- provide safety devices and mechanical safeguards
- use methods and processes to protect the life, health, safety and welfare of its employees and the general public
- establish a relationship of safety to our clients
- maintain and enforce a program to fulfill this responsibility

To ensure common goals and objectives, both Safety and Claims Management report the Vice President of Risk and Safety. We have a team of dedicated safety professionals that liaise with our Branch Operations to ensure the ABM safety culture is forefront in our employees' mind – every day. Our safety professionals are dedicated to all of ABM's Industry Groups so they are experts in the risks and exposures that our employees face every day in their types of business.

ThinkSafe Programs

To reach more than 140,000 employees, we have developed the following programs that are the cornerstone of ABM's **ThinkSafe** Program:

- An extensive **Safety Champion Program** was implemented to promote a safe working environment by creating and maintaining each employee's active interest in safety, to minimize the frequency of accidents, to identify innovative processes to address safety hazards, and implement corrective measures to mitigate recognized safety opportunities. The goal of the program is to set the tone for safety through:
 - Assessing account conditions
 - Providing and receiving feedback from front-line management and team members
 - Recognizing safe work practices and out of the box processes and procedures that drive results



- Developing a library of safety programs known to generate results across ABM
- Establishing a Safety Champion Network to implement and promote future safety initiatives
- **Leadership and Engagement Tours** were designed to foster engagement and ownership in Safety and Risk from the senior management team including the Regional Vice President, Regional Operations Managers, District Managers and Area Managers to the service employee. These tours are designed to promote dialogue about safety and safe working environments by ensuring effective communications between managers and their employees.
- **Empowerment of Field Locations** grants authority for the implementation and maintenance of ABM's Injury and Illness Prevention Program to our local branches and regional operations teams. Every operations manager, supervisor and site lead is responsible for implementing and maintaining ABM's Risk and Safety program to:
 - Ensure safety orientation training for all new employees
 - Train all employees in their scope of work and company safety programs
 - Deliver regularly scheduled safety training
 - Conduct site safety inspections on an ongoing basis
 - Develop hazard assessments how to work safely with those known hazards
 - Provide necessary documents to injured employees arrange for their timely medical assistance and expediting their return to work

These programs have been embedded into ABM's culture and provides opportunities to significantly reduce the amount of injuries that occur among our workforce. However, despite our best efforts, some accidents still occur and the utilization of risk management programs becomes essential to get employees back to good health and back to work as quickly as possible. Our Safety and Risk Management teams have made powerful developments in our company's ability to monitor and administer hazards, claims and other risk-related issues.




Safety Programs for City of Corinth

- **Moment of Safety:** Every day at ABM, our managers share a **Daily Safety Moment** with their employees. Included in these brief "toolbox" meetings are a brief safety talk based on the safety topic of the day, a basic overview of tasks, any changes or special requests discussed, reminder of safety slogan and adherence to safety guidelines, incentives offered and rewards presented.

Examples of **Safety Moment** topics include:

- How to Avoid Accidents
- Safe Lifting Techniques

- Hand Protection
 - Ladder Safety
 - Fire Safety
 - Slips and Falls
 - First Aid
 - Personal Protective Equipment
 - Machine Guard Use
 - Power Truck Safety
 - Lock Out For Safety
 - Learn from Near-Accidents
 - Safe Walking
- **Safety Hotline:** To reinforce the importance of our **ThinkSafe** culture and empower our employees to address safety concerns as they arise, ABM has implemented a toll-free Safety Hotline. This hotline (1-866-208-2114) is available 24 hours each day and 7 days each week and it gives employees a means to report safety issues that may affect ABM's employees, clients or the public. While employees are encouraged to first notify their supervisors of safety hazards or issues, as part of the **ABMWay**, the hotline should be used as an alternate method to address safety concerns when a supervisor is not readily available.
- 
- **Telematics:** All ABM fleet vehicles are equipped with telematics systems that monitor the employee's driving habits, including speed of travel, seatbelt use, idle time and the location of the vehicle at every stop. Data is collected automatically and audible alerts are sounded whenever a driver exhibits unsafe behavior. Driving habits, patterns, and violations of the policy are reviewed monthly and remain on file with us for 12 months.
 - **Nurseline:** A "first call" nurse triage program to assess on the job injuries for appropriate treatment. This ensures that possible injuries are detected and treated promptly and properly.
 - **Concentra National Clinic Program:** A specialized national network of clinics focused on the assessment and treatment of work-related injuries (for all areas outside of California).
 - **Stay-at-Work Program:** A specific focus on returning injured employees to work once the provider releases the employee with appropriate "light-duty" assignment.
 - **Telephone Nurse Case Management (TCM):** Utilizing qualified nurses to assist with the medical management component of the claim, with the goal of prompt return to work.
 - **Prompt Notification of Injury:** The reduction in lag time between the injury and report can minimize exacerbation of injuries; allow additional time to properly and expeditiously investigate the claim and implement proper corrective and preventive actions to avoid recurrence; decrease legal and claim related expenses; and ensure compliance with state and federal laws.
 - **Loss Accountability Program (LAP):** An opportunity-based insurance premium collection mechanism designed to measure safety and claim performance. The foundation of the LAP collection system rewards branches and regions that successfully reduce the frequency and severity of claims year-over-year. They also remediate those areas that performed poorly in the safety and claim arena. Data analytics and dashboard reporting is ABM leadership's primary tools to effectively measure each location's success.
 - **Safe Work Observation Process (SWOP)** is a formal documented process that reinforces ABM's safety culture through safety observations, communication and training. This process is in alignment with our Behavior Based Safety processes. Objectives are to:
 - Recognize or coach employees
 - Create a safe work environment for everyone
 - Demonstrate how to use the equipment and tools properly



- Reduce personal risk of injury
- Safety Training Videos: We created a series of online safety orientation videos to facilitate training that have engaging scenes and a few moments of fun. Please access these videos via the following link abm.com/thinksafe/videos/.



Quality Assurance Program

We've established a quality culture that focuses on client satisfaction, involves employees, measures performance, and is continuously improving. To support your quality goals and requirements, we use a unifying quality management system that places a variety of processes into a single framework. This framework acts as a starting point from which City of Corinth and ABM will customize a quality program for your building. The program will improve efficiencies and allow for greater transparency into your account activity.

Your account will be managed with innovative technology tools that improve communication, increase worker productivity and integrate processes to measure results. Your ABM Project Manager and service workers will be utilizing laptops, tablets or other wireless devices for data entry and communication. The staff servicing your building will be more dependable because of the efficiency and transparency of our systems.

Benefits You'll Receive:

- Automated communication, resulting in reduced response time
- Complete, up-to-date work order status
- Round-the-clock access, communication and tracking
- Periodic scheduling and tracking
- Customized inspection and work order reports providing data for process improvement
- Improved client satisfaction
- Less time spent managing issues



Quality Management System

ABM's quality management tool is a web-based control system that supports your quality goals and requirements. The system allows both City of Corinth and ABM to view inspection results, work order statuses, periodic maintenance schedules, and reports through a central online portal. ABM focuses on:

- Analyzing inspection results
- Automating work order management
- Establishing and tracking accountability
- Continually improving processes

Tracking Accountability

In order to provide you with transparent accountability, all work requests will clearly define who is responsible for the work and the time involved for completion. The requests will be time stamped, and automatic escalations are triggered by that time, notifying management. You will have the opportunity to measure, quantify and analyze service delivery, alongside ABM management. This process makes it easy to identify and disseminate best practices.

As work is accomplished and work orders are closed, the reporting system is updated. Supervisory personnel will follow up with service workers on issues and requests to make certain all work is completed to our high standards. Any problems that emerge from this follow-up are immediately corrected and the communication loop is then closed—but only when our clients are absolutely satisfied.

Your facilities will be inspected on a regular schedule, and the data is entered into the system via a wireless device, allowing for real-time access to inspection results. During inspection, tasks are rated on a scale from one to five, producing a percentage of the maximum possible. The total for all tasks during that inspection becomes the quality score for the site(s). Customized quality control inspection reports, showing results and trends will be accessible online or via an Excel spreadsheet. This information allows our managers to determine what actions are necessary to maintain compliance, continuous improvement, and ultimately, your satisfaction.

Process Improvement

We optimize our processes to achieve more efficient results for you through planning, standardization, employee engagement and other means. We continuously look to identify areas of opportunity and target any problem areas, formulate a detailed strategy, and promptly execute the solution. When we engage in a proactive process improvement strategy, we are able to build upon our foundation of best practices, procedures and processes so you receive the best service. Our quality management system helps us identify where to focus our efforts.



References

HPI REAL ESTATE SERVICES & INVESTMENTS



ROSS TOWER
500 N. Akard Street,
Dallas, TX 75201

Customer Contact:
Connie Pruitt, Property Mgr.
(214) 954-3300
pruett@HPItx.com

Facility Type:
Class "A" Multi-tenant Offices
Services Provided: Janitorial
Area Serviced: 1,113,575 sq. ft.
Serviced Since: 1997

CRESCENT REAL ESTATE



CRESCENT OFFICE TOWERS
100 Crescent Court
Dallas, TX 75201

Customer Contact:
Kristine Lang
Sr. Assistant Director of Public Services
(214) 880-4568
klang@crecident.com

Facility Type:
Class "A" Office Complex
Services Provided: Janitorial.
Area Serviced: 1,300,000 sq. ft.
Serviced Since: 2001

CRESCENT REAL ESTATE EQUITIES, LLC



MCKINNEY & OLIVE BUILDING
2021 McKinney Avenue
Dallas, TX 75201

Customer Contact:
Angelique Wade
Sr. Assistant Director of Public Services
(469) 917-4300
awade@crecident.com

Facility Type:
Premier Class A Offices
Services Provided: Janitorial
Area Serviced: 480,000 sq. ft.
Serviced Since: 2016



What to Expect From ABM

ABM provides solutions that lower your operating costs, preserve your assets and maximize their value. We focus on these core areas in order to deliver the best service possible:

Service Excellence

With our highly-trained, in-house workforce, you can trust that we'll provide you with services that increase efficiencies and lower your operating expenses—all while maintaining a uniform standard of service excellence.

Breadth of Services

We'll provide you with an unrivaled range of facilities solutions that will keep your properties safe, clean, comfortable and energy efficient.

Deep Industry Expertise

From our national office to our local branches, we've made sure our workforce understands your industry. After all, in over 100 years' of service, we've developed the expertise to make our solutions work best for you.

Technology-Enabled Workforce

Your facilities will be serviced with the support of innovative technology solutions that will simplify service delivery and allow for greater transparency.

Guaranteed Sustainability Solutions

We've got expertise to support all of your sustainability goals, including green cleaning, LEED support, bundled energy solutions, and more.



ABM Service Agreement

This Facility Service Agreement (the "Agreement") is made April 4, 2019, between ABM Industry Groups, LLC ("Contractor") and the City of Corinth, Texas ("Client").

1. Services. Contractor will provide the Services at the locations listed as 1260 Columbia Drive; Corinth, Texas (the "Services"). Contractor may perform the Services by any reasonable means and shall not be responsible for delays in performance beyond its control.

2. Term. This Agreement shall be in effect for 1 year, commencing May 1, 2019 and shall continue thereafter for successive periods of twelve months, unless terminated earlier as provided herein.

3. Termination. If Client is dissatisfied with the quality of the Services, Client may inform Contractor in writing of the specific areas of dissatisfaction, and if Contractor shall fail to correct the deficiencies within thirty (30) days ("Cure Period"), Client may then terminate this Agreement upon the date specified in the written notice for Contractor's failure to correct the deficiency during the Cure Period. Client may terminate this Agreement at any time upon thirty (30) days' written notice if Client vacates the premises; if funds for payment under this Agreement are not appropriated by Client's governing body for any given fiscal year of Client (Client's fiscal year begins on October 1, and ends on September 30 the following year); or if Client determines that termination serves its interests. Contractor may terminate this Agreement by thirty (30) days' written notice to Client and may terminate services at any time with thirty (30) days' prior written notice to Client for nonpayment; provided, however, if Client shall make payment within ten (10) days of receipt of notice, the Agreement shall not terminate. Notwithstanding the foregoing, in order to assure WARN Act compliance, the Client shall provide at least seventy-five (75) days' prior written notice of cancellation, only if the number of Contractor's employees assigned to Client's account is equal to or exceeds fifty (50) employees at any time during the six month period prior to the notice of termination, unless the premises is destroyed or otherwise rendered uninhabitable due to unforeseen circumstances. All property furnished by Contractor under this contract shall remain its property. Upon the termination of this contract, Contractor shall have a reasonable time to remove its property from Client's premises.

4. Price. Client agrees to pay Contractor on a monthly basis for the Services: Please see attached Pricing Summary. Payment shall be due within twenty (20) days from the earlier of the date of invoice or the last day of each month for which Services were performed. A late charge of the lesser of (a) 1.5% per month or (b) the maximum rate permitted by law, shall be paid by Client to Contractor on any past due payment not received within fifteen (15) days after the payment due date. The price is based upon the service area and frequency of services in the attached specifications. If there is any change in either, Client and Contractor agree to negotiate a reasonable price adjustment. Notwithstanding the foregoing, if the parties are unable to reach agreement regarding a price adjustment, this Agreement may be terminated by either party upon thirty (30) days' written notice to the other party.

5. Extraordinary Cost Changes. If any extraordinary event affects Contractor's costs, upon notice to Client the parties agree to negotiate a reasonable adjustment. Notwithstanding the foregoing, if the parties are unable to reach agreement regarding a price adjustment, this Agreement may be terminated by either party upon thirty (30) days' written notice to the other party. Such events shall include armed hostilities,

riots, strikes, picketing, boycott, acts of God, national financial or economic disturbances, epidemics, and other events not reasonably foreseeable or against which Contractor reasonably cannot protect itself.

6. Holidays. Contractor is not obligated to perform the Services on the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. Services on holidays, when requested, shall be charged on an over-time basis. A holiday on the sixth or seventh day of the work week shall be subject to additional charge of a full day at straight time if wages are required to be paid for that day.

7. Indemnification. Contractor shall release, indemnify, defend and hold harmless Client from loss, liability, cost, or expense (including reasonable attorneys' fees) for bodily injury, death and property damage (hereinafter referred to as "Claims(s)") but only to the extent same are caused by the partial or sole negligence, misconduct or other fault of Contractor, its agents and employees, and which arise out of, relate to, or are caused by work performed under this Agreement. The foregoing provision shall only benefit Client if Client notifies Contractor in writing of such Claim within five (5) business days of same being reported to Client or its representative or discovered by Client or its representatives. Contractor shall not be liable for delay, loss or damage caused by warfare, riots, strikes, boycotts, criminal acts, acts or omissions of others, fire, water damage, natural calamity, or causes beyond Contractor's reasonable control. Contractor shall not be liable for disposal of documents or valuable items, other than office furnishings, left on floors, and only to the extent allowed by law, Client shall indemnify and hold harmless Contractor from claims for such disposal. Client agrees to keep its facilities in a safe condition and in conformance with federal, state, and local laws, ordinances and regulations.

8. Insurance and Taxes. Contractor agrees to maintain in full force and effect during the term of this agreement the following insurance coverages with regard to the work performed for Client under this Agreement: 1) Commercial General Liability insurance with limits for bodily injury and property damage of not less than \$1,000,000 per occurrence; 2) Commercial Automobile Liability insurance with limits of liability for bodily injury and property damage of not less than \$1,000,000 per occurrence; and 3) Workers' Compensation insurance with statutory limits and with an employer's liability limit of at least \$500,000 or other comparable employer coverage providing a minimum of equivalent amounts and as allowed by law. Contractor has the right to be self-insured where permitted by state law or to provide such coverage subject to a deductible or self-insured retention. Upon request, Contractor will provide Client with a certificate of insurance describing the coverage provided in accordance with these provisions. Contractor's insurer shall waive all rights of subrogation against Client for property damage claims. Contractor shall be responsible for paying all payroll-based taxes affecting its employees. Client shall be listed as an additional insured on Contractor's commercial general liability and automobile liability insurance.

9. Independent Contractor. Contractor is an independent contractor and all persons employed to furnish services hereunder are employees of Contractor and not of Client. Contractor will pay for all wages, expenses, federal and state payroll taxes and any similar tax relating to such employees, and will provide uniforms in accordance with Contractor's established standards. Client agrees not to hire any employees or former employees of Contractor or its affiliates during the term of this Agreement or within 90 days after its termination.

10. Employees. Upon written request by Client, Contractor will remove from service any employee assigned to Client's premises who has engaged in improper conduct, including without limitation, a breach

of Client policies or failure to perform the duties herein, provided such request is in accordance with the law. Contractor shall supervise its employees through Contractor's designated personnel.

11. Keys. Contractor shall not be provided master keys to any property. Should access to a master key be required, Client will provide a key box or lock box for such master key(s) at the property.

12. Notices. Notices, requests, demands, etc., shall be written and delivered or mailed with postage prepaid

to Client at:
City of Corinth
3300 Corinth Parkway
Corinth, TX 76208
ATTN: Purchasing Department

to Contractor at:
ABM Industries Groups, LLC

ATTN: _____

With a copy to:
ABM Legal Department

13. Entire Agreement. This Agreement contains the entire agreement between the parties. All prior negotiations between the parties are merged in this Agreement, and there are no understandings or agreements other than those incorporated herein. This Agreement may not be modified except by written instrument signed by both parties. In the event of conflict between any of the foregoing provisions of this Agreement and any other contract, purchase order, agreement or specification between the parties, this Agreement shall be controlling. This Agreement shall inure to and bind the successors, assigns, agents and representatives of the parties. Exclusive venue shall be in Denton County, Texas.

14. Assignment. The Contractor may not assign this Agreement without the prior written consent of Client. In the event of an assignment by the Contractor to which the Client has consented, the assignee shall agree in writing with the Client to personally assume, perform, and be bound by all the covenants and obligations contained in this Agreement.

15. Successors and Assigns. Subject to the provisions regarding assignment, this Agreement shall be binding on and inure to the benefit of the parties to it and their respective heirs, executors, administrators, legal representatives, successors and assigns.

16. Severability. In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.

17. Counterparts. This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of any number of copies hereof each signed by less than all, but together signed by all of the parties hereto.

18. Exhibits. The exhibits attached hereto are incorporated herein and made a part hereof for all purposes.

19. Conflict of Interest. Contractor covenants and agrees that Contractor and its associates and employees will have no interest, and will acquire no interest, either direct or indirect, which will conflict in any manner with the performance of the services called for under this Agreement. All activities, investigations and other efforts made by Contractor pursuant to this Agreement will be conducted by employees, associates or subcontractors of Contractor.

20. No Third-Party Beneficiary. For purposes of this Agreement, including its intended operation and effect, the parties (Contractor and Client) specifically agree and contract that: (1) the Agreement only affects matters/disputes between the parties to this Agreement, and is in no way intended by the parties to benefit or otherwise affect any third person or entity notwithstanding the fact that such third person or entity may be in contractual relationship with Contractor or Client or both; and (2) the terms of this Agreement are not intended to release, either by contract or operation of law, any third person or entity from obligations owing by them to either Contractor or Client.

21. Prohibition regarding Israel. Pursuant to the requirements of Texas Government Code Chapter 2270, Contractor verifies that it does not boycott Israel, and it will not boycott Israel during the term of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

Client:
City of Corinth
By: _____
Name: _____
Title: _____

Contractor:
ABM Industries Groups, LLC
By: _____
Name _____
Title: _____

ABM CMS#441923

CONSENT ITEM 6.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: Corinth Asset Management Plan Adoption
Submitted For: Bob Hart, City Manager **Submitted By:** Cody Collier, Director
Finance Review: N/A **Legal Review:** N/A
City Manager Review: Approval: Bob Hart, City Manager
Strategic Goals: Infrastructure Development

AGENDA ITEM

Adoption of the Asset Management Plan as prepared by Public Sector Digest for the City of Corinth.

AGENDA ITEM SUMMARY/BACKGROUND

Recognizing the importance and need of a comprehensive Asset Management Plan (AMP) for the City of Corinth, Public Sector Digest was selected to work with staff on the development of a plan. The plan comprised a full asset listing, condition and replacement cost of every component comprising City infrastructure including; buildings, vehicles, equipment, road network, street signs, drainage system network, water system, waste water system, parks, and any other items/ structures listed as an asset owned by the City. From those detailed listings, a value of all city owned infrastructure was established.

The next step was to determine the condition of City owned assets based on inspection or upon age as determined by life cycle industry standards. From those findings, Public Sector Digest was able to determine a replacement cost schedule and budgetary requirements to establish a funding mechanism as determined by Corinth. The plan outlined a funding structure as a model to become 50% cash funded and 50% debt funded for replacement of assets within 20 years (section IX. Financial Strategy page 115 of the AMP). The capacity to fund the AMP at 50% will require detailed strategy and planning moving forward and is a target goal with options to modify that funding ability as the city moves forward.

Current condition of city owned assets was graded to reflect existing condition and combined with replacement funding balances for asset classes and the ability to fund replacement with current revenues. The "Average Asset Class Grade" as determined by PSD (X. 2018 Infrastructure Report Card page 128) assesses a grade of "F" on all assets primarily due to a lack of replacement funding balances for all asset classes. Replacement funding is identified as the single most significant challenge and necessity for the AMP. Adoption of this plan will provide direction and future discussion on levels of funding capacity for the planning of asset replacement strategies.

City Council approved an Asset Management Policy on December 6, 2018 to provide leadership and commitment to the development and implementation of the City's Asset Management Plan. The policy outlines the policy principles, objectives, benefits, risk management and performance assessment and improvement. The final Asset Management Plan, as presented for adoption, contains those principals and strategic planning for preparing now and into the future for funding requirements and establishing a replacement schedule for City owned assets.

RECOMMENDATION

Staff recommends adoption of The 2018 Asset Management Plan for the City of Corinth.

Attachments

2018 Asset Management Plan for Corinth



AMP 2018

www.psdrcs.com

The 2018 Asset Management Plan for the
City of Corinth

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Executive Summary

Infrastructure is inextricably linked to the economic, social and environmental advancement of a community. As analyzed in this asset management plan (AMP), the city of Corinth's infrastructure portfolio comprises the following asset classes: road system, bridges & culverts, buildings, stormwater system, water system, wastewater system, and machinery & equipment. The asset classes analyzed in this asset management plan for the City had a total 2018 valuation of \$659 million, of which the water system comprised 36%.

Strategic asset management is critical in extracting the highest total value from public assets at the lowest lifecycle cost. This AMP, the City's first, details the state of infrastructure of the City's service areas and provides asset management and financial strategies designed to facilitate its pursuit of developing an advanced asset management program and mitigate long-term funding gaps.

In addition to observed field conditions, historical capital expenditures can assist the City in identifying impending infrastructure needs and guide its medium- and long-term capital programs. The City has continuously invested into its infrastructure over the decades. Investments fluctuated during the 1970s and 1980s and then peaked in the late 1990s. During this time, \$218 million was invested with \$103 million put into the road system. Since 2015, \$29.5 million has been invested with a heavier focus on roads, the water system and buildings.

Based on 2018 replacement cost, and primarily age-based data, over 39% of assets, with a valuation of \$210 million, are in good to very good condition; 21% are in poor to very poor condition. The City has provided condition information for 6% of assets based on 2018 replacement cost. 86% of the assets analyzed in this AMP have at least 10 years of useful life remaining. However, 4%, with a valuation of \$22 million, remain in operation beyond their established useful life. An additional 3% will reach the end of their useful life within the next five years.

In order for an AMP to be effective, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the City to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements.

The average annual investment requirement for the above categories is \$6,319,000. Annual revenue currently allocated to these assets for capital purposes is \$0 leaving an annual deficit of \$6,319,000. To put it another way, these infrastructure categories are currently funded at 0% of their long-term requirements. In 2018, Corinth has annual tax revenues of \$11,400,000. Our strategy includes a 20-year option to become 50% funded by debt and 50% by current revenues by:

- starting in 2024, increasing tax revenues by 0.8% each year for the next 20 years solely for the purpose of phasing in 50% funding to the asset categories covered in this section of the AMP.
- when realized, reallocating the debt cost reductions to the infrastructure deficit as outlined above.
- phasing the debt funded portion of the capital plan from 100% to 50% as outlined above.
- increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

The average annual investment requirement for wastewater system, water system and stormwater system are \$6,099,000. Annual revenue currently allocated to these assets for capital purposes is \$0 leaving an annual deficit of \$6,099,000. To put it another way, these infrastructure categories are currently funded at 0% of their long-term requirements. In 2018, Corinth has annual wastewater system revenue of \$3,288,000, annual water system revenue of \$7,758,000 and annual stormwater system revenue of \$712,000.

Our strategy includes a 20 year option to become 50% funded by debt and 50% by current revenues by:

- each year for the next 20 years, solely for the purpose of phasing in 50% funding to the asset categories covered in this section of the AMP, increase revenues as follows: wastewater system 0.4%; water system 1.0%; stormwater system 3.8%.
- when realized, reallocating the debt cost reductions to the infrastructure deficit as outlined above.
- phasing the debt funded portion of the capital plan from 100% to 50% as outlined above.
- increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

Although our financial strategies allow the municipalities to meet its long-term funding requirements and reach fiscal sustainability, injection of additional revenues will be required to mitigate existing infrastructure backlogs.

A critical aspect of this asset management plan is the level of confidence the City has in the data used to develop the state of the infrastructure and form the appropriate financial strategies. The City has indicated a high degree of confidence in the accuracy, validity and completeness of the asset data for all categories analyzed in this asset management plan.

Asset Management Policy & City Council Resolution

RESOLUTION NO. 18-12-6-17

A RESOLUTION REVIEWING AND APPROVING THE STRATEGIC ASSET
MANAGEMENT POLICY FOR THE CITY OF CORINTH; AND
PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council has reviewed and approved the Strategic Asset Management Policy attached hereto as Exhibit A, and

NOW, THEREFORE, THE COUNCIL OF THE CITY OF CORINTH HEREBY RESOLVES:


SECTION 1. That the City Council has reviewed the attached Strategic Asset Management Policy, which contain the strategies and policies of implementing and developing a comprehensive asset management system that provides optimized lifecycle asset management across and the city, and hereby approves the Strategic Asset Management Policy.

SECTION 2. That the Public Works Director is the chair of the Asset Management Team and is responsible for the overall design, maintenance, documentation, review and improvement of the City's Asset Management System.

SECTION 3. That all resolutions or parts of resolutions in force when the provisions of this resolution became effective which are inconsistent or in conflict with the terms or provisions contained in this resolution are hereby repealed to the extent of any such conflict only.

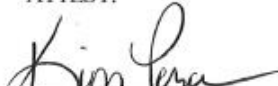
SECTION 4. That this resolution shall take effect immediately upon its passage and approval.

PASSED AND APPROVED this the 6th day of December 2018.


Bill Heidemann, Mayor



ATTEST:


Kim Pence, City Secretary

APPROVED AS TO FORM:


Wm. Andrew Messer, City Attorney

CITY OF CORINTH

POLICY/ADMINISTRATIVE PROCEDURE/ADMINISTRATIVE DIRECTIVE

SUBJECT: STRATEGIC ASSET MANAGEMENT POLICY	INITIAL APPROVAL DATE: 12-06-2018
NEXT POLICY REVIEW: March 1, 2021	LAST REVISION DATE: 12-06-2018

1. PURPOSE

The purpose of this policy is to provide leadership in and commitment to the development and implementation of the City's asset management program. It is intended to guide the consistent use of asset management across the organization, to facilitate logical and evidence-based decision-making for the management of municipal infrastructure assets and to support the delivery of sustainable community services now and in the future.

By using sound asset management practices, the City will work to ensure that all municipal infrastructure assets meet expected performance levels and continue to provide desired service levels in the most efficient, reasonable and effective manner. Linking service outcomes to infrastructure investment decisions will assist the Municipality in focusing on service, rather than budget driven asset management approaches.

This policy demonstrates an organization-wide commitment to the good stewardship of municipal infrastructure assets, and to improved accountability and transparency to the community through the adoption of best practices regarding asset management planning.

2. POLICY STATEMENT

This policy introduces an integrated Asset Management System (AMS) across all asset classes. The AMS adopted for each asset class will be consistent with international standards and commensurate with the size and importance of those asset classes.

The City of Corinth has a strategic role in providing an accessible street system, a dependable water system, a safe wastewater system, an adequate stormwater system, quality buildings, and dependable machinery, equipment, and vehicles that contribute to our economic development and enhances the quality of life for all Corinth residents. Long-term sustainable asset management is essential to fulfilling this role and delivering cost-effective infrastructure and services.

The approval of this policy is an important step towards integrating the Municipality's strategic goals with its asset management program, and ensuring that critical municipal infrastructure assets and vital services are maintained and provided to the community in a consistent, reliable and sustainable manner.

2.1 Policy Principles

The Following principles collectively guide the current management and future development of Corinth's infrastructure assets:

- Implement international best practice benchmarks for asset management.
The ISO 55000 suite of standards will be the international benchmark used by Corinth.
- Deliver a 'fix it first' approach.
Use the full potential of existing assets by proactively repairing or rehabilitating assets rather than replacing them to ensure their sustainability.
- Ensure life-cycle costs are factored into infrastructure investment decision-making.
Capital expansion programs and projects will be accompanied by a clear position on the ongoing funding required to maintain and operate the new assets and services.
- Provide 'fit for purpose' solutions.
Maintain existing assets to a 'fit for purpose' condition that is sustainable.

Corinth will define appropriate, affordable levels of service which balance performance, costs and risks over the asset's life to ensure the full range of assets are sustainable.

3. SCOPE

This policy covers the physical assets that comprise the city's infrastructure network and the integrated asset management system including data, processes, information system, governance, knowledge and capability.

The department's transport infrastructure asset classes covered by this policy include:

- Roads
- Bridges and culverts
- Water systems
- Wastewater systems
- Stormwater systems
- Buildings and facilities
- Machinery and equipment
- Vehicles

Although human factors such as leadership, motivation and culture are not directly addressed within the scope of this policy, they are critical to successfully achieving optimized and sustainable asset management and require due consideration. This is applicable to all the department's managers, employees, contractors and suppliers.

4. ROLES AND RESPONSIBILITIES

The development and continuous support of the Municipality's asset management program requires a wide range of duties and responsibilities. The following passages outline the persons responsible for these tasks:

- A. Council
 1. Approve the AM policy
 2. Maintain adequate organizational capacity to support the core practices of the AM program
 3. Prioritize effective stewardship of assets in adoption and ongoing review of policy and budgets
 4. Monitor levels of service

- B. City Manager
 1. Development of recommended policy and policy updates
 2. Provide organization-wide leadership in AM practices and concepts
 3. Provide departmental staff coordination
 4. Establish and monitor levels of service
 5. Coordinate and track AM program implementation and progress

- C. Asset Management Team (AMT)
 1. Development of recommended policy and policy updates
 2. Provide corporate oversight to goals and directions and ensure the AM program aligns with the Municipality's strategic plan
 3. Ensure that adequate resources are available to implement and maintain core AM practices
 4. Provide departmental staff coordination
 5. Establish and monitor levels of service
 6. Track, analyze and report on AM program progress and results
 7. External resources will contribute to development of condition ratings, lifecycle calculations, risk analysis and management, and cost estimates. External resources will also be responsible for providing legal advice.

- D. Departmental Staff
 1. Utilize the new business processes and technology tools developed as part of the AM program
 2. Participate in implementation task teams to carry-out AM activities
 3. Establish and monitor levels of service
 4. Provide support and direction for AM practices within their department
 5. Track, analyze and report on AM program progress and results

5. POLICY IMPLEMENTATION

Corinth will convene a senior management team, the Asset Management team (AMT), to oversee the development, implementation and continuous improvement of all components of the Asset Management System.

Corinth will measure and report on the Asset Sustainability Ratio as a key performance indicator on an annual basis. The city will also benchmark its progress against ISO 55000 requirements on a regular basis.

The Public Works Director is the chair of the Asset Management Team and is responsible for the overall design, maintenance, documentation, review and improvement of the City's Asset Management System.

The components of the Asset Management System will include:

- Asset management policy
- Asset management strategies and objectives
- Asset management plans
- High level action plans for improvement of asset management practice across Corinth in the Capital Improvement Plan (CIP), and
- Performance monitoring, reporting and review processes.

5.1 International Asset Management Standard

International asset management specifications highlight the importance of city-wide asset management policies as part of an integrated suite within an Asset Management System. The contents of this policy confirm to the direction and intent of the ISO 55000 suite of international asset management standards. ISO 55001 specifies that an organization shall establish, implement, maintain and continually improve an asset management system, including the processes needed and their interactions. In addition, the city shall develop a Strategic Asset Management Plan which includes documentation of the role of the asset management system in a supporting achievement of asset management objectives.

6. OBJECTIVES

The objective of this policy is to set the direction and framework required for infrastructure asset sustainability, and to include:

- Ensuring that the City's infrastructure assets are managed in a sustainable manner, with appropriate levels of service that balance the needs of residents and the environment within available funding and consistent with the city's risk framework.
- Safeguarding the City's infrastructure assets and employees by implementing effective asset management strategies and providing the necessary financial resources for those assets.
- Ensuring resources required and operational capabilities are identified and responsibility for asset management is allocated.

- Assigning clear responsibilities and accountabilities for the ownership and control of the City's infrastructure assets and the associated reporting responsibilities.
- Maximizing value-for-money, taking into account the full costs of providing, holding, using, maintaining and disposing of assets throughout their lifecycles.
- Optimizing the infrastructure solutions through improved management and economies of scale.
- Demonstrating transparent and responsible asset management processes that align with established best practices.

7. BENEFITS

The benefits to the City of implementing this policy include development a comprehensive asset management system that provides optimized lifecycle asset management across the city.

8. RISK MANAGEMENT

All components of the Asset Management System shall be developed in line with the principles of the City's Risk Management Framework.

9. PERFORMANCE ASSESSMENT AND IMPROVEMENT

Corinth is committed to continual improvement in asset management practices and asset management performance.

Corinth will define, through a Capital Improvement Plan (CIP), mechanisms for performance assessment and continual improvement of asset management system and practices that will include a reporting and review framework managed through the Asset Management Team including:

- Performance and condition monitoring
- Investigation of asset-related failures, incidents and non-conformities
- Evaluation of compliance
- Audit
- Improvement actions
- Records

Corinth will develop Asset Management Plans for each of its asset classes that will:

- Define performance measures for the asset based on city objectives, Council priorities, asset management objectives and recognized best practices.
- Review available resources
- Identify performance gaps, if any
- Define options to close the gaps based on sustainability principles and risk
- Outline improvements to the asset required to achieve sustainability.

10. REFERENCES

References include, but are not limited to:

- International Organization for Standardization (ISO), ISO 55000, 55001, and 55002
- IPWEA International Infrastructure Management Manual

11. POLICY REVIEW

This policy shall be reviewed on a biennial basis. The next review of this policy is due on March 1, 2021.

City of Corinth Asset Management Team

The City of Corinth’s Asset Management team, listed below, were PSD’s key contacts on this project and will continue to work on asset management initiatives going forward.

Table 1 Asset Management Team

Name	Title
Cody Collier	Director of Public Works
Melissa Dolan	Special Programs and Recreation Manager
George Marshall	City Engineer
Ben Rodriguez	Planning Manager
Garrett Skrehart	GIS Manager
Lee Ann Bunselmeyer	Director of Finance
Becky Buck	Comptroller
Julia Sykes	HR Generalist

I. Introduction & Context

The state of Texas has some of the largest infrastructure in the US and is leading the way in wind power energy production and population growth, necessitating continued and improved maintenance on their assets.

Texas is geographically the largest state in the continental US, with a large-scale infrastructure portfolio that is increasingly in need of maintenance. The asset portfolios managed by Texas municipalities are highly diverse. The City of Corinth's capital assets portfolio, as analyzed in this asset management plan (AMP) is valued at \$659 million using 2018 replacement costs and event costs. The City relies on these assets to provide residents, businesses, employees and visitors with safe access to important services, such as transportation, recreation, culture, economic development and much more. As such, it is critical that the City manage these assets optimally in order to produce the highest total value for taxpayers. This asset management plan, (AMP) will assist the City in the pursuit of judicious asset management for its capital assets.

II. Asset Management

Asset management can be best defined as an integrated business approach within an organization with the aim to minimize the lifecycle costs of owning, operating, and maintaining assets, at an acceptable level of risk, while continuously delivering established levels of service for present and future customers. It includes the planning, design, construction, operation and maintenance of infrastructure used to provide services. By implementing asset management processes, infrastructure needs can be prioritized over time, while ensuring timely investments to minimize repair and rehabilitation costs and maintain municipal assets.

Table 2 Objectives of Asset Management

Inventory	Capture all asset types, inventories and historical data.
Current Valuation	Calculate current condition ratings and replacement values.
Lifecycle Analysis	Identify Maintenance and Renewal Strategies & Lifecycle Costs.
Service Level Targets	Define measurable Levels of Service Targets.
Risk & Prioritization	Integrates all asset classes through risk and prioritization strategies.
Sustainable Financing	Identify sustainable Financing Strategies for all asset classes.
Continuous Processes	Provide continuous processes to ensure asset information is kept current and accurate.
Decision Making & Transparency	Integrate asset management information into all corporate purchases, acquisitions and assumptions.
Monitoring & Reporting	At defined intervals, assess the assets and report on progress and performance.

1. Overarching Principles

The Institute of Asset Management (IAM) recommends the adoption of seven key principles for a sustainable asset management program. According to IAM, asset management must be:¹

Table 3 Principles of Asset Management

Holistic	Asset management must be cross-disciplinary, total value focused.
Systematic	Rigorously applied in a structured management system.
Systemic	Looking at assets in their systems context, again for net, total value.
Risk-based	Incorporating risk appropriately into all decision-making.
Optimal	Seeking the best compromise between conflicting objectives, such as costs versus performance versus risks etc.
Sustainable	Plans must deliver optimal asset lifecycles, ongoing systems performance, environmental and other long term consequences.
Integrated	At the heart of good asset management lies the need to be joined-up. The total jigsaw puzzle needs to work as a whole - and this is not just the sum of the parts.

¹ "Key Principles", The Institute of Asset Management, www.iam.org

III. AMP Objectives and Content

This AMP is one component of Corinth’s overarching corporate strategy. It was developed to support the City’s vision for its asset management practice and programs. It provides key asset attribute data, including current composition of the City’s infrastructure portfolio, inventory, replacement costs, useful life etc., summarizes the physical health of the capital assets, enumerates the City’s current capital spending framework, and outlines financial strategies to achieve fiscal sustainability in the long-term while reducing and eventually eliminating funding gaps.

This AMP is developed in accordance with international best practices in asset management. The following asset classes are analysed in this document: road system; bridges & culverts; water; wastewater; stormwater; facilities; and machinery & equipment.



IV. Data and Methodology

The City's dataset for the asset classes analyzed in this AMP are maintained in PSD's CityWide® Tangible Assets module. This dataset includes key asset attributes and financial data, such as historical costs, in-service dates, field inspection data (as available), asset health, and replacement costs.

1. Condition Data

Municipalities implement a straight-line amortization schedule approach to depreciate their capital assets. In general, this approach may not be reflective of an asset's actual condition and the true nature of its deterioration, which tends to accelerate toward the end of the asset's lifecycle. However, it is a useful approximation in the absence of standardized decay models and actual field condition data and can provide a benchmark for future requirements. We analyze each asset individually prior to aggregation and reporting; therefore, many imprecisions that may be highlighted at the individual asset level are attenuated at the class level.

As available, actual field condition data was used to make recommendations more meaningful and representative of the City's state of infrastructure. The value of condition data cannot be overstated as they provide a more accurate representation of the state of infrastructure. The type of condition data used for each class is indicated in Chapter V, Section 2.

2. Financial Data

In this AMP, the average annual requirement is the amount, based on current replacement costs, that municipalities should set aside annually for each infrastructure class so that assets can be replaced upon reaching the end of their lifecycle.

To determine current funding capacity, all existing sources of funding are identified and combined to enumerate the total available funding; funding for the previous three years is analyzed as data is available. These figures are then assessed against the average annual requirements, and are used to calculate the annual funding shortfall (surplus) and for forming the financial strategies.

In addition to the annual shortfall, the majority of municipalities face significant infrastructure backlogs. The infrastructure backlog is the accrued financial investment needed in the short-term to bring the assets to a state of good repair. This amount is identified for each asset class.

Only predictable sources of funding are used, e.g., tax and utility revenues, user fees, and other streams of income the City can rely on with a high degree of certainty. Government grants and other ad-hoc injections of capital are not included in this asset management plan given their unpredictability. As state and federal governments make greater, more predictable and permanent commitments to funding municipal infrastructure programs, future iterations of this asset management plan will account for such funding sources.

3. Infrastructure Report Card

The asset management plan is a complex document, but one with direct implications on the public, a group with varying degrees of technical knowledge. To make communications more meaningful and the AMP more accessible, we’ve developed an Infrastructure Report Card that summarizes our findings in common language that municipalities can use for internal and external distribution. The report card is developed using two key, equally weighted factors: Financial Capacity and Asset Health.

Table 4 Infrastructure Report Card Description

Financial Capacity		A City’s financial capacity grade is determined by the level of funding available (0-100%) for each asset class for the purpose of meeting the average annual investment requirements.
Asset Health		Using either field inspection data as available or age-based data, the asset health component of the report card uses condition (0-100%) to estimate how capable assets are in performing their required functions. We use replacement cost to determine the weight of each condition group within the asset class.
Letter Grade	Rating	Description
A	Very Good	The asset is functioning and performing well; only normal preventative maintenance is required. The City is fully prepared for its long-term replacement needs based on its existing infrastructure portfolio.
B	Good	The City is well prepared to fund its long-term replacement needs but requires additional funding strategies in the short-term to begin to increase its reserves.
C	Fair	The asset’s performance or function has started to degrade and repair/rehabilitation is required to minimize lifecycle cost. The City is underpreparing to fund its long-term infrastructure needs. The replacement of assets in the short- and medium-term will likely be deferred to future years.
D	Poor	The asset’s performance and function is below the desired level and immediate repair/rehabilitation is required. The City is not well prepared to fund its replacement needs in the short-, medium- or long-term. Asset replacements will be deferred and levels of service may be reduced.
F	Very Poor	The City is significantly underfunding its short-term, medium-term, and long-term infrastructure requirements based on existing funds allocation. Asset replacements will be deferred indefinitely. The City may have to divest some of its assets (e.g., bridge closures, park closures) and levels of service will be reduced significantly.

4. Limitations and Assumptions

Several limitations continue to persist as municipalities advance their asset management practices.

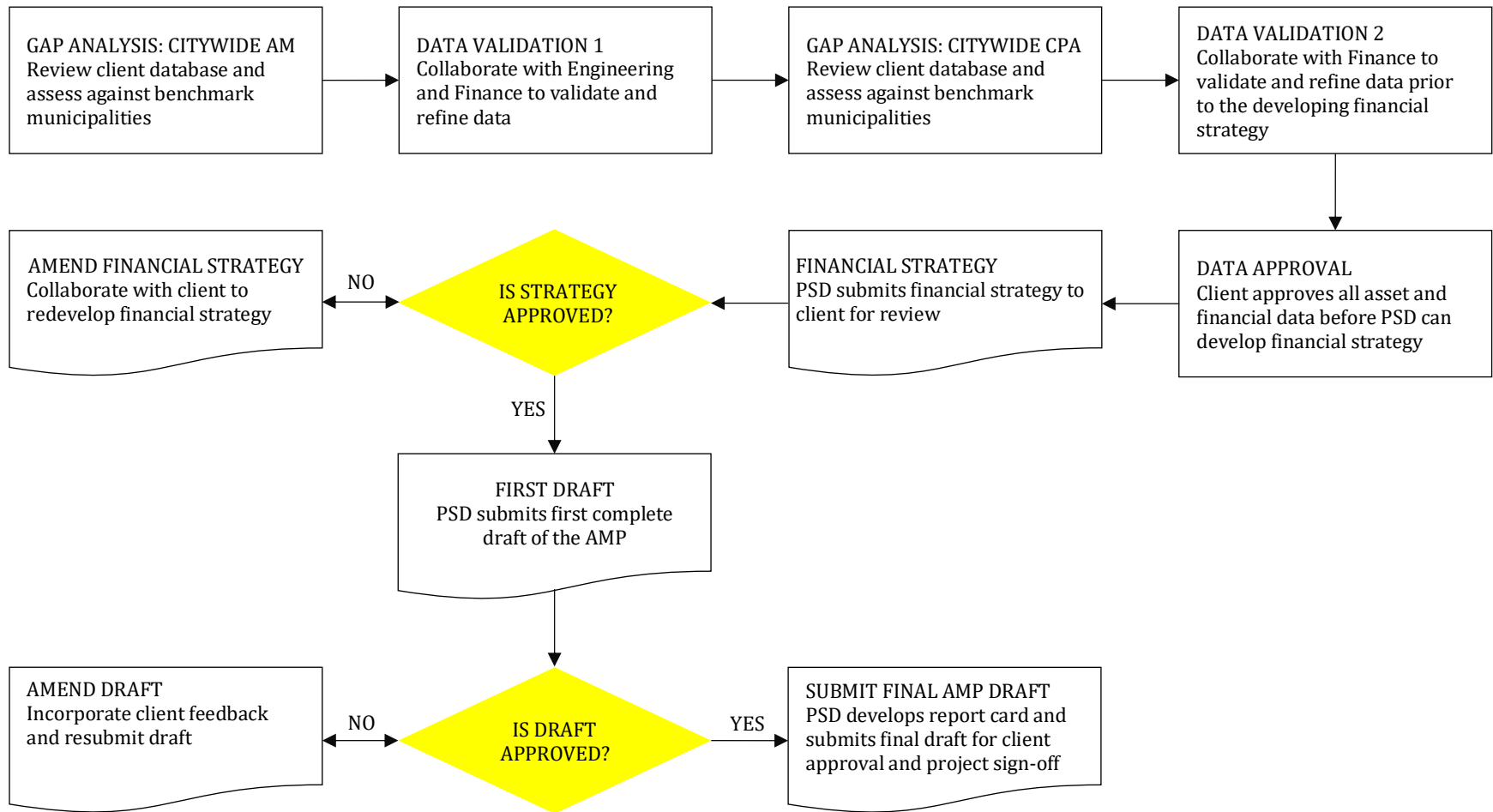
- As available, we use field condition assessment data to illustrate the state of infrastructure and develop the requisite financial strategies. However, in the absence of observed data, we rely on the age of assets to estimate their physical condition.
- A second limitation is the use of inflation measures, for example using CPI/NRBCPI to inflate historical costs in the absence of actual replacement costs. While a reasonable approximation, the use of such multipliers may not be reflective of market prices and may over- or understate the value of a City's infrastructure portfolio and the resulting capital requirements.
- Our calculations and recommendations will reflect the best available data at the time this AMP was developed.
- The focus of this plan is restricted to capital expenditures and does not capture O&M expenditures on infrastructure.



5. Process

High data quality is the foundation of intelligent decision-making. Generally, there are two primary causes of poor decisions: inaccurate or incomplete data, and the misinterpretation of data used. The figure below illustrates an abbreviated version of our work order/work flow process between PSD and municipal staff. It is designed to ensure maximum confidence in the raw data used to develop the AMP, the interpretation of the AMP by all stakeholders, and ultimately, the application of the strategies outlined in this AMP.

Figure 1 Developing the AMP – Work Flow and Process



6. Data Confidence Rating

Staff confidence in the data used to develop the AMP can determine the extent to which recommendations are applied. Low confidence suggests uncertainty about the data and can undermine the validity of the analysis. High data confidence endorses the findings and strategies, and the AMP can become an important, reliable reference guide for interdepartmental communication as well as a manual for long-term corporate decision-making. Having a numerical rating for confidence also allows the City to track its progress over time and eliminate data gaps.

Data confidence in this AMP is determined using five key factors and is based on a best practice approach in asset management. Municipal staff provide their level of confidence (score) in each factor for major asset classes along a spectrum, ranging from 0, suggesting low confidence in the data, to 100 indicative of high certainty regarding inputs. The five factors used to calculate the City's data confidence ratings are:

F1	F2	F3	F4	F5
The data is up to date.	The data is complete and uniform.	The data comes from an authoritative source	The data is error free.	The data is verified by an authoritative source.

The City's self-assessed score in each factor is then used to calculate data confidence in each asset class using Equation 1 below.

$$\text{Asset Class Data Confidence Rating} = \sum (\text{Score in each factor}) \times \left(\frac{1}{5}\right)$$

V. Summary Statistics

In this section, we aggregate technical and financial data across all asset classes analyzed in this AMP, and summarize the state of the infrastructure using key indicators, including asset condition, useful life consumption, and important financial measurements.



1. Asset Valuation

The asset classes analyzed in this asset management plan for the City had a total 2018 valuation with event costs of \$659 million, of which the water system comprised 36%, followed by the road system at 32%. The ownership per household (Figure 3) totaled \$90,339 based on 7,300 households for all asset categories except for the wastewater system with 7,275 households.

Figure 2 Asset Valuation by Class

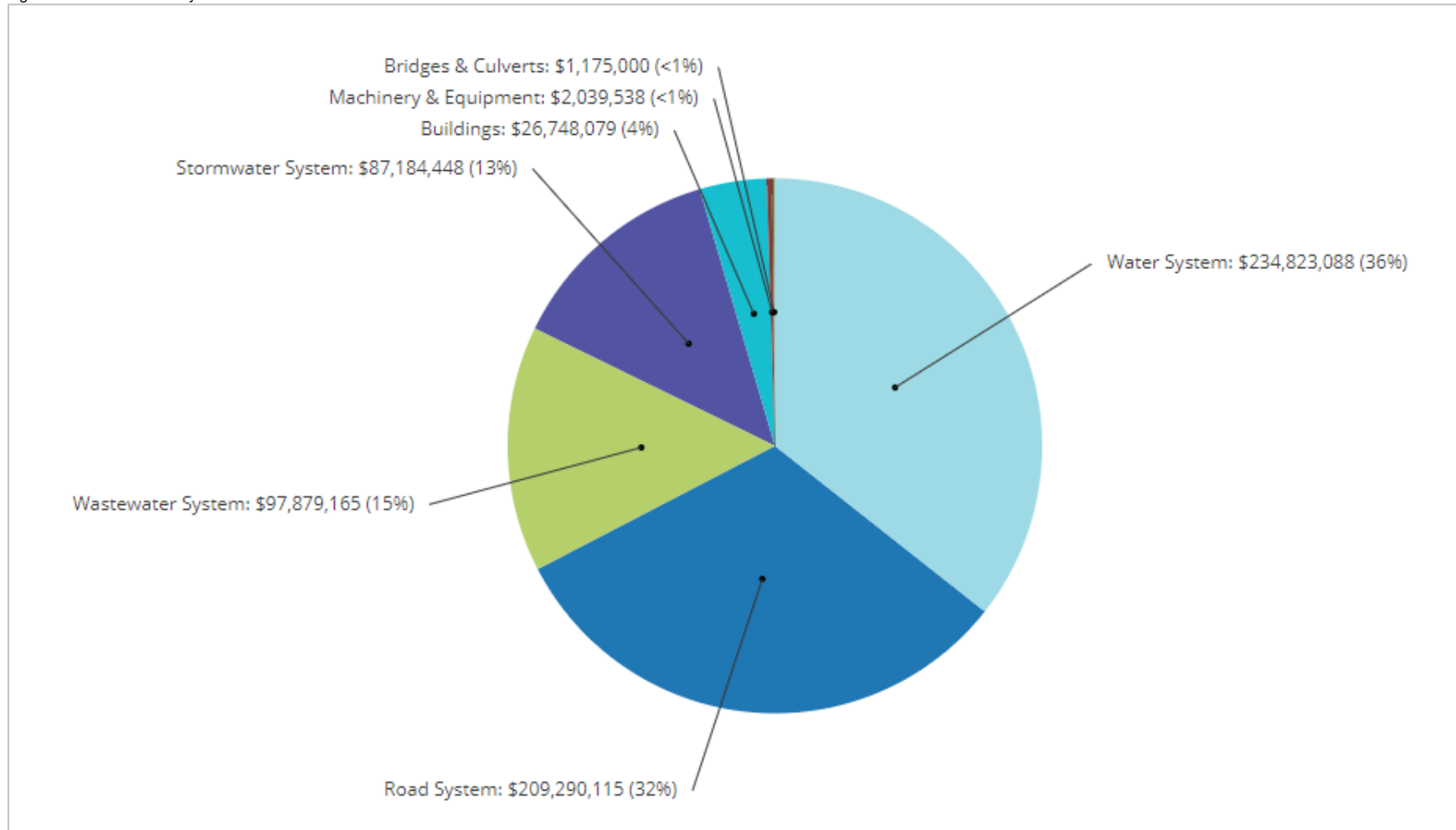
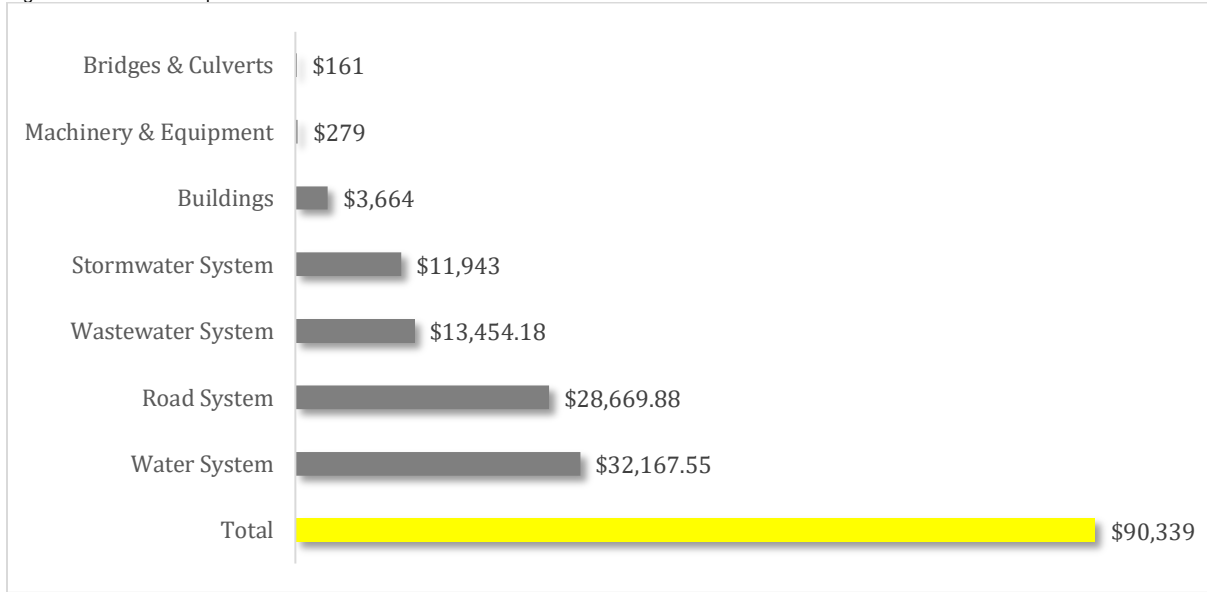


Figure 3 2017 Ownership Per Household



2. Source of Condition Data by Asset Class

Observed data will provide the most precise indication of an asset’s physical health. In the absence of such information, the age of capital assets can be used as a meaningful approximation of the asset’s condition. Table 5 indicates the source of condition data used for the various asset classes in this AMP. The City has condition data for 6% of all assets based on 2018 replacement cost.

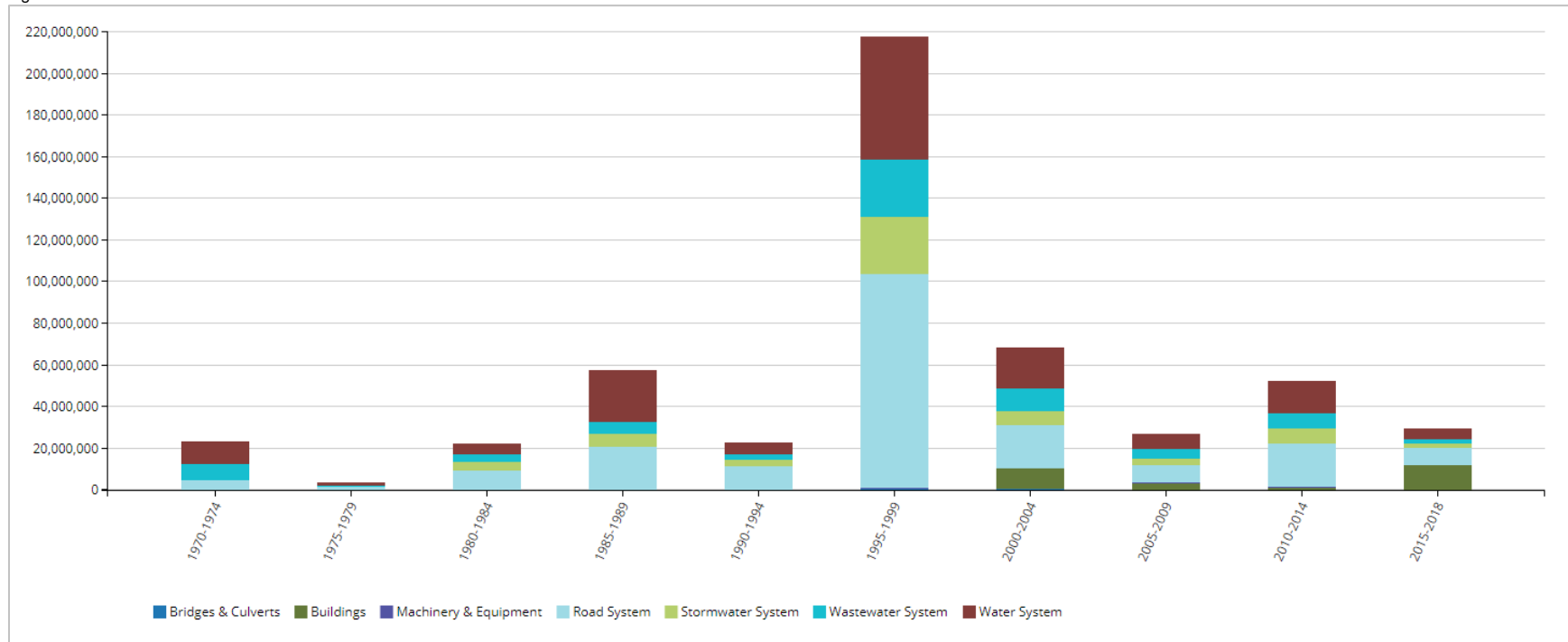
Table 5 Source of Condition Data by Asset Class

Asset class	Component	Source of Condition Data
Roads System	Street Signs	100% Assessed - 2018
	Remaining Segments	Age-based
Bridges & Culverts	All	100% Assessed - 2018
Water System	Pumping	100% Assessed – 2017
	Storage	100% Assessed – 2017
	Remaining Segments	Age-based
Wastewater System	Lift Station	100% Assessed – 2018
	Meter Station	100% Assessed – 2018
	Remaining Segments	Age-based
Stormwater System	All	Age-based
Buildings	All	Age-based
Machinery & Equipment	Rolling Stock	12% Assessed - 2019
	Remaining Segments	Age-based

3. Historical Investment in Infrastructure – All Asset Classes

In conjunction with condition data, two other measurements can augment staff understanding of the state of infrastructure and impending and long-term infrastructure needs: installation year profile, and useful life remaining. Using 2018 replacement costs, Figure 4 illustrates the historical investments made in the asset classes analyzed in this AMP since 1970. Often, investment in critical infrastructure parallels population growth or other significant shifts in demographics; they can also fluctuate with provincial and federal stimulus programs. Note that this graph only includes the active asset inventory as of December 31, 2018.

Figure 4 Historical Investment in Infrastructure – All Asset Classes

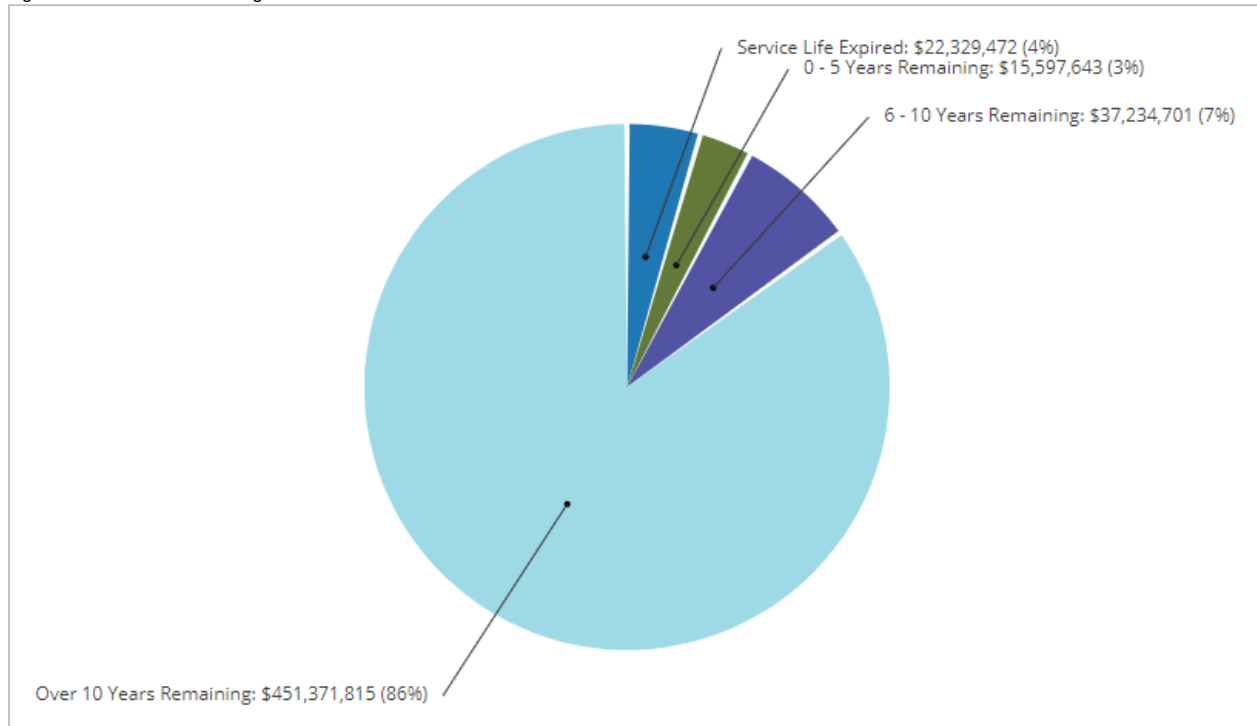


The City has continuously invested into its infrastructure over the decades. Investments fluctuated during the 1970s and 1980s and then peaked in the late 1990s. During this time, \$218 million was invested with \$103 million put into the road system. Since 2015, \$29.5 million has been invested with a heavier focus on roads, the water system and buildings.

4. Useful Life Consumption – All Asset Classes

While age is not a precise indicator of an asset's health, in the absence of observed condition assessment data, it can serve as a high-level, meaningful approximation and help guide replacement needs and facilitate strategic budgeting. Figure 5 shows the distribution of assets based on the percentage of useful life already consumed.

Figure 5 Useful Life Remaining as of 2017 – All Asset Classes

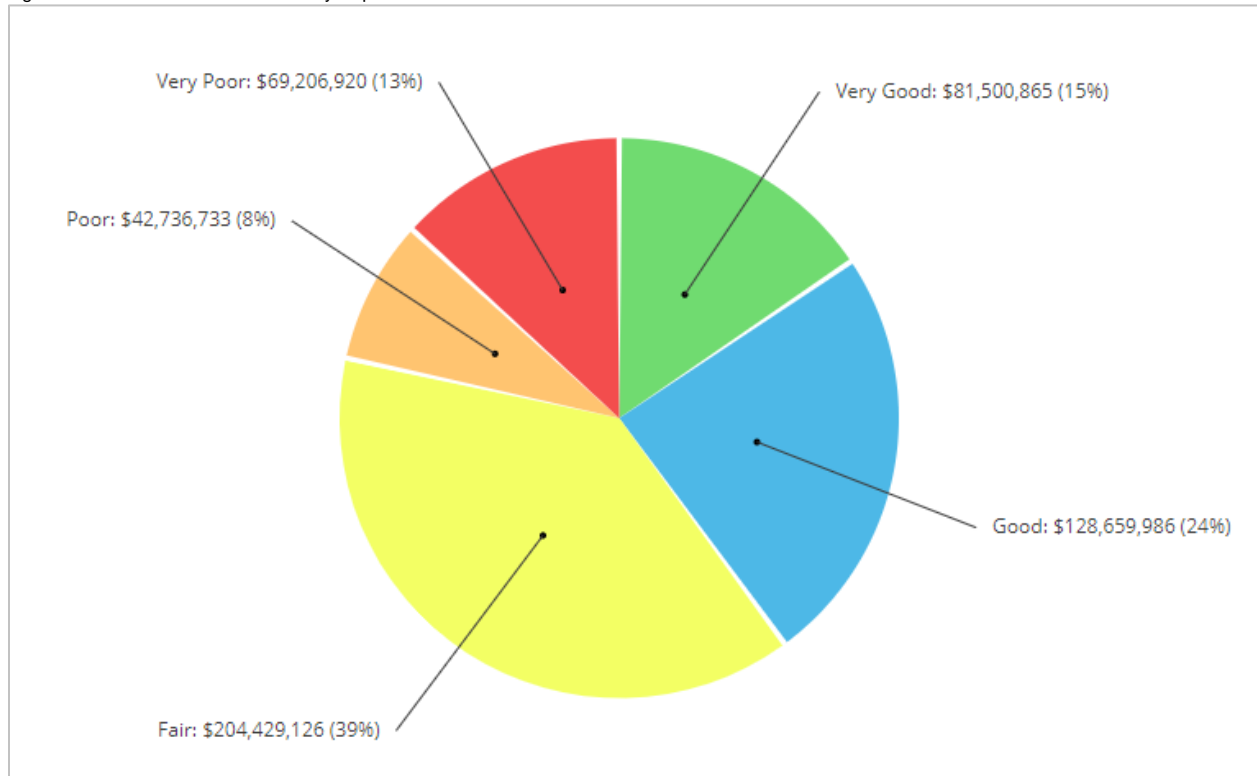


86% of the assets analyzed in this AMP have at least 10 years of useful life remaining. However, 4%, with a valuation of \$22 million, remain in operation beyond their established useful life. An additional 3% will reach the end of their useful life within the next five years.

5. Overall Condition – All Asset Classes

Based on 2018 replacement cost, and primarily age-based data, over 39% of assets, with a valuation of \$210 million, are in good to very good condition; 21% are in poor to very poor condition.

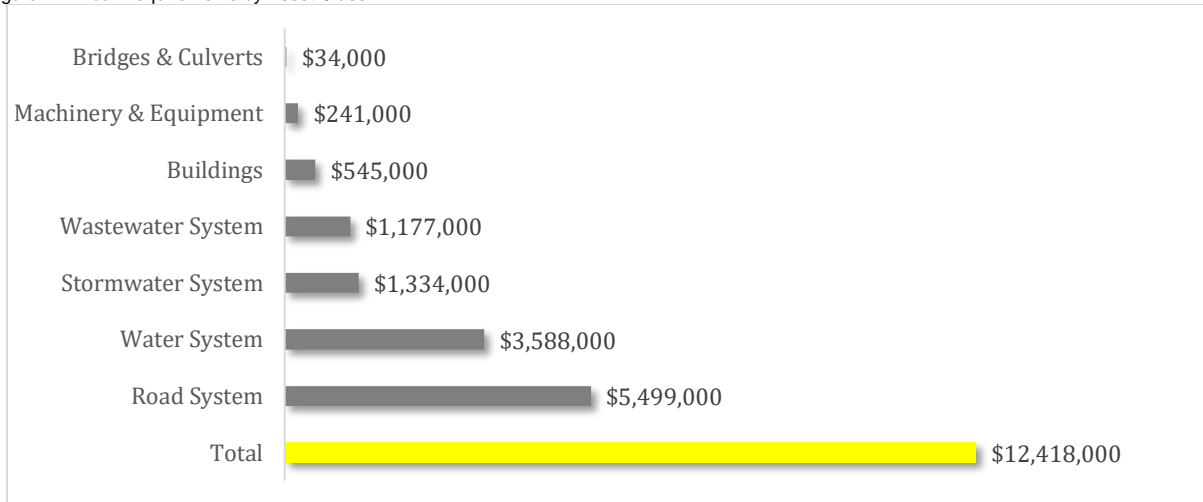
Figure 6 Asset Condition Distribution by Replacement Cost as of 2017 – All Asset Classes



6. Financial Profile

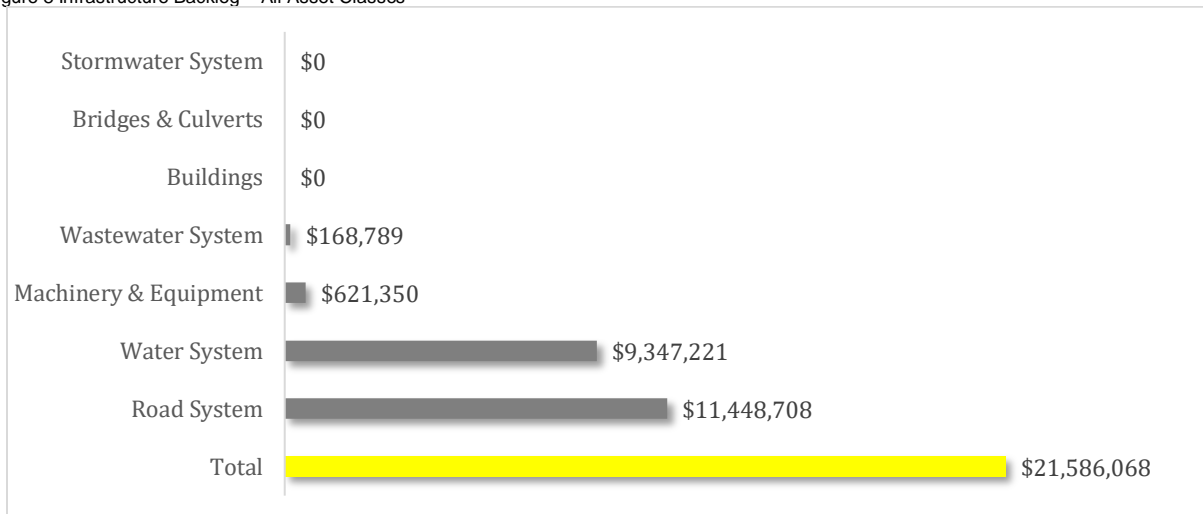
This section details key high-level financial indicators for the City's asset classes.

Figure 7 Annual Requirements by Asset Class



The annual requirements represent the amount the City should allocate annually to each of its asset classes to meet replacement needs as they arise, prevent infrastructure backlogs and achieve long-term sustainability. In total, the City must allocate \$12.4 million annually for the assets covered in this AMP.

Figure 8 Infrastructure Backlog – All Asset Classes

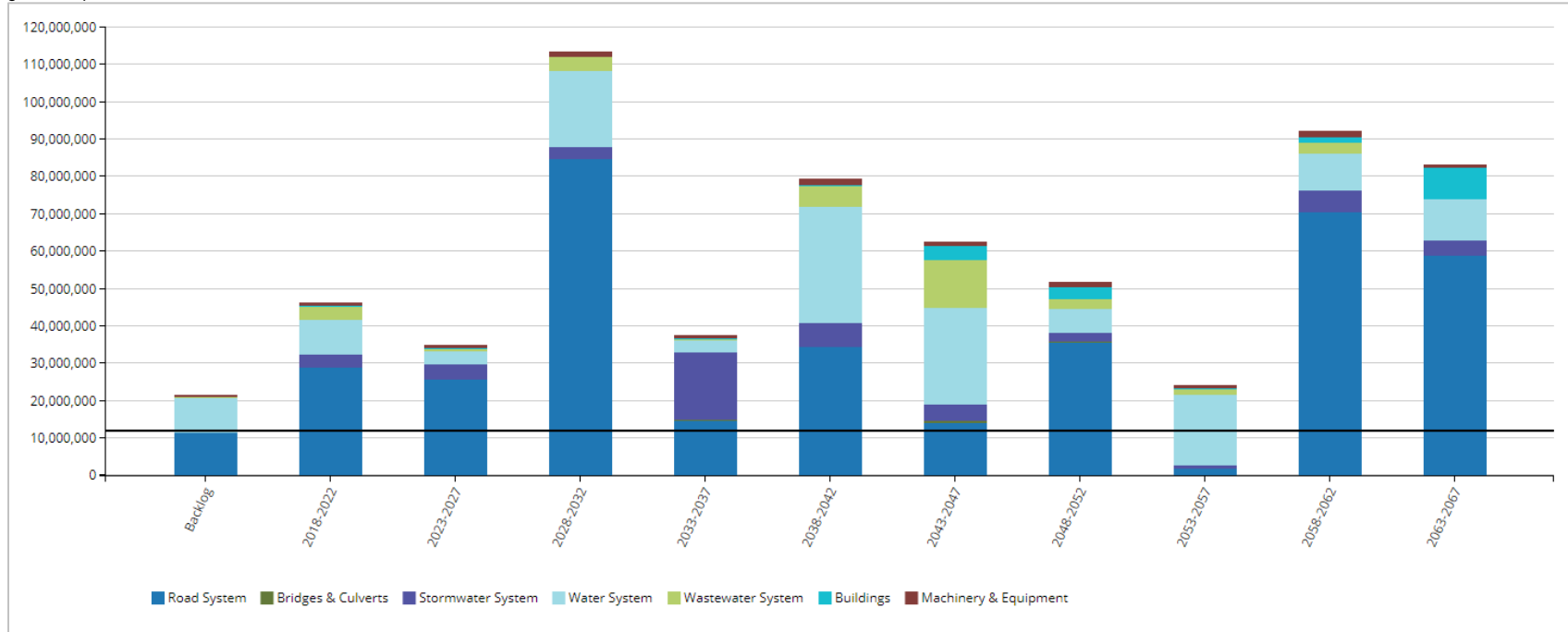


The City has a combined infrastructure backlog of \$21.5 million, with the road system comprising 53%. The backlog represents the investment needed today to meet previously deferred replacement needs. In the absence of assessed data, the backlog represents the value of assets still in operation beyond their established useful life.

7. Replacement Profile – All Asset Classes

In this section, we illustrate the aggregate short-, medium- and long-term infrastructure spending requirements (replacement only) for the City’s asset classes. The backlog is the total investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 9 Replacement Profile – All Asset Classes



Based primarily on age-based data, the City has a combined backlog of \$21.5 million, of which the road system comprises \$11.4 million. Aggregate replacement needs will total \$46 million over the next five years. An additional \$35 million will be required between 2023 and 2027. The City’s aggregate annual requirements (indicated by the black line) total \$12.4 million. At this funding level, the City would be allocating sufficient funds on an annual basis to meet the replacement needs for its various asset classes as they arise without the need for deferring projects and accruing annual infrastructure deficits. Currently, the City is funding 0% of the annual requirements for tax-funded assets and 0% for rate-funded assets. See the ‘Financial Strategy’ chapter for achieving a more optimal and sustainable funding level. Further, while fulfilling the annual requirements will position the City to meet its future replacement needs, injection of additional revenues will be needed to mitigate existing infrastructure backlogs.

8. Data Confidence

The City has a high degree of confidence in the data used to develop this AMP, receiving a weighted confidence rating of 98%. This is indicative of significant effort in collecting and refining its data set.

Table 6 Data Confidence Ratings

Asset Class	The data is up-to-date.	The data is complete and uniform.	The data comes from an authoritative source.	The data is error free.	The data is verified by an authoritative source.	Average Confidence Rating	Weighted Confidence Rating
Road System	100%	100%	100%	90%	100%	98%	47%
Bridges & Culverts	100%	100%	100%	90%	100%	98%	0.2%
Water System	100%	100%	100%	90%	100%	98%	54%
Wastewater System	100%	100%	100%	90%	100%	98%	24%
Stormwater System	100%	100%	100%	90%	100%	98%	6%
Buildings & Facilities	100%	100%	100%	90%	100%	98%	6%
Machinery & Equipment	90%	100%	100%	90%	100%	96%	0.3%
Overall Average Data Confidence Rating							98%

VI. State of Local Infrastructure

The state of local infrastructure includes the full inventory, condition ratings, useful life consumption data and the backlog and upcoming infrastructure needs for each asset class. As available, assessed condition data was used to inform the discussion and recommendations; in the absence of such information, age-based data was used as the next best alternative.



1. Road System

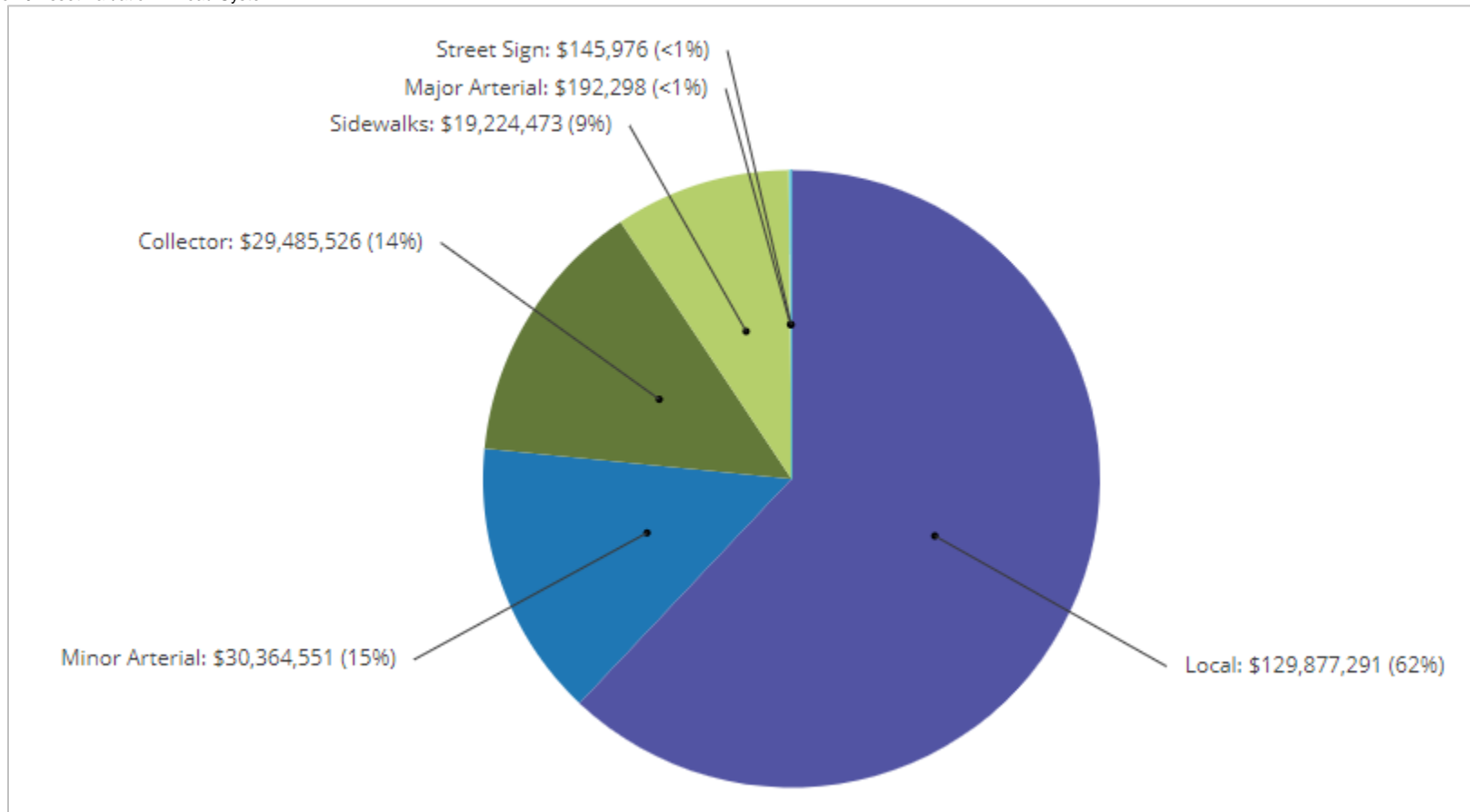
1.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 7 illustrates key asset attributes for the City’s road system, including quantities of various assets, their useful life, their replacement cost, and the valuation method by which the replacement costs were derived. In total, the City’s roads assets are valued at \$209 million based on 2018 replacement and life cycle event costs. The useful life indicated for each asset type below was assigned by the City.

Table 7 Key Asset Attributes – Road System

Asset Type	Asset Component	Quantity	Useful Life (Years)	2017 Unit Replacement Cost	2017 Overall Replacement Cost
Road System	Collector	248,083 yd ²	20-40	User-Defined/ Cost/Unit, Event Costs	\$29,485,526
	Local	1,012,067 yd ²	20-40	User-Defined/ Cost/Unit, Event Costs	\$129,877,291
	Major Arterial	1424 yd ²	40	Cost/Unit	\$192,298
	Minor Arterial	228,455 yd ²	20-40	Cost/Unit, Event Costs	\$30,364,552
	Sidewalks	2,746,353 ft ²	40	User-Defined	\$19,224,473
	Street Signs	1,604	10	User-Defined	\$145,976
Total					\$209,290,116

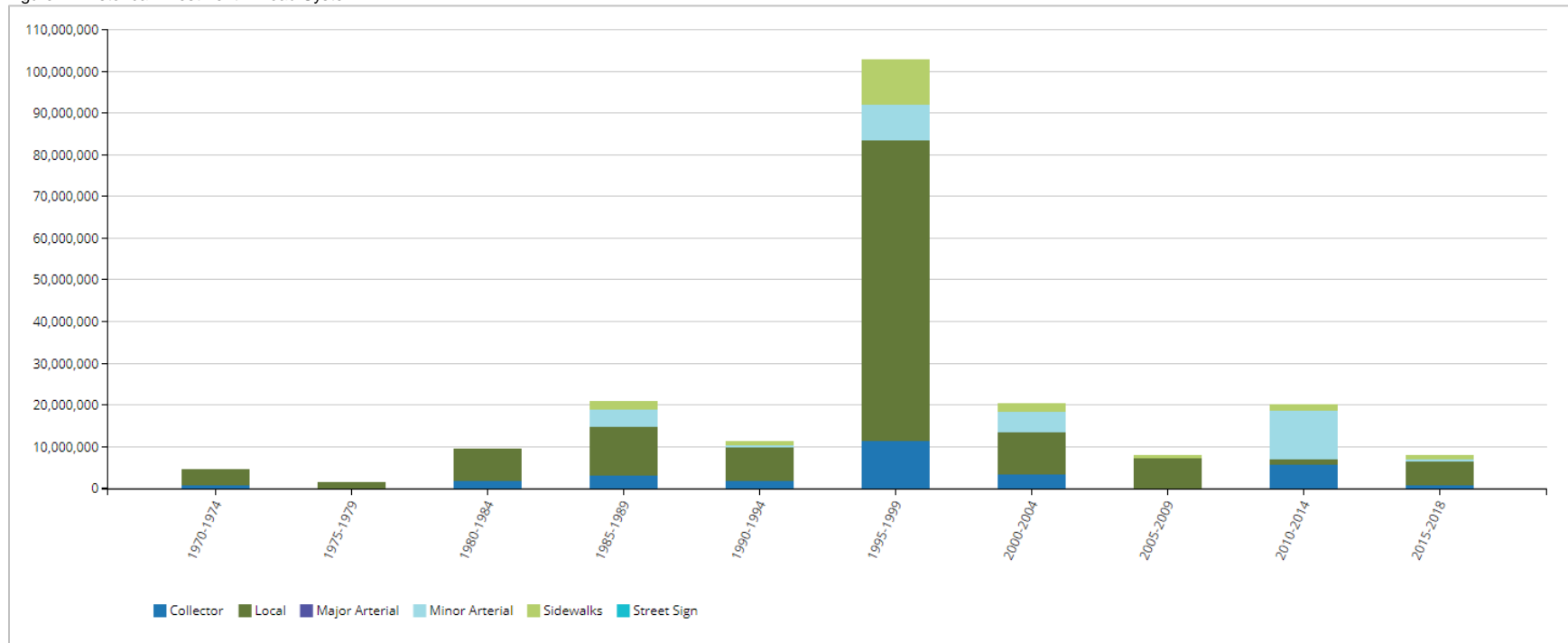
Figure 10 Asset Valuation – Road System



1.2 Historical Investment in Infrastructure

Figure 11 shows the City's historical investments in its road system since 1970. While observed condition data will provide superior accuracy in estimating replacement needs and should be incorporated into strategic plans, in the absence of such information, understanding past expenditure patterns and current useful life consumption levels (Section 1.3) can inform the forecasting and planning of infrastructure needs and in the development of a capital program. Note that this graph only includes the active asset inventory as of December 31, 2018.

Figure 11 Historical Investment – Road System

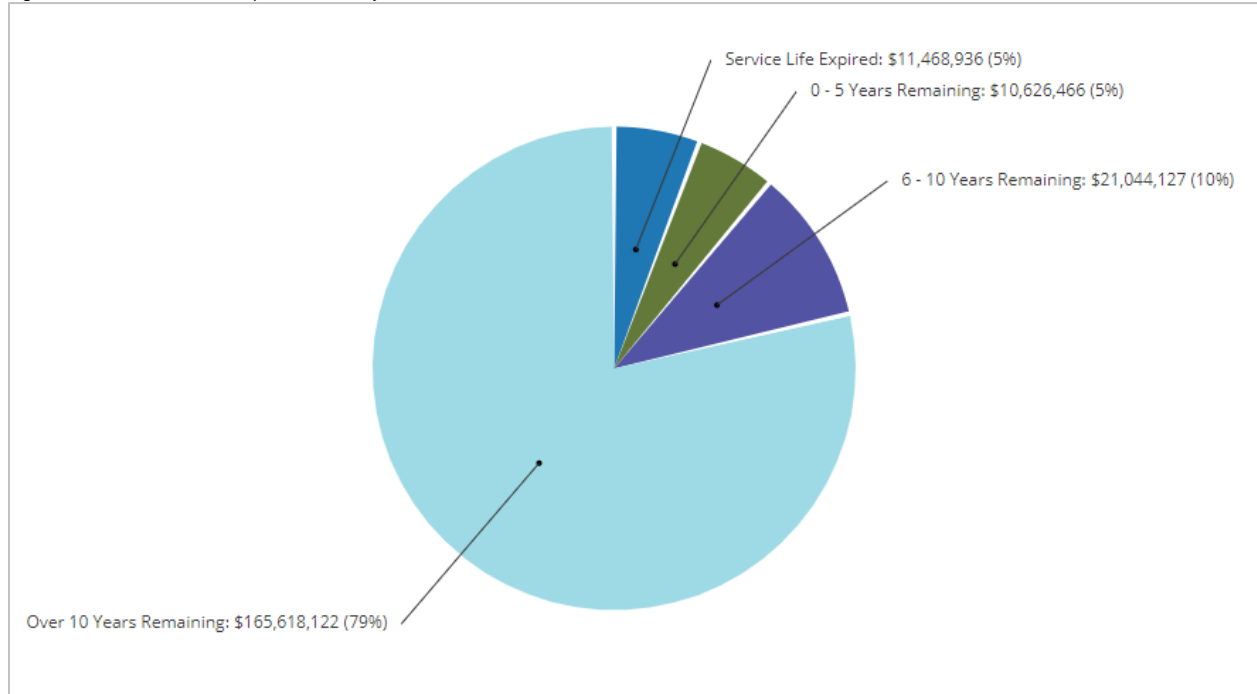


Investments in the City's road system have fluctuated since 1970. In the late 1990s, the period of largest investment, \$103 million was invested with over \$72 million put into local roads.

1.3 Useful Life Consumption

In conjunction with historical spending patterns and observed condition data, understanding the consumption rate of assets based on industry established useful life standards provides a more complete profile of the state of a community's infrastructure. Figure 12 illustrates the useful life consumption levels as of 2018 for the City's road system.

Figure 12 Useful Life Consumption - Road System

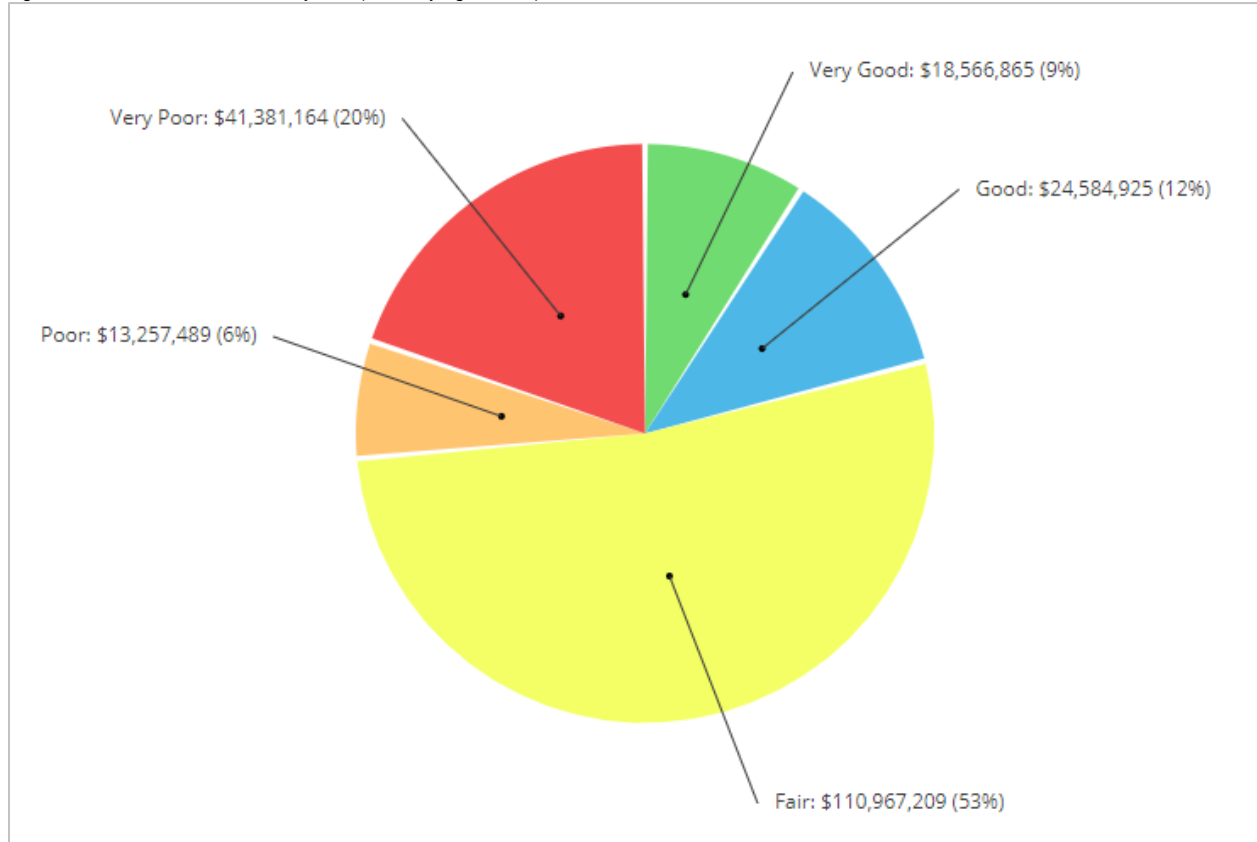


While 79% of the City's road system has at least 10 years of useful life remaining, 5%, with a valuation of \$11 million, remain in operation beyond their useful life. An additional 5% will reach the end of their useful life within the next five years.

1.4 Current Asset Condition

Using replacement cost, in this section we summarize the condition of the City's road system as of 2018. By default, we rely on observed field data as provided by the City. In the absence of such information, age-based data is used as a proxy. The City has only provided condition data for its street signs, the rest of the road system assets are age-based.

Figure 13 Asset Condition – Road System (Primarily Age-Based)

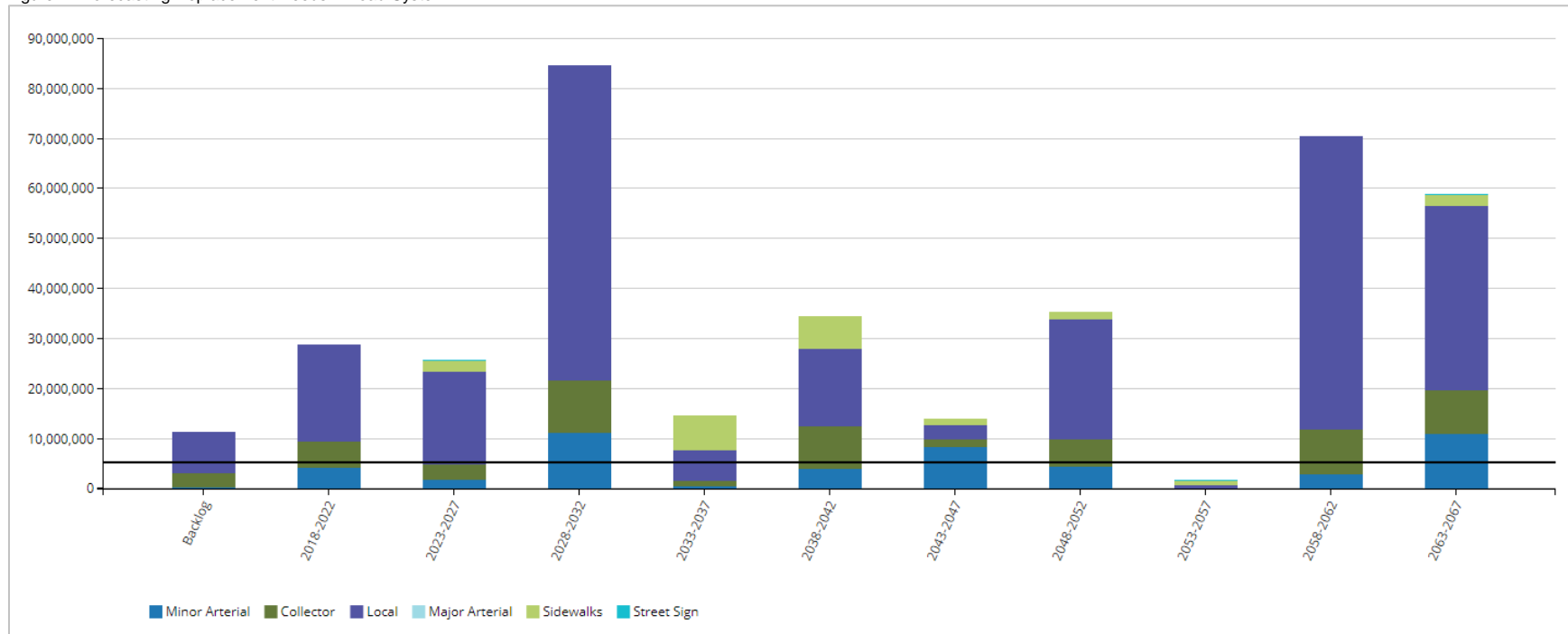


Based primarily on age-based condition data, 21% of assets, with a valuation of \$43 million are in good to very good condition; 26% are in poor to very poor condition.

1.5 Forecasting Replacement Needs

In this section, we illustrate the short-, medium- and long-term infrastructure spending requirements (replacement only) for the City’s road system assets. The backlog is the aggregate investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 14 Forecasting Replacement Needs – Road System



In addition to a backlog of \$11 million, replacement needs are forecasted to be \$29 million in the next five years; an additional \$25.7 million is forecasted in replacement needs between 2023-2027. The City’s annual requirements (indicated by the black line) for its road system total \$5.5 million. At this funding level, the City would be allocating sufficient funds on an annual basis to meet replacement needs as they arise without the need for deferring projects and accruing annual infrastructure deficits. However, the City is currently not allocating any funding towards this asset category. See the ‘Financial Strategy’ section for achieving a more optimal and sustainable funding level. Further, while fulfilling the annual requirements will position the City to meet its future replacement needs, injection of additional revenues will be needed to mitigate existing infrastructure backlogs.

1.6 Recommendations – Road System

- Age-based condition data indicates a backlog of \$11 million and significant 10-year replacement needs of \$54.7 million. The City should conduct condition assessments of its road surfaces and expand the program to incorporate all assets in order to more precisely estimate its actual financial requirements and field needs. See Section 2, ‘Condition Assessment Programs’ in the ‘Asset Management Strategies’ chapter.
- The data collected through future condition assessment programs should be integrated into a risk management framework which will guide prioritization of the backlog as well as short, medium, and long term replacement needs. See Section 4, ‘Risk’ in the ‘Asset Management Strategies’ chapter for more information.
- In addition to the above, a tailored lifecycle activity framework should also be developed to promote standard lifecycle management of the road system as outlined further within the “Asset Management Strategy” section of this AMP.
- Road system key performance indicators should be established and tracked annually as part of an overall level of service model. See Section 7 ‘Levels of Service’.
- The City is currently not allocating any funding towards this asset category. See the ‘Financial Strategy’ section on how to achieve more sustainable funding levels.

2. Bridges & Culverts

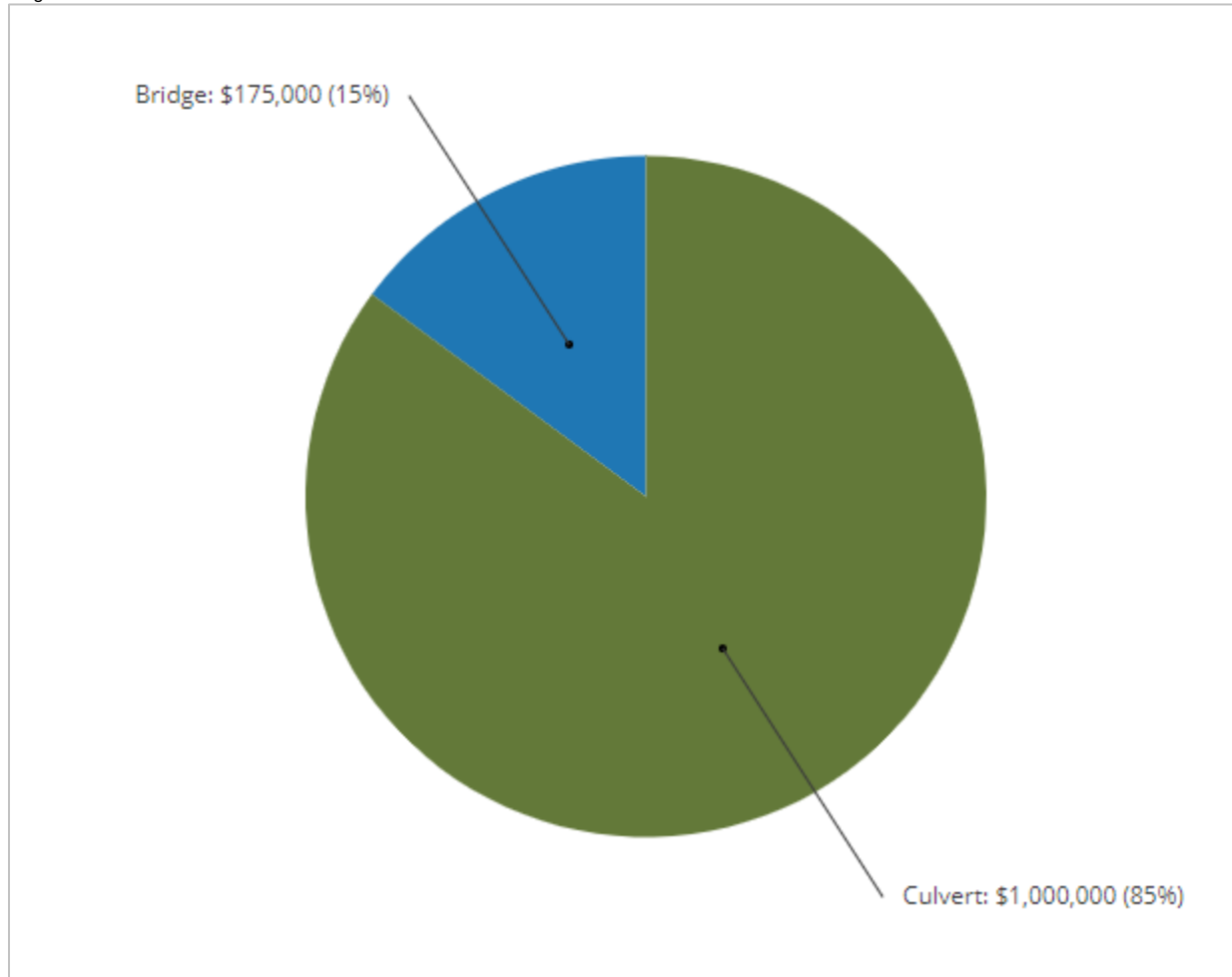
2.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 8 illustrates key asset attributes for the City’s bridges & culverts, including quantities of various assets, their useful life, their replacement cost, and the valuation method by which the replacement costs were derived. In total, the City’s bridges & culverts assets are valued at \$1,175,000 based on 2018 replacement costs. The useful life indicated for each asset type below was assigned by the City.

Table 8 Key Asset Attributes – Bridges & Culverts

Asset Type	Asset Component	Quantity	Useful Life (Years)	2018 Unit Replacement Cost	2018 Overall Replacement Cost
Bridges & Culverts	Bridges	1	20	User-Defined	\$175,000
	Culverts	2	40	User-Defined	\$1,000,000
Total					\$1,175,000

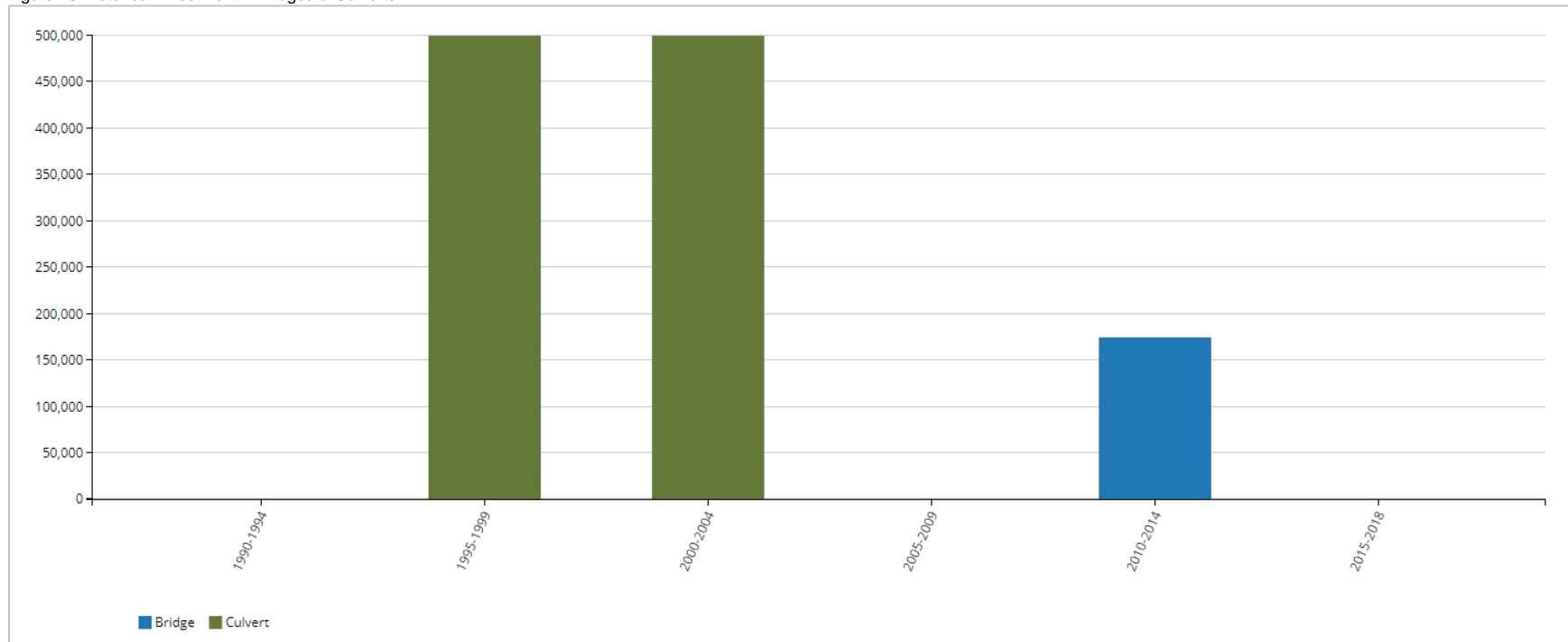
Figure 15 Asset Valuation – Bridges & Culverts



2.2 Historical Investment in Infrastructure

Figure 16 shows the City's historical investments in its bridges & culverts since 1990. While observed condition data will provide superior accuracy in estimating replacement needs and should be incorporated into strategic plans, in the absence of such information, understanding past expenditure patterns and current useful life consumption levels (Section 2.3) can inform the forecasting and planning of infrastructure needs and in the development of a capital program. Note that this graph only includes the active asset inventory as of December 31, 2018.

Figure 16 Historical Investment – Bridges & Culverts

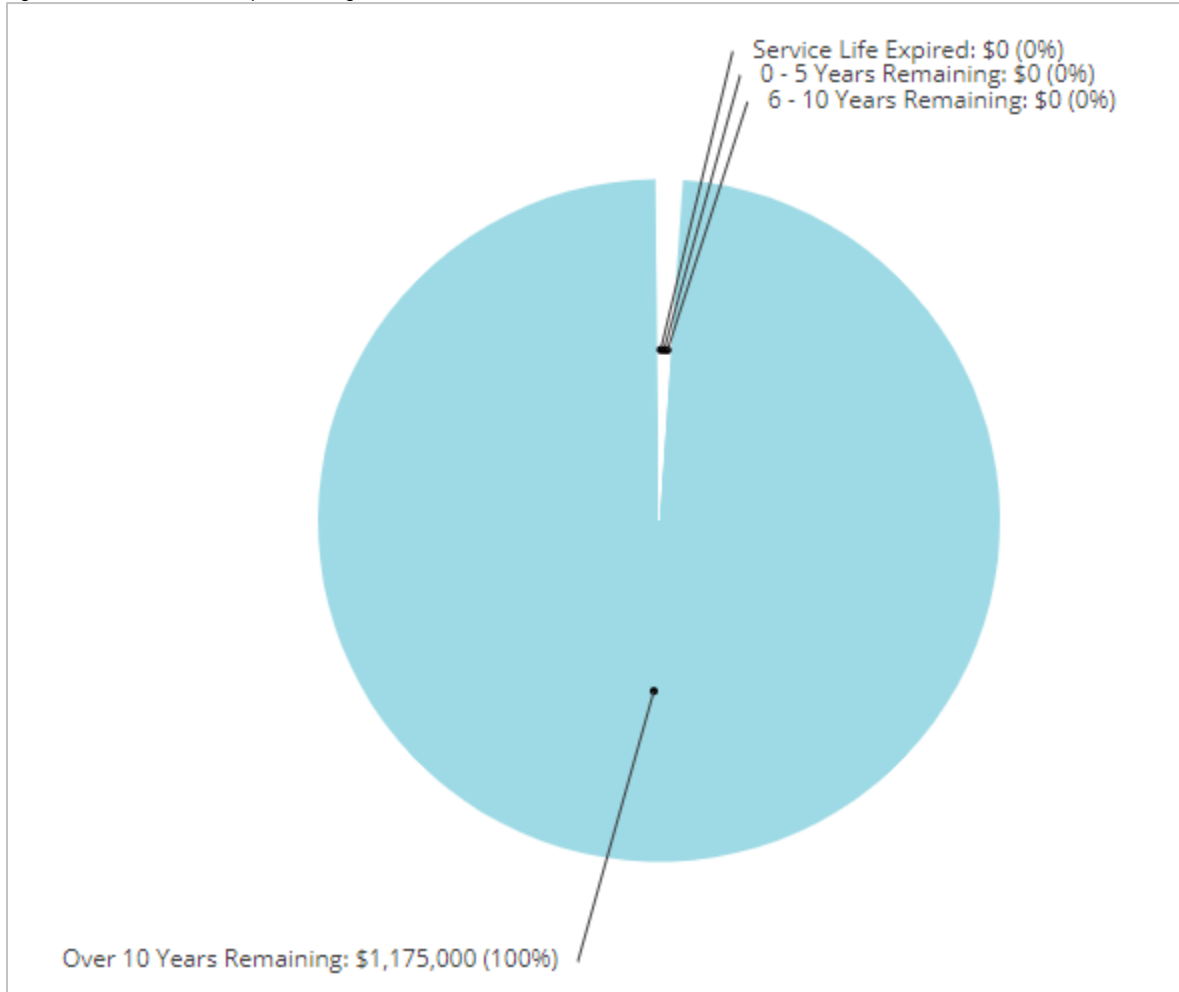


The City has invested lightly in its bridges and culverts since 1990. In the late 1990s and early 2000s, the period of the largest investments \$1 million was invested into culverts.

2.3 Useful Life Consumption

In conjunction with historical spending patterns and observed condition data, understanding the consumption rate of assets based on industry established useful life standards provides a more complete profile of the state of a community's infrastructure. Figure 17 illustrates the useful life consumption levels as of 2018 for the City's bridges & culverts.

Figure 17 Useful Life Consumption – Bridges & Culverts

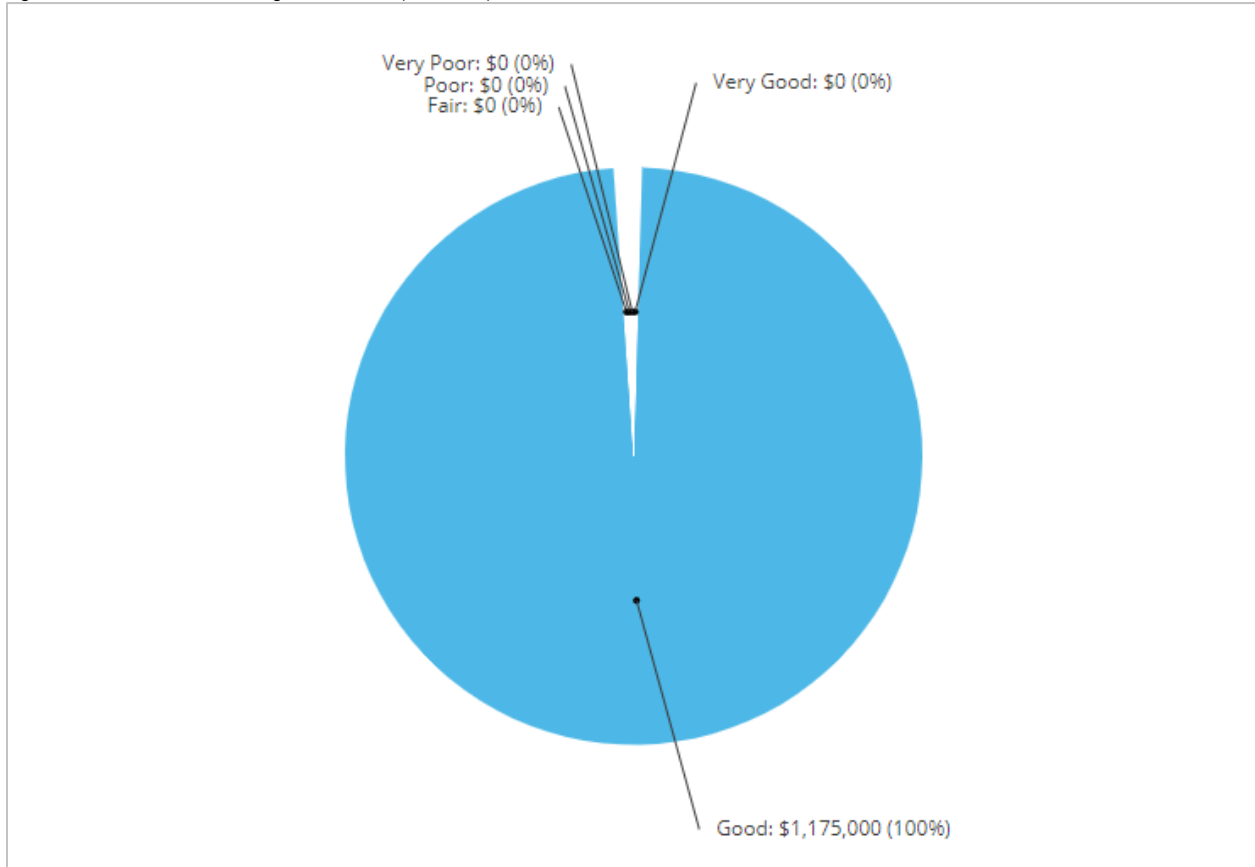


100% of the assets have at least 10 years of useful life remaining.

2.4 Current Asset Condition

Using replacement cost, in this section we summarize the condition of the City's bridges & culverts as of 2017. By default, we rely on observed field data adapted from OSIM inspections as provided by the City. In the absence of such information, age-based data is used as a proxy. All assets are based on assessed condition data.

Figure 18 Asset Condition – Bridges & Culverts (Assessed)

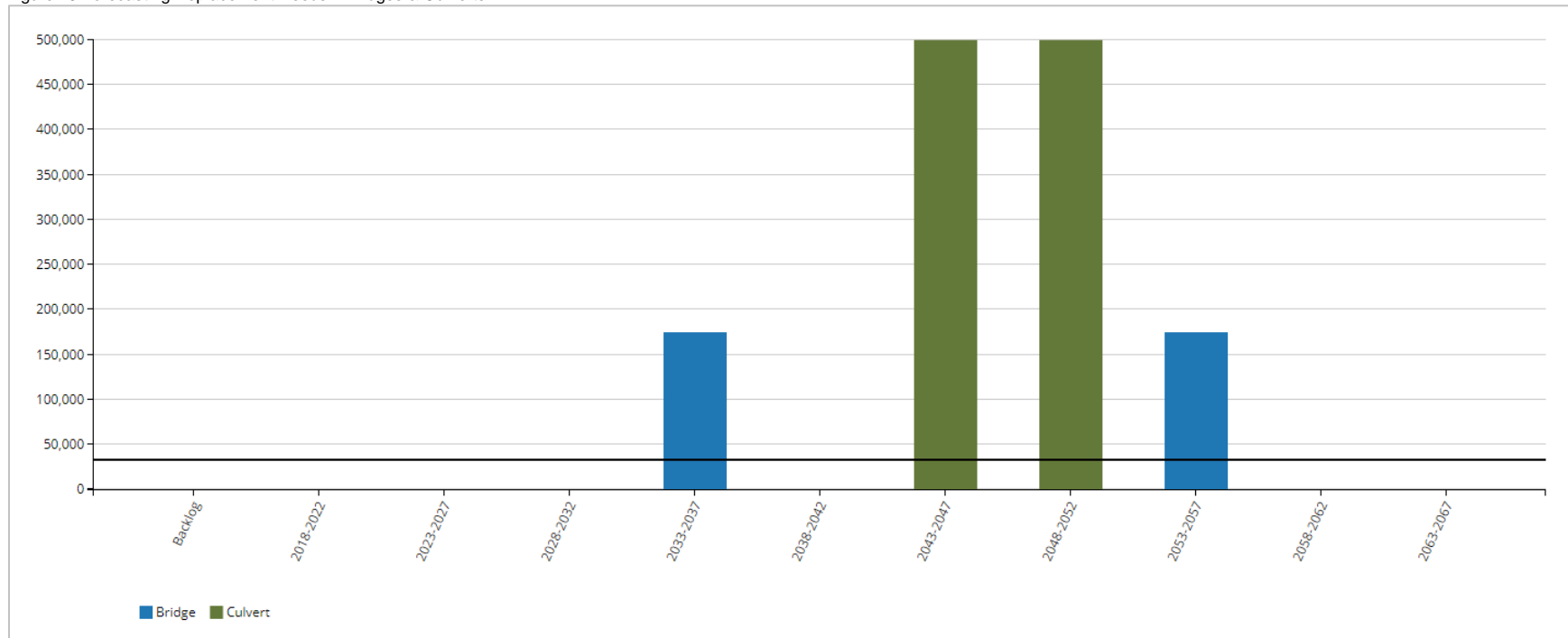


Assessed condition data indicates that 100% of the cities bridges & culverts are in good condition.

2.5 Forecasting Replacement Needs

In this section, we illustrate the short-, medium- and long-term infrastructure spending requirements (replacement only) for the City's bridges & culverts. The backlog is the aggregate investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 19 Forecasting Replacement Needs – Bridges & Culverts



Assessed data indicates no backlog and no replacement need in the next 10 years. The City's annual requirements (indicated by the black line) for its bridges & culverts total \$34,000. At this funding level, the City would be allocating sufficient funds on an annual basis to meet replacement needs as they arise without the need for deferring projects and accruing annual infrastructure deficits. However, the City is currently not allocating any funding towards this asset category. See the 'Financial Strategy' section for achieving a more optimal and sustainable funding level.

2.6 Recommendations – Bridges & Culverts

- Assessed condition data indicates no backlog and no replacement need in the next 10 years. The results and recommendations from the bridge inspections should be incorporated into the AMP analysis and used to generate the short-and long-term capital and maintenance budgets for the bridge and large culvert structures. See Section VIII, 'Asset Management Strategies'.
- Bridge & culvert structure key performance indicators should be established and tracked annually as part of an overall level of service model. See Section VII 'Levels of Service'.
- the City is currently not allocating any funding towards this asset category. See the 'Financial Strategy' section on how to achieve more sustainable and optimal funding levels.

3. Water System

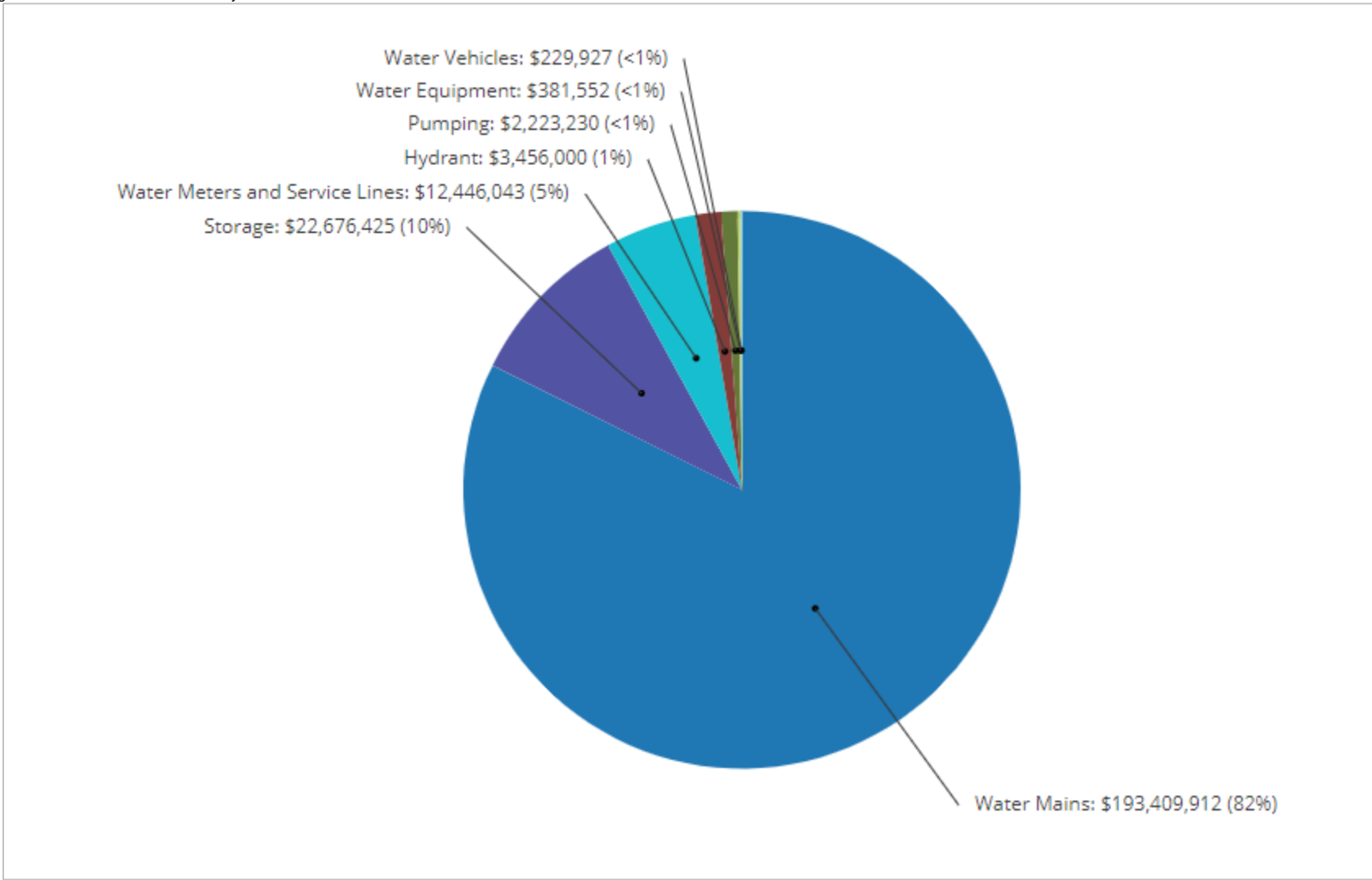
3.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 8 illustrates key asset attributes for the City’s water system, including quantities of various assets, their useful life, replacement costs, and the valuation method by which the replacement costs were derived. In total, the City’s water system assets are valued at \$235 million based on 2018 replacement and life cycle event costs. The useful life indicated for each asset type below was assigned by the City.

Table 9 Key Asset Attributes – Water

Asset Type	Asset Component	Quantity	Useful Life (Years)	2018 Unit Replacement Cost	2018 Overall Replacement Cost
Water System	Hydrants	864	50	User-Defined	\$3,456,000
	Pumping	3	30	Flat-Rate Inflation	\$2,223,230
	Storage	6	75	Flat-Rate Inflation	\$22,676,425
	Water Meters and Service Lines	7219	12	User-Defined	\$12,446,043
	Water mains (2-6 In)	123,776 ft	50	Cost/Unit, Event Costs	\$34,038,425
	Water mains (8 In)	350,787 ft	50	Cost/Unit, Event Costs	\$105,236,085
	Water mains (10 In)	4276 ft	50	Cost/Unit, Event Costs	\$1,304,220
	Water mains (12 In)	107,672 ft	50	Cost/Unit, Event Costs	\$39,838,777
	Water mains (14 In)	2304 ft	50	Cost/Unit, Event Costs	\$437,806
	Water mains (16 In)	7645 ft	50	Cost/Unit, Event Costs	\$3,364,016
	Water mains (18 In)	27 ft	50	Cost/Unit, Event Costs	\$13,780
	Water mains (20 In)	4489 ft	50	Cost/Unit, Event Costs	\$2,513,728
	Water mains (24 In)	9399 ft	50	Cost/Unit, Event Costs	\$6,391,218
	Water mains (30 In)	328 ft	50	Cost/Unit, Event Costs	\$271,858
	Water Vehicles	13	5-10	User-Defined/ Flat-Rate Inflation	\$229,927
	Water Equipment	8	10-20	User-Defined	\$381,552
Total					\$234,823,090

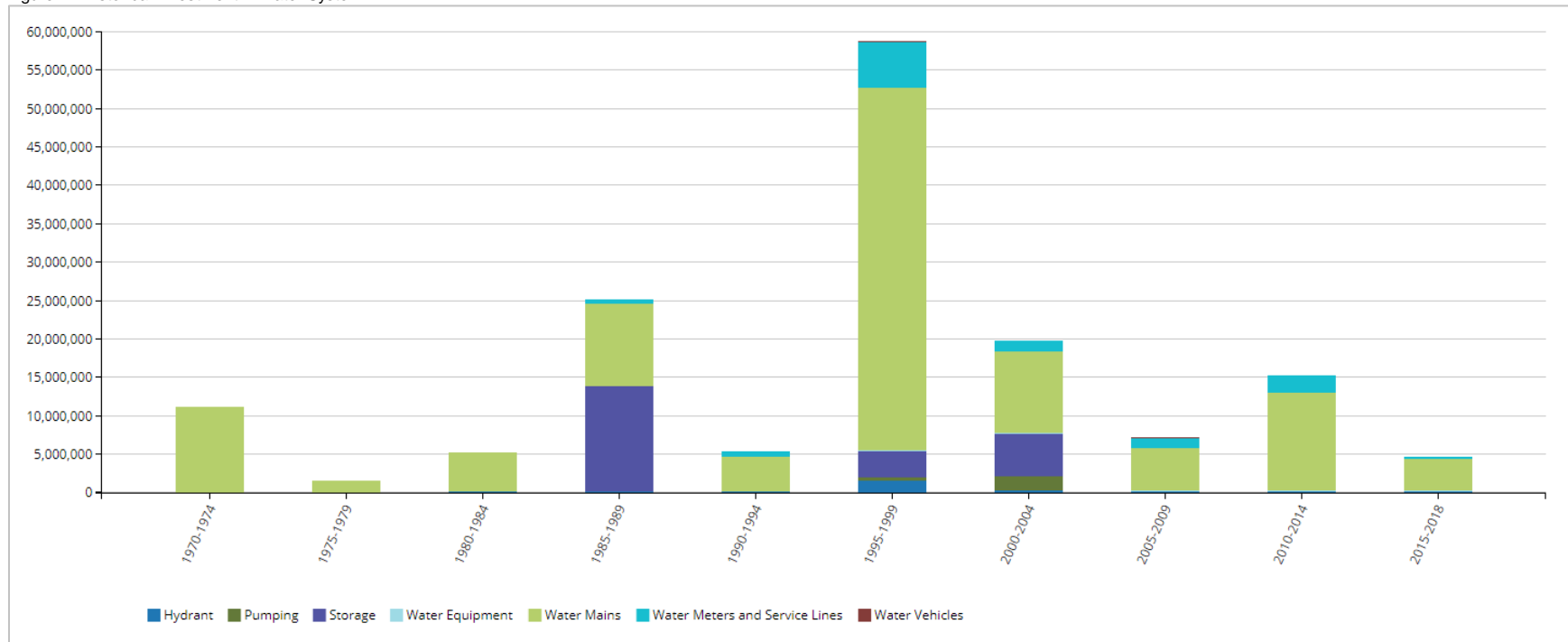
Figure 20 Asset Valuation – Water System



3.2 Historical Investment in Infrastructure

Figure 21 shows the City’s historical investments in its water system since 1970. While observed condition data will provide superior accuracy in estimating replacement needs and should be incorporated into strategic plans, in the absence of such information, understanding past expenditure patterns and current useful life consumption levels (Section 3.3) can inform the forecasting and planning of infrastructure needs and in the development of a capital program. Note that this graph only includes the active asset inventory as of December 31, 2018.

Figure 21 Historical Investment – Water System

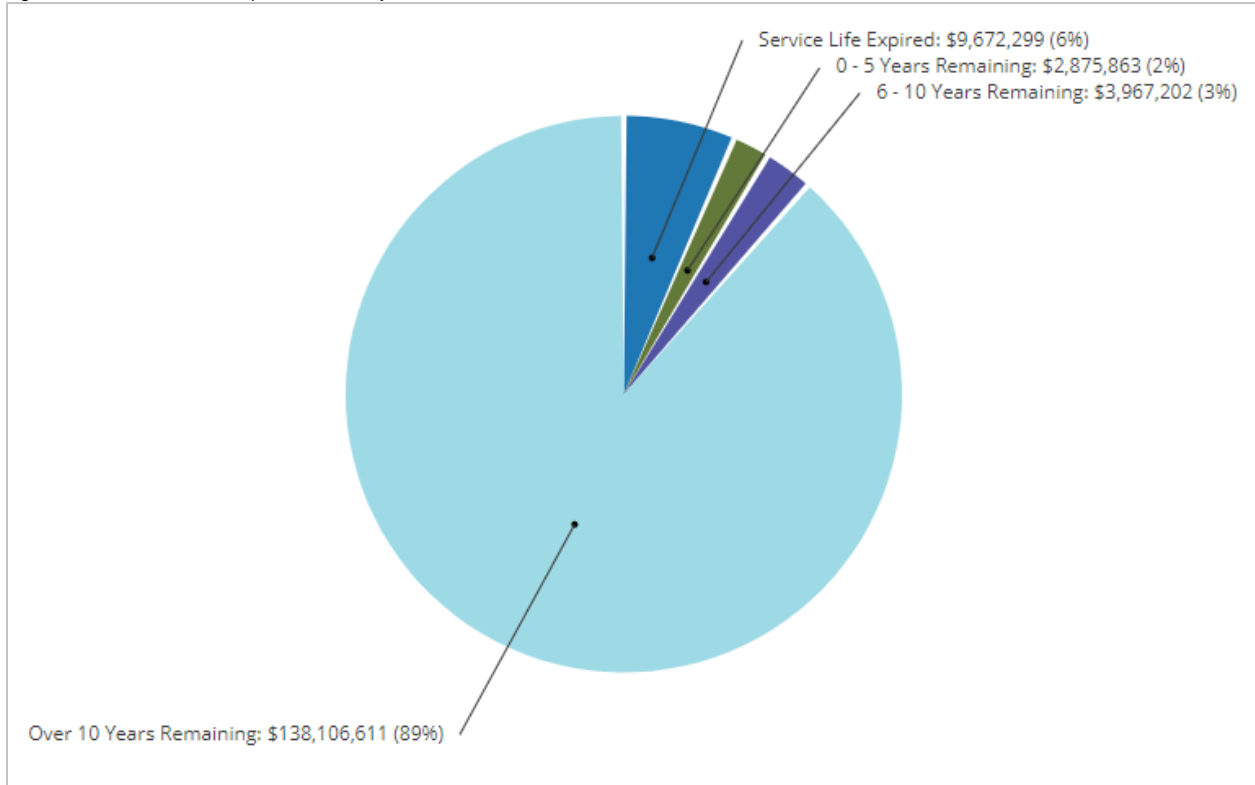


Investments in the water system have fluctuated since the 1970s. In the late 1990s, the period of largest investment, \$58.8 million was invested in the water systems with \$47 million put into watermains.

3.3 Useful Life Consumption

In conjunction with historical spending patterns and observed condition data, understanding the consumption rate of assets based on industry established useful life standards provides a more complete profile of the state of a community's infrastructure. Figure 22 illustrates the useful life consumption levels as of 2018 for the City's water system.

Figure 22 Useful Life Consumption – Water System

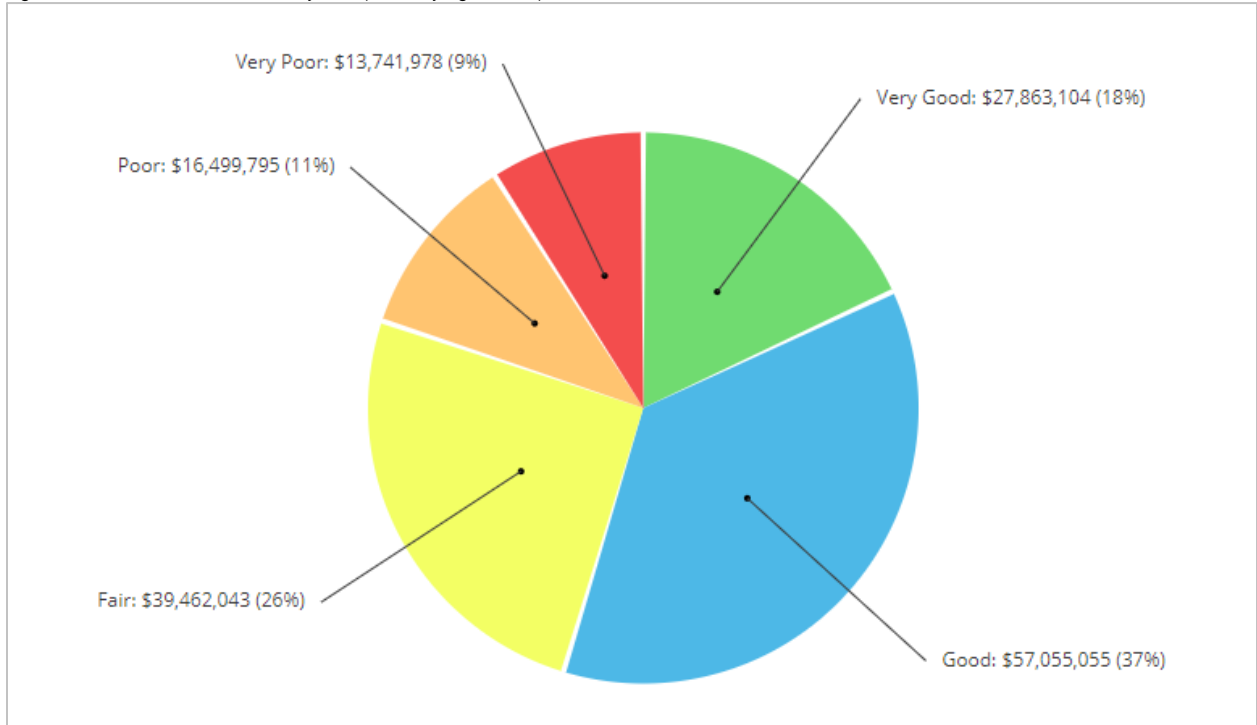


While 89% of the City's water system has at least 10 years of useful life remaining, 6%, with a valuation of \$9.6 million, remain in operation beyond their useful life. An additional 2% will reach the end of their useful life within the next five years.

3.4 Current Asset Condition

Using replacement cost, in this section we summarize the condition of the City’s water system. By default, we rely on observed field data as provided by the City. In the absence of such information, age-based data is used as a proxy. The City has only provided condition data for its water pumping and storage assets.

Figure 23 Asset Condition – Water System (Primarily Age-Based)

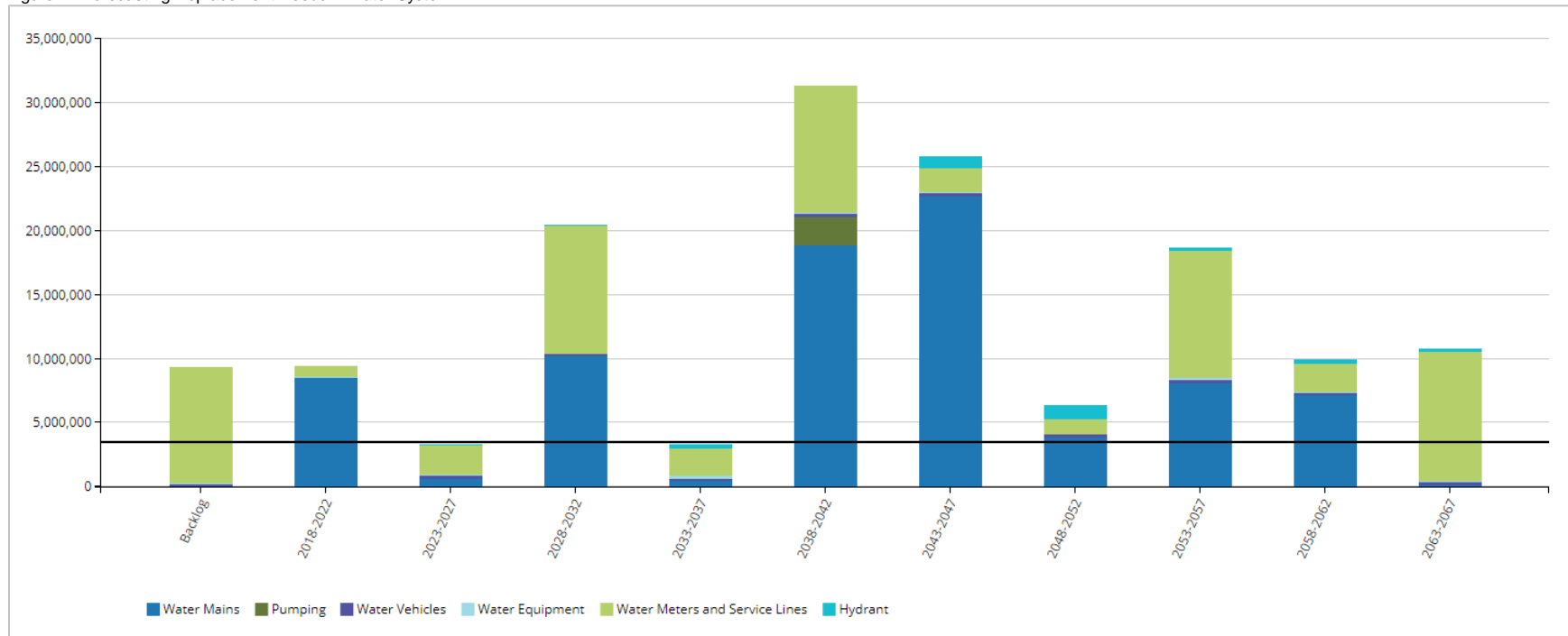


Based on primarily age-based condition data, 55% of assets are in good to very good condition while 20%, with a valuation of \$30 million, are in poor to very poor condition.

3.5 Forecasting Replacement Needs

In this section, we illustrate the short-, medium- and long-term infrastructure spending requirements (replacement only) for the City’s water system assets. The backlog is the aggregate investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 24 Forecasting Replacement Needs – Water System



In addition to a backlog of \$9.3 million, replacement needs are forecasted to be \$9.4 million in the next five years; an additional \$3.3 million is forecasted in replacement needs between 2023-2027. The City’s annual requirements (indicated by the black line) for its water system total \$3.6 million. At this funding level, the City would be allocating sufficient funds on an annual basis to meet replacement needs as they arise without the need for deferring projects and accruing annual infrastructure deficits. However, the City is currently not allocating any funding towards this asset category. See the ‘Financial Strategy’ section for achieving a more optimal and sustainable funding level. Further, while fulfilling the annual requirements will position the City to meet its future replacement needs, injection of additional revenues will be needed to mitigate existing infrastructure backlogs.

3.6 Recommendations – Water System

- Primarily age-base data shows a backlog of \$9.3 million and 10-year replacement needs of \$12.7 million. The City should start a condition assessment program for its water assets to precisely estimate its financial requirements and field needs. See Section 2, ‘Condition Assessment Programs’ in the ‘Asset Management Strategies’ chapter.
- The data collected through future condition assessment programs should be integrated into a risk management framework which will guide prioritization of short, medium, and long term replacement needs. See Section 4, ‘Risk’ in the ‘Asset Management Strategies’ chapter for more information.
- In addition to the above, a tailored lifecycle activity framework should be developed to promote standard lifecycle management of the water system as outlined further within the “Asset Management Strategy” section of this AMP.
- Water distribution system key performance indicators should be established and tracked annually as part of an overall level of service model. See Section VII ‘Levels of Service’.
- The City should assess its short-, medium- and long-term capital, and operations and maintenance needs.
- An appropriate percentage of the replacement costs should then be allocated for the City’s operations and maintenance standards.
- The City is not funding any portion of its long-term requirements on an annual basis. See the ‘Financial Strategy’ section on how to achieve more sustainable and optimal funding levels.

4. Wastewater Systems

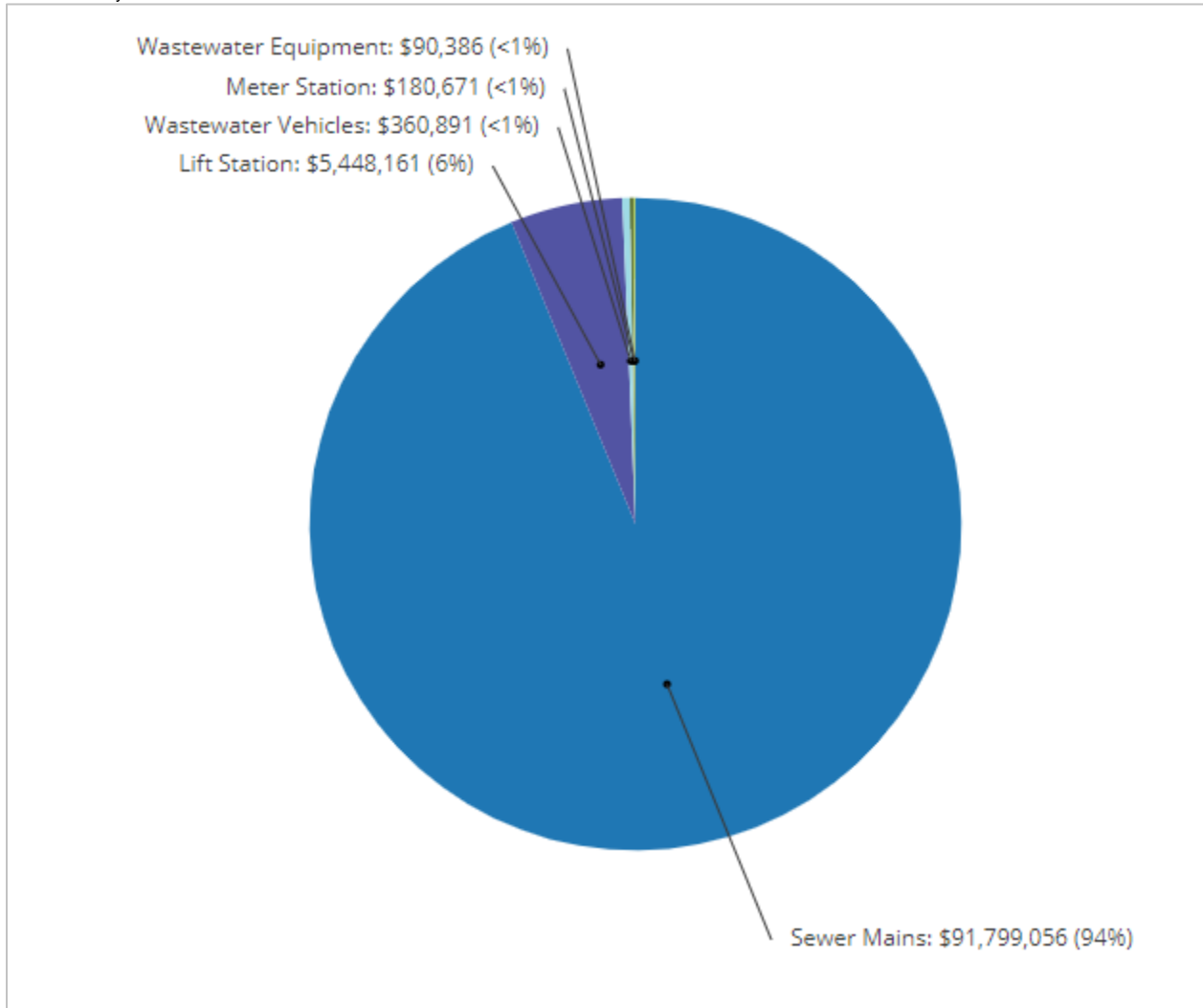
4.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 10 illustrates key asset attributes for the City’s wastewater system portfolio, including quantities of various assets, their useful life, replacement costs, and the valuation method by which the replacement costs were derived. In total, the City’s wastewater system assets are valued at \$98.8 million based on 2017 replacement and life cycle event costs. The useful life indicated for each asset type below was assigned by the City.

Table 10 Asset Inventory – Wastewater Systems

Asset Type	Asset Component	Quantity	Useful Life (Years)	2017 Unit Replacement Cost	2017 Overall Replacement Cost
Wastewater Systems	Lift Station	13	40	Flat-Rate Inflation	\$5,448,161
	Meter Station	2	20	Flat-Rate Inflation	\$180,671
	Sewer Mains (3-4 In)	2934 ft	50	Cost/Unit, Event Costs	\$299,933
	Sewer Mains (6 In)	77,191 ft	50	Cost/Unit, Event Costs	\$10,961,132
	Sewer Mains (8 In)	359,063 ft	50	Cost/Unit, Event Costs	\$58,240,090
	Sewer Mains (10 In)	20,314 ft	50	Cost/Unit, Event Costs	\$3,396,495
	Sewer Mains (12 In)	25,269 ft	50	Cost/Unit, Event Costs	\$5,235,774
	Sewer Mains (14-15 In)	16,438 ft	50	Cost/Unit, Event Costs	\$4,556,639
	Sewer Mains (18 In)	17,333 ft	50	Cost/Unit, Event Costs	\$5,497,930
	Sewer Mains (21-24 In)	4946 ft	50	Cost/Unit, Event Costs	\$2,137,506
	Sewer Mains (27 In)	1674 ft	50	Cost/Unit, Event Costs	\$840,634
	Sewer Mains (30 In)	1009 ft	50	Cost/Unit, Event Costs	\$633,022
	Wastewater Vehicles	5	5-10	Flat-Rate Inflation/ User-Defined	\$360,891
	Sewer Equipment	2	5-10	User-Defined	\$90,386
Total					\$98,879,264

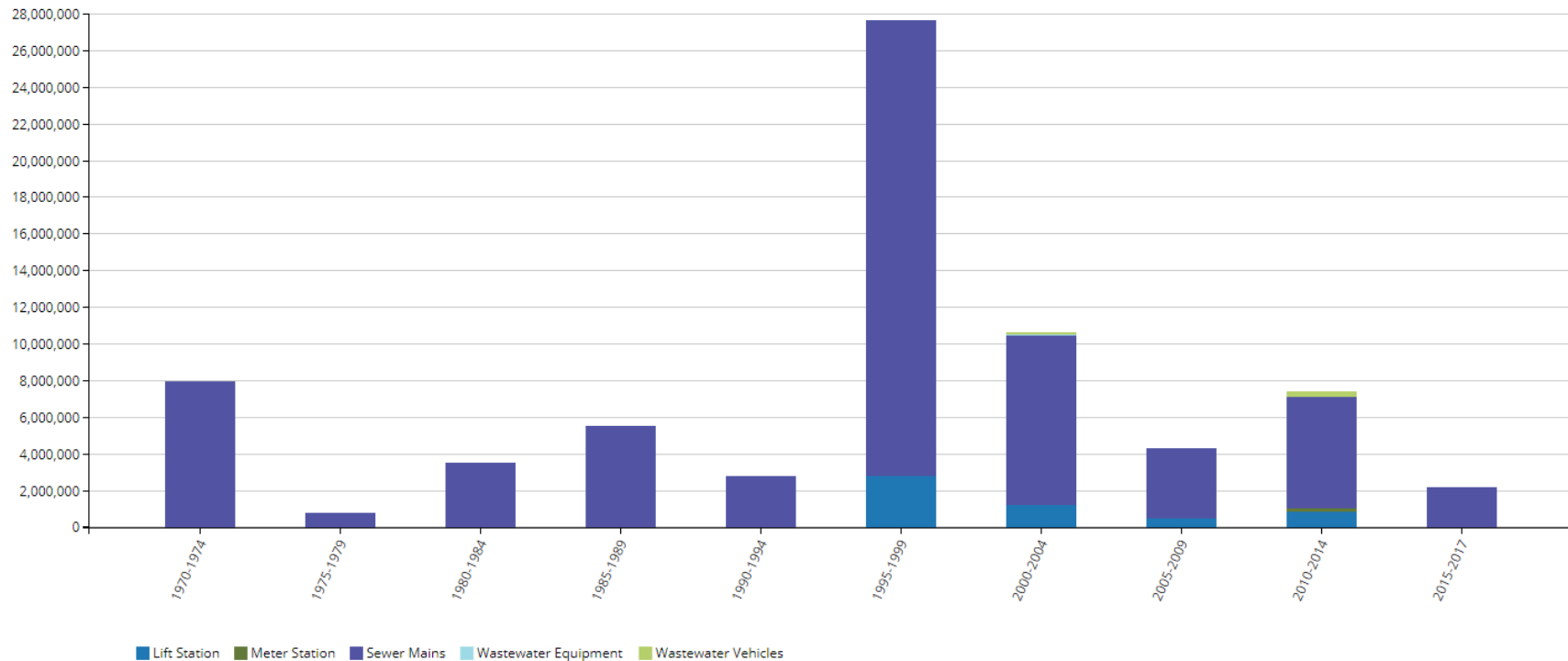
Figure 25 Asset Valuation – Wastewater System



4.2 Historical Investment in Infrastructure

Figure 26 shows the City's historical investments in its wastewater system since 1970. While observed condition data will provide superior accuracy in estimating replacement needs and should be incorporated into strategic plans, in the absence of such information, understanding past expenditure patterns and current useful life consumption levels (Section 4.3) can inform the forecasting and planning of infrastructure needs and in the development of a capital program. Note that this graph only includes the active asset inventory as of December 31, 2017.

Figure 26 Historical Investment – Wastewater System

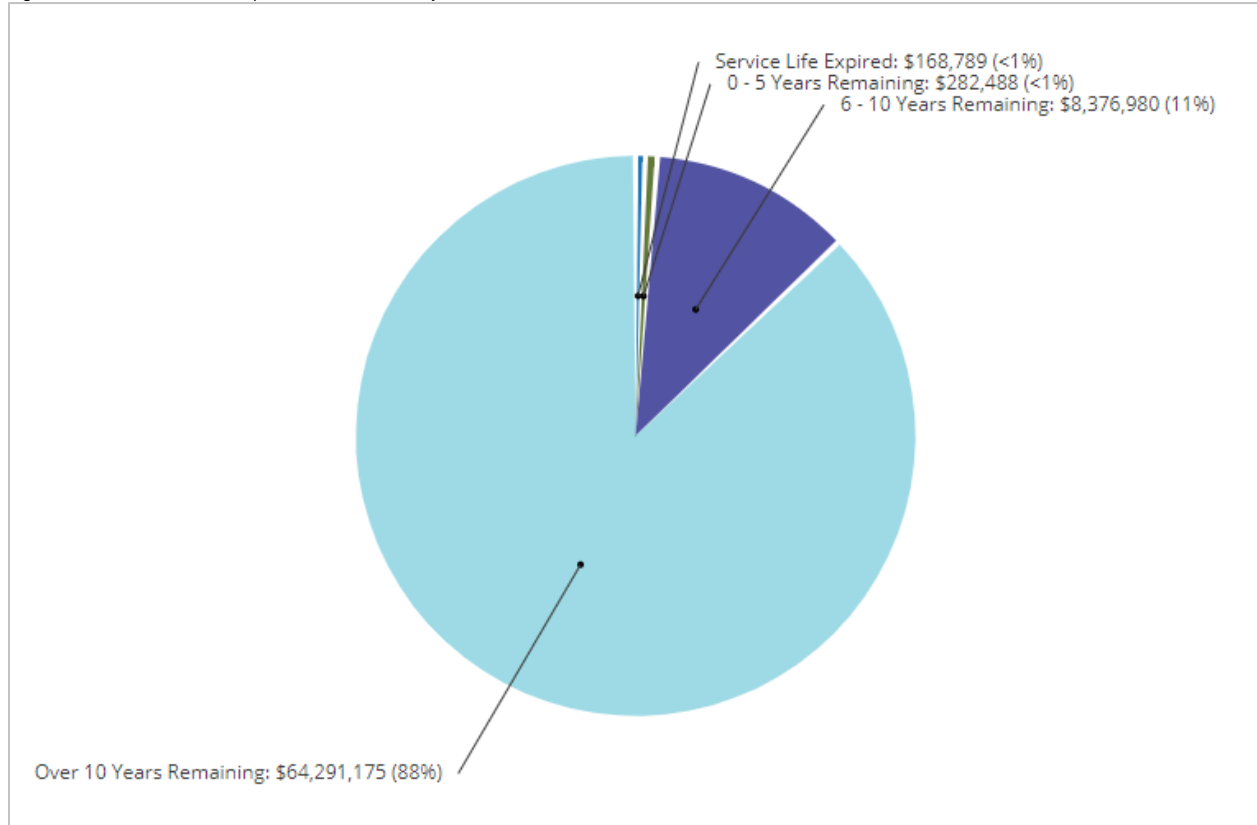


Major investments into the City's wastewater assets began in the early 1970s. Investments then fluctuated and peaked in the late 1990s at \$27.7 million. During this time \$24.9 million was put into sewer mains.

4.3 Useful Life Consumption

In conjunction with historical spending patterns and observed condition data, understanding the consumption rate of assets based on industry established useful life standards provides a more complete profile of the state of a community’s infrastructure. Figure 27 illustrates the useful life consumption levels as of 2017 for the City’s wastewater system.

Figure 27 Useful Life Consumption – Wastewater System

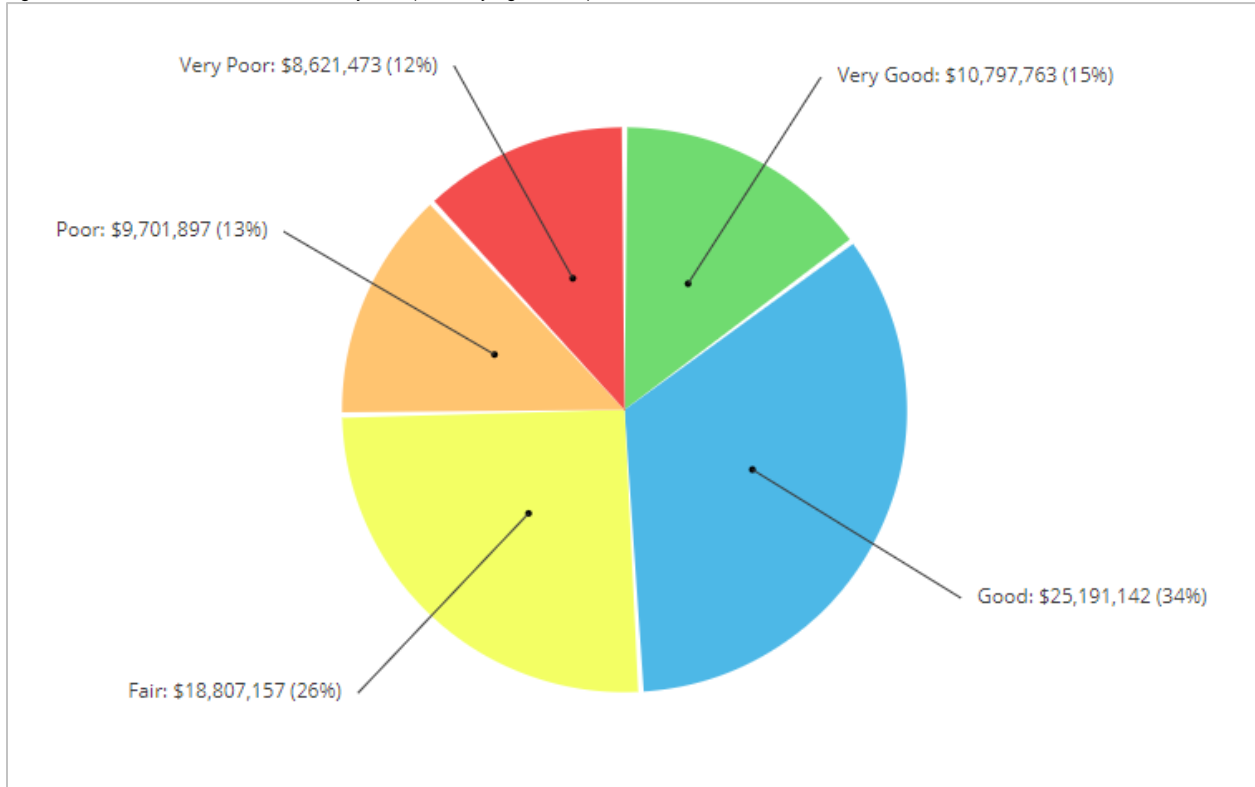


While 88% of the City’s wastewater system has at least 10 years of useful life remaining, less than 1%, with a valuation of \$169,000, remain in operation beyond their useful life. An additional 1% will reach the end of their useful life within the next five years.

4.4 Current Asset Condition

Using replacement cost, in this section we summarize the condition of the City's wastewater system as of 2017. By default, we rely on observed field data as provided by the City. In the absence of such information, age-based data is used as a proxy. The City has only provided condition data for its lift and meter stations.

Figure 28 Asset Condition – Wastewater System (Primarily Age-Based)

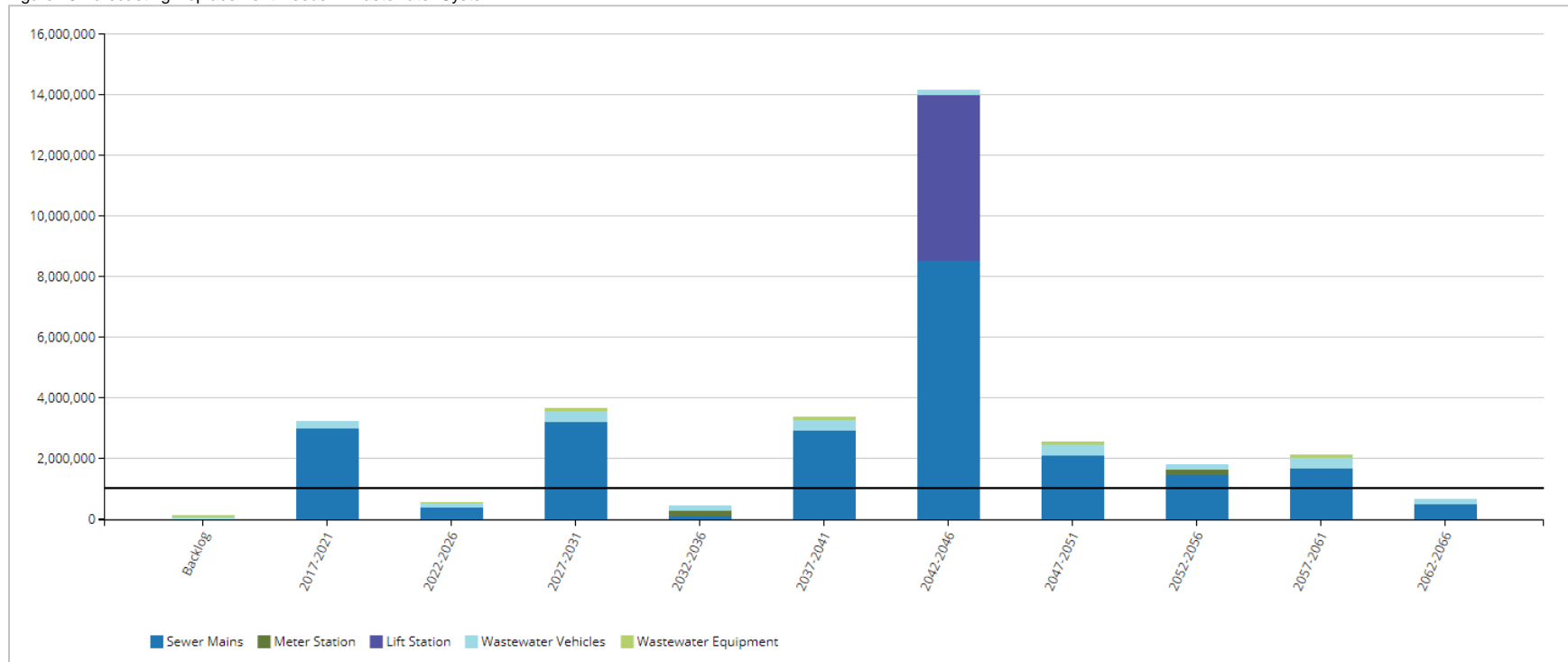


Primarily age-based data indicates that 49% of the assets are in good to very good condition, while 25%, with a valuation of \$18 million, are in poor to very poor condition.

4.5 Forecasting Replacement Needs

In this section, we illustrate the short-, medium- and long-term infrastructure spending requirements (replacement only) for the City’s wastewater system assets. The backlog is the aggregate investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 29 Forecasting Replacement Needs – Wastewater System



Primarily age-based data indicates a minimal backlog and a 5-year replacement need of 3 million. An additional \$570,000 will be required between 2022-2026. The City’s annual requirements (indicated by the black line) for its wastewater assets total \$1.1 million. At this level, funding would be sustainable and replacement needs could be met as they arise without the need for deferring projects. The City is currently not allocating any funding towards this asset category. See the ‘Financial Strategy’ section for achieving a more optimal and sustainable funding level. Further, while fulfilling the annual requirements will position the City to meet its future replacement needs, injection of additional revenues will be needed to mitigate existing infrastructure backlogs.

4.6 Recommendations – Wastewater System

- Primarily age-based data shows a minimal backlog and 10-year replacement needs of \$3.5 million. The City should begin a condition assessment program for its wastewater assets to precisely estimate its financial requirements and field needs. See Section 2, ‘Condition Assessment Programs’ in the ‘Asset Management Strategies’ chapter.
- The data collected through condition assessment programs should be integrated into a risk management framework which will guide prioritization of short, medium, and long term replacement needs. See Section 4, ‘Risk’ in the ‘Asset Management Strategies’ chapter for more information.
- In addition to the above, a tailored lifecycle activity framework should be developed to promote standard lifecycle management of the wastewater system as outlined further within the “Asset Management Strategy” section of this AMP.
- Wastewater collection system key performance indicators should be established and tracked annually as part of an overall level of service model. See Section VII ‘Levels of Service’.
- The City should assess its short-, medium- and long-term operations and maintenance needs. An appropriate percentage of the replacement costs should then be allocated for the City’s operations and maintenance standards..
- The City is not funding any portion of its long-term requirements on an annual basis. See the ‘Financial Strategy’ section on how to achieve more sustainable and optimal funding levels.

5. Stormwater System

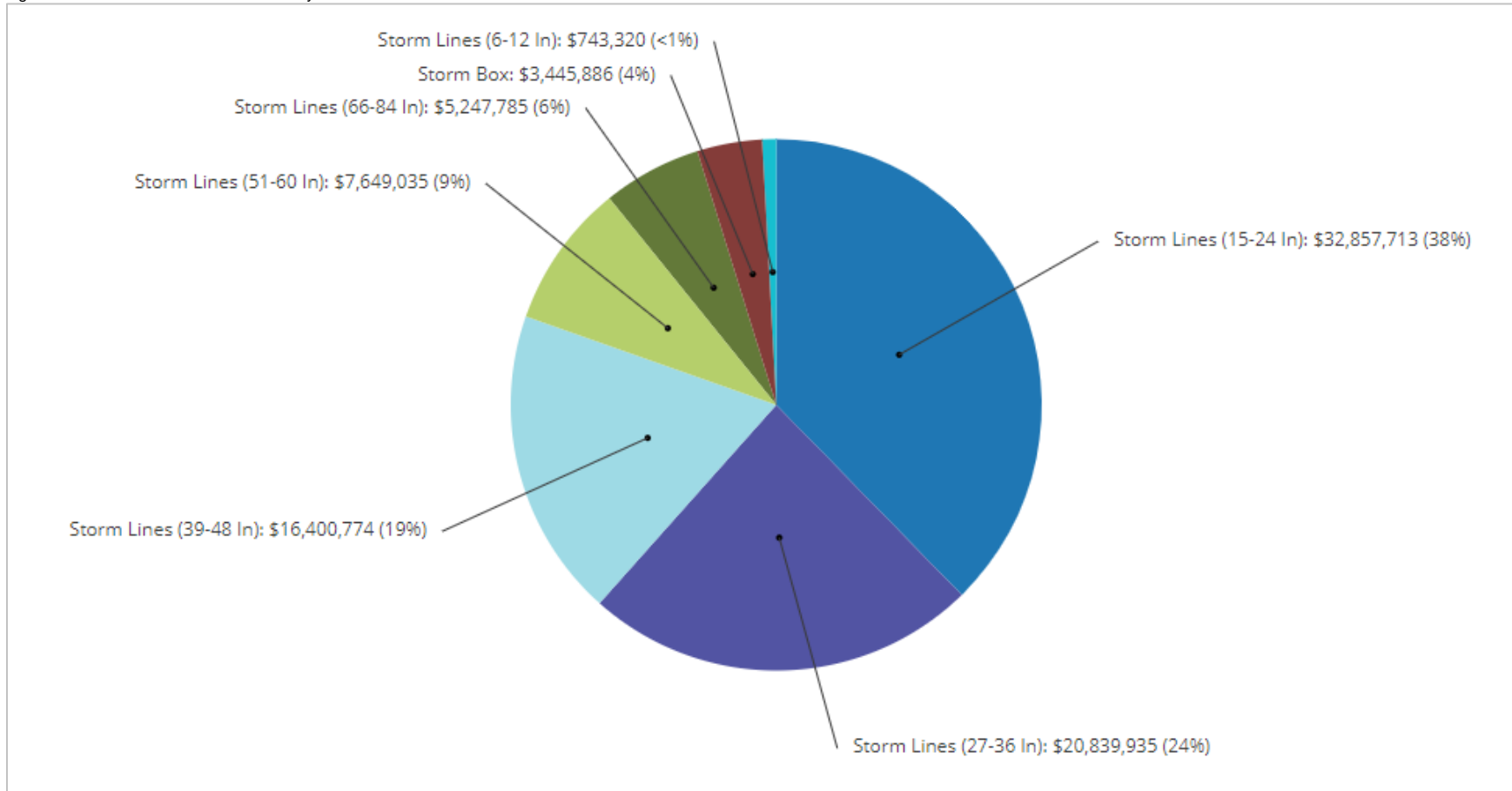
5.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 11 illustrates key asset attributes for the City's stormwater system, including quantities of various assets, their useful life, their replacement cost, and the valuation method by which the replacement costs were derived. In total, the City's stormwater system assets are valued at \$87 million based on 2018 replacement costs. The useful life indicated for each asset type below was assigned by the City.

Table 11 Asset Inventory – Stormwater System

Asset Type	Asset Component	Quantity	Useful Life in Years	2018 Valuation Method	2018 Replacement Cost
Stormwater System	Storm Box	9918 ft	40	User-Defined	\$3,445,886
	Storm Lines (6-12 In)	3072 ft	40	Cost/Unit, Event Costs	\$743,319
	Storm Lines (15-24 In)	105,649 ft	40	Cost/Unit, Event Costs	\$32,857,713
	Storm Lines (27-36 In)	43,236 ft	40	Cost/Unit, Event Costs	\$20,839,935
	Storm Lines (39-48 In)	27,244 ft	40	Cost/Unit, Event Costs	\$16,400,774
	Storm Lines (51-60 In)	12,706 ft	40	Cost/Unit, Event Costs	\$7,649,035
	Storm Lines (66-84 In)	8717 ft	40	Cost/Unit, Event Costs	\$5,247,785
Total					\$87,184,447

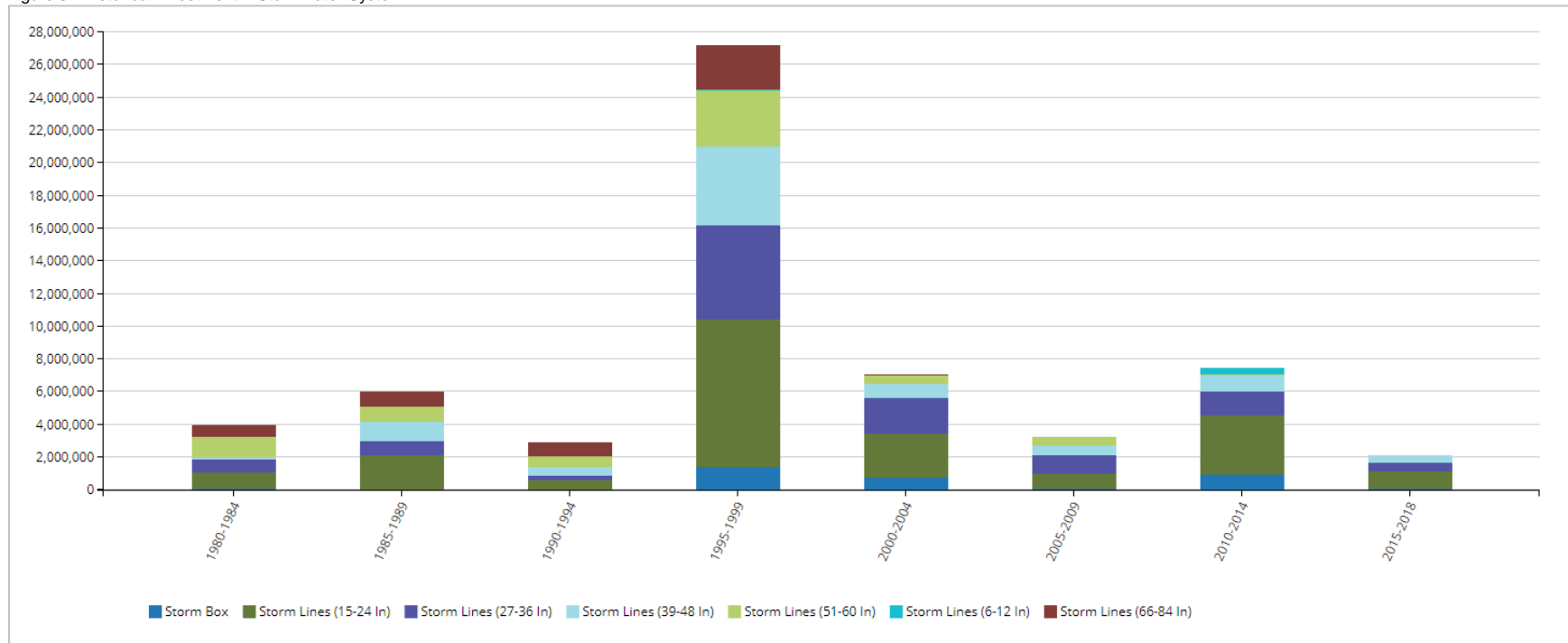
Figure 30 Asset Valuation – Stormwater System



5.2 Historical Investment in Infrastructure

Figure 31 shows the City's historical investments in its stormwater system since 1980. While observed condition data will provide superior accuracy in estimating replacement needs and should be incorporated into strategic plans, in the absence of such information, understanding past expenditure patterns and current useful life consumption levels (Section 5.3) can inform the forecasting and planning of infrastructure needs and in the development of a capital program. Note that this graph only includes the active asset inventory as of December 31, 2018.

Figure 31 Historical Investment – Stormwater System

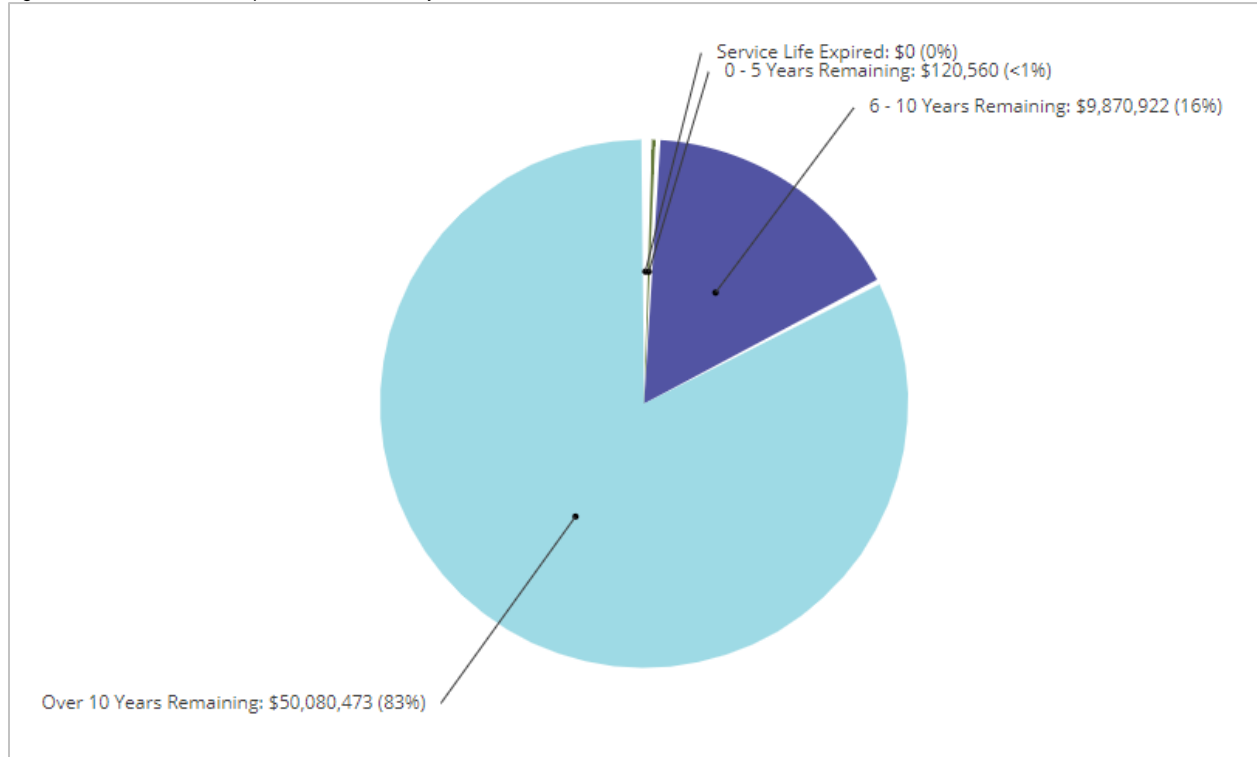


Investments in the stormwater system fluctuated since the 1980s. During the late 1990s, the period of the largest investment, \$27 million was invested with a focus on the storm lines.

5.3 Useful Life Consumption

In conjunction with historical spending patterns and observed condition data, understanding the consumption rate of assets based on industry established useful life standards provides a more complete profile of the state of a community’s infrastructure. Figure 32 illustrates the useful life consumption levels as of 2018 for the City’s storm assets.

Figure 32 Useful Life Consumption – Stormwater System

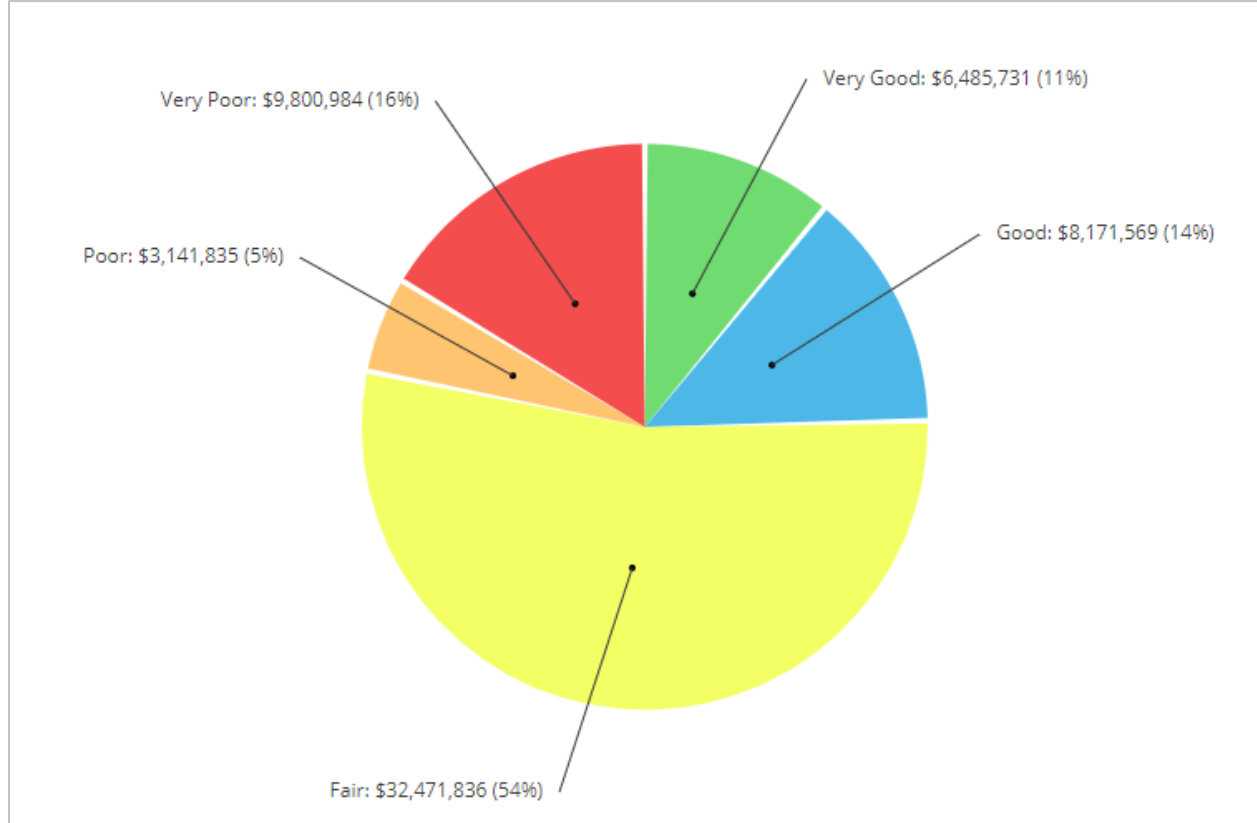


83% of the assets have at least 10 years of useful life remaining while the remaining 17% will reach the end of their useful life within the next ten years.

5.4 Current Asset Condition

Using replacement cost, in this section we summarize the condition of the City's stormwater system. By default, we rely on observed field data as provided by the City. In the absence of such information, age-based data is used as a proxy. The City has not provided condition data for its stormwater system assets.

Figure 33 Asset Condition – Stormwater System (Age-based)

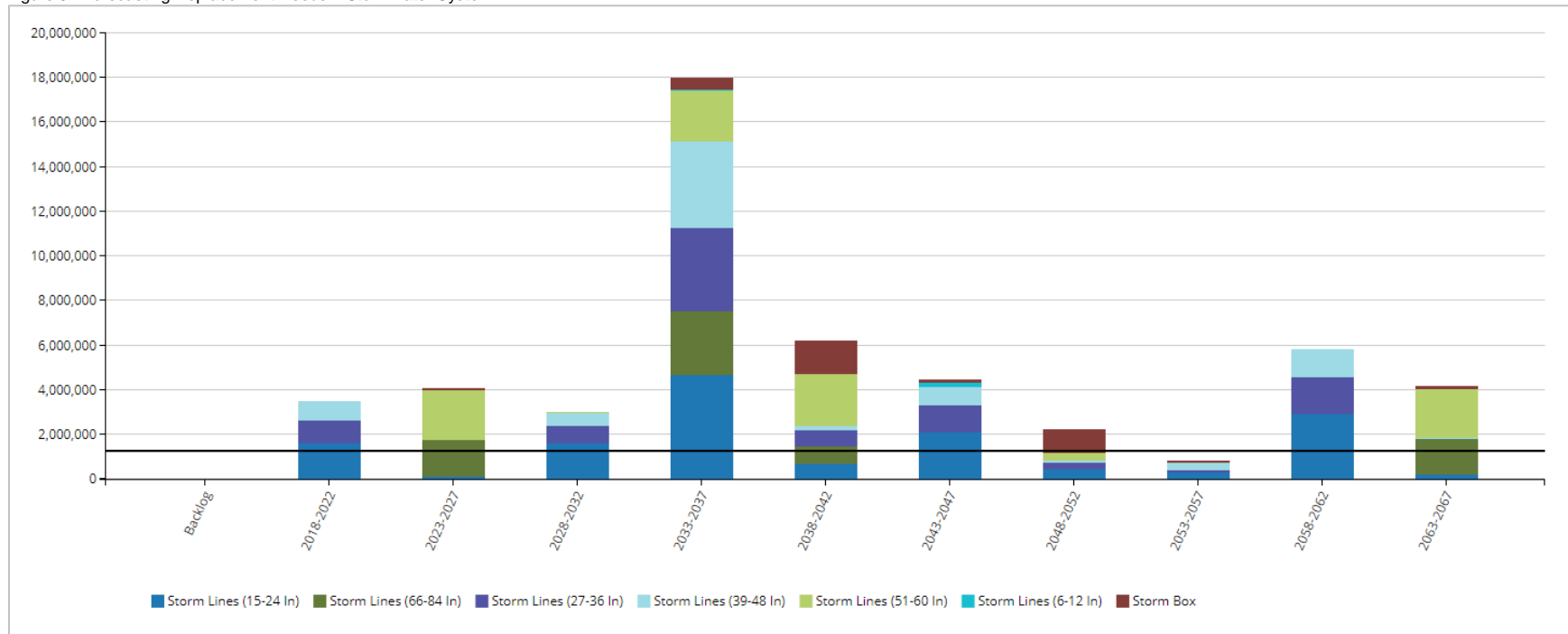


Age-based data indicates that 25% of the assets are in good to very good condition, while 21%, with a valuation of \$12.9 million, are in poor to very poor condition.

5.5 Forecasting Replacement Needs

In this section, we illustrate the short-, medium- and long-term infrastructure spending requirements (replacement only) for the City’s stormwater system assets. The backlog is the aggregate investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 34 Forecasting Replacement Needs – Stormwater System



Age-based data shows no backlog and five-year replacement needs of \$3.5 million. An additional \$4 million will be required between 2023-2027. The City’s annual requirements (indicated by the black line) for stormwater assets total \$1.3 million. At this funding level, the City would be allocating sufficient funds on an annual basis to meet replacement needs as they arise without the need for deferring projects and accruing annual infrastructure deficits. The City is currently not allocating any funding towards this asset category. See the ‘Financial Strategy’ section for achieving a more optimal and sustainable funding level.

5.6 Recommendations – Stormwater System

- The City should implement a condition assessment program of its storm mains to further define field needs and to assist the prioritization of the short and long term capital budget. See Section 2, ‘Condition Assessment Programs’ in the ‘Asset Management Strategies’ chapter.
- Using the above information, the City should assess its short-, medium- and long-term capital, and operations and maintenance needs.
- An appropriate percentage of the replacement value of the assets should then be allocated for the City’s operations and maintenance standards.
- Stormwater system key performance indicators should be established and tracked annually as part of an overall level of service model. See Section VII ‘Levels of Service’.
- The City is not funding any portion of it’s long-term requirements on an annual basis. See the ‘Financial Strategy’ section on how to achieve more sustainable and optimal funding levels.

6. Buildings & Facilities

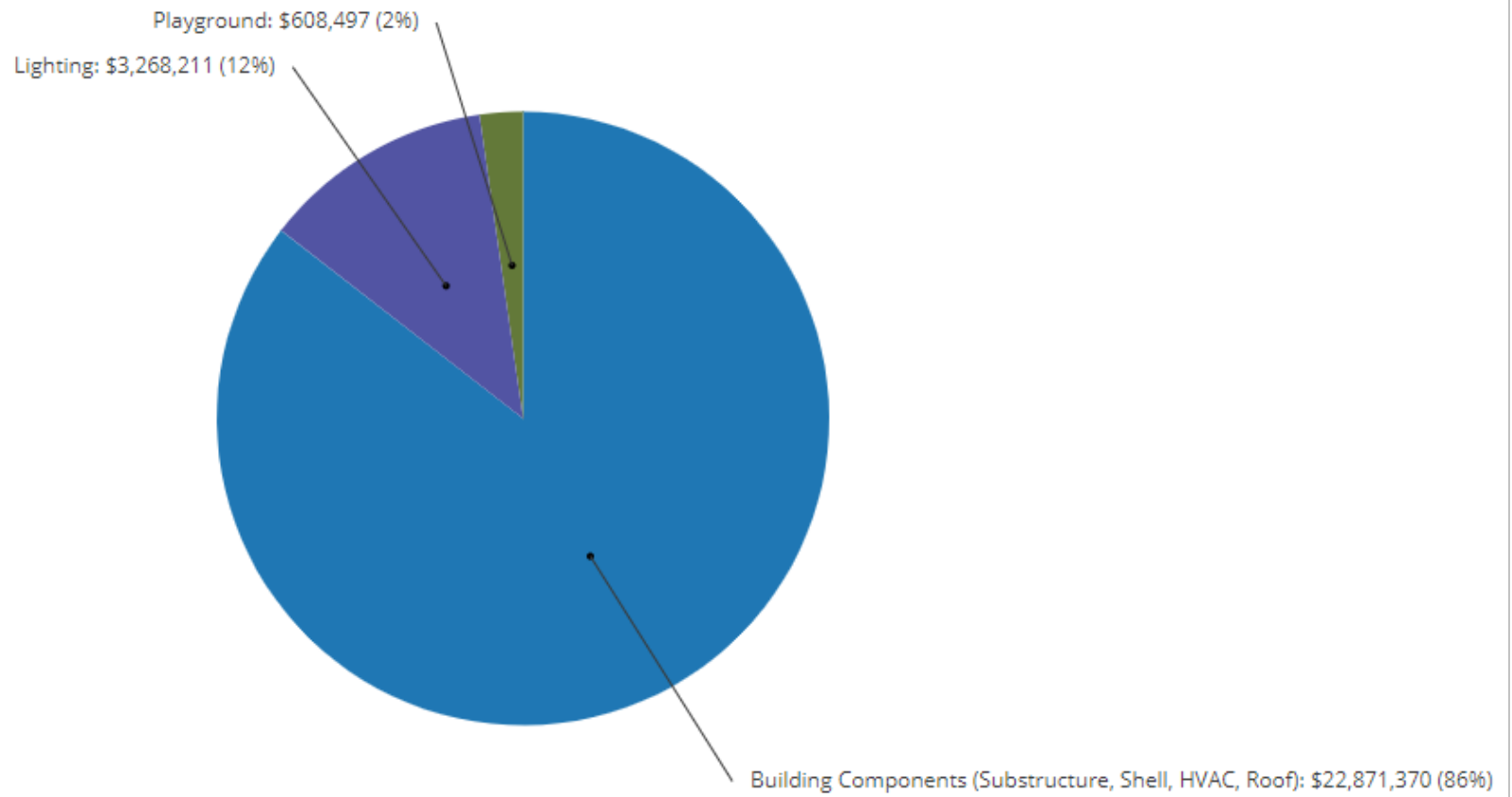
6.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 12 illustrates key asset attributes for the City's buildings & facilities, including quantities of various assets, their useful life, their replacement cost, and the valuation method by which the replacement costs were derived. In total, the City's buildings assets are valued at \$26.7 million based on 2018 replacement costs. The useful life indicated for each asset type below was assigned by the City.

Table 12 Key Asset Attributes – Buildings & Facilities

Asset Type	Asset Component	Quantity	Useful Life in Years	Valuation Method	2018 Replacement Cost
Buildings & Facilities	Building Components (Substructure, Shell, HVAC, Roof)	55	20-75	User-Defined/Flat-Rate Inflation	\$22,871,370
	Lighting	86	40	Flat-Rate Inflation	\$3,368,211
	Playground	20	20	User-Defined	\$608,497
Total					\$26,748,078

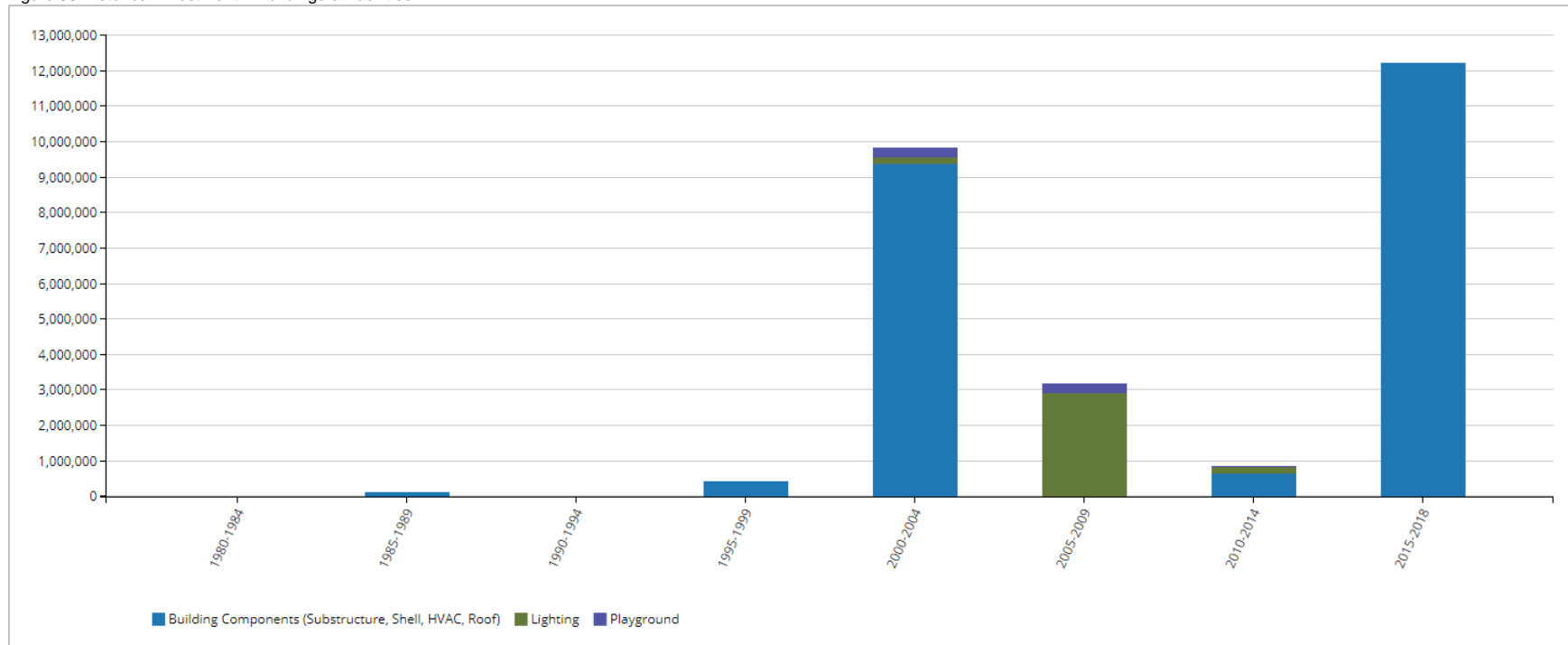
Figure 35 Asset Valuation – Buildings & Facilities



6.2 Historical Investment in Infrastructure

Figure 36 shows the City's historical investments in its buildings & facilities since 1980. While observed condition data will provide superior accuracy in estimating replacement needs and should be incorporated into strategic plans, in the absence of such information, understanding past expenditure patterns and current useful life consumption levels (Section 6.3) can inform the forecasting and planning of infrastructure needs and in the development of a capital program. Note that this graph only includes the active asset inventory as of December 31, 2018.

Figure 36 Historical Investment – Buildings & Facilities

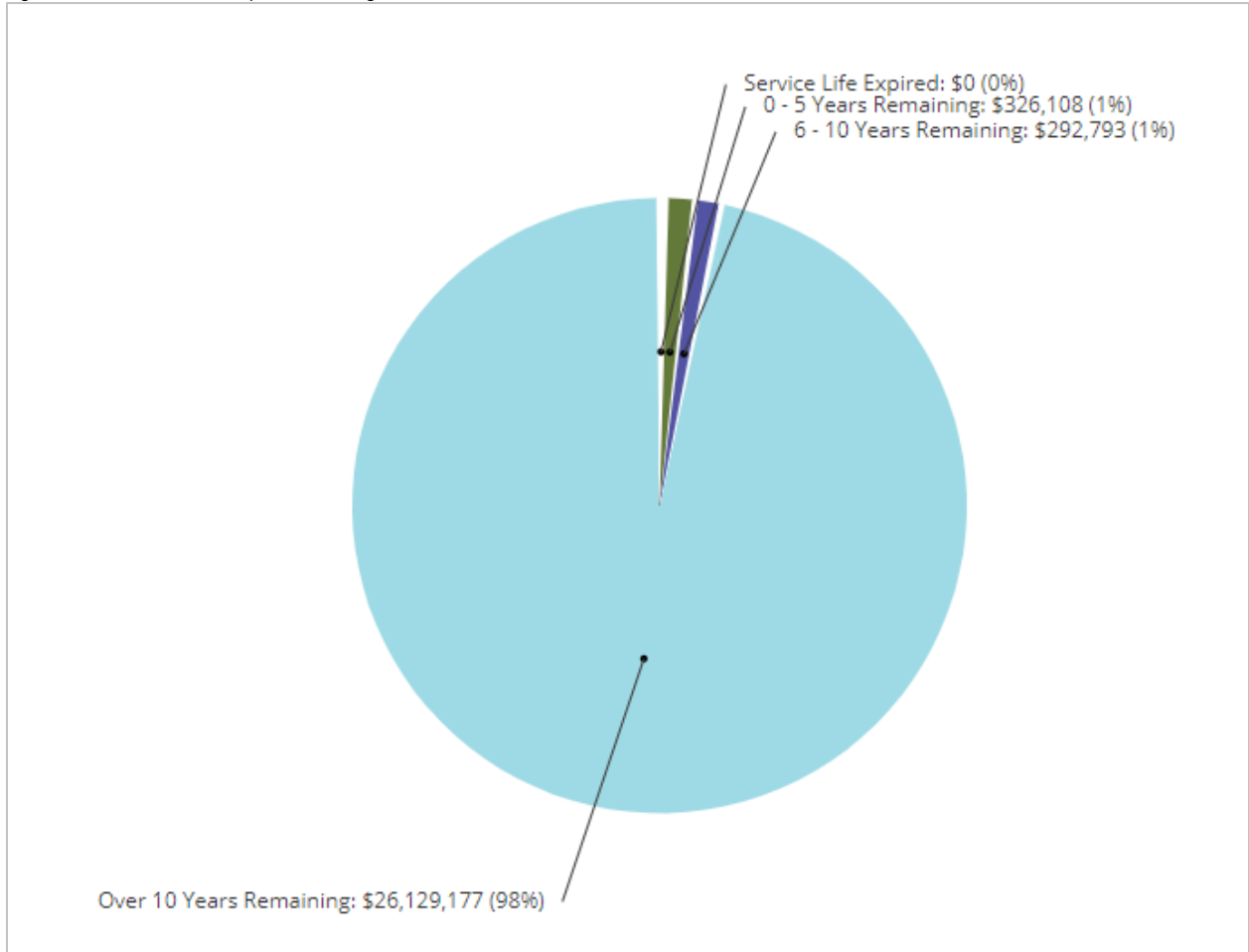


The City's investments into its building assets were minimal starting in late 1980s until the late 1990s. Between 2015 and 2018, the period of largest investment, \$12 million was invested into the building assets with a focus on building components.

6.3 Useful Life Consumption

In conjunction with historical spending patterns and observed condition data, understanding the consumption rate of assets based on industry established useful life standards provides a more complete profile of the state of a community’s infrastructure. Figure 37 illustrates the useful life consumption levels as of 2018 for the City’s buildings assets.

Figure 37 Useful Life Consumption – Buildings & Facilities

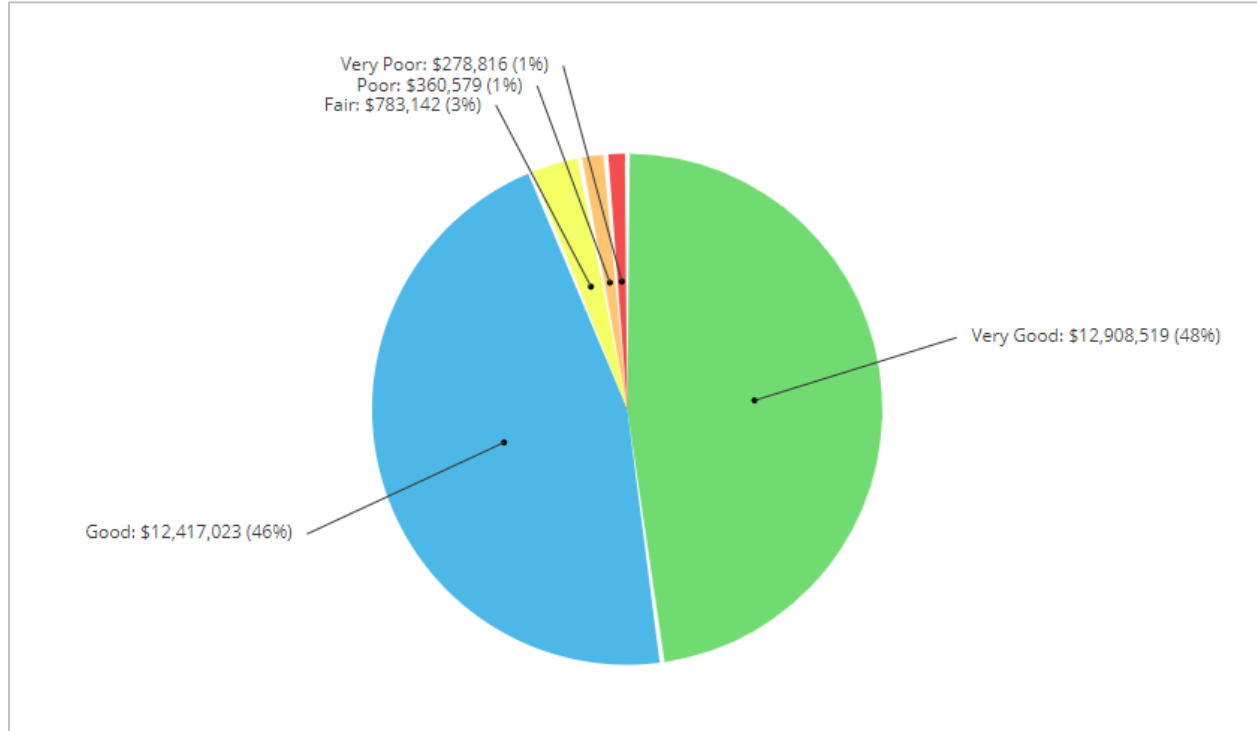


98% of buildings assets have at least 10 years of useful life remaining; 1%, with a valuation of \$326,000 will reach the end of their useful life in the next 5 years.

6.4 Current Asset Condition

Using replacement cost, in this section we summarize the condition of the City's buildings assets. By default, we rely on observed field data as provided by the City. In the absence of such information, age-based data is used as a proxy. The City has not provided condition data for its buildings & facilities.

Figure 38 Asset Condition – Buildings & Facilities (Age-Based)

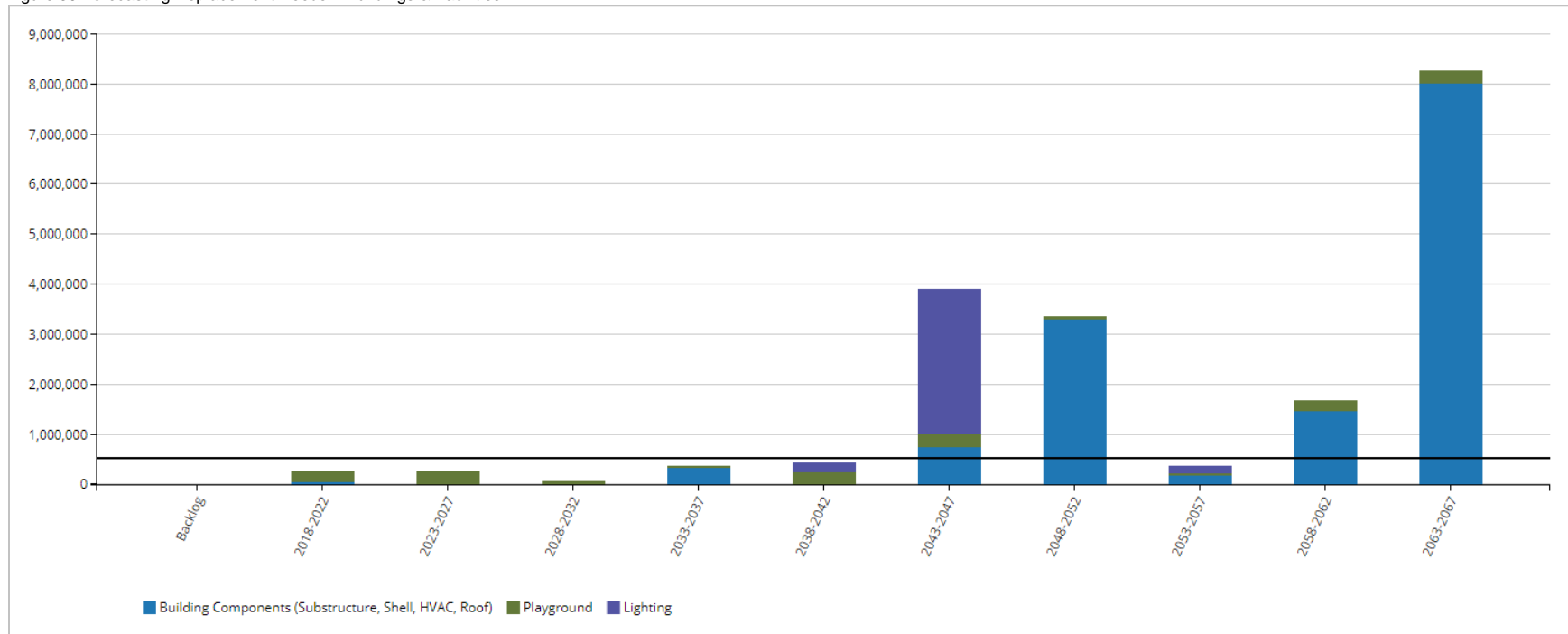


94% of buildings assets, with a valuation of \$25 million, are in good to very good condition; 2% are in poor to very poor condition.

6.5 Forecasting Replacement Needs

In this section, we illustrate the short-, medium- and long-term infrastructure spending requirements (replacement only) for the City’s buildings assets. The backlog is the aggregate investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 39 Forecasting Replacement Needs – Buildings & Facilities



Age-based data indicates no backlog and five-year replacement needs of \$279,000. An additional \$271,000 will be required between 2023-2027. The City’s annual requirements (indicated by the black line) for its buildings total \$545,000. At this funding level, the City would be allocating sufficient funds on an annual basis to meet replacement needs as they arise without the need for deferring projects and accruing annual infrastructure deficits. The City is currently not allocating any funding towards this asset category. See the ‘Financial Strategy’ section for achieving a more optimal and sustainable funding level.

6.6 Recommendations – Buildings & Facilities

- The City should implement a condition inspection program for its buildings & facilities to precisely estimate future financial needs. See Section 2, ‘Condition Assessment Programs’ in the ‘Asset Management Strategies’ chapter.
- The data collected through condition assessment programs should be integrated into a risk management framework which will guide prioritization of short, medium, and long term replacement needs. See Section 4, ‘Risk’ in the ‘Asset Management Strategies’ chapter for more information.
- In addition to the above, a tailored lifecycle activity framework should be developed to promote standard lifecycle management of buildings & facilities as outlined further within the “Asset Management Strategy” section of this AMP.
- Using the above information, the City should assess its short-, medium- and long-term capital, and operations and maintenance needs.
- An appropriate percentage of the replacement costs should then be allocated for the City’s operations and maintenance standards..
- Facility key performance indicators should be established and tracked annually as part of an overall level of service model. See Chapter VII, ‘Levels of Service’.
- The City is not funding any portion of it’s long-term requirements on an annual basis. See the ‘Financial Strategy’ section on how to achieve more sustainable and optimal funding levels.

7. Machinery & Equipment

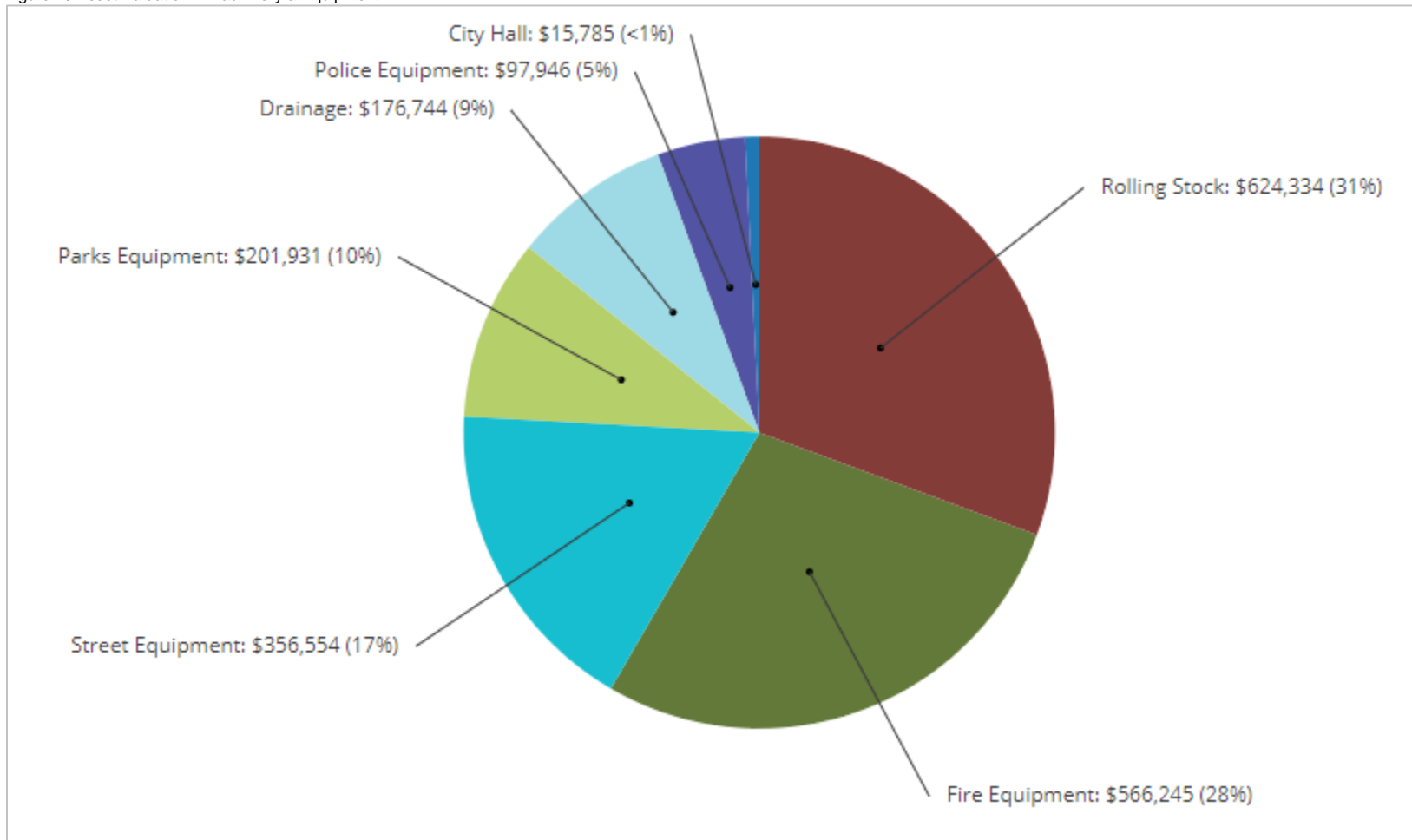
7.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 13 illustrates key asset attributes for the City's machinery & equipment, including quantities of various assets, their useful life, their replacement cost, and the valuation method by which the replacement costs were derived. In total, the City's machinery & equipment assets are valued at \$2 million based on 2018 replacement costs. The useful life indicated for each asset type below was assigned by the City.

Table 13 Asset Inventory – Machinery & Equipment

Asset Type	Components	Quantity	Useful Life in Years	Valuation Method	2018 Replacement Cost
Machinery & Equipment	City Hall	2	5	User-Defined	\$15,785
	Drainage	4	10-20	User-Defined	\$176,744
	Fire Equipment	10	4-10	User-Defined	\$566,245
	Parks Equipment	17	7-20	User-Defined	\$201,931
	Police Equipment	1	8	User-Defined	\$97,946
	Rolling Stock	33	5-15	Flat-Rate Inflation/ User-Defined	\$624,334
	Street Equipment	14	5-20	User-Defined	\$356,554
Total					\$2,039,539

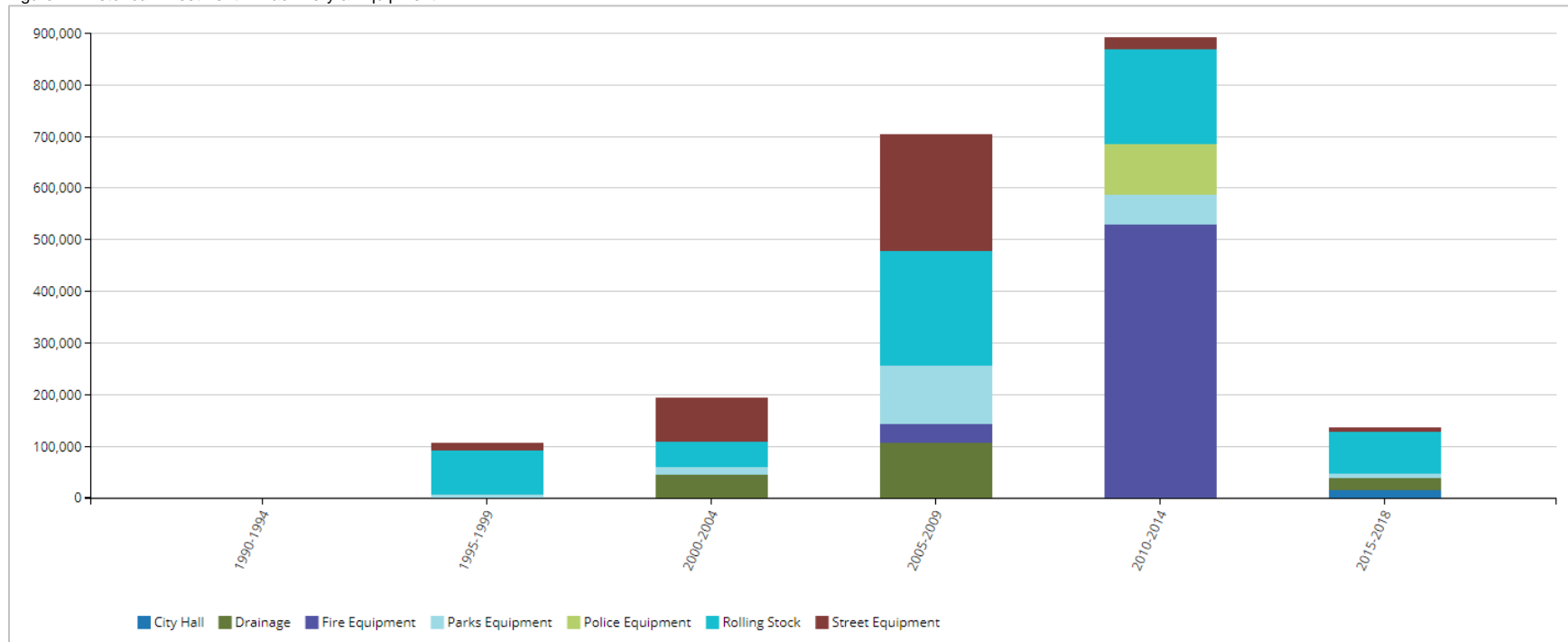
Figure 40 Asset Valuation – Machinery & Equipment



7.2 Historical Investment in Machinery & Equipment

Figure 41 shows the City’s historical investments in its machinery & equipment since 1990. While observed condition data will provide superior accuracy in estimating replacement needs and should be incorporated into strategic plans, in the absence of such information, understanding past expenditure patterns and current useful life consumption levels (Section 7.3) can inform the forecasting and planning of infrastructure needs and in the development of a capital program. Note that this graph only includes the active asset inventory as of December 31, 2018.

Figure 41 Historical Investment – Machinery & Equipment

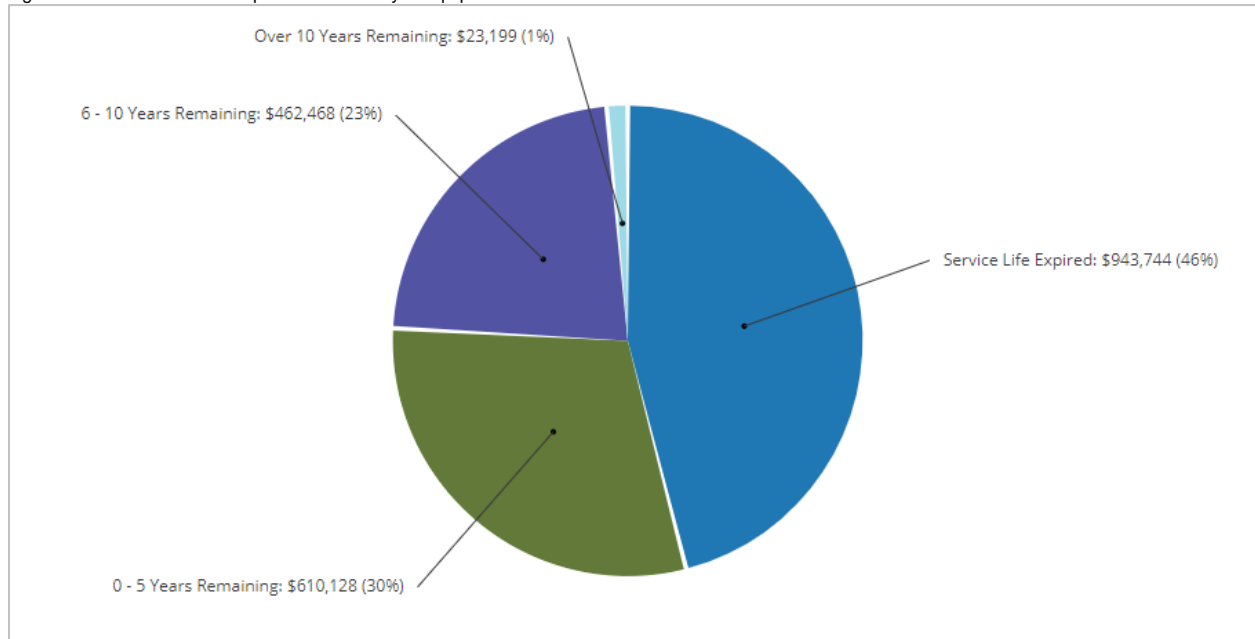


The City rapidly expanded its machinery & equipment portfolio beginning in the late 1990s. Between 2010 and 2014, the period of largest investment, \$893,000 was invested in the machinery and equipment category with a heavy focus on fire equipment.

7.3 Useful Life Consumption

In conjunction with historical spending patterns and observed condition data, understanding the consumption rate of assets based on industry established useful life standards provides a more complete profile of the state of a community’s infrastructure. Figure 42 illustrates the useful life consumption levels as of 2018 for the City’s machinery & equipment assets.

Figure 42 Useful Life Consumption – Machinery & Equipment

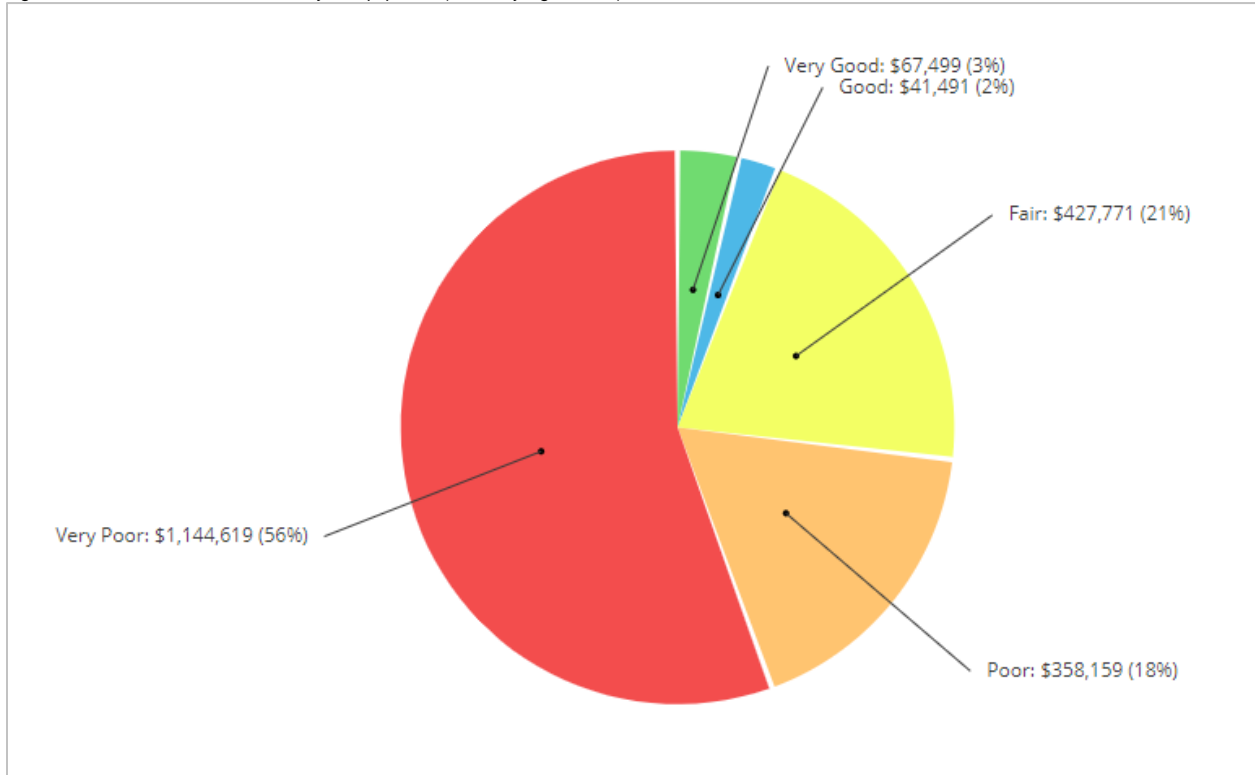


While 1% of assets have at least 10 years of useful life remaining, 46%, with a valuation of \$944,000, remain in operation beyond their useful life. An additional 30% will reach the end of their useful life within the next five years.

7.4 Current Asset Condition

Using replacement cost, in this section we summarize the condition of the City's machinery & equipment assets as of 2018. By default, we rely on observed field data as provided by the City. In the absence of such information, age-based data is used as a proxy. The City has provided condition data for some of its rolling stock assets.

Figure 43 Asset Condition – Machinery & Equipment (Primarily Age-based)

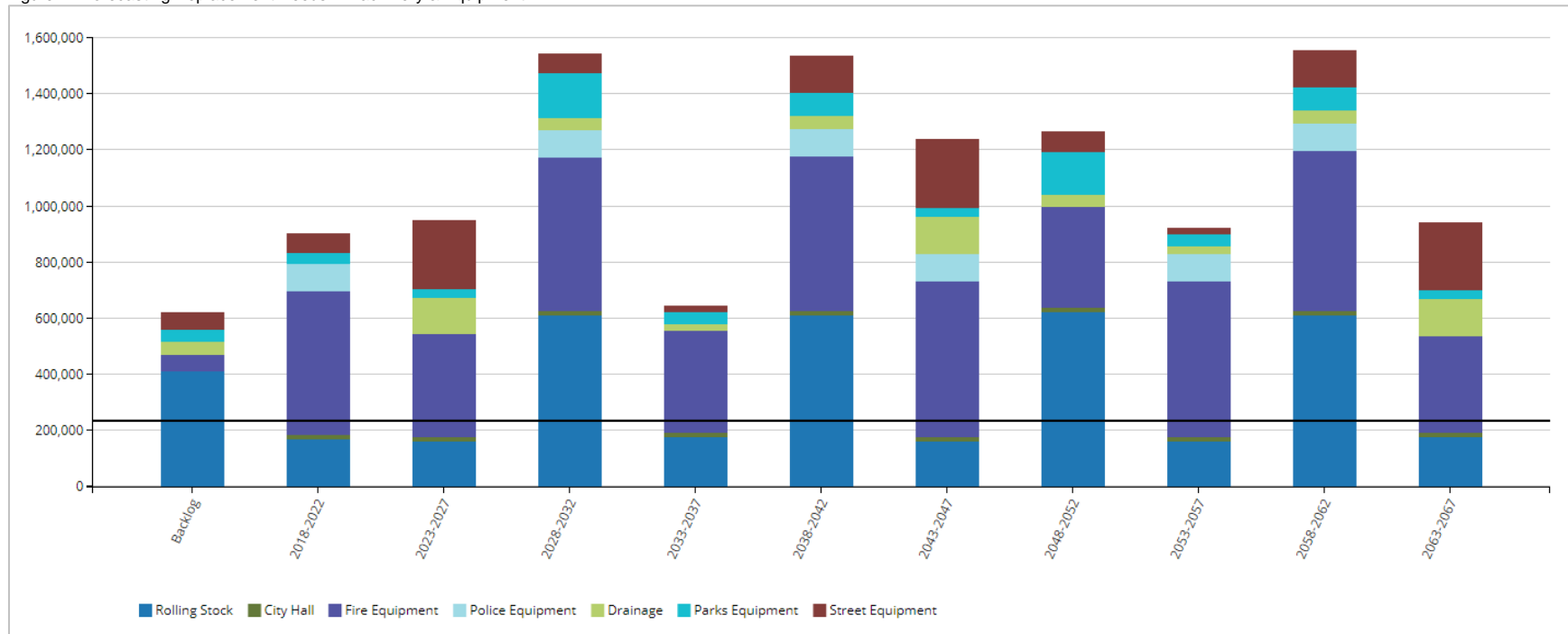


According to primarily age-based data, 74% of assets, with a valuation of \$1.5 million, are in poor to very poor condition; 5% are in good to very good condition.

7.5 Forecasting Replacement Needs

In this section, we illustrate the short-, medium- and long-term infrastructure spending requirements (replacement only) for the City’s machinery & equipment assets. The backlog is the aggregate investment in infrastructure that was deferred over previous years or decades. In the absence of observed data, the backlog represents the value of assets that remain in operation beyond their useful life.

Figure 44 Forecasting Replacement Needs – Machinery & Equipment



In addition to a backlog of \$621,000, the City’s replacement needs total \$906,000 in the next five years. An additional \$951,000 will be required between 2023-2027. The City’s annual requirements (indicated by the black line) for its machinery & equipment total \$241,000. At this funding level, the City would be allocating sufficient funds on an annual basis to meet replacement needs as they arise without the need for deferring projects and accruing annual infrastructure deficits. However, the City is currently not allocating any funding towards this asset category. See the ‘Financial Strategy’ section for maintaining a sustainable funding level. Further, while fulfilling the annual requirements will position the City to meet its future replacement needs, injection of additional revenues will be needed to mitigate existing infrastructure backlogs.

7.6 Recommendations – Machinery & Equipment

- The City should implement a component-based condition inspection program for all machinery & equipment assets to better define financial requirements for its machinery and equipment. See Section 2, 'Condition Assessment Programs' in the 'Asset Management Strategies' chapter.
- Using the above information, the City should assess its short-, medium- and long-term capital, and operations and maintenance needs.
- An appropriate percentage of the replacement costs should then be allocated for the City's operations and maintenance standards.
- The City is not funding any portion of its long-term requirements on an annual basis. See the 'Financial Strategy' section on how to maintain sustainable and optimal funding levels.

8. Vehicles

8.1 Asset Portfolio: Quantity, Useful Life and Replacement Cost

Table 14 illustrates key asset attributes for the City’s vehicles portfolio, including quantities of various assets, their useful life, their replacement cost, and the valuation method by which the replacement costs were derived. The City’s vehicles are leased through the Enterprise Lease Program, below is a summary of vehicles that have been leased and the vehicles that will be converted to being leased. This program is 100% funded.

Table 14 Asset Inventory – Vehicles

Asset Type	Components	Quantity	Useful Life in Years	Valuation Method	2018 Replacement Cost
Vehicles	Vehicles (Leased)	33		Not Planned for Replacement	\$0
	Vehicles (To be converted to leased)	47		Not Planned for Replacement	\$0
				Total	\$0

VII. Levels of Service

The two primary risks to a City’s financial sustainability are the total lifecycle costs of infrastructure, and establishing levels of service (LOS) that exceed its financial capacity. In this regard, municipalities face a choice: overpromise and underdeliver; under promise and overdeliver; or promise only that which can be delivered efficiently without placing inequitable burden on taxpayers. In general, there is often a trade-off between political expedience and judicious, long-term fiscal stewardship.

Developing realistic LOS using meaningful key performance indicators (KPIs) can be instrumental in managing citizen expectations, identifying areas requiring higher investments, driving organizational performance and securing the highest value for money from public assets. However, municipalities face diminishing returns with greater granularity in their LOS and KPI framework. That is, the objective should be to track only those KPIs that are relevant and insightful and reflect the priorities of the City.

1. Guiding Principles for Developing LOS

Beyond meeting regulatory requirements, levels of service established should support the intended purpose of the asset and its anticipated impact on the community and the City. LOS generally have an overarching corporate description, a customer oriented description, and a technical measurement. Many types of LOS, e.g., availability, reliability, safety, responsiveness and cost effectiveness, are applicable across all service areas in a City. The following LOS categories are established as guiding principles for the LOS that each service area in the City should strive to provide internally to the City and to residents/customers. These are derived from best practices in developing Levels of Service frameworks.

Table 15 LOS Categories

LOS Category	Description
Reliable	Services are predictable and continuous; services of sufficient capacity are convenient and accessible to the entire community.
Cost Effective	Services are provided at the lowest possible cost for both current and future customers, for a required level of service, and are affordable.
Responsive	Opportunities for community involvement in decision making are provided; and customers are treated fairly and consistently, within acceptable timeframes, demonstrating respect, empathy and integrity.
Safe	Services are delivered such that they minimize health, safety and security risks.
Suitable	Services are suitable for the intended function (fit for purpose).
Sustainable	Services preserve and protect the natural and heritage environment.

2. Key Performance Indicators and Targets

In this section, we identify industry standard KPIs for major infrastructure classes that the City can incorporate into its performance measurement and for tracking its progress over future iterations of its AMPs. The City should develop appropriate and achievable targets that reflect evolving demand on infrastructure, its fiscal capacity and the overall corporate objectives.

Table 16 Key Performance Indicators – Road System and Bridges & Culverts

Level	KPI (Reported Annually)
Strategic	<ul style="list-style-type: none"> – Percentage of total reinvestment compared to asset replacement value – Completion of strategic plan objectives (related to roads, and bridges & culverts)
Financial Indicators	<ul style="list-style-type: none"> – Annual revenues compared to annual expenditures – Annual replacement value depreciation compared to annual expenditures – Cost per capita for roads, and bridges & culverts – Maintenance cost per square foot – Revenue required to maintain annual network growth – Total cost of borrowing vs. total cost of service
Tactical	<ul style="list-style-type: none"> – Overall Bridge Condition Index (BCI) as a percentage of desired BCI – Percentage of road system rehabilitated/reconstructed – Percentage of paved road lane kilometres rated as poor to very poor – Percentage of bridges and large culverts rated as poor to very poor – Percentage of asset class value spent on O&M
Operational Indicators	<ul style="list-style-type: none"> – Percentage of roads inspected within the last five years – Percentage of bridges and large culverts inspected within the last two years – Operating costs for paved lane per mile – Operating costs for bridge and large culverts per square foot – Percentage of customer requests with a 24-hour response rate

Table 17 Key Performance Indicators – Buildings & Facilities

Level	KPI (Reported Annually)
Strategic	<ul style="list-style-type: none"> – Percentage of total reinvestment compared to asset replacement value – Completion of strategic plan objectives (related to buildings & facilities)
Financial Indicators	<ul style="list-style-type: none"> – Annual revenues compared to annual expenditures – Annual replacement value depreciation compared to annual expenditures – Revenue required to meet growth related demand – Repair and maintenance costs per square foot – Energy, utility and water cost per square foot
Tactical	<ul style="list-style-type: none"> – Percentage of component value replaced – Percent of facilities rated poor or critical – Percentage of facilities replacement value spent on O&M – Facility utilization rate <ul style="list-style-type: none"> – $Utilization\ Rate = \frac{Occupied\ Space}{Facility\ Usable\ Area}$
Operational Indicators	<ul style="list-style-type: none"> – Percentage of facilities inspected within the last five years – Number/type of service requests – Percentage of customer requests addressed within 24 hours

Table 18 Key Performance Indicators – Vehicles

Level	KPI (Reported Annually)
Strategic	<ul style="list-style-type: none"> – Percentage of total reinvestment compared to asset replacement value – Completion of strategic plan objectives (related to vehicles)
Financial Indicators	<ul style="list-style-type: none"> – Annual revenues compared to annual expenditures – Annual replacement value depreciation compared to annual expenditures – Cost per capita for vehicles – Revenue required to maintain annual fleet portfolio growth – Total cost of borrowing vs. total cost of service
Tactical	<ul style="list-style-type: none"> – Percentage of all vehicles replaced – Average age of vehicles – Percent of vehicles rated poor or critical – Percentage of vehicles replacement value spent on O&M
Operational Indicators	<ul style="list-style-type: none"> – Average downtime per vehicles category – Average utilization per vehicles category and/or each vehicle – Ratio of preventative maintenance repairs vs. reactive repairs – Percent of vehicles that received preventative maintenance – Number/type of service requests – Percentage of customer requests addressed within 24 hours

Table 19 Key Performance Indicators – Water, Wastewater and Stormwater Systems

Level	KPI (Reported Annually)
Strategic	<ul style="list-style-type: none"> – Percentage of total reinvestment compared to asset replacement value – Completion of strategic plan objectives (related to water, wastewater and stormwater)
Financial Indicators	<ul style="list-style-type: none"> – Annual revenues compared to annual expenditures – Annual replacement value depreciation compared to annual expenditures – Total cost of borrowing compared to total cost of service – Revenue required to maintain annual network growth
Tactical	<ul style="list-style-type: none"> – Percentage of water, wastewater and stormwater system rehabilitated/reconstructed – Annual percentage of growth in water, wastewater and stormwater system – Percentage of mains where the condition is rated poor or critical for each network – Percentage of water, wastewater and stormwater system replacement value spent on O&M
Operational Indicators	<ul style="list-style-type: none"> – Percentage of water, wastewater and stormwater system inspected – Operating costs for the collection of wastewater per mile of main – Number of wastewater main backups per 100 miles of main – Operating costs for stormwater management (collection, treatment, and disposal) per mile of drainage system. – Operating costs for the distribution/transmission of drinking water per mile of water distribution pipe – Number of days when a boil water advisory required by the Texas Commission on Environmental Quality (TCEQ), applicable to a municipal water supply, was in effect – Number of water main breaks per 100 miles of water distribution pipe in a year – Number of customer requests received annually per water, wastewater and stormwater system – Percentage of customer requests addressed within 24 hours per water, wastewater and stormwater system

Table 20 Key Performance Indicators – Machinery & Equipment

Level	KPI (Reported Annually)
Strategic	<ul style="list-style-type: none"> – Percentage of total reinvestment compared to asset replacement value – Completion of strategic plan objectives (related to machinery & equipment)
Financial Indicators	<ul style="list-style-type: none"> – Annual revenues compared to annual expenditures – Annual replacement value depreciation compared to annual expenditures – Cost per capita for machinery & equipment – Revenue required to maintain annual portfolio growth – Total cost of borrowing vs. total cost of service
Tactical	<ul style="list-style-type: none"> – Percentage of all machinery & equipment replaced – Average age of machinery & equipment assets – Percent of machinery & equipment rated poor or critical – Percentage of vehicles replacement value spent on O&M
Operational Indicators	<ul style="list-style-type: none"> – Average downtime per machinery & equipment asset – Ratio of preventative maintenance repairs vs. reactive repairs – Percent of machinery & equipment that received preventative maintenance – Number/type of service requests

3. Future Performance

In addition to a City's financial capacity and legislative requirements, many factors, internal and external, can influence the establishment of LOS and their associated KPI. These can include the City's overarching mission as an organization, the current state of its infrastructure and the wider social, political and macroeconomic context. The following factors should inform the development of most levels of service targets and their associated KPIs:

Strategic Objectives and Corporate Goals

The City's long-term direction is outlined in its corporate and strategic plans. This direction will dictate the types of services it aims to deliver to its residents and the quality of those services. These high-level goals are vital in identifying strategic (long-term) infrastructure priorities and as a result, the investments needed to produce desired levels of service.

State of the Infrastructure

The current state of capital assets will determine the quality of services the City can deliver to its residents. As such, levels of service should reflect the existing capacity of assets to deliver those services, and may vary (increase) with planned maintenance, rehabilitation or replacement activities and timelines.

Community Expectations

The general public will often have qualitative and quantitative insights regarding the levels of service a particular asset or a network of assets should deliver, e.g., what a road in 'good' condition should look like or the travel time between destinations. The public should be consulted in establishing LOS; however, the discussions should be centered on clearly outlining the lifecycle costs associated with delivering any improvements in LOS.

Economic Trends

Macroeconomic trends will have a direct impact on the LOS for most infrastructure services. Fuel costs, fluctuations in interest rates and the purchasing power of the American dollar can impede or accelerate any planned growth in infrastructure services.

Demographic Changes

The composition of residents in a City can also serve as an infrastructure demand driver, and as a result, can change how a City allocates its resources (e.g., an aging population may require diversion of resources from parks and sports facilities to additional wellbeing centers). Population growth is also a significant demand driver for existing assets (lowering LOS), and may require the City to construct new infrastructure to parallel community expectations.

Environmental Change

Forecasting for infrastructure needs based on climate change remains an imprecise science. However, broader environmental and weather patterns have a direct impact on the reliability of critical infrastructure services.

4. Monitoring, Updating and Actions

The City should collect data on its current performance against the KPIs listed and establish targets that reflect the current fiscal capacity of the City, its corporate and strategic goals, and as feasible, changes in demographics that may place additional demand on its various asset classes. For some asset classes, e.g., minor equipment, furniture, etc., cursory levels of service and their respective KPIs will suffice. For major infrastructure classes, detailed technical and customer-oriented KPIs can be critical. Once this data is collected and targets are established, the progress of the City should be tracked annually.

VIII. Asset Management Strategies

The asset management strategy section will outline an implementation process that can be used to identify and prioritize renewal, rehabilitation and maintenance activities. This will assist in the development of a 10-year capital plan, including growth projections, to ensure the best overall health and performance of the City's infrastructure. This section includes an overview of condition assessment, the lifecycle interventions required, and prioritization techniques, including risk, to determine which capital projects should move forward into the budget first.



1. Non-Infrastructure Solutions & Requirements

The City should explore, as requested through the provincial requirements, which non-infrastructure solutions should be incorporated into the budgets for its infrastructure services. Non-infrastructure solutions are such items as studies, policies, condition assessments, consultation exercises, etc., that could potentially extend the life of assets or lower total asset program costs in the future without a direct investment into the infrastructure.

Typical solutions for a City include linking the asset management plan to the strategic plan, growth and demand management studies, infrastructure master plans, better integrated infrastructure and land use planning, public consultation on levels of service and condition assessment programs. As part of future asset management plans, a review of these requirements should take place, and a portion of the capital budget should be dedicated for these items in each programs budget.

It is recommended, under this category of solutions, that the City should develop and implement holistic condition assessment programs for all asset classes. This will advance the understanding of infrastructure needs, improve budget prioritization methodologies and provide a clearer path of what is required to achieve sustainable infrastructure programs.

2. Condition Assessment Programs

The foundation of an intelligent asset management practice is based on having comprehensive and reliable information on the current condition of the infrastructure. Municipalities need to have a clear understanding regarding the performance and condition of their assets, as all management decisions regarding future expenditures and field activities should be based on this knowledge. An incomplete understanding of an asset may lead to its untimely failure or premature replacement.

Some benefits of holistic condition assessment programs within the overall asset management process are listed below:

- understanding of overall network condition leads to better management practices
- allows for the establishment of rehabilitation programs
- prevents future failures and provides liability protection
- potential reduction in operation/maintenance costs
- accurate current asset valuation
- allows for the establishment of risk assessment programs
- establishes proactive repair schedules and preventive maintenance programs
- avoids unnecessary expenditures
- extends asset service life therefore improving level of service
- improves financial transparency and accountability
- enables accurate asset reporting which, in turn, enables better decision making

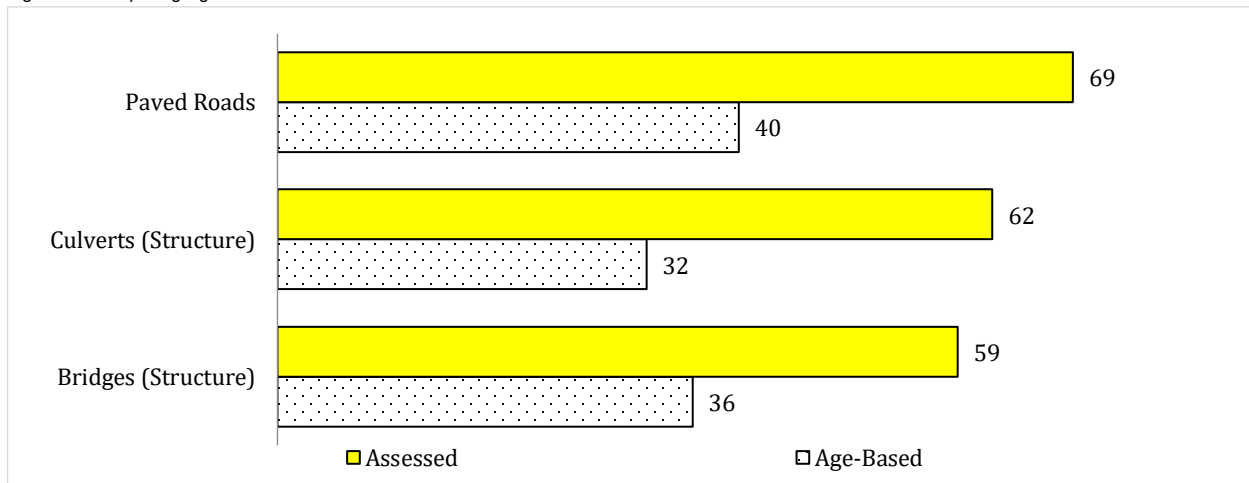
Condition assessment can involve different forms of analysis such as subjective opinion, mathematical models, or variations thereof, and can be completed through a very detailed or very cursory approach. When establishing the condition assessment for an entire asset class, a cursory approach (metrics such as good, fair, poor, very poor) is used. This is an economical strategy that will still provide up to date information, and will allow for detailed assessment or follow-up inspections on those assets captured as poor or critical condition later.

The Impact of Condition Assessments

In 2015, PSD assisted with a published study on the state of roads and bridges that looked at the infrastructure deficits, annual investment gaps, and the physical state of roads, bridges and culverts.

A critical finding of the report was the dramatic difference in the condition profile of the assets when comparing age-based estimates and actual field inspection observations. For each asset group, field data based condition ratings were significantly higher than age-based condition ratings, with paved roads, culverts, and bridges showing an increase in score (0-100) of +29, +30, and +23 points respectively. In other words, age-based measurements maybe underestimating the condition of assets by as much as 30%.

Figure 45 Comparing Age-based and Assessed Condition Data



2.1 Pavement Network

Typical industry pavement inspections are performed by consulting firms using specialized assessment vehicles equipped with various electronic sensors and data capture equipment. The vehicles will drive the entire road system and typically collect two different types of inspection data: surface distress data and roughness data.

Surface distress data involves the collection of multiple industry standard surface distresses, which are captured either electronically using sensing detection equipment mounted on the van, or visually by the van's inspection crew. Roughness data capture involves the measurement of the roughness of the road, measured by lasers that are mounted on the inspection van's bumper, calibrated to an international roughness index.

Another option for a cursory level of condition assessment is for municipal road crews to perform simple windshield surveys as part of their regular patrol. Many municipalities have created data collection inspection forms to assist this process and to standardize what presence of defects would constitute a good, fair, poor, or critical score. Lacking any other data for the complete road system, this can still be seen as a good method and will assist greatly with the overall management of the road system.

It is recommended that the City begin conducting a pavement condition assessment program and that a portion of capital funding is dedicated to this. We also recommend expansion of this program to incorporate additional components.

2.2 Bridges & Culverts

Municipalities are encouraged to inspect all structures that have a span of 10 feet or more, as a best practice measure.

Structure inspections must be performed by, or under the guidance of, a structural engineer, must be performed on a biennial basis (once every two years), and include such information as structure type, number of spans, span lengths, other key attribute data, detailed photo images, and structure element by element inspection, rating and recommendations for repair, rehabilitation, and replacement.

The best approach to develop a 10-year needs list for the City's structure portfolio relies on the structural engineer who performs the inspections to also produce a maintenance requirements report, and rehabilitation & replacement requirements report as part of the overall assignment. In addition to defining the overall needs requirements, the structural engineer should identify those structures that will require more detailed investigations and non-destructive testing techniques. Examples of these investigations are:

- Detailed deck condition survey
- Non-destructive delamination survey of asphalt covered decks
- Substructure condition survey
- Detailed coating condition survey
- Underwater investigation
- Fatigue investigation
- Structure evaluation

Through detailed investigations, a 10-year needs list can be developed for the City's bridges.

2.3 Buildings & Facilities

The most popular and practical type of buildings & facilities assessment involves qualified groups of trained industry professionals (engineers or architects) performing an analysis of the condition of a group of facilities and their components, that may vary in terms of age, design, construction methods and materials. This analysis can be done by walk-through inspection (the most accurate approach), mathematical modeling or a combination of both. The following asset classifications are typically inspected:

- **Site Components** – property around the facility and outdoor components such as utilities, signs, stairways, walkways, parking lots, fencing, courtyards and landscaping
- **Structural Components** – physical components such as the foundations, walls, doors, windows, roofs
- **Electrical Components** – all components that use or conduct electricity such as wiring, lighting, electric heaters, and fire alarm systems
- **Mechanical Components** – components that convey and utilize all non-electrical utilities within a facility such as gas lines, furnaces, boilers, plumbing, ventilation, and fire sprinkler systems
- **Vertical Movement** – components used for moving people between floors of buildings such as elevators, escalators and stair lifts

Once collected, this information can be uploaded into the CityWide®, the City's asset management and asset registry software database in order for short- and long-term repair, rehabilitation and replacement reports to be generated to assist with programming the short- and long-term maintenance and capital budgets.

It is recommended that the City begin conducting inspections of structures and expand its condition assessment program for other segments. It is also recommended that a portion of capital funding is dedicated to this.

2.4 Vehicles and Machinery & Equipment

The typical approach to optimizing the maintenance expenditures of vehicles and machinery & equipment, is through routine vehicle and component inspections, routine servicing, and a routine preventative maintenance program. Most makes and models of vehicles and machinery assets are supplied with maintenance manuals that define the appropriate schedules and routines for typical maintenance and servicing, and also more detailed restoration or rehabilitation protocols.

The primary goal of sound maintenance is to avoid or mitigate the consequence of failure of equipment or parts. An established preventative maintenance program serves to ensure this, as it will consist of scheduled inspections and follow up repairs of vehicles and machinery & equipment in order to decrease breakdowns and excessive downtimes.

A good preventative maintenance program will include partial or complete overhauls of equipment at specific periods, including oil changes, lubrications, fluid changes and so on. In addition, workers can record equipment or part deterioration so they can schedule to replace or repair worn parts before they fail.

The ideal preventative maintenance program would move progressively further away from reactive repairs and instead towards the prevention of all equipment failure before it occurs.

It is recommended that a preventative maintenance routine is defined and established for all vehicles and machinery & equipment assets, and that a software application is utilized for the overall management of the program.

2.5 Water System

Unlike sewer mains, it is often prohibitively difficult to inspect water mains from the inside due to the constant and high-pressure flow of water. A physical inspection requires a disruption of service to residents, can be an expensive exercise and is time consuming to set up. It is recommended practice that physical inspection of water mains typically occurs only for high-risk, large transmission mains within the system, and only when there is a requirement. There are a number of high tech inspection techniques in the industry for large diameter pipes but these should be researched first for applicability as they are quite expensive. Examples include remote eddy field current (RFEC), ultrasonic and acoustic techniques, impact echo (IE), and Georadar.

For the majority of pipes within the distribution network, gathering key information in regards to the main and its environment can supply the best method to determine a general condition. Key data that may be used, along with weighting factors, to determine an overall condition score include age, material type, breaks, hydrant flow inspections and soil condition.

It is recommended that the City conduct a watermain assessment program, and that funds are budgeted for this.

2.6 Sewer System Inspection (Wastewater and Storm)

The most popular and practical type of wastewater and stormwater assessment is the use of Closed Circuit Television Video (CCTV). The process involves a small robotic crawler vehicle with a CCTV camera attached that is lowered down a maintenance hole into the sewer main to be inspected.

The vehicle and camera then travel the length of the pipe, providing a live video feed to a truck on the road above where a technician/inspector records defects and information regarding the pipe. A wide range of construction or deterioration problems can be captured, including open/displaced joints, presence of roots, infiltration & inflow, cracking, fracturing, exfiltration, collapse, deformation of pipe and more. Therefore, sewer CCTV inspection is an effective tool for locating and evaluating structural defects and general condition of underground pipes.

Even though CCTV is an excellent option for inspection of sewers, it is a fairly costly process and does take significant time to inspect a large volume of pipes.

Another option in the industry today is the use of Zoom Camera equipment. This is very similar to traditional CCTV, however, a crawler vehicle is not used. Rather, in its place, a camera is lowered down a maintenance hole attached to a pole like piece of equipment. The camera is then rotated towards each connecting pipe and the operator above progressively zooms in to record all defects and information about each pipe. The downside to this technique is the further down the pipe the image is zoomed, the less clarity is available to accurately record defects and measurement. The upside is the process is far quicker and significantly less expensive and an assessment of the

manhole can be provided as well. Also, it is important to note that 80% of pipe deficiencies generally occur within 20 metres of each manhole.

It is recommended that the City begin a wastewater main assessment program and expend it to include stormwater mains. A portion of capital funding should be dedicated to this.

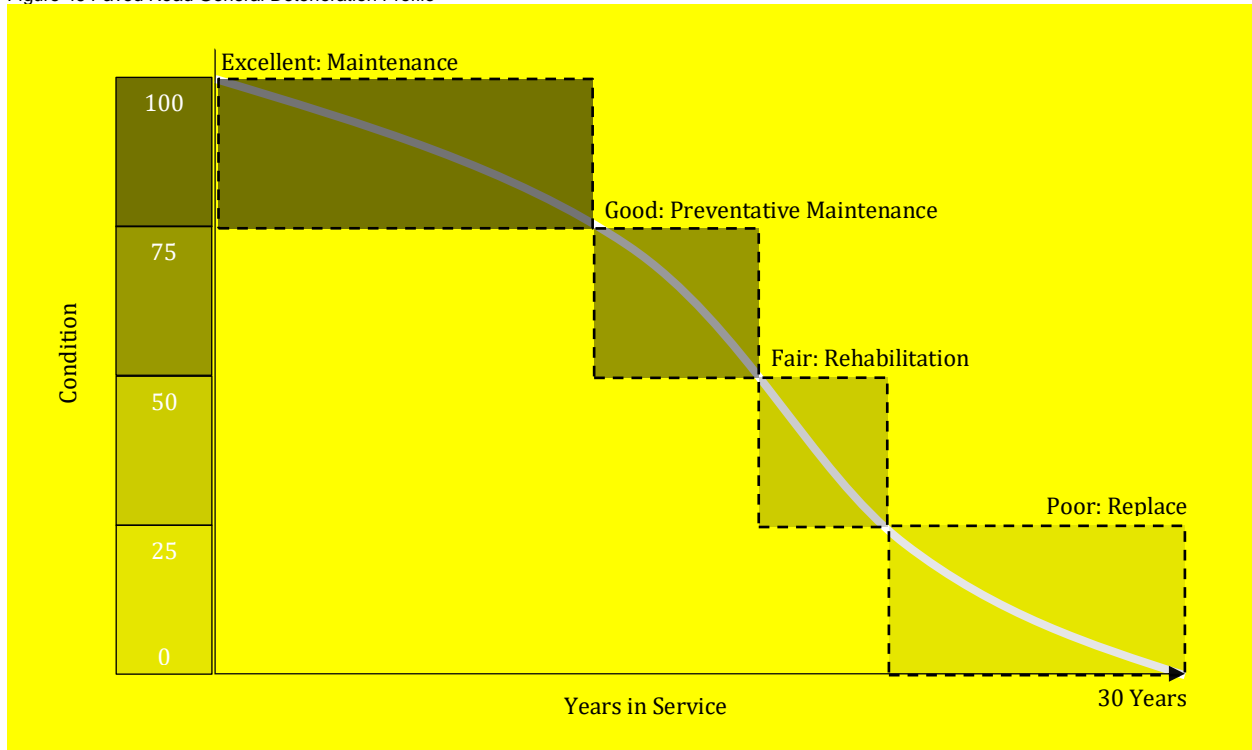
3. Lifecycle Analysis Framework

An industry review was conducted to determine which lifecycle activities can be applied at the appropriate time in an asset’s life, to provide the greatest additional life at the lowest cost. In the asset management industry, this is simply put as doing the right thing to the right asset at the right time. If these techniques are applied across entire asset networks or portfolios (e.g., the entire road network), the City can gain the best overall asset condition while expending the lowest total cost for those programs.

3.1 Paved Roads

The following analysis has been conducted at a fairly high level, using industry standard activities and costs for paved roads. With future updates of this asset management strategy, the City may wish to run the same analysis with a detailed review of City activities used for roads and the associated local costs for those work activities. All of this information can be entered into the CityWide® software suite in order to perform updated financial analysis as more detailed information becomes available. The following diagram depicts a general deterioration profile of a road with a 30-year life.

Figure 46 Paved Road General Deterioration Profile



As shown above, during the road’s lifecycle, there are various windows available for work activity that will maintain or extend the life of the asset. These windows are: maintenance; preventative maintenance; rehabilitation; and replacement or reconstruction.

The windows or thresholds for when certain work activities should be applied to also coincide approximately with the condition state of the asset as shown below:

Table 21 Asset Condition and Related Work Activity for Paved Roads

Condition	Condition Range	Work Activity
Very Good (Maintenance only phase)	81-100	– Maintenance only
Good (Preventative maintenance phase)	61-80	– Crack sealing – Emulsions
Fair (Rehabilitation phase)	41-60	– Resurface - mill & pave – Resurface - asphalt overlay – Single & double surface treatment (for rural roads)
Poor (Reconstruction phase)	21-40	– Reconstruct - pulverize and pave – Reconstruct - full surface and base reconstruction
Very Poor (Reconstruction phase)	0-20	– Critical includes assets beyond their useful lives which make up the backlog. They require the same interventions as the 'poor' category above.

With future updates of this asset management strategy, the City may wish to review the above condition ranges and thresholds for when certain types of work activity occur, and adjust to better suit the City's work program. Also note: when adjusting these thresholds, it actually adjusts the level of service provided and ultimately changes the amount of money required. These thresholds and condition ranges can be updated and a revised financial analysis can be calculated. These adjustments will be an important component of future asset management plans, as the province requires each City to present various management options within the financing plan.

It is recommended that the City establish a lifecycle activity framework for the various classes of paved road within their transportation network.

3.2 Bridges & Culverts

The best approach to develop a 10-year needs list for the City's bridge structure portfolio relies on the structural engineer who performs the inspections to develop a maintenance requirements report, a rehabilitation and replacement requirements report and identify additional detailed inspections as required.

3.3 Buildings & Facilities

The best approach to develop a 10-year needs list for the City's facilities portfolio would be to have the engineers, operational staff or architects who perform the facility inspections to also develop a complete portfolio maintenance requirements report and rehabilitation and replacement requirements report, and also identify additional detailed inspections and follow up studies as

required. This may be performed as a separate assignment once all individual facility audits/inspections are complete.

The above reports could be considered the beginning of a 10-year maintenance and capital plan; however, within the facilities industry, there are other key factors that should be considered to determine over all priorities and future expenditures. Some examples would be functional and legislative requirements, energy conservation programs and upgrades, customer complaints and health and safety concerns, and customer expectations balanced with willingness-to-pay initiatives.

It is recommended that the City establish a prioritization framework for the facilities asset class that incorporates the key components outlined above.

3.4 Vehicles and Machinery & Equipment

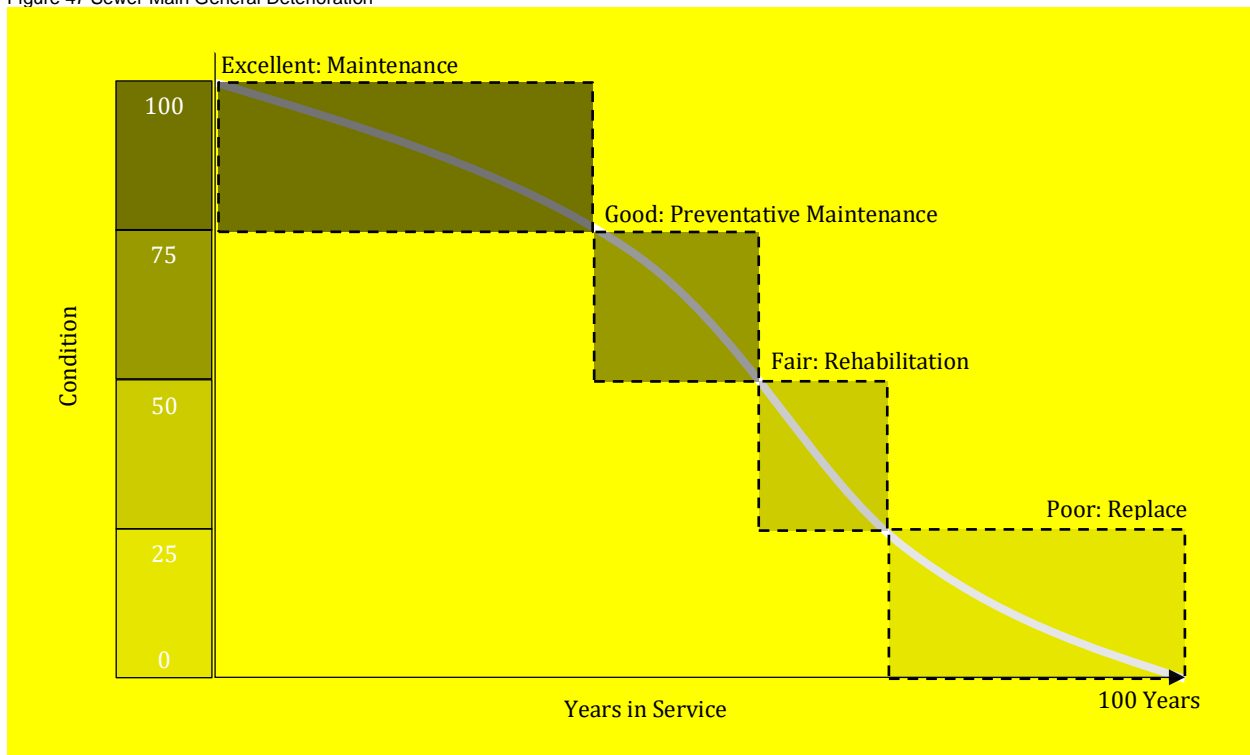
The best approach to develop a 10-year needs list for the City's vehicles and machinery & equipment portfolio would first be through a defined preventative maintenance program, and secondly, through an optimized lifecycle vehicle replacement schedule. The preventative maintenance program would serve to determine budget requirements for operating and minor capital expenditures for renewal of parts, and major refurbishments and rehabilitations. An optimized replacement program will ensure a vehicle or equipment asset is replaced at the correct point in time in order to minimize overall cost of ownership, minimize costly repairs and downtime, while maximizing potential re-sale value. There is significant benchmarking information available within the vehicles industry in regard to vehicle lifecycles which can be used to assist in this process. Once appropriate replacement schedules are established, the short- and long-term budgets can be funded accordingly.

There are, of course, functional aspects of vehicles management that should also be examined in further detail as part of the long-term management plan, such as vehicles utilization and incorporating green vehicles, etc. It is recommended that the City establish a prioritization framework for the vehicles asset class that incorporates the key components outlined above.

3.5 Wastewater and Stormwater

The following analysis has been conducted at a fairly high level, using industry standard activities and costs for wastewater and storm sewer rehabilitation and replacement. With future updates of this asset management strategy, the City may wish to run the same analysis with a detailed review of activities used for sewer mains and the associated local costs for those work activities. This information can be input into the CityWide® software suite in order to perform updated financial analysis as more detailed information becomes available. The following diagram depicts a general deterioration profile of a sewer main with a 100-year life.

Figure 47 Sewer Main General Deterioration



As shown above, during the sewer main’s lifecycle there are various windows available for work activity that will maintain or extend the life of the asset. These windows are: maintenance; major maintenance; rehabilitation; and replacement or reconstruction. The windows or thresholds for when certain work activities should be applied also coincide approximately with the condition state of the asset as shown below:

Table 22 Asset Condition and Related Work Activity for Sewer Mains

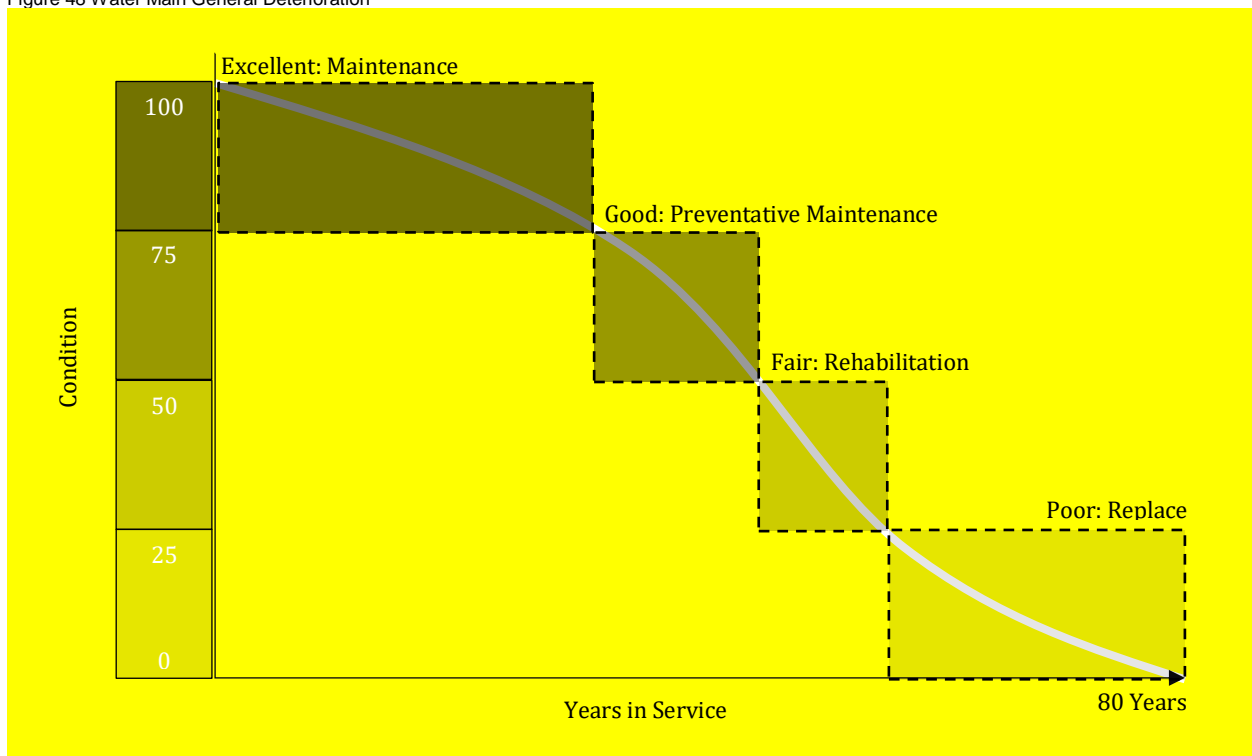
Condition	Condition Range	Work Activity
Very Good (Maintenance only phase)	81-100	– Maintenance only (cleaning & flushing etc.)
Good (Preventative maintenance phase)	61-80	– Mahhole repairs – Small pipe section repairs
Fair (Rehabilitation phase)	41-60	– Structural relining
Poor (Reconstruction phase)	21-40	– Pipe replacement
Very Poor (Reconstruction phase)	0-20	– Critical includes assets beyond their useful lives which make up the backlog. They require the same interventions as the “poor” category above.

With future updates of this asset management strategy the City may wish to review the above condition ranges and thresholds for when certain types of work activity occur, and adjust to better suit the City’s work program. Also note: when adjusting these thresholds, it actually adjusts the level of service provided and ultimately changes the amount of money required. These adjustments will be an important component of future asset management plans, as the province requires each City to present various management options within the financing plan.

3.6 Water System

As with roads and wastewater, the following analysis has been conducted at a high level, using industry standard activities and costs for water main rehabilitation and replacement. The following diagram depicts a general deterioration profile of a water main with an 80-year life.

Figure 48 Water Main General Deterioration



As shown above, during the water main’s lifecycle, there are various windows available for work activity that will maintain or extend the life of the asset. These windows are: maintenance; major maintenance; rehabilitation; and replacement or reconstruction. The windows or thresholds for when certain work activities should be applied also coincide approximately with the condition state of the asset as shown in Table 23.

Table 23 Asset Condition and Related Work Activity for Water Mains

Condition	Condition Range	Work Activity
Very Good (Maintenance only phase)	81-100	– Maintenance only (cleaning & flushing etc.)
Good (Preventative maintenance phase)	61-80	– Water main break repairs – Small pipe section repairs
Fair (Rehabilitation phase)	41-60	– Structural water main relining
Poor (Reconstruction phase)	21-40	– Pipe replacement
Very Poor (Reconstruction phase)	0-20	– Critical includes assets beyond their useful lives which make up the backlog. They require the same interventions as the “poor” category above.

4. Growth and Demand

Growth is a critical infrastructure demand driver for most infrastructure services. As such, the City must not only account for the lifecycle cost for its existing asset portfolio, but those of any anticipated and forecasted capital projects associated specifically with growth. Based on the 2017 census, the population for Corinth has increased 4.9% since 2011 to reach 21,152. Population changes will require the City to determine the impact to expected levels of service and if any changes to the existing asset inventory may be required.

5. Project Prioritization and Risk Management

Generally, infrastructure needs exceed municipal capacity. As such, municipalities rely heavily on provincial and federal programs and grants to finance important capital projects. Fund scarcity means projects and investments must be carefully selected based on the state of infrastructure, economic development goals, and the needs of an evolving and growing community. These factors, along with social and environmental considerations will form the basis of a robust risk management framework.

5.1 Defining Risk Management

From an asset management perspective, risk is a function of the consequences of failure (e.g., the negative economic, financial, and social consequences of an asset in the event of a failure); and, the probability of failure (e.g., how likely is the asset to fail in the short- or long-term). The consequences of failure are typically reflective of:

- **An asset’s importance in an overall system:**
For example, the failure of an individual computer workstation for which there are readily available substitutes is much less consequential and detrimental than the failure of a network server or telephone exchange system.
- **The criticality of the function performed:**
For example, a mechanical failure on a road construction equipment may delay the progress of a project, but a mechanical failure on a fire pumper truck may lead to immediate life safety concerns for fire fighters, and the public, as well as significant property damage.
- **The exposure of the public and/or staff to injury or loss of life:**
For example, a single sidewalk asset may demand little consideration and carry minimum importance to the City’s overall pedestrian network and performs a modest function. However, members of the public interact directly with the asset daily and are exposed to potential injury due to any trip hazards or other structural deficiencies that may exist.

The probability of failure is generally a function of an asset’s physical condition, which is heavily influenced by the asset’s age and the amount of investment that has been made in the maintenance and renewal of the asset throughout its life.

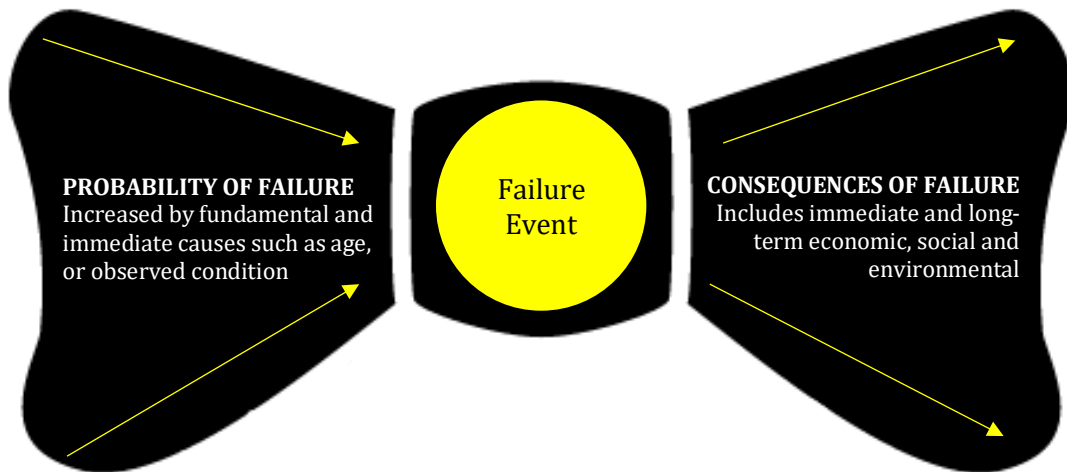
Risk mitigation is traditionally thought of in terms of safety and liability factors. In asset management, the definition of risk should heavily emphasize these factors but should be expanded to consider the risks to the City’s ability to deliver targeted levels of service

- The impact that actions (or inaction) on one asset will have on other related assets
- The opportunities for economic efficiency (realized or lost) relative to the actions taken

5.2 Risk Matrices

Using the logic above, a risk matrix will illustrate each asset's overall risk, determined by multiplying the probability of failure (PoF) scores with the consequence of failure (CoF) score, as illustrated in the table that follow. This can be completed as a holistic exercise against any data set by determining which factors (or attributes) are available and will contribute to the PoF or CoF of an asset. Figure 49 (known as a bowtie model in the risk industry) illustrates this concept. The probability of failure is increased as more and more factors collude to cause asset failure.

Figure 49 Bow Tie Risk Model



Probability of Failure

In this AMP, the probability of a failure event is predicted by the condition of the asset.

Table 24 Probability of Failure – All Assets

Asset Classes	Condition Rating	Probability of Failure
ALL	0-20 Very Poor	5 – Very High
	21-40 Poor	4 – High
	41-60 Fair	3 – Moderate
	61-80 Good	2 – Low
	81-100 Excellent	1 – Very Low

Consequence of Failure

The consequence of failure for the asset classes analyzed in this AMP will be determined either by the replacement costs of assets, or other attributes as relevant. These attributes include material types, classifications, or size. Asset classes for which replacement cost is used include: bridges & culverts, buildings & facilities, and machinery & equipment. This approach is premised on the assumption that the higher the replacement cost, the larger (and likely more important) the asset, requiring a higher risk scoring.

Assets for which other attributes are used include: water, wastewater, storm and roads. Attributes are selected based on their impact on service delivery. For linear infrastructure, pipe diameter is used to estimate a suitable consequence of failure score as it reflects the potential upstream service area affected. Scoring for roads, the risk is based on classification as it reflects the traffic volumes and number of people affected.

Table 25 Consequence of Failure – Roads

Road Classification	Consequence of failure
Local	Score of 1
Collector	Score of 3
Minor Arterial	Score of 4
Major Arterial	Score of 5

Table 26 Consequence of Failure – Bridges & Culverts

Replacement Value	Consequence of failure
Up to \$100k	Score of 1
\$101 to \$150k	Score of 2
\$151 to \$300k	Score of 3
\$301 to \$400k	Score of 4
\$401 and over	Score of 5

Table 27 Consequence of Failure – Water Mains

Pipe Diameter	Consequence of Failure
Less than 7 In	Score of 1
7-10 In	Score of 2
11-16 In	Score of 3
17-20 In	Score of 4
21 In and over	Score of 5

Table 28 Consequence of Failure – Wastewater Mains

Pipe Diameter	Consequence of failure
Less than 7 In	Score of 1
7-10 In	Score of 2
11-16 In	Score of 3
17-24 In	Score of 4
25 In and over	Score of 5

Table 29 Consequence of Failure – Stormwater Lines

Pipe Diameter	Consequence of Failure
Less than 16 In	Score of 1
16-24 In	Score of 2
25-36 In	Score of 3
37-51 In	Score of 4
52 In and over	Score of 5

Table 30 Consequence of Failure – Buildings & Facilities

Replacement Value	Consequence of failure
Up to \$50k	Score of 1
\$51k to \$100k	Score of 2
\$101k to \$600k	Score of 3
\$601k to \$3 million	Score of 4
Over \$3 million	Score of 5

Table 31 Consequence of Failure – Machinery & Equipment

Replacement Value	Consequence of failure
Up to \$15k	Score of 1
\$16k to \$30k	Score of 2
\$31k to \$50k	Score of 3
\$51k to \$100k	Score of 4
Over \$100k	Score of 5

The risk matrices that follow show the distribution of assets within each asset class according to the probability and likelihood of failure scores as discussed above.

Figure 50 Distribution of Assets Based on Risk – All Asset Classes

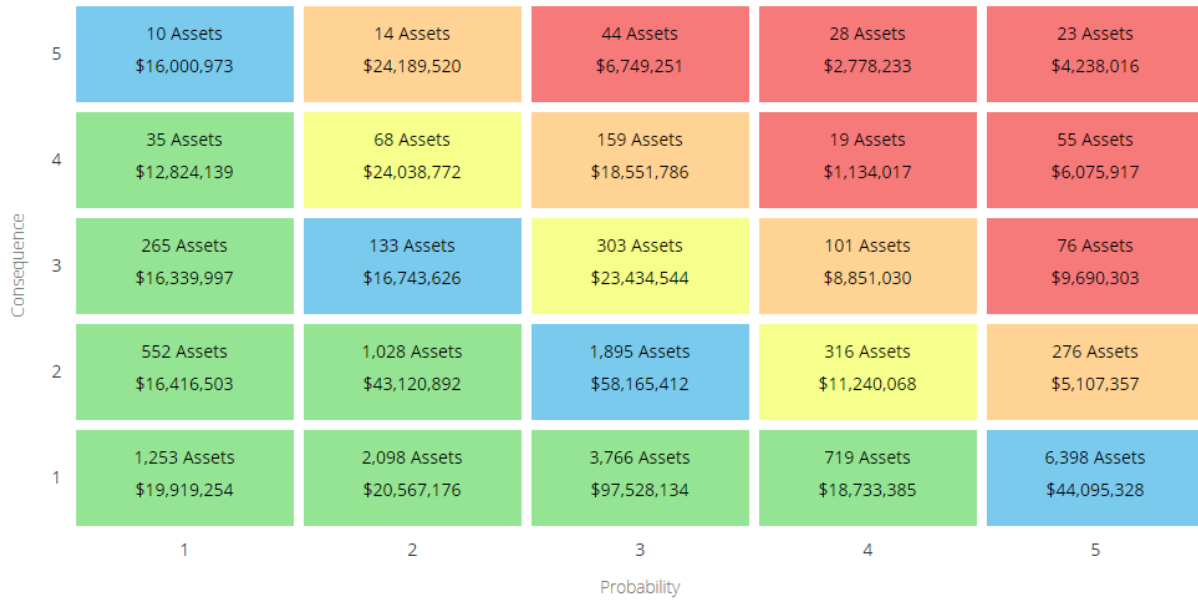


Figure 51 Distribution of Assets Based on Risk – Road System

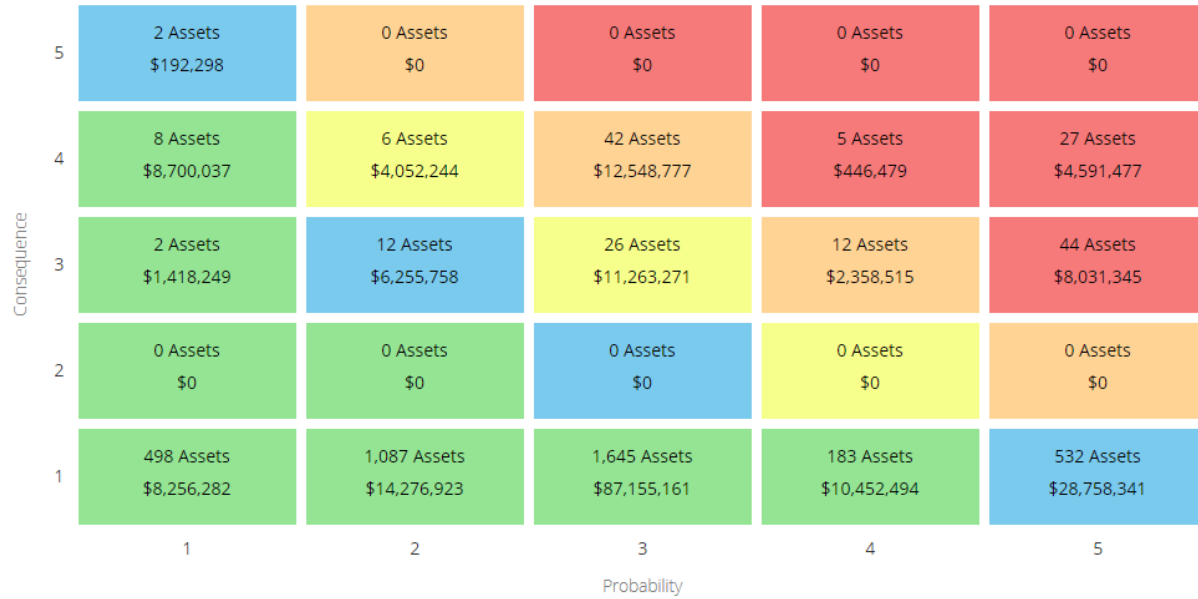


Figure 52 Distribution of Assets Based on Risk – Bridges & Culverts

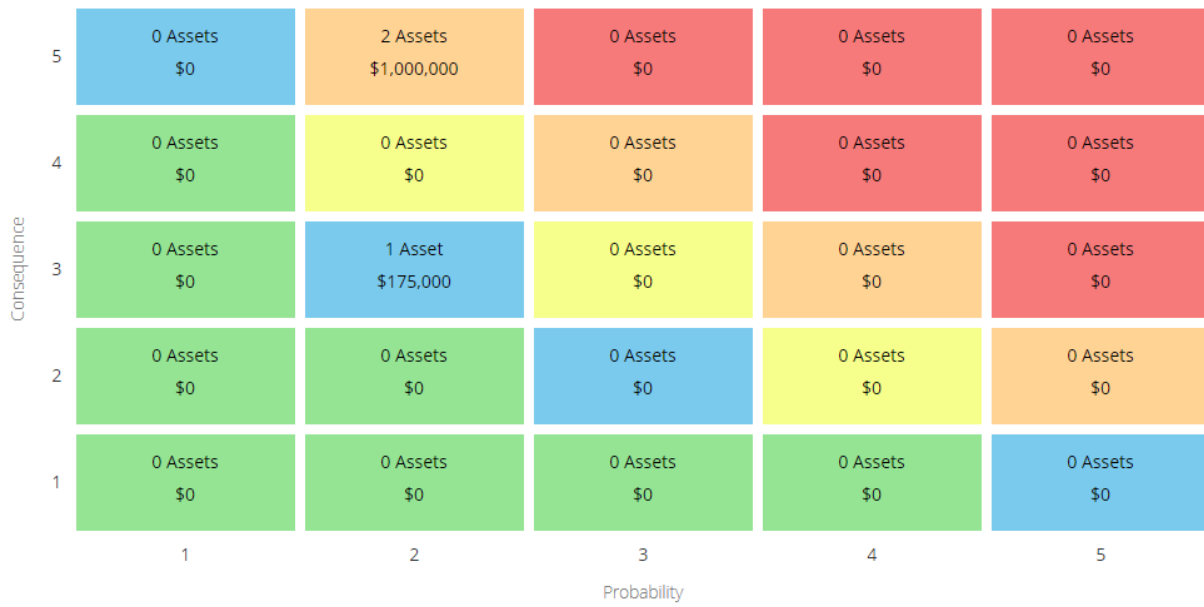


Figure 53 Distribution of Assets Based on Risk – Water System

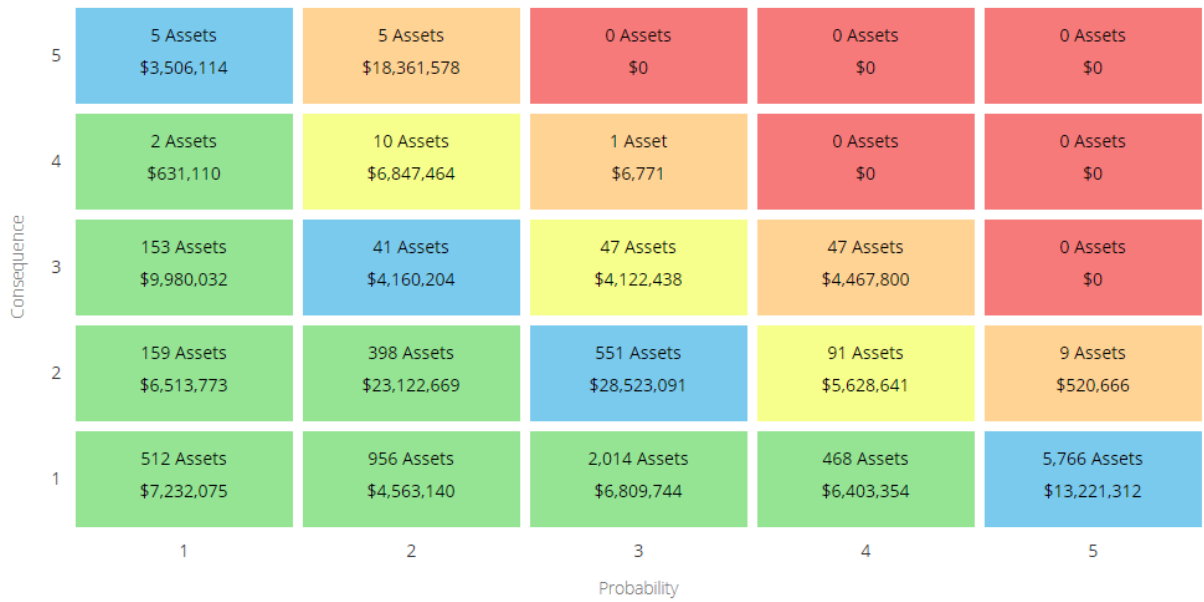


Figure 54 Distribution of Assets Based on Risk – Wastewater System

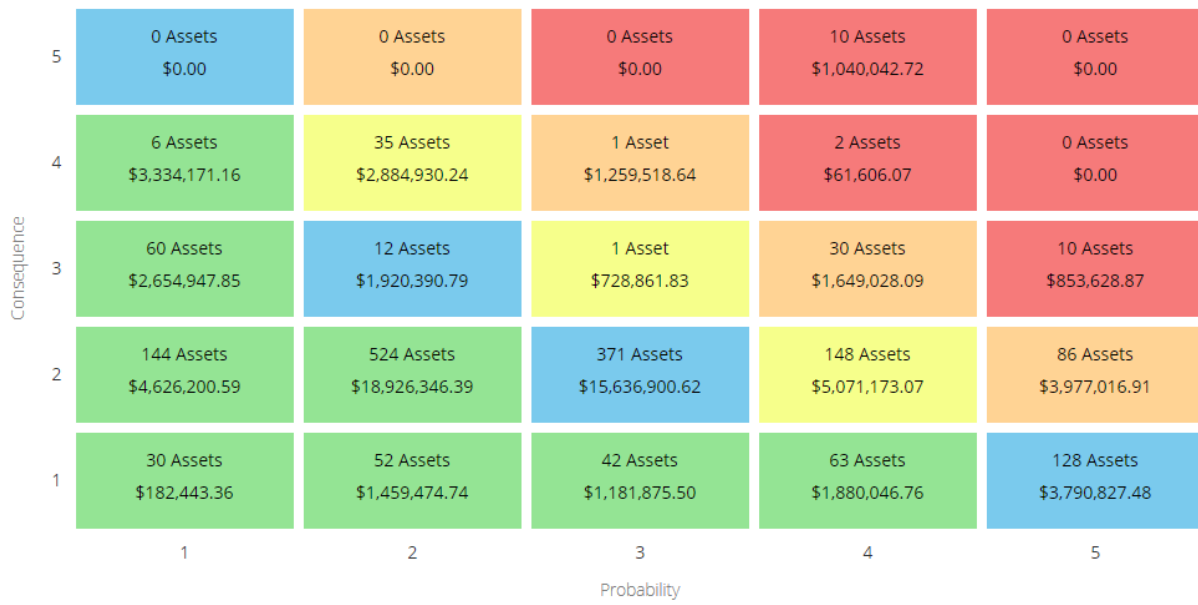


Figure 55 Distribution of Assets Based on Risk – Stormwater System

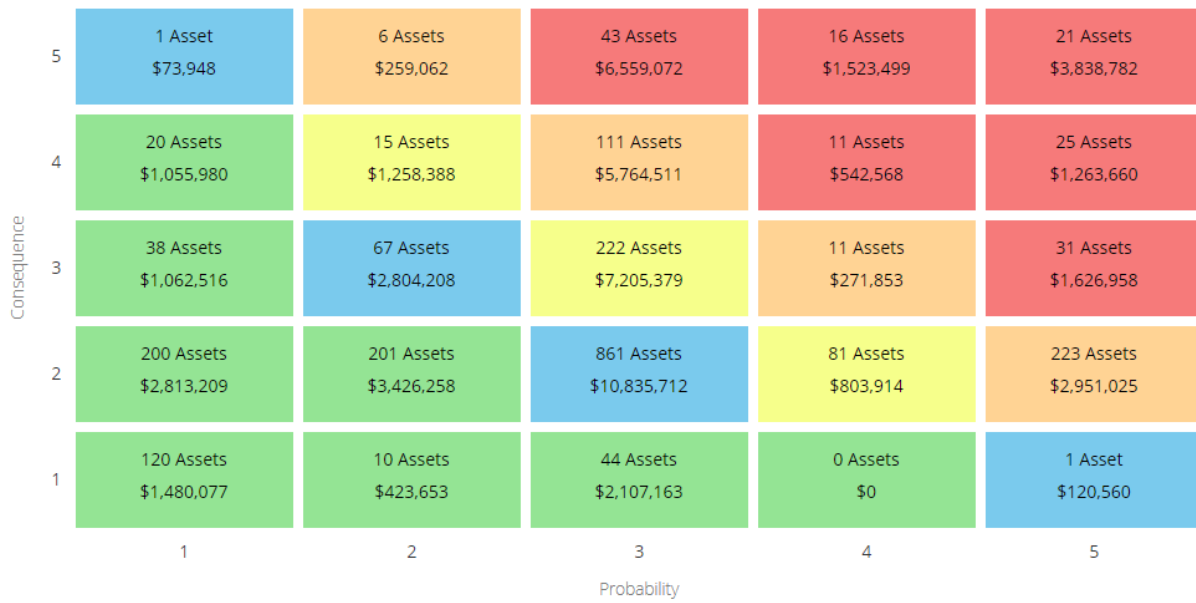


Figure 56 Distribution of Assets Based on Risk – Buildings & Facilities

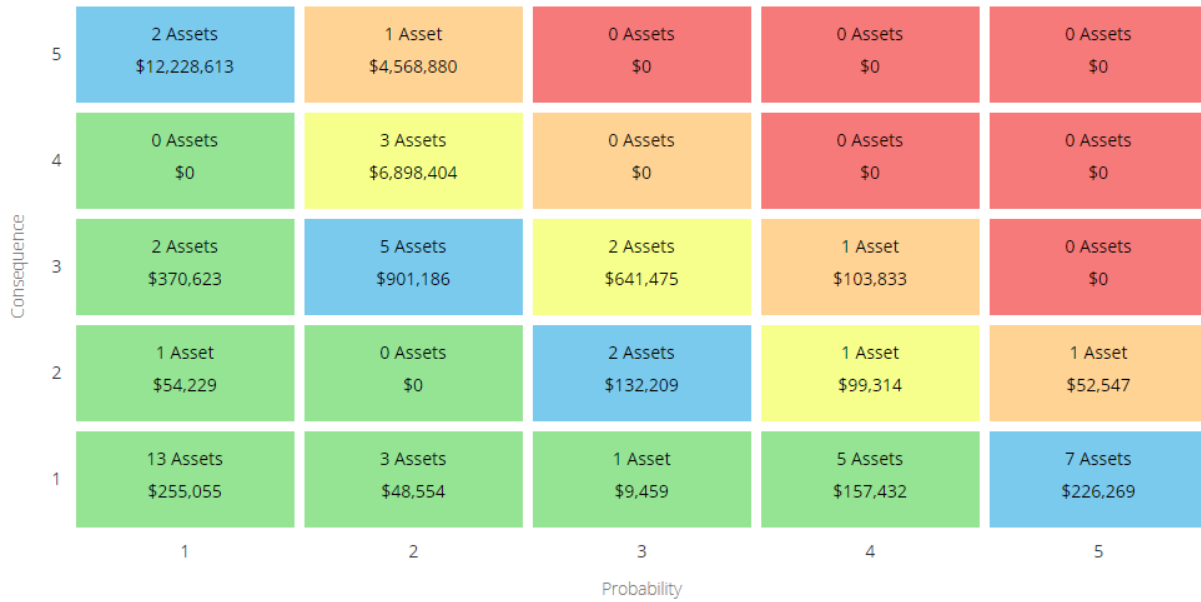


Figure 57 Distribution of Assets Based on Risk – Machinery & Equipment



IX. Financial Strategy

1. General Overview

In order for an AMP to be effective and meaningful, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the City to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service and projected growth requirements.



Figure 58 Cost Elements

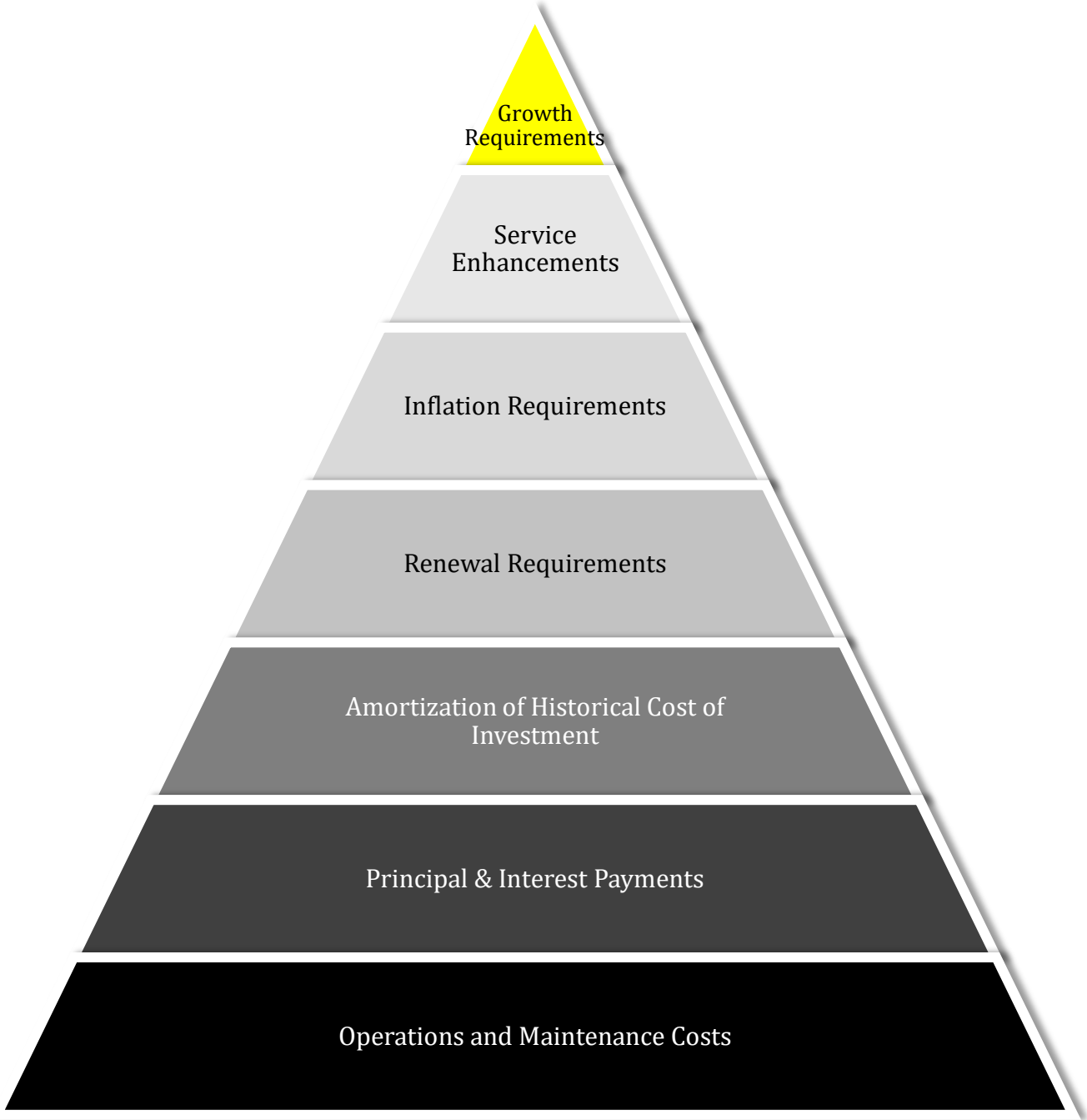


Figure 58 depicts the various cost elements and resulting funding levels that should be incorporated into AMPs that are based on best practices. Municipalities meeting their operational and maintenance needs, and debt obligations are funding only their cash cost. Funding at this level is severely deficient in terms of lifecycle costs.

Meeting the annual amortization expense based on the historical cost of investment will ensure municipalities adhere to accounting rules implemented in 2009; however, funding is still deficient for long-term needs. As municipalities graduate to the next level and meet renewal requirements, funding at this level ensures that need and cost of full replacement is deferred. If municipalities meet inflation requirements, they're positioning themselves to meet replacement needs at existing levels of service. In the final level, municipalities that are funding for service enhancement and growth requirements are fiscally sustainable and cover future investment needs.

This report develops a financial plan by presenting several scenarios for consideration and culminating with final recommendations. It includes recommendations that avoid long-term funding deficits. As outlined below, the scenarios presented model different combinations of the following components:

- the financial requirements (as documented in the SOTI section of this report) for existing assets, existing service levels, requirements of contemplated changes in service levels (none identified for this plan), and requirements of anticipated growth (none identified for this plan)
- use of traditional sources of municipal funds including tax levies, rates, impact fees, reserves, debt, and sales taxes.
- use of non-traditional sources of municipal funds including, reallocated budgets, public partnerships, in construction.
- use of State and Federal funds, such as grants

If the financial plan component of an AMP results in a funding shortfall, a specific plan should be included that demonstrates how the impact of the shortfall will be managed. In determining the legitimacy of a funding shortfall, a City's approach to the following should be evaluated:

- In order to reduce financial requirements, consideration has been given to revising service levels downward.
- All asset management and financial strategies have been considered. For example:
 - If a zero debt policy is in place, is it warranted? If not, the use of debt should be considered.
 - Do user fees reflect the cost of the applicable service? If not, increased user fees should be considered.

2. Financial Profile: Tax Funded Assets

2.1 Funding Objective

We have developed scenarios that would enable the City to achieve full funding within five to 20 years for the following assets: road system; bridges & culverts; buildings & facilities; and machinery & equipment. For each scenario developed, we have included strategies, where applicable, regarding the use of tax revenues, user fees, reserves and debt.

2.2 Current Funding Position

Table 32 and Table 33 outline, by asset class, the City's average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by taxes.

Table 32 Infrastructure Requirements and Current Funding Available: Tax Funded Assets

Asset class	Average Annual Investment Required	Total Funding Available in 2018				Total Funding Available	Annual Deficit/Surplus
		Taxes	Fees	Reserves	Other		
Road System	5,499,000	0	0	0	0	0	5,499,000
Bridges & Culverts	34,000	0	0	0	0	0	34,000
Machinery & Equipment	241,000	0	0	0	0	0	241,000
Facilities	545,000	0	0	0	0	0	545,000
Total	6,319,000	0	0	0	0	0	6,319,000

2.3 Recommendations for Full Funding

The average annual investment requirement for the above categories is \$6,319,000. Annual revenue currently allocated to these assets for capital purposes is \$0 leaving an annual deficit of \$6,319,000. To put it another way, these infrastructure categories are currently funded at 0% of their long-term requirements.

In 2018, Corinth has annual tax revenues of \$11,400,000. As illustrated in Table 33, **without consideration of any other sources of revenue**, full funding would require the following tax change over time:

Table 33 Tax Change Required for Full Funding

Asset class	Tax Change Required for Full Funding
Road System	48.2%
Bridges & Culverts	0.3%
Machinery & Equipment	2.1%
Facilities	4.8%
Total	55.4%

Due to other operating pressures, Corinth does not have capacity to increase tax revenues for capital purposes over the next 5 years. As a result, over the next 5 years infrastructure will continue to be fully debt funded. Starting in year 6, a capital funding levy is being introduced and phased in over a number of years. We are presenting two options:

- A funding solution that results in a capital model fully funded by current revenues.
- A funding solution that results in a capital model funded 50% by debt and 50% by current revenues

Option 1 - capital model fully funded by current revenues:

For this option, the budget for debt payments in year 6 of \$2,842,000 will be phased down by 100% and reallocated for capital purposes as follows: 0% in years 1 to 5; 20% or \$568,000 in years 6 to 10; 30% or \$853,000 in years 11 to 15; 50% or \$1,421,000 in years 16 to 20.

Through Table 34, we have expanded the above information to present multiple options. Due to the significant increases required, we have provided phase-in options of up to 20 years:

Table 34 Capital Model Fully Funded by Current Revenues

	Without Capturing Changes				With Capturing Changes			
	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit as outlined in table 32	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000
Changes in Debt Costs	N/A	N/A	N/A	N/A	0	-568,000	-1,421,000	-2,842,000
Resulting Infrastructure Deficit	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000	5,751,000	4,898,000	3,477,000
Resulting Tax Increase Required:								
Total Over Time	55.4%	55.4%	55.4%	55.4%	55.4%	50.4%	43.0%	30.5%
Annually	11.1%	5.5%	3.7%	2.8%	11.1%	5.0%	2.9%	1.5%

Option 2 - capital model funded 50% by debt and 50% by current revenues:

For this option, the budget for debt payments in year 6 of \$2,842,000 will be phased down by 50% and reallocated for capital purposes as follows: 0% in years 1 to 5; 10% or \$284,000 in years 6 to 10; 15% or \$427,000 in years 11 to 15; 25% or \$710,000 in years 16 to 20.

Through Table 34, we have expanded the above information to present multiple options. Due to the significant increases required, we have provided phase-in options of up to 20 years:

Table 35 Capital Model Funded 50% by Debt and 50% by Current Revenues

	Without Capturing Changes				With Capturing Changes			
	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit as outlined in table 32	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000	6,319,000
50% Funded by Debt	-3,160,000	-3,160,000	-3,160,000	-3,160,000	-3,160,000	-3,160,000	-3,160,000	-3,160,000
Changes in Debt Costs	N/A	N/A	N/A	N/A	0	-284,000	-711,000	-1,421,000
Resulting Infrastructure Deficit	3,159,000	3,159,000	3,159,000	3,159,000	3,159,000	2,875,000	2,448,000	1,738,000
Resulting Tax Increase Required:								
Total Over Time	27.7%	27.7%	27.7%	27.7%	27.7%	25.2%	21.5%	15.2%
Annually	5.5%	2.8%	1.8%	1.4%	5.5%	2.5%	1.4%	0.8%

Considering all of the above information, we recommend the 20-year option of the 50/50 model in table 35 with the reallocations. This results in 50% funding from current revenues being achieved over 20 years by:

- starting in 2024, increasing tax revenues by 0.8% each year for the next 20 years solely for the purpose of phasing in 50% funding to the asset categories covered in this section of the AMP.
- when realized, reallocating the debt cost reductions to the infrastructure deficit as outlined above.
- phasing the debt funded portion of the capital plan from 100% to 50% as outlined above.
- increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in

Notes:

- We realize that raising tax revenues by the amounts recommended above for infrastructure purposes will be very difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure.

Although this option achieves full funding on an annual basis in 20 years and provides financial sustainability over the period modeled, the recommendations do require prioritizing capital projects to fit the resulting annual funding available. Current data shows a pent-up investment demand of \$10,763,000 for the road system, \$0 for bridges & culverts, \$547,000 for machinery & equipment and \$0 for facilities. Prioritizing future projects will require the current data to be replaced by condition-based data. Although our recommendations include no further use of debt after 5 years, the results of the condition-based analysis may require otherwise.

3. Financial Profile: Rate Funded Assets

3.1 Funding Objective

We have developed scenarios that would enable the City to achieve full funding within five to 20 years for the following assets: stormwater, water, and wastewater. For each scenario developed we have included strategies, where applicable, regarding the use of tax revenues, user fees, reserves and debt.

3.2 Current Funding Position

Table 36 and Table 37 outline, by asset class, the City’s average annual asset investment requirements, current funding positions, and funding increases required to achieve full funding on assets funded by rates.

Table 36 Summary of Infrastructure Requirements and Current Funding Available

Asset class	Average Annual Investment Required	Total Funding Available in 2016			Total Funding Available	Annual Deficit/Surplus
		Rates	To Operations	Other		
Wastewater System	1,177,000	3,288,000	-3,288,000	0	0	1,177,000
Water System	3,588,000	7,758,000	-7,758,000	0	0	3,588,000
Stormwater System	1,334,000	712,000	-712,000	0	0	1,334,000
Total	6,099,000	11,758,000	-11,758,000	0	0	6,099,000

3.3 Recommendations for Full Funding

The average annual investment requirement for wastewater system, water system and stormwater system is \$6,099,000. Annual revenue currently allocated to these assets for capital purposes is \$0 leaving an annual deficit of \$6,099,000. To put it another way, these infrastructure categories are currently funded at 0% of their long-term requirements.

In 2018, Corinth has annual wastewater system revenue of \$3,288,000, annual water system revenue of \$7,758,000 and annual stormwater system revenue of \$712,000. As illustrated in Table 37, without consideration of any other sources of revenue, full funding would require the following increases over time:

Table 37 Rate Change Required for Full Funding

Asset class	Rate Change Required for Full Funding
Wastewater System	35.8%
Water System	46.2%
Stormwater System	187.4%

We are presenting two options:

- A funding solution that results in a capital model fully funded by current revenues.
- A funding solution that results in a capital model funded 50% by debt and 50% by current revenues.

Option 1 - capital model fully funded by current revenues:

Wastewater system:

For this option, the budget for current debt payments of \$690,000 will be phased down by 100% and reallocated for capital purposes as follows: 0% in years 1 to 5; 20% or \$138,000 in years 6 to 10; 30% or \$345,000 in years 11 to 15; 50% or \$690,000 in years 16 to 20.

Water system:

For this option, the budget for current debt payments of \$546,000 will be phased down by 100% and reallocated for capital purposes as follows: 0% in years 1 to 5; 20% or \$109,000 in years 6 to 10; 30% or \$273,000 in years 11 to 15; 50% or \$546,000 in years 16 to 20.

Stormwater system:

For this option, the budget for current debt payments of \$256,000 will be phased down by 100% and reallocated for capital purposes as follows: 0% in years 1 to 5; 20% or \$51,000 in years 6 to 10; 30% or \$128,000 in years 11 to 15; 50% or \$256,000 in years 16 to 20.

Through Tables 37 and 38, we have expanded the above information to present multiple options. Due to the significant increases required, we have provided phase-in options of up to 20 years

Table 38 Without Change in Debt Costs

	Wastewater System				Water System				Stormwater System			
	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit	1,177,000	1,177,000	1,177,000	1,177,000	3,588,000	3,588,000	3,588,000	3,588,000	1,334,000	1,334,000	1,334,000	1,334,000
Change in Debt Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Resulting Infrastructure Deficit	1,177,000	1,177,000	1,177,000	1,177,000	3,588,000	3,588,000	3,588,000	3,588,000	1,334,000	1,334,000	1,334,000	1,334,000
Resulting Rate Increase Required:												
Total Over Time	35.8%	35.8%	35.8%	35.8%	46.2%	46.2%	46.2%	46.2%	187.4%	187.4%	187.4%	187.4%
Annually	7.2%	3.6%	2.4%	1.8%	9.2%	4.6%	3.1%	2.3%	37.5%	18.7%	12.5%	9.4%

Table 39 With Change in Debt Costs

	Wastewater System				Water System				Stormwater System			
	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit	1,177,000	1,177,000	1,177,000	1,177,000	3,588,000	3,588,000	3,588,000	3,588,000	1,334,000	1,334,000	1,334,000	1,334,000
Change in Debt Costs	0	-138,000	-345,000	-690,000	0	-109,000	-273,000	-546,000	0	-51,000	-128,000	-256,000
Resulting Infrastructure Deficit	1,177,000	1,039,000	832,000	487,000	3,588,000	3,479,000	3,315,000	3,042,000	1,334,000	1,283,000	1,206,000	1,078,000
Resulting Rate Increase Required:												
Total Over Time	35.8%	31.6%	25.3%	14.8%	46.2%	44.8%	42.7%	39.2%	187.4%	180.2%	169.4%	151.4%
Annually	7.2%	3.2%	1.7%	0.7%	9.2%	4.5%	2.8%	2.0%	37.5%	18.0%	11.3%	7.6%

Option 2 - capital model funded 50% by debt and 50% by current revenues:

Wastewater system:

For this option, the budget for current debt payments of \$690,000 will be phased down by 50% and reallocated for capital purposes as follows: 0% in years 1 to 5; 10% or \$69,000 in years 6 to 10; 15% or \$172,000 in years 11 to 15; 25% or \$345,000 in years 16 to 20.

Water system:

For this option, the budget for current debt payments of \$546,000 will be phased down by 50% and reallocated for capital purposes as follows: 0% in years 1 to 5; 10% or \$55,000 in years 6 to 10; 15% or \$136,000 in years 11 to 15; 25% or \$273,000 in years 16 to 20.

Stormwater system:

For this option, the budget for current debt payments of \$256,000 will be phased down by 50% and reallocated for capital purposes as follows: 0% in years 1 to 5; 10% or \$26,000 in years 6 to 10; 15% or \$64,000 in years 11 to 15; 25% or \$128,000 in years 16 to 20.

Through Table 39 and 40, we have expanded the above information to present multiple options. Due to the significant increases required, we have provided phase-in options of up to 20 years:

Table 40 Without Change in Debt Costs

	Wastewater System				Water System				Stormwater System			
	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit	1,177,000	1,177,000	1,177,000	1,177,000	3,588,000	3,588,000	3,588,000	3,588,000	1,334,000	1,334,000	1,334,000	1,334,000
50% Funded by Debt	-589,000	-589,000	-589,000	-589,000	-1,794,000	-1,794,000	-1,794,000	-1,794,000	-667,000	-667,000	-667,000	-667,000
Change in Debt Costs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Resulting Infrastructure Deficit	588,000	588,000	588,000	588,000	1,794,000	1,794,000	1,794,000	1,794,000	667,000	667,000	667,000	667,000
Resulting Rate Increase Required:												
Total Over Time	17.9%	17.9%	17.9%	17.9%	23.1%	23.1%	23.1%	23.1%	93.7%	93.7%	93.7%	93.7%
Annually	3.6%	1.8%	1.2%	0.9%	4.6%	2.2%	1.4%	1.0%	18.7%	9.4%	6.2%	4.7%

Table 41 With Change in Debt Costs

	Wastewater System				Water System				Stormwater System			
	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years	5 Years	10 Years	15 Years	20 Years
Infrastructure Deficit	1,177,000	1,177,000	1,177,000	1,177,000	3,588,000	3,588,000	3,588,000	3,588,000	1,334,000	1,334,000	1,334,000	1,334,000
50% Funded by Debt	-589,000	-589,000	-589,000	-589,000	-1,794,000	-1,794,000	-1,794,000	-1,794,000	-667,000	-667,000	-667,000	-667,000
Change in Debt Costs	0	-69,000	-172,000	-345,000	0	-55,000	-136,000	-273,000	0	-26,000	-64,000	-128,000
Resulting Infrastructure Deficit	588,000	519,000	416,000	243,000	1,794,000	1,739,000	1,658,000	1,521,000	667,000	641,000	603,000	539,000
Resulting Rate Increase Required:												
Total Over Time	17.9%	15.8%	12.7%	7.4%	23.1%	22.4%	21.4%	19.6%	93.7%	90.0%	84.7%	75.7%
Annually	3.6%	1.6%	0.8%	0.4%	4.6%	2.2%	1.4%	1.0%	18.7%	9.0%	5.6%	3.8%

Considering all of the above information, we recommend the 20 year option of the 50/50 model in table 41 with the reallocations. This results in 50% funding from current revenues being achieved over 20 years by:

- each year for the next 20 years, solely for the purpose of phasing in 50% funding to the asset categories covered in this section of the AMP, increase revenues as follows: wastewater system 0.4%; water system 1.0%; stormwater system 3.8%.
- when realized, reallocating the debt cost reductions to the infrastructure deficit as outlined above.
- phasing the debt funded portion of the capital plan from 100% to 50% as outlined above.
- increasing existing and future infrastructure budgets by the applicable inflation index on an annual basis in addition to the deficit phase-in.

Notes:

- We realize that raising rate revenues by the amounts recommended above for infrastructure purposes will be very difficult to do. However, considering a longer phase-in window may have even greater consequences in terms of infrastructure failure.
- Any increase in rates required for operations would be in addition to the above recommendations.

Although this option achieves full funding on an annual basis and provides financial sustainability over the period modeled, the recommendations do require prioritizing capital projects to fit the resulting annual funding available. As of 2018, age based data shows a pent up investment demand of \$169,000 for the wastewater system, \$8,855,000 for the water system and \$0 for the stormwater system. Prioritizing future projects will require the age based data to be replaced by condition based data. Although our recommendations include no further use of debt after 5 years, the results of the condition based analysis may require otherwise.

X. 2018 Infrastructure Report Card

The following infrastructure report card illustrates the City’s performance on the two key factors: Asset Health and Financial Capacity. Appendix 1 provides the full grading scale and conversion chart, as well as detailed descriptions, for each grading level.

Table 42 2017 Infrastructure Report Card

Asset class	Asset Health Grade	Funding Percentage	Financial Capacity Grade	Average Asset Class Grade	Comments
Roads	D	0%	F	F	<p>Based on 2018 replacement cost, and primarily age-based data, over 39% of assets, with a valuation of \$210 million, are in good to very good condition; 21% are in poor to very poor condition.</p> <p>The City is underfunding its assets. Tax-funded categories are funded at 0% while rate-funded categories are funded at 0%.</p>
Bridges & Culverts	B	0%	F	D	
Water System	C	0%	F	F	
Wastewater System	C	0%	F	F	
Stormwater System	D	0%	F	F	
Buildings & Facilities	B	0%	F	D	
Machinery & Equipment	F	0%	F	F	
Average Asset Health Grade			C		
Average Financial Capacity Grade			F		
Overall Grade for the City			F		

XI. Appendix A: Grading and Conversion Scales

Table 43 Asset Health Scale

Letter Grade	Rating	Description
A	Excellent	Asset is new or recently rehabilitated
B	Good	Asset is no longer new, but is fulfilling its function. Preventative maintenance is beneficial at this stage.
C	Fair	Deterioration is evident but asset continues to full its function. Preventative maintenance is beneficial at this stage.
D	Poor	Significant deterioration is evident and service is at risk.
F	Very Poor	Asset is beyond expected life and has deteriorated to the point that it may no longer be fit to fulfill its function.

Table 44 Financial Capacity Scale

Letter Grade	Rating	Funding percent	Timing Requirements	Description
A	Excellent	90-100 percent	<input checked="" type="checkbox"/> Short Term <input checked="" type="checkbox"/> Medium Term <input checked="" type="checkbox"/> Long Term	The City is fully prepared for its short-, medium- and long-term replacement needs based on existing infrastructure portfolio.
B	Good	70-89 percent	<input checked="" type="checkbox"/> Short Term <input checked="" type="checkbox"/> Medium Term <input checked="" type="checkbox"/> Long Term	The City is well prepared to fund its short-term and medium-term replacement needs but requires additional funding strategies in the long-term to begin to increase its reserves.
C	Fair	60-69 percent	<input checked="" type="checkbox"/> Short Term <input checked="" type="checkbox"/> Medium Term <input checked="" type="checkbox"/> Long Term	The City is underprepared to fund its medium- to long-term infrastructure needs. The replacement of assets in the medium-term will likely be deferred to future years.
D	Poor	40-59 percent	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Short Term <input checked="" type="checkbox"/> Medium Term <input checked="" type="checkbox"/> Long Term	The City is not well prepared to fund its replacement needs in the short-, medium- or long-term. Asset replacements will be deferred and levels of service may be reduced.
F	Very Poor	0-39 percent	<input checked="" type="checkbox"/> Short Term <input checked="" type="checkbox"/> Medium Term <input checked="" type="checkbox"/> Long Term	The City is significantly underfunding its short-term, medium-term, and long-term infrastructure requirements based on existing funds allocation. Asset replacements will be deferred indefinitely. The City may have to divest some of its assets (e.g., bridge closures, arena closures) and levels of service will be reduced significantly.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: Brittan & Crawford LLC Professional Services Contract
Submitted For: Jason Alexander, Director **Submitted By:** Jason Alexander, Director
Finance Review: Yes **Legal Review:** N/A
City Manager Review: **Approval:** Bob Hart, City Manager
Strategic Goals: Land Development
Economic Development

AGENDA ITEM

Consider and act on a contract for service between Brittan & Crawford LLC and the Corinth Economic Development Corporation for surveying and preparing acquisition documents for surplus right-of-way to be acquired from the Texas Department of Transportation, including legal descriptions and drawing exhibits, for an amount not to exceed \$20,000.00.

AGENDA ITEM SUMMARY/BACKGROUND

The City of Corinth (the "City") and the Corinth Economic Development Corporation (the "CEDC") are presented with an opportunity to acquire surplus right-of-way from the Texas Department of Transportation ("TxDOT") at the four corners of the Interstate Highway 35E and Corinth Parkway Interchange. Acquisition of some, most or all of this right-of-way can stimulate opportunities for economic development, particularly as it relates to hotel, restaurant and retail development, and in some instances, such acquisition may help to positively influence development patterns within the City's emerging urban core.

Per the contract for service, Brittan & Crawford, LLC (the "Consultant") will complete surveys of the four corners with respect to the surplus right-of-way, as well as provide right-of-way acquisition documents, including legal descriptions and drawing exhibits. The contract for service, as presented, states that the services to be rendered will be billed at an hourly rate, as follows, with the combined fees not to exceed an amount of \$20,000.00:

R.P.L.S.	\$160.00 per hour
Auto CAD	\$140.00 per hour
2-Man Survey Crew	\$160.00 per hour
3-Man Survey Crew	\$210.00 per hour
GPS Survey Crew	\$260.00 per hour

The CEDC Board of Directors met in Special Session on March 18, 2019, and unanimously approved the Contract between Brittan & Crawford and the CEDC. However, the CEDC require that any contract for service or agreement first be approved by the City Council, before the CEDC may enter into any such contract for service or agreement. Further the CEDC Board of Directors unanimously passed a Resolution authorizing the City Manager to execute the contract for service on behalf of the CEDC.

RECOMMENDATION

Staff recommends that the City Council approve the contract for services as presented.

Fiscal Impact

Source of Funding: Corinth Economic Development Corporation

FINANCIAL SUMMARY:

If the contract for service is approved by the City Council, then the CEDC would be responsible for making the payment(s) to the Consultant in an amount not to exceed \$20,000.00.

Attachments

Professional Services Contract

Resolution of the Corinth Economic Development Corporation Board of Directors

BRITTAIN & CRAWFORD, LLC
LAND SURVEYING & TOPOGRAPHIC MAPPING

Celebrating 45 years of providing quality professional land surveys

March 6, 2019

City of Corinth
3300 Corinth Parkway
Corinth, Texas 76208
(940) 498-3265
George.Marshall@cityofcorinth.com

Attention: Mr. George S. Marshall, P.E., CFM
City Engineer

Re: **SURPLUS TXDOT RIGHT-OF-WAY
LOCATED AT INTERSTATE 35E
AND CORINTH PARKWAY**
Corinth, Texas

Dear Mr. Marshall,

Pursuant to your request, and our review of the project site, we hereby submit our proposal to provide survey services. Our understanding of the desired scope of services is as follows:

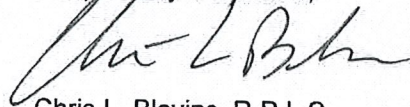
Survey and prepare four surplus TXDOT right-of-way acquisition documents including legal descriptions and drawing exhibits per TXDOT standards. The survey will show all surface features within the surplus tract. Our fee will include all research and abstracting necessary to meet TXDOT's requirements as well as setting final monumentation approved by TXDOT. In addition, we will make all necessary revisions and submittals required to obtain TXDOT's approval of the City of Corinth's acquisition of said parcels.

The foregoing will be accomplished for a fee not to exceed **\$5,000.00** per parcel, for a combined not to exceed fee of **\$20,000.00**, and will be billed at the following hourly rate schedule:

R.P.L.S.	\$160.00 per hour
AutoCAD Drafter	\$140.00 per hour
2-Man Survey Crew	\$160.00 per hour
3-Man Survey Crew	\$210.00 per hour
GPS Survey Crew	\$260.00 per hour

We sincerely appreciate being considered for this project and look forward to working with you.

Respectfully Submitted,

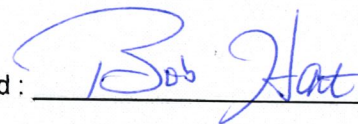


Chris L. Blevins, R.P.L.S.

Firm Certification #10019000

Complaints or Questions should be addressed to the Texas Board of Professional Land Surveying: 12100 Park 35 Circle, Building A, Suite 156, MC-230 Austin, Texas 78753, (512) 239-5267, Natalie.Jackson@txls.texas.gov

Approved: _____



Date: _____

3/6/2019

RESOLUTION NO. 2019 - 03 - 18 - 01

A RESOLUTION OF THE BOARD OF DIRECTORS AUTHORIZING THE CITY MANAGER OF THE CITY OF CORINTH, TEXAS TO EXECUTE A CONTRACT FOR SERVICE WITH BRITTAIN & CRAWFORD, LLC ON BEHALF OF THE CORINTH ECONOMIC DEVELOPMENT CORPORATION FOR AN AMOUNT NOT TO EXCEED \$20,000.00, SUBJECT TO AMENDMENT AND APPROVAL BY THE CITY COUNCIL OF THE CITY OF CORINTH, TEXAS; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, on the 18TH day of March, 2019, the Corinth Economic Development Corporation (the "CEDC") convened in Special Session to review, consider and provide an recommendation to the City Council of the City of Corinth, Texas on a contract for service between the CEDC and Brittan & Crawford, LLC (the "CONTRACT");

WHEREAS, the CEDC considered and provided an affirmative recommendation on approval of the Contract; AND

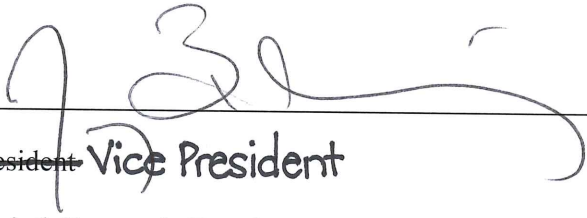
WHEREAS, the CEDC authorizes the City Manager to execute the Contract on the behalf of the CEDC, subject to amendment and approval of the City Council of the City of Corinth, Texas.

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE CEDC:

PART 1. The City Manager is authorized to execute the Contract on the behalf of the CEDC.

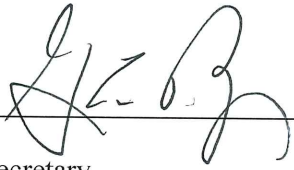
PART 2. This Resolution shall be effective immediately upon its passage.

PASSED AND APPROVED 18TH day of March, 2019.



~~President~~ Vice President

Corinth Economic Development Corporation



Secretary

Corinth Economic Development Corporation

BUSINESS ITEM 8.

City Council Regular and Workshop Session

Meeting Date: 04/04/2019
Title: Subdivision Waiver for 2181 Driveway Spacing
Submitted For: Helen-Eve Liebman, Director **Submitted By:** Ben Rodriguez, Manager
Finance Review: N/A **Legal Review:** N/A
City Manager Review: Approval: Bob Hart, City Manager
Strategic Goals: Land Development

AGENDA ITEM

Consider and act upon a request from the applicant, Lawrence Holdorf, authorized representative for the property owner, Markwardt Investment Holdings LLC, for a Major Subdivision Waiver to the City of Corinth Access Management Standards out of the City’s Unified Development Code (UDC) to allow a reduction in the minimum required distance between driveways along a major arterial street for the proposed driveway on property legally described as A0915A MEP & PRR, TR 10(PT), 2.031 ACRES, OLD DCAD TR #3A(2), A0833A E. MARSH, TR 27, .443 ACRES, OLD DCAD TR #8A(1D), and A0153A BBB & CRR, TR 2, .401 ACRES, OLD DCAD TR #10A (FM 2181 Commercial Development)

AGENDA ITEM SUMMARY/BACKGROUND

The applicant is requesting a waiver from the City’s Unified Development Code “UDC” as it pertains to minimum spacing between driveways.
The property is located along FM 2181 approximately 1,000 feet west of Parkridge Drive.

The City’s UDC states that there shall be a minimum of 250 feet of spacing between driveways on state maintained roadways. Ex. FM 2181, IH35, and FM 2499.

The applicant is requesting a subdivision waiver to allow a driveway to be placed within 212 feet of the nearest driveway. The applicant has agreed to provide a cross access point that will connect to the adjoining doctors’ offices when the property is developed. This will provide a contiguous point of access from Parkridge Drive to the soon to be developed property and reduce the amount of traffic entering into FM2181 from this area as the cross access points will facilitate much of this traffic internally.

The City Engineer has reviewed the proposed waiver and has approved the location pending final approval by the City Council.

Following the approval of the waiver the City will forward the applicants driveway request for TxDot’s approval. TxDot approval is contingent on the City’s approval of the applicant’s request.

RECOMMENDATION

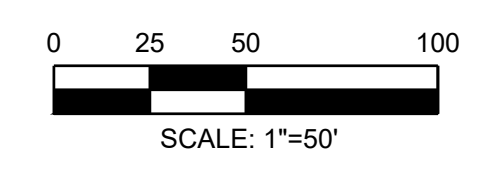
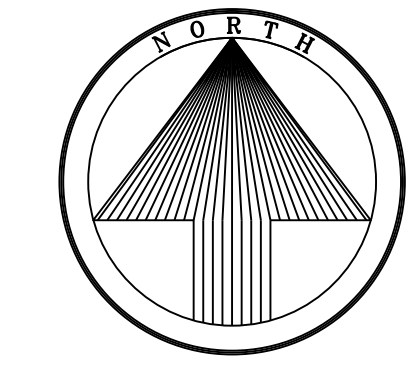
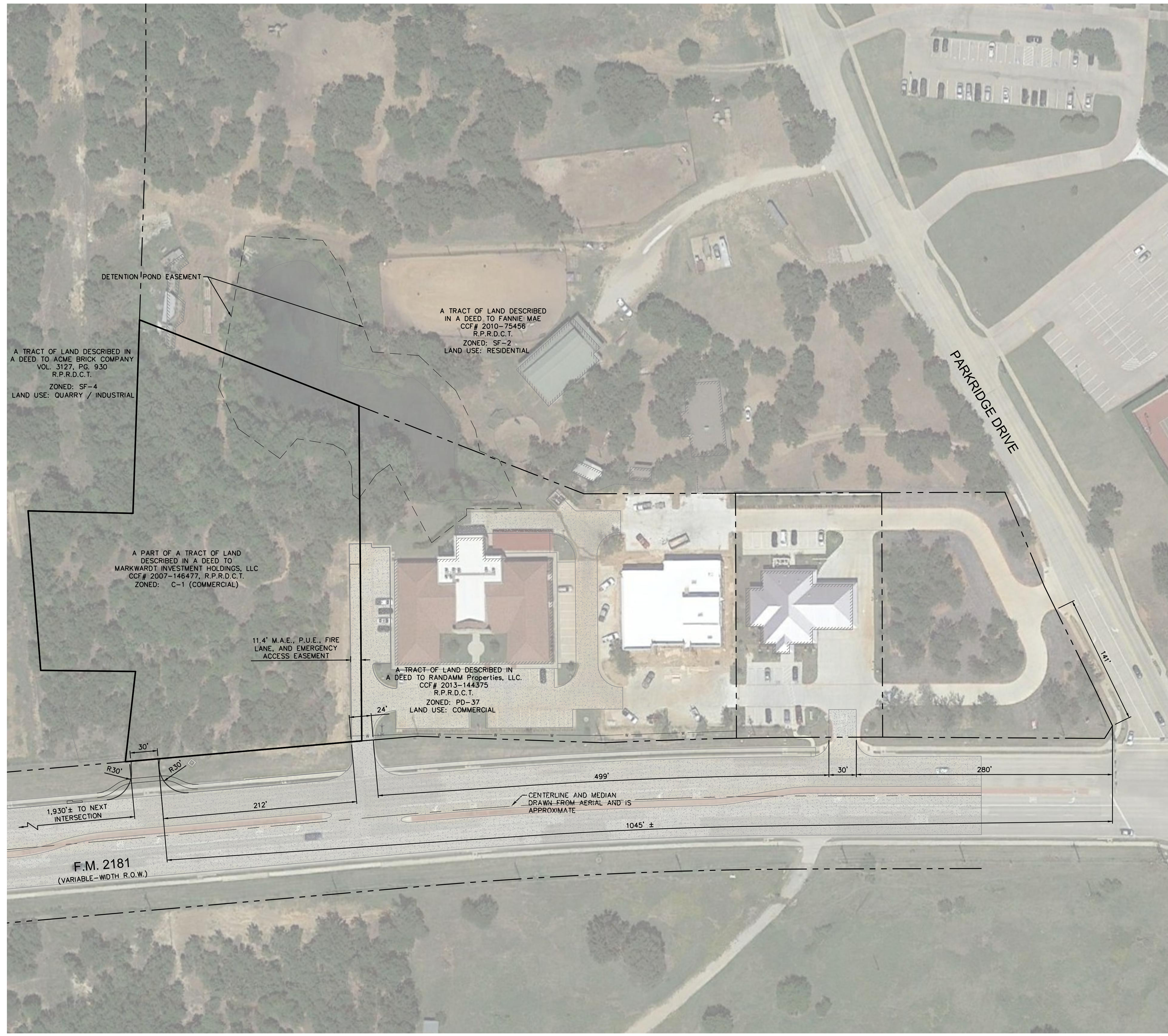
At the Planning and Zoning Commission Meeting on March 25, 2019 the commission unanimously recommended their approval of the waiver as presented.

Staff recommends approval as presented.

Attachments

Drive spacing exhibit

Printed By: Adam Chrycomb, PLO Date: Wednesday, August 22, 2018 3:46:14 PM
 File Name: P:\Projects\DDM1701 - 2899 Swisher Rd Drive\DWG\Drive Spacing Subdivision Waiver\DDM1701 SW - Exhibit.dwg
 Save Date: Wednesday, August 22, 2018 3:38:04 PM
 Plot Style Table: Allison.ctb



LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY LINE
- CENTER LINE

NOTE:

1. THE DIMENSIONS FOR COMMERCIAL DRIVEWAYS AT STATE MAINTAINED ROADWAYS ARE: A MINIMUM DRIVEWAY SPACING OF 300' FACE OF CURB TO FACE OF CURB, A DRIVEWAY THROAT WIDTH OF 24'-40', AND A DRIVEWAY CURB RADIUS OF 20'-30' PER CITY OF CORINTH REQUIREMENTS.
2. THE PROPOSED DRIVE FOR THE SITE LOCATION IS A RIGHT IN / RIGHT OUT DUE TO THE EXISTING MEDIAN. DRIVEWAY SPACING CAN BE REDUCED TO 250' PER CITY OF CORINTH REQUIREMENTS.
3. MINIMUM DRIVEWAY SPACING IS MET TO THE WEST OF THE PROPERTY.
4. MINIMUM DRIVEWAY SPACING IS NOT MET TO THE EAST OF THE PROPERTY. DRIVEWAY SPACING FROM THE NEAREST INTERSECTION, FM 2181 AND PARKRIDGE DRIVE, IS 1,045' ±. THE SPACING IS SUFFICIENT FOR 3 ACCESS DRIVES, 2 EXISTING AND 1 PROPOSED. SPACING REQUIREMENTS ARE NOT MET BUT THE NUMBER OF DRIVES ARE APPROPRIATE.
5. THE ACME BRICK COMPANY TO THE WEST OF THE PROPERTY IS IN OPERATION AND DOES NOT ALLOW THE DRIVE TO BE SHIFTED TO THE WEST THEREBY MEETING MINIMUM DRIVE SPACING TO THE EAST OF THE PROPERTY.

Drawn by: AJC
 Checked by: LAH

DDM CONSTRUCTION COMPANY
 MAJOR SUBDIVISION WAIVER, PROPOSED DRIVE SPACING ON FM 2181
FM2181 DRIVE COMMERCIAL DEVELOPMENT
 CORINTH, TX

ACCESS CONNECTION SPACING

2445 N. ELM STREET
 DEATON, TEXAS 76001
 Phone (940) 380-9453
 FAX (940) 380-9431
 Texas Board of
 Professional Engineers
 Registration Number: F-7898
 info@ae-grp.com

