SANITARY SERVICING STRATEGY FUND

2017 ANNUAL REPORT

July 2018

Prepared by:

City of Edmonton
Network Integration, Growth Coordination
City Planning Branch, Urban Form and Corporate Strategic Development Department

MESSAGE FROM THE CHAIR OF THE MANAGEMENT COMMITTEE

Since its inception in 1999, the Sanitary Servicing Strategy (SSS), through the Sanitary Servicing Strategy Fund (SSSF), has been remarkably successful in its mandate to encourage growth and facilitate new development in Edmonton. This is the 19th annual report of the SSSF program and activities. The 2017 SSSF activities included; continued construction and installation of North Edmonton Sanitary Trunk (NEST) N1 Real Time Control RTC gate, completion of NEST NC2/NC3 trunk phase 1 and continued tunneling of phase 2, construction and commissioning of South Edmonton Sanitary Sewer (SESS) SA1a, tunneling of SESS SW4 trunk, design and procurement of SESS SA10a trunk with pump station & force main, construction and installation of SESS SA1c RTC gate. Also a decision was made to treat SESS flows at the Gold Bar Wastewater Treatment Plant (GBWWTP) instead of Alberta Capital Region WWTP as recommended by the Integrated Planning Study as it is expected to bring $160M worth of savings to the overall SSSF program.

Significant developments in 2017 included an internal City reorganization and City Council's decision to transfer drainage services, including all SSSF completed trunks/assets, to EPCOR. The SSSF committees, operations, and construction activities continued to operate seamlessly towards successfully achieving the years' objectives. The Governance Review, which was initiated in the fourth quarter of 2017, will investigate and re-evaluate the management strategy of the Fund upon the internal reorganization and transfer of drainage services to EPCOR.

The SSSF Management and Operational Committees jointly met on four occasions throughout 2017 to approve segment design, construction schedules, and budgets for the upcoming segments. Additionally, the joint committee approved revenue rates for 2018, monitored construction progress, and reviewed the financial status of the Fund.

Since the start of the program, about 39.7 km of offsite tunnels have been constructed to support various new developments including single family residential, multi-family residential, commercial, and industrial lots.

In 2017, the SSSF recorded revenues of $18.7 million and a total expenditure of about $14.5 million, resulting an addition of $4.2 million to the fund. The closing balance at the end of 2017 was $70.0 million as compared to the 2016 year-end balance of $65.9 million. The actual revenue collected this year was only slightly less than the anticipated revenue of $18.8 million. Considering the current positive balance and future revenue forecast, it is anticipated that SSSF will be able to meet short-term development needs within the City. The 2017 expenditure was $14.5 million, which was significantly less than the $47.0 million forecast (which includes $17 million carryover from 2016). This was due to delays in two major projects: NEST NC2/NC3 and SESS SW4.

Due to accelerated projected spending, the cash flow model shows a positive fund balance until 2022 (compared to the previous year's prediction of 2033). The fund balance is projected to maintain a downward trend until a maximum negative balance of approximately $50.1 million is reached by the year 2025. The SSSF Committee continues to work with its stakeholders to refine project costs and cash flows, and rationalize the increase in revenues needed to continue the construction. The fund is projected to recover into a positive balance by the year 2031.

The focus in 2018 will be to commission N1 and SA1c RTC gate, continue tunneling of NC2/NC3 and SW4, complete restoration of SA1a construction site, and start construction of SA10a with pump station and force main. The ongoing planned studies for the year include the W3,4,5 functional planning study and the SW1 PS upgrade functional planning study.

Todd Wyman, P. Eng.
Chair, SSSF Management Committee

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1.0 PLANNING & CONSTRUCTION ACTIVITIES IN 2017

The following construction and planning activities highlight the planning and construction achievements in 2017:

North Edmonton Sanitary Trunk (NEST) Stage N1 RTC Gate

The NEST N1 RTC gate will optimize the storage capacity in upstream NEST trunks and convey flows into the Clareview Sanitary Trunk (CST) via the Pilot Sound Trunk (PST).

The ongoing N1 RTC project involves design and construction of a Real Time Control (RTC) gate at 153 Avenue and Manning Drive that will control the flow into the CST trunk system en route to the Capital Region treatment facility.

The contractor has mobilized to the site on November 2017. Trenchless installation of conduits for power and communication cable is underway. Construction of the new 2400 mm manhole is expected to be completed by the end of December 2017. Installation of the bulkhead is anticipated for completion by the first quarter of 2018 and project commissioning is expected by November 2018.

North Edmonton Sanitary Trunk (NEST) - Stage NC2/NC3

The NEST NC2/NC3 Phase 2 project will connect the existing NC1 and NL1 sections.

The NEST NC2/NC3 tunnel is part of the overall NEST system developed to facilitate growth in the North Edmonton area. The segment intends to connect the existing NC1 section, which terminates at the NC1 Pump Station located at 153 Ave/Castledowns Road, to the NL1 tunnel which begins at 153 Avenue and 88 Street.

Drainage services started design for NC2-NC3 in 2015 and finished phase 1 (383 m) of the project by the end of 2017. The phase 1 trunk is planned for commissioning in July 2018.

Phase 2 construction of the remaining 2,340 m section is currently in progress. To date, 440 m of tunneling is completed.
The project is expected to be commissioned by 2020. Some construction photos are shown on pages 6 to 9.

South Edmonton Sanitary Sewer (SESS) – Stage SA1a

SESS SA1a connects the SW1 pump station to the previously constructed SA1b/SA1c section. The project reached completion in 2017 and is currently in service.

SESS Stage SA1a involves construction of a 2,160 m long, 2100 mm - 2300 mm diameter tunnel that connects the SW1 pump station at Ellerslie Road and Parsons Road to Stage SA1b/SA1c tunnel at 91 Street.

Construction has been completed and the system is in service as of December 2017; however, remaining landscaping work is expected to be completed by mid-2018.

South Edmonton Sanitary Sewer (SESS) – Stage SW4

The SESS SW4 section will ultimately convey flows and provide wet weather storage for the Windermere and Riverview areas.

SESS Stage SW4 involves construction of a 1,550 m long, 2940 mm diameter tunnel, which extends from Ellerslie Road (south west at Whitemud Creek) to Windermere Boulevard (west of the Anthony Henday/Rabbit Hill Road interchange).

Construction is in progress and the in-house tunnelling crew has completed 68% of the 1,550 m segment.

Upon completion, the trunk will provide the required wet weather sanitary storage to facilitate growth in this region. The trunk is planned for commissioning by fall 2019. Some construction photos are shown on pages 10 to 13.

South Edmonton Sanitary Sewer (SESS) Stage SA10a with PS & FM

SESS SA10a project is currently in the design and procurement phase, with construction anticipated to commence in 2018.

The 750 m long, 3050 mm diameter SA10a sanitary trunk will provide service to the Pylypow Industrial, Southeast Industrial, and Maple Ridge Industrial areas.

The project is currently in procurement phase and construction is expected to start in 2018.

Project is anticipated to be commissioned by spring 2020.

South Edmonton Sanitary Sewer (SESS) – Stage SA1c RTC Gate

The SESS SA1c RTC gate will be commissioned in 2018 to control flows from downstream SESS trunks to the Mill Woods Double Barrel trunk.

This project includes design and construction of a Real Time Control (RTC) Gate at 28 Avenue/91 Street. Once installed, the gate will control flows into the existing system.

Construction and installation of the gate was completed in October 2017, with project commissioning expected by the second quarter of 2018.

Integrated Planning Study

The Integrated Planning Study provided valuable recommendations towards the future activities of the SSSF.

The SSSF Integrated Planning study is complete, with the final report being submitted in August 2017. The main objective of this study was to refine the overall SSSF program concept and finalize the treatment option between Gold Bar Wastewater Treatment Plant and Alberta Capital Region Wastewater Treatment Plant for sanitary flows being generated from the southern part of the City.

Findings and recommendations from the report were presented to the joint committee during the second quarter meeting (June 2017).

Based on the approved recommendations, sanitary flows from the southern areas of the City will be treated at Gold Bar Waste Water Treatment Plant (GBWWTP). It reduces the operational cost because of reduced length and expected to bring $160M worth of savings to SSSF program. In addition to affordability, directing flows to the Gold Bar Wastewater Treatment Plant was rated higher for constructability, environmental impact, operability and flexibility.

Timelines for remaining SSSF segments were refined as part of this exercise. Periodic assessment of the SSSF program has been recommended to align the timings of segments to actual growth scenarios.

CST Functional Planning Update & Condition Assessment

The Clareview Sanitary Trunk (CST) Functional Planning Study evaluates the performance of the existing system, refines the integration concept with NEST segments, and examines future requirements.

The Clareview Sanitary Trunk (CST) functional planning and condition assessment study was completed in 2017.

The objective of this planning study was to understand long term NEST requirements and identify any potential risks associated with utilizing CST as the discharge system from NEST to ACRWC.

The planning study results showed immediate requirements to rehabilitate some portions of CST and to refine timelines of remaining NEST segments to ultimately convey flows from NEST areas.

Riverview Servicing Study

The Riverview Servicing Study investigates interim and ultimate servicing options for the rapidly developing Riverview area.

The servicing study was initiated to refine the ultimate servicing concept for Riverview developments and to update the timelines for the SESS segments related to Riverview servicing.

The project was initiated in October 2016 and the final report was submitted on April 20, 2017.

The study confirmed that Riverview developments can be serviced through Edgemont system for the next 8-10 years; however, a permanent servicing system will be required through the south system (SESS) by 2026.

SESS Flow Control Planning Study

The SESS Flow Control Planning Study entails a review and refinement of the flow control options for SESS system.

The focus of the study is to update flow control philosophy for the SESS system in order to manage the flow effectively and utilize available storage to its maximum capacity.

This project started in mid-2016 and the final study report was submitted on April 20, 2017.

The study has confirmed the need for an SW1 pump capacity upgrade to mitigate the risks of sanitary overflows to Whitemud Creek and basement flooding issues in the development areas.

SSSF Financial Model Update – Phase 2

The financial model of the SSSF is continuously updated and improved to provide a better predictor of future revenue.

The phase 2 financial model upgrade is to further enhance the functionality based on phase 1 outcomes with some additional outputs that will add value to the current setting of the model.

This project started in August 2017. So far the major data collection and validation for land absorption at the neighborhood level have been completed. Mapping functionality will be included in the financial model as a new feature. Charts and maps that were produced directly from the test model were presented to the City. The consultant will continue to refine the mapping feature based on the feedback.

Governance Review/SSSF Committee Structure

The Governance Review will provide an overview of the current Fund management strategies and propose necessary changes to improve the program management performance.

The Governance Review was initiated by the consultant in Q4 2017 after being put on hold due to organizational changes within the City. With most of the work expected to be completed in 2018, the review will assess the structure of the management & operational committees and provide recommendations for increased communication & collaboration between the City, EPCOR, and other stakeholders. Furthermore, it includes suggestions of improved process, policies, and management principles towards further improving the transparency & effectiveness of the overall Fund management.

Figure 1a – NEST NC2/NC3, TBM at the Removal Shaft

Figure 1b – NEST NC2/NC3 Phase 1 Tunnel Segments

Figure 1c – NEST NC2/NC3 Phase 2 Tunneling

Figure 1d – SESS SW4 Working Shaft

Figure 1e – SESS SW4 Intermediate Shaft #2

Figure 1f – SESS SW4 behind Tunnel Boring Machine

Figure 1g – SESS SW4 Concrete Segment #2

2.0 MANAGEMENT AND OPERATIONAL COMMITTEES

Due to internal reorganization and the transfer of drainage services to EPCOR, the membership of the management and operational committees are being taken into consideration through the Governance Review initiated in Q4 2017.

The role of the **SSSF Management Committee** is to make decisions regarding revenues and expenditures that best meet the long-term plan of all the stakeholders. The Management Committee consists of the following six members:

Chair:

Todd Wyman	Director, Network Integration, COE

Members:

David Kinders	UDI Representative
Wade Zwicker	UDI Representative
Tim Ford	Senior Planner, Core and Mature Communities, COE
Byron Nicholson	Director, Utility Infrastructure Delivery, COE / EPCOR
Fernando Sacluti	General Supervisor, Growth Coordination, COE (Secretary & Non-voting member)
Angella Vertzaya	General Supervisor, Growth Coordination, COE (Secretary & Non-voting member)

Until September 2017

Since September 2017

Major accomplishments of the Management Committee in 2017 were:

- *NC2/NC3 risk contingency approval*
- *Endorsement of Integrated Planning Study recommendations*
- *SA10a revised budget approval*
- *SSSF Financial Model phase 2 budget increase approval*
- *Revenue rate increase of 4% for 2018*
- *NEST-N1 RTC revised budget approval*

The Management Committee met four times in 2017 at joint sessions with the SSSF Operational Committee. The major decisions made by the Management Committee are as follows:

- Endorsed recommendations given by the Integrated Planning Study 2017 completed by ISL Engineering.
- Approved a revenue rate increase of 4% in 2018. The increase was also approved by the UDI board.
- Approved a revised budget of $27,847,916 for construction and commissioning of SA10a segment by March 2020.
- Approved a revised construction budget increase of $296,307 (from $1,614,000 to $1,910,307) for the NEST-N1 RTC due to design costs and inclusion of overhead & contingency.

- *SW1 pump station upgrade study approval.*

- Approved a risk contingency allocation of $50K to fund early commissioning of NC2-NC3 Phase 1 by construction & removal of a temporary bulkhead.
- Approved an additional budget of $21,937.50 to proceed with the SSSF Financial Model Phase 2 update.
- Approved an allocation of $50K to complete an SW1 pump station upgrade study to investigate increasing the pump capacity.

The **SSSF Operational Committee** provides recommendations to the Management Committee regarding the timing and capacity requirements for new trunk construction, and flags relevant issues for consideration by the Management Committee. The Operational Committee is composed of seven members:

Chair:

Fernando Sacluti	General Supervisor, Growth Coordination, COE
Angella Vertzaya	General Supervisor, Growth Coordination, COE

Until September 2017
Since September 2017

Members:

James Tan	Director, Utility Infrastructure – Construction, COE
Jim Wood	Land Development Engineer, Development Services, COE
Leo Levasseur	UDI Representative
Dylan Hunchak	UDI Representative
Melanie Hong	Finance Manager, Financial Services, COE
Khalid Aziz	Program Manager, Infrastructure Planning, COE (Secretary & Member)

The Operational Committee discussed technical & financial issues and recommended solutions for the Management Committee's approval.

The Operational Committee met on a quarterly basis in 2017 at joint sessions with the Management Committee, and as an independent committee when needed with the following accomplishments:

- Recommended an endorsement of findings from the Integrated Planning Study as discussed earlier.
- Recommended a revenue rate increase of 4% for 2018.
- Continued review and adjustment of revenue/spending projections for the Fund to account for changing population growth and economic conditions.
- Recommended $50,000 of risk contingency towards early commissioning of

NC2-NC3 Phase 1 by construction & removal of a temporary bulkhead.

- Completed an RFP upon receiving feedback from committee members, and chose contractor for the SSSF governance review.
- Recommended a revised construction budget & schedule for SA10a.
- Recommended an additional $21,937.50 to proceed with SSSF Financial Model phase 2 update.
- Recommended delaying W3,4,5 due to coordination with WJP outline plan and future LRT construction.
- Recommended an additional budget of $296,307 towards designs costs, overhead, and contingency of NEST-N1 RTC
- Recommended $50,000 towards an upgrade study of the SW1 pump station.

3.0 FIVE YEAR CONSTRUCTION PLAN

The following section outlines the proposed major SSSF construction program for the next five years (2018-2022). The proposed program is developed to support orderly development throughout the City of Edmonton in a cost effective manner, using current population and employment projections, as well as input from the development industry. It also strives to meet the important objective of maintaining a positive balance for the Fund. The locations of the construction projects are shown in Figure 2 on page 21.

2018 – North Edmonton Sanitary Trunk (NEST) Stage N1 RTC

N1 RTC gate is anticipated to be completed by summer 2018.

Installation of a 2400mm manhole and underground pipe was completed in 2017. Steel gate installation will start in the first quarter of March 2018.

Tunneling group is currently working with EPCOR Distribution and Transmission Inc. to bring power to the site.

Forecasted project completion is summer 2018.

2018 – South Edmonton Sanitary Sewer (SESS) Stage SA1a

Construction works for both in-house tunneling and external components have been

SA1a is in service and surface restoration will continue until mid-2018.

completed and put into service by December 2017.

Surface restoration work is expected to be completed by mid-2018.

2018 – South Edmonton Sanitary Sewer (SESS) – Stage SA1c RTC Gate

Construction of the SA1c RTC gate is completed and is expected to enter service by second quarter 2018.

Construction of SA1c RTC gate is complete as of October 2017.

Project commissioning is projected to take place by the second quarter of 2018.

2018 – West Edmonton Sanitary Sewer (WESS) W3,4,5 Functional Planning Study

The W3-4-5 functional planning study will be completed in 2018 and will provide alignment and pipe sizing recommendations. The study will also finalize the integration needs of W3-4-5 segments with upcoming LRT West project.

A functional planning study will be completed in 2018 to refine the concept for W3, 4, 5 segments.

Completion of the functional planning study is expected by end of 2018.

2018 – South Edmonton Sanitary Sewer (SESS) SW1 PS Upgrade Concept Planning Study

A planning study for the proposed SW1 Pump Station upgrade will be conducted to finalize the pump upgrade requirements. Procurement of consultant is completed.

The SW1 pump station upgrade concept planning study, to occur in 2018, will determine the staging and upgrade requirements of the upgrade.

The concept planning results/recommendations from the study will act as the basis to move forward with the pump station upgrade.

The study is expected to finish by end of 2018.

2018 – SSSF Financial Model Update- Phase 2

The model is anticipated to be delivered for testing in the first quarter of 2018. The final model and technical report will be delivered to the City in the 2nd quarter of 2018.

2018 – Governance Review

Most of the work towards completion of the Governance Review is planned to be completed in 2018. The review will speak to the restructuring of the SSSF committees.

2018 to 2019 – South Edmonton Sanitary Sewer (SESS) Stage SW4

SW4 tunneling has been ongoing since 2015 and will service the expanding Southwest region.

Construction of the SW4 tunnel is ongoing. 80% or 1.2 km of tunneling is completed to date. Overall project is anticipated to reach completion by December 2019.

2018 to 2020 – North Edmonton Sanitary Trunk (NEST) Stages NC2 & NC3 - Phase 2

NC2/NC3 phase 1 construction is completed and is expected to be in service by July 2018. Phase 2 tunneling is in progress and is expected to continue until 2020.

Phase 1 construction of the NEST NC2/NC3 was completed in 2017 and is planned for commissioning by July 2018.

Phase 2 construction for the remaining 2,340 m section is currently in progress. 440m of tunneling has been completed.

The project is expected to be commissioned by 2020.

2018 to 2020 – South Edmonton Sanitary Sewer (SESS) Stage SA10a with Pump Station & Force Main

SA10a, anticipated for completion in 2018, will provide service to southeast industrial areas and ultimately connect to downstream SESS trunks.

Tunneling works for Stage SA10a is scheduled to start by the first quarter of 2018.

Procurement of external contractor is in progress.

Project completion is expected by second quarter of 2020.

2019 to 2022 – West Edmonton Sanitary Sewer (WESS) Stage W3,4,5 and Connection Structure to the 1650mm Combined Trunk

The WESS W3,4,5 functional planning study will provide recommendations for sizing and staging of the tunnel. Project completion is expected by 2022.

WESS W3,4,5 segments are proposed to be connected to the 1500-1650 mm combined trunks along 142 Street to 125 Street to ultimately increase conveyance capacity of the sewer network from West Edmonton through downtown and Gold Bar Waste Water Treatment Plant (GBWWTP).

Construction of a 2,600 m long, 2340 mm diameter tunnel was originally recommended to start in 2022; however, constructing them sooner will help relieve an existing bottleneck in the system.

These segments are expected to provide sufficient storage to support new developments in the area.

Project is planned for completion by 2022.

2020 – South Edmonton Sanitary Sewer (SESS) Stages SW1 PS Upgrade

The SW1 pump station is planned for an upgrade to 400 L/s capacity by 2020.

Based on the projected pumping requirements, the SW1 Pump Station will be upgraded in several stages depending on the rate of development within the SESS service area.

The concept planning phase will be completed by the end of 2018, and upgrades will be completed by 2020.

2020 to 2021 – South Edmonton Sanitary Sewer (SESS) Stage SW5

SW5 construction is expected to finish by 2022.

Stage SW4/SW5 was originally proposed as a combined trunk to provide wet weather storage capacity for flows generated from the Heritage Valley and Windermere areas.

Based on updated timings from the recent SSSF integrated planning study, construction of SW5 is expected to start by 2020 and project completion is anticipated by 2022.

2020 to 2022 – South Edmonton Sanitary Sewer (SESS) Stage SA2 & RTC

The three year construction of the SA2 section is planned to begin in 2020 and will ultimately provide conveyance for the SESS system.

Stage SA2 is a 1,700 m long, 2340 mm diameter trunk planned to connect the SA1 trunk to the Millwoods storage tunnel (SA3 & SA4). This segment provides additional storage; however, the primary purpose is conveyance to the SA system and must be constructed to convey flows to SA5/SA6.

The SA2 RTC gate structure is expected to regulate flows at the downstream end of the SA2 trunk to manage and optimize storage/conveyance of the SA system.

Construction of the SA2 segment is planned to start in 2020 with a three year construction target.

2021 to 2023 – South Edmonton Sanitary Sewer (SESS) Stage SA5

SA5 will relieve high flows in existing trunks and is projected for construction from 2021 to 2023.

Stage SA5 is a 1,500 m long, 2920 mm storage/conveyance segment that will relieve the 99th Street trunk by discharging SESS flows to the Burnewood Trunk.

The project is anticipated to start in 2021 and completion by 2023.

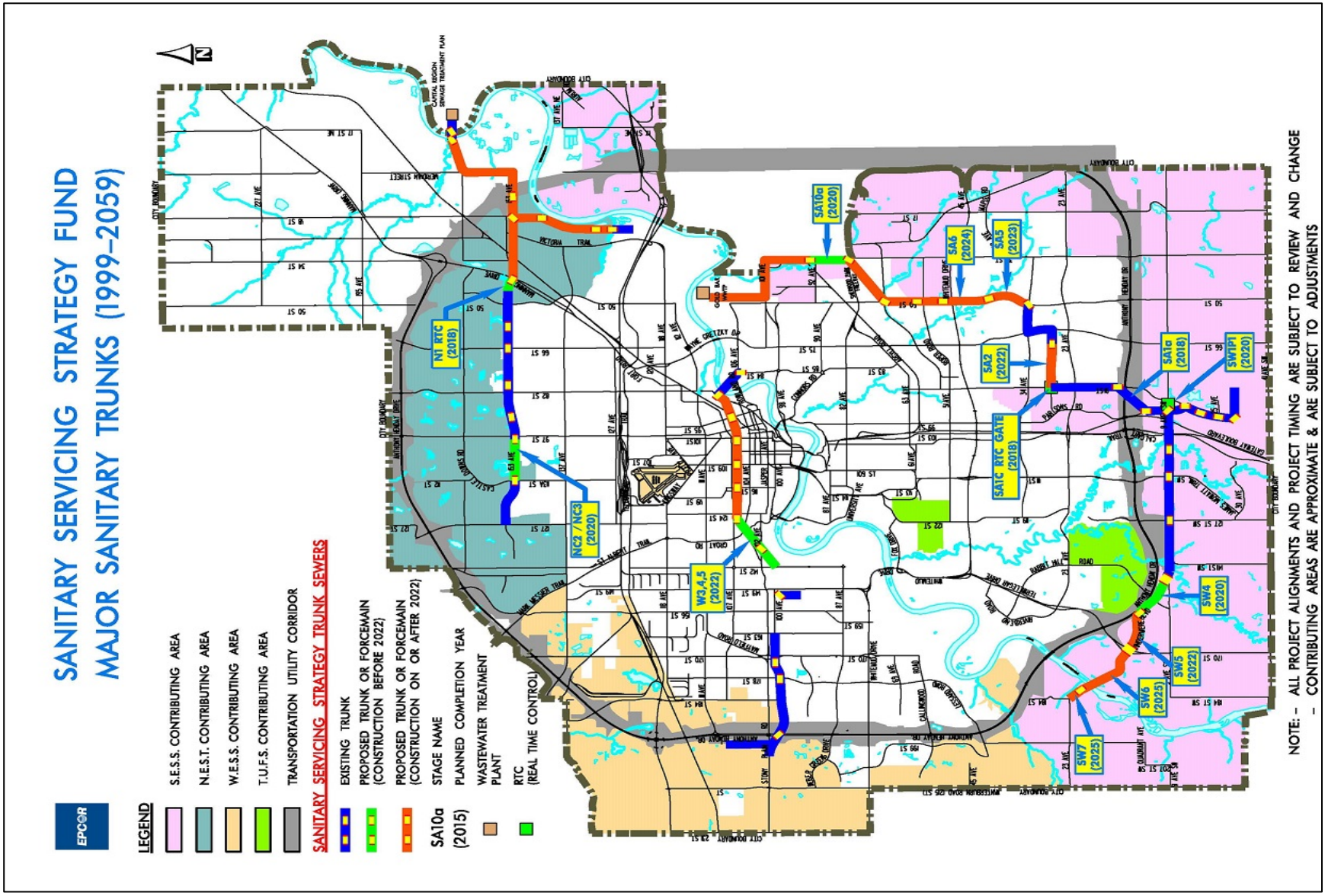

Figure 2 – SSSF Major Sanitary Trunks Map

4.0 FUND BALANCE

4.1 TWENTY FIVE YEAR HISTORY AND PROJECTION

The Integrated Planning Study provided recommendations for cost saving and efficiency.

In 2017, the City of Edmonton, in coordination with EPCOR and ACRWC, worked with ISL Engineering on the Integrated Planning Study. Based on the greater system functionality and cost savings, the Integrated Planning Study suggests that the SESS flow should no longer be treated at ACRWC and instead at Gold Bar WWTP. In addition, TUFS was identified as no longer being required and has been removed from the SSSF program. The new segment timings and proposed Sanitary Servicing Strategy have been incorporated into the financial model. The latest projection in the financial model shows a shifting of the negative fund balance from 2034 to 2022, as compared to the 2016 forecast. The shift is primarily a result of incorporation of the recommendations of the Integrated Planning Study completed in 2016.

The financial model was updated and several scenarios were developed to determine future revenue rates.

The scenario analysis incorporated the changes noted above and in addition to update of other financial variables required a 6% rate increase in 2018 and 5.5% increase in each year from 2019 to 2022. The 5% - 6% rate increases were slightly higher than historical increases but they were considered necessary to align with the planning study and to maintain the health of the reserve fund. It is critical that rate adjustments occur in advance of the start of construction to ensure funds are available and to avoid disruption in construction activities.

Alternate scenarios reflecting a lower 2018 rate increase and rescheduling of the Riverview segments were prepared and presented to the Management Committee through a revised motion. Following consideration of the proposed and alternate scenarios, a 4% rate increase was approved by the joint committee and subsequently by City Council for 2018. The joint committee acknowledged the potential need for greater future rate increases to build up positive cash flow and to fund the required development.

The following assumptions have been adopted in the current version of the financial model as provided by the City of Edmonton Urban Form and Corporate Strategic Development Department and Finance and Treasury Department:

a) Population projections were based on the 2012-2047 Capital Region Traffic population and employment forecasting data.

b) City of Edmonton Land Supply reports for low density residential and industrial.
c) City of Edmonton Employment and Population forecasts by traffic zone.
d) City of Edmonton NSP/NASP statistics
e) Expenditure Inflation Rate of 3% compounded annually.
f) Economic inflation rate of 3%
g) Interest earning rate of 1% per annum.

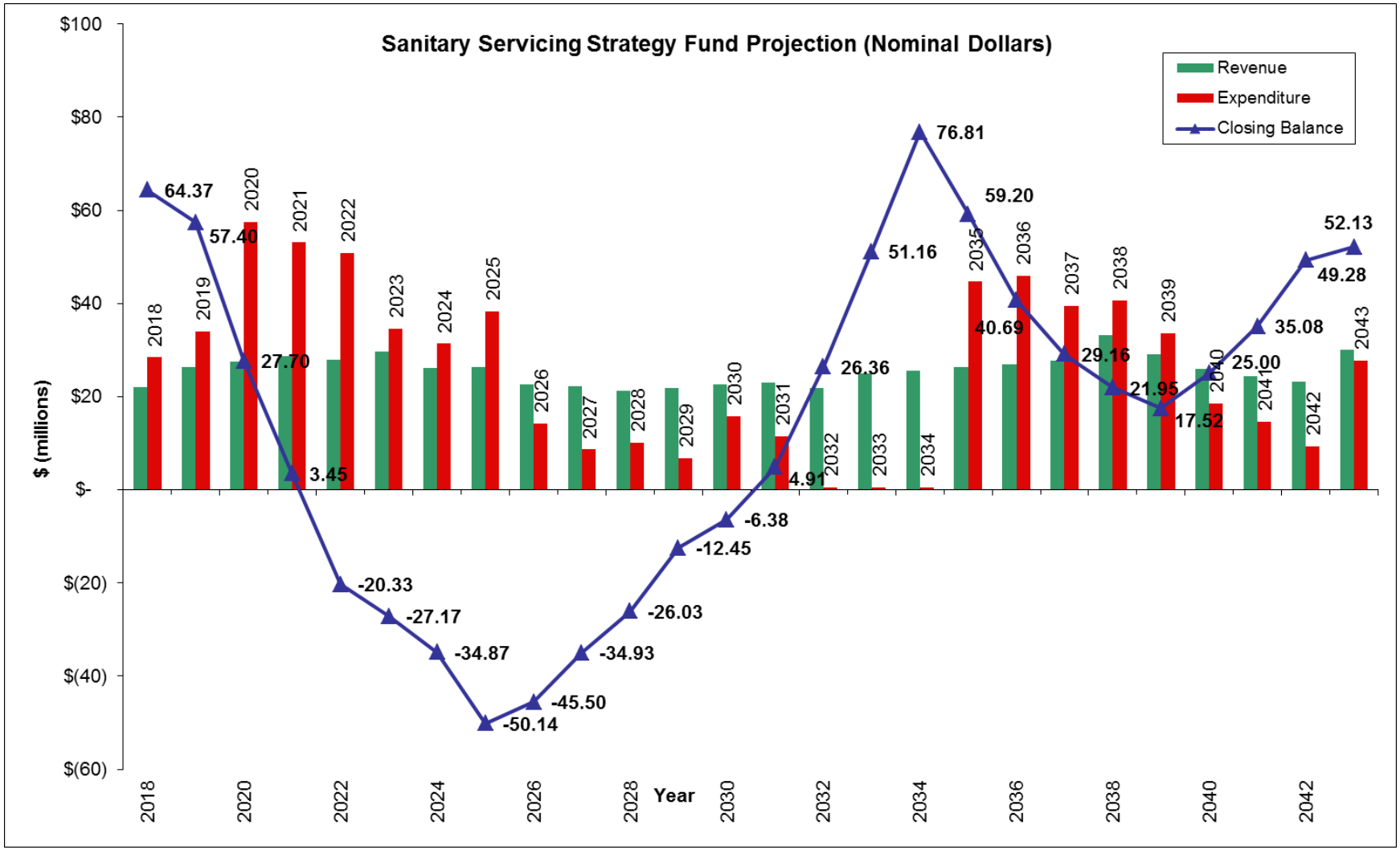

Figure 3 – SSSF 25 Year Projection

4.2 FIVE YEAR PROJECTION

Table 1 on page 27 shows the five year revenues and expenditures (2018-2022) projections for the Sanitary Servicing Strategy Fund based on the currently updated financial model.

REVENUES

*The closing Fund balance as of December 2017 was **$70.0 million**, which is the opening balance for 2018.*

Opening Balance for 2018 – The SSSF closing reserve balance as of December 31, 2017.

Revenues and Expenditures for 2017 – These are based on actual values recorded.

Interest (2018-2022) – Interest rate assumed at 1% per annum was used.

Utility Contribution – This amount represents contributions from the Sanitary Utility for diversion of sanitary flows from serviced City lands to the new trunk system constructed under the SSSF. These lands are located in Mill Woods and Castle Downs. The amount is calculated based on an estimate of the SSTC these lands would have to pay. Based on results of the lot counts conducted in 2000, the Sanitary Utility would make annual contributions of $2.6 million to the SSSF until 2014. In March 2006, City Council approved the recommendation to change the Utility Contribution amount to $1.3 million commencing on January 1, 2007. The contributions will be in place till 2024 as per current assessment.

Sanitary Sewer Trunk Charge – The SSTC is collected when an application is made for a development permit or sanitary service connection. This charge applies to all new and re-developments in the City.

The following are the SSTC rates for 2017 and 2018:

Type of development	2017	2018
Single-family/Duplex Residential	$1,566/dwelling	$1,629/dwelling
Secondary, garage & garden suite	$693/dwelling	$721/dwelling
Multi-family Residential	$1,118/dwelling	$1,163/dwelling

Commercial, Industrial, & Institutional	$7,832/ha	$8,148/ha

Estimated SSTC revenues from 2018 to 2022 were based on the current development growth projections provided by Urban Form and Corporate Strategic Development Department.

Expansion Assessment (EA) – The EA is an area-based assessment that is collected at the time of subdivision, development permit application, or sanitary service connection application. The EA applies to those areas of the City that did not have an approved Neighborhood Structure Plan (NSP) before January 1, 1999.

There is 4% increase for 2018 revenue rates for both SSTC and EA. The 2018 rates are as follows:

Contributing Area	**2017**	**2018**
North Edmonton Sanitary Trunk (NEST)	$22,367/ha	$23,270/ha
South Edmonton Sanitary Trunk (SESS)	$22,367/ha	$23,270/ha
Terwillegar University Farm Sewer (TUFS)	$22,367/ha	$23,270/ha
West Edmonton Sanitary Sewer (WESS)	$27,962/ha	$29,091/ha

EXPENDITURES

Estimated Construction Costs – Construction cost estimates for the 2018 to 2022 time frame were based on the updated segment costs provided as a result of the recent planning studies.

SANITARY SERVICING STRATEGY FUND - 5 YEAR PROJECTION

	2017 (Actual)	2018	2019	2020	2021	2022
Opening Balance	$ 65,859,443	$ 70,045,881	$ 64,369,909	$ 57,404,225	$ 27,701,298	$ 3,454,815
Interest Earned	642,788	668,735	605,841	423,411	155,006	(765,257)
Sanitary Utility Conribution	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000
Sanitary Sewer Trunk Charge	10,674,707	12,243,458	14,921,676	15,362,381	15,972,603	15,506,330
Expansion Assessment	6,034,835	8,549,317	10,222,042	10,791,599	11,443,483	11,075,306
Total Revenues	18,652,331	22,761,510	27,049,560	27,877,390	28,871,092	27,116,378
Estimated Construction Costs	(14,038,325)	(27,937,482)	(33,515,243)	(57,080,317)	(52,617,574)	(50,399,730)
Preliminary Studies	(427,565)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)
Total Expenditures	(14,465,890)	(28,437,482)	(34,015,243)	(57,580,317)	(53,117,574)	(50,899,730)
Closing Reserve Balance	$ 70,045,884	$ 64,369,909	$ 57,404,225	$ 27,701,298	$ 3,454,815	$ (20,328,537)

Construction Costs (Nominal Dollars)

	Total 2018 - 2022	2018	2019	2020	2021	2022
SA1a	1,009,707	1,009,707	-	-	-	-
SA10a (Incl PS)	26,490,563	5,000,000	10,655,245	10,835,318	-	-
NL1 PS Concept/Pipe Repairs	-	-	-	-	-	-
SW4	17,103,483	8,480,085	8,623,398	-	-	-
NC2/NC3	33,254,803	11,000,000	12,202,800	10,052,003	-	-
SA1d	-	-	-	-	-	-
N1 RTC	1,243,705	1,243,705	-	-	-	-
SA1b/c RTC	1,203,985	1,203,985	-	-	-	-
W3-4-5 Including Connection	56,984,171	-	2,033,800	15,511,284	19,554,310	19,884,777
SW1 PS1	5,170,428	-	-	5,170,428	-	-
SW5	33,432,061	-	-	15,511,284	17,920,777	-
SA2	29,617,445	-	-	-	15,142,488	14,474,957
SA5	16,039,996	-	-	-	-	16,039,996
Total	$ 221,550,347	$ 27,937,482	$ 33,515,243	$ 57,080,317	$ 52,617,574	$ 50,399,730

Table 1 – Five Year Revenues and Expenditures Projection

4.3 STATEMENT OF FUND ACTIVITIES & BALANCE

The Statement of Fund Activities and Balance for 2017 are shown on Table 2, while Figure 4 shows each revenue component as a percentage of the total 2017 revenues. Figure 5 depicts the historical SSSF revenue breakdown, whereas Figure 6 shows the historical SSSF expenditures.

REVENUES:

Total revenues for 2017 were $18.7 million which is lower than $20.8 million collected in 2016.

- **Sanitary Sewer Trunk Charge (SSTC)** – For 2017, SSTC revenues totaled $10.7 million, lower by $2 million than the $12.7 million collected in 2016. Single-family/duplex developments contributed $7.5 million in 2017 versus $ 6.5 million in 2016. For the multi-family residential, total collection this year was $2.0 million which is $2.7 million lower than 2016. The remaining SSTC revenues, $1.1 million came from commercial, industrial, and institutional sector, is $0.5 million lower than 2016.
- **Expansion Assessment (EA)** - For 2017, the total EA collected was $6.0 million, compared to the $6.3 million collected in 2016.
- **Utility Contribution** – Total Utility contribution in 2017 was $1.3 million.
- **Interest Earned** – Total interest earned during 2017 was $0.60 million compared to $0.5 million in 2016.

EXPENDITURES:

The largest expenditure item in 2017 was $5.8 million for the construction of NEST (Stage NC2 & NC3). Another $5.6 million was spent on the construction of SESS (Stage SW4), while the remainder was spent on SESS (Stage SA1A), SESS (SA10A), NEST (Stage N1 RTC Gate) as well as several planning studies.

Sanitary Servicing Strategy Fund
Statement of Fund Activities and Balance
For the Period Ending December 31, 2017

	2016 Actual	2017 Actual	2017 Budget	2017 Variance
REVENUES				
Sanitary Sewer Trunk Charges - Single/duplex revenue	6,455,391	7,544,108	4,976,012	(2,568,097)
Sanitary Sewer Trunk Charges - Multi family revenue	4,717,331	2,047,421	2,984,606	937,185
Sanitary Sewer Trunk Charges - Commercial/industrial/institutional	1,528,982	1,083,178	1,408,841	(325,663)
Expansion assessment	6,272,602	6,034,835	7,284,658	(1,249,823)
	18,974,306	**16,709,542**	**16,654,116**	**55,426**
Sanitary Utility Contribution	1,300,000	1,300,000	1,300,000	(0)
Interest Earned	499,718	642,788	818,286	(175,498)
Total Revenues	**20,774,024**	**18,652,331**	**18,772,402**	**(120,071)**
EXPENDITURES				
NEST NC2 & NC3	2,887,105	5,840,268	8,665,795	(2,825,527)
N1 RTC Gate	76,291	590,304	623,709	(33,405)
SESS SA1A	4,098,618	774,165	378,313	395,852
SESS SA1C RTC Gate	6,728	514,287	(6,728)	521,015
SESS SA1D	3,500,000	-	-	-
SESS SA10A	536	728,306	39,370	688,936
SESS SW4	5,120,470	5,566,349	23,618,557	(18,052,208)
WESS W1	28,415	23,949	(28,508)	52,457
WESS W13	(56,412)	695	51,672	(50,976)
WESS W14	-	-	(11,857)	11,857
Preliminary Studies	539,221	427,566	(811,782)	1,239,349
Future Projects	-	-	14,533,764	(14,533,764)
Completed Projects	(357,394)	-	-	-
Total Expenditures	**$15,843,578**	**$14,465,890**	**$47,052,306**	**$32,586,416**
Opening Balance	**$60,928,997**	**$65,859,443**	**$65,859,443**	-
Excess of Revenues over Expenditures	**$4,930,446**	**$4,186,441**	**($28,279,904)**	**$32,466,344**
Ending Balance	**$65,859,443**	**$70,045,884**	**$37,579,539**	**$32,466,344**

Table 2 – Statement of Fund Activities and Balance

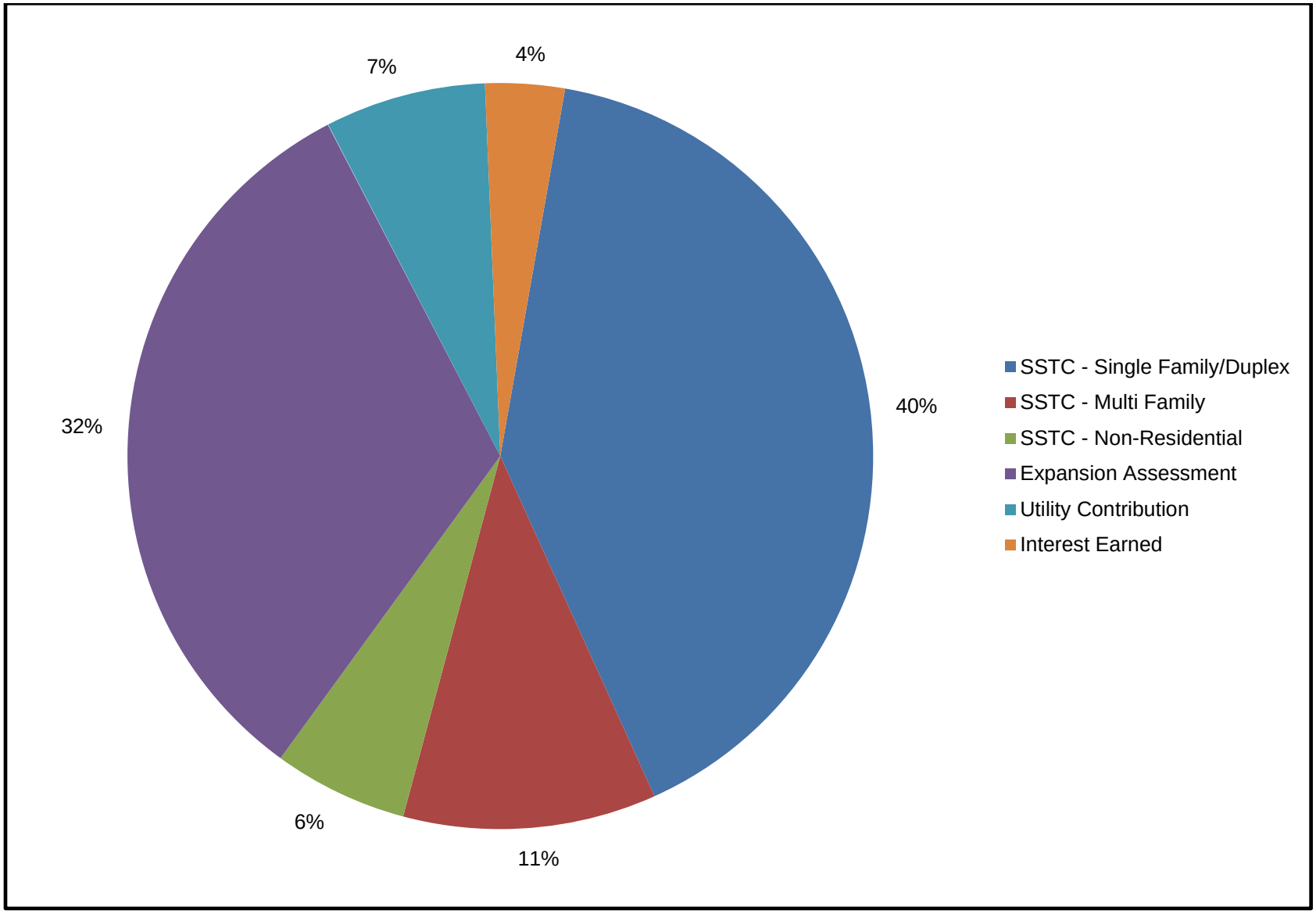

Figure 4 – 2017 SSSF Revenues ($18.7M)

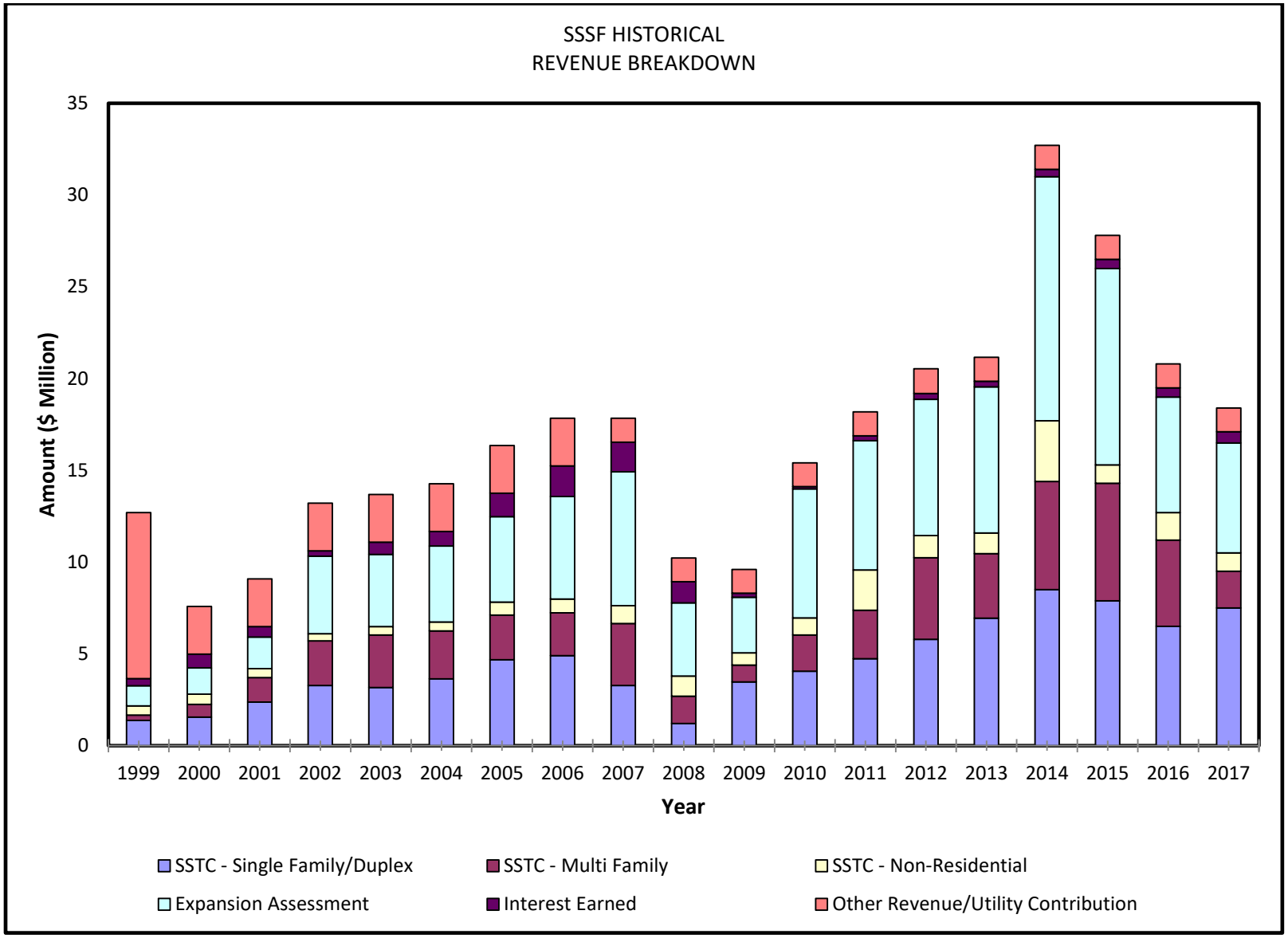

Figure 5 – SSSF Historical Revenue Breakdown

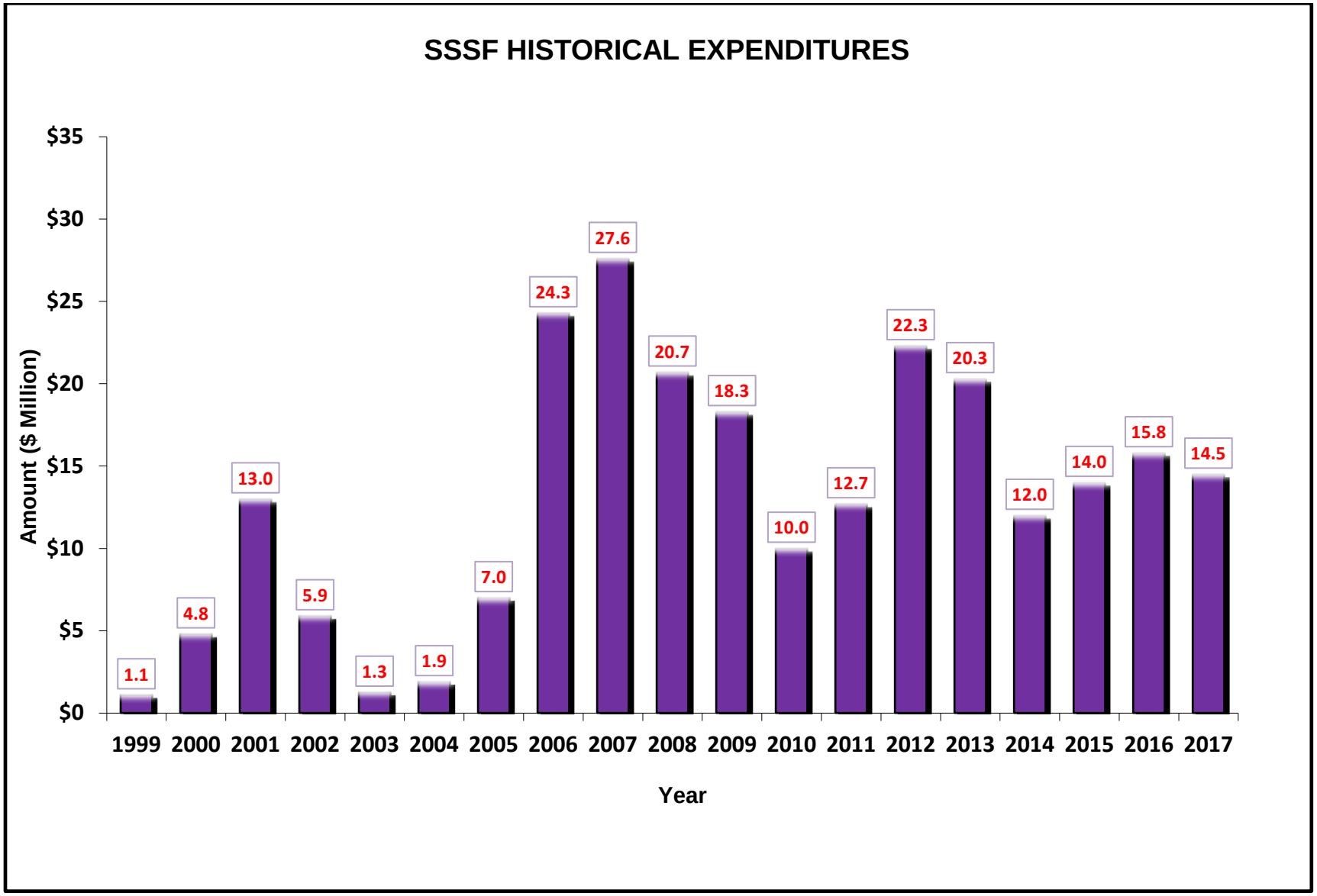

Figure 6 – SSSF Historical Expenditures

For more information, visit our website:

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