

# Community Energy Funding Strategy

Presented to Priorities Committee  
March 12, 2019

LLS.12920054

# Agenda

- History
- Current State
- Funding Options
- Recommendation

# History



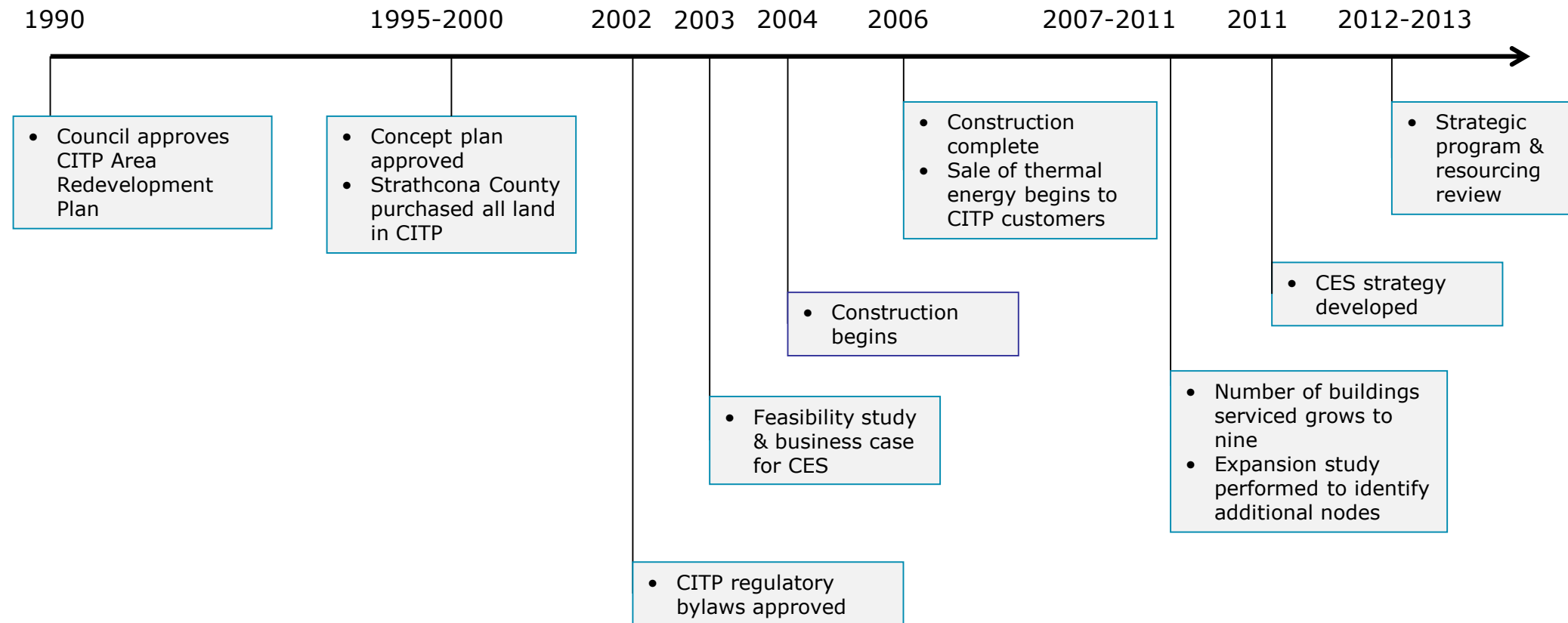
# Why community energy?

- Specific attributes of Centre in the Park (CITP) made district heating an attractive solution:
  - Lifecycle of boilers in municipal buildings – improves building energy efficiency
  - Guaranteed customer base from municipal buildings
  - Load smoothing – varied building uses increase system efficiency
  - High profile area that demonstrated leadership – aligned well with the County's Strategic Plan and sustainability platforms
  - Adaptability – provides a platform for future opportunities such as alternative fuels
  - Pilot – presented an opportunity for the County to put into practice its sustainability goals

# Community energy benefits

- Environmental
  - Efficient production and distribution = reduction of 1,100 tonnes of greenhouse gas (GHG) per year at full build-out
  - 18% reduction in GHGs
  - Healthier buildings
  - Possible further reductions from fuel switching
- Social & economic
  - Fuel switching could protect from volatile energy prices
  - Energy dollars stay in the community
  - Resilience
  - Demonstrate leadership
  - Political and economic context in 2002

# CITP & community energy system timeline





# Current state review



Source: Aerial  
photo 2018

# Original business case vs current state

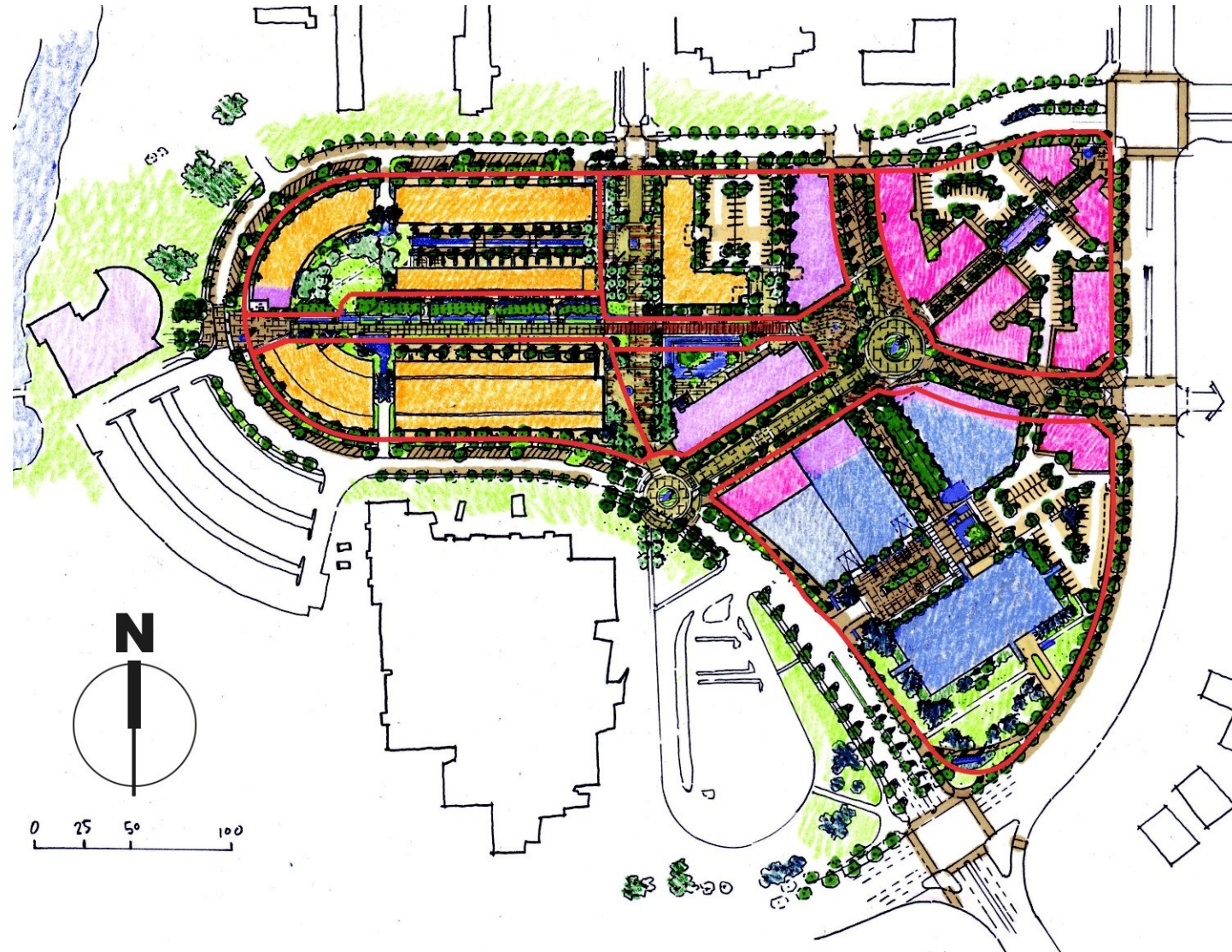
- A lack of development has negatively impacted the program

Item	Planned <sup>1</sup> (2004)	Actual (2018)	Actual vs. Planned (% diff)
Number of buildings	23	11	(52%)
Annual volume (MWH)	19,990	12,100	(39%)
Capital investment	\$5,509,000	\$9,501,358	72%
Annual revenues	\$1,333,600	\$826,556	(39%)
Annual total expenses (including amortization)	\$1,293,250	\$1,422,352	10%

1) Feasibility study for Strathcona County Community Energy System, May 2014



# Planned



Source:  
Development Guidelines 2003



# Actual



Source: Aerial  
photo 2018

# Buildings not connected to system

- St. Theresa Catholic School, formerly Archbishop Jordan Catholic High School, and Salisbury Composite High School
  - These two buildings alone represent 20% of the customer load that was expected for the system that will not be connected over the life of the system
- Centre in the Park was originally planned for completion in 2008 but delays in development due to the economic downturn has lead to at least 10 years of delayed customer connections to the system



# Financial impact

- The community energy system (CES) is not self-supporting and draws upon contributions from the utility reserve in order to cover annual net income losses and capital investments (2018 - \$689,310)
- With the planned connections in the next five years, the CES will require financial contributions annually until 2027. This equates to approximately \$5.5M from 2019 - 2027 on top of the \$8.6M contribution that has been made to date from the utility reserve, for a total of \$14.1M



# Financial impact

- Given that the CES cannot fully fund its operations and consistently relies on funding from the utility reserve, it is desired to both:
  - Improve on its operational scale and asset utilization; and
  - Review funding mechanisms to ensure its financial sustainability
- Each new connection does provide a positive, yet small, cash contribution to the CITP system
- Long term perspective – turns cash flow positive once all the capital financing obligations are completed (year 26)

# Funding options

1. Remain status quo and continue to draw from the utility reserve for annual shortfalls
2. Fund annual shortfalls through municipal taxes to protect utility reserves from further impacts



# Option 1 : Utility reserve funding

Pros	Cons
Relatively new infrastructure in County	Utility rate payers are only a portion of the community at large
Reserve balance is sufficient to offset current capital financial obligations	Less financial capacity to deal with utility infrastructure needs
No impact on tax rate for residents	Utility reserves have been generated by water, wastewater and storm rates

# Option 2 : Municipal tax support

Pros	Cons
Entire community contributes to a program that has community benefits (lower GHG emissions, supports County infrastructure)	Impact on tax rate for residents (0.32% increase for 2019)
Utility reserves were intended to be an interim financing solution until the project was self sustaining	Less financial capacity to deal with other priorities in the County



# Questions?