



City of Arvada

City Council Agenda

MARCH 25, 2025

Councilmembers:

Lauren Simpson, Mayor
Randy Moorman, Mayor Pro-Tem
Shawna Ambrose, District 2
Sharon Davis, At large
Bob Fifer, District 4
John Marriott, District 3
Brad Rupert, At large

Staff Members Usually Present:

Linda Haley, Acting City Manager
Don Wick, Deputy City Manager
Rachel Morris, City Attorney
Jacqueline Rhoades, Director of Public Works
Jessica Morales, Interim Director of Utilities
Jessica Garner, Director of Community & Econ. Dev.
Bryan Archer, Director of Finance
Gabiella Bommer, Director of Human Resources
Ryan Stevenson, Director of Vibrant Community & Neighborhoods
Rachael Kuroiwa, Director of Communications & Engagement
Ed Brady, Chief of Police
Kristen Rush, City Clerk

Info: 720-898-7550

THIRD FLOOR CONFERENCE ROOM EXECUTIVE SESSION

5:00 P.M.

Legal Advice, Pursuant to CRS 24-6-402(4)(b) Related to Recent Land Use Bills

WORKSHOPS CITY COUNCIL CHAMBERS 6:00 P.M.

1. Call to Order/Roll Call of Councilmembers
2. Workshops
 - A. Acquisition of Street Light Infrastructure
 - B. Staff Updates
3. Adjournment



REPORT TO CITY COUNCIL WORKSHOP

AGENDA ITEM
2.A.

TO: THE HONORABLE CITY COUNCIL

DATE: March 25, 2025

SUBJECT: Acquisition of Street Light Infrastructure

Report in Brief

On November 5th and 6th, 2020, the city's leadership team met for a strategic planning session. One of the outcomes resulted in the leadership team creating an Action Initiative Plan (AIP) to study Xcel-owned streetlights as a possible strategic acquisition for the City. In the spring of 2023, the City issued an RFP for services related to streetlight acquisition. As a result of this process, Tanko Lighting was selected and contracted as the vendor to work on this project.

In 2024, Tanko completed an audit and inventory of all the Xcel-owned streetlights in the City of Arvada. Tanko then used this inventory to conduct a financial feasibility analysis and determined that the economic case existed for the City to acquire the streetlight infrastructure from Xcel.

Background

In November 2020, the city's leadership team created an AIP to study the Xcel-owned streetlights as a possible strategic acquisition for the City. The City contracted with Tanko Lighting to perform a complete inventory of the Xcel-owned infrastructure. Tanko conducted an in-person field audit of each streetlight in the City owned by Xcel Energy, and documented over 7000 streetlights in the City. Using this inventory, Tanko performed a financial analysis and determined that there is a positive economic benefit to the City acquiring the streetlight inventory.

The Tanko Lighting team conducted the following tasks to determine the economic analysis:

- Streetlight Inventory Analysis (based on Tanko's completed in-field inventory audit and data reconciliation of the bills)
- Rate Analysis
- Streetlight Ownership Transfer Analysis
- Light Emitting Diode (LED) Conversion Analysis
- Streetlight Maintenance Analysis
- Financing Analysis
- Funding Source Analysis
- Rebate Analysis
- Conduit Value Analysis – the value (use of it and importance).

Some of the benefits of pursuing an acquisition include:

- Owning the vertical infrastructure provides opportunities for other possible uses of the poles
- Reduced operating costs
- Reduced maintenance costs
- Provides the opportunity to consider using smart tools to control the brightness and dimness of the streetlights on demand
- Improved response to customer service issues, such as streetlight outages in a more timely manner
- Overseeing the maintenance aspect of owning the streetlight infrastructure

Some of the concerns about owning the streetlight infrastructure include:

- Upon acquisition, taking immediate responsibility for the infrastructure
- The City will be responsible for the operation and maintenance of the system

- Actively manage the system
- Ongoing relationship with Xcel Energy

Summary of Tanko's findings:

Option 1: Ownership Transfer from Xcel to City, Ongoing Maintenance

- With this option, ownership of the City's streetlight system will be transferred from Xcel to the City and the City would be responsible for maintaining the entire streetlight system via either internal staff or a third-party qualified contractor. The standalone streetlight poles would be fully transitioned to City ownership. The distribution poles would remain owned by Xcel, but the arms and fixtures would be fully transitioned to City ownership.
- Option 1 is estimated to cost the City approximately \$5.4M upfront for ownership and labeling. This option results in approximately 72% savings in its first year. The payback period is approximately 5.11 years based on energy and maintenance savings. Please note that, while this option does not include an LED conversion, the City will still save on energy costs because the transition to a municipal-owned rate will eliminate the significant adders and fees that the City is paying for based on its current rate.
- The City would save an estimated total of \$20,670,100 based on energy and maintenance savings over 20 years.

Option 2: Ownership Transfer from Xcel to City, LED Conversion, Ongoing Maintenance

- With this option, ownership of the City's streetlight system will be transferred from Xcel to the City and the City would convert all remaining High Pressure Sodium (HPS) streetlights to LED, as well as be responsible for maintaining the entire streetlight system via either internal staff or a third party qualified contractor. The standalone streetlight poles would be fully transitioned to City ownership. The distribution poles would remain owned by Xcel, but the arms and fixtures would be fully transitioned to City ownership.
- Option 2 is estimated to cost the City approximately \$6,681,423 upfront for ownership, labeling, and conversion. This option results in approximately 83% savings in its first year. The payback period is approximately 5.43 years based on energy and maintenance savings.
- The City would save an estimated total of \$24,920,888 based on energy and maintenance savings over 20 years.

Option 3: Status Quo (Baseline): Continued Utility Ownership – No Action

- With this option, the City would continue with existing operations and there would be no change to the City's streetlight system. Xcel will continue to own, operate, and maintain the existing system in this scenario. The City will have no direct oversight of the fixtures or design of the system, nor control over the efficiency with which they are maintained. Under the best-case option, the City's energy and maintenance costs would remain the same in future years.

If the City Council approves moving forward with the acquisition, the City will contract with Tanko Lighting who will guide the City through the acquisition process with Xcel, and will assist the City in setting up the maintenance program to ensure a smooth transition of ownership.

Strategic Alignment

The streetlight acquisition project is in alignment with the direction of the November 2020 AIP.

Next Steps

- Obtain City Council feedback regarding the acquisition proposal
- Proceed with a further exploration of Option 2, which includes Xcel streetlight ownership transfer to the City, LED Conversion, and ongoing maintenance, as the estimated Total Annual and 20-year savings are significantly greater than

the other options. While Option 2 has higher initial upfront costs and a similar payback period to Option 1, the City will see higher long-term savings with Option 2.

- Proceed with the acquisition phase of Tanko Lighting's existing contract.

Prepared by:
Don Wick, Deputy City Manager

Reviewed by:

Approved by:

Jacqueline Rhoades, Public Works Director	3/10/2025
Bryan Archer, Director of Finance	3/10/2025
Tammy Hedlund, Legal Specialist	3/10/2025
Kelsy Sargent, Assistant City Attorney	3/11/2025
Don Wick, Deputy City Manager	3/11/2025
Rachel Morris, City Attorney	3/12/2025
Linda Haley, Acting City Manager	3/12/2025

Enclosure, exhibits & attachments required to support the report



Arvada, CO Street Light Acquisition Project

Presentation to
City Council Workshop
March 25, 2025



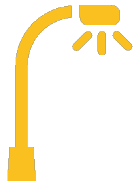
Jason Tanko
Chief Executive Officer



History of Street Acquisition Project

- **Nov 2020 Leadership Team Strategic Planning Process**
- **An action initiative plan (AIP) was developed**
- **RFP Issued for professional services**
- **Tanko was selected**
- **Structure of process included decision gates**
- **Tanko completed asset inventory and financial analysis**
- **Decision gate to move forward**

Who is Tanko Lighting?



**Sole Focus
Municipal Streetlighting
Consultant**



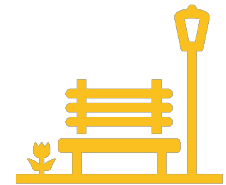
**928,000+ Streetlights
In Contract**



**523,000+ Streetlight
Acquisitions**



**80,000+ Fixtures
Maintained**



**270+ Projects
Nationwide**

Importance of Municipal Streetlighting



- **High costs**
- **Public safety**
- **Control over lighting design**
- **Smart City technologies**
- **Control of right-of-way**
- **Public perception / expectation**

Benefits of Ownership



**Reduced
Costs**



**Control of
Streetscape**



**Improved
Public Safety**

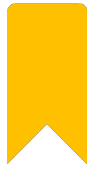


**Smart
Cities**



**Outsourced
Maintenance**

Additional Benefits to City



**Pole Banner
Attachments**



**Dimming / Outage
Notification**



**Gunshot
Detection**



**Small Cell
Service**



**Environmental
Sensors**

Municipal Ownership Trends



Recent CO Acquisitions

- **Boulder**
- **Erie**
- **Windsor**
- **Centennial**

Estimated Municipal Streetlight Acquisitions by State	
State	Estimated Number of Municipal Acquisitions
Colorado	10
California	85
Connecticut	50
Maine	15
Massachusetts	80
New Hampshire	12
New York	10
Rhode Island	30
Texas	4

Project Updates



Phase	Task
Phase 1 – Streetlight Inventory	Task 1a – Data Collection
	Audit Punchlist
	Task 1b – Data Reconciliation
	Task 1c – 12-Month Billing Comparison
Phase 2 – Economic Analysis	Task 2a – Data Analysis
	Task 2b – Development of Economic Analysis Report
Phase 3 - Negotiations - Owner's Agent (If Necessary)	
Phase 4 – Streetlight System Separation and LED Conversion Planning, Analysis, Design, and Implementation Plan	Task 4a – Separation Study Requirements Strategy
	Task 4b – LED Conversion Design
Phase 5 – Streetlight Operations and Maintenance	Task 5 – Streetlight Maintenance Recommendations Report



Completed Phases

- **RFP – Closed July 6, 2023**
- **Tanko Lighting awarded contract**
 - **Responsible for Phases 1 - 2 of the scope of work**
 - **Completed – July 2024**

Project Updates



Remaining Phases

Phase	Task
Phase 3 - Negotiations - Owner's Agent (If Necessary)	
Phase 4 – Streetlight System Separation and LED Conversion Planning, Analysis, Design, and Implementation Plan	Task 4a – Separation Study Requirements Strategy
	Task 4b – LED Conversion Design
Phase 5 – Streetlight Operations and Maintenance	Task 5 – Streetlight Maintenance Recommendations Report

Additional Recommendations

- 1. LED Conversion:**
 - Construction Management (Tanko)
 - Material/Install (contractor)
- 2. Master Plan (Tanko)**
- 3. Maintenance:**
 - Administrative Management (Tanko)
 - In-Field Services (contractor)

Project Updates – Economic Analysis Report Results



Analyzed 3 Options:

- **Option 1: Ownership Transfer from Xcel to City, Ongoing Maintenance**
- **Option 2: Ownership Transfer from Xcel to City, LED Conversion, Ongoing Maintenance**
- **Option 3: Status Quo (Baseline): Continued Utility Ownership – No Action**



Project Updates – Economic Analysis Report Results

		Existing Energy and Maintenance Cost (Option 3 – Status Quo)	New Energy and Maintenance Cost	Savings	% Savings
Option 1 – Xfer Ownership & Maintenance	Annual Energy + Maintenance	\$1,445,671	\$404,227	\$1,041,444	72%
	20-Year Energy + Maintenance	\$31,832,242	\$11,162,142	\$20,670,100	65%***
Option 2 – Xfer Ownership, LED Conversion & Maintenance	Annual Energy + Maintenance	\$1,445,671	\$245,073	\$1,200,598	83%
	20-Year Energy + Maintenance	\$31,832,242	\$6,911,354	\$24,920,888	78%

Recommended Option



Tariff Change | Cost Reduction Per-Fixture



Current
Monthly Cost

\$13.77

*(100w Deco. HPS,
35% of system)*

Ownership Change



New
Monthly Cost
\$2.87

*(40w LED, includes
energy &
maintenance)*

Financial Analysis | Arvada, CO



Project Overview

Total Cost (<i>Ownership + Conversion</i>)	\$6,681,423
20 Year Savings	\$24,920,888
Payback Period (<i>Energy Savings Only</i>)	4.86 years
Payback Period (<i>Energy + Maintenance Savings</i>)	5.43 years

Year 1 Analysis	Existing	New	Savings
Energy Usage [kWh]	3,140,356	1,745,842	1,394,513
Utility Bill Cost	\$1,445,671	\$97,947	\$1,347,724
Maintenance Cost	<i>Included in current Utility Bill Costs</i>	\$147,126	(\$147,126)
Total	\$1,445,671	\$245,073	\$1,200,598

Maintenance Options



Streetlight Operations & Maintenance

- **100% Outsourced via bid**
 - Tanko is an option as consultant to assist with admin
- **Consistent with other CO munis**
- **Efficient governing, not bigger!**



Next Steps



1. **Proceed with Ownership Transfer, LED Conversion, Maintenance (Option 2).**
2. **Proceed with remaining contract phases – 3, 4, & 5.**
3. **Proceed with additional recommendations:**
 - **LED Conversion:**
 - Construction Management (Tanko)
 - Material/Install (contractor)
 - **Master Plan** (Tanko)
 - **Maintenance:**
 - Administrative Management (Tanko)
 - In-Field Services (contractor)

Additional Questions?

<https://tankolighting.maps.arcgis.com/apps/dashboards/f7e598b420054424a9c19ff4d9ac4eb0>

Jason Tanko | Chief Executive Officer
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REPORT TO CITY COUNCIL

AGENDA ITEM
2.B.

TO: THE HONORABLE CITY COUNCIL

DATE: March 25, 2025

SUBJECT: Staff Updates

Report in Brief

The purpose of this workshop is for staff to provide City Council with brief updates on projects and issues that do not require a full workshop.

Prepared by:
Chris Koch, CCO Admin

Reviewed by:

Approved by:

Enclosure, exhibits & attachments required to support the report