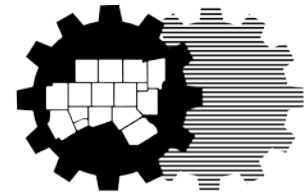


# Building Management Systems:

**Scalable Solutions to Help You Manage What Matters**

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

August 19, 2025



North Central Texas  
Council of Governments



# Welcome & Housekeeping

- Please keep your microphone on mute until the end of the presentations.
- We will have a moderated Q&A at the end of all presentations.
- The workshop slides and recording will be posted on the Conserve North Texas website under News/Events → Event Archive at the link below. Follow-up emails to come.  
<https://www.conservenorthtexas.org/event-archive>
- Please consider donating the value of your time on today's webinar through an in-kind match:  
<https://www.surveymonkey.com/r/XZGBXF5>

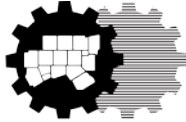
# Workshop Sponsor



NCTCOG receives funding through SECO to work on energy management and efficiency projects within the region. As part of this work, we have provided workshops, webinars, and technical assistance on a variety of energy management, energy efficiency, water efficiency, and renewable energy topics.

# Who We Are

**How do we support energy management efforts for entities across the state?**



North Central Texas  
Council of Governments

NCTCOG is a regional planning agency serving North Texas local governments on a variety of topics. NCTCOG's Regional Energy Management Program is an ongoing effort to identify energy management needs, increase awareness to the local government energy reporting requirements, and provide resources to assist local governments in energy conservation efforts.



SECO partners with local governments, public K-12 schools, public institutions of higher education and state agencies, across Texas to reduce utility costs and maximize energy efficiencies.



# Today's Agenda

1. Speaker Introductions
2. Presentations: Building Management Systems
3. Q&A Session
4. Upcoming Events
5. Resources and Funding



**01**

# Speaker Introductions





# Catherine Callaway

*Associate Partner & Director of Sustainability  
and Building Performance, Kirksey*



# Umair Surani

*Advisor, Energy Solutions, Environ Energy  
Board Member, SPEER & US Proptech Council*






# Greg Wellman

*Managing Partner - Dallas, CMTA*



# Brandon Boyter

*Executive Director of Construction,  
Planning, & Growth, Denton ISD*



**02**

# **Presentations: Building Management Systems**

# What is a Building Management System (BMS)?



## **BMS-Lite**

*Networked control of HVAC, lighting, & air quality*



## **Standard BMS**

*More equipment control, sophistication, some automation*



## **Advanced BAS**

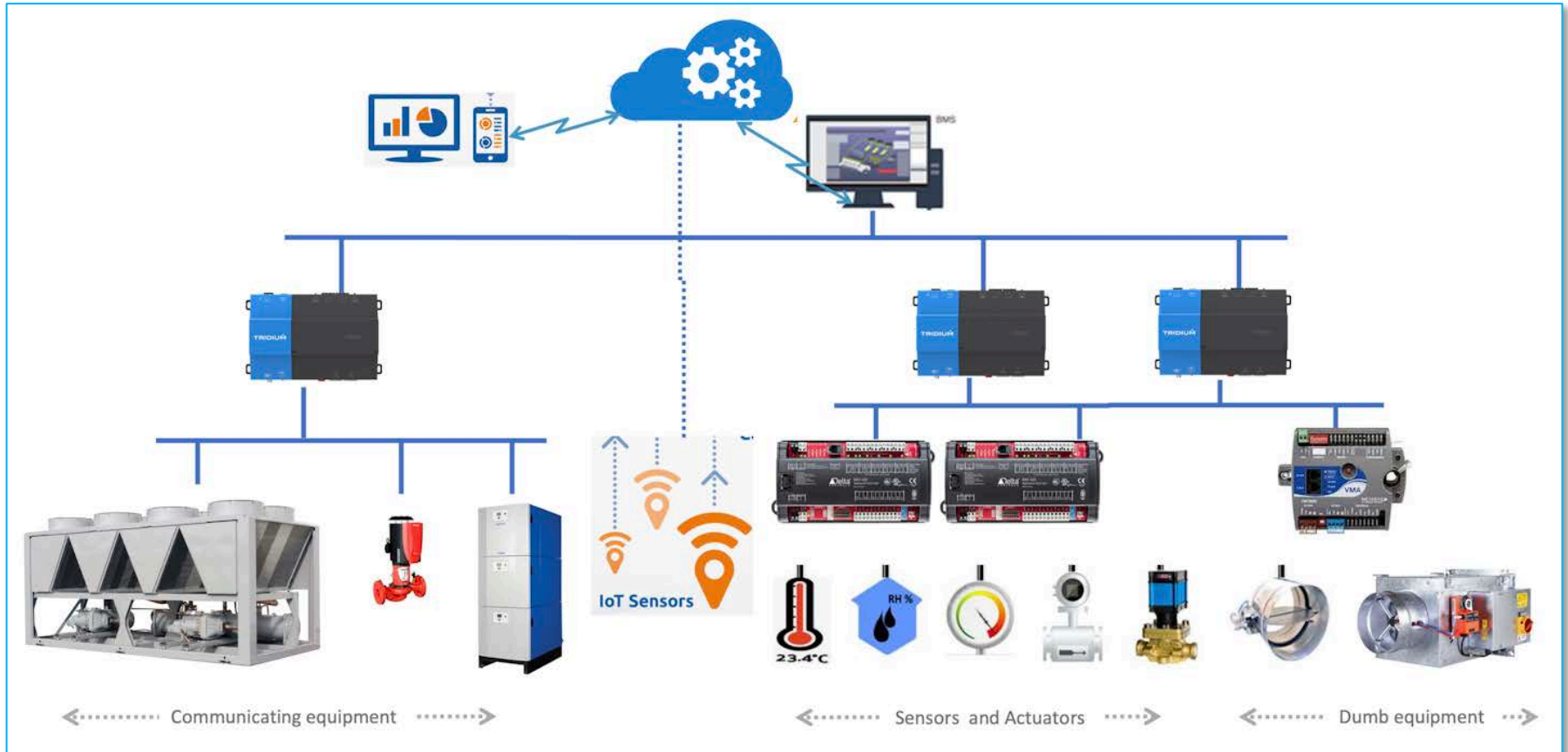
*Advanced with full-automation*



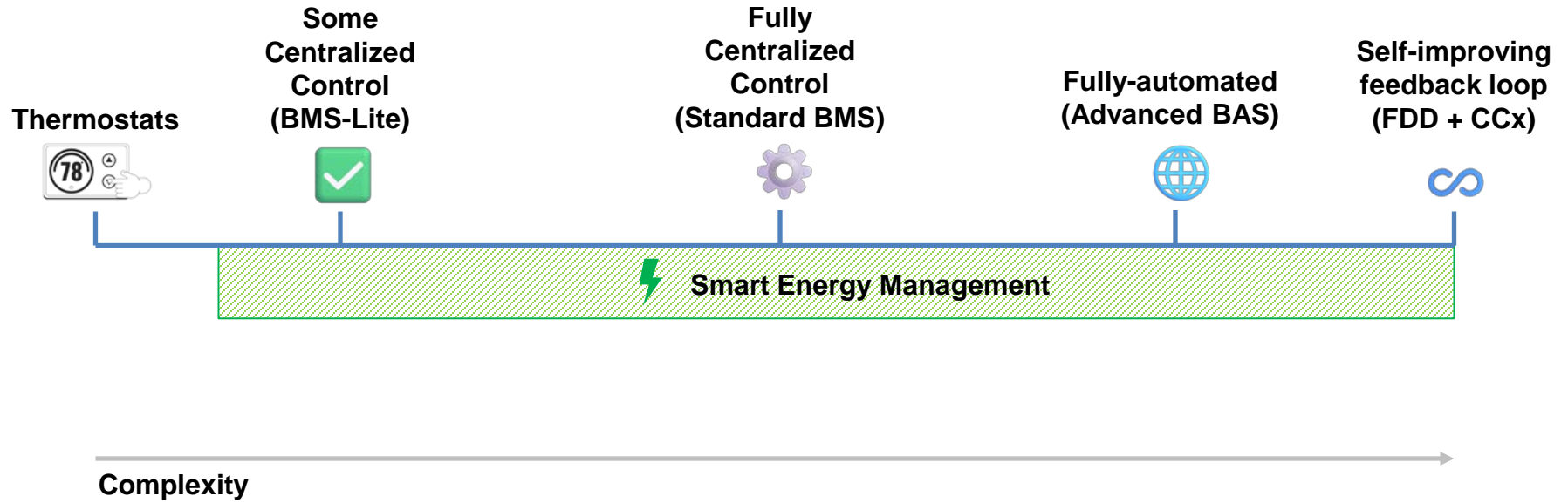
## **Energy Management**

*Analytics later for energy and sustainability insights*

# What is a Building Management System (BMS)?




# Journey to Smarter Operations





# Which BMS Fits Your Facility & Needs?

Goals	Small (<50k ft <sup>2</sup> ) <i>Libraries, fire/police stations</i>	Medium (50k–250k ft <sup>2</sup> ) <i>Schools, admin buildings, city halls</i>	Large/Complex (>250k ft <sup>2</sup> ) <i>Universities, hospitals, labs, arenas, data centers</i>
Reliability / Uptime	✓ → ⚙️	⚙️ → 🌐	⚙️ → 🌐
Comfort / Occupant Exp	✓	✓ → ⚙️	⚙️ → 🌐
Energy Efficiency	✓ → ⚙️ ⚡	⚙️ → 🌐 ⚡	🌐 ⚡
Asset Optimization	⚙️	⚙️ → 🌐	🌐
Internal Reporting	✓ ⚡	✓ → ⚙️ ⚡	⚙️ ⚡

 **BMS-Lite**  
Networked control of HVAC, lighting, & air quality

 **Standard BMS**  
More equipment control, sophistication, some automation

 **Advanced BAS**  
Advanced with full-automation

 **Energy Management**  
Analytics later for energy and sustainability insights

# Benefits of Building Management Systems

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1. Reduced cost \*\*\*\*\*
2. Central control of building systems (better control)
3. 40% - 80% of the building's energy usage can be at your control.
4. Effective (efficient) monitoring and targeting of energy consumption.
5. Effective response to HVAC related complaints. (Operational efficiencies)
6. Improved indoor air quality
7. Automatic storage of historical data for analysis and reporting.
8. Local control inside set parameters.
9. Optimized start of facility




# Challenges of Building Management Systems

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1. Initial cost of implementation
2. Decision on which BMS system is right for my application
3. Locked into one BMS system for life – Cost to Upgrade or change systems
4. Implementation of usage plan,
  1. Who can access system and how do I manage access
  2. Who can change or modify system
5. Trained staff to manage / monitor the BMS system



**03**

# Q&A Session





**04**

# Upcoming Events





# Upcoming Events

## **SPEER 2025 Industry + Policy Workshop**

**Dates:** September 18 - 19, 2025

**Location:** Austin

[Agenda](#)

[Registration Link](#)



# Upcoming Events

## Regional Integration of Sustainability Efforts (RISE) Coalition

**Next meeting:** Wednesday, October 29, 2025, at 9:30 a.m.

**Location:** Microsoft Teams

[RSVP for Meeting](#)

Visit the [committee page](#) to stay updated on meetings.

Learn more about the RISE Coalition on their [program page](#).



# Stay Informed on Upcoming Events



## UPCOMING NCTCOG EVENTS

Environment and Development:

<https://nctcog.org/envir/events>

DFW Clean Cities:

[www.dfwcleancities.org/events](http://www.dfwcleancities.org/events)



## NCTCOG'S FREE E-MAIL LISTS AND COMMITTEE UPDATES

NCTCOG General:

<https://www.nctcog.org/stay-informed?ext=>

Environment & Development General:


<https://www.nctcog.org/envir/mail>

Energy Mailing List:

<https://nctcog.activehosted.com/f/11>

Transportation:

<https://publicinput.com/hub/Subscriptions/2768>



**05**

# Resources and Funding



# NCTCOG Resources

**Conserve North Texas** ([www.conservenorthtexas.org](http://www.conservenorthtexas.org))

Highlighted Resources:

- [A Guide to Zero Energy and Zero Energy Ready K-12 Schools](#)
- [Better Buildings Accelerators](#)

**Go Solar Texas** ([www.gosolartexas.org](http://www.gosolartexas.org))

**Energy Management, Efficiency, and Renewable Energy**  
([www.nctcog.org/envir/natural-resources/energy-efficiency](http://www.nctcog.org/envir/natural-resources/energy-efficiency))



# SECO Resources

No-cost resources offered by SECO to aid entities in achieving their energy management or efficiency goals



## Technical Assistance



- Preliminary Energy Assessment (PEAs)
- Analysis of current systems, O&M programs
- Energy Management Policy development
- Funding options
- Prioritized project planning



## WattWatchers of Texas

- Behavioral program for schools and families
- TEKS aligned STEM material



## Local Government Energy Reporting

- Technical assistance for State-mandated energy efficiency and reporting



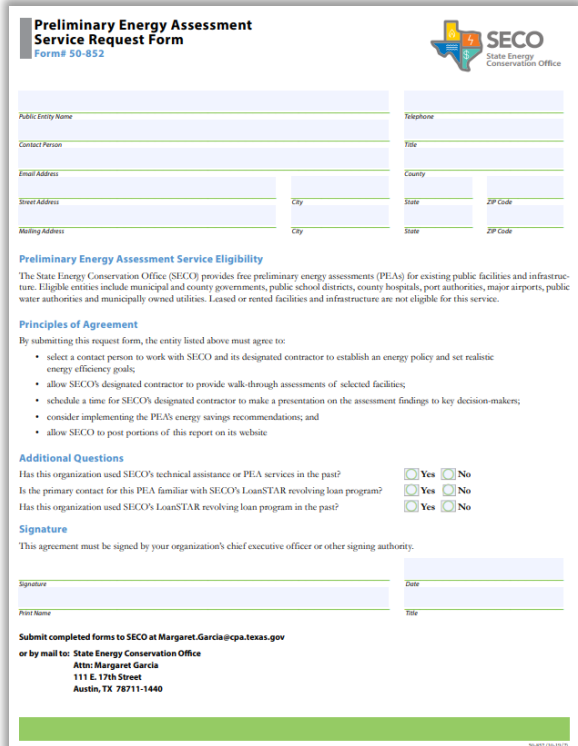
## LoanSTAR

- 2.5% (1.5% for ARRA funds)
- Simple payback of 15 years or less
- *Open enrollment through Aug. 31, 2025*

# Preliminary Energy Assessments (PEAs)

Preliminary Energy Assessments (PEAs) are provided by the State Energy Conservation Office (SECO) and offer cost effective resource efficiency measures entities can implement to decrease energy consumption at **no cost to you!**

- Help guide the development of an energy management policy
- Provides facility benchmarking using ENERGY STAR Portfolio Manager
- Recommended maintenance procedures
- Develop efficiency level guidelines for equipment purchases



**Preliminary Energy Assessment Service Request Form**  
Form# 50-852

**SECO**  
State Energy Conservation Office

Public Entity Name \_\_\_\_\_ Telephone \_\_\_\_\_  
Contact Person \_\_\_\_\_ Title \_\_\_\_\_  
Email Address \_\_\_\_\_ County \_\_\_\_\_  
Street Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_  
Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

**Preliminary Energy Assessment Service Eligibility**  
The State Energy Conservation Office (SECO) provides free preliminary energy assessments (PEAs) for existing public facilities and infrastructure. Eligible entities include municipal and county governments, public school districts, county hospitals, port authorities, major airports, public water authorities and municipally owned utilities. Leased or rented facilities and infrastructure are not eligible for this service.

**Principles of Agreement**  
By submitting this request form, the entity listed above must agree to:

- select a contact person to work with SECO and its designated contractor to establish an energy policy and set realistic energy efficiency goals;
- allow SECO's designated contractor to provide walk-through assessments of selected facilities;
- schedule a time for SECO's designated contractor to make a presentation on the assessment findings to key decision-makers;
- consider implementing the PEA's energy savings recommendations; and
- allow SECO to post portions of this report on its website.

**Additional Questions**

Has this organization used SECO's technical assistance or PEA services in the past? ☐ Yes ☐ No  
Is the primary contact for this PEA familiar with SECO's LoanSTAR revolving loan program? ☐ Yes ☐ No  
Has this organization used SECO's LoanSTAR revolving loan program in the past? ☐ Yes ☐ No

**Signature**  
This agreement must be signed by your organization's chief executive officer or other signing authority.

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Print Name \_\_\_\_\_ Title \_\_\_\_\_

Submit completed forms to SECO at [Margaret.Garcia@cpa.texas.gov](mailto:Margaret.Garcia@cpa.texas.gov)  
or by mail to: State Energy Conservation Office  
Attn: Margaret Garcia  
111 E. 17th Street  
Austin, TX 78711-1440

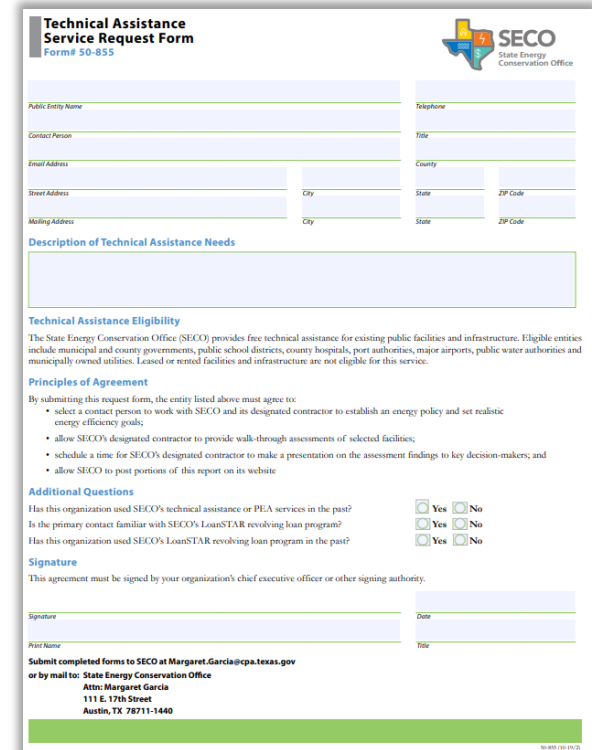
50-852 (10-11-12)

# SECO No-Cost Technical Assistance

Through this program SECO contracts with engineering firms to provide customized, on-site, energy-related services ranging from basic consultation to feasibility studies.

Eligible entities may request assistance with either **energy** or **water**-related technical matters.

Upon determination that the requested services are reasonable and within the contractors' scope of work, SECO will assign an engineer to contact the entity officials to determine the level of service necessary to provide assistance.



The image shows a 'Technical Assistance Service Request Form' from the State Energy Conservation Office (SECO). The form is titled 'Form# 50-855' and includes a header with the SECO logo. It contains several sections for data entry: 'Public Entity Name', 'Contact Person', 'Email Address', 'Street Address', 'Mailing Address', 'Telephone', 'Title', 'County', 'State', and 'ZIP Code'. There is a large text area for 'Description of Technical Assistance Needs'. Below this, the 'Technical Assistance Eligibility' section explains that SECO provides free technical assistance to existing public facilities and infrastructure. The 'Principles of Agreement' section states that by submitting the form, the entity agrees to select a contact person, allow SECO's designated contractor to provide walk-through assessments, schedule a presentation, and allow SECO to post portions of the report. The 'Additional Questions' section has three yes/no questions regarding previous use of SECO services. The 'Signature' section requires a signature and date from the chief executive officer or other signing authority. At the bottom, it provides contact information for Margaret Garcia at SECO and a footer with the North Central Texas Council of Governments logo.

**Technical Assistance Service Request Form**  
Form# 50-855

Public Entity Name \_\_\_\_\_ Telephone \_\_\_\_\_

Contact Person \_\_\_\_\_ Title \_\_\_\_\_

Email Address \_\_\_\_\_ County \_\_\_\_\_

Street Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

Description of Technical Assistance Needs

**Technical Assistance Eligibility**

The State Energy Conservation Office (SECO) provides free technical assistance for existing public facilities and infrastructure. Eligible entities include municipal and county governments, public school districts, county hospitals, port authorities, major airports, public water authorities and municipally-owned utilities. Leased or rented facilities and infrastructure are not eligible for this service.

**Principles of Agreement**

By submitting this request form, the entity listed above must agree to:

- select a contact person to work with SECO and its designated contractor to establish an energy policy and set realistic energy efficiency goals;
- allow SECO's designated contractor to provide walk-through assessments of selected facilities;
- schedule a time for SECO's designated contractor to make a presentation on the assessment findings to key decision-makers; and
- allow SECO to post portions of this report on its website

**Additional Questions**

Has this organization used SECO's technical assistance or PEA services in the past? ☐ Yes ☐ No

Is the primary contact familiar with SECO's LoanSTAR revolving loan program? ☐ Yes ☐ No

Has this organization used SECO's LoanSTAR revolving loan program in the past? ☐ Yes ☐ No

**Signature**

This agreement must be signed by your organization's chief executive officer or other signing authority.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Print Name \_\_\_\_\_ Title \_\_\_\_\_

Submit completed forms to SECO at [Margaret.Garcia@cpa.texas.gov](mailto:Margaret.Garcia@cpa.texas.gov)  
or by mail to: State Energy Conservation Office  
Attn: Margaret Garcia  
111 E. 17th Street  
Austin, TX 78711-1440

50-855 (20-11/12)

[Learn More Here](#)

# Texas LoanSTAR Revolving Fund

Finances Projects that Reduce Energy/Water/Utility Costs

- Simple Payback Period of **15 Years or Less**
- 2.5% Loan Interest Rate; 1.5% if you choose ARRA Funds with more reporting requirements

Open Enrollment through Aug. 31, 2025

- Maximum \$6 M loan per application for State Energy Program (SEP) funds.
- Maximum \$8 M./\$3 M. minimum for loans funded with repaid American Reinvestment and Recovery Act (ARRA) funds.
- Maximum 2 loans per entity



[https://www.youtube.com/watch?v=4lFuj\\_5ZeGI](https://www.youtube.com/watch?v=4lFuj_5ZeGI)

For more information visit the  
[Notice of Loan Fund Availability](#)



# Quick Links

[www.conservenorthtexas.org](http://www.conservenorthtexas.org)

[www.nctcog.org/envir/natural-resources/energy-efficiency](http://www.nctcog.org/envir/natural-resources/energy-efficiency)

# Reminders

Please complete the Workshop  
Evaluation:

<https://www.surveymonkey.com/r/XZFYL8F>



Please Complete the In-Kind  
Attestation Form:

<https://www.surveymonkey.com/r/XZGBXF5>



# SECO and SPEER Contacts

**Adam Mueller**

Program Specialist

State Energy Conservation Office  
(SECO)

[Adam.mueller@cpa.Texas.gov](mailto:Adam.mueller@cpa.Texas.gov)

**Shaun Auckland**

Senior Manager

The South-central Partnership for  
Energy Efficiency as a Resource  
(SPEER)

[cities@eepartnership.org](mailto:cities@eepartnership.org)

# NCTCOG Contacts

**Crysta Guzman**

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Environment & Development  
817-695-9107

[cguzman@nctcog.org](mailto:cguzman@nctcog.org)

**Corinne Buckley**

E&D Planner I  
Environment & Development  
817-704-2510

[cbuckley@nctcog.org](mailto:cbuckley@nctcog.org)

**Cassidy Campbell**

Environment & Development Program  
Manager  
817-608-

**Savana Nance**

Air Quality Planner  
Transportation  
682-433-0488

[snance@nctcog.org](mailto:snance@nctcog.org)

**Energy Team**

[energy@nctcog.org](mailto:energy@nctcog.org)