

City of North Las Vegas REMOTE Inspection Program

Valarie Evans M.C.P

Building Official

City of North Las Vegas



REMOTE Inspection Program

AGENDA

- Purpose
- Setting up Virtual Inspections
 - Process of Inspection
 - What the Contractor Needs
- Tips, Overcoming Hurdles, Lessons Learned





Remote Inspection

Remote: Situated far from the main centers of population; distant

Inspection: Careful examination or scrutiny



Pre-COVID-19: Residential Video Inspection Program

Purpose prior to COVID-19:

The purpose of the City of North Las Vegas Residential Video Inspection Program was initially intended to provide an alternative for eligible residential inspections, including limited re-inspections. The program required the customer to schedule the inspection via an Appointments Plus link on the City web page and to use the Skype app on a minimum 4G smart phone in order to interact with the City Inspector.

North Las Vegas went live with the Residential Video Inspection **Program** on July 1, 2019.



Residential Video Inspection Program

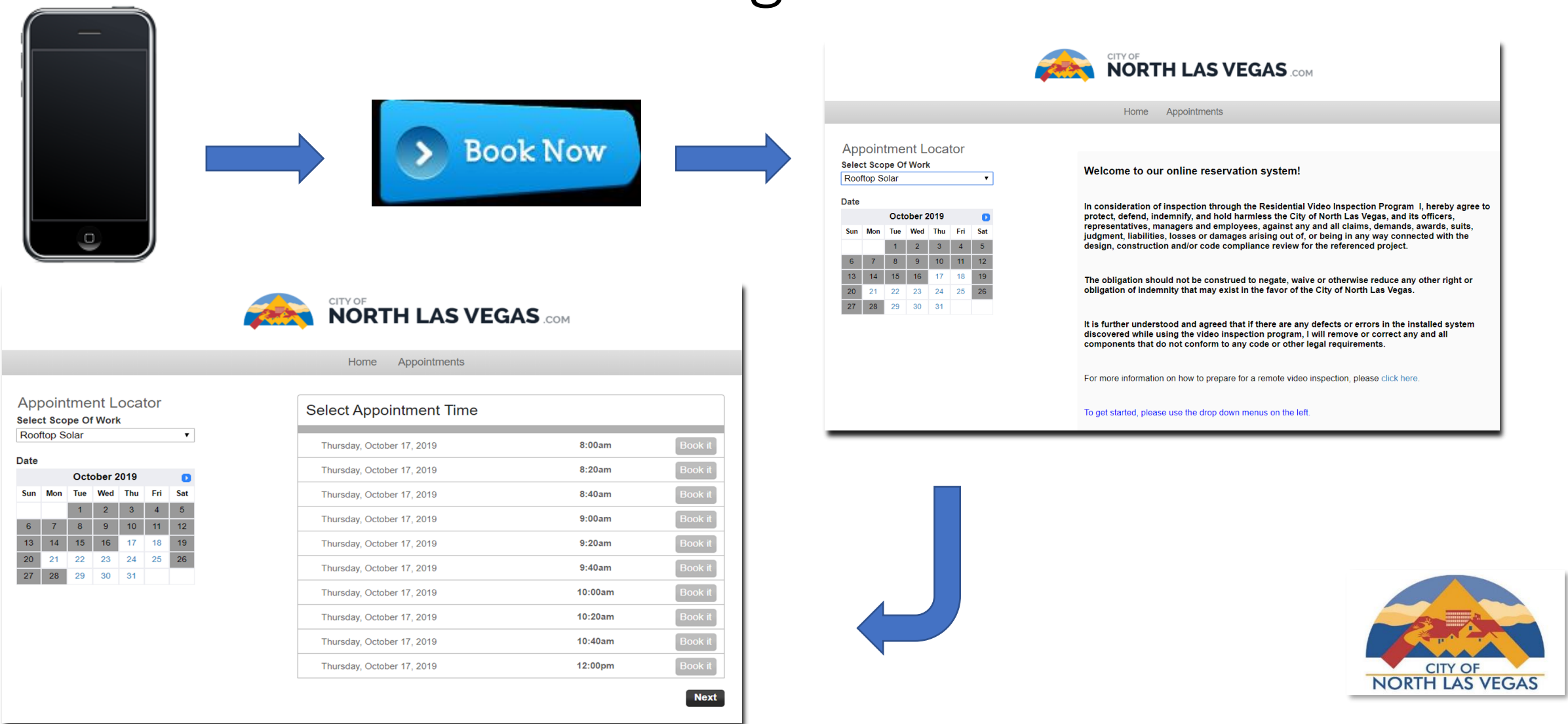
Types of Inspections:

- Rooftop Solar
- Aluminum Patio Cover
- Water Heater
- Water Softener
- Plumbing Re-Pipe
- Gas Line Extension for BBQ and Fire Pits
- A/C Change out
- Attic FAU
- Main Line Water Repair
- Electrical Service Change
- Electric Car Chargers and Storage Systems
- Spa Circuit
- Detached Storage Sheds not to Exceed 600 Sq. Feet

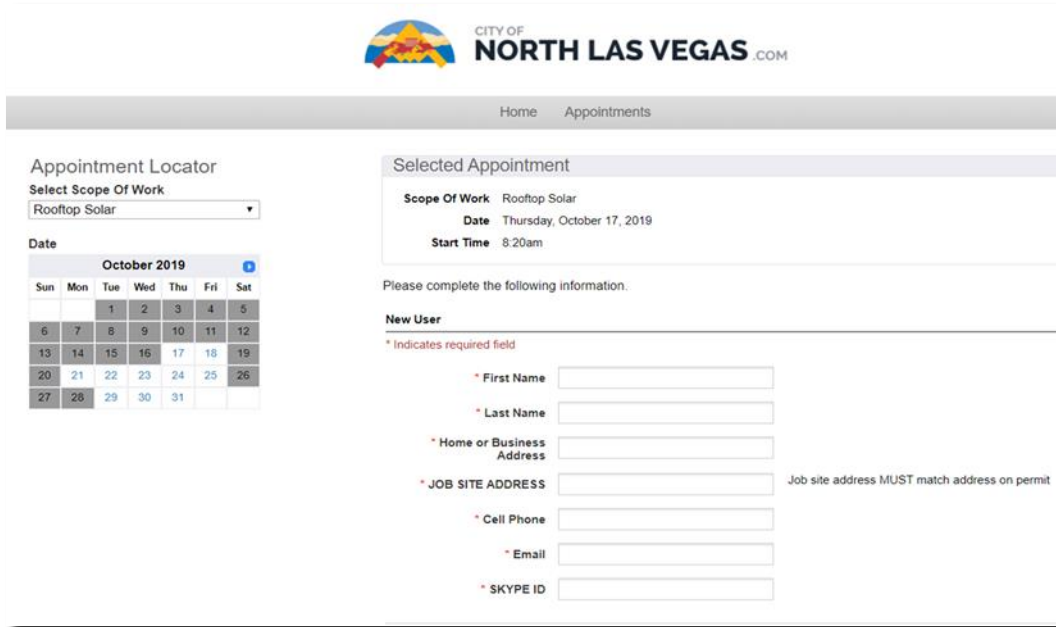
Note: If for any reason the Inspector is not able to complete the inspection via the Residential Video Inspection Program, **every effort will be made to route a field inspector to complete the inspection the same day. If this is not possible, the inspector will schedule a field inspection for the next business day.**



Pre-COVID-19: Residential Video Inspection Program



Pre-COVID-19: Residential Video Inspection Program



CITY OF NORTH LAS VEGAS .COM

Home Appointments

Appointment Locator

Select Scope Of Work
Rooftop Solar

Date
October 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Selected Appointment

Scope Of Work Rooftop Solar
Date Thursday, October 17, 2019
Start Time 8:20am

Please complete the following information.

New User

* Indicates required field

* First Name

* Last Name

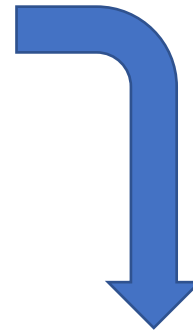
* Home or Business Address

* JOB SITE ADDRESS Job site address MUST match address on permit

* Cell Phone

* Email

* SKYPE ID



* Permit #

Special Instructions

Finalize Appointment

© The City of North Las Vegas
Powered by Appointment-Plus

Are you a European Union citizen? If yes, please read our [GDPR fact sheet](#).



Pre-COVID-19: Residential Video Inspection Program

- Residential scopes **greatly benefit the homeowners**, as they do not have to take off time or wait for inspections.
- Benefit to contractors to potentially only make one trip to job site.
- No wasted travel time for inspectors.
- The Current procedure requires the work to be completed first, and then the inspection is scheduled for the following day. **For this program to benefit, we must be able to perform the remote inspection after the work is complete, before covers are re-installed, ladders put away, and before the contractor leaves the site.** This may necessitate a shift in how and when inspections are scheduled. A remote inspection after the contractor leaves the site, lessens the benefit for the customers, but still has merit.
- Appointment software like **Appointments Plus** used by City of North Las Vegas.



Remote Inspection Program

Setting up virtual inspections:

- List of the inspections allowed to be performed remotely.
- Determine the method of media used to stream the video i.e.: Skype, FaceTime, Hangouts, Google Duo, Google Meets, Zoom, WebEx.
- How is the inspection going to be scheduled?
- How is the inspection going to be performed?
- How will you follow-up with documents? QAA, Reports, Permits.
- Archiving. Are you going to keep the video?



During COVID-19: Remote Inspection Program

Purpose during COVID-19:

- The purpose of the City of North Las Vegas Remote Video Inspection is to allow the development community to have continued momentum during the Coronavirus pandemic.
- To safeguard the City employees and the public while still performing critical inspections.
- There were several families waiting to move into new homes, as well commercial timelines that were dependent on us to maintain.



During COVID-19: Remote Inspection Program

Inspections:

- All inspections to be performed via video means.
- No in-person inspections (staff working from home).
- Photos allowed when approved by the jurisdiction, provide enough photos to allow for a complete inspection.
- Documents sent via email PDF (third party daily reports, final reports, approved revisions etc.).



Remote Inspection Program

What the contractor/customer needs:

1. 4G Wireless service -
Ensure inspection location and smart phone or tablet has minimum 4G connectivity.
2. Media account i.e.: Skype, FaceTime, Google Duo, Google Meet, Hangouts, Zoom.
3. Prior to scheduled inspection time, ensure all necessary tools based on type of inspection are readily available. For example: tape measure, level, GFCI tester, flashlight, step ladder, etc.



During COVID-19: Remote Inspection Program Process

1. Inspector gets schedule at home via VPN or other means

- Inspector calls each contact to schedule inspection, gives time window, and agrees on media platform.
- Some inspectors have contractor/customer text them when they are on project site.
- Inspector allots a minimum amount of time to perform inspection.
- Inspector lets customer know they may be performing an inspection when their time slot occurs and will call them back when finished.
- Inspector gets all documents electronically or via video at the time of the inspection.

2. Start Inspection

- Inspector validates permit information.
- Inspector accesses all documentation.
- Inspector guides the inspection process.
- Contractor/customer follows direction of the inspector.



Post-COVID-19: Statistics

- Over 11,500 inspections performed via video March 18 to May 18, 2020
- Building inspections
- Fire inspections
- Projects to revisit once in person inspection has been permitted has been identified



What Remote Inspection is NOT

- NOT the answer to all inspections
 - Some things are just more through in person
 - Many inspections take longer
 - Trusting in technology
 - Inspector learning curve
 - Individual comfort levels
- NOT ideal for complex projects
 - Complex projects have more detail in person



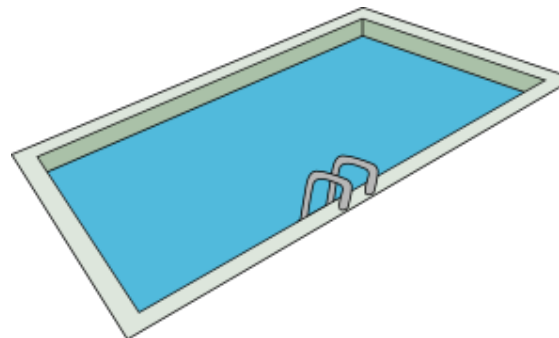
Residential Scopes Added

Gazebos

Residential Room Additions not to Exceed 600 square feet (where the permit is obtained by a licensed contractor)

Residential Swimming Pools

Privacy Masonry Walls (interlocking without soils retention)



Single Family Subdivisions

Underground Electrical

Gypsum Board (that is not a part of a fire-resistive-rated assembly or shear assembly)

Exterior Lath

Gas Tag

Electric Tag

Privacy Masonry Wall (interlocking without soils retention)

Residential Subdivision Signs



Commercial

Wall Mounted Signs

Monument Signs

Cell Tower Antenna Co-Location

Temporary Generators

Simple Mechanical, Plumbing, and Electrical

Gate AVI

Wrought Iron Fence

On-Site Utilities



Commercial

Fire Rehab

Garage to Sales Office

Temporary Construction Trailers

Tenant Improvements of B & M Occupancies not to Exceed 3000
Square Feet



Fire

Sprinkler Rough/Final up to (5) Heads with Approval Letter

Sprinkler Hydrostatic Test

Sprinkler System (Dry) 24 Hour Air Test

Standpipe Hydrostatic Test

Underground Hydrostatic Test

Fire Alarm 24 Hour Battery Test



Fire

Medical Gas Pressure Test

Fire Final Tenant Improvements of B & M Occupancies not to Exceed
3000 Square Feet

Fire Business License of a B & M Occupancies not to Exceed 3000
Square Feet



Remote Inspection Program

Tips, Overcoming Hurdles, Lessons Learned

- Contact information of contractor/customer is imperative.
- Utility reconnections
- Getting Plans downloaded for projects inspectors go to regularly.
- Get contractors to think like an inspector.
- Filter all inspections to Appointments plus or another scheduling platform so the customer can choose the inspection



Changes will continue to occur AS THE PROCESS GROWS.



Remote Inspection Program

- Identify efficiencies.
- Increase program guidelines to allow for more inspections via video.
- Identify the projects where an in-person inspection is most critical.
- Follow up on projects that may have needed a closer look.

There is no pain in change itself, there is only pain in resistance to change.



Conclusions

Change Takes Change

Start with what is comfortable

Include staff in the planning process

Keep track of lessons learned from both internal and external customers

Make changes as necessary

What will be next?

MOVING FORWARD ▷



Remote Inspection Program

Thank you



Valarie Evans M.C.P

Building Official

City of North Las Vegas

evansv@cityofnorthlasvegas.com

702-633-1580





INTERNATIONAL
CODE
COUNCIL®

ICC Government Relations
August 5, 2020

My Name is Susan Dowty

← **Susan Dowty**
2,228 Tweets



[Edit profile](#)

Susan Dowty
@sdowtyICC

ICC Government Relations Manager covering California, Nevada, Guam, American Samoa, & Northern Mariana Islands.
[#BuildingSafety365](#)

📍 Brea, CA [🌐 iccsafe.org](https://www.iccsafe.org) 📅 Joined October 2015

675 Following **541** Followers

Background



S. K. Ghosh Associates Inc.

International Conference of Building Officials

San Diego County Building Department

ICC Government Relations

INTERNATIONAL CODE COUNCIL State & Local Areas of Responsibility



My Job Duties and Email

Serve the Members

Facilitate Code Adoptions

Engage with Chapters and Stakeholders

Monitor Legislation



sdowty@iccsafe.org

Frequently Asked Questions



Technical Opinions

ICC

AAA

Technical Opinions

Technical Opinions on codes and standards are an exclusive benefit of [ICC Membership](#). Staff Code Opinions provide technical support and clarification of code text for adopting jurisdictions, design professionals, and members of the construction industry.

Staff Code Opinions

Staff Code Opinions are issued by ICC technical staff and are verbal or written. Written staff code opinions will be issued by ICC staff after receipt of a written request. All requests, verbal and written, require your ICC Membership number and the member name.

- Verbal: Call 888-ICC-SAFE (888-422-7233), ext. 33807 (Service provided between 7:30 AM - 5:30 PM CST, Monday through Friday.)
- [Online](#) (ICC members must log in using their email address and password.)

Written Staff Code Opinions

Requests for written staff code opinions must be submitted to ICC in writing. When requesting a written staff code opinion, you must include the following information:

Frequently Asked Questions

- Certifications, Pronto, CEUs
- Codes, Errata, and Code Changes
- Training and Preferred Provider Program
- ICC's Family of Solutions
- Safety 2.0: Next Generation of Code Officials
- New Products and Services
- Building Safety Month and Annual Conference
- Governmental membership and validated voters
- PDF downloads and PremiumAccess subscription
- ICC Plan Review Services
- Building Valuation Data

Nevada

ICC

AAA

State Adoptions

Codes are adopted locally. The Nevada State Fire Marshal adopted the following codes effective February 2020: 2018 IFC, 2018 IBC, and 2018 IWUIC. The Nevada Public Works adopted the 2018 IBC, 2018 IRC, and 2018 IEBC for state owned buildings. The 2018 IECC is adopted statewide.

- 2018 International Building Code
- 2018 International Energy Conservation Code
- 2018 International Existing Building Code
- 2018 International Fire Code
- 2018 International Residential Code
- 2018 International Urban-Wildland Interface Code

Links to State Adoption Agencies

[Public Works Division](#)

[State Fire Marshal](#)

[State Energy Office](#)

Key Contacts

State of Nevada Fire Marshal:

Lt. Mike Dzyak, Interim State Fire Marshal
Nevada Department of Public Safety
State Fire Marshal
107 Jacobsen Way
Carson City, NV 89711
Phone: (775) 684-7525
Fax: (775) 684-7518
sfm@dps.state.nv.us

Nevada Governor's Office of Energy:

David Robzian, Director

Nevada ICC Chapters



Southern Nevada Chapter of the ICC
SNICC

Northern Nevada ICC Chapter
NNICC

Fire Prevention Association of Nevada
FPAN

Monthly Correspondence

Every month, ICC's
Government
Relations Dept posts
a monthly update.



Social Media

-  Facebook.com/InternationalCodeCouncil
-  Twitter.com/@sdowtyICC
-  LinkedIn.com/Susan Dowty
-  Youtube.com/ICCMedia

“People Helping People Build a Safer World”

Thank you!



Susan Dowty, S.E.
Regional Manager
Government Relations
sdowty@iccsafe.org

International Code Council
Western Regional Office
3060 Saturn Street, Suite 100
Brea, CA 92821
t: 888.ICC.SAFE (422.7233), ext. 3111
c: 949.463.3544
www.iccsafe.org | @sdowtyICC

SWEEP 3Q Nevada Energy Code Collaborative

Resources for advancing building energy efficiency & decarbonization

Michelle Britt

Director, Energy Programs
International Code Council



Background: International Code Council

- ▶ 15 ICC Codes
 - ▶ Structural/Life Safety
 - ▶ Plumbing, Mechanical & Fuel Gas
 - ▶ Energy
 - ▶ Fire Safety
 - ▶ Property Maintenance
 - ▶ Zoning
 - ▶ Green Construction
 - ▶ Swimming Pools & Spas
 - ▶ Etc.



Background: International Code Council (Code Development)

- ▶ New edition of codes every three years
- ▶ Changes are made during an open public hearing and voting process
- ▶ Participation open to anyone at no cost
- ▶ Process used is *Governmental Consensus Process*
- ▶ Nearly 3,000 code changes are submitted each cycle





The IECC has saved U.S. consumers over **\$44 billion** and avoided **300 million tons** of carbon dioxide emissions.

This is equivalent to:

Greenhouse gas emissions from **15 million** garbage trucks of waste recycled instead of landfilled



*1 truck = 1 million trucks





Southwest Energy Efficiency Project
Enhancing and Reducing Pollution through Energy Conservation

GOING BEYOND CODE

A Guide to Creating Energy Efficient and Sustainable Buildings in the Southwest

Executive Summary

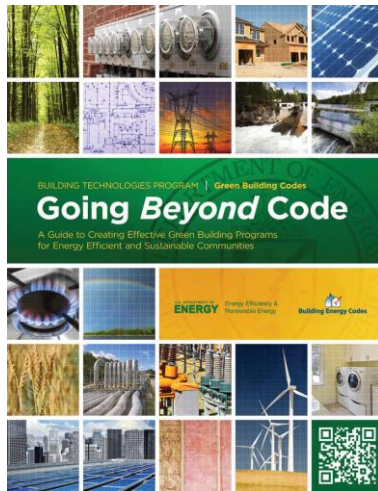
Prepared by:

Steve Dunn, SWEEP

Michelle Ditt and Eric Makela,
Brill Makela Group

December 2008

2200 Harrison Road, Suite 212 • Boulder, Colorado 80502 • tel: 303-443-0078 • fax: 303-443-0024 •
www.sweep.org



Future of Building Energy Efficiency?



Breakout #3 Moving Forward

Can there be a broad, inclusive process for national collaboration that moves us toward our stated end goal? It should have these elements:

1. A descriptive or innovative name
2. List the first two steps toward the goal/target
3. Who should participate to get to the first steps?
4. Who are potential contributing funders?



Breakout #3 Moving Forward

Can there be a broad, inclusive process for national collaboration that moves us toward our stated end goal? It should have these elements:

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Sustainability Membership Council

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Related Links

[Committee Documents](#)[SEPHCAC](#)

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NEXT MEETING

August 28, 2020 -WebEx Call For more information look for the agenda on the [documents page](#)

The Sustainability Membership Council is open to all ICC Members. You'll have an opportunity to discuss issues that you face as a community, and how ICC might best serve you.

If you're looking to get more involved in green and energy code enforcement and influence the direction of ICC, enroll in the Sustainability Membership Council today. Simply fill out the enrollment form, and ICC will be in touch with more details. The Governing Committee serves to actively engage Members in discussions about priorities and opportunities for the direction of the Council.

[Enroll Now](#)[SMC in Social Media](#)

cdpACCESS

LIVE CHAT



Net Zero and Decarbonization

- ▶ Net Zero Energy
- ▶ Zero Carbon
- ▶ O & M and Post Occupancy
- ▶ Grid Mod and EV Storage
- ▶ Financing – Public and Private
- ▶ Implementation and Compliance





Toolkit

- ▶ Chapter 2 – Getting Started: Keys to Successful Adoption and Implementation Strategies
- ▶ Chapter 3 – Key Components of energy efficient and low carbon building construction
- ▶ Chapter 4 – Policies, regulations, best practices and case studies
- ▶ Chapter 5 – Resources

A B I U ... Normal No Spacing

Model Policies and Resources

States and local jurisdictions across the nation have demonstrated leadership in developing programs and policies that both encourage and require advanced energy efficiency and carbon reduction. The laws and regulations behind these programs and policies can help other states and jurisdictions establish unique policies to address their particular needs.

Resources and model policies for-building construction have been identified in the following categories:

[View example policies](#)

Advanced Building Energy Policies and Resources

Exceeding the code policies require or encourage commercial and residential buildings to exceed the minimum code adopted by a state or jurisdiction. These policies may require that all projects achieve the same percentage of efficiency over the state or model energy code or that a particular project achieve an efficiency level over the adopted code.

[View example policies](#)

Existing Building Energy Conservation Ordinances and Mandatory Upgrade Policies and Resources

Energy conservation ordinances require existing buildings to meet minimum energy-efficiency standards at the time of sale or renovation. This may include retro-commissioning measures, benchmarking and disclosure, an energy audit of the building, or mandatory upgrades.

[View example policies](#)

Embodied Carbon Policies and Resources

One key challenge is that it can be difficult to compare products of different classes and even products within the same class because of the lack of transparent product data. To begin addressing embodied carbon in new construction, resources included here focus on products that currently have more transparent product data available (i.e. concrete and steel). While it may not be feasible to develop and adopt embodied carbon code language in the current market, this is the first step to generate discussion on this topic.

[View example policies](#)

Grid Modernization and Connectivity/Electric Vehicles/Energy Storage

Clean-energy, including onsite renewables, energy storage, and energy-efficient technologies, such as electric vehicles, separately and together are increasingly being adopted to support energy efficiency. As they become more prevalent on the customer side of the meter, the distribution system must evolve to account for these technologies in the supply and demand equation. Integration of these technologies into the electrical grid is critical to ensure that utilities can continue to operate the grid in a safe, reliable, and cost-effective manner.

[View example policies](#)

Operations and Maintenance

A well-run O&M program should conserve energy and water and be resource efficient, while meeting the comfort, health, and safety requirements of the building occupants. Effective O&M is one of the most cost-effective methods for ensuring reliability, safety, and energy efficiency. Inadequate maintenance of energy-using systems is a major cause of energy waste. Uninsulated lines, maladjusted or inoperable controls, and other losses from poor maintenance are often considerable. Good maintenance practices can generate substantial energy savings and should be considered a resource. Moreover, improvements to facility maintenance programs can often be accomplished immediately and at a relatively low cost. – [Source FEMP O&M Best Practices Guide, Release 3.0](#)

[View example policies](#)

Implementation Workforce

Local governments across the United States are increasingly enacting policies and offering programs to drive energy savings, but the success of these activities is inextricably linked to a strong, capable energy efficiency





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Building safety professionals can ask questions, gather with industry colleagues virtually, and discuss relevant industry topics in a peer-to-peer environment.

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Trusted Source for Codes & Standards

Our model building codes and standards provide the highest level of safety in the world.



Building Safety Experts

Our family of solutions delivers a wide array of building safety services, including evaluation, accreditation, certification, codification, training and more.



Professional Development

We support the building industry with the latest training, mentoring and education resources.



Coronavirus Response Center

The Code Council continues to track how the global novel coronavirus (COVID-19) pandemic is affecting our industry.



Leaders in the global built environment

QUESTIONS?

Michelle Britt
Director, Energy Program
International Code Council
mbritt@iccsafe.org