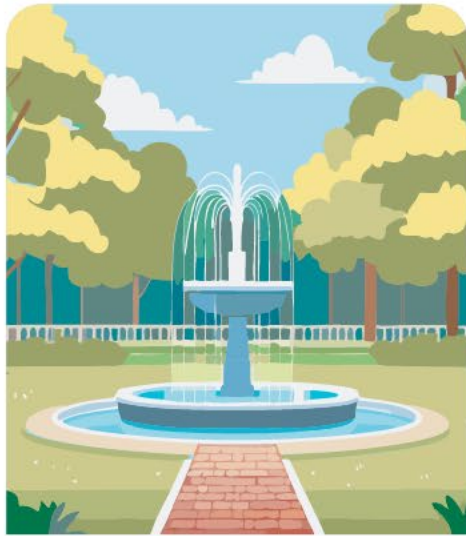


2025 NATIONAL CONFERENCE | SAVANNAH, GEORGIA

Bridging The Gap: Designers & Water Managers Unite for Water Efficiency

Panelists: Andrew Chase, John Keesen, Glenn Kramer, Danny Smith

Moderator: Steve Hohl



2025 NATIONAL CONFERENCE | SAVANNAH, GEORGIA

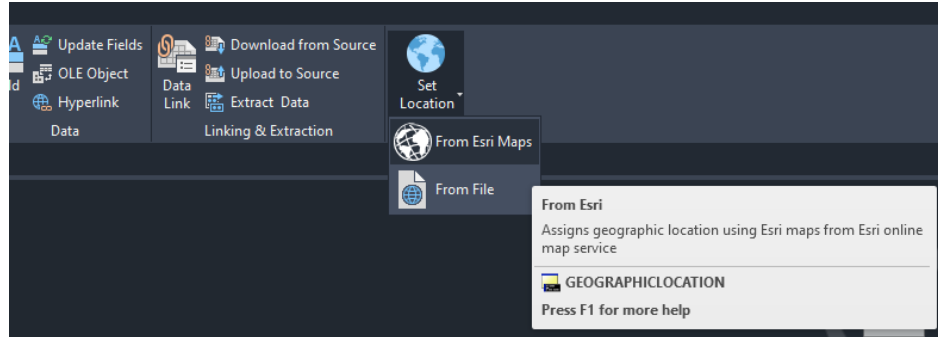
Efficient by Design

The Future of Irrigation with AutoCAD – Part 1

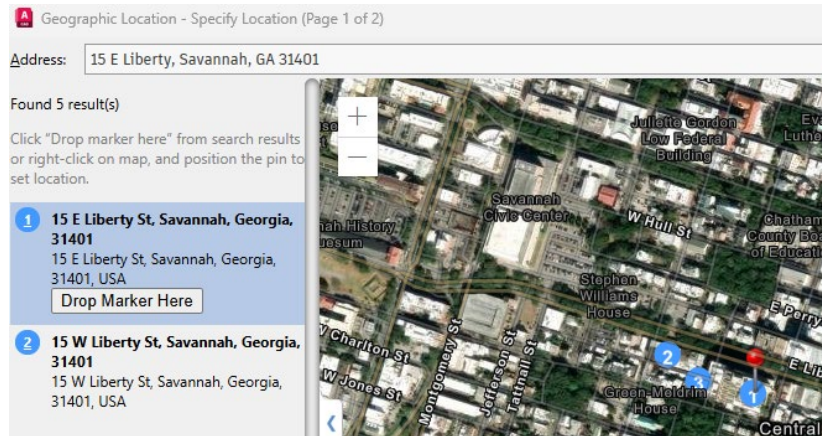
Using Aerial Imagery with AutoCAD



- Access from the Insert ribbon tab



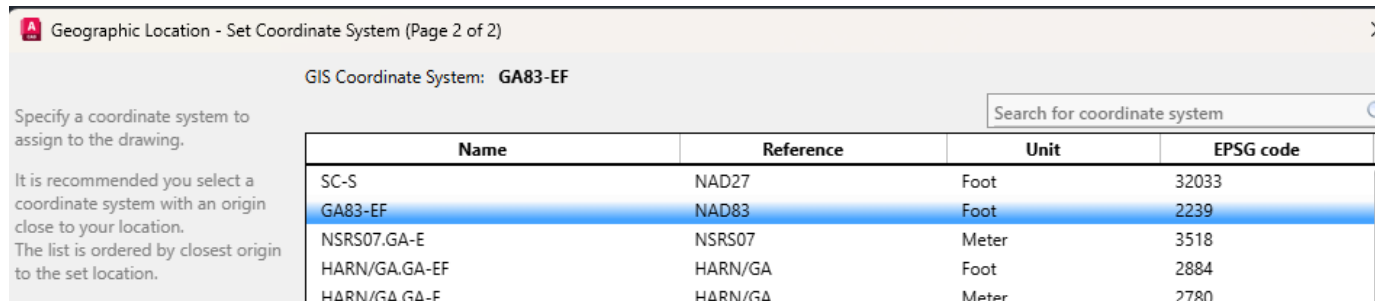
- Enter the address



Using Aerial Imagery with AutoCAD



- Select a coordinate system that matches your drawing units



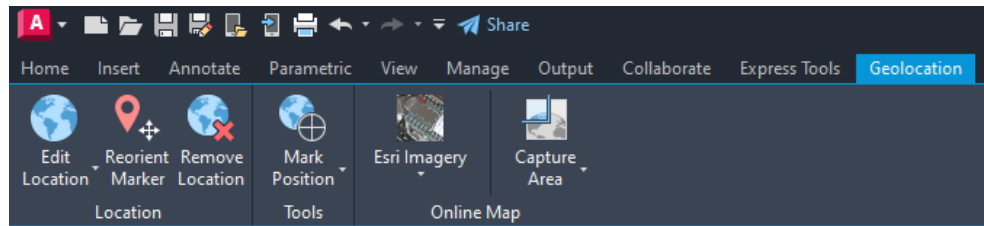
- Select a point and rotation angle to drop the map in



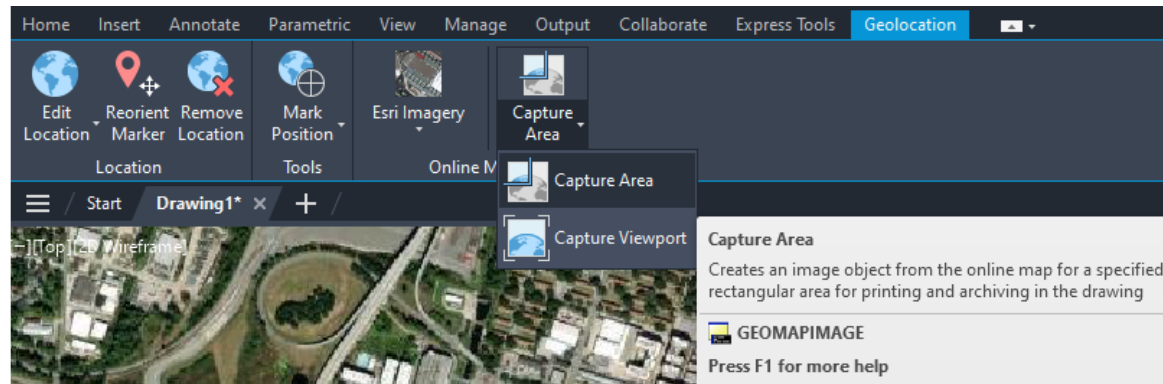
Using Aerial Imagery with AutoCAD



- Change the settings for the imagery in the Geolocation ribbon tab



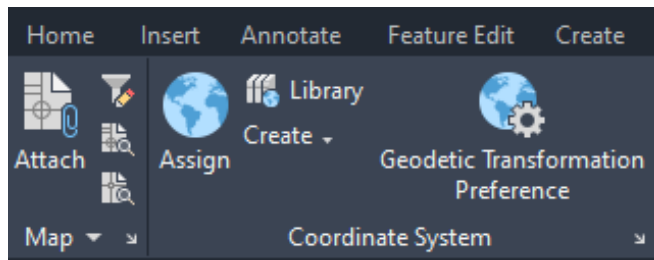
- Use the Capture Area or Viewport tools to have the image print in your drawing



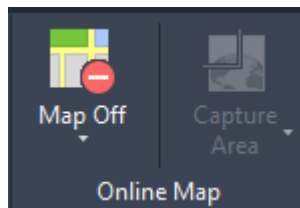
Using Aerial Imagery with AutoCAD Map 3D



- Set your coordinate system for your project using the Assign tool in the Map Setup ribbon tab



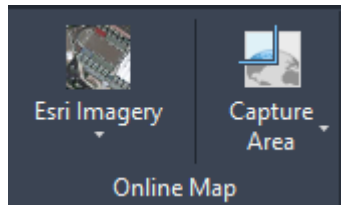
- Turn on the Online Map from the Home ribbon tab



Using Aerial Imagery with AutoCAD Map 3D



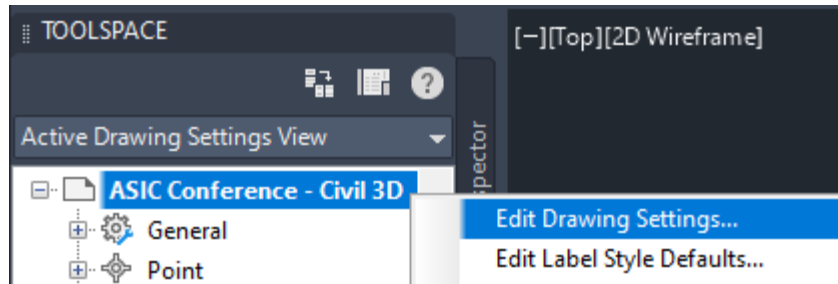
- Use the Capture Area or Viewport tools to have the image print in your drawing



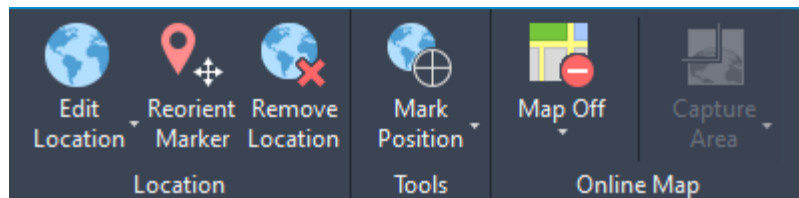
Using Aerial Imagery with Civil 3D



- Set your coordinate system for your project in your Civil 3D Drawing Settings



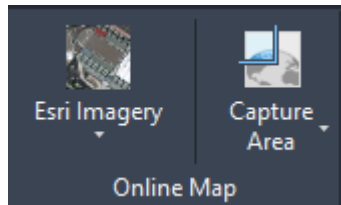
- Turn the Map on from the Geolocation ribbon tab



Using Aerial Imagery with Civil 3D



- Use the Capture Area or Viewport tools to have the image print in your drawing



Locating and Using LISP Routines



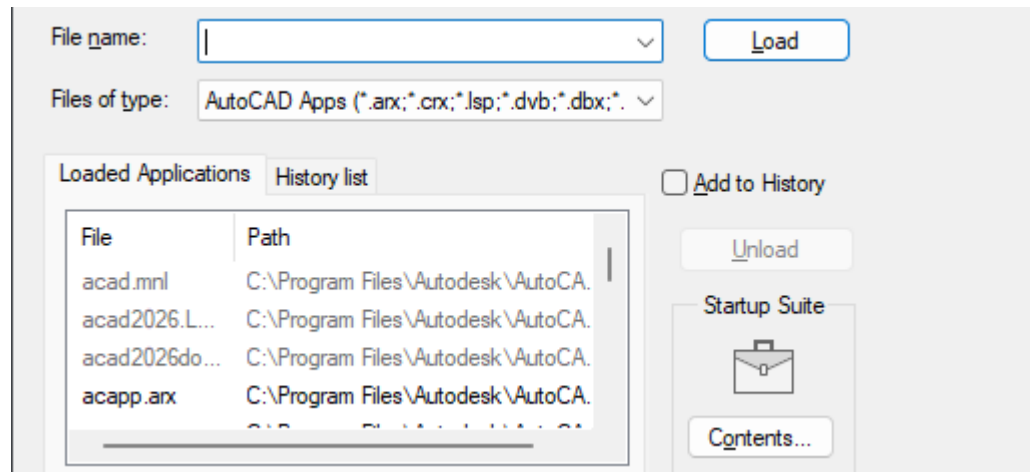
- LISP routines are powerful tools for automating repetitive tasks, creating custom commands and customizing workflows
- Commonly used with AutoCAD and can also be used in AutoCAD LT (AutoCAD LT 2024 and higher)
- Download LISP routines from the Internet
- Contact a professional for assistance
- Learn to write your own LISP routines



Locating and Using LISP Routines



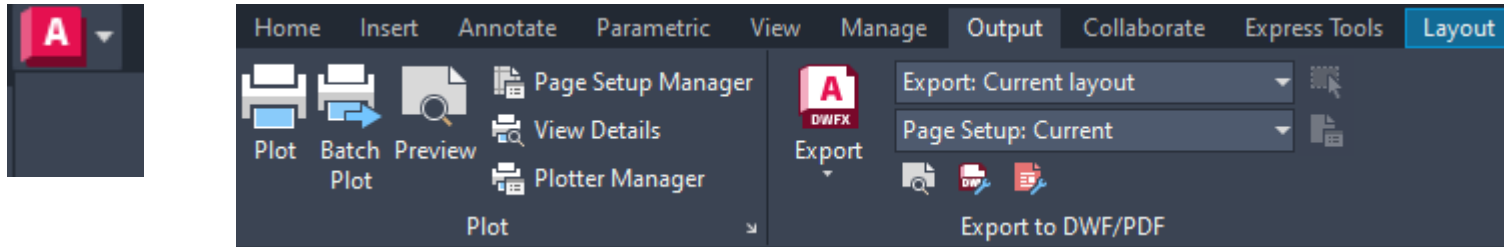
- To load a LISP routine in AutoCAD, use the Load Application tool on the Manage ribbon tab
- You can load them one at a time or add them to the Startup Suite



Batch Plot (Publish)



- Access from the Application menu or from the Output ribbon tab



- Print multiple sheets/drawings at once to either a printer or to a digital format like PDF
- Create Saved Page Setups to use with Batch Plot



Batch Plot (Publish)



Publish

Sheet List:
None

Publish to:
Plotter named in page setup

☒ Automatically load all open drawings

Publish Options Information
Location: C:\Users\kade.king\Documents\
File type: Multi-sheet file
Naming: Prompt for name
Layer information: Include
Merge control: Lines overwrite
Publish Options...

Sheet Name	3D DWF	Page Setup	Status
Title Sheet-Model	<input type="checkbox"/>	<Default: None>	✓ No errors
Title Sheet-Cover Sheet	<input type="checkbox"/>	<Default: None>	✓ No errors
Master Site Plan-Model	<input type="checkbox"/>	<Default: None>	✓ No errors
Master Site Plan-Master Plan	<input type="checkbox"/>	<Default: None>	✓ No errors
Existing Conditions Plan-Model	<input type="checkbox"/>	<Default: None>	✓ No errors
Existing Conditions Plan-Plan 1		<Default: None>	✓ No errors
Existing Conditions Plan-Plan 2		<Default: None>	✓ No errors
Existing Conditions Plan-Plan 3		<Default: None>	✓ No errors
Existing Conditions Plan-Plan 4		<Default: None>	✓ No errors

Selected Sheet Details

Source drawing
Drawing location
Layout name
Plot device
Plot size
Plot scale
Page setup detail

Publish Output
Number of copies: 1
Precision: None
☐ Include plot stamp
☒ Publish in background
☐ Open in viewer when done

▲ Hide Details

Publish Cancel Help

Add Sheets...

Load List...

Save List...

Remove

Remove All

Move Up

Move Down

Rename Sheet

Change Page Setup

Copy Selected Sheets

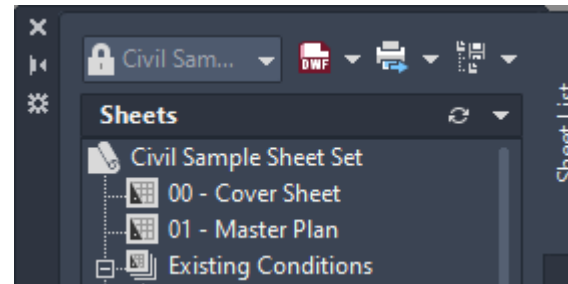
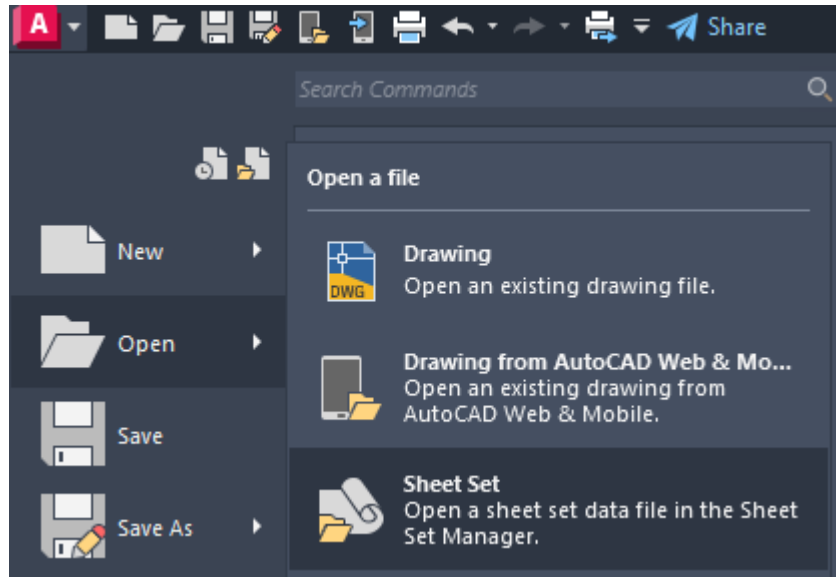
✓ Include Layouts When Adding Sheets

✓ Include Model When Adding Sheets



Sheet Set Manager

- Document management tool within AutoCAD
- Allows you to manage files within a project
- Batch plot (publish) entire sheet set



Good Sources for Education on AutoCAD



- Autodesk University -
<https://www.autodesk.com/autodesk-university/>
- AUGI (CAD and BIM User Group) -
<https://www.augi.com/>
- Autodesk Training Centers -
<https://www.autodesk.com/training/find-a-partner>



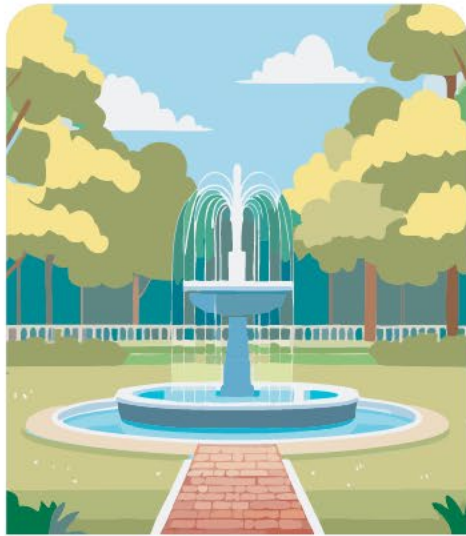
Thank you!



I'll see you tomorrow for part 2 of this presentation!

KaDe.King@uscad.com





2025 NATIONAL CONFERENCE | SAVANNAH, GEORGIA

Strengthening Partnerships: Enhancing Interpersonal Relations between Irrigation Consultants & Vendors

Panelists: Geoff Graber, Dave Krause, Lance Sweeney, Neil Tandan

Moderator: Tim Fredericks

THE NEW GUARD: Attracting, Engaging, and Empowering Young Professionals



2025 NATIONAL CONFERENCE | SAVANNAH, GEORGIA

A vertical decorative bar on the left side of the slide, featuring a light gray gradient background and several realistic water droplets of varying sizes at the top and bottom.

COPYRIGHT

THIS PRESENTATION IS PROTECTED BY US AND INTERNATIONAL COPYRIGHT LAWS. REPRODUCTION, DISTRIBUTION, DISPLAY AND USE OF THE PRESENTATION WITHOUT WRITTEN PERMISSION OF THE SPEAKER IS PROHIBITED.

CHERISE LAKESIDE, FCSI

SENIOR SPECIFICATION WRITER,
RDH BUILDING SCIENCE INC.

CLAKESIDE@RDH.COM
CHERISELAKESIDE@GMAIL.COM

#CSIKraken

TWITTER, LINKEDIN, INSTAGRAM:
[@CHERISELAKESIDE](#)



Architecture
MEP Engineering
Construction
Building Science

Host of the **ARCAT** "DETAILED"
Podcast.
www.arcat.com/podcast

CSI Fellow

Portland CSI:
PDX CSI Past President
Certification Chair
CDT Instructor

National CSI:
Former Director at Large, Institute Board
of Directors
Former Education Committee Chair
Jury of Fellows

Speaker

Teacher

Mentor

Social Media

Wedding Officiant

And more!





**WHY IS THIS CONVERSATION
IMPORTANT?**

LET'S TALK NUMBERS!



GENERATIONAL IMBALANCE

2030 PEAK

- **Boomers** (1946-1964, Age 61 to 79):
74.1 Million
 - Approx 28% still working.
 - Retiring in record numbers - expected 4.1 Mil retiring in 2025.
 - All will pass retirement age by 2030.*
- **Gen X** (1965 to 1976, Age 45 to 60):
49.2 Million (-25 Mil smaller than Boomers)
 - Gen X will begin retiring in 2030.
- **Millennials** (1981 to 1996 – Age 29 to 44):
83.5 Million – All in the Workforce
 - 30% moving to leadership years early to fill gap between Boomers and X.
- **Gen Z** (1997 to 2012 – 13 to 28):
86.4 Million (+12 Mil Bigger than Boomers)
 - All will be in the workforce by 2030
- **Gen Alpha** (2010 to 2024 – 1 to 12):
38.5 Million (Another Gen X, only smaller)
 - Will start entering the workforce in 2030.

GENERATIONAL GAP

- **CRITICAL MASS BY 2030:**

Boomers all past retirement age

Gen X starting to retire

Millennials fully in the Workforce

Gen Z fully in the Workforce

Gen Alpha starting to enter the Workforce.

=

**80% of our workforce being Millennials
and younger (split 50/50 with Gen Z)**

The background of the slide is a light gray gradient. In the top-left and bottom-right corners, there are several realistic-looking water droplets of various sizes, some overlapping. The text is centered in the middle of the slide.

**WHAT ARE YOU DOING IN YOUR FIRM OR
COMPANY TO ADDRESS THIS?**

(adjective)
PRESUMPTUOUS



failing to observe the limits of
what is permitted or appropriate

TAMARA DIGGS

TEXAS LICENSED LANDSCAPE
IRRIGATOR
CHATAM DESIGNS / FREELANCE

TAMARADIGGS@CHATAMDESIGNS.COM

LINKEDIN:
TAMARA DIGGS



TCEQ TX Licensed
Landscape Irrigator

ASIC Associate

Irrigation Association Member
Dallas Irrigation Association
Lone Star Irrigation Association
Women in Irrigation Co-Leader

B.S. in Home Furnishing
Merchandising from
University of North Texas

Licensed Irrigation Designer since
2022

Mom of 6

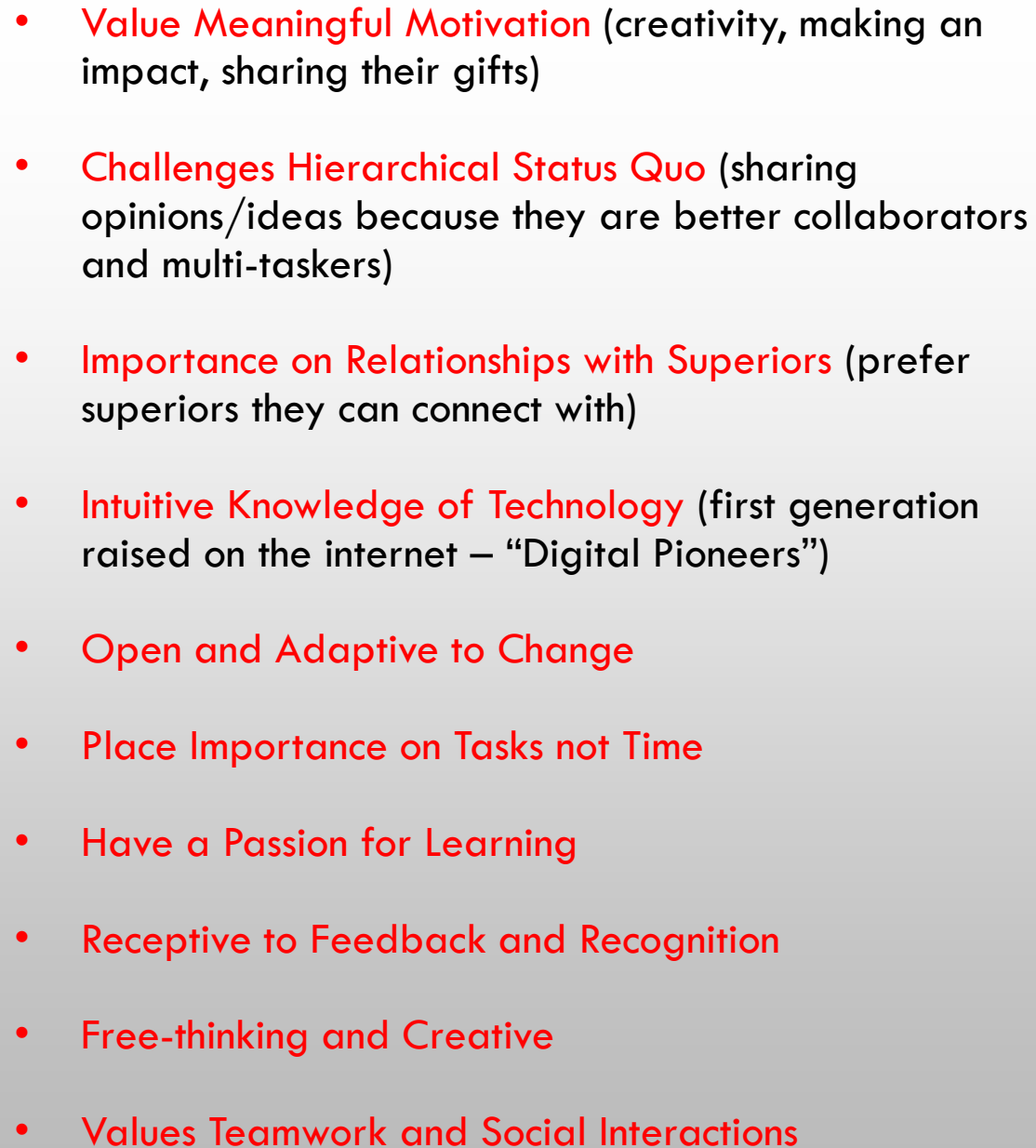


And more!



T

TRAITS OF MILLENNIALS (29 TO 44)

- **Value Meaningful Motivation** (creativity, making an impact, sharing their gifts)
 - **Challenges Hierarchical Status Quo** (sharing opinions/ideas because they are better collaborators and multi-taskers)
 - **Importance on Relationships with Superiors** (prefer superiors they can connect with)
 - **Intuitive Knowledge of Technology** (first generation raised on the internet – “Digital Pioneers”)
 - **Open and Adaptive to Change**
 - **Place Importance on Tasks not Time**
 - **Have a Passion for Learning**
 - **Receptive to Feedback and Recognition**
 - **Free-thinking and Creative**
 - **Values Teamwork and Social Interactions**
- 

C

TRAITS OF GEN Z (13-28) (SO FAR)

- **Diversity is their Norm** (Last generation that will be predominately white. Far more comfortable and accepting of different cultures and lifestyles)
- **Our First “Digital Natives”** (Raised fully using technology, the internet and social media)
- **Pragmatic and Financially Minded** (having witnessed parents take financial hits in the Great Recession, they are driven by security)
- **Mental Health Challenges** (Referred to by some as the “loneliest generation” due to endless hours spent online which can foster feelings of isolation, anxiety and depression)
- **Politically Progressive**
- **Money Driven and Ambitious**
- **Not Afraid to Set Boundaries** (Think Work/Life Balance)
- **Avid Gamers and Love to Travel**
- **Use Social Media in a Unique Way** (To search for answers)

T

**WHAT DO
WE
WANT?
IN THE
WORKPLACE
AND IN THEIR
ASSOCIATIONS**

A voice

A collaborative
environment/teamwork

Open communication

Flexibility

Transparency and
authenticity

Support

Career advancement
and skill development

Tolerance and
diversity

Change

The ability to make a
difference

Work/life balance

Productive Feedback

Growth opportunities

To be paid a fair
wage



C


**YOU ARE NOT
MEETING THEM
WHERE THEY ARE.**

- “But we have always done it this way” doesn’t cut it anymore.
- Old methods for recruiting don’t work anymore. Think outside the box.
- YP’s today build their careers across many social and professional channels.
 - Network on LinkedIn
 - Learn on YouTube
 - Inspiration from TikTok and Instagram.
 - Community on places like Reddit and Facebook.
 - Associations/Organization (if they are not boring)
 - **Are you there?**
- Speak their language, not yours!



T

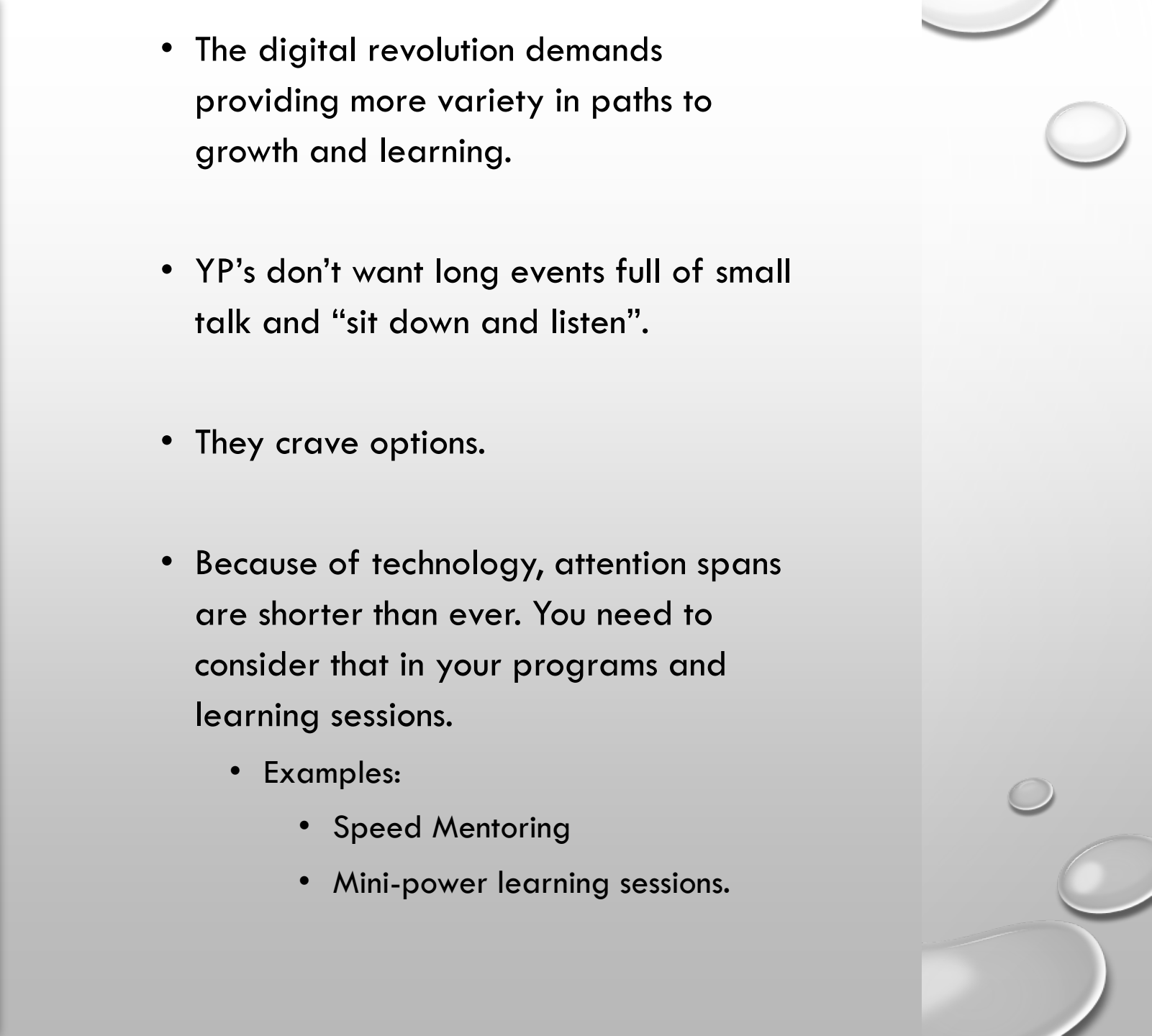
**YOU ARE NOT
SUPPORTING
OUR NUANCED
CAREER
TRAJECTORIES**

- There are more career paths, options, and dual roles than ever before.
 - We want variety and continual growth.
 - We have millions of tools to learn - all at the touch of a button.
 - Gone are the days of working your way up through one organization.
 - We are far less likely to stay in a work environment where we are not happy and growing.
 - We will change jobs for growth opportunities.
 - We have learned that company loyalty alone does not equal career advancement.
 - If you are leading with tactics from a bygone era, you will not be able to attract or retain younger professionals.
- 



C

**YOU ARE NOT
CREATING
EXPERIENCES
THEY WANT**

- The digital revolution demands providing more variety in paths to growth and learning.
 - YP's don't want long events full of small talk and "sit down and listen".
 - They crave options.
 - Because of technology, attention spans are shorter than ever. You need to consider that in your programs and learning sessions.
 - Examples:
 - Speed Mentoring
 - Mini-power learning sessions.
- 

A large, bold, white letter 'T' is centered on a dark gray vertical band. The background of the slide is light gray with several realistic water droplets of various sizes scattered across it, particularly concentrated on the left and right edges.

T

**HAVE YOU
PROVEN YOUR
VALUE?**

- Workplaces and/or organizations today are less “top down” and more “two-way street” relationships.
- We know we have choices and we will make them. We were raised to not accept the status quo.
- If you can’t create an environment and experiences we need and want, then you are not providing your value to me – even though you ask me to prove mine. So why stay?
- For associations, if you don’t meet the changing needs – you will not have young people participate in your organization.
- Many of us want more flexibility at work and/or more flexible membership models in our associations.

C

HOW ARE YOU COMMUNICATING

- “Sit down, shut up, and listen” doesn’t fly. YP’s want, and should have, a voice.
- YP’s today want deeper connections and to be fully involved in collaboration.
- They want to be respected.
- They want to make a difference.
- They hate emails but crave interaction and communication. Consider alternate methods of communication, in addition to face-to-face.
- An “equal seat at the table” approach shows mutual respect. Who wants to be talked down to?
- Don’t worry, you are still the boss!



T

**ARE YOU
THINKING
ABOUT WHERE
WE ARE IN LIFE
(IN A DIFFERENT WORLD
THAN YOU GREW UP IN)?**

- We don't live in the days of "Leave it to Beaver anymore."
- We work hard BUT also value that work/life balance and mental health.
- We are starting families and our family time is important. (Translate to "No, I will not miss my kids choir concert AGAIN to work overtime.)

** See 6 kids picture!
- Our young men are far more involved in their families than ever before and share responsibilities at home.
- Only 24% of American Mothers are stay-at-home moms. That means the other 75% are in the workforce but still largely remain the primary caregivers at home.
- We either can't or won't work overtime or go to lengthy association meetings if it means we will miss out on family and important social activities.
- We typically make a lot less money. Does your firm or your association make it affordable for me to learn, grow and participate.
 - Examine your benefits and/or fees to see how you may better serve us.



SO. WHAT
—DO—
YOU DO?

C

EVALUATE

- Reevaluate the journey you currently provide for your YP's.
- Consider creating Young Professionals Committee and give them a voice in your workplace practice. (You have to be willing to listen!)
- Assign a “Seasoned Advocate” to the committee that can provide guidance and resources, but only when asked.
 - The Advocate should be a quiet resource, not running the show or telling them what to do.
- Task your YP's with evaluating your company or chapter (without repercussions) and ask them to offer ideas for change.



T

LEADERSHIP

- Establish a mentorship program that actually works for us. We want mentors that we truly connect with.
 - Encourage and empower younger professionals to be leaders.
 - Don't be afraid to create opportunities where we can run the show, and then get out of the way and let us do it.
 - Create a safe environment to fail with task and new ideas so we can learn without fear.
 - Start appointing YP's to speak, lead groups, chair committees and then let us be creative with it.
 - Create opportunities to let us innovate and shine!
- 

C

FOR ASSOCIATION PROGRAMS

- Get rid of traditional dinner/speaker 3-hour chapter meeting.
- Create a YP Committee and have YP specific events (they invite their friends) but make everyone welcome. Great networking/mentoring opportunity.
- Put YP's on your Board and give them a voice.
- Consider Happy Hour Networking paired with a speaker/event.
- It's OK if some events are just fun!
 - i.e. Chili Cook Off, Architectural Scavenger Hunt, Holiday YP Ugly Sweater Party, Golf Tournament, etc.
- Do more hands-on activities, mentoring events, online events, project tours, plant tours, bring your friends events, install something – We don't always have to be sitting down.
- Pair up with other industry organizations or offices to mix it up at your meetings.
- **Keep it CHEAP** for YP's!
 - (In PDX, we term YP's as anyone with 10 yrs or less AEC experience, **member or not - \$10 regardless of program.**)

T

ARE YOU ALLOCATING MONEY TO HELP YOUR YP'S GROW?



- Many companies and associations donate money to things like scholarships or sponsorships.
- Companies:
 - Consider using that money for continuing education, certifications, and other learning opportunities for your YP's.
 - Help support the licensure path.
 - Why is it so hard for YP's to get support to attend a conference? These are rich in education. It shouldn't be only senior professionals at the firm that get to go and who need it far less.
 - Remember, we are the ones doing the bulk of the work while you lead.
- Associations:
 - Fund YP's certification path in exchange for participation in your Chapter. Win/win all the way around.
 - Provide discounted events and consider YP's are "emerging" for years.
 - Help fund attendance at conferences and education programs.
 - **Keep the value of those dollars at home where you get to see the benefits.**



C+T

IN CLOSING

OPEN YOUR MIND

- Create opportunities to lead!
 - Empower your YP's to grow and share the spotlight with THEIR ideas.
 - Give YP's an equal seat and equal voice.
 - Be open to drastically new ideas.
 - Create a safe space to fail.
 - Be flexible and open minded.
 - Don't resist change.
 - Learn from your YP's. They have as much to offer you as you do them.
 - Step back a little and let them take the reins.
 - Don't micro-manage. It' doesn't have to be your way!
 - Don't be condescending.
 - Make a meaningful connection.
 - Communicate but don't over communicate. (Nobody reads that 12-page email)
 - Offer assistance/guidance, don't give orders.
 - Limit corrections to what is actually wrong, not just what they didn't do "your way".
 - Not everybody gets a trophy but recognition and praise makes anyone feel good. Use it!
- 
- 

QUESTIONS?



THANK YOU!

CHERISE LAKESIDE, FCSI

SENIOR SPEC WRITER
RDH BUILDING SCIENCE

CLAKESIDE@RDH.COM

CHERISELAKESIDE@GMAIL.COM

TAMARA DIGGS

LICENSED IRRIGATION DESIGNER
JAMES POLE IRRIGATION /
FREELANCE

TAMARADIGGS@CHATAMDESIGNS.COM