Environmental Change Initiative
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General Overview of Deliverables with Objectives and Measurement

Promotional Video
View: https://www.youtube.com/watch?v=eDjr0NDCZVo
Views: 463 views
Average watch duration: 1:50

Video Marketing Strategy
In parallel to the creation of the promotional video, a full-scale marketing strategy was created to disseminate the video. This activity included the development of boilerplate language to be used for sharing the video with various audiences, UAA launch week social posts, and email marketing content. Additionally, the strategy included sharing the video with up to 15 adaptation and related networks.

The success of the strategy was measured having at least five external entities shared the UAA tool with their networks, whether through resource site features, blog coverage by their writers, social, or upcoming newsletter updates. The tool was placed on several on several high-profile climate networks, including NOAA (climate.gov), Climate Adaptation Knowledge Exchange (CakeX), Climate Nexus, USDN, National Adaptation Forum, and ClimateWire. Additional follow-up is underway presently.

ND-GAIN disseminated an email marketing campaign to ND-GAIN's listserv of appropriately 2,600 subscribers. The campaign garnered a 29.2% open rate and 15.2% click-to-open rate to visit the tool. View: https://t.e2ma.net/webview/e35fob/6d69c8ae87e3184aa32df65565d5b35b

See detailed video plan later in this document.

Media
Notre Dame distributed a press release (https://news.nd.edu/news/notre-dame-releases-climate-vulnerability-assessment-of-more-than-270-us-cities/) to PR newswires as a means to advance of the tool's launch. The release had 1650 pageviews on news.nd.edu, in addition to being posted on various other internal sites (research.nd.edu, environmentalchange.nd.edu, gain.nd.edu). Average time spent on page was 3:13. Uniquely, the release went live the first day of the National Association of Science Writers Conference in Washington D.C. ND-GAIN purchased a booth at the three-day conference to pitch and demo the UAA tool for attendees, which included 800+ national scientific reporters. At the event, ND-GAIN spoke to several reporters and freelance writers, as well as funding agencies (NIH, NSF). American Scientist expressed interest in the tool at event, and we are currently in discussion on an article. Additionally, the release garnered attention from:

- Scientific American (https://www.scientificamerican.com/article/index-ranks-u-s-cities-based-on-climate-risk-and-readiness/)
- Climate Wire (https://www.eenews.net/climatewire/stories/1060105467/)
- Meetings of Minds (op-ed) (https://meetingoftheminds.org/decision-making-strategies-for-urban-adaptation-29900)
- Bloomberg (https://news.bloombergenvironment.com/environment-and-energy/insight-did-amazon-consider-climate-risk-for-its-new-headquarters)

Postcards

Three postcards were developed to be sent along with the tool launch press release at the Conference. This print collateral introduced the UAA and encouraging users to engage with it.

See postcards later in this document.

Tutorials and Educational Materials

Educational materials (video tutorials and downloadable PDFs) were developed to guide first- and second-tier users through the process of using UAA. Distance education and instructional material design principles can be employed to provide UAA users with the guidance needed to navigate the UAA tool, educational support to understand UAA data, and prompts to pursue actions such as having conversations and dialogue surrounding climate change adaptation. Educational materials include:

- **Build a Data-Based Report**: The UAA provides access to raw and visualized data. Make sure to take full advantage by building these data and graphics into reports for your city.
- **City Juxtaposition in the UAA:** To strengthen your orientation in the UAA, explore a few cities that are not your own, and see what you can learn from the similarities and differences.
- **Reflection on the UAA:** These questions will help you reflect on your Urban Adaptation Assessment data outcomes, resources in your city and identify steps for taking action.
- **Customizable Presentation Deck**: This presentation framework has been created for implementing UAA data, providing a visual tool for advocating the needed resources in your city.
- **City Report:** This forthcoming city report will serve as a model of how the UAA data can be used by decision-makers.
- **Determining the Return on Investing in Adaptive Strategies (Use Case):** See how a city sustainability officer can identify which climate hazards post the highest risk to their city, and evaluate whether adaptation strategies for that risk would be a good investment.
- **Bringing Future Cost Data to a Community Debate (Use Case):** Many community leaders are concerned about the risk of flooding in their cities. Learn how one could use the UAA to explore the cost and probability of flooding, to help in advocating for effective adaptation strategies.

- **Making the Case for Where to Invest (Use Case):** Climate hazards do not pose the same risk equally within a city. See how a city councilor can use the UAA to study how risks are distributed, to determine if their district shows the greatest vulnerability and need for adaptation investments.
  View: https://gain.nd.edu/our-work/urban-adaptation/help-center/

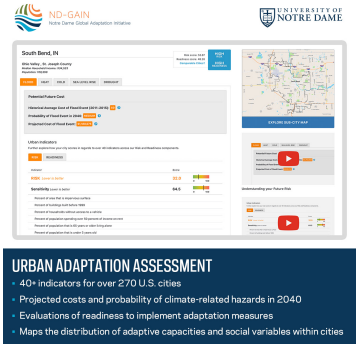
Prioritization focused on critical educational takeaways so that users receive need-to-know information and are not overloaded with nice-to-know information. Instructional tutorials were split up into five smaller, digestible segments, so users can quickly find the topics and knowledge they need without having to search or get overwhelmed with too much information. Instructional materials aim to guide users towards actions so that UAA data and knowledge is employed in their locale. These tutorials incorporate screencasts, animations, and voiceover.
Collectively, the tutorials have 147 views. View: https://gain.nd.edu/our-work/urban-adaptation/help-center/

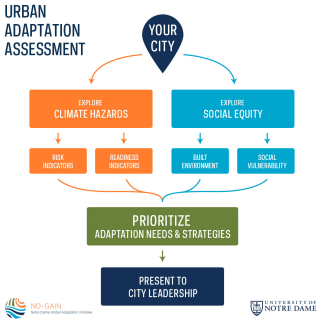
Messaging Guide
Prior to developing the marketing and educational pieces for the tool, a guide to messaging about the tool was developed to ensure consistent communications about the tool's capabilities and the benefits it offers. The document contains supplemental messaging pieces, including a short-form introduction to the tool (elevator pitch), target users, bullet-points on its distinguishing features, reasons to use the tool, and three use case scenarios. This messaging has been incorporated into writing for the promotional video, social strategy, and other marketing tactics, and was be shared beyond the core UAA team with advisors, contractors, and partners.

See messaging guide later in this document

Social Media Strategy
ND-GAIN is gearing up to launch a social media strategy to market the various components of the UAA to cities around the U.S., and also serve as a primary location to share insights and impact updates about tool use from approved users. An editorial calendar will be utilized ensure that approved content is posted in a timely manner. The goal of the social media efforts would be to bring in new users, provide badges of credibility for UAA, and promote educational resources — all to help draw in new users and walk them through the process of accessing the tool and using it as a decision support tool.

Launch graphics have been developed to visually draw individuals to the postings and entice followers to click and visit the tool. Various internal (Notre Dame, ND Research) and external (Climate Nexus) will be tagged as a means to amply reach.





See social media plan and examples later in this document.

Factsheet

To supplement the media outreach and other engagement, ND-GAIN is in the process of developing a vibrant 2-page factsheet, to be designed like an infographic and echoing the messaging from the promotional video. This print collateral will introduce the UAA and encouraging users to engage with it. The factsheet will be available for distributing in meetings, conferences, and other events throughout the duration of the awareness campaign.

Based on these deliverables, our metrics aim to incorporate various types of feedback as measures of success. Sources of data include pre- and post-campaign endorsement numbers, "Contact" emails, web analytics, media outreach tracking, etc. Baseline metrics were characterized before the UAA tool launched. The analytics will be reviewed again near the end of the campaign - June 1, 2019.

ND-GAIN

Notre Dame Global Adaptation Initiative

Urban Adaptation Assessment Messaging Guide

NOVEMBER 2018

Overview

What is the Urban Adaptation Assessment?

The Urban Adaptation Assessment (UAA) is a free measurement and analysis tool that explores a city's adaptability to climate change. Developed by researchers at the University of Notre Dame, and funded by the Kresge Foundation, the UAA provides data and interpretation on the current climate risks and readiness to adapt of more than 270 U.S. cities. For the climate-related hazards of extreme heat, extreme cold, flooding, and drought, the UAA is able show the projected cost and probability in 2040. Just as critical, it includes a sub-city mapping to capture, and allow exploration of, potential inequities within a city, catalyzing conversation around and implementation of more inclusive adaptation options for all residents.

Many indicator frameworks exist to measure resilience and vulnerability at the city level; however, current literature lacks assessment of cities' capacity to take on adaptation actions and to reduce losses and damages arising from climate hazards. The UAA addresses this gap by uniquely incorporating adaptive capacity and readiness, hazard specificity, and the use of outcome data to determine strong indicators. It also acknowledges and helps assess the disproportionate impacts of climate change on vulnerable populations. In doing so, the UAA supports cities in their prioritization of adaptation efforts by identifying populations on the front lines of climate change that do not have resources to adequately adapt to climate risks.

As a decision support tool, the UAA collates a rich dataset within an online platform to visualize those data. Though it does not prescribe policy solutions, it does provide data and essential knowledge for more informed adaptation planning, encouraging policy innovation to make cities more adapted. Ultimately, the UAA is designed to help users advocate for needed adaptation resources to city leaders.

What is the mission of the UAA project?

The UAA ignites conversation and dialogue around climate change adaptation and brings a wide-range of stakeholders including city leaders and community organizers to the table to address this important issue. By providing quantitative analysis of cities in an open-source format, the UAA fosters sharing of best practices and adaptation innovation.

By including a sub-city analysis, the UAA explores conditions within a city through a social equity lens. There is currently a knowledge gap in understanding how risks and opportunities of climate change are distributed within a city, thereby making it

difficult to adapt to risks faced by already vulnerable populations. The UAA provides relevant data to cities to inspire solutions that are inclusive of vulnerable populations and enhance a general understanding of the relationship between social equity and adaptation to climate hazards.

What is the intended output?

The UAA presents a Risk Score and a Readiness Score for each city, housed within a profile that allows stakeholders to view indicators across risk and readiness for each of the climate hazards, including future projected climate costs. The UAA incorporates the ability to easily download any data of interest and share across social media platforms.

Most importantly, the UAA provides a detailed visualization of the distribution of adaptive capacities and social variables with the objective of exploring potential inequities that exist at the sub-city level (i.e. census-tract), painting a vivid visual of social inequities that lie within a city's boundaries in relation to the adaptation measures. Specifically, stakeholders have the opportunity to select a variety of adaptive capacities, overlaying these with social variables including lack of health insurance, lack of access to vehicles, and linguistic isolation.

Who is the intended user?

UAA users span a variety of groups seeking to explore, define and improve adaptation practices in U.S. cities. Power users, including both sustainability and resilience officers, are the UAA's first tier targeted stakeholders, whilst community leaders and advocates, mayors and municipal government officials are second tier stakeholders. While many users will already have a strong grasp of the need for climate adaptation and risk assessments, the primary power of the UAA is in delivering assessment data for users who have not yet been able to put resources towards creating climate risk assessments or adaptation plans for their cities. The UAA is accompanied by resources developed to help new users learn how to get the most out of the tool, and how to apply the data towards their work.

The UAA inspires adaptation questions and helps users identify opportunities and priorities. In addition, its outputs are intended to aid in the planning process, better inform policy, highlight funding needs, empower users, build upon existing adaptation efforts and facilitate on-the-ground action.

To begin assessing for your city and to better advocate for needed adaptation resources, visit **gain.nd.edu/urban.**

Short-form Introduction to the Tool (Elevator Pitch)

The Urban Adaptation Assessment, or UAA, is a measurement and analysis tool from the University of Notre Dame that explores a city's adaptability to climate change. This interactive database profiles over 270 cities within the United States, to be a decision-support tool as city leaders plan for a changing climate. The tool allows sustainability officers and community leaders to evaluate climate risks and readiness, on a city level and by census tract, to analyze the equity of city policies. To begin assessing for your city and to better advocate for needed adaptation resources, visit **gain.nd.edu/urban**.

Distinguishing Features

- The UAA's rich, open-source dataset covers 40+ indicators for over 270 cities in the United States & Puerto Rico.
- The UAA shows the projected cost and probability of climate-related hazards in 2040.
- In addition to assessing cities' risks due to climate-related hazards, the UAA shows evaluations of cities' readiness to implement adaptation measures.
- The UAA is one of the first tools to provide a detailed visualization of the distribution of adaptive capacities and social variables at the sub-city level, to support discussions of strategies that improve adaptation with social equity across communities.

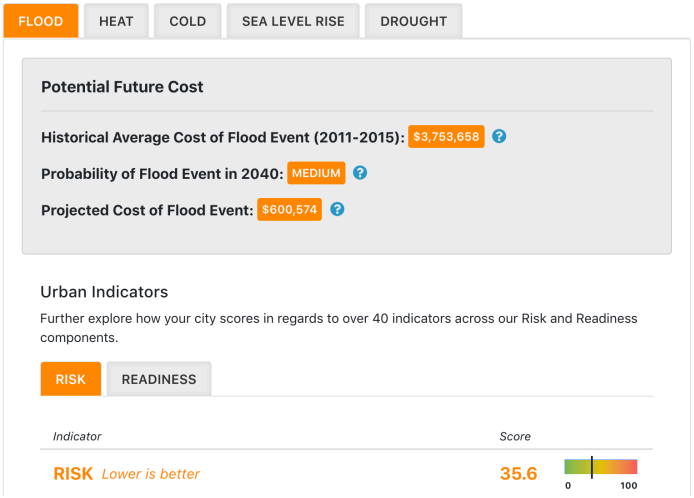
Reasons to Use the Tool

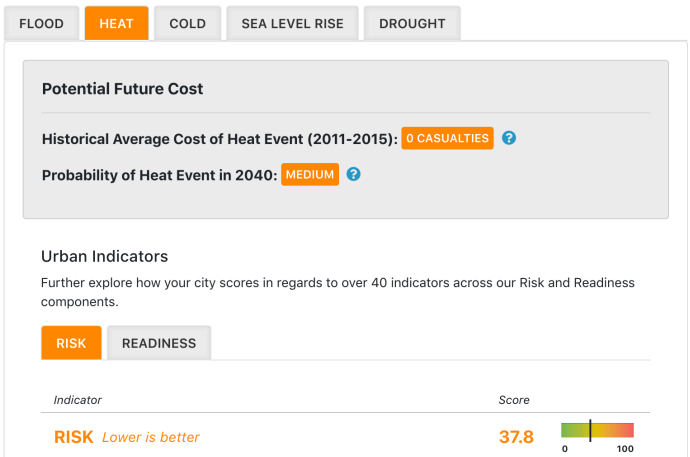
- The UAA provides a free, fast and helpful assessment for cities' climate vulnerabilities and ability to adapt to those hazards.
- The UAA supports sustainability officers and other community leaders in deciding on needed adaptation resources, and advocating for those resources to city leaders.
- The UAA is accompanied by resources developed to help new users quickly learn how to get the most out of the tool, and how to apply the data towards their work.

Use Case Scenarios

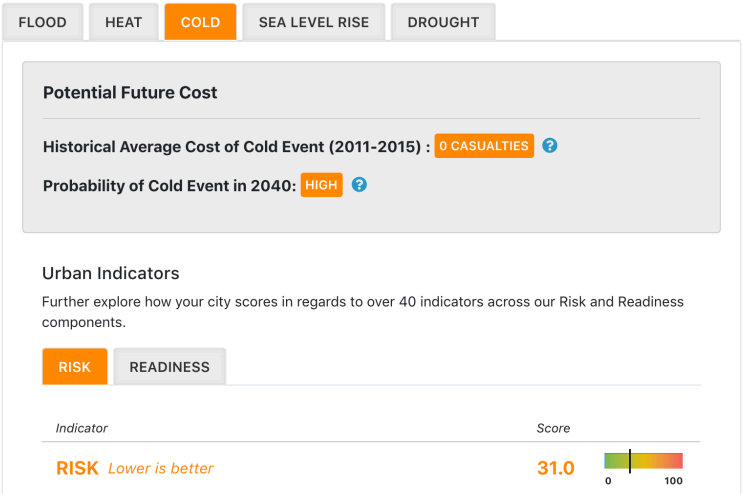
Case Scenario #1: Determining the return on a city investing in adaptive strategies

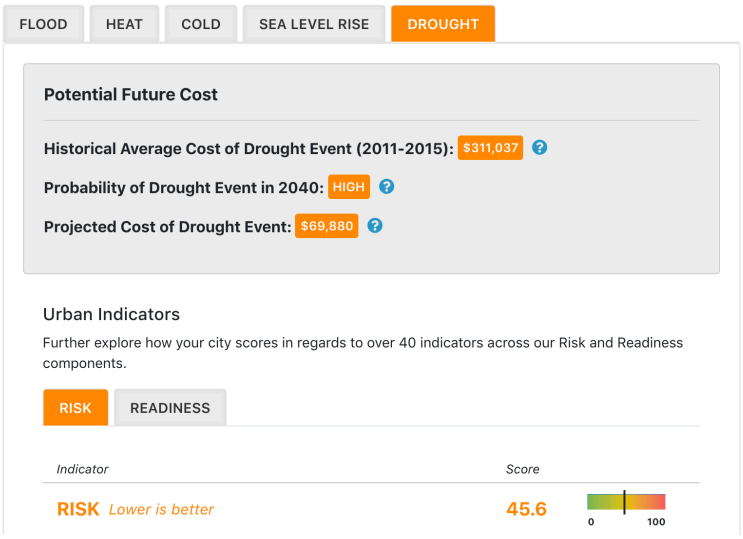
A city sustainability officer in the Midwest has learned of adaptation actions moving forward in neighboring peer cities, and wants to propose strategies to the mayor to help their city keep current. With the UAA, the sustainability officer can find their city data, and identify the hazards (whether extreme cold, extreme heat drought, flooding, or sea level rise) that pose the highest risk to their city.





They can then, for each hazard, evaluate conditions in a peer city that might influence their own strategies, by looking at specific indicators, costs of hazards, or overall scores.

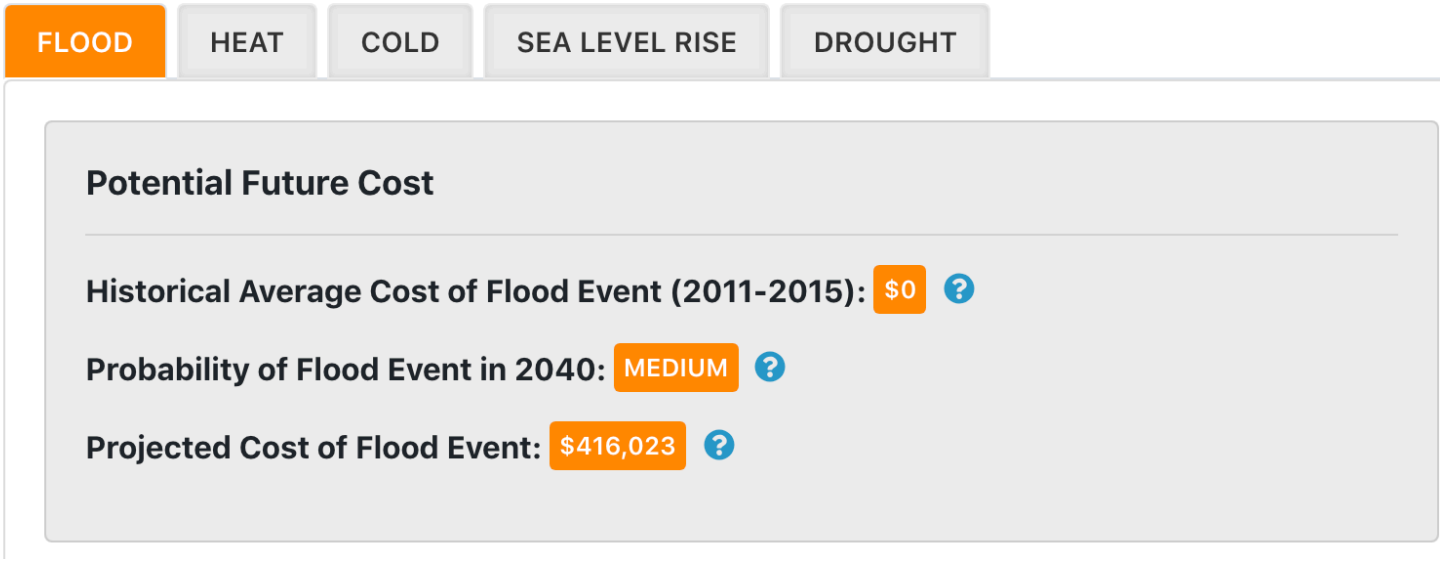




If a strategy, for instance, would raise the city's adaptive capacity to mitigate the cost of droughts, and the city data shows low adaptive capacity currently and an overall high risk for drought, the sustainability officer can be confident that this strategy would likely deliver a good return on the cost of implementation. The sustainability officer can review indicators for each of the climate hazards, and develop a package for the mayor with a prioritized list of which strategies that would be likely to reduce future climate-related costs.

Case Scenario #2: Bringing future cost data to a community debate

Recent years of hurricanes on the East and Gulf coasts have brought record amounts of rainfall and flooding to communities in Texas, Louisiana, and the Carolinas, spurring debate in other Southeastern cities about how best to prepare for future storms. A community leader is concerned about the risk of flooding in their city. With the UAA, they can find their city, and on the City Profile page, select the Flood hazard tab.

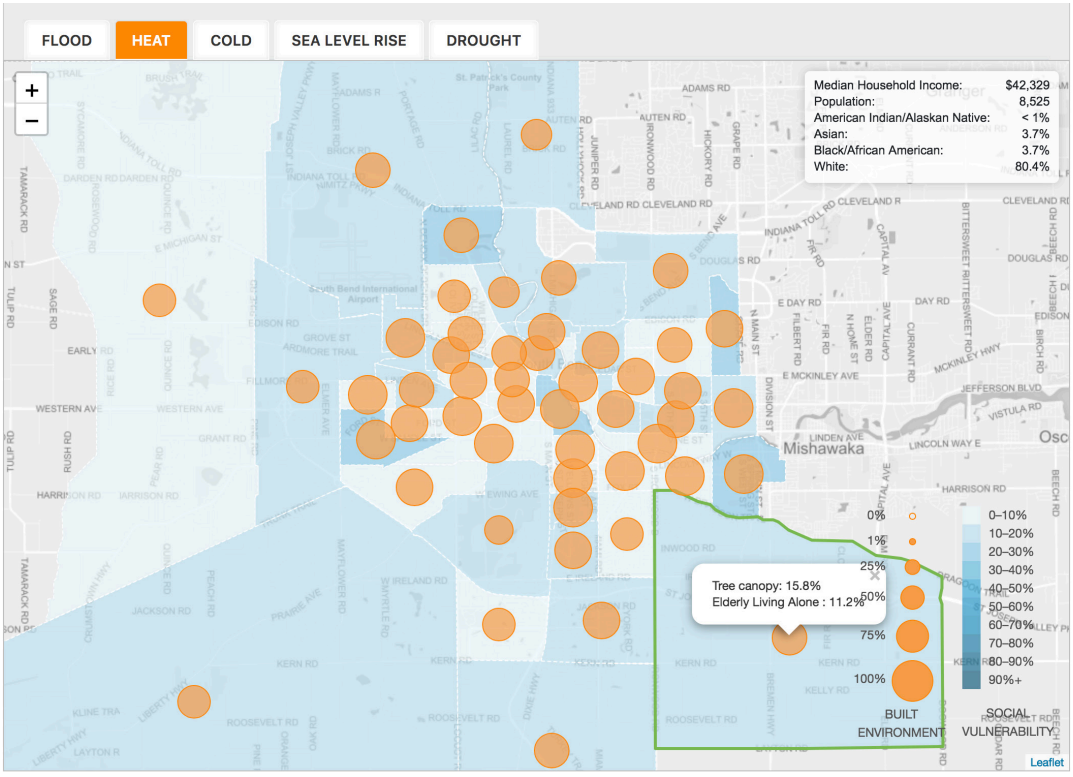


At the top of this tab is a projection of the cost of an average flood in 2040, as well as the probability of such an occurrence. Say this leader sees that their city has a high probability for flooding. On this same page, they can see scores for Risk and Readiness indicators related to flooding.

The Risk scores are the result of three main indicator categories, Exposure, Sensitivity, and Adaptive Capacity. The community leader sees that the city's exposure (calculated from data tracking the percent of people and buildings in high risk flood zones) is high. On the other hand, the city's sensitivity is low, and the adaptive capacity (including the ability to keep drinking water available) is high. With this knowledge, the community leader can feel confident in advocating for strategies that encourage development away from flood zones, in order to lower exposure to floods.

Case Scenario #3: Making the case for where to invest

A city council for a mid-size city in Arizona has been presented with a proposal for adaptation strategies to reduce the health risks due to future heat waves. These strategies include public communications efforts to direct residents to seek air-conditioned shelter, stay hydrated, and limit their exposure to direct sunlight, as well as investing in future community infrastructure like cooled community centers and added tree coverage. The UAA can be used to determine not only what to focus funds on, but where. With the UAA, a city councilor can find their city, and access the sub-city mapping. Within these maps, they can select the heat hazard tab, then view a map of their city that shows -- for each census tract within the city -- the percentage of tree canopy coverage, layered with a view of social vulnerabilities such as the percentage of the population that is elderly and living alone.



Select indicators below to pinpoint the locations of vulnerable populations overlaid with structural conditions that contribute to heightened climate risk.

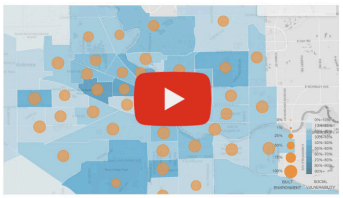
Built Environment

The built environment refers to the human-made surroundings that provide the setting for human activity. Indicators of the built environment were selected based on the following justifications:

- ○ Buildings Built Before 1979
- ◉ Tree canopy

Reset

Social Vulnerability



Coming Soon: Exploring Neighborhood Equity

With this information, a city councilor can determine if their district shows the highest need for adaptation within the city. If it does, they can screen capture the maps and download the data to present to the other city councilors, supporting the case that investment in their district offers the most return in terms of health outcomes, minimizing any political struggle over where in the city to distribute resources.

Flooding cost Memphis more than $2 billion from 2011-2015.

IS YOUR CITY READY FOR EXTREME FLOODING?

UNIVERSITY OF NOTRE DAME | RESEARCH

Eight of the 10 cities facing the highest likelihood of extreme heat in 2040 are located in the Midwest.
IS YOUR CITY READY FOR EXTREME HEAT?
UNIVERSITY OF NOTRE DAME | RESEARCH

IS YOUR CITY READY FOR THE NEXT...

RESEARCH

UNIVERSITY OF NOTRE DAME

The **Urban Adaptation Assessment (UAA)** is an interactive online tool that showcases data from more than 270 U.S. cities with populations over 100,000, in all 50 states and Puerto Rico.

The UAA includes metrics on vulnerability to and readiness for:

- Flooding
- Extreme heat
- Extreme cold
- Drought
- Sea-level rise

Developed at the University of Notre Dame, the UAA provides metrics at both the city and the neighborhood level. For each city, you can evaluate the overall hazard risks, in addition to exploring social vulnerability via census tract.

With the UAA, anyone can analyze the equity of adaptation policies and programs within their community.

Explore: gain.nd.edu/urban

ND-GAIN
Notre Dame Global Adaptation Initiative

How vulnerable is your city?

City: _____

Overall Risk: _____ Overall Readiness: _____

Likelihood in 2040

Extreme Heat: _____
Extreme Cold: _____
Drought: _____
Flooding: _____
Sea Level Rise: _____

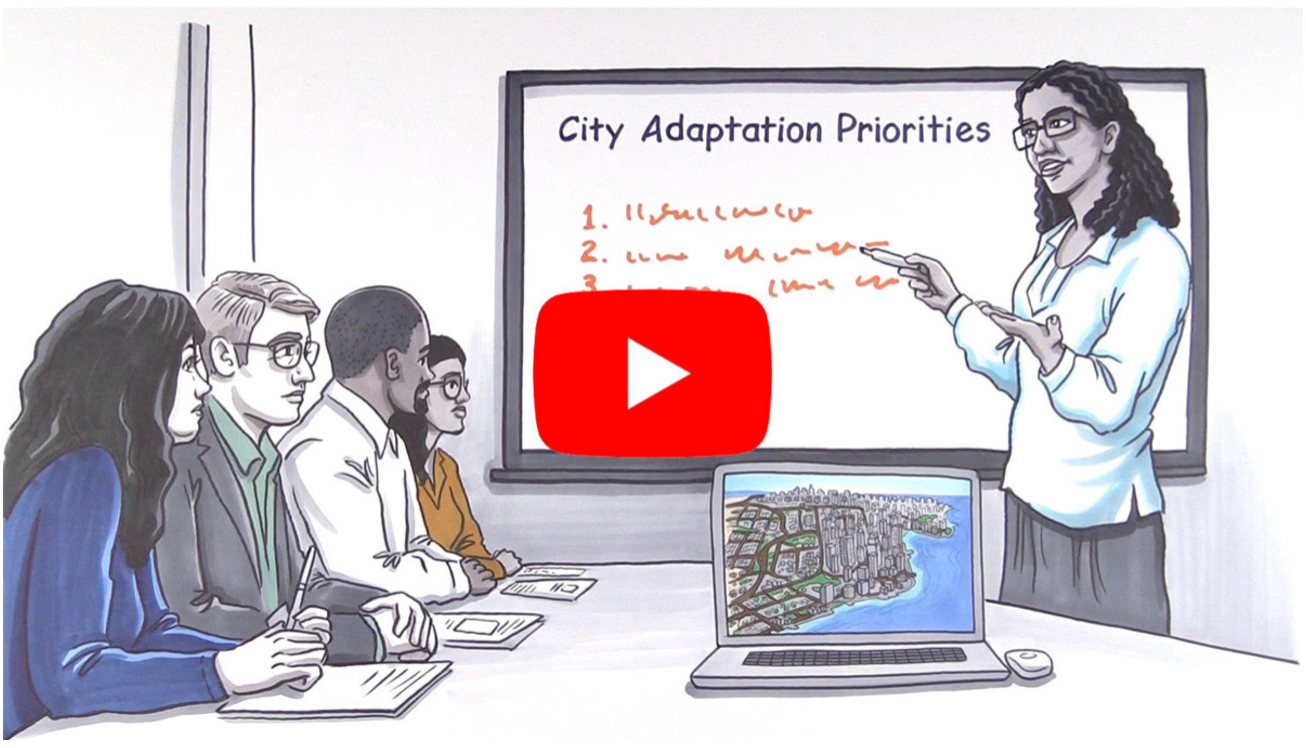
The Notre Dame Global Adaptation Initiative (ND-GAIN) is proud to announce that the Urban Adaptation Assessment (UAA) is now live! A free and open source tool, the UAA collates a rich dataset to analyze a city's adaptability to climate change.

Funded by The Kresge Foundation, the UAA builds upon ND-GAIN's flagship asset, the annual Country Index. The UAA includes data from more than 270 cities in the United States with populations over 100,000, including all 50 states and Puerto Rico.

As communities continue to face the intensifying effects of climate change, this decision support tool enables city officials, sustainability leaders, and others to evaluate climate risks and readiness, on a city level and by census tract, to help cities adapt and prepare.

For each city, the tool shows metrics for vulnerabilities related to flooding, extreme heat, extreme cold, drought, and sea-level rise, as well as the city's readiness to adapt. Additionally, the UAA is one of the first climate tools available that shows social vulnerabilities at the neighborhood level.

Watch the launch video below to learn more about how the UAA can help assess cities' climate risks, readiness, and social equity distribution.



To begin assessing for your city and to better advocate for needed adaptation resources, visit gain.nd.edu/urban.

GET STARTED

UNIVERSITY OF NOTRE DAME | RESEARCH

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ND-GAIN
UAA Promotional Video
Creative Strategy

Objective

- Create awareness of the UAA tool and its benefits, and get users to try the tool

Target audience: sustainability and resilience officers

- Primary audience: The "power users" include sustainability and resilience officers in 278 cities included in the UAA tool database (U.S. including four Puerto Rican cities with populations over 100,000)
- Secondary target audience: community leaders and advocates, mayors and municipal government officials
- Will not need a lot of introduction to the need for climate adaptation, or risk assessments
- Have access to indicators for resilience and vulnerability, but not assessment of cities' capacity for adaptation actions.
- For officers in mid-size cities, they have not yet been able to put resources towards creating climate risk assessments or adaptation plans

Main message

- The UAA provides for more informed city adaptation planning, to empower sustainability officers and other community leaders in advocating for needed adaptation resources to city leaders

Supporting points & unique characteristics

- Start with brief overview of the idea of climate adaptation in cities
- The UAA shows data for adaptation readiness, unlike other tools
- It's free to use, and does not take long to learn how to use
- Guidance for using the tool is available to make it easier to get the most relevant data
- The UAA provides the ability to explore social inequity within local climate vulnerability, allowing leaders to prioritize adaptation strategies that protect the community's most vulnerable populations from climate risks.
- The UAA enables cities to make comparisons between cities to help identify opportunities for improvement and to foster innovation

- The UAA is a tool that can help leaders consider priority areas to build policies, implement programming, and drive pragmatic decisions based on actionable data
- For officers, community leaders and advocates, more detailed data within a city, for some locations or some indicators, allows for neighborhood and community-level comparisons as well.
- An example use case will help show that the tool was designed for the target audience's needs, and how it fits into their workflows
- Designed by the experienced team behind the ND-GAIN Country Index

Execution

- Tone: Matter-of-fact, optimistic ("a better future for citizens is possible")
- Style: More naturalistic than cartoony
- Visuals to include:
    - Zoom in from globe to city map (connect macro climate change to local)
    - Citizens and neighborhoods (those who are ultimately affected by this work)
    - Graphs and maps (underscores focus on analytics and data visualization)
    - More green, color, vitality in the future
- Visuals to avoid
    - Heat and flames
    - Heat-stressed citizens
    - Dramatic flooding
- How to transition to demo footage: Could illustrate a potential user thinking about how to quantify climate risk and readiness in their city, and then the video zooms into the thought bubble, inside which is the demo footage

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ND Overview on Promotional Video

Promotional Video Arc = Hook → UAA Content → Call-to-Action

<u>UAA Hook</u> – Give audience a reason to care about the UAA
Possible content covered:

- Introduction (question, problem) prompt = Empowerment!
    - Stat, graphic, map
- Climate change & decision-makers

- Transition to UAA history & development

<u>UAA Content</u> – Give audience specifics on the UAA
Possible content covered:

- What is the UAA?
- Purpose & mission
- Users (use case)
- Outputs
    - Ranking (maybe)
    - City Profile
    - Social Equity
    - "What if"/customization scenarios
- What makes the UAA unique? See below.

<u>High - Must Say</u>

SCOPE + GRANULATITY + PLANNING

- Geographical range: 270+ cities, all cities over 100K, all 50 states + Puerto Rico).
- Includes both city level and sub-city level data.
- Hazard specificity: heat, cold, flooding, drought and sea level rise.
- "What If" customization scenarios based upon 2040 impact projections – future facing outcomes
    - Units UAA provides meet the specificity demands of city practitioners
- Free and open-source, based within the University of Notre Dame's Global Adaptation Initiative, also known as ND-GAIN.

Purpose + Mission:
Decision-support – ignite conversation for better future.

- Address social equity. Today's changing climate is distributing resources; the UAA measures sub-city inequities as a means to help level the playing field for all.
- Inform the decision - "prescriptive" knowledge
- The tool should inform stakeholders on how to approach adaptation from a strategy rooted in social equity

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ND-GAIN
UAA Example Social Media Posts & Graphics

1. We're proud to announce the launch of the Urban Adaptation Assessment (UAA) tool. UAA is a free analysis tool that allows sustainability officers and city leaders explore their city's adaptability to #ClimateChange. Try it out here: gain.nd.edu/urban #Cities4Climate
[Attach promo video]

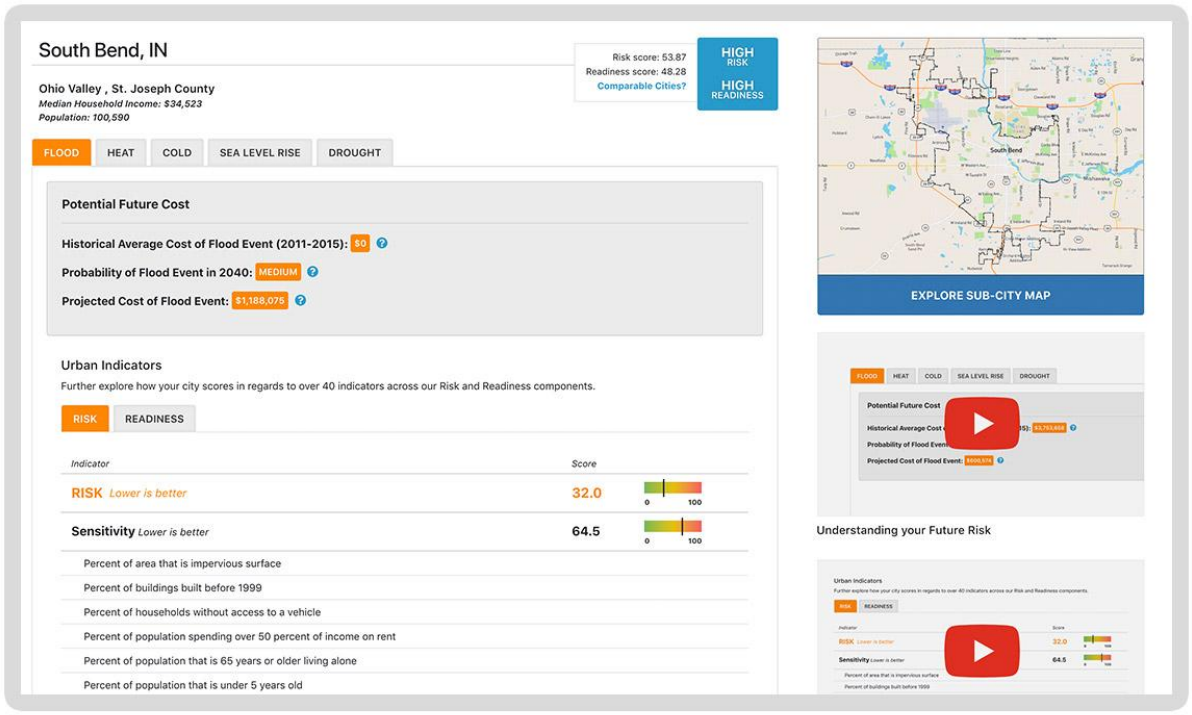
2. The Urban Adaptation Assessment (UAA) provides comprehensive data on current #ClimateChange risks and the readiness to adapt of more than 270 U.S. cities. Hazards include extreme heat, extreme cold, flooding, and drought. Look up your city: gain.nd.edu/urban #StepUp2018
[Attach promo video]

3. Using the Urban Adaptation Assessment is easy! Type in your city's name to access your city's overall risk and readiness profile, or dive in to explore social equity data at the sub-city level. Learn more today: gain.nd.edu/urban #ClimateChange #AdaptationEquity
[Attach welcome tutorial video]

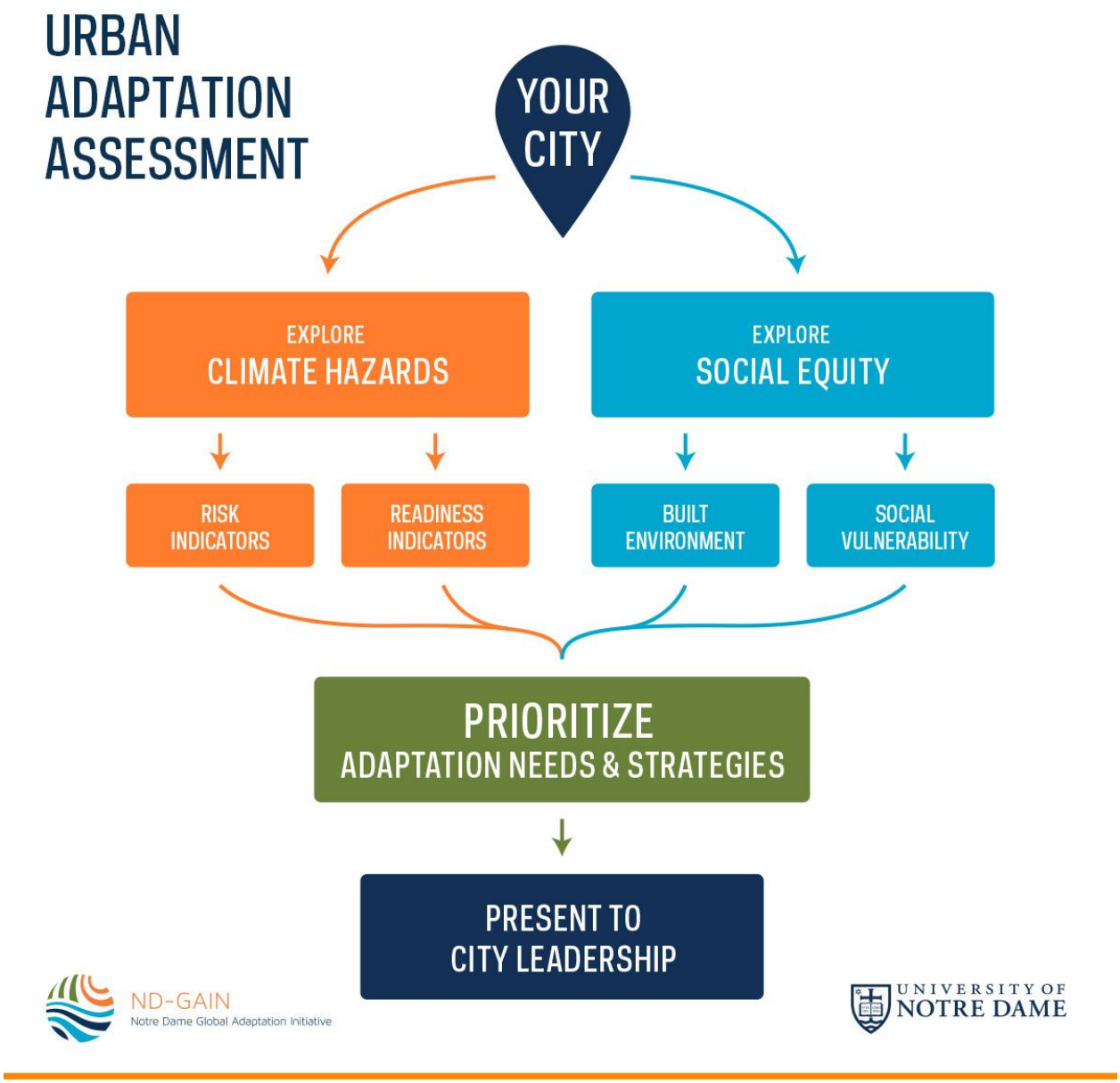
The Urban Adaptation Assessment (UAA) was developed to support the work of #SustainableCities leaders. Assess your city today: gain.nd.edu/urban #ClimateChange

5.

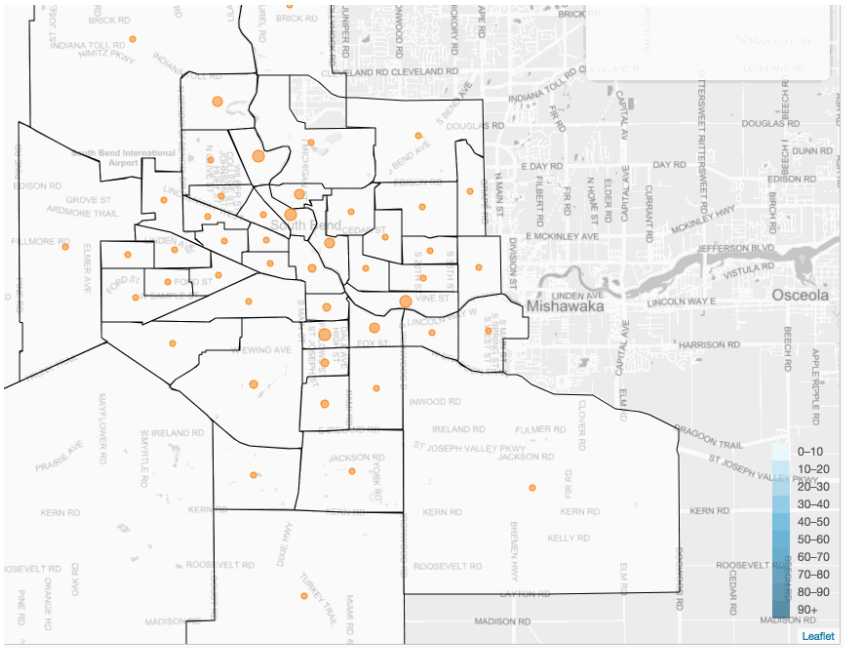
6. The Urban Adaptation Assessment (UAA) tool has launched. It supports sustainability officers and city officials in exploring and #Planning their cities' #Adaptation to #ClimateChange, with 40+ risk and readiness indicators. Research your city now: gain.nd.edu/urban



7. With the Urban Adaptation Assessment, city and community leaders can explore climate hazards and #SocialEquity, and prioritize #Adaptation needs and strategies to support advocating for smart decisions in their city. gain.nd.edu/urban #ClimateChange #AccelerateAdaptation



8. The Urban Adaptation Assessment (UAA) enables sustainability officers and city officials to view their city's vulnerability, but it can go deeper. UAA can go neighborhood-by-neighborhood and look at #SocialVulnerability. Learn more: gain.nd.edu/urban #ClimateChange



Built Environment

The built environment refers to the human-made surroundings that provide the setting for human activity. Indicators of the built environment were selected based on the following justifications:

- (●) High Risk Flood Zones
- ( ) Impervious Surfaces
- ( ) Buildings Built Before 1999

Reset

Social Vulnerability

Social vulnerability refers to the inability of people, organizations, and societies to withstand adverse impacts from multiple stressors to which they are exposed. Indicators of social vulnerability were selected based on the following justifications:

- ( ) Single Mothers
- ( ) Access To Vehicle
- ( ) Housing Instability

ND-GAIN
Notre Dame Global Adaptation Initiative

ND-GAIN's Urban Adaptation Assessment
Overview Document

What is the Urban Adaptation Assessment?

The Urban Adaptation Assessment (UAA) is a measurement and analysis tool that explores a city's adaptability to climate change. It provides data and interpretation on the current climate risks and readiness to adapt of 279 U.S. cities to climate change hazards including extreme heat, extreme cold, inland flooding, drought and sea level rise. In addition, it includes a sub-city, social equity analysis to capture, and allow exploration of, potential inequities within a city, catalyzing conversation around and implementation of more inclusive adaptation options for all residents.

Many indicator systems exist to measure resilience and vulnerability at the city level; however, current literature lacks assessment of cities' capacity to take on adaptation actions and to reduce losses and damages arising from climate hazards. The UAA addresses this gap by uniquely incorporating adaptive capacity and readiness, hazard specificity, the use of outcome data to determine the best indicators and covering a broad geographic coverage. It also acknowledges and helps assess the disproportionate impacts of climate change on vulnerable populations. In doing so, the UAA supports cities in their prioritization of adaptation efforts by identifying populations on the front lines of climate change that do not have resources to adequately adapt to climate risks.

Though it collates a rich dataset within an online platform to visualize those data, the UAA is not a decision-making tool and does not prescribe policy solutions. Rather, provides data and essential knowledge for more informed adaptation planning, the UAA encourages policy innovation to make cities more adapted.

What is the mission of the UAA project?

The UAA ignites conversation and dialogue around climate change adaptation and brings a wide-range of stakeholders including city leaders and community organizers to the table to address this important issue. By providing quantitative analysis of cities in an open-source format, the UAA fosters sharing of best practices and adaptation innovation.

By including a sub-city social equity analysis, the UAA explores conditions within a city through a social equity lens. There is currently a knowledge gap in understanding how risks and opportunities of climate change are distributed within a city, thereby making it difficult to adapt to risks faced by already vulnerable populations. The UAA provides relevant data and analysis to cities to inspire solutions that are inclusive of vulnerable populations and enhance a general understanding of the relationship between social equity and adaptation to climate hazards.

What is the intended output?

The UAA presents three scores including an Overall Score, Risk Score and Readiness Score housed within a city profile that allows stakeholders to explore and compare at the indicator level across risk and readiness, to group cities of interest, to customize the assessment for their needs by manipulating the weighting of various indicators, and incorporates the ability to easily download any data of interest and share across social media platforms including Twitter, Facebook and Instagram.

The UAA allows for categorical comparisons among and within cities to foster innovation and the sharing of best practices. There is no threshold at which cities are considered "resilient" or "vulnerable." By comparing cities, nonetheless, the UAA can help identify opportunities for improvement.

Most importantly, the UAA provides a detailed visualization of the distribution of adaptive capacities and social variables with the objective of exploring potential inequities that exist at the sub-city level (i.e. census-tract). Specifically, stakeholders have the opportunity to select a variety of adaptive capacities including home heating, health insurance, hospital bed and tree cover, overlaying these with social variables across race, income, education level, median household income and single-parent headed households. Painting a vivid visual of social inequities that lie within a city's boundaries in relation to the adaptation measures.

Who is the intended user?
The UAA includes more than 270 cities (U.S. including four Puerto Rican cities with populations over 100,000). Its users span a variety of groups seeking to explore, define and improve adaptation practices in U.S. cities. Power users, including both sustainability and resilience officers, are the UAA's first tier targeted stakeholders, whilst community leaders and advocates, mayors and municipal government officials are second tier stakeholders. The primary power of the UAA is its geographic scope and method of framing adaption needs and opportunities. More detailed data within a city, for some locations or some indicators, allows for neighborhood and community-level comparisons as well. Questions of equity can be discussed looking at both the between and within cities scales.

The UAA inspires adaptation questions and helps users identify opportunities and priorities. In addition, its outputs are intended to aid in the planning process, better inform policy, highlight funding needs, empower users, build upon existing adaptation efforts and facilitate on-the-ground action.

ND-GAIN
Urban Adaptation Assessment Components