



### INTRODUCTION TO THE SCOPE OF WORK

To help advance ocean conservation, in 1998 and 1999 The Ocean Project conducted major public opinion research into Americans' understanding of and attitudes toward the ocean. This research – including focus groups and a subsequent telephone survey – significantly expanded upon SeaWeb's 1996 ocean attitudes research, which marked the first time public opinion research had been used to strategically inform conservation and advocacy efforts.

The Ocean Project's 1998-99 research sought to better comprehend the means by which future communication efforts, especially at zoos, aquariums, and museums (ZAMs), could increase the American public's awareness of ocean-related issues, and engender greater concern and advocacy for ocean health. The research findings, *Communicating About Oceans: Results of a National Survey*, were published by The Ocean Project in October 1999. The effort both established a baseline from which future initiatives could measure changes in how the American public perceives and relates to the ocean, and also provided a benchmark for future research.

Since the publication of *Communicating About Oceans: Results* of a National Survey, nearly a decade has passed. This same decade has witnessed dramatic transformation in multiple global arenas: The Internet has redefined the means by which the public gains access to information, globalization has blurred traditional borders, a global financial crisis has

reshaped consumer behaviors, the world's youth population has exploded in unprecedented numbers, and concerns have grown about a looming environmental crisis that would threaten the future health of the planet. The seeming rapidity of these changes challenges the conventions and tenets of our times. Indeed, understanding the lessons of the past is no longer sufficient to prepare for the future.

It was against this backdrop that The Ocean Project again sought to capture a moment in time and offer its findings for the betterment of the health of the ocean – and, equally, the planet. In July 2008, The Ocean Project commenced a research process to quantify the public's perceptions and use of the ocean. Comprising qualitative and quantitative data from 22,000 Americans, it is believed to be the single largest, most comprehensive public opinion research project ever undertaken on behalf of any environmental concern. Among the goals of this initiative were:

- to innovate new best practices in the field of public opinion research,
- to leverage new technologies that lend a high-confidence analytical context to data,
- to significantly expand the ocean-health knowledge base and provide ZAMs and others in the ocean conservation community with actionable information, and
- to provide a baseline from which to identify and track changes in the public's actions and attitudes relating to the ocean over time.



The survey was conducted online in the United States and selected Canadian cities over a four-month period (late July through early November, 2008). The U.S. sample statistically reflects the American population. The survey makes extensive use of scalar variables, which ask respondents to give their opinions based on a 100-point scale, with 100 being absolute agreement and 0 being absolute disagreement.

The results of this effort, America, the Ocean, and Climate Change: New Research Insights for Conservation, Awareness, and Action – Results of a National Survey, published here in summary format, represent the vanguard of quantifiable analyses and predictive intelligence concerning the ocean. This report of survey findings takes measure of the American public as it relates to the ocean today, with a hopeful eye on tomorrow.

#### SUMMARY OF KEY FINDINGS

Many findings emerged as a result of the recent research effort. This report documents those findings deemed most critical and relevant by the National Survey Advisory Committee of The Ocean Project.

# Ocean awareness and literacy are stagnant ...and they were never high

Since the time of The Ocean Project's assessment in 1999, the American public's knowledge and awareness of ocean-related topics remains low. Despite the advent of digital communication platforms such as the Internet that provide near universal, uncensored access to ocean information, and the growing popularity of mass media programming distributed via outlets including the Public Broadcasting Service, Discovery Channel, Animal Planet, and the National Geographic Channel, the American public has not gained significant ocean literacy.

Specific knowledge of ocean issues remains negligible. Of the sampled respondents, 35% cannot identify a single ocean-related issue affecting the United States. Compared to similar recent research, the American public possesses significantly greater literacy about topics such as college football, the Academy Awards, luxury automobiles, casino gambling, and video games than it does the ocean.

Moreover, the little "real" knowledge possessed by the American public is superficial. Similar to the findings published by The Ocean Project in 1999, Americans are generally unable to articulate valid reasons explaining the importance of the ocean beyond simple declarations such as, "We can't live without water" and "We need fish to survive."

On matters related to ocean health, there is evidence of ambivalence with 35% of the sample population indicating a belief that "ocean health is overstated as an environmental issue" while 41% of the same population indicated concern about the future health of the ocean.



### A lack of urgency

Much like environmental issues in general, the ocean does not rate as a "top-of-mind" concern among members of the American public. When asked to identify the biggest issues confronting the United States, the only environment-related issue cited by respondents was "global warming" (number nine on a list of 13 issues listed in order of descending frequency by respondents in an open-ended query). The first item on the list – the economy – was cited 31 times more frequently as the biggest concern confronting the United States. Energy costs and energy independence were respectively cited 22x and 19x more frequently. National security was cited 17x more frequently.

In terms of priority, approximately three-quarters (74%) of respondents cited either the economy, energy-related concerns, or national security as the top priority among the issues confronting the United States. Slowing global warming was identified by nearly 4% of the sample population as the biggest priority, and just over 2% cited protecting the environment. No specific ocean-related issue was cited by the sample population.

### **Number 1 National Priority**

Improving the economy40%
National security15%
Energy independence11%
Lower energy costs9%
Universal health care6%
Slowing global warming4%

While it is important to note that the survey was done during a period of economic upheaval, these findings are consistent with past survey work. Environmental issues are not viewed with the same sense of urgency as most other issues of the day.

### The great divide: ocean and climate

While climate change is one environmental issue often cited in the top tier of public issues, the American public does not associate or otherwise connect the ocean with climate change and/or global warming. (In the interest of consistency, this report defers to the public's belief that "global warming" is not symptomatic of climate change but, instead, analogous to it.)

Technical descriptions of greenhouse gas-related threats to the ocean (e.g., acidification) are generally not understood by the public. Indeed, it is the perception of the American public that climate change is almost entirely a terrestrial phenomenon.

While the American public is generally concerned about climate change (global warming), less than half of the sample population indicates a belief that "climate change is negatively impacting the health of the ocean."



#### The ocean is vast...and therefore immune

Common descriptions of the ocean include such words as vast, huge, powerful, and mighty. These connotations suggest a level of protection against issues that the public believes threaten terrestrial environments.

Articulated concerns about "pollution" (identified by the public as the leading threat to ocean health) relate primarily to the well-being of individual species rather than to the ocean as a larger environment or ecosystem.

The issue of scale challenges the American public's ability to apply meaningful, impactful solutions to ocean threats. Therefore, it is challenging to identify a conceptual context into which we can effectively place messages regarding ocean threats and solutions. Typical responses to an openended query asking respondents to identify means of protecting the ocean included "Recycle used motor oil" and "Stop buying plastic six-packs of beer." Our survey revealed little indication of the public's knowledge of policy-based solutions to ocean threats.

### Concern about the ocean stops at the beach

Consistent with the findings of the 1999 effort, the most recent research finds that the public possesses little to no awareness of issues affecting the open ocean, beyond the beach. Moreover, there is little evidence of concern relating to open-ocean issues because the public perceives these issues as "foreign" in nature and beyond the scope of American responsibility.

There is no appreciable distinction in open-ocean awareness and literacy measures between the responses of persons residing near a coastline (within 100 miles) and those residing inland.

### Environmental xenophobia or provincial bias?

Much of the American public believes that the ocean waters bordering the United States are healthier, safer and less endangered than "foreign" waters by a near order of magnitude.

While 23% of the sample population agrees with narrative language describing the ocean as "connecting," the majority of Americans view the ocean in starkly provincial terms. When asked to assess the health of popularly defined bodies of water, Americans overwhelmingly believe the Indian Ocean, Arctic Ocean and China Sea to be significantly more at risk than the Atlantic Ocean and Pacific Ocean. (Overall, Americans believe that the "foreignness" of a body of water increases its risk level by a factor of over 3x.)

Applied to behaviors and usage patterns, Americans believe that seafood caught in close proximity to the coastal United States is healthier than seafood caught elsewhere in the world. Similarly, the public believes that it is generally "safer" to swim in U.S. coastal waters than in foreign waters.

Combined with a lack of literacy concerning ocean issues and a failure to associate the ocean with climate change, the



provincial bias of the American public supports its belief that threats to the ocean are "someone else's problem." Furthermore, emerging data indicates that the opinions of Australians, Canadians, Western Europeans and other nations' citizens concerning ocean-related topics generally do not match those of the American public.

Attendant survey work done in the course of this initiative used a relatively smaller international sample to compare the attitudes and opinions of Americans to those of citizens of selected other countries. The data revealed, for instance, that Americans understate their own responsibility for climate change, overstate which countries are responsible, and overstate America's role in addressing the problem.

Similar findings consistently reaffirm a delta between the ocean-related opinions of Americans and much of the rest of the world.

# Americans in different regions are not so different from each other

An enhancement to the research methodology deployed by The Ocean Project was the geographic definition of twelve metropolitan markets wherein data was collected to compare against both the other metropolitan markets and also the composite population. The twelve distinct geographic "universes" are Atlanta, Baltimore, Boston, Chattanooga, Chicago, Houston, Los Angeles, San Antonio, the San Francisco Bay Area, Coastal Carolina, Seattle, and the Tampa Bay Area.

The findings indicate no significant variances in attitudinal perceptions and only slight variances in usage of the ocean based on geography. For example, regardless of geography, 76% of U.S. responses to the proposition "The world's ocean is endangered" were within  $\pm 10.0\%$  of the mean response.

The usage-related findings defy common assumptions that persons with more proximate access to the ocean are more apt to "use" it (e.g., go to the beach, swim, sail) than those living inland. In fact, the findings indicate that household income is a more reliable indicator of ocean usage than geography.

This finding is perhaps somewhat biased by self-selection as increasingly the costs associated with living in proximity to the ocean create a barrier to access for the majority of the U.S. population. This said, there is scant evidence of distinction between persons living in widely distributed geographic regions of the United States when it comes to issues of ocean awareness and literacy.

However, there are some differences from region to region about issues that have a contentious political dimension. For example, there are significant differences between how residents of southern metropolitan areas and residents of West Coast metropolitan areas view the extent of and importance of climate change.



# Households where English is not the primary language know less, care more

Members of households where English is not the primary language (ESL household, or household where English is the second language) tend to describe themselves as less informed about ocean issues than do members of English-speaking households. This finding also holds true of Hispanic households where English is the primary language. Among ESL households 33% identify themselves as "informed about current ocean and environmental issues," compared to 56% of non-Hispanic households where English is the primary language.

Conversely, ESL households indicate higher levels of concern about the health of the ocean and a greater willingness to modify their own behaviors to benefit the ocean than do members of households where English is the primary language. ESL households are 19% more likely than English language households to identify the actions of humans as the primary threat to the ocean. Overall, ESL households indicate a greater willingness to pay more taxes to positively impact ocean health, pay more for seafood that has been certified as healthy and sustainable, and change their seafood-eating habits to protect endangered species than does the balance of the U.S. population.

Regarding potentially more strategic, policy-related actions, ESL households are 14% more likely to vote for a political candidate due to his or her position on an environmental issue.

This finding may be critical to garnering the support of America's future majority (by ethnicity) population to act on behalf of ocean health. By percentage of total U.S. population, more Hispanics live within 100 miles of the coast than do any other ethnic cohort. Engaging this rapidly growing sector of the population could translate into a positive impact on the environmental health of U.S. coastal regions.

### Youth have not (yet) been served

While this report quantifies U.S. adult populations within its findings, attendant research strongly suggests the growing importance of engaging youth audiences (especially tween and teen populations) as their respective opinions depart dramatically from the composite U.S. adult population.

In general, the U.S. youth population has a higher level of awareness of ocean-related issues, and a greater propensity to modify their behaviors and/or engage in advocacy on behalf of the ocean than does the U.S. adult population.

While the notion that young people are often more idealistic in the viewpoints than adults is nothing new, the key point of these findings is that U.S. adults believe their tween and teen children are better informed on matters concerning conservation and seem to be willing to follow their advice. This belief suggests the child as an "influencer" on household conservation-related behaviors.



Additional research will lend greater clarity to these findings, but the implications of the existing data are profound and compelling.

## Belief in the power of one

Compared to earlier research, current findings indicate an increase in the American public's belief in the potential for individual actions to positively impact the environment and ocean. However, there is no general level of agreement among Americans concerning either the culpability or responsibility of individuals when it comes to protecting and conserving the ocean.

For example, while 64% of the U.S. public believes that individuals can have "a fair amount" or "a great deal" of impact on solving contemporary environmental problems, only 35% believe that "individual citizens are responsible for protecting the ocean."

This seeming contradiction has been fostered by a belief that the health of the open ocean is primarily a "foreign" concern and that the U.S. is not responsible for whatever conditions may threaten ocean health. The American public believes that its actions (such as recycling used motor oil) will benefit the ocean, but does not extend this thinking to include escalated levels of engagement such as ocean policy advocacy.

Recent attendant research related to ocean conservation indicates that the two "conservation" actions that the American public are willing and most likely to perform are: (1) properly inflating their vehicles tires to maximize fuel efficiency; and (2) replacing light bulbs in their residences with energy-efficient light bulbs.

Changing light bulbs was cited as a likely-to-be-adopted behavior 18x more frequently than voting for an environmentally friendly political candidate.

## Seafood may be a good entrée

The public generally agrees that the individual choices people make about what seafood to eat impacts the health of the ocean, and they would change seafood eating habits to positively impact the ocean. This is especially true of people who worry that sustainable and healthy seafood will not be available to them in the future.

A significant number of people are willing to change their seafood buying habits in order to protect the health of the ocean or endangered species. Moreover, people would pay more for seafood at a restaurant or market that only serves seafood that has been certified as healthy. Importantly, the concept of "healthy" seafood resonates more with the public than the concept of "sustainable" seafood.



#### The world is online

The primary and dominant means by which the American public accesses information about ocean- and environment-related content (and, for that matter, nearly any topic) is the Internet. As a conduit for information, the Internet operates to the near exclusion of every other medium.

Quantified on an index value basis where 100.0 indicates average importance, any value greater than 100.0 indicates more importance, and any value less than 100.0 indicates less importance, the index value of the Internet as a means of accessing information about the ocean and environment is 418. The value of daily newspapers is 93. The value of ZAMs is 40. In other words, the Internet is considered approximately 10x more important than a ZAM as a medium to deliver messaging to the American public.

## Competition challenges message differentiation

Precedent research indicates – and this report affirms – that the public is increasingly attuned to competitive conservation messaging from private industry (e.g., automobile manufacturers, commercial energy concerns and waste management companies) and lobbyists (e.g., the American Petroleum Institute).

Recent advertising campaigns by these types of enterprises have blurred the historic lines that once differentiated conservation messaging. The resulting "noise" poses an enormous threat to ZAMs, whose authority as conservation

messengers risks compromise in a non-differentiated market.

When asked "How do you learn about and/or access information about the environment?" more respondents cited Toyota, Honda, Chevron, Waste Management, and General Motors as sources of information than daily newspapers such as *The New York Times, The Washington Post, The Boston Globe* and *The San Francisco Chronicle.* Perhaps most tellingly, the American public is 3x more likely to access information about the environment from a commercial enterprise (such as Toyota, Honda, et al.) than from a ZAM.

## The public's expectation of ZAMs

The American public increasingly expects ZAMs to offer prescriptive recommendations as to how their constituencies can best impact environment-related issues.

In general, the public trusts recommendations from ZAMs more than they trust recommendations from governmental agencies. Many ZAMs possess an "authority" on topics relating to the environment, and this authority is the primary differentiating quality of ZAMs when compared to their broad competitive sets. This authority supports the unique relationship that ZAMs share with their constituencies. Unlike many other nonprofit and nongovernmental organizations, visitor-serving ZAMs facilitate and manage a direct relationship with the general public. As a result, the public indicates a greater willingness



to adopt recommendations made by a ZAM with whom it has an existing relationship than similar recommendations proffered by other entities with whom it does not "relate."

The data suggests, too, that the market is increasingly receptive to – indeed, expectant of – the delivery of these types of prescriptive recommendations. Tracked by IMPACTS during the past 24 months, related findings indicate a 19% increase in the U.S. public's desire to receive recommendations from ZAMs concerning the means by which they can positively impact an environment-related objective ("demand"). However, the same public indicates the diminishing perceptional availability of prescriptive recommendations from ZAMs during the same 24-month period ("supply").

The research findings suggest that alternative messengers – specifically competitive, less differentiated messaging from commercial entities such as Toyota and Chevron – have worked to fill the gap between the American public's perception of prescriptive supply and demand. Continuation of this trend risks eroding the unique authority of ZAMs, and, in turn, the diminishing of one of their primary differentiating qualities.

### Conclusion

These findings clearly have implications for many different types of organizations, agencies, and others interested in advancing conservation. The Ocean Project hopes you will let us know of your reactions to and interpretations of the data so that we can continue to improve our efforts with our broad and growing network of Partner ZAMs, conservation organizations, agencies, universities and schools, and others. We will be conducting tracking surveys every six months to test messages and measure changes in public opinion connected to the ocean and conservation and providing these data online.



### **ACKNOWLEDGEMENTS**

The Ocean Project would like to thank the individuals and organizations that made substantial contributions to this research and outreach initiative to improve ocean literacy and conservation action.

First and foremost, this report and related outreach activities were made possible by an Environmental Literacy Grant from the National Oceanic and Atmospheric Administration (NOAA).

We would also like express thanks to three individuals – Julie Packard, Executive Director, Monterey Bay Aquarium; Dave Pittenger, Executive Director, National Aquarium in Baltimore; and Chris Andrews, Chief of Public Programs, and Director of the Steinhart Aquarium, at the California Academy of Sciences – who helped make this research initiative most efficient and effective by generously allowing the use of their institutions' public opinion data to assist the development of our national survey.

We especially thank the two primary advisors for this initiative: Jim Hekkers, Managing Director of the Monterey Bay Aquarium; and Kathy Sher, Deputy Director, External Affairs, of the National Aquarium in Baltimore.

Several others also served on The Ocean Project's National Survey Advisory Team and volunteered significant talent and time, including: Jackson Andrews, Director of Operations and Husbandry, Tennessee Aquarium; and Tom Schmid, President & CEO, Texas State Aquarium. We would like to recognize the following, as well, for their helpful input: Kathleen Reaugh, Manager of the Ecosystem-Based Management Project, SeaWeb; Carol Saunders, Core Faculty member, Department of Environmental Studies at Antioch University New England; and Douglas Meyer, Bernuth & Williamson, who is also conducting much of the evaluation work for this initiative.

Additional financial support for The Ocean Project's ongoing research and collaborative outreach initiative is provided by The Curtis and Edith Munson Foundation and a foundation that requested anonymity.

The Ocean Foundation serves as the fiscal sponsor for The Ocean Project.

Principal Investigators on the grant from NOAA are Paul Boyle, Senior Vice President for Conservation and Education, Association of Zoos and Aquariums; and Bill Mott, Director of The Ocean Project.



#### TYPES OF DATA COLLECTED

## Demographic criteria

Both the qualitative and quantitative instruments deployed by IMPACTS collect demographic data for the primary purpose of segmenting ("cross-tabulating") responses by demographic cohorts.

For example, The Ocean Project is able to segment perceptional findings by age, ethnicity, education, gender and household income (among many) cohorts.

The IMPACTS certification process ensures the integrity of the collected data by verifying that respondents to the survey instruments possess the actual demographic characteristics that they claim.

#### Scalar variables

A scalar variable is a proposition that seeks to quantify the relativity of a response within a continuum. These types of propositions inform degrees of agreement with certain statements (e.g., "On a scale of 1-10 with "1" being completely disagree and "10" being completely agree...)

Additionally, scalar variables inform the development of Structural Equation Models. Structural equation modeling is a means of assessing latent constructs – factors that are not observable and, therefore, less readily measured.

In general, the scales utilized within the research processes proposed by IMPACTS seek to *maximize* the variability of responses; thus, the scale deployed within the proposed qualitative and quantitative survey instruments is "0-100" (as opposed to the more traditional "1-5" or "1-10").

### Open-end queries

Open-end queries encourage the sample population to respond in its own words and enable lexical analysis – the results of which underpin many of the network models utilized by IMPACTS.

Perhaps the best means of explaining the lexical analysis process is to provide an example from a precedent implementation. The following queries appeared on an instrument used to inform an organization's understanding of its visitors' interpretation of "inspiration":

# Query A. Describe a setting or location where you were inspired?

# Query B. What about [INSERT LOCATION] was inspiring to you?

The responding sample population (totaling upwards of 4,000 persons) identified several locations and characteristics as being particularly "inspiring." Among the most "inspiring" locations were the Parthenon, Great Pyramids, Golden Gate Bridge, National Cathedral, Notre Dame and Omaha Beach. The output of the lexical analysis suggested that a component of the inspiration experienced



by visitors to the stated locations was attributable to symmetry.

Thus, after respondents specifically named the Parthenon (or Notre Dame or the Pyramids, etc.) as an inspiring location, they were consequently asked *what* about the cited structure was inspiring.

Respondents generally commented on the beauty and scale of the named locations. A follow-on question delved deeper into what visual components constituted "beauty" – "symmetry" emerged as a key component. Thus, the lexical analysis did reveal "symmetry" in the responses (most frequently cited relating to Notre Dame, Golden Gate Bridge, National Cathedral and Omaha Beach. The output of the lexical analysis was a basic tabular categorization that ranked responses based on frequency.

The analysis contemplated lexical pointers (relationships between words in "synsets" - <u>SYN</u>omym <u>SETS</u> - sets of words that are generally interchangeable in the prevailing context) and classifies the synsets as holonyms and/or hypernyms. (Holonyms are the whole to which a constituent belongs - "A" is a holonym of "B" if "B" is a part of "A." Hypernyms are a general classification of words - "A" is a hypernym of "B" if "B" is an example of "A.")

Specific nouns such as "Parthenon" that do not have obvious synsets are categorized by the synsets of their respective definitions. For example, in the examples of "Parthenon" and "Golden Gate Bridge" (copied verbatim from the lexical analysis):

(n) **Parthenon** (the main temple of the goddess Athena; built on the acropolis in Athens earlier than 400 B.C.; example of Doric architecture)

<u>holonym</u> (n) <u>Athens, Athinai, capital of Greece, Greek capital</u> (the capital and largest city of Greece; named after Athena (its patron goddess))

<u>holonym</u> (n) <u>Greece, Hellenic Republic, Ellas</u> (a republic in southeastern Europe on the southern part of the Balkan peninsula)

<u>hypernym</u> (n) temple (place of worship consisting of an edifice for the worship of a deity)

- (n) place of worship, house of prayer, house of God, house of worship (any building where congregations gather for prayer)
- (n) <u>building</u>, <u>edifice</u> (a structure that has a roof and walls and stands more or less permanently in one place)
- (n) <u>structure</u>, <u>construction</u> (a thing constructed; a complex entity constructed of many parts)
- (n) <u>artifact</u>, <u>artefact</u> (a man-made object taken as a whole)
- (n) whole, unit (an assemblage of parts that is regarded as a single entity)
- (n) <u>object</u>, <u>physical object</u> (a tangible and visible entity; an entity that can cast a shadow)
- (n) physical entity (an entity that has physical existence)
- (n)  $\underline{\text{entity}}$  (that is perceived or known or inferred to have its own distinct existence (living or nonliving))
- (n) Golden Gate Bridge (a suspension bridge across the Golden Gate)



<u>holonym</u> (n) <u>San Francisco</u> (a port in western California near the Golden Gate that is one of the major industrial and transportation centers; it has one of the world's finest harbors; site of the Golden Gate Bridge)

<u>holonym</u> (n) <u>California</u>, <u>Golden State</u>, <u>CA</u>, <u>Calif.</u> (a state in the western United States on the Pacific; the 3rd largest state; known for earthquakes)

holonym (n) United States, United States of America, America, the States, US, U.S., USA, U.S.A. (North American republic containing 50 states - 48 conterminous states in North America plus Alaska in northwest North America and the Hawaiian Islands in the Pacific Ocean; achieved independence in 1776)

<u>hypernym</u> (n) bridge, <u>span</u> (a structure that allows people or vehicles to cross an obstacle such as a river or canal or railway etc.)

- (n) <u>structure</u>, <u>construction</u> (a thing constructed; a complex entity constructed of many parts)
- (n) <u>artifact</u>, <u>artefact</u> (a man-made object taken as a whole)
- (n) whole, unit (an assemblage of parts that is regarded as a single entity)
- (n) <u>object</u>, <u>physical object</u> (a tangible and visible entity; an entity that can cast a shadow)
- (n) physical entity (an entity that has physical existence)
- (n) <u>entity</u> (that is perceived or known or inferred to have its own distinct existence (living or nonliving))

The highest common denominator of the hypernyms (in the above example, the nouns "structure" and "construction") form the categorization. Thus, the lexical analysis would

recognize that both the Golden Gate Bridge and the Parthenon are structures.

A similar process applies to the balance of the user-inputted text. Respondents who associated "Golden Gate Bridge" with the descriptor "symmetry" (or "symmetrical") would trigger the following analysis:

(n) **symmetry**, <u>symmetricalness</u>, <u>correspondence</u>, <u>balance</u> ((mathematics) an attribute of a shape or relation; exact reflection of form on opposite sides of a dividing line or plane)

<u>hypernym</u> (n) <u>spatial property</u>, <u>spatiality</u> (any property relating to or occupying space)

- (n) <u>property</u> (a basic or essential attribute shared by all members of a class)
- (n) <u>attribute</u> (an abstraction belonging to or characteristic of an entity)
- (n) <u>abstraction</u> (a general concept formed by extracting common features from specific examples)
- (n) abstract entity (an entity that exists only abstractly)
- (n) <u>entity</u> (that which is perceived or known or inferred to have its own distinct existence (living or nonliving))

Each of the associated descriptors associated with symmetry (i.e., "balance") have their own hypernym sets. After identifying the multiple levels of hypernyms, a network model "maps" each association and commonality (thereby identifying that respondents who cited "Notre Dame" also cited "symmetry" as a contributing component of



inspiration – as did respondents who cited "Golden Gate Bridge.")

The intent of this process is to gain a greater depth of understanding than the normally stated responses to a survey would otherwise provide about an abstraction such as "inspiration." By identifying the non-explicit contributors to large volumes of seemingly disparate data points, network models reveal connections and patterns that would otherwise remain hidden and/or isolated.

### **Unstructured data**

Technology has dramatically altered the means by which the public gains awareness of issues, conducts research, seeks recommendations and offers its feedback. No organization is immune to the revolutionary impacts of technology. The wide adoption of digital technologies has fundamentally altered an organization's interface with its market. Content-sharing websites such as *flickr.com* and *youtube.com* provide a means of documenting and promulgating experiences. Online communities ("socialhoods") such a *tripadvisor.com* provide forums for affinity communication and testimonials. Blogs offer the validation of publication and the geographic reach of a global audience.

All of the above-described digital technologies represent examples of unstructured data. Unstructured data differs from structured data due to the relative challenge to easily collect, categorize and process it in a consistent, meaningful manner. Recent studies estimate that unstructured data accounts for more than 80% of the world's information supply. As such, an organization's sole reliance on structured data impedes its ability to develop a fully-informed, holistic understanding of its audiences.

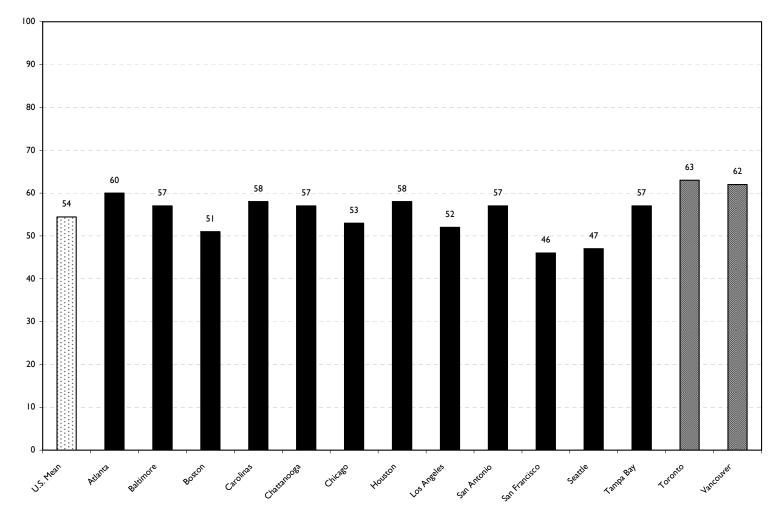
When combined with the delivery of predicted intelligence, the analysis of unstructured data enables organizations to approach total information awareness in near real-time.



# Protecting the environment is a priority for the government.

(scalar variable, 0-100)

Mean 54

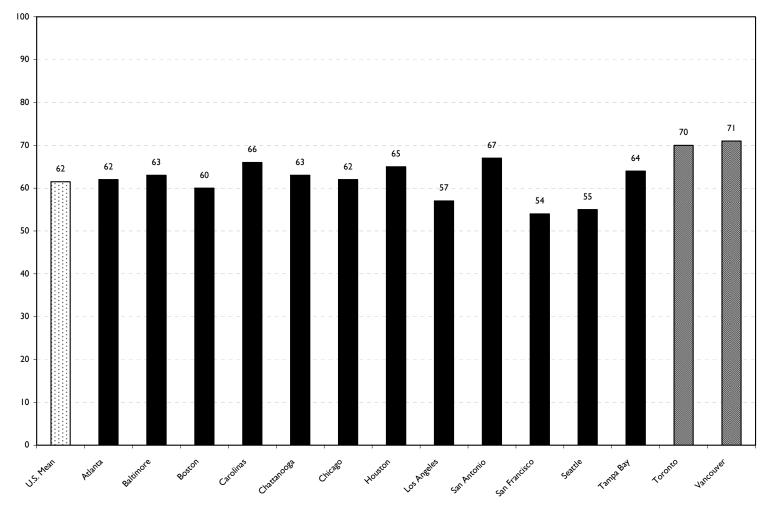




# Protecting the environment is the responsibility of the federal government.

(scalar variable, 0-100)

Mean 62

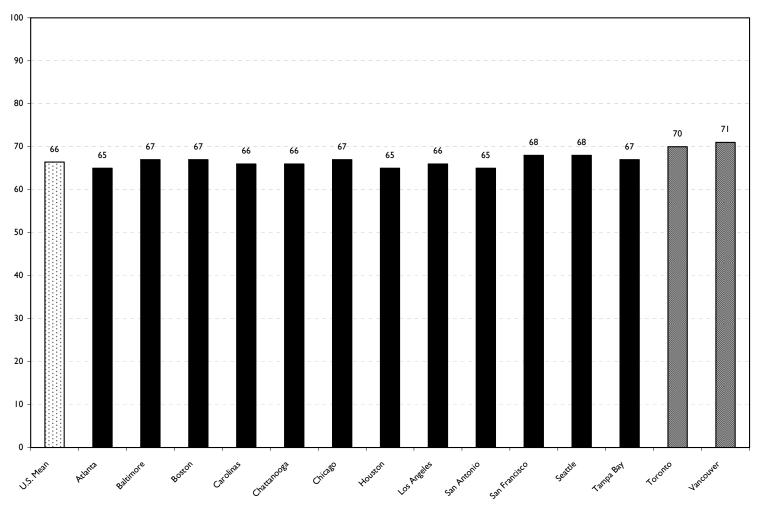




# Protecting the environment should be a priority for the government.

(scalar variable, 0-100)

Mean 66

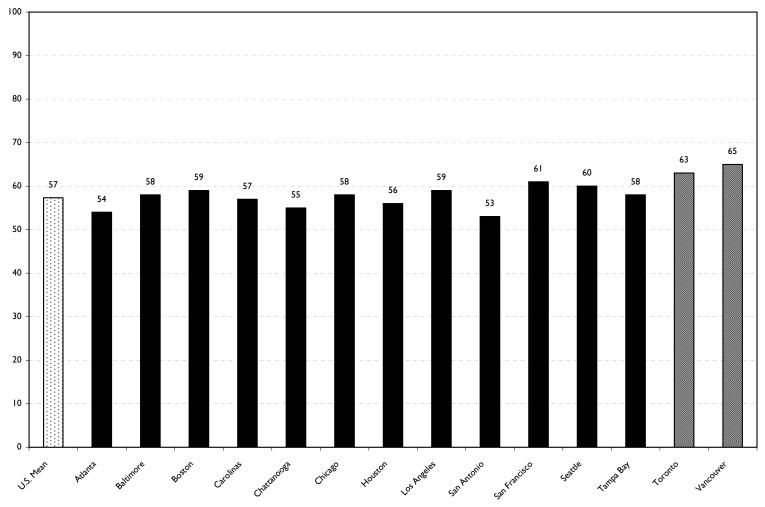




# Protecting the environment is the responsibility of state government.

(scalar variable, 0-100)

Mean 57

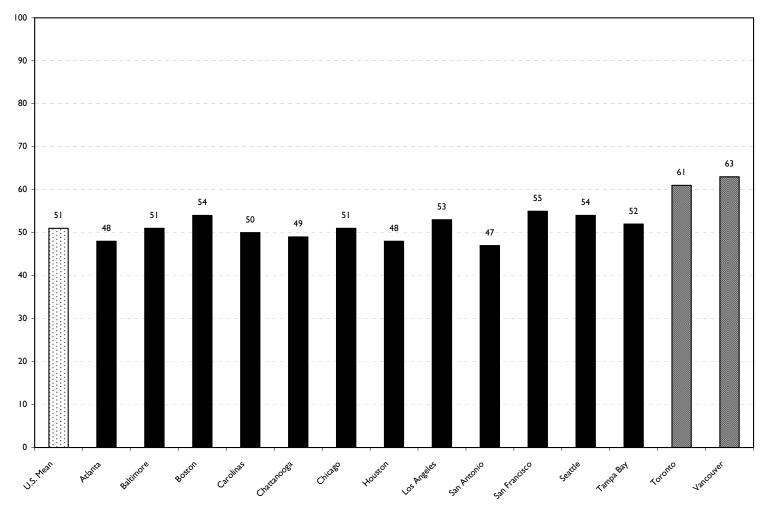




# Protecting the environment is the responsibility of local government.

(scalar variable, 0-100)

Mean 51

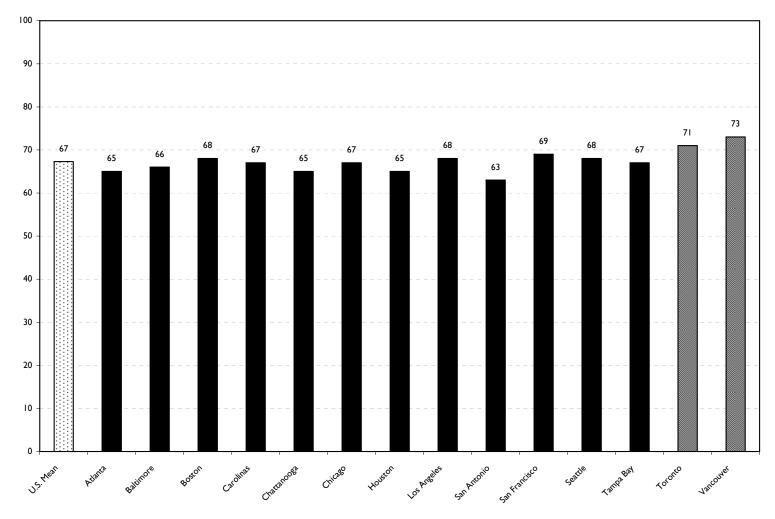




## The public education system is in better condition than the environment.

(scalar variable, 0-100)

Mean 67

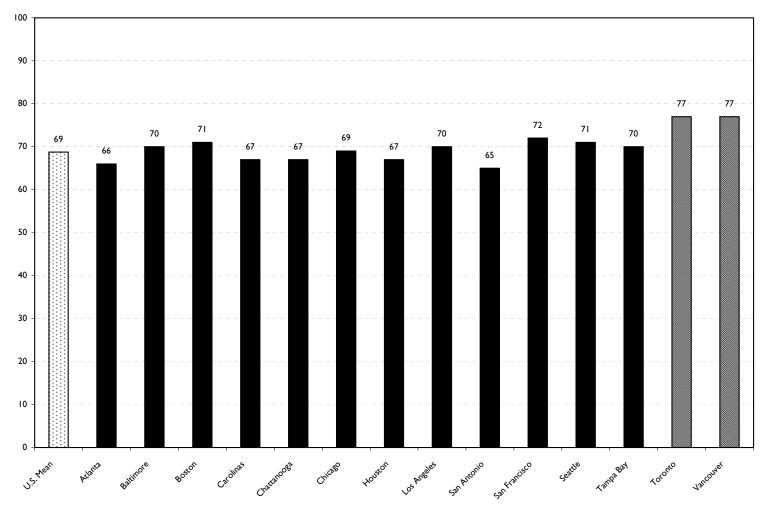




# Protecting the environment is a higher priority than improving public education.

(scalar variable, 0-100)

Mean 69

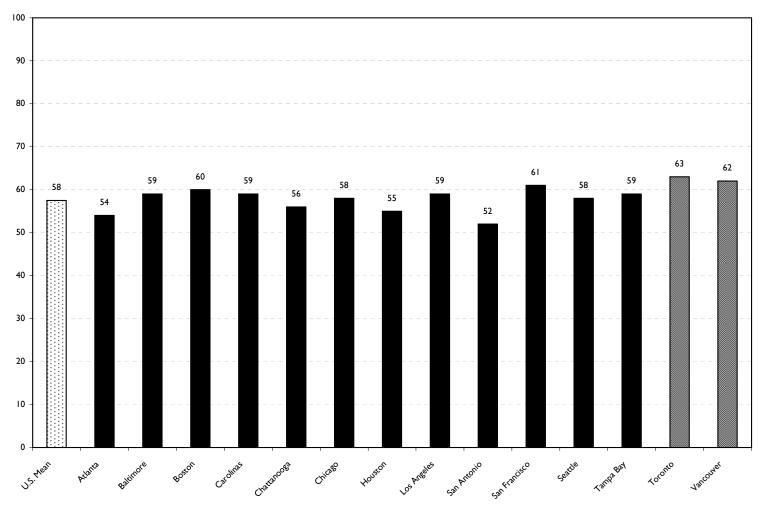




The U.S. health care system is in better condition than the environment.

(scalar variable, 0-100)

Mean 58

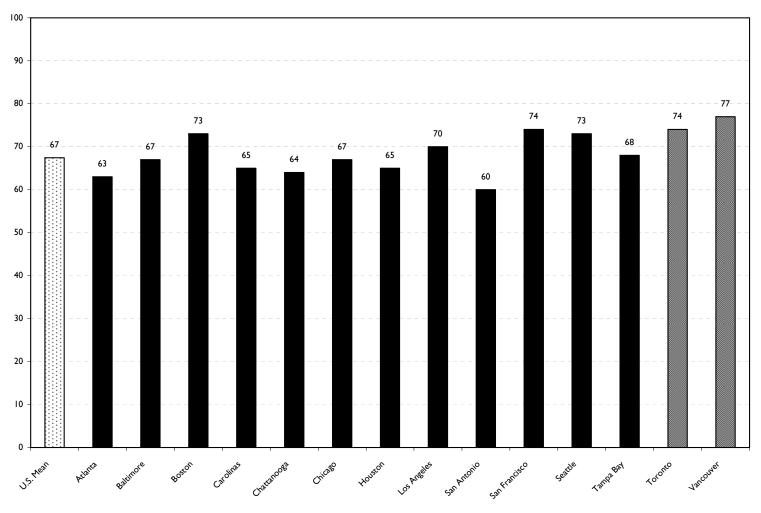




# Individual citizens are responsible for protecting the environment.

(scalar variable, 0-100)

Mean 67

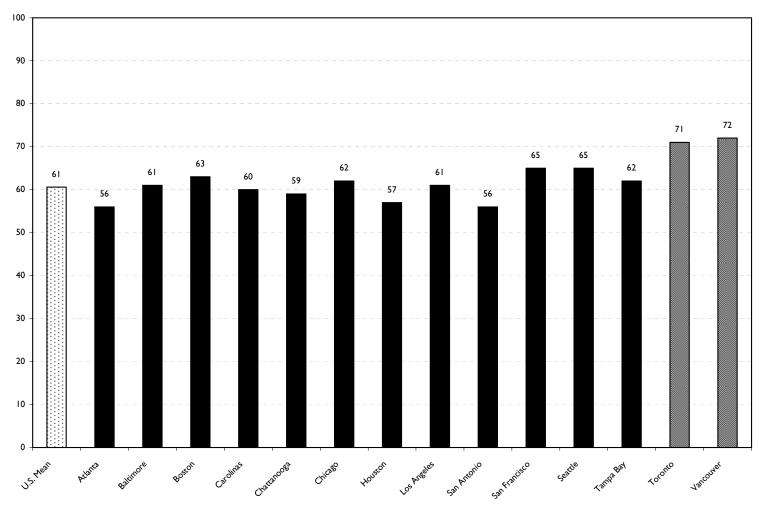




# Protecting the environment is a higher priority than national defense.

(scalar variable, 0-100)

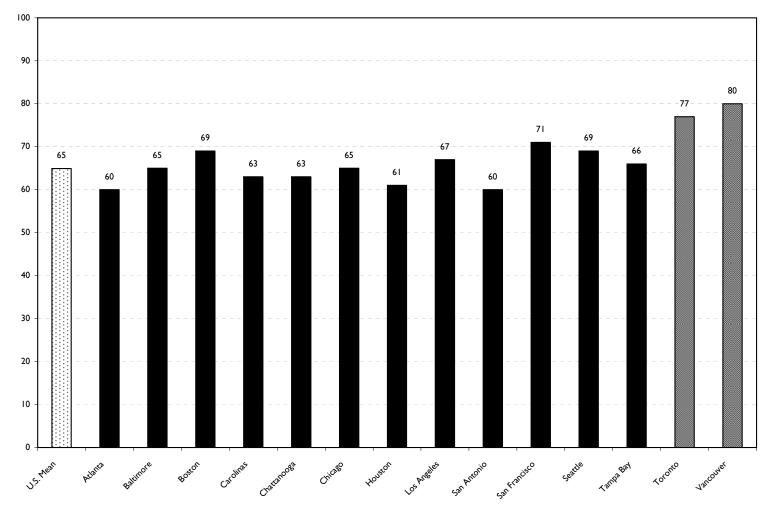
Mean 61





Protecting the environment is a higher priority for the United States than preserving the current social security system. (scalar variable, 0-100)

Mean 65

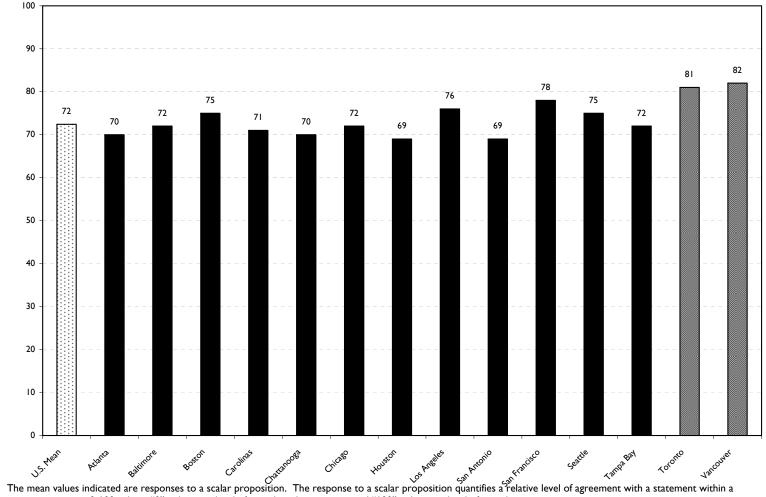




In terms of long-term strategic thinking, protecting the environment is important to the future health and well-being of the United States.

(scalar variable, 0-100)

Mean 72



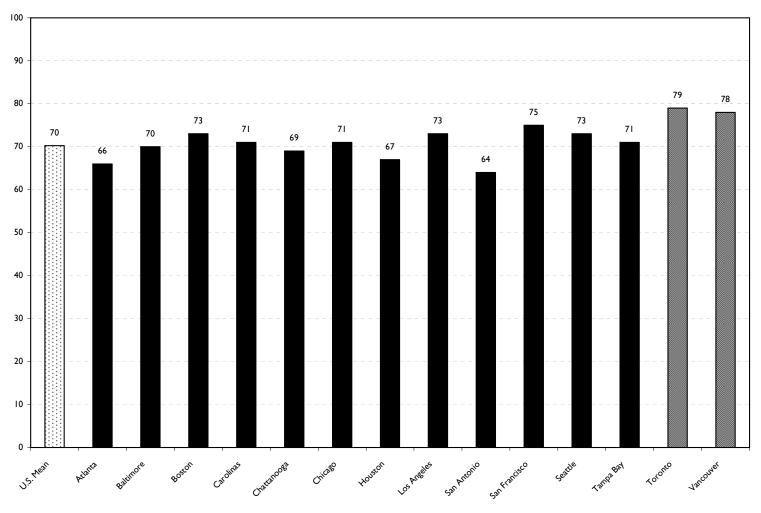
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



# Protecting the environment is important to the health and well-being of the United States.

(scalar variable, 0-100)

Mean 70

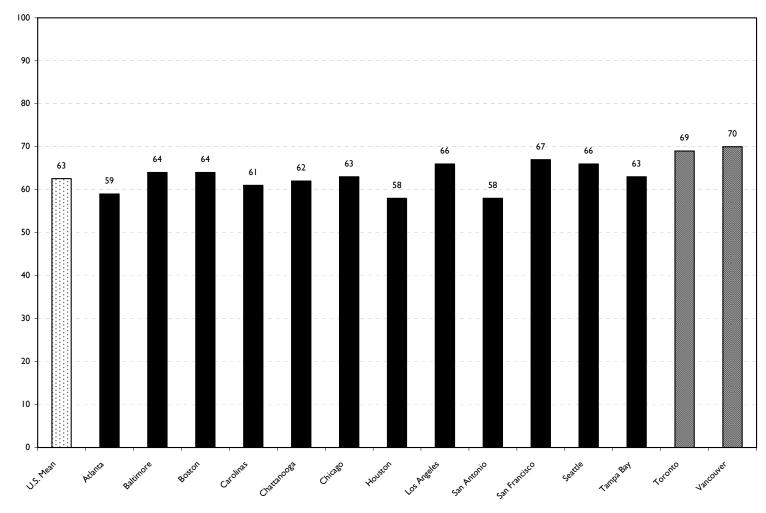




# Protecting the environment is important to the national security of the United States.

(scalar variable, 0-100)

Mean 63

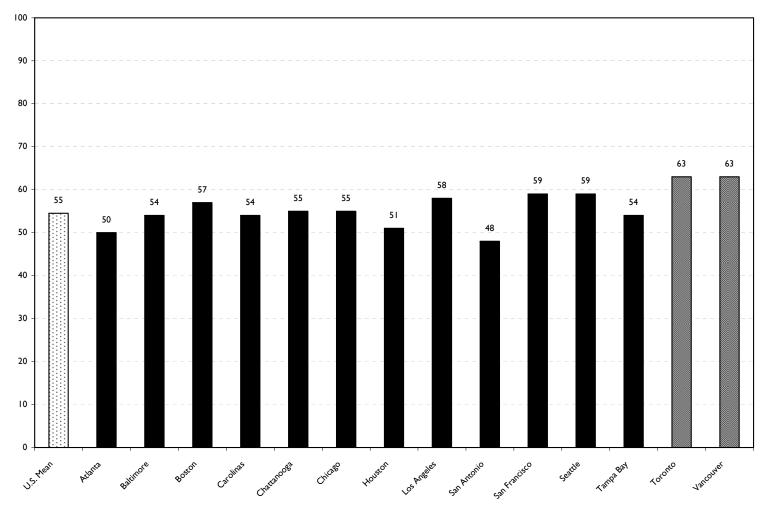




# Protecting the environment is a higher priority than improving the health care system.

(scalar variable, 0-100)

Mean 55

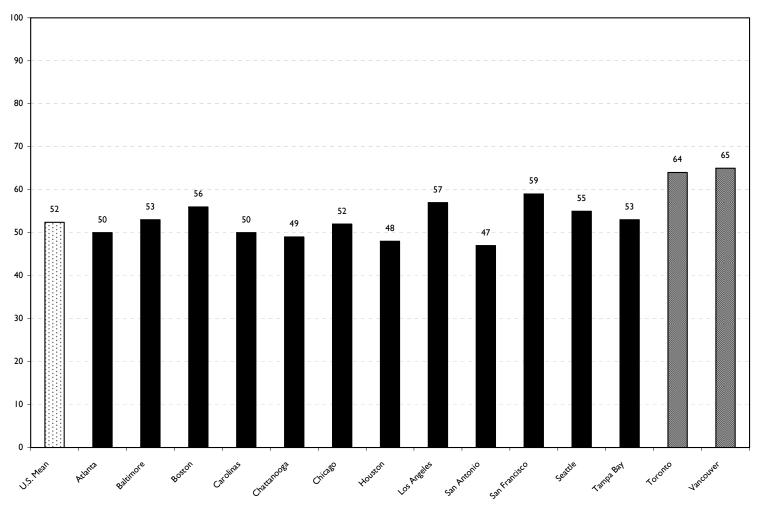




# Protecting the ocean should be a priority for the government.

(scalar variable, 0-100)

Mean 52

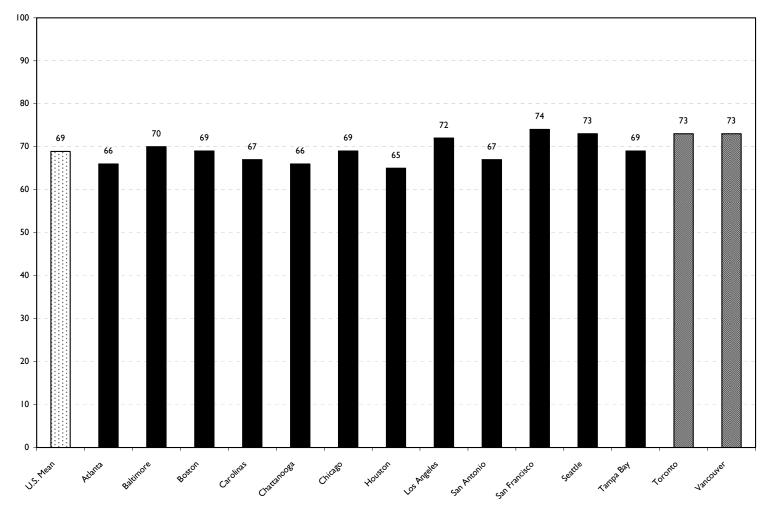




# Protecting the ocean is an important part of protecting the environment.

(scalar variable, 0-100)

Mean 69

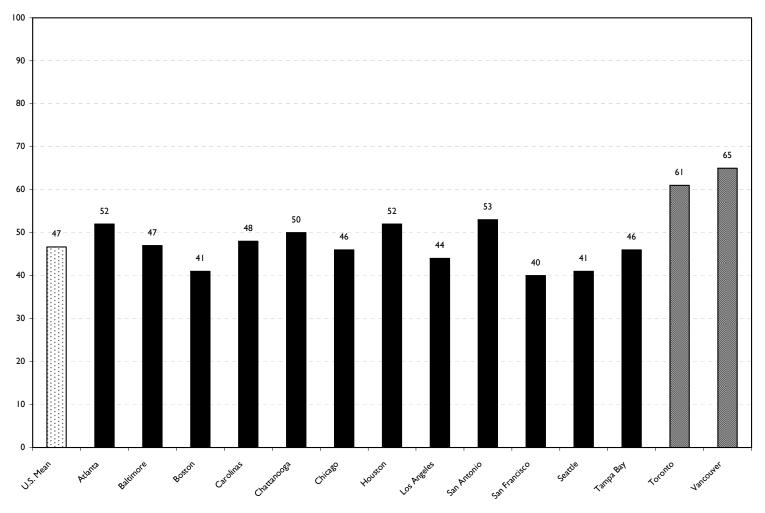




# Protecting the ocean is a priority for the government.

(scalar variable, 0-100)

Mean 47

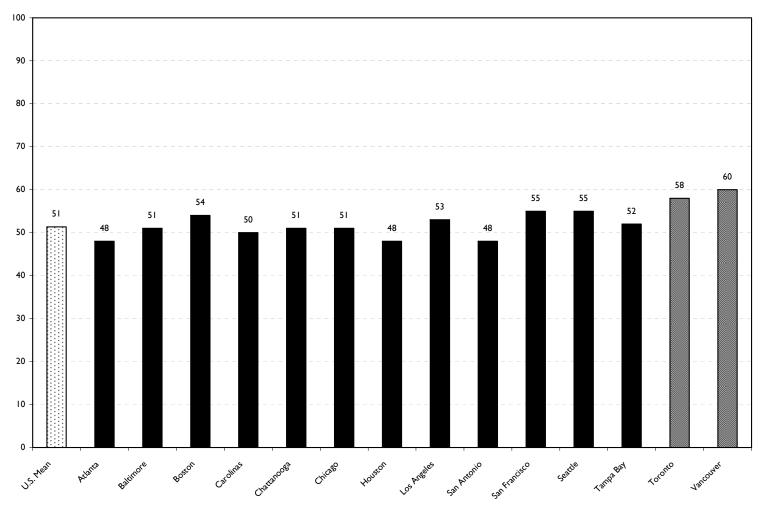




# Protecting the ocean is the responsibility of the federal government.

(scalar variable, 0-100)

Mean 51

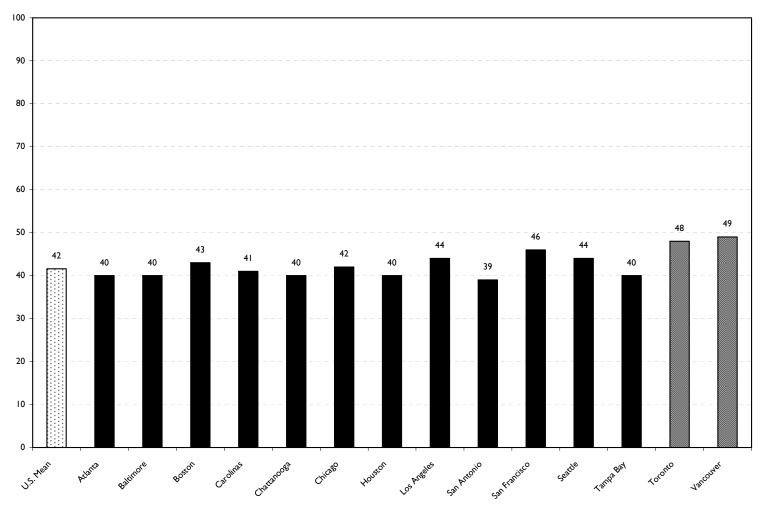




# Protecting the ocean is the responsibility of state government.

(scalar variable, 0-100)

Mean 42

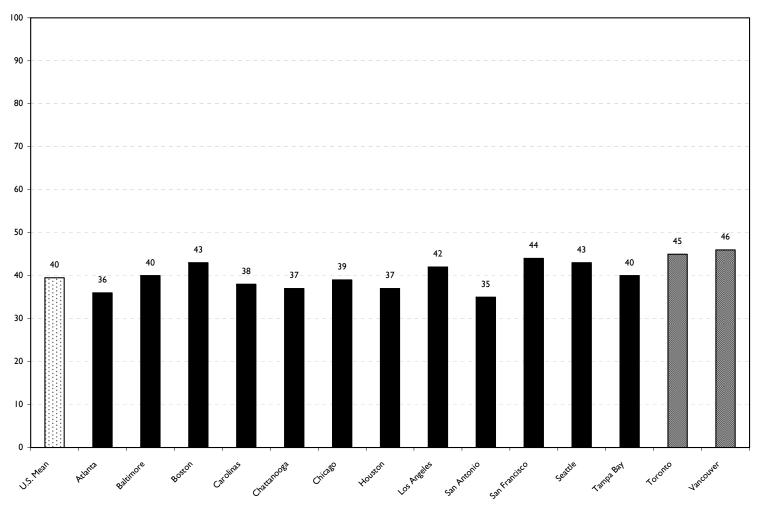




# Protecting the ocean is the responsibility of local government.

(scalar variable, 0-100)

Mean 40

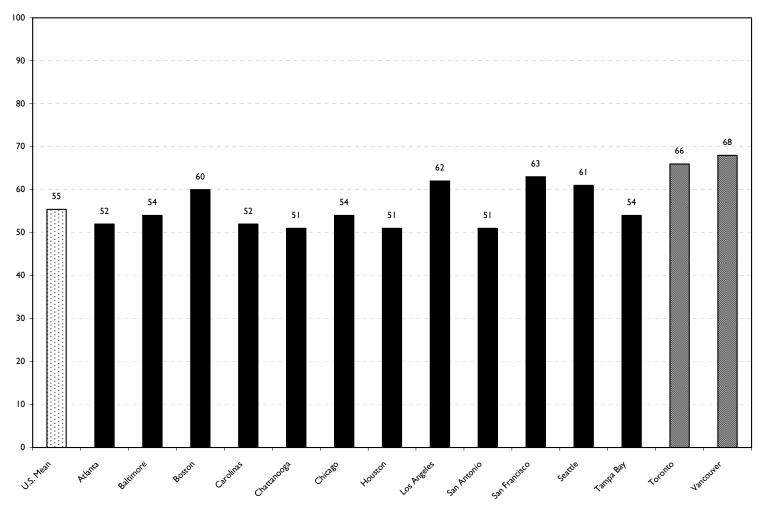




## Individual citizens are responsible for protecting the ocean.

(scalar variable, 0-100)

Mean 55

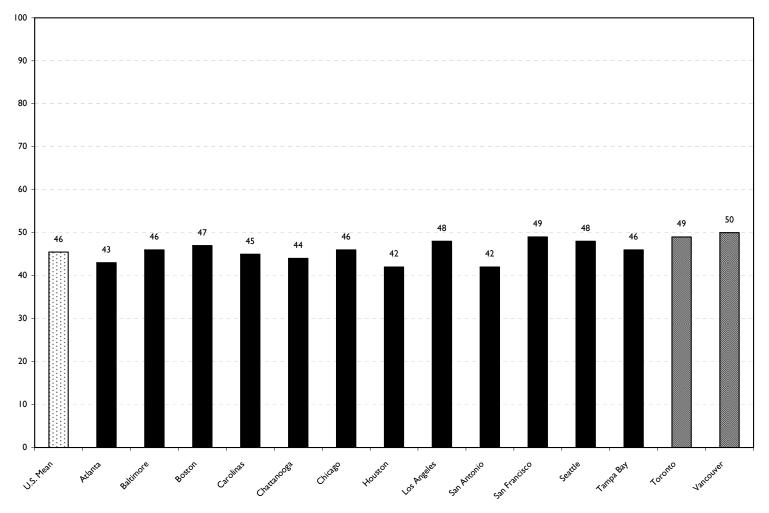




## Protecting the ocean is a higher priority than national defense.

(scalar variable, 0-100)

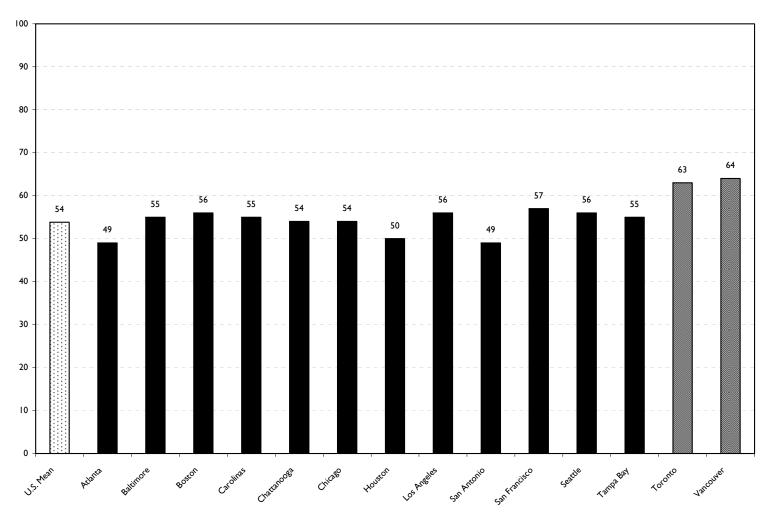
Mean 46





Protecting the ocean is a higher priority for the United States than preserving the current social security system. (scalar variable, 0-100)

Mean 54

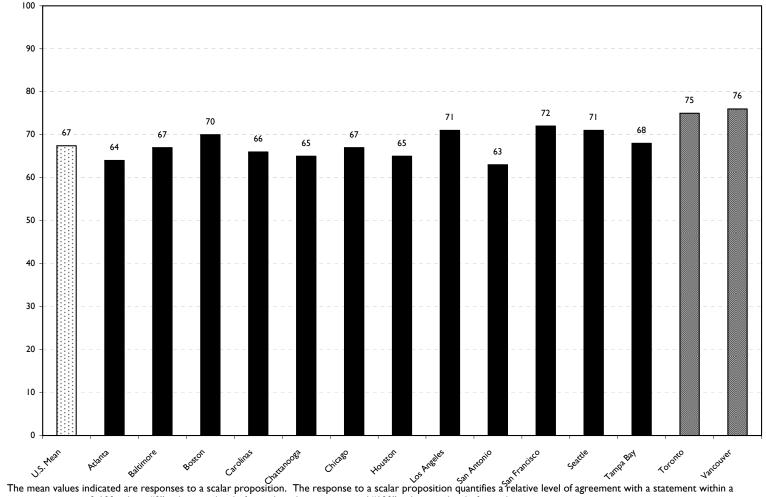




In terms of long-term strategic thinking, protecting the ocean is important to the future health and well-being of the United States.

(scalar variable, 0-100)

Mean 67



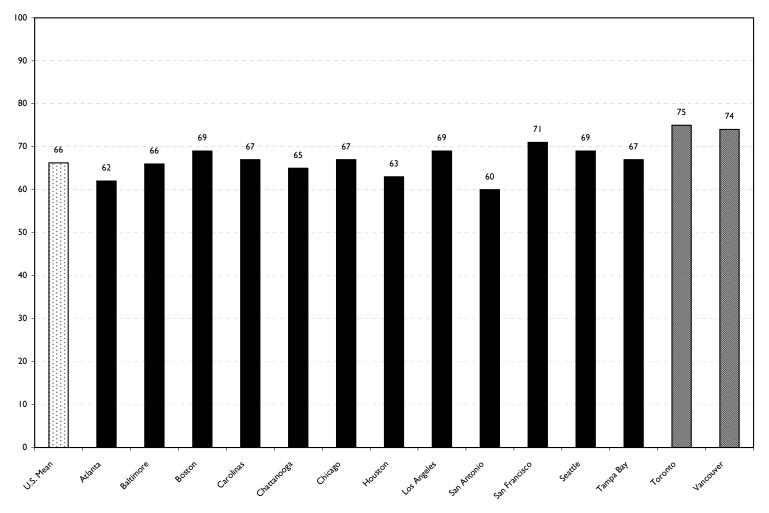
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



## Protecting the ocean is important to the health and well-being of the United States.

(scalar variable, 0-100)

Mean 66

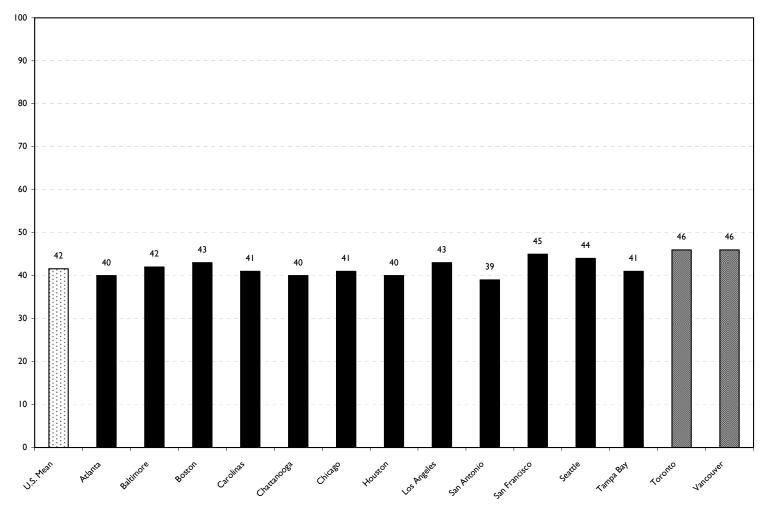




## Protecting the ocean is important to the national security of the United States.

(scalar variable, 0-100)

Mean 42

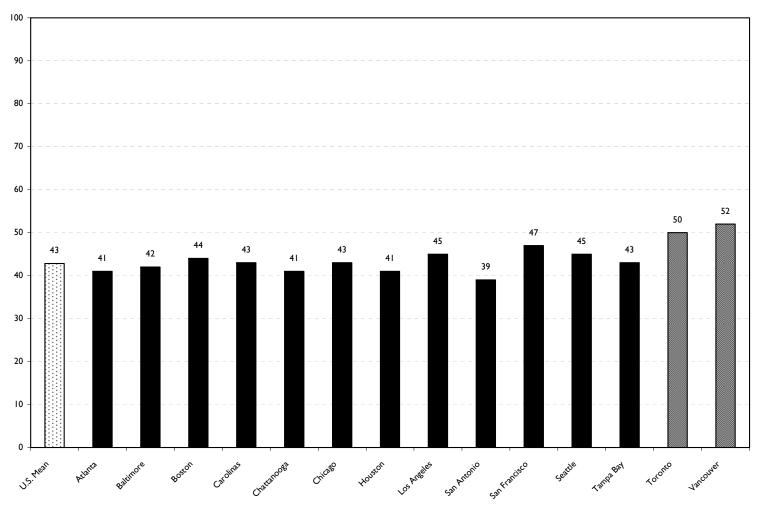




#### The public education system is in better condition than the world's ocean.

(scalar variable, 0-100)

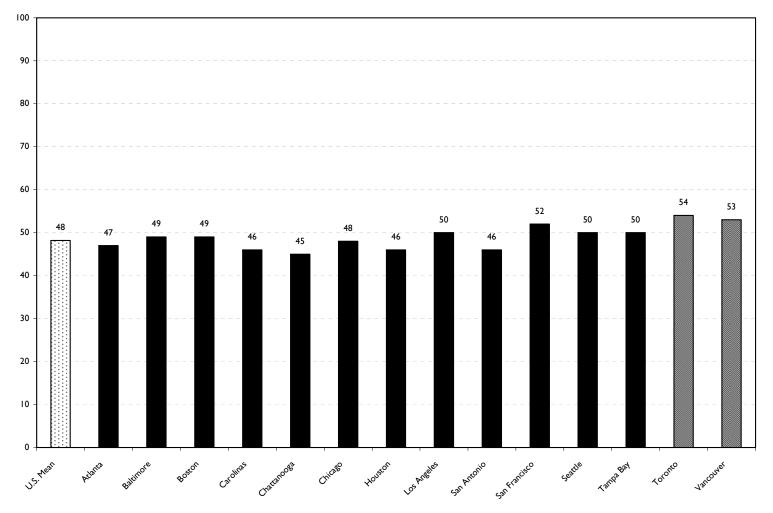
Mean 43





The U.S. public education system is in better condition than the Atlantic Ocean.

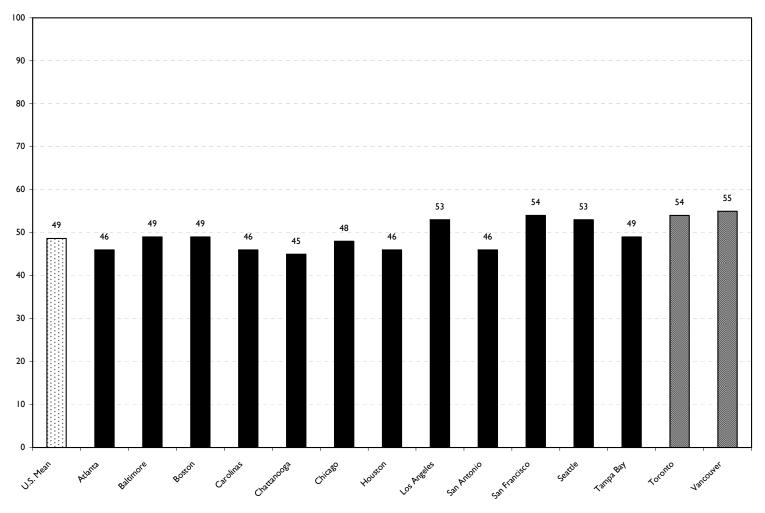
Mean 48





The U.S. public education system is in better condition than the Pacific Ocean.

Mean 49

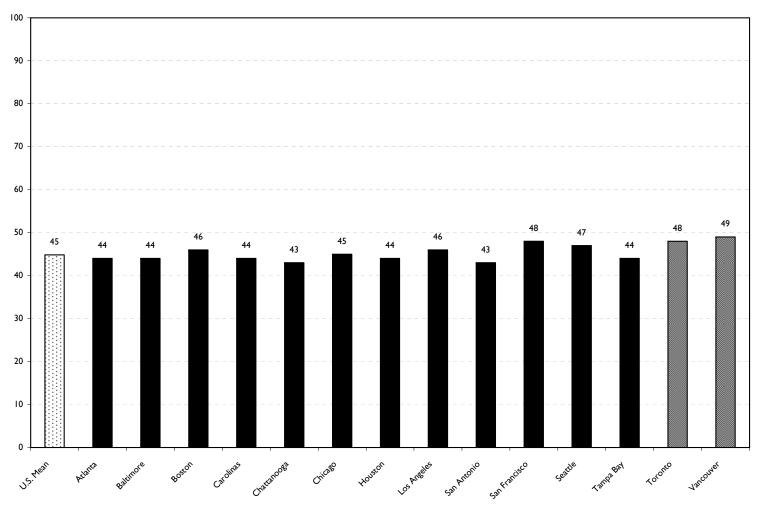




## Protecting the Atlantic Ocean is a higher priority than improving public education in the United States.

(scalar variable, 0-100)

Mean 45

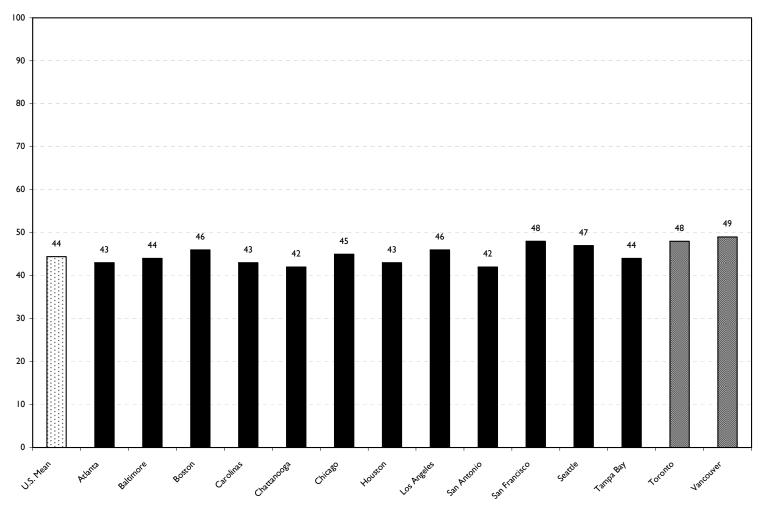




## Protecting the Pacific Ocean is a higher priority than improving public education in the United States.

(scalar variable, 0-100)

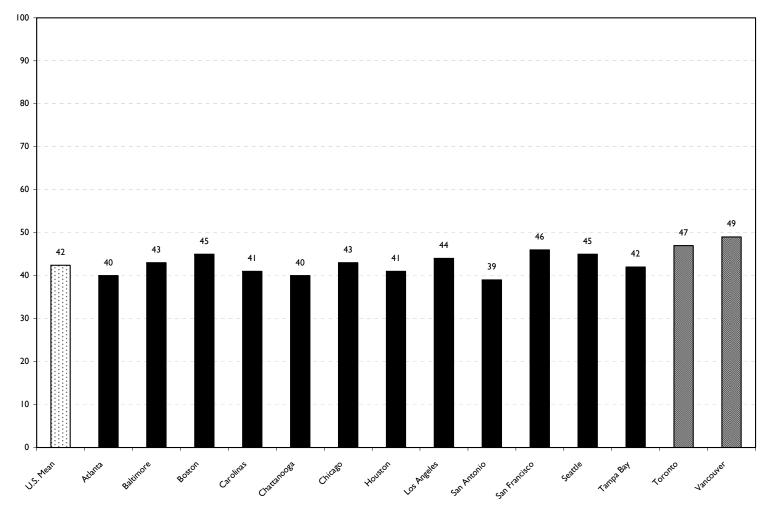
Mean 44





The U.S. health care system is in better condition than the ocean.

Mean 42

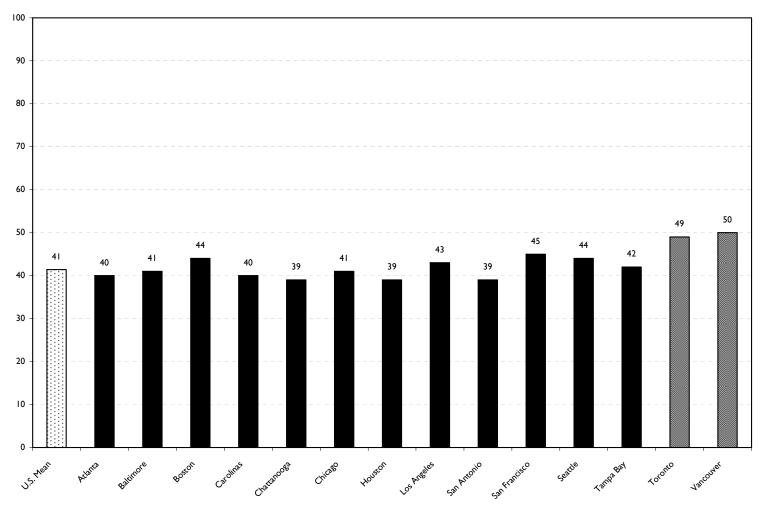




## Protecting the ocean is a higher priority than improving the U.S. health care system.

(scalar variable, 0-100)

Mean 41

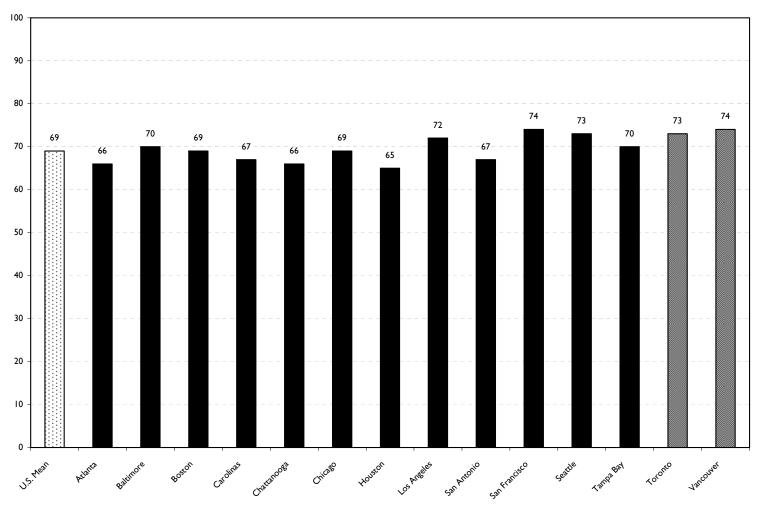




## Protecting the world's ocean is the most important part of protecting the environment.

(scalar variable, 0-100)

Mean 69

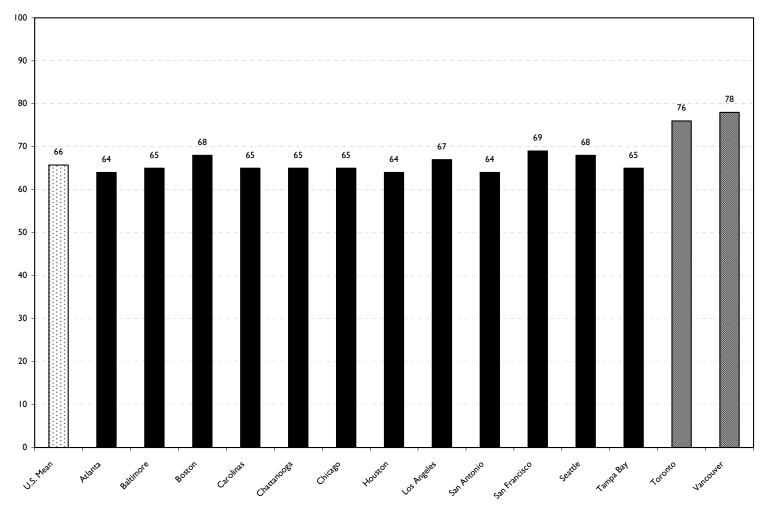




## The United States should protect the world's ocean.

(scalar variable, 0-100)

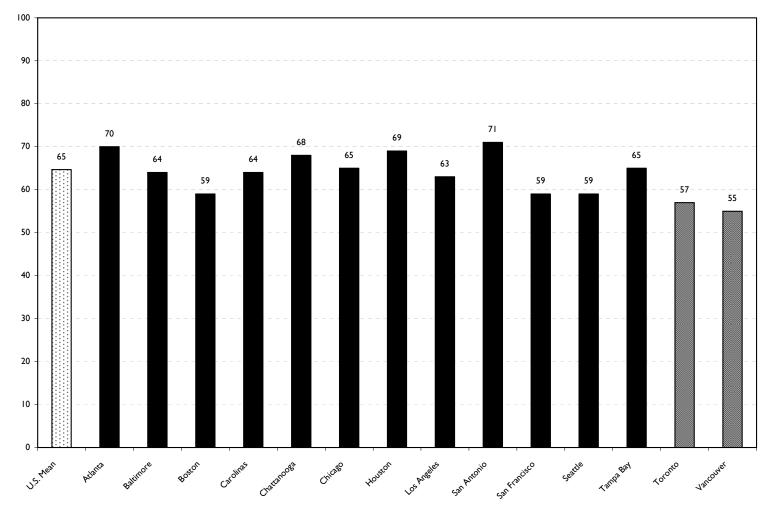
Mean 65





The United States is a positive contributor to the health of the world's ocean.

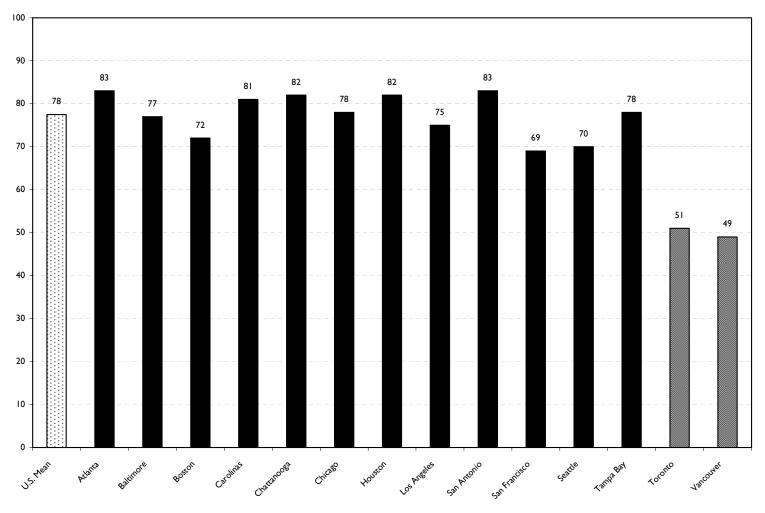
Mean 65





The world should follow the United States' example when it comes to developing effective ocean conservation policies.  $(scalar\ variable,\ 0-100)$ 

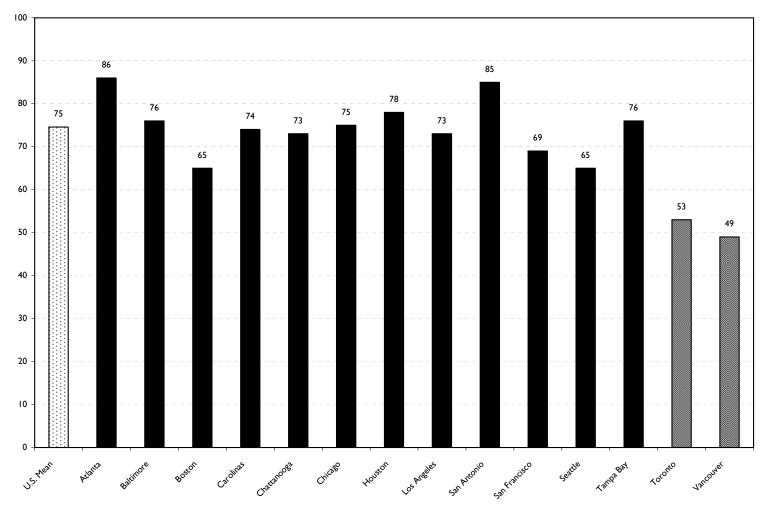
Mean 78





The world should follow the United States' example when it comes to developing effective environmental policies. (scalar variable, 0-100)

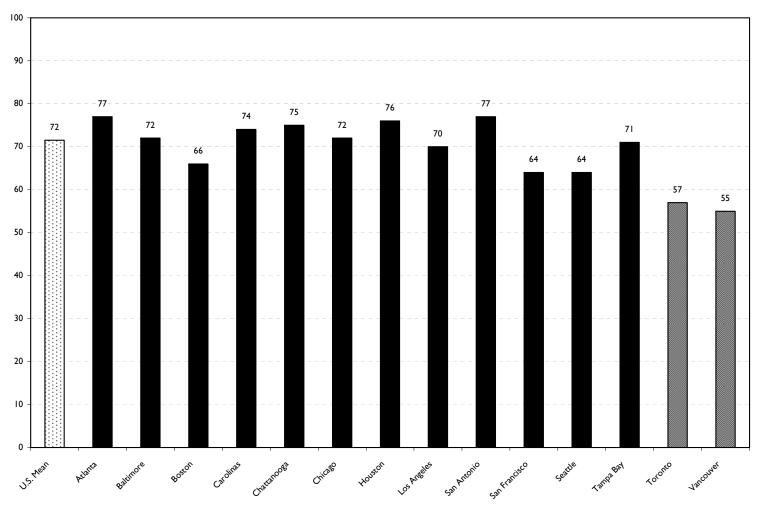
Mean 75





The United States is global leader on the topic of ocean conservation.

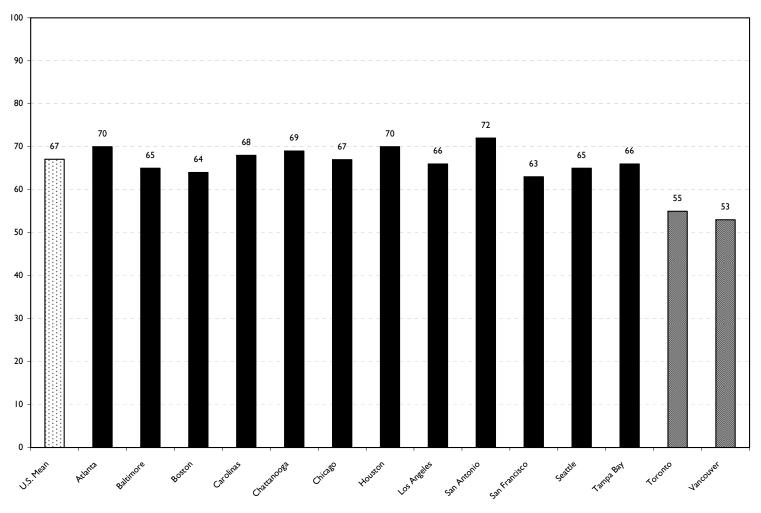
Mean 72





Overall, U.S. citizens are positive contributors to ocean conservation.

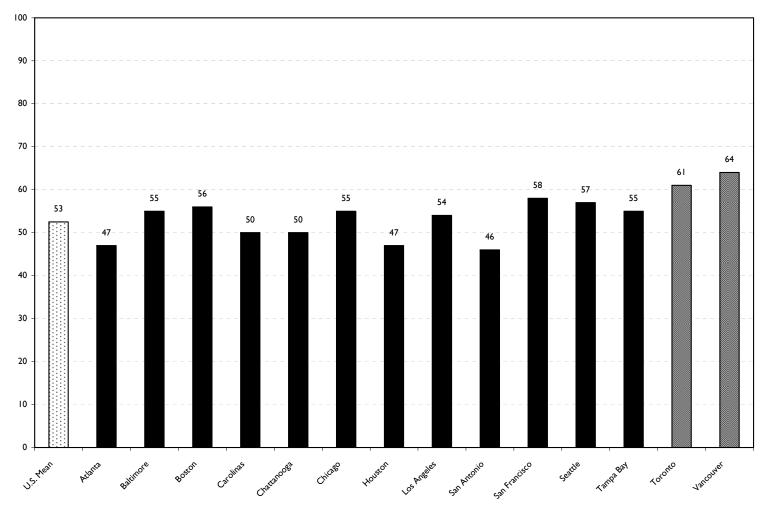
Mean 67





Overall, U.S. citizens are negative contributors to ocean conservation.

Mean 53

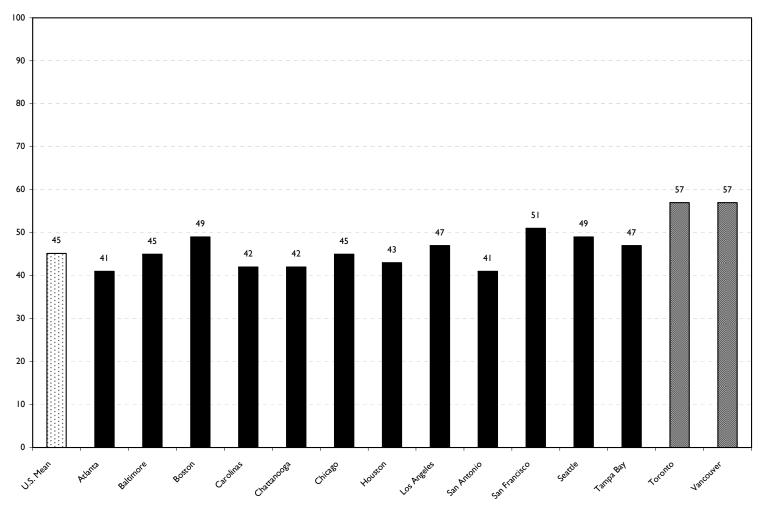




## I am actively engaged in at least one ocean conservation initiative.

(scalar variable, 0-100)

Mean 45

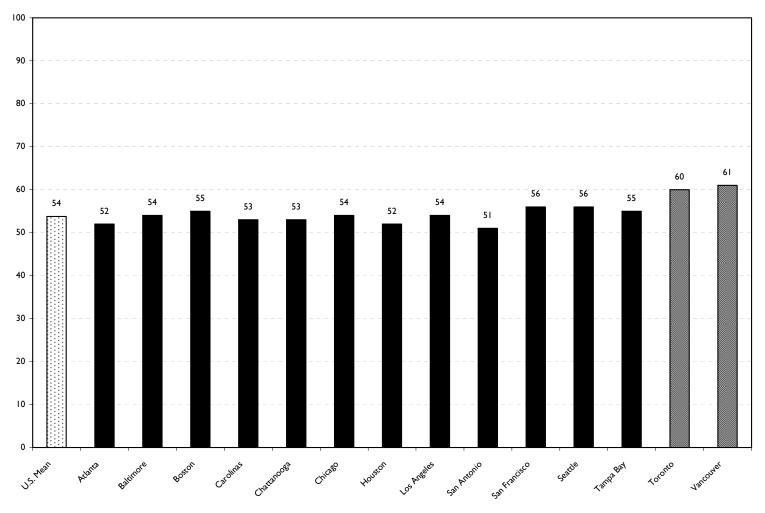




## My choice of seafood that I purchase in a store or restaurant impacts the health of the ocean.

(scalar variable, 0-100)

Mean 54

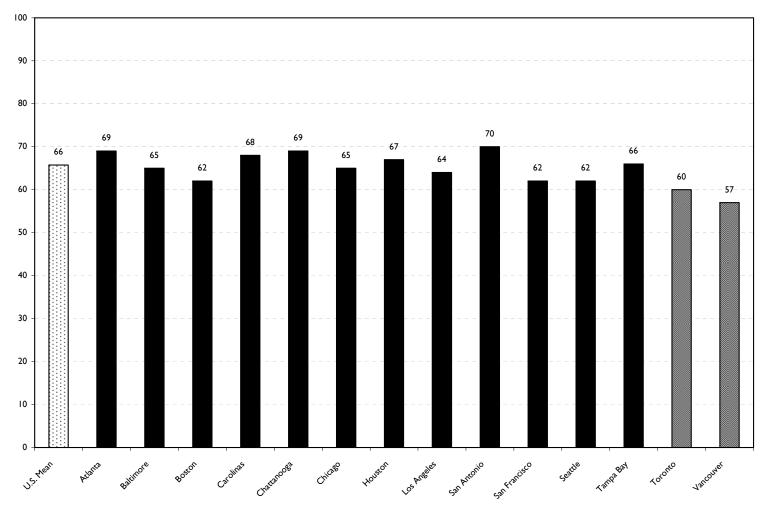




#### Overall, the United States is a positive contributor to ocean conservation.

(scalar variable, 0-100)

Mean 66

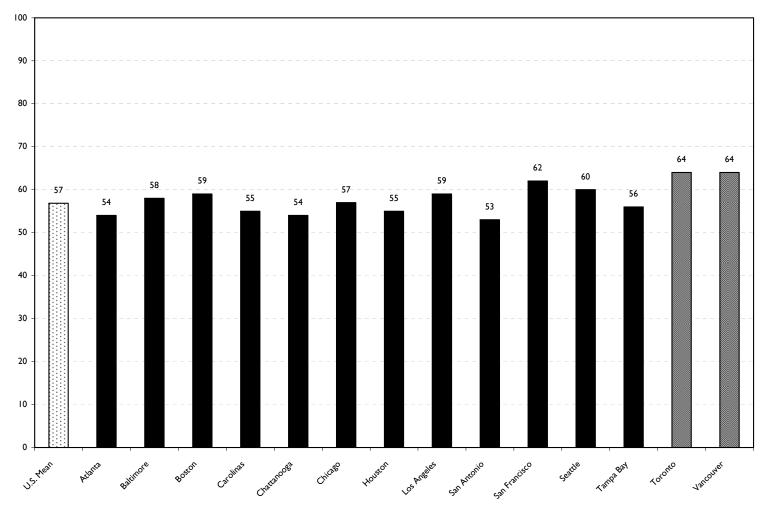




## The world's ocean is endangered.

(scalar variable, 0-100)

Mean 57

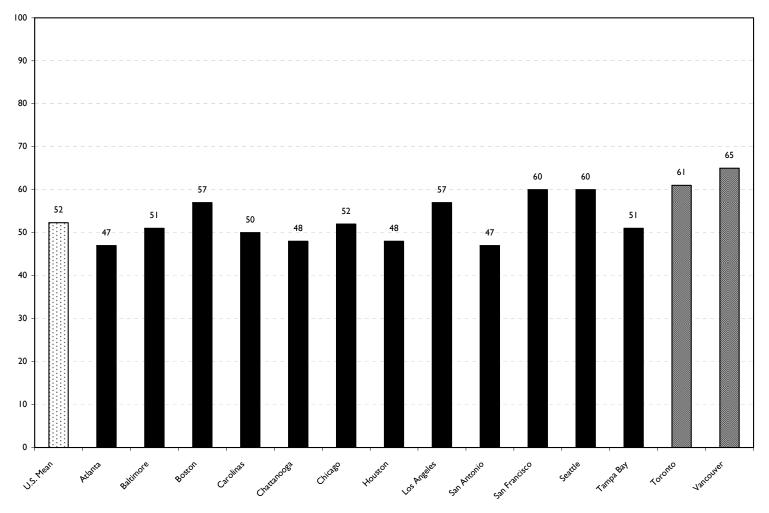




## The Pacific Ocean is endangered.

(scalar variable, 0-100)

Mean 52

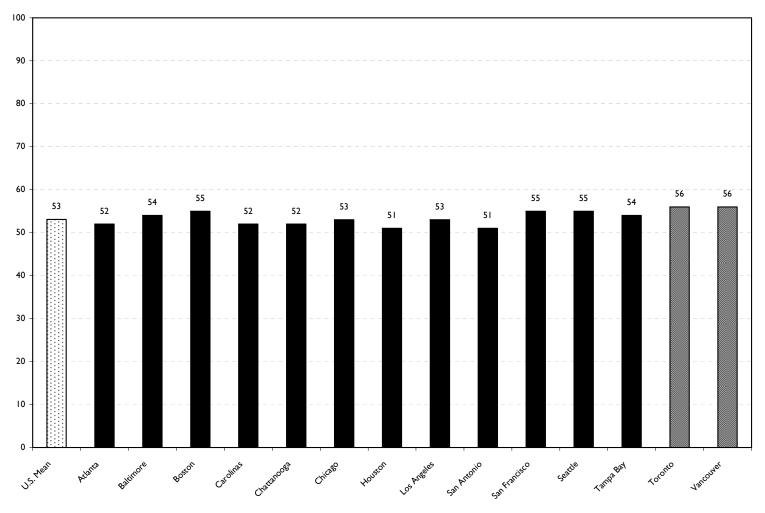




#### The Atlantic Ocean is endangered.

(scalar variable, 0-100)

Mean 53

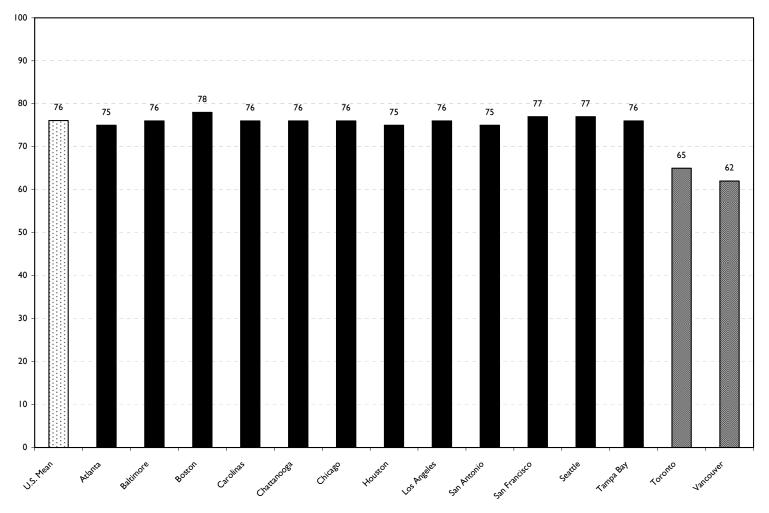




#### The Indian Ocean is endangered.

(scalar variable, 0-100)

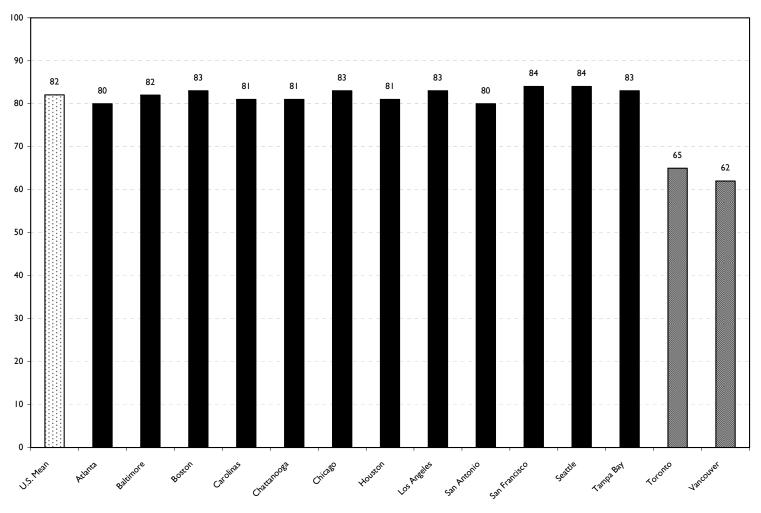
Mean 76





The Arctic Ocean is endangered.

Mean 82

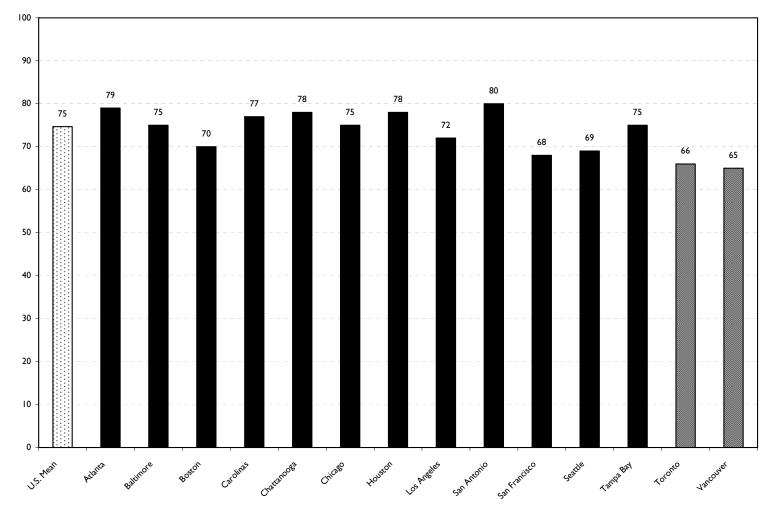




## Overall, the Pacific Ocean is in good health.

(scalar variable, 0-100)

Mean 75

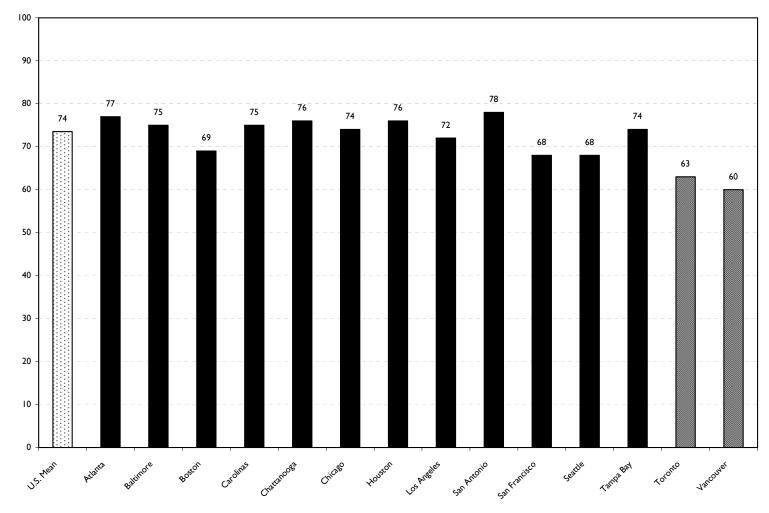




## Overall, the Atlantic Ocean is in good health.

(scalar variable, 0-100)

Mean 74

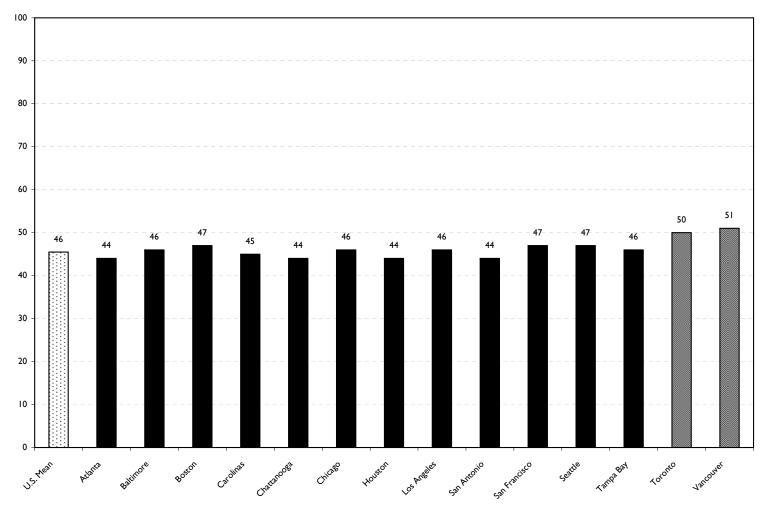




# Overall, the Indian Ocean is in good health.

(scalar variable, 0-100)

Mean 46

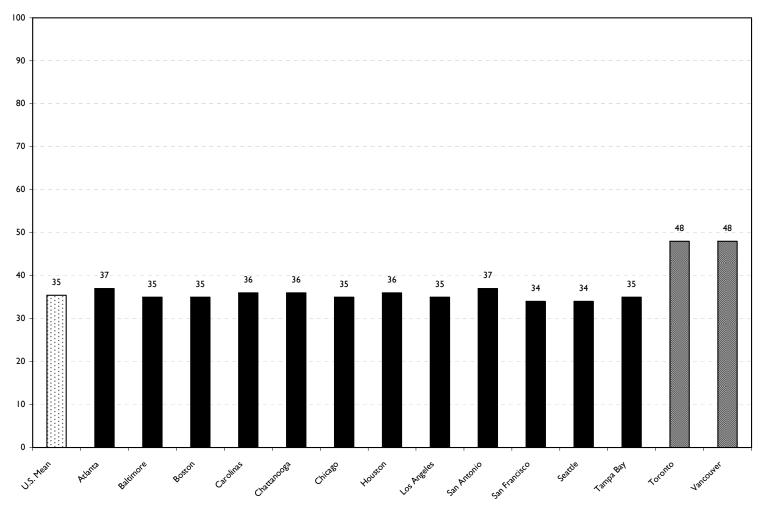




# Overall, the Arctic Ocean is in good health.

(scalar variable, 0-100)

Mean 35

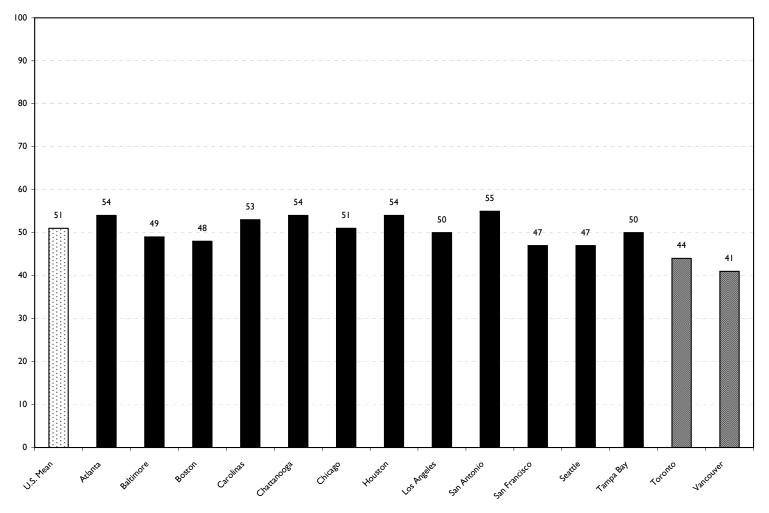




## In the future, the ocean will be healthier than it is today.

(scalar variable, 0-100)

Mean 51

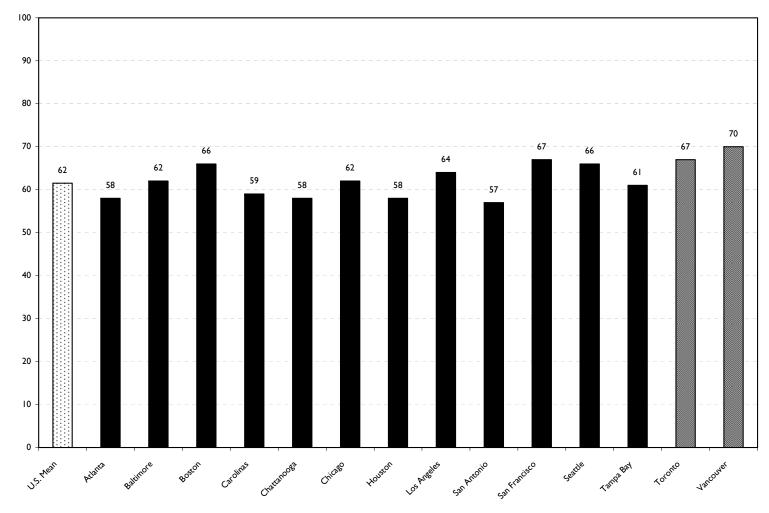




#### In the future, the ocean will be less healthy than it is today.

(scalar variable, 0-100)

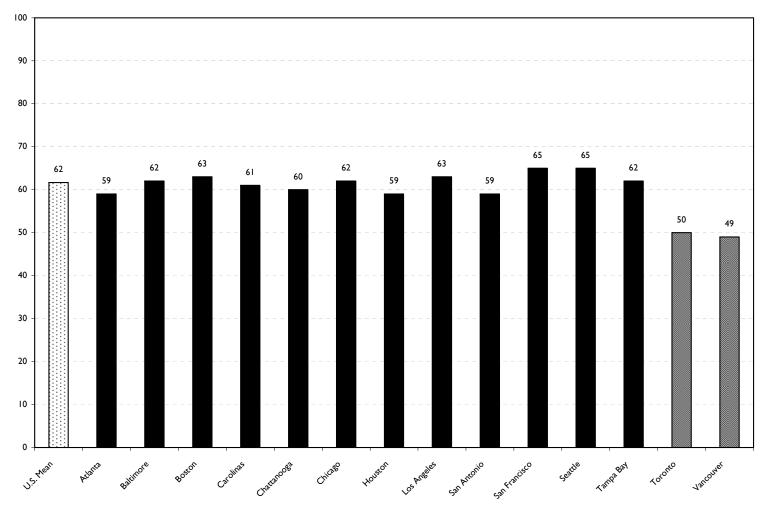
Mean 62





The United States is largely responsible for the health of the world's ocean.

Mean 62

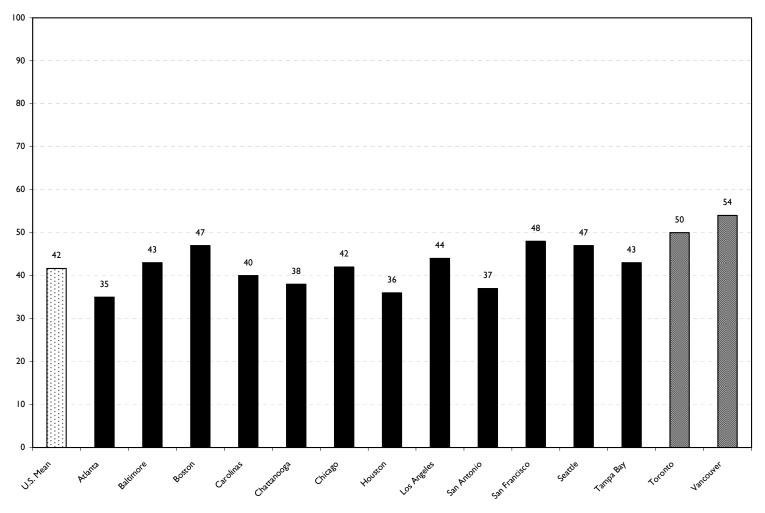




### The United States is largely responsible for pollution in the world's ocean.

(scalar variable, 0-100)

Mean 42

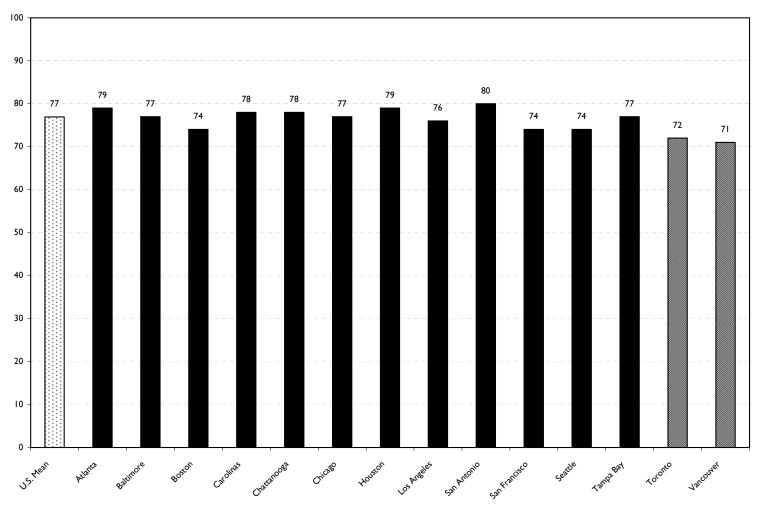




#### I would swim in the Pacific Ocean.

(scalar variable, 0-100)

Mean 77

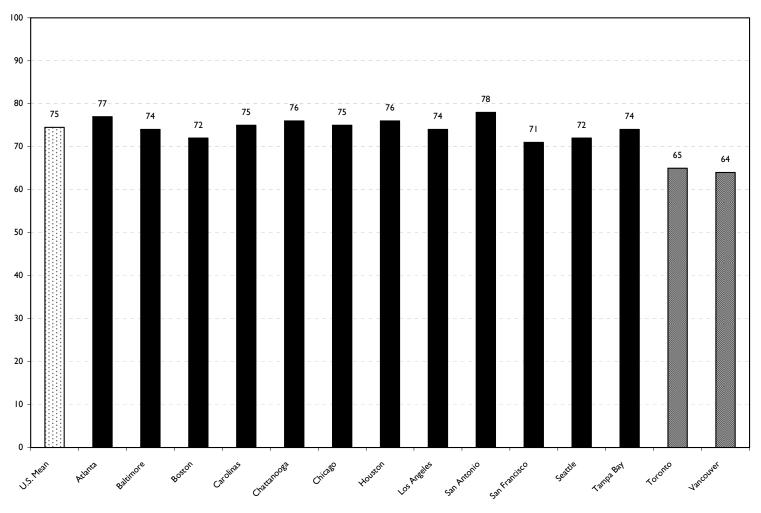




#### I would swim in the Atlantic Ocean.

(scalar variable, 0-100)

Mean 75

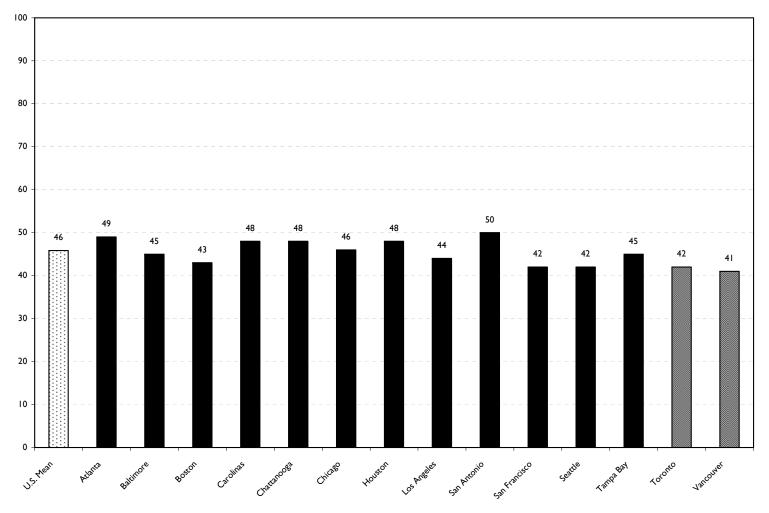




#### I would swim in the Indian Ocean.

(scalar variable, 0-100)

Mean 46

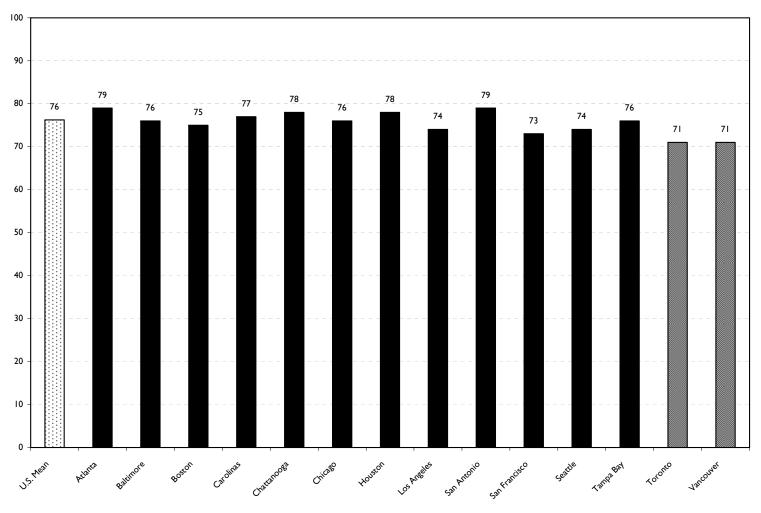




### I would take my children swimming in the Pacific Ocean.

(scalar variable, 0-100)

Mean 76

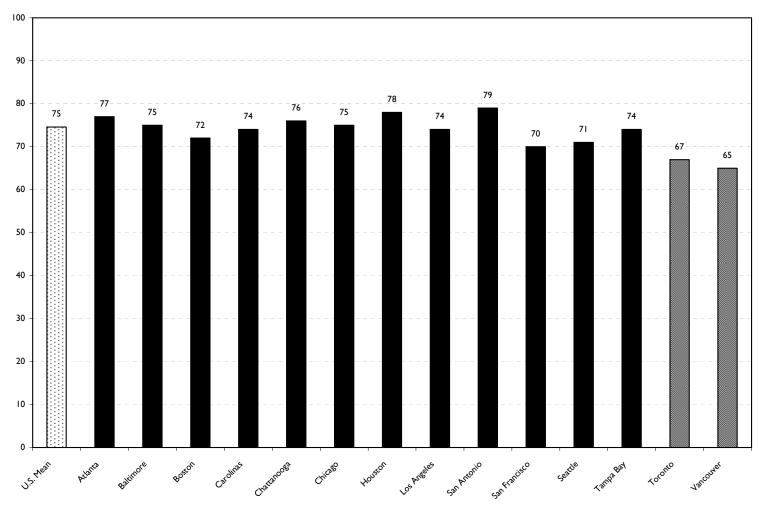




### I would take my children swimming in the Atlantic Ocean.

(scalar variable, 0-100)

Mean 75

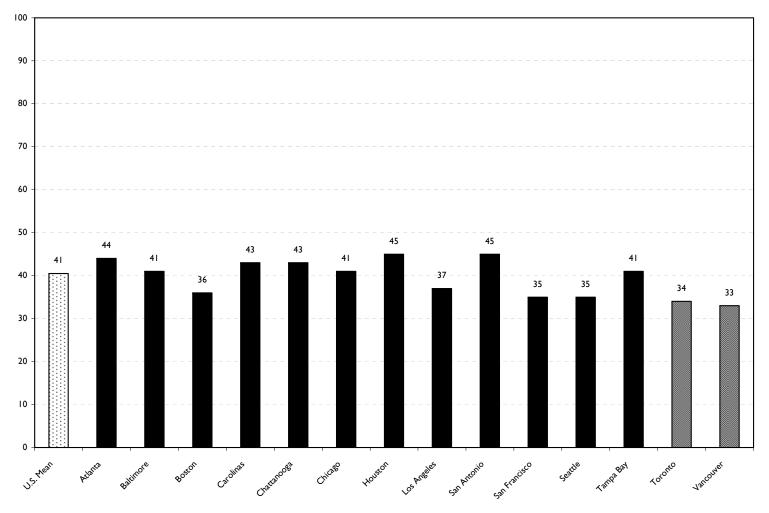




### I would take my children swimming in the Indian Ocean.

(scalar variable, 0-100)

Mean 41

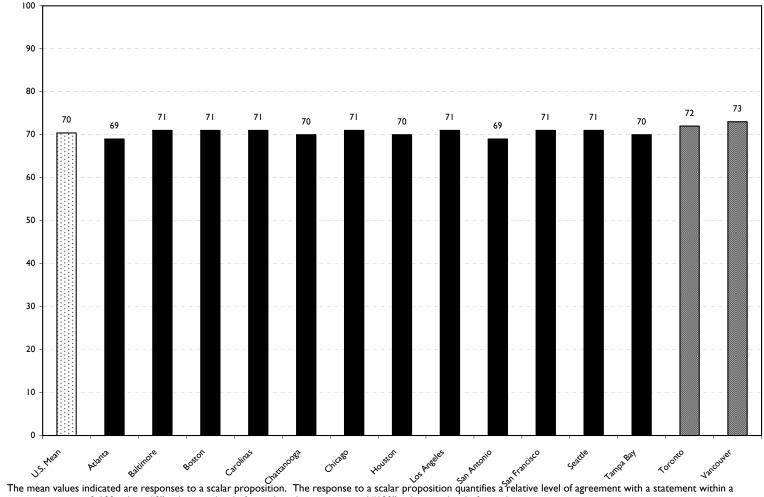




In general, the ocean that borders the United States such as the Atlantic Ocean and Pacific Ocean are safer to swim in than other bodies of water around the world.

(scalar variable, 0-100)

Mean 70



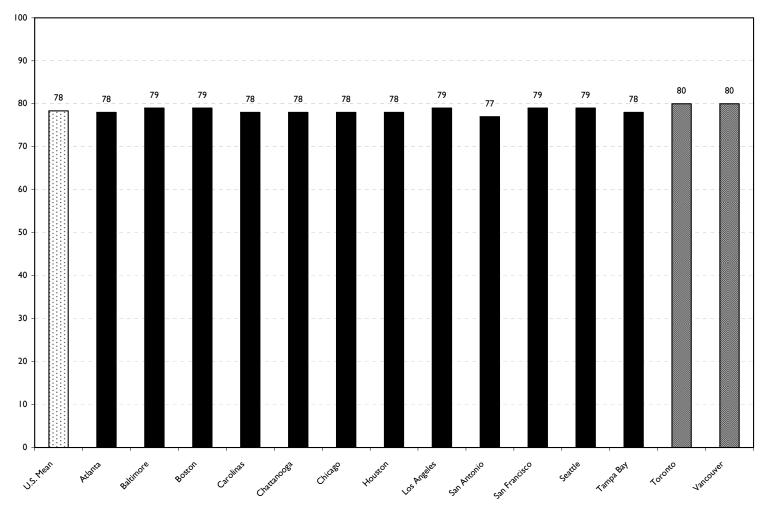
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



#### It is safer to swim in the Atlantic Ocean than the Indian Ocean.

(scalar variable, 0-100)

Mean 78

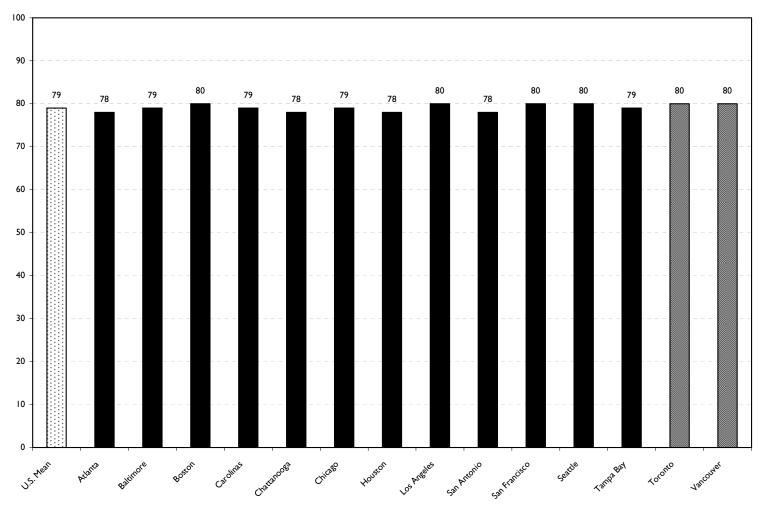




#### It is safer to swim in the Pacific Ocean than the Indian Ocean.

(scalar variable, 0-100)

Mean 79

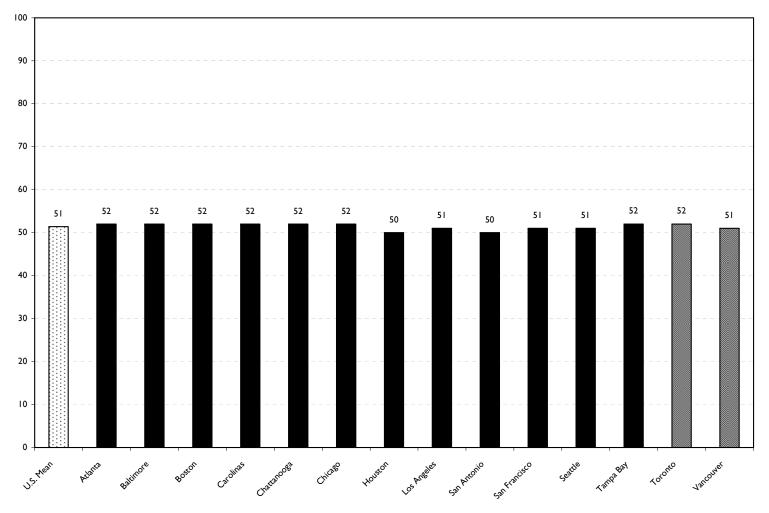




#### It is safer to swim in the Atlantic Ocean than the Pacific Ocean.

(scalar variable, 0-100)

Mean 51

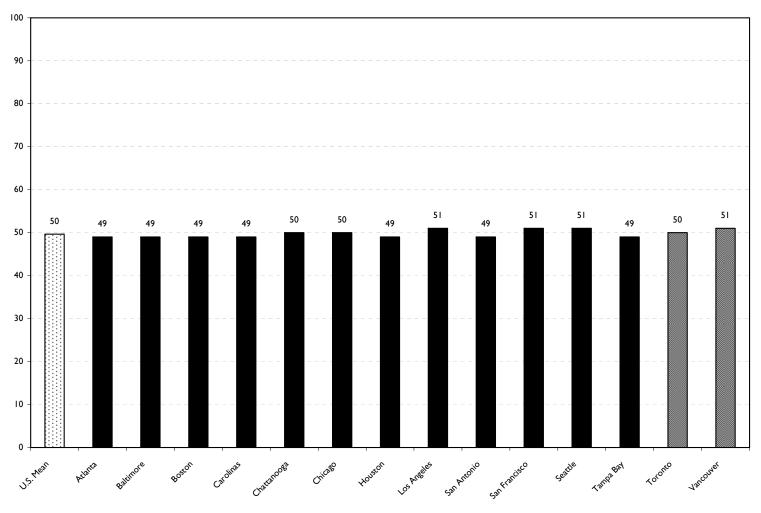




#### It is safer to swim in the Pacific Ocean than the Atlantic Ocean.

(scalar variable, 0-100)

Mean 50

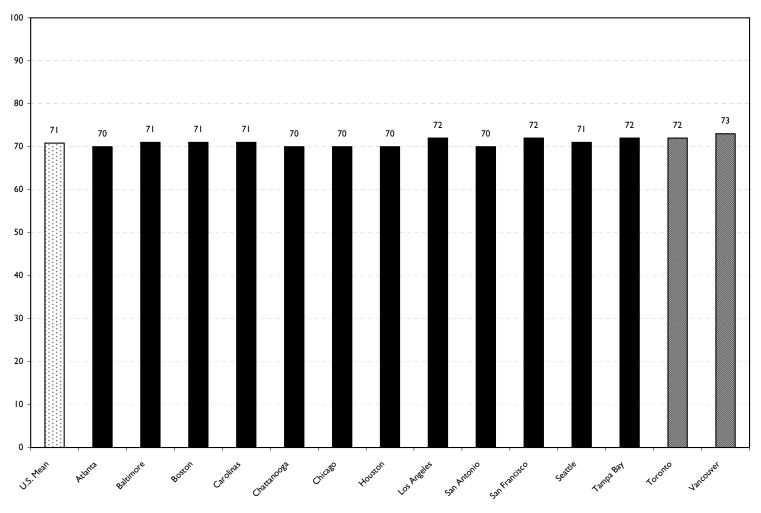




# Seafood caught in the ocean is healthy to eat.

(scalar variable, 0-100)

Mean 71

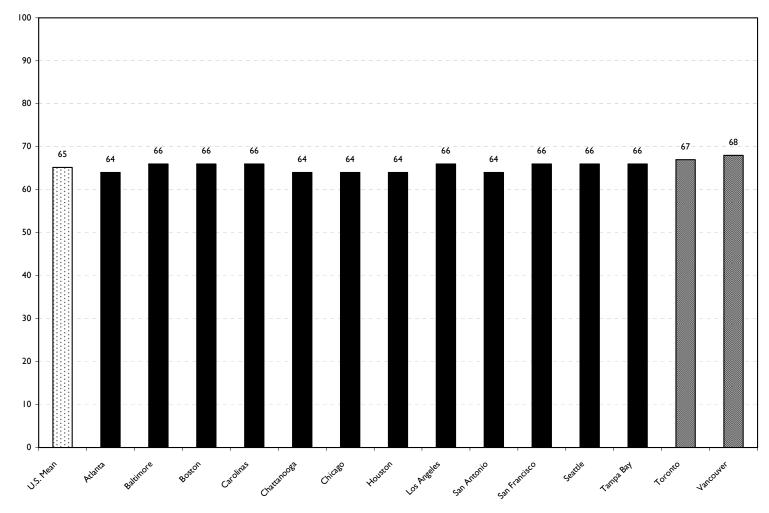




#### Seafood caught in the ocean is healthier to eat than seafood raised in aquatic farms.

(scalar variable, 0-100)

Mean 65

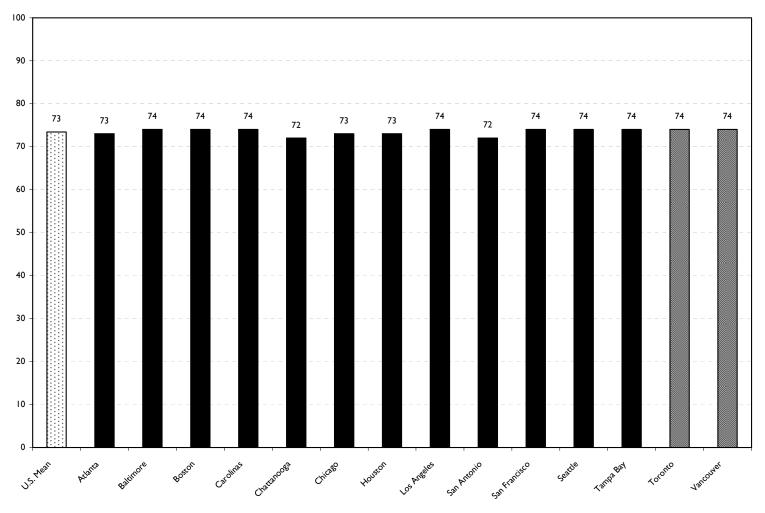




### Seafood caught in the Pacific Ocean is healthy to eat.

(scalar variable, 0-100)

Mean 73

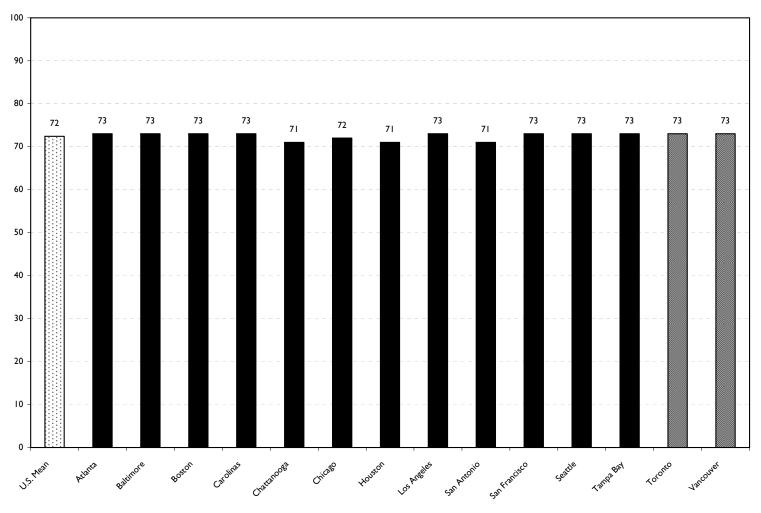




#### Seafood caught in the Atlantic Ocean is healthy to eat.

(scalar variable, 0-100)

Mean 72

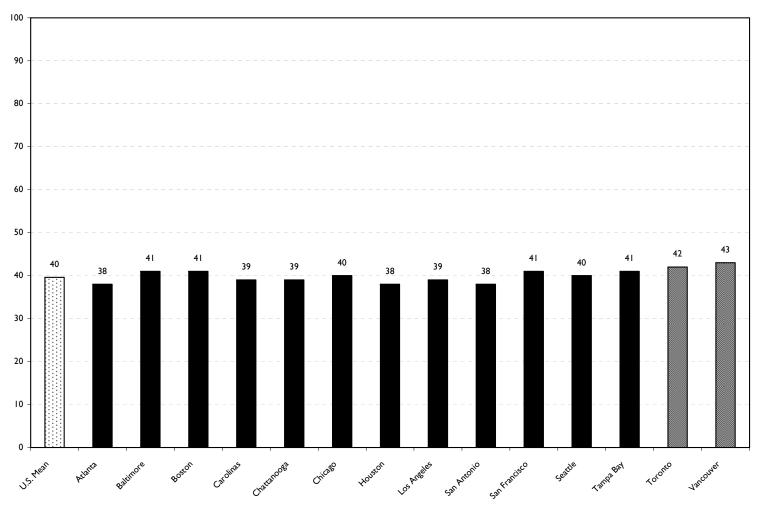




### Seafood caught in the Indian Ocean is healthy to eat.

(scalar variable, 0-100)

Mean 40

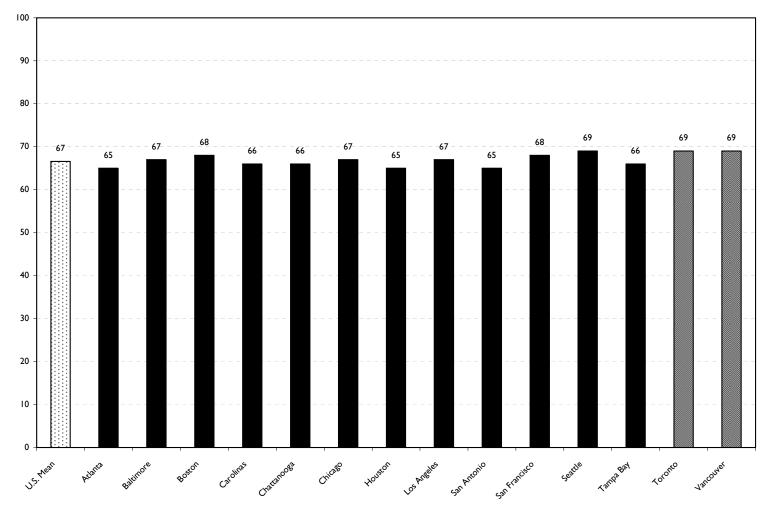




### Seafood caught in the Arctic Ocean is healthy to eat.

(scalar variable, 0-100)

Mean 67

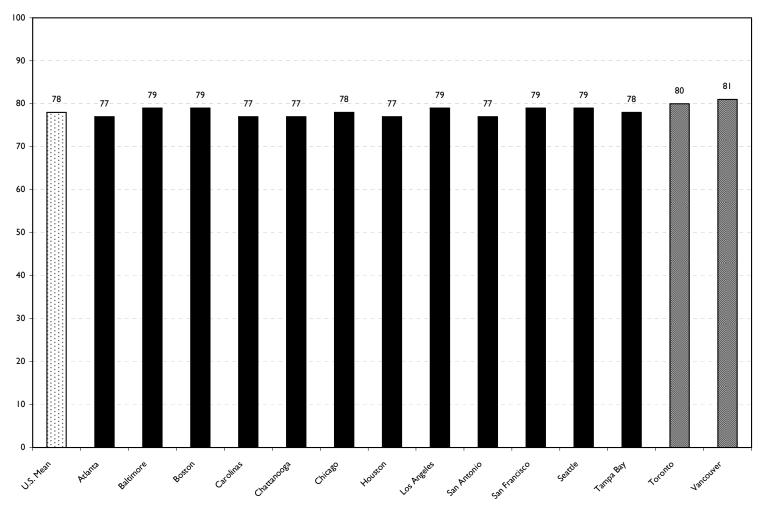




### Seafood caught in the Atlantic Ocean is healthier to eat than seafood caught in the Indian Ocean.

(scalar variable, 0-100)

Mean 78

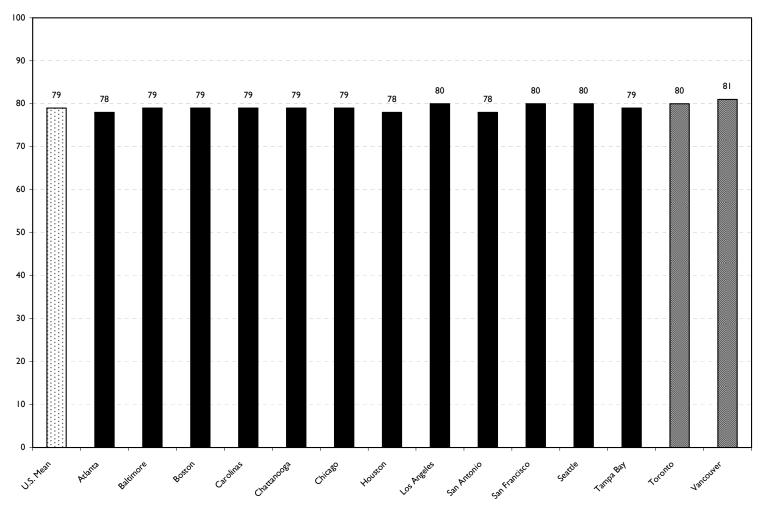




### Seafood caught in the Pacific Ocean is healthier to eat than seafood caught in the Indian Ocean.

(scalar variable, 0-100)

Mean 79

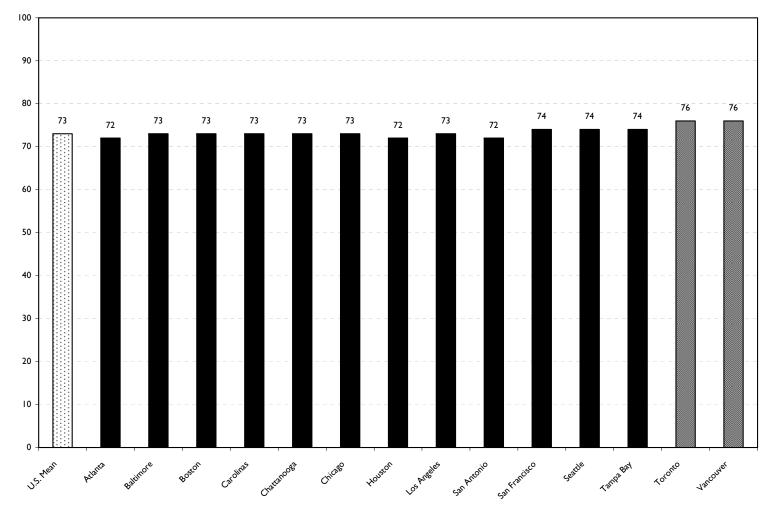




#### Seafood caught in the Arctic Ocean is healthier to eat than seafood caught in the Indian Ocean.

(scalar variable, 0-100)

Mean 73

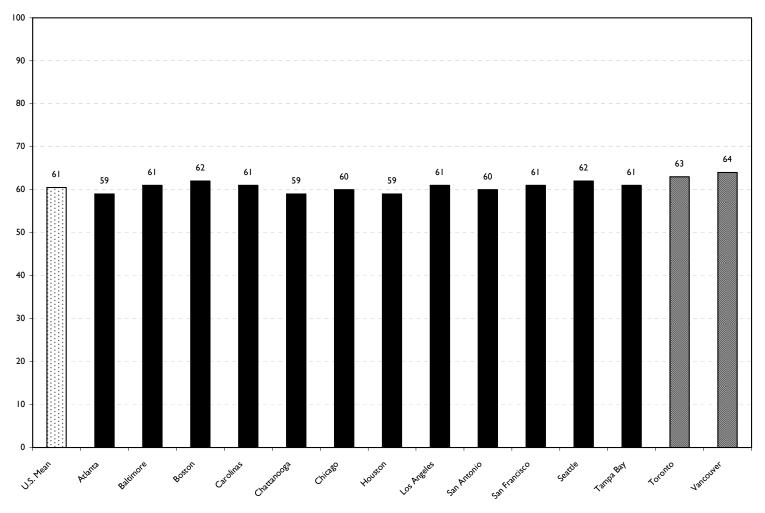




### Seafood caught in the Pacific Ocean is healthier to eat than seafood caught in the Arctic Ocean.

(scalar variable, 0-100)

Mean 61

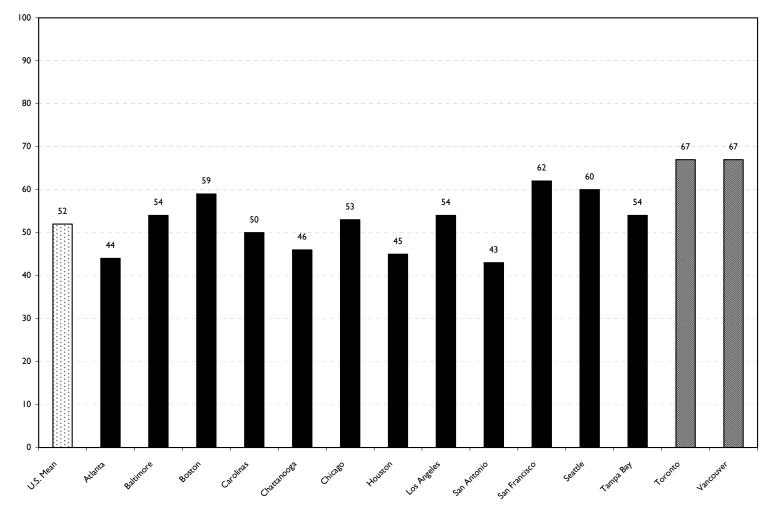




### The world's ocean is fragile.

(scalar variable, 0-100)

Mean 52

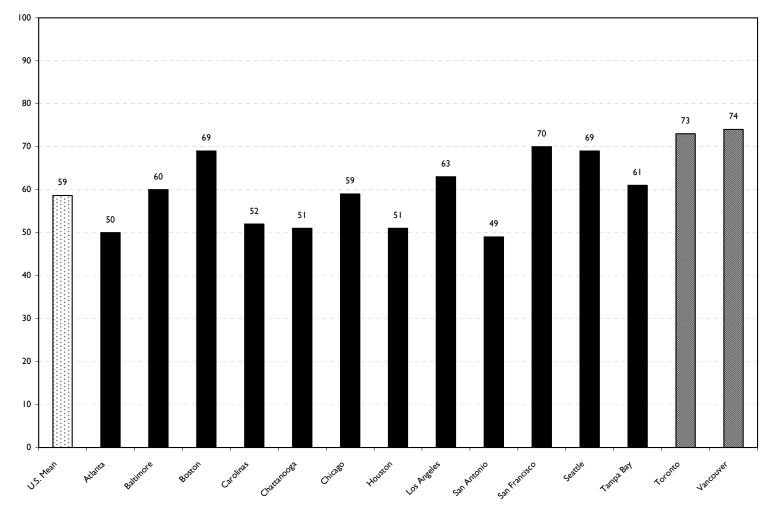




### I worry about the health of the world's ocean.

(scalar variable, 0-100)

Mean 59

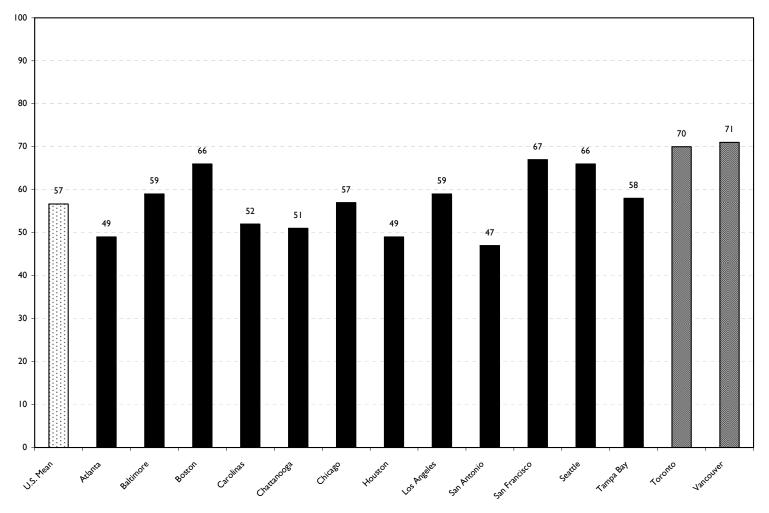




# I worry about the future availability of healthy seafood.

(scalar variable, 0-100)

Mean 57

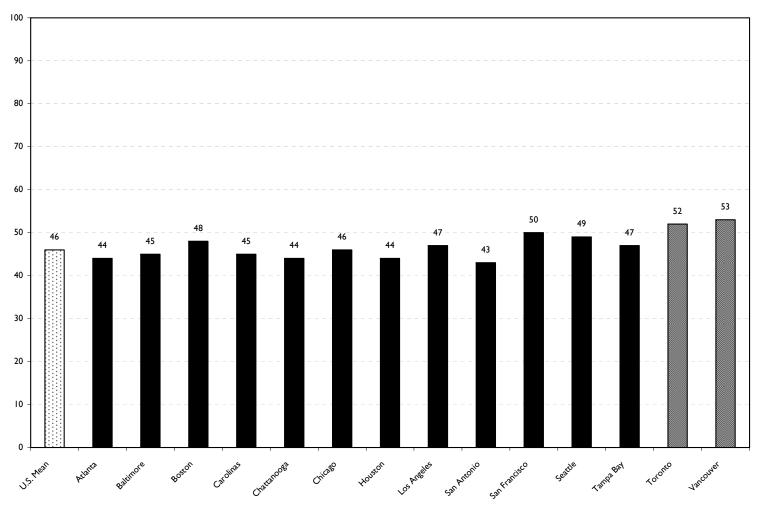




### The primary threat to the future availability of healthy seafood is overfishing.

(scalar variable, 0-100)

Mean 46

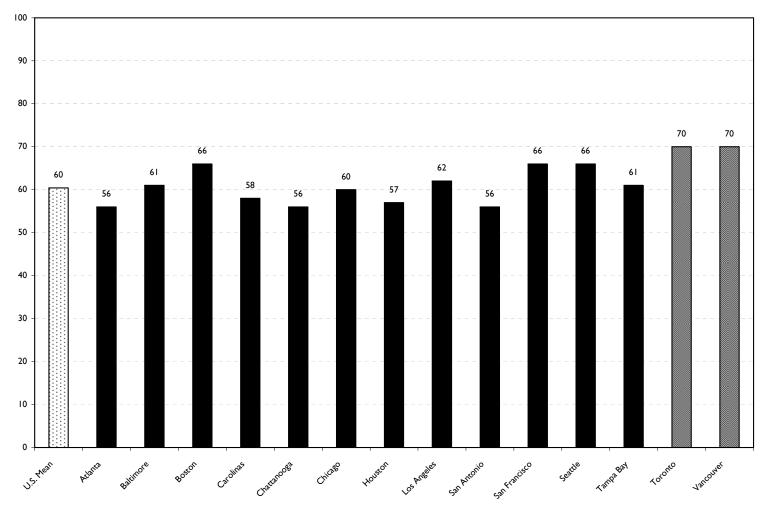




### The primary threat to the future availability of healthy seafood is pollution.

(scalar variable, 0-100)

Mean 60

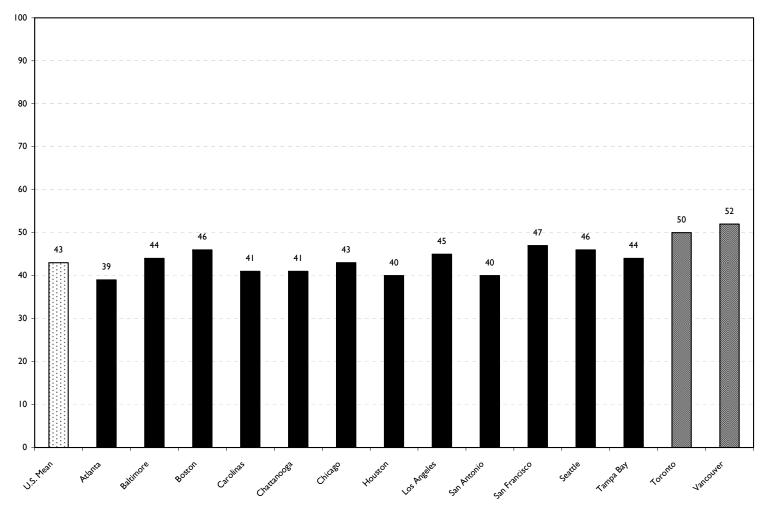




### The primary threat to the future availability of healthy seafood is global climate change.

(scalar variable, 0-100)

Mean 43

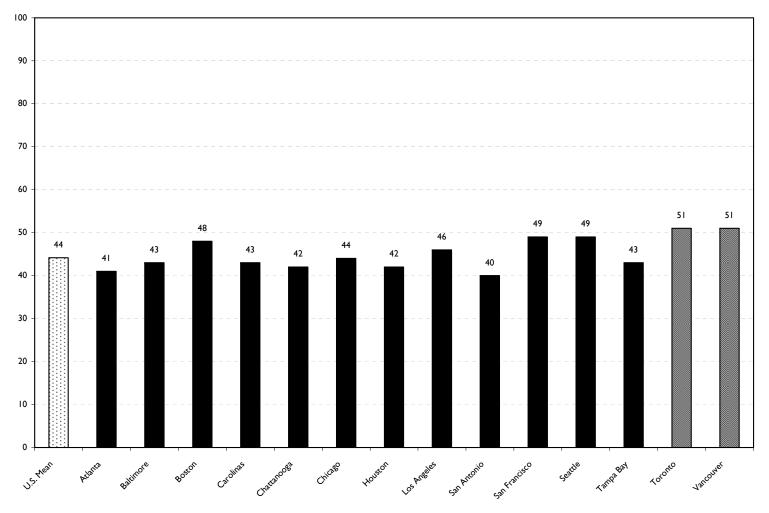




## The primary threat to the future availability of healthy seafood is global warming.

(scalar variable, 0-100)

Mean 44

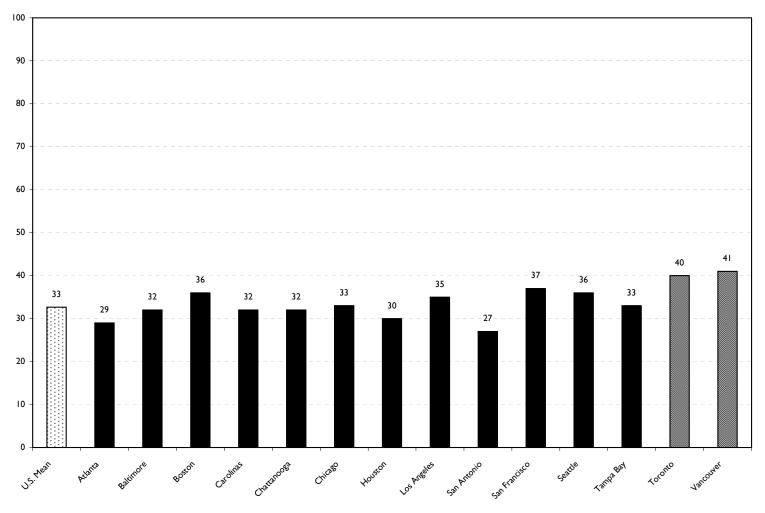




### The primary threat to the future availability of healthy seafood is human overpopulation.

(scalar variable, 0-100)

Mean 33

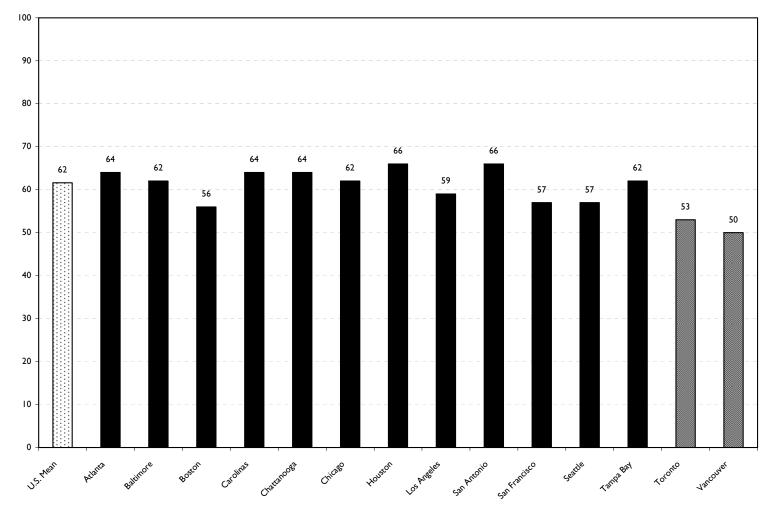




### In terms of environmental quality, coastal areas and beaches are healthy.

(scalar variable, 0-100)

Mean 62

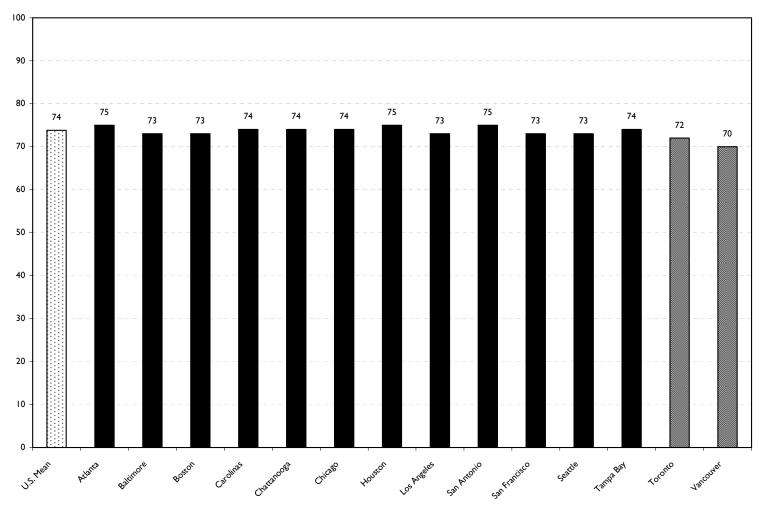




#### In terms of environmental quality, the deep ocean away from coastal areas is healthy.

(scalar variable, 0-100)

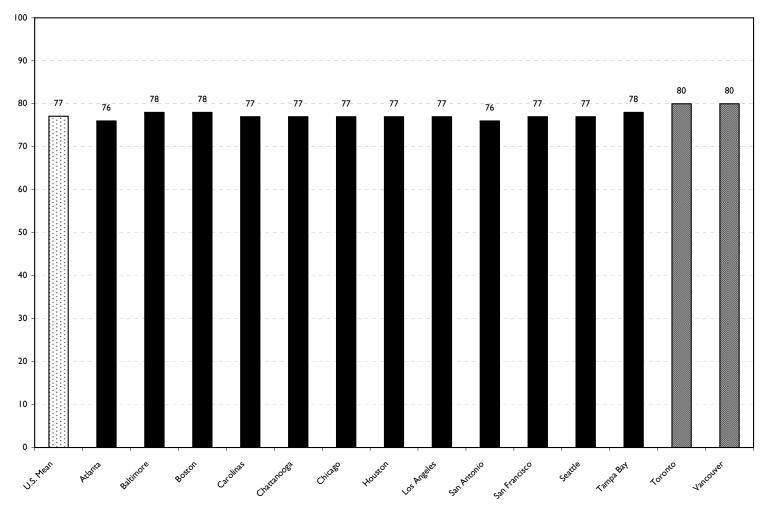
Mean 74





In terms of environmental quality, the deep ocean away from coastal areas is healthier than coastal areas and beaches. (scalar variable, 0-100)

Mean 77

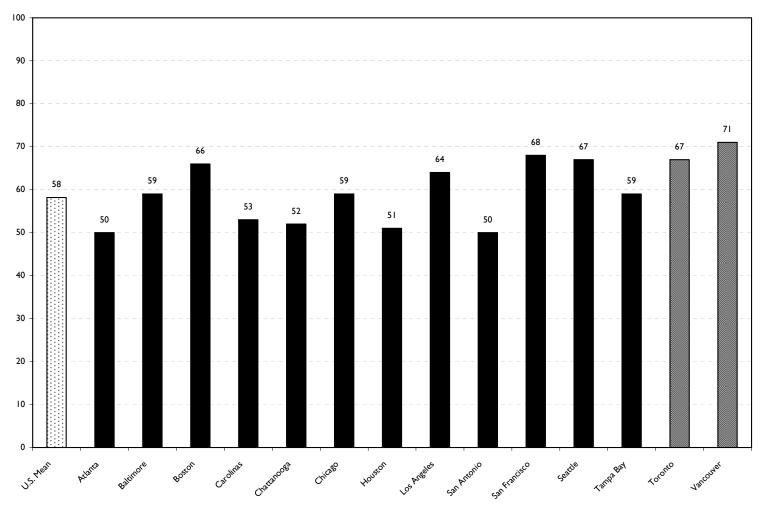




### The most important environmental issue confronting the world is climate change.

(scalar variable, 0-100)

Mean 58

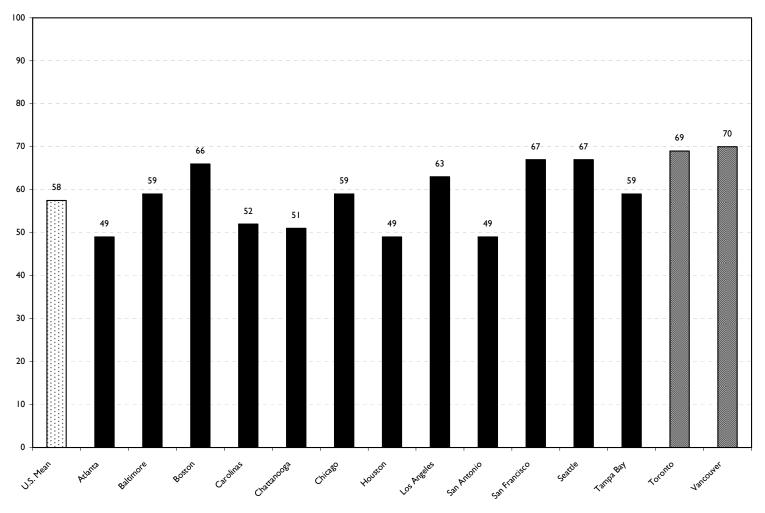




### The most important environmental issue confronting the United States is climate change.

(scalar variable, 0-100)

Mean 58

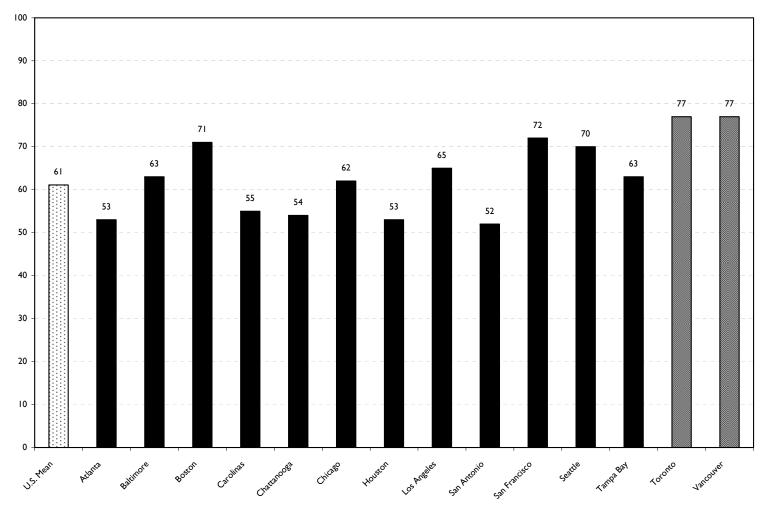




When it comes to climate change, the actions of individual people can make a positive difference.

(scalar variable, 0-100)

Mean 61

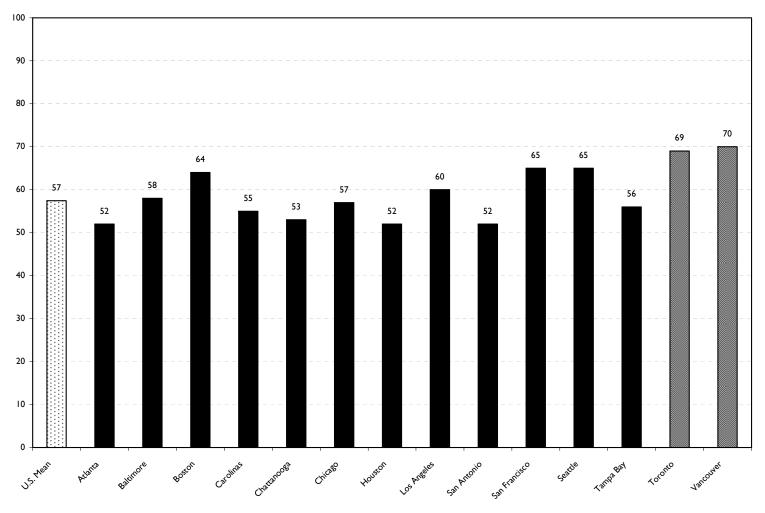




## In terms of environmental issues, I consider climate change to be a crisis.

(scalar variable, 0-100)

Mean 57

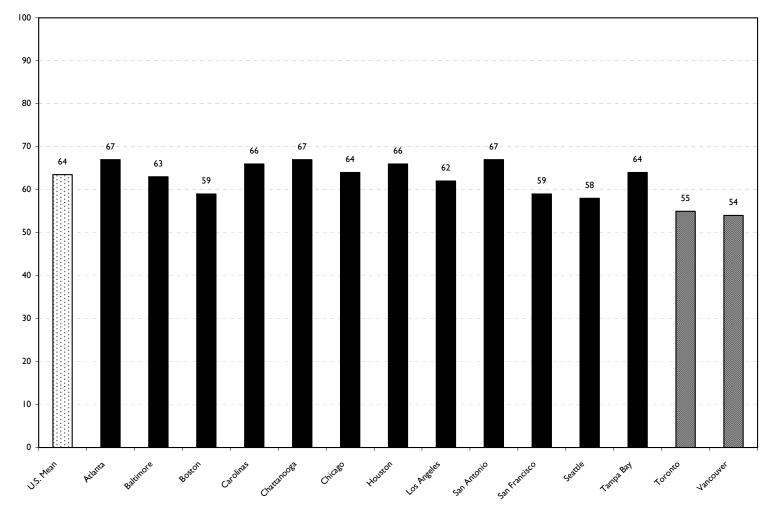




# Climate change is overstated as an environmental issue.

(scalar variable, 0-100)

Mean 64

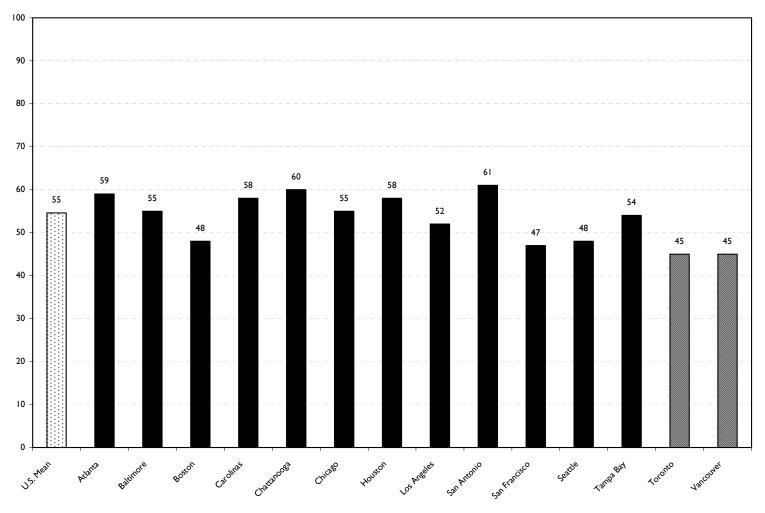




#### Ocean health is overstated as an environmental issue.

(scalar variable, 0-100)

Mean 55

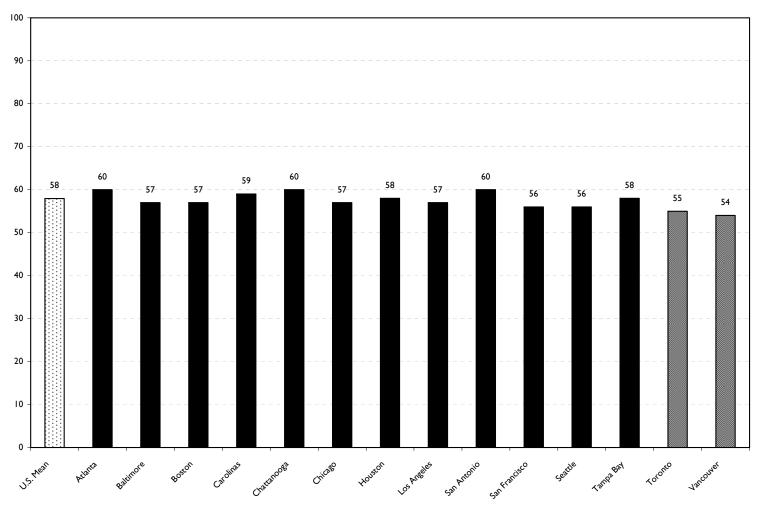




## Solving the climate change crisis is the responsibility of the federal government.

(scalar variable, 0-100)

Mean 58

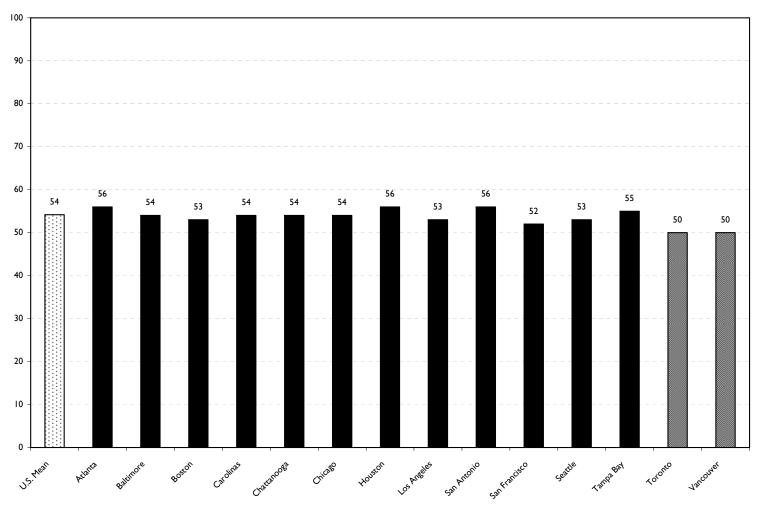




## Solving the climate change crisis is the responsibility of state government.

(scalar variable, 0-100)

Mean 54

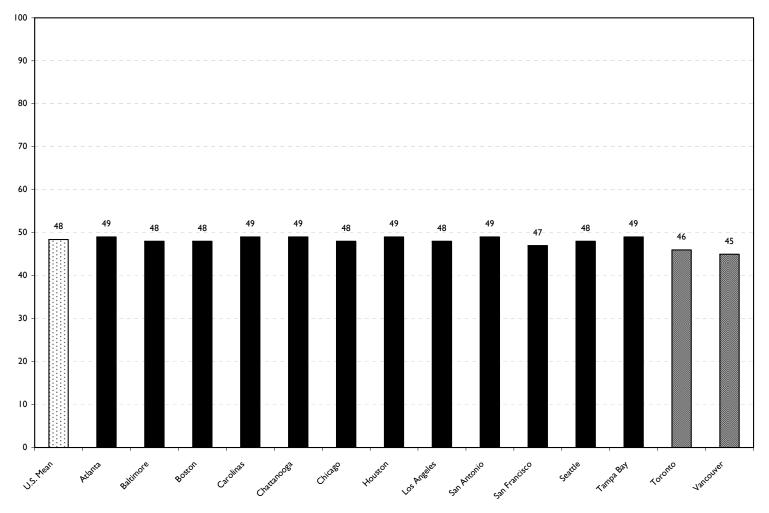




## Solving the climate change crisis is the responsibility of local government.

(scalar variable, 0-100)

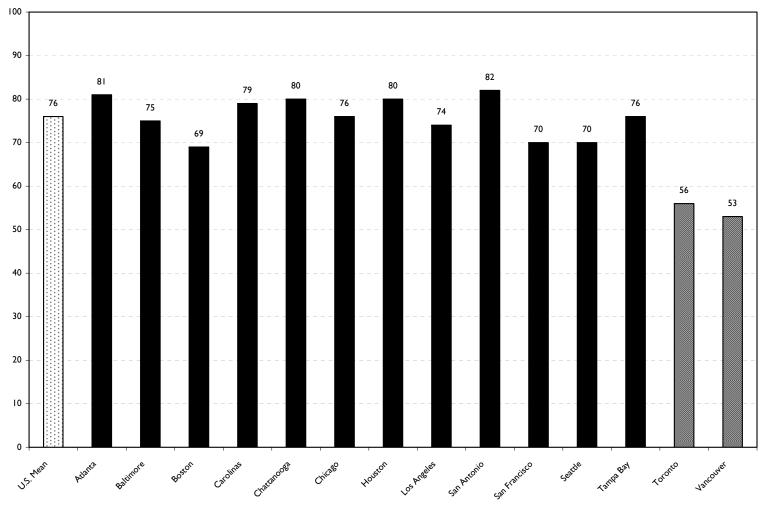
Mean 48





The United States is a leader in the development and implementation of positive climate change policies. (scalar variable, 0-100)

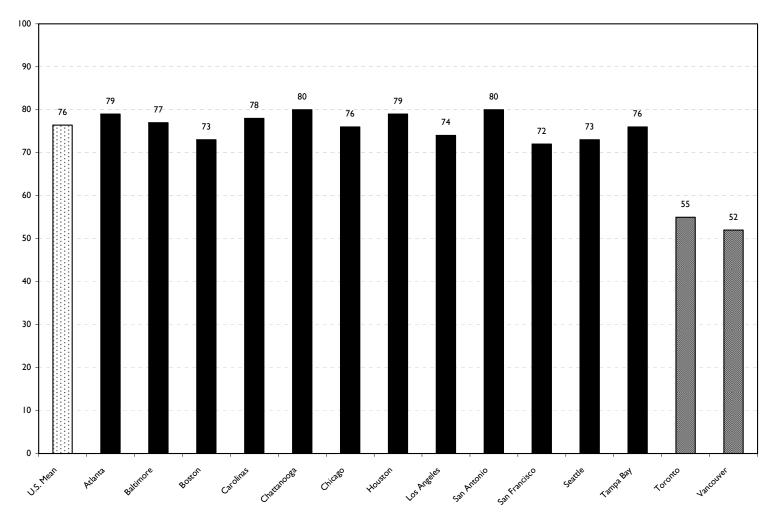
Mean 76





The United States is more advanced in its efforts to positively influence climate change than the rest of the world. (scalar variable, 0-100)

Mean 76

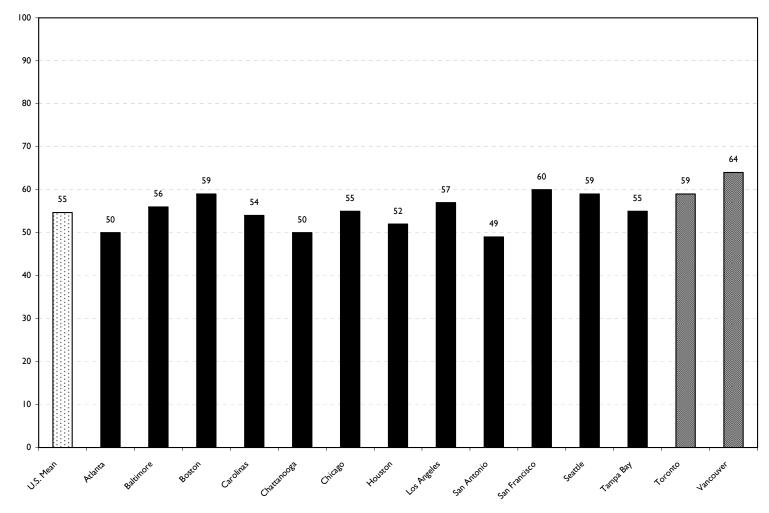




# Climate change threatens ocean health.

(scalar variable, 0-100)

Mean 55

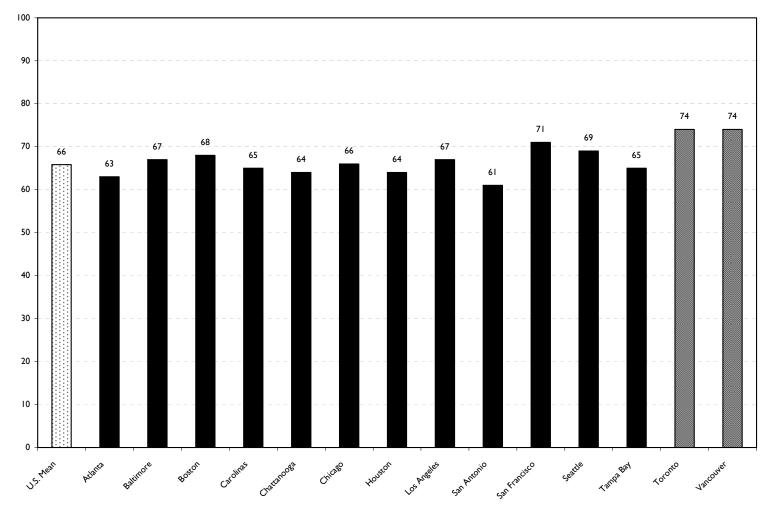




## The actions of human beings are the primary threat to ocean health.

(scalar variable, 0-100)

Mean 66

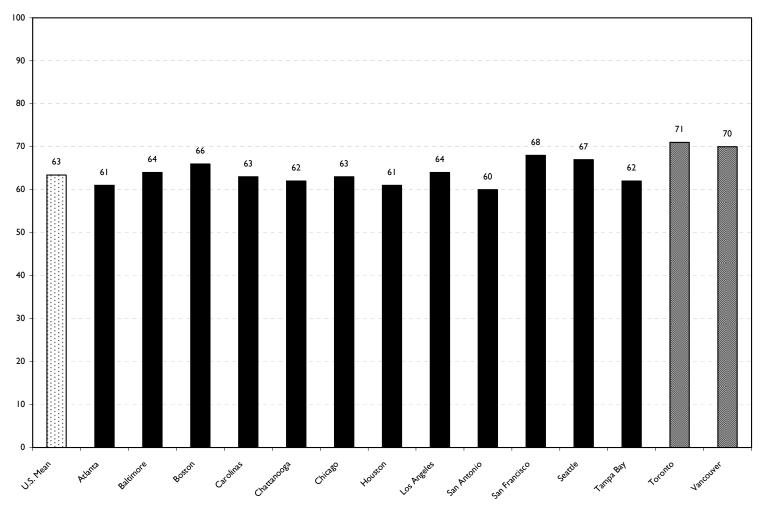




## The actions of human beings are the primary threat to climate change.

(scalar variable, 0-100)

Mean 63

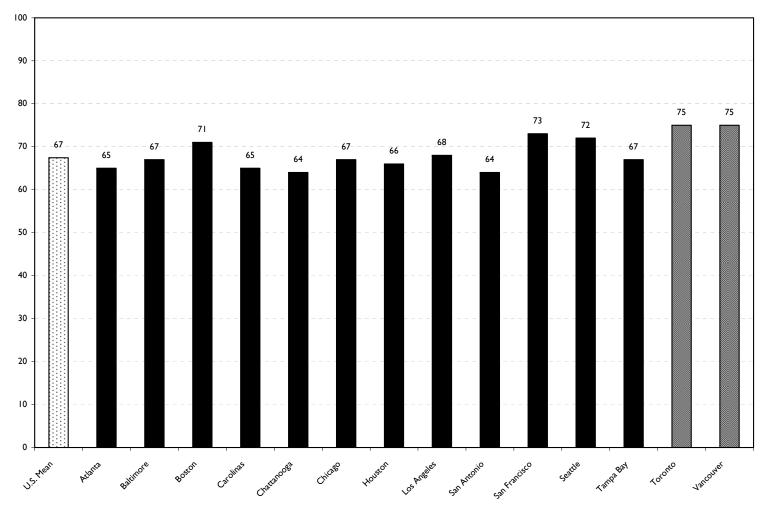




# The ocean is affected by the actions of people.

(scalar variable, 0-100)

Mean 67

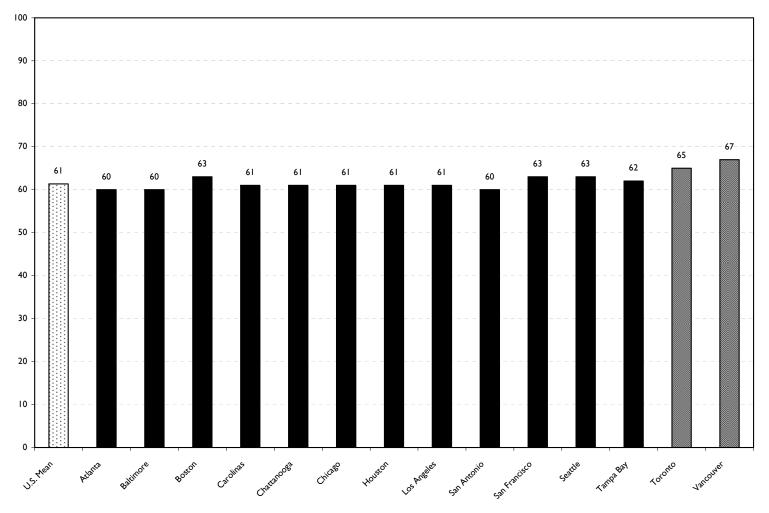




#### I am worried about the future health of the ocean.

(scalar variable, 0-100)

Mean 61

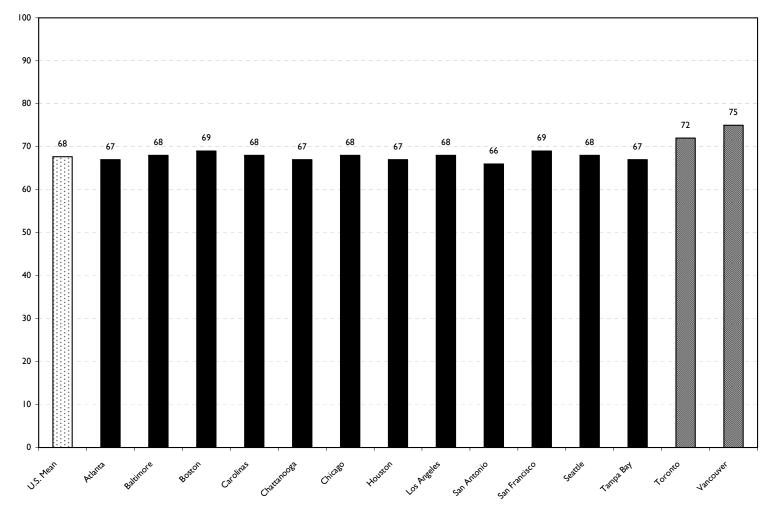




# I am worried about climate change.

(scalar variable, 0-100)

Mean 68

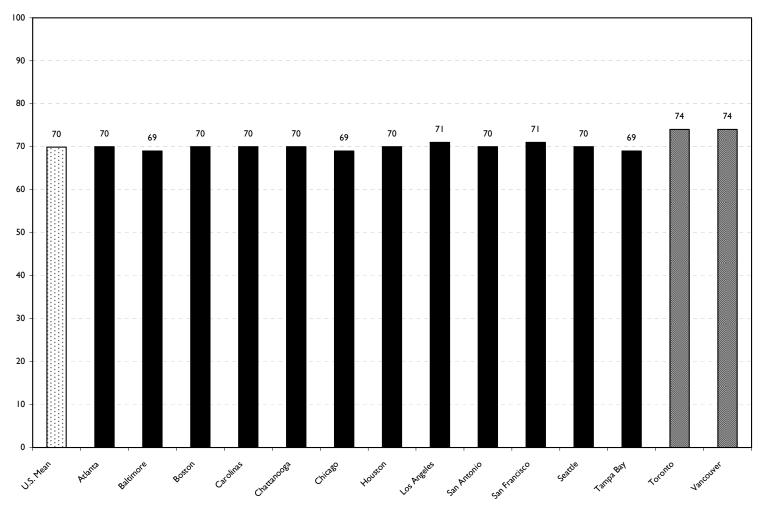




# I am worried about global warming.

(scalar variable, 0-100)

Mean 70

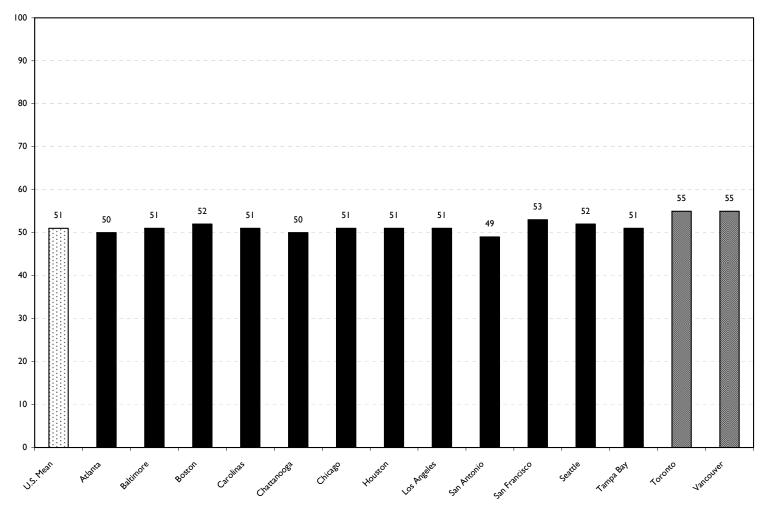




## Global climate change is negatively impacting my quality of life.

(scalar variable, 0-100)

Mean 51

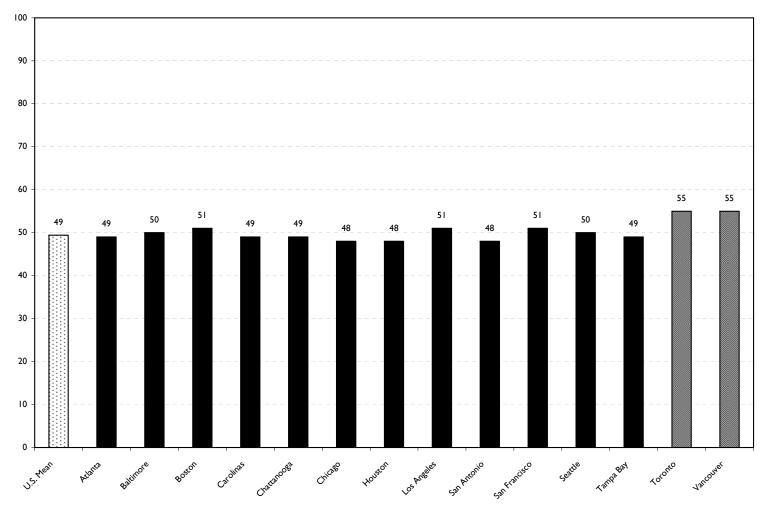




## Global climate change is negatively impacting the health of the ocean.

(scalar variable, 0-100)

Mean 49

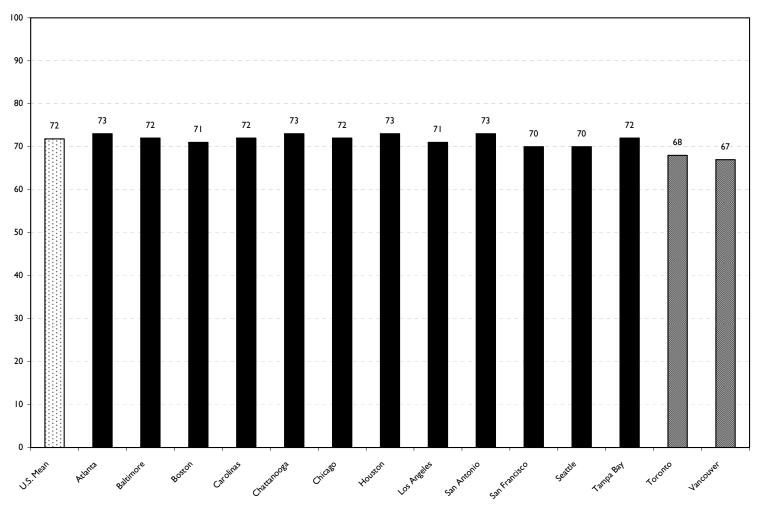




## Future technologies will solve the climate change crisis.

(scalar variable, 0-100)

Mean 72

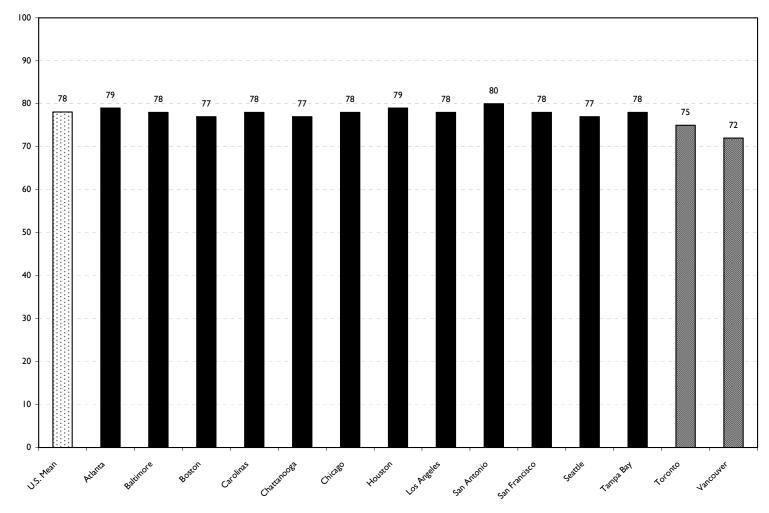




#### Future technologies will <u>help</u> solve the climate change crisis.

(scalar variable, 0-100)

Mean 78

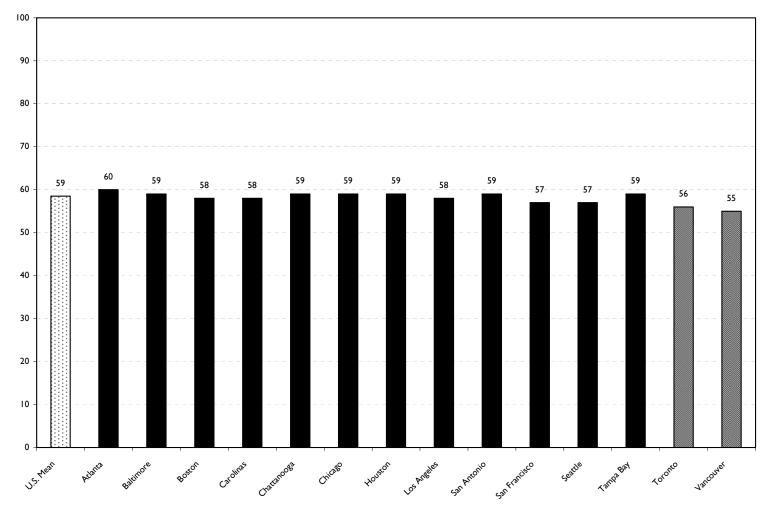




## Future technologies will solve ocean pollution issues.

(scalar variable, 0-100)

Mean 59

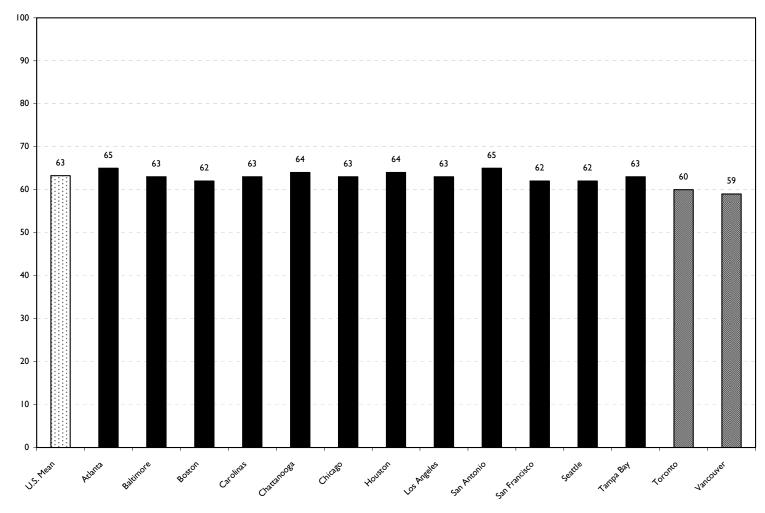




# Future technologies will <u>help</u> solve ocean pollution issues.

(scalar variable, 0-100)

Mean 63

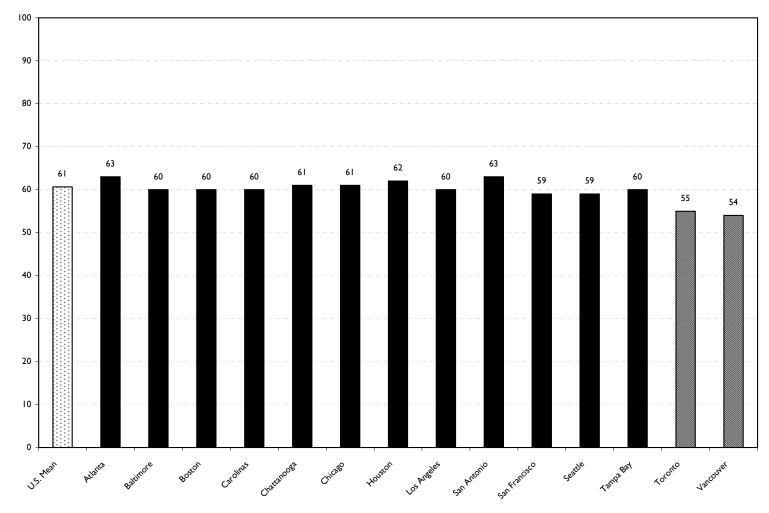




#### My actions have little impact on climate change.

(scalar variable, 0-100)

Mean 61

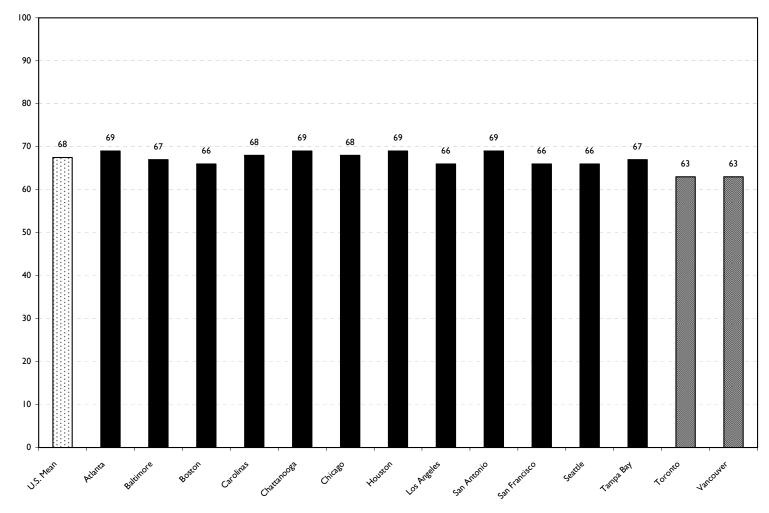




## My actions have little impact on ocean health.

(scalar variable, 0-100)

Mean 68

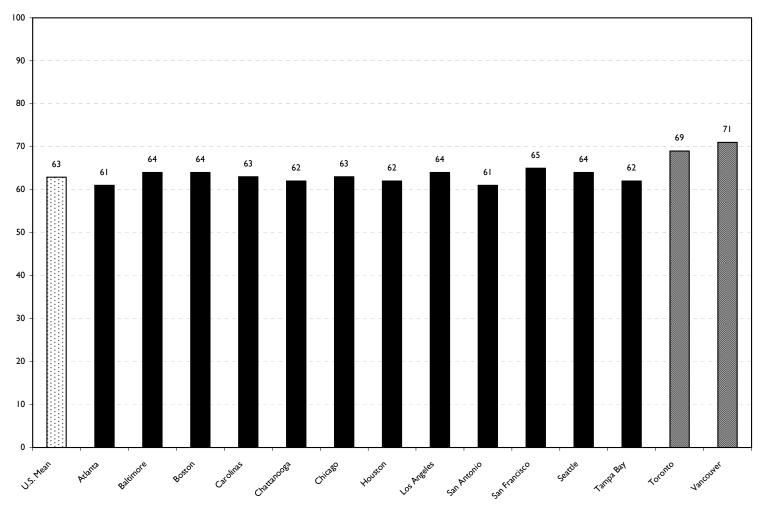




## I would pay more in taxes to positively impact climate change.

(scalar variable, 0-100)

Mean 63

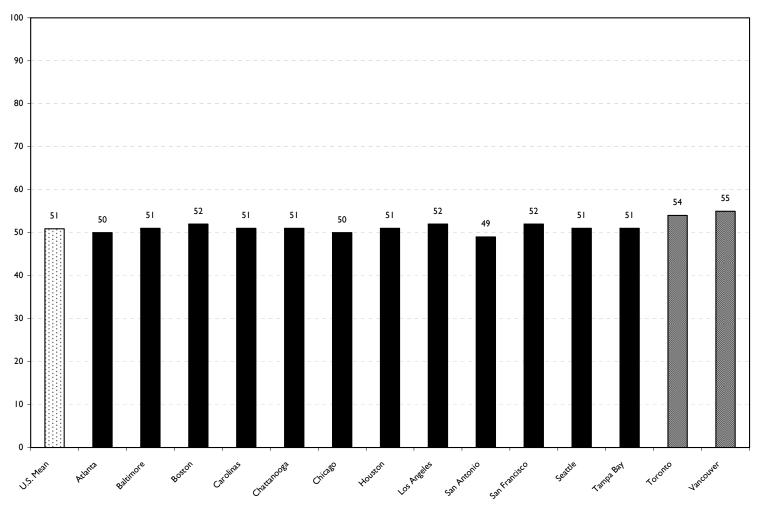




## I would pay more in taxes to positively impact ocean health.

(scalar variable, 0-100)

Mean 51

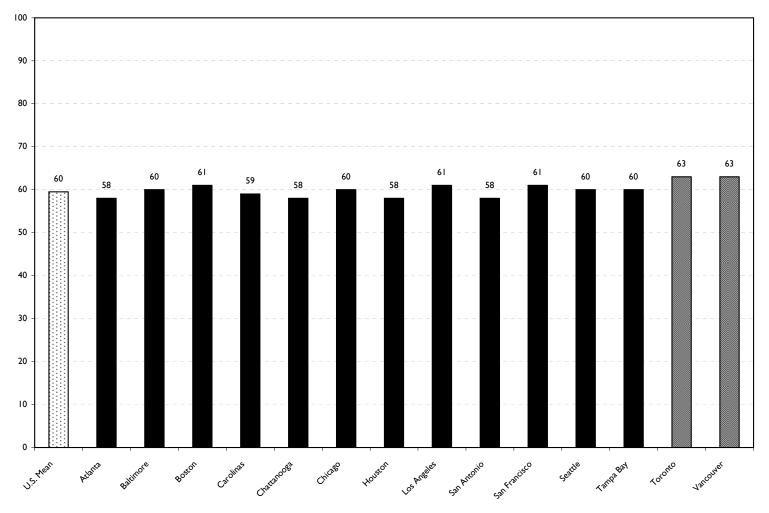




## I would pay more in taxes to ensure the future availability of healthy seafood.

(scalar variable, 0-100)

Mean 60

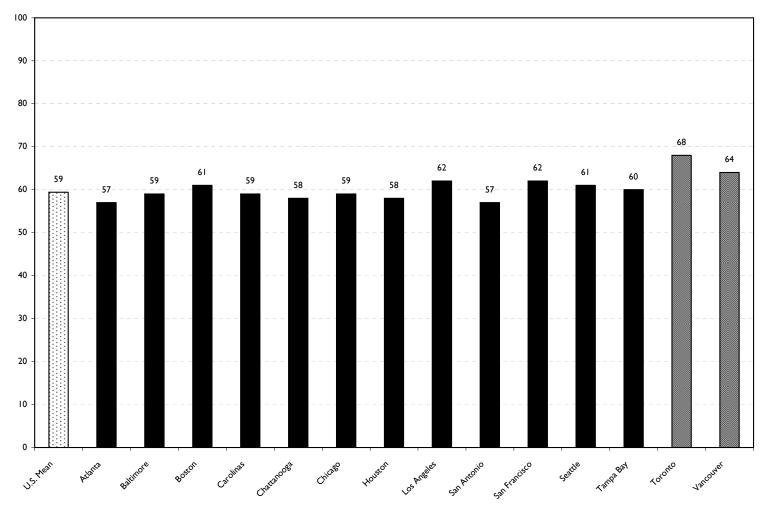




## I would pay more for seafood at a restaurant to positively impact ocean health.

(scalar variable, 0-100)

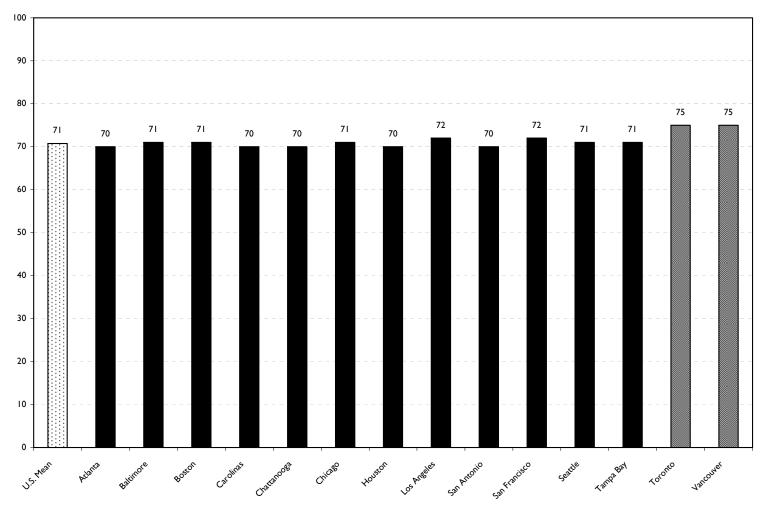
Mean 59





I would pay more for seafood at a restaurant that only serves seafood that has been certified as healthy and sustainable. (scalar variable, 0-100)

Mean 71

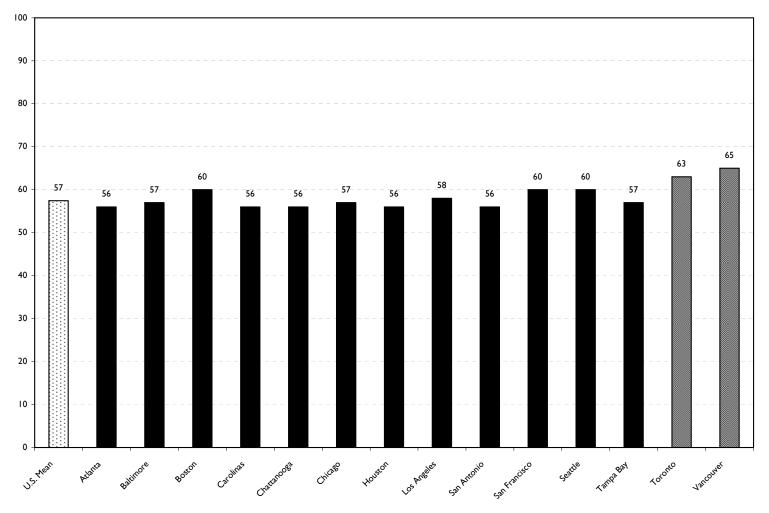




## I would pay more for seafood at the grocery market to positively impact ocean health.

(scalar variable, 0-100)

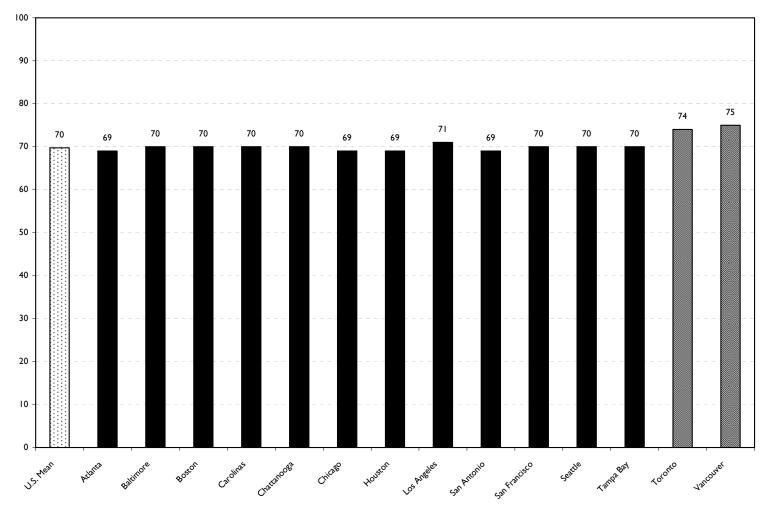
Mean 57





I would pay more for seafood at a grocery market that only serves seafood that has been certified as healthy and sustainable. (scalar variable, 0-100)

Mean 70

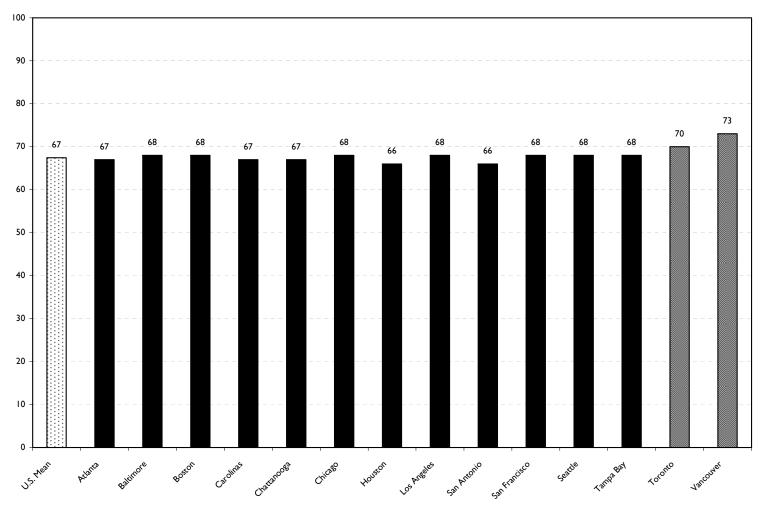




## I would change my seafood eating habits to positively impact ocean health.

(scalar variable, 0-100)

Mean 67

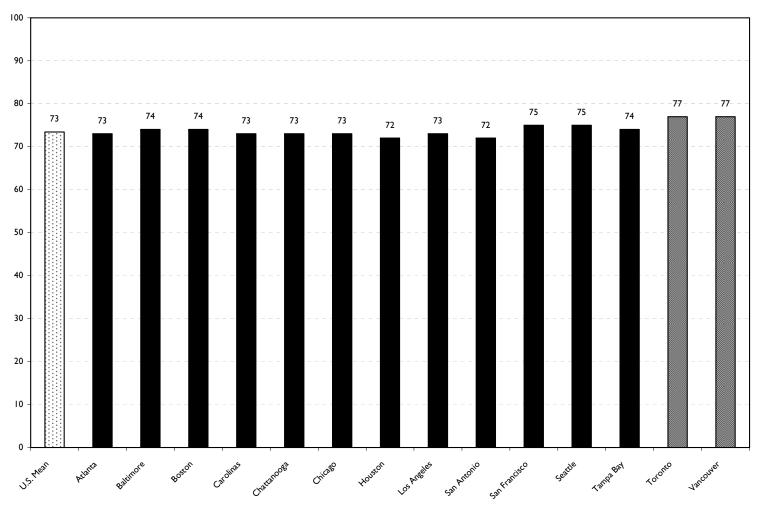




## I would change my seafood eating habits to protect and/or preserve an endangered species.

(scalar variable, 0-100)

Mean 73

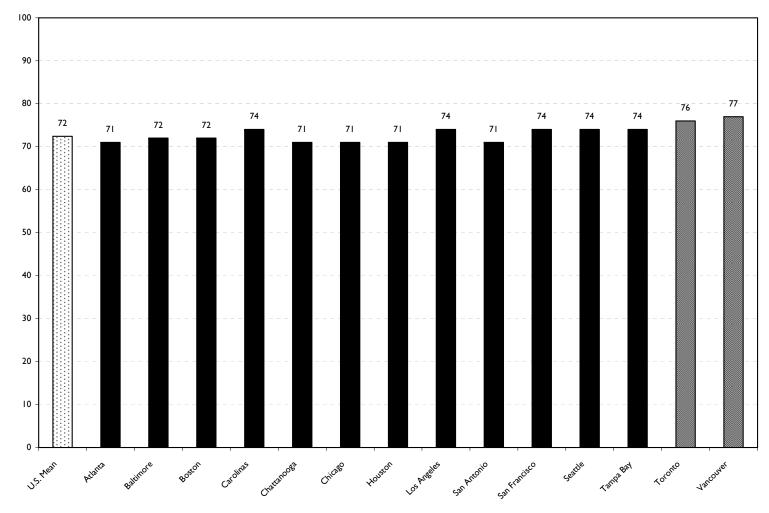




# I am inspired by the ocean.

(scalar variable, 0-100)

Mean 72

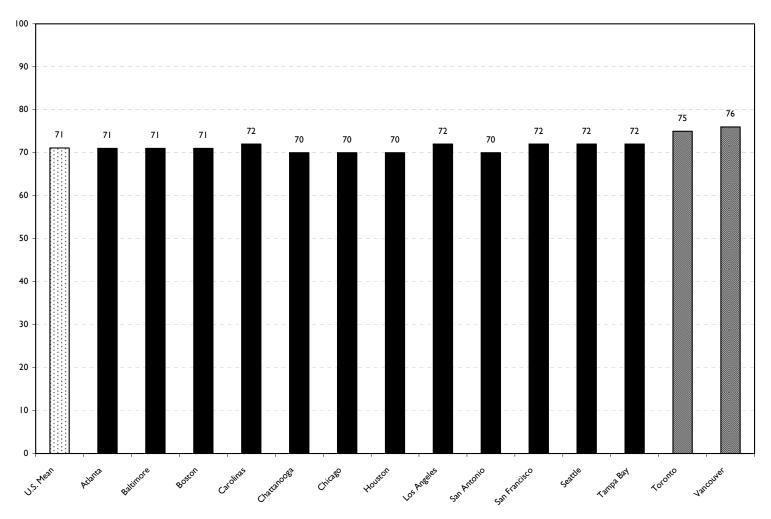




# I find the ocean inspirational.

(scalar variable, 0-100)

Mean 71

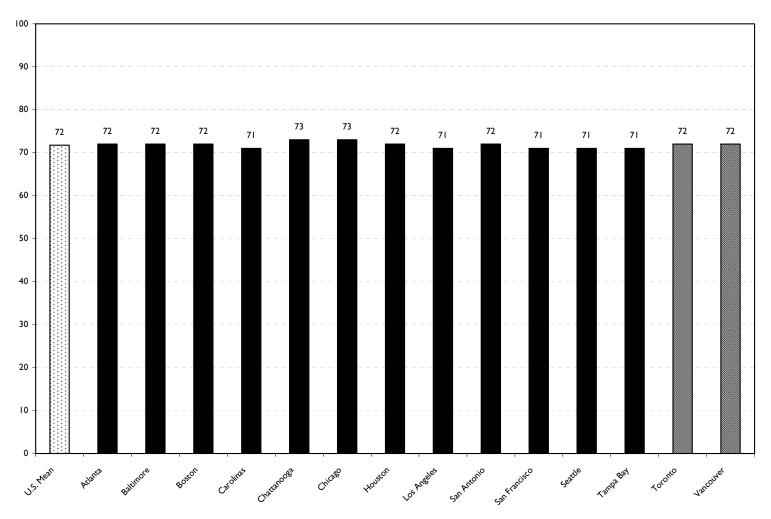




The ocean is scary.

(scalar variable, 0-100)

Mean 72

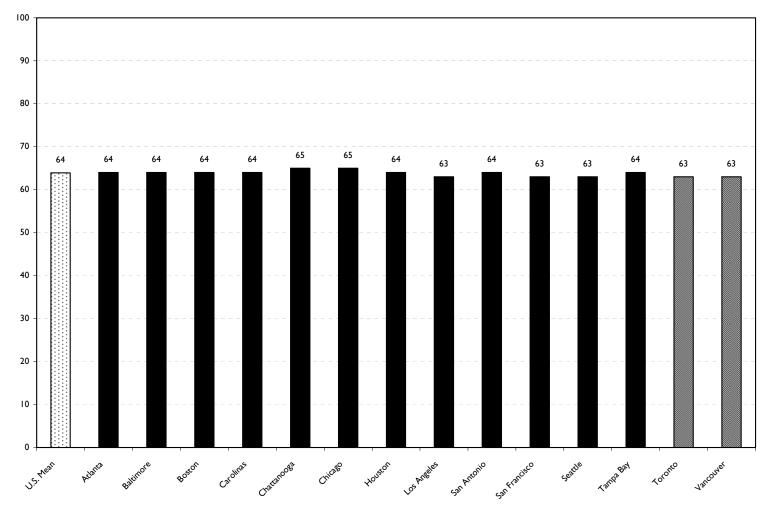




# I am frightened by the ocean.

(scalar variable, 0-100)

Mean 64

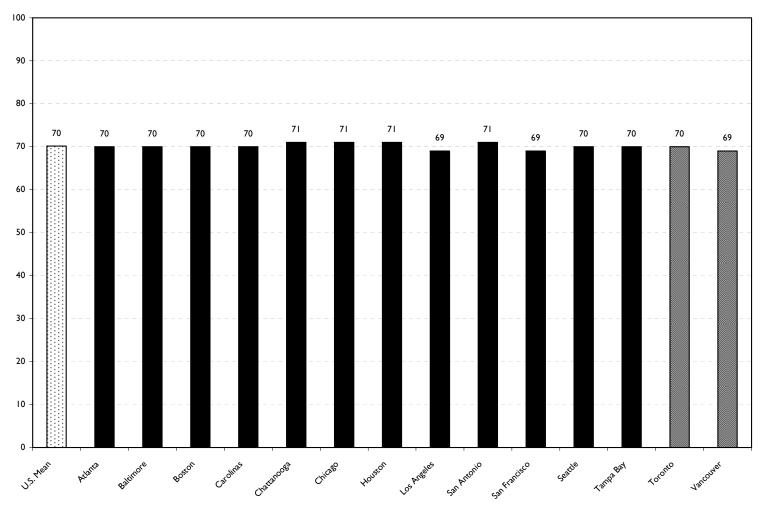




### The ocean is dangerous.

(scalar variable, 0-100)

Mean 70

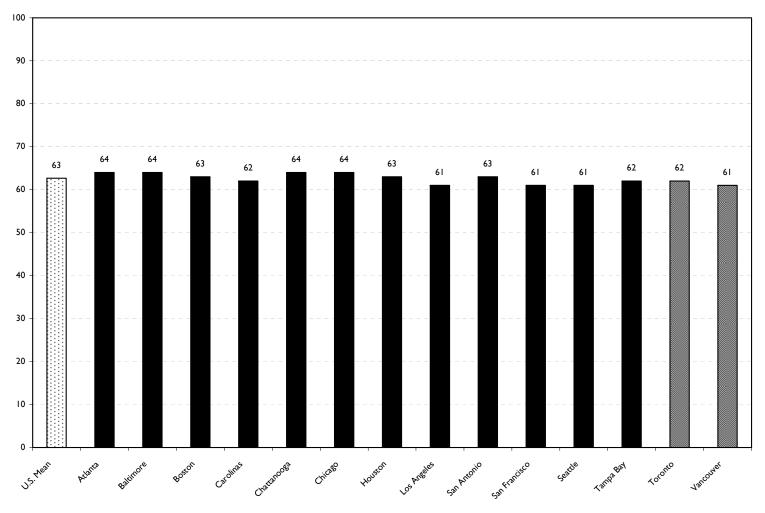




## The ocean is frightening.

(scalar variable, 0-100)

Mean 63

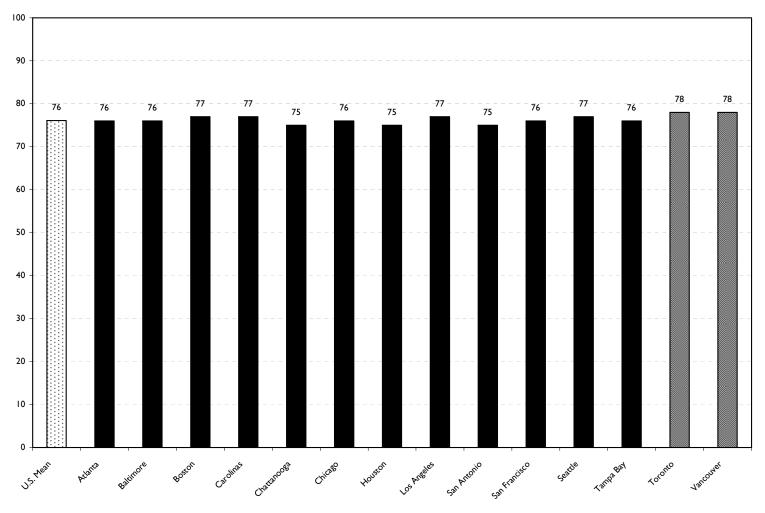




#### It is fun to visit a beach.

(scalar variable, 0-100)

Mean 76

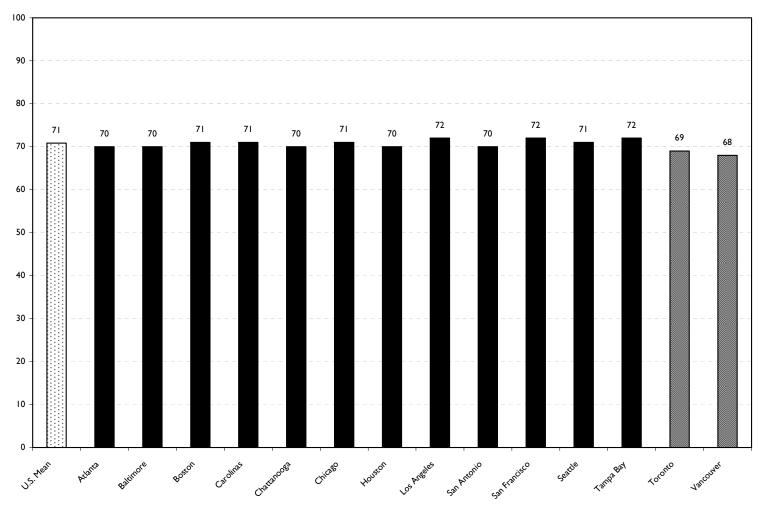




# The beach is a good place to visit with children.

(scalar variable, 0-100)

Mean 71

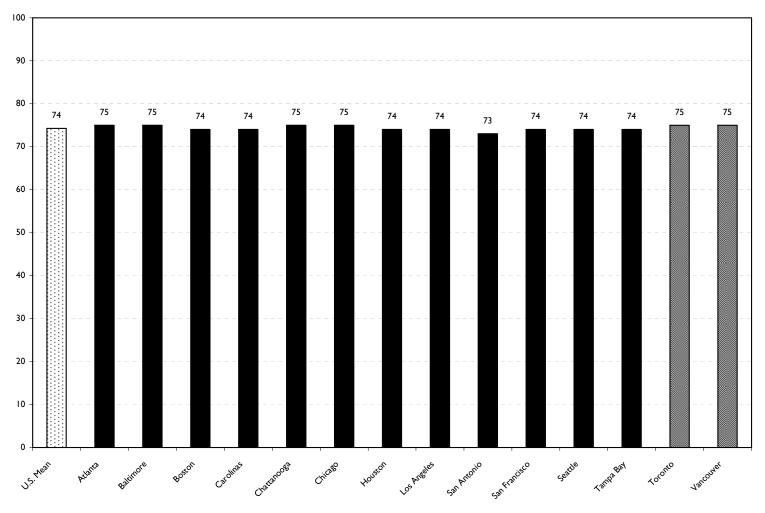




# The beach is a good destination for a vacation.

(scalar variable, 0-100)

Mean 74

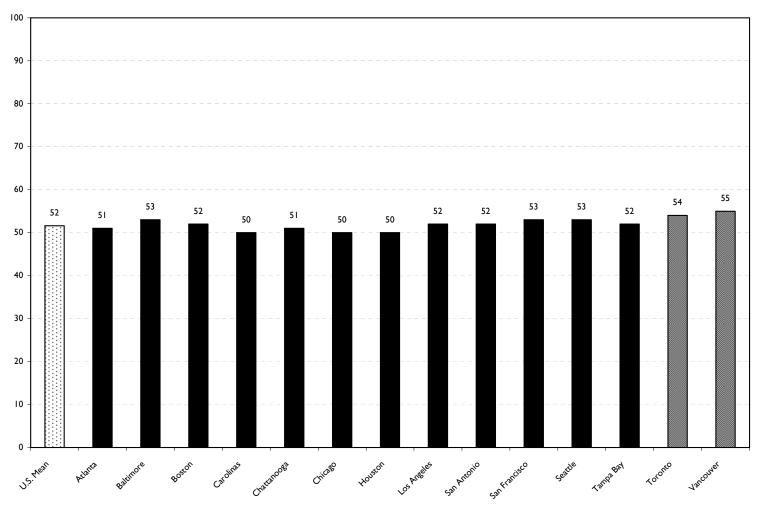




#### When I visit an aquarium, I expect to learn about climate change.

(scalar variable, 0-100)

Mean 52

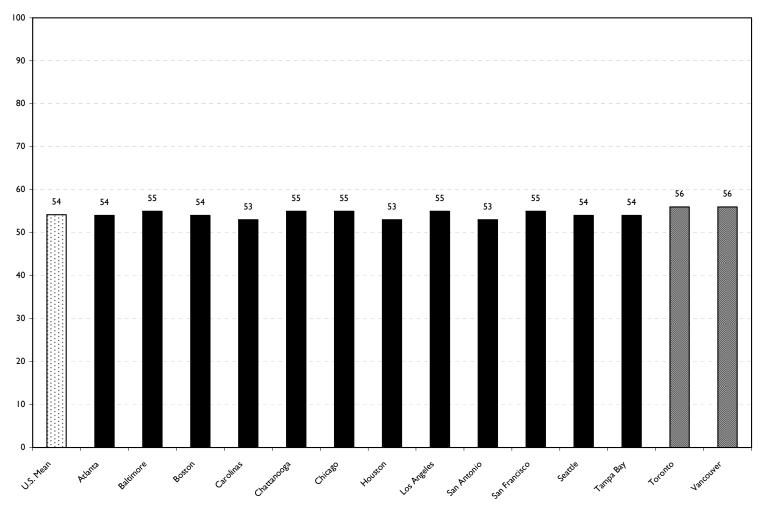




### When I visit an aquarium, I expect to learn about global warming.

(scalar variable, 0-100)

Mean 54

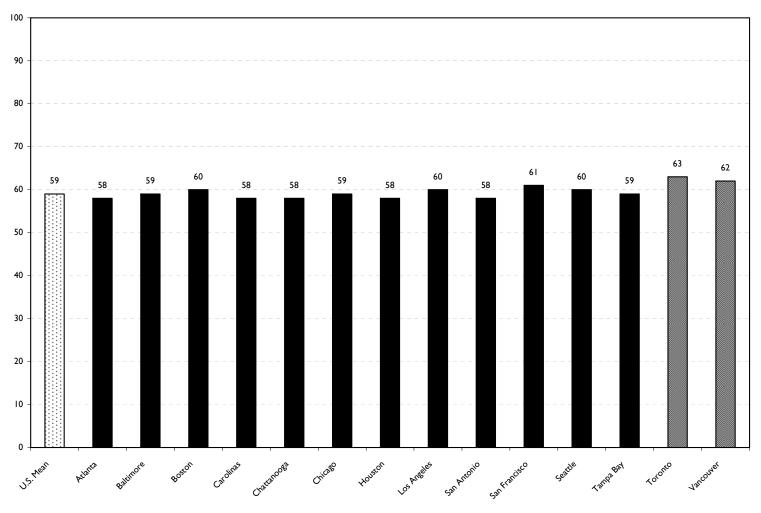




#### When I visit a science museum, I expect to learn about climate change.

(scalar variable, 0-100)

Mean 59

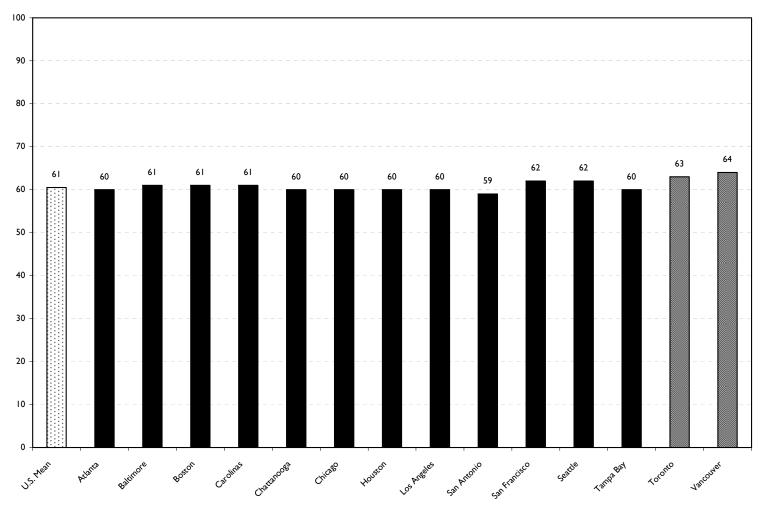




#### When I visit a science museum, I expect to learn about global warming.

(scalar variable, 0-100)

Mean 61

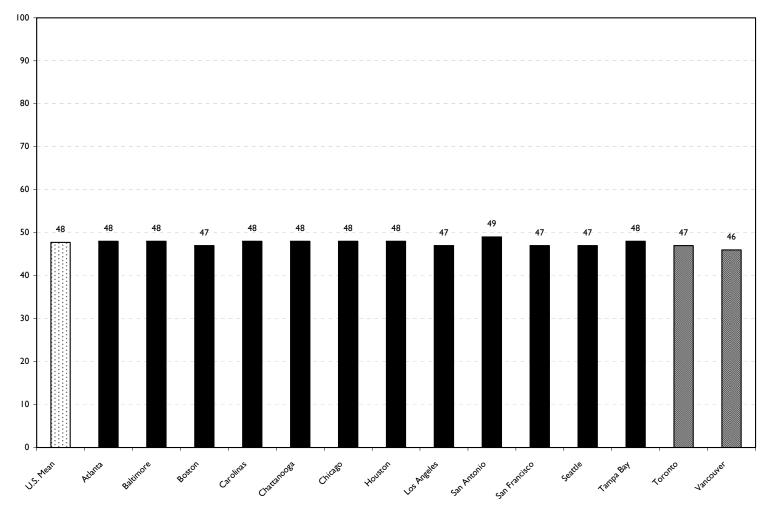




#### When I visit a natural history museum, I expect to learn about climate change.

(scalar variable, 0-100)

Mean 48

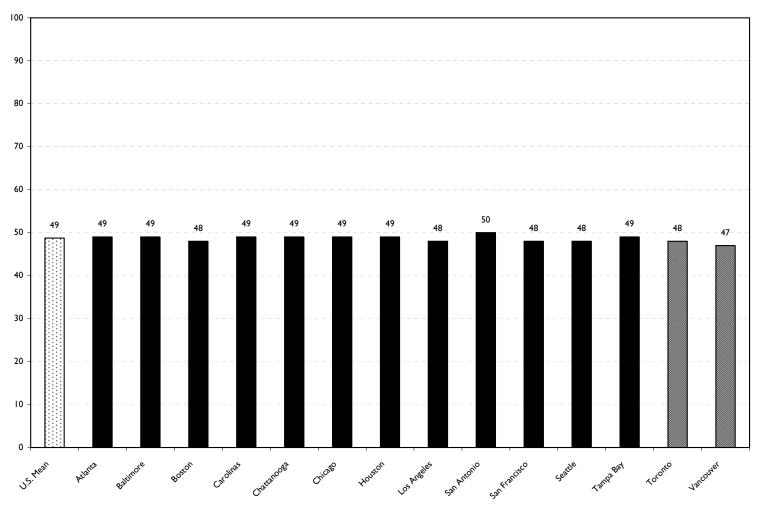




### When I visit a natural history museum, I expect to learn about global warming.

(scalar variable, 0-100)

Mean 49

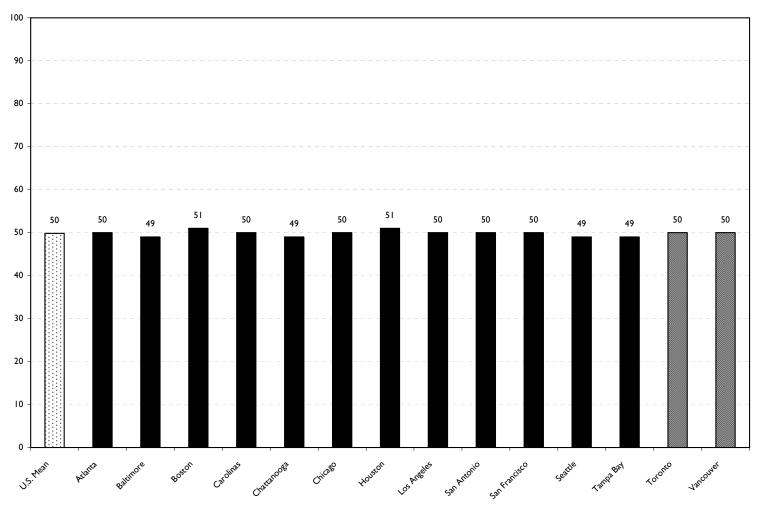




### When I visit a zoo, I expect to learn about climate change.

(scalar variable, 0-100)

Mean 50

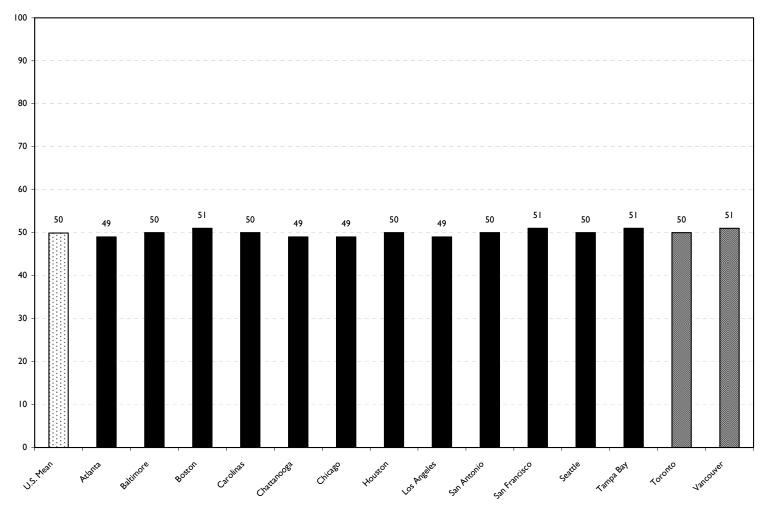




### When I visit a zoo, I expect to learn about global warming.

(scalar variable, 0-100)

Mean 50

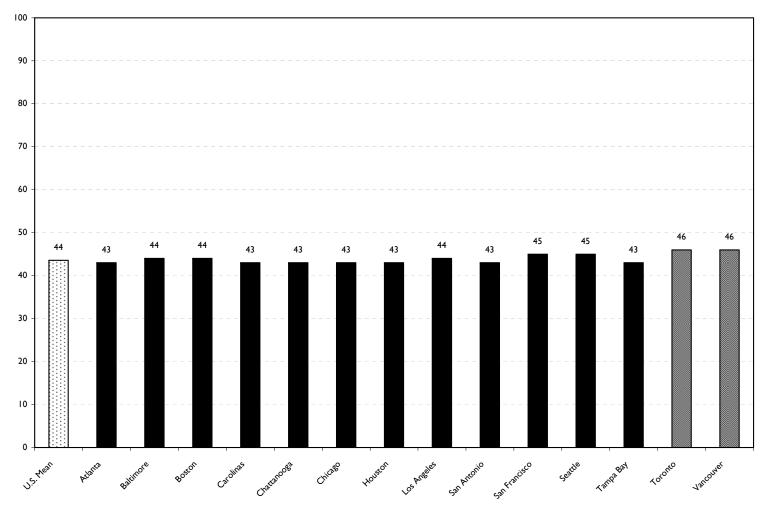




### When I visit a botanical garden, I expect to learn about climate change.

(scalar variable, 0-100)

Mean 44

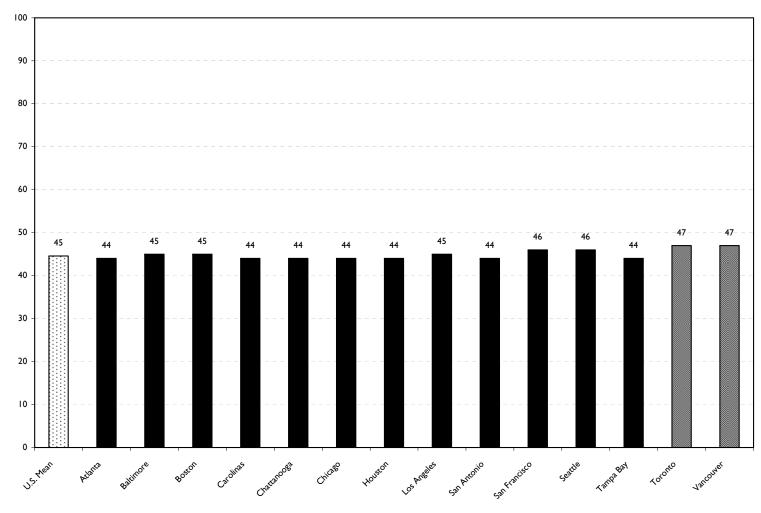




### When I visit a botanical garden, I expect to learn about global warming.

(scalar variable, 0-100)

Mean 45

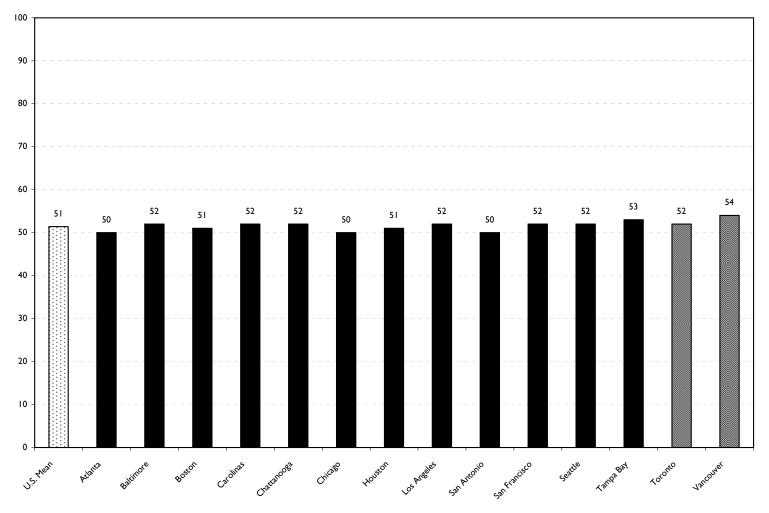




### I am likely to visit an aquarium, botanical garden or zoo within the next six months.

(scalar variable, 0-100)

Mean 51

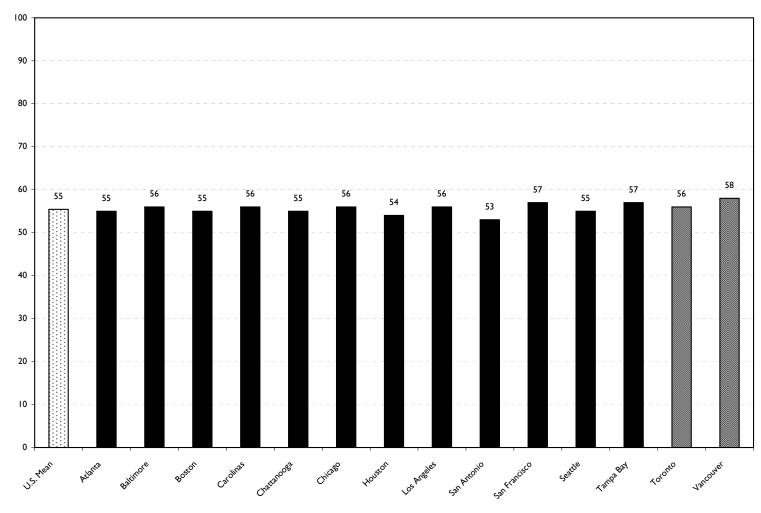




### I am likely to visit an aquarium, botanical garden or zoo within the next year.

(scalar variable, 0-100)

Mean 55

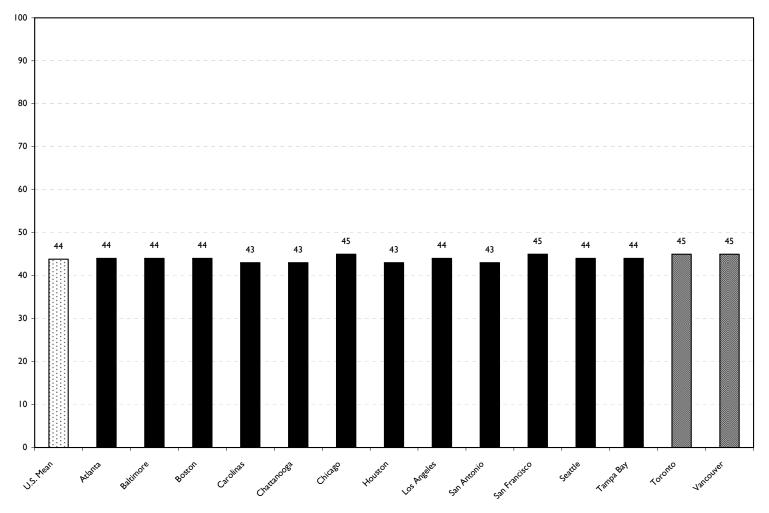




#### I am likely to visit a natural history museum or science center within the next six months.

(scalar variable, 0-100)

Mean 44

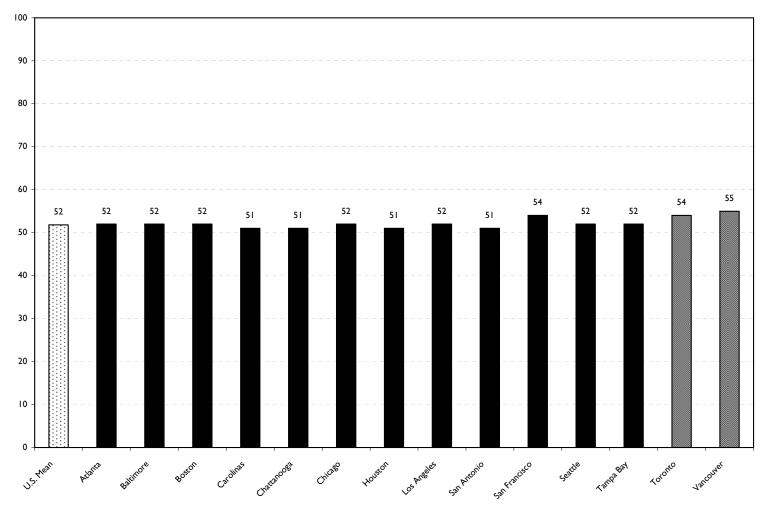




#### I am likely to visit a natural history museum or science center within the next year.

(scalar variable, 0-100)

Mean 52

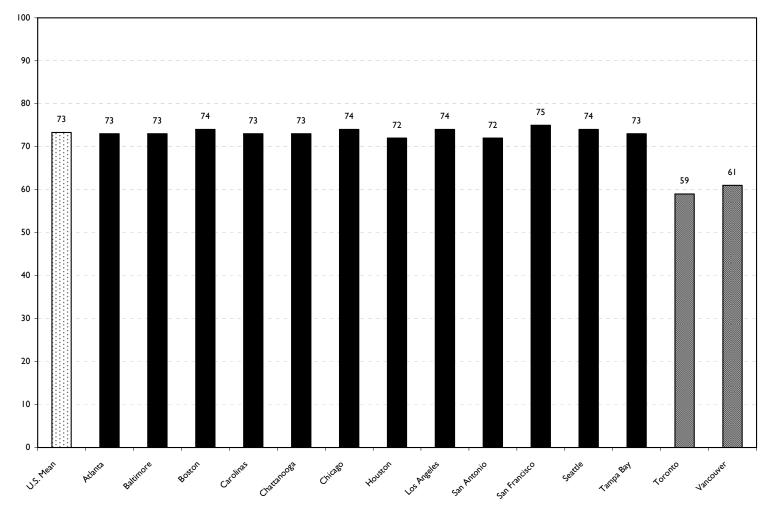




#### I am informed about current environmental issues.

(scalar variable, 0-100)

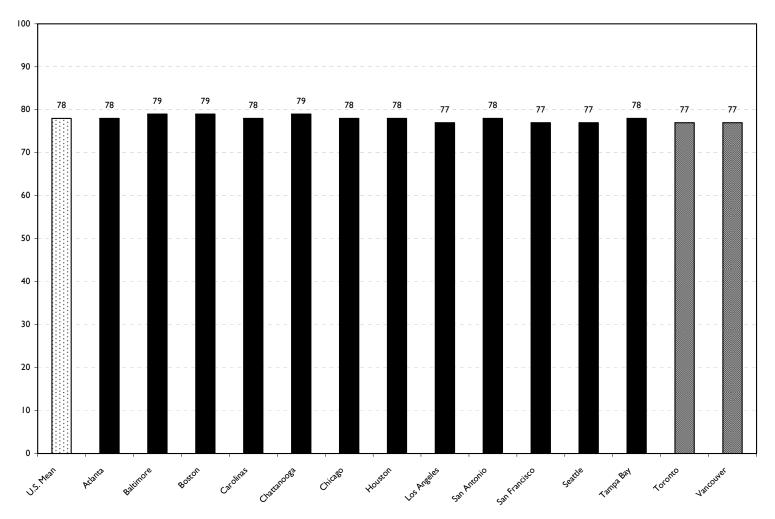
Mean 73





#### My child is better informed about current environmental issues than am I.

(affirmative child in HH < 18 years of age, scalar variable, 0-100) Mean 78

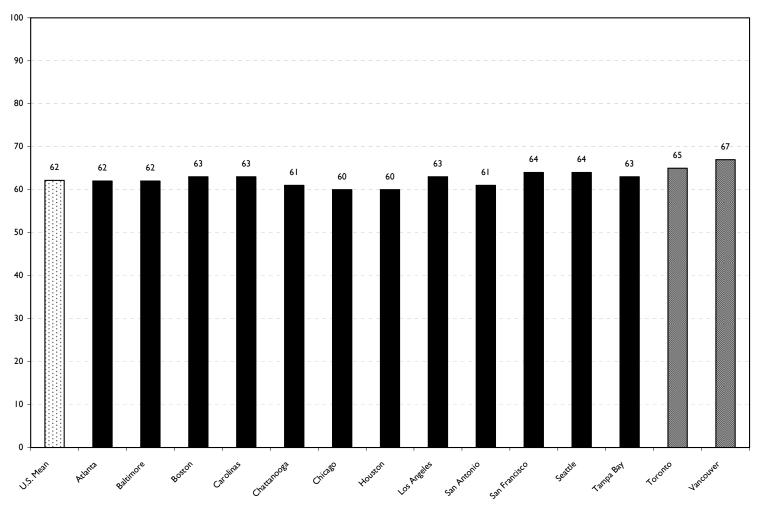




#### I am informed about current ocean health issues.

(scalar variable, 0-100)

Mean 62

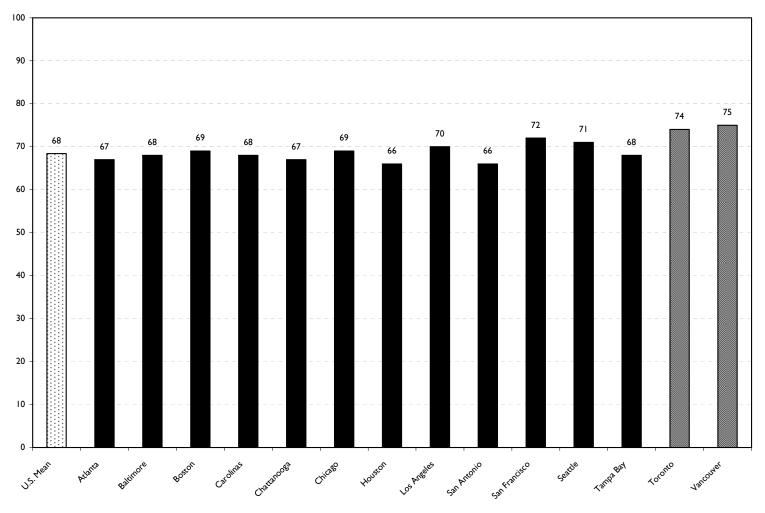




#### All things considered, the environmental movement has done more than good than harm.

(scalar variable, 0-100)

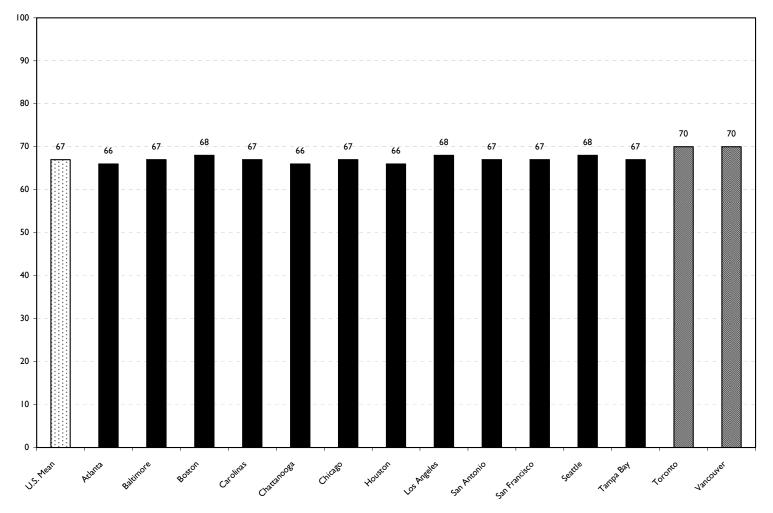
Mean 68





All things considered, the environmental movement has done a lot to help protect the heath of the world's ocean. (scalar variable, 0-100)

Mean 67

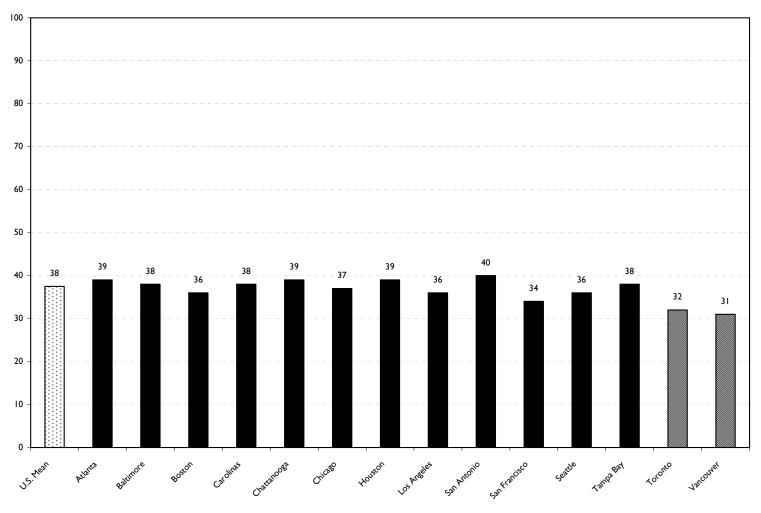




I trust government environmental agencies such as the EPA to protect the quality of our environment.

(scalar variable, 0-100)

Mean 38

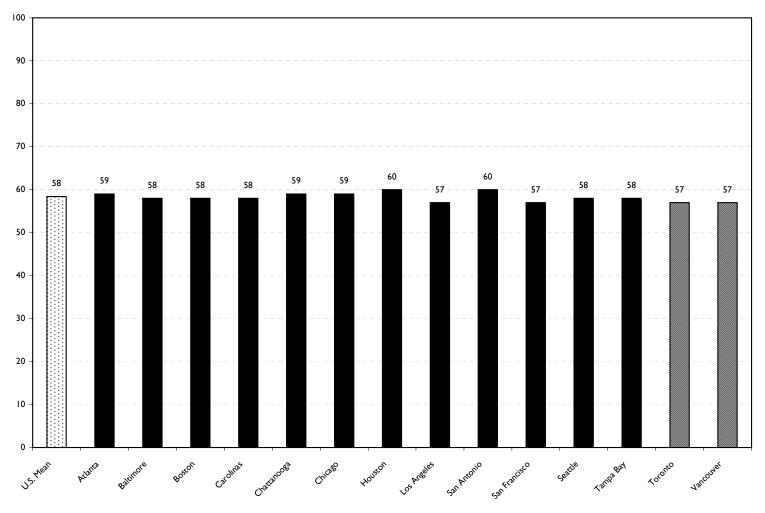




I trust environmental organizations such as the Sierra Club to protect the quality of our environment.

(scalar variable, 0-100)

Mean 58

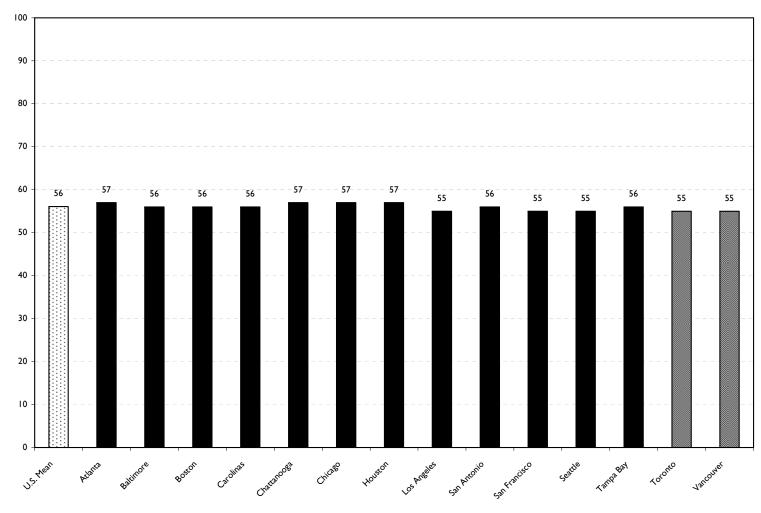




## I trust nonprofit, non-governmental environmental organizations to protect the quality of our environment.

(scalar variable, 0-100)

Mean 56

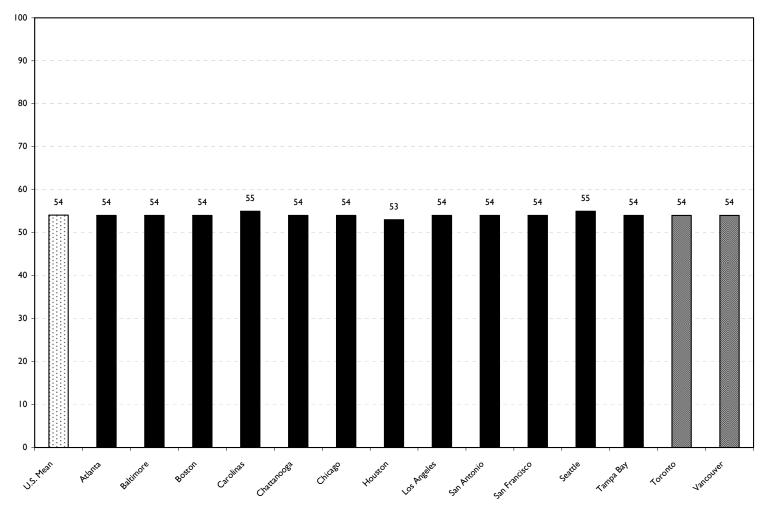




### I trust nonprofit organizations such as aquariums to protect the quality of our environment.

(scalar variable, 0-100)

Mean 54

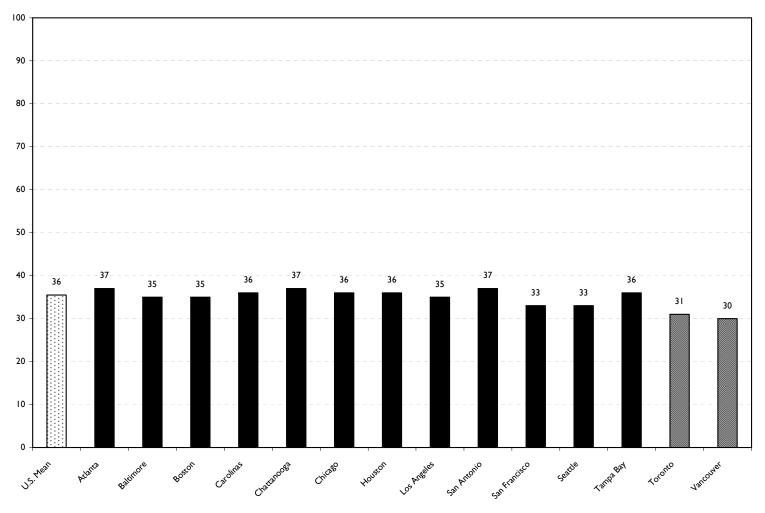




### I trust government environmental agencies such as the EPA to protect the quality of our ocean.

(scalar variable, 0-100)

Mean 36

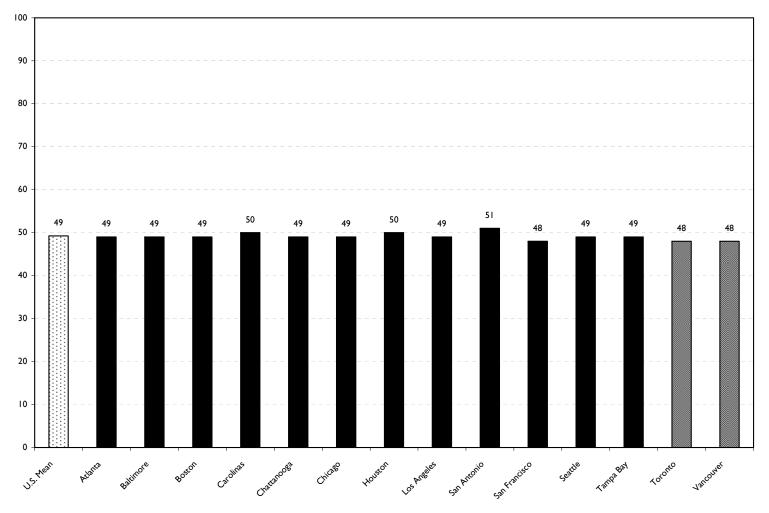




### I trust environmental organizations such as the Sierra Club to protect the quality of our ocean.

(scalar variable, 0-100)

Mean 49

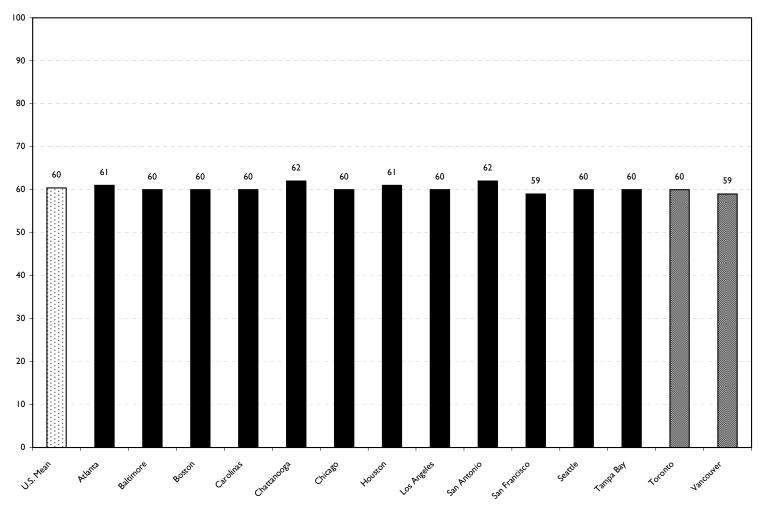




#### I trust environmental organizations such as Greenpeace to protect the quality of our ocean.

(scalar variable, 0-100)

Mean 60

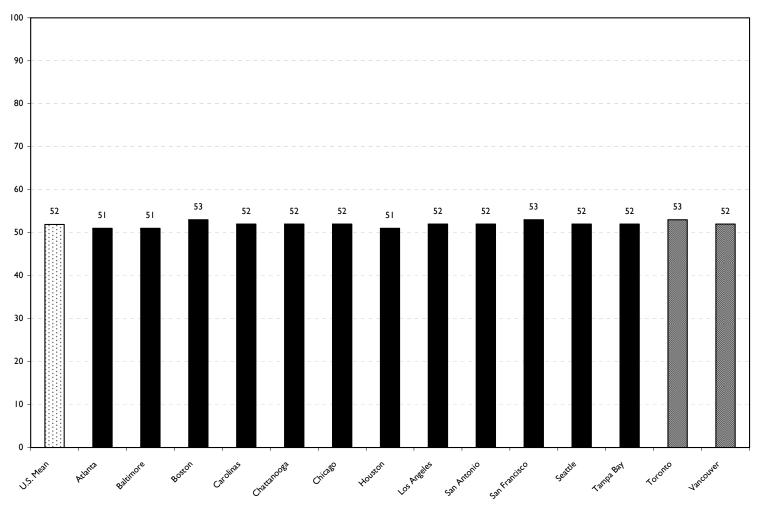




### I trust nonprofit, non-governmental environmental organizations to protect the quality of our ocean.

(scalar variable, 0-100)

Mean 52

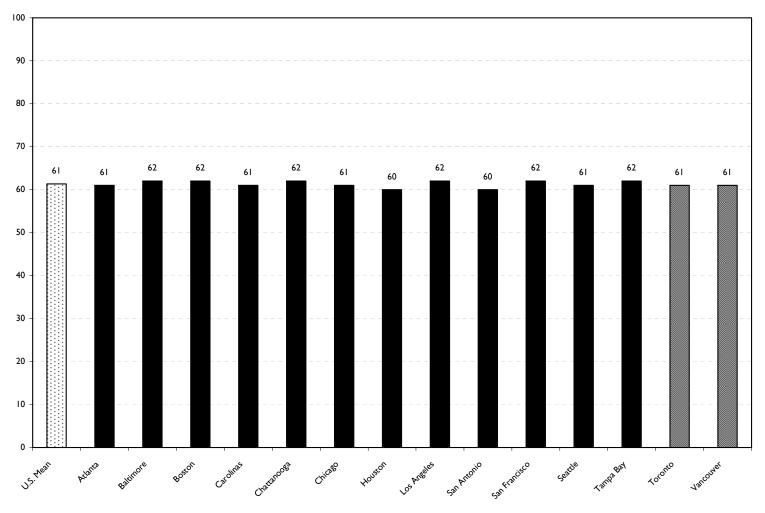




### I trust nonprofit organizations such as aquariums to protect the quality of our ocean.

(scalar variable, 0-100)

Mean 61

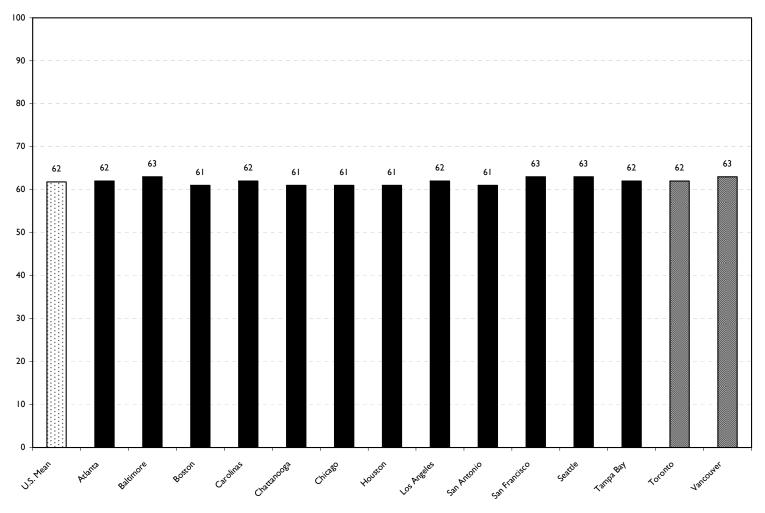




### The primary mission of an aquarium is to protect the quality of our ocean.

(scalar variable, 0-100)

Mean 62

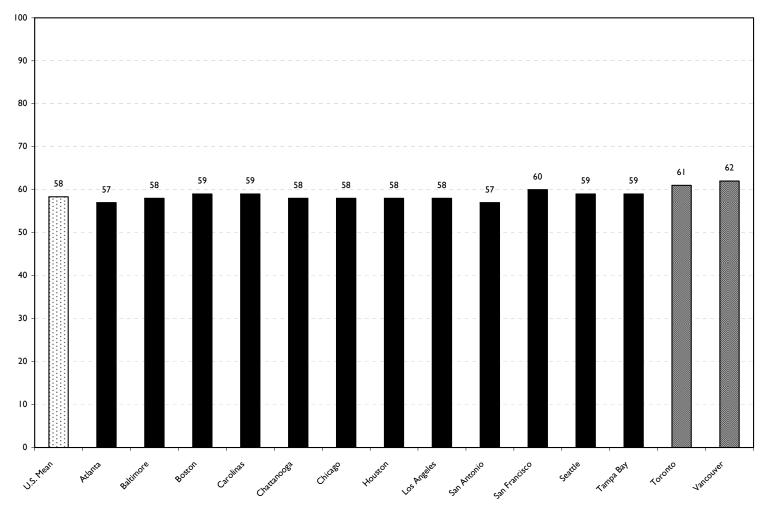




### Aquariums are scientific organizations.

(scalar variable, 0-100)

Mean 58

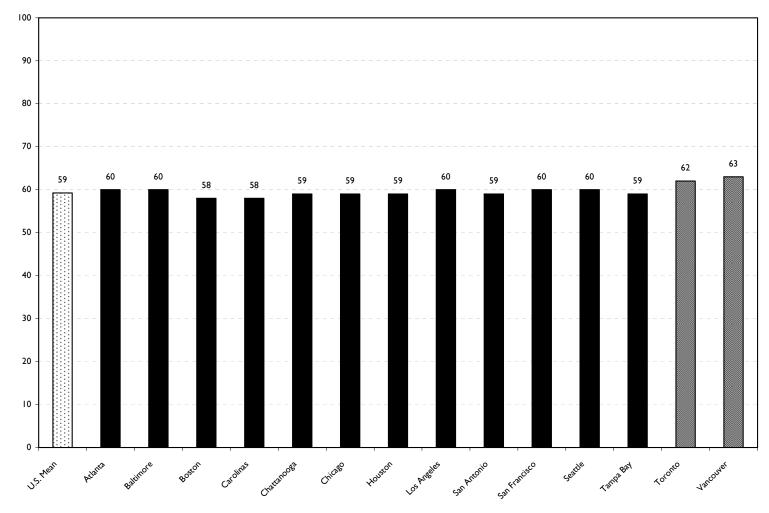




### Aquariums are research organizations.

(scalar variable, 0-100)

Mean 59

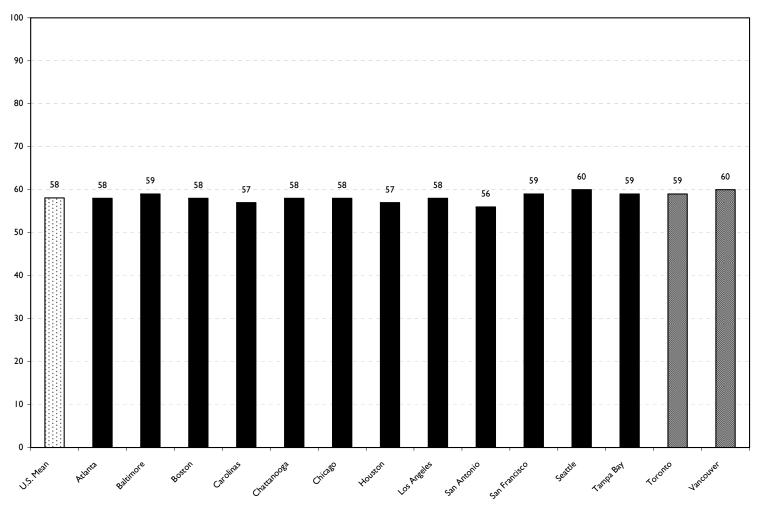




#### Aquariums are the <u>best</u> source of accurate information about ways to protect and conserve the ocean.

(scalar variable, 0-100)

Mean 58

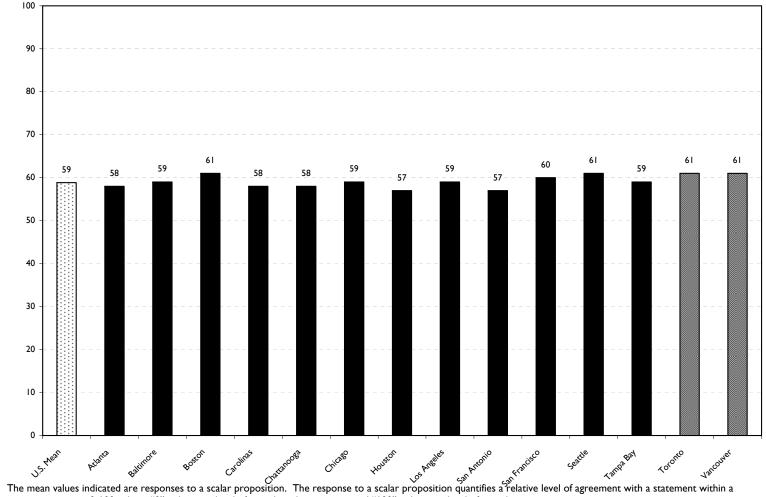




Aquariums are a better source of accurate information about ways to protect and conserve the ocean than information available on the Internet.

(scalar variable, 0-100)

Mean 59

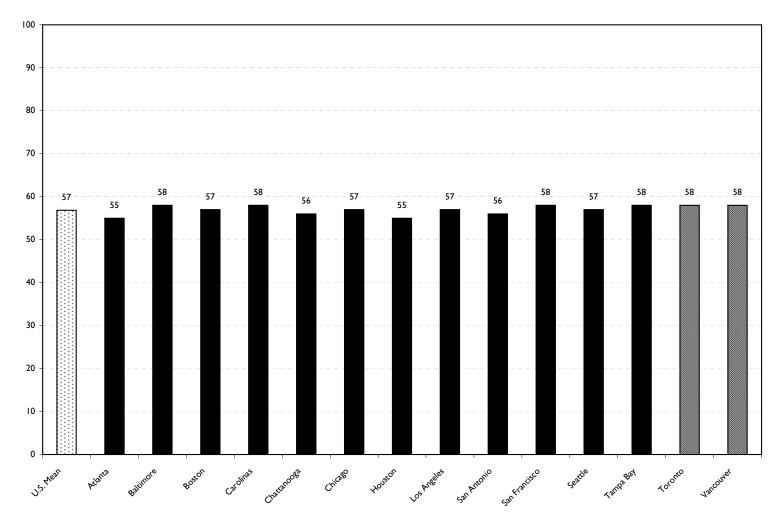


continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



Aquariums are a better source of accurate information about the ocean than information available on the Internet. (scalar variable, 0-100)

Mean 57

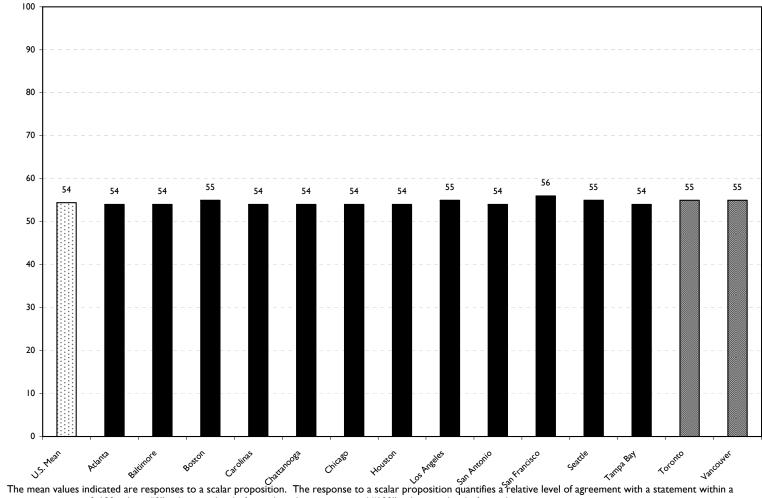




Aquariums are a better source of accurate information about the ocean than commercial programming available on network and cable television.

(scalar variable, 0-100)

Mean 54



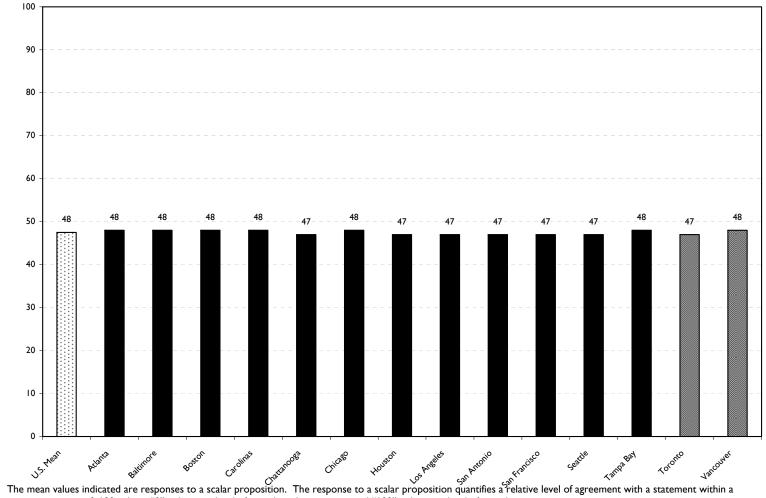
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



Aquariums are a better source of accurate information about the ocean than programming on public television stations such as PBS.

(scalar variable, 0-100)

Mean 48



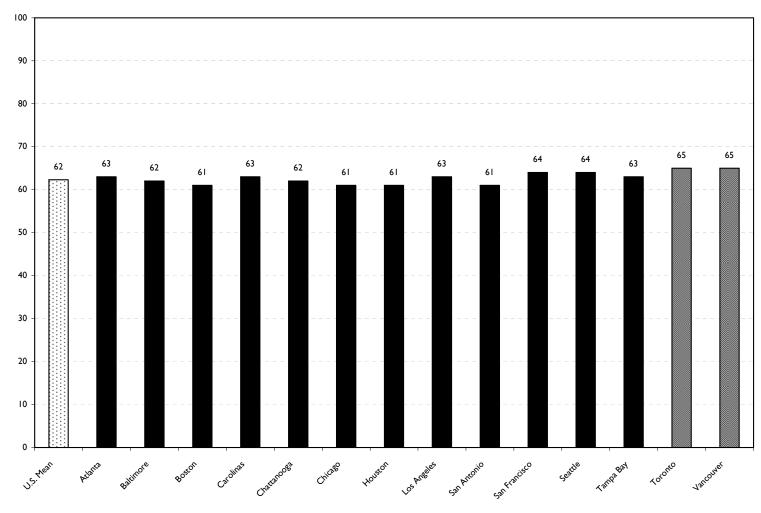
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



#### I would prefer to visit an aquarium to learn about the ocean than visit a Website.

(scalar variable, 0-100)

Mean 62

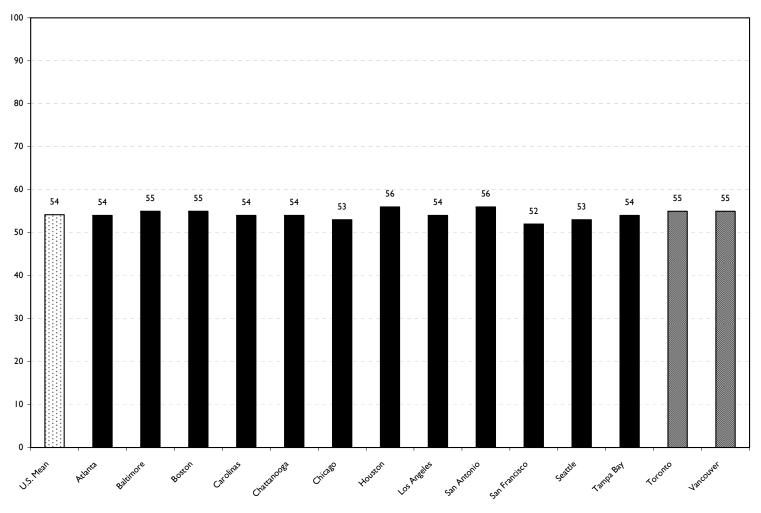




#### I would prefer to visit a Website to learn about the ocean than visit an aquarium.

(scalar variable, 0-100)

Mean 54

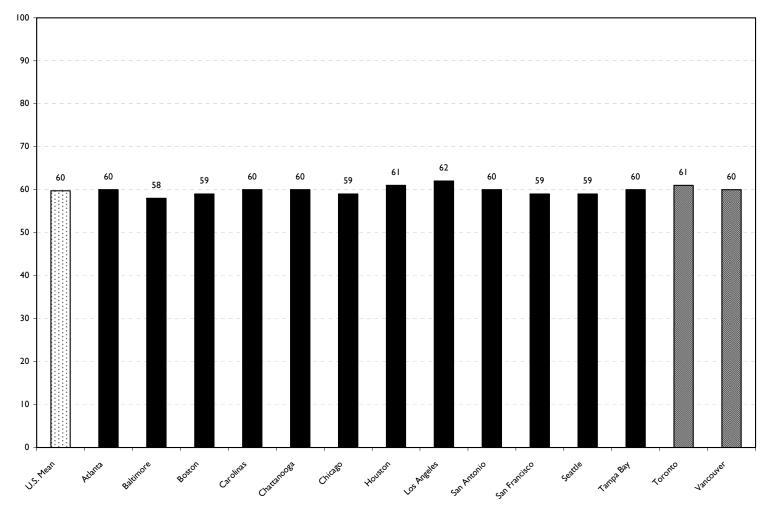




## The Internet is the best means of acquiring information about the ocean.

(scalar variable, 0-100)

Mean 60

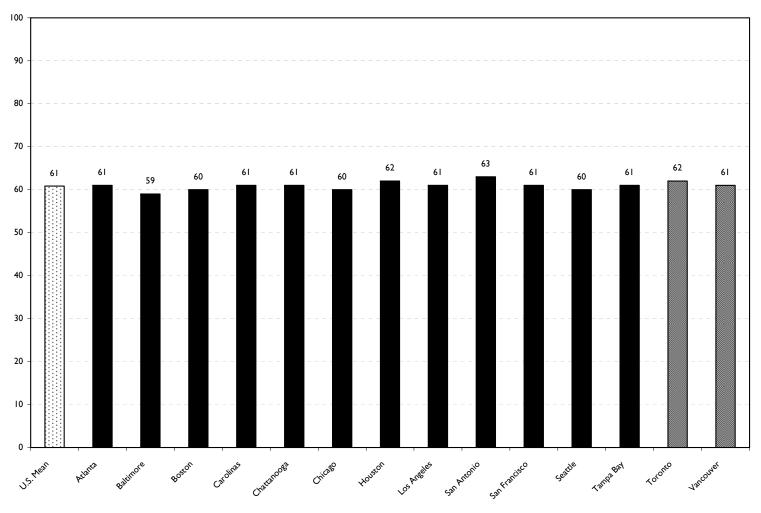




#### I would prefer to visit an aquarium to learn about the ocean than watch a television program.

(scalar variable, 0-100)

Mean 61

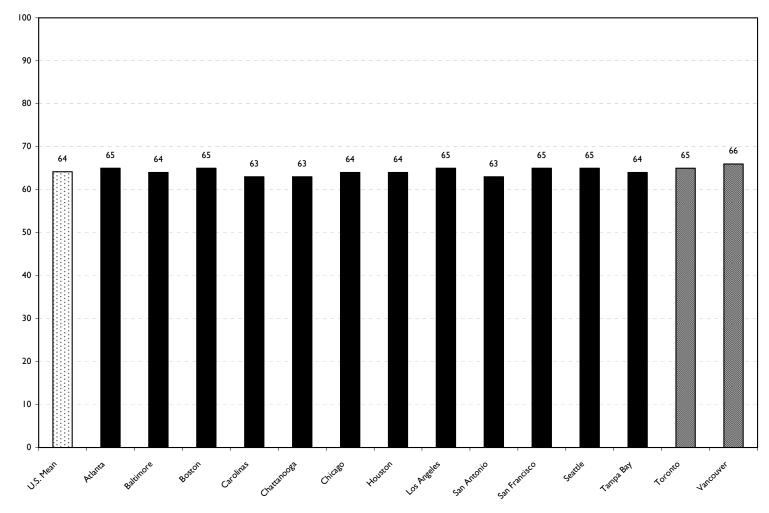




#### The primary role of aquariums is to educate people about ocean conservation.

(scalar variable, 0-100)

Mean 64

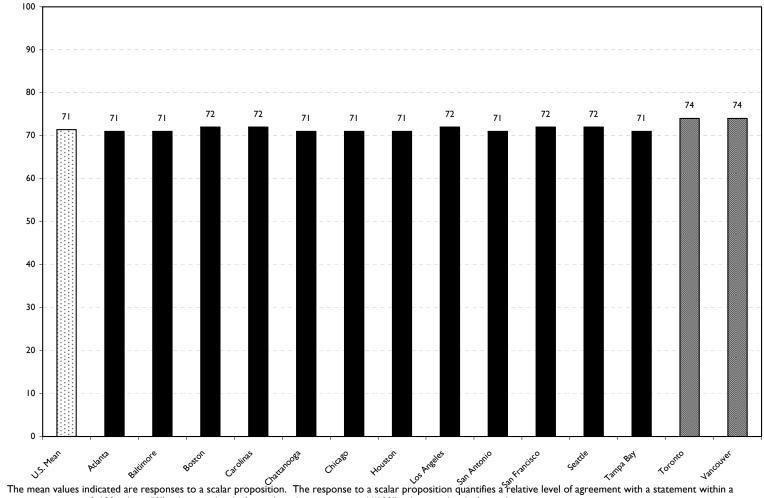




Aquariums should suggest or recommend certain behaviors or ways for the general public to support their causes or missions.

(scalar variable, 0-100)

Mean 71



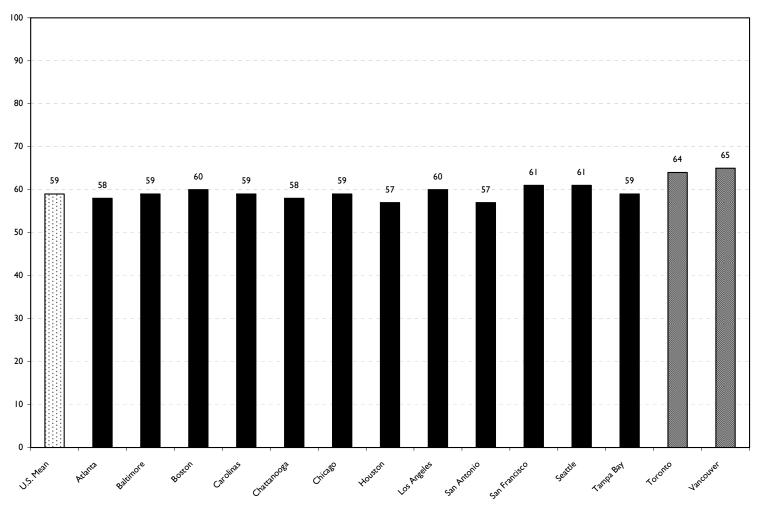
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



# Offshore oil drilling poses a risk to the environment.

(scalar variable, 0-100)

Mean 59

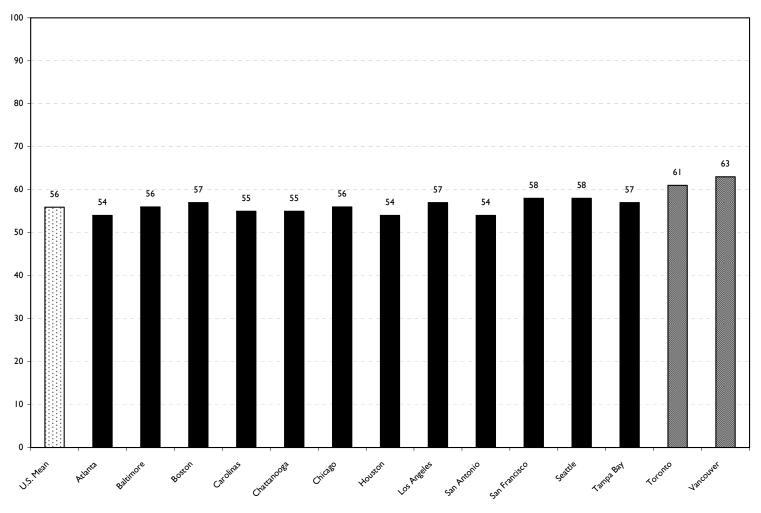




# Offshore oil drilling poses a risk to the health of the ocean.

(scalar variable, 0-100)

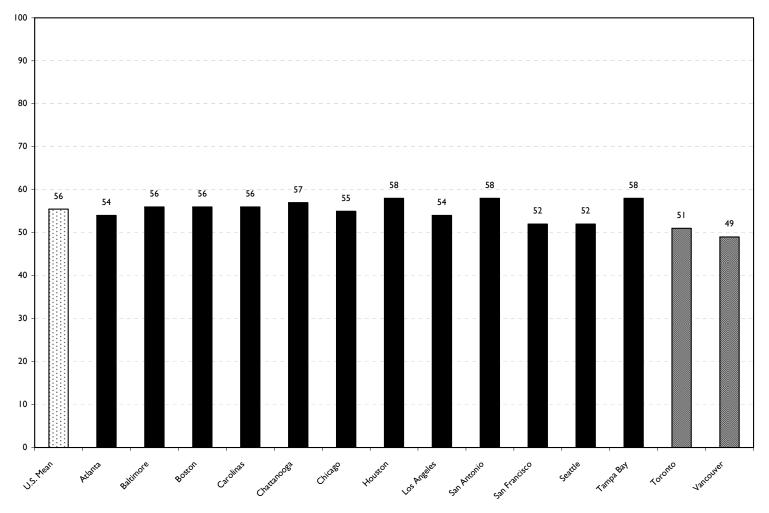
Mean 56





The potential benefits of offshore oil drilling outweigh the potential risks that offshore oil drilling poses to the environment. (scalar variable, 0-100)

Mean 56

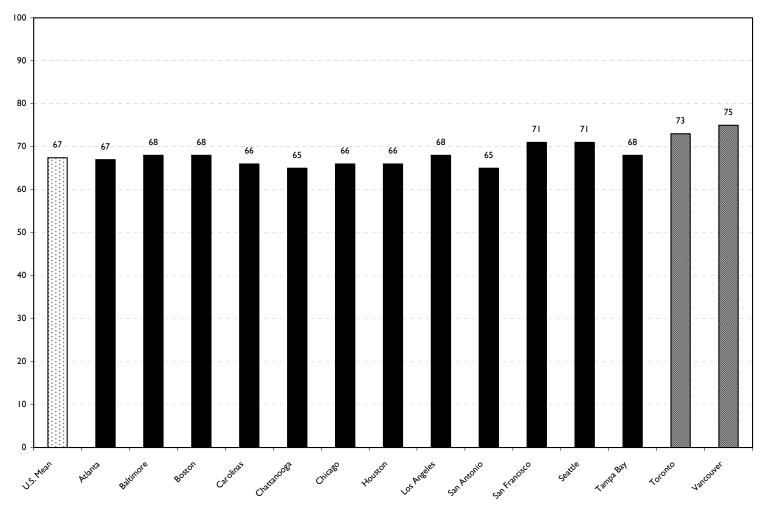




## Oil drilling in the Arctic National Wildlife Refuge poses a risk to the environment.

(scalar variable, 0-100)

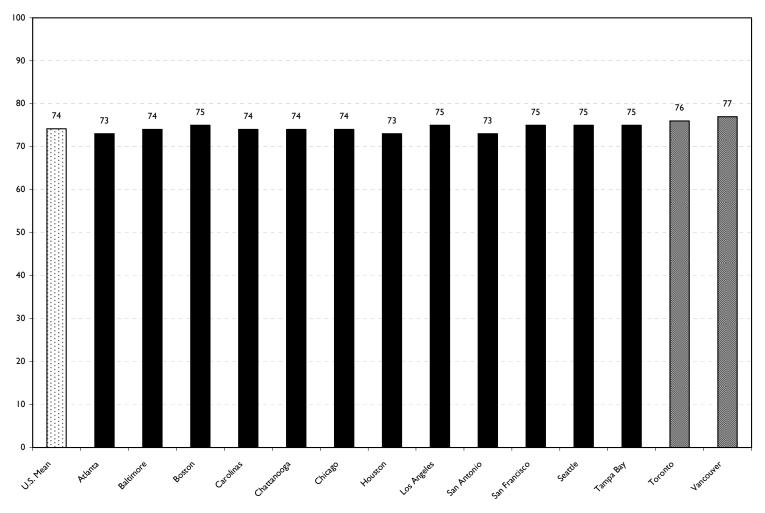
Mean 67





Aquariums should suggest or recommend certain behaviors or ways for the general public to protect the environment. (scalar variable, 0-100)

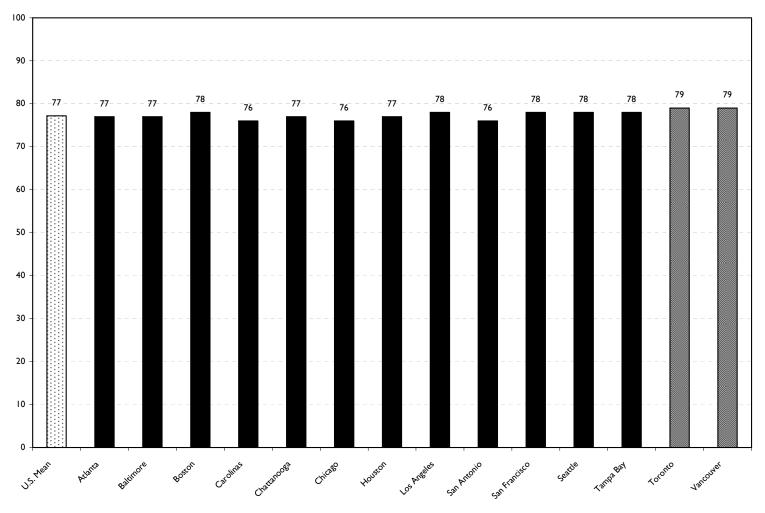
Mean 74





Aquariums should suggest or recommend certain behaviors or ways for the general public to protect the ocean. (scalar variable, 0-100)

Mean 77

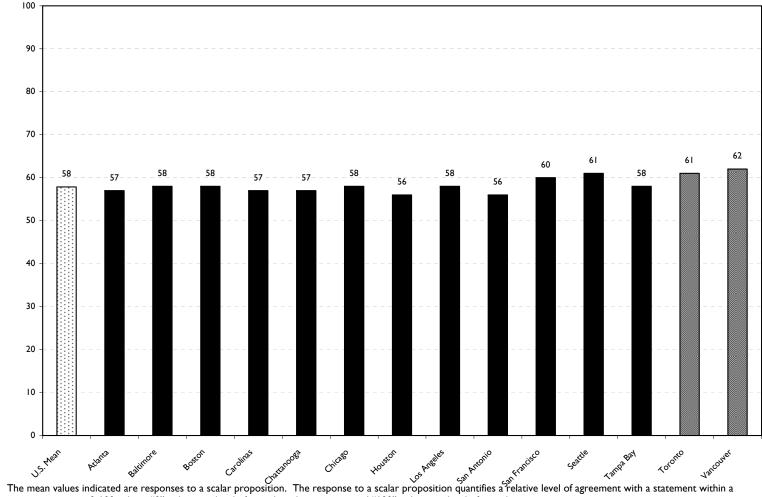




The primary benefit of becoming a member of an aquarium or zoo is feeling like you positively contribute to the conservation of the world's ocean.

(scalar variable, 0-100)

Mean 58



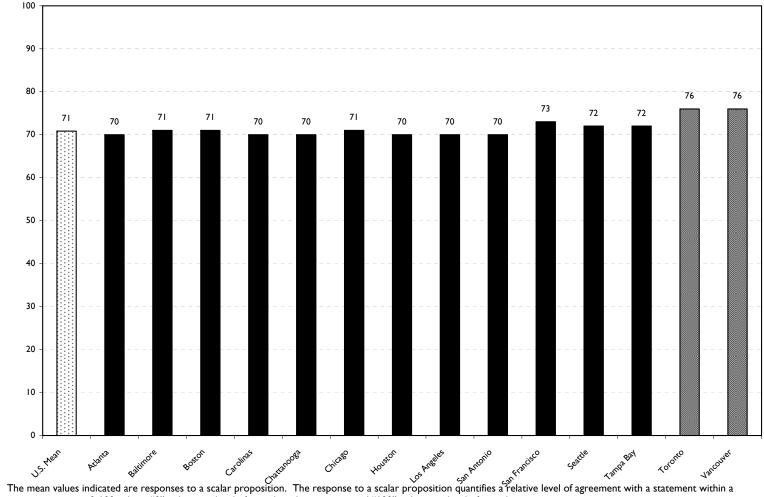
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



A major benefit of becoming a member of an aquarium or zoo is feeling like you positively contribute to the conservation of the world's ocean.

(scalar variable, 0-100)

Mean 71



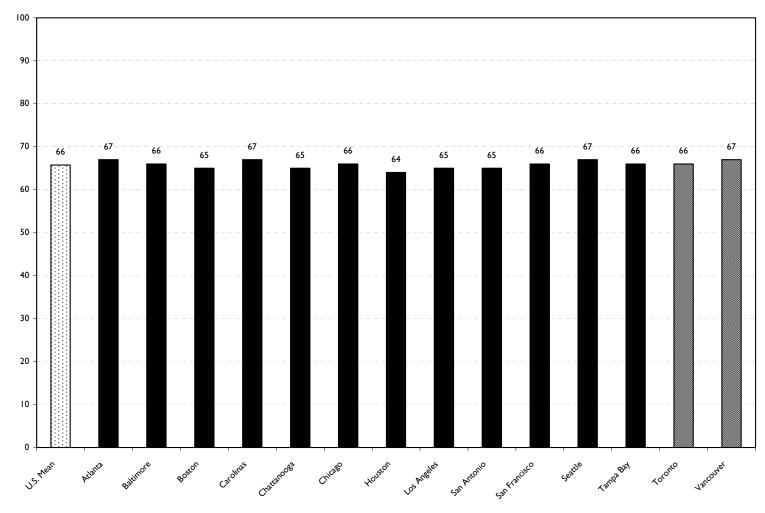
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



#### People who are members of aquariums and zoos contribute to the conservation of the world's ocean.

(scalar variable, 0-100)

Mean 66

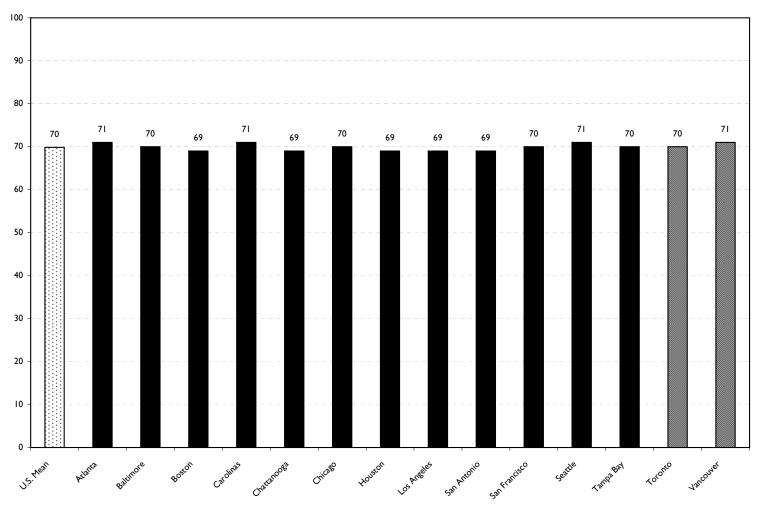




#### Members of aquariums contribute to the conservation of the world's ocean.

(scalar variable, 0-100)

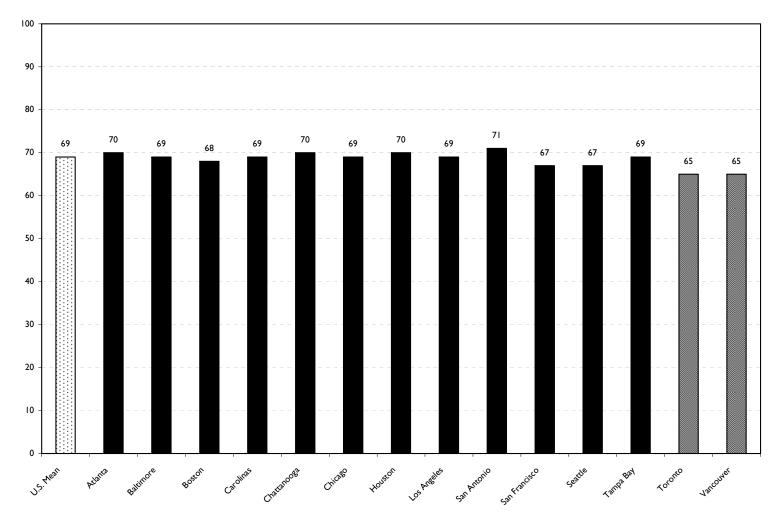
Mean 70





A good way to contribute to the conservation of the world's ocean is to become a member of an aquarium. (scalar variable, 0-100)

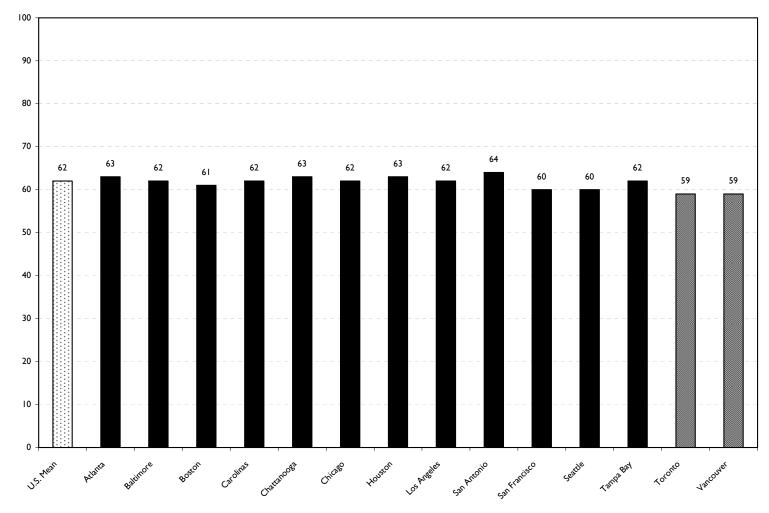
Mean 69





The best way to contribute to the conservation of the world's ocean is to become a member of an aquarium. (scalar variable, 0-100)

Mean 62

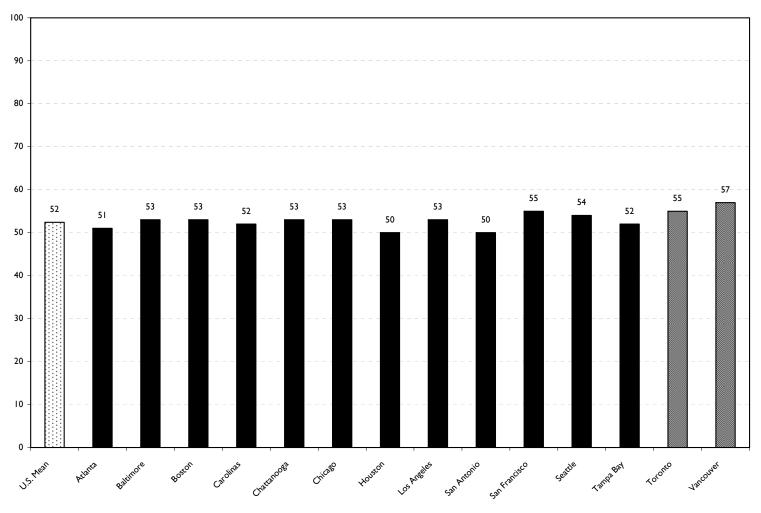




#### I am familiar with the concept of sustainable seafood.

(scalar variable, 0-100)

Mean 52

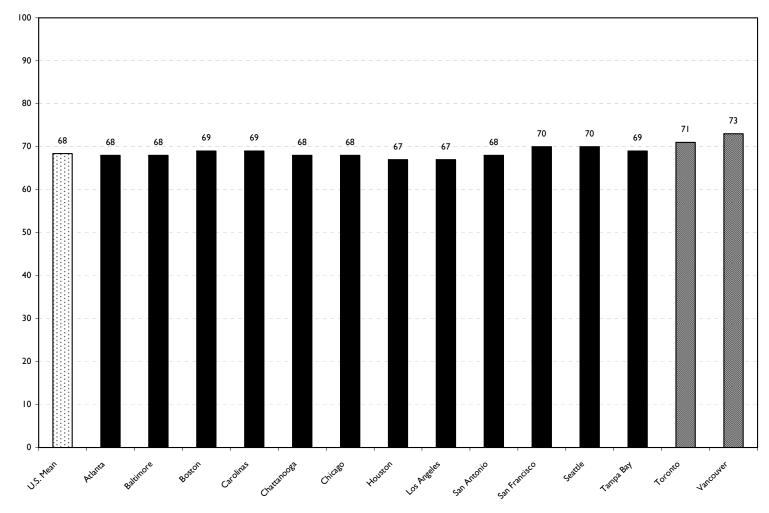




## Pollution poses a serious risk to the health of the world's ocean.

(scalar variable, 0-100)

Mean 68

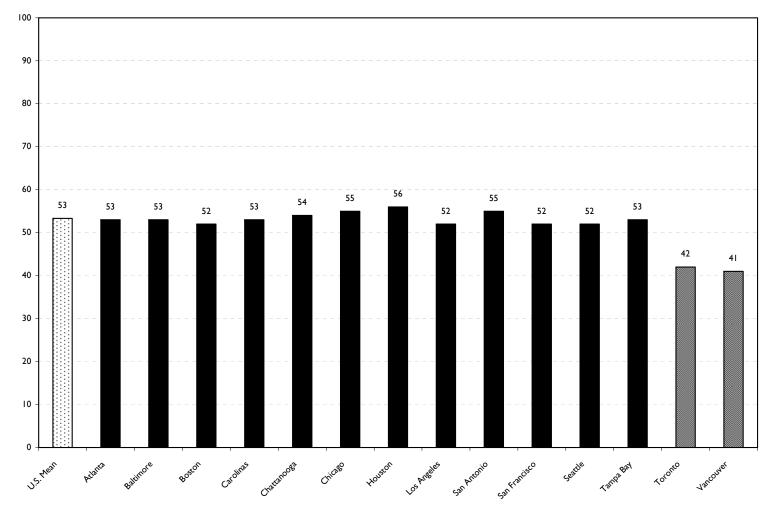




## The science relating to global warming is untested.

(scalar variable, 0-100)

Mean 53

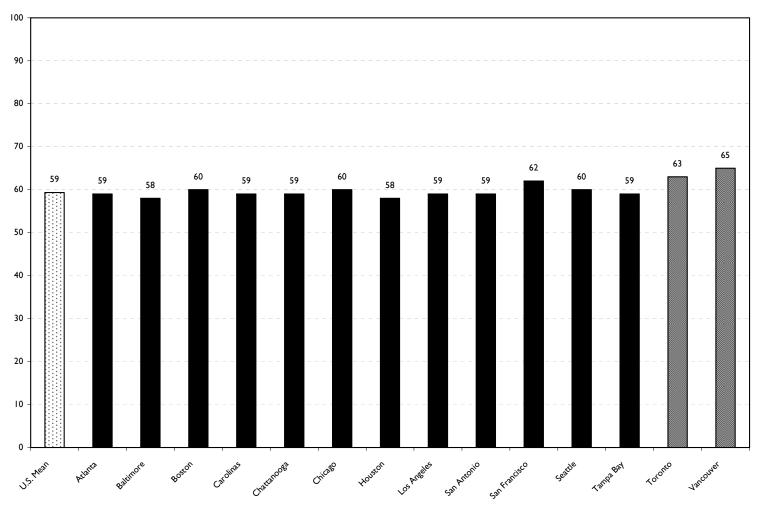




## We don't know what causes global climate change.

(scalar variable, 0-100)

Mean 59

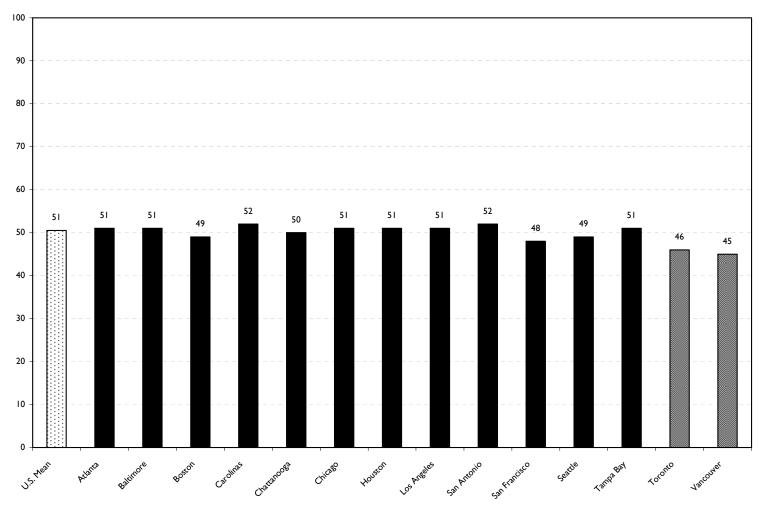




## The science relating to global warming is unproven.

(scalar variable, 0-100)

Mean 51

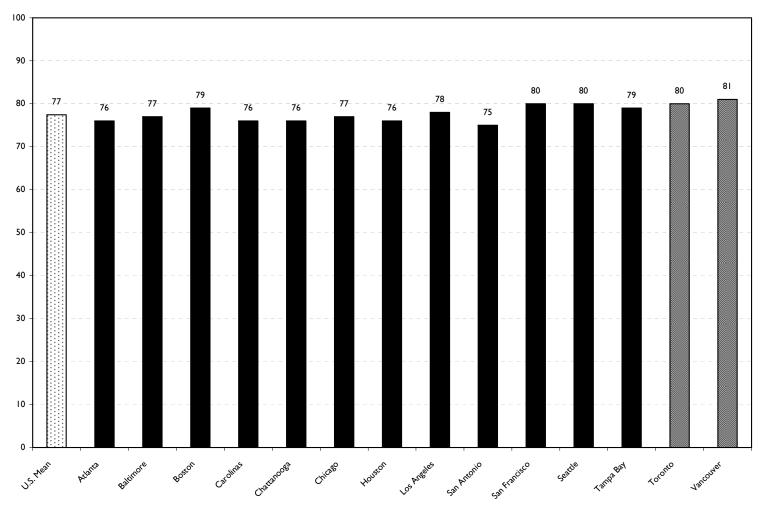




#### Researchers and scientists know a lot about what causes global warming.

(scalar variable, 0-100)

Mean 77

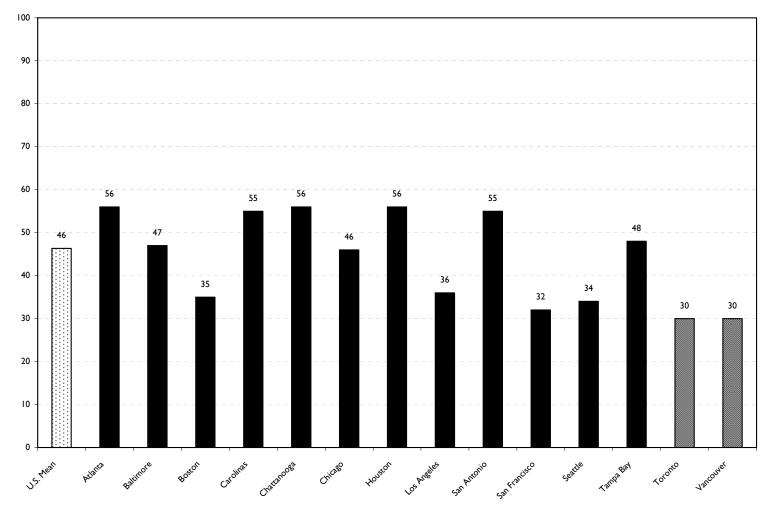




## Researchers and scientists don't know a lot about what causes global warming.

(scalar variable, 0-100)

Mean 46

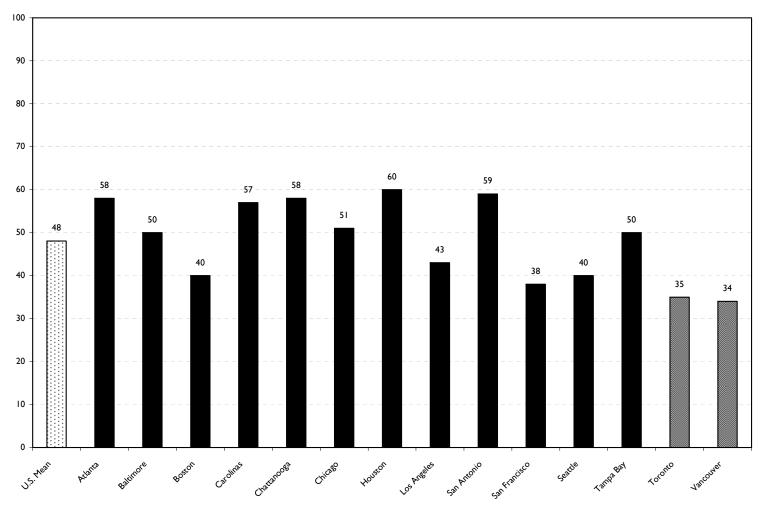




## There is a lot of debate about what causes global warming.

(scalar variable, 0-100)

Mean 50

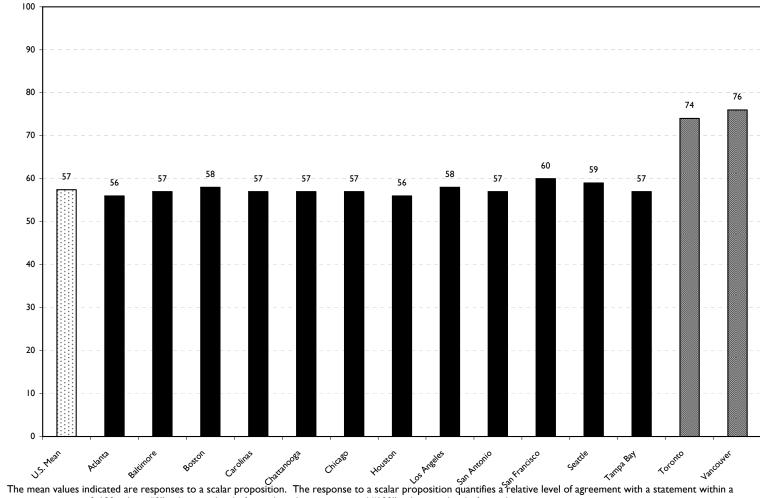




- a. The United States of America is a major contributor to global warming.
- b. The United States of America is a major contributor to global climate change.

(scalar variable, 0-100)

Mean 57



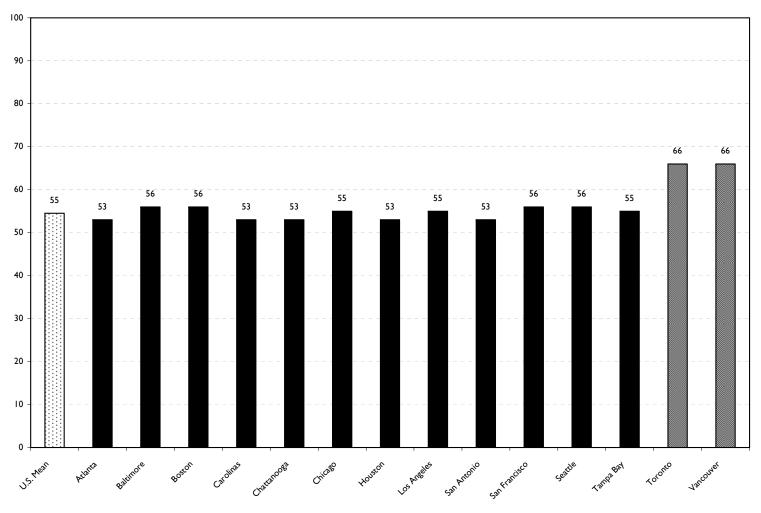
continuum ranging 0-100, where "0" indicates a level of complete disagreement and "100" indicates a level of complete agreement.



The United States of America is a major contributor to ocean pollution.

(scalar variable, 0-100)

Mean 55

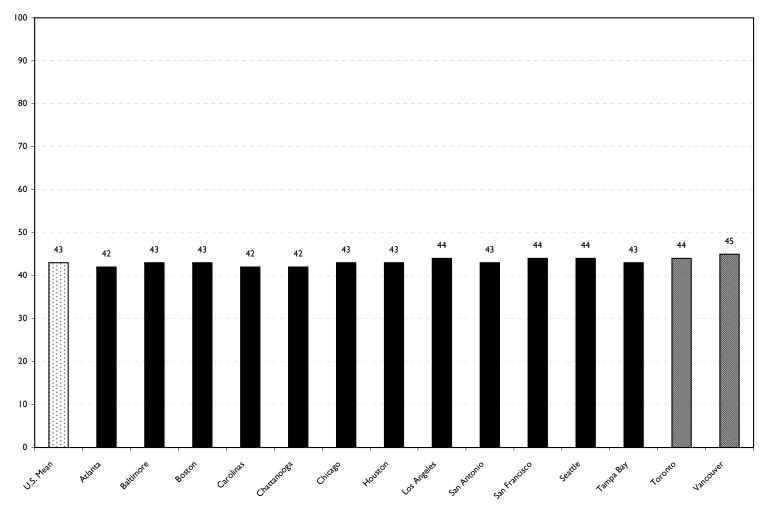




## I would donate money to help conserve the world's ocean.

(scalar variable, 0-100)

Mean 43

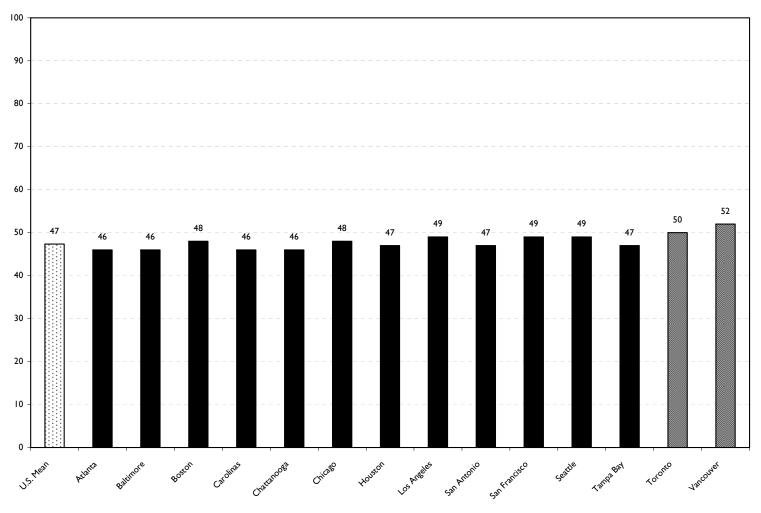




## I would donate money to help contribute to a solution to the global climate change crisis.

(scalar variable, 0-100)

Mean 47

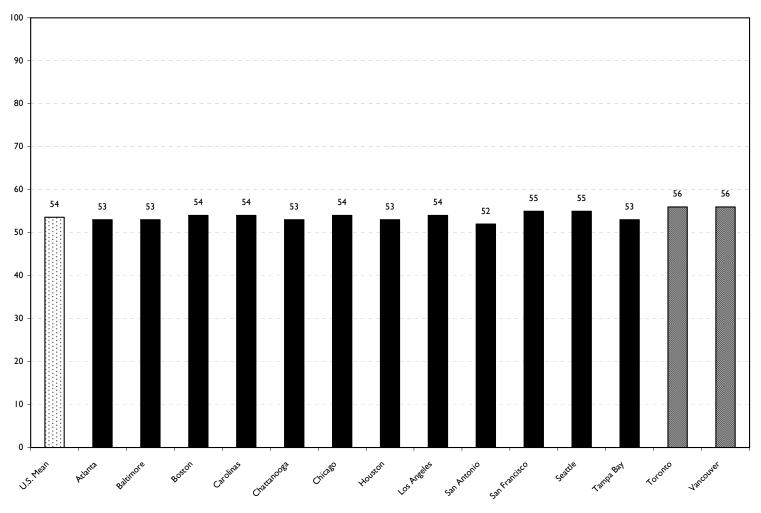




## I would donate money to help protect the future availability of healthy fish populations.

(scalar variable, 0-100)

Mean 54

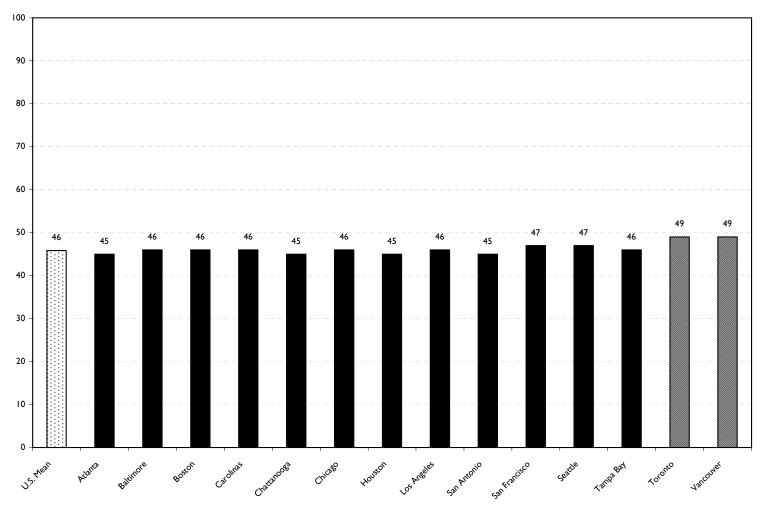




## I would donate money to help ensure the future availability of healthy seafood.

(scalar variable, 0-100)

Mean 46

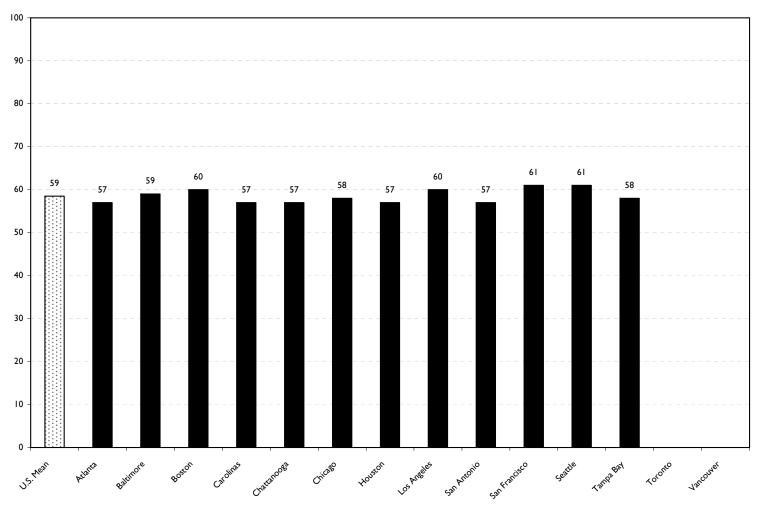




## I am familiar with the concept of a "carbon tax."

(scalar variable, 0-100)

Mean 59

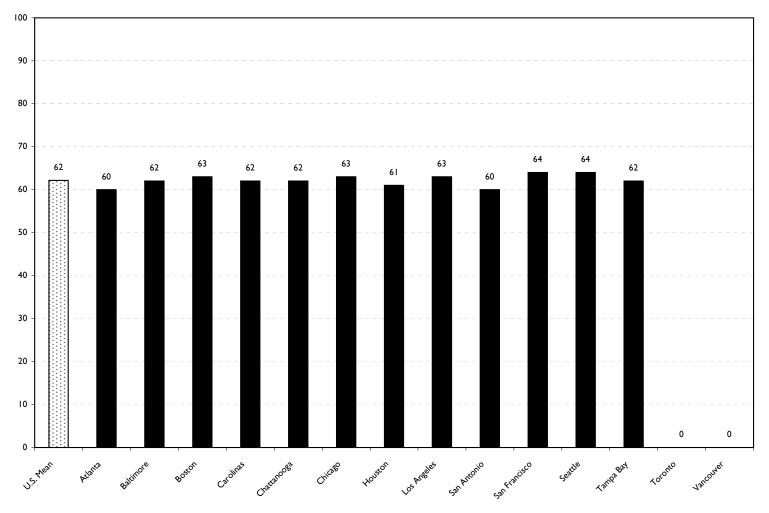




## A "carbon tax" is a good way to help solve the climate change crisis.

(scalar variable, 0-100)

Mean 62

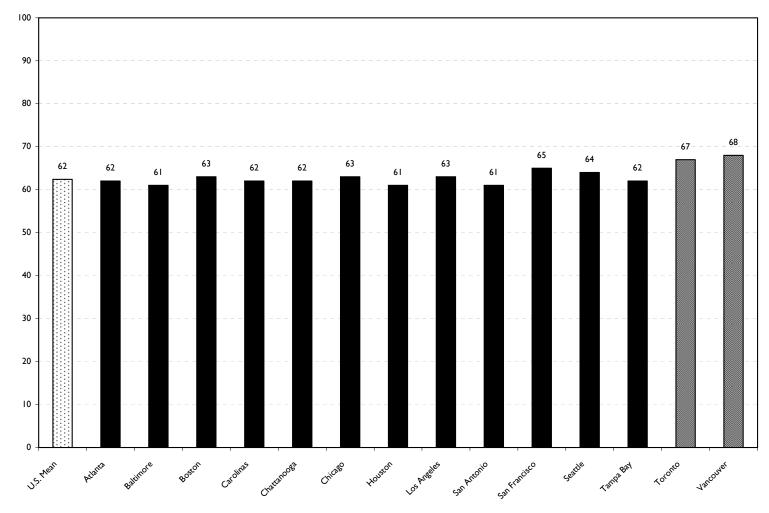




## I lead an "environmentally-friendly" lifestyle.

(scalar variable, 0-100)

Mean 62

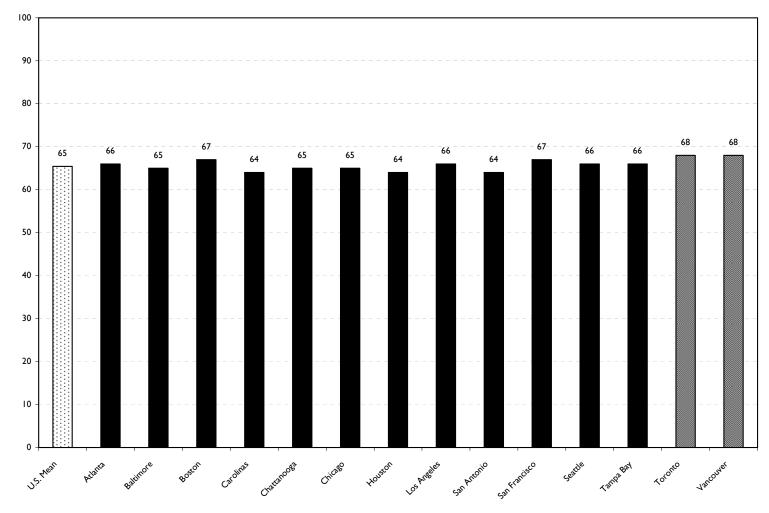




## I am interested in visiting an aquarium.

(scalar variable, 0-100)

Mean 65

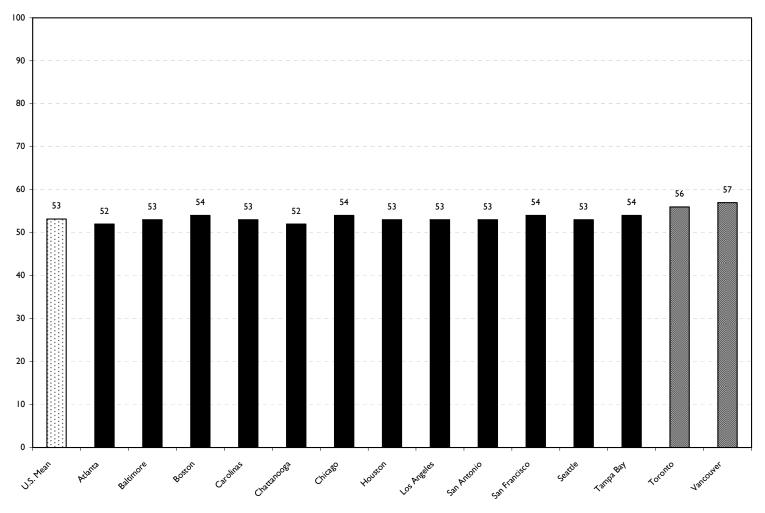




## I am interested in visiting a science museum.

(scalar variable, 0-100)

Mean 53

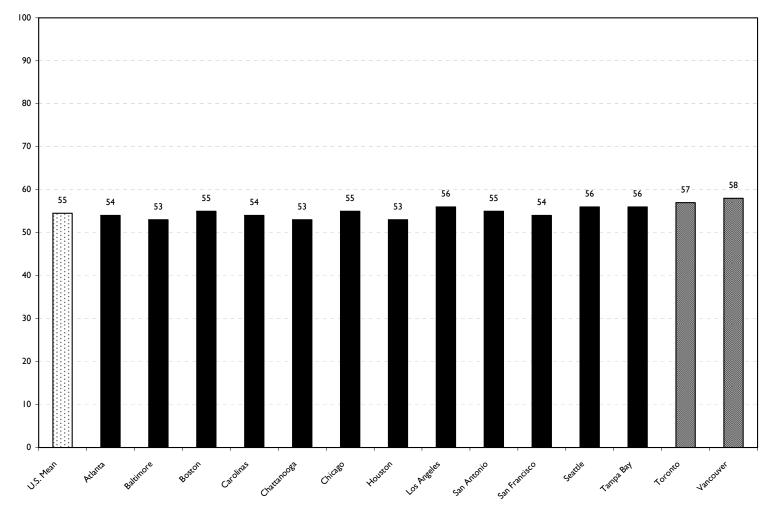




## I am interested in visiting a natural history museum.

(scalar variable, 0-100)

Mean 55

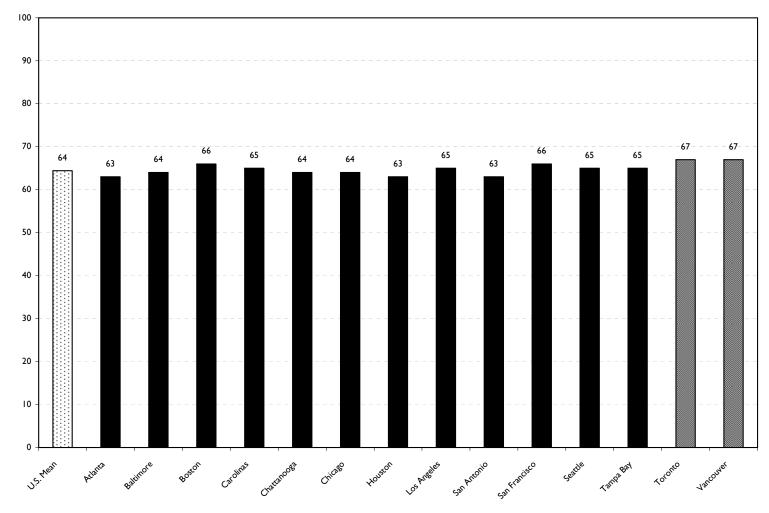




#### I am interested in visiting a zoo.

(scalar variable, 0-100)

Mean 64

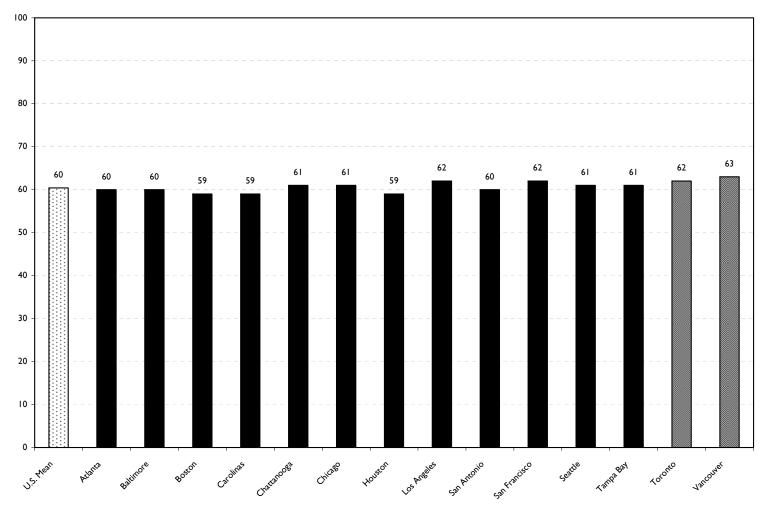




#### I am satisfied with my experience when I visit an aquarium, science center or zoo.

(scalar variable, 0-100)

Mean 60





#### Aquariums, science centers and zoos offer an excellent value for the cost of admission.

(scalar variable, 0-100)

Mean 63

