

HOW MUCH IS TOO MUCH?
A Public Opinion Perspective
Tom Bowerman, PolicyInteractive

Abstract:

Given the ubiquity of opinion surveying in marketing and politics, it is surprising how little opinion surveying about consumption may be found in the public domain. With household consumption credited for seventy percent of United States GDP, the urgency of climate change policy and contributory human behaviors makes better understandings of affluent consumption attitudes and behaviors imperative. This paper gives an overview of four years of public opinion research about consumption and discusses future steps. Using high quality multi-method sampling techniques, the research finds consistent strong attitudinal support that “our country would be better off if we all consume less” (74-88%). These results appear to be at odds with policy elite views toward economic growth. This paper discusses values, attitudes, and behaviors along with barriers and activators for significant consumption behavior change. Attitudes regarding excessive consumption bridge the typical political and social ideological divisions observed in climate change dialogue, giving evidence that lowering consumption possesses broader social agreement than climate concern. Our findings are from quantitative statistical sampling, target sector sampling, opt-in internet surveys, qualitative interviews, focus groups, and meta-scans of other public opinion findings.

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Is consumption our national purpose? It has been broadly noted that U.S. citizens love their stuff and aren't about to give up acquiring more of it anytime soon. Although some decline in consumption is now nationally observed, commentators commonly explain this as a momentary phenomenon and that consumption will return to “normal” as the economy recovers (Brooks 2008). At about 4.5% of the world population, the United States consumes about a third of the world's resources constituting the highest per capita consumption rate in the world.¹

Alongside demand-side consumer behavior, there's significant supply-side motive as well. A real estate marketing study reports that the United States retail floor area per person exceeds Europe by a factor of 10 (square foot/capita retail floor area: US 20.2, UK 2.5, France 2.3, Italy 1.1) (Gibbs 2008). American journalism advertising revenue exceeds 80% of total publication revenue compared to less than 50% in most other industrialized nations. U.S advertising annual expenditure of \$175 billion is 36% of the world total, over 8 times the per-capita world average (Levy 2010). Journalistic mediums and their clients (manufacturers, retailers and investors) have strong economic self-interest to maintain the cash cow.

¹ American Association for Advancement of Sciences, <http://atlas.aaas.org/index.php?part=2>

Within this context, accumulating evidence suggests that civilization and its supporting environment may face irrevocable catastrophe unless we change our present economic model (IPPC 2007, Huntington 2012, Methmann 2011). Two competing solutions to “business as usual” have emerged (Princen 2001, Bluhdorn & Walsh, 2007; Knight & Rosa 2009, Rees, 2009). The first and dominant version promotes an efficient and “green” technology overlay on the contemporary economic model of mass-consumption and infinite economic growth. This version offers that we “grow” our way out of recession by redirecting investment toward “green” futures, a model which is comparatively easily endorsed by organizations and officials who promote ecological “sustainability” because we can have our cake and eat it too. Success of this version necessitates practically complete decoupling of carbon emissions from consumption based products and behaviors. The second proposes that changes in our way of life - our material expectations - are necessary due to the inherent thermodynamic limits of production efficiency and climate consequences, a.k.a. the Jevon’s Paradox (Trainer 2010, Alcott 2008, Herring 2006, Jackson 2009, Owen 2012). This view posits that the United States’ material standard of living is unsustainable, even when accounting for improved efficiency, unless accompanied with sizable decreases in material consumption.

Others have observed and our own research confirms that the political and economic elite embrace the first and deny the second of these approaches for a variety of reasons (Markowitz & Bowerman 2011). An emerging body of research challenges the efficacy of the growth and efficiency approach as misguided and an unlikely path toward real sustainability (York, Rosa & Dietz 2003; Jackson 2009, Heuting 2010, Rees 2010). This topic has been covered extensively elsewhere, mentioned here for contextual reasons.

This paper is to report on what I think are some significant findings regarding public attitudes as they relate to these competing views of “progress” and well-being.

Surveying Values & Attitudes: Observing in 2007 a deterioration of public concern for climate change we initiated a research template we had used on a prior ideologically divisive topic (land use planning) in the State of Oregon. The procedure largely steps away from the divisiveness to survey the public on broad values and world-views set alongside commonly perceived policy topics related to or in competition with the focal topic. In this application, we sidestep the primary polarization and examine motivators and barriers relevant to climate impact while avoiding discord activation, exploring for other pathways to reduce greenhouse gas emission behaviors.

One of the values proxies we used in the first survey (April 2008, N=406)² asked respondents their level of agreement to “Our country would be better off if we all consumed less.” This wording was of ad hoc design but drawn from a body of consumption and materialism research developed over several decades (Inglehart 1992, Richins & Dawson 1992, Richins 2004, Schor 1999). We were surprised to find 88 percent response agreement with the statement, with nearly half strongly agreeing on a four point bi-directional scale. Due to the conventional view of consumption described above, we worried that we’d inadvertently primed or biased the results notwithstanding our effort to negate common priming influences. Thereafter we introduced a variety of techniques (touched on below) to triangulate the results against counter-point value statements, changing field-house contractors and prevailing on other researchers to embed key items in their own surveys. In five subsequent peer-reviewed random-digital surveys over two years after the initial finding, conducted through a “severe recession”, support for our initial ‘consume-less’ statement varied from 74-88% with “strongly agree” approaching 50%.

Examining the literature we found (limited) similar evidence that citizens are deeply concerned about issues related to over consumption (cf., Harwood 1994, Schor 1999; Stafford, Taylor, & Houston, 2001 New American Dream 2004, Center for American Progress 2008). However, the paucity of extended research from any of these surveys was puzzling. To rectify an apparent one-off approach of these other surveys, our project took shape around a continuum of survey and analytical tools to examine the consumption topic using a variety of methods and levels of detail.

Bridging the Ideological Divide: We found that cultural sectors with low level climate change concern (political ‘right’ and religious conservatives) showed high ‘consume-less’ agreement. Republicans shifted from 34% climate concern to 76% consumption concern; Christian conservatives shifted 45% to 67% respectively (PI November 2008, N = 400). Sectors previously concerned with climate change such as democrats and environmentalists showed modestly higher concern about consumption than climate.

To observe for acquiescence and desirability responding bias we initiated counter-point paired items with rotating ordering to avoid order influence. Using language for each pair judged equivalent in tone, directionality and level of efficacy, we aimed to measure relative support for competing personal economic and social economic world-views as well as correlate those measurement levels to other cultural concerns and behavior choices. This component of research draws on nine statistical sample sur-

² Space limitations prevent detailed discussion of methodology here but available on our website: www.policyininteractive.org. For our exploratory method, we believe a larger number of surveys with fewer respondents is more effective than a few surveys with large response counts, allowing us to replicate, triangulate or deeper exploration of prior findings. Our quantitative surveys are commonly N=400, providing a margin of error <5%.

veys (two conducted by third party DHM research, one of which was a three state Pacific Northwest sample). Three examples from these nine surveys are typical:

PolicyInteractive November 2008 N=400 Statistical Sample Random Digit Dial All Oregon					
Statement Text (rotates)	Strongly Disagree	Somewhat Disagree	In-between	Somewhat Agree	Strongly Agree
Our country would be better off if we all consume less	6	7	12	26	48
We need to buy goods for the good of the economy	15	21	17	29	16

PolicyInteractive Dec 2010 by InfoAlliance N=400 statistical sample RDD telephone		
5A Our country would be better off if we all consumed less.		
Strongly disagree	33	8.3%
Moderately disagree	64	16.0%
Moderately agree	96	24.0%
Strongly Agree	184	46.0%
(DO NOT READ) In-between	7	1.8%
(DO NOT READ) Don't know, No Opinion, Refused	16	4.0%
5B We need to buy things to support a strong economy.		
Strongly disagree	48	12.0%
Moderately disagree	89	22.3%
Moderately agree	157	39.3%
Strongly Agree	76	19.0%
(DO NOT READ) In-between	17	4.3%

PI – DHM Research Nov 2011 N=300 Statistical Random Dial Land & Cell Eugene, Oregon	
Forced Choice Response Category	N=300
A. We need to get the economy growing by consuming more goods and services	27%
B. We'll be better off by consuming less and living more simply	65%
C. Both/Neither/Can't decide (not read)	7%

The examples above are not atypical of the nation. In 2009 a survey conducted by the Center for American Progress called “The Forty Ideas Which Frame American Politics” found that the highest level of agreement was for the item “Americans should adopt a more sustainable lifestyle by conserving energy and consuming fewer goods” (80% agreement, 47% “strongly agree”).³ As with our own re-

³ The “double-barrel” question framing leaves open whether respondents may be more agreeable to “conserving energy” or “consuming fewer goods” however the third highest level of agreement in the CAP survey (seventy six percent agreement, four percentage points lower) is a question specific to fuel and energy efficiency, suggesting that consuming fewer goods was an equal or stronger issue to conserving energy (Center for American Progress 2009)

search, this item also showed the strongest agreement within the traditional ideological divisions of the forty items tested (CAP 2009). Our own surveying on a national platform shows similar results. We may have high affluent consumption behavior but are nonetheless willing to voice disapproval of such. Affirming stability to the ‘consume-less’ attitude we expanded the research into a multi-mode approach to capture a broader range of variables possible in a single survey method. Over four years we have fielded approximately 450 questions across nine statistical sample surveys of over 4000 respondents (regional), four opt-in internet surveys fielding 800 questions to over 2000 respondents(national), two sector specific qualitative interviews (70 interviews), and two randomly selected focus groups (12 participants each group).

So what! While the above findings are of the most general attitude level, they seem to challenge the conventional wisdom that we are a nation of mindless consumers – it seems that some thinking (not mindlessness) about consumption is happening. We are fully aware that reasonable readers might respond with a hearty, “So what!” As one political aide to the Oregon governor we talked with said in response to our findings, “Can’t we all look out the window and see we all consume too much? Then we jump in our SUV and go buy some disposable trivia [*sic*]” (anonymous interview, August 2008). We partly agree with this sentiment. It is precisely because “we can see” consumption that our sensibilities are activated (compared to climate change – so far). But we challenge the “so what” logic when used to explain away opportunity to engage pressing social and ecological problems. Thus ‘so what!’ becomes a relevant topic of exploration itself. Avoidance mechanisms depend on such rationales as disbelief of results, futility of effort (hopelessness), alternative causation (e.g. the economic downturn), other more urgent concerns (e.g. the perpetual budgetary “crisis”) and so on. Exploration of the ‘so what!’ topic, along with other attitudinal nuances of consumption attitudes necessitated more personalized methods of exploration than numerically robust quantitative surveying.

Qualitative Interviews: To obtain nuanced attitudes toward consumption not typically feasible in quantitative surveying, we implemented in-depth, one-on-one interviews by phone and in person. We interviewed two groups of individuals in 2009 and 2010. One group was drawn from a prior random sample survey of self-described conservatives who’d disagreed that climate change was a concern and who viewed environmentalists as “extremists”. The other group targeted “policy elites” (balanced conservative & progressive drawn equally from business, education, religion and politics). Both sets of interviews began afresh soliciting level of agreement/disagreement to the statement “Our country would be better off if we all consumed less.” With this benchmark reference, we progressed to asking respondents to respond in their own words to various questions, including: “What does ‘consume less’ mean to

you?”, “How would our country be better off if we all consumed less?”, “Should you consume less too?”, “What kinds of actions have you or could you take to consume less?”, “If we all consumed less how would this affect the economy?” (For a detailed explanation of methodology, findings, and controls: www.policyinteractive.org surveys 3a & 3b).

The self-identified conservatives we interviewed were re-contacted, drawn from a prior random sample who had given permission to be called with further questions. In the original April 2008 they had responded at an 87% mean level of agreement to “Our country would be better off if we all consumed less”. Asking the same question afresh in the interview eight months later, fully 100% of the interviewees agreed with the statement, this time being at the beginning of the survey with little opportunity for priming. Next, participants were asked, “What does ‘consume less’ mean to you?” The responses were nearly all pejorative (see Figure 1), with a number of respondents referring to issues such as: fuel and energy waste (11 participants); junk, waste and garbage (8 mentions); and, overeating, junk food and obesity (4 mentions). Next we asked respondents, “How do you see our country being a better place if we all consumed less?” Responses included: more time with family and friends (9 participants); less impact on environment (4 participants); and, fairer distribution of resources (3 participants).

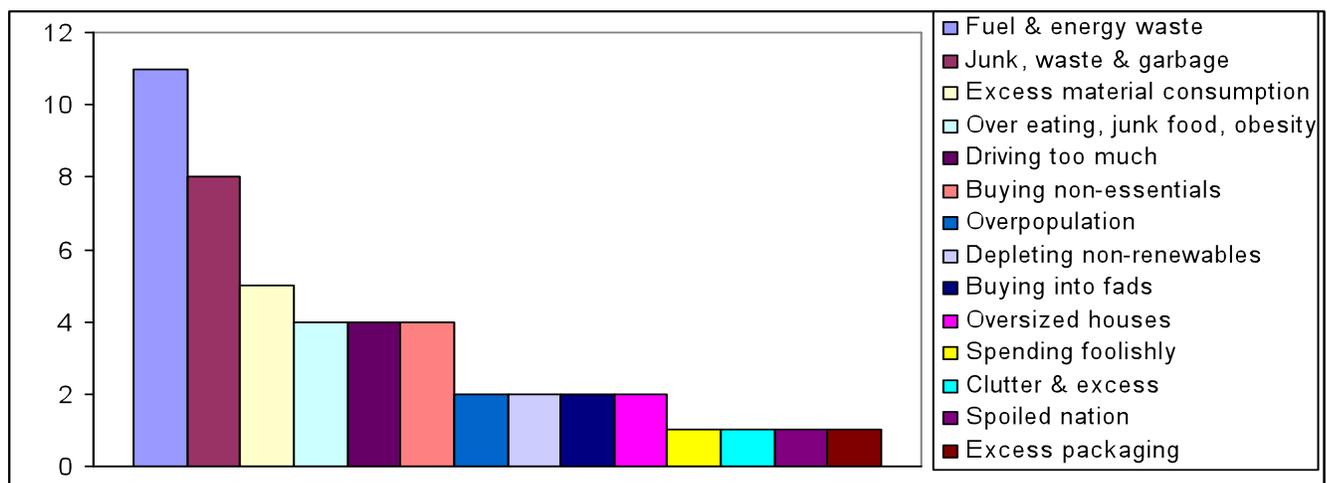


Figure 1. : “Summary of response mentions: “Would you give me a few examples of what ‘consume less’ means to you.” Results from qualitative interviews of conservatives conducted July-Sept., 2009, $n = 34$.

Both groups reported strong dispositional responses to the need to consume less. The conservative group did not see the resultant economic influence as necessarily a bad result, a typical response, from a middle-aged man, was “Yes, it will hurt the economy but it’s something we must go through to get to a better place.” By comparison, the follow-up interviews with policy-elite also showed high re-

sponse agreement that we consume too much but were seemingly conflicted regarding the economic implications, preferring the common policy solution along the lines of “grow our way out of this mess.”

Because two interviews of 32 respondents each are not statistically representative, we triangulated these findings with a fresh statistical survey (N=406, April 2009) that included the questions “how much should our country consume less?” and “do you think you also should consume less to make our country a better place?” and, if so “...how much...less?” The “How much should our country consume less?” yielded a mean collective response of 24% less consumption. The personal “consume less” yielded a collective mean of 12% less consumption, suggesting lower personal responsibility for over-consumption than their indicated views towards others. Our reviewers point to a double-standard while also acknowledging the directionality of attitude toward consuming less.⁴

Yet another explanation could be that respondents had already adopted reduced consumption but were not yet aware of lowered national consumption. A review of consumption behavior metrics over the past several decades reveals a long period of increasing consumption until 2000, followed by a 50% reduction in the trend line until 2005, then flat-lining for two years followed by a decline in consumption beginning around 2007 – two years before the economic recession was officially back dated to have begun. This is evidenced by governmental metrics such as freight imports at all ports of U.S. entry, new vehicle purchases, vehicle miles traveled and other key metrics describing this moderation and decline⁵. A periodic multi-decade survey conducted by the Pew Research organization found that between 2006 and 2009 hard consumables such as clothes dryers, TV sets, microwaves, hair dryers and home air conditioners were re-defined by consumers from “necessities” to the category of “luxury” in the double digits, following previously unbroken growth since the beginning of the survey in the 1970’s (Moran & Taylor 2009). The survey showed automobile necessity declined, but more modestly. JD Powers Research reports that younger adults are abandoning the automobile in favor of perceived freedom of living without the attending burden and costs, to great concern of the industry which has cultivated a youth love of vehicular mobility and status (Zimmerman 2009, Cohen 2011). Supposedly now past the fears of the 2009 recession, the use of refined gasoline by January 2012 dropped ten percent below the 2009 recessionary economic low mark (EIA 2012). These results suggest consumption decline behavior

⁴ Since consumption behavior metrics indicate Oregonians consume about 20% less than the national average an inquiry of this type needs to be run on a national sample.

⁵ Vehicle miles traveled decline: MT decline:

http://www.brookings.edu/~media/Files/rc/reports/2008/1216_transportation_tomer_puentes/figure_1b.pdf;

Vehicle miles traveled decline: <http://www.fhwa.dot.gov/ohim/tvtw/11novvt/page2.cfm>

Value of Freight Ports of Entry: <http://www.internationaltransportforum.org/statistics/StatBrief/2011-12.pdf>

New car sales falling: http://www.bts.gov/publications/national_transportation_statistics/html/table_01_17.html

shifted independently of recession anxiety or economics, and comport with results from two focus groups we collaborated on with a local for-profit market research agency in December 2011.

Focus Groups: Twenty four participants were drawn from a random digit dial telephone recruit procedure to screen for a set of basic demographics, targeting essentially thirty to fifty year old adults of generally above the median income (e.g. affluent consumption target). A forced choice pair of statements we've fielded for several years was used to screen respondents into two discussion groups: "Economic growth should be given a priority, even if the environment suffers to some extent" (to create the "economy" group) or "Protecting the environment should be given priority, even at the risk of slowing economic growth" ("environment group").⁶ Each group discussion was professionally facilitated on the same evening for two hours following a loose script and interactive table discussion exploring topics of consumption motivations as well as barriers and motivations toward more thoughtful consumption.

Space limits detailed findings here; however, both groups described our society's consumption levels as problematic but often showed discrete differences toward perceptions and behaviors. The *economy* group expressed economic motivations about employment, paying bills, reducing debt, keeping money in the local area and supporting families as priorities. The women were the most disapproving of consumption levels and focused on lower consumption practices being more earth-friendly, especially to the "waste" they could see. One woman graphically described over-consumption: "I see my neighbor's oversized garbage container overflowing with trash spilling onto the ground all the time." Both men and women were unanimous about benefits of supporting localized production and viewed waste often in context of cheaper foreign made goods, often verbalizing support for buying from local producers. A frequently mentioned motive was quality and "keeping our money in the community". One woman volunteered inter-generational perspective toward over-consumption: "It uses up the planet, not anything left for future generations."

The '*environment*' group also frequently mentioned the topics of visual waste, local economic exchange and reducing consumption to control debt. However this group expanded into a broader lifestyle vision of less consumption and being aware of how consumption aggravates their larger vision of simplicity. Volunteered comments often centered on lowering consumption as a "way of life, normal

⁶ This forced question was used for the same project in a statistical sample random telephone interview of 300 Eugene, Oregon respondents a month earlier; the response ratio of the 'protect the environment priority' to 'economic growth priority' was 6:4 respectively. While Eugene is a small city of two hundred thousand in a state with one percent of national population, surveying the same pair of questions in two national opt-in non-representative surveys (skewed 6:4 to women, younger mean, lower than average income, higher than average education, geographically representative) showed a higher proportion for 'protect the environment' over 'economic growth', suggesting that Eugene is not atypically "environmentally conscious". Mainstream national survey results are mixed on this item perhaps because some survey designs possess extrinsic economic priming bias.

behavior,” and seeing reducing consumption as increasing personal self-reliance and personal skills of growing food, repairing things and doing with fewer objects in life. “Living holistically” was frequently mentioned in the context of how personal actions have complex or extended consequences. “Health benefits”, “being part of the solution, not part of the problem”, “contributing to society”, and “vote with my pocketbook” were typical comments. Comments included “drive less, bike more”, “efficient appliances”, “second hand purchasing”, “turn down thermostats”, “improve building efficiency” and “energy audits”. One forty year old male (architect) described an earlier life aspiration for prestige and income but after stress and unhappiness made a mid-course correction to down-scale, describing himself as “...poor and loving it”. Questioned about whether reduced consumption would be bad for the economy, comments like “...we’ll get through it”, “consumption isn’t sustainable at current levels”, and “we’ll turn attention to a local exchange economy”. Considering that this group was screen selected from using a forced choice item which had previously yielded a 6:4 plurality to the *environmental* direction in statistical sampling, these views may be considered mainstream.

Neither of the two focus groups mentioned climate change as a primary or key rationale for reducing consumption.

Summarizing: Upon consolidating the findings from the above methods, quantitative surveying, qualitative interviewing and focus groups – several things are clear. First, there is a generally widespread attitude that as a country and as individuals we consume too much. Second, drawing from governmental consumption metrics, affluent consumption behavior began declining before the economic downturn. It appears that consume-less behavior is not exclusively dependent on economic necessity. Third, citizens are willing to engage dialogue around social and ecological issues related to consumption. Fourth, the opportunity for a widespread behavior shift may be present, supported by strong attitudes and emerging normative behavior we have documented.

Push-back: A variety of contrary positions argue against attitudinal consume-less findings translating to sustained consume-less behavior. These might be characterized by such generalizations as:

- We’re biologically hardwired to be consumers, as are all living things, attitudes are weak motivators compared to biological drives. (Rees 2009)
- The economic downturn provides economic reasons to consume less, this will evaporate when the economy returns to normal growth (Brooks 2008)
- If economic withdrawal becomes serious and lasting, there will be a return to Maslowian drives of survival and outer-directedness, replacing inner-directed post-materialism (Inglehart 1990, Maslow 1943).
- In addition to cognitive dissonance and an attitude-behavior split, entrenched social norms and behaviors stymie and constrain attitudes favoring a lower material standard of living. (Rees 2009).

- Powerful institutional actors (e.g. marketers and the governmental-industrial complex) will effectively apply increasingly sophisticated tools to preserve and expand consumption behaviors. (Hoyer & McInnis 2008)
- The existential relativistic view that everything is ephemeral; we're here for a geologic second of time; what difference does it really make? So, live for today; be here now; enjoy the present. (from author's informal interviewing)

Indeed, these positions (individually or in combinations) seem formidable barriers to reducing consumption. And these are certainly not a comprehensive list. As a young adult in the 1970's I also was aware of an social popularization of consuming less, reflected in popular works like *Tragedy of the Commons* (Hardin 1968), *Small is Beautiful: economics as if people mattered* (Schumacher 1973) and, *Voluntary Simplicity* (Elgin, 1981). Then "consume-less" lost mainstream popularity in the Reagan-Clinton-Bush eras of neo-conservatism and neo-liberalism. Moreover, the United States has earlier witnessed ebbs and flows of frugality philosophies alongside personalities like Benjamin Franklin, Emerson, Thoreau, and Veblen. But has the urgency of awareness ever been presented quite as starkly as in the case of climate change, increased costs of energy and inequities of incomes?

Present and Future Research Directions:

"It is naive to ask consumers to voluntarily downscale, and give up their desires without offering them alternative dreams." Tim Jackson, Sustainable Development Commission, U.K.

Life, Liberty and the Pursuit of Happiness. There has recently emerged considerable interest in "alternative measures" to Gross Domestic Product as a metric of cultural progress. At least nine national or international initiatives measure and publicize some version of a "happiness" or well-being index. It has occurred to us that correlating motivations and behaviors with well-being and happiness indices may offer more positive motivational insights than pejorative views of consumption.

Researchers of happiness and life-satisfaction provide evidence that progressively higher income and consumption levels do not deliver happier, healthier or more satisfied populations once fairly basic levels of sustenance and comfort are obtained. (Easterlin 2005, 1973, 1974, 1995; Layard 2005; *for an opposing view see* Stevenson 2008 *and for a counter rebuttal see* Easterlin, et.al. 2010). For Oregon policy research we assembled per capita income, carbon emissions and self-reported well-being for analysis and discussion purposes (see figure 2).

Income/Emissions/Life Satisfaction Four Nations & Oregon Compared

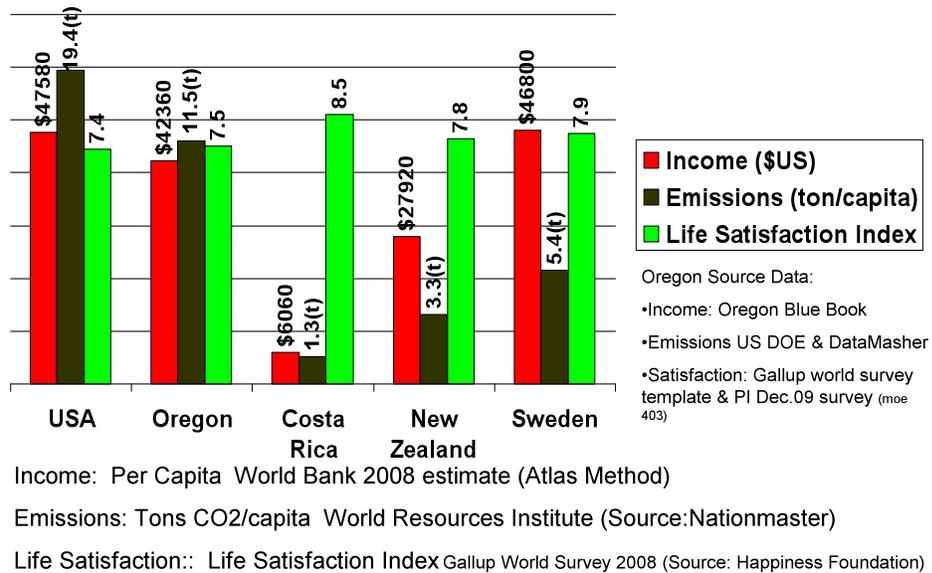


Figure 2.

Alongside the U.S. and our own state we selected three countries as distinctively meaningful in size and various circumstance to the State of Oregon. The lack of correlation between income, emissions and self-reported life satisfaction confers support for questioning income growth and commensurate consumption above certain levels if human well-being is a primary objective.

Researching these relationships more deeply led us to collaborate with the San Francisco State University Department of Psychology Well-being Laboratory (SFSU). We have recently completed four opinion survey pilot studies using an extensive array of validated scales along with our own novel constructs to correlate consumption behavior with measures of well-being. An extension of this work is testing how people view the importance of and satisfaction with the physical and social qualities of the neighborhoods in which they live. The objective is to obtain insights for policymakers about how social and physical place-making decisions interact with quality of life and sustainability policy objectives. We'd worked for months designing our "quality of place" back to back with the Gross National Happiness Index we'd worked on with Sustainable Seattle and SFSU. We recently learned that our scheduled fielding of this survey in collaboration with Oregon's largest municipal governing body has hit a last-minute snag. Senior staff at METRO suddenly objected to the term "Happiness" as lacking in seriousness and minimizing the participation of the business community and many citizens. This setback reveals some of the challenges applied research is likely to face. We are currently reorganizing to approach this research strand at a more grass-roots neighborhood leadership level.

Another extension of our work with SFSU is co-founding a new survey portal called Beyond the Purchase (link: www.BeyondThePurchase.org). We developed this website as an interactive tool for people to explore their purchasing and money management choices and compare their choices with others. The Internet provides for economical data collection while simultaneously cultivating cultural conversation about consumer behavior. With these data, we can better understand the ways in which our financial decisions affect self-reported well-being.

Framing and Messaging: Another approach to understanding motivations is to tap the methods of the advertising-marketing industry. We have begun collaborating with several for-profit marketing consultants providing services to Oregon jurisdictions to improve sustainability policy objectives. This opportunity derives from local policymakers' directives to staff to make progress on sustainability objectives. The evidence we have gathered on public attitudes toward consumption seems to encourage mid-level policy implementers (managers) to explore the interaction of sustainability and consumption with their citizenry. Nonetheless, we note nervousness within policy elite circles toward lowered consumption effects on business, incomes, tax revenues, and delivery of services (cf. Markowitz & Bowerman 2011). While recognizing the reasons for elite concern, we are encouraged nonetheless by emerging opportunity to move consumption research into the public policy domain. This process is currently underway and too early to judge the success of this strand. In any case, evidence suggests that just being aware of findings that a majority of citizens support reducing consumption encourages lower consumption as normative behavior. (Cialdini 2004, Thaler & Sunstein 2008, Markowitz & Bowerman 2011).

Dissonance, Denial and Transformation: A third emerging strand of our research regarding motivations examines the cognitive dissonance, denial and individual experiences of changing consumer behavior. This approach approximates the qualitative interviews mentioned above (2009 & 2010). At least two sets of interviews are planned. One is to engage "environmentalists" who express climate change concern and exhibit large carbon footprints. We are especially interested in understanding the gap between the attitudes and behavior of this group, recognizing the challenges of creating a meaningful dialogue within this tension. Do they recognize the incongruity of attitude and behavior? Is there anxiety or guilt involved? What are their motivations and barriers for aligning attitude and behavior? A different target group is adults who exhibit a voluntary low carbon emission lifestyle. With this low-carbon group we aim for insights about personal transformation and life outside the cultural norm. Were these people born consumption frugality, was change incremental or from epiphany? Do they feel they overcame barriers? Are they comparatively satisfied with life? What can we learn from them?

We welcome suggestions and critiques of these extensions into understanding population-wide attitude toward over-consumption and behavior change.

Conclusion: The first part of this paper reports general findings from four years of public surveying. Opinion research has pros and cons. Done well, it allows us to transcend our personally limited perspective to gain a broad generalized view of the cultural topography. The negatives are reduced by applying best-practice methodologies, mixed methods and triangulated results. We believe we have done this while finding that most people believe “Our country would be better off if we all consumed less.” Those who view vastly lower consumption as necessary may be disappointed with the aggregated finding of *how much* people think they individually should consume less (12%) or how much our country collectively should consume less (24%); especially in light of scientific evidence that we must reduce our emissions by 75 – 90% within 30 years. A more optimistic view is that altering the massive inertia of collective behavior is necessarily incremental without widespread social backlash. I have provided evidence that actual behavior shift is observed independent of recessionary causation. The supertanker USS Consumption has altered direction. Most of this change appears from voluntary personal behavior rather than policy directives or mandates. Self-discovery that the world will not end or I won’t be less popular by altered behavior permits further shift, especially when corresponding rewards are realized.

We also observe that policymakers are almost entirely unsupportive of this attitude and behavior shift, constrained by conventional economic thinking and associated electioneering. Yet our research group believes that elite leadership and policy augmentation is necessary. “When the people lead the leaders will follow” was expressed during the Viet Nam war era when national leadership clung to ideological loss of face or supposed fear of communism. Indeed, public opinion eventually disgraced entrenched leadership, leading to policy change. Whether public opinion findings will solidify individual attitude and behavior as normal or induce policy elite toward revising conventional “it’s all about the economy” thinking is yet unclear. But if the last two decades of abject policy failure on climate change is any gauge, grass-root attitudes to lower consumption should be considered as leverage for broad based behavior change – at both individual and policy levels.

We invite critique of our findings and suggestions for our current direction.

Public sentiment is everything. With public sentiment nothing can fail. Without it nothing can succeed.
Abraham Lincoln, in debate with Steven Douglas 1858

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Tom Bowerman has a degree in architecture from the University of Oregon, has practiced in the field of architecture, urban design and planning for three decades with focus on the interface of development and environmental protection. He co-founded several non-profit organizations and initiated PolicyInteractive to examine, through the lens of public opinion, a perceived disconnect between physical science and social responsiveness toward anthropogenic climate change.

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