

Protecting Consumer Privacy and Welfare in the Era of “E-Scores,” Real-time Big-Data “Lead-Generation” Practices and other Scoring/Profile Applications.

Comments by U.S. PIRG and the Center for Digital Democracy for the FTC’s “Alternative Scoring Product” Workshop, Spring Privacy Series

Summary:

These scores have long been an area of research interest for the non-partisan non-profit organizations U.S. PIRG and the Center for Digital Democracy.¹ The growing use of so-called “e-scores” —a form of invisible (to the consumer) online ratings — can help determine our credit worthiness, “lifetime value,” or even the prices we pay. These e-scores can be used to blacklist or engage in discriminatory practices against individuals or even groups of consumers. We are aware that there are numerous online scores being generated for a variety of generally non-controversial uses, including predicting identity theft or fraud. However, we remain concerned that the largest and most important uses of online scoring are to substitute for the highly-regulated pre-screening regime that for years has governed the use of consumer credit reports for marketing purposes. Its proponents claim that the files developed are not on individual consumers, but on clusters of consumers. Its proponents claim online scores are simply a method for establishing audiences for serving ads. Not subject to the Fair Credit Reporting Act (FCRA) regulation, they assert, are scores and other products that identify consumers on an aggregate basis (which for them means information narrowed to a small cluster of households at the ZIP+4 level) or consumers not named by name. We disagree with these representations and commend FTC for its inquiry.

Decisions Are Being Made About Individual Consumers

U.S. PIRG² and the Center for Digital Democracy (CDD) commend the FTC’s focus on the ways that companies use scoring, profiling, and other data-driven analytic products and services to make important decisions about individual consumers. As we will describe, scoring products are especially being used to determine how a consumer is treated in the financial services marketplace. Such scores are non-transparent, unaccountable, and can be used by companies to engage in unfair and discriminatory practices. U.S. PIRG and CDD have been closely analyzing the e-scoring marketplace for several years, including its relationship with online lead-generation practices; with digital data profiling and targeting; and in its incorporation of a wide range of “Big Data”-driven practices. While companies have the right to assess risk and opportunity as well engage in non-obtrusive forms of segmentation, there is no defense when these practices are conducted—as they currently are—without transparency, consumer accountability, individual control, serious self-regulatory governance, or appropriate public policy.

The Big-Data-driven Consumer Landscape

As the commission recognizes, one cannot discuss e-scores and related products and applications without initially acknowledging that such scoring is part of an increasingly integrated system of continuous and real-time data collection and predictive analysis, which is used to make a wide range of decisions that affect individual consumers, their social networks, and even their communities. Far-reaching capabilities of “Big-Data”

processing that gather, analyze, predict, and make instantaneous decisions about an individual hold both promise and risk, especially for economically vulnerable Americans. Banks, credit and retail companies have invested to ensure they have the ability to gather, analyze, and make actionable—instantly—information about our offline and online behaviors—especially those related to our finances and spending. The flow of personal and other data coming from our use of an array of devices is being combined with other information—about our neighborhoods, race, ethnicity, buying habits, social relationships and more to create detailed profiles and predictions about us. Credit card companies, for example, can obtain “a more complete picture of cardholder behavior” to identify the profitability of each individual.³ Banks, credit card companies, and other financial services entities are able to collect and analyze information on individuals’ “transactions, preferences and online interactions.”⁴ Increasingly, companies create a “consolidated view of the consumer across all checkpoints,” capturing an individual’s offline and media use, “life events,” demographics and what “Life-Time Value segment they are in.”⁵ Companies are using scoring products and related data applications to engage in the “pre-qualifying” or “prescreening” of consumers, to determine their suitability for financial product targeting.⁶

The growth of what is called “multichannel” behavior by consumers—who routinely use various devices for communications and decision-making (such as using mobile phones, personal computers, and digital TV to decide about products and services)—has led to their platform-related and behavioral information being captured by “data management platforms” (DMPs) and similar customer relationship management (CRM) products. Advances in data processing (e.g., Hadoop and MapReduce) adopted by the financial services industries and others, which enable a robust and continuous analysis to “discover” opportunities and patterns in an individual’s behavior, have fundamentally transformed the consumer experience (and helped create the technical foundation for e-scores and related segmentation applications).⁷ Companies, including those in the financial services sector, now desire to understand and influence *everything* a consumer does, using DMP platforms and applications to achieve what data broker Merkle terms “connected recognition.”⁸ In a recent presentation, Acxiom provided an example of how it assembles and uses data, explaining that it takes bank data and combines them with information it and other data broker partners provide about a consumer’s “behaviors,” “email opens,” social media, search, and “offline” activity. Such detailed data on an individual can be scored and segmented, it explains (and can include such details as whether an individual is a “female with small children, searched on site for travel rewards, and was served ... a gold card ad”).⁹

In addition to collecting and analyzing so-called “First Party” information—the data generated by individual consumers—companies now routinely “append” to these dossiers vast amounts of data from third parties. Such “data onboarding” enables financial services and other companies to create granular files on consumers that contain information on their economic activity and behavior, race/ethnicity, family composition, and much more. These onboarding services also enable companies to identify the physical and online addresses of an individual consumer.¹⁰ E-scores are also a part of the consumer “activation” system created by data brokers and the online data industry, which

features real-time auctions of individual consumers to the financial services industries and many others for the purposes of targeted advertising and transactions.¹¹ Illustrating how interconnected scoring is with today's digital data collection and targeting system, Google's "Universal Analytics" is said to "give marketers an enhanced ability to create a visitor scoring (a.k.a. lead scoring) platform within their web analytics data."¹²

The Historic Role of the FCRA: Is It Being Undermined?

The 1970 Fair Credit Reporting Act (FCRA) regulates the sale of consumer reports – detailed dossiers about a consumer's bill-paying habits and general financial history. It generally limits their use to "establishing the consumer's eligibility for credit, or insurance to be used primarily for personal, family, or household purposes; employment purposes; or any other purpose authorized under section 604."

From the early days of the act, an FTC interpretation had allowed an additional but restricted credit marketing use of consumer reports. A "pre-screened" list of consumers generated from credit reports could only be sold for marketing credit (but not general direct marketing) and only if its use resulted in a "firm offer of credit" to the consumer. This interpretation, as broadened to include "credit or insurance," was codified in 1996 amendments that also confirmed a creditor's right to conduct a further "post-screen" of the consumer's file, negating the notion of a "firm offer."

To compensate for the "invasion of privacy" no longer being offset by an actual "offer" of credit, the 1996 amendments importantly also established the consumer's countervailing right to opt-out of pre-screening uses of their credit reports.

On the one hand, as epitomized by its long litigation with the credit bureau Trans Union, the FTC has vigorously defended the law's strict prohibition on the use of consumer reports –specifically financial information in consumer reports -- for non-credit (or insurance) marketing.

The FTC has also, in a series of important recent actions against mobile app firms, employment background check firms and others made clear that the sale of scores or other information derived, for example, from social network interactions, which bears on a consumer's "reputation" or "mode of living," makes the firm into a consumer reporting agency subject to the FCRA.

Yet, on the other hand, much of what we see occurring on the Internet today that may be detrimental to consumers is an outgrowth of mid-2000s interpretations by the FTC that allowed broader and more rapid pre-screening uses of credit reports. Effectively, instead of companies initiating a formal request to a CRA to sell them a list of consumers meeting the firm's desired target criteria, the CRAs simply began affirmatively and aggressively pitching consumer "trigger" lists of "hot leads."

The Federal Trade Commission, in 2006-2007, was sharply criticized by consumer advocates and mortgage brokers for allowing the sale of these "trigger lists" as pre-

screened lists. Yet, from 2005 through to the financial collapse of 2008, the development of “trigger lists” played an important role.

How trigger lists worked to create “hot leads” was simple: a consumer could be negotiating with her preferred lender for a refi, which placed an “inquiry” on her credit report, which gave the CRA a data point that made her a hot lead for instant sale of a trigger list to other potential lenders – the trigger lists were derived from a daily, or ongoing, sweep of changes to consumer reports. The purchasers of trigger lists would then carpet-bomb the consumer’s email account or overload her phone lines. Often, the offers were from firms selling less desirable credit products, but the consumer was under so much pressure, she might not be able to compare them all or make an informed decision.

Today’s Internet lead lists appear to function no differently from the “old” prescreened lists marketed for the intention of selling credit offers. Certainly no one would pay \$5-25 or more for someone’s address to mail them an advertising brochure. Lists of “click-throughs” (which lead to ad serving) may or may not cross the “blurry” line we describe both in these comments and in greater detail in our reports, but “lead lists” certainly appear to do so.

The development of “trigger lists” was an important bridge between traditional FCRA-regulated “prescreening” and the newer system of lead generation on the Internet. We believe that any careful examination of scoring and related applications in use in the Internet ecosystem will reveal that either the FCRA should apply—or, if not, that new safeguards must be enacted. This finding is made more urgent because of the clear findings of regulatory investigations and actions by states, the Department of Justice and the FTC indicating that the primary users of lead generation sites are often problematic firms including predatory online lenders and for-profit colleges. Significant percentages of firms in both sectors have been directly linked to financial fraud and deceptive practices leading to unsustainable levels of debt.

Many companies claim they are not using such data to make financial offers, but only to build audiences. They also claim that the files developed are not on individual consumers, but on clusters of consumers. Not subject to FCRA regulation, they assert, are scores and other products that identify consumers on an aggregate basis—which for them means information narrowed to a small cluster of householders at the ZIP+4 level. Or, they claim that products that identify IP addresses only do not identify individual consumers. To any reasonably knowledgeable observer, neither of these claims holds water.

Further, we believe that given the capabilities and practices of the contemporary-data-driven consumer landscape, an array of detailed information is available through the consumer profile that is used to generate an intelligence-driven marketing process designed to lead to a transaction—such as the sale of a financial product. As ads or other forms of marketing (such as using social media techniques) promoting credit cards or loan products appear in real time directly on a consumer’s phone or computer (based largely on an analysis of an individual’s financial behavior, transactions, history, location,

etc.), it is U.S. PIRG and CDD's emphatic position that these scoring systems should be considered to result in prescreened offers of credit and thus trigger the protections of the FCRA. If the Commission determines that the use is not exactly a FCRA use, it should nevertheless agree, on the basis of the weight of the facts, that the parallel uses subverting the original protections of the FCRA should subject the firms to a set of parallel regulatory protections.¹³

Increasingly, in the authors' views, the bright line that once separated such advertising and regulated transactions subject to the FCRA is blurring. One reason is that the marketing lists are based on massive amounts of financial information. Such information is integrated with a wide range of other data measures, helping make these online scoring profiles more specific to an individual consumer. These scores and other new little-known measures allow financial companies to evaluate the rewards and risks in providing financial products to particular consumers, and then to "micro-target" them.¹⁴

In the next sections, we explain why we have come to these conclusions.

The Rise of Contemporary Online Scoring Practices That Resemble Credit Pre-Screening:

We are aware that many firms generate scores for predicting identity theft and fraud propensity or other uses that are generally non-objectionable. Yet, there are numerous other e-scores in today's marketplace, the operations and role of which are largely unknown to consumers and are worthy of greater scrutiny and policymaker review. As we describe in our forthcoming "Big Data" and financial inclusion report, today, companies use decision-management systems to build a "sophisticated predictive model for every data mining function under the sun." One of the outcomes of this process is the growing array of e-scores. These scores rate individual consumers based on a number of variables connected to their financial status and behavior. Such identifiers can signal what companies believe consumers' lifetime value (LTV) to be, their propensity for purchasing goods, and how they should be treated in terms of offers and consumer service. The scoring function is incorporated in "decision management and prediction" software used by banks and others, capable of rating millions of consumers in minutes." There is growing interest to not serve an individual if their long-term "lifetime value" to a company or product will not generate the revenues desired.¹⁵

FICO's "Revenue Scores," for example, are used to identify "a prospect or customer's true revenue potential ... [to] tell you which individuals have the potential to build and revolve large balances, earning you the most in total revenue." FICO explains that its Revenue Scores "help you find the 24-carat opportunities in your prospect mail base or customer portfolio." It identifies "low-revenue potential" of consumers who fall in various "risk score ranges," which helps companies "rank-order" consumers based on their "future revenue generation."¹⁶ Banks, credit and financial services companies now use a range of data to make decisions on a consumer—from a handful of information to "thousands of data points and machine-based algorithms to better access credit risk."¹⁷ Companies such as Experian use scoring and other data products for their financial services products, taking advantage of today's capabilities to monitor and analyze a

consumer's actions closely, including those considered "thin-file" credit applicants. Experian has described how "the combination of scores and data attributes (both point-in-time and trended) allow for micro-targeting within segments of the near-prime population."¹⁸

eBureau's "eScores" "provide specialty finance lenders and retailers, including cable and telecom service providers," a host of credit-scoring services—including Americans identified as the "60 million underbanked consumer population." It uses a

vast data network that seamlessly integrates billions of records across thousands of databases that cover nearly all US adults and households. eBureau adds over 3 billion new records each month and maintains a current version of each data source as well as monthly historical versions in a single online system With eScores' automated statistical modeling software, over 25,000 variables are commonly incorporated in the model development process, generating superior score performance. eBureau's highly scalable system allows the number of modeling attributes to grow as eBureau's data resources expand. With more data—and more variables—eScores consistently provide greater predictive power This gives eScores access to critical information including: Data; Real property and asset records; Household demographic information; Multiple files containing name, address, telephone and date of birth information; Internet, catalog and direct marketing purchase histories; Various public records such as bankruptcy and deceased files.¹⁹

eBureau products score people using an "Income Estimator," "a model-driven information append service that helps consumer-facing companies quickly estimate a person's income." Among its recommended uses, according to eBureau, are "[s]egmenting online sales leads and targeting appropriate marketing offers, [p]rioritizing call center and receivables management contact strategies, [and] [e]valuating newly admitted hospital patients for charity care program eligibility."²⁰ If these methods aren't forms of pre-screening, we follow with additional examples.

Scoring company Alliant's "ProfitSelect" helps companies "identify the best customers early on and focus your best offers on them. On the other hand, if you know who the slow or non-payers are, in advance, you can limit your exposure to payment risk. ProfitSelect lets you know who's who. ProfitSelect accesses the current transaction histories of over 130 million consumers and delivers a performance score that shows you just how good (or bad) a new customer is likely to be. At fulfillment, in the call center, or online, ProfitSelect lets you know who you are dealing with and how you can manage each opportunity for maximum profitability."²¹

Alliant has "developed a custom payment score that segments consumers into three tiers for offer selection. The scores are delivered in real-time for conversion efforts online and in the call-center. Top prospects with the highest probability of paying and staying receive the original "bill me later" option. Middle tier consumers are offered a premium for upfront payment. Bottom score groups are required to pay by credit card with the

incentive of free shipping and handling.”²² Alliant also uses scoring based on a consumer’s financial behavior for its Online Audiences product. It identifies those who are “financially challenged,” “risky consumers,” “credit card rejects,” “paid cancelers,” “frequent returners,” “credit challenged,” as well as “Big Spenders” and “Financially in Charge.”²³

IXI (a division of Equifax) also offers a suite of scoring products that assess a consumer’s financial behavior and opportunity. It claims, as many other scoring services do, that these products fall outside of the safeguards provided by the Fair Credit Reporting Act. Among its scoring products are the following:

- Income360 Digital: “a powerful estimate of your prospects’ and customers’ total household income”
- DSS Digital: “an estimate of a household’s spending after accounting for fixed expenses of life (housing, utilities, public transportation . . .)”
- Ability to Pay Digital: “ranks online consumers based on their expected ability to pay their financial obligations”²⁴
- Financial Cohorts Digital: “data involving consumer assets; income, spending, and likely availability of credit.” Companies can provide “premium offers to visitors likely to have significant financial potential and save lower value offers for others.”²⁵

To illustrate the role that digital data collection and analysis play in the construction of the online financial marketplace, IXI explains that it can “differentiate visitors in real-time [to] reach more visitors with the desired standard profile and propensities for product and services.” It can thus “serve the right offer with the right message and creative based on visitors’ likely financial position and purchase tendencies.”²⁶

Consumer scoring cannot only determine the future financial wellbeing of Americans, but can also be used to discriminate against certain individuals. As we discuss below, these practices, if involving protected classes, may violate the Equal Credit Opportunity Act and its Regulation B. Among the companies engaged in consumer scoring today are the following:

- Netmining, whose scores use “vast pools of data in real-time” to measure the “value [of] each individual.” Consumers are given “true-interest” scores, which dynamically change based on their individual actions.²⁷
- TellApart, which generates “customer-quality scores” for each consumer, using “predictive models [that] evaluate thousands of data features.” These scores are used to “‘tell apart’ high-quality visitors from the rest [E]ach of your visitors will see a unique section of products.”²⁸
- Adroit Digital, which employs “P3 scores” that reflect “Personal, Purchase and Propensity” information on consumers, and which are integrated into “300 million cookies” a month and used for online targeting.²⁹
- Dstillery, which focuses on mobile users, with the data targeting company claiming that it can “score and rank the universe of mobile user events . . . through

our observations of billions of user actions over time.”³⁰

There are many other scoring products used in the marketplace that involve so-called “untraditional” data and raise consumer-protection concerns. For example, Credit Optics’ “supplemental score” evaluates consumers’ credit worthiness by assessing their “stability.” Its score “gauges risk by examining the velocity of account openings along with changes in the consumer’s phone numbers, addresses and additional identifiers—all in real time.”³¹ Moven’s CredScore utilizes “a combination of financial wellness, social media metrics, transactional insight, and feedback loops” The CredScore affects a consumer’s “monthly fees, other processing charges, interest rates on savings, [and] availability to credit facilities.”³² There are numerous other scores, such as ones identifying a “Buyer” and “Influencer.” Consumers can be assigned a “social credit score,” which uses their social media activities to help determine how they are evaluated for financial products and services.³³ Consumers also confront an array of “propensity” scores that are designed to identify and take advantage of online and off-line behaviors and experience.³⁴

Neustar’s “Buying Power” applications enable its customers to “gain instant intelligence on households likely to have the financial capacity to buy specific products or services. Ultimately, businesses can leverage these financial insights to tailor offers and promotions to match consumers with the most appropriate product or service and improve conversion rates and return on marketing investments, and improve customer experiences.”³⁵ Neustar says its scoring application can “match the right consumer with the right offer at the right price,” explaining that “proprietary financial insight is delivered to help differentiate between groups of households that may appear to be identical using traditional segmentation platforms, but in fact are likely to have considerably different purchasing power. Buying Power Insight was designed to deliver insights about a household’s expected financial resources by combining aggregated credit information and household-level demographics to build predictive segments based on the likelihood of household groupings to respond to offers and make purchases. With this insight, marketers can match prospects with the relevant product or service and the right promotion or offer.”³⁶ TruSignal’s uses “a wide variety of offline consumer data from over 40 third party data sources, including financial databases, property records, census, demographics, past purchases, household databases,” and more for its scoring products. Among the consumers who can be targeted online are those identified as “underbanked,” those seeking higher education and life and auto insurance, and with categories analyzing their “estimated financial health” and “estimated household income.”³⁷

These and other scores impact consumers on a daily basis, affecting their economic and personal lives, and yet they are unaccountable to the consumers they serve.

Segmentation and Propensity Practices Involve Scoring Techniques and Require Safeguards

Numerous “propensity models” are also deployed in the marketplace, helping trigger a set of decisions that impact consumers, including those seeking financial services.³⁸ As KXEN explains in a description of its scoring product, a company today can build

“sophisticated predictive models for every data mining function under the sun.”³⁹ Acxiom’s Audience Propensities product, for example, “incorporates consumer behavior, 3rd party transactional, response and other types of channel data to model purchase propensities, brand affinities, in-marketing timing and shopping channel preference.” It applies “advanced analytical algorithms ... creating a model score that rates the probability of a specified action and/or affinity. Model scores predict the likelihood of consumers to respond to particular messages and offers”⁴⁰ Propensities addressed include spending, assets, attitude, and behavior.

Economically hard-pressed Americans, who through no fault of their own lost jobs, homes, and resources as a result of the unregulated financial marketplace that led to the 2008 economic crisis, should not be subjected to practices that can disadvantage them still further. Nielsen’s 2013 P\$YCLE Segmentation System, for example, identifies Americans who fall into the following categories:

- Bottom Line Blues are “... the most financially challenged segment. No other has fewer income-producing assets, and few rank lower when it comes to income or home ownership. Concentrated in inner-city neighborhoods ... [they spend] their leisure time going online, eating at fast-food restaurants, and listening to music.”
- Payday Prospects “... find themselves living paycheck to paycheck ... tend to rent their exurban homes, many of which are mobile homes [M]any are saddled with student, personal, and auto loans, and they own few investments or insurance products beyond renter’s and auto coverage”
- Fiscal Fledglings are the “... group with the lowest levels of income and assets Their financial holdings consist mainly of student loans and non-interest-bearing checking accounts. They also are the least likely of all groups to have auto, life, or residential insurance This group represents one of the top markets ... for African-American targeted radio stations and cable TV networks.”
- Social Insecurity is “filled with ethnically diverse widows and widowers who rely on Social Security and Medicare/Medicaid for survival. With downscale incomes and low income-producing assets Financially strapped, most Social Insecurity residents lead quiet lifestyles in their older city apartments: there’s little money for travel, nightlife, or dining out. Instead, this segment is the top-ranked audience for daytime television, particularly game shows, Spanish-language shows, and soaps.”⁴¹

Data-driven propensity scores and services, along with micro-segmentation practices, operate opaquely and contribute to decision-making that can place a consumer at a disadvantage.

Big Data Scores Used For Credit Decision-Making May Not Have Predictive Value and May Pose Discrimination/Disparity Issues

If a firm, such as Lendup or Moven, uses e-score variables to predict the creditworthiness

of its own potential customers, it, of course, does not become a Consumer Reporting Agency and its activities are not regulated by the Fair Credit Reporting Act. As an FTC official recently told the Wall Street Journal:

“Under the Fair Credit Reporting Act, consumer-reporting companies such as Experian and Equifax must verify that a borrower's credit history is accurate if a consumer disputes the information. However, companies that use social media in their lending decisions don't have to verify that information since they don't provide it to third parties like a reporting agency does, said Maneesha Mithal, the associate director of the FTC's division of privacy and identity protection.”⁴²

However, as the National Consumer Law Center recently explained, the information used to create the score may not accurately “generate a predictive score,” and while such firms may not run afoul of the FCRA, their actions may pose Equal Credit Opportunity Act concerns:

With big data, there is no independent source confirming the accuracy or reliability of the algorithms used to generate a predictive score. Nor is there transparency regarding how the score is calculated. Consumers obtaining loans based upon this score have no real way of knowing whether the loan really is tailored for them or whether this is an elaborate marketing scam. As discussed next, the FCRA does not explicitly require credit scores to be predictive of creditworthiness. However, Regulation B, the implementing regulation for the Equal Credit Opportunity Act (ECOA), does address predictiveness. Regulation B requires that a credit scoring system satisfy four criteria....”⁴³

In addition, the NCLC also buttresses our concern that data broker-sold databases that do not fully identify a consumer by name are still important in the generation of e-scores and may establish an FCRA relationship:

In some cases, the consumer's name may actually be irrelevant. Hypothetically, if an online lender uses an analysis of the websites a potential borrower views based upon the cookies on the computer applying for the loan, then the most important piece of identifying information for that consumer may be the IP address and not the potential borrower's name. Still, since the lender is using the IP address as a proxy for an individual, a report about that IP address should be considered a consumer report because it can reasonably be linked to the consumer who will be repaying the loan.⁴⁴

The Growth of Location Scoring, Including Hyper-location, Raises Serious Consumer Protection Issues

As the commission recognizes from its work on mobile data collection, there has been a significant expansion of highly granular commercial data tracking and targeting of consumers. Hyper-local targeting now incorporates the use of various forms of scores, which can identify and help influence how a single consumer, set of consumers, or one's neighborhood are assessed and served. Beyond the critical privacy issue raised by the

merging of online and “physical” environments is a more fundamental question on the impact—including potential discriminatory applications—of such geographical, economic, race-based analysis. For example, Place IQ, among others, has carved up the U.S. into very discrete geographic boundaries it calls “tiles,” as it explained to eMarketer: “What we do is map data from multiple sources onto a grid of tiles that cover every square foot of the US. Each tile is 100 meters by 100 meters, and we inject third-party demographic information about that area into the tile, as well as data on what’s physically located there— points of interest like parks and airports, tourist attractions, retailers, stadiums, and so forth. Then, we connect that data with where a mobile device is in real time, or where it has recently been, to build unique audience segments for brands to target.”⁴⁵

In a new patent, Place IQ illustrates the role that scoring plays in analyzing a consumer for targeting, including the role of “tile-attribute scores,” “location-attribute scores,” “user-attribute scores,” and practices related to the behavior and location of others.⁴⁶ U.S. PIRG and CDD urge the commission to open up an inquiry into the use of such tiles, especially how they are used to score and serve consumers. These practices may lead to new forms of discrimination, as consumers are treated differently based on race, ethnicity, income, etc.

“Geoperformance Scores” offered by Alliant are another example of how location is increasingly incorporated into the scoring and consumer-targeting apparatus. These “[s]cores reveal the buying habits, payment history, and demographics of 130 million active US consumers—as reported by some of the largest direct and interactive marketers in the business.” The scores rank what Alliant terms are “geographies,” such as Zip codes, and “micro-geographies,” using data that “covers the behavioral waterfront: household income, recency of purchase, product preferences, detailed payment and transaction histories and much more”⁴⁷

The scoring of consumers based on location operates outside of their expectations, and illustrates why the scoring industry should be required to operate transparently and with accountability—including to the communities in which they operate.

The Differential Treatment of Consumers and Scoring with Customer Service

Scoring is used to evaluate and determine how individual consumers will be treated—in terms of offers and service (such as on the phone). Such practices are not disclosed. This may also raise Section 5 unfair or deceptive practices concerns. For example, working with a “Fortune 500 and Top 5 Cable Operator,” eBureau helped “determine the appropriate equipment and service packages to sell each new customer.” It built a “custom model . . . that identified and segmented the risk for every online lead, ultimately scoring and rank ordering each customer for appropriate level of service and equipment.”⁴⁸ How a consumer is treated in call centers, for follow-up, and with offers is also increasingly influenced by these scores. For example, Neustar’s Buying Power Score enables companies to determine, online or at a specific location, “which prospects were most likely to purchase specific products and what kinds of payment programs were most likely to appeal to those prospects Each incoming call or online lead is categorized

on these elements, which allows the sales agents to instantly deliver an offer tailored to insights about each consumer's propensity to purchase and predicted preferences."⁴⁹ Neustar's data sources include household income, household demographics, and financial data, delivered in real time.⁵⁰ Its AdAdvisor product uses cookies to help its clients apply scoring applications online.⁵¹

The Role of Online Lead Generation and E-scores

As discussed earlier, online lead-generation practices play a key role in the creation of scoring services and require serious scrutiny by the commission. Lead-gen services are used to stealthily capture and sell a consumer's information, which can involve the identification of a prospect (a so-called "hot" lead) for a loan or some other financially connected product and also provide the data used to score that individual. Through encouraging consumers to provide information, including under the pretext that they will gain some information or access an online tool such as a calculator, data are gathered on individuals (with a cookie or cookies placed on their browser for future retargeting). Various forms of data analysis are used, including by companies engaged in scoring, to help generate additional information on consumers.⁵² Their information is then sold, increasingly in real time and therefore involving locational data, so they can be targeted for various financial and related products. Lead-generation practices today incorporate the same set of offline and online data integration and targeting techniques used by digital marketers and many others.⁵³

Neustar explains that lead scoring "forecasts the likelihood of a consumer to exhibit certain behaviors by analyzing multiple attributes, isolating those most highly correlated with the desired outcome and producing a score. This insight empowers the response team to identify the potential value of a consumer and take specific, customized action on a lead-by-lead basis. Questions about a prospect that Lead Scoring can answer include: Is this caller likely to purchase premium life insurance? Is this prospective student likely to enroll in online classes? Is it likely that this direct mail respondent will purchase our value product line?" Reflecting the evolution of e-scoring and lead generation to incorporate online consumers, "with Neustar's "On-Demand Lead Scoring solutions marketers can identify, verify, and evaluate leads at the moment of interaction—whether it's on the phone, over the Web or at the point of sale."⁵⁴

eBureau's eTarget data-append product enables "online marketers [to] instantly gain a comprehensive perspective of their opt-in website visitors" (online leads). Among the data it provides are household income, educational level, occupation, political affiliation, gender, age, which it uses to identify "score segmentation."⁵⁵ Alliant offers a range of lead-generation score-related services, such as "Alliant Engage," to "instantly determine the value of leads and lead sources ... [and] use custom lead scoring models to pinpoint profit-driving behaviors for specialized markets such as education, credit offers, and subscriber services," while its "Campaign Intelligence" product can "identify behaviors that increase profit and target the prospects who are ready to respond."⁵⁶ Lead-generation revenues for 2012 were \$1.7 billion for the online industry, according to the Interactive Advertising Bureau.⁵⁷ Illustrating the important role "lead-gen" plays

today, members of the IAB Lead Generation Committee include scores of companies, including Google, eBureau, Edmunds, Microsoft, Univision, and Pontiflex.⁵⁸

Data Collection Practices Used for Scoring Have An Impact on Privacy

Consumers are neither aware of the extent of data that are collected concerning their various activities, online and off, nor how this surveillance is carried out. The amount of financial data on an individual that can be readily obtained is staggering. Consumers are not sufficiently informed that so much information can be captured by forms of marketing-automation software designed to gather and analyze consumers' "digital body language." The consumer-financial-data-complex engages in wide-ranging gathering of an individual's data, including—as industry likes to say—across all "touchpoints." For example, Merkle's single repository of data includes an analysis of individuals' offline and online media use (including mobile, social, and print), "life events," demographics, and what "Life-Time Value segment" they are in.

Conclusion:

The bottom line is that tremendous amounts of data are being collected in real time on individuals, without any real limits on what can be collected or how it is used, and we know that the e-scores and other metrics generated by the data are affecting the consumers' financial opportunities and choices. What we do not know, is how often the effect is positive for the consumer and how often it is negative. That's because there is no transparency at all in today's digital collection system and little ability for an individual to assume some measure of control. Much of the information collected and used on consumers is connected to their financial interests—either assessing their worth, value, prospects for credit, loans, and additional ways for them to spend their resources. That the data are being collected and used in the new dimension of location, or where the consumer is at any given time, adds to its potential power. Scoring products are a symptom of a much larger privacy and consumer protection problem. In the absence of legislation, and with regulators too often constrained, Americans confront an environment in which neither their privacy is safe nor their activities meaningfully protected from unfair or harmful practices. The FTC should reiterate how unacceptable the failure to enact meaningful privacy legislation is for consumers today.

For many years, under the FCRA, the detailed analog dossiers based on "creditworthiness," "reputation" or "mode of living" could (and still, when FCRA applies) only be sold for marketing purposes if (1) those marketing purposes are limited to "credit or insurance," and (2) the consumer receives a "firm offer of credit" and (3) the consumer has a right to opt-out of those uses.

None of these conditions seems to apply in the digital world of the Internet, where Internet lead generation companies provide financial marketers with a wide range of tools to help them capture and then capitalize on a consumer's information. Online display and search engine ads for financial products and services are used to generate leads, such as "lower your monthly payments," "free life insurance quotes," or "Find Your Perfect Degree in 3 Steps!," where a "call-to-action" click will trigger the collection of data identifying a prospective customer.⁵⁹ One popular technique is the placement of online calculators that can be specially configured to promote credit cards, credit line, college

planning, insurance, and retirement products.⁶⁰ Consumers are unlikely to realize as they investigate a loan offer on a website page that it has been purposely structured to ensure they complete the transaction, including interacting with the calculator.

Unless the FTC acts, the FCRA, which provides a robust system of consumer protections for marketing uses of financial information is in danger of being replaced by an online unregulated non-transparent system characterized by firms that have aggregated much more information about consumers than even the big credit bureaus—the original users of Big Data – dreamed of. The problems identified also implicate the FTC’s Section 5 authority over Unfair and Deceptive Acts or Practices and its enforcement of the Equal Credit Opportunity Act.

Even better for the firms, and worse for consumers, the corporations – many of which are strictly business-to-business firms trolling through a consumer’s life without her knowledge, can use these data in real time due to the massive analytical power available in today’s systems, without granting consumers any rights or taking on any significant corporate responsibilities.

We believe that this threat raises troubling questions. We commend the agency for discussing them at this public workshop. We are certainly aware that some industry organizations represent that their only use of scoring systems on the Internet is to create audiences, or for FCRA-exempt or FCRA-compliant uses (including Identity theft and fraud analytics). The questions, however, are too large to ignore. Our view is that a larger debate, and action by the FTC, is required.

¹ Note that parts of these comments are drawn from our ongoing inquiries into the matters before the FTC. Both U.S. PIRG’s Ed Mierzwinski and CDD’s Jeff Chester have conducted research on e-scores as part of

² U.S. PIRG means U.S. PIRG and its affiliate, the U.S. PIRG Education Fund, throughout.

³ Rob Hudson, “How Card Issuers Can Leverage Big Data to Improve Cardholder Retention Efforts,” TSYS, http://www.tsys.com/Downloads/upload/2013_TSYS_Big_Data_White_Paper_Video.pdf (viewed 10 Feb. 2014).

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⁵ Mierzwinski and Chester, “Big Data Means Big Data Opportunities and Big Challenges: Promoting Financial Inclusion and Consumer Protection in the ‘Big Data’ Financial Era.”

⁶ eBureau and TruSignal, “How Do You Find Your Next Customer: Pre-Qualify Audiences for High Value Leads,” LeadsCon West, 29 Feb. 2012. <http://www.slideshare.net/trusignal/leadscon-workshop-featuring-selectquote> (viewed 8 Mar. 2014).

⁷ See, for example, Teradata Aster, “Deeper Insights for Financial Services,” <http://www.asterdata.com/solutions/financial.php>; Merkle, “Marketing Imperatives for Banking and Finance,” Apr. 2013, <http://www.merkleinc.com/sales-collateral/marketing-imperatives-banking-and-finance> (both viewed 8 Mar. 2014).

⁸ See, for example, Kate Kaye, “New Forrester Study Singles Out Top Data Management Platforms,” *Ad Age*, 21 Aug. 2013, <http://adage.com/article/datadriven-marketing/marketers-dmps/243746/>; Merkle, “Connected Recognition,” <http://www.merkleinc.com/what-we-do/database-marketing-services/connected-recognition>. The commission should review the use of Big Data analytics and its impact in financial services, such as what is possible with Hadoop and MapReduce. See, for example, Teradata, “Financial

Services,” <http://www.teradata.com/industry-expertise/financial-services/> (all viewed 8 Mar. 2014). The scoring function is embedded in a wide range of services and applications that interact daily with consumers, all without any meaningful transparency, accountability, or safeguards. The so-called programmatic ad exchange market, in which consumers are bought and sold in milliseconds, uses a form of such scoring. Indeed, so does the related field of behavioral advertising.

⁹ Marc Trudeau and Stephen Drees, “Next-Gen Card Marketing: Meeting the Expectations of New Consumers ... And Your Existing Ones.” Acxiom, 2013, <http://www.paymentsource.com/media/pdfs/CFE13-Acxiom.pdf> (viewed 11 Feb. 2014).

¹⁰ For examples of data onboarding, see LiveRamp, <https://liveramp.com/>; DataXu, “Announcing Enhanced CRM Toolkit for the Enterprise Marketer!” <http://www.dataxu.com/enhanced-crm-partners/>. For the integration of first-, second-, and third-party data, see Lotame, “1st, 2nd, 3rd Party Data: What Does It All Mean?” <http://lotame.com/1st-2nd-3rd-party-data-what-does-it-all-mean> (all viewed 10 Feb. 2014).

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¹² Mark Ryan, “Visitor Scoring with Custom Dimensions in Universal Analytics,” ClickZ, 24 July 2013, <http://www.clickz.com/clickz/column/2284342/visitor-scoring-with-custom-dimensions-in-universal-analytics>; Google, “Custom Dimensions & Metrics—Feature Reference,” Google Developers, <https://developers.google.com/analytics/devguides/platform/customdimsmets> (both viewed 8 Mar. 2014).

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¹⁵ Mierzwinski and Chester for U.S. PIRG Education Fund and the Center for Digital Democracy, “Big Data Means Big Data Opportunities and Big Challenges: Promoting Financial Inclusion and Consumer Protection in the ‘Big Data’ Financial Era.” (This report will be released later this month.)

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¹⁸ Experian, “Expanding the Marketable Universe,” 2011, <http://www.experian.com/assets/consumer-information/white-papers/universe-expansion-white-paper.pdf> (viewed 8 Mar. 2014). The commenters urge the FTC to examine the credit scoring marketplace to assess how data are used to generate risk scores, especially using non-traditional data. See our Casey report for a discussion.

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attribute score; storing the user-attribute score in a user-profile datastore; and wherein, obtaining a location history of a user comprises: obtaining a plurality of pairs of geolocations and times at which the user was at the geolocation, the geolocation being determined based on a wireless environment of a hand-held computing device; obtaining a location-attribute score of a location comprises: mapping a location in the location history to a tile in a geographic information system (GIS), the tile being a quantization of a geographic area described by the GIS and including the location; and retrieving a list of tile-attribute scores for the tile from the GIS, the tile-attribute scores each describing a potential activity of a user while in the tile and a statistical likelihood that a user is engaging in the activity based on behavior of other users while in the tile; determining a user-attribute score comprises: for each tile-attribute score in the list of retrieved attribute scores, updating an average of scores for the respective attribute for the user based on scores of tiles corresponding to previous locations of the user; and storing the user-attribute score comprises: storing the updated averages for each attribute in a profile of the user in the user-profile datastore, wherein the user-profile datastore is operative to receive a request for attributes of a user from an advertiser, retrieve attributes of the user from a responsive user profile, and identify attributes of the responsive user to the advertiser to assist the advertiser with the selection of advertisements for the responsive user.” PlaceIQ, “Apparatus and Method for Profiling Users,” Patent Application, 4 Jan. 2013, <http://www.uspto.gov/web/patents/patog/week29/OG/html/1392-3/US08489596-20130716.html> (viewed 9 Mar. 2014).

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contacted by a marketer (email, postal, telephone, fax). These processes are priced on a performance basis (e.g., cost-per-action, -lead or -inquiry), and can include user applications (e.g., for a credit card), surveys, contests (e.g., sweepstakes) or registrations.” Interactive Advertising Bureau, “IAB Internet Advertising Revenue Report: 2013 First Six Months’ Results,” Oct. 2013, <http://www.iab.net/media/file/IABInternetAdvertisingRevenueReportHY2013FINALdoc.pdf> (viewed 10 Feb. 2014).

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