NOTICE TO ALL ENTITIES AND PERSONS LICENSED BY THE CONNECTICUT INSURANCE DEPARTMENT

CONCERNING

THE USAGE OF BIG DATA AND AVOIDANCE OF DISCRIMINATORY PRACTICES

PURPOSE: This Notice of the Connecticut Insurance Department ("Department") is intended to remind all entities and persons licensed by the Department that the Department continues to expect such entities and persons to use technology and Big Data in full compliance with anti-discrimination laws.

The Department is supportive of the insurance industry’s use of technological advances and opportunities to provide innovative products and services to consumers and to operate more effectively and efficiently. In addition, the Department recognizes the potentially transformative and diverse nature of what is colloquially called Big Data. With this notice, we wish to remind insurers of their continuing obligation to use technology and Big Data responsibly and transparently in full compliance with Federal and State anti-discrimination laws.

In doing so, the Department recognizes the transitory nature of three aspects of the usage of Big Data:

1. Insurers continue to be responsible and accountable for ensuring that Big Data that is used within their business operations, and that may also be provided to them by vendors, is in compliance with Federal and State anti-discrimination laws. The insurance industry’s use of Big Data may include, but not be limited to, data gathering, product design, marketing, distribution, management, rating, underwriting and claims activities regardless of whether parties are using their own algorithms, predictive models, and/or processes or have purchased or contracted for joint development of algorithms, models, or processes from third-party developers or vendors.

2. The definition of the Big Data ecosystem is wide, varied, and rapidly evolving from a diversity of sources, such as consumer intelligence, social media, credit and alternative credit information, retail purchase history, geographic location tracking and telematics, mobile, satellite, behavioral monitoring, psychographic / biographic / demographic / firmographic data, sensors, wearable devices, RFID, etc.

3. As part of its role in regulating the Connecticut insurance industry, the Department has the authority to require that insurance carriers and third-party data vendors, model developers, and bureaus provide the Department with access to data used to build models or algorithms
included in all rate, form, and underwriting filings. (For reference, Appendix A provides examples of the types of questions that may be requested by the Department as part of an examination).

Having recognized the above, the Department would like to reiterate the potential for regulatory concerns with regards to the following general topics:

a. **Internal data deployment**: Insurers should be sensitive to how Big Data utilized as a precursor to or as a part of algorithms, predictive models, and analytic processes, including but not limited to, the purposes outlined above in items #1 and #2.

b. **Internal data governance**: How Big Data is governed throughout the precursor to its usage within the insurance industry, where such data resides and is used within the insurance industry, and how such data subsequently moves into industry archives, bureaus, data monetization mechanisms, or additional processes within or beyond the insurance ecosystem. The Department wishes to emphasize the importance of data accuracy, context, completeness, consistency, timeliness, relevancy, and other critical factors of responsible and secure data governance.

c. **Risk management and compliance**: How Big Data algorithms, predictive models, and various processes are inventoried, risk assessed / ranked, risk managed, validated for technical quality, and governed throughout their life cycle to achieve the mandatory compliance mentioned above.

Any questions regarding this Notice may be directed to: cid.mc@ct.gov.

[Signature]
Andrew N. Mais
Insurance Commissioner
APPENDIX A

In an effort to afford guidance, the Connecticut Insurance Department is providing the following examples of the types of information that may be requested during the course of an examination specific to the usage of data brokers.

The organization:
Information about the organization including how many employees are there in the company and who oversees all data related questions

Data source:
1. Where does the data that is offered to insurers come from? Is it public or private sources or a combination of both?
2. Provide the name of all data sources, vendors, brokers, aggregators, bureaus, etc. utilized as part of your services, products, or offerings, indicating if the sources are public or private.
3. How often is the data collected?
4. Are all the data sources documented and checked for reliability, accuracy, consistency and completeness?
5. Is data collected that is regulated in use like age, gender, race, income, marital status?

Data storage:
1. Provide the privacy protections used and/or followed when storing the data including the methods used.
2. Do you have any insurance coverages for consumer data breaches? If Yes, describe the types of insurance coverages purchased and if No, describe why insurance is not purchased and how the costs of a potential incident will be handled if a breach occurs.
3. Describe how you notify state and federal regulators when you experience a breach and explain the method and time taken to notify regulators after a breach.

Data curation:
1. How many iterations of the raw data are done before it is shared with the user and provide a list of the number of iterations and describe the general process of preparing the data for sale/consumption.
2. What data validation methods are used once it is transformed and provide a list of the name of methods and general process of data validation and accuracy determination.
3. What standards are used for validation and list such validation standards used and general process for following the standards and fixing any problems or issues that occur? Are these standards Internal, External standards or Combination of both?
4. How are these standards checked for compliance with insurance regulation?

Data documentation:
1. How are the data transformation processes documented and describe process methods and standards?
2. How often is the documentation process updated?
3. Is the documentation/update process reviewed internally or externally? By whom?
4. Are errors reported to users or authorities? Please describe this process and notification process.
5. What corrective action is taken to prevent future errors?