Date of Hearing: April 8, 2021

ASSEMBLY COMMITTEE ON PRIVACY AND CONSUMER PROTECTION
Ed Chau, Chair
AB 13 (Chau) – As Amended March 25, 2021

SUBJECT: Public contracts: automated decision systems

SUMMARY: This bill would establish the Automated Decision Systems Accountability Act of 2021, which would require state agencies seeking to procure automated decision systems (ADS) for high-risk applications to consider, among other things, steps taken by a prospective contractor to identify and mitigate potential disparate impacts that could result from use of that ADS; require a prospective contractor for an ADS for a high-risk application to submit an ADS impact assessment containing specified information about the ADS; and would require the contracting agency to submit to the Department of Technology (CDT) a high-risk ADS accountability report containing specified information regarding their proposed use of the ADS. Specifically, **this bill would**:

1) Require that contract awards for goods or services that include the use, licensing, or development of an ADS for a high-risk application be based on the proposal that provides the most value-effective solution, as defined, to the State's requirements, as determined by the evaluation criteria contained in the solicitation document, and be determined based on a comprehensive assessment of objective criteria not limited to cost alone.

2) Specify that a bid response submitted by a prospective contractor for a good or service that includes the use, licensing, or development of an ADS for a high-risk application shall not be considered responsive to the solicitation document unless the bid response includes an ADS impact assessment (AIA) that makes specified disclosures to the contracting agencies, including:

    - the name, vendor, and version of the ADS and its general capabilities;

    - the purpose of the ADS, including the decision or decisions it can make or support, and its intended benefits compared to alternatives;

    - a thorough explanation of how the ADS functions, the logical relationship between data inputs and outputs, and how those outputs relate to the decisions made or supported by the system;

    - affirmative steps taken by the prospective contractor, or third-party engagement, to conduct legitimate, independent, and reasonable tests of the ADS to assess risks posed to the privacy or security of personal information and risks that may result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons;

    - any potential disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act from the proposed use of the ADS, including reasonably foreseeable capabilities outside the scope of its proposed use;

- internal policies the prospective contractor has adopted for identifying potential disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act resulting from the proposed use of the ADS;

- best practices for the proposed high-risk application of the ADS to avoid or minimize disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act, as specified;

- any additional information specified in the solicitation, or otherwise required by the contracting agency for the purpose of effectively evaluating and avoiding or minimizing disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act from the use of the ADS; and

- any additional information required in accordance with regulations adopted by CDT.

3) Require a state agency that awards a contract for goods or services that include the use, licensing, or development of an ADS for a high-risk application to, within 10 days of awarding that contract, submit to CDT a high-risk ADS accountability report (HAAR) that includes specified clear and understandable statements, including:

   - the name, vendor, and version of the ADS;

   - the type or types of data that will be used as inputs for the ADS, how that data will be generated, collected, and processed, and the type or types of data the system is likely to generate in the course of its proposed use;

   - a description of the purpose of the ADS, including what decision or decisions it will be used to make or support, and a detailed determination of whether, and how, the ADS serves reasonable objectives and furthers a legitimate interest;

   - a clear use and data management policy that includes specified protocols;

   - a description of how the agency will ensure that all personnel responsible for the adoption and operation of the ADS or access its data are knowledgeable about, and able to ensure compliance with, the use and data management policy prior to the use of the ADS and throughout its contracted use;

   - a description of how the agency will ensure that all personnel responsible for the adoption and operation of the ADS understand its decisional criteria, the respective weights of those criteria, and the factors that may affect or underlie specific results the ADS produces;

   - a description of any public or community engagement that has been carried out, and any intended future public or community engagement, pertaining to the use of the ADS;

   - a description of any potential disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act from the proposed use of the ADS, and a detailed mitigation plan for identifying and minimizing the potential for any disparate impacts throughout the contracted use of the system, including procedures to regularly audit its performance;

- a description of the fiscal impact of the use, licensing, and deployment of the ADS, and any cost savings that would be achieved through the use of the ADS, as well as a comparison with the costs of alternative solutions for achieving the agency's purpose; and

- the extent to which members of the public have access to the results of the ADS and are able to correct or object to its results, and where and how that information will be made available and any applicable procedures for initiating corrections or objections, as appropriate.

4) Require that, within 30 days of awarding a contract subject to this bill, and for the duration of that contract, CDT publish on its internet website both the AIA and the HAAR.

5) Authorize CDT to adopt regulations and publish guidelines as necessary to effectuate the purposes of the bill.

6) Authorize a local agency, for a contract for a good or service that includes the use, licensing, or development of an ADS for a high-risk application, to require a bid response submitted by a prospective contractor to include an AIA in order to be considered responsive to the solicitation; and to base the contract award on the proposal that provides the most value-effective solution to the agency's requirements, as defined.

7) Define "automated decision system" to mean a computational process, including one derived from machine learning, statistical modeling, data analytics, or artificial intelligence, that issues a score, classification, recommendation, or other simplified output, as defined, that is used to support or replace human decision-making and materially impacts natural persons.

8) Define "high-risk application" to mean use of an ADS for which any of the following apply: (1) poses a significant risk to the privacy or security of personal information or has the potential to result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons, taking into account the novelty of the technology used and the nature, scope, context, and purpose of the ADS; (2) affects the legal rights, health and well-being, or economic, property, or employment interests of a natural person, or otherwise significantly impacts a natural person; (3) involves the personal information of a significant number of individuals with regard to race, color, national origin, political opinions, religion, trade union membership, genetic data, biometric data, health, gender, gender identity, sexuality, sexual orientation, criminal record, or any other characteristic identified in the Unruh Civil Rights Act; or (4) meets any other criteria established by CDT in regulations.

9) Define "value-effective" to include, but not be limited to, the following: (1) the quality and effectiveness of steps taken by the prospective contractor to prevent disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act; and (2) the extent and quality of the internal policy adopted by the prospective contractor for how bias in the ADS is identified and mitigated to prevent disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act, and how it will respond to claims or evidence of bias that may arise within the terms of the contract.

EXISTING LAW:

1) Establishes the State Contract Act, which prescribes certain standards and procedures governing the process of soliciting and awarding contracts for state procurement of goods and services, and, among other things, specifies that whenever provision is made by law for any project that is not under the jurisdiction of the Department of Water Resources, the Department of Parks and Recreation, the Department of Corrections and Rehabilitation, as specified, the Department of Transportation, the High-Speed Rail Authority, or the Military Department, the project shall be under the sole charge and direct control of the Department of General Services (DGS). (Pub. Con. Code Sec. 10100, et seq.; 10107.)

2) Specifies that, on the day named in a public notice advertising a state contract, the contracting department shall publicly open the sealed bids and award the contracts to the lowest responsible bidders. (Pub. Con. Code Sec. 10180.)

3) Establishes, within the Government Operations Agency, the Department of Technology (CDT), and generally tasks the department with the approval and oversight of information technology (IT) projects, and with improving the governance and implementation of IT by standardizing reporting relationships, roles, and responsibilities for setting IT priorities. (Gov. Code Sec. 11545, et seq.)

4) Finds that the unique aspects of IT goods and services and their importance to state programs warrant a separate body of governing statutes that should enable the timely acquisition of IT goods and services to meet the state's needs in the most value effective manner. (Pub. Con. Code Sec. 12100(a).)

5) Provides that all contracts for the acquisition of IT goods and services related to IT projects, as defined, shall be made by or under the supervision of CDT as provided, and endows CDT with the final authority for all of the following: the acquisition of IT goods and services related to IT projects; the determination of IT procurement policy; the determination of IT procurement procedures applicable to IT acquisitions and telecommunications procurements; and the determination of procurement policy in telecommunications procurements. (Pub. Con. Code Sec. 12100(b)-(e).)

6) Requires DGS to maintain, in the State Administrative Manual (SAM), all policies and procedures governing the acquisition and disposal of IT goods and services, including, but not limited to, the policies and procedures that CDT is authorized to establish for the acquisition of IT projects, as specified. (Pub. Con. Code Secs. 12102(a); 12102.1(a).)

7) Provides that the State Contracting Manual shall set forth all procedures and methods that shall be used by the state when seeking to obtain bids for the acquisition of IT; that revisions to the manual must be publicly announced; that DGS and CDT shall develop, implement, and maintain standardized methods for the development of all IT requests for proposals; and that all IT requests for proposals shall be reviewed by CDT prior to release to the public. (Pub. Con. Code Sec. 12104.)

8) Expresses the intent of the Legislature that policies and procedures developed by CDT and DGS pertaining to the acquisition of IT goods and services provide for all of the following: the expeditious and value-effective acquisition of IT goods and services to satisfy state requirements; the acquisition of IT goods and services within a competitive framework; the

delegation of authority by DGS to each state agency that has demonstrated to the department's satisfaction the ability to conduct value-effective IT goods and services acquisitions; the exclusion from the state bid process of any supplier having failed to meet prior contractual agreements related to IT goods and services; and the review and resolution of protests submitted by any bidders with respect to any IT goods and services acquisitions. (Pub. Con. Code Sec. 12101.)

9) Requires that contract awards for all large-scale systems integration projects be based on the proposal that provides the most value-effective solution to the state's requirements, as determined by the evaluation criteria contained in the solicitation document, and provides that evaluation criteria for the acquisition of IT goods and services, including systems integration, shall provide for the selection of a contractor on an objective basis not limited to cost alone. (Pub. Con. Code Sec. 12102.2(a).)

10) Provides that "value-effective acquisition," for the purposes of state IT acquisition, may be defined to include all of the following: the operational cost the state would incur if the bid or proposal is accepted; the quality of the product or service, or its technical competency; the reliability of delivery and implementation schedules; the maximum facilitation of data exchange and systems integration; warranties, guarantees, and return policy; supplier financial stability; consistency of the proposed solution with the state's planning documents and announced strategic program direction; the quality and effectiveness of the business solution and approach; industry and program experience; the prior record of supplier performance; supplier expertise with engagements of similar scope and complexity; the extent and quality of the proposed participation and acceptance by all user groups; proven development methodologies and tools; and innovative use of current technologies and quality results. (Pub. Con. Code Sec. 12100.7(e).)

11) Provides, pursuant to the Unruh Civil Rights Act, that all persons within the jurisdiction of this state are free and equal, and no matter what their sex, race, color, religion, ancestry, national origin, disability, medical condition, genetic information, marital status, sexual orientation, citizenship, primary language, or immigration status are entitled to the full and equal accommodations, advantages, facilities, privileges, or services in all business establishments of every kind whatsoever. (Civ. Code Sec. 51.)

FISCAL EFFECT: Unknown

COMMENTS:

1) **Purpose of this bill**: As state agencies adopt more sophisticated technology to effectuate their mandates, this bill seeks to ensure that equitable decision-making remains a priority for the State by providing a mechanism for contracting agencies to give informed consideration during the procurement process to the potential of an ADS used for a high-risk purpose to result in disparate impacts or discriminatory outcomes disadvantaging certain segments of the population. This bill is sponsored by the Greenlining Institute.

2) **Author's statement**: According to the author:

> Existing California law protects and safeguards the rights of all persons in a variety of contexts against discrimination, harassment and retaliation on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical

condition, genetic information, marital status sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status.

According to a 2019 report by The Brookings Institution's Artificial Intelligence and Emerging Technology Initiative, "algorithmic or automated decision systems use data and statistical analyses to classify people and assess their eligibility for a benefit or penalty." The application of these systems assists with credit decisions, employment screening, insurance eligibility, and marketing, as well as the delivery of government services, criminal justice sentencing and probation decisions. In fact, there is a growing interest by the public sector to increase its uses of algorithmic or automated decision systems to improve operations and serve the needs of citizens. However, poorly designed algorithmic or automated decision systems can create unfair, biased and inaccurate results, causing disproportionate harm to some communities, while also undermining trust in the public sector.

The state has a legitimate and substantial interest in ensuring that "high-risk" automated decision-making systems, procured and used by government, do not result in discrimination. It is therefore necessary to establish a process to review algorithmic decision systems in order to account for impacts on accuracy, fairness, bias, discrimination, privacy, and security. Doing so, will help to mitigate the potential negative impacts of these systems, especially in relation to protected-classes.

3) **Algorithms, government, and disparate impacts**: Since the turn of the millennium, monumental advances in computer and information science, along with the rise of "big data," have facilitated new milestones in artificial intelligence and machine learning. As computers and the software controlling them become more sophisticated, the types of decisions that machines are capable of making can become both more complex and more consequential. If designed and operated conscientiously, these so-called automated decision systems (ADS) can considerably expedite decision-making to dramatically improve the efficiency of services, and may mitigate the influence of heuristics and biases that otherwise interfere with objective human decision-making. The promise of these ADS for reliably managing decision-making with respect to large datasets makes the adoption of ADS by government entities particularly enticing. Because government agencies are typically tasked with making highly consequential decisions in a manner that is reliable, reproducible, efficient, and scalable to large populations, ADS have the potential to become an indispensable tool for supporting many public functions.

However, ADS are not a panacea, and their value for decision-making critically depends on how they are developed and how they are used. Algorithmic decision-making, and in particular machine learning and artificial intelligence, is generally opaque in terms of its decision-making process, relying on ineffable variables derived from complex and unintuitive relationships between inputs and outputs that can change as the machine learns from new information. Andrew McLaughlin, executive director of the Center for Innovative Thinking at Yale University, predicts, "AI [has] massive short-term benefits, along with long term negatives that can take decades to be recognizable. AI will drive a vast range of

efficiency optimizations but also enable hidden discrimination and arbitrary penalization of individuals in areas like insurance, job seeking and performance assessment."[1]

A coalition of civil rights, civil liberties, anti-discrimination, and privacy groups, including the bill's sponsor, similarly explain:

> The public sector increasingly uses automated systems to make decisions and as a way to improve efficiency, implement complex processes and support evidence-based policy making. Government agencies are using ADS to determine access to benefits like unemployment and Medicare, and there is a growing push to increase the use of ADS as a way to deliver government services more effectively and innovatively. However, poorly designed automated systems create unfair, biased and inaccurate results, causing disproportionate harm to low income families and communities of color while also undermining trust in the public sector.

These concerns are not hypothetical. Several examples of government uses of ADS from throughout the country have resulted in devastatingly inequitable outcomes, particularly for already disadvantaged communities. For instance, between 2013 and 2015, a privately-built, error-prone Michigan unemployment ADS operating with minimal employee oversight wrongly accused 40,000 people of fraud, many of whom were forced to pay heavy fines, declared bankruptcy, or had their homes foreclosed upon. Upon appeal, less than 8% of those fraud charges were validated.[2] In 2016, the state of Arkansas implemented an algorithm to assign access to Medicaid benefits, only for an estimated 19% of Medicaid beneficiaries to see their benefits inappropriately cut, losing access to home care, nursing visits, and medical treatments. In a lawsuit filed by Arkansas Legal Aid, the courts ultimately found that those who were denied benefits could not effectively challenge the system, since there was no way of knowing what information factored into the algorithm's opaque decision-making process leading to that result. Fact-finding during the court case ultimately revealed that the algorithm featured several design flaws, miscodings, and incorrect calculations.[3]

Depending on how the systems are designed and what types of datasets are used to train them for making the desired decisions, ADS can easily reflect or even exacerbate the same biases that plague human judgement. Particularly in the context of government, where public trust and accountability are paramount, this lack of transparency and potential for mechanizing human biases can be highly problematic.

This bill seeks to provide government agencies with the tools necessary to both critically evaluate the design and proper use of ADS, and to ensure that private contractors developing

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[1] Jenna Anderson & Lee Rainie, "Artificial Intelligence and the Future of Humans," *Pew Research Center*, Dec. 10, 2018, https://www.pewresearch.org/internet/2018/12/10/artificial-intelligence-and-the-future-of-humans/, [as of Apr. 6, 2021].
[2] Alejandro de la Garza, "States' Automated Systems Are Trapping Citizens in Bureaucratic Nightmares With Their Lives on the Line," *Time Magazine*, May 20, 2020, https://time.com/5840609/algorithm-unemployment/, [as of Apr. 6, 2021].
[3] Colin Lecher, "What happens when an algorithm cuts your healthcare," *The Verge*, Mar. 21, 2018, https://www.theverge.com/2018/3/21/17144260/healthcare-medicaid-algorithm-arkansas-cerebral-palsy, [as of Apr. 6, 2021].

these technologies have a strong incentive to incorporate considerations of the propensity for disparate impacts into their design decisions and practices.

4) **State procurement for IT projects and "value-effective" acquisition**: State procurement is, in most circumstances, overseen by DGS, and prioritizes contract awards to the so-called "lowest responsible bidder." (*See* Pub. Con. Code Sec. 10180.) In other words, the cost basis provided by a prospective contractor is typically the preeminent factor in decisions related to assigning state contracts, so long as the bidder "has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the public works contract." (Pub. Con. Code Sec. 1103.) The State Contracting Manual (SCM) additionally clarifies that such contracts shall be awarded to the responsible bidder that submits a *responsive* bid that is the lowest cost after application of any preference, several of which are discussed throughout the Public Contracts Code. The SCM goes on to define both "responsive bid" and "responsible bidder" as follows:

> Responsive Bid: A bid is considered responsive if it indicates compliance without material deviation from the requirements of the solicitation and the terms and conditions of the proposed contract.
>
> Responsible Bidder: A bidder is responsible if they possess the experience, facilities, reputation, financial resources and are fully capable of performing the contract. (SCM Sec. 4.D2.0.)

In the case of procurement for IT projects, however, the State recognizes that circumstances are unique, and that different needs may apply. Accordingly, in Section 12100(a) of the Public Contracts Code, the Legislature finds "that the unique aspects of IT goods and services and their importance to state programs warrant a separate body of governing statutes that should enable the timely acquisition of IT goods and services to meet the state's needs in *the most value-effective manner*." In contrast to other state contracts which are assigned to the lowest responsible bidder, Section 12100, et seq., of the Public Contracts Code details a process for assigning contracts on the basis of value-effectiveness, which, though not explicitly defined in full, may include: the operational cost the state would incur if the bid or proposal is accepted; the quality of the product or service, or its technical competency; the reliability of delivery and implementation schedules; the maximum facilitation of data exchange and systems integration; warranties, guarantees, and return policy; supplier financial stability; consistency of the proposed solution with the state's planning documents and announced strategic program direction; the quality and effectiveness of the business solution and approach; industry and program experience; the prior record of supplier performance; supplier expertise with engagements of similar scope and complexity; the extent and quality of the proposed participation and acceptance by all user groups; proven development methodologies and tools; and innovative use of current technologies and quality results. (Pub. Con. Code Sec. 12100.7(e).) In short, the State permits a far more comprehensive, holistic assessment of proposed contracts for IT procurement to determine the most appropriate proposal for the State's unique need, rather than the proposal that meets minimum criteria and provides the lowest initial cost.

The procurement process for IT goods and services is overseen primarily by CDT, and CDT is conferred final authority on the acquisition of IT goods and services, determination of IT procurement policy, and determination of IT procurement procedures applicable to IT and

telecommunications procurements. (Pub. Con. Code Sec. 12100(b)-(d).) While CDT is authorized to oversee and approve all IT procurement, however, they are not the exclusive body authorized to procure IT, and may delegate approval of IT contracts to other agencies or entities under certain circumstances. (*See* SAM Sec. 4819.34.) According to the SCM, "[w]hen an Agency's/state entity's proposed expenditures on IT are consistent with established policies and when the Agency/state entity has consistently adhered to those policies and successfully implemented IT projects, the Department of Technology will consider delegating authority for the approval of resources to Agency/state entity directors, as defined." (*Ibid.*) This means that while CDT has the general authority to oversee and approve IT procurement, under certain circumstances, broad authority is conferred to other state agencies, subject to certain limitations, to carry out the IT procurement process without the explicit review of CDT. Generally speaking, CDT is not to permit delegation of project approval authority in circumstances in which the project has the potential for involving "new or unfamiliar technology" or has "potential risk associated with the security and confidentiality of the information being processed." (*Id.*) That said, the Public Contracts Code details the Legislature's intent that the policies and procedures developed by CDT and DGS for IT procurement provide for, among other things, "the expeditious and value-effective acquisition of information technology goods and services to satisfy state requirements," and "the delegation of authority by the Department of General Services to each state agency that has demonstrated to the department's satisfaction the ability to conduct value-effective information technology goods and services acquisitions." (Pub. Con. Code Sec. 12101.)

The fact that "value-effective acquisition" is not explicitly defined in statute apart from certain potential criteria seems to indicate recognition of the context-dependence of that term. In certain circumstances, particularly as technology continues to play a role in a more diverse array of state functions, it may be essential that an agency consider specific factors in order to ensure that IT supporting state functions operates in a manner consistent with the values, ethics, and objectives of the state. In the context of ADS, which are uniquely complex and have the demonstrated potential for intrinsic design-based or operations-based biases, examination of information relevant to this risk, and consideration of a proposals efficacy in avoiding harmful inequities seems critical.

As the policymaking branch of the state government, it therefore seems incumbent on the Legislature to provide the agencies responsible for procurement with both the information necessary, and the explicit authority, to examine these critical factors when making decisions relating to procurement of ADS that may have significant implications for the lives of Californians.

This bill would provide for value-effective acquisition that considers both design-based and programmatic efforts to minimize the potential for disparate impacts when state agencies seek to procure ADS for high-risk applications. The bill would further require prospective contractors to provide certain information necessary to effectively evaluate these criteria in order to be considered responsive to a bid solicitation, and would ensure that CDT maintains essential oversight over these projects by requiring a report to be submitted by the procuring agency relating to their intended high-risk use of the ADS. In support of this effort, the National Association of Social Workers, California Chapter, writes "We believe this is an important measure in addressing, even unintentionally, reinforcing existing biases and

inequities within algorithmic decision-making which harm marginalized communities the most."

5) **AB 13 would require ADS impact assessments (AIAs) and high-risk ADS accountability reports (HAARs) to address potential disparate impacts of ADS use**: AB 13 is comprised of four key provisions relating to the acquisition of ADS for high-risk applications. First, AB 13 would require the procurement process for ADS for high-risk applications to be based on a value-effective acquisition framework, and defines "value-effective" to include the quality and effectiveness of steps taken by the prospective contractor to prevent disparate impacts on the basis of protected characteristics (i.e. characteristics identified in the Unruh Civil Rights Act; Civ. Code Sec. 51), and the extent and quality of internal policies adopted by the prospective contractor for how bias in the ADS is identified and mitigated to prevent disparate impacts, as well as how it will respond to claims or evidence of bias that may arise within the terms of the contract. Next, AB 13 would provide that a bid response cannot be considered responsive to a solicitation for an ADS for a high-risk application unless it includes an AIA detailing specified information relating the design, purpose, use, and risks of disparate impacts associated with the ADS. Third, AB 13 would require a state agency that awards a contract for an ADS for a high-risk application to submit a HAAR to CDT including specified information relating to the purpose, protocols, policies, and intended uses of the ADS, including any potential disparate impacts that may result from the proposed use, and a detailed mitigation plan for identifying and minimizing those disparate impacts. Both the AIA and HAAR would be accessible to the public and published on CDT's internet website. Finally, the bill would permit, but not require, local agencies acquiring ADS for a high-risk application to adopt the same criteria and procedures for their procurement process.

   In addition to explicitly allowing for the consideration of potential disparate impacts, and measures taken to mitigate them, in the awarding of contracts for ADS for high-risk applications, the core of this bill rests in the two reports it requires: the AIA and the HAAR. Though these reports overlap to some extent in the information required, they occur at different stages of the procurement process and are intended, according to the author, to serve distinct functions. The AIA, which is submitted by the prospective contractor along with their proposal, relies on the expertise of the designer and provides the contracting agency with the information to make an informed judgement as to the relative value-effectiveness of the technology with respect to potential disparate impacts. The AIA necessitates transparency with respect to the general purpose and function of the algorithm, the aspects of the design and evaluation process intended to evaluate bias and potential disparate impacts, as well as recommended best practices for the use of the ADS to prioritize security, privacy, and fairness.

   The HAAR, on the other hand, is submitted by the procuring agency to CDT, and documents policies and procedures governing the use of the ADS by the agency, including permissible uses and data management practices, training for employees with access to the ADS or resulting data, expected fiscal impact compared to alternative solutions, and public access and engagement with respect details related to its use. This report is submitted once the contractor is selected, and is intended to provide accountability and transparency to both CDT and the public with respect to the intentions, limitations, and general functions of the agency's use of the ADS. To support public accountability and the capacity for the public to

engage with the processes underlying their governance, both the AIA and the HAAR would be published on CDT's website for the duration of the contract.

Consumer Reports, a consumer advocacy group, who support the bill if amended to include additional constraints on government use of ADS in certain circumstances, argue:

> As automated decision making becomes more common in government, important decisions like who has access to financial services, education, and other basic necessities are put in the hands of algorithms which tend to be opaque and often biased. Bias in algorithms can stem from a variety of factors, such as non-inclusive datasets, biased data collection methods, and algorithmic model type. The requirements for the impact assessment this bill would mandate from potential vendors and from the agency using the technology are a good step in terms of providing transparency to the public. The impact assessments might also force agencies to question whether or not certain automated decision making actually contributes to more equitable, and not just more efficient, allocation of resources and services.

Because these documents are made public and include certain details related to the function of algorithms that may be proprietary, opponents of AB 13 have raised concerns that this may require the disclosure of trade secrets that would jeopardize the economic and intellectual property interests of state contractors. As a coalition of industry groups write in opposition:

> AB 13's impact assessments are so broad and arbitrary that many businesses could be required to reveal proprietary information about internal processes and trade secrets in order to apply for contracts with local agencies. Indeed, many local agencies have come under scrutiny from businesses and the public for unreasonable demands that businesses divulge valuable intellectual property and even the personal information of consumers. AB 13 should provide safeguards against unreasonable demands from local agencies for such information.

Staff notes that AB 13 does not require local agencies to adopt these policies, nor does it require them to procure ADS for any high-risk applications. Staff further notes that in response to similar concerns in a previous version of the bill, the author has amended the bill to specify that the section relating to the publication of the AIA and HAAR "shall not be construed to require the publication of trade secrets, as defined in Section 3426.1 of the Civil Code." It is arguably critical that information material to the government's use and application of a highly consequential technology be made available to the procuring agency to ensure that its use is consistent with the principles of fair governance. While it does not seem necessary under the bill to divulge information with a level of detail that would infringe on intellectual property rights, this explicit clarification that such information need not be published should prevent disclosure of any contents of the AIA that could be considered trade secrets beyond the agency that would be procuring the technology. If, for reasons related to intellectual property rights, a prospective contractor cannot provide sufficient information to meet the specifications of the AIA, it would seem that neither should such a black-box mechanism be used to make consequential decisions on behalf of the government in this state.

6) **AB 13 may slow procurement of ADS, but would create a framework that considers fair and equitable results as components of technological value**: AB 13 would establish

additional requirements for both prospective contractors and contracting agencies, and would realign priorities in assigning value to bid proposals. By requiring the submission and consideration of comprehensive AIAs and the preparation of HAARs, it is possible that its passage would increase the timeframe for procurement of ADS for high-risk applications. Additionally, by providing for the consideration of equitable design and implementation in the evaluation of bids, state contracts for ADS could be awarded to bidders that do not provide the lowest cost proposal, but rather the ones that submit proposals representing the greatest value when accounting for the need for accurate, unbiased output.

Opponents of the bill representing business interests contend that such a process would place an unnecessary burden on the procurement process that would harm both its efficiency and its cost-effectiveness:

> The additional bureaucratic processes that AB 13 requires will slow down state procurements from both the vendor and agency side. These additional procurement procedures will also increase agency workloads and drive up the costs of bids for contracts. Additionally, for smaller businesses that cannot afford to, or otherwise do not have the resources to jump through the bureaucratic hurdles imposed by AB 13 will be left unable to compete [*sic.*].

Indeed, it is not unlikely that, in circumstances in which the state seeks to procure ADS for high-risk applications, the procurement process may take longer, and result in contracts that cost more than from awarding contracts to the lowest responsible bidder as generally understood. That being said, it should be noted that, under AB 13, these conditions would apply only to those highly consequential procurement processes where the lives of Californians could be significantly harmed by the haphazard implementation of a poorly designed or poorly understood ADS. In that light, it would seem that the additional time taken to prepare these documents and consider steps taken to mitigate potential disparate impacts is a reasonable trade-off for the improved capacity this process would provide for procuring technology consistent with the espoused values of the state. It also does not seem unreasonable to consider this additional process as an enhanced form of assessing "responsibility," since an ADS that is inaccurate or systematically biased and results in disparate impacts arguably fails to meet the quality standards of the state, and does not accomplish the goal of the procurement process, which is to support the government's objective to provide for the well-being of all of its residents.

Similarly, while consideration of value rather than cost would, by definition, result in greater costs upfront, it would seem that these increases in cost pale in comparison to the potential costs to communities disadvantaged by discriminatory technology. Even taking the social costs of inequitable governance out of the equation, there are likely sizable financial costs that would stem from rectifying or litigating discriminatory outcomes, particularly in the event the State acts negligently in adopting problematic technology without due consideration.

7) **Definitions for "ADS" and "high-risk application" are likely sufficient to specify the scope of the bill, especially in light of prescribed guidelines**: AB 13 would define "automated decision system" to mean a computational process, including one derived from machine learning, statistical modeling, data analytics, or artificial intelligence, that issues a score, classification, recommendation, or other simplified output, that is used to support or

replace human decision-making and materially impacts natural persons; "simplified output" is defined to mean output composed of fewer dimensions than the respective inputs used to generate it. Further narrowing the scope of the bill, AB 13 applies only to the procurement of ADS for "high-risk applications," which it defines to mean use of an ADS for which any of the following apply: (a) poses a significant risk to the privacy or security of personal information or has the potential to result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons, taking into account the novelty of the technology used and the nature, scope, context, and purpose of the ADS; (b) affects the legal rights, health and well-being, or economic, property, or employment interests of a natural person, or otherwise significantly impacts a natural person; (c) involves the personal information of a significant number of individuals with regard to race, color, national origin, political opinions, religion, trade union membership, genetic data, biometric data, health, gender, gender identity, sexuality, sexual orientation, criminal record, or any other characteristic identified in the Unruh Civil Rights Act; or meets any other criteria established by CDT in regulations. These definitions seem to be derived in part from the terminology used in Article 35 of the European Union's General Data Protection Regulation (GDPR) to characterize circumstances requiring a "data protection impact assessment," as well as its associated description for "risks to the rights and freedoms of natural persons" in Recital 75.

Opponents of AB 13 argue that these definitions are overly broad and would capture virtually every computing system. As the aforementioned business coalition argues:

> ADS is defined as any computational process that issues a score, classification, recommendation, or other simplified output that is used to support or replace human decision making and materially impacts natural persons. This definition literally encompasses all of computing, including calculators, which is demonstrative of how broadly this bill is drafted. […] Additionally, the definition of "simplified output" means output composed of fewer dimensions than the respective inputs used to generate it. This is the same issue with the definition of ADS. A simple calculator takes several inputs and generates an output with a smaller dimension (e.g. 1+2 is the input, and the output is 3; two dimensions of input vs one dimension of output). Almost any computational function will provide a simplified output, thus leaving this definition overbroad.

This broad interpretation of ADS seems to rely on an apparent misunderstanding of the concept of dimensionality reduction, and, by extension, simplified output. The additive function used as an example to demonstrate that "almost any computational function will provide simplified output," would not in fact constitute simplified output under the bill's definition. Rather, while "1+2=3" does input two pieces of data and outputs a single datum, all of these data are within the same dimension. To clarify this concept, one could imagine that these numbers were not unitless, but rather were referring to lengths of string; attaching a one inch string to a two inch string would result in a string with a length of three inches. The dimension in question for all of the above, however, would still be length, and the function does not rely at all on, say, the thickness of the string to produce that output. As a result, the output would not have fewer dimensions than the input, and would not be considered "simplified output." This interpretation of the term "dimension" is consistent with both the common use of the term (e.g. "the dimensions of a room") and the technical use of the term in computer science, and seems to rule out consideration of a simple calculator under the definition of ADS used in this bill.

The opposing coalition raises similar concerns with respect to the definition of "high-risk application":

> Similarly, the definition of "high-risk application" is in no way confined to high risk applications. Confusingly, it includes any use of an ADS that has the potential to result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons. Literally every computational system in the world has the potential to result in inaccuracy. This is not a reasonable standard. It bears no relationship to true unlawful discrimination, and it is not narrowly tailored to avoid sweeping in totally harmless inaccuracies or human error. Moreover, almost anything has the potential to result in unfairness, bias or discriminatory decisions that impact natural persons. For example, a system that favors first-time applicants or customers over second-time applicants or customers would be "biased" but could be reasonable in application because it produces positive effects.

It is true that marginal inaccuracy is an inevitable consequence of technological design and operation. Nonetheless, the definition appears to consider that the relevance of such inaccuracy is contextual, and qualifies the terminology quoted above as follows:

> Poses a significant risk to the privacy or security of personal information or has the potential to result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons, *taking into account the novelty of the technology used and the nature, scope, context, and purpose of the automated decision system*. (Emphasis added.)

Because the scope, context, and purpose of the ADS are relevant, the definition would not seem to encompass the potential for "harmless inaccuracies" or for "biases" that would be irrelevant to the equitable treatment of the subjects affected by the proposed use.

Still, the possibility that additional guidance would be necessary for prospective contractors and agencies alike to determine the precise boundaries of these definitions remains foreseeable. Accordingly, the author has provided CDT with both the mandate to establish and publish guidelines for identifying automated decision systems that are subject to the requirements of the bill on or before January 1, 2023, and with the authority to adopt regulations and publish guidelines as necessary to effectuate the bill's purposes.

REGISTERED SUPPORT / OPPOSITION:

Support

The Greenlining Institute (sponsor)
National Association of Social Workers, California Chapter
Consumer Reports Advocacy (if amended)

Opposition

Advanced Medical Technology Association (AdvaMed)
Alliance for Automotive Innovation
American Council of Life Insurers
Association of California Life & Health Insurance Companies
Association of National Advertisers

California Bankers Association
California Business Properties Association
California Chamber of Commerce
California Credit Union League
California Financial Services Association
California Grocers Association
California Land Title Association
California Manufacturers & Technology Association
California Mortgage Bankers Association
California Trucking Association
Consumer Data Industry Association
Electronic Transactions Association
Insights Association
Internet Association
Internet Coalition
MPA – Association of Magazine Media
Pacific Association of Domestic Insurance Companies
Securities Industry and Financial Markets Association
Silicon Valley Leadership Group
TechNet
Technology Industry Association of California (TechCA)

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