

A Vermont Databanking Pilot

A proposal to test a licensed personal-data custodian under Vermont state law

Dr Dan Protopopescu, University of Glasgow, Scotland, UK | databanking.org | October 2026

— Concept note

Databanking is a proposed model for regulated personal-data intermediation in which personal data remains under the custodial control of trusted intermediaries, while approved computations are brought to the data and only authorised, policy-constrained outputs are released.

The central insight is simple: organisations frequently do not need a copy of a person's underlying data. They need an answer derived from it.

Vermont has already legislated for much of what such a model requires. Since 2018 its statutes have provided for personal information protection companies, licensed by the Department of Financial Regulation to receive, hold and manage the disclosure or use of a consumer's personal information under a fiduciary duty to that consumer. On 16 June 2026 the state enacted the Vermont Data Privacy and Online Surveillance Act, which from 1 January 2028 limits the collection of personal data to what is reasonably necessary and proportionate, and on the same day it strengthened its data broker law. Its Age-Appropriate Design Code takes effect on 1 January 2027, and the Attorney General's Office is finalising rules on how online services may establish a user's age with the least intrusion. What Vermont does not yet have is a custodian that answers a question in place of disclosing the record.

This proposal suggests a **bounded Vermont pilot that aims to replace the inspection of identity documents with a query**. A person's date of birth, verified against the state's motor vehicle records, would be held by a licensed custodian of the person's choosing. A business that needs to know whether the person is 21 or over would put that question to the custodian and receive only the answer. The pilot is designed to test, under statutes already enacted, parts of the proposed Databanking model that have not been tested by any existing system: a custodian independent of both the source registry and the relying business and bound to the individual by a fiduciary duty, more than one such custodian competing for accounts, portability between them, and a share of each access fee returned to the person whose data was queried.

The model is described in the Databanking whitepaper:

<https://doi.org/10.2139/ssrn.6992518>

with further material at <https://databanking.org>.

— 1. What Vermont already has

A licence for personal-data custodians. Chapter 78 of Title 8 of the Vermont Statutes, enacted in 2018 as part of the state's blockchain business development act, provides for **personal information protection companies**. Such a company is organised for the primary purpose of providing

personal information protection services, defined as “receiving, holding, and managing the disclosure or use of personal information concerning an individual consumer”, under a written agreement and in the consumer’s best interests. A company that accepts personal information on those terms has a fiduciary responsibility to the consumer. Subject to that duty it may provide elements of the information to third parties, certify or validate it, and be paid for doing so. It must hold a licence from the Department of Financial Regulation, be organised or authorised in Vermont, keep a place of business in the state, hold an annual meeting of its governing body there, and maintain a comprehensive information security programme. It may serve consumers wherever they live. The Department may adopt rules governing such a company’s safeguarding of personal information and its interaction with third parties.

A data-minimisation law. The [Vermont Data Privacy and Online Surveillance Act](#) (Act 145 of 2026, S.71), signed on 16 June 2026 and in force from 1 January 2028, requires controllers to limit the collection of personal data to what is “reasonably necessary and proportionate” to the purposes disclosed. It treats government identification numbers, precise geolocation, biometric data and consumer health data as sensitive data, which may be processed only with the consumer’s consent, and it bars the sale of personal data, and its use for targeted advertising, where a controller knows the consumer to be between 13 and 17. The Attorney General has exclusive authority to enforce it.

A data broker law. Vermont established the first data broker registry in the United States in 2018. The [amendments signed on 16 June 2026](#) (Act 138, H.211), in force from 1 January 2027, widen what counts as brokered personal information, expand what brokers must disclose when they register, and commission a study of a single mechanism through which a consumer could ask every broker to delete their data.

Rules on establishing age. The Age-Appropriate Design Code (Act 63 of 2025), signed on 12 June 2025 and in force from 1 January 2027, requires the Attorney General’s Office to [provide covered businesses with “privacy-minded methods to estimate the age of its users”](#). The [proposed rules](#), published in August 2026, require the least intrusive method that is reasonably accurate, rising from self-declaration through estimation from device or usage data to the checking of credentials only as far as the risk to minors requires. A business may collect only the data strictly necessary to determine whether a user is a minor, must delete it once the determination is made, must document its choice of method, and may rely on a vendor it has vetted.

Mobile identification. Since 2023, [Vermont law](#) has allowed the Department of Motor Vehicles to issue mobile identification alongside the physical credential. With the holder’s consent, it presents either the full credential or a limited profile containing only some of its information, and the Department may make agreements with third parties for its verification. A mobile identification does not replace producing the physical credential on request.

A regulator that builds specialist industries. The Department of Financial Regulation supervises banking, insurance and securities. Vermont was home to [707 active captive insurance companies](#) at the end of 2025, an industry the state has built over four decades on the strength of its regulatory expertise.

Age-restricted sales. Alcohol, cannabis and tobacco may be sold in Vermont only to people aged 21 or over, and regulated retail sales of cannabis have operated under the Cannabis Control Board since 2022.

These are the legal foundations of the Databanking model, already enacted: a licensed custodian with a fiduciary duty, a statutory standard of proportionate collection, and a regulator under instruction to find age-assurance methods that protect privacy.

— 2. What it does not yet have

Age is still established by showing a document. At a counter, a clerk reads a whole licence (name, address, date of birth, licence number and photograph) to learn one fact, and identity scanners and online verification services can retain what they capture. The proposed age-assurance rules set out a ladder of methods and permit a business to climb it only as far as the risk requires. Each step up the ladder buys accuracy with disclosure: the more certain a business becomes of a user's age, the more it learns about the user. Selective disclosure loosens that link, since a mobile driving licence can confirm that its holder is 21 or over without revealing the date of birth. What a credential does not provide is an independent custodian answering on the person's behalf, with a fresh answer each time a question is asked, a record of every query, accounts that can move between competing custodians, and a share of each fee returned to the person.

The licence for personal information protection companies provides the custodian and its duty, but not the discipline that makes a custodian a Databank. Chapter 78 permits a company to release elements of the information it holds. It does not oblige the company to answer in place of releasing, to refrain from analysing what it holds, to account to the consumer for every query, to let the consumer move the account to a competitor on a common schema, or to share the fee for each answer. Those are the conditions the pilot would add, as conditions of the licence or under the Department's existing rulemaking power. Whether all of them can be imposed under the statute as it stands is settled in the first phase.

Nor does the statute create a custodial market. It provides no common account schema on which a person could move between custodians, and no mechanism by which part of the value of an access returns to the person whose data was accessed.

The proposal does not depend on whether any company holds such a licence today, since the pilot custodians would apply for licences of their own with the Databanking conditions attached.

— 3. The proposition

The pilot would route a single class of transaction, the age check, through a personal information protection company operating as a **Databank**.

1. The individual opens an account with one of the pilot Databanks, proving their identity with a Vermont driver's licence or non-driver identification card.
2. The date of birth on that credential is verified with the Department of Motor Vehicles and held in the account. The federal Driver's Privacy Protection Act permits a motor vehicle department to release a record to a requester holding the **written consent** of the person it concerns, and the pilot would use that route.
3. A business that needs to know whether the person is 21 or over submits that question to the Databank, through a link online, or at the counter by a tap of the customer's phone or linked payment card. The Databank checks the request against the individual's per-

missions, evaluates it against the date of birth in an isolated environment, and returns a signed answer bound to that transaction: yes or no.

4. Every query appears on the individual's account statement, with the business that asked and the answer it received.
5. The business pays an access fee, and a fixed share of it is credited to the individual.

The Databank never analyses what it holds. It keeps the record, enforces the individual's permissions, executes approved computations and releases bit-scarce results under an auditable leakage budget, and it earns revenue from custody and authorised access alone. The individual can move the account to the other pilot Databank at any time, on a standardised account schema, without the record passing through any relying business.

The online flow requires no new legislation. At the counter, an answer can stand in for an identity document only where the law on age-restricted sales allows it and the Cannabis Control Board and the Department of Liquor and Lottery accept it, which is a question for the first phase.

— 4. Why Vermont

The value of a pilot lies in testing the assumptions most vulnerable to failure. For Databanking these are institutional and economic: whether individuals will entrust a record to an independent custodian, whether relying organisations will accept an answer in place of the record, whether custodians can compete and accounts can move between them, and whether a custodian can sustain itself without exploiting what it holds.

Vermont has already answered part of the institutional question in statute. A licence class for custodians of personal information, bound by fiduciary duty and supervised by the financial regulator, exists. A pilot that elsewhere would have to begin by persuading a legislature to create such a licence can begin in Vermont with an application. Because a state licenses and supervises such companies itself, licensing and supervising the pilot custodians lie within Vermont's own powers.

The Department of Financial Regulation has shown what a specialist licence can grow into. A personal information protection company must, like a captive insurer, be organised in Vermont, keep a place of business there and meet there each year, while serving consumers anywhere. A custodial industry built on the licence would be a Vermont industry, in the way captive insurance became one.

The timing is unusually precise: the Age-Appropriate Design Code and the strengthened data broker law take effect on 1 January 2027, and the Data Privacy and Online Surveillance Act a year later. Businesses are now deciding how they will establish age and how little they can collect, and the Attorney General's Office, which enforces both the design code and the privacy act, is finalising its age-assurance rules. A pilot designed now would produce evidence while those decisions are still being made.

Vermont also offers the hardest market in which to test the economic proposition. The United States has no general federal privacy statute. If relying businesses accept an answer in place of a record in Vermont, and pay for it, the result carries weight well beyond the state.

At about 645,000 people, with a citizen legislature and a compact set of institutions, Vermont is of a scale at which a bounded experiment is meaningful and its results legible.

— 5. A lead use case: age assurance

The initial transaction should be selected jointly with the participating organisations and regulators. One candidate fits Vermont's new laws closely enough to be proposed as the starting point.

Age is checked often and is rarely needed in full. A business that must know whether a customer is 21 or over learns, from a driver's licence, the customer's name, address, date of birth, licence number and photograph. From 1 January 2027 an online service within the Age-Appropriate Design Code must establish whether its users are minors by privacy-minded methods, collecting only what that determination strictly requires and deleting it afterwards. From 1 January 2028 the Data Privacy and Online Surveillance Act requires businesses above its thresholds to collect only what is proportionate, and treats government identification numbers as sensitive data. One threshold is the processing of sensitive data of 3,000 Vermonters in a year, which a busy retailer scanning licences can reach, so that scanning can itself bring a retailer within the act.

In the pilot the age check runs inside a Databank:

- the person's date of birth, verified with the Department of Motor Vehicles, is held in the person's Databank account;
- the business submits a threshold question, such as whether the person is 21 or over, drawn from a catalogue of approved queries;
- the computation runs inside the Databank against the date of birth;
- the business receives a signed yes or no bound to the transaction, and holds it no longer than the decision requires;
- the Databank's audit ledger records the query and the result, so that the business can evidence its age assurance to the Attorney General without holding an identity document or a date of birth.

The design code's own question, whether a user is a minor, is the same query at a lower threshold.

A Databank answer gives a business a credential's certainty about the holder's age with less disclosure than self-declaration, since a user who declares a date of birth reveals more than one bit. The relying businesses are under legal duties, so the regulatory question is precise: can the Attorney General accept a Databank answer as privacy-minded age assurance under the design code, and as proportionate collection under the privacy act? The baseline already exists, since the same checks run today by inspection, upload or facial estimation, so the pilot can compare answer against document directly. Date of birth is the standard target for leakage, since threshold questions at different ages progressively narrow it, and the pilot would test the leakage budget on exactly the class of query that most needs one. The transaction is frequent and of low value, which makes it the sternest test of whether a per-query fee, and the individual's share of it, can sustain a custodian. And both sides can see the benefit: the customer shows no document, and the business holds no identity document or date of birth that it must secure, retain and delete.

At the counter the same answer could replace the inspection of a licence for sales of alcohol, cannabis and tobacco, where the law and the regulators allow it. In place of a licence handed over and read by the cashier, the customer would tap a phone or a linked payment card, and the

till would show a signed yes or no. The cashier sees neither name nor address, a forged licence can no longer pass, and the Databank's audit ledger shows that the check was made.

Other Vermont candidates remain open: residency and eligibility attestations, consumer health data, which the privacy act protects at every business regardless of size, and research access to health records, the most institutionally demanding of them. The [worked example](#) and the [age-assurance case](#) on databanking.org show the same query in other settings.

— 6. The pilot ecosystem

A realistic Databanking transaction involves four roles, and in Vermont all four already have a legal footing. The pilot brings them together, with two custodians rather than one.

The individual, an adult Vermont resident holding a Vermont driver's licence or non-driver identification card, who opens a pilot account, chooses the custodian and authorises queries.

The authoritative data provider, here the Department of Motor Vehicles, which verifies the date of birth at the individual's written request.

Two Databanks, each licensed by the Department of Financial Regulation as a personal information protection company and bound by licence conditions that carry the custodial duties set out in the whitepaper: no analysis of what they hold, answers in place of disclosure, revenue from custody and authorised access only, a standardised account schema, portability on request, and a share of each fee to the individual. The whitepaper allows a Databank to be a commercial company, a non-profit or a state-backed institution. The pilot custodians may take any of these forms, provided each is independent of both the source registry and the relying businesses.

The relying businesses, online services within the Age-Appropriate Design Code and, where the law and the regulators allow it, licensed retailers of age-restricted products, which agree in advance to accept a Databank answer in place of a document.

Above these sits the governance layer: the Department of Financial Regulation, which licenses and supervises the custodians; the Attorney General's Office, which enforces the design code and the privacy act; the Department of Motor Vehicles; the Cannabis Control Board and the Department of Liquor and Lottery for sales at 21; and an independent auditor. In Vermont the authority that licenses the custodians is known before the pilot begins.

Two custodians are the minimum at which choice, switching and portability on a common schema can be observed in practice.

— 7. Solving the initial adoption problem

Databanking has an inherent multi-sided network problem. Individuals have little reason to open an account until organisations accept its answers, organisations have little reason to integrate until enough individuals hold one, and data providers have little reason to build interfaces before either.

In Vermont the new laws supply an early incentive. From 2027 online services within the design code must establish age by privacy-minded methods, and from 2028 every covered business must collect no more than is proportionate. Relying businesses therefore have a reason to integrate before many individuals hold accounts, and an answer that keeps identity documents

out of their systems has value to them from the first day. The pilot needs only a closed group of businesses that agree in advance to accept a defined Databank answer, and a bounded cohort of adults recruited at the point where the age check appears. A user asked to establish their age can be offered the choice between the methods the business already uses and a Databank answer, which also gives the pilot a natural comparison group.

— 8. What the pilot would test

The pilot would test four forms of viability, weighted towards the institutional and the economic.

Technical viability A threshold computation on a date of birth is simple. What remains open is binding the answer to the person presenting it, online and at the counter, in a country without a national electronic identity, and enforcing a leakage budget on a date of birth queried at more than one threshold.

Institutional viability Can a personal information protection company, bound by fiduciary duty and licence conditions, maintain a credible structural separation between custody and exploitation, backed by governance, audit and enforceable duties? Does the fiduciary duty in Vermont law strengthen that separation in practice?

Market viability Will adults open an account so as not to show or upload a document? Will businesses pay for a one-bit answer when less accurate methods cost less? Does the individual's share of the access fee matter, and at what level?

Regulatory viability Can the Attorney General accept a Databank answer as privacy-minded age assurance under the design code, and as proportionate collection under the privacy act? Can the Department of Financial Regulation license and supervise a Databank under chapter 78 as it stands? Does the law on alcohol, cannabis and tobacco sales allow an answer at the counter, and will its regulators accept one?

— 9. Technical and governance research programme

The demonstrator should sit alongside an interdisciplinary research programme. The lead use case keeps some of these questions narrow and sharpens others, and the last is specific to Vermont.

1. **Query leakage.** A question at 21 bisects the date of birth beneath it, and questions at further thresholds would narrow it more. The retention-bounded leakage budget described in the whitepaper, a per-datum quota shared by all Requestors and derived from the short period for which a result may lawfully be held, would be tested on live traffic, including against Requestors that combine their answers.
2. **Computation scrutiny.** The pilot fixes the approved queries in advance as a small catalogue of threshold questions. This makes scrutiny tractable, and tests the premise that a regulator can approve the questions a Requestor may ask in place of the data it may hold.

3. **Correctness and provenance.** Motor vehicle records are authoritative but not infallible. The pilot must define how corrections flow back to the Department of Motor Vehicles, and who is responsible when the source is wrong.
4. **Identity binding.** The United States has no national electronic identity. The pilot must bind each account to its holder at enrolment, and bind each answer to the person presenting it, without the relying business learning more than it already knows.
5. **Liability and dispute resolution.** Responsibility has to be allocated among the Department of Motor Vehicles, the Databank and the relying business when an answer is wrong.
6. **Coercive authorisation.** A service could make a broader query a condition of access. The design code rules' limit to data strictly necessary, and the privacy act's proportionality standard, give the governance model a legal anchor for defining which queries a business may request.
7. **Concentration and resilience.** With two custodians, breach containment and continuity can be tested directly, including the transfer of accounts if one custodian fails.
8. **Interoperability and portability.** Accounts must move between the two pilot Databanks on a common schema. Because a personal information protection company may serve consumers wherever they live, a later phase can extend the pilot to residents of neighbouring states and test whether an answer is accepted across a state line.
9. **Economic sustainability.** The pilot should measure the cost of custody, computation, audit and support against fee income and the individual's share, and set both against what businesses spend today on age verification and on securing the identity data it produces.
10. **Fiduciary custody.** Vermont law makes the custodian a fiduciary of the consumer. The pilot can establish what that duty requires of a custodian that answers rather than discloses, and whether it already reaches the prohibition on analysing what the custodian holds. It can also test whether payment per query is compatible with that duty, since a custodian paid for each answer gains from more questions being asked, and which safeguards keep that incentive in check.

— 10. Success criteria

The decisive test is whether three propositions hold at the same time. Individuals are willing to entrust the relevant record to a custodian they chose. Relying organisations accept the minimal authenticated result instead of the underlying record, and their regulator accepts that they have done so lawfully. The Databanks provide the service on economically sustainable terms while remaining strictly independent of commercial exploitation of what they hold.

Three further criteria are specific to the Vermont design: the two custodians are licensed under chapter 78 with the Databanking conditions attached; accounts move between them on the common schema without loss and without passing through any relying business; and the individual's share of each access fee is paid and visible on their statement.

Secondary measures include the number of identity documents not shown, uploaded or scanned, accuracy, latency, dispute and correction rates, the frequency with which leakage

budgets bind, integration cost for businesses, and compliance cost. Failure on any of these is itself evidence, and identifies where the model requires modification.

The adult cohort shows how the method treats adults. How it performs for minors, the design code's own concern, would need a separate study with its own safeguards.

— 11. Proposed programme structure

Phase 1 — Scoping and consortium formation Confirm or replace the lead use case with the Department of Financial Regulation, the Attorney General's Office, the Department of Motor Vehicles, the Cannabis Control Board, the Department of Liquor and Lottery and the participating businesses. Settle the conditions under which the pilot custodians are licensed under chapter 78, and recruit academic partners in law, computer science and economics.

Phase 2 — Architecture and governance design The standardised account schema, enrolment and holder binding, the verification interface with the Department of Motor Vehicles, the sandbox and leakage budget, the catalogue of approved queries, licence conditions, audit, liability allocation and fee structure. This phase also settles whether answers are best carried in existing digital credential formats, such as the mobile driver's licence standards already in use in several states.

Phase 3 — Prototype Both Databanks running the age query on synthetic data, with test integrations at the participating businesses, so that architecture and security assumptions are validated before operational personal data is involved.

Phase 4 — Regulated demonstrator A bounded cohort of adults, two Databanks and the participating businesses making live age checks, collecting technical, behavioural, economic and governance evidence.

Phase 5 — Evaluation and extension decision Evaluate the four forms of viability and decide on extension to further attributes, sectors or custodians, and to residents of other states.

A successful pilot should lead not automatically to scale-up, but to an evidence-based decision about which parts of the model merit further development.

— 12. Relation to Vermont and federal law

Personal information protection companies. The pilot custodians would operate under 8 V.S.A. chapter 78 as it stands. The Databanking conditions would be imposed through the licence, or by rule under § 2457, which already allows the Department of Financial Regulation to govern a company's safeguarding of personal information and its interaction with third parties.

Data Privacy and Online Surveillance Act. For a relying business the act's central question, whether collection is reasonably necessary and proportionate, has an unusually clear answer when what it receives is a yes or no, with no identity document or date of birth. The consumer rights the act creates, to access, correct, delete and obtain a portable copy of personal data, are the ordinary operations of a Databank account.

Age-Appropriate Design Code. The proposed rules define a ladder on which accuracy rises with intrusion. A Databank answer matches a credential's certainty about the holder's age and sits below self-declaration in disclosure. The pilot would give the Attorney General's Office the evidence on which to decide where such an answer belongs in its framework. Under the proposed rules, data collected to establish a user's age must be deleted once the determination is made, and a vendor acting for the business is bound by the same terms. The pilot would need to establish that a Databank holds the date of birth as the individual's custodian rather than as the business's vendor, so that the deletion duty attaches to what the business receives and not to the custodian's record.

Federal law. The Driver's Privacy Protection Act permits a motor vehicle department to release a record to a requester holding the written consent of the person it concerns. The pilot enrolls adults only, so its own processing does not engage the Children's Online Privacy Protection Act. The United States has no general federal privacy statute, so a pilot conducted under Vermont law tests what a state can establish within its own powers.

— 13. What it would take to start

The only commitments needed at this stage are those that allow the first two phases, scoping and design, to begin. None involves legislation, statewide deployment or funding.

From the State of Vermont:

1. A scoping meeting with the Department of Financial Regulation, the Attorney General's Office, the Department of Motor Vehicles, the Cannabis Control Board and the Department of Liquor and Lottery, to confirm or replace the lead use case and identify participating businesses.
2. Agreement in principle from the Department of Financial Regulation to examine applications from two pilot custodians for licences under chapter 78, with the Databanking conditions attached.
3. A named contact at the Attorney General's Office to examine whether a Databank answer can serve as privacy-minded age assurance under the design code, and as proportionate collection under the privacy act.
4. Agreement in principle from the Department of Motor Vehicles that the date of birth on a Vermont credential may be verified for a pilot account at the holder's written request, using test data during Phase 3.

From the General Assembly:

1. A briefing for the House and Senate committees that considered S.71 and the Age-Appropriate Design Code, so that the committees can follow, as the pilot runs, how their laws work in practice.

Can Vermont demonstrate, under laws it has already enacted, that a business can establish a person's age from a one-bit answer instead of an identity document, where the record is held by an independent custodian, licensed by the state, that the person chose and can change?

If the answer can be demonstrated convincingly, the resulting architecture, regulatory treatment and economic evidence would provide a basis for deciding whether Databanking should develop into a broader infrastructure industry, in Vermont and beyond.

Enquiries: contact@databanking.org