To direct the Secretary of the Treasury to develop and pilot digital dollar technologies that replicate the privacy-respecting features of physical cash.

IN THE HOUSE OF REPRESENTATIVES

Mr. LYNCH introduced the following bill; which was referred to the Committee on

A BILL

To direct the Secretary of the Treasury to develop and pilot digital dollar technologies that replicate the privacy-respecting features of physical cash.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Electronic Currency And Secure Hardware Act” or the “ECASH Act”.

SEC. 2. DEFINITIONS.

In this Act:
(1) ECIP.—The term “ECIP” means the Electronic Currency Innovation Program established under section 4.

(2) SECRETARY.—The term “Secretary” means the Secretary of the Treasury.

SEC. 3. ELECTRONIC DOLLAR.

(a) ESTABLISHMENT.—The Secretary of the Treasury shall promote and facilitate the development and deployment of an electronic version of the United States dollar for use by the general public that replicates and preserves the privacy, anonymity-respecting, and minimal transactional data-generating properties of physical currency instruments such as coins and notes to the greatest extent technically and practically possible.

(b) ELECTRONIC DOLLAR REQUIREMENTS.—The electronic dollar described under subsection (a) shall be—

(1) known as “e-cash”;

(2) payable to bearer;

(3) legal tender, as described in section 5103 of title 31, United States Code;

(4) an obligation of the United States, as described in section 8 of title 18, United States Code;

(5) created and issued into circulation by the Department of the Treasury, in such quantities, denominations, and technical forms as the Secretary,
in the Secretary’s discretion, determines to be appropriate;

(6) distributed directly to, and capable of being owned, held, and used directly by, the general public;

(7) capable of instantaneous, final, direct, peer-to-peer, offline transactions using secured hardware devices that do not involve or require subsequent or final settlement on or via a common or distributed ledger, or any other additional approval or validation by the United States Government or any other third-party payments processing intermediary;

(8) inter-operable with all existing financial institution and payment provider systems and generally accepted payments standards and network protocols, as well as other public payments programs, including the U.S. Debit Card and Digital Pay Program and the EagleCash card program of the Department of the Treasury and any other digital dollar or public banking products;

(9) classified and regulated in a manner similar to physical currency for the purposes of anti-money laundering, know-your-customer, counter-terrorism, and transaction reporting laws, and accordingly not subject to the third-party exemption to an otherwise presumptive expectation of privacy;
(10) designed, issued, and administered to be consistent with—

(A) the statutory objectives articulated in subsection (c), as well as any rules, standards, and criteria enacted to further those objectives;

(B) the consumer protections articulated in subsection (d), as well as any rules, standards, and criteria enacted to further those protections; and

(C) any and all other technical and policy criteria established by this Act or by the Secretary or Director under the authority granted to them under this Act;

(11) distinguishable from other forms of electronic currency issued by or on behalf of the United States Government, including any such forms that—

(A) are issued by a department, branch, agency, or instrumentality of the United States Government other than the Department of the Treasury, including such forms of “central bank digital currency” as may be issued by the Board of Governors of the Federal Reserve System or its designated agents;

(B) are legally classified as an account balance or any other kind of financial instrument
not payable to bearer or that otherwise require identification and account or device registration to hold, access, or use;

(C) are not distributed directly to, or otherwise capable of being owned, held, or used directly by, the general public;

(D) fail to replicate and preserve the privacy, anonymity-respecting, and minimal transactional data-generating properties of physical currency instruments such as coins and paper notes to the greatest extent technically and practically possible; and

(12) not included in calculations of public debt subject to limit under section 3101 of title 31, United States Code.

(e) STATUTORY OBJECTIVES.—The Secretary shall promulgate and enforce rules, standards, and criteria pertaining to the development and implementation of e-cash instruments, devices, technologies, platforms, and supporting and enabling infrastructure, as well as the issuance, dissemination, circulation, storage, and use of e-cash balances, including use in transactions, in such a manner and to such an extent as the Secretary determines to be necessary or appropriate to achieve the objectives of this Act, subject to the following conditions:
(1) OWNERSHIP.—The Secretary shall require that any and all e-cash instruments are capable of being owned, held, and used directly by the general public via widely available hardware devices, without the necessary involvement of third-party custodial or payment processing intermediaries.

(2) PRIVACY.—The Secretary shall require that any hardware device authorized to hold or otherwise facilitate transactions involving e-cash shall be secured locally via cryptographic encryption and other appropriate technologies, and shall not contain or be subject to any surveillance, personal identification or transactional data-gathering, or censorship-enabling backdoor features.

(3) UNIVERSALITY.—The Secretary shall prioritize wherever possible technologies, practices, and programs that promote universal access and usability, particularly for—

(A) individuals with disabilities, including blindness or other eyesight problems;

(B) low-income individuals; and

(C) communities with limited access to the internet or telecommunications networks.

(4) INCLUSION.—The Secretary shall take into consideration the unique needs and circumstances of

marginalized communities and populations that have historically been excluded from or otherwise prevented from taking full advantage of traditional and current financial institutions and payment services.

(5) TRANSPARENCY.—The Secretary shall seek out and prioritize wherever practically feasible the use of hardware and software technologies issued under open-source licenses, and shall further require that all publicly funded research and technology be released under a suitable open-source license and made available for study and review by the scientific community and the general public, except to the extent that doing so would undermine or impair the security and integrity of e-cash devices or instruments.

(d) CONSUMER PROTECTIONS.—

(1) FEES.—The Government may charge reasonable prices when selling e-cash-compatible hardware (henceforth “e-cash devices”) directly to the public, provided such prices are proportionate to, and not unduly in excess of, actual production and administration costs, but may in no instance impose fees or other charges for holding, receiving, sending, or otherwise transacting with e-cash balances using such devices.
(2) Solicited issuance of e-cash hardware devices.—The Government or an authorized e-cash distributor may issue an e-cash device to a member of the public only in response to an oral or written request for such device.

(3) Solicited issuance of e-cash balances.—The Government or an authorized e-cash distributor may issue e-cash instruments to a user only in response to an oral or written request to receive funds in the form of e-cash, and any such requested funds shall be capable of being—

(A) received in the form of an increase in the available balance of an existing e-cash device or as a balance on a newly-issued e-cash device; and

(B) paid for, to the extent such instruments shall be paid for, through delivery of physical currency or demand deposits at an interoperable exchange terminal.

(4) Disclosures by e-cash distributors.—

(A) In general.—Disclosures by the United States Government and any third-party authorized to distribute e-cash devices or balances regarding usage, fees, interoperability, security, privacy, data collection, error resolution,
and any other terms considered relevant by the Bureau of Consumer Financial Protection shall be clear and readily understandable, in writing, and in a form the e-cash instrument bearer can reasonably maintain.

(B) FORM OF DISCLOSURES.—Disclosures described under subparagraph (A) may be provided to the consumer in offline electronic form, subject to compliance with the consumer-consent and other applicable provisions of the Electronic Signatures in Global and National Commerce Act (15 U.S.C. 7001 et seq.).

(5) LIABILITY OF ISSUERS FOR UNAUTHORIZED TRANSFERS.—Neither the issuing entity nor any other Government agencies or approved e-cash distributors shall be held liable for unauthorized transfer of e-cash balances, so long as the appropriate disclosures and protections described in this Act are made.

(6) FEES BY MERCHANTS.—It shall be unlawful for the United States Government, authorized e-cash distributors, or any other person to impose a service fee or an interchange fee, or other processing fee or surcharge, for the use of e-cash in payments or purchases.
(7) **BANKRUPTCY.**—E-cash instruments and balances shall be considered exempt property equivalent to physical currency for the purposes of Chapter 7 Bankruptcy proceedings.

(8) **TRANSACTIONAL REPORTING.**—Under no circumstance, regardless of the particular technology involved, shall any transaction data generated by e-cash payments be collected, monitored, or retained by the United States Government, an authorized e-cash distributor, or any other counterparty except via the exemptions provided by this Act.

(9) **PREEMPTION OF INCONSISTENT STATE LAWS.**—State consumer laws are pre-empted unless the Director of the Bureau of Consumer Financial Protection determines, upon the Director’s own motion or upon the request of a State government, but ultimately in the Director’s sole discretion, that a State’s consumer protection laws are not pre-empted.

(e) **REQUIREMENT TO ACCEPT E-CASH.**—

(1) **FEDERAL GOVERNMENT.**—The Federal Government shall—

(A) accept e-cash for any payment to the Federal Government, including payments for taxes, fines, and fees; and
(B) upon request, provide any Federal
Government benefit in the form of e-cash.

(2) PRODUCTS AND SERVICES.—Any person
selling products or services that accepts physical cur-
rency as a form of payment shall also accept e-cash
as a form of payment to the extent it is practically
feasible and reasonable to do so.

(f) ILICIT FLOWS.—

(1) PRESCRIPTION OF LEGITIMATE USE.—
Under no condition shall the acquisition, possession,
or use of e-cash devices, instruments, and balances
under the parameters established by this Act be
treated as prima facie or intrinsic evidence of crimi-
nal activity or intent, nor be established as a predi-
cate offense or factor in crimes not specified in or
under the authority established by this Act.

(2) INCLUDING UNDER THE BANK SECRECY
ACT.—

(A) IN GENERAL.—Section 5312(a)(3) of
title 31, United States Code, is amended—

(i) in subparagraph (C), by striking
“and” at the end;

(ii) by redesignating subparagraph

(D) as subparagraph (E);
(iii) by inserting after subparagraph (C) the following:

“(D) e-cash, as defined under section 3 of the ECASH Act; and”; and

(iv) in subparagraph (E), as so redesignated, by striking “subparagraph (A), (B), or (C)” and inserting “subparagraph (A), (B), (C), or (D)”.

(B) AMENDMENTS TO DOLLAR THRESHOLDS.—At any time, the Director of ECIP may increase the value thresholds applicable to e-cash for any reporting requirement under subchapter II of chapter 53 of title 31, United States Code, but may at no time decrease such value thresholds.

(g) SYSTEMIC LIQUIDITY.—The Board of Governors of the Federal Reserve System shall take appropriate measures to ensure that the implementation and adoption of e-cash does not disrupt or substantially impact the general availability or cost of liquidity for depository institutions, credit unions, or community development financial institutions, or their capacity to extend credit and other financial services to underserved populations, as described under the Community Reinvestment Act of 1977, and any other applicable Federal and State laws, however such
measures may in no way impair, restrict, or otherwise limit the ability of the public to access, hold, and use e-cash.

SEC. 4. ELECTRONIC CURRENCY INNOVATION PROGRAM.

(a) IN GENERAL.—The Secretary shall establish the Electronic Currency Innovation Program to direct, oversee, coordinate, and harmonize the development, implementation, maintenance, and regulation of e-cash instruments, devices, technologies, platforms, and supporting and enabling infrastructure in accordance with the technical and policy criteria established by this Act.

(b) DIRECTOR.—

(1) APPOINTMENT.—

(A) IN GENERAL.—The head of the ECIP shall be the Director, who shall be appointed by the President, by and with the advice and consent of the Senate.

(B) TERM.—The term of the Director is 5 years.

(C) REMOVAL.—The President may remove the Director from office. On removal, the President shall send a message to the Senate giving the reasons for removal.

(D) INTERIM DIRECTOR.—When a Director has not yet been confirmed or appointed,
the Secretary may, subject to the consent of the President, appoint an Interim Director, who shall enjoy the full powers and privileges of the Director as established under this Act until such time as a permanent Director is confirmed and appointed. In the event neither a Director or Interim Director is appointed, all responsibilities and duties assigned to the Director under this Act shall be assumed by the Secretary.

(2) DUTIES AND POWERS.—The duties and powers of the Director are as follows:

(A) Promote innovation in, and ensure the successful implementation and widespread adoption of, e-cash instruments, devices, technologies, platforms, and supporting and enabling infrastructure in accordance with this Act, by—

(i) directing, conducting, sponsoring, and publishing research;

(ii) generating, collecting, analyzing, and publishing data;

(iii) acquiring, developing, disseminating, and sharing open-access technologies and technical knowledge;
(v) developing and administering e-cash pilot programs, both individually and in partnership with other actors and entities that the Secretary determines appropriate;

(vi) promulgating, and enforcing rules, objectives, standards, and criteria pertaining to the development and implementation of e-cash instruments, devices, technologies, platforms, and supporting and enabling infrastructure, as well as the issuance, dissemination, circulation, storage, and use of e-cash, including its use in transactions;

(vii) coordinating with other actors, including other departments, branches, agencies, and instrumentalities of the United States Government, as well as State, local, and foreign governments and international regulatory bodies, in furtherance of the general goals of this Act; and

(viii) developing and disseminating public educational materials and conducting public educational campaigns to foster awareness and understanding of e-
cash and its economic and social significance in the broader monetary system; and

(B) Such other duties and powers as the Secretary may delegate or prescribe.

(c) STAFF, EQUIPMENT, AND FACILITIES.—The Director shall be authorized to hire staff, purchase equipment, and rent or acquire facilities as the Director determines to be appropriate to achieve the goals and objectives established under this Act, subject to the approval of the Secretary.

(d) PILOT PROGRAMS.—

(1) Establishment.—

(A) In general.—Not later than 90 days after the enactment of this Act, the Director shall initiate a two-phase e-cash pilot program in anticipation of general deployment of e-cash to the public not later than forty-eight months after the date of enactment of this Act.

(B) Phase 1.—Phase 1 of the pilot program shall consist of not less than three distinct pilots (in this section referred to as “Proof-of-Concept Pilots”), each of which shall launch no later than 180 days after the date of enactment of this Act, and run for no longer than 360 days thereafter.
(C) Phase 2.—Phase 2 of the pilot program shall consist of at least one large-scale deployment to a segment of the public (in this section referred to as “Field Test Pilots”), which shall launch no later than 2 years after the enactment of this Act, and run for no longer than 2 years thereafter.

(D) Extension of Timelines for Pilot Programs.—The timelines for the implementation of the two phases of the e-cash pilot program described in this paragraph may be extended upon a determination by the Director that such an extension is necessary to ensure the security and integrity of the technologies to be piloted in the program.

(2) Administration.—

(A) In general.—The pilot programs shall be administered by the Director, in coordination with the Digital Dollar Council, and subject to the ongoing oversight and review of the Monetary Privacy Board.

(B) Proof-of-Concept Pilots.—Proof-of-Concept Pilots may be conducted—

(i) in partnership with one or more universities, non-profit entities, insured fi-
nancial institutions, non-bank payment
providers aimed at promoting financial in-
clusion, technology-focused financial firms
and companies, financial technology com-
panies, or foreign central banks; and

(ii) through, or in partnership with,
any existing Federal, State, or local gov-
ernment fund disbursement and payments
program, including those that rely on the
U.S. Debit Card and Digital Pay Program,
the EagleCash Card program, or any other
payments technology offered by or in part-
nership with the Bureau of the Fiscal
Service of the Department of the Treasury.

(C) FIELD TEST PILOTS.—Field Test Pi-
lots may be conducted in partnership with any
entity capable of partnering for a Proof-of-Con-
cept Pilot, as well as other departments,
branches, agencies, and instrumentalities of the
United States Government, or State, local, and
foreign governments and international regu-
laratory bodies.

(3) OBJECTIVES.—The objectives of the pilot
programs are to test the viability and capacity of
various forms of e-cash technologies to—
(A) preserve the privacy, anonymity-respecting, and minimal transactional data-generating properties of physical currency instruments such as coins and notes to the greatest extent technically and practically possible;

(B) enforce total balance and transactional activity limits on a per-device basis without rendering such devices vulnerable to surveillance or censorship by third parties including the United States Government;

(C) deploy rapidly, securely, and efficiently on a mass scale; and

(D) maintain ease of use and interoperability with existing financial institution and payment provider systems, as well as any other digital dollar products.

(4) Parameters and constraints.—

(A) All technologies selected for Proof-of-Concept Pilots and Field Test Pilots shall be—

(i) designed as bearer instruments;

(ii) capable of instantaneous, final, direct, peer-to-peer, offline transactions; and

(iii) capable of being distributed directly to, and owned, held, and used directly by, the general public.
(B) At least two technologies selected for Proof-of-Concept Pilots shall be based on secured hardware-based architectures for the purposes of creation, distribution, holding, and payment that do not involve any common or distributed ledger.

(C) At least one technology selected for Proof-of-Concept Pilots shall include a stored-value magnetic or pin card option for storage and payment of e-cash.

(D) At least one technology selected for Proof-of-Concept Pilots shall include a cell phone or SIM card option for storage and payment of e-cash.

(E) All technologies selected for Field Test Pilots shall have or at a minimum be capable of incorporating stored-value card functionality.

(5) SPECIAL TENDER AUTHORITY.—In order to facilitate and promote the effectiveness of the pilot programs, the Secretary may grant special recognition of prototypical e-cash instruments issued under a pilot program as legal tender, and direct the Board of Governors of the Federal Reserve System, other departments, branches, agencies, and instrumentalities of the United States Government, any
other federally regulated financial institution to ac-
cept such prototypical e-cash instruments in settle-
ment of outstanding obligations on an at-par basis.

(6) REPORTING.—Not later than 180 days after
the date on which each phase of the pilot programs
terminates, the Secretary shall submit to Congress a
report regarding that phase of the pilot programs,
which shall—

(A) include—

(i) a description of which elements of
the pilot programs were successful and
which were unsuccessful;

(ii) recommendations regarding legis-
lative changes to the pilot programs and
related authority under this Act and else-
where; and

(iii) recommendations for additional
pilots and revisions to the pilot program;
and

(B) make the nonsensitive analytical data
available for public review and comment.

SEC. 5. DIGITAL DOLLAR COUNCIL.

(a) IN GENERAL.—The Secretary shall establish the
Digital Dollar Council (in this section referred to as “the
Council”) to coordinate the Secretary’s ECIP-related ac-
tivities with the efforts of other bureaus of the Department of the Treasury and other departments, branches, agencies, and instrumentalities of the United States Government, including the Board of Governors of the Federal Reserve System and the United States Postal Service.

(b) MEMBERSHIP.—The Council shall be comprised of the Secretary, the Director of ECIP, the Chairman of the Board of Governors of the Federal Reserve System, the Postmaster General of the United States Postal Service, the Director of the Office of Science and Technology Policy, the Chief Technology Officer of the United States, and the Director of the National Institute of Standards and Technology, and any other Federal employees or representatives of Federal agencies as the Secretary, in the Secretary’s discretion, determines to be appropriate.

(e) LEADERSHIP.—The head of the Council shall be the Secretary, however, the Secretary may, at the Secretary’s discretion, delegate administrative and decision-making responsibility to the Director.

(d) AUTHORITY.—The Council shall have the power to redeploy personnel and resources among the various participating agencies, as well as establish or amend any rules and regulations promulgated by any participating agencies to the extent the Council determines such actions
to be necessary to achieve the goals and objectives estab-
lished under this Act.

(e) JURISDICTION.—Nothing in this section shall be
construed as taking away any powers heretofore or other-
wise vested by law in the Secretary, and wherever any
power vested in the Council appears to conflict with the
powers vested in the Secretary under this Act, such powers
shall be exercised subject to the supervision and control
of the Secretary.

(f) JOINT REPORT.—Beginning 180 days after the
date of enactment of this Act, and each 180 days there-
after, the Council and the National Institute for Stand-
ards and Technology shall issue a joint report to the Con-
gress detailing a plan to achieve full interoperability with
existing public and private payments systems within 1
year.

SEC. 6. MONETARY PRIVACY BOARD.

(a) IN GENERAL.—There is established a Monetary
Privacy Board (in this section referred to as “the Board”).

(b) MEMBERSHIP.—

(1) IN GENERAL.—The Board shall be com-
prised of 5 members, appointed by the President, by
and with the advice and consent of the Senate.

(2) CHAIR.—The President shall appoint one
member of the Board as the Chair of the Board. Ex-
cept as provided under subsections (c) and (e), the Chair shall—

(A) make all decisions of the Board with respect to staffing, hiring, and budget allocation; and

(B) conduct the meetings of the Board.

(3) TERM.—The term of each member of the Board is 3 years.

(4) REMOVAL.—The President may remove a member of the Board from office. On removal, the President shall send a message to the Senate giving the reasons for removal.

(5) INTERIM MEMBERS.—When a vacancy on the Board remains open for more than three months, the President may appoint an interim member to fill that vacancy. Interim members shall enjoy the full powers and privileges of a full member until such time as a permanent member is appointed and confirmed.

(c) MEMBER OFFICES.—Each member of the Board shall be entitled to spend 5 percent of the budget of the Board on the personal office and staff of the member.

(d) DUTIES AND POWERS.—

(1) IN GENERAL.—The Board shall review the actions and decisions of the Secretary, the Director
of ECIP, and ECIP generally on an ongoing basis
to evaluate the extent to which their decisions are
consistent with their statutory responsibilities under
this Act, and more broadly, a general commitment
to preserving the privacy interests of individuals and
actors that use e-cash and other forms of digital dol-
lar technologies issued or administered by the
United States government.

(2) Semi-Annual Report.—The Board shall
issue a report to Congress no less than twice per
year—

(A) detailing its findings from its ongoing
review process;

(B) providing an assessment of the general
state of monetary privacy in the United States;
and

(C) offering recommendations for how to
better protect civil liberties and individual pri-
vacy interests through legislative and regulatory
reform.

(3) Interim Reports.—The Board, or one or
more members thereof, may publish interim reports
or any other communication at any time at their dis-
cretion, provided such reports and communications
are clearly distinguished from the reports required
under paragraph (2), and the particular authors and co-signatories are clearly indicated.

(e) FUNDING AUTHORITY.—The Board shall submit an annual budget request to the Secretary, and the Secretary shall transfer the requested amount to the Board, using the authorities provided under section 7(b), unless the Secretary determines that the amount is unreasonable in light of the Board’s duties and powers under this Act.

SEC. 7. ENABLING AUTHORITY.

(a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out this Act.

(b) FINANCING.—

(1) FUND ACCOUNT.—The Federal Reserve Bank of New York shall establish a new account on behalf of the Secretary, called the “Treasury Electronic Currency Innovation Fund Account” (in this section referred to as the “Fund Account”).

(2) USE OF FUND ACCOUNT.—The Secretary shall effectuate any and all spending under this Act by drawing an overdraft on the Fund Account, which shall be accommodated and facilitated automatically, on an indefinite basis, and without the imposition of any interest charge or other form of maintenance or overdraft fees by the Federal Re-
serve Bank of New York and the Board of Governors of the Federal Reserve System.

(3) OVERDRAFT TREATMENT.—The Fund Account shall be exempt from any overdraft prohibitions that currently apply to other accounts administered on behalf of the Department of the Treasury Department by the Federal Reserve System or a Federal reserve bank, and any overdraft liability incurred by the Department of the Treasury shall not be included in calculations of public debt subject to limit under section 3101 of title 31, United States Code.

(4) TREATMENT OF LOSSES.—The Federal Reserve Bank of New York shall record any losses incurred as a result of spending undertaken on behalf of the Secretary from the Fund Account as a deferred asset (as described in section 11.96 of the Financial Accounting Manual for Federal Reserve Banks, as in effect on the date of the enactment of this Act) and shall be excluded from calculations of the net operating position or consolidated balance sheet of the Federal Reserve Bank of New York or the Federal Reserve System, so as to not reduce or impact the calculation of total income or revenue generated by the Federal Reserve System, or other-
wise reduce the total amount of net operating profits
to be made available for remittance to the Treasury
on an ongoing basis.