SUBAGREEMENT NO. 00010773

between

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

and

SAN FRANCISCO DISTRICT ATTORNEY'S OFFICE

THIS Subagreement is entered into by and between **The Regents of the University of California**, for the Berkeley campus ("**Berkeley**") and **San Francisco District Attorney's Office** ("**Subrecipient**") collectively referred to as "**Parties**" or individually as a "**Party**".

WHEREAS, Berkeley has received funding from the **California Community Foundation** ("Foundation"), under Grant No. 051128 ("Prime Award"), for the sole purpose of allowing Berkeley's Goldman School of Public Policy to develop and coordinate a competition under the **California 100 Initiative**, which seeks to articulate a strategy for California's next 100 years that is grounded in systematic research and evidence, deeply engaged with Californians around the state, and guided by core values and commitments to innovation, resilience, inclusion, sustainability, and equity (collectively, the "**Purpose**"), and

WHEREAS, the Subrecipient responded to the Request for Proposal, entitled "California 100 Initiative Call for Innovation Projects" (the "RFP"), and

WHEREAS, the Subrecipient's proposal, entitled "Justice Driven Data Science for Prosecutorial Impact" ("Project"), was selected for funding;

NOW THEREFORE, in consideration of the mutual promises set forth below, Berkeley and the Subrecipient agree as follows:

ARTICLE 1. STATEMENT OF WORK

The Subrecipient shall exercise reasonable efforts to carry out the Statement of Work incorporated herein and made a part of this Subagreement as **Exhibit A**. Changes to the Statement of Work require amendment to this Subagreement.

ARTICLE 2..... PERFORMANCE PERIOD

Berkeley hereby authorizes an initial Performance Period from **November 1, 2021** through **October 31, 2022**. Extensions of the authorized Performance Period require **amendment** to this Subagreement.

The anticipated full Performance Period of this Subagreement is from **November 1, 2021** through **October 31, 2023**, and is subject to the Foundation's support of Berkeley for the duration of that period. Should the Subrecipient require a no-cost extension of this Subagreement's full Performance Period, the Subrecipient must request such an extension from **Berkeley's Authorized**

Official (see Exhibit D), not later than thirty (30) days before the full Performance Period end date.

ARTICLE 3..... FINANCIAL CONSIDERATION

Berkeley will reimburse the Subrecipient on a cost-reimbursable basis for actual costs in the performance of the work under this Subagreement in an amount not to exceed **\$149,000**, which is based on the approved Budget incorporated herein and made part of this Subagreement as **Exhibit B**. Expenditures shall be in accordance with **Exhibit B**, and shall comply with any cost limitations imposed by the Foundation. The foregoing obligation amount shall not be exceeded unless this Subagreement is amended to obligate additional funds.

Berkeley's obligation to pay the Subrecipient shall at all times be conditioned upon the Foundation's obligation of funds to Berkeley.

Revisions to the approved Budget shall be in accordance with the terms of the Prime Award and the Foundation's policies. When **prior approval** is required for Budget revisions, such revisions shall require **amendment** to this Subagreement.

ARTICLE 4..... INVOICING AND PAYMENT

Invoicing:

The Subrecipient shall submit invoices to Berkeley, not more frequently than monthly and not less frequently than quarterly, after incurring costs not previously invoiced. Invoices must be submitted by email in accordance with the instructions provided by the UC Berkeley Accounts Payable Office at <u>https://controller.berkeley.edu/financial-operations/accounts-payable/helpful-hints-our-vendors</u>. At the time each invoice is submitted, a copy must be sent to the **Berkeley Financial Contact** (see Exhibit **D**). At the request of the Berkeley's Financial Contact, the Subrecipient shall provide back-up summary and detail to match invoiced categories.

All invoices shall be submitted in English, with costs shown in U.S. Dollars, using the Subrecipient's standard invoice. All invoices shall be dated, sequentially numbered, and at a minimum, must provide:

- 1. a current and cumulative breakdown of costs by major cost category in accordance with **Exhibit B**, including cost sharing, if applicable;
- 2. this Subagreement number **00010773**;
- 3. the Prime Award number **051128**;
- the Berkeley Purchase Order number (e.g. BB#######), which will be available from the Berkeley Financial Contact (see Exhibit D), after the full execution of this Subagreement; and
- 5. a **certification** that expenditures claimed represent actual costs for committed effort and work performed under this Subagreement.

A final statement of cumulative costs incurred, including cost sharing (if applicable), marked "FINAL" must be submitted, according to the above invoicing instructions, not later than sixty (60) days after expiration date of this Subagreement. In the event of early termination (see Article 13), the Subrecipient shall submit a final invoice to Berkeley according to the foregoing timeline, but relative to the effective date of termination. The final statement of costs shall constitute the Subrecipient's final financial report. The final invoice shall include the following certification or similar version thereof:

"Payment of this final invoice shall constitute complete satisfaction of all of Berkeley's obligations under this Subagreement. The Regents of the University of California are released and discharged from all further claims and obligations upon payment hereof."

Invoices not in compliance with the above requirements may be returned without payment, or payment may be delayed. The Subrecipient shall have the opportunity to correct and resubmit returned invoices.

Terms and conditions (front, reverse, attached, or incorporated) included in any Purchase Order, or other such financial documents associated with this Subagreement, issued by Berkeley to make and/or facilitate payment(s), regardless of the date of such documents, do not apply to this Subagreement. No such payment instruments will be construed to modify this Subagreement and its Amendments.

Payment:

Berkeley shall reimburse the Subrecipient, not more often than monthly for allowable costs.

All payments shall be considered provisional and subject to adjustment within the total estimated cost in the event such adjustment is necessary as a result of an adverse audit finding against the Subrecipient. Berkeley reserves the right to reject an invoice, in accordance with the Prime Award Terms and Conditions. The Subrecipient shall have the right to correct and resubmit any rejected invoices.

The closeout of this Subagreement does not affect the right of Berkeley or the Foundation to disallow costs and recover funds on the basis of a later audit or other review.

ARTICLE 5..... RECORDS AND AUDITS

Financial Records:

Funds are subject to financial audit. Therefore, separate accounting of the funds must be maintained.

The Subrecipient shall maintain accurate books and records of funds received and all costs incurred in the performance of this work and agrees to allow representatives of Berkeley access to its books and records, within a reasonable time. The Subrecipient shall maintain and retain financial records, supporting documents and other records pertaining to this Subagreement for a period of three (3) years from the termination date of the Prime Award. Notwithstanding the foregoing sentence, any records pertaining to audit, appeals, litigation or settlement of claims arising out of performance of this Subagreement shall be retained until such audits, appeals, litigation or claims have been disposed of.

In the event that any payment made to the Subrecipient is determined on the basis of an audit to be unallowable, the Subrecipient shall promptly refund the unallowable amount to Berkeley upon demand.

ARTICLE 6..... PROJECT MANAGEMENT / CONTACTS AND NOTICES

For Financial Matters:

Matters concerning invoicing, payments and financial reporting shall be directed to the appropriate Party's **Financial Contact**, as specified in **Exhibit D (Key Contacts)**.

For Technical Matters:

Matters concerning the technical performance of this Subagreement shall be directed to the appropriate Party's **Principal Investigator**, as specified in **Exhibit D (Key Contacts)**.

Berkeley's Principal Investigator, is responsible for the overall conduct of the Project. This Principal Investigator is responsible for the overall technical monitoring and guidance.

The Subrecipient's Principal Investigator is responsible for the Subrecipient's portion of the Project. Changes to the Subrecipient's Principal Investigator require amendment to this Subagreement.

For Business Matters:

Matters concerning the negotiation of changes to the terms, conditions, or funding amounts cited in this Subagreement, shall be directed to the appropriate Party's **Authorized Official**, as specified in **Exhibit D (Key Contacts).** Any such changes require **amendment** to this Subagreements.

Whenever any notice of approval is to be requested or given hereunder, it will be in writing and sent to the named **Authorized Officials**, at the addresses shown in **Exhibit D (Key Contacts)**. Notices shall state the date of effectiveness, when applicable.

ARTICLE 7..... REPORTING

The Subrecipient shall furnish to Berkeley any assistance reasonably requested by Berkeley to meet Berkeley's reporting obligations under the Prime Award.

Technical Reporting:

Technical reports shall be submitted, in writing, to **Berkeley's Principal Investigator** no later than **thirty (30)** days after the close of the period for which the reports are being made. Interim technical

reports are required for Phase 2 and Phase 3 of the project as described **Exhibit A**. A final technical report is required after Phase 4. Technical reports shall include the following components:

1. Deliverables update - In less than 250 words, provide a brief update on deliverables/milestones scheduled to be completed over the most recent reporting period. If any deliverables/milestones were delayed from the previous reporting period, please include those as part of the update.

2. Schedule update - In less than 250 words, provide a brief statement as to any anticipated changes in future deliverables and anticipated delays to the deliverables/milestones scheduled to be completed over the upcoming reporting period.

3. Communications update - Describe any media products (e.g., policy briefs, white papers, descriptive reports) produced as part of the project in the most recent reporting period.

Financial Reporting:

A final financial report is due according to the final invoicing timeline provided in Article 4 (Invoicing and Payment).

The financial report shall show actual expenditures reported as of the date of the report against the approved line item budget. The financial report shall be submitted, in writing, to **Berkeley's Financial Contact** (see **Exhibit D**).

Other Reporting

The Subrecipient shall be responsible for reviewing the Prime Award reporting requirements for other reporting terms applicable to the Subrecipient. Questions regarding content and frequency of, and due dates for, such reporting, should be discussed with the **Berkeley's Principal Investigator**.

ARTICLE 8..... INTELLECTUAL PROPERTY AND WORK PRODUCTS

Copyright:

The Subrecipient shall own all copyright and other intellectual property rights on all materials, inventions, works of authorship and software conceived and reduced to practice by the Subrecipient in the performance of this project.

To the extent that the Subrecipient has the right to grant such a license, when publications or similar materials are developed from work supported in whole or in part by this Subagreement, the Subrecipient shall grant to Berkeley a non-transferable, non-exclusive, irrevocable, worldwide, royalty-free license to use, reproduce, make derivative works, publish, or re-publish, display or otherwise disseminate in any manner and media such copyrighted or copyrightable materials for non-commercial, research or educational purposes.

The Subrecipient shall grant to the Foundation license to intellectual property according to the terms of the Prime Award.

Patentable Inventions:

The Subrecipient shall own any inventions conceived and first reduced to practice under the performance of this Subagreement ("**Patentable Invention**").

Subject to the Subrecipient's legal ability to offer such a license, the Subrecipient shall grant to Berkeley a non-commercial, royalty-free, non-exclusive license to the Subrecipient's rights to any Patentable Invention or discovery conceived and first reduced to practice under this Subagreement, for Berkeley's internal use.

Data Rights:

The Subrecipient shall own data it generates under the Subagreement.

The Subrecipient shall have the right to publish, disclose, disseminate and use, in whole or in part, any data or information received or developed under this Subagreement.

The Subrecipient hereby grants to Berkeley access to and use of data created in the performance of this Subagreement, to the extent required by Berkeley to meet its obligations to the Foundation under the Prime Award.

ARTICLE 9..... PUBLICATION

It is expected that research produced as a result of the California 100 Initiative will be made publicly available, in accordance with the University of California's Open Access Policy. Working papers may be printed and announced on the platforms controlled by the Initiative or Commission as well as any other publication venues and repositories of the University of California and its various campuses and research centers.

As a condition of participation in the project and upon receipt of project funding, researchers will be asked to provide the California 100 Initiative with right of first refusal for publication of commissioned reports. The California 100 Initiative shall make a determination on publication and communicate the decision with researchers within 90 days of receipt of the commissioned report manuscript. All drafts of commissioned reports are embargoed prior to publication by California 100. If California 100 refuses to publish the commissioned report, researchers are free to publish the rejected report in its entirety but shall make no representation of approval of the report by California 100. Outside of the commissioned report, researchers will be free to publish the results of their research in the venues of their choosing and at the time of their choosing.

ARTICLE 10. USE OF NAME AND ACKNOWLEDGMENT OF SUPPORT

Use of Name:

Neither Party shall use the other Party's name, trademarks, or other logos in any publicity, advertising, or news release without the **written prior approval** of the appropriate **Party's Authorized Official** (see **Exhibit D**). The Parties agree that each may use factual information regarding the existence and purpose of the relationship that is the subject of this Subagreement, for

legitimate business purposes, to satisfy any reporting and funding obligations, or as required by applicable law or regulation, without written permission from the other Party. In any such statement, the relationship of the Parties shall be accurately and appropriately described.

The Subrecipient understands that the California Education Code Section 92000 provides that the name "University of California" is the property of the State of California and that no person shall use that name without the permission of The Regents of the University of California, as described in the CEC Code.

The Subrecipient's use of the Foundation's name, trade name, trademark or other designations shall be in compliance with the terms of the **Prime Award Article 6 (Publicity and Publication)**. The Subrecipient's use of the California 100 Names shall be in compliance with the terms of the **Prime Award Article 6 (Publicity and Publication)** and **Article 7 (Intellectual Property and Copyrights)**.

The Subrecipient shall acknowledge Berkeley and its contributions to the Project supported by the Prime Award in any materials (in any media) produced in connection with the Project and in any public statements made regarding the Project. The Subrecipient agrees to establish Berkeley's requirements for attribution of their sponsorship prior to interviews or other promotional efforts. The Subrecipient also agrees to provide to Berkeley the form of its acknowledgment in all materials and media releases prior to distribution of any materials or media release. Acknowledgments in all materials and media releases will refer to Berkeley as the "University of California, Berkeley."

The Subrecipient agrees that publication of project results from work under this Subagreement will acknowledge that the Project was supported in whole or in part by the Foundation. The Subrecipient's acknowledgement of the Foundation's support shall be in compliance with the terms of the **Prime Award Article 6 (Publicity and Publication).**

ARTICLE 11..... CONFIDENTIALITY

It is expected that the work of this Subagreement can be carried out without any of the Parties disclosing confidential information to the other Parties.

However, should it become necessary to disclose confidential information, the disclosing Party will notify the receiving Party's **Principal Investigator** (see **Exhibit D**) in advance and in writing. All confidential documents must be clearly marked as "Confidential." If the information is orally disclosed which is deemed to be confidential, such confidential information must be reduced to writing by the disclosing Party within thirty (30) days after the oral disclosure, and provided to the receiving Party. The Parties agree to protect disclosed confidential information with the same degree of care as they would their own. The obligations of confidentiality under this Subagreement shall survive termination or expiration of this Subagreement for a period of **three (3) years**.

The obligations contained in this clause shall not apply to any confidential information which:

a. Is publicly known at the time of the disclosure to the receiving Party;

- b. After disclosure becomes publicly known otherwise than through a breach by the receiving Party, its officer, employees, agents or contractors;
- c. Can be shown by reasonable proof by the receiving Party to have reached its hands otherwise than by being communicated by the other Party, including being known to it prior to disclosure, or having been developed by or for it wholly independently of the other Party or having been obtained from a third party without any restrictions on disclosure on such third party of which the recipient is aware, having made due inquiry;
- d. Is required by law, regulation or order of a competent authority (including any regulatory or governmental body or securities exchange) to be disclosed by the receiving Party, provided that, where practicable, the disclosing Party is given reasonable advance notice of the intended disclosure and provided that the relaxation of the obligations of confidentiality shall only last for as long as necessary to comply with the relevant law, regulation or order and shall apply solely for the purposes of such compliance; or
- e. Is approved for release, in writing, by an authorized representative of the disclosing Party.

ARTICLE 12. SUBCONTRACTING AND ASSIGNMENT

The Subrecipient shall perform the work contemplated with resources available within its own organization. No portion of the work shall be subcontracted, nor shall this Subagreement be assigned, without the **prior written authorization** of **Berkeley's Authorized Official** (see **Exhibit D**), via **amendment** to this Subagreement. Any subcontractors listed in Exhibit B have been approved. Nothing contained in this Subagreement shall create any contractual or agency relationship between a lower tier Subrecipient or assignee, and Berkeley.

ARTICLE 13. SUSPENSION/TERMINATION

Either Party may terminate this Subagreement upon thirty (30) days advance written notice to the other Party. In the event of such termination, the Subrecipient shall take all reasonable steps to minimize further costs, and shall be entitled to reimbursement for allowable and proper budgeted costs and non-cancellable obligations incurred prior to the effective date of termination, except in no event shall such reimbursement exceed the amount set forth in Subagreement Article 3 (Financial Consideration).

In the event the Prime Award is suspended or terminated by either the Foundation or by Berkeley, Berkeley shall suspend or terminate this Subagreement in accordance with the terms of the Prime Award, and such suspension or termination shall be effective the date of the Prime Award suspension or termination. Berkeley will be unable to reimburse any expenses under such termination unless and until the Foundation reimburses Berkeley for such costs. Should the Foundation issue a "Cause Notice" related to this Subagreement, Subrecipient agrees to cooperate with the procedure and timeline described under **Article 16 of the Prime Award**. In accordance with the requirements of the Prime Award, "Cause" shall constitute any conduct that (A) would compromise the Foundation's reputation, interest or goodwill, (B) that is inconsistent with the values of the Foundation, or (C) that is inconsistent with the ethical framework and Purpose described in this Subagreement. Notification of suspension by Berkeley, or termination on the part of either Party, shall be communicated in writing, to the relevant Party's **Authorized Official** (see **Exhibit D**), and shall include the effective date of such action.

In the event of termination prior to the end date of this Subagreement, the Subrecipient agrees to deliver a final invoice according to the final invoicing timeline in Article 4 (Invoicing and Payment), and a final report showing progress to date, and copies of any deliverables completed to date, according to the final reporting timeline in Article 7 (Reporting). The balance owed to the Subrecipient will be paid upon receipt of all final reports and subject to the terms of this Subagreement.

ARTICLE 14. DISPUTES

Any dispute arising under this Subagreement which is not settled by agreement of the Parties may be settled by mediation, arbitration, or other appropriate legal proceedings.

Pending any decision, appeal or judgment in such proceedings, or the settlement of any dispute arising under this Subagreement, the Subrecipient shall proceed diligently with the performance of this Subagreement.

ARTICLE 15. FORCE MAJEURE

No Party shall be in default by reason of any failure in performance of this agreement if such failure arises, directly or indirectly, out of causes reasonably beyond the direct control or foreseeability of such party, including but not limited to, acts of God or of the public enemy, U.S. or foreign governmental acts in either a sovereign or contractual capacity, labor, fire, flood, epidemic and strikes.

ARTICLE 16. INDEMNIFICATION

Berkeley shall defend, indemnify and hold the Subrecipient, its officers, employees and agents harmless from and against any and all liability, loss, expense (including reasonable attorney's fees), or claims for injury or damages arising out of the performance of this Subagreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of Berkeley, its officers, employees or agents.

The Subrecipient shall defend, indemnify and hold Berkeley, its officers, employees and agents harmless from and against any and all liability, loss, expense (including reasonable attorney's fees), or claims for injury or damages arising out of the performance of this Subagreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the Subrecipient, its officers, employees or agents.

In accordance with requirements in the **Prime Award Article 9 (Subgrantees)**, the Subrecipient shall defend, indemnify and hold Foundation, its officers, employees and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury

or damages arising out of the performance of this Subagreement or Subrecipient's management and use of the funds received under this Subagreement, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of Subrecipient, ifs officers, agents or employees.

ARTICLE 17. INSURANCE

The Subrecipient shall maintain at its expense, during the Performance Period of this Subagreement, insurance or an equivalent form of self-insurance acceptable to Berkeley in terms as follows:

1. Commercial Form General Liability (contractual liability included) with limits as follows:

Each Occurrence	.\$1,000,000
Products, Completed Operations Aggregate	
Personal and Advertising Injury	
General Aggregate	
Concerne 1.99. 69	···π-,000,000

If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination of this Subagreement. The insurance shall have a retroactive date of placement prior to or coinciding with the effective date of this Subagreement.

- 2. Business Automobile Liability (Minimum Limits) for owned, scheduled, non-owned or hired automobiles with combined single limit of not less than \$1,000,000 per occurrence.
- 3. Workers' Compensation Coverage per statutory limits
- 4. The Commercial General Liability and Business Automobile Liability coverages referred to shall include The Regents of the University of California as an additional insured. Such a provision shall apply only in proportion to and to the extent of the negligent acts or omissions of the Subrecipient, its officers, employees, and agents. The Subrecipient shall upon, the execution of this Subagreement, furnish Berkeley with certificates of insurance evidencing compliance with all requirements. Certificates shall further provide for thirty (30) days (10 days for non-payment of premium) advance written notice to Berkeley of any material modification, change, or cancellation of the above insurance coverages.
- 5. Certificates shall be issued in the name of The Regents of the University of California and include the Subagreement No. in the Remarks section of the Certificate and be provided to the **Berkeley's Authorized Official**.

ARTICLE 18. INDEPENDENT CONTRACTOR

The Subrecipient and its employees, consultants, agents, or independent contractors will perform all services under this Subagreement as independent contractors. Nothing in this Subagreement will be deemed to create an employer-employee or principal-agent relationship between Berkeley and the Subrecipient's employees, consultants, agents, or independent contractors. The Subrecipient and its employees, consultants, agents and lower tier Subrecipients will not, by virtue of any services provided under this Subagreement, be entitled to participate, as an employee or otherwise, in or

under any employee benefit plan of Berkeley or any other employment right or benefit available to or enjoyed by employees of Berkeley.

ARTICLE 19. GOVERNING LAW

This Subagreement shall be governed, construed and enforced for all purposes in accordance with the laws of the State of California.

ARTICLE 20. ANTI-TERRORISM

The Subrecipient agrees it will use the Subagreement funds in compliance with all applicable antiterrorists financing an asset control laws, regulations, rules and executive orders, including but not limited to, the USA Patriot Act of 2001 and Executive Order 13224.

ARTICLE 21. LOBBYING

The Subrecipient agrees that no portion of these funds will be used for any attempt to influence legislation, to influence the outcome of any specific election or to carry on directly or indirectly any voter registration drive. Should the results of the Project be used for technical assistance to a legislative body, the Subrecipient agrees that it shall be at the written request of such body or duly constituted committee thereof, and the results will be made available to the entire body. Subrecipient further agrees that it will not use Subagreement funds for any purpose other than religious, charitable, scientific or educational within the meaning of Internal Revenue Code Section 170(c)(2)(B) or in any manner inconsistent with Internal Revenue Code Section 501(c)(3), including causing any private inurement or improper private benefit to occur.

ARTICLE 22..... EXPORT CONTROL

It is understood that both Parties are subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities, and that their obligations hereunder are contingent on compliance with applicable U.S. export laws and regulations (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979).

ARTICLE 23..... PRIME AWARD TERMS & CONDITIONS

The provisions of the Prime Award set forth in **Exhibit C**, which is incorporated herein and made a part of this Subagreement, are applicable to the Subrecipient and the Subrecipient hereby agrees to comply with such provisions, except for the following:

- 1. Payment terms, schedules or mechanisms described in the Prime Award and/or associated Foundation terms and condition are superseded by the equivalent terms within this Subagreement.
- 2. Reporting terms and/or schedules described in the Prime Award are superseded by this Subagreement's Article 7 (Reporting).

- 3. Termination terms described in the Prime Award are superseded by this Subagreement's Article 13 (Suspension/Termination).
- 4. Article 17 of the Prime Award (Tax Status) shall not apply to the Subrecipient.
- 5. All prior approval requests and notices are to be submitted to Berkeley and not the Foundation directly.

In all incorporated provisions, unless the context of the provision requires otherwise, the term "UCB" shall mean "Subrecipient"; the term "Grant Agreement" and equivalent phrases shall mean "Subagreement"; and the term "Foundation" and equivalent phrases shall mean "Berkeley". It is intended that the appropriate provisions shall apply to the Subrecipient in such manner as is necessary to reflect the position of the Subrecipient as a subrecipient to Berkeley, to ensure the Subrecipient's obligations to Berkeley and to the Foundation, and to enable Berkeley to meets its obligations under its Prime Award.

In the event of a conflict between the Prime Award and this Subagreement, the terms and conditions of this Subagreement shall govern.

ARTICLE 24..... ADDITIONAL TERMS AND CONDITIONS

All provisions of the **California 100 Initiative Call for Innovation Projects**, set forth in **Exhibit E**; and all provisions of the **Goldman School of Public Policy Award Letter**, set forth in **Exhibit F**, which are incorporated herein and made part of this Subagreement, are applicable to the Subrecipient, and the Subrecipient hereby agrees to comply with such provisions.

ARTICLE 25..... CHANGES AND AMENDMENTS

Requests for changes and amendments to this Subagreement shall be directed to **Berkeley's** Authorized Official (see Exhibit D).

This Subagreement may be modified only by written agreement and executed by authorized representatives of both Parties, excepting that Berkeley may issue non-substantive changes to the authorized Performance Period and obligated Budgets, unilaterally. Such unilateral modifications shall be considered to have been accepted, unless the Subrecipient indicates otherwise within fourteen (14) days after receipt, when sent by Berkeley to the Subrecipient's **Authorized Official** (see **Exhibit D**).

ARTICLE 26. ENTIRE AGREEMENT

This Subagreement, including the following Exhibits, states the entire contract between the Parties in respect to the subject matter of the Subagreement and supersedes any previous written or oral representations, statements, negotiations, or agreements.

Exhibit A – The Subrecipient's Statement of Work Exhibit B – The Subrecipient's Budget Exhibit C – Prime Award Exhibit D – Key Contacts Exhibit E – California 100 Initiative Call for Innovation Projects Exhibit F – Goldman School of Public Policy Award Letter

ARTICLE 27..... ORDER OF PRECEDENCE

Any inconsistency in the Subagreement documents shall be resolved by giving precedence in the following order:

- 1. Subagreement Articles;
- 2. California 100 Initiative Call for Innovation Projects (Exhibit E)
- 3. The Goldman School of Public Policy Award Letter (Exhibit F); and
- 4. Prime Award terms and conditions (Exhibit C)
- 5. Other Documents/Attachments

ARTICLE 28..... DUE AUTHORITY

The persons signing this Subagreement certify that they are Authorizing Official Representatives of their respective Organizations and have the requisite legal power and authority to execute this Subagreement on behalf of their Organization and to bind their Organization to the obligations herein.

In witness whereof, the Parties hereto have executed this Subagreement as of the day and year written.

FOR:	SAN FRANCISCO DISTRICT ATTORNEY'S OFFICE ("Subrecipient")	FOR:	THE REGENT'S OF THE UNIVERSITY OF CALIFORNIA ("Berkeley")
By:		By:	
Name:		Name:	Erin Lentz
Title:		Title:	Subaward Specialist Sponsored Projects Office
Date:		Date:	

Statement of Work

Project Title: Justice Driven Data Science for Prosecutorial Impact

Grantee: San Francisco District Attorney's Office (SFDA)

Grant Amount: \$149,400

Project Summary:

The use of data to inform prosecutorial decisions is a key tenet of "progressive prosecution," a new relatively approach to criminal prosecution that seeks to reverse the role of prosecutors as drivers of mass incarceration by shifting the goals of prosecutors from conviction and punishment to fairness and accountability. The San Francisco District Attorney's Office (SFDA) is committed to this goal. Unfortunately, the antiquated nature of criminal justice data and many criminal justice data systems makes it extremely difficult to actually use data, especially in real-time to inform daily case-specific decisions. This is especially true for Assistant District Attorneys (ADAs) in our Intake Unit, who must review extensive information about suspects and alleged criminal conduct housed in multiple data systems and in varying—and often text-based—formats to decide whether to discharge, divert, or prosecute a given case. If diversion is most appropriate, the ADA must further discern the most appropriate diversion program based on an array of person and case characteristics; similarly, if prosecution is appropriate, there are similarly difficult decisions to make, particularly for harder to identify and prosecute cases, such as human trafficking.

Despite these challenges, SFDA is committed to using data to make fairer and more equitable decisions, including better identifying cases for discharge, diversion, or prosecution. In late 2021, we will be implementing a new electronic case management system, which will put us in a prime position to achieve this goal. Nonetheless, the disparate and semi-structured nature of the data that feed into this new data system will continue to impose limitations if we do not address them. Toward this end, SFDA proposes *Justice Driven Data Science for Prosecutorial Impact*, an innovative effort to use data science and machine learning to leverage criminal justice data to inform our most critical decisions.

This two-year project will begin with a research effort to allow us to better quantify critical characteristics of cases that have been or should have been discharged, diverted, or prosecuted. Based on this, we will build a series of algorithms that can inform and improve prosecutorial decision-making by flagging cases as good candidates for specific prosecutorial action. While all cases will still be reviewed by an ADA who will make the decision to discharge, divert, or charge, by using data science to identify key case characteristics that sit in disparate places across SFDA data and flagging cases based on likely appropriate paths, this effort will serve three distinct but interrelated goals: first, reducing the prosecution of cases that pose a low risk to public safety and thus are shown by a growing body of research to be more effectively addressed without formal prosecution; second, reducing SFDA caseloads through earlier and more effective identification of cases for discharge or diversion; and three, increasing our prosecution of difficult-to-identify but high priority cases that pose a significant risk to public safety. We believe that this pioneering effort, if successful, can transform prosecution across California and the US by creating a replicable model of true data-driven prosecution.

Project Timeline, Goals, Objectives and Milestones:

The SFDA *Data Science for Prosecutorial Impact* (DSPI) proposes the following goals, objectives, and milestones, outlined in the Chart below, to successfully implement this project.

Goal		Objective	Milestones	
		Phase 1: Months 1-	4	
1.	Lay groundwork for successful project implementation	 Objective 1.1. Complete City and County of San Francisco Accept and Expend Process allowing for release of funds. Objective 1.2. Hire Project Director. 	approved by SFDA HR.Project director hired.	
		Phase 2: Months 5		
2.	Reduce SFD caseloads by increasing identification of cases for discharge or diversion at initial intake	 Objective 2.1. Establish common characteristics of cases for discharge. Objective 2.2. Establish common characteristics of cases eligible for SFDA pretrial diversion programs and/or San Francisco collaborative courts. 	 Review of best practices in prosecution and discharge completed. Interviews conducted with intake unit ADAs and case carrying ADAs re: commonly discharged cases. Primary discharge categories identified, such as insufficient evidence; interest of justice; pretextual stop. Established list of case characteristics for primary categories of discharged cases. Review of best practices in pretrial and collaborative court diversion. Interviews conducted with diversion unit ADAs and program partners. List of case and defendant characteristics for each diversion program. 	
		Phase 3: Months 1	1-15	
3.	Improve identification of cases involving harder-to- identify characteristics that pose a high risk to public safety and community well-being.	 Objective 3.1. Establish common characteristics of cases involving human trafficking, including commercial sexual exploitation and labor trafficking. Objective 3.2. Establish common characteristics of domestic violence cases with a high risk for escalation, especially lethality. 	 Review of best practices in human trafficking identification and prosecution. Interviews conducted with specialized unit ADAs and Victim Service Division staff. Interviews conducted with experts in human trafficking. List of case and defendant characteristics indicating high 	

			 Interviews conducted with specialized unit ADAs and Victim Service Division staff. Interviews conducted with experts in domestic violence, especially high lethality domestic violence. List of case and defendant characteristics indicating high likelihood of severe domestic violence cases, especially high lethality risk.
		Phase 4: Months 1	16-24
4.	Use data science, machine learning, and IT business rules to flag cases for likely discharge, diversion, or additional attention at Intake.	 Objective 4.1. Match relevant case characteristics to available data elements in SFDA case management system. Objective 4.2. Develop scripts to flag characteristics from text- based materials. Objective 4.3. Develop algorithms to flag cases for special review at intake based on relevant characteristics. Objective 4.4. Test algorithms. Objective 4.5. Refine and redeploy algorithms 	 materials. Preliminary diversion algorithm. Preliminary discharge algorithm. Preliminary high safety risk case algorithm. Tests of each algorithm. Revised and deployed algorithms.

Key Participating Staff:

Mikaela Rabinowitz, PhD. I SFDA Director of Data, Research, and Analytics

This project will be led by Dr. Mikaela Rabinowitz, SFDA's Director of Data, Research, and Analytics. As project lead, Dr. Rabinowitz will oversee all aspects of project planning and implementation, working with a to-be-hired research associate to collect and analyze the qualitative and quantitative data necessary to identify characteristics for different case processing paths and then with a data engineer and with SFDA IT staff to coordinate the development and implementation of appropriate algorithms.

Dr. Rabinowitz brings 15 years of experience in using data to inform criminal justice decisions and worked in a number of criminal justice research and advocacy positions prior to joining SFDA. In her role at SFDA, Dr. Rabinowitz oversees all aspects of data collection, processing, and analysis, including working closely with SFDA's IT Department to plan for the implementation of the office's new case management system.

Beth Munger I SFDA Principal IT Business Analyst

Beth Munger, SFDA's Principle IT Business Analyst, will work closely with Dr. Rabinowitz and a data engineer to support the integration of business rules and algorithms to flag cases. As the project manager for SFDA's new case management system, she will also act as the liaison

between the case management system vendor and SFDA staff during the implementation of this project.

Ms. Munger has been an IT Business Analyst with SFDA for more than six years, during which time she has served as the single point of contact for all technical implementations and business streamlining opportunities. In this role, she has partnered with attorneys, analysts, and support staff to understand the existing business environment, identify opportunities for streamlining, and facilitate the transition to new business processes. Prior to her work at SFDA, Ms. Munger was a product manager and senior business analyst in San Francisco's Human Services Agency for more than a decade. She holds a Business Analyst Certification from George Washington University and a Project Management Professional (PMP) certification from UC Berkeley.

Exhibit B - Subrecipient's Budget

	Budget Works	heet		Notes:
Name of Agency/Organization	San Francisco Distric	t Attorney's Office		Please describe each line item below.
		Requested Budge	t	
Expense Category	Year 1	Year 2	Total	
Personnel	\$0.00	\$0.00	\$0.00	
Fringe Benefits	\$0.00	\$0.00	\$0.00	
Equipment	\$1,000.00	\$0.00	\$1,000.00	SFDA will purchase a high quailty OCR software to convert text in law enformcent PDF reports to data for analysis.
-4-1-	+-,		+-/	
Supplies	\$0.00	\$0.00	\$0.00	
				SFDA will contract with an IT programmer via one of the City of San Francisco's approved vendors to develop new programs and/or algorithms to flag cases, as described in the proposal. In addition, SFDA will pay Journal Technologies, Inc. (JTI), the vendor for our eProsecutor Case Management System, \$20,000 to integrate the programs developed as
Subcontracts	\$25,000.00	\$123,000.00	\$148,000.00	part of this project into our eProsecutor system.
Other	\$0.00	\$0.00	\$0.00	
Total Direct Cost	\$26,000.00	\$123,000.00	\$149,000.00	
Indirect Costs (cap of 5%)	\$0.00	\$0.00	\$0.00	
Total Cost	\$26,000.00	\$123,000.00	\$149,000.00	1
NOTE: Total requested budget				
across the two year period.				

California 100 Initiative: Design and Implementation Budget

Budget Justification

Project Title: Justice Data Driven Science for Prosecutorial Impact **Grantee:** San Francisco District Attorney's Office

Budget Justification:

Equipment	SFDA will purchase a high-quailty OCR software to convert text in law enforcement PDF reports to data for analysis.
Subcontracts	SFDA will contract with an IT programmer via one of the City of San Francisco's approved vendors to develop new programs and/or algorithms to flag cases, as described in the proposal. In addition, SFDA will pay Journal Technologies, Inc. (JTi), the vendor for our eProsecutor Case Management System, \$20,000 to integrate the programs developed as part of this project into our eProsecutor system.

GRANT AGREEMENT Between

CALIFORNIA COMMUNITY FOUNDATION and THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, ON BEHALF OF ITS BERKELEY CAMPUS

Grant Agreement Number: 051128

This Grant Agreement is entered into by and between California Community Foundation ("Foundation") and The Regents of the University of California, on behalf of its Berkeley Campus ("UCB") in support of the project entitled, "California 100"; where the Foundation is funding this agreement at the recommendation of the Spiegel Family Fund, a donor-advised fund.

The parties hereto agree to the following terms and conditions:

Article 1. STATEMENT OF WORK

UCB shall perform the work described, and perform such work in the manner described, in Attachment A, Statement of Work ("Work"), attached and incorporated into this Grant Agreement. UCB shall use its best efforts in conducting the Work but does not guarantee any specific research result or project outcome.

Article 2. PERIOD OF PERFORMANCE

The period of performance shall begin on March 1, 2021 and shall not extend beyond October 31, 2023 (the "Grant Term") unless extended by amendment(s) to this Grant Agreement.

Article 3. COMPENSATION AND PAYMENTS

For the performance of the Work described in Attachment A, Foundation agrees to award UCB the maximum amount of \$17,711,029 (the "Grant Award"). The Grant Award will be disbursed in accordance with the schedule below for cost described in Attachment B, Budget, attached and incorporated into this Grant Agreement.

Phase	Due Date	Amount
Phase 1a	Upon execution	\$4,842,375
Phase 1b.1	September 1, 2021	\$3,374,482
Phase 1b.2	February 1, 2022	\$3,374,482
Phase 2.1	September 1, 2022	\$3,059,845
Phase 2.2	February 1, 2023	\$3,059,845

Payments shall be made according to the following payment schedule:

UCB shall return any unspent funds within one hundred twenty (120) days of the project end date or termination date whichever comes first.

Foundation shall send UCB payment(s) by electronic transfer to:

Bank Name:	Bank of America, NA
Bank Account Number:	01753-80001
Name of Bank Account:	University of California Berkeley,
	A Regents of the University of California Affiliate
Bank Routing ACH Code:	121000358
Bank Address:	150 N College Street, NC1-028-17-06, Charlotte, NC 28255
Reference:	UCB# 051128, PI Lerman

Article 4. PROJECT MANAGEMENT

The parties' representatives are listed in Attachment C, attached and incorporated into this Grant Agreement.

Each party's Authorized Representatives have the authority to execute this Grant Agreement and its Amendment(s) on behalf of the corresponding party to this Grant Agreement.

UCB agrees to permit Foundation's Technical Representatives to confer on a regular and periodic basis with UCB's Principal Investigator. It is understood and agreed that Foundation's representatives have no authority to supervise, direct, or control the work performed hereunder.

The Foundation has delegated the role of Technical Representative to the individuals identified on Attachment C, as such Attachment may be modified from time to time. The Foundation's Technical Representative is responsible for technical monitoring of the project and providing guidance to UCB, as more particularly set out in Articles 4, 5 and 16 of this Grant Agreement. UCB's Principal Investigator is responsible for the overall technical and administrative conduct of the project.

Key Personnel positions for this project are: Executive Director, Director of Engagement, Director of Research, Director of Innovation and Director of Advanced Technology. UCB's Principal Investigator is responsible for assigning Key Personnel roles and shall consult with the Foundation's Technical Representative on changes to Key Personnel.

The replacement of UCB's Principal Investigator, a change in the institutional affiliation of the Principal Investigator and an anticipated reduction in effort of greater than 25% by the Principal Investigator must be consented to by the Foundation's Technical Representative.

Article 5. **REPORTS**

Report Type	Due Date
Verbal progress reports	During periodic check-ins (not less frequently
	than monthly)
Phase 1 technical report	At the completion of Phase 1
Phase 1 interim financial report	At the completion of Phase 1
Phase 2 technical report	At the completion of Phase 2
Final financial report and a brief final narrative	Within ninety (90) days of the project end date or
report summarizing the results of the Work	termination date whichever comes first.

UCB shall provide the following reports to the Foundation's Technical Representative:

Article 6. PUBLICITY AND PUBLICATION

The parties agree that neither will use the name of the other party or its employees, or, in the case of the Foundation, the individual funder of Spiegel Family Fund, in any advertisement, press release or publicity with reference to this Grant Agreement or any product or service resulting from this Grant Agreement, without prior written approval of the other party. Notwithstanding the foregoing, the parties agree that (a) prior to the end date of this Grant Agreement, either party shall be permitted to use the names "California

100," "California 100 Initiative," "California 100 Commission" and their derivatives (collectively the "California 100 Names") publicly in connection with the Work and in a manner appropriate and consistent with the standards and objectives set out in Attachment A, Statement of Work, which is attached and incorporated into this Grant Agreement and (b) following the end date of this Grant Agreement, the Foundation may continue to use the California 100 Names.

Foundation understands that the California Education Code Section 92000 provides that the name "University of California" is the property of the State of California and that no person shall use that name without the permission of The Regents of the University of California.

UCB agrees that publication of project results from work under this Grant Agreement will acknowledge that the project was supported in whole or in part by the California 100 Initiative and California Community Foundation.

Article 7. INTELLECTUAL PROPERTY AND COPYRIGHTS

UCB shall own the entire right, title and interest, including all copyrights and other intellectual property rights, in and to all materials, inventions, works of authorship, software, information and data conceived or developed by UCB in the performance of this project. However the California 100 Names shall not be considered intellectual property rights owned by UCB under this Grant Agreement and. UCB agrees to not use the California 100 Names (a) for purposes other than the Work at any time and (b) for any purposes after the end date of this Grant Agreement. The Foundation may continue to use the California 100 Names following the end date of this Grant Agreement.

In consideration of Foundation's support of the Work, and to the extent that UCB has the right to grant such a license, when publications or similar materials are developed from work supported in whole or in part by Foundation under this Grant Agreement, UCB shall grant to Foundation a non-exclusive, perpetual, irrevocable, worldwide, royalty-free license to use, reproduce, publish, or re-publish, display, or otherwise disseminate in any manner and media such copyrighted or copyrightable materials for non-commercial purposes.

Article 8. PATENT RIGHTS

All rights to inventions conceived or reduced to practice in the performance of this Grant Agreement are the property of UCB and will be disposed of in accordance with the UCB Patent Policy.

Article 9. SUBGRANTEES

UCB may select subgrantees of its choice in furtherance of the Work and as set forth in Exhibit A. UCB confirms that the Foundation has not required either in writing or orally that UCB select any specific subgrantee, and UCB shall retain full discretion and control over the selection of subgrantees. UCB is responsible for ensuring that all subgrantees use funds received solely in a manner that is consistent with this Grant Agreement and agreements between UCB and subgrantees include indemnification of the Foundation in accordance with Article 13.

Article 10. RECORD RETENTION

Financial records, supporting documents and other records pertaining to this Grant Agreement shall be maintained and retained by UCB for a period of three (3) years from the termination date of this Grant Agreement.

Article 11. EQUIPMENT TITLE

In the event UCB purchases equipment under this Grant Agreement, the title of such equipment shall vest with UCB.

Article 12. CONFIDENTIALITY

It is expected that the work of this Grant Agreement can be carried out without any of the parties disclosing confidential information to the other parties.

However, should it become necessary to disclose confidential information, Foundation will notify UCB in advance and in writing. All confidential documents must be clearly marked as "Confidential." If the information is orally disclosed which is deemed to be confidential, such confidential information must be reduced to writing by Foundation within thirty (30) days of the oral disclosure, and provided to UCB clearly marked as "Confidential." UCB agrees to protect Foundation's confidential information with the same degree of care as they would their own.

The obligations contained in this clause shall not apply to any confidential information which:

- a. Is publicly known at the time of the disclosure to the receiving party;
- b. After disclosure becomes publicly known otherwise than through a breach by the receiving party, its officer, employees, agents or contractors;
- c. Can be shown by reasonable proof by the receiving party to reached its hands otherwise than by being communicated by the other party, including being known to it prior to disclosure, or having been developed by or for it wholly independently of the other party or having obtained from a third party without any restrictions on disclosure on such third party of which the recipient is aware, having made due inquiry;
- d. Is required by law, regulation or order of a competent authority (including any regulatory or governmental body or securities exchange) to be disclosed by the receiving party, provided that, where practicable, the disclosing party is given reasonable advance notice of the intended disclosure and provided that the relaxation of the obligations of confidentiality shall only last for as long as necessary to comply with the relevant law, regulation or order and shall apply solely for the purposes of such compliance; or
- e. Is approved for release, in writing, by an Authorized Representative of the disclosing party.

Article 13. INDEMNIFICATION

UCB shall defend, indemnify and hold Foundation, its officers, employees and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Grant Agreement or UCB's management and use of the funds received under this Grant Agreement, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of UCB, its officers, agents or employees.

Foundation shall defend, indemnify and hold UCB, its officers, employees and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Grant Agreement, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of Foundation, its officers, agents or employees.

Article 14. FORCE MAJEURE

No party shall be in default by reason of any failure in performance of this Grant Agreement if such failure arises, directly or indirectly, out of causes reasonably beyond the direct control or foreseeability of such party, including but not limited to, acts of God or of the public enemy, U.S. or foreign governmental acts in either a sovereign or contractual capacity, labor, fire, flood, epidemic and strikes.

Article 15. DISPUTES

Any dispute arising under this Grant Agreement which is not settled by agreement of the parties may be settled by mediation, non-binding arbitration or other appropriate legal proceedings.

Exhibit C - Prime Award

Article 16. TERMINATION

Either party may terminate this Grant Agreement without Cause upon thirty (30) days advance written notice to the Authorized and Technical Representatives of the other party, listed in Attachment C. In addition, the Foundation may terminate this Grant Agreement for Cause, with such termination to be effective on the Cause Termination Date. If the Foundation wishes to terminate this Grant Agreement for Cause, the Foundation shall provide written notice setting forth the Cause for the termination (the "Cause Notice") to UCB's Authorized and Technical Representatives, listed in Attachment C. UCB shall have thirty (30) days following delivery of the Cause Notice to meet with the Foundation to structure a solution that would cure the issues giving rise to the Cause (the "Notice Period"). If UCB and the Foundation are able to reach an agreement on a solution that would cure the issues giving rise to the Cause within the Notice Period, UCB shall have an additional ten (10) days following the end of the Notice Period to implement the solution that would cure the issues giving rise to the Cause (the "Cure Period"). For purposes of this Article 16, the "Cause Termination Date" shall be (A) the last day of the Notice Period, if UCB and the Foundation are unable to reach an agreement on a solution that would cure the issues giving rise to the Cause during the Notice Period, or (B) the last day of the Cure Period, if UCB and the Foundation are able to reach an agreement on a solution that would cure the issues giving rise to the Cause during the Notice Period but UCB fails to implement that solution during the Cure Period. If, following the delivery of Cause Notice, UCB and the Foundation are able to reach an agreement on a solution that would cure the issues giving rise to the Cause during the Notice Period and UCB implements that solution during the Cure Period, no termination of this Grant Agreement shall result from the delivery of that Cause Notice.

For purposes of this Article 16, "Cause" shall constitute any conduct on the part of UCB, its officers, agents or employees, specifically including subgrantees and others selected by and receiving funds through UCB pursuant to this Grant Agreement that (A) would compromise the Foundation's reputation, interest or goodwill, (B) that is inconsistent with the values of the Foundation, or (C) that is inconsistent with the ethical framework and purpose of the Work described in the Statement of Work.

In the event of an early termination of this Grant Agreement without Cause, UCB shall be entitled to payments of all allowable costs incurred and non-cancellable obligations to the effective date of such termination. Non-cancellable obligations includes personnel commitments UCB is required to cover in accordance with UC policy. In the event of an early termination of this Grant Agreement by the Foundation for Cause, the Foundation shall have no further obligation to make any further payments of the Grant Award under Article 3 other than to make payments for funds already spent in full compliance with this Grant Agreement through the Cause Termination Date. Any unspent funds shall be returned to the Foundation in accordance with Article 3.

Article 17. TAX STATUS

UCB certifies that it is exempt from Federal income taxes under Section 501(c)(3) of the Internal Revenue Code and is classified as a public charity under Section 509(a)(1) of the Internal Revenue Code. If there is any change in UCB's status and/or classification, UCB shall promptly notify the Foundation. Further, if at any time prior to the end date of this Grant Agreement, UCB ceases to qualify as a public charity under Section 509(a)(1) of the Internal Revenue Code, any remaining financial obligations of the Foundation under this Grant Agreement shall be null and void, expect the Foundation shall provide funding for costs incurred prior to UCB ceasing to qualify as a public charity.

UCB further agrees that it will not use any of these funds:

- a) To carry on propaganda or otherwise attempt to influence legislation;
- b) To influence the outcome of any specified public election or to carry on, directly or indirectly, any voter registration drive;
- c) For any purpose other than religious, charitable, scientific or educational within the meaning of Internal Revenue Code Section 170(c)(2)(B).

d) In any manner inconsistent with Internal Revenue Code Section 501(c)(3), including causing any private inurement or improper private benefit to occur.

Article 18. AMENDMENTS AND NOTICES

Any amendment(s) to this Grant Agreement must be in writing and signed by Authorized Representatives of both parties.

Whenever any notice is to be given hereunder, it shall be in writing and shall be deemed received, if delivered by courier on a business day, or if such day is not a business day, the first business day thereafter, or on the second business day following mailing, if sent by first class mail, postage prepaid. Notices shall be addressed to the Authorized Representatives in Attachment C.

Article 19. INDEPENDENT CONTRACTOR

UCB is deemed at all times to be an independent contractor and shall be responsible for the manner in which it performs the work under this Grant Agreement. Nothing contain herein shall be construed as creating the relationship of employer and employee between UCB and Foundation or its officers, employees or agents.

Article 20. SEVERABILITY

If any of the provisions of this Grant Agreement determined to be illegal or unenforceable by a court of competent jurisdiction, the other provisions shall remain in full force and effect.

Article 21. ENTIRE AGREEMENT

This Grant Agreement represents the entire understanding and contract between the parties regarding the subject matter herein, and supersedes any previous written or oral representations, statements, negotiations, or agreements.

IN WITNESS WHEREOF, duly authorized representatives of the parties have executed this Grant Agreement on the dates noted below.

California Community Foundation	The Regents of the University of California
By: Jui /ogueda.	By: Digitally signed by Angela R. Ford Date: 2021.04.05 22:06:53 -07'00'
Name: Terri Mosaueda Title: VP, Developnieut aucl	Name: Angela R. Ford
	Title: Associate Director, Sponsored Projects Office
Date: Doncer Relations aport 5, 2021	Date: April 5, 2021

ATTACHMENT A

Statement of Work

STATEMENT OF WORK

CALIFORNIA 100: People, Ideas, and Action to Power the Next Century

Outline

- I. Setting the Stage
- II. Key Insights and Approach
- III. Key Issues and Throughlines
- IV. Organizational Structure and Work Plan
- V. Timeline and Deliverables

Appendices

- A. Developing Baseline Knowledge
- B. Draft Call for Innovation Projects
- C. Everyday Indicators (EI) Process
- D. Potential Strategic Partnerships
- E. Systems Change Frameworks

I. Setting the Stage

California is an idea that is finally coming to fruition.

When the state entered the Union in 1850, it was the quintessential "golden child." Discovery of gold in 1849 enabled the territory to achieve statehood in record time, overcoming Congressional proposals to split the state into a free North and a slaveholding South. Soon, prospectors from around the world came to California, lured by the promise of social liberty and economic prosperity for all.

It quickly became apparent, however, that the golden dream was accessible only to some. Within a year of statehood, California passed laws stripping rights from Chinese immigrants, Mexican American landholders, Native Americans, and Black workers. For the next 150 years, California held distinction as a national leader in immigrant exclusion and racist ballot propositions, even as it made progress in some aspects of gender rights and LGBT rights. The state finally started making amends on citizenship rights in 2001, passing the California Dream Act and followed by a <u>series of reforms</u> that has brought the state closer to its original vision, as a land of opportunity and place of prosperity for all.

In addition to exclusion and inclusion, California is also a story of innovation and revolution:

- of political revolutions such as the progressive movement (1910s) that spread women's suffrage, direct democracy, and nonpartisan local elections;
- of <u>revolutions in federalism and public policy</u> that created an alternative national standard for air quality starting in 1970;
- of human rights revolutions such as expansions in gay rights and immigrant rights; and
- of tech revolutions from semiconductors (1950s) to integrated circuits and networks (1960s), personal computing (1970s), Internet software (1990s), clean tech (2000s), and social media (2010s).

Soon after the presidential election in 2016, California seemed to have temporarily forgotten its core strengths in innovation. Resistance became the initial rallying cry, and justifiably so given the erosion of rights on a national scale. Since then, however, a parallel narrative has begun to emerge, and much more in keeping with California's brand of innovation—the state is taking national leadership once again, in areas ranging from <u>space exploration</u> and <u>lithium extraction</u>, to innovations in <u>foreign policy</u> and <u>domestic policy</u>.

Regardless of who is in the White House, in 2021 or 2121, innovations that advance equity and sustainability will continue to propel California and the nation forward. We need a plan to accelerate and sustain those trends during California's next century.

II. Key insights and approach

These are the key insights that inform our approach to shaping California's next century:

 Federalism offers important opportunities and constraints. If states are to fulfill their promise as laboratories of change, we need to create a climate of pro-innovation federalism—one that encourages policy and social innovation while also providing a floor of state-level rights and protections guaranteed by Congressional legislation and consistent enforcement of the 14th Amendment. It is important to create strategic openings in federalism with allies in other states and the federal government over the coming century.

To provide just one example of how pro-innovation federalism could work: California could be a leader in proposals enabling states to issue their own work visas—something that is actively being discussed in a few Midwestern states with so-called "heartland visas." This would entail building sufficient agreement across states to push for changes in Congressional law. Less ambitious proposals could include giving states preference points for new visa applications, something Canadian provinces can currently do. In other policy areas such as environment and health, California could formally or informally set an alternative national standard along the lines of the Clean Air Act (*formal*) or along the lines of the short-lived Western States Pact on COVID-19 response including California, Oregon, Washington, Nevada and Colorado (*informal*). Finally, California can continue exploring ways to directly engage in agreements with foreign governments at the state or provincial level, much as it did with <u>cap-and-trade</u>.

- 2. <u>Cross-regional coalitions are essential for large-scale policy reforms</u>. Federalism is important not only with respect to state-national dynamics, but also for policy and political dynamics within California (or *intrastate* federalism). In recent years, we have seen a consistent pattern in housing policy, where innovative proposals get incubated in the Bay Area and subsequently die in the legislature due to opposition from Southern California. By contrast, the success of immigration reform in California has been built on the strength of regional advocacy coalitions (including in the critical population-rich regions of Central Valley and Inland Empire) working in concert with allied legislators across the state and with statewide advocacy groups like the California Immigrant Policy Center.
- 3. <u>Inclusive and diverse teams tend to produce better solutions</u>. Geographic diversity is not only politically smart, it also helps generate a greater diversity of ideas that can work across the state's various regions. Similarly, demographic diversity tends to produce stronger teams and a wider range of good ideas. It is thus critical to ensure that younger

voices and the voices of communities of color, low-income residents, immigrants, women, and LGBTQ residents are equally empowered as those in more privileged positions. Finally, ideological rigidity tends to prevent a full and fair airing of innovative ideas. It will be important to ensure that various political and policy perspectives are included in the work of the California 100 Initiative and Commission.

- 4. <u>Transformative work requires a systems change approach</u>. There is a growing recognition that systemic change requires not only changes in policies and practices, but also changes in mindsets, social norms, relationships, and power dynamics (see Appendix, Systems Change Frameworks). Without attention to these other dynamics, investments in policy change tend to be short-lived or can otherwise be scuttled by powerful dynamics that reinforce the status quo. Investing in narrative change, and connecting with other allied philanthropic efforts doing systems change work, will be essential for the success of this project.
- 5. <u>Collective work needs to be anchored in core values and operating principles</u>. Our experiences with systems change projects have shown that when diverse teams agree on core values and principles, they can go relatively fast and far. By contrast, collaborative projects that don't have early agreement on core values tend to drag out and fail. Based on our recent work and observing the work of others, key core values for the project include:
 - a. *innovation* (improvements in systems, processes, and products);
 - b. *belonging* (meaning that everyone feels included and valued, regardless of their identity or life circumstance);
 - c. *equity* (fairness and justice in the distribution of outcomes); and
 - d. *sustainability* (environments and processes that promote well-being over generations).
- 6. <u>Human-centered design and empowerment are essential for innovations to take root</u>. Innovations may often be born out of individual inspirations. In order for solutions to spread and scale, however, human-centered design and empowerment are essential. *Human-centered* means honoring the expertise of lived experiences of those closest to the problem, and working on solutions that are co-designed with them. *Design principles* involve an iterative process of inspiration, ideation, prototyping, and testing. *Empowerment* means that everyone who shares the vision and solution is inspired to act within their own sphere of influence.
- 7. <u>It is vital to harness the state's strengths in youth culture, advanced technology, and</u> <u>entertainment</u>. If California builds a "think- and do-tank" for its next century, it needs to harness its strengths in youth culture, digital technology, and entertainment. Our

experience and learning from statewide investments in criminal justice reform, immigrant rights, and inclusive economic development suggest that investing in youth leadership and youth culture is critical for systems change work to succeed.

California has also severely underutilized its global strengths in advanced technology and entertainment to drive policy innovation and systems change. While the COVID-19 pandemic has accelerated the adoption of digital tools such as Zoom, state and local governments can go much farther in engaging residents and stakeholder groups by meeting them "where they are" in their everyday digital interactions. Finally, California's policy innovations could benefit from more meaningful and strategic engagement with the entertainment industry. Film, television, music, games, and other augmented reality apps—these are powerful mediums to help drive narrative change, public input, and public opinion, and they are currently underutilized by philanthropy and the state's policy community.

III. Key Issues and Throughlines

When thinking about innovations that advance a more innovative and just society, it is important to consider the inter-relationships between key issues that affect people and planet alike, in the medium as well as long term. The work of California 100 will provide a vision and plan that is grounded in systematic research and evidence, and true to our core values of advancing innovation, belonging, and equity.

The following is a list of *issue areas* (horizontals) and *throughlines* (verticals) that will comprise the work of California 100. Below, we discuss the historical and strategic importance of each issue to the strength and success of California, contemporary threats and opportunities, and how research and demonstration projects can help chart a stronger future for the state.

1. Advanced Technology and Basic Research

a. Why is it important for California's future? For decades, California has led the nation in research and development, commercialization, and mass adoption of advanced technologies. Building on the foundations of Jet Propulsion Laboratory and CalTech in the early 1930s, to Stanford Industrial Park in 1951, and defense-related R&D investments in the decades that followed, California has been a leader in advanced technology in fields ranging from semiconductors and personal computing, to advancements in Internet software and biotechnology. California's continued success in the coming century depends critically on maintaining its leadership in advanced technology, while at the same time upholding core values of inclusion, sustainability, and equity.

- b. *What are the threats/challenges?* Tech innovation clusters in Asia, Europe, and elsewhere in the United States increasingly offer alternate venues for investments, and challenges in other issue areas (such as education, housing affordability, and federalism dynamics) constrain the future growth potential of the state's human capital and business infrastructure.
- c. *How can research and demonstration projects help?* Research, based on publicprivate partnerships elsewhere in the United States and in other countries, is essential to understand the opportunities and challenges to maintain and grow California's leadership in advanced technology. Key topics for inquiry include the catalyzing and sustaining role of strategic government investments, the interrelationships between university research, commercialization and regional economic development, and the future importance of physical proximity to industrial cluster development. This is an opportunity to lay the groundwork for a more forward-looking technology strategy for California.

2. Arts, culture, and entertainment

- a. *Why is it important for California's future?* California has long captured the nation's imagination, from its successful entertainment industry to its cultural influences in fashion, music, architecture, technology, and industrial design. California has thriving profit-making and non-profit arts, entertainment and design sectors that support and reinforce one another.
- b. *What are the threats/challenges?* Global competition from Canada, Asia, and from elsewhere in the United States challenge California's future in entertainment and cultural production, and high costs in real estate and production hamper the growth of startup ventures.
- c. *How can research and demonstration projects help?* Research is essential to understand the opportunities and challenges to maintain and grow California's leadership in arts, entertainment, and culture. More needs to be known about the mix of public, private, and philanthropic investments needed to strengthen educational, economic, and workforce benefits connected with arts, culture, and entertainment.

3. Education and workforce (cradle to career)

a. *Why is it important for California's future?* In the 1960s and 1970s, California led the nation in K-12, community college, and undergraduate and graduate education. This educational leadership spawned and supported several generations of innovation in movie-making, agriculture, and aerospace. Today, it seeds innovation in the Internet, energy technology, biotechnology, and nanotechnology. California still leads the world in the quality and accessibility of its

community college and four-year colleges, but has fallen behind in K-12 education.

- b. *What are the threats/challenges?* California's K-12 education has fallen behind at a time when the labor market has hollowed out in the middle, and students grow up in contexts of concentrated and multi-generational poverty. The higher education sector faces the challenges of diminished public funding and growing racial disparities in college attainment. California's potential for innovation depends on a strong educational system from K-12 through graduate education, but this system is weakening, and it has not adequately addressed the needs of life-long learning.
- c. *How can research and demonstration projects help?* California needs new models for ensuring educational excellence, accessibility, and equity. It needs a new "Master Plan" for higher education. It needs a plan for life-long learning. Research can identify these new approaches.

4. Economic mobility and inequality

- a. *Why is it important for California's future?* Despite its great wealth, California has a very high poverty rate, especially when adjusted for cost of living. Inequality and its consequences (homelessness, crime, poverty, and health problems) create a less fair and livable society. Economic mobility creates hope and optimism about the future.
- b. *What are the threats/challenges?* California faces grave housing, health, and family problems stemming from inequality. It needs a mixture of workforce policies (e.g., the EITC, minimum wage, unemployment insurance, and child care) and consumer policies (e.g., housing, health care, education, and food availability) to facilitate economic mobility and to ensure a high quality of life for all groups in the state.
- c. *How can research and demonstration projects help?* California needs a concerted look at how its piecemeal policies can be better designed and coordinated to ensure equity and to reward hard work and diligence while keeping costs and taxes at a reasonable level.

5. Energy, environment and natural resources

- a. *Why is it important for California's future?* Much of California's appeal as a destination for tourism and living depends on its temperate climate and natural beauty. The state also boasts an abundance of natural resources including rich agricultural land, forests, and minerals, but it is a fragile ecosystem "beyond the 100th Meridian" with its water, air, and land resources subject to the vicissitudes of meteorological disturbances and climate change.
- b. *What are the threats/challenges?* California's natural assets are under considerable stress, with frequent droughts, growing wildfires, and concentrated

air pollution threatening the health and livelihoods of millions, with impacts being disproportionately borne by low-income, Black and Brown communities.

c. *How can research and demonstration projects help?* California has taken the lead in 21st century renewable energy policies and technologies, including solar, wind, and geothermal. Research can show how to broaden these policies to ensure adequate water resources, responsible land management, and the maintenance of good air quality in a systematic approach to environmental justice and environmental protection. Research can also shed light on the conditions under which development of hydrogen fuel, lithium extraction, and battery storage can be done in a sustainable and responsible manner.

6. Federalism and foreign policy

- a. *Why is it important for California's future?* Lord Bryce famously said that California was the only American state that could be a nation-state. California is the world's fifth-largest economy with significant trade relationships, but it is not a nation-state. Yet it exists within the US federal system that provides substantial leeway for action by each of the fifty states, and this latitude for action has been important for California's success in many areas including the environment, education, health care and welfare policy, and even some aspects of immigration policy.
- b. *What are the threats/challenges?* California's ability to continue innovating in the coming century will depend on actions by the federal government, including Congress, the President, and the Supreme Court, but it will also depend upon its continuing ability to use its flexibility within the federal system to innovate on its own.
- c. *How can research and demonstration projects help?* Research is essential to understand the structural, economic, and political factors that can expand or constrain the ability of states to exceed or modify federal standards on a range of issues, and to deepen the state's ties with public and private foreign entities.

7. Governance, media, and civil society

- a. *Why is it important for California's future?* Progressive era reforms from a century ago, including direct democracy and nonpartisan local elections offered the promise of citizen control over important decisions from the local to statewide level, but they do not seem to be working.
- b. *What are the threats/challenges?* With the decimation of local news outlets, the growth of misinformation, and the growing influence of money in politics, it is challenging for residents to be informed and meaningfully engage in various policy decisions. In addition, California faces other crises in governability, as legislative districts grow in size (state senate districts are now larger than

Congressional districts), as special districts proliferate, and as constitutionally mandated restraints on taxation and spending provide little room for fiscal flexibility.

c. *How can research and demonstration projects help?* We need research that points out the best ways to improve resident awareness and civic engagement, and the kinds of systemic reforms needed to build a more inclusive system of state and local governance among legislators and constituents alike.

8. Health and wellness

- a. *Why is it important for California's future?* Public opinion polls show that health care has been the major public policy concern of Americans for over a decade. It is simultaneously a major fiscal issue because health spending comprises 18% of the nation's GDP and about the same percentage of California's general fund expenditures. Health care access, affordability, and quality are fundamentally important for the well-being of California's families.
- b. *What are the threats/challenges?* The much greater than inflation yearly increase in health care costs has elbowed aside other expenditures in household, institutional, state, and national budgets. Lack of access to health care has been an ongoing concern in California even after passage of the Affordable Care Act and expansions in health care to immigrant children. Racial inequities in life expectancy and other health outcomes remain unacceptably high, something made painfully evident during the course of the COVID-19 pandemic.
- c. *How can research and demonstration projects help?* Research can help uncover the kinds of innovations and efficiencies that can be achieved from reforms in policy (as evident, for example, with MediCal expansion and the creation of a "Covered California" health insurance marketplace under the Affordable Care Act), private-sector innovations that can benefit from strategic public investments, and changes in practices that can reduce cost overruns and eliminate racial disparities in health.

9. Housing and Community Development

- a. *Why is it important for California's future?* Housing costs in California are a major component of the state's high cost of living, and they contribute to long commutes, people leaving the state, poverty, and homelessness. California needs to deal with housing availability and affordability in order to ensure that its population can live near its workplaces.
- b. *What are the threats/challenges?* California's housing problems stem from restrictive land-use policies, high construction costs, complex bureaucratic regulations for siting and permitting, lack of tax funds for providing infrastructure, and restrictions on housing construction methods.

c. *How can research and demonstration projects help?* Instead of trying (and failing) to push statewide reforms, California could benefit from experimentation and demonstration projects in particular regions. Some useful projects would explore ways to reduce regulatory burden while protecting the environment or investigate new construction methods that reduce costs while protecting the rights of labor.

10. Immigrant integration

- a. Why is it important for California's future? California is the national leader on policies that promote immigrant integration, from in-state tuition and financial aid to driver's licenses and expanded access to health insurance and social services. Indeed, many have noted that California has created its own kind of state citizenship, with immigration reform that fixes various shortcomings in national policy.
- b. *What are the threats/challenges?* Immigration to California has slowed and immigrants remain anxious under federal enforcement policies. California is tremendously dependent on immigrant labor in industries that range from agriculture to technology and hospitality. Immigrant labor has helped to create California's dynamic economy. California must find ways to welcome and support immigrants to maintain its dynamism.
- c. *How can research and demonstration projects help?* We need research to better understand how the state can continue to attract, retain, and support its immigrant residents and workers.

11. Public Safety and Criminal Justice Reform

- a. *Why is it important for California's future?* Public safety is the most important function of most local governments, and the level of real or perceived safety affects housing prices, local commerce, and quality of life. Local police departments are under stress from concerns about the broad array of functions that they perform, the inequities in their administration, their lack of accountability, their rising costs, and their large pension obligations. Criminal justice has also become a major state expenditure item as well, with concerns about over-incarceration and the high financial and human costs of corrections.
- b. *What are the threats/challenges?* Criminal justice systems must be redesigned to be more racially equitable, more cost-effective, and more accountable while still ensuring public safety. These efforts must restore trust in police and criminal justice systems, especially in communities of color that have borne the brunt of America's high rates of incarceration.
- c. *How can research and demonstration projects help?* Little is known about the impacts of "unbundling" local police departments to hive off mental health,

domestic violence, traffic, and many other functions. Research and demonstration projects could help us determine which reforms work and how well they work.

12. Transportation and Planning

- a. *Why is it important for California's future?* Even before the opening of the first freeway in the United States, the Pasadena Freeway in 1940, California was a highly mobile culture in love with the automobile. The current highway system dates from the 1950s and 1960s, and it has only slowly been augmented with major mass transit systems in California cities (e.g., San Francisco Bart in 1972-3 and the Los Angeles Metro in 1990). Housing, land-use, transportation, and jobs are inextricably linked, and California's future requires better planning to better connect housing with jobs, commerce, and amenities.
- b. *What are the threats/challenges?* California must decarbonize its transportation system, reduce its commute distances, improve its land-use, and make its housing affordable to ensure that its cities are competitive and livable.
- c. *How can research and demonstration projects help?* Transportation and planning experts are developing exciting ways to improve transportation by creating smart cities and by developing more sustainable and accessible cities. Making use of this research requires taking a broad view across many different policy areas and many different jurisdictions in order to provide better legal regulations and cross-subsidies that take into account the many externalities in transportation systems.

13. Fiscal Reform

- a. *Why is it important for California's future?* California's ability to remain a land of equal opportunity for future generations will depend critically on its ability to efficiently cover the cost of essential public goods and services, including physical, educational, and civic infrastructure. In other words, most of the visionary reforms envisioned by the Commission will need to answer the questions of who pays for it, how the money would be raised, and how efficiently it would be spent.
- b. *What are the challenges?* To some extent, California is succeeding despite its fiscal structure, meaning the way it raises and spends taxes and fees to cover the cost of various services. First, the state is heavily reliant on income taxes, which makes it more vulnerable to economic downturns than a system of taxation that includes a higher mix of sales and property taxes. Heavy reliance on income taxes also makes the state vulnerable to any potential future exodus of wealthy individuals and corporate headquarters. Direct democracy has also played a significant role—not only has Proposition 13 constrained the contribution of residential and commercial property taxes, subsequent fixes through "ballot box

budgeting" have significantly limited the amount of discretion left in the state's general fund.

c. *How can research and demonstration projects help?* We need research on fiscal reform that provides more precise understandings of how state and local governments pay for various public goods and services. Viewed either from the macro perspective of government agility and accountability, or from human-centered approaches such as behavioral economics, research on state and local government spending in various issue domains can shed significant light on how California can engage in smarter spending, not only with respect to government spending to ensure California's continued success in that particular issue area. Finally, long-range thinking on spending and solutions for issues such as energy/environment, education, and health will also require us to also think about expanding time horizons on revenues (beyond our current tendency to think in one- or two-year cycles) to effectively and efficiently cover those expenses.

We will utilize the following throughlines (or verticals) to evaluate the status quo and assign priorities for research, stakeholder engagement, and demonstration projects:

- 1. **Inclusion and civic engagement:** Systems in California need to be reformed in a manner that deepen civic engagement and policy influence for a broad range of communities, particularly those that have traditionally been marginalized or excluded from decision making. These include young people, communities of color, immigrant communities, inland regions, rural areas, and low-income communities.
- 2. Equity and intersectionality: Systems need to be redesigned and reformed in ways that ensure justice in the allocation of resources and life chances by race, gender and gender expression, immigrant status, ability/disability, and LGBTQ+ identity. Particular attention needs to be paid to intersectional communities (such as women of color) that face multiple disadvantages that might not be entirely solved with singular attention to each dimension of disadvantage.
- 3. Advanced Technology and Innovation: Systems need to be redesigned and reformed in ways that ensure innovation, as well as efficiency in the use of scarce resources, whether monetary or planetary. Leveraging new technologies offers critical opportunities for improving public and private sector operations across nearly all domains, from streamlining service delivery to ensuring transparency and accountability. While advanced technology, including robotics and artificial intelligence, offer considerable promise in this regard, we also need to ensure that the adoption of advanced technology is ethical, equitable, and empowering of individuals and communities alike.
- 4. **Sustainability:** Systems need to be redesigned and reformed in ways that foster and maintain environments, conditions, and processes that promote health and well-being

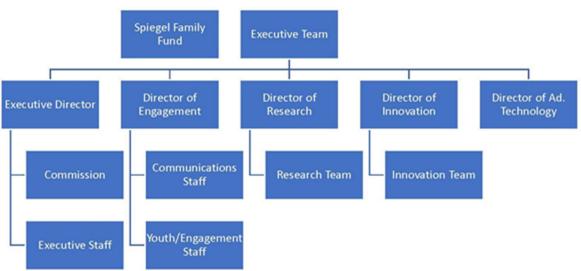
over multiple generations. Particular attention needs to be paid to the climate and planetary consequences of various activities and processes.

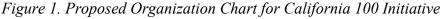
5. **Resilience:** Systems need to be redesigned and reformed in ways that can enable communities to bounce back in the face of pandemic, natural disasters, economic downturns, mass violence, and other human-caused disasters.

IV. Organizational Structure and Work Plan

The California 100 Initiative (also hereafter, the "Initiative") will harness the talent of a diverse array of leaders from across the state through an advisory commission (hereinafter, the "California 100 Commission" or the "Commission") and four main engines of transformation: research, engagement, policy innovation, and advanced technology (see Figure 1). Each of these engines will: 1) engage an array of institutions and assets in the state, 2) include a diverse committee of advisors who are part of the California 100 Commission, and 3) will be led by a Director who is part of the executive team.

During the Grant Term, as defined in the Grant Agreement between The Regents of the University of California through its Berkeley campus (hereafter "UC Berkeley" or "University") and the Spiegel Family Fund, a donor advised fund administered at the California Community Foundation ("Spiegel Family Fund"), the Initiative and the Commission will be administered by the University, with the necessary inter-campus agreements and contracts to non-University of California participants, as described below.





The executive team will include the Executive Director, Director of Research, Director of Policy Innovation, Director of Engagement and Director of Advanced Technology (collectively, the "Executive Team"). The Executive Team will foster a culture where the contributions of each engine is fully respected, and will inform the work of the others.

Executive Director

The Executive Director will be responsible for ensuring timely progress on completion of the California 100 Initiative in all its components (research, innovation, and engagement), and working with the Commission and engagement team to carry out stakeholder engagement as outlined in the Timeline and Deliverables. The Executive Director shall work in collaboration with the rest of the Executive Team to produce a vision, narrative, and overall plan that inspires and engages a broad and diverse array of stakeholders, leaders, and residents in California. In an organizational structure and culture where the contributions of each engine is fully and mutually respected, the Executive Director shall be the ultimate locus of accountability for the success of the Initiative. As such, the Executive Director will work collaboratively with the Commission and the rest of the Executive Team to make any adjustments as necessary to ensure successful completion of the Initiative.

Research Engine

The Director of Research will work with the research lead, as well as research centers and personnel (faculty, postdoctoral students, graduate student researchers, other research staff) in institutions that have comparative strengths in bringing research and evidence to action on each of California 100's key topics. The Director of Research will be responsible for ensuring that the research activities meet high standards for creativity and rigor, and will be conducted in coordination with the Advanced Technology, Engagement, and Innovation engines.

Policy Innovation Engine

The Director of Innovation will work with the innovation lead, as well as key centers and personnel (faculty, postdoctoral students, graduate student researchers, other research and outreach staff) in institutions that have comparative strengths in human-centered design and policy demonstration projects. The Director of Innovation will be responsible for ensuring that the demonstration activities meet high standards for creativity and rigor, and will be conducted in coordination with the Research and Engagement engines and in service of the Commission's broader visioning goals.

Advanced Technology Engine

The Director of Advanced Technology will inspire and build/maintain strong relationships with industry, government, and community partners to develop an advanced technology strategy for California in the coming decades and ensure that advanced technology and innovation are adequately prioritized and thoughtfully engaged in the work of shaping California's future. In carrying out this mission, the Director of Advanced Technology will work closely with the entire Executive Team, the lead research center on the Advanced Technology and Basic Research track

to guide research within the advanced technology issue area, and with the Director of Research to ensure prioritization and synergy between advanced technology and all relevant research tracks.

Engagement Engine

The Director of Engagement will work with the Executive Director, as well as the youth summit organizers and other key stakeholders, to design and support engagement work in both phases of the Initiative. Throughout the project, the Director of Engagement will bring together a broad and representative swath of Californians to inform the work of the Commission and the Initiative.

The California 100 Commission

The California 100 Commission will draw on a diverse group of experts by industry, region, race, and gender who have demonstrated expertise in our key areas of research and stakeholder engagement. The Commission will include an equal number of younger and older residents (ages 18 to 34, ages 35 and older). It is vital for a commission that represents the future of California to have significant youth representation, and it is also important to provide opportunities for intergenerational learning and mentoring.

The University, the Goldman School of Public Policy ("GSPP) and Spiegel Family Fund may work together to make information about Commissioner positions available to a diverse array of potential nominees. This may include outreach from representatives of Spiegel Family Fund to known individuals across California. The final Commission appointment decisions will be made by the Executive Team, acting on behalf of the University and with regard to all policies and practices that relate to this subject.

Commissioners will review research and innovation projects, and provide input on the overall direction of the research aims, including in the selection of research topics and projects, in consultation with Spiegel Family Fund. The Director of Research and Director of Innovation, in consultation with the rest of the Executive Team, will have final decision-making authority on decisions related to research and innovation, respectively, including related to contracting associated with the overall project.

A similar governance process between the Executive Team and Commission will apply to all other matters related to the work of the California 100 Initiative. The Executive Team is responsible for bringing together research, innovation and engagement produced by the University of California and other participants, to produce a vision, narrative, and overall plan that inspires and engages a broad and diverse array of stakeholders, leaders, and residents in California. The Commission will provide strategic input, and the Executive Team will have final decision-making authority and accountability, on these various matters. The Executive Team will provide support and guidance to the Commission in all aspects of the work of the Commission. This includes setting up meetings, coordinating payments, and other logistical matters (e.g., travel, conference support, etc.).

The placement of the Commission, alongside the California 100 Initiative, within the University during the Grant Term is important as the program carries out the initial stages of the project within the 36-month timeline identified in the California 100 Program proposal. The activities, interactions, and governance involving the Commission, the Executive Team, and the research/innovation entities support this concept. However, even during the initial stages of the project, it is the intention that the Commission and the Initiative be positioned as a California-wide project seeking to harness the expertise of a broad range of California institutions and innovators, but with special stewardship by the University of California. Further, beyond the initial stages of the project, the Commission may find it necessary to act independently of the University of California's oversight including, but not limited to, playing a more direct role in legislation or political advocacy. In light of this, the Commission should be considered to have a nonpermanent status as part of the University of California for this project timeline. Should the University and Spiegel Family Fund wish to extend the placement of the California 100 Initiative and the Commission within the University of California, it will be codified within a new proposal, funding arrangement, and grant agreement.

Additional Roles and Responsibilities

Staff

Supporting staff for the Executive Team (e.g., associate director), as well as for Research, Innovation, Engagement (e.g., Team Leads, Technical Support), will be hired and paid as Berkeley employees.

Researchers

Researchers outside Berkeley and any associated supporting staff for individual research and innovation projects (e.g., postdocs, graduate student assistants) will be contracted and paid through Berkeley. The Director of Research and Director of Innovation will oversee the contracting and work to ensure timeliness and quality of deliverables.

Researchers will be able to draw on the advice and support of both the Executive Team and Commission in carrying out their work. However, researchers at the University of California and those under contract working elsewhere will maintain intellectual freedom to carry out research as they see fit, according to the highest standards of their respective fields.

Researchers, (both at the University of California and other non-UC campuses,) will follow their respective IP policies. However, all agreements between the University of California and non-UC entities will provide permission for Berkeley to use IP for non-profit purposes that further

the goals of the broader project. It is expected that research produced as a result of the California 100 Initiative will be made publicly available, in accordance with the University of California's <u>Open Access Policy</u>. These working papers may be printed and announced on the platforms controlled by the Initiative or Commission as well as any other publication venues and repositories of the University of California and its various campuses and researchers centers.

As a condition of participation in the project and upon receipt of project funding, researchers will be asked to provide the California 100 Initiative with right of first refusal for publication of commissioned reports. The California 100 Initiative shall make a determination on publication and communicate the decision with researchers within 90 days of receipt of the commissioned report manuscript. All drafts of commissioned reports are embargoed prior to publication by California 100. If California 100 refuses to publish the commissioned report, researchers are free to publish the rejected report in its entirety but shall make no representation of approval of the report by California 100. Outside of the commissioned report, researchers will be free to publish the results of their research in the venues of their choosing and at the time of their choosing. *Digital presence of the California 100 Initiative*

The Executive Team shall be responsible for building and maintaining the digital presence of the California 100 Initiative in cooperation with the Commission. While the Initiative's primary funding flows through the University of California, the individuals and entities involved with research, innovation, advanced technology, and engagement engines reflect a broad and diverse set of leaders in the state of California. Accordingly, the Internet domain name, associated email addresses, website, social media handles, and partner logos will reflect the broad reach of the Initiative and its nonprofit/501(c)(3) status serving the entire state of California.

V. Timeline and Deliverables

California 100 will take place in three phases, each of which will intertwine the related work of research, innovation, and engagement.

Phase 1 will commence in early 2021 and run approximately 20 months. During Phase 1, we will *characterize the present and envision the future*, as well as *chart a path forward*.

Phase 2 will commence in fall 2022 and run approximately 12 months. During Phase 2, we will *create the vision for California's next century*.

Phase 3 will work to *communicate the vision* and *build infrastructure to succeed*. We will move forward with Phase 3 if desired by the Foundation, once Phase 2 is complete.

In this timeline, we outline the specific activities that will take place during each phase, as well as a set of deliverables related to each component of work.

PHASE ONE

MARCH 2021 – September 2021: Characterizing the Present and Envisioning the Future

Research

In order to begin the process of visioning California's future, we first need to know where we are, where we want to go, and how we might get there. As described in the document, "Developing Baseline Knowledge," GSPP will bring together faculty experts and graduate student researchers from institutions across the state of California to write policy memos focused on 13 key issue areas. These memos will bring together the best available evidence to answer the questions:

- Where are we? What are our current successes? What are our current challenges?
- Where do we want to go? What might future success look like?
- What current trends will help or hinder us from getting there?
- What policies or reforms might the state employ to move towards this vision of California's future? What do other states/countries do? What models are out there that we might consider?
 - Deliverables: The research team will produce policy background memos on 13 key issues areas.

Demonstrating the policy value of deliberative polling in California through the Commission holds the potential to innovate and improve decision making by many state and local agencies. Hosting a virtual (or physical) California in One Room deliberative exercise would allow Californians more broadly to debate the future scenarios that emerge from the research engine. Feedback on these potential futures from a representative sample of Californians will help shape the overall visioning exercise for the Commissioners and research teams.

• Deliverables: The research director will produce a summary report on the California in One Room exercise.

Policy Innovation

Californians have an incredible capacity for innovation, and there are countless sources from which we might uncover new and exciting ideas that will take the state into its next hundred years. At the start of the project, The People Lab will put out a statewide call for submission of proposals for innovation concepts, as described in the document "Call for Innovation Proposals". These innovation concepts will aim to answer the question:

- What new and creative ideas are out there that have the potential to move California forward but have not yet been attempted or accomplished at scale?
 - Deliverables: The innovation team will compile concept submissions sourced from around the state.

At the same time, we can begin to draw on communities themselves to help establish ways of conceptualizing and measuring success. The People Lab will carry out Everyday Indicators (EI) processes with local communities around the state, focused on policy outcomes within a subset of policy domains. As described in the "EI Process" document, we will use a structured, "bottom-up" process to help us define and ultimately evaluate complex outcomes. These EI processes will answer the question:

- How do communities themselves conceptualize success on critical outcomes like criminal justice, health, and prosperity?
- How can we measure success in a way that is meaningful to Californians, especially those who have been historically marginalized?
 - Deliverables: The innovation team will produce EI reports on policy outcomes

Advanced Technology (TBD, pending Director recruitment)

Engagement

At the beginning of the project, the Executive Director will work with the rest of the executive team to select and formally appoint a set of Commissioners. Commissioners will be selected for their knowledge and expertise related to the state, its policies, and its future, and the Commission will be constituted in a way that prioritizes geographic, generational, and demographic diversity in order to best represent the diversity of California. The first meeting of the Commission will be held in spring/summer 2021 to introduce the project, begin to develop the vision for California's future, and to inform the research and innovation work.

• Deliverables: The Executive Director and engagement team will produce minutes and a summary report from the initial Commission meeting.

In Q3 2021, Commissioners will be provided with background materials, including policy reports from the research team, results from the EI processes, and submissions from the call for proposals of innovation projects. The Executive Director will then convene the second meeting of the Commission. Drawing on the background materials, as well as their own experience and expertise, Commissioners will address the questions:

- Where are we? What are our current successes? Where are our challenges?
- Where do we want to go? What might future success look like?
- What if anything is missing from the policy reports?
- What process will be useful for engaging communities/experts/policymakers?
- What policy ideas are especially exciting? What would it take to make them a reality?
 - Deliverables: The Executive Director and engagement team will produce minutes and a summary report from the first two Commission meetings.

November 2021-October 2022: Charting a Path Forward

Research

The research team will revise and expand its draft policy background reports in response to comments and questions raised by Commissioners at its first two meetings. It will then carry out formal policy analyses of potential reforms within each policy domain. These policy analyses will bring together existing data and original analysis to answer the question:

- How do these potential reforms compare in terms of their likely effectiveness, efficiency, equity, and political feasibility?
- Given this, what reforms appear most promising to help California move towards the vision for its future?
 - Deliverables: The research team will update policy background reports and draft policy analyses.

Policy Innovation

The best way to learn, we believe, is to do. New ideas are exciting, but must also be feasible, scalable, and effective. A great example of this is the Universal Basic Income (UBI) project carried out in the City of Stockton, which pioneered an evaluation of UBI to begin building a robust evidence base. Mayors from across the country have learned critical lessons from the Stockton pilot program.

The innovation team will use a peer review process, along with input from the Commission, to identify a set of concepts that can be carried out as demonstration projects like the Stockton UBI experiment. The chosen projects will each be matched with a Principal Investigator from a research entity with expertise in the relevant policy domain. The research entity will be provided with training and technical support to design and launch each project.

• Deliverables: The innovation team and demonstration project PIs will prepare pre-analysis plans, trial protocols, and IRB documents.

Advanced Technology (TBD, pending Director recruitment)

Engagement

Following the inaugural Commission meeting, the Executive Director and Director of Engagement will work with individual Commissioners to host stakeholder meetings around the state of California. Each Commissioner will be tasked to identify relevant stakeholders within specific policy domains/topics, and will then host them for a half-day meeting. For example, a Commissioner with expertise in economic development would assemble a group of business, labor, and community associations in the Central Valley or Inland Empire. Each meeting will be designed to solicit input on California's future, which can help inform the Commission's work.

• Deliverables: The Executive Director, Director of Engagement, and engagement team will produce minutes and draft summary reports from each stakeholder meeting.

In addition, the executive team will work with the Berkeley Institute for the Future of Young Americans (BIFYA) and other youth-centered organizations to host two statewide summits that activate youth power builders and youth culture, with elements of Boys State/Girls State and past statewide summits by Leaders Up, Yo Cali! and Power California and online mobilization by Brown Issues. Young people are the future of California, and it will be essential to align and integrate with other youth investments by philanthropy to drive future leadership and cultural change in the state. BIFYA will also lead on conducting a state-wide survey of young Californians, to better understand their priorities, aspirations, and concerns.

• Deliverables: BIFYA will produce minutes and draft summary reports from each youth summit, including recommendations for how to build on the summits to continue building a youth coalition, as well as a report on the youth survey.

PHASE TWO

November 2022-October 2023: Creating the Vision for California's Next Century

<u>Research</u>

The research team will assist in summarizing insights that emerge from the stakeholder meetings, and conduct additional background research as needed to accompany reports on the stakeholder events.

• Deliverables: The research team will submit final reports to the Commission for review.

Policy Innovation

The innovation team will summarize progress on innovation projects and evaluate short-term outcomes.

• Deliverables: The innovation team will submit final reports to the Commission for review.

Advanced Technology (TBD, pending Director recruitment)

Engagement

The Executive Director and Director of Engagement will convene the third full meeting of the Commission. During this meeting, Commissioners will report back on stakeholder meetings and draft preliminary recommendations that summarize the vision for California's future and provide a roadmap for the next one hundred years, including intervals in between.

• Deliverables: The Executive Director, Director of Engagement, and engagement team will work with the Commission to produce a final visioning document report.

PHASE THREE

November 2023 - TBD: Communicating the Vision and Building Infrastructure to Succeed

Engagement

The Executive Director will work the Commission, as well as the executive team, to draft a plan to work with the Foundation to share the vision with California's leaders, government agencies, businesses, non-profits, labor and community organizations, and others throughout the state.

Policy Innovation

If possible and/or necessary, the innovation team will evaluate longer-term outcomes for demonstration projects.

Advanced Technology (TBD, pending Director recruitment)

Subaward No.		EXHIBIT D	Prime Award No.
		KEY CONTACTS	;
	F	or Berkeley	For the Subrecipient
Institution:			
		Principal In	westigators
Name:		-	
Department:			
Address:			
Email:			
Phone:			
		Financial	Contacts
Name:			
Title:			
Email:			
Phone:			
		Authorized	d Officials
Name:			
Title:			
Department:			
Address:			
Email:			
Phone:			
Fax:			



CALIFORNIA 100 INITIATIVE CALL FOR INNOVATION PROJECTS

Californians have an incredible capacity for innovation, and there are countless sources from which we might uncover new and exciting ideas that will take the state into its next hundred years. This call for submission of proposals seeks innovative concepts that aim to answer the question: What new and creative ideas are out there that have the potential to move California forward but have not yet been attempted or accomplished at scale?

To identify promising ideas and evaluate their likely impact at scale, The People Lab at UC Berkeley is partnering with the California 100 Initiative to support a set of innovation projects across the State in key <u>policy areas</u>. Each selected project will rigorously test an innovative policy, program, or practice aimed at addressing a pressing challenge faced by Californians. Selected projects will provide 'proof of concept' for bold ideas, demonstrating the possibilities for California's future when we embrace innovative ways of approaching long-standing problems.

Each project will be co-designed and carried out as a partnership between a California-based research team and a local or state agency, department, or organization. Projects will be chosen through a competitive process described below.

Who is eligible to apply?

Any California city, county, state agency, or non-profit is eligible to apply for funding, so long as they have the authority and capacity to carry out the innovation project if selected.

How many projects will be selected?

We will select up to 6 innovation projects.

What is the timeline for carrying out projects?

Project timelines should be roughly 2 years, including planning, implementation and evaluation. Projects can be carried out in any 2-year period between September 2021 and August 2024.

What is the timeline for project selection?



Completed applications must be submitted by **<u>5pm PT on June 15, 2021</u>**.

Review of applications will take place between June 15th and July 15th. Finalists will be interviewed in the last two weeks of July and we aim to finalize contracts by September 1st, 2021.

What policy areas can projects focus on?

Proposed projects can be in any policy domain, so long as it deals with a problem or outcome that is important to the future of California. Projects may focus on any of the <u>policy domains</u> outlined in the broader work of the California 100 Initiative. The following is a list of policy areas that will comprise the work of California 100:

- 1. Advanced technology and basic research
- 2. Arts, culture, and entertainment
- 3. Education and workforce
- 4. Economic mobility and inequality
- 5. Energy, environment and natural resources
- 6. Federalism and foreign policy
- 7. Fiscal reform
- 8. Governance, media, and civil society
- 9. Health and wellness
- 10. Housing and community development
- 11. Immigrant integration
- 12. Public safety and criminal justice reform
- 13. Transportation and urban planning

In addition, projects can focus on issues that cut across policy domains, including (but not limited to) policies aimed at fostering inclusion and equity, promoting civic engagement, strengthening public management (e.g., improving how residents interact with government, or recruiting and supporting a high quality public-sector workforce), and improving public service delivery (e.g., ensuring resilience, increasing procedural justice, or reducing administrative burdens).

Within each topic area, California 100 will utilize the following throughlines to evaluate the status quo and to understand the future:

(1) *Resilience* that enables communities to bounce back from a range of natural and human-caused disasters.

(2) Advanced technology and innovation that improves private and public sector operations across various domains.

The People Lab

(3) *Inclusion*-especially of traditionally marginalized groups such as communities of color, immigrants, inland regions, rural areas, and low-income communities-that deepens community involvement in identifying and implementing solutions.

(4) Sustainability that promotes health and well-being over multiple generations.

(5) *Equity* that ensures justice in the allocation of resources and life chances by race, ethnicity, gender and gender expression, immigrant status, LGBTQ+ identity, and socio-economic status.

What is the selection process and criteria?

All proposals will be evaluated through a rigorous blinded review process. Reviewers will include both academic and policy experts from across the state. Projects will be evaluated on the basis of 7 criteria. Not all projects will meet all criteria; some projects might in fact be strong on just one dimension. However, the full set of projects will meet the range of criteria outlined below. In addition, final project selection will prioritize diversity of geography and policy topics, as well as the commitment and preparedness of the proposing agency/organization to carry out the project.

Proposed projects should be:

- Relevant (clearly related to the vision outlined by the California 100 Initiative)
- Testable (can be rigorously evaluated for short-term outcomes).
- Bold (have significant potential to change outcomes for the better)
- Cost effective (feasible to fund in an on-going way)
- Scalable (have significant potential to affect sizable groups of Californians)
- Replicable (are generalizable beyond one specific city or location)
- Innovative (creative and novel ideas that are not already common practice)

Finalists will be interviewed virtually by a small panel of policy and research experts to confirm fit.

What is the amount of the award?

The total budget for both project implementation and evaluation will be in the range of \$250,000-\$270,000. The award includes two components:

(a) Design and implementation award



Proposed design and implementation budgets will be in the range of \$100,000 – \$150,000 per project. These funds will be provided to the applicant city/county/organization in order to support staff time and other resources related to project implementation. The selected projects will receive significant additional pro-bono technical assistance with the design, implementation, and evaluation of the innovation project, from The People Lab and broader California 100 Initiative.

(b) Research and evaluation award

Following project selection, successful projects will be paired with a researcher from the state of California who has relevant expertise based on fit with the policy innovation and scope of each project. Applicants may also apply with a pre-identified research partner. Proposed projects that have already identified a research or evaluation partner should include this information in their proposal. All researchers (both paired and pre-identified) will be provided with funds in the range of \$100,000 – \$150,000 per project, separate from the implementation funds, to support data collection, analysis, and reporting. In addition to the funding award, all research teams will be provided with in-kind technical assistance and support from a dedicated team at The People Lab.

How do I apply?

All applications can be submitted online <u>here</u>. Please upload all documents as PDFs. Font must be Arial 11 points or larger.

Completed applications must be submitted by **<u>5pm PT on June 15, 2021</u>**.

Applications must include:

- ✓ <u>Cover Sheet</u> (using linked form)
- ✓ Project summary: Summarize the purpose of your project in brief (2-3 paragraphs).
- Project proposal: Describe your project (maximum of 3-5 pages) including the following elements:
 - The problem statement: What problem are you addressing, what is the scope of the problem, and why is it important to address?
 - The policy idea: What is your policy idea?
 - Theory of change and expected outcomes: How and why do you expect this policy idea to address the problem? Please include any existing evidence of how this policy idea might be effective..

The People Lab

- Data availability/ability to measure outcomes: What existing data are already being collected that could be used to assess the success of the policy idea in addressing the problem? What additional infrastructure could be available to measure outcomes (e.g., ability to conduct surveys, ability to track information on implementation)? You do not need to include a full-fledged evaluation, but instead describe what data might be available or how additional data might be collected.
- Capacity to carry it out: What will it take to implement this policy idea? Why do you think you are positioned to successfully implement this policy idea? What support would you need?
- ✓ **Timeline:** Summarize the main milestones of your project with an expected timeframe for each element (maximum 2 pages).
- ✓ Implementation budget (using linked budget template): Provide a detailed description of the costs to be funded by this grant, including specific costs for personnel, supplies, equipment, travel, meetings, etc.
- ✓ List and background of key participating staff: Include name, title, responsibilities, relevant experience for each participant
- ✓ CV of proposed research partner, if relevant
 - Most projects will be matched with an evaluation partner after selection. However, if you already have a proposed research partner, please share a letter of commitment from that person or organization, and the CV of the relevant Principal Investigator (PI).
- ✓ <u>Research/Evaluation budget (</u>using linked budget template), if relevant
 - Please only include a research/evaluation budget if you have a proposed research partner. Otherwise, evaluation and research costs will be calculated by The People Lab.

How Do I Learn More

Learn more about The People Lab at <u>www.peoplab.berkeley.edu</u>.

<u>Click here</u> to learn more about the California 100 Initiative.

Join us for an informational webinar on **Wednesday**, **May 5th from 12:00 - 1:00 PM PT**. To register for the webinar, <u>click here</u>. A recording of the webinar will be available on The People Lab website.

If you have any questions please send them to us using this form.



Stephanie Hom <stephaniehom@berkeley.edu>

Fwd: California 100 Innovation Projects Application Update

The People Lab at UC Berkeley peoplelab@berkeley.edu>
To: Stephanie Hom <stephaniehom@berkeley.edu>

Mon, Aug 30, 2021 at 3:37 PM

------ Forwarded message ------From: **The People Lab at UC Berkeley** <peoplelab@berkeley.edu> Date: Thu, Aug 26, 2021 at 5:46 PM Subject: California 100 Innovation Projects Application Update To: Rabinowitz, Mikaela (DAT) <mikaela.rabinowitz@sfgov.org> Cc: Amy Lerman <alerman@berkeley.edu>, Elizabeth Linos <elinos@berkeley.edu>

Dear Mikaela,

Congratulations!

We are pleased to inform you that your project has been selected for funding from the California 100 Initiative. In the coming week, we will be back in touch to schedule a kickoff meeting with your team and The People Lab, in order to talk through logistics of the funding, and also to begin discussing implementation and evaluation plans. In the meantime, please feel free to reach out to us with any questions or concerns.

Again, our sincere congratulations. We thoroughly enjoyed reading your proposal, and we are excited about your innovative ideas. We look forward to working with you soon!

Best, Amy Lerman and Elizabeth Linos Faculty Directors of The People Lab