

## **BOARD OF SUPERVISORS AGENDA ITEM REPORT AWARDS / CONTRACTS / GRANTS**

ector Award:
ing Date: October 18, 2022

#### Contractor/Vendor Name/Grantor (DBA):

National Association of County & City Health Officials (NACCHO)

### \*Project Title/Description:

Grant Title: Implementing Overdose Prevention Strategies at the Local Level (IOPSLL). Pima County Program Title: Together We Rise, Community Partnerships to Reduce Overdose.

#### \*Purpose:

The purpose of this project is to reduce overdose fatalities by supporting existing community strengths while working toward lowering health disparities in overdose risk faced by high risk populations, including the African-American and American Indian/Alaskan Native communities.

Amendment #1 extends the term for one year and adds funding in the amount of \$329,770.96 for a total amount of \$499,912.19.

#### \*Procurement Method:

This revenue/grant contract is a non-Procurement contract and not subject to Procurement rules.

## \*Program Goals/Predicted Outcomes:

The primary components of this project are:

- 1. Enhance data surveillance: Improve early sentinel awareness of overdose risk based on fentanyl drug seizure and overdose data. The task force of public safety entities and PCHD will use data to guide the design and deployment of appropriate interventions. PCHD plans to be able to send out public alerts to county stakeholders and the public and to target resources to high-risk areas and populations.
- 2. Expansion of safe space initiative: Expand the Safe Space concept to PCHD clinics so individuals who currently engage in substance use can come and seek assistance in a trauma-informed and judgement-free space and be linked to appropriate services they may need.
- 3. Strengthen peer navigation services: Partnerships with Tucson Indian Center and HOPE Inc. Dedicated staff of Tucson Indian Center and HOPE Inc will identify individuals who are at risk of an overdose and provide overdose and harm reduction education and linkages to care. PCHD will provide assistance and training to staff, as needed.
- 4. Promotion of harm reduction: Distribution of fentanyl test strips and partnership with public safety agencies and community-based organizations to provide outreach and education to the public about harm reduction, overdoses, and the 911 Good Samaritan Laws.
- 5. Anti-stigma media campaign: PCHD will recruit members of the public with lived experiences related to racial discrimination and substance use and listen to what they would like to communicate to the public, local providers, and to peers who may be going through similar experiences. PCHD will utilize their expertise throughout the development of a media campaign to create messaging that is well informed and impactful.

#### \*Public Benefit:

The Together We Rise project will strengthen existing partnerships throughout the community, expand services to those who are at a high risk of overdose, and outreach members of the public to continue to educate and inform, and break down barriers and stigma to ultimately reduce overdose fatalities and link people to appropriate services. This project utilize a variety of strategies to target the increased rates of overdose fatalities in Pima County.

#### \*Metrics Available to Measure Performance:

Each of the activites listed above have a number of quantitative metrics having to do with activity, training, number of clients served, fentanyl strips distributed, persons referred for Medication Assisted Treatment and other services, and the use of traditional and social media. In addition, the project will collect qualitative/anecdotal responses from members of the public and community-based organizations regarding the services being offered.

#### \*Retroactive:

Yes. The the amendment begins August 1, 2022 but the grant document was not received from NACCHO until September 15, 2022.

## THE APPLICABLE SECTION(S) BELOW MUST BE COMPLETED

Click or tap the boxes to enter text. If not applicable, indicate "N/A". Make sure to complete mandatory (\*) fields

Contract / Award Information		
Document Type:	Department Code:	Contract Number (i.e., 15-123):
Commencement Date:	Termination Date:	Prior Contract Number (Synergen/CMS):
Expense Amount \$*		Revenue Amount: \$
*Funding Source(s) required:		
Funding from General Fund?	es 🗭 No If Yes \$	
Contract is fully or partially funded wi	th Federal Funds? FYes	No No
If Yes, is the Contract to a vendor o	r subrecipient?	
Were insurance or indemnity clauses If Yes, attach Risk's approval.	modified? C Yes C	No .
Vendor is using a Social Security Num If Yes, attach the required form per Adm		No No
Amendment / Revised Award Infor	mation	NOTES TO CONTRACT AND STATE OF
Document Type:	Department Code:	Contract Number (i.e., 15-123):
Amendment No.:		AMS Version No.:
Commencement Date:		New Termination Date:
		Prior Contract No. (Synergen/CMS):
C Expense C Revenue C Inci	rease C Decrease	Amount This Amendment: \$
Is there revenue included?	es C No If Yes \$	
*Funding Source(s) required:		
Funding from General Fund?	es C No If Yes\$	
Grant/Amendment Information (for	or grants acceptance and awards)	C Award 🗭 Amendment
Document Type: GTAM	Department Code: <u>HD</u>	Grant Number (i.e., 15-123): <u>23-026</u>
Commencement Date: <u>08/01/2022</u>	Termination Date: <u>0</u>	<u>17/31/2023</u> Amendment Number: <u>01</u>
Match Amount: \$	⊠ F	Revenue Amount: \$ <u>329,770.96</u>
*All Funding Source(s) required: Ce	enters for Disease Control and P	Prevention
*Match funding from General Fund	I? <sup>←</sup> Yes • No If Yes \$	<u> </u>
*Match funding from other source:  *Funding Source:		<u></u>
*If Federal funds are received, is fu Via NACCHO	nding coming directly from the I	Federal government or passed through other organization(s)?
Contact: Sharon Grant		
Department: <u>Health</u>		Telephone: <u>724-7842</u>
Department Director Signature:	ADV. Tur	Date: 9/26/22
Deputy County Administrator Signature	E: D	Date: 4 Det 2022
County Administrator Signature:	( seur	Date: 10 Shore

## **Modification of Agreement**

This Modification of Agreement ("Modification") is entered into, effective as of the date of the later signature indicated below, by and between the **National Association of County and City Health Officials** (hereinafter referred to as "NACCHO"), with its principal place of business at 1201 (I) Eye Street NW 4th Fl., Washington, DC 20005, and the following Subrecipient, hereinafter referred to as "Subrecipient:"

Pima County for and on behalf of	
the Pima County Health Department	86-6000543
Subrecipient	Federal Tax ID Number
3950 S Country Club Rd, Ste 100	
Address	
Tucson, AZ 85714	(520) 724-7765
City, State and Zip	Phone

WHEREAS, the parties entered into Contract # 2022-021602 on the 8th day of June, 2022 ("Agreement") and,

WHEREAS, the general purposes of the Agreement are unchanged; and

WHEREAS, both parties wish to make modifications to the Agreement, as described below;

THEREFORE, for the mutual consideration described in the Agreement, the parties agree to the modifications below through the signatures of the person(s) who have the authority to bind the parties to the changes in the Modification:

1. Term of Agreement: Article I, Section 2 of the Agreement is modified and shall continue in effect until July 31, 2023, unless earlier terminated in accordance with the terms herein. NACCHO and Subrecipient agree that the term of the Agreement may be extended to complete the project to July 31, 2023. NACCHO has been approved through "Expanded Authority" to temporarily continue programmatic activities of CDC GRANT #6NU38OT000306-04-01, CFDA #93.421, while waiting for CDC's acceptance and approval, in compliance with applicable guidance, federal rules and regulations. NACCHO reserves the right to exercise clause 6 of this Agreement, when requested by its Primary Funder. Expiration of the term or termination of this Agreement shall not extinguish any rights or obligations of the parties that have accrued prior thereto. The term of this Agreement may be extended by mutual agreement of the parties

2. <u>Payment of Services</u>: the updated payment schedule is as follows:

<u>Payment of Services</u>: Article I: Special Provisions, Clause 3 of the Agreement is modified to amend payment by NACCHO to Subrecipient for services performed as follows:

Original Contract Amount : \$170,141.23

Mod I Amount : \$329,770.96

Invoice paid up to 7/31/2022 : \$ 0.00

Total Contract Award Amount : \$499,912.19 NEW available Contract Amount : \$499,912.19

## **Updated Invoice Schedule**

Seven invoices must be submitted as follows:

Invoice No.	Period of Performance	Due date		
Invoice I	January 1, 2022 to March 15, 2022	May 30, 2022		
Invoice II	March 16, 2022 to June 30, 2022	July 15, 2022		
Invoice III	July 1, 2022 to July 31, 2022	August 15, 2022		
YEAR 2 - Year 2 Agreement award is contingent upon NACCHO receiving approval to exercise expanded authority in the administration of the award of CDC GRANT				
6NU38OT000	)306-04-01, CFDA #93.421.			
Invoice IV	August 1, 2022 to November 15, 2022	December 30, 2022		
Invoice V	November 16, 2022 to March 15, 2023	April 28, 2023		
Invoice VI	March 16, 2023 to June 30, 2023	July 15, 2023		
Invoice VII	July 1, 2023 to July 31, 2023	August 15, 2023		

- 3. <u>Scope of Work:</u> The Scope of Work attached hereto as Attachment I to the Modification is incorporated into the Agreement and made a part thereof.
- 4. All other terms and conditions of the Agreement remain unchanged.

IN WITNESS WHEREOF, the persons signing below warrant that they are duly authorized to sign for and on behalf of, the respective parties.

AGREED AND ACCEPTED AS ABOVE <b>NACCHO</b> :	SUBRECIPIENT:
By:  Name: Jerome Chester  Title: Chief Financial Officer	By:  Name:  Title:
Date:	Date:
	1
	APPROVED AS TO FORM: Deputy County Attorney
	Appointing Authority or Designee Pima County Health Department

## NATIONAL ASSOCIATION OF COUNTY AND CITY HEALTH OFFICIALS MODIFICATION OF AGREEMENT – ATTACHMENT I

## SCOPE OF WORK

Implementing Overdose Prevention Strategies at the Local Level (IOPSLL)

This modification is to continue the project as planned per the RFA. The original contract expires on 7/31/2022 and this modification will extend the period of performance to 7/31/2023.

Organization Name: Pima County Health Department, Community Mental Health & Addiction Program

Proposed Project: Together We Rise: Community Partnerships to Reduce Overdose

Program Goal: To reduce overdose fatalities among high-risk populations in Pima County and leverage existing community strengths and resources to address health disparities.

Process Objective 1. By Oct 2022, implement an early alert surveillance system utilizing law enforcement drug seizure activity, in order to improve our ability to respond and notify local behavioral health provider network and community partners, when fentanyl exposure risk is expected to be high.

Activities	Lead Person/ Organization	Estimated time frame	Notes	Status
1a. Establish a task force in partnership with local law enforcement (TPD and PCSD), CBP, and DEA to share information and coordinate response.	PCHD (Mark Person) and TPD (Aeric Koerner)	Jan 2022 – Mar 2022	Initial Meeting completed on 1/18/22 between TPD, CBP, and PCHD.	Complete
1b. Establish data sharing protocols and procedures between public health and public safety agencies.	PCHD (Mark Person and Hollie Watson- Smith) and Data Analysts from TPD, CBP, DEA	June 2022 –Sept 2022	Established verbal discussion, can develop written drafts for data sharing protocols.	In Process
1c. Develop operational definitions and quantitative thresholds for public health and safety alerts.	PCHD (Mark Person and Hollie Watson- Smith) and Data Analysts from TPD, CBP, DEA	July 2022 – Oct 2022		In Process
1d. Develop novel interventions to reduce overdose rates, by blending the knowledge	PCHD (Mark Person)	July 2022 – Oct 2022	Includes designing public health alerts to be sent.	Not started

and experience of local public health and					
safety experts.				1 1 1	
Process Objective 2. By July 2023, develop a n	nedia campaign and distr	ribute communication and edu	cational materials, to	reduce perpetuation of	of stigma and

Process Objective 2. By July 2023, develop a media campaign and distribute communication and educational materials, to reduce perpetuation of stigma and negative stereotypes around substance misuse towards communities of color (racial and ethnic) that have been historically marginalized and targets of racism, discrimination, and ostracism.

	discrimination, and ostracism.						
Activities	Lead Person/ Organization	Estimated time frame	Notes	Status			
2a. Identify local community members with lived experience from target communities to co-design culturally and linguistically appropriate strategies and messaging and materials for media campaign.	DCHD (Mark Person	Aug 2022 – Sept 2022	In close coordination with PCHD Communications Dept lead	In Process			
2b. Develop a communications plan including evaluation metrics and methods for assessing effectiveness of the marketing and media campaign	PCHD (Communications Lead and Mark Person and Mayra Jeffery)	Oct 2022 – Dec 2022		Not Started			
2c. Identify (via survey/focus groups/etc.) needs of people with lived experience in target communities at the intersection of racism and substance use disorders to inform program strategies and messaging.	PCHD (Mark Person and Mayra Jeffery)	Oct 2022 Dec 2022	Committee will decide on best route to gather information	Not Started			
2d. Develop content for messaging and social marketing /media campaign	PCHD (Communications Lead, Mark Person and Mayra Jeffery) and Community partners and Lived Experience Experts	Dec 2022 – Feb 2023		Not Started			
2e. Design and Develop marketing and media campaign materials including digital, print and radio (print, review, approval)	PCHD (Communications Lead)	Dec 2022 – Feb 2023		Not Started			
2f. Implement communications plan.	PCHD (Mark Person and Mayra Jeffery)	Mar 2023 – May 2023	The distribution of materials and methods to engage will depend on the	Not Started			

			committee and what is decided to be the best way to engage community in messaging.	
2g. Evaluate communications plan.	PCHD (Communications Dept, Mark Person, and Mayra Jeffery)	May 2023 - July 2023		Not Started
Process Objective 3. By March 2023, develop a linkage to care, harm reduction, and resource of				
Activities	Lead Person/ Organization	Estimated time frame	Notes	Status
3a. Develop "safe space" protocol for PCHD clinics	PCHD (CS Division)	July 2022 – December 2022		Not Started
3b. Develop standard operating procedures for PCHD clinics	PCHD (CS Division)	July 2022 - December 2022	######################################	Not Started
3c. Complete staff training on "safe space" protocol and procedures	PCHD (CS Division)	Jan 2023- March 2023		Not Started
3d. Develop tracking tool to measure outcomes	PCHD (CS Division)	Aug 2022 – December 2022		Not Started
3e. Design and develop media materials to notify general public of "Safe Space"	PCHD (Communications Department and CS Division)	Dec 2022 - Jan 2023		Not Started
3f. Send notification to stakeholders for new process and implementation	PCHD (CS Division)	lanuary 2023		Not Started
3g, Distribute media advertising to notify general public of "safe space" procedures.	PCHD (Communications Department and CS Division)	lanuary 2023		Not Started
3h. Hold ongoing monthly debrief for staff and leadership as support through implementation.	PCHD (CS Division)	Post implementation	In these meetings, specific situations can be reviewed to ensure protocols and policies are being followed and if they need to be revised.	Not Started

Process Objective 4. By December 2022, expand peer navigation services in community based organizations in high risk target communities and provide overdose prevention services and support to at least 20 people per month (per agency) identified as high risk.

Activities	Lead Person/ Organization	Estimated time frame	Notes	Status
	PCHD (Mark Person, Jennie Mullins) and TIC (Veronica Boone)	July 2022 – Aug 2022	Kick off meeting completed, scope of work is complete, finalized contract is pending	In process
populations (emphasizing drug court participants and others involved in pretrial services and adult probation).	PCHD (Mark Person)		IGA with Superior Court is pending approval and contract amendment is in draft form	In Process
4c. Track units billed and outreach services provided by both Hope Inc and TIC to ensure service targets are being met, and support both agencies with training and start-up needs.	PCHD (Mark Person)	July 2022 – Sept 2022	Tracking tools and documentation forms are complete	In Process
4d. Onboard a program coordinator and align functional job descriptions with scope of work and overdose prevention work being done by public health case managers.		July 2022 –Oct 2022		In Process
4e. Launch case management services to begin accepting referrals from the justice system, and provide brief interventions to at-risk populations.	PCHD (Mayra Jeffery)	Oct 2022 – Dec 2022	Referral system is in place and services will roll out pending coordinator start date.	In Process

Process Objective 5. By July 2023, distribute at least 5,000 fentanyl test supplies strips to local agencies, partners, and coalitions for use in clinical settings or directly to people who use drugs (harm reduction).

Activities	Lead Person/ Organization	Estimated time frame	Notes	Status
5a. Develop storage & distribution policies and procedures.	PCHD (Mark Person)	Jan 2022		Completed

5b. Create a targeted distribution plan.	PCHD (Mark Person)	Jan 2022		Completed
5c. Identify fentanyl test supplies vendor and POC to begin plans for procurement.	PCHD (Mark Person)	Jan 2022		Completed
5d. Procure fentanyl testing supplies shipment and target date for receipt.	PCHD (Mark Person)	June 2022	Shipment of items arrived in June	Completed
5e. Develop training and presentations, media and marketing materials.	PCHD (Mark Person and Mayra Jeffery)	June 2022 – Oct 2022	Process of updating existing slide deck for training	In process
5f. Notify substance use collaboration groups and other partners to start distribution process, provide marketing materials, and offer fentanyl test supplies training.	PCHD (Kimberly Wang)	June 2022 – Aug 2022	Shipment of items arrive in June, awaiting updating materials	In process
Sg. Track and report number of fentanyl test supplies distributed, trainings completed, and agency reports	PCHD (Mark Person)	June 2022 – Aug 2022	Tracking tools complete, and distribution and tracking started.	In process - Ongoing

Process Objective 6. By July 2023, provide at least 4 presentations to local law enforcement and begin distributing a standardized presentation for providers, jails, and stakeholders who work with SUD populations in order to bolster community harm reduction.

Activities	Lead Person/ Organization	Estimated time frame	Notes	Status	
6a. Develop training resource for local law enforcement collaboration on opioid overdose and naloxone education, the Good Samaritan Law and treatment resources.	PCHD (Mark Person)	June 2022 – Oct 2022	The training materials in draft format pending review and comment from relevant partners.	In Process	
	PCHD (Mark Person and Mayra Jeffery)	Oct 2022 –July 2023		Not Started	
	PCHD (Mark Person and Mayra Jeffery)	June 2022 – Oct 2022	The training materials in draft format pending review and comment from relevant partners.	In Process	

6d. Identify key messages and target audience for media and marketing materials and develop marketing and communications plan.	PCHD (Communications Department and Marl Person and Mayra Jeffery)	Sept 2022 – Nov 2022	In Process
6e. Establish evaluation method and metrics to measure marketing success.	PCHD (Mark Person)	Sept 2022 – Nov 2022	Not Started
of. Implement communications plan including disseminating marketing materials and providing education and awareness-raising events to the general public and community partners.	PCHD (Communications Dept and Mark Person)	Nov 2022 – Jan 2023	Not Started

## **Crosscutting Activities**

Objective 1. Through the period of performance, participate in virtual learning, and evaluation activities to openly share challenges, results, and outcomes of selected site's experience						
Period	Activity	Lead Person/Organization	Timeline			
Year 1 & Year 2	Participate in monthly check-in calls facilitated by NACCHO to review the progress of ongoing activities, any major changes to the work plan, and discuss technical assistance needs. Participants will include at least one representative from NACCHO, CDC, and the awardee as well as any other stakeholders invited by the awardee. Supplemental technical assistance (TA) calls will be scheduled to address needs.	NACCHO, CDC, Selected jurisdiction, SME consultant(s)	Complete by July 31, 2023			
Year 1	Complete the Overdose Prevention Capacity Assessment Tool (OPCAT) and Technical Assistance Assessment (TAA) at the start of the project. Technical assistance and training will be available to sites and will be informed by the site OPCAT results.	NACCHO, Selected jurisdiction	Complete by January 31, 2022			

Year 1	Develop an evaluation plan based on the logic model. A template and technical assistance will be provided from NACCHO, CDC, and SME consultant.	NACCHO, CDC, Selected jurisdiction	Complete by February 15, 2022
Year 2	Implement the evaluation plan and hold quarterly calls to update progress on evaluation.	NACCHO, CDC, Selected jurisdiction, SME consultant(s)	Completed by July 31, 2022
Year 1 & Year 2	Participate in cohort learning and sharing experiences. Present expertise through at least one peer learning experience.	NACCHO, CDC, SME consultant(s), all program participants	Complete by July 31, 2022
Year 2	Submit a final report that includes information about lessons learned, successes, and challenges experienced during the project, as well as progress and evaluation data from the beginning of funding through the end of the project period.	NACCHO, CDC, Selected jurisdiction	Complete by July 31, 2023
Year 2	Complete an Overdose Prevention Capacity Assessment Tool (OPCAT) at the end of the project and participate in project evaluation-related activities with NACCHO and CDC, including interviews to assess how the technical assistance and funding impacted the site's capacity.	NACCHO, Selected jurisdiction	Complete by July 31, 2023

# LINE-TEM BUDGET TEMPLATE Pince County / No.th. Department Together We Alex: Constructly Portnerships to Reduce Oversions 01/01/2022-07/31/2023

line items	Original Year 1 Sudget (Through July 31, 2022)	Expenses incurred (Through June 30,2022)	Expenses Forecasted (For Month of July 2022)	Year 1 Carryover Forecasted	Original Year 2 Sudget (Aug. 1, 2022 - July 31, 2023)	Total Available (August 1, 2021-July 31, 2002)	Proposed Revisions	Cost & stiffration
					2023)	2022)		
Fersonnel (Name) Project Director - Warti Person	\$9,996.01	\$ 1,735.84	\$ 1,900.00	5 6,360.17	5 19,992.00	5 26,252.19	\$ 15,000.00	Reduced from 0.25 to 0.20 FTI
Project Director - Willie Watson-Snith	\$6,832.80	\$ 1,725.84 \$ 227.78	\$ 450.00	5 6,360.37 5 6,355.02	5 19,993.03 5 13,665.60	3 33,520.62	\$ 15,000.00	Reduced from 0.25 to 0.20 FTE  Untilled 1.0 FTE, supertied start date of
Program Coordinator - Vacant	\$24,960.00	s .	ş	\$ 24,960,00	\$ 49,920.00	\$ 74,880.00	\$ (25,000.00	9/12/23. Changing from Case Managers Frogram Coordinator to align with SCW
Communications Specialist Special Staff Assistant - Umberly Wang Program Manager - Mayra Jeffery	\$ 56,760,00 \$ :	s :	\$ 2,000.00	\$ 4,760,00 5 -	\$ 13,520.00	\$ 13,230.00 \$ .	\$ 20,000,00 \$ 7,000,00 \$ 9,000,00	
Personnal Subtatal	\$ 48,548.81	\$ 1,963.62	\$ 4,350.00	\$ 42,235.19	\$ 97,097.62	\$ 139,312.01	<b>.</b>	
Total Sringe Secretiza	\$ 17,963.66	\$ \$69.20	\$ 1,600.50	\$ 15,754,36	\$ 35,926.12	\$ 51,720.48	\$ · · · ·	
Missge	\$ 289.25	s -		5 209.25 5 -	\$ 578.50	5 867.78 5 -	s -	Local mileage for Program Coordinator @ 1000 miles/year
			•			s .		
Travel Subtotal Supplies	\$ 299.25			\$ 299.25	\$ 578.50	\$ 867.75	•	
Office Supplies	\$500.00	s .	, .	\$ 500.00 \$ -	\$ 1,000.00	\$ 1,500.00 \$ -	5	\$1,500 per year @ 250/year per person
Supplies Subtotal Contractual Costs	\$ 500.00			\$ 500,00	\$ 1,000.00	\$ . \$ 1,500,00	\$ · · · · ·	
HOPE Inc.	\$ 45,000.00	5 -	, .	\$ 45,000.00	\$ 90,000.00	\$ 125,000.00	; ·	Peer support/navigation services
Fuction Indian Center	\$35,000	s -	s .	\$ 35,000.00	\$ 70,000.00	\$ 205,000.00	5 .	Safe Space and harm reduction activities
	2			5 ·		5 .		
Contractual Subtotal Other	\$ 80,000.00	• · · · · · · · · · · · · · · · · · · ·		\$ \$0,000.00	\$ 150,000.00	\$ 240,000.00		
Communication Campaigne, Public Education, and	\$9,550	s .		5 9,550,00	5 18,715.00	5 28,285.00		
Continued and Control of the Control	\$550.00	š :		5 9,550,00 5 550,00	\$ 1,000.00	5 28,285.00 5 1,550.00 5	\$	Madia charges, including production costs
Other Substal:	\$ 10,300.00	\$ 1000000000000000000000000000000000000		\$ 10,100,00	\$ 19,715.00 \$ .	\$ 29,835.00	•	
Other Subtottal:			s	s . s .	s .	* ·		
Subtotals of Direct costs	\$ 157,403.12	\$ 2,512.62				\$ 461,246.04	š .	Pints County calculates indirect using di- minimis rate, 10% of modified total direct
Indirect (10%)	\$ 12,740.11 \$ 170,141.23	5 253.28 \$ 2,786.30	5 505.95 5 6.355.45	\$ 11,890.88 \$ 160,799.68	5 15,433.72 5 329,770.96	\$ 27,324.60 \$ 499,579,64		costs (MTDC).

Total Yrl expenses: 5

9,341.55 Total Yr1 & Yr2 Award: \$
Total Yr1 & Yr2 Award: \$
Total Yr1 exp validation \$

495,932.20 490,570.64 9,341.55