

# **New York State Education Department's P20W Statewide Longitudinal Data System (SLDS) Initiative**

## **Phase 1 - Expanding Infrastructure and Improving Interoperability**

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**A Presentation to the Board of Regents  
January 2024**



# What is an SLDS?

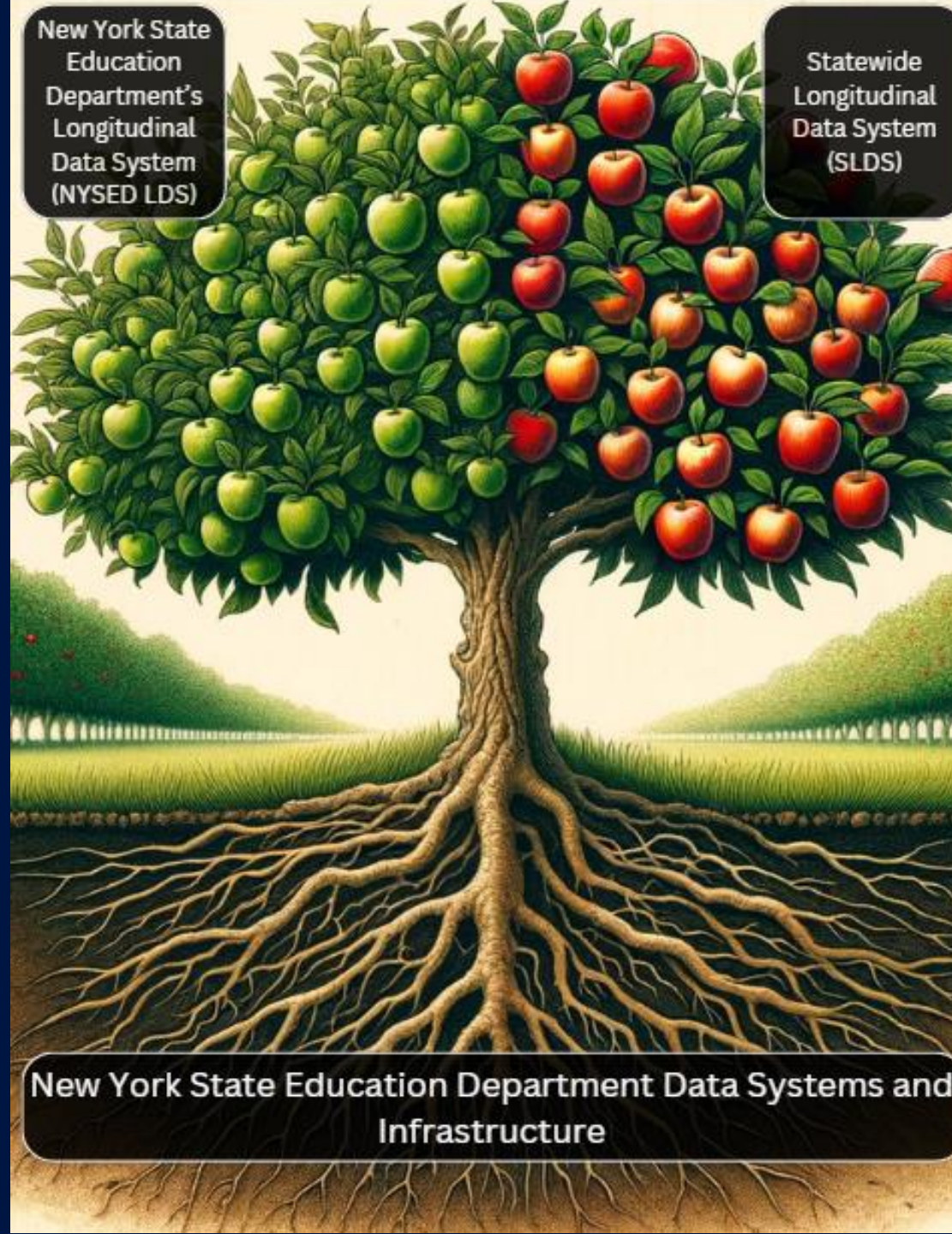
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A comprehensive system that integrates data from P-12, higher education, workforce, and other relevant data sets

- **Purpose:**
  - Answer critical questions
  - Inform decision making
  - Guide policy development to improve education outcomes
- **Critical Components:**
  - Data governance and data usage strategies
  - Technical infrastructure for security and data sharing
  - Sustainable support for long-term maintenance

# NYS Education Department LDS vs Statewide LDS and the Importance of Our IT Systems

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# Growing an SLDS

Current \$3.75m Grant

\$10.5m Appropriation

Integration of Statewide  
Data Systems



IT Data System and Infrastructure Needs Expand

# Current State of NYSED's LDS

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What we have now:



What we dream to build:



# Current State of NYSED's LDS

We have a robust P-12 data warehouse with some postsecondary data to meet reporting needs. However:

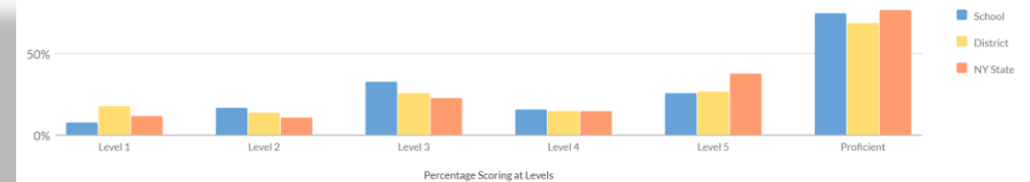
- Disparate, siloed, and aged technical infrastructure must be addressed
- Expansion is necessary for higher education and workforce data
- Previous unsuccessful attempts resulted in missed opportunities

ENROLLMENT BY GENDER

MALE	
1,148	54%
FEMALE	
968	46%
NON-BINARY	
1	0%



ANNUAL REGENTS EXAMINATION IN ELA (2022-23)



Subgroup	Tested	Level 1		Level 2		Level 3		Level 4		Level 5		Proficient (Levels 3 & Above)	
		#	%	#	%	#	%	#	%	#	%	#	%
All Students	427	36	8%	71	17%	139	33%	70	16%	111	26%	320	75%
Female	198	7	4%	31	16%	67	34%	32	16%	61	31%	160	81%
Male	229	29	13%	40	17%	72	31%	38	17%	50	22%	160	70%
General Education Students	359	31	9%	48	13%	118	33%	61	17%	101	28%	280	78%
Students with Disabilities	68	5	7%	23	34%	21	31%	9	13%	10	15%	40	59%

















# Current State of NYSED's LDS

USDE lists 14 SLDS requirements to assist with status review:

- One item, “Secure Access to Data,” is considered “Complete”
- Seven items, including “Governance,” “Privacy Protection,” and “Data Quality,” are rated as “Currently in progress” or as early stage
- Six items, including “Institutional Support,” “Sustainability,” and “Enterprise-wide Architecture,” are rated with the status of “Has not begun”

Exhibit 1: SLDS Requirements & NYS Status

SLDS Requirements		NYS Status	
1. Governance & Policy	a. Needs and Uses	Currently in progress	
	b. Governance	Currently in progress	
	c. Institutional Support	Has not begun	
	d. Sustainability	Has not begun	
2. Technical	a. Federal Reporting	Currently in progress	
	b. Privacy Protection and Data Accessibility	Currently in progress	
	c. Interoperability	Has not begun	
	d. Data Quality	Currently in progress	
	e. Enterprise-wide Architecture	Has not begun	
3. Data Use	a. Secure Access	Complete	
	b. Data Use Deliverables	Currently in progress	
	c. Evaluation	Has not begun	
	d. Partnerships with Research Community	Currently in progress	
	e. Sustainability Plan	Has not begun	

# SLDS 2023 Grant: Award Summary

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NYSED has received a four-year \$3.75 million grant award from USDE in support of an SLDS project focusing on the priority of “Infrastructure and Interoperability.”

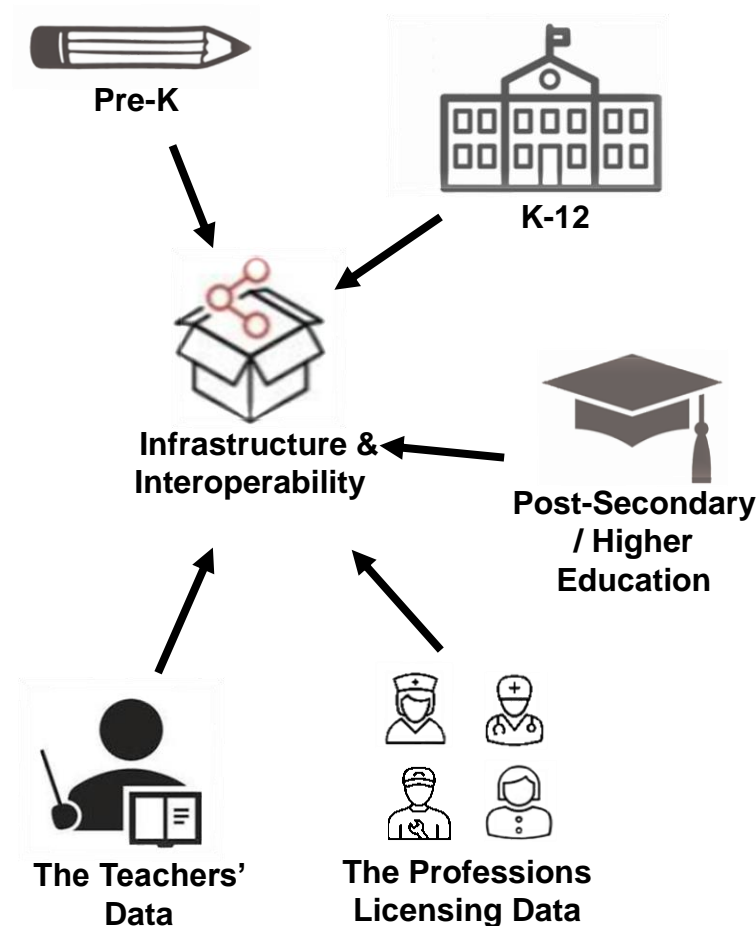
- Infrastructure: update, expand, and develop technical infrastructure to support an SED LDS
  - On-going: Student identification system in P-12 data warehouse
  - Proposed: Data integration and storage infrastructure
- Interoperability: create linkages of data elements



# SLDS 2023 Grant: Proof of Concept

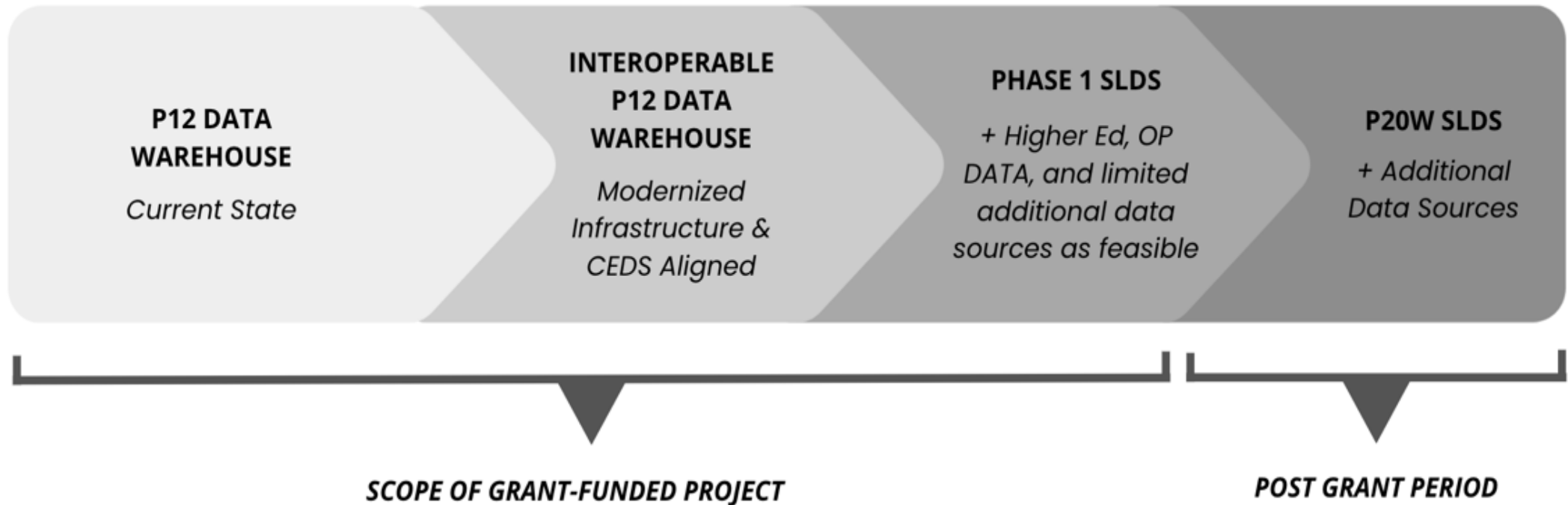
Overarching goal: To demonstrate the “Proof of Concept” and a pathway to success:

- Connect P-12 data warehouse to data from the Office of the Professions and the Office of Teaching Initiatives
- Link P-12 data warehouse to the systems of SUNY and CUNY
- Demonstrate data visualization through expanded infrastructure and technical solution



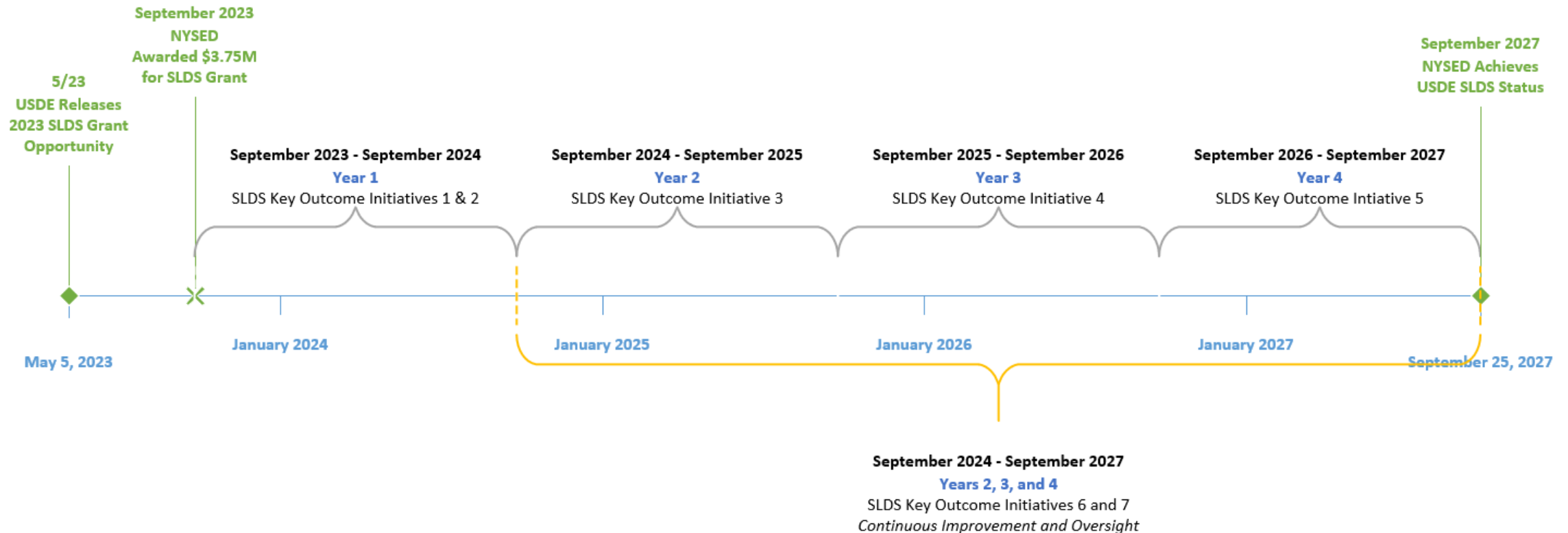
# SLDS 2023: Scope of Work

## CONTINUUM OF DEVELOPMENT New York State P20W SLDS



# SLDS 2023 Grant: Work Plan

## NYSED SLDS Timeline by Key Outcome Initiatives



# SLDS 2023 Grant: Professions

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## Registered Nurses

- NYSED OP Licensed more than 30,000 Nurses in NYS in 2022.

## Licensure-Qualified Nursing Programs

- NYSED OP authorizes more than 100 RN programs.

## RNs Who Graduated from NYS High Schools

- This subset of RNs will allow us to review regional trends regarding where more students are successfully navigating to professional careers in nursing.



# SLDS 2023 Grant: Teachers



## Certified Teachers

- NYSED OTI certifies thousands of teachers annually with more than 200,000 certified public-school teachers active in 2023

## Public Schools and Students

- NYSED IRS collects data on 700+ districts with more than 4,500 schools where ~2.5M students receive instruction

## Teacher-Student Linkages

- The link between teachers and students in combination with teacher certifications will allow us to review regional trends where more students are successfully navigating to careers and college

# SLDS 2023 Grant: Key Outcome #1

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## Define and align mission and vision of the work for key stakeholders

- Work with the USDE State Support Team and learn from other state's SLDS experiences
- Engage key stakeholders in NYS
- Develop data privacy campaign and “myth buster” document



**Council on Children and Families**



# SLDS 2023 Grant: Key Outcome #2

## Update policies and standard practices to support the SLDS

- Improve data governance program
- Develop data usage strategies
- Engage external state-level stakeholders in discussions about addressing possible legal limitations that diminish capacity for statewide data interoperability



## Finalize technical decisions related to infrastructure and interoperability

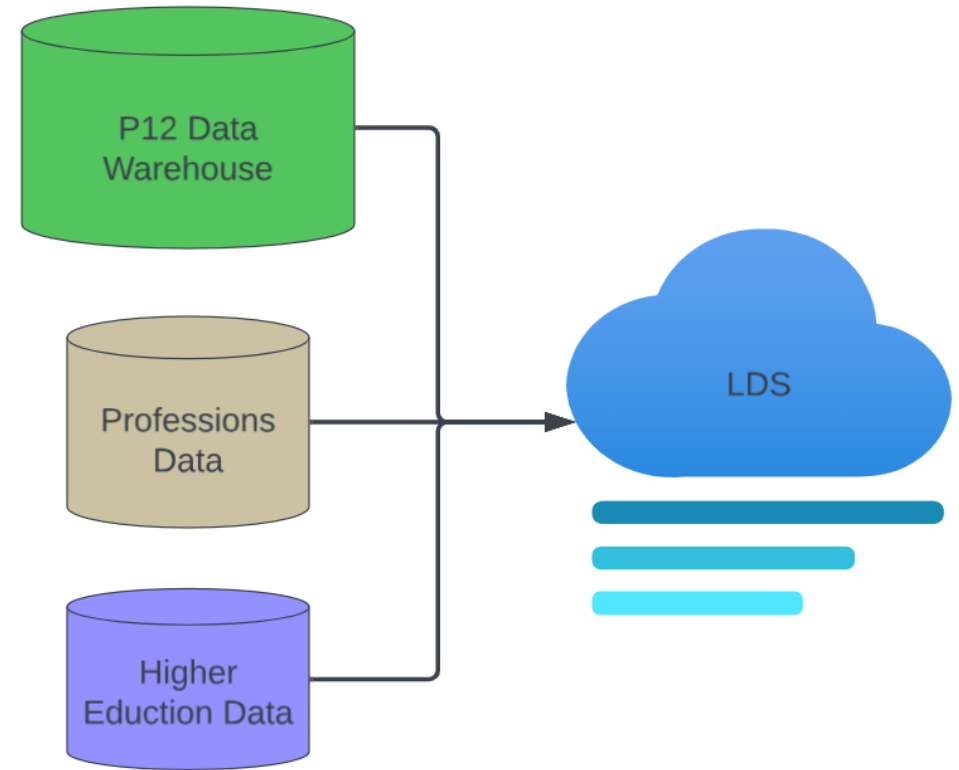
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# SLDS 2023 Grant: Key Outcome #4

## Expand P-12 Data Warehouse infrastructure to support interoperability

- Modernize technologies (such as Cloud storage and Virtual Private Network/VPN tunnel)
- Implement matching mechanism among multiple data systems
- Develop visualization standards and report delivery standards and mechanisms



# SLDS 2023 Grant: Key Outcome #5

## Implement technological solution to include other statewide data sources in Phase 1 SLDS

- Pilot Phase 1 SLDS with Office of the Professions data
- Pilot Phase 1 SLDS with data from SUNY and CUNY
- Develop automated mechanism for matching P-12 data sets with other data sets

Master Table

ID	First Name	Last Name	Address 1	Address 2	Phone	Nat ID	State	ZIP	Birthdate
458	John	Oneel	16 M. St	Null	516465+09	256489458	Nyc	85001_	10/11/1988
2398	Jonathan	O'nil		Norw1ch	+1578698754	#####	_NY		
CL_96		John O.	Mekel Street	NY	00000	25648945-8	NEW YORK	85001NY	OCT-11
Null	j0hny	O'neal	16m1l	Norwich				85001-4561	11/10/1988

# SLDS 2023 Grant: Key Outcome #6

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## Achieve continuous improvement through stakeholder input and feedback

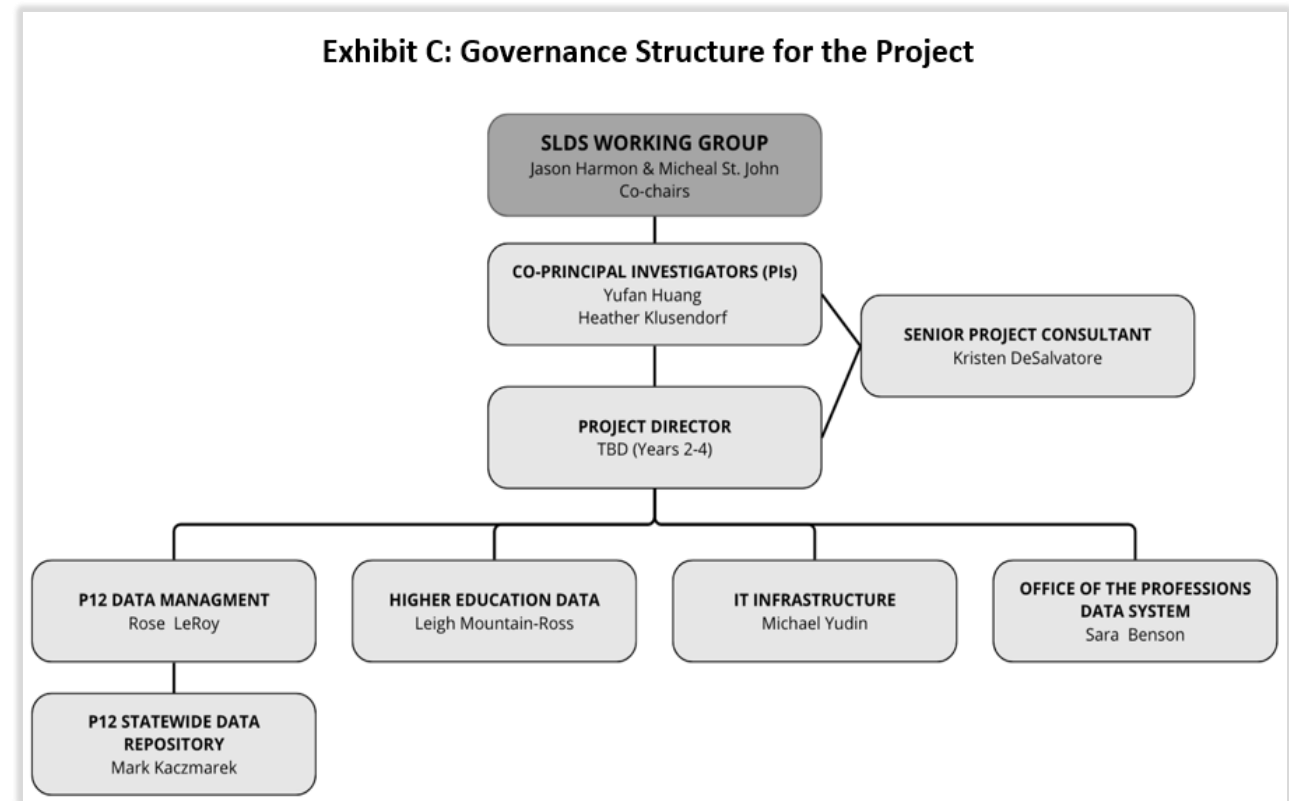
- Stakeholder input for maintaining the privacy and security of student data
- New NYSED webpage for data submission requests, questions, and feedback
- Outreach campaign through NYSED's listservs, newsletters, and social media



# SLDS 2023 Grant: Key Outcome #7

## Maintain proper oversight of the project through SLDS Working Group

- Maintain mission & vision of the Phase 1 SLDS throughout the grant period
- Standard quarterly meetings and ad hoc meetings as needed
- Disparate, siloed, and aged technical infrastructure must be addressed





# SLDS 2023 Grant: Future Opportunities

**An SLDS should help to answer critical questions, inform decision making, and guide policy development to improve outcomes**

- Are changes to the teacher pipeline resulting in more teachers available in areas of need?
- Are improvements we have made for incarcerated youth to receive a diploma resulting in improved career and economic outcomes?
- Can we identify critical class and course taking patterns that improve the career and college outcomes for our students and make those learning opportunities available statewide?



# Questions?

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New York State  
EDUCATION DEPARTMENT

Knowledge › Skill › Opportunity