LONG BEACH
UNIFIED · SCHOOL · DISTRICT

Excellence and Equity
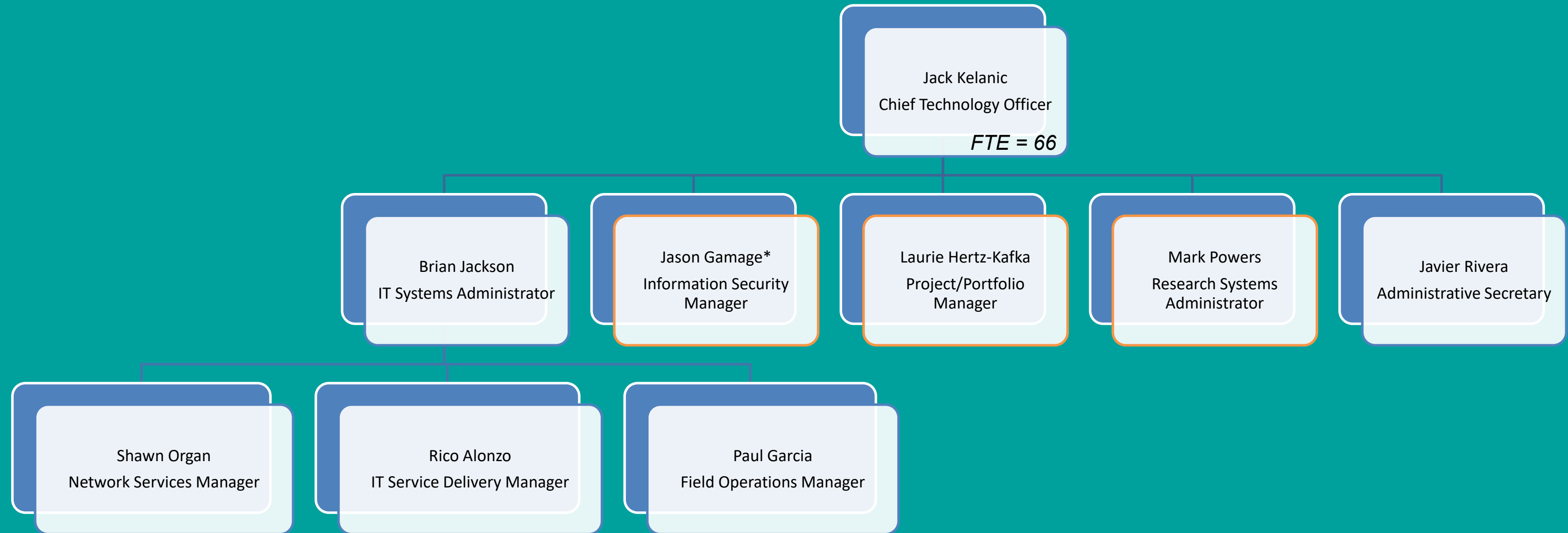
Technology & Information Services Updates
Board Workshop
July 17, 2024

Agenda

- **Technology Services Overview**

- **Strategic Focus Areas for School Year 24-25**

- **Business Systems Modernization Program Update**

  - Question & Answer

- **Cybersecurity Program Update**

- **Artificial Intelligence Update**

  - Question & Answer
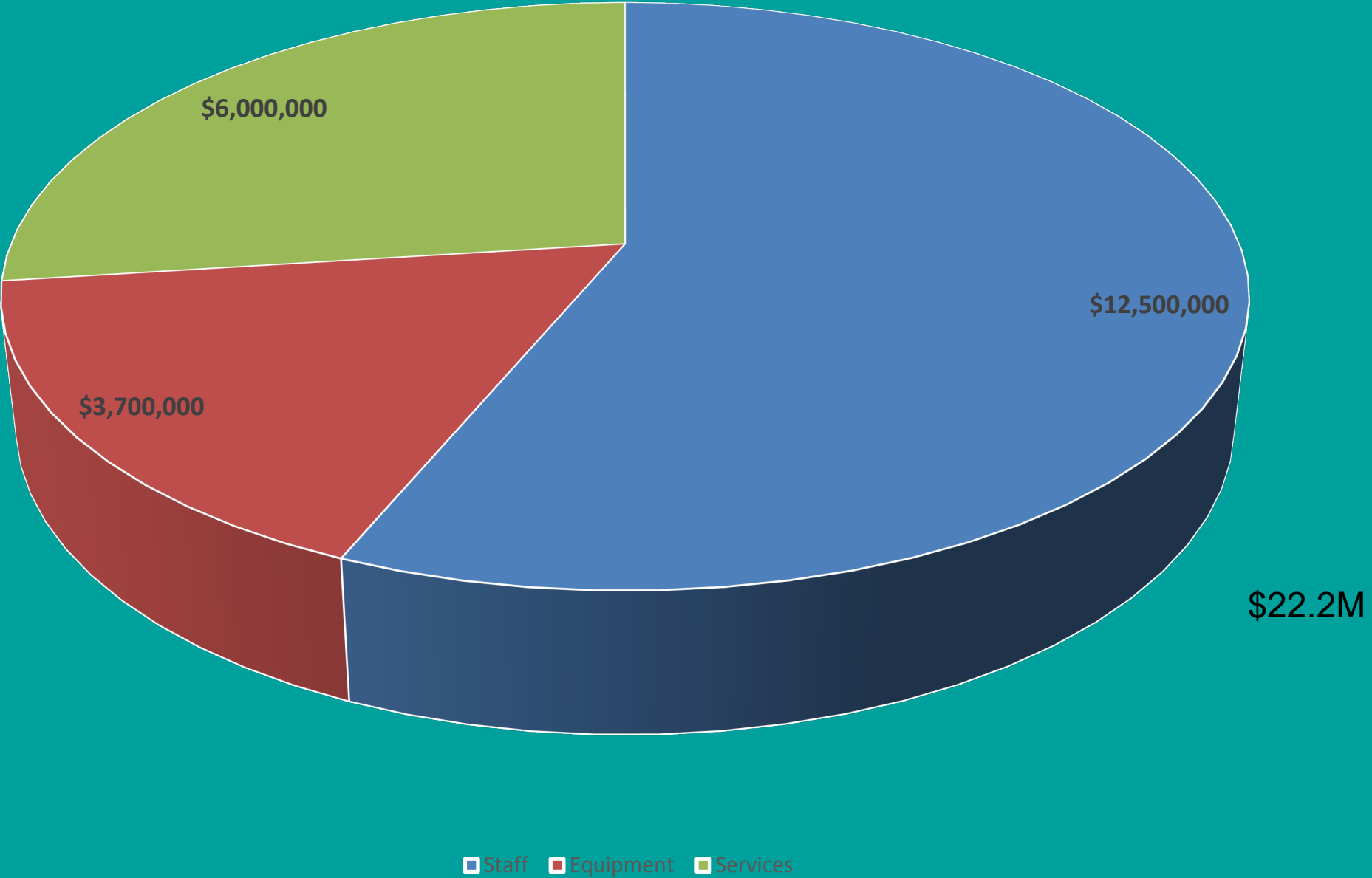
Technology Services Organization

Jack Kelanic
Chief Technology Officer

FTE = 66

Brian Jackson
IT Systems Administrator

Jason Gamage*
Information Security Manager

Laurie Hertz-Kafka
Project/Portfolio Manager

Mark Powers
Research Systems Administrator

Javier Rivera
Administrative Secretary

Shawn Organ
Network Services Manager

Rico Alonzo
IT Service Delivery Manager

Paul Garcia
Field Operations Manager

*Contractor

Technology Service Portfolio

Services	Description	Value Statement
IT Infrastructure	Networking equipment, servers, switches, uninterruptable power supplies, and end-computing devices for schools and business operations.	Resilient education services
Telecommunication	Wi-Fi networking for entire campus, voice services, and 1-10 Gbps Internet service to each campus and office	Business communications
Messaging & Collaboration	Email services, instant messaging, calendaring, video conferencing, cloud-based file storage, secure remote access tools	Employee collaboration
Emergency Communications	Emergency communication UHF radios used by School Safety, Operations, and school Principals	School safety
Hosting & System Administration	Data center hosting, computing, data storage, and backup/restore capabilities for the District's information and systems	Efficient resource utilization Business continuity
Business Systems	Business automation and transaction processing required to execute the District's major business functions (HR/Payroll, Budget/Finance, Procurement)	Efficient resource utilization & compliance
Research Systems (New)	Development, support and data integration for LROIX longitudinal student data warehouse and related web applications, including Parent LROIX & School of Choice.	Student accountability & Parent engagement
Cybersecurity Services (New)	Establishes and monitors appropriate information systems controls to protect against loss of data, disruption of services, and other misuse of District resources.	Compliance Resiliency of education services
Customer Support Services	Campus-based technicians for technology deployments, installation, troubleshooting, repairs, upgrades, user access, and related customer requests. Live help desk support via voice, email, or chat. Synchronous remote support.	Maximize teaching and learning opportunities

Technology Services Budget

2024-25 IT Operating Budget

Pie chart showing IT Operating Budget breakdown:
- Staff: $12,500,000
- Equipment: $3,700,000
- Services: $6,000,000
- Total: $22.2M
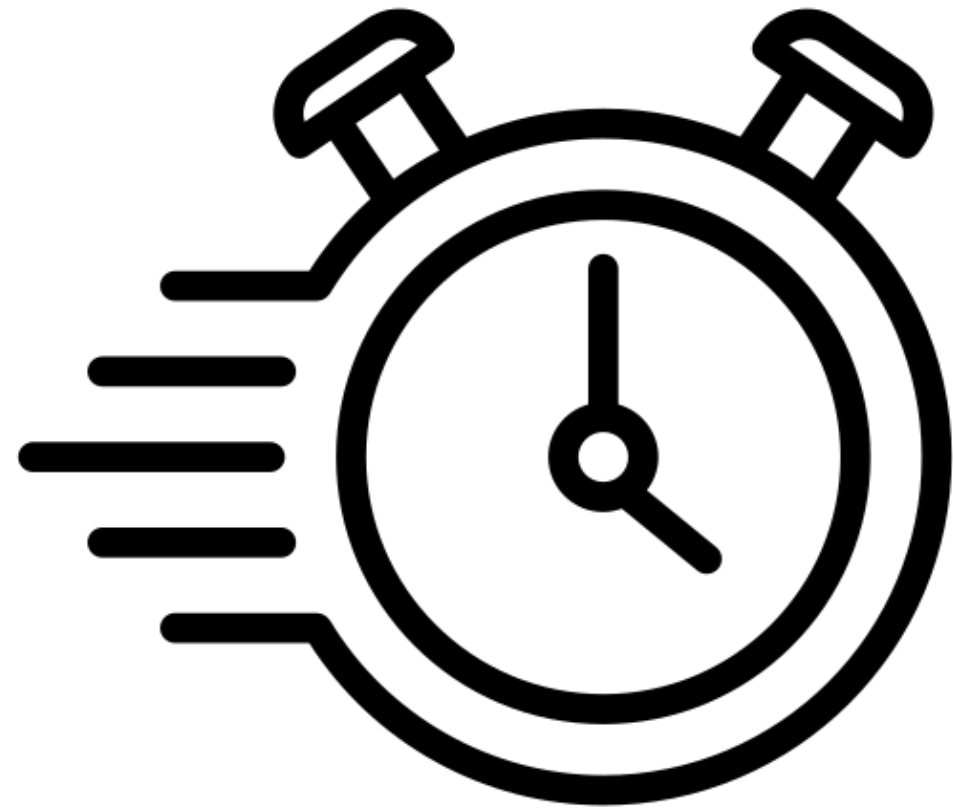
Legend: Staff | Equipment | Services
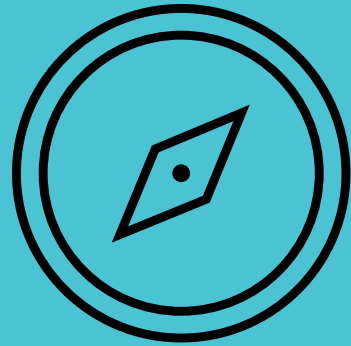
IT Strategic Focus

The CTO 100-day onboarding process included interviews with dozens of stakeholders across all LBUSD departments, school visits, service ride-along, third-party assessments, and documentation review.

As a result of this engagement, four areas of near-term strategic focus were identified to address emergent needs of the District and to begin aligning with Vision 2035, specifically:
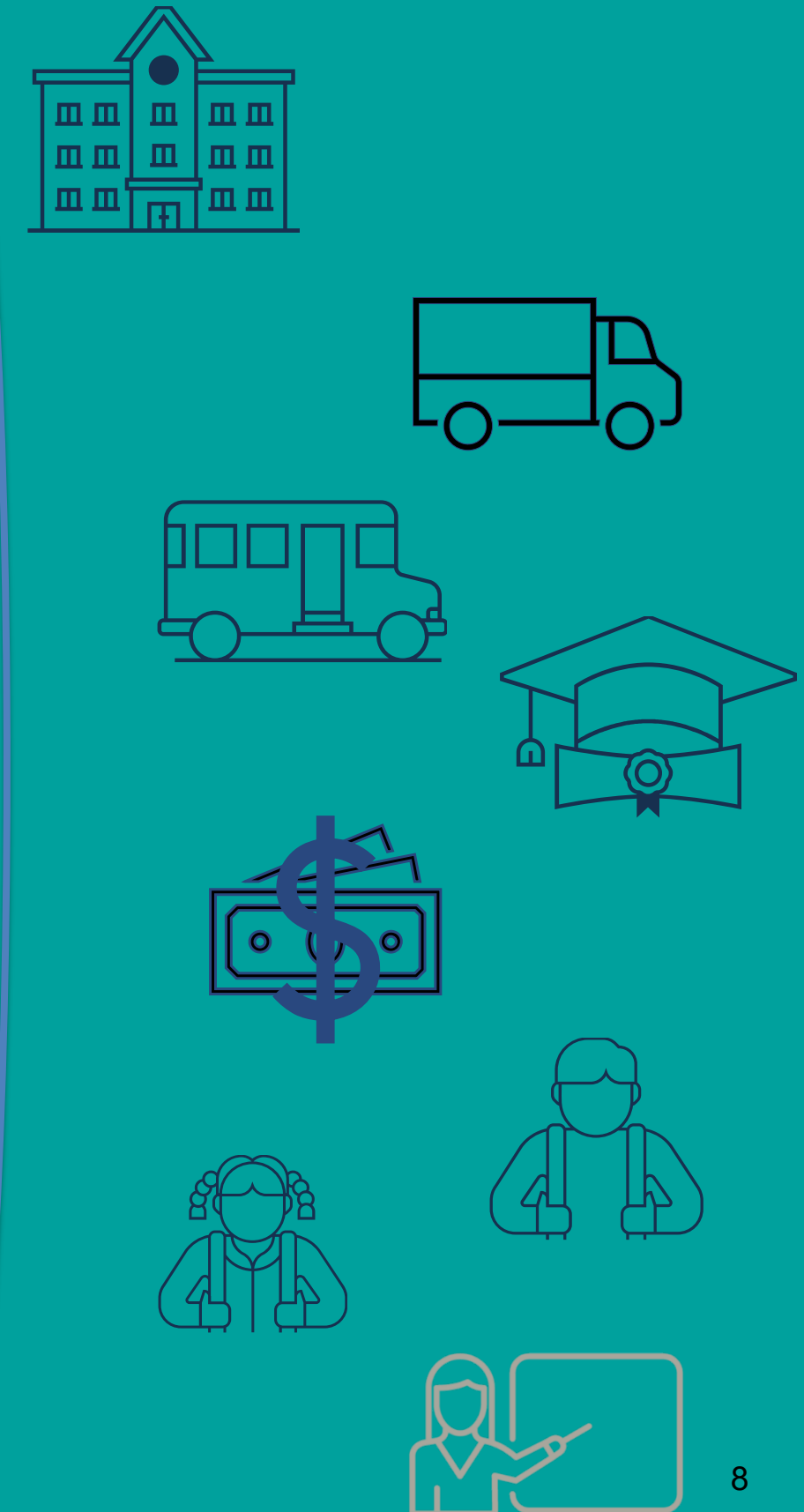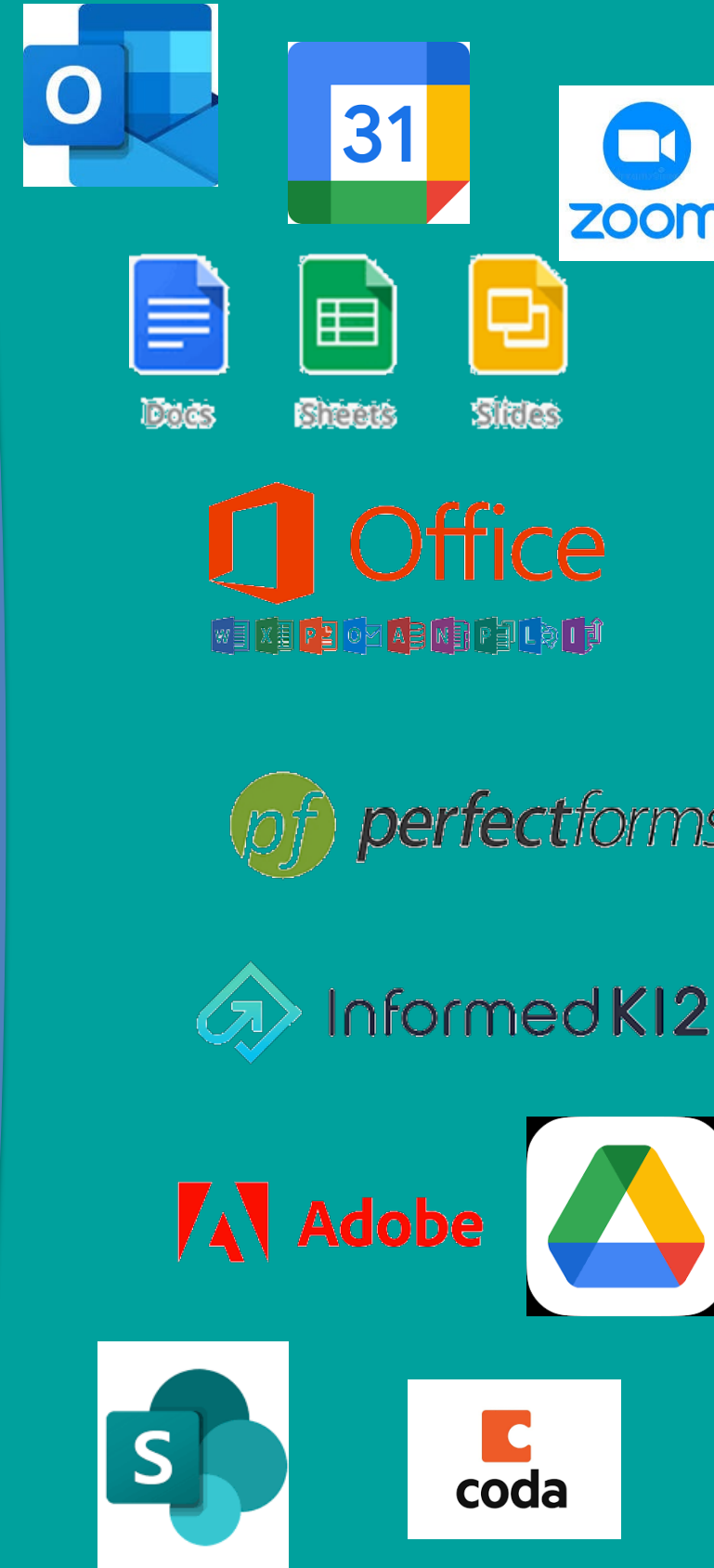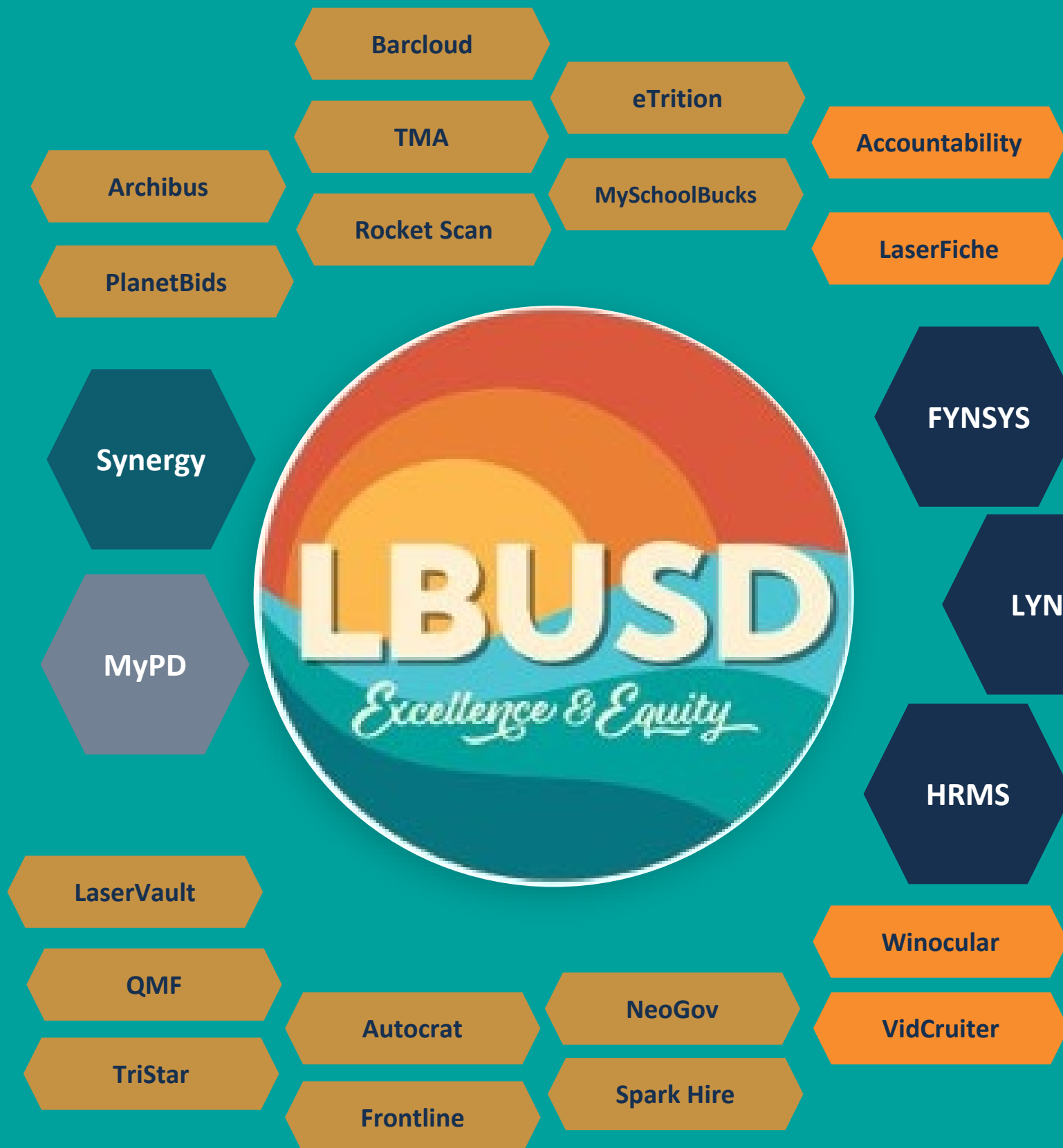- **Graduate Portrait**
- **Adult Portrait**
- **System Portrait**

Cybersecurity
- Cybersecurity assessments
- Develop policies, technical controls, capabilities, and training to meet the District's compliance objectives
- Support business continuity
- Protect sensitive information

Digital Leadership
- Design the technology experience for teachers and students
- Develop long-range technology plans
- Fiscal sustainability
- Future skills & roles
- Professional development

System Modernization
- Modernize the District's core business information systems
- Modernize the District's core student information systems
- Develop new applications that promote increased engagement with parents and students

Data & Analytics
- Establish a data governance framework
- Document current and future state systems architecture
- Modernize the District's data warehouse
- Consolidate and streamline dashboards
- Develop the District's AI strategy

VISION 2035
Let's reimagine education in LBUSD.

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Business Systems Modernization Program

Update

Business Systems Overview
Current-State Architecture

Barcloud

eTrition

TMA

Accountability

Archibus

MySchoolBucks

Rocket Scan

LaserFiche

PlanetBids

Synergy

FYNSYS

MyPD

LYNX

HRMS

LaserVault

Winocular

QMF

VidCruiter

Autocrat

NeoGov

TriStar

Frontline

Spark Hire

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Business Systems Overview
Case for Change

- Antiquated systems
- Limited or no commercial support
- Business process complexity
- Manual work processes
- Duplicative data entry
- Limited data-driven decision making
- Speed
- Customer experience
- Business continuity risk

```
          Long Beach Unified School District
                      Main Menu


              Please enter menu selection: _

        01   Inquiries                  (PGMM1)
        02   VA Processing              (PFE)
        03   Position Control           (BLA)
        04   Personnel                  (PEM)
        05   Risk Management            (PRM)
        06   Accounting                 (PAM)
        07   Payroll                    (PFM)
        08   Remote Time Entry          (PFK)
        09   Dictionary                 (DTM)
        10   Security                   (DCM)
        11   Logoff

      Your last signon was at 16:34:01 on 04/25/2024.



Command for Help
ands: E G X                              Command
                                        R  6 C 55
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Business Systems Overview
Future-State Vision

"RPM" STANDS FOR

Resource

Planning

Modernization

PROJECT OBJECTIVE

Modernize LBUSD's core business systems and processes by leveraging a fully-integrated commercial digital business suite

Major Business Processes Included

Budget/Finance

- ❑ Budget
- ❑ Accounting
- ❑ Capital Planning
- ❑ Asset Management
- ❑ Work Order Management
- ❑ Financial Reporting

HR/Payroll

- ❑ Recruitment
- ❑ Onboarding
- ❑ Transfers
- ❑ Payroll
- ❑ Benefits
- ❑ Travel & Expense
- ❑ Retirement

Supply Chain

- ❑ Sourcing
- ❑ Purchasing
- ❑ Contracts
- ❑ Receiving
- ❑ Warehouse
- ❑ Distribution
- ❑ Accounts Payable

Project Governance

Executive Sponsors

Kelly An, Assistant Superintendent, Human Resources
Yumi Takahashi, Chief Business and Financial Officer

Steering Committee

Human Resources
Kelly An
Kim Dalton

Fiscal Services
Renee Arkus
Shawn Bartschi

Personnel Commission
Susan Leaming

Technology
Brian Jackson
Jack Kelanic

Warehouse
Steve Bui
Juan Rivera

Procurement
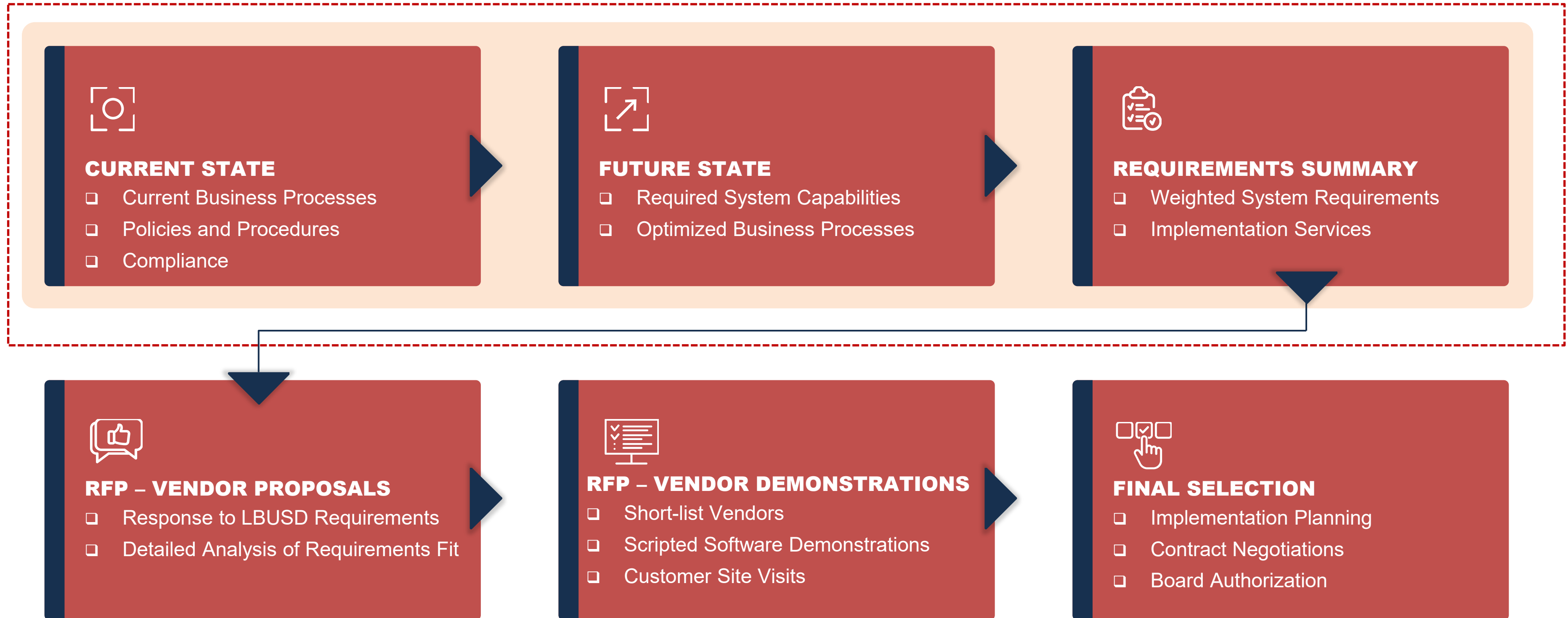John Tamura

Nutrition Services
Lieling Hwang

Facilities
Alan Reising
David Van Westerhuyzen

Project Consultants

Katrina McCullough, Project & Change Lead
Prysilla Martiz, Project & Change Coordinator

Breana Ortiz, HR Business Systems Analyst
Rati Sah, Financial Business Systems Analyst

Vendor Selection Process

CURRENT STATE
- Current Business Processes
- Policies and Procedures
- Compliance

FUTURE STATE
- Required System Capabilities
- Optimized Business Processes

REQUIREMENTS SUMMARY
- Weighted System Requirements
- Implementation Services

RFP – VENDOR PROPOSALS
- Response to LBUSD Requirements
- Detailed Analysis of Requirements Fit

RFP – VENDOR DEMONSTRATIONS
- Short-list Vendors
- Scripted Software Demonstrations
- Customer Site Visits

FINAL SELECTION
- Implementation Planning
- Contract Negotiations
- Board Authorization

Request for Information

Bidders Conference Statistics

- ❑ Held Thursday March 27, 2024
- ❑ 40+ Attendees
- ❑ Vendor Representation*
  - CGI
  - Frontline
  - Infor
  - Oracle
  - Power School
  - SAP
  - Tyler
  - UKG (Kronos)

Including Multiple System Integration Partners

RFI Learnings

Best Practices for Large-Scale ERP Implementations

Establish Guiding Principles	Establish a Governance/ Steering Committee for decision making and escalations	Begin with Financial systems, followed by HR/Payroll	Identify LBUSD dedicated project personnel during the implementation	Minimize customization; standardize business processes

Implementation Approach

*Draft Implementation Schedule**

| | Mar '25 | May '25 | Jul '25 | Sep '25 | Nov '25 | Jan '26 | Mar '26 | May '26 | Jul '26 | Sep '26 | Nov '26 | Jan '27 | Mar '27 | May '27 | Jul '27 | Sep '27 |

Supply Chain
Mon 2/24/25 - Fri 10/3/25

HCM (HRS & PC) / Payroll
Thu 2/12/26 - Thu 7/1/27

Warehouse / Inventory
Mon 2/24/25 - Fri 8/8/25

Budget
Wed 8/13/25 - Wed 7/1/26

Maintenance
Wed 7/1/26 - Tue 10/20/26

Finance
Wed 8/13/25 - Wed 7/1/26

Recruiting
Mon 9/15/25 - Fri 2/27/26

Fiscal Year Start
Wed 7/1/26

Subject to change

Considerations
- Approximate 32-month timeline
- Five phases
- Begin with Procurement
- Budget/Finance aligned to fiscal year
- Recruiting launch in low hiring season, concurrent with Budget/Finance
- HR and Payroll concurrent with Budget/Finance
- Payroll includes highest complexity and risk

Investment

- The Project Team developed a preliminary budget
- Validated with RFI data and benchmarked with other K12s
- Preliminary investment range is $32-42M over four fiscal years
- Budget will be refined throughout the planning process

Next Steps

Complete Requirements Gathering
- Complete Requirements Gathering
- Publish RFP

Respond to Questions
- Respond to Questions
- Evaluate Proposals
- Shortlist Vendors

Product Demonstrations
- Product Demonstrations
- Site Visits
- Vendor Selection
- Contract Negotiations

Board Action
- Board Action

July – August 2024

September - October 2024

November – January 2025

February 2025
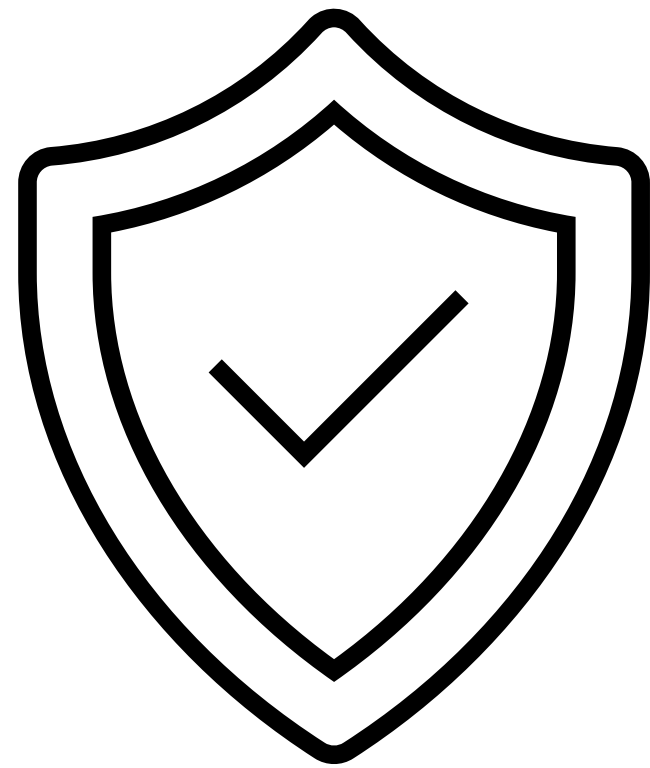
Cybersecurity Program Update

Rising Threat of Cyber Attacks in Education

The rising threat of cyber attacks, and the high costs associated in recovering effectively following an event, presents a large and expensive risk that all school districts must address to maintain learning continuity

K-12 Cybersecurity Incidents are Expanding Across the Country
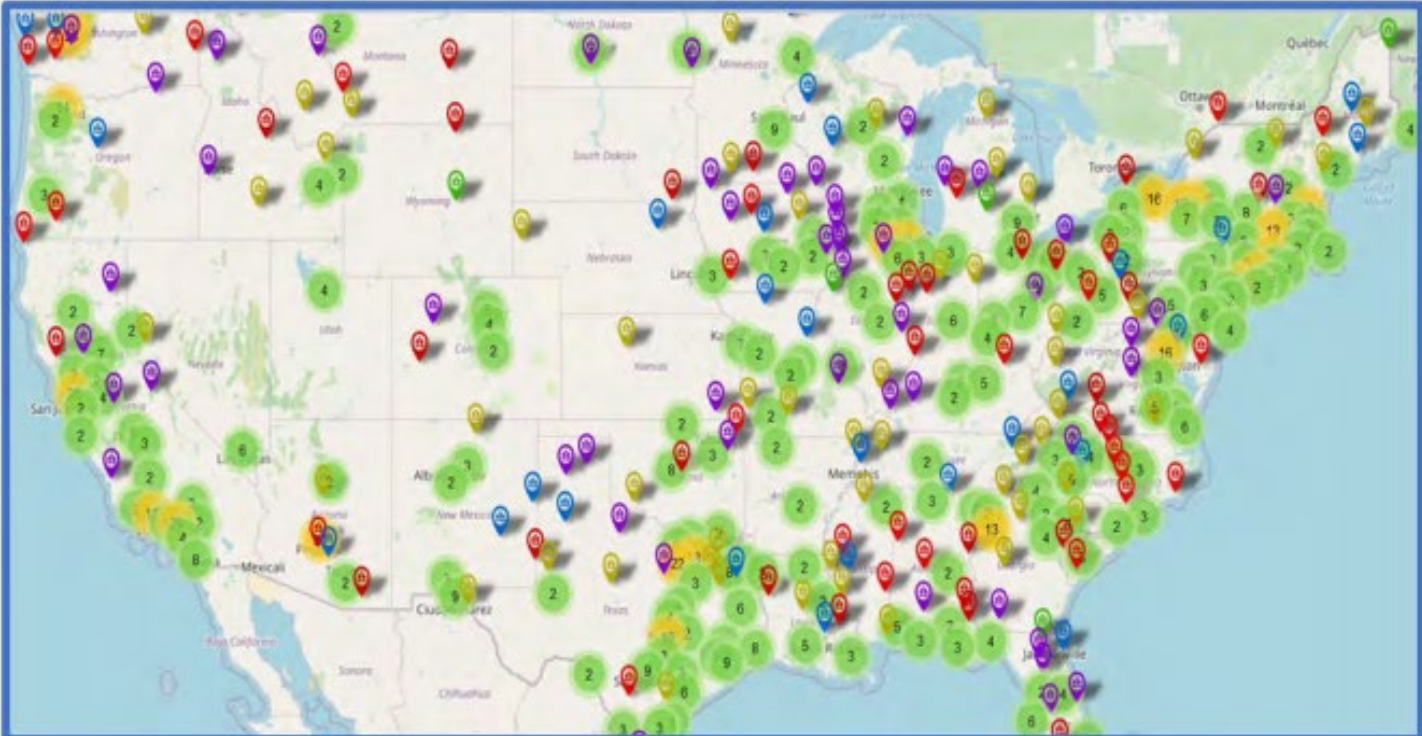
The K-12 Cyber Incident Map, a visualization of publicly disclosed school cyber incidents from 2016 to present. Available online at https://k12six.org/map

- **Data Breach/Leaks**
- **Phishing**
- **Other Incidents Resulting in School Disruptions**
- **Ransomware Attacks**
- **Denial-of-Service Attacks**

Same Criminal Syndicate: Cyber Attacks Since LA Unified

Xavier University of Louisiana	United States
University Institute of Technology of Paris	France
Publicare	Switzerland
Universidade Catolica Portuguesa	Portugal
Feu Vert	Spain
Glutz	Switzerland
Plascar Participacoes Industriais	Brazil
IKEA	Morocco
IKEA	Kuwait
Cincinnati State	United States
Institute of Science and Technology	Austria
Baysgarth School	United Kingdom
Kreisverwaltung Rhein-Pfalz-Kreis	Germany
Hartnell College	United States
CR&R Environmental Services	United States
Jammal Trust Bank	Beirut
Unidad Medica Angloamericana	Spain
Rooks Heath School	United Kingdom
YMCA of Metropolitan Washington	United States
Kujalleq Municipality	Greenland
The Bishop of Hereford's Bluecoat School	United Kingdom
Maternite des Bluets	France
Mars Area School District	United States
Test Valley School	United Kingdom
Pate's Grammar School	United Kingdom
Marist College Ashgrove	Australia
HALYVOURGIKI.S.A.	Greece
TMShipping	United States
Grupo Jaime Camara	Brazil

* Blue denotes education sector

US Education Organizations Impacted by Ransomware in 2022

Obtained from: Emisoft. 2022. The State of Ransomware in the US: Report and Statistics.

- 44 colleges and universities

- 45 school districts (operating almost 2,000 schools)

- Data obtained in 65% of incidents (up from 50% the previous year)
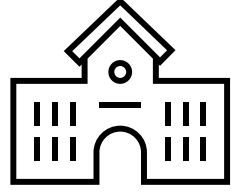
Cybersecurity Enhancements

Recently Completed

Happening Now

Next

- Cyber Lead
- Various Assessments
- Server Protection
- Multi-Factor Authentication
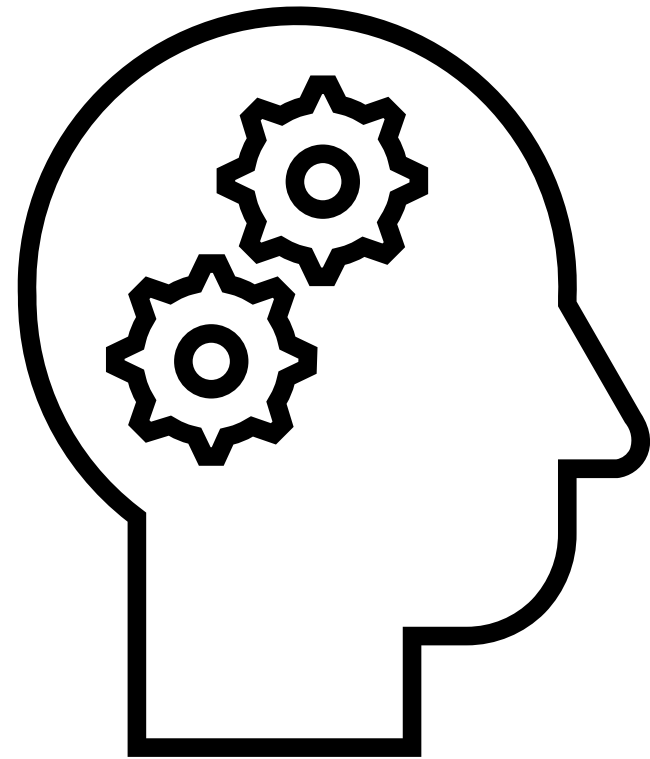- Clever Student Portal
- Vulnerability Scanning

- Clever Badging for Elementary
- Firewall Enhancements
- Penetration Test
- Advanced Endpoint Protection
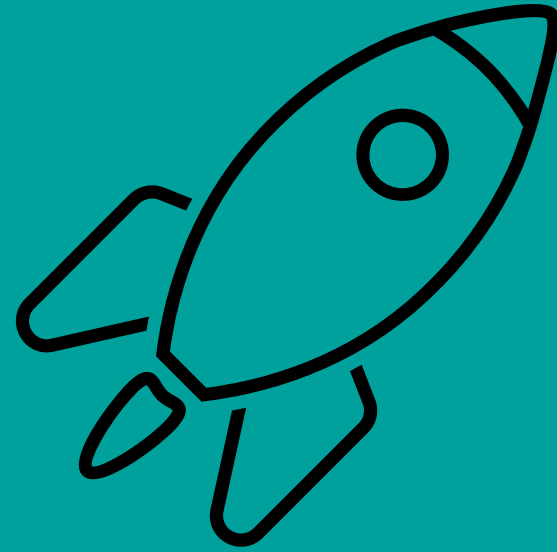- Policies and Procedures
- Student Interns

- Log Analytics
- 24x7 System Monitoring
- New Self-Service Account Management Features
- Identity and Access Management
- New Job Classifications & Training

Artificial Intelligence Update

AI Task Force Members

Name	Department/School	Role
Meagan Kinsey	Legal	Assistant General Counsel
Chris Lund	OCIPD	Assistant Superintendent
Angelica Gonzalez	OCIPD	Director
Amy Pendray	OCIPD	Program Specialist
Cecilia Santos-Camerino	OCIPD	Director
Vanitha Chandrasekhar	Instructional Technology	Program Administrator
Gregg Parra	HR	Operations Manager
Wendy Rosenquist	HR	Program Administrator
Lucy Salazar	Equity, Engagement & Partnerships	Director
Sal Madrigal	Middle Schools	Program Administrator
Beth Cohen	Prisk ES	Principal
Laura Martin	Hamilton MS	Principal
Danyett Armstrong-Lee	Lindsay Academy MS	Principal
George Walton	Cabrillo HS	Assistant Principal
Edward Sigur	Dooley ES	Principal
Stacie Alexander	Wilson HS	Assistant Principal
Thyjuan Harris	McBride HS	Assistant Principal
Tarquinn Curry	Jefferson MS	Teacher
Porsha Smith	Washington MS	Teacher, special assignment
Jack Kelanic	TISB	Chief Technology Officer
Rico Alonzo	TISB	IT Manager
Osvaldo Rios	TISB	IT Supervisor

AI Task Force Charge:

Explore responsible use of AI in the graduate, adult, and system portraits. Take action to learn from the community, establish guiding principles, develop initial policies, and provide guidance, professional development and support to instructional and business teams.
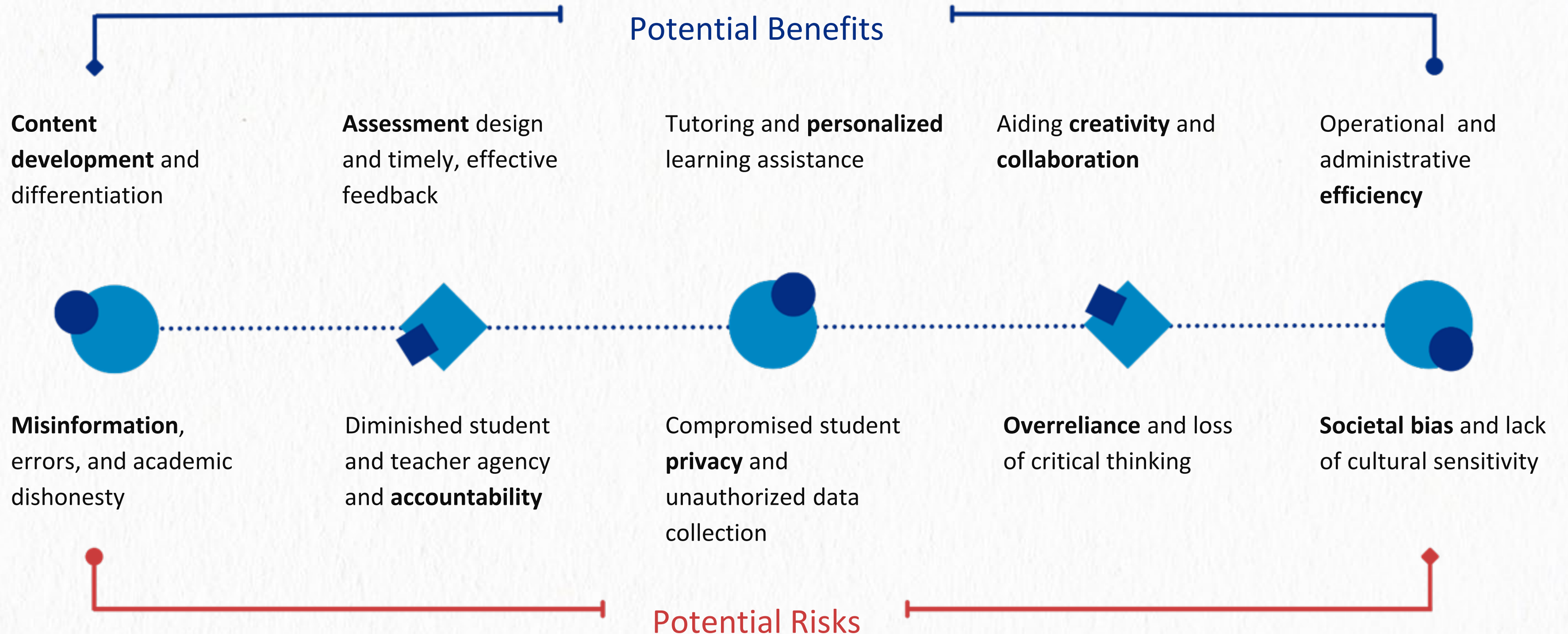
AI Task Force Goals

90-day Goals ↑

Develop AI Guiding Principles

Best practices from other K-12s

Recommend policy position for students over age 13

Update student & adult Responsible Use Policies

Map AI skills to the Graduate, Adult, System Portraits

Conduct focus groups or surveys

Invite experts to present/educate

Collaborate with LACOE/LBCC or other agencies

Work sessions with Google, Microsoft, Open AI, etc.

Identify 2-3 pilot use cases

Develop 2024-25 PD plans

Deep-dive learning

180-day Goals ↓

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Potential Benefits and Risks of AI

Potential Benefits

Content development and differentiation

Assessment design and timely, effective feedback

Tutoring and **personalized** learning assistance

Aiding **creativity** and **collaboration**

Operational and administrative **efficiency**

Misinformation, errors, and academic dishonesty

Diminished student and teacher agency and **accountability**

Compromised student **privacy** and unauthorized data collection

Overreliance and loss of critical thinking

Societal bias and lack of cultural sensitivity

Potential Risks

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Approach for Implementing AI

We are here!

Phase 1
Create policies to address immediate risks so that AI does not undermine learning during the 24-25, and to unlock immediate value for staff.

Guidance & Policy

Organizational Learning

Phase 2
Facilitate organizational learning by making a small but strategic investments in harnessing the individual learning of the many educators already using AI.

Improvement and Transformation

Phase 3
Identify areas for improvements and effective transformations with potential to scale to support the education system.

THANK YOU!

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