



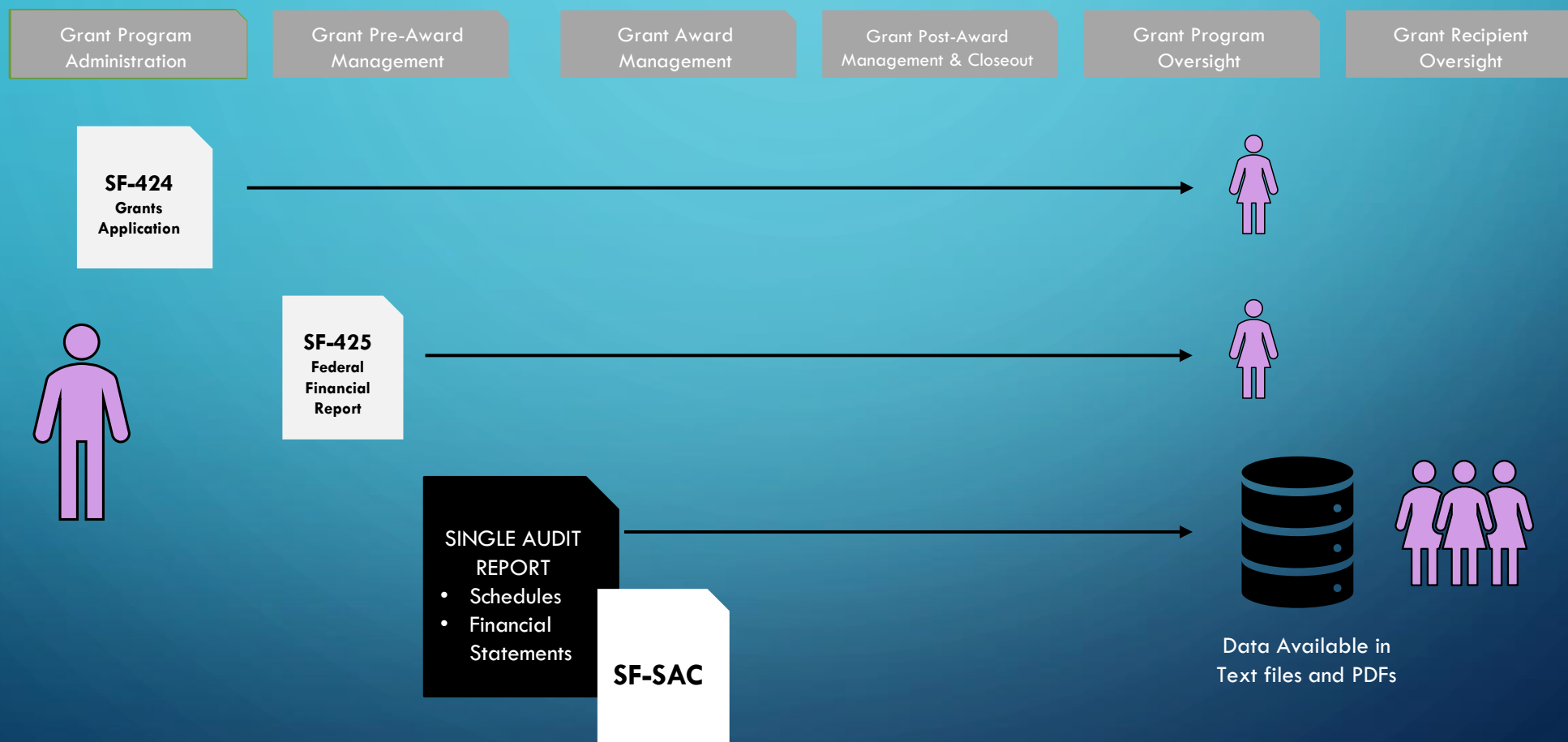
# APPLYING MACHINE READABLE DATA STANDARDS TO REDUCE GRANTEE BURDEN AND ENHANCE OVERSIGHT

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# AGENDA

- Challenges with grants reporting and data collection today
- How machine-readable data standards work
- Case study: How standards can improve grants reporting

# GRANTS MANAGEMENT AND GRANTS DATA USE



# PAIN POINTS

- Grantees
  - Duplicate data entry
  - Data integrity risk from manual data entry
  - “Old” data (data is outdated by the time it’s used)
  - Grants management tracking/monitoring is highly manual especially for large grantees
    - Hundreds of grants, different federal agencies, multiple grants administrators
- Users of grants data

# DATA FROM SINGLE AUDITS

- Single Audit reports are available to researchers and the general public through the Federal Audit Clearinghouse. See <https://facdissem.census.gov/Main.aspx>.
- For grantee fiscal year 2020, over 37,000 single audit documents have been filed with the FAC thus far. This number should increase in 2021 and 2022, as local governments and non-profits spend American Rescue Plan Act funds.
- Single Audits can be dozens or even hundreds of pages each, so the FAC is receiving millions of pages of unstructured audit data each year.
- Aside from financial data for grantees, many of these audits also include operating and performance statistics.

# WHAT OVERSIGHT AGENCIES WANT TO BE ABLE TO DO

- Utilize all the data available in the financial and compliance audit (single audit)
- Reduce the amount of time it takes to analyze the data
- Pinpoint problem areas in order to do targeted quality control reviews
- Analyze data across multiple years to aid in monitoring and grant making decisions

# GREAT ACT IMPLEMENTATION COULD UNLOCK THIS DATA

- The Grant Reporting Efficiency And Agreements Transparency Act Of 2019 (Public Law 116-103) requires Single Audits data standards that shall, to the extent reasonable and practicable —
  - (1) render information reported by recipients of Federal awards **fully searchable and machine-readable**;
  - (2) be nonproprietary;
  - (3) incorporate standards developed and maintained by voluntary consensus standards bodies;
  - (4) be consistent with and implement applicable accounting and reporting principles; and
  - (5) incorporate the data standards established under the Federal Funding Accountability and Transparency Act of 2006



# WHY MACHINE-READABLE DATA STANDARDS



- Examples: UPC, shipping container (a standard is NOT a product)
- Machine-readable data standards enable:
  1. Unambiguous shared understanding of reported information (the only way data can become machine-readable is if a computer can “read” it)
  2. Data sharing/commingling of different datasets (for example grants application data with grantee financial statement data; or corporate financial data with corporate ESG data)
  3. Easy cataloging and maintenance (and searching and querying) of data inventories
  4. Higher data integrity (transparency, trust, timeliness)
  5. Easy (low cost) adaptability to changes in reporting requirements and technology advances over time





**Federal Financial Report**  
(Follow form Instructions)

OMB Number: 4040-0014  
Expiration Date: 02/28/2022

Federal Grant Identifier

Agency: DOD/NSA

Reporting Entity: College  
of DuPage

Report Period End Date:  
4/25/2020

Advanced Student  
GenCyber Grant

1. Federal Agency and Organizational Element to Which Report is Submitted National Security Agency		2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment) H98230-19-1-0173	
3. Recipient Organization (Name and complete address including Zip code) Recipient Organization Name: College of DuPage Street1: 425 Fawell Boulevard Street2: City: Glen Ellyn County: State: IL: Illinois Province: Country: USA: UNITED STATES ZIP / Postal Code: 60137-6708			
4a. DUNS Number 066209610	4b. EIN 36-2594972	5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment) 06-10-02739	
6. Report Type <input type="checkbox"/> Quarterly <input type="checkbox"/> Semi-Annual <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Final	7. Basis of Accounting <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Accrual	8. Project/Grant Period From: 04/26/2019 To: 04/25/2020	9. Reporting Period End Date 04/25/2020
10. Transactions (Use lines a-c for single or multiple grant reporting)			Cumulative
Federal Cash (To report multiple grants, also use FFR attachment):			
a. Cash Receipts			15,602.22
b. Cash Disbursements			23,625.48
c. Cash on Hand (line a minus b)			-8,023.26
(Use lines d-o for single grant reporting)			
Federal Expenditures and Unobligated Balance:			
d. Total Federal funds authorized			23,979.08
e. Federal share of expenditures			23,625.48
f. Federal share of unliquidated obligations			0.00
g. Total Federal share (sum of lines e and f)			23,625.48
h. Unobligated balance of Federal Funds (line d minus g)			353.60

Cash Receipts

Advanced Student  
GenCyber Grant

Reporting Entity: College  
of DuPage

Monetary: US dollars

Report Period End Date:  
4/25/2020

# DATA STANDARDS SUPPORT THE GREAT ACT

- Pilot: College of DuPage
  - Can data standards be implemented cost-effectively?
  - Can grants data be rendered unambiguously machine-readable?
  - Can standardizing grants data reduce the burden of reporting and data collection?

# DATA STANDARDS SUPPORT THE GREAT ACT

## Data Standard (Taxonomy)

### GRANTS MANAGEMENT (FIBF)

- Grant Program Administration (010)
- Grant Pre-Award Management (020)
- Grant Award Management (030)
- Grant Post-Award Management and Closeout (040)
- Grant Program Oversight (050)
- Grant Recipient Oversight (060)

### ANNUAL COMPREHENSIVE FINANCIAL REPORT

- Single Audit Schedules
  - Expenditures
  - Findings & Questioned Costs
- Grant reports – SF424/SF425
- Financial Statements (7)

- Framework to define what's reported and how each fact relates to other facts (e.g., federal award identifier to cash disbursed for a specific grant; how current and noncurrent assets add into total assets)
- Is software agnostic so can be used in any application or database
- **Single Data Model** that communicates to reporting, data collection, and analytical tool what is reported

# MACHINE-READABLE DATA STANDARDS IN PRACTICE

Application for Federal Assistance SF-424

OMB Number: 4040-0004  
Expiration Date: 12/31/2022

**Application for Federal Assistance SF-424**

\* 1. Type of Submission:  
☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

\* 2. Type of Application:  
☒ New  
☐ Continuation  
☐ Revision

\* If Revision, select appropriate letter(s):  
☐ Other (Specify):

3. Date Received:

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:  
 6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION

\* a. Legal Name:  
 Community College District 502 - College of DuPage

\* b. Employer/Taxpayer Identification Number (EIN/TIN):  
 35-2594972

\* c. UEI:  
 PYXNEN2N228

d. Address:  
 Street 1: 425 Fawell Blvd  
 Street 2:  
 City: Glen Ellyn  
 County/Parish: DuPage  
 State: Illinois  
 Province:

SF-424

OMB Number: 4040-0014  
Expiration Date: 02/28/2022

**Federal Financial Report (Follow form instructions)**

1. Federal Agency and Organizational Element to Which Report is Submitted  
 National Security Agency

2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment)  
 H98230-19-1-0173

3. Recipient Organization (Name and complete address including zip code)  
 Recipient Organization Name: College of DuPage  
 Street 1: 425 Fawell Blvd  
 City: Glen Ellyn  
 County:  
 State: IL Illinois  
 Province:  
 Country: USA-UNITED STATES  
 ZIP / Postal Code: 60137-6708

4a. DUNS Number: 065209010  
 4b. EIN: 35-2594972  
 5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment)  
 06-10-02739

6. Report Type Quarterly Semi-Annual  
☐ Annual  
☒ Final

7. Basis of Accounting  
☒ Cash  
☐ Accrual

8. Project/Grant Period  
 From: 04/28/2019 To: 04/25/2020

9. Reporting Period End Date  
 04/25/2020

10. Transactions

Particulars (Use lines a-c for single or multiple grant reporting)	Cumulative
Federal Cash (To report multiple grants, also use FFR Attachment)	
a. Cash Receipts	15,602.22
b. Cash Disbursements	23,623.48
c. Cash on Hand (line a minus line b)	-8,023.26
Federal Expenditures and Unobligated Balance	
d. Total Federal funds authorized	23,979.08
e. Federal share of expenditures	23,623.48

SF-425

COLLEGE OF DUPAGE  
COMMUNITY COLLEGE DISTRICT NUMBER 502  
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
FOR THE YEAR ENDED JUNE 30, 2020

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Pass through Award Number	Program or Award Amount	Expenditures
U.S. Department of Education				
Student Financial Aid Cluster				
Federal Pell Grant Program 2018-2019, and prior	84.063		\$ 484,505	\$ 484,505
Federal Pell Grant Program 2019-2020	84.063		20,119,362	20,119,362
Federal Direct Student Loans 2018-2019, and prior	84.268		328,815	328,815
Federal Direct Student Loans 2019-2020	84.268		12,767,923	12,767,923
Federal Work-Study Program 2018-2019	84.033		450,000	28,783
Federal Work-Study Program 2019-2020	84.033		400,000	322,879
Federal Supplemental Educational Opportunity Grants 2018-2019, and prior	84.007		600,000	111,597
Federal Supplemental Educational Opportunity Grants 2019-2020	84.007		700,000	749,614
Sub Total Student Financial Aid Cluster			35,850,605	34,913,477
Coronavirus, Aid, Relief, and Economic Security (CARES) Act Section 2				
Higher Education Emergency Relief Fund (HEERF)				
COVID-19 Higher Education Emergency Relief Fund - Student Portion	84.425E		4,550,443	2,637,350
COVID-19 Higher Education Emergency Relief Fund - Institutional Portion	84.425F		4,550,443	2,637,350
Sub Total Coronavirus Aid Relief and Economic Security (CARES) Act			9,100,886	5,274,700
Passed through Illinois Community College Board				
Adult Education - Basic Grants to States 2019	84.002	F5020119	824,640	5,509
Adult Education - Basic Grants to States 2020	84.002	F5020020	952,410	869,871
English Literacy and Civics Grant 2020	84.002	F5020020	55,000	55,000
Sub Total CFDA 84.002			1,832,050	930,380
Career and Technical Education - Basic Grants to States 2019	84.048	V048A190013	1,503,193	(1,871)
Career and Technical Education - Basic Grants to States 2020	84.048	V048A200013	1,794,223	1,633,142
Sub Total CFDA 84.048			3,297,416	1,631,271
Total U.S. Department of Education			50,080,957	42,749,849
National Science Foundation				
Scholarships in Science, Technology, Engineering, and Mathematics	47.076		650,000	187,957
Pass through Elmhurst College				
Education and Human Resources	47.076	1911271 LSAMP_COD_1	165,035	15,690
Sub Total CFDA 47.076			815,035	203,647

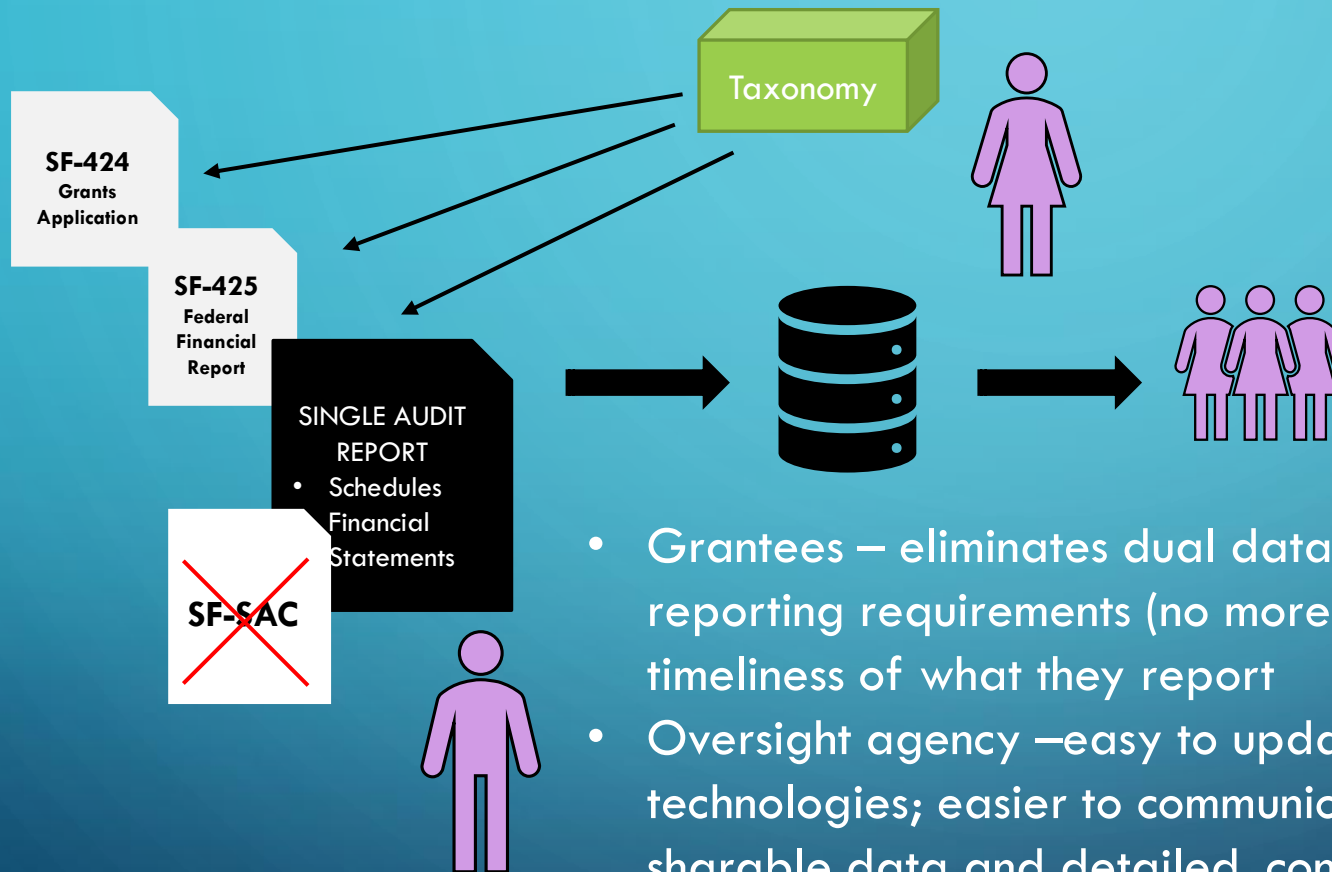
Schedule of  
Expenditures of  
Federal Awards

## STATEMENT 2 COLLEGE OF DUPAGE COMMUNITY COLLEGE DISTRICT NUMBER 502 STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEAR ENDED JUNE 30, 2020

<b>REVENUES</b>	
<b>Operating Revenues</b>	
Student tuition and fees	\$ 52,362,008
(net of scholarship allowances of \$24,726,997 and uncollectable of \$264,017)	
Sales and service fees	2,815,697
Other operating revenues	2,134,996
<b>Total Operating Revenues</b>	<b>57,312,701</b>
<b>EXPENSES</b>	
<b>Operating Expenses</b>	
Instruction	122,686,527
Academic support	16,639,549
Student services	27,373,023
Public service	4,214,638
Operation and maintenance of plant	22,325,372
General administration	18,583,521
General institutional	29,345,137
Auxiliary enterprises	11,241,011
Scholarship expense	15,681,881
Depreciation expense	30,484,235
<b>Total Operating Expenses</b>	<b>298,574,894</b>
<b>Operating Income (Loss)</b>	<b>(241,262,193)</b>
<b>NON-OPERATING REVENUES (EXPENSES)</b>	
Real estate taxes	101,833,157
Corporate personal property replacement taxes	1,663,185
State appropriations	106,032,624
Federal grants and contracts	30,992,114
Non-governmental gifts and grants	1,480,651
Investment income	8,244,788
Interest on capital asset-related debt	(5,645,983)
Gain (loss) on sale of capital assets	31,155
<b>Net Non-Operating Revenues (Expenses)</b>	<b>244,631,691</b>
<b>Net Income Before Capital Contributions</b>	<b>3,369,498</b>
<b>CAPITAL CONTRIBUTIONS</b>	
Capital gifts and grants	10,500
<b>Increase in Net Position</b>	<b>3,379,998</b>
<b>Net Position at Beginning of Year</b>	<b>420,716,255</b>
<b>Net Position at End of Year</b>	<b>\$ 424,096,253</b>

Financial Statements

# GRANTS MANAGEMENT AND GRANTS DATA USE



- Grantees – eliminates dual data entry; ensures they have most current reporting requirements (no more outdated forms); improves quality and timeliness of what they report
- Oversight agency – easy to update reporting requirements, adapt to new technologies; easier to communicate to grantees and data users; enables sharable data and detailed, consistent data inventories
- Data users (including oversight agencies) – higher integrity, faster, more granular data

# OVERSIGHT AGENCIES ARE TAKING THIS APPROACH TODAY

- 6,000+ public companies and investment management companies report in XBRL to the SEC
- 5,000 banks report in XBRL to the FDIC
- 600+ public utilities report in XBRL to the FERC
- 184 XBRL regulatory and oversight programs worldwide
- 80 global oversight agencies have adopted



# STATES PIONEERING THE USE OF MACHINE-READABLE DATA STANDARDS FOR SINGLE AUDIT DATA

- [Florida – State CFO’s Florida Open Financial Statement System Project](#)
- [Michigan - University of Michigan Center for Local State and Urban Policy \(CLOSUP\)](#)

# QUESTIONS

- Marc Joffe, [marc.joffe@reason.org](mailto:marc.joffe@reason.org)
- Mark Priebe, [mark.priebe@ed.gov](mailto:mark.priebe@ed.gov)
- Michelle Savage, [michelle.savage@xbrl.us](mailto:michelle.savage@xbrl.us)