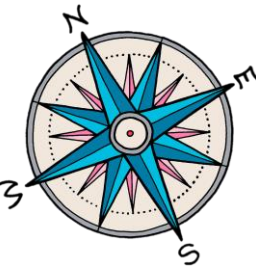


# Data Driven Contract Management

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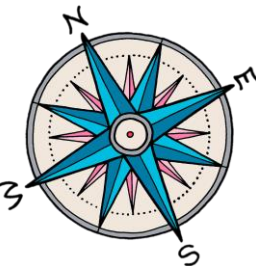
PRESENTED BY: BRUCE DERGE, SBOP, DOA  
MOJGAN HALL, SBOP, DOA



# Agenda

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- Data analysis defined
  - Process Overview
- Sources of data
  - User-driven versus data-driven
- Using data through the contract life cycle
  - Examples from State Bureau of Procurement contract managers
- Questions and Answers



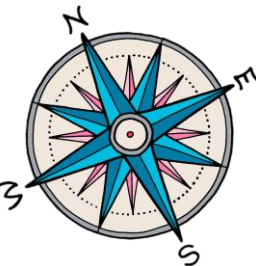
# What is Data Analysis?

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**Data:** factual information (such as measurements or statistics) used as a basis for reasoning, discussion, or calculation

**Analysis:** a detailed examination of anything complex in order to understand its nature or to determine its essential features

<https://www.merriam-webster.com>



# Data Analysis: Process Overview

1

Define your goal

2

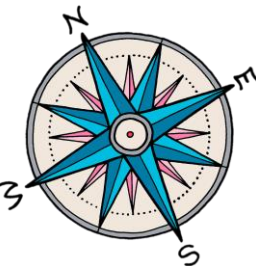
Determine Objective Measurements

3

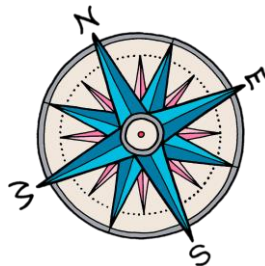
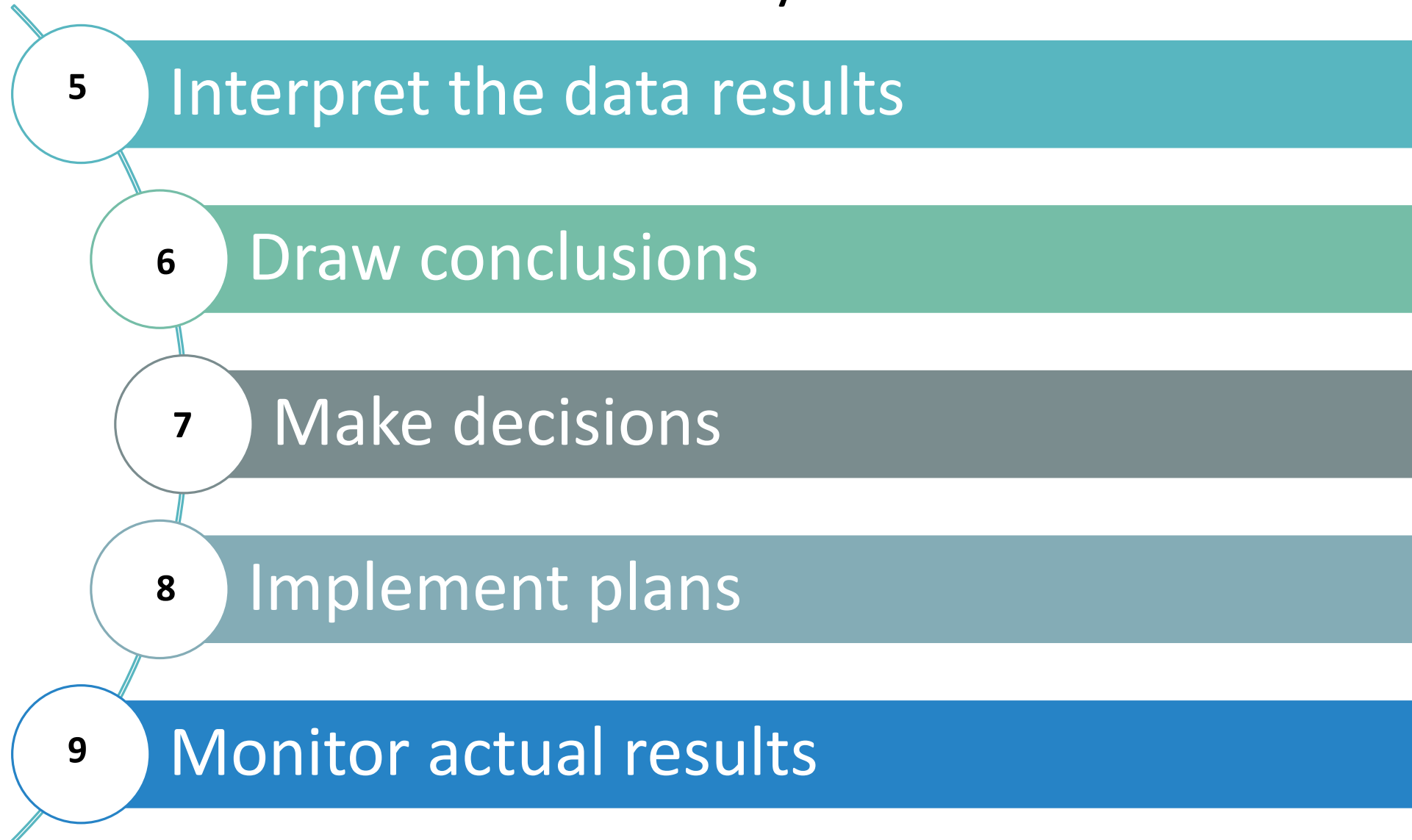
Collect data from reliable sources

4

Analyze the data



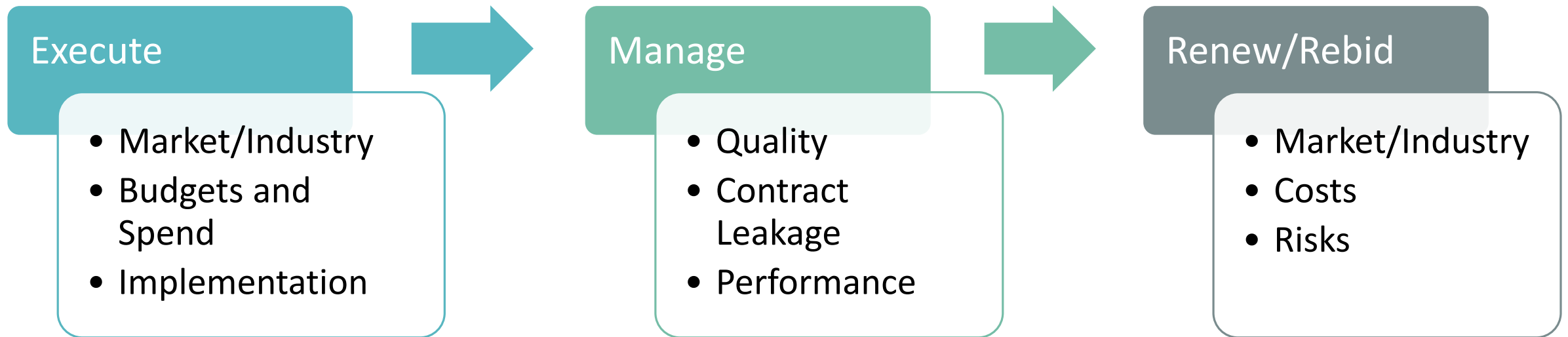
# Data Analysis: Process Overview



# Applying Data Analysis

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- Data measurements at various points in the cycle:



# Data Sources

- There is a variety of sources depending on the issue or question you are trying to solve. Examples include:

## Execute

- Previous solicitations
- Industry Associations

## Manage

- Surveys
- PeopleSoft Business Intelligence

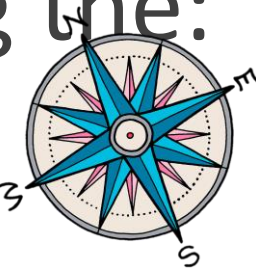
## Renew/Rebid

- Supplier Reports
- Third party sources

# Using Data during the

## Execute Phase

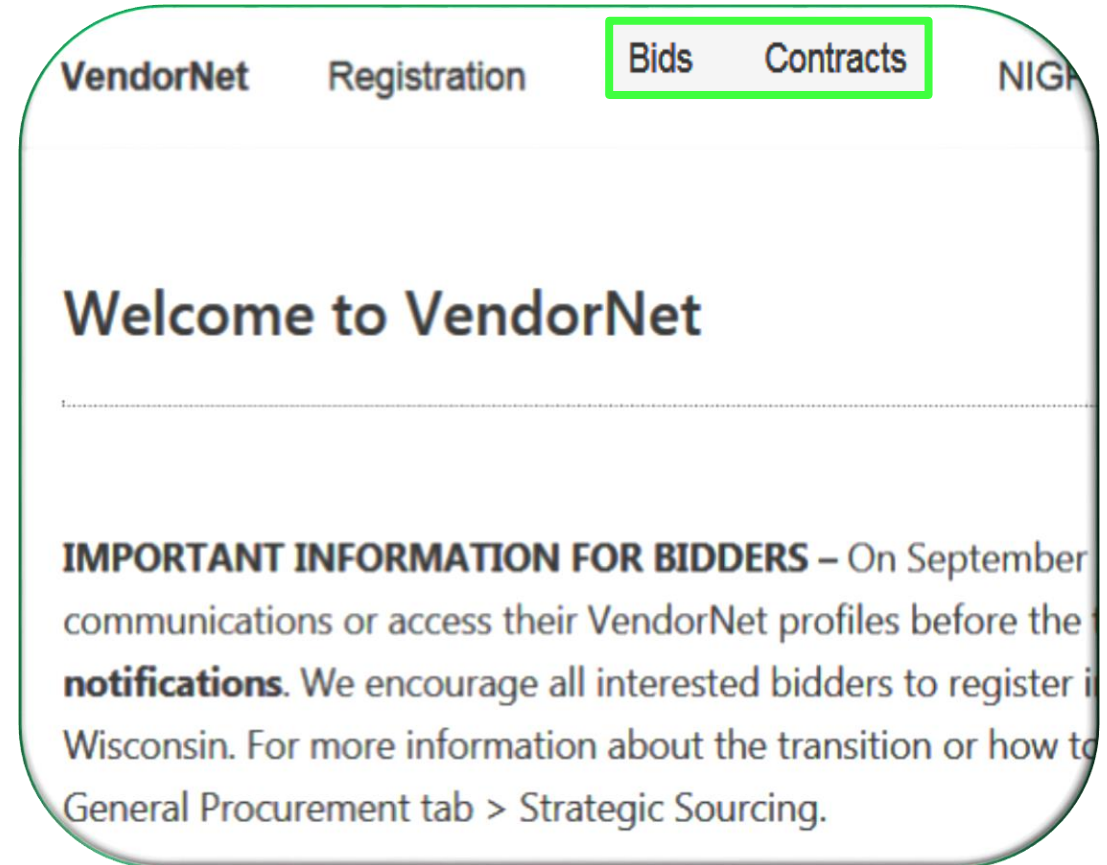
- Helps decide on a procurement strategy
  - Example: Using a NASPO contract versus establishing a state/agency contract
  - Assists in developing specifications
- Provides visibility into potential vendors
- Data can be used to assist with understanding the:
  - Market/Industry
  - Spend





# Data Sources: Previous Solicitations

- Search VendorNet for RFB/RFP for similar commodity/service
- Provides starting point for specification development
- Reveals information on prior needs/usage that will be helpful in next solicitation



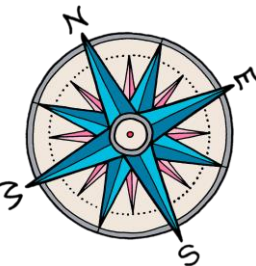
# Data Sources: Industry Associations

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- National Association of State Procurement Officers (NASPO).

<http://www.naspovaluepoint.org>

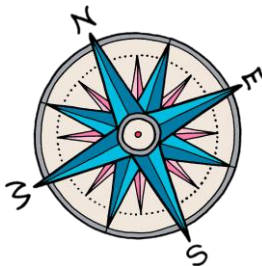
- Information includes:
  - Listing of existing contracts available to participating states
  - Current solicitations
  - Guides and resources



# Example #1: Elevators (New Contract)

---

- **Background:** The State's enterprise-wide Elevator Maintenance and Repair Services contract was due to expire and the State needed to update the future solicitation to include new state and federal laws and technology.
- **Goal:** Use data to define and incorporate new laws and technology.



# Example #1: Elevators (New Contract)

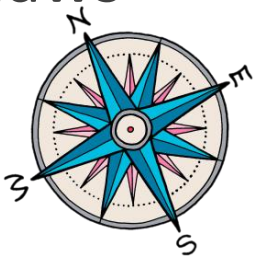
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## • Sources Used:

- Third Party – American Society of Mechanical Engineers (ASME) Chapter 17.1A
- Department of Safety and Professional Services (DSPS) Code SPS 318
- Procurement contacts at local municipalities
- Procurement contacts in other states

## • Results:

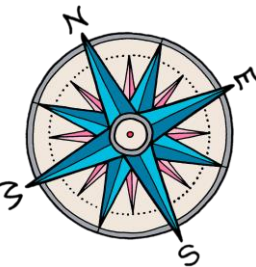
- The resulting contract is more in line with new technologies and laws
- Implementing new best practices
- Increased contract compliance
- Enhanced communication with end-users and vendors



# Example #2: Networking Equipment (New Contract)

---

- **Background:** Wisconsin needed a new contract for Cisco networking gear to support the data center. A national consortium contract, NASPO, was available.
- **Goal:** Obtain the highest possible discounts available from local, authorized dealers of Cisco. The original contract with NASPO offered 35% off list, and State bids in the past received 41% off.



# Example #2: Networking Equipment (New Contract)

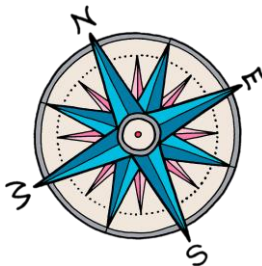
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- **Sources used:**

- Participating agreements for other states using NASPO
- Usage reports from expiring WI contract

- **Results:**

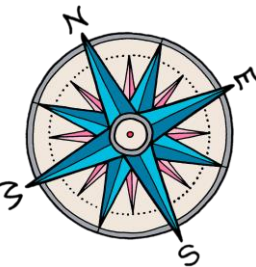
- Competitive “bid” process to get better discounts from 8 authorized dealers
- Awarded to 7 with discounts between 41-43.6%
- Savings between 3-12% each year over prior contract



# Using data during the

## Manage Phase

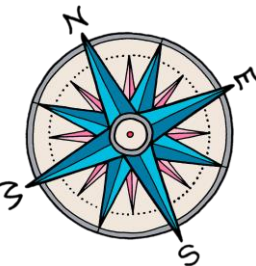
- Looking to data sources during the life of the contract could be used to:
  - Negotiate a price increase with an existing supplier
  - Educate/train staff on use of proper contracts
  - Audit compliance with contract:
    - Internal end users
    - Supplier



# Data Sources: User-Driven

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- Survey tools such as SurveyMonkey.com can be a useful way to obtain end user feedback on:
  - Contractor performance
  - How well contract is meeting end user needs
  - Areas for improvement
- Surveys can be issued as needed or at regular intervals:
  - Contract could require supplier to issue customer satisfaction surveys during contract term
    - Used to measure contractor performance

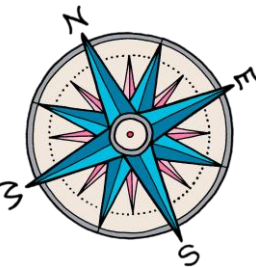




# Data Sources: Data-Driven

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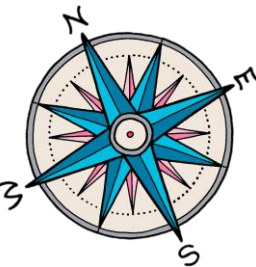
- Oracle Business Intelligence (BI)
  - Following STAR Release 1, STAR and DOA worked to create reporting dashboards using Oracle Business Intelligence (OBIEE) tool
  - Used to understand how the system is being used and to provide business performance information on key operational indicators for procurement
  - Includes Spend Analyzer



# Date Sources: Oracle BI con't.

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- Spend Analyzer Dashboard includes:
  - Procurement spend analytics
  - Percentage and value of spend on state contracts
  - On/off contract spend
  - Contract leakage by business unit/department
- Sample of on/off contract spend and contract leakage on next slide



\* Fiscal Year Business Unit Name Division/Bureau/Other Department Description

Commodity Code Group Commodity Code Buyer Supplier PO Type

Apply Reset

Spend Analyzer Dashboard Data Dictionary

Chapter 16 Off-Contract Spend by Supplier

Chapter 16 Contract Leakage by Supplier and Location

Time run: 10/3/2017 3:18:49 PM

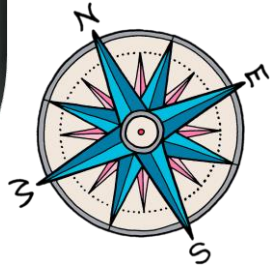
Time run: 10/3/2017 3:18:49 PM

View By Supplier Name

Supplier Name	Spend	Off Contract Amount	Off Contract %
Enterprise Services LLC	\$21,210,038	\$74,353	0.4%
TAPFIN Process Solutions	\$18,670,709	\$108,043	0.6%
Cardinal Health 110 Inc	\$10,824,897	\$0	0.0%
Act Inc	\$8,171,804	\$2,014	0.0%
Deloitte Consulting	\$7,267,727	\$0	0.0%
Indianhead Food Sv Distributor	\$5,453,650	\$0	0.0%
DRC/CTB	\$4,368,744	\$0	0.0%
SHI International Corp	\$4,117,048	\$138,228	3.4%
Insight Public Sector	\$3,886,986	\$59,280	1.5%
IGT Global Solutions Corporation	\$3,202,535	\$0	0.0%
Vestica Healthcare LLC	\$2,746,830	\$0	0.0%
Hoffman York Inc	\$2,468,285	\$0	0.0%
Fast Enterprises, LLC	\$2,266,900	\$0	0.0%
Ibm Corporation	\$2,142,926	\$3,767	0.2%
Wisconsin Interactive Network	\$1,945,606	\$0	0.0%

Rows 1 - 15

Supplier Name	Spend	Contract Leakage	Contract Leakage %
Enterprise Services LLC	\$21,210,038	\$74,353	0.4%
TAPFIN Process Solutions	\$18,670,709	\$108,043	0.6%
Cardinal Health 110 Inc	\$10,824,897	\$0	0.0%
Act Inc	\$8,171,804	\$2,014	0.0%
Deloitte Consulting	\$7,267,727	\$0	0.0%
Indianhead Food Sv Distributor	\$5,453,650	\$0	0.0%
DRC/CTB	\$4,368,744	\$0	0.0%
SHI International Corp	\$4,117,048	\$138,228	3.4%
Insight Public Sector	\$3,886,986	\$59,280	1.5%
IGT Global Solutions Corporation	\$3,202,535	\$0	0.0%
Vestica Healthcare LLC	\$2,746,830	\$0	0.0%
Hoffman York Inc	\$2,468,285	\$0	0.0%
Fast Enterprises, LLC	\$2,266,900	\$0	0.0%
Ibm Corporation	\$2,142,926	\$3,767	0.2%



# Example #3: State PCard Policies and Procedures

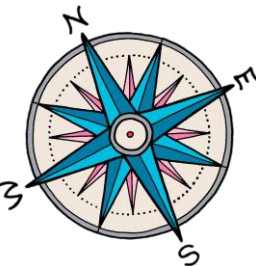
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- **Background:**

The State's Purchasing Card Manual provides information on policies, procedures, and processes related to the State's purchasing card program.

- **Goal:**

Automate and update the manual to address new technology and processes.



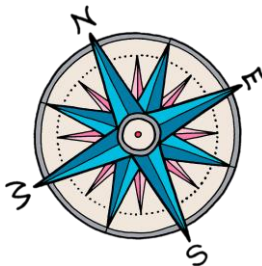
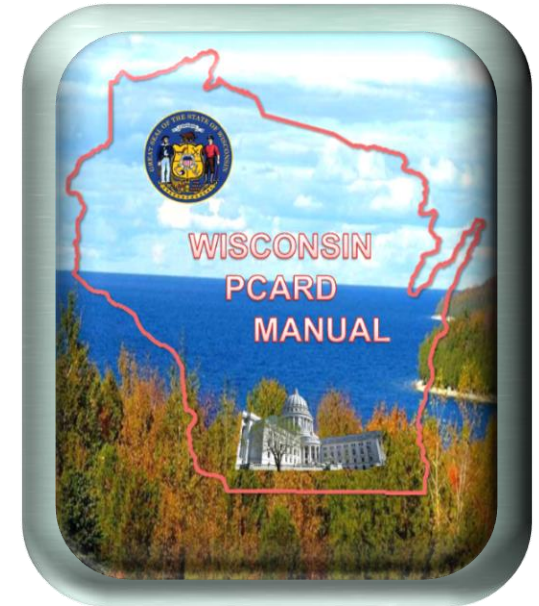
# Example #3: State PCard Policies and Procedures

- **Sources used:**

- Procurement contacts at other agencies and states
- Industry associations: NASACT, NAPCP
- STAR/PeopleSoft resources
- SCO: State Controller's Office resources
- Supplier resources

- **Results:**

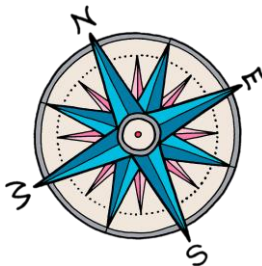
- Discovered new best practices
- Increased program compliance
- Enhanced communication



# Using Data During the Renew/Rebid Phase

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- Looking to data sources at the time of renew/rebid of the contract could be used to:
  - Decide whether renew/rebid is in the State's best interest
  - Verify that prices are still competitive in the market/industry
- Negotiate with incumbent contractor to:
  - Maintain current prices
  - Decrease prices where appropriate





# Example #4: Electronic Fingerprinting

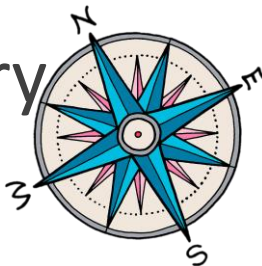
Renew/Rebid

- **Background:**

The contract for agencies to use for electronic fingerprinting services was expiring and needed to be renewed. A renewal would require that prices from the incumbent are competitive enough to keep the contract rather than rebid.

- **Goal:**

Hold current prices and demonstrate they are market/industry competitive.



# Example #4: Electronic Fingerprinting

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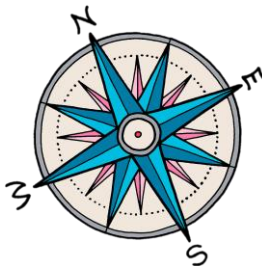
Renew/Rebid

- **Sources used:**

- Other states contract websites with similar agreements posted in Tennessee, New Jersey, Oklahoma, and West Virginia

- **Results:**

- Held original bid prices firm for a 2 year renewal term
- Showed that current pricing was reasonable compared to other states on next slide

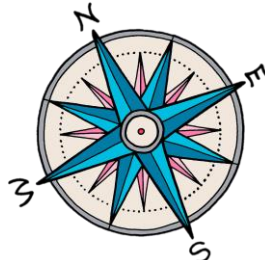




# Example #4: Electronic Fingerprinting

Renew/Rebid

State	Contract Rate	WI Compared % Less
Wisconsin	\$7.75/set	N/A
Tennessee	\$8.65/set	10%
New Jersey	\$10/set	23%
Oklahoma	\$12/set	35%
West Virginia	\$12.50/set	38%



## Example #5: Enterprise Banking Services

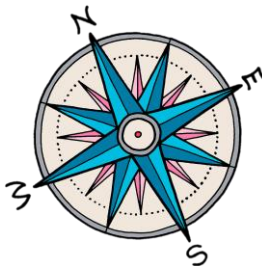
---

- **Background:**

The State's Banking contract was due to expire and the State needed to decide which direction to go with a new solicitation.

- **Goal:**

Use data to support decision to continue contracting with current supplier.



# Example #5: Enterprise Banking Services

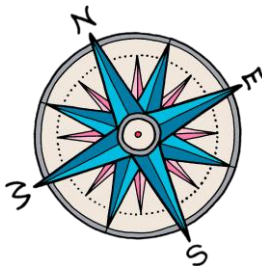
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- **Sources Used:**

- Supplier Reports
- Third party source information

- **Process Followed:**

- Started with a spreadsheet of four year's worth of data (approx. 68,000 rows and 21 columns) containing information on State's payment fees
- Next few slides will detail step-by-step approach



# Step 1: Formatted Spreadsheet

Identified data that is essential to understanding State's usage and payment trends over four years including:

- Year
- Fee Description
- Volume
- Dollar Amount

	YEAR 2015	ACCOUNT NAME	ACCOUNT NAME 2	ELEMENT	AFP CODE	DESCRIPTION	#VOLUME	AVG UNIT PRICE	\$TOTAL CHARGE	COLLECTIBLE BALANCE REQ
4	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	593,717	\$ 0.09	\$ 52,247.09	\$ 288,942,240.00
3	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	459,342	\$ 0.06	\$ 28,479.20	\$ 152,418,006.00
6	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	276,880	\$ 0.09	\$ 24,365.44	\$ 134,748,267.00
9	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	274,351	\$ 0.09	\$ 24,142.88	\$ 133,517,442.00
4	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	382,776	\$ 0.06	\$ 23,732.11	\$ 131,245,760.00
6	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	382,488	\$ 0.06	\$ 23,714.25	\$ 131,146,989.00
7	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	372,620	\$ 0.06	\$ 23,102.44	\$ 123,642,091.00
11	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	368,449	\$ 0.06	\$ 22,843.83	\$ 126,333,302.00
5	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	364,434	\$ 0.06	\$ 22,594.90	\$ 120,925,784.00
8	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	347,258	\$ 0.06	\$ 21,529.99	\$ 115,226,486.00
2	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	335,311	\$ 0.06	\$ 20,789.28	\$ 123,183,234.00
12	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	330,494	\$ 0.06	\$ 20,490.62	\$ 109,663,875.00
1	2015	STATE OF WISCONSIN	LOCKBOX BILLING ACCO	DDA69871	050 20Z	RLBX per Item Dor- St WI	223,804	\$ 0.09	\$ 19,694.75	\$ 105,404,454.00
9	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	311,091	\$ 0.06	\$ 19,287.64	\$ 106,666,494.00
3	2015	STATE OF WISCONSIN	LOCKBOX BILLING ACCO	DDA69871	050 20Z	RLBX per Item Dor- St WI	210,351	\$ 0.09	\$ 18,510.88	\$ 99,068,493.00
1	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	285,624	\$ 0.06	\$ 17,708.68	\$ 94,775,194.00
10	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69872	050 20Z	RLBX per Item Dot- St WI	281,110	\$ 0.06	\$ 17,428.82	\$ 93,277,409.00
3	2015	STATE OF WISCONSIN	LOCKBOX BILLING ACCO	DDA69802	050 20Z	RLBX per Item- St WI	222,201	\$ 0.06	\$ 13,776.46	\$ 73,730,321.00
12	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	138,551	\$ 0.09	\$ 12,192.48	\$ 65,253,009.00
5	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	115,253	\$ 0.09	\$ 10,142.26	\$ 54,280,424.00
10	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	111,032	\$ 0.09	\$ 9,770.81	\$ 52,292,458.00
2	2015	STATE OF WISCONSIN	LOCKBOX BILLING ACCO	DDA69871	050 20Z	RLBX per Item Dor- St WI	110,364	\$ 0.09	\$ 9,712.03	\$ 57,546,931.00
7	2015	STATE OF WISCONSIN	LOCKBOX BILLING ACCO	DDA69871	050 20Z	RLBX per Item Dor- St WI	102,457	\$ 0.09	\$ 9,016.21	\$ 48,253,910.00
4	2015	DOR - RETAIL LOCKBOX 208	0	DDA69844	050 21I	RLBX Low Speed Open- St WI	593,717	\$ 0.02	\$ 8,905.75	\$ 49,251,496.00
8	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	92,210	\$ 0.09	\$ 8,114.48	\$ 43,427,935.00
11	2015	DOR - RETAIL LOCKBOX 208	0	DDA69871	050 20Z	RLBX per Item Dor- St WI	85,865	\$ 0.09	\$ 7,556.12	\$ 41,787,633.00
2	2015	STATE OF WISCONSIN	LOCKBOX BILLING ACCO	DDA69802	050 20Z	RLBX per Item- St WI	119,891	\$ 0.06	\$ 7,433.24	\$ 44,044,360.00
3	2015	WISCONSIN DEPARTMENT	OF TRANSPORTATION	DDA69844	050 21I	RLBX Low Speed Open- St WI	459,342	\$ 0.02	\$ 6,890.13	\$ 36,875,329.00

# Step 2: Pivot Tables

Created pivot tables from formatted data to highlight the essential data

The screenshot shows an Excel spreadsheet with a PivotTable and the PivotTable Fields task pane. The PivotTable summarizes data by month, showing volume and total charge. A secondary PivotTable breaks down the total volume and cost by account type (CY15, LBX-050, TMA-100, and TOTAL).

**PivotTable Fields Task Pane:**

- Choose fields to add to report:
  - MONTH
  - YEAR 2015
  - ACCOUNT NUMBER
  - ACCOUNT NAME
  - ACCOUNT NAME 2
  - ELEMENT
  - AFP CODE
  - DESCRIPTION
  - VOLUME
  - AVG UNIT PRICE
  - TOTAL CHARGE
  - COLLECTED BALANCE REQUIRED
- More Tables...
- Drag fields between areas below:
  - Filters: (empty)
  - Columns:  $\Sigma$  Values
  - Rows: MONTH
  - Values:
    - Sum of MON...
    - Sum of VOLU...
    - Sum of TOTA...

**PivotTable Data:**

Row Labels	Sum of MONTH	Sum of VOLUME	Sum of TOTAL CHARGE
1	204	368243	10407.51
2	406	400450	11215.74
3	642	586655	16053.87
4	868	636696	17148.02
5	1075	363690	10283.85
6	1266	486838	13376.37
7	1484	376098	10113.9
8	1720	335927	9496.05
9	1836	400422	11018.6
10	2040	307979	8789.25
11	2156	333088	9522.62
12	2352	338841	9638
<b>Grand Total</b>	<b>16049</b>	<b>4934927</b>	<b>137063.78</b>

**Summary PivotTable:**

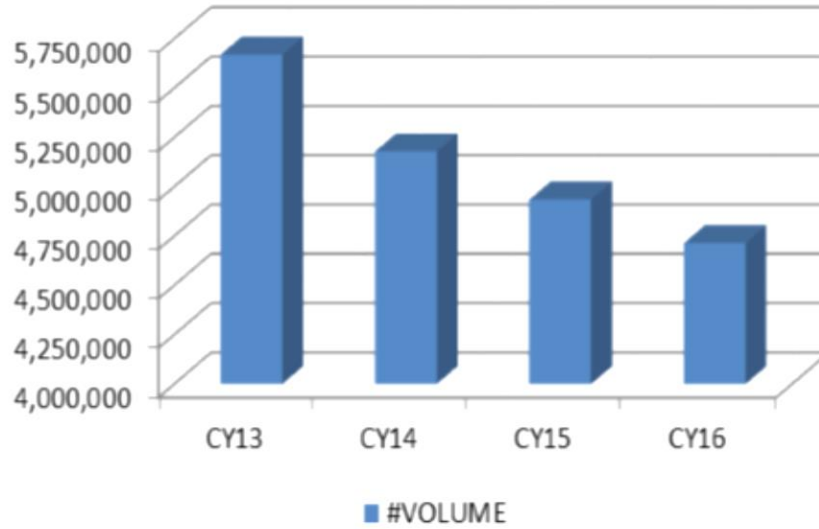
CY15	#VOLUME	\$COST
LBX-050	0	\$ 1,139,290
TMA-100	4,934,927	\$ 137,064
<b>TOTAL:</b>	<b>4,934,927</b>	<b>\$ 1,276,354</b>



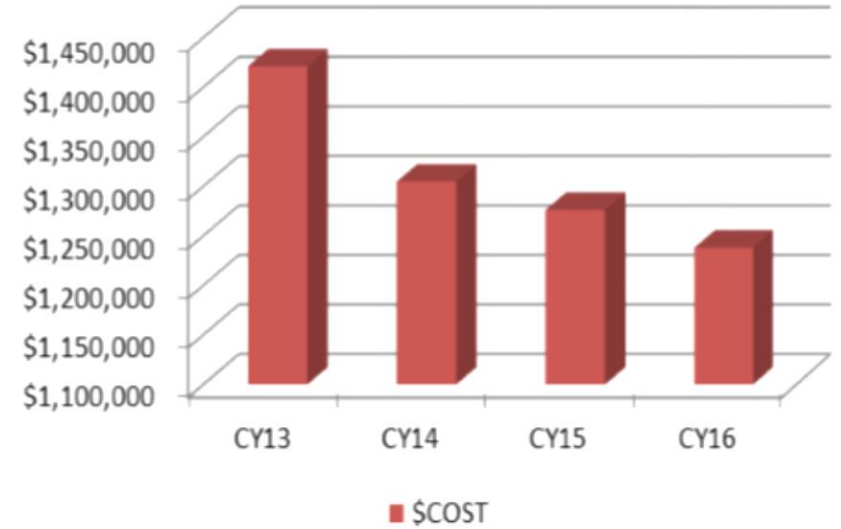
# Step 3: Charts and Tables

Used pivot tables to create charts and tables to illustrate the payment trends.

**#CHECK VOLUMES**



**\$COST TOTALS**



**#CHECK VOLUMES**

CY	#VOLUME	%CHANGE ↓
CY13	5,669,710	0.00%
CY14	5,178,638	8.66%
CY15	4,934,927	4.71%
CY16	4,714,016	4.48%
<b>TOTAL:</b>		<b>17.84%</b>

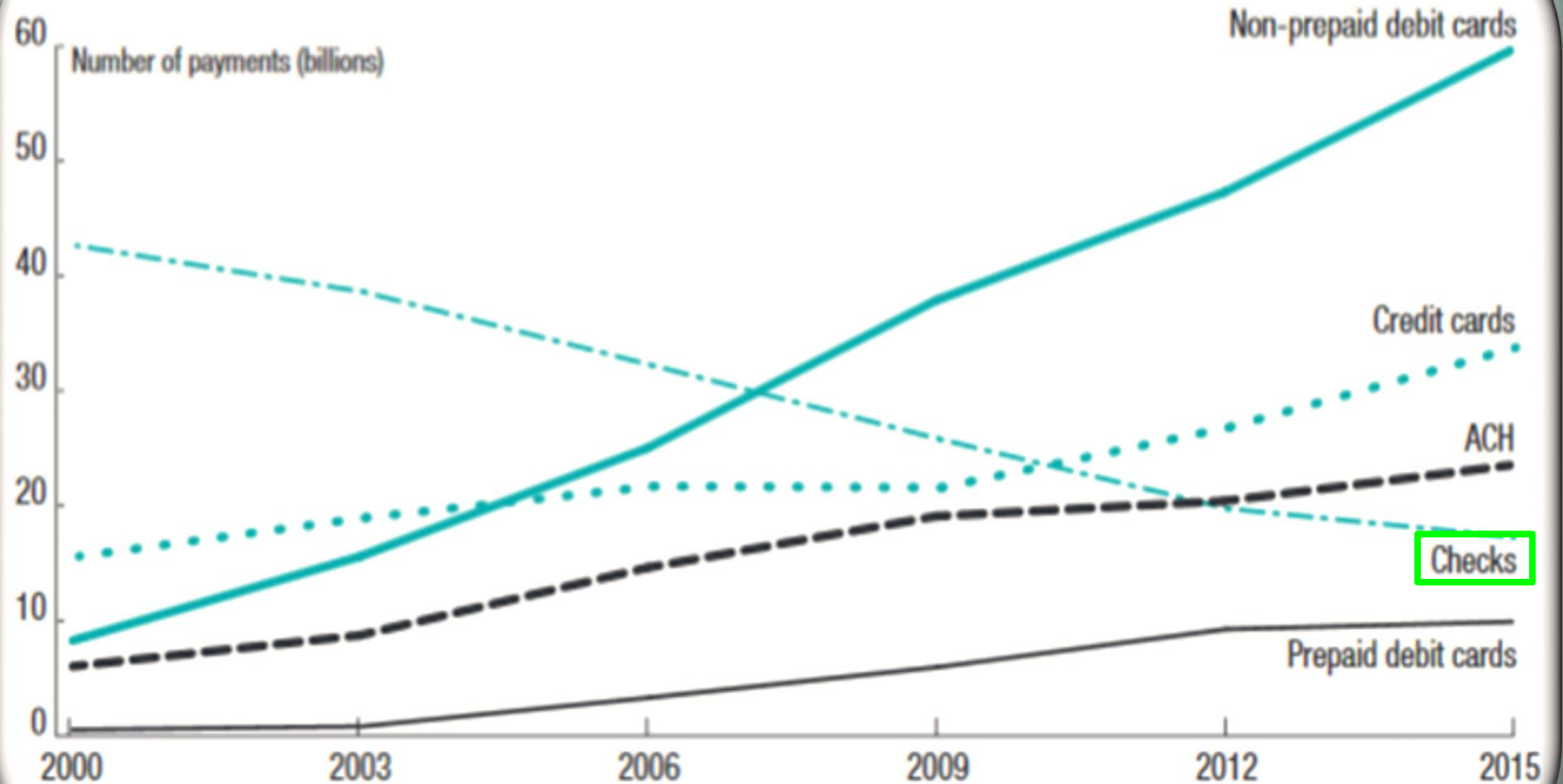
**\$COST TOTALS**

CY	\$COST	%CHANGE ↓
CY13	\$ 1,421,246	0.00%
CY14	\$ 1,304,898	8.19%
CY15	\$ 1,276,354	2.19%
CY16	\$ 1,238,276	2.98%
<b>TOTAL:</b>		<b>13.36%</b>

## Step 4: Validation

Compared the data presented in the charts and tables with third party industry information to validate the State's trends

Figure 2. Trends in noncash payments 2000–15, by number



Note: Prepaid debit card includes general purpose, private label, and electronic benefit transfer.

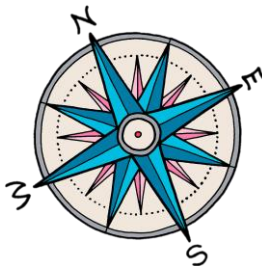
SOURCE: 2016 Federal Reserve Payments Study

# Example #5: Enterprise Banking Services

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- **Results:**

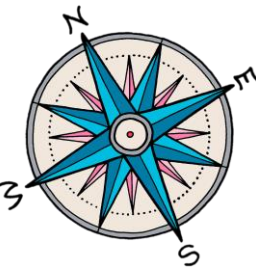
- State's internal data showed that the usage and cost for the service was declining over the four-year period
- External third party data validated State's experience was in line with industry trends
- Data confirmed that due to the declining usage and costs for this service, it would be in the State's best interest to continue contracting with current provider





# Questions & Answers

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# Thank You!

