

# University of Vermont



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# Creating a financial dashboard for Extension and Experiment Station - and GAK<sup>©</sup> bonus supplement!

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UVM Extension

UVM College of Agriculture and Life Sciences



The University of Vermont

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## Learning outcomes

- Know our strategy around programming and resource allocation and make “links” to possible applicability to you (?)
- Understand the “dashboard” thing and see how we are “making the sausage” using queries, databases
- Appreciate our increased scrutiny around grants relative to program resource allocation and cost within RCM budget



A. Hamilton

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Dean retires, CALS acquires, new Director's a high-flier, he has to sate his desire to get out of this budget quagmire, but is it a mire or does it simply require a magnifier, a slight rewire, a dose of constructive satire?

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First, then, the September 2018 strategic plan.

- Four programmatic “results areas”. Funding Extension. Strategic investment fund. Increase financial strength of grants. Diversify funding sources.



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Strategic plan, summarized.

**X**



**Y**

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## Develop data-driven tools to support decision making

*“To adhere to this strategic plan, Extension needs to **differentiate** and **rank** proposals and programs relative to mission alignment and operational feasibility. Evaluating existing work and UVM Extension new opportunities using these criteria will **guide** Extension resources into alignment with the **Result Areas** and move the entire organization towards its purpose and mission.”*



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A **data set** capable of producing **reports** that **communicate** the following information to a wide audience the overall fiscal status of the organization

Base funding (general operating funds + capacity grants)  
Allocated across Result Areas and by employee “grouping”

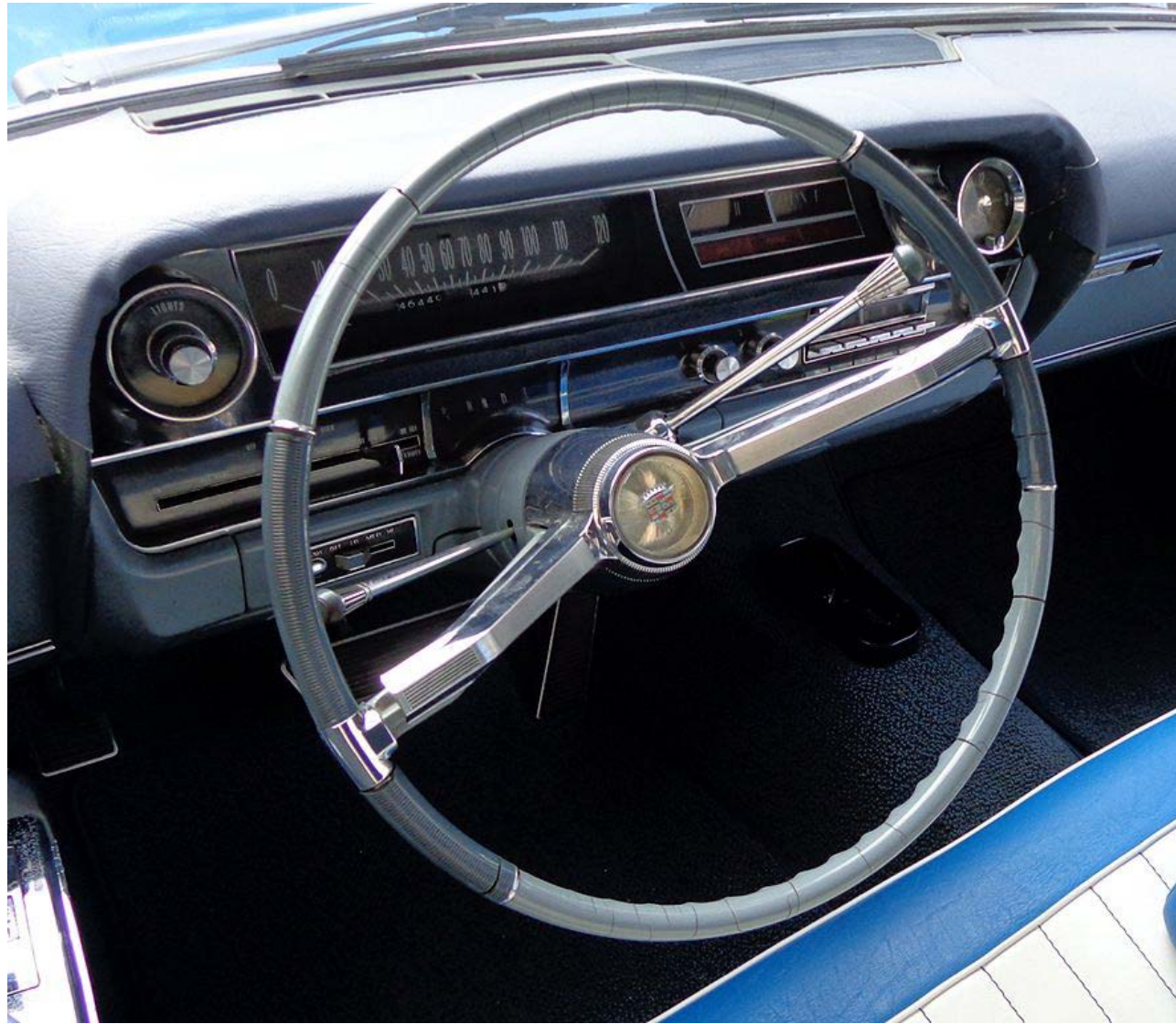
Grant funding

Allocated across Result Areas

**calculator** to determine the relative affordability of grant proposals







What do  
dashboards do?

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# Dashboards help people identify correlations, trends, anomalies, patterns and conditions.

A dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.

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# Here are the key characteristics of a dashboard:

- Fits on a single computer screen.
- Automatically updated without fuss.
- Shows the most important stuff.
- Easy to understand and use.



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A. Track active grants' finances

I. By result area

II. By cost share commitment

B. Measure how base funding is being allocated

I. By employee type or "grouping"

II. By result area



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X



Y

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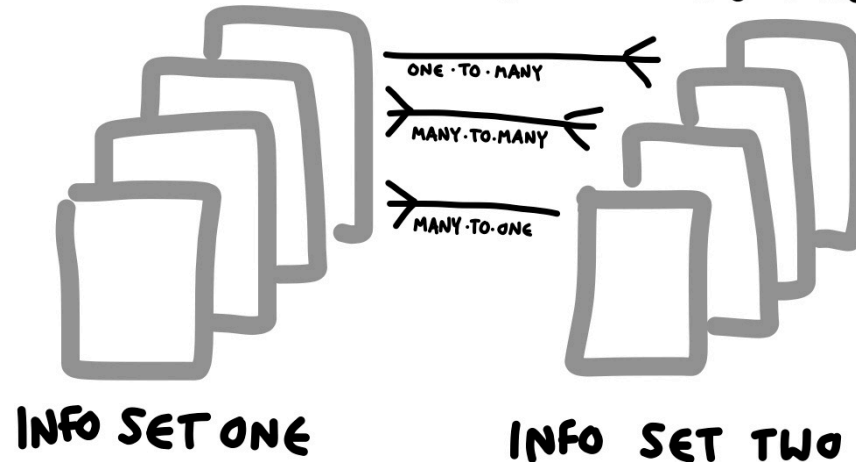
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## Some notes and challenges

- The structure must be able to be maintained with minimal time and effort. **Simplicity enhances odds of success.**
- Essential data from **PeopleSoft**
- “**Base funds**” = general operating and federal formula funds
- Fiscal year is the university fiscal year
- Data requires **intervention** – employee categorization
- Varying data sources = relational database, **MS Access**

A *relational database* is a set of formally described tables from which data can be accessed or reassembled in many different ways without having to reorganize the *database tables*.

# RELATIONAL DATABASE



File Home Create External Data Database Tools Design Tell me what you want to do...

View Run Select Make Table Append Update Crosstab Delete Union Pass-Through Data Definition Show Table Insert Rows Delete Rows Builder Insert Columns Delete Columns Return: All Totals Parameters Property Sheet Table Names

Results Query Type Query Setup Show/Hide

### All Access Objects

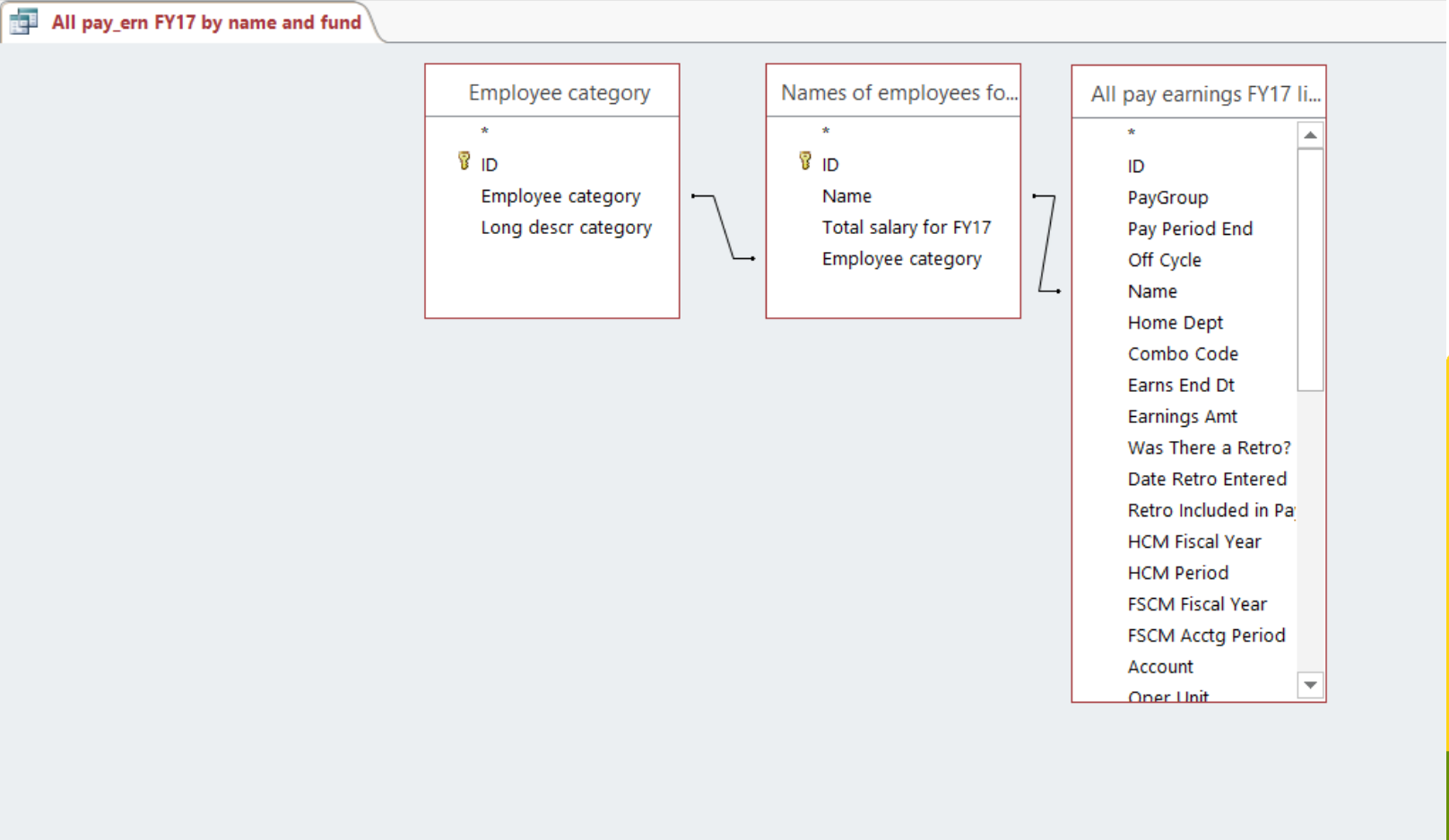
Search...

**Tables**

- Account table FY17
- Employee category
- Names of employees found in all funds pay ern F...
- Names of employees in funds 100 and 330
- All pay earnings FY17 linked table

**Queries**

- All pay\_ern FY17 by name and fund



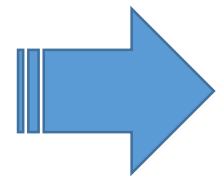


# Measure how base funding is being allocated by "grouping"

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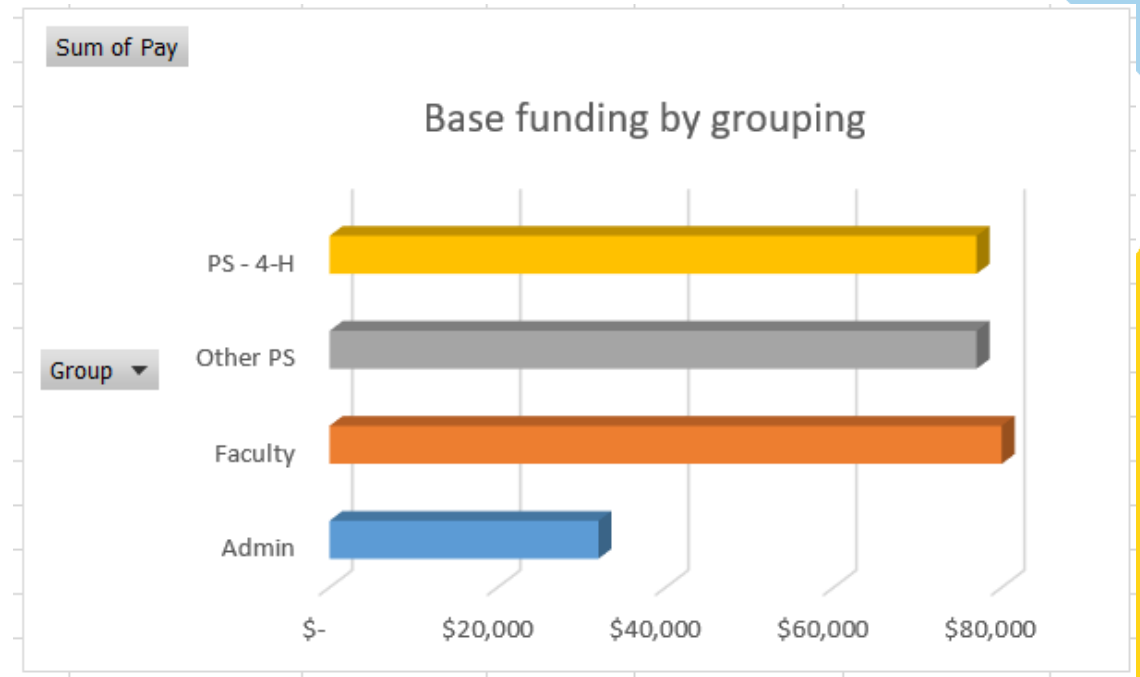
<u>PayGroup</u>	<u>Pay Period End</u>	<u>Off Cycle</u>	<u>Name</u>	<u>Home Dept</u>	<u>Combo Code</u>	<u>Earns End Dt</u>
<u>Earnings Amt</u>	<u>Was There a Retro?</u>	<u>Date Retro Entered</u>	<u>Retro Included in Payroll Dt</u>			
<u>HCM Fiscal Year</u>	<u>HCM Period</u>	<u>FSCM Fiscal Year</u>	<u>FSCM Acctg Period</u>	<u>Account</u>		
<u>Oper Unit</u>	<u>Dept</u>	<u>Fund</u>	<u>Source Function</u>	<u>Project Program</u>	<u>Purpose</u>	
<u>Property</u>	<u>Emplid</u>	<u>Empl Rcd #</u>	<u>PC BU</u>	<u>Project Start Dt</u>	<u>PProject End Dt</u>	<u>Page</u>
<u>Nbr</u>	<u>Sep Check Nbr</u>	<u>Check Nbr</u>	<u>Earn Code</u>	<u>Earnings Descr</u>	<u>A21 Eligible</u>	<u>Check Dt</u>

<u>Name</u>	<u>Group</u>
Edna	Faculty
Lou	PS - 4-H
Pat	Other PS
Sam	Other PS
Gurt	Other PS
Cedulie	PS - 4-H



UV\_FY\_ENCUMBRANCES

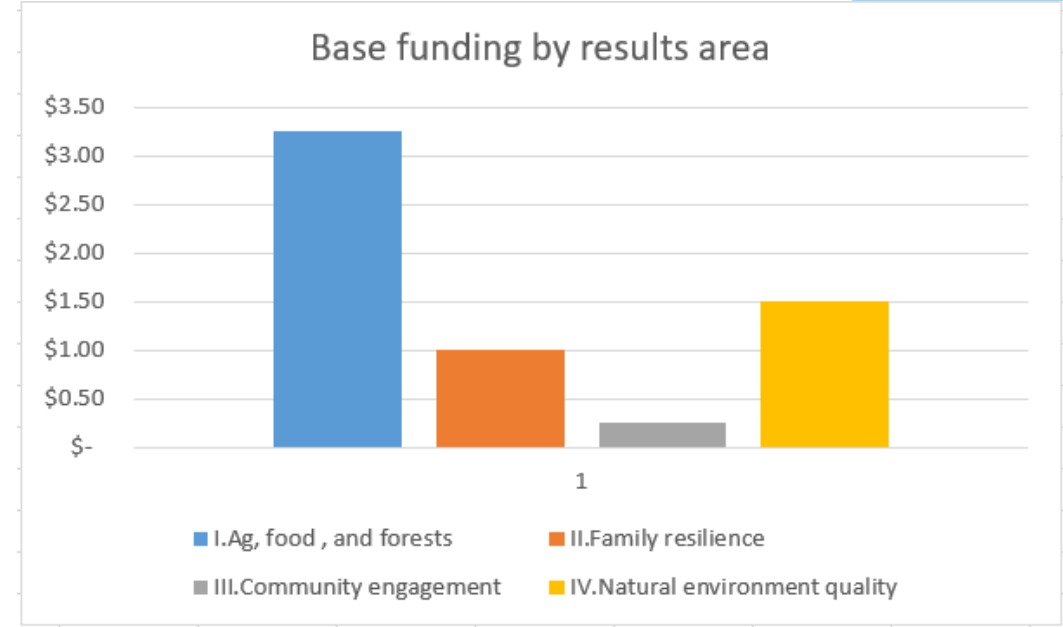
<u>Name</u>	<u>ID</u>	<u>Combo Code</u>	<u>Sum Encumb AMT</u>	<u>Account</u>	<u>Oper Unit</u>	<u>Dept</u>	<u>Fund</u>
	<u>Source</u>	<u>Function</u>	<u>Project Program</u>	<u>Purpose</u>	<u>Property</u>		



# Measure how base funding is being allocated by "results area"

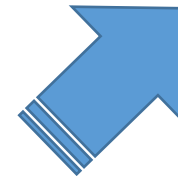
UV\_PAY\_ERN\_DIST

<u>PayGroup</u>	<u>Pay Period End</u>	<u>Off Cycle</u>	<u>Name</u>	<u>Home Dept</u>	<u>Combo Code</u>	<u>Earns End Dt</u>
<u>Earnings Amt</u>	<u>Was There a Retro?</u>	<u>Date Retro Entered</u>	<u>Retro Included in Payroll Dt</u>			
<u>HCM Fiscal Year</u>	<u>HCM Period</u>	<u>FSCM Fiscal Year</u>	<u>FSCM Acctg Period</u>	<u>Account</u>		
<u>Oper Unit</u>	<u>Dept</u>	<u>Fund</u>	<u>Source</u>	<u>Function</u>	<u>Project</u>	<u>Program</u>
<u>Property</u>	<u>Emplid</u>	<u>Empl Rcd #</u>	<u>PC BU</u>	<u>Project Start Dt</u>	<u>PProject End Dt</u>	<u>Page</u>
<u>Nbr</u>	<u>Sep Check Nbr</u>	<u>Check Nbr</u>	<u>Earn Code</u>	<u>Earnings Descr</u>	<u>A21 Eligible</u>	<u>Check Dt</u>



is being allocated by results area (VIA payroll)

<u>Name</u>	<u>I.Ag, food, and forests</u>	<u>II.Family resilience</u>	<u>III.Community engagement</u>	<u>environment quality</u>
Edna	50%			50%
Lou		100%		
Pat				100%
Sam	75%		25%	
Gurt		25%	75%	
Cedulie	100%			



UV\_FY\_ENCUMBRANCES

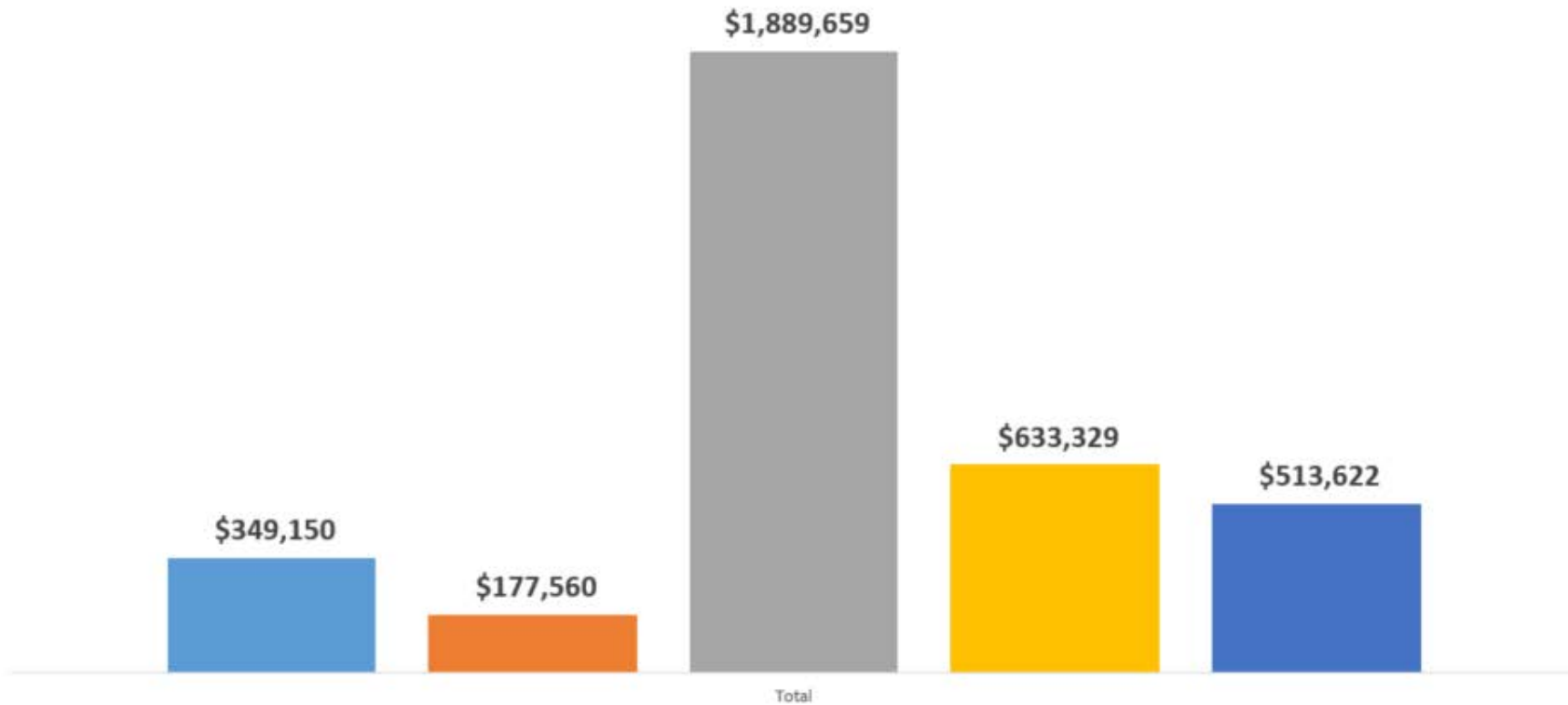
<u>Name</u>	<u>ID</u>	<u>Combo Code</u>	<u>Sum Encumb AMT</u>	<u>Account</u>	<u>Oper Unit</u>	<u>Dept</u>	<u>Fund</u>
	<u>Source</u>	<u>Function</u>	<u>Project</u>	<u>Program</u>	<u>Property</u>		

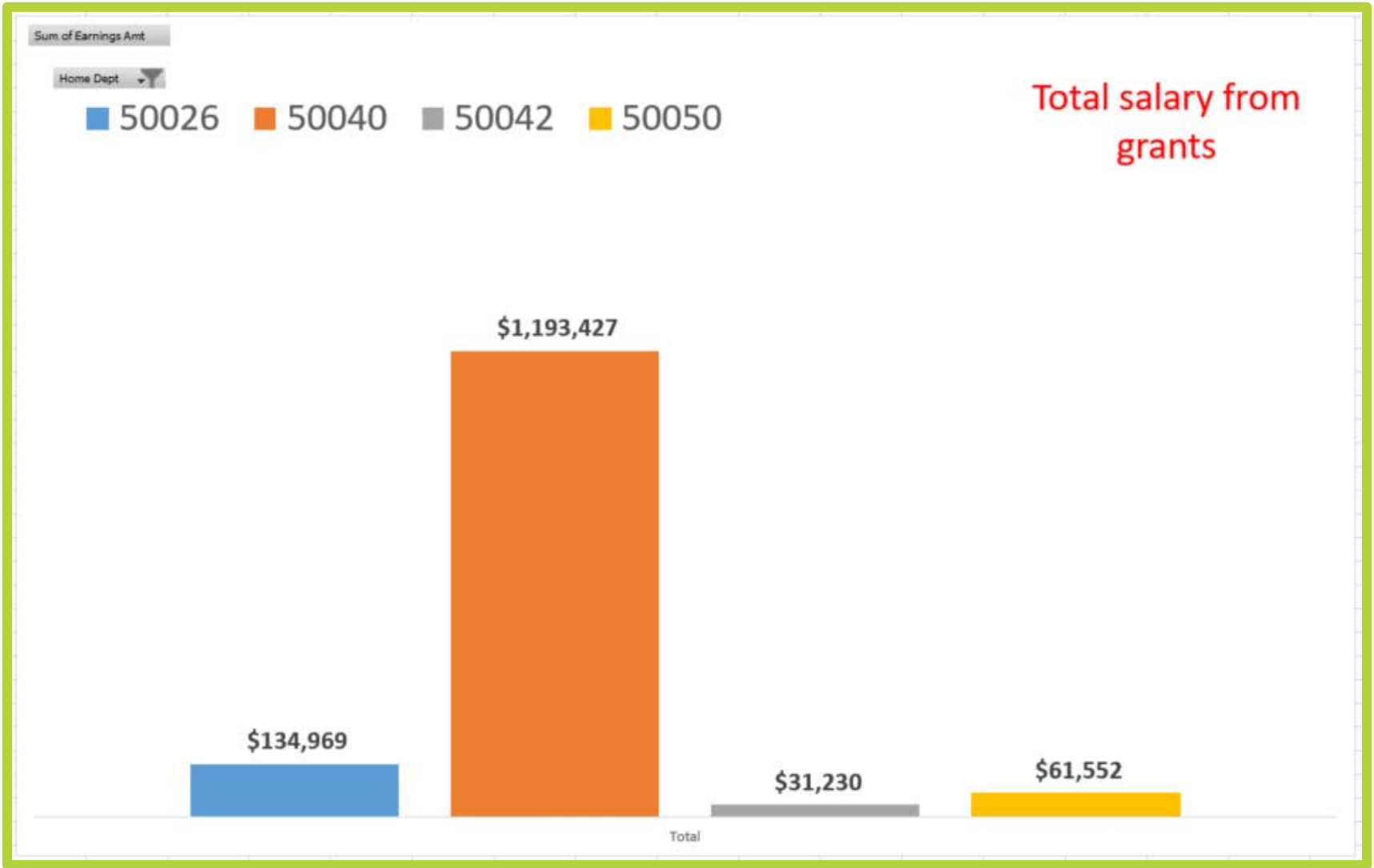
Sum of Earnings Amt

Home Dept

■ 50020 ■ 50026 ■ 50040 ■ 50042 ■ 50050

Total salary from  
"base funds"





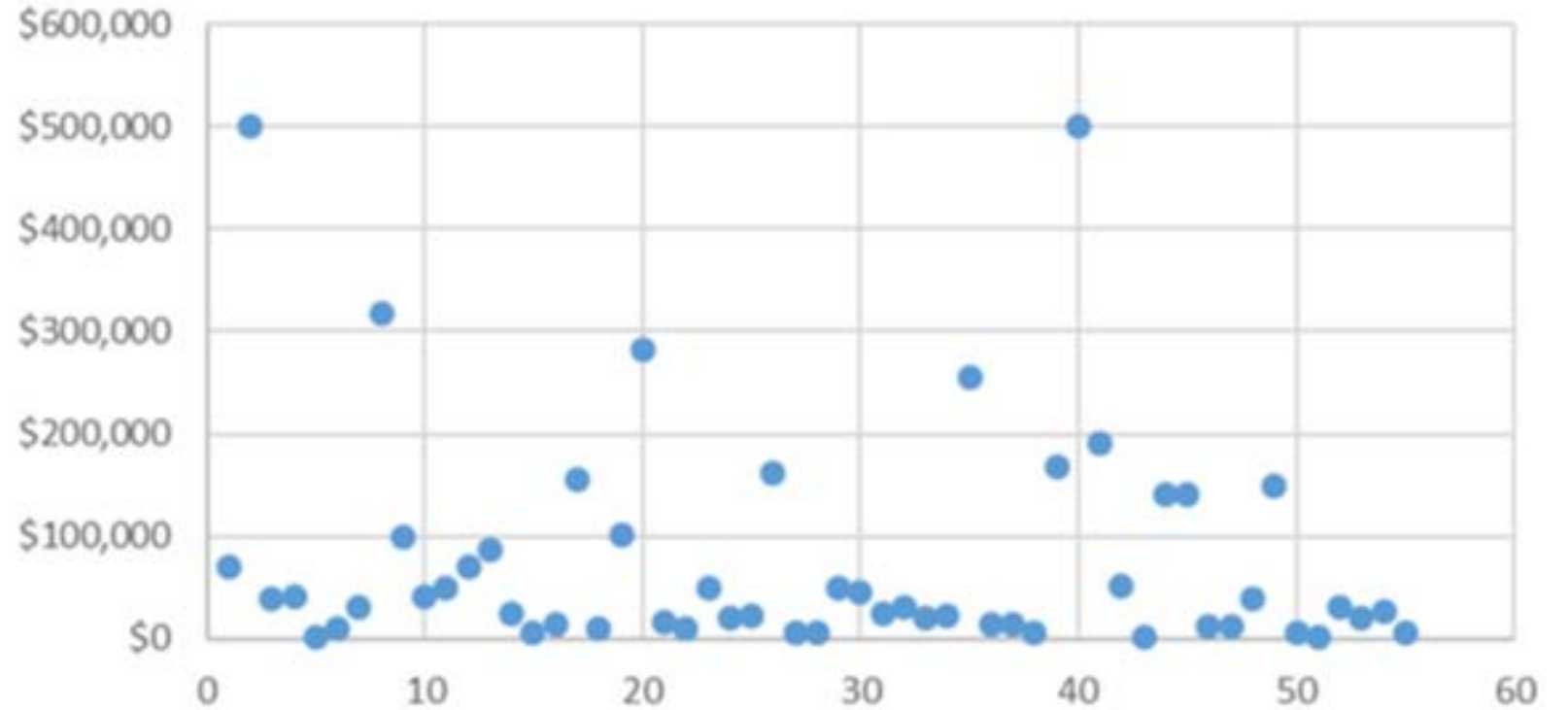
# Grants

\$12,000,000



Grants  
Will  
Drive  
You  
To  
Grant's

FY18 grant awards, total amount, N-55, without  
NESARE



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# Reduce dependence on grants by increasing other sources of funding

Track **changing budget composition** over time with the goal of the overall budget composition reflecting greater diversification of source, increased longevity of awards, and larger grants—all critical to the long-term stability of Extension.

Increase **philanthropic funding** coming to Extension through UVM Foundation.

Explore the use of **fee-for-service models** when and where appropriate.

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# Develop a goal to reduce the number of grants while maintaining or increasing funding

Assess the **current spread of grant commitments** to understand the relationship between grants and the administrative cost of managing them.

Shift from 120 grants in a given 12-month period to a **smaller number** focused on advancing the result areas, generating more money, and supported by cohesive teams.

Consider a **minimum grant size** below which the Cabinet will review and determine whether to instead use the strategic investment fund.

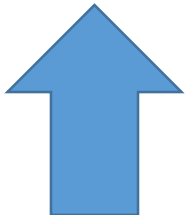
Consider setting a **higher threshold for the minimum effort** allowed on a grant.

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## Develop annual goals to increase Extension's “effective F&A rate”

Track **annual average F&A** rate with the goal of increasing the effective F&A rate year over year.

13.1%  25.7%





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# GAK<sup>©</sup>

## Grant Accounting Calculator

Using tool with **RCM** drivers:

1. F&A rate, [revenue]
2. FTE and employee count, [expenses]
3. Office of Vice-President of Research levy, [expense] and
4. fund 100 (if cost share) levy [expense]



Instructions: Fill in blue cells	
Date	
Project Title	
Sponsor	
Principal Investigator	
Will the F&A be split with a PI from outside Extension? (If yes, explain split)	
Are there subcontracts? (If yes, complete subcontract list below)	

Affordability Key:	
Negative revenue	<0%
Low revenue	1%–15%
High revenue	>15%

Proposal information	Data	Multiplier	Revenue and costs	Description	Formula used
A1. Total proposed award amount	\$229,250	0.0361	-\$8,276	Cost: Internal IBB fee to support Office of Vice President of Research	Award Amount x Multiplier
A2. Proposed direct costs (not including F&A or cost share) (See line E in SPA worksheet)	\$210,000				
B. Allowable sponsor F&A rate	15.0%	\$195,000	\$29,250	Revenue: F&A (multiplier is proposed direct costs minus any subcontract "pass through" dollars that are not subject to F&A)	F&A Rate x Direct costs eligible for F&A
C1. Project start date	7/1/2018				
C2. Project end date	6/30/2020				
Number of university fiscal years (July 1-June 30) the award covers	2				
D. FTE of permanent Extension staff employed on this project (do not include faculty or other base-funded FTE). (See column I in SPA worksheet)	0.5	\$8,837	-\$8,837	Cost: IBB "head tax" (\$8,000 per employee per year) and "FTE tax" (\$837 per 1.00 FTE per year) fee.	FTE x Fiscal Years x Multiplier
E. Cost share (do not include base-funded salary) (See columns V through AA in SPA worksheet)	\$0	0.1790	\$0	Cost: Match needed from UVM Extension (direct expenses out of Fund 100 or 150)	Cost Share x Multiplier
F. Salary and fringe savings, where award offsets base-funded salary (do not include soft-funded 0.2 FTE for faculty) (See column T in SPA worksheet)	\$0		\$0	Revenue: Grant dollars that replace base dollars (e.g., within faculty 0.8 FTE)	Data entered
Total cost or revenue:			\$12,137		
Affordability indicator:			5%	Cost or revenue as % of award total	Total Cost or Revenue ÷ Award Amount
Projected Research and Outreach Incentive Funds (formerly known as "BOOST"):			\$2,194		

Subcontract list	Amount	Subject to F&A
Subcontract 1	\$40,000	\$25,000
Subcontract 2	\$10,000	\$10,000
Subcontract 3	\$0	\$0
Subcontract 4	\$0	\$0
Subcontract 5	\$0	\$0
Subcontract 6	\$0	\$0
Subcontract 7	\$0	\$0
Subcontract 8	\$0	\$0
Total	\$50,000	\$35,000
Total "pass through" (not subject to F&A)	\$15,000	



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## In summary

- UVM Extension's programming goals will be supported by active resource allocation based on real-time data
- May have applicability for Hatch
- "Dashboards" can be a powerful tool to show "where we are" to decision-makers
- Grants and contracts to be scrutinized as they never have before.
- Thank you!

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