solver

BI360

SUCCESS IN GOVERNMENT
Accelerated by BI360

ADVANCED REPORTING & BUDGETING

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Introduction

Government Organizations face increasing challenges from citizens to provide more, better, and faster information on revenues, expenditures, and performance. Many organizations struggle with meeting these needs because they have data in multiple systems and rely on tools that are inadequate to provide the needed information. The result is a mish mash of various reporting, budgeting, data presentation tools or software in silos. This environment is frustrating for the users, management, elected officials, and citizens. BI360 is the tool that will enable you to meet all of those needs and more.

BI360 is the first full Corporate Performance Management (CPM) suite that combines the familiarity and flexibility of Microsoft Excel with real-time ERP access, as well as a powerful Data Warehouse (Microsoft SQL Server) to gather all of the organization's important information in a single, easy-to-manage database. End users have anytime, anywhere access from any web browser, regardless of device.

The features that differentiate BI360 from other BI applications are:

1. Can be deployed in the Cloud or on premise private host. Can be purchased as a subscription or as a one-time license, giving you the flexibility to choose how to fund the purchase.
2. Excel add-in for simple or complex reporting and budgeting template design. This allows for the power and features of Excel to be leveraged.
3. Modern Excel, Web and Mobile end-user front-ends for easy access to information and powerful collaboration.
4. Pre-Configured and extensible, "smart" data warehouse. Multiple data sources can be brought in for reporting across the organization regardless of the source data system.
5. Deployed as individual Reporting, Planning, and Data Warehouse modules or as a Suite with a single security model and deployment. In addition, third-party data viewing tools such as PowerBI can easily be deployed with BI360.

Architecture Overview

Below, you can see a simplified architecture with all of the BI360 modules. The *Reporting and Planning* modules can both run live on a number of different ERP systems, and/or off the BI360 *Data Warehouse*. Data visualization can accommodate any of the popular applications in the market such as PowerBI.
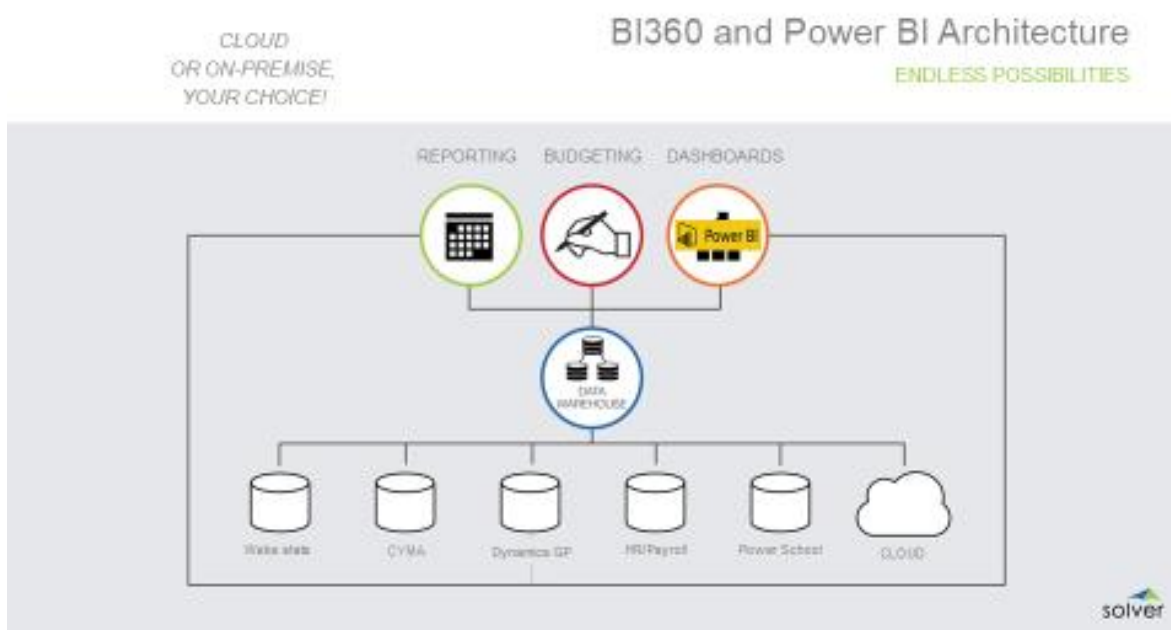
Note about the Examples in this Document

The examples in this document are based on a generic government demo model. These represent <u>examples</u> of what many government organizations use in their own budgeting and reporting processes. The templates below can be tailored for your organization as well. You can take the templates as a starting point and modify them for your needs or <u>create your own templates</u> using the BI360 Report Designer.

Please contact Solver at info@solverglobal.com for any comments or questions.

Budgeting

Preparing the Annual Budget

Preparing the Annual Budget is easy in BI360 whether your organization budgets centrally or de-centralized. There is full budget entry, review, edit capability along with multiple budget scenarios. The budget can be locked from entry while going through review. Line item detail can be included along with comments at any level.

Revenue Input

The revenue form is used by departments that need to budget for sources of revenues.

- The form is executed by budget year, budget version, department and fund.
- Everything is calculated other than the yellow cells.
- Not visible in the screenshot below is a comment column on the far right of the form for departmental text comments, which can also be viewed in a report.
- Note that the form is locked down, and only the yellow cells allow input.

BI360 — **Solver County**
Revenue Budget Input

Sheriff	29000
Final Budget	B
Fund	100

Object	Description	2018 Actuals	2019 Actuals	2020 Adopted	2021 Target % Change	2021 Dept. Baseline	2021 Dept. Adjust (%)	2021 Dept. Adjust ($)	2021 Dept. Request	% Change	Departmental Notes
400	Taxes					0			0		
401	Property Taxes					0			0		
402	City Income Taxes, Refunds, and Interest					0			0		
403	Licenses and Registrations					0			0		
404	Permits					0			0		
500	Intergovernmental Revenue					0			0		
508	Sales & Use Taxes	5,238	5,447	5,616		5,616			5,616	0.00%	
509	Local Government Revenues	200	208	214		214			214	0.00%	
600	Service Charges					0			0		
601	Miscellaneous Service Fees	12,701	13,208	13,614		13,614			13,614	0.00%	
602	Services	2,938	3,055	3,151		3,151			3,151	0.00%	
603	Housing, Zoning, and Nuisances					0			0		
604	Sales - Other	6,538	6,799	7,010		7,010			7,010	0.00%	
605	Admissions and Other Fees	250	260	268		268			268	0.00%	
606	Parking Fees	1,613	1,677	1,727		1,727			1,727	0.00%	

Personnel Budgeting

Personnel Budget Assumptions or Drivers

The assumption form values are later used in the personnel budget form(s). You can set assumptions or drivers for making global changes to the budget without having to make the changes individually. For example if you want to make a change that impacts each department by 10% you can make it here and it will flow to each department's budget entry form without the need to go into each department individually to make the change.

- o The form is executed for budget year and budget version
- o Note that the form is locked down and only the yellow cells allow input

BI360

Solver County
Budget Assumptions - Personnel
City Assumptions   CITY
Final Budget   B

Salary Grade	Description	Rate
01	Salary Grade 01	10.74
02	Salary Grade 02	11.19
03	Salary Grade 03	11.66
04	Salary Grade 04	12.24
05	Salary Grade 05	13.13
06	Salary Grade 06	14.09
07	Salary Grade 07	15.11
08	Salary Grade 08	16.22
09	Salary Grade 09	17.40
10	Salary Grade 10	18.67
11	Salary Grade 11	20.03
12	Salary Grade 12	21.49
13	Salary Grade 13	23.05
14	Salary Grade 14	24.73
15	Salary Grade 15	26.54
16	Salary Grade 16	28.47
17	Salary Grade 17	30.55
18	Salary Grade 18	32.78

Assumptions

The payroll example below allows the end user to calculate the annual budget for salary and benefits for all employees. Note that the employee information should be added to the BI360 data warehouse ("SODS") (starting salary) prior to the start of the budget process. To make developing your Personnel Budget easier, the following are available in BI360 so your users do not have to undertake a massive data entry effort each budget season. These budget assumption/drivers forms allow users to make changes across departments/divisions/organization-wide, and they feed the main budget entry forms, which avoids double data-entry. These can bet set a dollar amounts, percentages, or both.

- Wage Schedule (Class/Step/Grade, Exempt/Non-Exempt)
- Wage Rate Drivers (OT, Hazard Pay, Out of Class, Shift Differential, Exempt/Non-Exempt)
- Benefits and Taxes Drivers (Health, Dental, Vision, 401K, FICA, etc.)

The form also has the following benefits:
  o In this example, Salaries are evenly spread across the twelve months but could be set based on whatever parameters you want.
  o The form is too large to show in a print screen. There are numerous tax and benefit columns to the right of the visible screen below.
  o Note that the form is locked down, and only the yellow cells allow input.

BI360
Solver County
Personnel Budget (What If Analysis)
B
29000

Job Title	Fund	Employee Name	Pay Grade	FTEs for Benefits	FTE in Count	FTEs	Grade Calc Salary	Budgeted Salary	Current Salary	Merit/ Bonus ID	Merit/ Bonus $	Overtime	FICA Exempt	FICA $	Medicare Exempt	Medicare $	Retire Y/N?	Retire $
Salaries																		
Position 0069	General Fund	Employee 45	8	1.0	Y	1.0	33,738	45,089	45,089	MER	2,480		Y	2,949	Y	131	Y	5,708
Position 0072	General Fund	Employee 46	10	1.0	Y	1.0	38,834	48,541	48,541	MER	2,670		Y	3,175	Y	131	Y	6,145
Position 0075	General Fund	Employee 47	10	1.0	Y	1.0	38,834	23,777	23,777	MER	1,308		Y	1,555	Y	131	Y	3,010
Position 0078	General Fund	Employee 48	10	1.0	Y	1.0	38,834	38,737	38,737	MER	2,131		Y	2,534	Y	131	Y	4,904
Position 0081	General Fund	Employee 49	10	1.0	Y	1.0	38,834	25,358	25,358	MER	1,395		Y	1,659	Y	131	Y	3,210
Position 0084	General Fund	Employee 50	10	1.0	Y	1.0	38,834	47,192	47,192	MER	2,596		Y	3,087	Y	131	Y	5,975
Position 0087	General Fund	Employee 51	10	1.0	Y	1.0	38,834	58,189	58,189	MER	3,200		Y	3,806	Y	131	Y	7,367
Position 0090	General Fund	Employee 52	10	0.0		0.0	38,834	26,165	26,165		0		Y	1,622		0		0
						0.0	0		0		0			0		0		0
						0.0	0		0		0			0		0		0
						0.0	0		0		0			0		0		0
						0.0	0		0		0			0		0		0

Payroll

Spreading and Line item details

Expenditure Input

The expense form example displays the prior two years of actual, historical figures as well as last year's adopted budget. But could be expanded for additional prior years, or projected years. The form also has the following benefits:

- o Automatic calculation of a Baseline budget based on Target Changes (see earlier form in the document for this).
- o Easy departmental input of $ or % increase or decrease of Baseline budget.
- o Text comment input.
- o Line Item detail input is allowed.

Solver County
Departmental Budget Input   Monday, March 18, 2019

Sheriff	29000
Final Budget	B
General Fund	100

Object	Description	2017 Actuals	2018 Actuals	2019 Adopted	2020 Target % Change	2020 Dept. Baseline	2020 Dept. Adjust (%)	2020 Dept. Adjust ($)	2020 Dept. Request	% Change	Departmental Notes
700	Salaries and Benefits								0	N/A	
702	Retiree Health Costs	30,788	31,774			33,006			33,006	3.88%	
703	Employee Salaries	265,425	273,919			284,536			284,536	3.88%	
704	Social Security (FICA)	17,288	17,842			18,534			18,534	3.88%	
705	Bonuses/Merit Increases	13,375	13,803			14,338			14,338	3.88%	
706	Medicare	888	917			953			953	3.93%	
709	Health Benefits	17,800	18,370			19,082			19,082	3.88%	
710	Life Insurance	3,850	3,973			4,127			4,127	3.88%	
711	Overtime								0	N/A	
713	Dental Benefits	1,525	1,574			1,635			1,635	3.88%	
751	Supplies	2,325	2,399			2,399		20,000	22,399	833.68%	This increase is needed
752	Postage	213	218			218			218	0.00%	
753	Clothing/Cleaning Allowance					0		10,000	10,000	N/A	We feel like we need this
754	Inventory	1,013	1,046			1,046			1,046	0.00%	
800	Other Charges and Services					0			0	N/A	

Other Expenses

Budget Review and Adjustment Form

This is an example of a form where the Budget Office, administrators/budget reviewers can review a department budget and make adjustments to Revenue or Expenditures line items and comments for later inclusion with the departmental budget. Form features:

- o Displays the departmental request for the revenue budget.
- o Separate columns (see yellow columns below) for input of adjustments and text comments for an unlimited number of reviewers.

Solver County
Departmental Exp Budget Review

			Sheriff	29000	
			Final Budget	B	
			General Fund	100	

Account	Description	2017 Actuals	2018 Actuals	2019 Adopted	2020 Budget Baseline	2020 Dept. Adjust	2020 Dept. Request	OMB Adjust. (%)	OMB Adjust ($)	OMB Request	Exec. Adjust. (%)	Exec. Adjust ($)	Exec. Request
702	Retiree Health Costs		30,788	31,774		33,006	33,006			33,006			33,006
703	Employee Salaries		265,425	273,919		284,536	284,536			284,536			284,536
704	Social Security (FICA)		17,288	17,842		18,534	18,534			18,534			18,534
705	Bonuses/Merit Increases		13,375	13,803		14,338	14,338			14,338			14,338
706	Medicare		888	917		953	953			953			953
709	Health Benefits		17,800	18,370		19,082	19,082			19,082			19,082
710	Life Insurance		3,850	3,973		4,127	4,127			4,127			4,127
711	Overtime					0	0			-			-
713	Dental Benefits		1,525	1,574		1,635	1,635			1,635			1,635
750	Supplies					0				-			-
751	Supplies		2,325	2,399		22,399	22,399			22,399			22,399
752	Postage		213	218		218	218			218			218
753	Clothing/Cleaning Allowance					10,000	10,000			10,000			10,000
754	Inventory		1,013	1,046		1,046	1,046			1,046			1,046
800	Other Charges and Services					0	0			-			-
802	Services		8,788	9,070		9,070	9,070			9,070			9,070

DeptRev

Spreading and Line item details

Capital Improvement or Program Budgeting

BI360 Supports full Capital budgeting functionality. This includes budgeting, tracking, and reporting for capital assets (including depreciation) in addition to budgeting for capital projects. You can have multiple revenue sources and multiple projects tied to a capital project. You can track/update the budget to actual easily throughout the life of the project, not just during budget season. Department worksheets can be provided, in addition to budget book reports. Examples are included in our demo model.

Grants Budgeting

BI360 has full Grants budgeting and tracking functionality. In addition you can easily build out whichever reports you need to use for your Grant reporting. Just some of the functionality is: multi-year grants, split funding, allocations, spend tracking (including labor), grant award/expire tracking, projects tied to grants, etc. Examples are included in our demo model.

Budget Allocations

You can have multiple different types of allocations in BI360. You can do split funded positions and allocate central or shared services back to departments. There is no limit to the ways you can setup and track allocations in BI360. Examples are included in our demo model.

Workflow

Budget workflow can be set for those organizations without centralized budgeting. For example the budget entry forms can be opened for Departmental entry, then locked for OMB review, then re-opened for changes, until they are in a Final stage. There is a budget status view where administrators can review which departments/users have started the budget process, who is working on it and who has finished and is ready for review.

Budget Book

Putting together the annual Budget Book can be a time consuming effort for most organizations. BI360 makes it simple with ready to go reports that can easily be exported into your budget book template containing your narratives. Some of the common budget book reports available in BI360, that can be based on parameters such as period, fund, org level, are:

- Fund Revenue by Source and Year
- Proposed Budget by Fund
- Fund Budget to Actual with Percent Change
- Funds Summary (including Fund Category and Sub-funds)
- Operating Statement
- Headcount by Fund/Program/Initiative
- Budget by Program/Initiative
- CIP – Source and Use
- Grants – Source and Use
- Program/Initiative Source and Use

Report Examples

Below are just a few of the numerous examples of reports that are availalbe. These are run based on parameters selected by the user (based on user security). This allows the user to run their reports for various months, years, funds, departments, etc. Any number of parameters can be used which allows the same report to be used across the organization rather than having to build a separate report for each Department (as an example). Note that an entire report may not fit in a single print screen in this document, so there are rows and columns you do not see. Since the Report Designer in BI360 is Excel based, conditional formatting and charts/graph functionality native to Excel are used in the below examples.

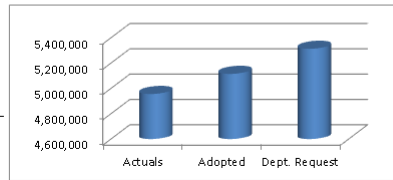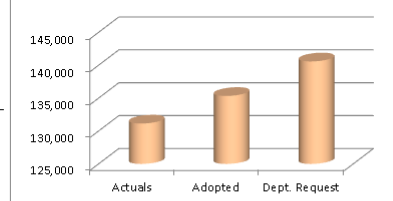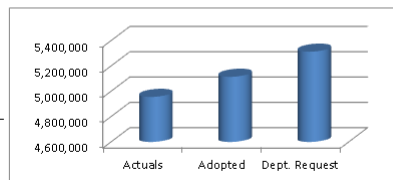# Expenditure by Fund – Recommended Budget

The report example below shows accounts grouped by Fund in the rows and actual figures as well as approved and adopted budgets across the columns.

Fund Summary by Cost Center and Account (Object)

The report shows accounts (object code) grouped by cost center in the rows, and actual figures last year, this year's adopted budget, and next year's requested budget in the columns.

Consolidated Fund Summary

This report example shows Funds across the columns with a total consolidated amount on the right (not visible in the screenshot) and Accounts down the rows, grouped by Revenues and Expenses, with a Net Surplus (or deficit) at the bottom (not visible in the screenshot).

Object	Description	General Fund	Housing	Criminal Justice	Tourism	Vehicle Replacement	Visitor Cent
Revenue							
401	Property Taxes	32,592,020	469,750	1,340,940	202,820	12,940	
402	City Income Taxes, Refunds, and Interest	12,039,175	170,465	474,690	73,565	4,710	
403	Licenses and Registrations	37,595		880	128,965	28,885	
404	Permits	927,950	12,865	35,645	54,360	41,885	
501	Dept Of Housing & Urban Development	491,010	4,615	17,290	2,085	745	
502	Dept Of Justice	59,230		1,610			
503	Dept Of Transportation	16,365					
504	Environmental Protection Agency	23,260		670			
505	Dept Of Interior	1,475					
506	Dept Of Homeland Security	6,240					
507	Dept Of Commerce	19,770					
508	Sales & Use Taxes	1,933,215	24,330	75,445	9,305	3,025	
509	Local Government Revenues	73,090	670	1,935			
601	Miscellaneous Service Fees	4,466,860	58,785	174,485	25,415	7,790	
602	Services	1,100,385	12,690	42,615	4,690	1,800	
603	Housing, Zoning, and Nuisances	30,035		880			
604	Sales - Other	2,403,960	30,245	91,865	13,075	3,750	
605	Admissions and Other Fees	92,675	880	2,410			
606	Parking Fees	596,355	5,570	21,975	2,545	1,015	
607	Other Fines and Penalties	1,018,820	11,465	37,940	4,480	1,685	
608	Interest	1,020,355	10,930	37,445	4,365	1,610	
609	Rentals - Other	481,460	4,365	16,350	2,085	745	
610	Special Assessments	51,565		1,340			
611	Property Sales	124,105	1,130	3,425			
612	Contributions	188,275	1,740	5,035	805		
613	Reimbursements	125,495	1,130	3,485			
614	Miscellaneous Other	2,921,645	37,940	110,555	16,305	4,555	
Total Revenue		62,842,385	859,565	2,498,910	544,865	115,140	
Expenditures							
702	Retiree Health Costs	2,310,980					

Payroll Report

Departments are repeated down the rows with their employees listed below each department. This would include all benefits, wage rates/scales, splits, etc.

Job Title	Fund	Employee Name	FTEs	Current Salary	Merit/ Bonus $	Overtime	FICA $	Medicare $	Retire $	Life $	Health $	Dental $	Total Comp.
Payroll Budget													
Position Control/Headcount by Organization													
Final Budget for year 2011													
Board Of Supervisors													
Position 0014	General Fund	Employee 14	1.0	18,539	1,020		1,213	131	2,347	293	3,500	300	27,342
Position 0015	General Fund	Employee 15	1.0	29,382	1,616		1,922	131	3,720	465	3,500	300	41,035
Position 0016	General Fund	Employee 16	1.0	38,545	2,120		2,521	131	4,880	610	3,500	300	52,606
Total Board Of Supervisors			**3.0**	**86,466**	**4,756**	**0**	**5,656**	**392**	**10,947**	**1,368**	**10,500**	**900**	**120,984**
Charges For Services													
Position 0012	General Fund	Employee 12	1.0	18,625	1,024		1,218	131	2,358	295	3,500	300	27,451
Position 0013	General Fund	Employee 13	1.0	85,589	4,707		5,598	131	10,836	1,354	3,500	300	112,015
Total Charges For Services			**2.0**	**104,214**	**5,732**	**0**	**6,817**	**261**	**13,193**	**1,649**	**7,000**	**600**	**139,466**
Community Relations													
Position 0020	General Fund	Employee 20	0.0	70,354	0		4,362	131	0	0	0	0	74,846
Position 0021	General Fund	Employee 21	1.0	40,485	2,227		2,648	131	5,125	641	3,500	300	55,056
Position 0022	General Fund	Employee 22	1.0	48,770	2,682		3,190	131	6,174	772	3,500	300	65,519
Total Community Relations			**2.0**	**159,609**	**4,909**	**0**	**10,200**	**392**	**11,300**	**1,412**	**7,000**	**600**	**195,422**
County Attorney													
Position 0028	General Fund	Employee 28	1.0	30,609	1,683		2,002	131	3,875	484	3,500	300	42,585
Position 0029	General Fund	Employee 29	1.0	32,771	1,802		2,144	131	4,149	519	0	0	41,515
Position 0030	General Fund	Employee 30	1.0	33,946	1,867		2,220	131	4,298	537	3,500	300	46,799
Position 0031	General Fund	Employee 31	1.0	59,615	3,279		3,899	131	7,547	943	3,500	300	79,214
Total County Attorney			**4.0**	**156,941**	**8,632**	**0**	**10,266**	**522**	**19,869**	**2,484**	**10,500**	**900**	**210,113**
County Executive													
Position 0017	General Fund	Employee 17	0.5	15,618	859		1,022	131	0	0	3,500	300	21,429
Position 0018	General Fund	Employee 18	1.0	46,121	2,537		3,017	131	5,839	730	3,500	300	62,174
Position 0019	General Fund	Employee 19	0.0	80,608	0		4,998	131	0	0	0	0	85,736
Total County Executive			**1.5**	**142,347**	**3,396**	**0**	**9,036**	**392**	**5,839**	**730**	**7,000**	**600**	**169,339**
Courts													
Position 0051	General Fund	Employee 40	1.0	71,244	3,918		4,660	131	9,019	1,127	0	0	90,100
Position 0054	General Fund	Employee 41	1.0	66,513	3,658		4,351	131	8,421	1,053	3,500	300	87,925
Position 0057	General Fund	Employee 42	1.0	22,372	1,230		1,463	131	2,832	354	3,500	300	32,183
Position 0060	General Fund	Employee 43	1.0	22,978	1,264		1,503	131	2,909	364	3,500	300	32,948
Position 0063	General Fund		0.0	0	0		0	0	0	0	0	0	0
Position 0066	General Fund	Employee 44	0.0	43,148	0		0	0	0	0	0	0	43,148
Total Courts			**4.0**	**226,255**	**10,071**	**0**	**11,977**	**522**	**23,181**	**2,898**	**10,500**	**900**	**286,304**

Budget Monitoring

Throughout the year organizations depend on having an up to date view of their expenditures against the budget. With BI360 we make this easy to do in just some of the following ways:

- Encumbrance Reporting
- Grant Tracking Report (including the SEFA)
- Budget Amendment Form
- Decision Packs, Initiatives
- Position Control

Annual Reporting – CAFR

BI360 helps you find the elusive "easy button" for producing your CAFR by having ready made CAFR reports that are updated with the click of a button. These reports can be exported to Microsoft Word, Adobe, or any other desktop publishing tool to make producing the CAFR as easy as possible.

Some common reports that are available in BI360:

- Fund Balance Sheet
- Revenue, Expenditures, Changes in Fund Balance
- Net Position
- Revenue, Expenditures, Changes in Net Position
- Statement of Activities
- Cash Flow
- Combining Statements

Additional Reporting and Functionaliy

BI360 makes it easy for your organization to do any reporting and analysis whether financial, compliance, or operations based. Just some examples are:

- OMB A-133

- Cost Accounting, including Activity Based Costing
- GASB 34

Benchmarking

With BI360 you can easily benchmark your organization against other, similar organizations. With pre-built metrics you can get started immediately or choose to add your own metrics.

Data Visualization

Data visualization is an increasingly important part of Corporate Performance Management. With BI360 you have many options for creating charts, graphs, dashboards, and other ways of visualizing your data. Some of the functionality is native in Excel which forms the basis of the BI360 Report Designer. Applications like PowerBI, Tableau, etc. are commonly used with BI360 as the BI360 database serves as another data source to those applications. Many customers choose to use PowerBI with BI360 to provide data visualization for a multi-tude of data sources, financial and operational. Rather than have to setup connections to each of the data sources, BI360 is used as the central data source making it much easier for your team members to build their favorite dashboards and share across the organization.

BI360 – Data Warehouse

The BI360 data warehouse (sits on Microsoft SQL Server) acts as the central data store for all budgets, actual historical data, as well as any other information from any other data source that you want to use BI360 or other BI tools to create reports and dashboards for. The data warehouse is pre-configured with more than fifty modules and is very quick to set up and highly user-friendly to administer. You can see a few screenshots from the data warehouse administrative interface below. These screens are used to manage dimensions and attributes, copy budgets, create hierarchies and many other useful data warehouse functions.