Dashboards

Case studies on the use of dashboards amongst leading global pension funds

1. Overview

We wanted to find out how some of the world's biggest and operationally-complex pension systems are using dashboards to convey management information. We interviewed six pension systems in the US, UK and Canada, and produced a case study on each.

1.1 Thank you

At the outset we want to extend our sincere thanks to the six organizations that agreed to work with us. Without them this report would not have been possible. The six are:

Alberta Pension Services

Arizona State Retirement System

California State Teachers' Retirement System

Illinois Municipal Retirement Fund

Teachers' Pension Scheme

Washington State Department of Retirement Systems

1.2 Using this report

We don't believe there is one correct or optimal solution for the capture and dissemination of management information. The case studies presented here will hopefully provide insights into what has worked in different setting and organizations.

We believe that each case study provides different ideas on what could be measured and how the information might be presented and used. We hope the case studies will also give direction in terms of resourcing, timelines, pitfalls and success factors. We think that readers will want to choose from the different measures they see and reflect on what a great dashboard might look like in their organization.

1.3 General observations

We expected to see dashboards that comprised high-level summaries of operational measures and to compare and contrast the content of each dashboard. However, we soon discovered that the very idea of what a dashboard is differs within each organization, and a broader perspective would be required.

One immediate differentiator was the scope of the dashboards. We categorized two different types:

1. Dashboards that focus on member service and operations, and
2. Dashboards that provide an overview of the entire organization, e.g., including financial information like funded status, investment success, or HR measures like employee engagement.

We were struck by how different all the dashboards looked; there was no standard format or length. They were tailored to each system's individual needs and ranged from 2 pages to over 40 pages of complex and extensive reporting.

Five of the dashboards were produced wholly or partly in Excel. Alberta Pension Services (APS) is the only system to fully automate its dashboard using Microsoft's Power BI. The systems that use Excel employ independent teams of one to four people to produce and maintain the dashboards. It was clear from speaking to each system that what really matters is how they use the data. Although Excel may not be a cutting-edge data visualization tool, it is sufficient for many organizations, and the real power of the dashboard is how it is used within each organization.

We were keen to see cool designs and interesting measures, but the overriding message was that the dashboard is a means to an ends: to engage with high-quality data in an intelligible and meaningful way, to drive organizational development.

APS, for example, developed its current dashboard to maximize operational efficiency and service. With strong leadership support for the dashboard and its underlying measures, APS was able to improve its CEM service score by 6 points in one year. On the other hand, California Teachers' Retirement System (CalSTRS) uses its dashboard as a tool for fostering collaboration and accountability across the organization. Every quarter CalSTRS holds two rounds of reviews for its member service dashboard, where directors and executives come together to discuss the measures and actions flowing from the data.

For each system, dashboards are much more valuable than just the information they convey; they are used to promote accountability, collaboration and improvement. As CEM has always said, '*what gets measured gets managed*'.

2. Introduction

2.1 About This Report

Every year CEM Benchmarking Inc. (CEM) produces proprietary and leading edge research on a chosen area of pension system management. The research is based on the experience and input of our Pension Administration Benchmarking Service (PABS) clients. Topics are selected by a Global Steering Group. The resulting report is provided exclusively for CEM clients.

This research has accumulated over time and become a library of best practices based on the submissions of many of the world's leading pension systems including:

- Satisfaction Surveying
- IT Strategy
- Communication Strategy
- On-line Member Transactions
- Call Centers
- Member Statements
- Social Media
- Mobile Applications
- Employer Service

As well as providing a valuable source of information on how large pension systems operate, the research guides CEM in the development of our benchmarking model. The research helps us to understand what good practices look like, and enables us to review and refresh the measures that we use in our benchmarking reports.

The topic for the 2017 report is 'Dashboards'.

2.2 Questions to be answered by the dashboards research

These are the questions we set out to answer:

Context

- How are organizations using dashboards at a Board and Senior Management level?
- What is shared at an operational level?
- What was the context for developing dashboards, i.e., what was the organization doing before, what was missing, and why did they change?

Form and content

- What form do the dashboards take?
- What data is being captured/monitored in the dashboards and why?
- How, when, and how frequently are dashboards distributed?

- How current is the data that is being shared (e.g., real time, prior month, quarterly)?

Resourcing and organization

- How much time and resources went into the development of dashboards?
- How much was done internally versus externally and which vendors were used?
- What systems are being used? How integrated are those systems? How many different data sources are there? How frequently is the data refreshed?
- What resources are needed to maintain the dashboards? Which team has primary responsibility for producing the dashboards, and in which area does that team sit?
- How frequently is the data reviewed and by whom (i.e., to ensure the dashboards are accurate)?
- How and when are metrics within your dashboard reviewed, if at all (i.e., how and when are the measures changed or updated)?

Outcomes

- How has decision making or behavior changed as a result of the dashboards?
- Have the dashboards delivered expected results?
- What has worked well? What would you do differently? What advice would you give others?

2.3 Methodology

Our approach has been to complete a series of case studies on systems that have an established and mature approach to reporting dashboard information. We sought to work with systems from different geographical areas, with different perspectives – for example, to include systems that operate with an outsourced model, where reporting might occur between a commercial supplier and the client's Board.

The research has been limited to:

- Dashboard information presented to, and used by Boards
- Dashboard information used by senior leaders/managers

2.4 Working Group

We would like to express our appreciation to the members of the Working Group that supported the development of the prospectus and reviewed the report:

- Rob Dolphin, Utah RS
- Kathy Goerdt, IMRF
- Mark Feldhausen, Washington State DRS
- Pieter Jansen, PFZW
- Donna Lum, CalPERS
- Kevin Olineck, BC Pension Corp
- Matthew Rickard, Oregon PERS
- Gary Russell, STRS Ohio

2.5 About CEM

CEM is an independent provider of benchmarking information for pension systems.

Benchmarking pension systems is all we do, all over the world, for many of the world's largest systems. They know we have robust data from a wide cross section of systems – critical for benchmarking. More importantly, they trust us to be sensitive, independent, and credible - with a deep understanding of the issues they face.

CEM does not advise on pension system management, and does not make recommendations for changes to current practices. We simply collect and provide comparative information. Decisions on actions arising from the information we supply are yours alone.

2.6 About PABS

Leading pension systems from around the world use PABS to understand how their costs compare, and how they are performing. At the most basic level, our reports are used to communicate value to stakeholders. Some systems use the analysis more progressively though, to develop strategy, set objectives and measure outcomes.

Approximately 100 systems from Europe, the US, Canada and Australia participate in PABS.

This report is designed to complement our annual detailed benchmarking report and is available only to systems participating in PABS in the corresponding benchmarking cycle.

3. Summary of the Case Studies

	APS	Arizona SRS	CalSTRS	IMRF	TPS	Washington State DRS
Context for Development	Maximizing operational efficiency and service (2016)	COO wanted to support strategic decisions with data (2006)	Consistent metrics for measuring performance (2005)	Adopted Baldridge Criteria, balanced scorecard (2010)	Accountability and contract management	Worked with Mass Ingenuity to develop Fundamentals Map (2012)
Tool	Power BI	Excel	Excel	Excel	Excel	Excel
Format	Power BI	Printed	PowerPoint	PowerPoint	Printed	PowerPoint
Scope	Operations	Operations	Operations, Member Services	Overall org.	Overall org., Member Service	Operations
Maintenance	Automated	2 FTE	4 FTE	2 FTE	2 FTE	1 FTE
Data Refresh Rate	Weekly	3 Weeks	Monthly	Monthly	2-3 Weeks	Monthly
Management Review	Weekly	Twice a year	Quarterly	10 per year	Monthly	Monthly
Frequency seen by Board	Continuous	Every other month	Quarterly	Quarterly	Quarterly	Annually
Metrics Review	Continuous	Continuous	Annually	1-3 years	Varies (periodic tendering)	Annually
Most Important Factor for Success	Strong leadership support	Consistent metrics	Data-oriented CEO	Getting the data right	Developing a strong reporting process	Aligning strategic plan with operational measures
Biggest Impact	6 service point improvement	Guiding strategic plan	Facilitate deeper discussion about process improvement	Consolidating organization culture	Holding outsourced provider to account and encouraging service improvements	Smarter resource allocation
Next Steps	Add governance measures	Automated reporting, data cube	Improving metrics	Explore ‘Minitab’	Generalizing the report for multiple audiences	Automation, explore Power BI

4. Alberta Pension Services (APS)

APS provides administration services to seven public sector pension plans and two supplementary retirement plans, including the Alberta Local Authorities Pension Plan (LAPP). APS serves 500 participating employers and over 350,000 members.

About APS' dashboard

We were excited to see APS' dashboard, and APS was excited to show us. They insisted on a demo and we understood why - the images reproduced here don't do justice to what APS have created.

Using Microsoft's Power BI, APS have integrated their dashboard reporting in an elegant and highly automated solution, with rich functionality. The dashboards are automatically updated (no periodic updating of spreadsheets) and accessible via a web interface or through an App on mobile devices. APS' leadership team can monitor what's going on in the business wherever they are, customize what they see, and drill down to underlying data instantaneously.

The dashboards are mainly used by the senior management team for operational oversight, but APS' 'Enterprise BI' team is just getting started. They have more ideas for what they want to do with the tools at their disposal. Right now, key components of the dashboards are incorporated in Board papers, but APS is looking at how broader aspects of governance can be incorporated, and how the Board might access the dashboards directly.

There's no doubt that APS' dashboard is cool. What was just as interesting for us, however, was that the 'story' associated with the dashboard is also great. The dashboards have been part of a transformation that has led to significant service improvements. We were delighted to hear that CEM's reporting was one of the catalysts for the change, and many of our metrics are reflected in what is being measured. APS' service score has gone up as a result.

What is also interesting is just how efficient this has been. The licensing costs for Power BI are low. APS' Enterprise BI team only has three people, but they have unique skills. Deploying the dashboards is just one of their responsibilities, and the build time was in the region of 3 months. Given the high level of automation there is practically zero ongoing maintenance.

Things we love about APS' dashboard:

- The wow factor – rich interactive graphics make APS' dashboard easy to look at and easy to work with.
- Customizable at a user level – individual managers can configure what they see to reflect their specific requirements.
- Straight-through – all the data is automated; there are no spreadsheets to update periodically and the dashboard requires almost no ongoing maintenance.
- Low cost and quick to deploy.

APS: Dashboard Q&A

Context

How are you using dashboards at a Board and Senior Management level?

We have an executive dashboard that provides the Senior Leadership Team with a bird's eye view of our entire operations areas, including the Contact Center and Client Operations. We have corporate level KPIs to monitor service quality in those areas, including the pension inception rate, average wait times, call abandonment rates, etc. These are critical performance metrics for us, and are mostly derived from the CEM benchmarking survey.

What is shared at an operational level?

We have several other reports and dashboards that are shared at the operational level. One of them is the Retirement Radar, which is used to manage and prioritize our retirement application files. We call it 'radar' because it shows all our outstanding retirement files – each as a dot on a 2-dimensional plane. Each file is color coded to indicate in which of the three possible states it currently sits:

- *Green* - not due for processing yet
- *Yellow* - due for processing but still within our SLA
- *Orange* - target missed

The idea is to focus on the yellow files and make sure we process them within our SLA. This dashboard essentially acts as our queuing model for managing retirement applications and is a useful tool for resource planning.

What was the context for developing dashboards, i.e., what were you doing before, what was missing, and why did you change?

We transitioned to a new pension administration system. This was completed in mid-2016. Our focus throughout was on maximizing operational efficiency and improving service quality. Our CEM survey results for fiscal year 2015 showed that there were opportunities for improvements in our service proposition. To realize the potential gains we needed a way to measure and monitor performance consistently, and to facilitate better conversations within the organization, hence the dashboards.

Content

What data is being captured/monitored in the dashboards, and why?

Our dashboards employ data and measures from the following operational activities:

- Call Center: speed, volume and quality
- Emails: speed, volume and quality
- File processing: speed, throughput, backlogs and quality
- Retirement: pension inception rate and backlogs

How current is the data that is being shared (e.g., real time, prior month, quarterly)?

The dashboards are refreshed at different intervals, dictated by audience needs. For example, the retirement radar is refreshed twice daily, while the executive dashboard is refreshed daily. Irrespective of the frequency, the data refreshes are scheduled and run automatically without human intervention.

Resourcing and organization

How much time and resources went into the development of the dashboards?

It took about 3 months for a typical dashboard, but we found that timelines really depend on the complexity of the dashboard and the nature of the data. For us, dashboard development has three parts:

1. Data sourcing: setting up connections to the required databases/sources and loading the data.
2. Data modeling: conducting data explorations, setting up entity relationships and defining KPIs and measures.
3. Visualization: building visual and textual presentations.

Data modeling typically accounts for around 75% of the total developments time. There are, however, other BI initiatives that we are working on that will significantly cut dashboard development time, essentially eliminating the data modeling phase.

How much was done internally versus externally, and which vendors were used?

Everything was done internally. We have a dedicated enterprise BI team.

What systems are being used? How integrated are those systems? How many different data sources are there?

Our system transformation project created databases that are more integrated than they were before. Nonetheless, our dashboards still pull data from 5 different databases.

We chose to use Microsoft Power BI as the platform for the dashboard. We completed some due diligence on other software solutions but it was a straightforward choice as Power BI ticked so many boxes, including price. Moreover, our dashboards and the associated measures require advanced statistical measures that are not often readily available in many BI tools. Power BI is able to interface and integrate with our other statistical programming tools. Lastly, most of our other analytical tools are Microsoft products, making Power BI an easy fit.

What resources are needed to maintain the dashboards? Which team has primary responsibility for producing the dashboards and in which area does that team sit?

We have a dedicated Business Intelligence team that handles all analytics work at APS. We do the development, maintenance and deployment of all dashboards. The BI team sits under the Finance division, but works very closely with operations and other divisions.

How frequently is the data reviewed and by whom (i.e., to ensure the dashboards are accurate)?

The underlying data models and measures are reviewed at different levels before they are deployed. Typically the BI team gathers and documents requirements from the intended audience for the dashboard, and completes the initial development work. Then an iterative review/refine process kicks in until all requirements are satisfied. It's a rigorous and time consuming process, but once the dashboard is deployed, the measures are frozen until a need arises in the future for revisiting them. Full spectrum automation and robust data modeling ensure accuracy and reliability at all times.

Outcomes

How has decision making or behavior changed as a result of the dashboards?

Clearly we have been moving rapidly towards evidence-based and data-driven decision making. The availability of the dashboards and analytics in general has been fundamental to that. It has been a big cultural change.

Have the dashboards delivered expected results?

Definitely – you can see it in our CEM survey results.

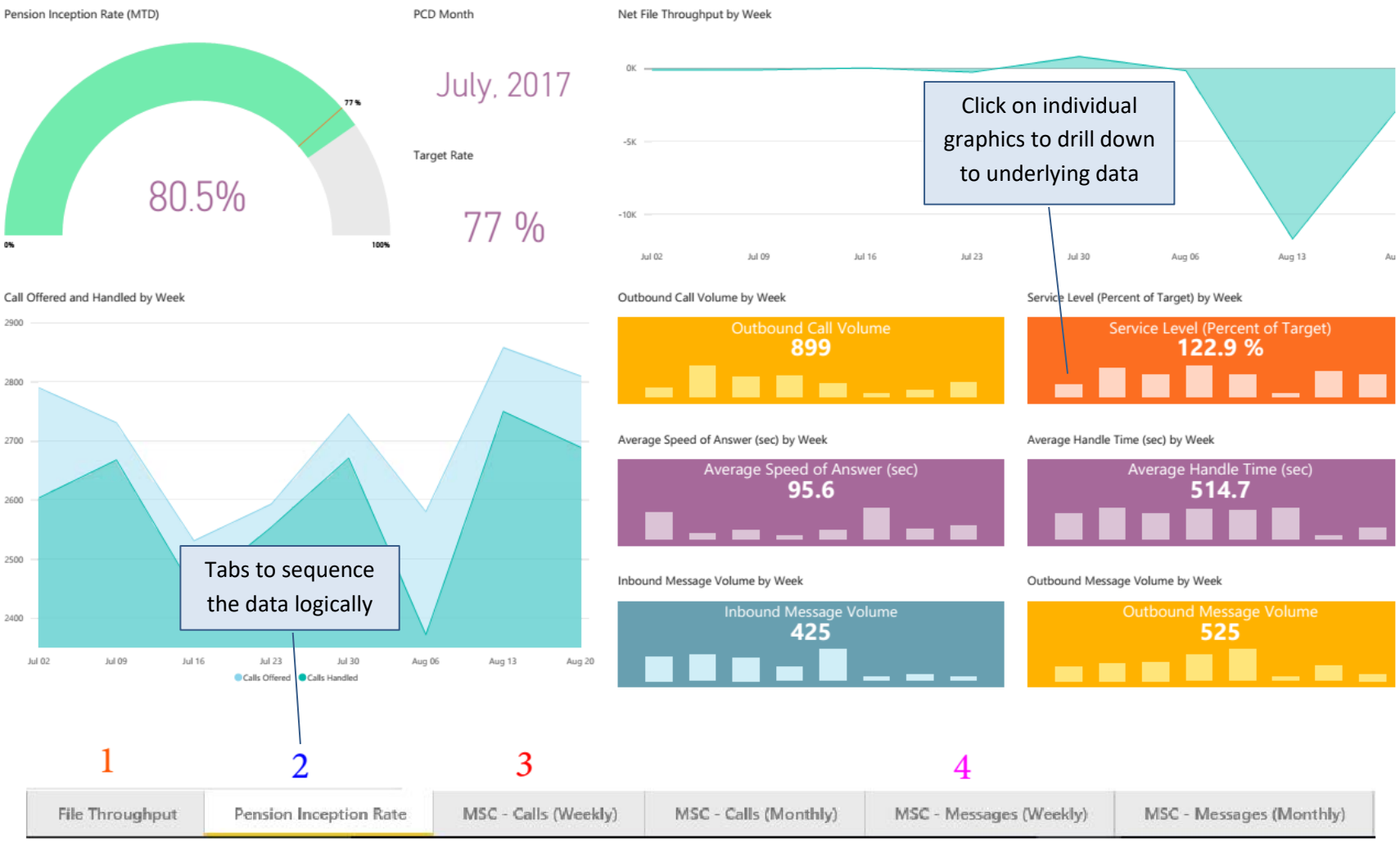
At the end of 2015, our pension inception rate was 29% and our overall service level score was 73. We ranked very low in this area. By the end of 2016, our pension inception rate was over 97% and our service score was 79.

While there were many initiatives driving this improvement, it is difficult to exaggerate the impact of the dashboards. Having the right data in the right hands at the right time really helped us focus on getting things right in that area.

What has worked well? What would you do differently? What advice would you give others?

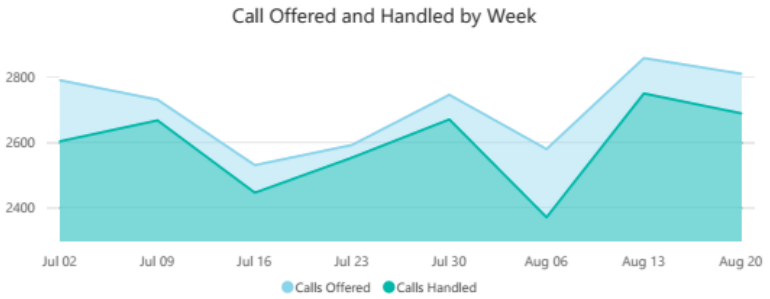
Perhaps the most important factor that has contributed to our success is strong support for our BI vision from APS' leadership. The BI team ultimately reports to the Chief Financial Officer and that means we are visible across the organization and have strong buy-ins. Another factor is having the right combination of skills. The work of the BI team requires IT and statistical skills be matched with business knowledge. We have been effective at bringing the right people together to achieve this vision.

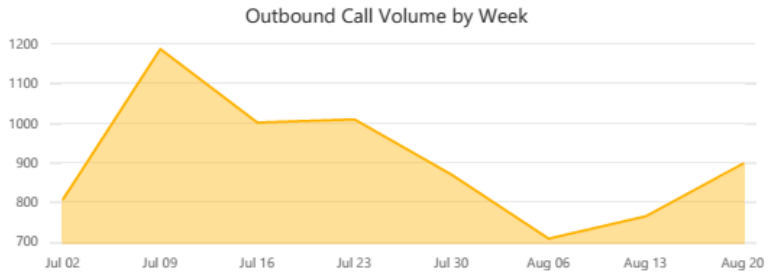
APS' 'landing page' – the opening screen

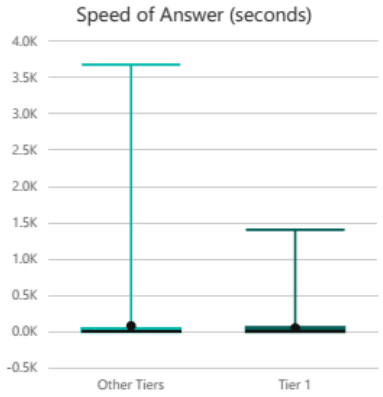


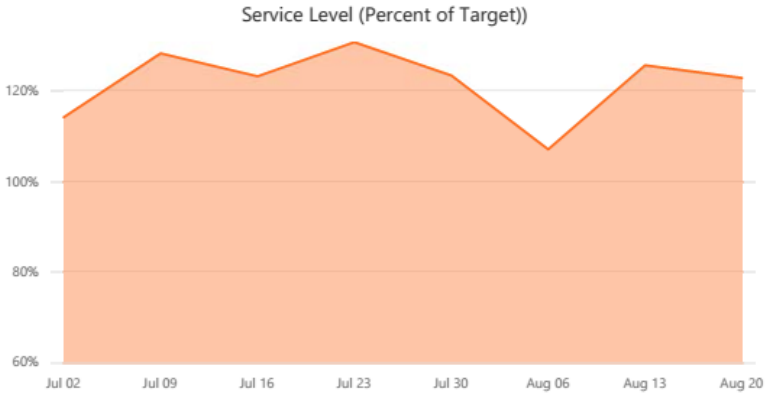
MSC Contact Center Weekly

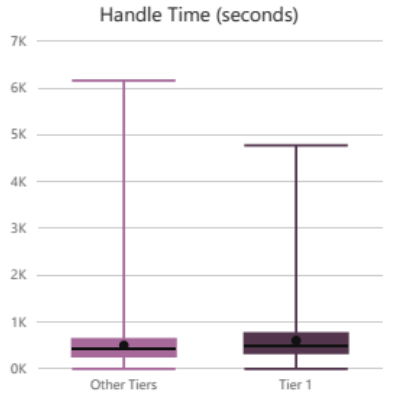
Other Tiers | Self-Serve | Tier 1

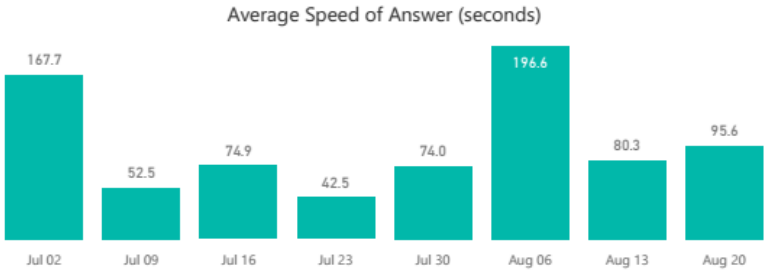


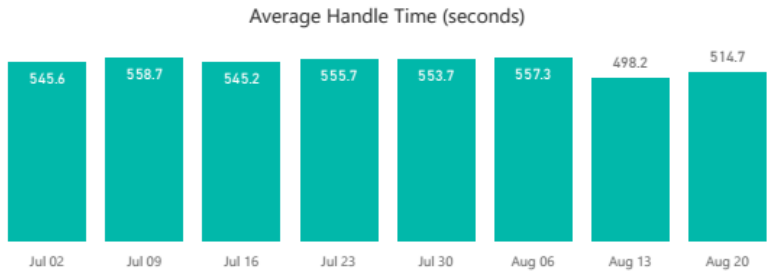




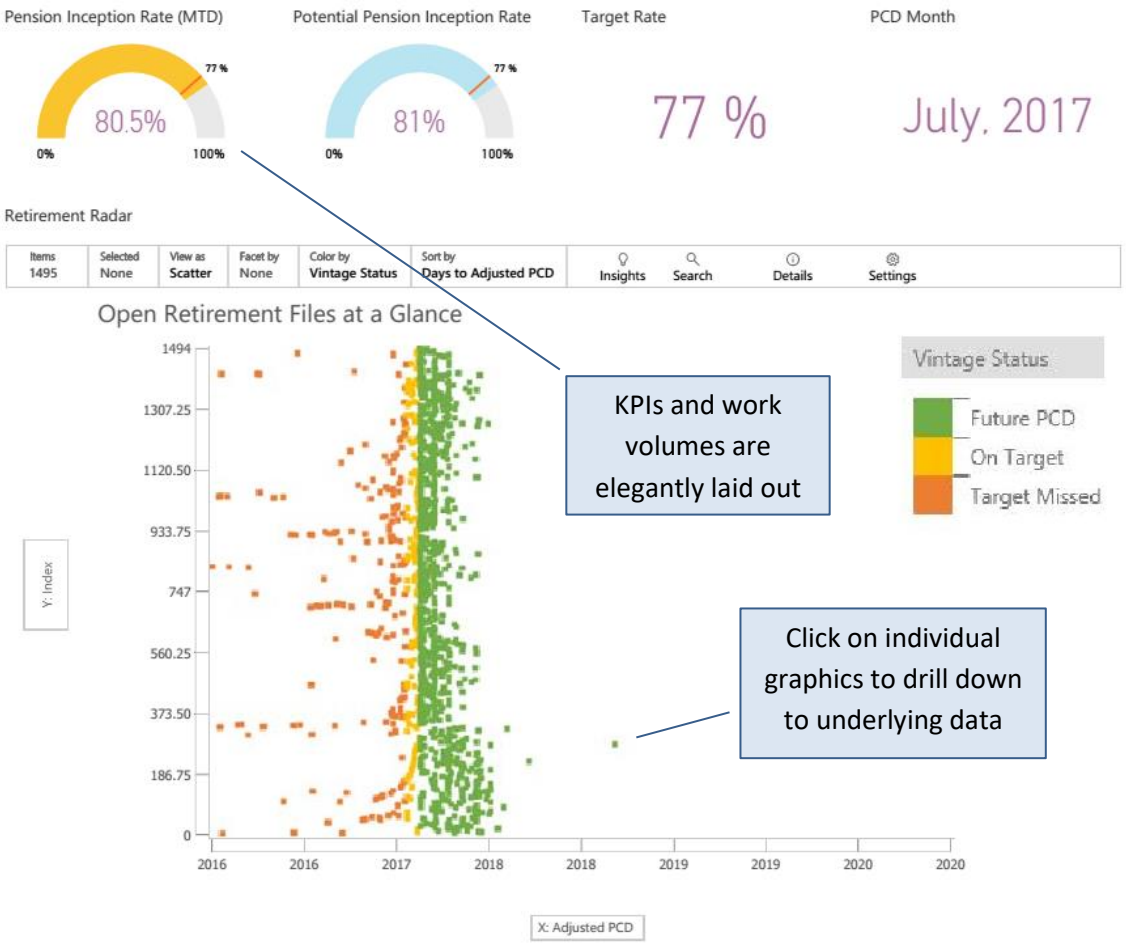


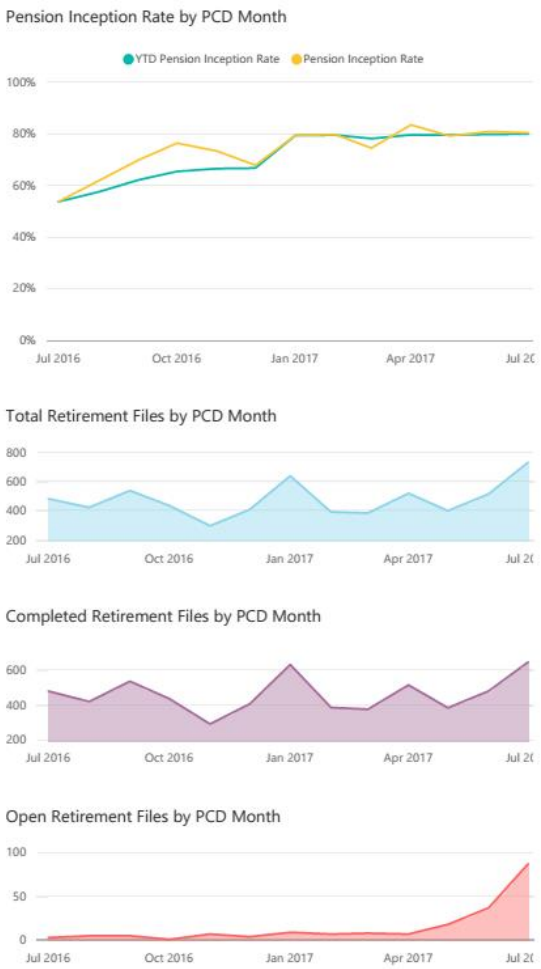






APS' 'Retirement Radar' – a separate dashboard targeted on retirement applications





5. Arizona State Retirement System (ASRS)

The Arizona State Retirement System provides retirement security for employees of the state, counties, municipalities, universities, community colleges, school districts and other political entities. ASRS serves 560,000 members, 600 employers and has approximately $36 billion in assets.

.

About ASRS' dashboard

ASRS has a mature dashboard that is well organized across key operational areas. It comprises 10 pages, with each page providing a snapshot of success against KPIs in that area. Each page is broadly organized in the same way to include consistent volume and satisfaction measures. The layout allows the reader to easily scan and make sense of the data in a logical order. The ten pages cover:

1. Member Advisory Center: Phone (call center)
2. Member Secure Messages (secure mail)
3. One-on-One Counseling
4. Outreach Education and Benefit Estimates
5. Service Purchase
6. Refunds
7. New Retiree and Pension Payroll
8. Survivor Benefits
9. Public Website
10. Secure Website

ASRS has separate dashboards that address wider aspects of system performance, for example, investment returns. Those dashboards are not the focus of this case study.

The data for the operational dashboard is provided by each department and analyzed in Excel. The combined report is manually updated in Excel and has a data-lag of three weeks. ASRS has been running the dashboard for so long, and the process is so well established, that it takes virtually no time to perform the updates – everyone know what's required, and when.

The dashboard is shared every other month with the board, and bi-annually with senior managers, who take a deeper look at the service measures. Since the dashboard displays monthly data over the fiscal year, it's easy to see trends in performance and recognize the impact of operational changes.

The next step for Arizona is to integrate the data in an automated dashboard, which would allow for real-time, data-driven decision making.

Things we love about Arizona's dashboard:

- The dashboard is logical and well ordered. It is easy to follow because it shows volume, timeliness, satisfaction, etc., consistently on each page.
- It is mature and well established – as a result, everyone knows what they are doing and so the time and resources allocated to the dashboard are minimal.
- It aligns very well with CEM's service metrics.

Arizona: Dashboard Q&A

Context

How are you using dashboards at a Board and Senior Management level?

The Operations Report is included in the Director's Report section of each board packet. It is distributed every other month to the board, and displays month-to-month trends for key metrics in member services and operations. It is not discussed in detail at every board meeting, unless trends show unique or unusual activity.

The same dashboard is shared with senior managers twice a year and is discussed thoroughly in the context of how operational trends align with strategic objectives.

What is shared at an operational level?

Although this dashboard uses data from separate departments' operations, it is not necessarily shared at an operational level. However, the act of collecting data for the dashboard forces managers to monitor and reflect on their teams' performance. The call center, for example, has its own dashboard of department-specific metrics that the manager uses to evaluate operations.

What was the context for developing dashboards, i.e., what were you doing before, what was missing, and why did you change?

Over 10 years ago, when Arizona first became a client of CEM, the COO urged the development of an operations dashboard to monitor performance. He wanted to support strategic decisions with data.

Form and content

What form do the dashboards take?

The dashboards are a series of Excel spreadsheets that populate graphs and charts with data provided by individual departments. They're printed out and put into packets for the board.

What data is being captured/monitored in the dashboards, and why?

The dashboards monitor operational metrics such as call center abandonment rate, timeliness of refunds, etc. The measures are picked by the strategic planning and analysis team to provide a summary of system-wide operational health and performance, compared to strategic objectives.

How current is the data that is being shared (e.g., real time, prior month, quarterly)?

The data is not live. Since each team feeds its own data to the Strategic Planning and Analysis team, the dashboard must be 'run' manually when all the data has been collected. As a result, the dashboard data has a 3-week lag.

Resourcing and organization

How much time and resources went into the development of the dashboards?

Each page was built over time. To do that, we needed to:

1. Know what our objectives were
2. Ensure that we were collecting the proper data
3. Ensure that we had good performance measures

If we had all the data needed to create the dashboard, it would not take very long to put a page together. However, we rarely found ourselves in a situation where we had all the data we needed from the start. We would need to start collecting the right data before we could build the report, which can take months depending on the priorities of technology services.

How much was done internally versus externally, and which vendors were used?

100% was done internally.

What systems are being used? How integrated are those systems? How many different data sources are there? How frequently is the data refreshed?

We use SQL for data storage and retrieval, and Microsoft Excel for analysis. The dashboards don't use Application Programming Interfaces (APIs) and so each report is manually updated, with a lag of 3 weeks.

What resources are needed to maintain the dashboards? Which team has primary responsibility for producing the dashboards and in which area does that team sit?

The Strategic Planning and Analysis team comprises four staff members, two of whom maintain and produce the dashboards. The team sits within the Director's Office.

How frequently is the data reviewed and by whom (i.e., to ensure the dashboards are accurate)?

The COO and Assistant Director of Member Services regularly review operational data and try to make sense of the data and their underlying drivers in the context of the organization's strategic plans.

How and when are metrics within your dashboard reviewed, if at all (i.e., how and when are the measures changed, or updated)?

The role of the Strategic Planning team is to make sure performance is reported, to monitor actual performance versus objectives, and to facilitate discussions and action when targets are being missed or exceeded regularly. Our team will make recommendations for changes to metrics, but we do not have discretion to change metrics without approval from executive leadership.

Outcomes

How has decision making or behavior changed as a result of the dashboards?

Since the dashboards provide monthly trends over a year, it is easier to see cycles and fluctuations in operations. This helps the team to pinpoint and analyze the underlying phenomena.

Have the dashboards delivered expected results?

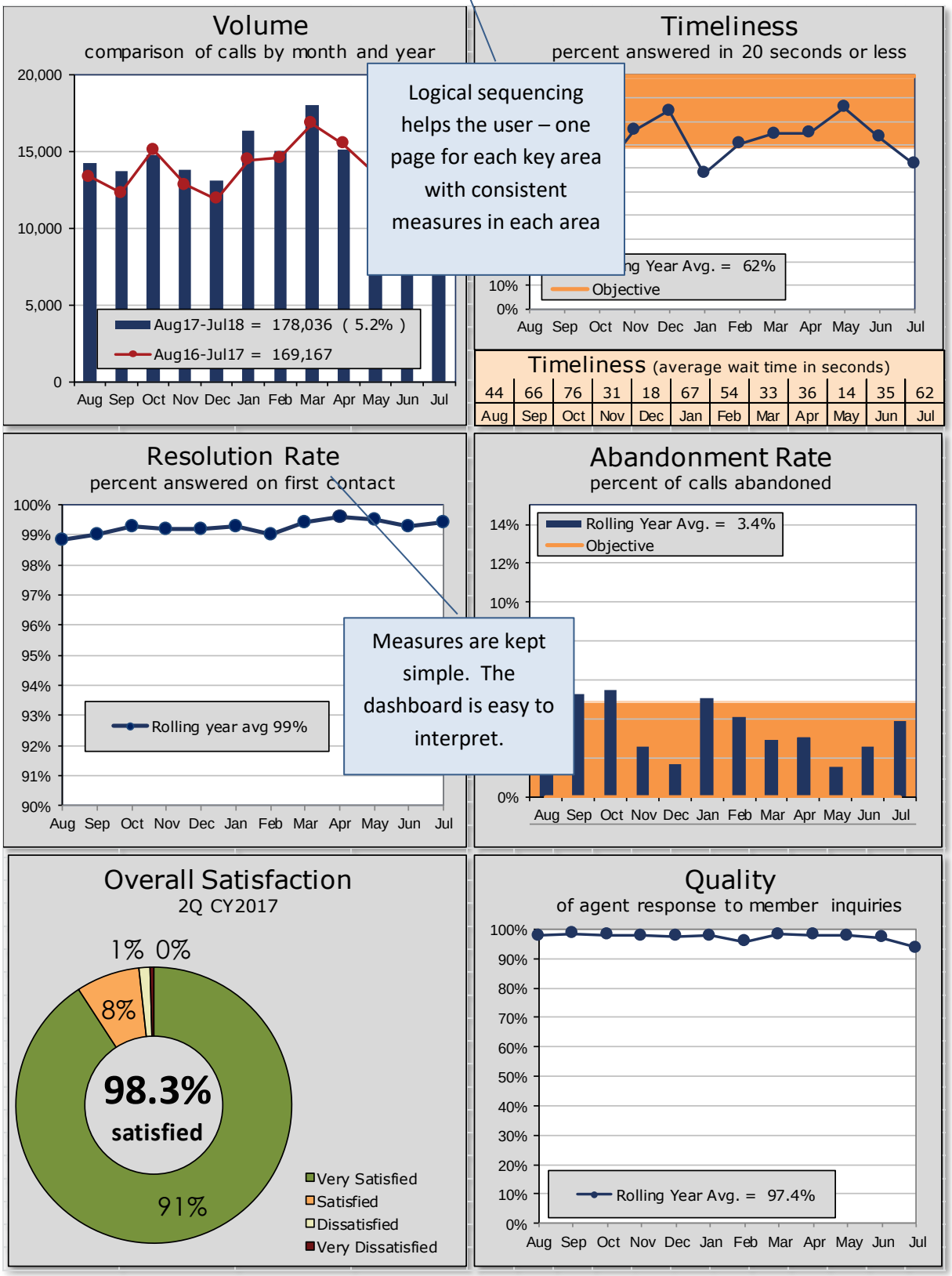
Arizona's dashboard reporting is a mature process now, and is used regularly by the assistant director of member services. It evolves symbiotically with our strategic objectives, and has been useful in guiding the organization since its inception.

What has worked well? What would you do differently? What advice would you give others?

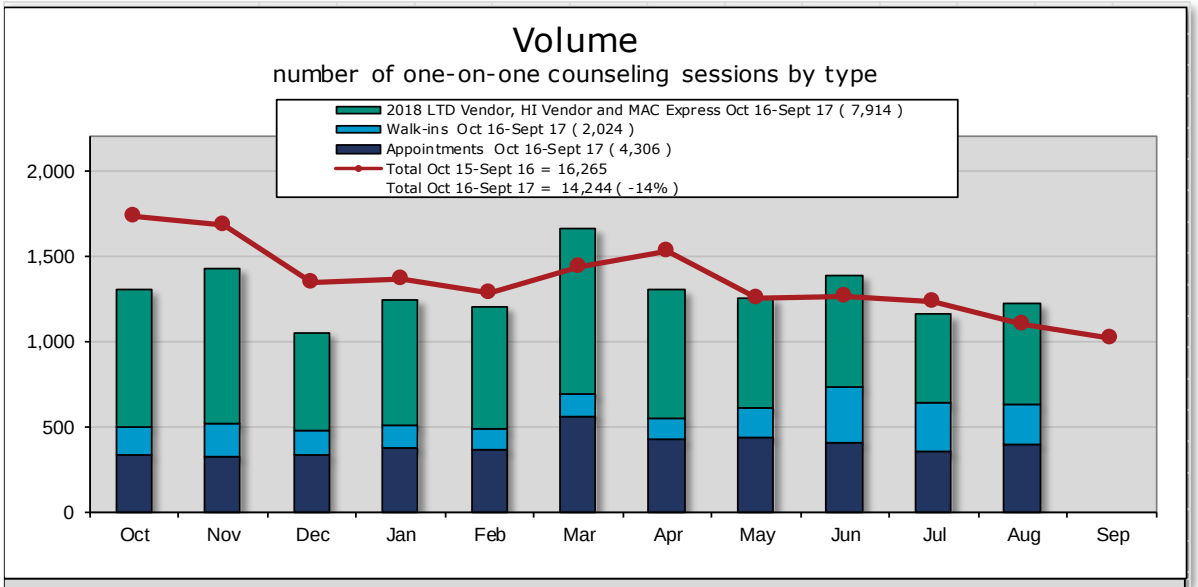
The current system has worked well. It is useful to have one main person consolidate the dashboard measurements and calculations. For example, if each department is reporting its own metrics, there might be logical mismatches (e.g. averages could be weighted differently; there could be different definitions of what is considered 'completed', etc.).

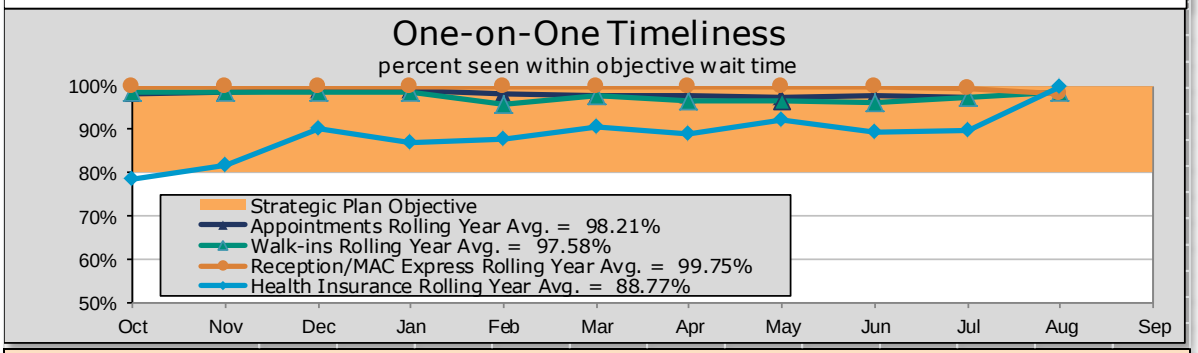
Potential areas of improvement include automated dashboard reporting within individual departments and switching from SQL to a 'data cube', where operational data is automatically stored. The Strategic Planning team also wants to change how the organization monitors its strategic plan. Currently, the plan resides in a Microsoft Word document, but the hope is to integrate it within dashboards.

Member Advisory Center: Phone



One-on-One Counseling

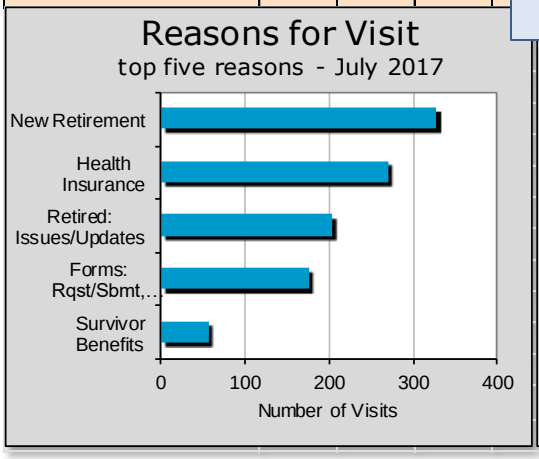


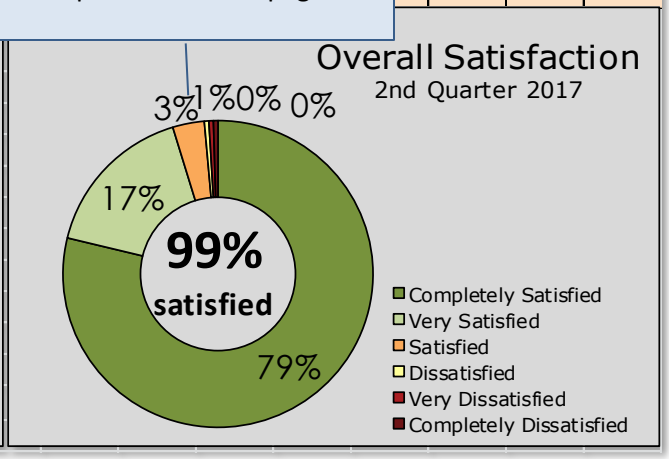


Timeliness (average wait time in minutes)

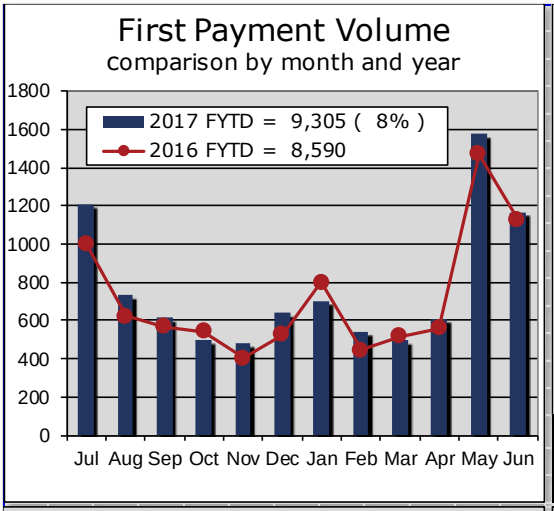
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Appointments	0	1	0	1	0	0	1	0	1	0	0	0
Walk-Ins	4	4	5	4	6	5	5	5	6	5	4	0
Reception/MAC Express	0	0	0							0	0	0
Health Insurance	9	7	5							5	4	0
LTD Vendor	0	0	0							0	0	0

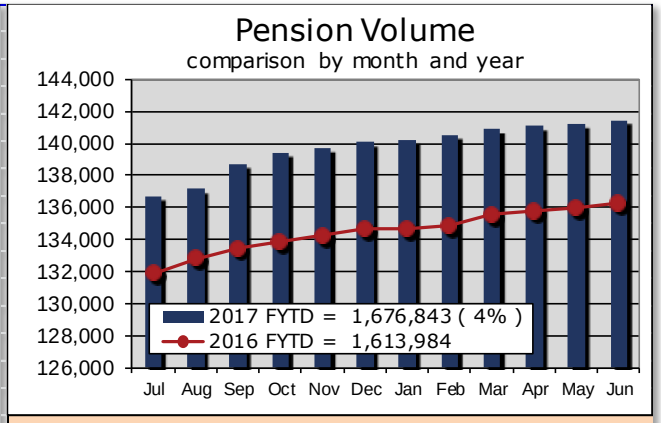
Satisfaction measures are repeated on each page





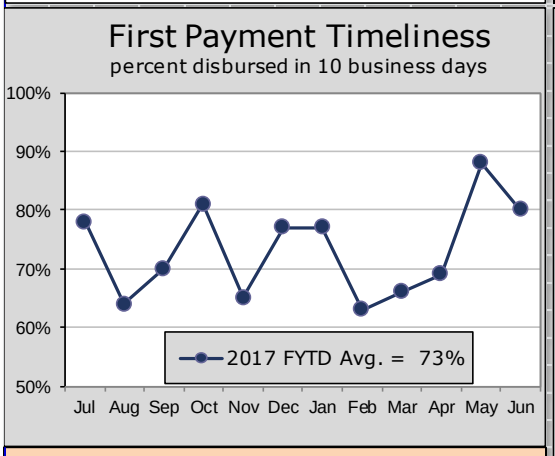
New Retiree and Pension Payroll





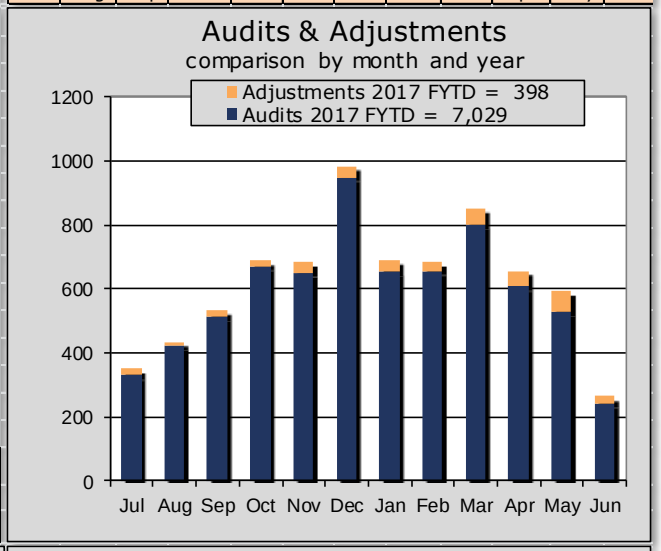
Pension Payment (percent disbursed by 1st of the months)

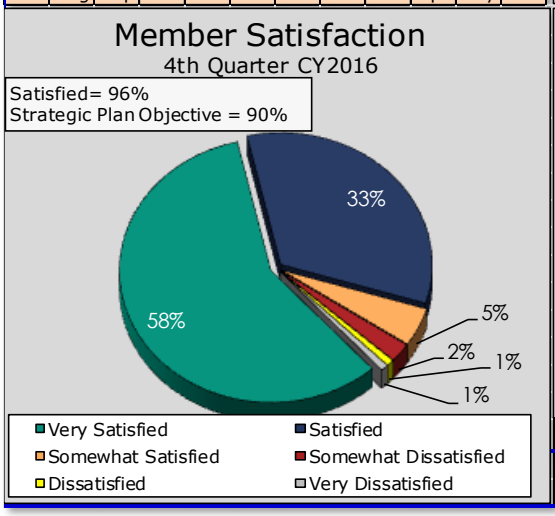
100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun

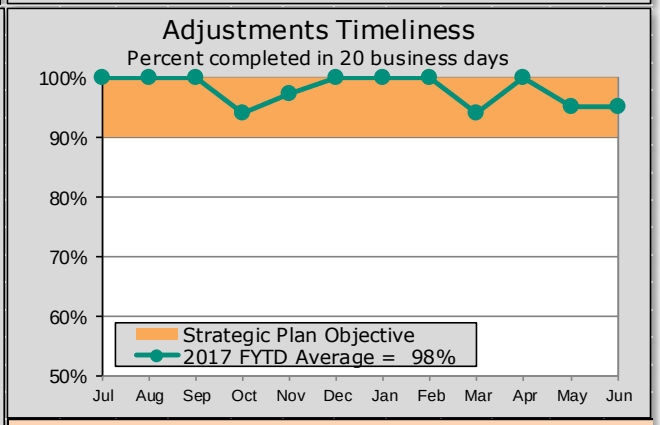


First Payment Timeliness (average turnaround time in days)

10	12	11	7	18	12	13	22	26	22	8	12
Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun







Adjustments Timeliness (average turnaround time in days)

5	9	5	7	10	10	7	13	11	10	8	13
Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun

6. California State Teachers' Retirement System (CalSTRS)

The California State Teachers' Retirement System, with over 900,000 members and beneficiaries, 1,700 employers, and $210 billion in assets as of June 30, 2017, is the largest educator-only pension fund in the world.

About CalSTRS' Dashboard

What really interests us about CalSTRS' dashboard is how it's used systematically across the organization.

CalSTRS' culture emphasizes data-driven decision making. Accountability starts with the CEO, who is a strong sponsor for the dashboards and an active participant in sharing and analytically appraising key performance data. The dashboards encourage conversations around data at every level, and keep the whole organization focused on the critical aspects of CalSTRS' mission.

CalSTRS' process for presenting their dashboards is the most structured that we've seen. Every quarter, each branch business area, led by a branch executive, conducts an internal 'business review'. This is when branch directors discuss their business areas' results with the executive. Key results from each business review are then compiled into organization-wide dashboards, and presented at the Customer Service Performance Review or Operations Performance Review.

The dashboards are then subjected to detailed scrutiny at further quarterly meetings involving other key leaders and CalSTRS' executive team. The nature of the information presented makes it very clear where CalSTRS is performing well, and where there are issues. The dashboards root cause analyses and action plans provide the platform for informed debate, allowing the executive team to hold directors accountable for delivery, identify where interventions are necessary, allocate resources, and agree upon next steps.

CalSTRS' dashboard content is deep and rich, but it's the strength of the process and the accountability that follows that really bring the dashboards to life.

Things we love about CalSTRS' dashboard:

- A one-page stoplight chart displays the targets and results of each service area. This gives the reader a quick overview of operational health across the organization.
- Member service graphs show monthly data over the past 3 years, so both short-term and long-term trends are readily available.
- Depth of analysis: each graph is accompanied by root cause analyses, success drivers, and future steps. There is already a plan in place when the dashboard is presented to executives.

CalSTRS: Dashboard Q&A

Context

How are you using dashboards at a Board and Senior Management level?

The Board receives quarterly performance updates in the form of one-page dashboards posted to the Board website. The Board's 'Benefits and Services Committee' receives an annual presentation on member service results.

At an executive level, there are two performance meetings:

1. Customer Service Performance Review (for member service areas)
2. Operations Performance Review (for internal operations, such as talent management or procurement)

These are presented to executives by directors at quarterly performance reviews.

What is shared at an operational level?

It's up to directors to disseminate department-specific dashboards to their teams, or to use the performance measures as tools for guidance. The complete dashboards are posted on the intranet for viewing by all CalSTRS staff.

What was the context for developing dashboards, i.e., what were you doing before, what was missing, and why did you change?

Beginning in 2005, CalSTRS held monthly performance meetings where branches and individual directors presented operational results to a roundtable of executives and other directors. Structure, consistent measurement, and visualization data were missing from the presentations. CalSTRS then implemented Active Strategy, a strategic planning software, to collect and display data. Data stewards and directors found this cumbersome and costly. Four years ago staff began developing dashboards using MS Excel and PowerPoint.

Form and content

What form do the dashboards take? What data is being captured/monitored in the dashboards?

The dashboards are presented in a PowerPoint deck of over 40 slides. The first slide is a one-page stoplight chart that displays the targets and results of each measure which gives the reader a quick idea of operational health across the organization. Each individual key performance indicator or service performance objective is accompanied by a graph and additional analysis on subsequent pages.

The Customer Service dashboard includes timeliness, processing and service quality measures. The Operational dashboard includes financial, technology services and administrative measures.

How current is the data that is being shared (e.g., real time, prior month, quarterly)?

Data presented at quarterly meetings lag by approximately 1.5 months in order to capture data from point of service surveys.

Resourcing and organization

How much time and resources went into the development of the dashboards?

It was labor intensive, but worth it. This has been a highly iterative process with multitudinous changes over the last decade of development. Consistent focus on performance measurement created an environment of data accountability that endorsed performance discussions and allowed evolution to the current state. Strategic partnerships with each business area continue to drive this force forward.

How much was done internally versus externally, and which vendors were used?

As the process works today, all dashboards are developed internally. As noted previously, a vendor was used in the past.

What systems are being used? How integrated are those systems? How many different data sources are there? How frequently is the data refreshed?

Microsoft Excel is used for analysis, SharePoint is used for data sharing, and PowerPoint is used for display.

We have 23 data sources including Genesys IVR, *my*CalSTRS, START, MIC, Thomas Ferrous, SRA, DSD (Access database), COG, Certain, SharePoint, Survey Monkey, TCG, RFP, VOYA, Investment Accounting, Business Direct, Unicenter, SIR, JLL, WCF, MSC, and MIRS.

Some of these systems are integrated and some are not. Most of the data is captured on a monthly basis, while some is captured quarterly or annually.

Monthly data allows for higher accuracy when calculating quarterly percentages. Most dashboards are presented with quarterly data while graphical representations are shown month over month.

What resources are needed to maintain the dashboards? Which team has primary responsibility for producing the dashboards and in which area does that team sit?

Each business area has its own data steward who collects and feeds data into the SharePoint site. The dashboards are produced by the Strategy and Organizational Performance (SOP) team, which sits within the Enterprise Strategy Management division within the Executive branch and reports to the COO. The Strategy and Organizational Performance team has a manager and four full-time positions that are responsible for working with business areas to identify KPIs, overseeing data collection and creating and updating the slide decks.

How frequently is the data reviewed, and by whom (i.e., to ensure the dashboards are accurate)?

Every quarter, after the SOP team's QA process, the data and graphical representations are reviewed by the data stewards and directors within each business area prior to each business review. Occasionally the internal audit team will review all CSPR performance objective reporting for accuracy of data collection and quality control checks.

How and when are metrics within your dashboard reviewed, if at all (i.e., how and when are the measures changed or updated)?

Executive-led conversations during a performance review can spark changes or adjustments to the metrics as needed. But more often metric reviews happen outside of the formal performance review, and are held in individual business areas. SOP meets annually with business area leaders to analyze whether the best measures and targets are in place to support the overall objectives. Changes to Service Performance Objectives reported to the board are approved by the executive team.

Outcomes

How has decision making or behavior changed as a result of the dashboards?

The dashboards have helped:

- Strengthen relationships between business areas,
- Highlight dependencies,
- Encourage collaboration,
- Increase accuracy in tracking processes,
- Keep staff focused on targets and goals,
- Increase accountability, and
- Facilitate deeper discussion about process improvement.

Have the dashboards delivered expected results?

Yes, the dashboards enable the Executive Team to monitor performance more easily, highlight areas that are not meeting performance targets, and strategize on tactics. The dashboards encourage collaboration through multiple levels of the organization and motivate business areas to deliver higher service.

What has worked well? What would you do differently? What advice would you give others?

What worked well?

- Open and collaborative discussions around performance,
- Accountability and follow-up on action items, and
- A data-oriented CEO to support the project.

What would we do differently?

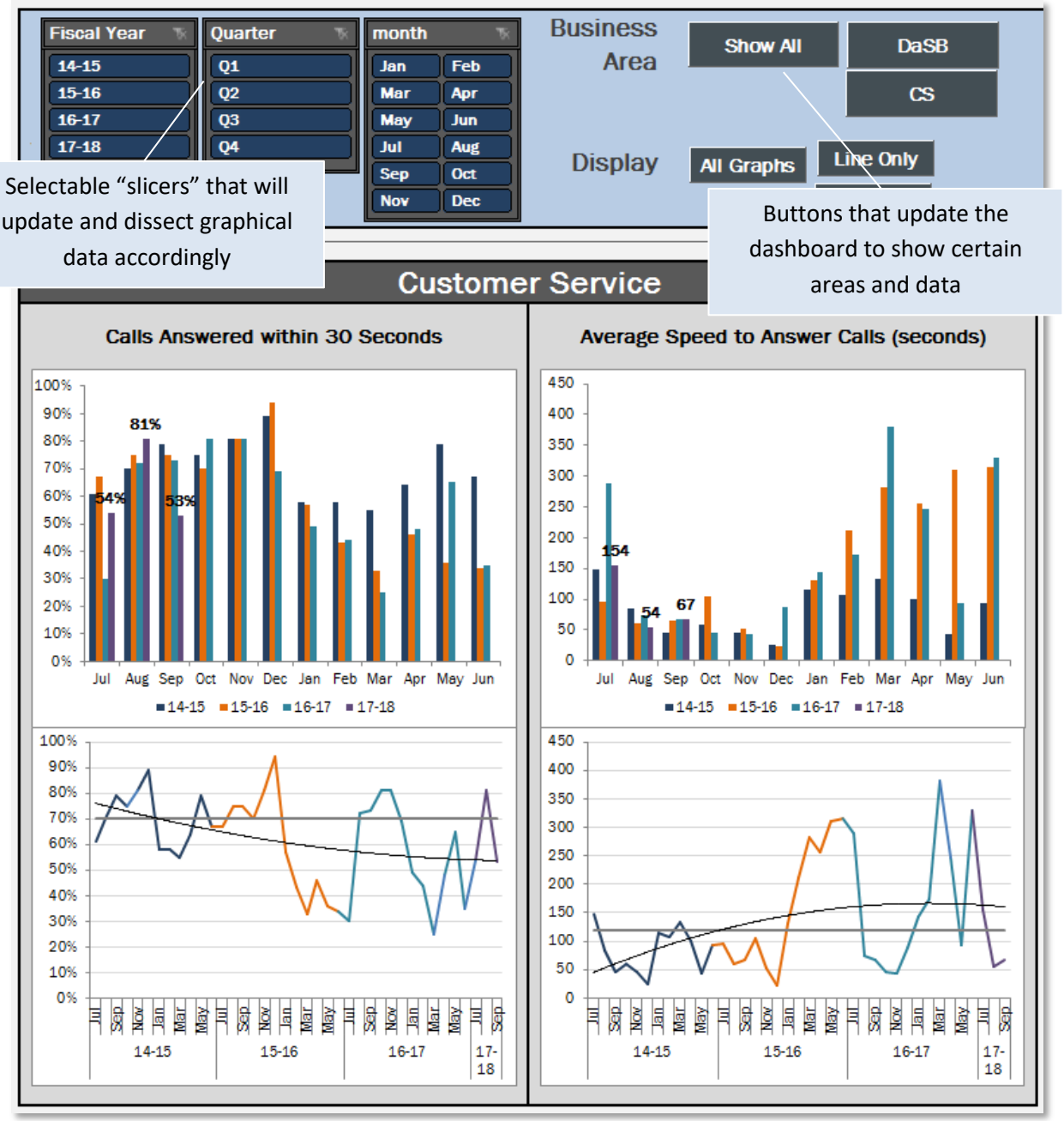
- Make better use of time during performance reviews (not necessarily discussing every individual metric), and
- Develop the ability to drill down using more adaptable charts/graphs.

Our advice:

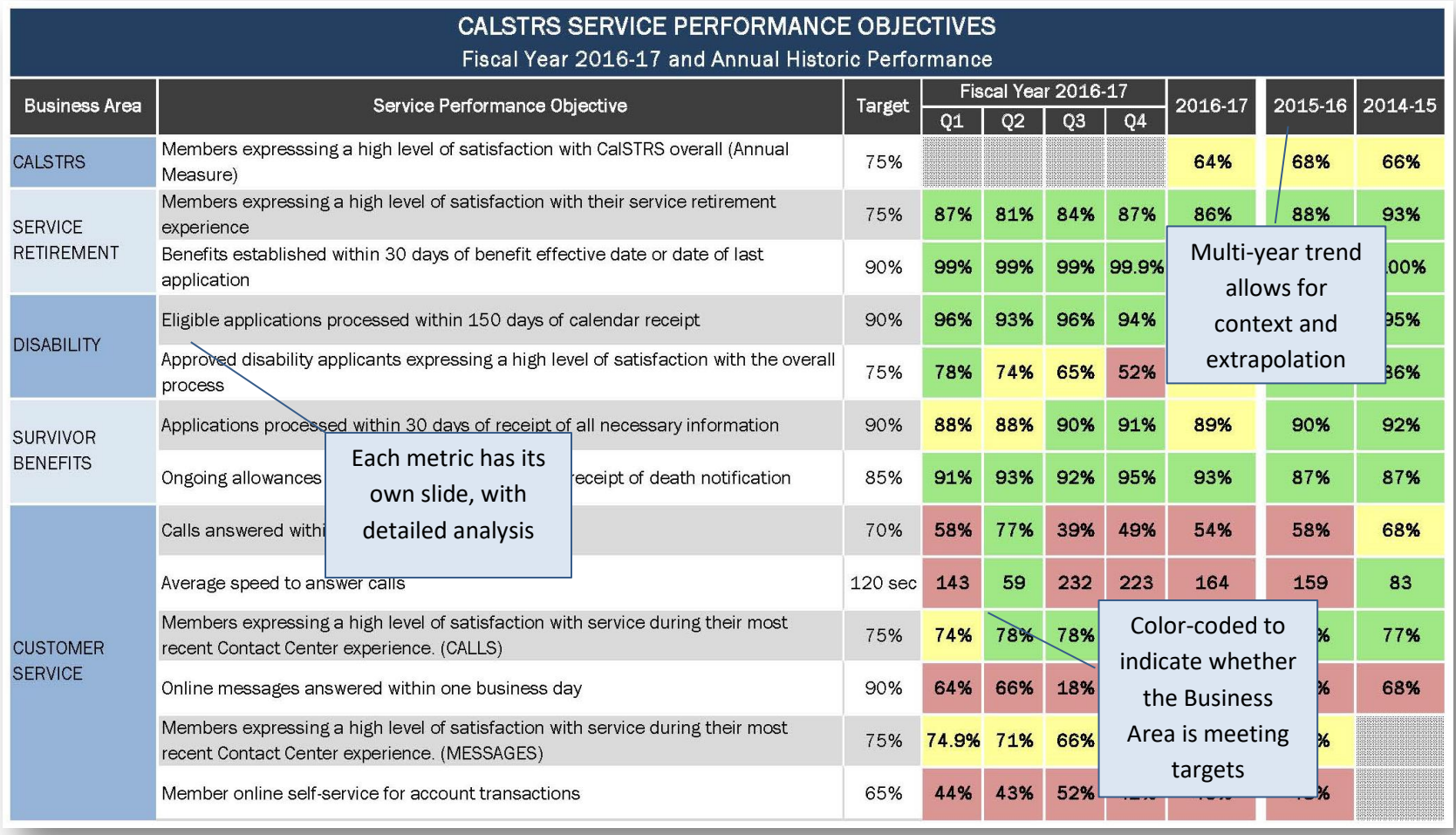
- Go slowly—this is a culture shift and openness to greater accountability can take time—promote early adopters,
- Maintain positive relationships with those managing data—not an 'us vs. them' mentality,
- Help directors identify key points to communicate with executives to keep the meetings on track and on time, and
- Actively seek support from executives who believe in data-driven decision making.

What are your next steps for dashboard use?

CalSTRS continues to develop dashboard use through automation and advanced Excel methodology and techniques. The newest dashboard will be dissectible by time frame and Business Area, which will allow further analysis into performance trends and deeper understanding of relationships between various KPIs and processes. As the SOP team strengthens their partnerships with each Business Area, the expectation grows for greater data availability and dashboard visibility.



CalSTRS Customer Service Performance Review – Stoplight Chart



CALSTRS SERVICE PERFORMANCE OBJECTIVES
Fiscal Year 2016-17 and Annual Historic Performance

Business Area	Service Performance Objective	Target	Fiscal Year 2016-17				2016-17	2015-16	2014-15
			Q1	Q2	Q3	Q4			
CALSTRS	Members expresssing a high level of satisfaction with CalSTRS overall (Annual Measure)	75%					64%	68%	66%
SERVICE RETIREMENT	Members expressing a high level of satisfaction with their service retirement experience	75%	87%	81%	84%	87%	86%	88%	93%
	Benefits established within 30 days of benefit effective date or date of last application	90%	99%	99%	99%	99.9%			00%
DISABILITY	Eligible applications processed within 150 days of calendar receipt	90%	96%	93%	96%	94%			95%
	Approved disability applicants expressing a high level of satisfaction with the overall process	75%	78%	74%	65%	52%			36%
SURVIVOR BENEFITS	Applications processed within 30 days of receipt of all necessary information	90%	88%	88%	90%	91%	89%	90%	92%
	Ongoing allowances	85%	91%	93%	92%	95%	93%	87%	87%
CUSTOMER SERVICE	Calls answered withi	70%	58%	77%	39%	49%	54%	58%	68%
	Average speed to answer calls	120 sec	143	59	232	223	164	159	83
	Members expressing a high level of satisfaction with service during their most recent Contact Center experience. (CALLS)	75%	74%	78%	78%			%	77%
	Online messages answered within one business day	90%	64%	66%	18%			%	68%
	Members expressing a high level of satisfaction with service during their most recent Contact Center experience. (MESSAGES)	75%	74.9%	71%	66%			%	
	Member online self-service for account transactions	65%	44%	43%	52%			%	

Each metric has its own slide, with detailed analysis

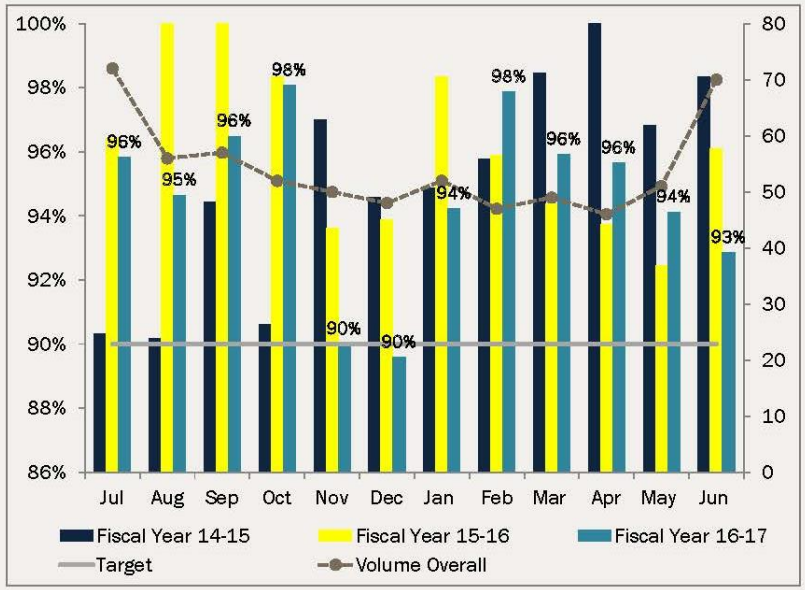
Multi-year trend allows for context and extrapolation

Color-coded to indicate whether the Business Area is meeting targets

CalSTRS Customer Service Performance Review

CALSTRS **Disability** 3

Service Performance Objective	Goal	Target	Q1	Q2	Q3	Q4	FY 16-17
Eligible applications processed within 150 days of calendar receipt	⇧	90%	96%	93%	96%	94%	95%



Root Cause Analysis / Drivers for Success

Summary:
CalSTRS received 198 applications (18% below the Q4 average) and closed 174 applications this quarter (net +24)

Success Drivers:
- 5 out of 8 remaining analysts are highly experienced
- Effective business and casework models
- Highly engaged team members

Custom analysis for each individual measure

Open Caseload as of (6/30/17)

Age in Days	Case Volume	% of Open Caseload
000 - 090	146	83.0%
091 - 120	18	10.2%
121 - 150	12	6.8%
150+	0	0%
Total	**176**	**100%**

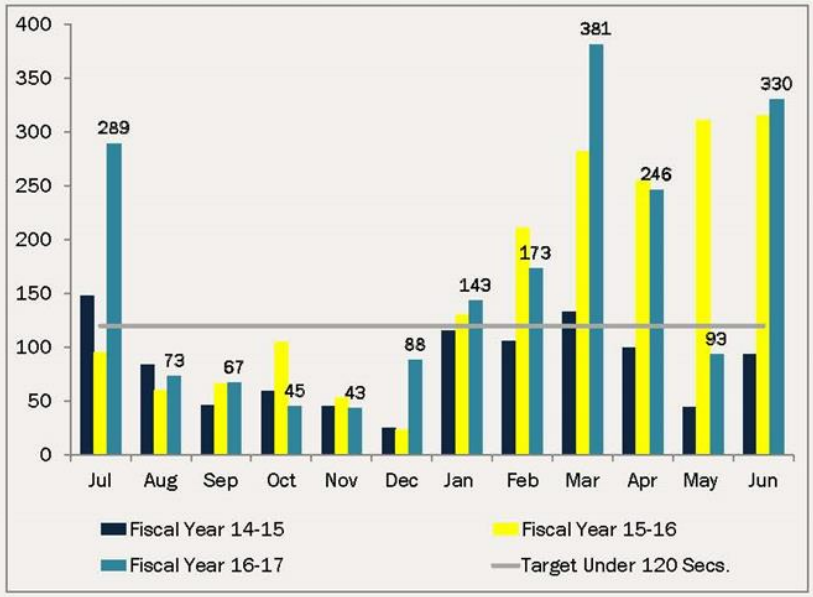
CalSTRS Customer Service Performance Review

CALSTRS

Customer Service

11

Service Performance Objective	Goal	Target	Q1	Q2	Q3	Q4	FY 16-17
Average speed to answer calls	⇩	120 sec	143	59	232	223	164



Root Cause Analysis / Drivers for Success

Measure	CS	RR
ASA	228	190
AHT	10.4	8.3

Summary provides context for lower/higher performance

Summary:

- Slight decrease in ASA due to newer staff coming out of training
- Staff increased efficiency in requesting and updating member contact information over the phone

Root Cause Analysis:

- Call complexity – Direct deposit letter confusing to members who initiated a new direct deposit request
- Call volumes – We received 2,666 more calls in May, and 1,405 more calls in June 2017 than in 2016

Path Forward:

- Maintain low vacancy rate through continuous recruitment efforts
- Redirect positions from support functions to Contact Center, when possible

CalSTRS Operations Performance Review – Hire to Separation Analysis

CALSTRS

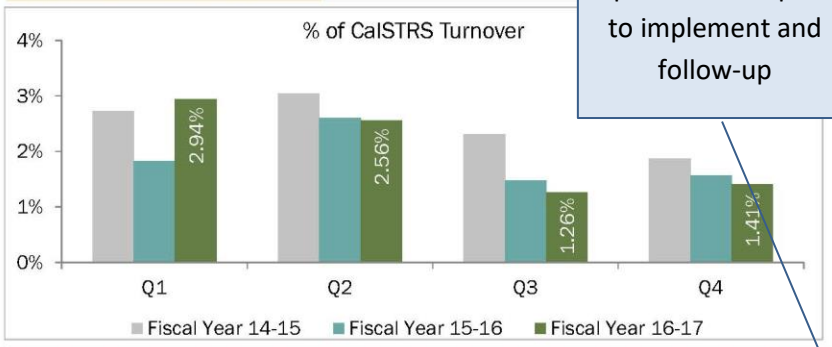
Hire to Separation
Engage, Develop and Retain Employee

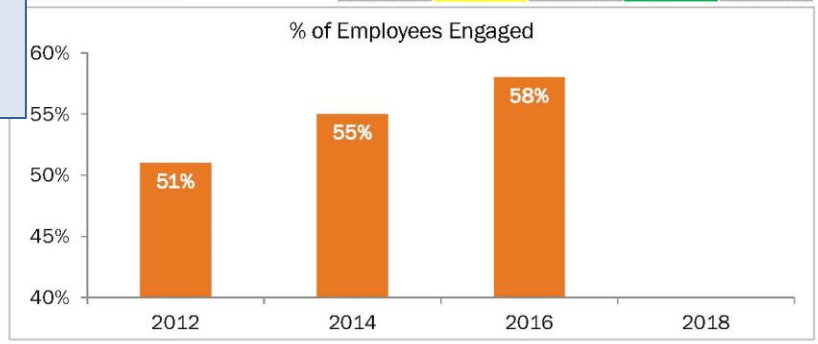
12

Function	KPI	Goal	Target	Q1	Q2	Q3	Q4	FY 16-17
Engage, Develop and Retain Employee	% of CalSTRS Turnover	⇩	10%					8.17%

Function	KPI	Goal	Target		FY 13-14	FY 14-15	FY 15-16	FY 16-17
Engage, Develop and Retain Employee	% of Employees Engaged	⇧	58%		55%		58%	

Specific action plan to implement and follow-up





Root Cause Analysis / Drivers for Success

KPI #1: (*Quarterly Target*)
CalSTRS turnover remains low in Q4 and below the threshold of 10% annually.

ESM Note: Although turnover percentages are shown on a quarterly basis, this is an annual measure with a target of 10% or lower.

KPI #2: (*Biennial Target*)
- 2016 reflects an increase in employee engagement to 58%.
- SRA completed its review of key drivers of employee engagement. Communications and Human Resources partnering to implement strategies.

7. Illinois Municipal Retirement System (IMRF)

IMRF is the pension fund for employees of local governments and school districts in Illinois (with the exception of the City of Chicago and Cook County). IMRF serves 400,000 members, 3,000 employers and has approximately $40 billion in assets.

About IMRF's dashboard

IMRF's dashboard is possibly the most holistic and strategically focused dashboard that CEM has looked at. Produced for the Board and shared throughout the organization, it provides a simple and powerful snapshot of the organization's progress towards its strategic objectives.

IMRF is widely recognized for the rigor it applies to strategic planning. Since 2009, IMRF has applied the Baldrige Excellence Framework to refine its vision and mission. IMRF uses the framework to align its strategic priorities with its vision and to ensure that those priorities are actionable. IMRF is 100% focused on its strategic objectives, from top to bottom.

This is important because the dashboard is one of the key points of reference that keeps the whole organization focused. It delivers, in one place, a whole-of-organization health check. It brings together all of the most important metrics that measure progress towards IMRF's vision. The dashboard is as important to the Board as it is to leadership and staff.

IMRF gathers data from across the organization and presents the dashboard under 4 headings:

Area	*Nature of measures*
Financial health	Funding and investment performance
Operational excellence	CEM service score, costs, call outcomes and hold times
Customer engagement	Member and employer engagement and satisfaction
Workforce engagement	Engagement survey results and staff turnover rates

The dashboard is currently produced in Excel, but shared in a more elegant form via the corporate intranet. This involves work and coordination across the organization, but IMRF is looking at ways to develop its approach, including the potential of using Power BI.

Things we love about IMRF's dashboard:

- It's 100% focused on the material aspects of the organization's strategic objectives. It provides a simple and effective snapshot of IMRF's 'Journey of Excellence'.
- It is relevant to everyone in the organization. Everyone knows which target(s) they contribute towards, and its relevance to the overall objective.
- It integrates CEM measures – highlighting how CEM's analysis can be used in establishing objectives and tracking progress towards those objectives.
- It is shared across the organization over the corporate intranet using an elegant interface.

IMRF: Dashboard Q&A

Context

How are you using dashboards at a Board and Senior Management level?

Board of Trustees: The Board reviews our dashboard (Leadership Scorecard) on a periodic basis, using it as a key tool to measure the achievement of our Strategic Plan. Staff provides the Board with quarterly reports on the progress of all action plans, along with metrics supporting our Strategic Objectives. These come directly from our Leadership Scorecard. Staff also presents an annual review of our Leadership Scorecard at a Board meeting early in each calendar year.

Senior Management: All levels of leadership, including directors, managers, supervisors and team leaders, attend 10 meetings per year to review all the Leadership Scorecard metrics and progress of the action plans.

What is shared at an operational level?

The Leadership Scorecard metrics are shared via a tool called PREZI on our internal intranet (COMPASS). This is the same data that is reviewed by the Board and the leadership team. It comes directly from our Leadership Scorecard.

What was the context for developing dashboards, i.e., what were you doing before, what was missing and why did you change?

We adopted the *Baldrige Criteria for Performance Excellence* as the framework for our Journey of Excellence in 2009. We submitted an award application to the Illinois organization responsible for administering a Baldrige-like award in May 2009. As part of the award process, we received a comprehensive feedback report from our team of examiners. That feedback report pointed out the need for a balanced scorecard approach to managing organizational metrics. We implemented a scorecard in 2010, and subsequently applied continuous cycles of improvement to enhance it over the years.

Form and content

How did you pick which KPIs and metrics to track?

We use the results of SWOT and STEP analyses to inform the development of our triennial Strategic Plan. Our planning process includes the development of Key Result Areas, Strategic Objectives, and key metrics to measure progress towards achieving our objectives.

Our strategic planning process also includes Key Strategies to support our objectives, and action plans to implement those strategies. We develop metrics needed to track performance of those action plans.

How, when and how frequently are dashboards distributed?

Board of Trustees: Quarterly plus an annual deep dive

IMRF Leadership: 10 times annually

All Employees: Monthly

How current is the data that is being shared (e.g., real time, prior month, quarterly)?

The data is very current and is no older than the end of the prior month.

Resourcing and organization

How much time and resources went into the development of the dashboards?

Our dashboard was developed by the Performance Excellence Department, which has two staff members. The dashboard is Excel based and has been improved over time to its current state. More improvements are scheduled for the future. The dashboard was developed in less than a month but informed by years of continuous improvement and scorecard experience.

How much was done internally versus externally, and which vendors were used?

We had a consultant help create our first Leadership Scorecard in 2010. This consultant was versed in the Baldrige Criteria and was also helping us improve other areas of our organization. Our current dashboard (Leadership Scorecard) was developed internally.

What systems are being used? How integrated are those systems? How many different data sources are there?

The scorecard is produced in Excel, presented with 'Prezi', and distributed on our intranet (COMPASS).

Data comes from a variety of sources, depending on the department. It is then input into the Leadership Scorecard in advance of our meetings. Each department pulls its data on a monthly basis.

What resources are needed to maintain the dashboards? Which team has primary responsibility for producing the dashboards and in which area does that team sit?

The Performance Excellence team has primary responsibility for maintenance of the dashboard. Action plan owners are responsible for inputting their data. The Performance Excellence team is in the Operations area and reports to the Deputy Executive Director.

How frequently is the data reviewed, and by whom (i.e., to ensure the dashboards are accurate)?

The Performance Excellence team reviews all data inputs prior to the 10 Leadership Scorecard Meetings. All metrics are reviewed before each of the 10 Scorecard meetings and then again during the meetings in front of the whole leadership team. The data is shared with the Board quarterly and with all staff monthly.

How and when are metrics within your dashboard reviewed, if at all (i.e., how and when are the measures changed or updated)?

Our Strategic Plan is developed every three years in accordance with our triennial strategic planning process. Our Strategic Plan is validated and/or tweaked annually. Measures are part of our Plan; therefore, they could be changed as often as annually.

Outcomes

How has decision making or behavior changed as a result of the dashboards?

Decisions are more fact-based and leadership is informed about the organizations' progress as a whole, enabling knowledge sharing across the organization. Trends are analyzed and actions are taken in response to fact based analyses. Also, what gets measured does get managed. For example, if a particular measure shows that we are not trending toward top decile, we will develop an action plan and dedicate resources to achieve desired results.

Have the dashboards delivered expected results?

Absolutely. We have a clear picture of where we want to go and how we are progressing towards those goals. Most importantly, the Leadership Scorecard allows us to measure our progress towards achieving our Strategic Objectives for the benefit of our stakeholders.

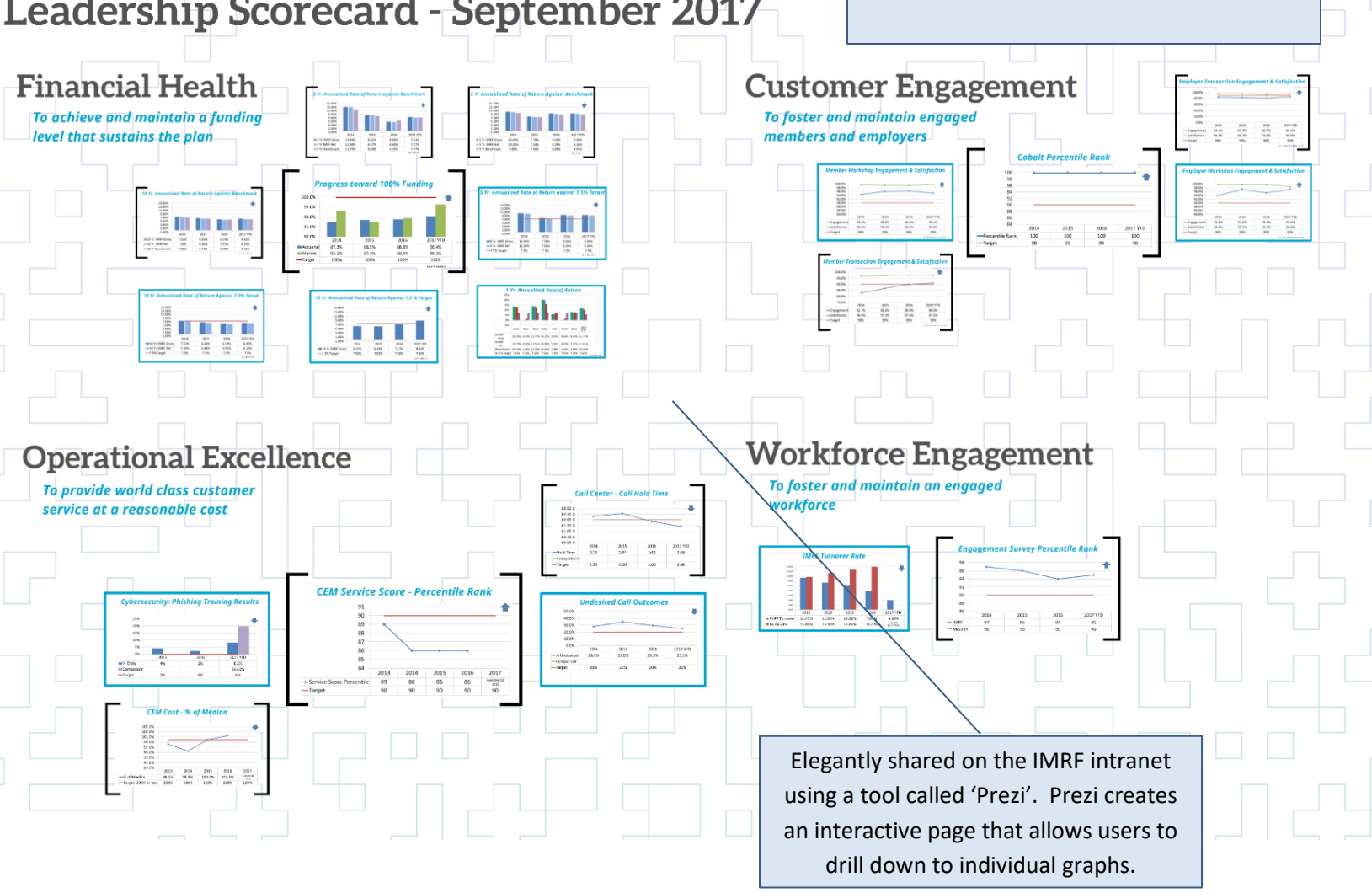
What has worked well? What would you do differently? What advice would you give others?

Having a structured scorecard has allowed us to focus on our Strategic Objectives. Without it, we would not know if we were making progress or trending in the right direction.

The Leadership Scorecard for the 2017-2019 Strategic Planning Cycle was improved to follow the Balanced Scorecard methodology (4 Key Result Areas – Financial / Customer / Workforce / Operations). This resulted in a more concise compartmentalization of the data and eliminated tracking of 'projects' on the scorecard.

IMRF's Leadership Scorecard

IMRF's complete strategy captured in 20 graphs under 4 headings. Funding, investment, and administration measures are together as part of the strategy.



Elegantly shared on the IMRF intranet using a tool called 'Prezi'. Prezi creates an interactive page that allows users to drill down to individual graphs.

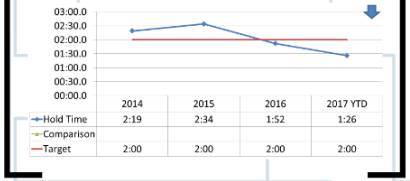
IMRF's Leadership Scorecard – Operational Excellence Measures

IMRF thinks very carefully about the measures that are material to achieving its objectives. 'Noise' is eliminated by having a small number of relevant measures.

Operational Excellence

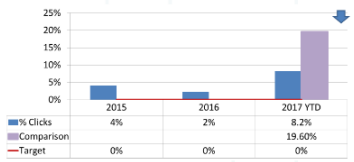
To provide world class customer service at a reasonable cost

Call Center - Call Hold Time



	2014	2015	2016	2017 YTD
Hold Time	2:19	2:34	1:52	1:26
Comparison				
Target	2:00	2:00	2:00	2:00

Cybersecurity: Phishing Training Results



	2015	2016	2017 YTD
% Clicks	4%	2%	8.2%
Comparison			19.60%
Target	0%	0%	0%

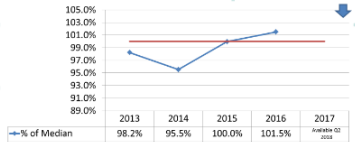
CEM Service Score - Percentile Rank

	2013	2014	2015	2016	2017
Service Score Percentile	89	86	86	86	Available Q2 2018
Target	90	90	90	90	90

Undesired Call Outcomes

	2014	2015	2016	2017 YTD
% Undesired	28.0%	35.0%	29.5%	25.1%
Comparison				
Target	20%	20%	20%	20%

CEM Cost - % of Median



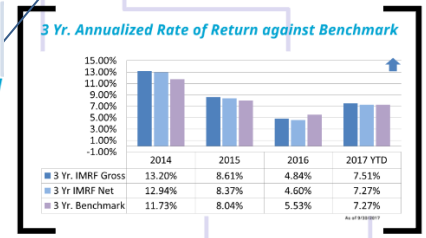
	2013	2014	2015	2016	2017
% of Median	98.2%	95.5%	100.0%	101.5%	Available Q2 2018
Target: 100% or less	100%	100%	100%	100%	100%

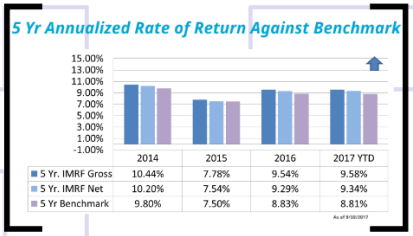
The CEM service score is a key measure and IMRF has a target service score. The dashboard tracks progress towards the target.

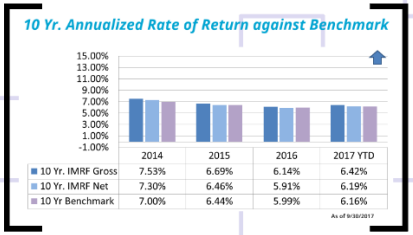
Financial Health

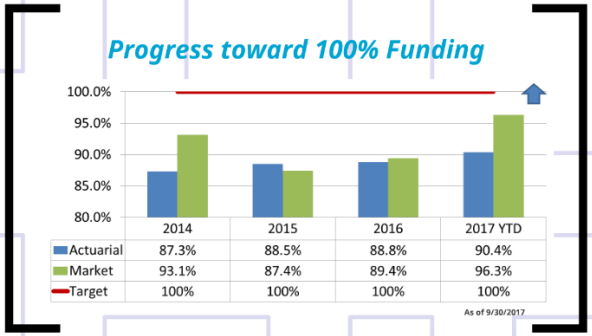
To achieve and maintain a funding level that sustains the plan

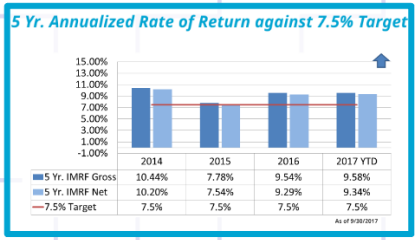
Clearly articulated objectives

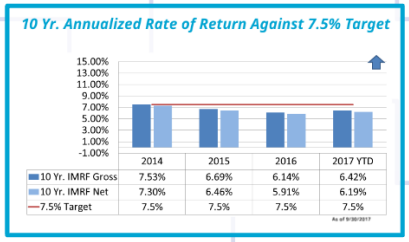


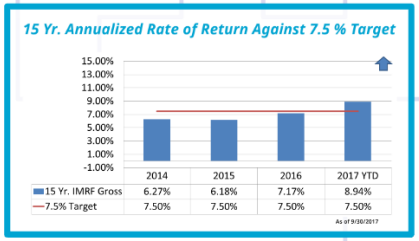


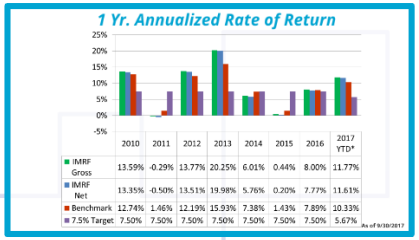








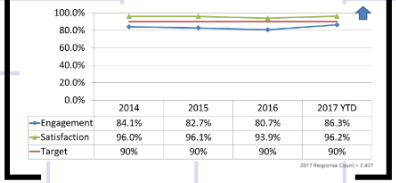




Customer Engagement

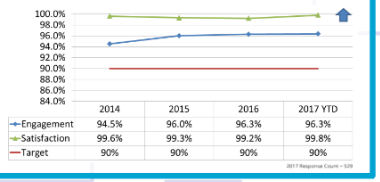
To foster and maintain engaged members and employers

Employer Transaction Engagement & Satisfaction



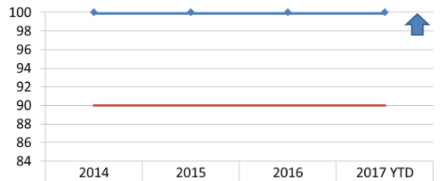
	2014	2015	2016	2017 YTD
Engagement	84.1%	82.7%	80.7%	86.3%
Satisfaction	96.0%	96.1%	93.9%	96.2%
Target	90%	90%	90%	90%

Member Workshop Engagement & Satisfaction



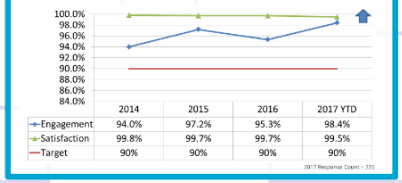
	2014	2015	2016	2017 YTD
Engagement	94.5%	96.0%	96.3%	96.3%
Satisfaction	99.6%	99.3%	99.2%	99.8%
Target	90%	90%	90%	90%

Cobalt Percentile Rank



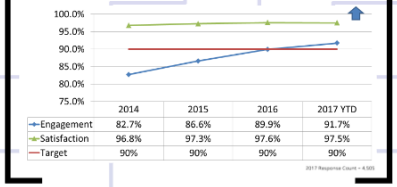
	2014	2015	2016	2017 YTD
Percentile Rank	100	100	100	100
Target	90	90	90	90

Employer Workshop Engagement & Satisfaction



	2014	2015	2016	2017 YTD
Engagement	94.0%	97.2%	95.3%	98.4%
Satisfaction	99.8%	99.7%	99.7%	99.5%
Target	90%	90%	90%	90%

Member Transaction Engagement & Satisfaction



	2014	2015	2016	2017 YTD
Engagement	82.7%	86.6%	89.9%	91.7%
Satisfaction	96.8%	97.3%	97.6%	97.5%
Target	90%	90%	90%	90%

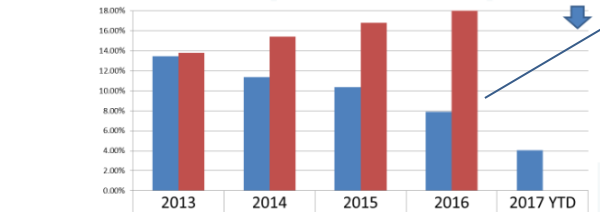
IMRF uses a true engagement question on its 'Voice of the Customer Surveys' and distinguishes between Engagement and Satisfaction.

Workforce Engagement

To foster and maintain an engaged workforce

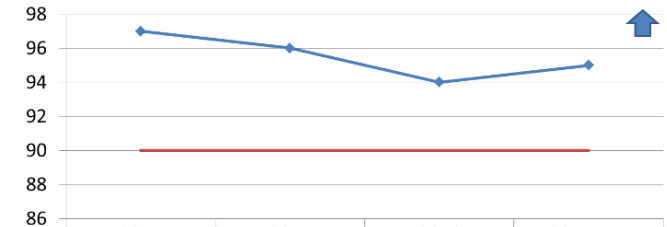
IMRF has targets and comparisons for each key metric.

IMRF Turnover Rate



	2013	2014	2015	2016	2017 YTD
IMRF Turnover	13.45%	11.35%	10.36%	7.89%	4.06%
CompData	13.80%	15.40%	16.80%	18.20%	Available Q2/Q3 2018

Engagement Survey Percentile Rank



	2014	2015	2016	2017 YTD
IMRF	97	96	94	95
McLean	90	90	90	90

8. Teachers' Pension Scheme (TPS)

The TPS serves 1.9 million members and 9,700 employers in England and Wales. It is unfunded and the management of the scheme, including all aspects of administration and member service, are outsourced to a commercial organization called Capita.

.

About TPS' Dashboard

There are lots of things to learn from TPS. The context is very important and defines how management information is captured, distributed and used.

TPS is unfunded[1]. There are no assets, so the Board and executives focus entirely on member service and policy issues. Without assets, decisions to spend money on member service are made by the sponsor, the UK's Department for Education (DfE), which balances competing financial demands.

Another critical point is that the DfE outsources all aspects of pension administration to an external, commercial organization called Capita (which provides outsourcing and other business services in both the public and private sectors). There is a small contract management and oversight team within DfE and an oversight Board, but it's Capita that pick up the telephone when members call.

Reporting between Capita (supplier) and the DfE (client) is not just about stewardship and accountability; it's also about contract management. SLAs, KPIs and Outcomes are enshrined in the commercial contract which is 'retendered' in line with Public Procurement Regulations. The contract includes financial redress if Capita fails to meet SLAs. The DfE's contract management team needs regular data to monitor Capita's performance. A team within Capita produces a substantial monthly reporting pack for that purpose that covers the following topics:

- The status of projects
- Updates from individual business units
- Policy issues
- An operational report
- Performance against SLAs and KPIs
- Performance against contractual outcome measures, including customer satisfaction and member/employer engagement
- Strategic improvements
- Financials
- Risk Management update
- Audit reports

There is a monthly meeting between Capita and the DfE contract management team to review the pack. This is a detailed meeting and the pack is discussed line-by-line.

The pack is distilled quarterly for the Board into a number of dashboards, including one main service delivery dashboard which is discussed here.

[1] Whilst there is no focus on investment management, there is a significant amount of work involved in cash flow management and financial forecasting.

Things we love about the TPS dashboard:

- The information presented is rich and dense. The dashboard works hard to tell a complete and meaningful story in a compact space. Everything the Board needs to know is on one page. Because the data on SLAs and KPIs is condensed, there is space left over for some narrative.

- This is the only dashboard we have seen that includes some components of the scheme's risk management framework – the Board can readily see the status of key risks. It's also the only dashboard that looks at complaint volumes and the output of quality audits in the back office.

- We like that the dashboard has a forward looking perspective. It scans the horizon for potential issues. This ties to the risk framework, but also indicates how key service measures are likely to be impacted by the operating environment.

TPS: Dashboard Q&A

Context

How are you using dashboards at a Board and Senior Management level?

Senior Management: Capita generates a monthly performance reporting pack. This is an essential contract management tool. It contains all the data needed to enable us [DfE] to hold Capita accountable for the services they are providing to members. The reporting pack is produced to coincide with a monthly meeting between ourselves and Capita where we scrutinize the analysis at a detailed level.

Board: We have a number of Boards and Committees, some of which are operationally focused and some of which are focused on policy issues. The main Board receives a quarterly dashboard. The dashboard contains the key elements of the monthly reporting pack, distilled into a snapshot of key measures, and is captured on one page.

What data is being captured/monitored in the dashboards and why?

Distilling the reporting pack to generate the dashboard involves focusing on what's really important. This includes timeliness measures and an understanding of the key risks, but we're focused on outcomes as well. We have 14 recognized outcome measures. Many of these measures focus on the members' experience but we also include measures for employers.

Whilst we have no assets, our members and employers do contribute and we are very focused on the financial aspects of scheme management. With this in mind, the dashboard includes key financial metrics, including contribution collection, but also our spend with Capita.

What was the context for developing dashboards, i.e., what were you doing before, what was missing, and why did you change?

The reporting framework was established when the outsourcing contract was awarded to Capita. In handing over responsibility for member service, we really needed a strong reporting and control process to make sure we understand how Capita perform. The monthly reporting pack was designed to meet that objective.

At the time the contract was awarded, there was no oversight Board. The Board has been a relatively recent addition to our governance framework. Clearly the Board needs to have information for its own purposes and the monthly reporting pack was just too big, hence the need to present the data in dashboard form.

Form and content

How did you pick which SLAs/KPIs and metrics to track?

Again, this was determined in the tender specification. A lot of work went into scoping the services that Capita would deliver and the standards that they would be expected to perform to. Those standards are contained in the commercial agreement governing the contract and are reflected in the reporting.

How, when and how frequently are dashboards distributed?

Board:	Quarterly
DfE contract management team:	Monthly

How current is the data that is being shared (e.g. real time, prior month, quarterly)?

The monthly reporting packs are completed by the tenth working day of the following month, but reflect data from the prior month-end. The Board dashboard is produced quarterly to reflect data from the most recent monthly reporting pack (but reflecting quarterly performance).

Resourcing and organization

How much was done internally versus externally, and which vendors were used?

Our reporting pack and dashboard was developed entirely by Capita, with input from the DfE as the client.

What systems are being used? How integrated are those systems? How many different data sources are there?

The dashboard is produced in Excel. The monthly reporting pack is a collection of reports that are run by team leaders and then amalgamated into one pack. The Governance team is responsible for amalgamating the pack, but the work is out with team leaders. The dashboard itself is maintained and updated by the Governance team.

What resources are needed to maintain the dashboards? Which team has primary responsibility for producing the dashboards and in which area does that team sit?

Relatively little, mainly because the work is done within each business area within Capita (so it's difficult to track how much work is involved in total). The Governance team comprises three people. It's a part time job for one of those people to coordinate the reporting pack. The Governance team is within Capita and also has responsibility for risk management and data analytics in relation to the DfE contract.

How and when are metrics within your dashboard reviewed, if at all (i.e., how and when are the measures changed or updated)?

There is a formal, contractual six month review of SLAs involving both Capita and DfE.

Clearly the award of the contract and the regular tendering of the contact provide natural break points at which careful consideration is given to our future relationship with an outsourced supplier. For example, we are in the planning stage now for tendering the contract. This is a carefully managed process during which we think about what we want to achieve. We consult widely amongst stakeholders, look for inspiration from inside and outside the industry, and try to think 10 years into the future. Only when we have a clear vision on what we want to achieve can we think about potential measures of success.

Outcomes

How has decision making or behavior changed as a result of the dashboards? Have the dashboards delivered expected results?

The monitoring of SLAs and contract outcome measures drive the agenda for DfE and Capita. This helps to identify issues, risks, and improvements to the overall member/employer experience.

Our Board is still relatively new. There has been an iterative process that has involved educating the Board about what it should be looking at and at the same time understanding what it wants to see and how it wants to see it. The Board has brought a new level of accountability and the dashboard certainly helps them get comfort on the efficacy of Capita's service. Having everything they need to focus on in one compact space arguably makes Board meetings more effective.

What has worked well? What would you do differently? What advice would you give others?

The reporting as it is structured really helps us (and Capita) to focus on the fundamentals of the contract. We have developed a strong process associated with the reporting, which is important as we hold Capita to account, and encourage service improvements. Everyone knows what the critical measures of success are and everyone is focused on the achievement of those goals.

We also believe that the procurement process helps us focus on the correct objectives for our members and employers into the future. When we get the procurement right, the correct measures and the right reporting naturally flow.

Our governance process has evolved quickly and we have had to adapt our reporting for new audiences. We are finding that different audiences have different data requirements and this means some replication of reporting. It would be helpful to agree a common reporting framework for multiple audiences.

TPS' Board Dashboard[2]

Key contract management information

Narrative for key operational headlines

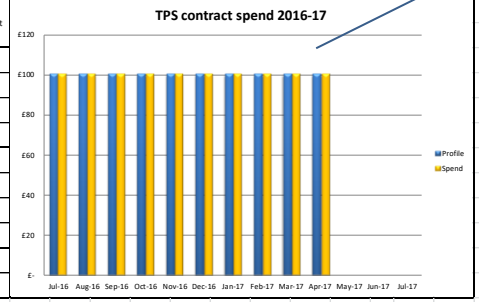
Summary of performance relating to KPIs

Critical risks highlighted

Paper 3 (Agenda item various) : TPSPB 20 Sept 2017 — **Teachers' Pension Scheme Pension Board DASHBOARD (data removed)**

Headlines:
1. The TPS accounts were laid before recess without challenge.
2. Telephony was discussed at the QSB and TP were asked to put forward a commercial proposal regarding customer contact to respond to changes in member behaviour.

	Scheme Financial Performance		Period ending 30 Apr 2017	Period ending 31 Jul 2017	Change from previous	Forecast
Accounts	Income Cash Variance	Estimate v Actual (+ve overcollection/-ve undercollection)	£ xx m	£ xx m	→	→
	Expenditure Cash Variance	Estimate v Actual (+ve underspend/-ve overspend)	£ xx m	£ xx m	→	→
	Net Cash Requirement Position	Estimate v Forecast (+ve underspend/-ve overspend)	£ xx m	£ xx m	→	→
	Resource Net Expenditure Out-turn Position	Estimate v Forecast (+ve underspend/-ve overspend)	£ xx m	£ xx m	→	→
Contributions	Total Tiered Contributions Variance	Overall actual v expected across 6 tiers	0.00%	0.00%	→	→
	Value of Unallocated Contributions	Contributions to be allocated to correct tier	£ xx m	£87m	→	→
	Unallocated v Total Contributions	% of contributions unallocated against total receipts	0.00%	0.00%	→	→
	Outstanding EOYC Forms 2015-16	No audited return submitted by Employer	0.0%	0.0%	→	→
Debt	Member Overpayments Outstanding	Value of member debt not recovered	£ xx m	£ xx m	→	→
	Arrears of Contributions Outstanding	Value of member/ER debt not recovered	£ xx m	£ xx m	→	→

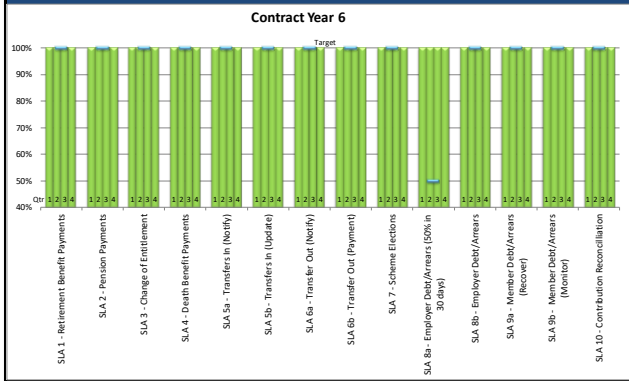


Engagement & Customer Feedback		
Activity	RAG	Forecast
Member Campaigns	→	→
Member Satisfaction	→	→
Employer Campaigns	→	→
Employer Satisfaction	→	→
Seminars/Webinars	→	→

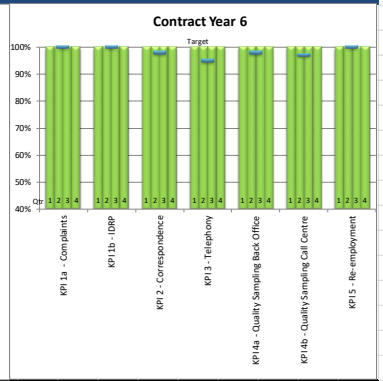
Programmes		
Programme	RAG	Forecast
Mortality Screening	→	→
Monthly Data Collection	→	→
Data Strategy	→	→
Deferred Solution	→	→

Teachers' Pension Service Performance - Previous 4 Quarters (most recent to right)

Service Level Agreements (SLAs)



Key Performance Indicators (KPIs)



Capability and Resources:	Within the Department the recruitment of a Risk and Finance Manager is still underway to allow John Smith to move to the Procurement team. Mary Jones has joined Teachers' Pensions as Analytics and Risk Manager.

RAG status and directional arrows definitions:

R = For attention; no plans in place.
A = Issue noted; plans in place to address.
G = No concerns; within agreed parameters.

→	No change since previous period
↗	Improvement in RAG since previous period
↘	Deterioration in RAG since previous period

Acronyms and Abbreviations:

QSB - Quarterly Strategy Board
GMP - Guaranteed Minimum Pension
SMP - Security Management Plan

Key Risk Updates (as determined by the Risk Committee)

Risk Description	Change in risk rating
As a result of... there is a risk that... leading to...	↘
As a result of... there is a risk that... leading to...	↘
As a result of... there is a risk that... leading to...	→
As a result of... there is a risk that... leading to...	→
As a result of... there is a risk that... leading to...	→

[2] The DfE / Capita dashboard is commercially sensitive. Dummy data has been substituted to enable the creation of this document.

TPS' Board Dashboard

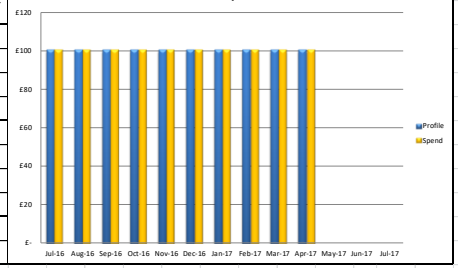
Paper 3 (Agenda item various) : TPSPB 20 Sept 2017 — **Teachers' Pension Scheme Pension Board DASHBOARD (data removed)**

Headlines:
1. The TPS accounts were laid before recess without challenge.
2. Telephony was discussed at the QSB and TP were asked to put forward a commercial proposal regarding customer contact to respond to changes in member behaviour.

Scheme Financial Performance

			Period ending 30 Apr 2017	Period ending 31 Jul 2017	Change from previous	Forecast
Accounts	Income Cash Variance	Estimate v Actual (+ve overcollection/-ve undercollection)	£ xx m	£ xx m	→	→
	Expenditure Cash Variance	Estimate v Actual (+ve underspend/-ve overspend)	£ xx m	£ xx m	→	→
	Net Cash Requirement Position	Estimate v Forecast (+ve underspend/-ve overspend)	£ xx m	£ xx m	→	→
	Resource Net Expenditure Out-turn Position	Estimate v Forecast (+ve underspend/-ve overspend)	£ xx m	£ xx m	→	→
Contributions	Total Tiered Contributions Variance	Overall actual v expected across 6 tiers	0.00%	0.00%	→	→
	Value of Unallocated Contributions	Contributions to be allocated to correct tier	£ xx m	£87m	→	→
	Unallocated v Total Contributions	% of contributions unallocated against total receipts	0.00%	0.00%	→	→
	Outstanding EOYC Forms 2015-16	No audited return submitted by Employer	0.0%	0.0%	→	→
Debt	Member Overpayments Outstanding	Value of member debt not recovered	£ xx m	£ xx m	→	→
	Arrears of Contributions Outstanding	Value of member/ER debt not recovered	£ xx m	£ xx m	→	→

TPS contract spend 2016-17



Engagement & Customer Feedback

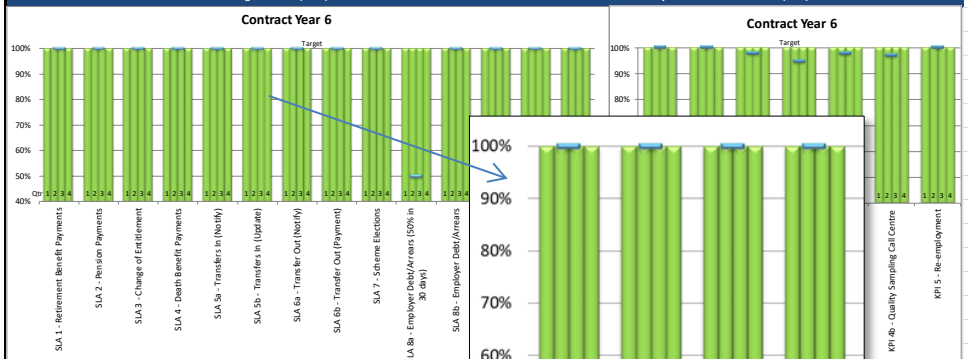
Activity	RAG	Forecast
Member Campaigns	→	→
Member Satisfaction	→	→
Employer Campaigns	→	→
Employer Satisfaction	→	→
Seminars/Webinars	→	→

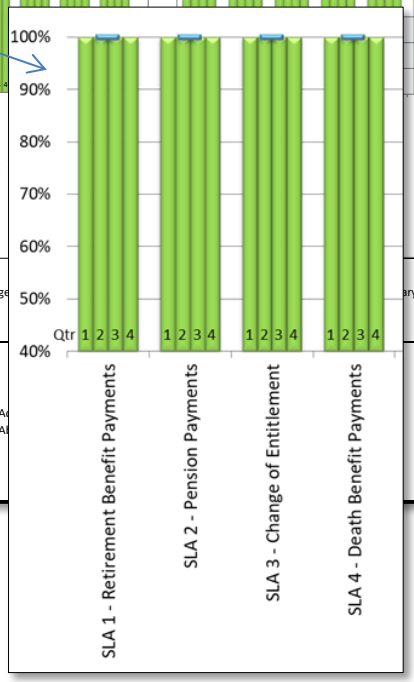
Programmes

Programme	RAG	Forecast
Mortality Screening	→	→
Monthly Data Collection	→	→
Data Strategy	→	→
Deferred Solution	→	→

Teachers' Pension Service Performance - Previous 4 Quarters (most recent to right)

Service Level Agreements (SLAs) — Key Performance Indicators (KPIs)





Capability and Resources:	Within the Department the recruitment of a Risk and Finance Manage… joined Teachers' Pensions as Analytics and Risk Manager. … ary Jones has
RAG status and directional arrows definitions:	R = For attention; no plans in place. A = Issue noted; plans in place to address. G = No concerns; within agreed parameters.

→	No change since previous period
↗	Improvement in RAG since previous period
↘	Deterioration in RAG since previous period

Key Risk Updates (as determined by the Risk Committee)

Risk Description	Change in risk rating
As a result of… there is a risk that… leading to…	↘
As a result of… there is a risk that… leading to…	↘
As a result of… there is a risk that… leading to…	→
As a result of… ther…	
As a result of… ther…	

Engagement & Customer Feedback

Activity	RAG	Forecast
Member Campaigns	→	→
Member Satisfaction	→	→
Employer Campaigns	→	→
Employer Satisfaction	→	→
Seminars/Webinars	→	→

Key Risk Updates (as determined by the Risk Committee)

Risk Description	Change in risk rating
As a result of… there is a risk that… leading to…	↘
As a result of… there is a risk that… leading to…	↘

9. Washington State Department of Retirement Systems (DRS)

Washington State DRS administers 8 public retirement systems for state and local government employees and has over $105 billion under management and over 750,000 members.

About DRS' dashboard

Washington State DRS derived its dashboard from its 'Fundamentals Map' – a comprehensive strategic map that outlines over 60 operational measures that relate to the agency's main mission and vision.

Washington's dashboard, the 'QTR' (Quarterly Target Review), is operations-focused and presented quarterly to 100 agency leaders. Components of the dashboard are presented annually to the Select Committee on Pension Policy, which is composed of state legislators, pension members, public employers, and the Director of the Governor's budget office. The QTR data is updated monthly by each department's data steward and reviewed by the department leader. The operational metrics are reviewed annually by senior management. Microsoft Excel performs the analyses, which are embedded in a PowerPoint presentation.

The visibility of the QTR dashboard has spurred team members to focus on performance. It has also helped stimulate discussion and helped with the allocation of resources within the organization. For example, if a department is 'in the red' of a performance target, leaders will ask if more resources are needed, if the underlying process requires additional analysis (i.e., to improve the process) or if the target itself is too harsh. Each process owner is expected to know why one of their measures is 'in the red' and identify the actions they've already initiated prior to a QTR presentation.

The next steps for Washington are to automate the reporting process – potentially through Power BI – and to develop custom dashboards for each department. Custom dashboards would eliminate the inefficiency of having to weed through over 60 measures to find those that have the strongest relationship to a team member's (or unit's or division's) performance.

Things we love about Washington State DRS' dashboard:

- We really like the breadth of the analysis. It is holistic and extends across 'Outcome Measures' as well as 'Operating Processes' and 'Supporting Processes'. It aligns reporting with WSDRS' strategy which is captured in the 'Fundamentals Map'.

- The structure is logical and easy to work with. Measures are color-coded according to performance (green, yellow, red). Each process and outcome has a reference and an identified owner. This provides real accountability.

- Different types of charts are used to quickly communicate the status as well as the trend of the agency's performance relative to agreed-upon targets.

Washington: Dashboard Q&A

Context

How are you using dashboards at a Board and Senior Management level?

We have 60+ measures in our QTR [dashboard] file. It is presented quarterly to around 100 agency leaders and reviewed monthly by our agency's leadership (senior management) team. Although we don't report to a Board (as DRS is a cabinet agency that reports to the Governor), we do use numerous components of the QTR in annual reports and presentations to the Select Committee on Pension Policy (a committee composed primarily of state legislators but also member group and public employer representatives, along with the Director of the Governor's budget office).

What is shared at an operational level?

Certain process owners (who tend to be Assistant Directors in our agency) have created what are referred to as "Tier 2" maps to enable them to drill down further into unit or even desk-level measures.

What was the context for developing dashboards, i.e., what were you doing before, what was missing, and why did you change?

We developed our dashboard using the methodology outlined in the book "Business at the Speed of Now" by John Bernard. We worked with John's company, Mass Ingenuity, to develop our Fundamentals Map, which includes development of performance measures. It's essentially a comprehensive strategic planning effort that produces operational measures to keep the agency on track to achieve its mission.

While the agency had numerous performance measures before (with many of them being supported by CEM research), using the Fundamentals Map methodology enabled us to better align the measures with business objectives, and identify gaps in performance and/or areas where we needed better measures.

Form and content

What form do the dashboards take? What data is being captured/monitored in the dashboards and why?

The QTR takes the form of a deck of approximately 40 PowerPoint slides. The first page is a summary. It captures, in traffic light form, the status of key measures in each operational area as they relate to the Fundamentals Map. At a glance, the reader can see where we're on track as an organization and where we need to do more work.

The slides that follow dive into each of the 60 individual measures. There's a clear route-map, which helps to guide the reader.

The QTR file is posted on the agency's intranet each quarter after it is presented to approximately 100 team leaders. The file is also reviewed by the agency's leadership team each month to determine if performance issues need to be addressed.

We have a lot of supporting information on what is being measured and why. Part of the reason for the supporting documentation was to make sure people had logically thought through the measure, and to make sure that someone could replicate the measure if a data steward left the agency.

How, when, and how frequently are dashboards distributed?

The QTR file is presented quarterly to around 100 agency leaders and the components are presented once annually to the Select Committee on Pension Policy, composed of state legislators, pension members, public employers, and the Director of the Governor's budget office.

How current is the data that is being shared (e.g., real time, prior month, quarterly)?

Prior month. Although real time or daily data is available in some 'Tier 2' Maps used by the divisions.

Resourcing and organization

How much time and resources went into the development of the dashboards?

A large amount of effort went into building the agency's Fundamentals Map. Once it was built, we identified where our existing performance measures lined up with the processes in the Fun Map and where we had gaps. In addition to the effort put in by the agency's leadership team (LT), there was also a lot of effort that we'll call "homework" in which LT members worked with their own teams to evaluate existing measures, identify new measures, recommend performance targets, identify resource gaps, etc.

How much was done internally versus externally and which vendors were used?

Most of the effort was internal but we did contract with Mass Ingenuity to help us develop the Fundamentals Map, etc.

What systems are being used? How integrated are those systems? How many different data sources are there? How frequently is the data refreshed?

The dashboard is a PowerPoint file that is linked to multiple Excel files (one for each core process). This way, individual process owners can update the data in their Excel file (manually or via extracts) without causing a conflict in the PowerPoint file. We're currently looking at other solutions, including Microsoft Power BI, and a few of the data stewards are helping others determine if there are ways to further automate data collection. Data in the file is refreshed at least every month.

What resources are needed to maintain the dashboards? Which team has primary responsibility for producing the dashboards and in which area does that team sit?

One designated person works on it monthly, but most of the effort is in the divisions around the agency. The individual process owners have data stewards who are responsible for obtaining the data for their measures and getting them into the appropriate Excel files. They also go into the PowerPoint file and refresh the links between the charts and the Excel files. They can update any bullets/text to help explain what's happening, if necessary.

How frequently is the data reviewed, and by whom (i.e., to ensure the dashboards are accurate)?

The QTR data is updated monthly by each department's data steward and reviewed by the department leader.

How and when are metrics within your dashboard reviewed, if at all (i.e., how and when are the measures changed or updated)?

The operational metrics are reviewed at least annually by senior management.

Outcomes

How has decision making or behavior changed as a result of the dashboards?

Consistent with CEM's tagline, "what gets measured gets managed," the visibility of the QTR dashboard has caused team members to focus on the performance contained in the measures. The other aspect we've enjoyed seeing is that team members continue to work on improving the measures (i.e., coming up with better measures that more closely align with the aspect of our business we're trying to measure, coming up with better data and/or more efficient ways to collect data, etc.).

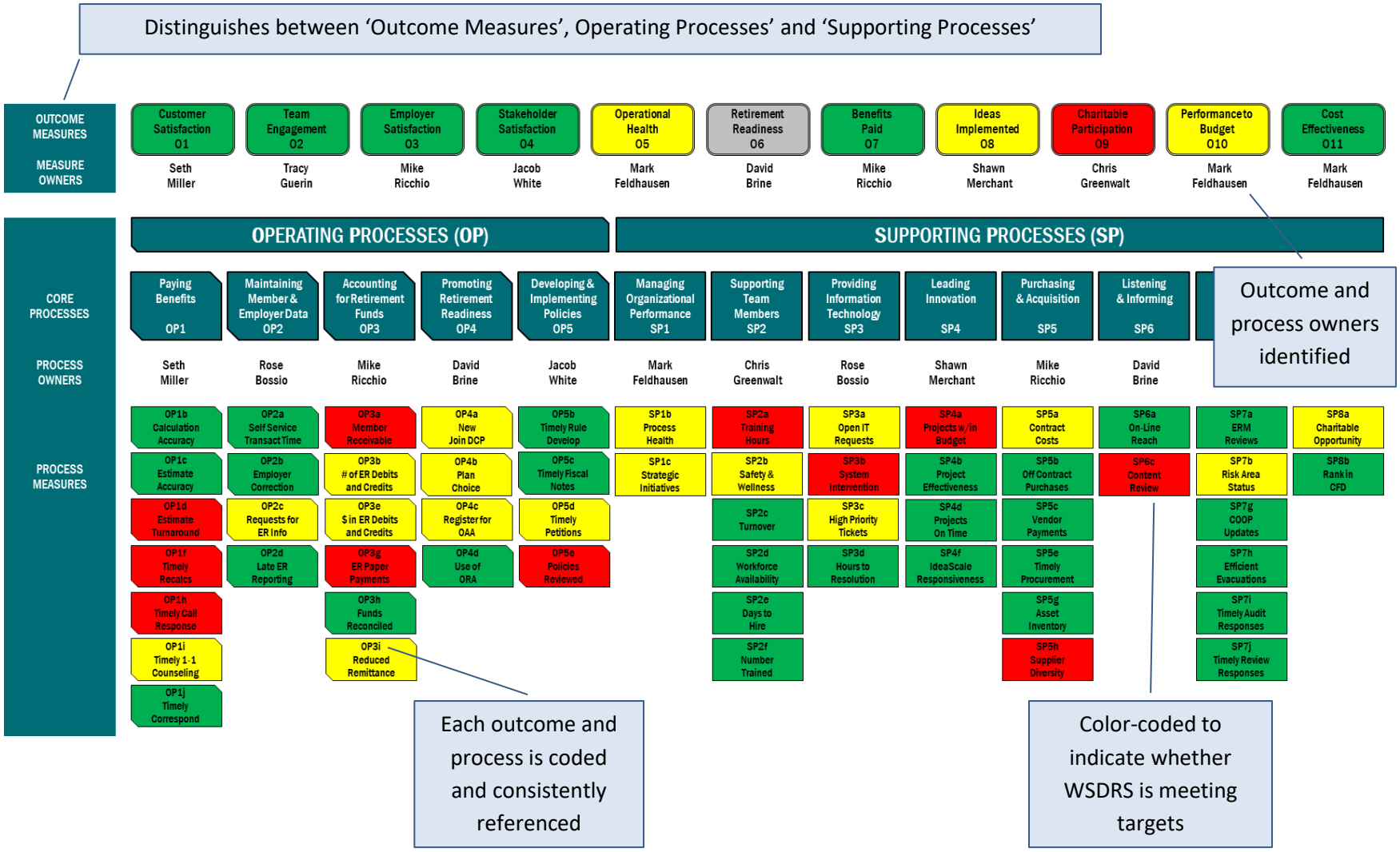
Have the dashboards delivered expected results?

The visibility of the QTR dashboard has spurred team members to focus more on the underlying performance contained in the measures. As well, the dashboard has helped stimulate discussion and better allocate resources within the organization.

What has worked well? What would you do differently? What advice would you give others?

Since we're currently preparing for our 21st Quarterly Target Review meeting at the end of October 2017, it must be working well. If we had to do it differently, we would "loan" some analytical resources earlier in the process to areas that were having trouble developing comparable measures. Our advice to others would be that "you'll get out of it what you put into it."

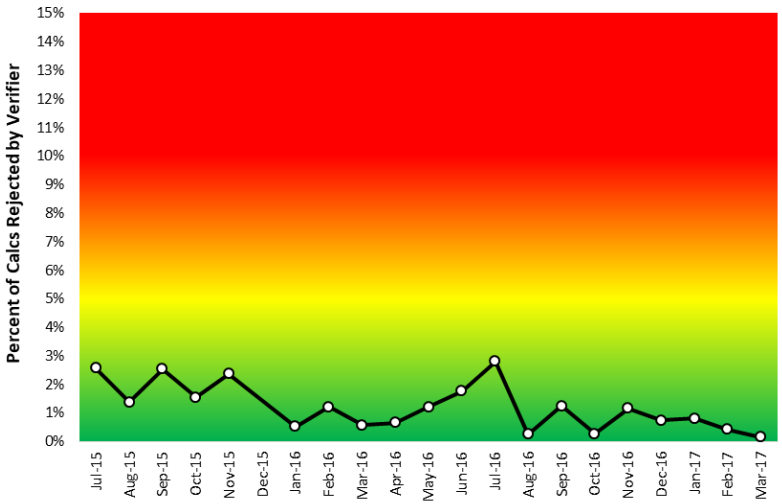
WSDRS' Dashboard – Summary Page (derived from WSDRS' Fundamentals Map)



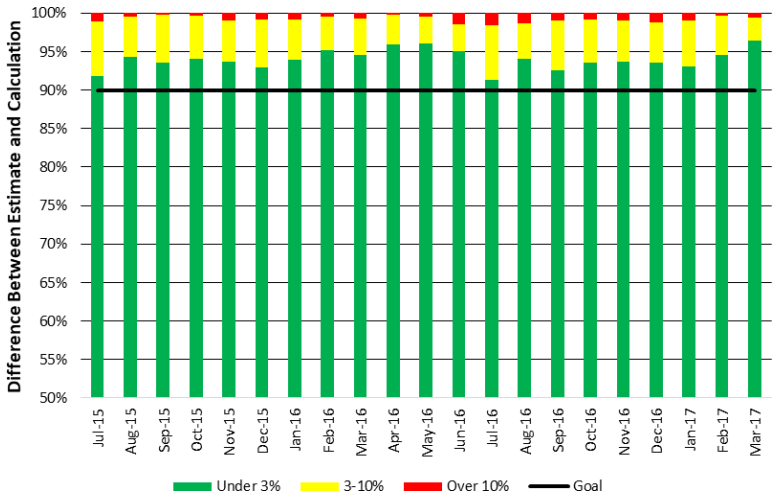
The presentation drills down to focus on individual measure

We really like the accuracy of the data

OP1b-Benefit Calculation Accuracy (Seth)



OP1c-Estimate Accuracy (Seth)



References make it easy to toggle between the summary page and the presentation

DRS
WASHINGTON STATE
Department of Retirement Systems

OP1-Paying Benefits

11

10. Data visualization software

The following list is neither exclusive nor exhaustive, and we do not endorse any of the packages mentioned. It simply highlights some of the data visualization software tools we encountered as we explored the world of dashboards. The descriptions provided are taken directly from the providers' websites.

iDashboards www.idashboards.com

With iDashboards' business intelligence software, build interactive, custom dashboards that are secured, informative, and engaging. Save time and resources by combining Excel spreadsheets and database outputs into an automated dashboard with features like:

- Drilldowns, interactive intelligence, and real-time updates
- Intuitive drag-and-drop interface
- Fully customizable charts, graphs, and graphics

Minitab® 18 www.minitab.com

Analyze your data and improve your products and services with the leading statistical software used for quality improvement worldwide. Minitab provides the tools you need to analyze data and find meaningful solutions to your toughest business problems. Minitab provides convenient features that streamline your workflow, a comprehensive set of statistics for exploring your data, and graphs for communicating your success.

Power BI https://powerbi.microsoft.com/en-us/

Power BI is a suite of business analytics tools that deliver insights throughout your organization. Connect to hundreds of data sources, simplify data prep, and drive ad hoc analysis. Produce beautiful reports, then publish them for your organization to consume on the web and across mobile devices. Everyone can create personalized dashboards with a unique, 360-degree view of their business. And scale across the enterprise, with governance and security built-in.

+ a b | e a u www.tableau.com

Tableau helps people transform data into actionable insights. Explore with limitless visual analytics. Build dashboards and perform ad hoc analyses in just a few clicks. Share your work with anyone and make an impact on your business. From global enterprises to early-stage startups and small businesses, people everywhere use Tableau to see and understand their data.