

ORACLE®

**ENGINEERING AND
CONSTRUCTION**

&



Public Infrastructure & Construction -Monitoring Solution

Oracle Construction & Engineering Global Business Unit
Territory Manager Edward Hartung

Safe Harbor Statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



Our focus for the past 35 years:
Transforming the world by
helping organizations to
plan, build and operate
critical assets



Delivering a Complex System of Systems



Plan

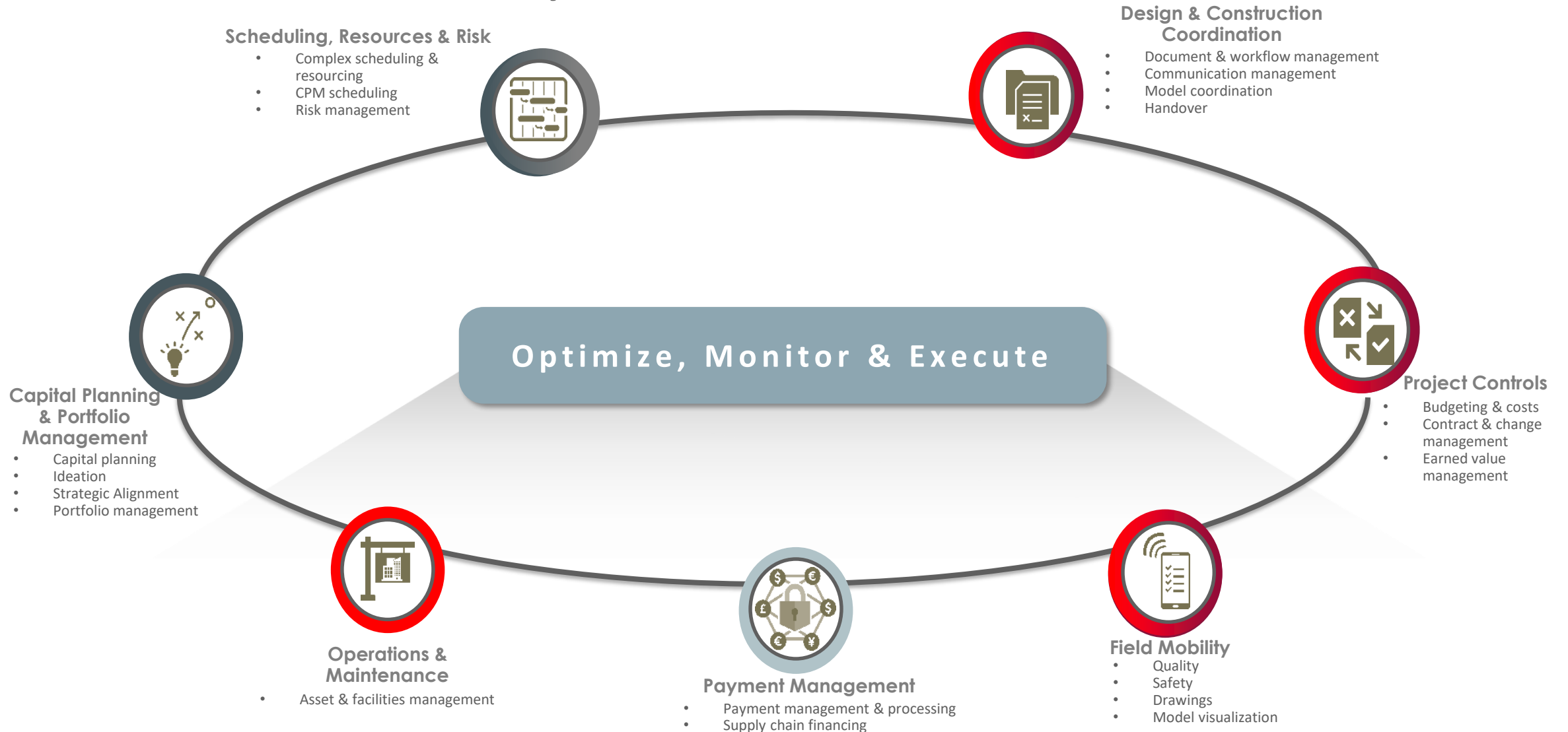



Build



Operate

End-to-End Lifecycle Solution



A person in a dark suit and tie is shown from the chest up, holding a pen and drawing a city skyline on a transparent surface. The drawing includes a long building with many windows and a bridge with arches. The background is dark and out of focus.

New Infrastructure can transform the economic
landscape of the host city, region or country.

*It is a catalyst for economic growth, tourism and
job creation!*

Why our customers focus on infrastructure development



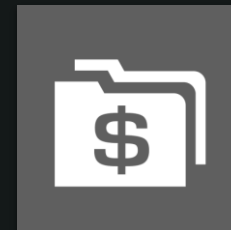
Use infrastructure as a catalyst for economic development



Cope with rapid urbanisation and improved service delivery objectives



Promote regional integration and develop economic corridors

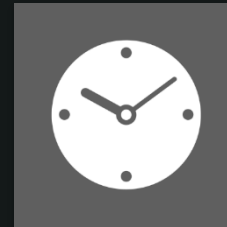


Correct historic underinvestment in infrastructure and maintenance

Challenges our customers face in infrastructure development



Where to invest?
How much to invest?
Securing funding



Long duration projects
It is like running a
temporary business



Multiple stakeholders
across many
organizations



Lack of real time
visibility in overall
project performance

Negative outcomes in infrastructure projects to resolve



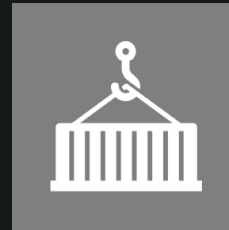
Cost increase due to uncontrolled scope and contract changes



Schedule delays due to resource and materials constraint

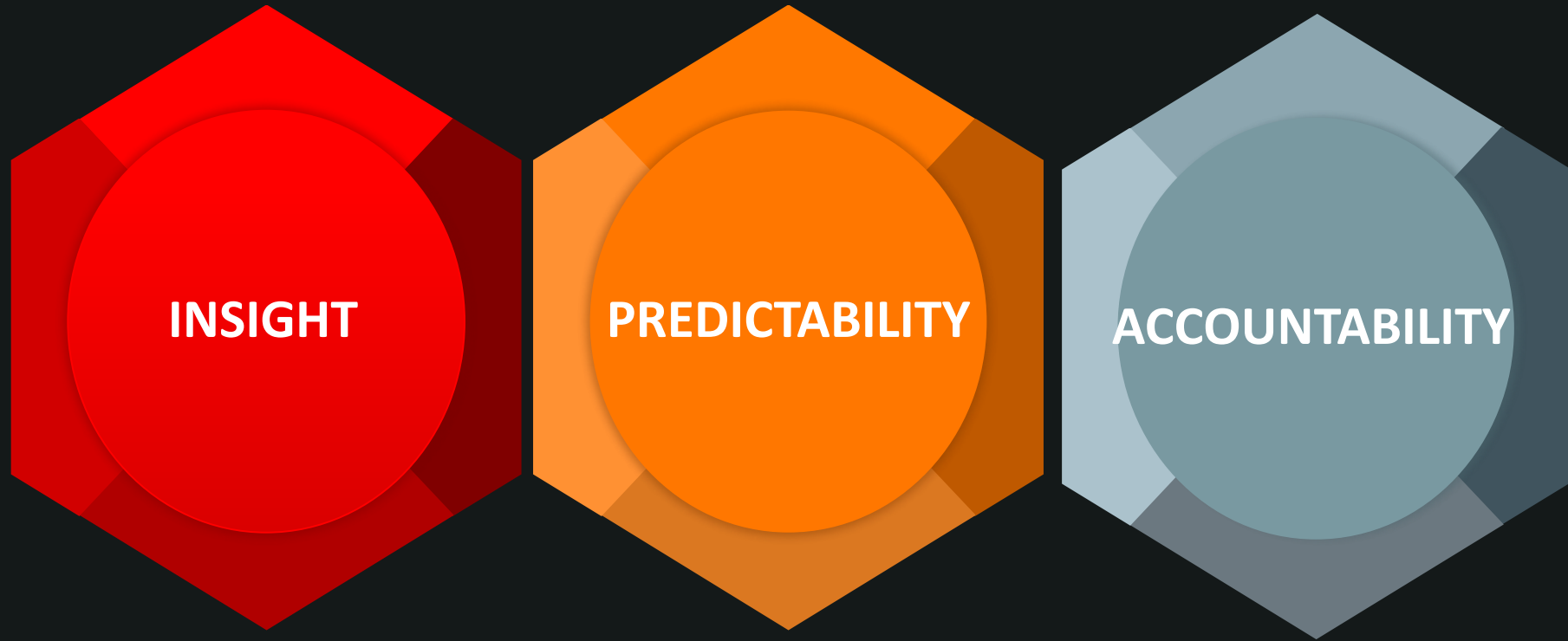


Payment disputes due to incorrect invoicing



Delay in ramp-up to full capacity

Helping our customers to achieve.....



With infrastructure project delivery

Oracle Primavera Solution Functionality



A full function Enterprise Project Portfolio Management solution for public sector infrastructure development

Advancing holistic planning, monitoring and evaluation

Healthcare

Telecom

Power and
Energy

Human
Settlements

Security

Waste
Management

Recreation

Water and
Sanitation

Transportation

Education

An aerial photograph of a city skyline, likely Nairobi, Kenya, featuring a mix of modern high-rise buildings and older structures. A large red rectangular box is superimposed over the center of the image, containing white text. The word 'through' is written in red, positioned between the top and bottom lines of text.

Advancing holistic planning, monitoring and evaluation
through
Enterprise Project Portfolio Management

Oracle Primavera Infrastructure Solution

A technology platform for public infrastructure development & project management

Gain insight in the full public infrastructure lifecycle performance



Selecting the right projects
to enable the city's
transformation



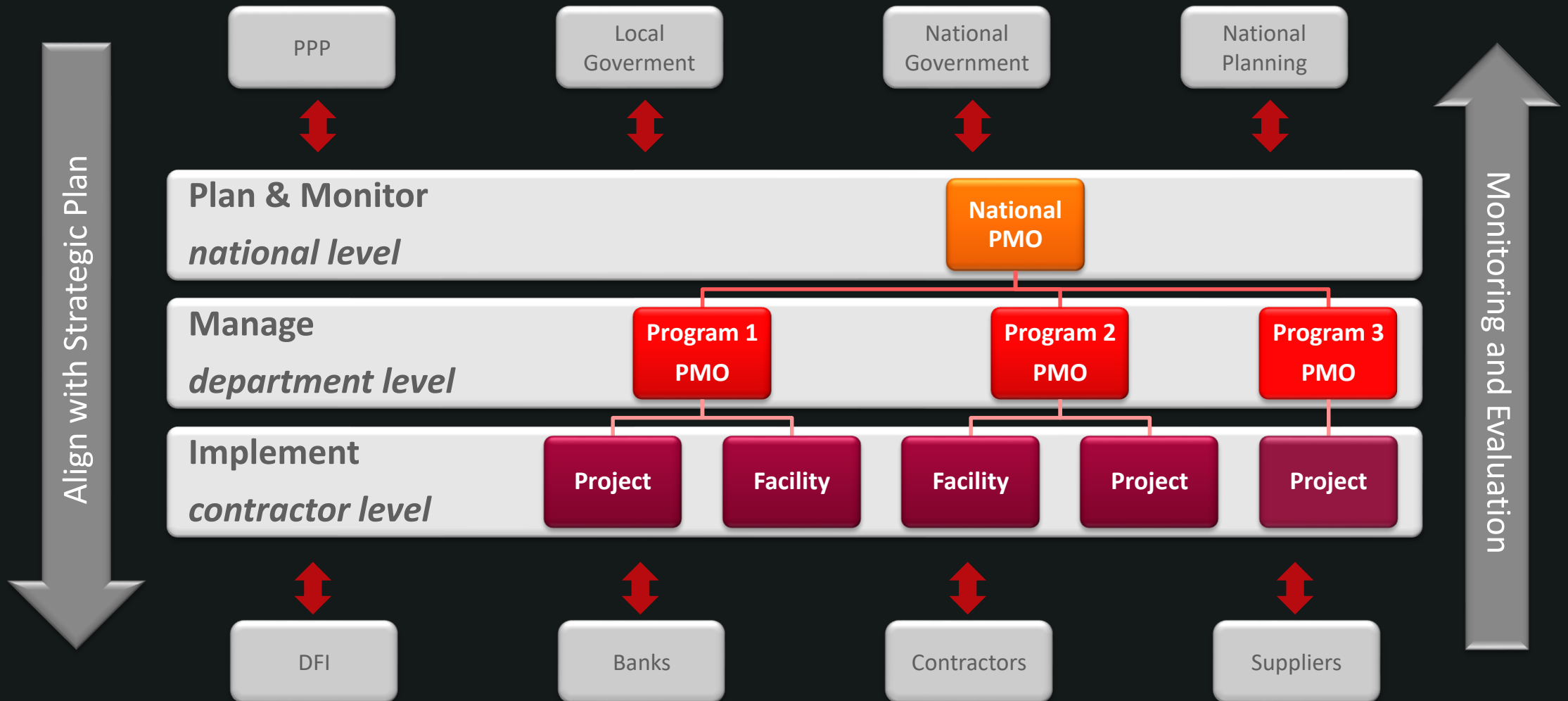
Implementing projects
with confidence and with
predictable outcomes



Maintain the infrastructure
and facilities for
sustainable productivity

Built on the Oracle Primavera technology platform to provide a full enterprise
project portfolio management solution for Public Sector

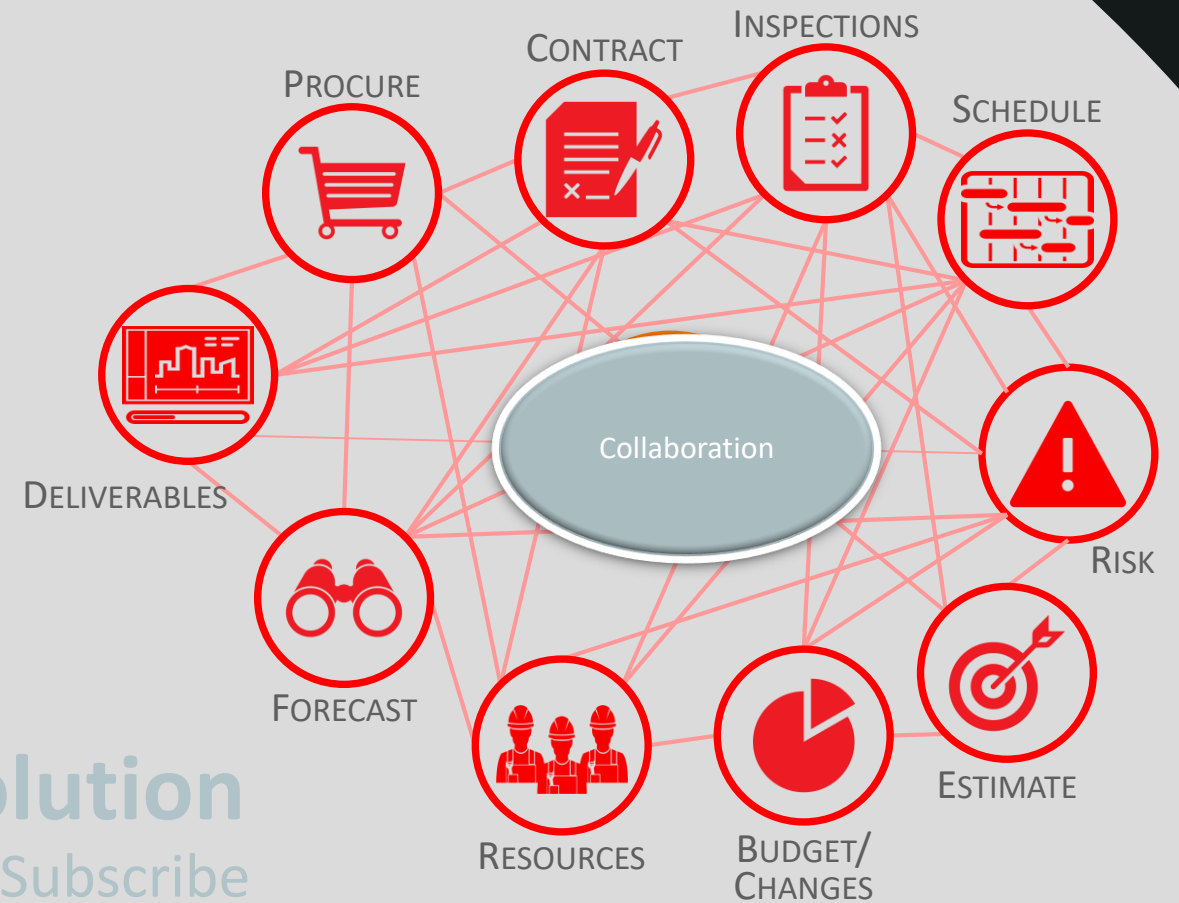
Public Infrastructure Monitoring Solution Deployment



The Owner Problem

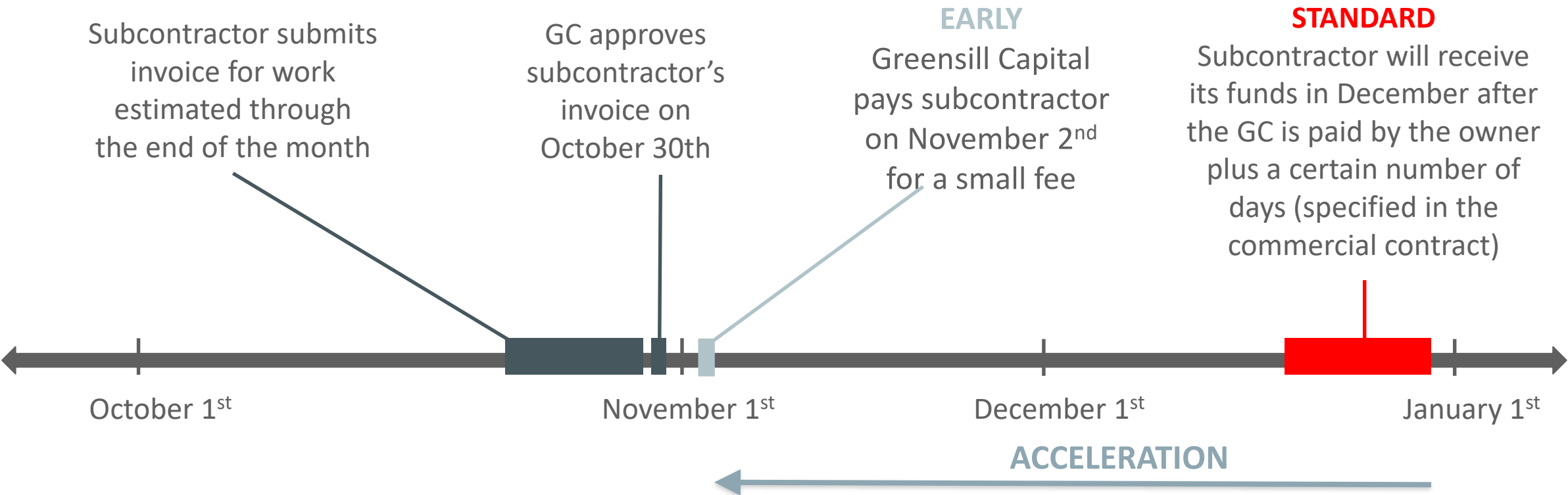


Scope-Centered Single System



The Solution
Publish & Subscribe

Payment Timelines – Standard vs. Early Payment



Program Benefits



General Contractor

- Competitive differentiation
- Lower bids + more coverage
- Ability to help project partners
- Reduced risk of sub default
- New revenue stream



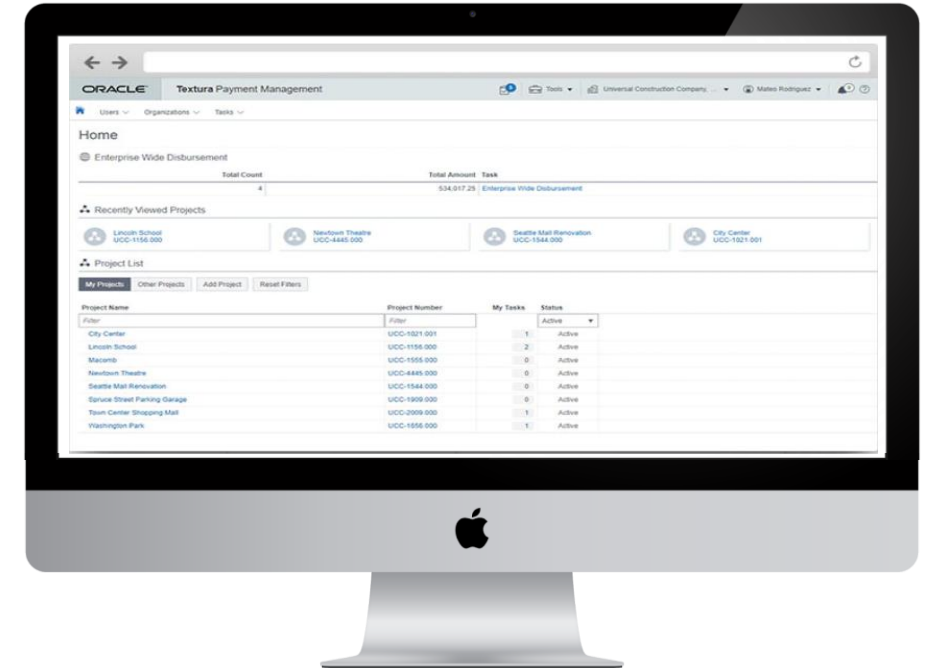
Subcontractor

- Faster payment + known timing
- Affordable capital option
- Reduction in financial strain
- Vendor discount opportunities
- Potential to invest in growth

Textura: Optimize Payment Management and Accelerate Payments

Cloud based, collaborative payment management and supply chain financing:

- **Increase efficiency:** eliminate paper and electronic gridlock by providing a single source of truth to the supply chain
- **Mitigate Risk:** automate and streamline collection of compliance materials
- **Strengthen Supply Chain:** close the finance gap to the supply chain and reduce risk



Payment
Management &
Processing

Supply Chain
Finance

“Oracle Textura Payment Management helped Torcon streamline its payment processes, enabling staff to focus on value-added tasks”

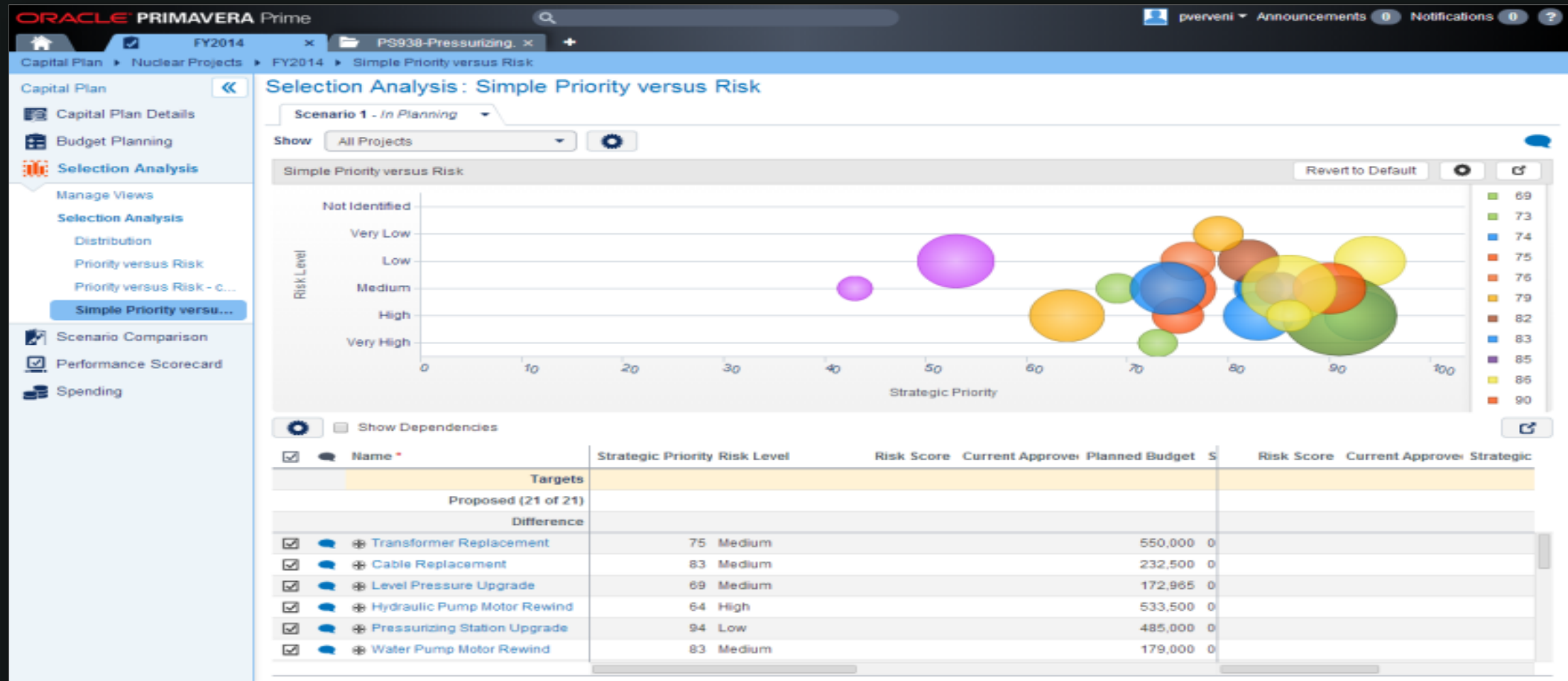
-Karen Zavali, Project Accountant, Torcon, Inc

Oracle | Primavera

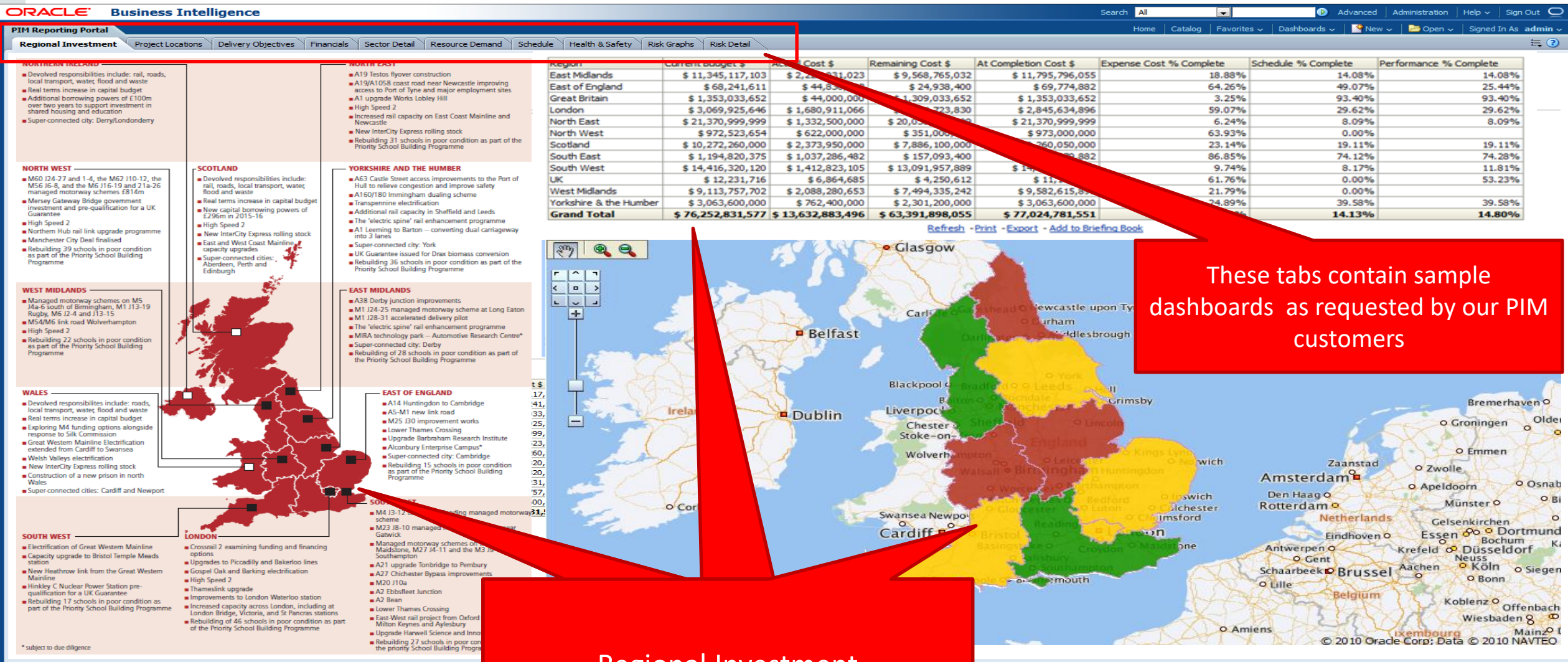
Public Infrastructure Monitoring Solution

Overview

Selecting the correct projects for infrastructure investment



Regional Investment



Project locations | Projects in distress

ORACLE Business Intelligence

PIM Reporting Portal

Regional Investment

Project Locations

Delivery Objectives

Financials

Sector Detail

Resource Demand

Schedule

Health & Safety

Risk Graphs

Risk Detail

Search All

Advanced

Administration

Help

Sign Out

Department --Select Value--

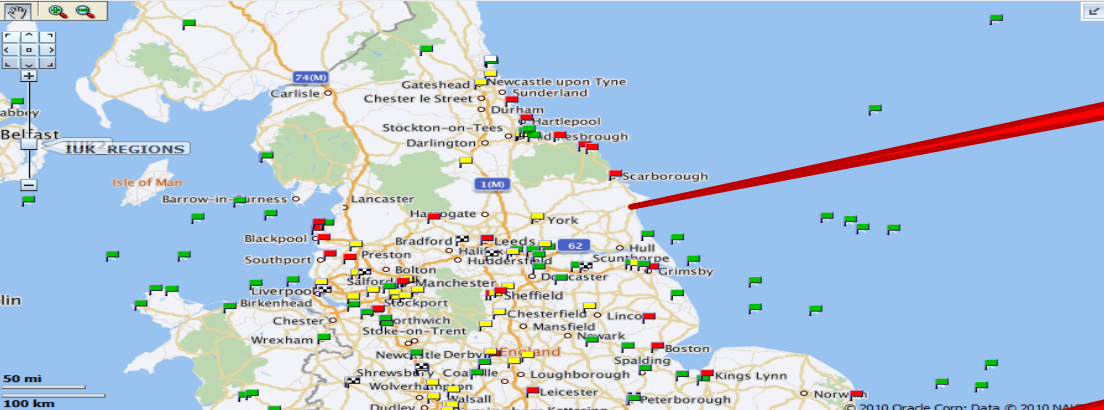
Sector --Select Value--

Region --Select Value--

Apply

Reset

Project Locations according to P6 Cost and Schedule Performance Index Calculations



Exception Report:

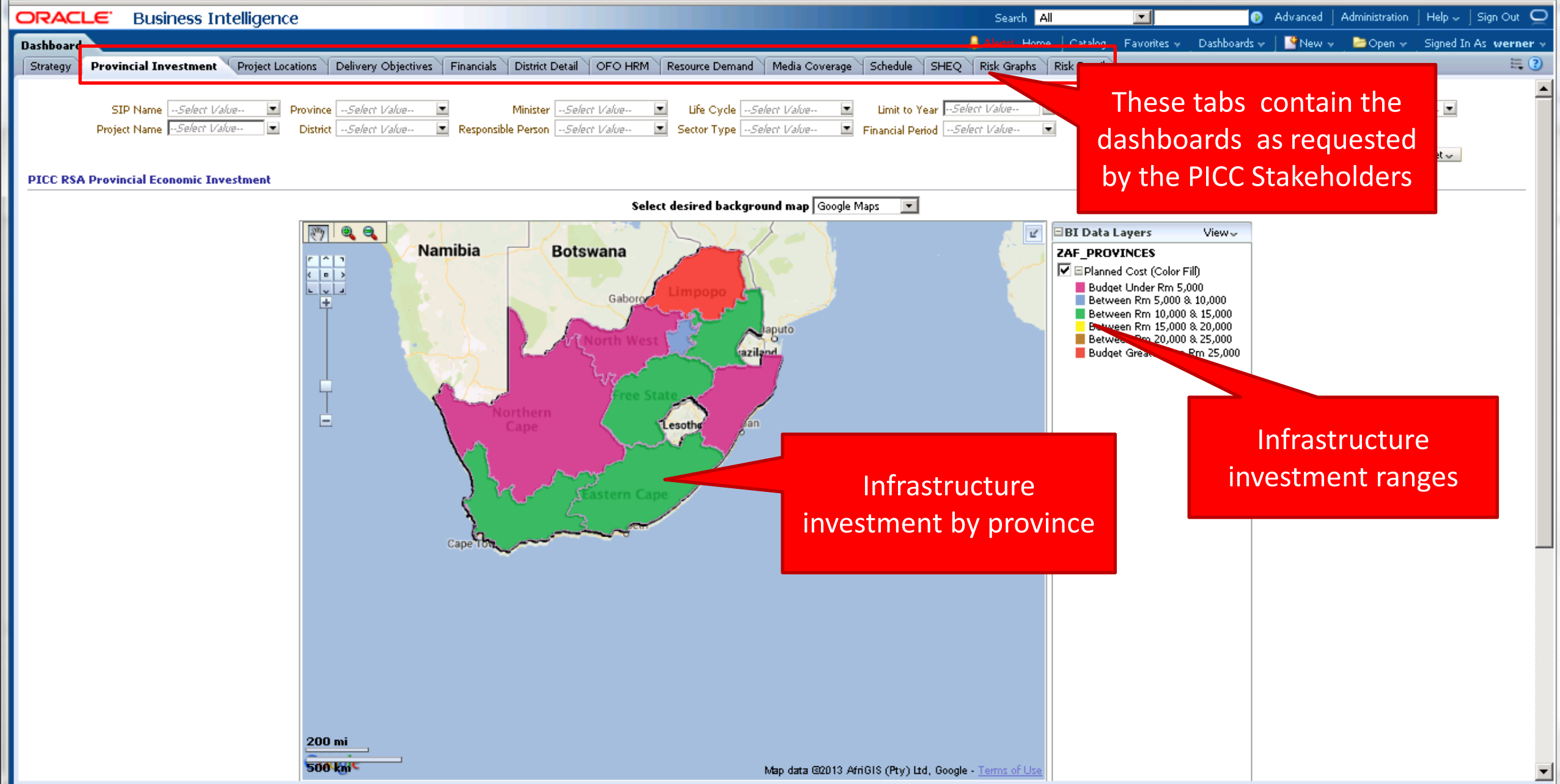
Projects in Distress (Where Project CPI & SPI Index Less Than 0.95)

Department	Project Name	Link to Project Workspace	Link to Activities	CPI	SPI	Planned Cost	Actual Cost	Remaining Cost	At Completion Cost	Expense Cost % Complete	Performance % Complete	Life Cycle
Department of Energy & Climate Change	Scottish and Southern Energy Southern	Project Workspace	Project Activities	0.10	1.00	261 m	124 m	137 m	261 m	47.35	4.84	Confirmed
Department for Transport	Access for All Mid Tier Programme	Project Workspace	Project Activities	0.14	1.00	37 m	21 m	12 m	34 m	63.93	8.22	Confirmed
Department of Energy & Climate Change	CCGT	Project Workspace	Project Activities	0.88	0.52	35 m	20 m	13 m	33 m	60.52	50.00	Some started, some confirmed
Department for Environment, Food & Rural Affairs	Northumbrian Water: Sewerage service	Project Workspace	Project Activities	0.94	1.00	540 m	534 m	6 m	568 m	93.66	88.85	Started
Department for Environment, Food & Rural Affairs	Thames RFCC	Project Workspace	Project Activities	0.94	1.00	565 m	532 m	36 m	568 m	93.66	88.85	Started
Department of Energy & Climate Change	Carrington Power Station	Project Workspace	Project Activities	0.95	1.00	63 m	60 m	3 m	63 m	95.24	90.63	Some started, some confirmed
Department of Energy & Climate Change	Roths Bio-Plant	Project Workspace	Project Activities	0.96	1.00	871 m	854 m	17 m	871 m	98.07	93.89	Proposed
Department for Environment, Food & Rural Affairs	Regional Growth Fund (RGF)	Project Workspace	Project Activities	1.16	1.00	10 m	6 m	3 m	9 m	63.41	66.00	Confirmed

Project Locations

Detail analysis of the projects in distress

Click to get more detail related to the project

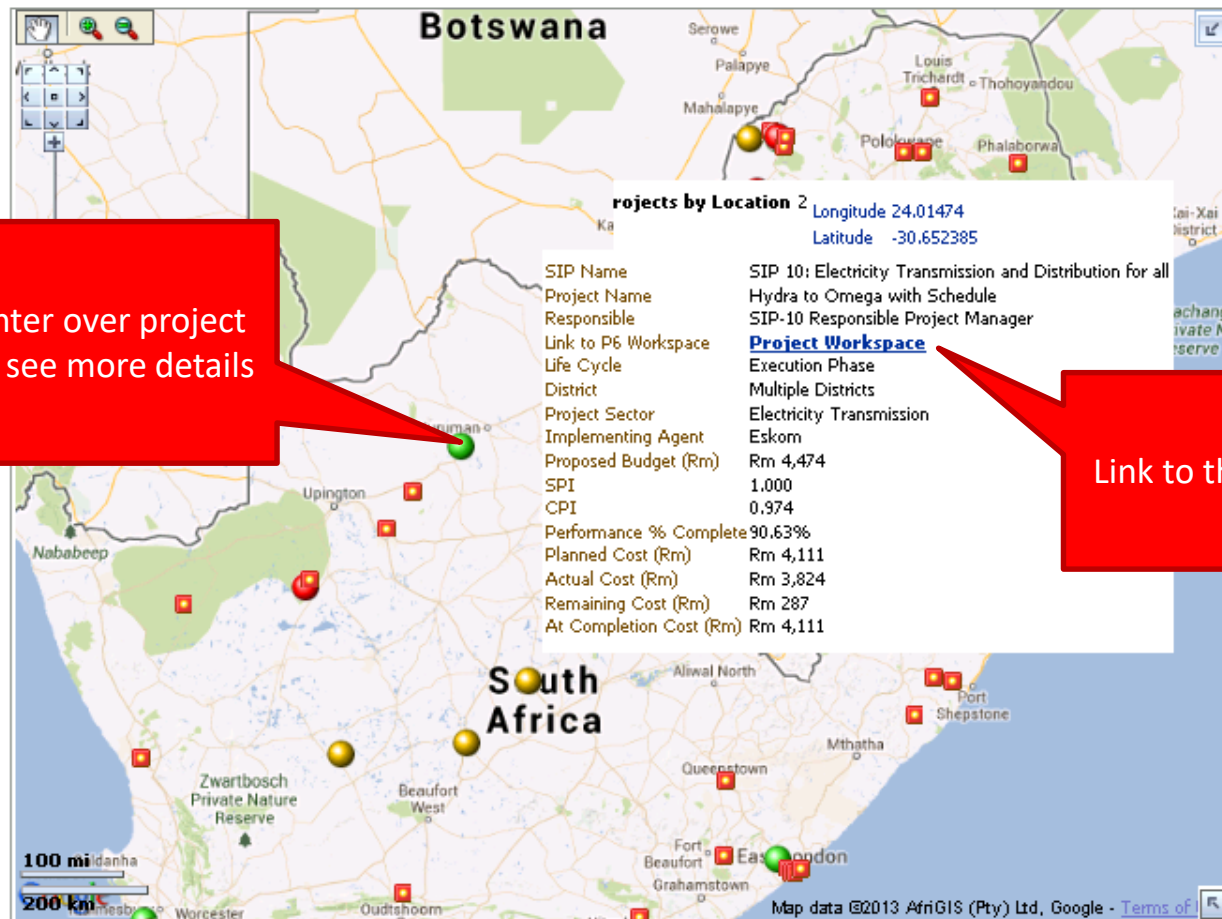


SIP Name --Select Value-- Province --Select Value-- Minister --Select Value-- Life Cycle --Select Value-- Limit to Year --Select Value-- Project Status --Select Value-- Implementing Agent --Select Value--
Project Name --Select Value-- District --Select Value-- Responsible Person --Select Value-- Sector Type --Select Value-- Financial Period --Select Value-- Portfolio --Select Value--

Apply Reset

Project Locations according to P6 Cost and Schedule Performance Index Calculations

Select the desired background map Google Maps



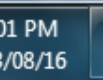
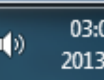
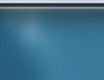
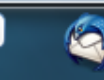
BI Data Layers View

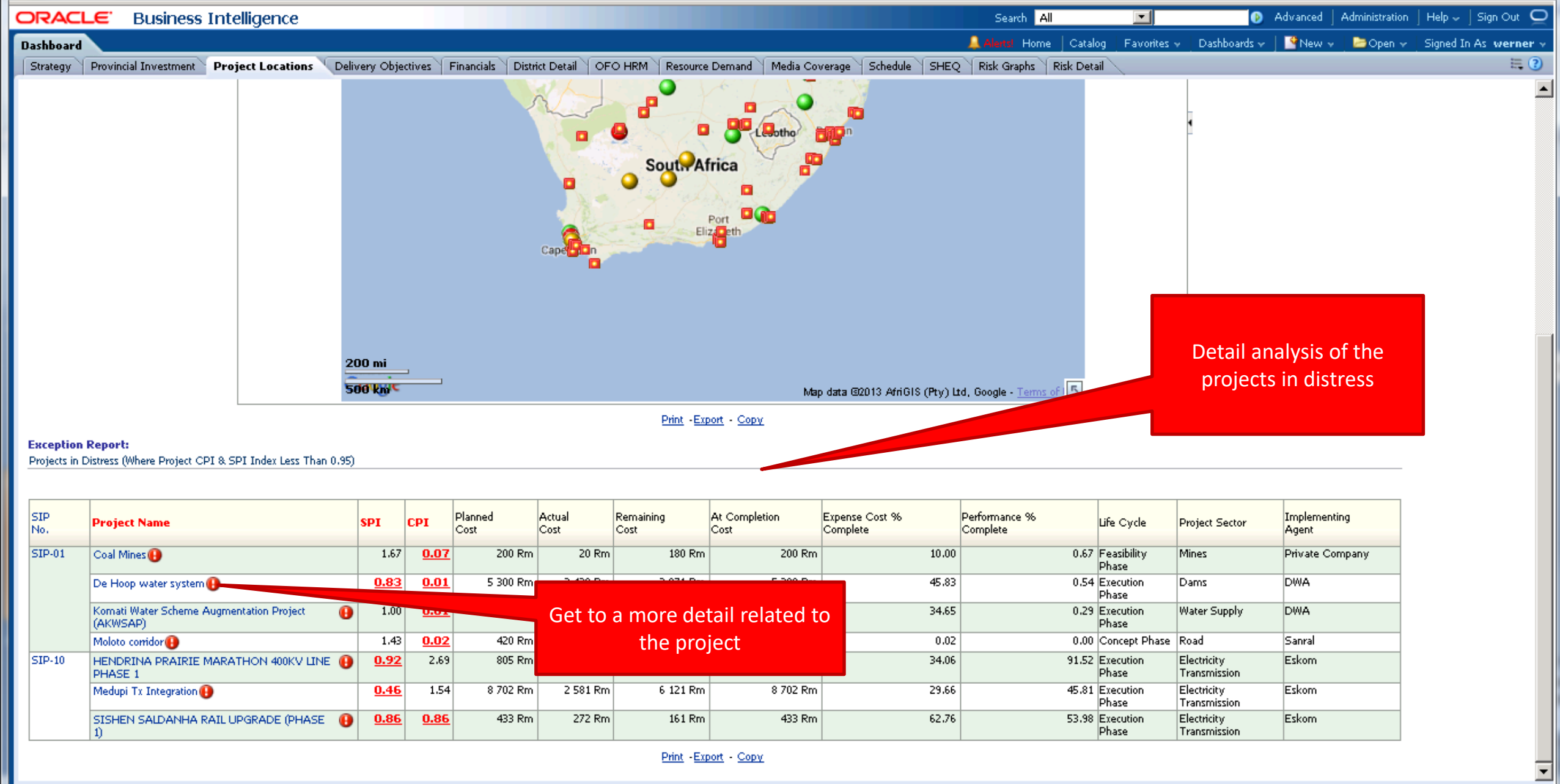
Longitude, Latitude

- ☒ PICC Projects by Location (Variab
- ☐ On Schedule & Budget
- ☐ Schedule & Budget Warning
- ☐ Behind Schedule & Over Budge
- ☐ Project In Planning Stage

Hover pointer over project location to see more details

Link to the Project Workspace in the P6 solution





Detail analysis of the projects in distress

Get to a more detail related to the project



100%

03:08 PM
2013/08/16

Project: 809941

Project Summary

DOT Description

ATMS/ATIS: WESTCHESTER COUNTY PARKWAYS TRAFFIC SENSORS (PRIOR PIN 8ATS.01)

Public Description

"Install an automated traffic management system on the Cross County Parkway in Westchester County. The new system will include acoustic vehicle detectors that will communicate with the region's Transportation Management Center located in Hawthorne, Westchester County."

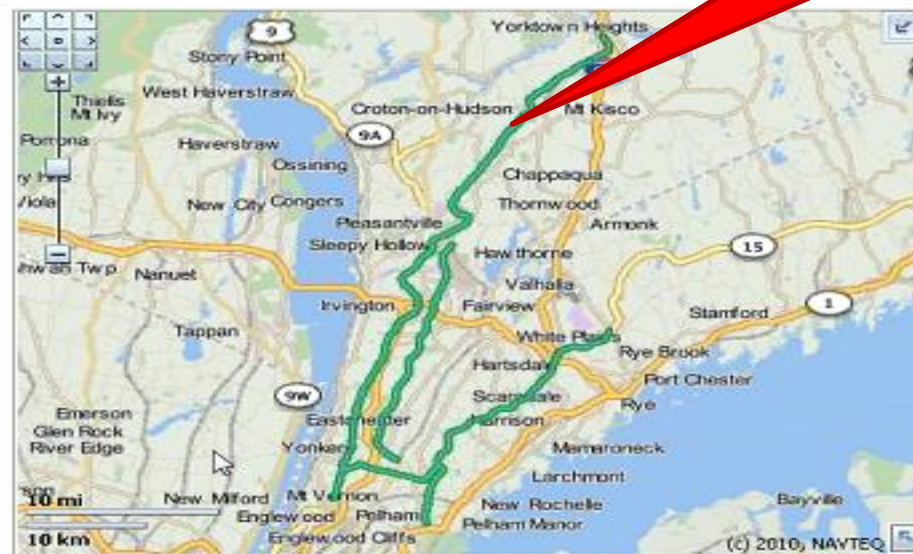
Project Status "Construction Start"

Planned Construction Cost **\$4,876,000**

Notes

Disadvantaged Business Enterprise (DBE) Contracting Goal 0% vs Commit of 5.64%.

Project Location



Project Locations

BI Data Layers

Hwy Projects

- ☒ Planned Construction
- ☐ First Third
- ☐ Second Third
- ☐ Last Third

Map Features

- ☐ Economic Impact

Project Portioning

Counties

County	Mileage	# of Bridges	% of Project	Cost
WESTCHESTER	61.2		100.0%	\$4,875,996



WESTCHESTER, Cost

Assembly Districts

District	Mileage	# of Bridges	% of Project	Cost
87	3.04		5.0%	\$242,164
88	8.77		14.3%	\$698,650
89	14.18		23.2%	\$1,130,200
91	1.30		2.1%	\$103,654
92	23.67		38.7%	\$1,886,450

Rows 1 - 5



87
88
89
91
92
93

Current Project Status



IDD Key Performance Areas

% Complete

63%

Positive Schedule Completion %

% Project Activities Completed Within Schedule



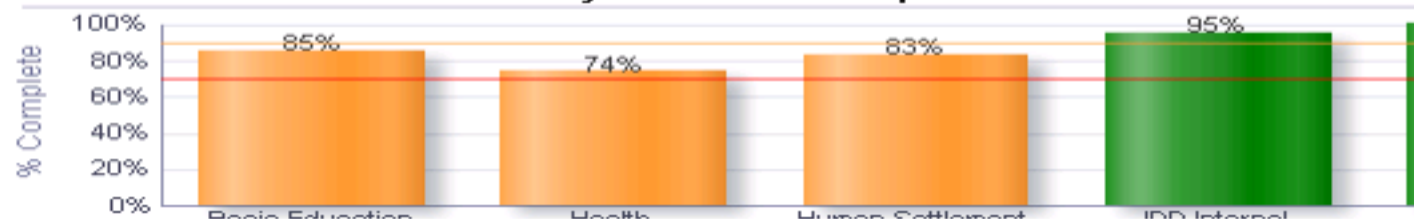
Sector	% Complete
Basic Education	98%
Health	48%
Human Settlement	57%
IDD Internal	93%
Spatial Projects	100%
Grand Total	63%

% Complete

80%

Cost Variance is the Earned Value minus the Actual...

% Project Activities Completed Within Cost



Sector	% Complete
Basic Education	85%
Health	74%
Human Settlement	83%
IDD Internal	95%
Spatial Projects	100%
Grand Total	80%

Key Activity

5%

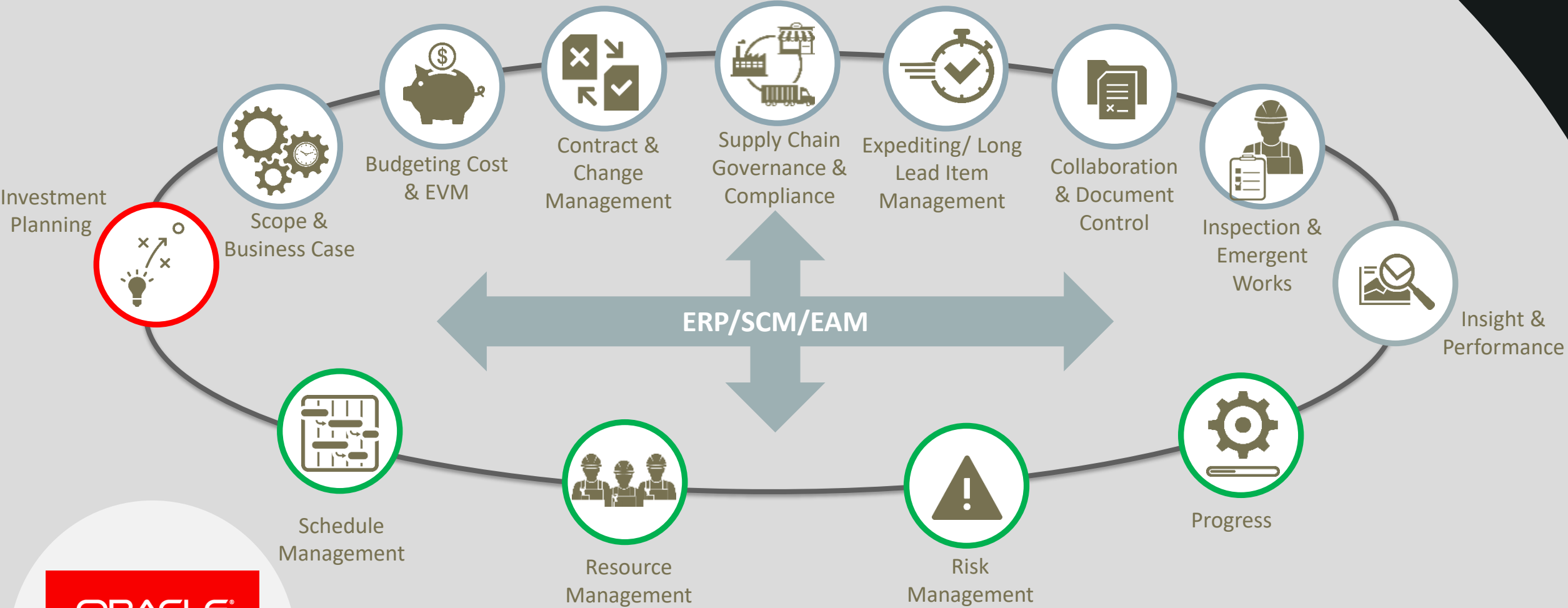
Key activity completion within baseline date

Key Activities Completed on Time

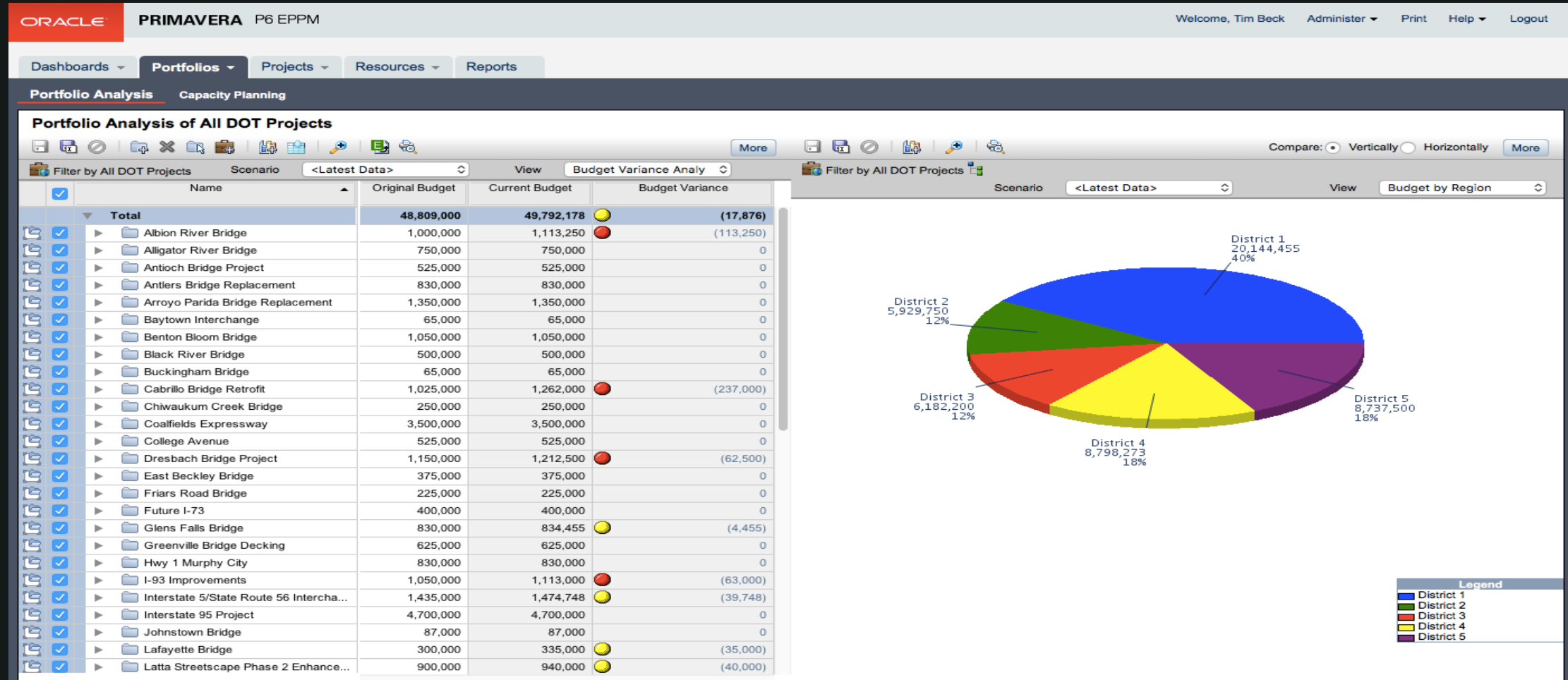


Sector	Ratio
Basic Education	3%
Health	4%
Human Settlement	13%
Spatial Projects	12%

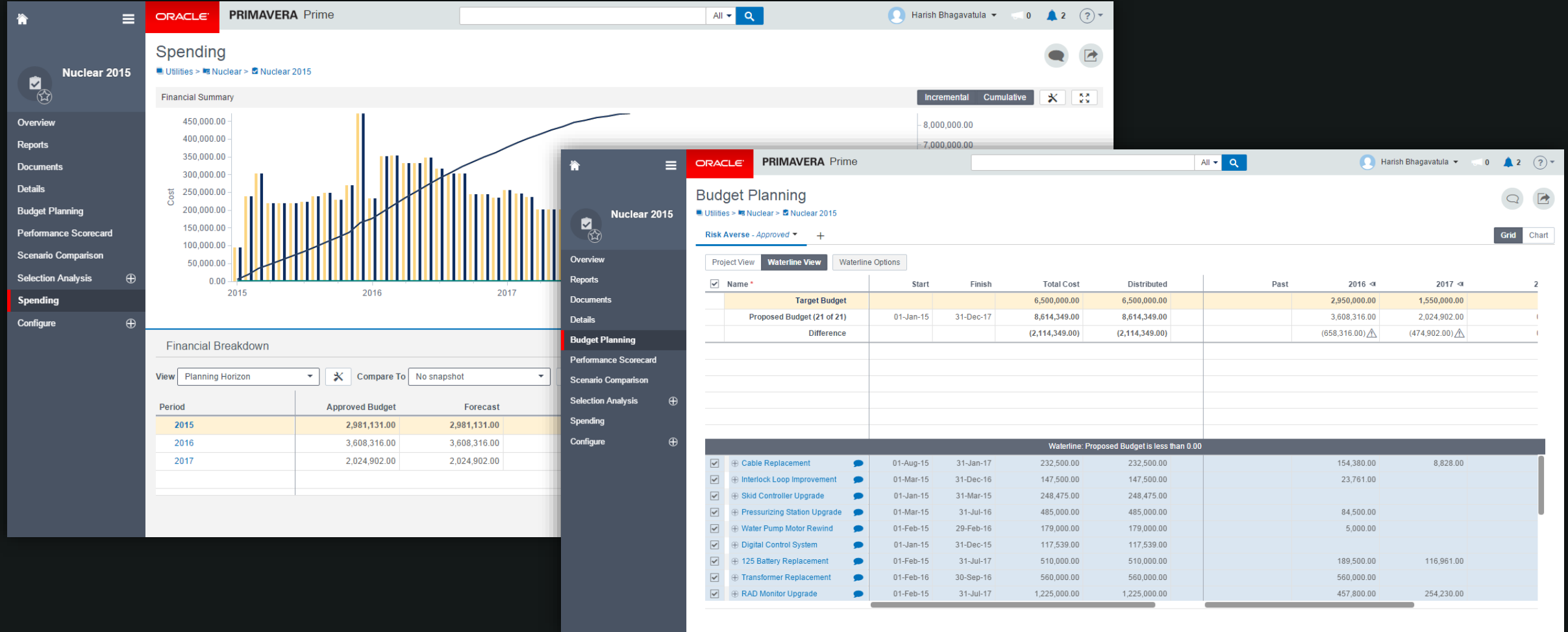
Opex Solution



Tracking the inventory of projects



Prepare long range capital plans



Managing the risk profiles

Oracle Primavera Prime interface showing the Risk Register for project risk1.

Risk Register

Project: risk1 | Register | Chart | Matrix: Risk Matrix 5 x 5

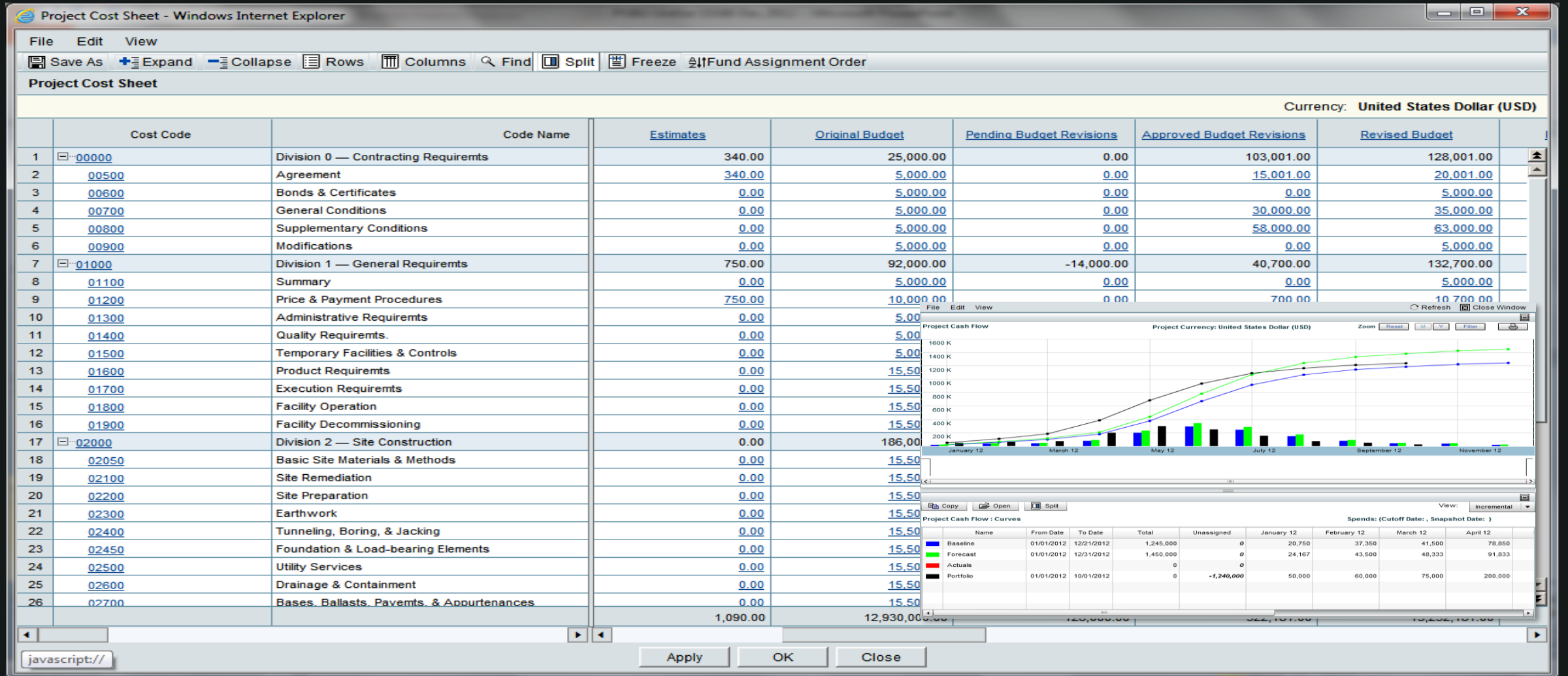
ID *	Name *	Score	Status *	Type	Probability *	Schedule Impact *	Cost Impact *
Risk Register 2	Risk Register 2	28	Proposed	Opportunity	H (60% - 80%)	VL (0.00d - 12.80d)	H (720,000.00 - 960,000.00)
Risk Register 1	Risk Register 1	12	Open	Threat	L (20% - 40%)	M (25.60d - 38.40d)	H (720,000.00 - 960,000.00)
RR04	Risk04	2	Proposed	Opportunity	VL (0% - 20%)	M (25.60d - 38.40d)	VL (0.00 - 240,000.00)
RR03	Risk03	12	Proposed	Threat	L (20% - 40%)	VL (0.00d - 12.80d)	H (720,000.00 - 960,000.00)
RR02	Risk02	3	Proposed	Threat	L (20% - 40%)	L (12.80d - 25.60d)	VL (0.00 - 240,000.00)
RR01	Risk 01	72	Proposed	Threat	VH (80% - 100%)	VH (51.20d - 64.00d)	VH (960,000.00 - 1,200,000.00)
RR05	Risk05	20	Proposed	Threat	M (40% - 60%)	Negligible	H (720,000.00 - 960,000.00)
RR06	Risk06	14	Proposed	Threat	H (60% - 80%)	L (12.80d - 25.60d)	M (480,000.00 - 720,000.00)

Start Typing...

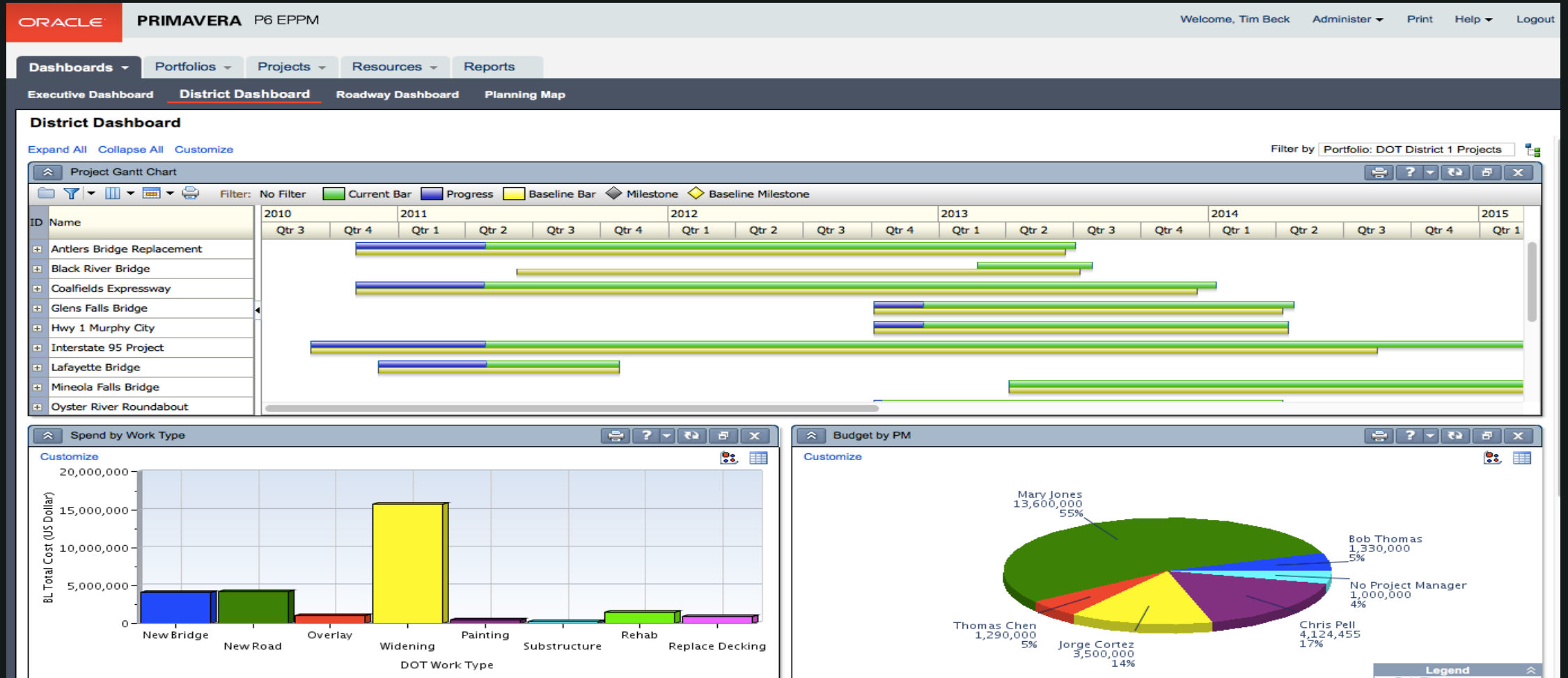
Response Plan | Activities

ID *	Name *	Active *	Type *	Status	Score	Finish Date	Probability	Cost Impact
asdf	asdf	<input checked="" type="checkbox"/>	Reject		28	27-Jan-15	H (60% - 80%)	H (720,000.00 - 960,000.00)
asdf	asdf		Proposed			27-Jan-15		

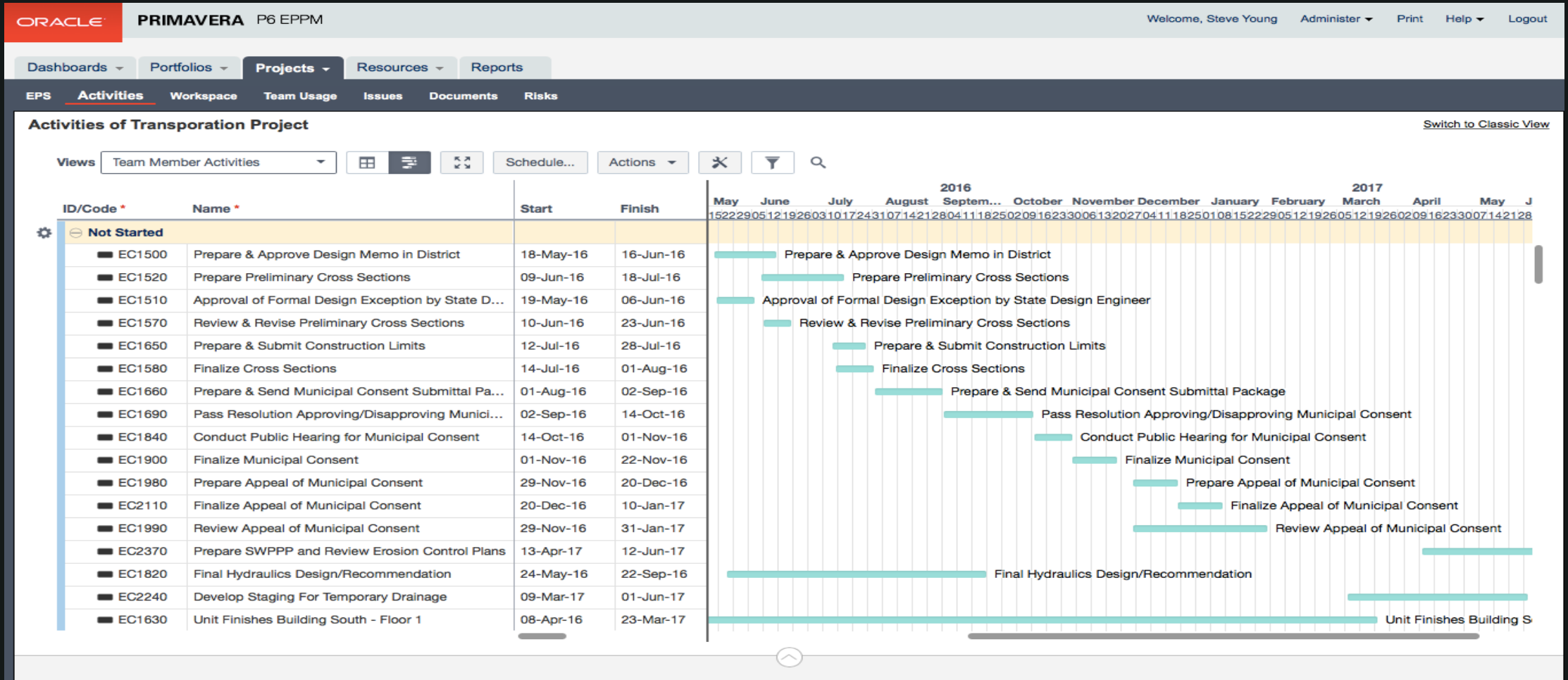
Manage the budgets and cash flow



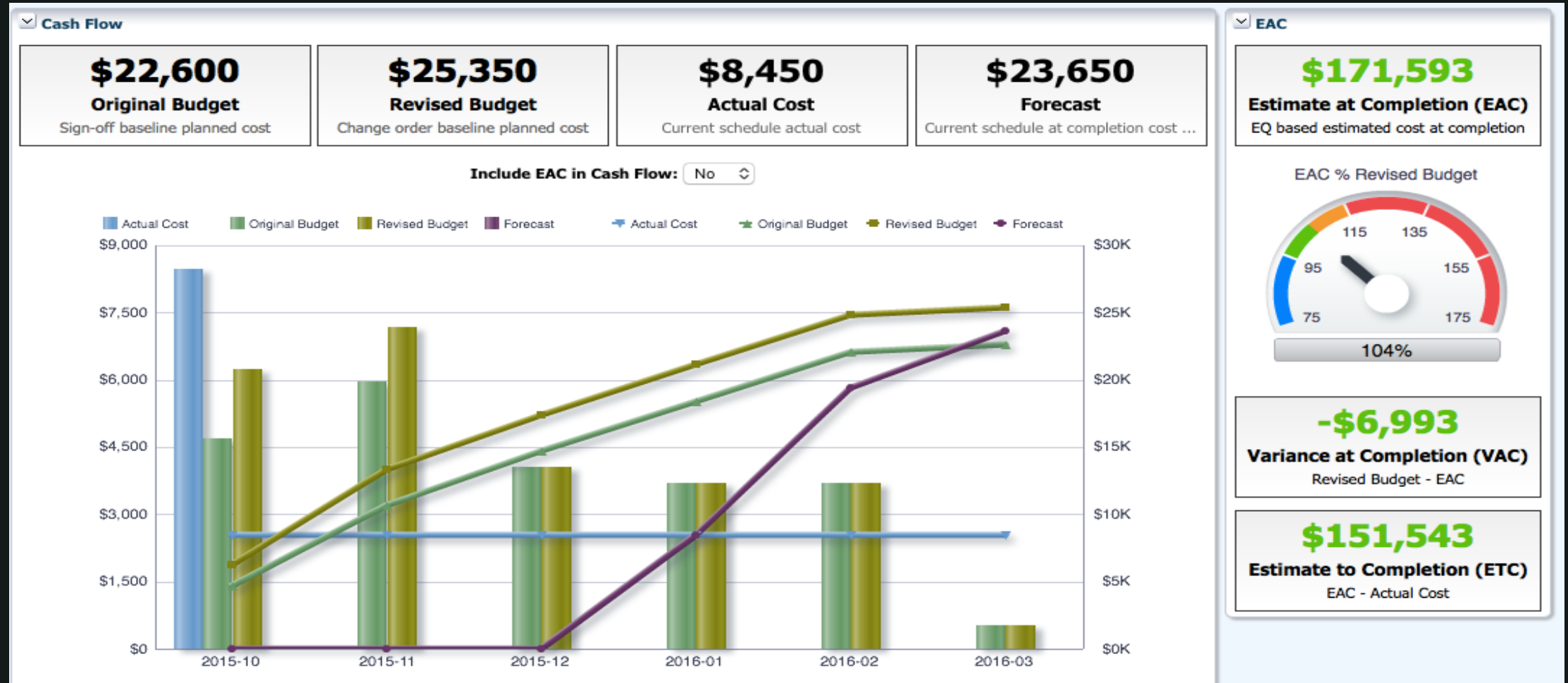
Monitor the summary schedules



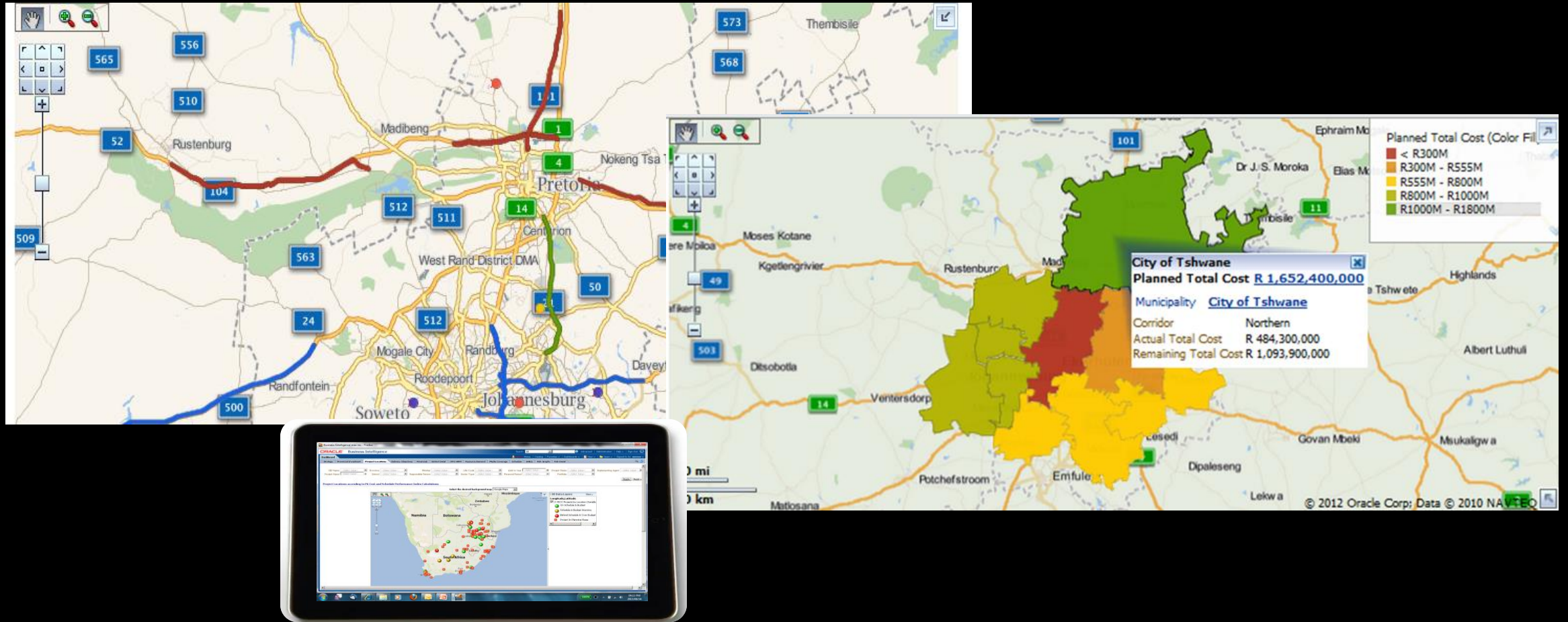
Plan and manage the detailed schedules



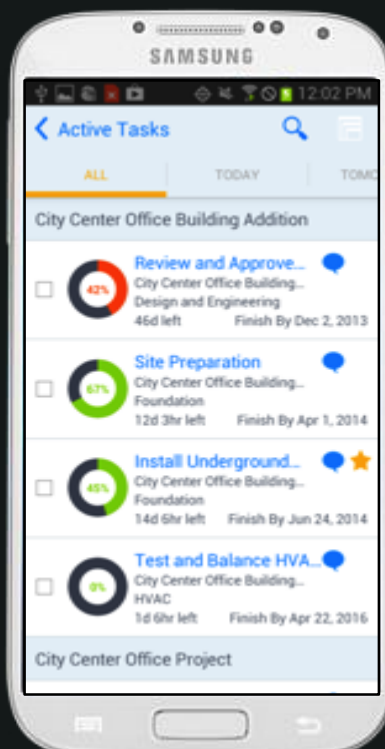
Track performance



Track performance – spatial reporting

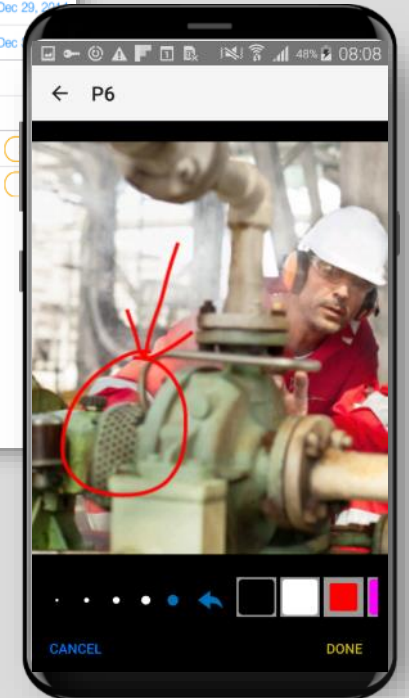
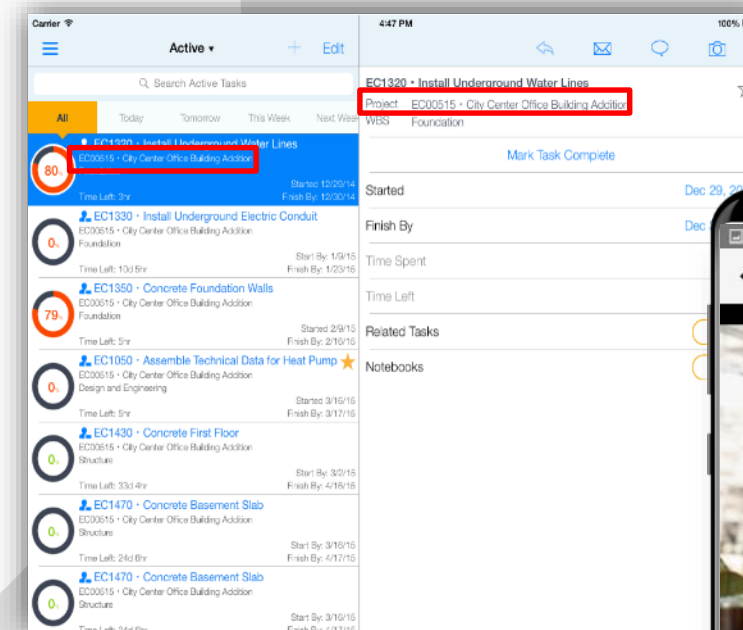


Mobile workforce



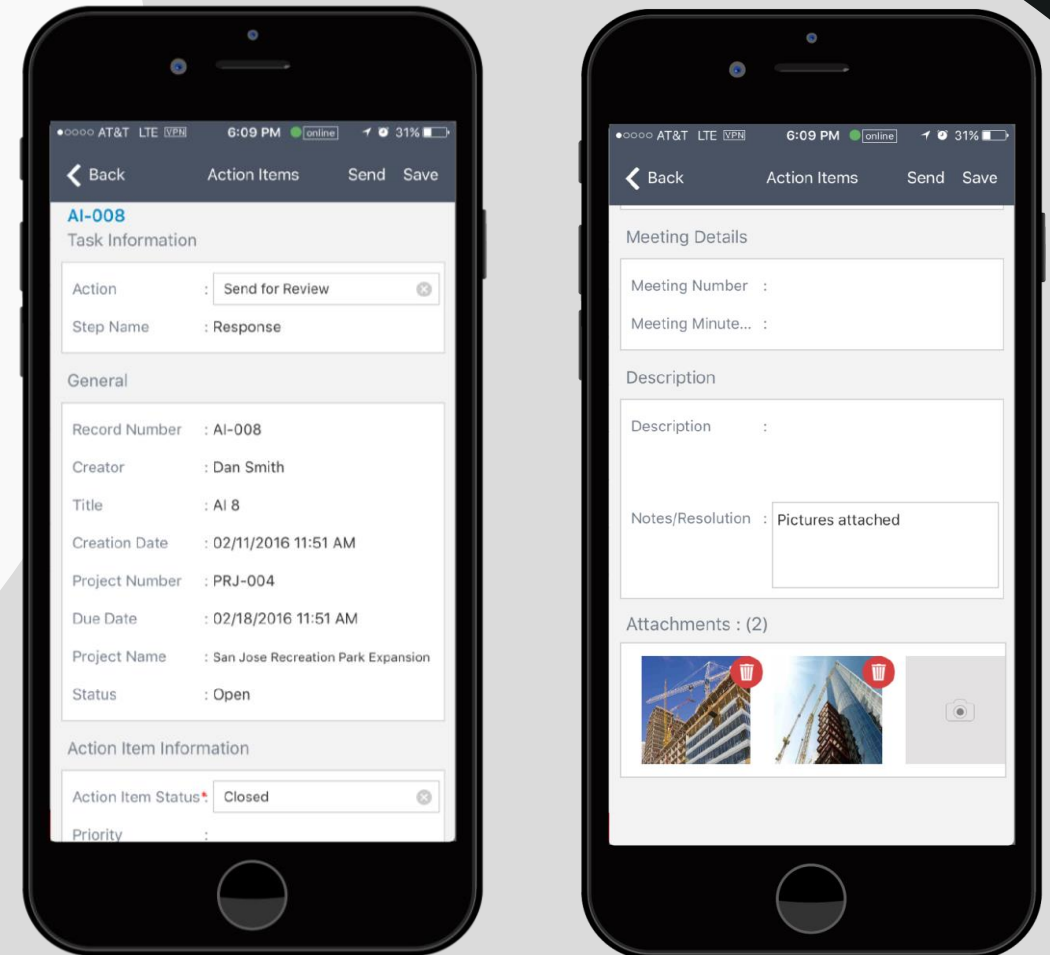
Field Productivity

- Manage field status/productivity issues in both Online and TAR use cases (Inspections, Emergent work, Status, HSE etc.) through simple to use mobile applications
- View documents & provide updates from the field
- Capture changes including photos
- On/Off line modes
- *'35% see savings in deploying mobile technology in the Field'- Accenture*

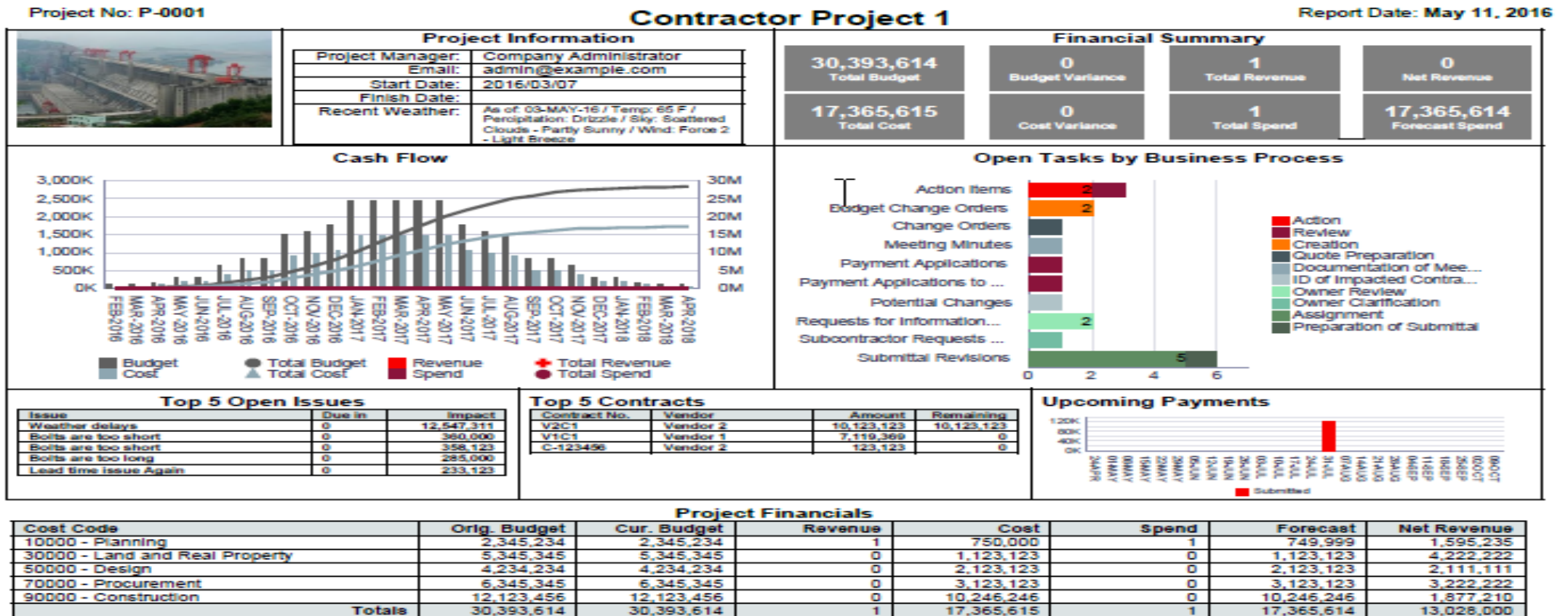


Operations – Administration Efficiencies

- Effectively capture ,manage and control all Health, Safety and Environmental (HS&E) incidents
- Manage and control Vendor activity on an operational asset
- Provide ePermits for access to asset via mobility etc.
- Undertake Regulatory asset Inspections (field based), and ensure they are checked off



Project status reports



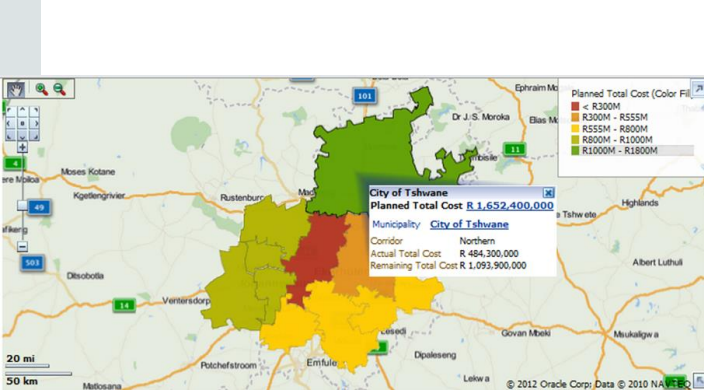
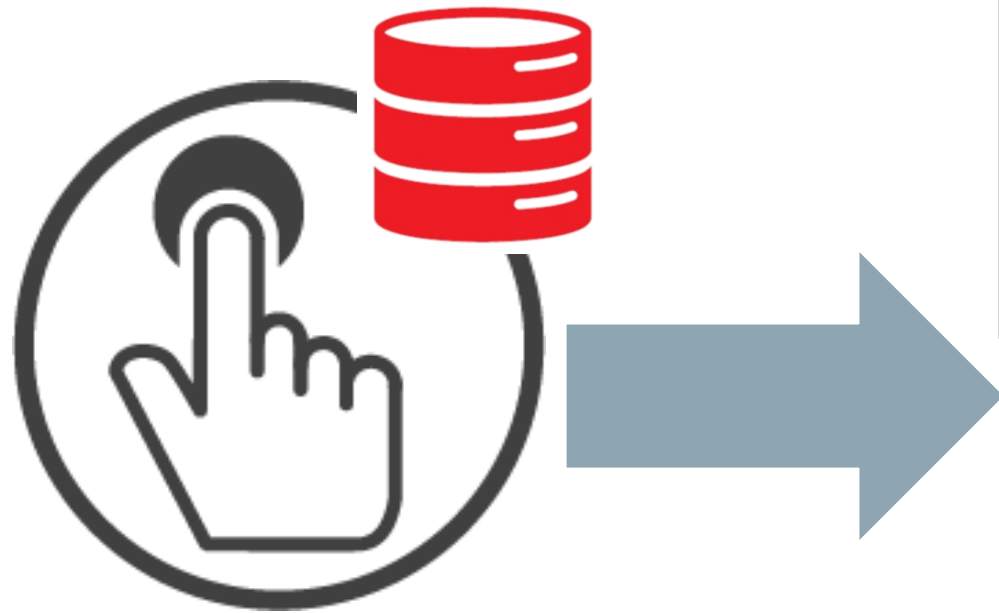
ORACLE

PRIMAVERA Unifier

Project Summary

Page: 1

Need reporting



ORACLE®

PRIMAVERA

Towards collaboration.....

ORACLE®