

# Performance Metrics

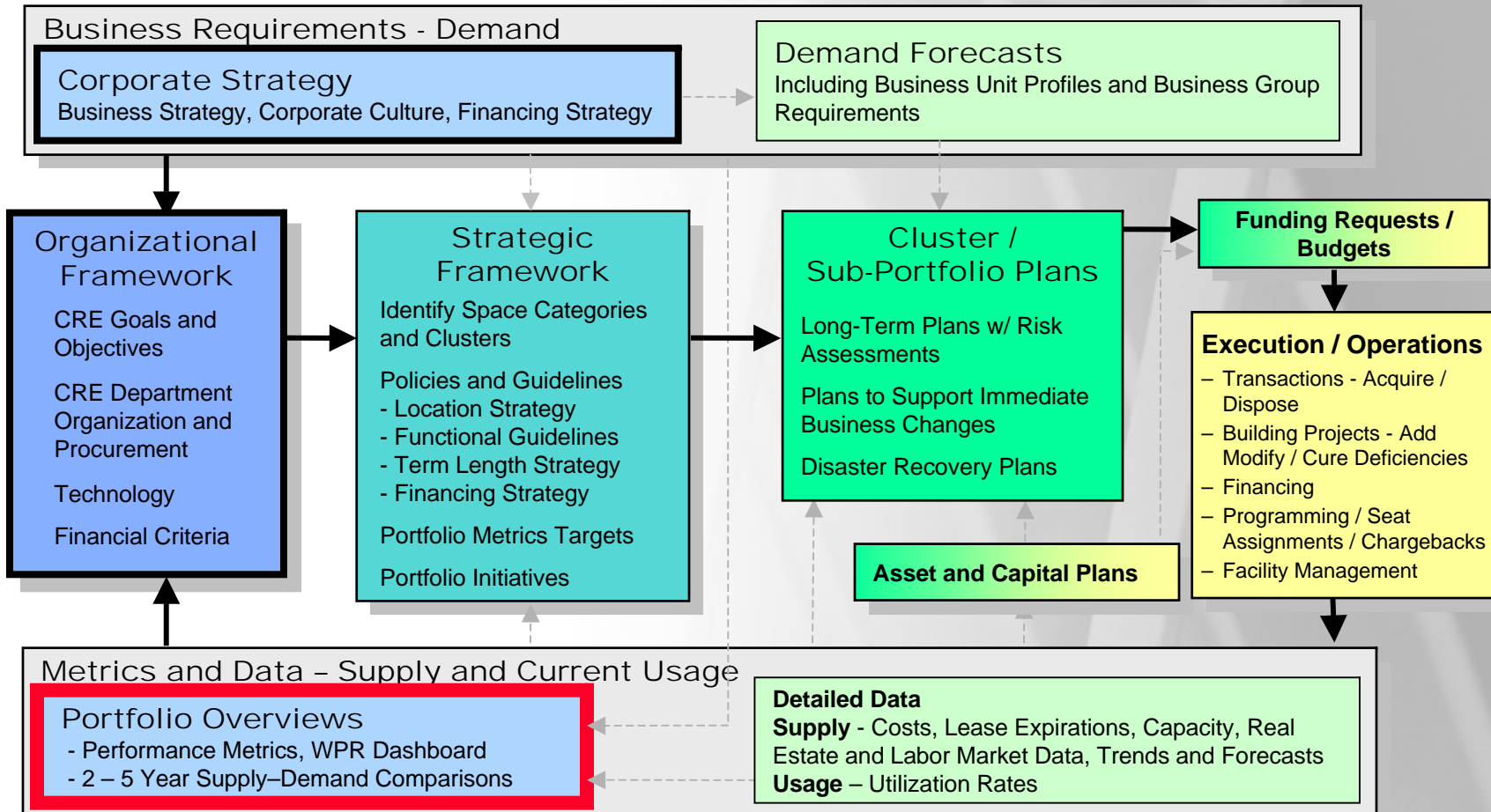
## Overview

*Jane Mather*

Performance Portfolio Management

# Advanced Portfolio Management Process

Blue and green activities are part of portfolio management.



Activities as defined by OSCRE Strategy and Planning Working Group.

# Performance Metrics

***Metrics provide benchmarks, targets, and progress measures for portfolio optimization***

***Metrics measure more than financial issues***

- Cost – if lower costs may sacrifice other goals
- Quality / productivity
- Responsiveness
- Flexibility
- Balance sheet structure
- Business risks – disaster recovery, political instability
- Social responsibility and sustainability

***CRE should provide different metrics for different stakeholders***

***Metrics should not be used for forecasting***

# Metrics Implementation

## ***Keep simple and focused on organizational needs***

- Different measures for different stakeholders

## ***Go beyond financial measures***

## ***Develop for whole portfolio and relevant segments and clusters***

- Space categories
- Geographic locations

## ***Establish consistent metrics***

- Owned versus leased properties – include cost of capital
- RSF vs USF

## ***Set targets and benchmark metrics***

- Are metrics consistent with CRE strategy?
- Are metrics better or worse than peers?

## ***Use in performance evaluations and compensation decisions***

## ***Develop strategies to improve performance***

# Metrics Approaches

***Identify CRE critical success factors – what are the objectives***

***Identify key performance indicators (KPIs) / performance metrics for these success factors, how do we measure***

## ***Selected approaches***

- ***Balanced Scorecard***

- ◆ Introduced by Kaplan and Norton (1992), now trademarked
- ◆ Used by over 50% of Fortune 500
- ◆ Components
  - Customer
  - Process
  - Financial
  - Learning

- ***Triple Bottom Line***

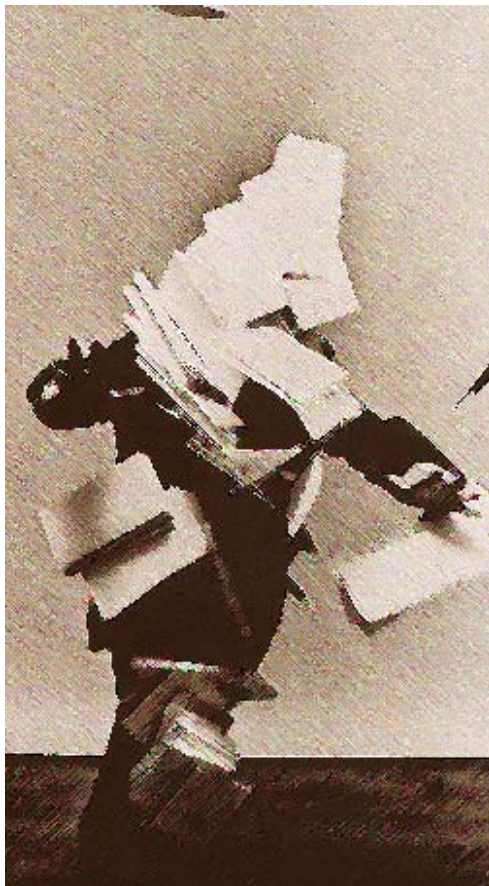
- ◆ Recent approach, used more in Europe
- ◆ Components
  - Financial (Profit)
  - Social Responsibility (People)
  - Environmental Sustainability (Planet)

# Possible Metrics – Balanced Scorecard

Metrics Categories	Stakeholders			
	CEO, CFO	Business Group Executives	CRE Executive	Planning and Strategy Team
<b>Financial Cost</b>	<ul style="list-style-type: none"> <li>WPR / CRE expense / revenue, corporate expenses</li> <li>WPR / CRE expense / persons housed</li> <li>WPR / CRE expense / demand driver</li> <li>CRE impact on balance sheet</li> <li>Cost saving achieved through initiatives – consolidation, flexible officing, outsourcing</li> </ul>	<ul style="list-style-type: none"> <li>WPR / CRE expense by business group</li> <li>Business revenue / real estate supply measure – revenue per store</li> </ul>	<ul style="list-style-type: none"> <li>WPR / CRE expense / SF (including sub-components and additions for cost of capital)</li> <li>WPR / CRE expense / seat</li> <li>CRE overhead expenses / persons housed</li> <li>Cost per move, seat reconfiguration, other real estate activity</li> <li>Contract rent relative to market rent</li> </ul>	<ul style="list-style-type: none"> <li>WPR / CRE expense / other demand drivers</li> </ul>
<b>Volume</b>	<ul style="list-style-type: none"> <li>Utilization rate</li> </ul>		<ul style="list-style-type: none"> <li>SF / persons housed</li> <li>SF / other demand driver (engineer, clients, product, etc.)</li> <li>Persons housed / seat</li> <li>Share of FTE or workstations moved per year</li> </ul>	<ul style="list-style-type: none"> <li>SF / Seat</li> <li>Share of space devoted to site services, team space</li> <li>Forecasted percentage change in space by classification</li> <li>Share of persons served by work type (traditional, mobile, telework)</li> </ul>
<b>Customer Asset Quality</b>	<ul style="list-style-type: none"> <li>Client satisfaction measure</li> </ul>	<ul style="list-style-type: none"> <li>Workplace quality measure</li> <li>Marketing, brand, image value</li> <li>Business continuity measure, space concentration</li> </ul>		
<b>Process and Service Quality</b>	<ul style="list-style-type: none"> <li>Project completion time</li> </ul>	<ul style="list-style-type: none"> <li>Disruption, churn rates</li> </ul>	<ul style="list-style-type: none"> <li>Forecast of workload</li> <li>Share of authorized projects completed</li> <li>Planning results vs goals</li> </ul>	<ul style="list-style-type: none"> <li>SF managed / planner</li> <li>Persons housed / planner</li> </ul>
<b>Process Flexibility</b>	<ul style="list-style-type: none"> <li>How readily can portfolio contract or expand to meet changing needs – time and cost measure</li> </ul>		<ul style="list-style-type: none"> <li>Commitment duration (lease vs. own, lease term distribution)</li> <li>How much can be disposed or added within time period</li> </ul>	<ul style="list-style-type: none"> <li>Measure of ability to switch space between usage and types</li> <li>Share of expensive fixed improvements in core space</li> </ul>

# Data and Sources

*Technology is important to portfolio management. Collecting and reconciling the data can be the most difficult parts of creating performance metrics because the data comes from so many sources.*



## **Facility Capacity and Configuration Data**

CAFM Systems

Special Surveys for Special Use Space

## **Facility Cost Data**

Lease Administration, Portfolio Administration

Facility Management

General Ledger

## **Occupancy Data**

CAFM Systems

HR, Security, Telecom

## **Existing Asset Values**

Capital Accounts

Discussions with Real Estate Market Experts



### III. Key Drivers for ABN AMRO's Sustainability Journey

#### Sustainability Rating Agencies & SRI Funds

##### Performance of ABN AMRO's peer group top 20 in the DJSI World



Peers	Index	Sector	Score 2003			Score 2002		
			eco	env	soc	eco	env	soc
<b>Group 1</b>								
Citigroup	DJSI World	Financial Services	5	5	5	4	4	4
ING	DJSI World/ Stoxx	Insurance	5	5	5	5	5	5
<b>Group 2</b>								
ABN AMRO	DJSI World/ Stoxx	Banks	5	4	4	4	4	5
Credit Suisse	DJSI World/ Stoxx	Banks	3	5	5	4	5	5
UBS	DJSI World/ Stoxx	Banks	4	5	5	4	5	5
<b>Group 3</b>								
Barclay's Plc	DJSI World/ Stoxx	Banks	3	5	4	4	4	5
BNP Paribas	DJSI World/ Stoxx	Banks	4	4	4	5	4	4
Deutsche Bank AG	DJSI World/ Stoxx	Banks	4	4	4	4	5	5
Hypo Vereinsbank	DJSI World/ Stoxx	Banks	4	4	4	5	4	4
Lloyds TSB	DJSI World/ Stoxx	Banks	3	5	4	4	5	5
<b>Group 4</b>								
Fleet Boston	DJSI World	Banks	4	3	4	not rated		
HSBC	DJSI World/ Stoxx	Banks	4	3	4	5	3	5
Société Generale	DJSI World/ Stoxx	Banks	4	3	4	4	3	4
<b>Group 5</b>								
BBVA	DJSI World	Banks	3	3	4	4	3	4
GSCH	DJSI World/ Stoxx	Banks	3	3	4	5	2	4
<b>Not rated</b>								
Bank One		Not rated						
Wells Fargo		Not rated						
JP Morgan Chase		Not rated						
Merrill Lynch		Not rated						
Morgan Stanley		Not rated						
Nordea		Not rated						



# Resources for Triple Bottom Line

## Dow Jones Sustainability Index

- Includes ratings by industry
- [www.sustainability-indexes.com](http://www.sustainability-indexes.com)
- Created by SAM Group - The indexes are based on SAM's corporate sustainability assessment, which identifies global sustainability leaders on the basis of economic, environmental and social criteria.
- [www.sam-group.com](http://www.sam-group.com)

## "Values and Value: Communicating the strategic importance of Corporate Citizenship to Investors"

- World Economic Forum Global Corporate Citizenship Initiative
- [www.weforum.org/corporatecitizenship](http://www.weforum.org/corporatecitizenship)

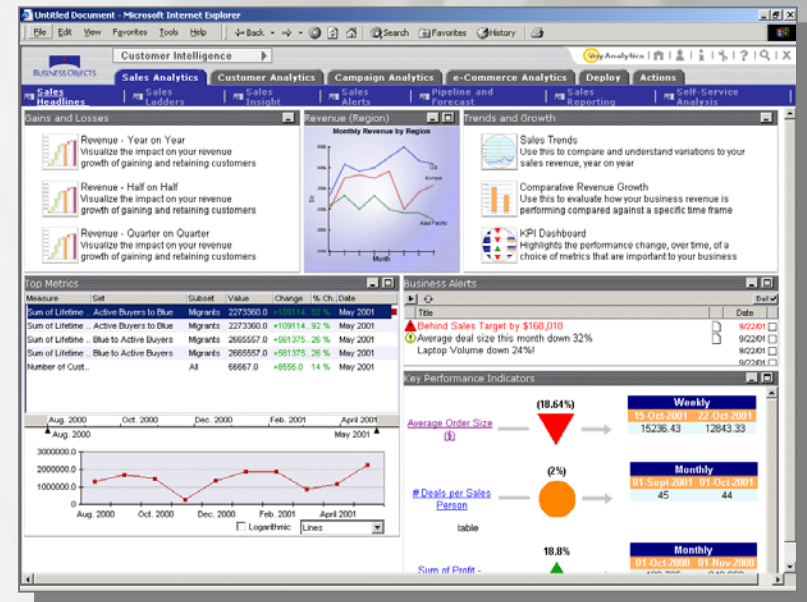
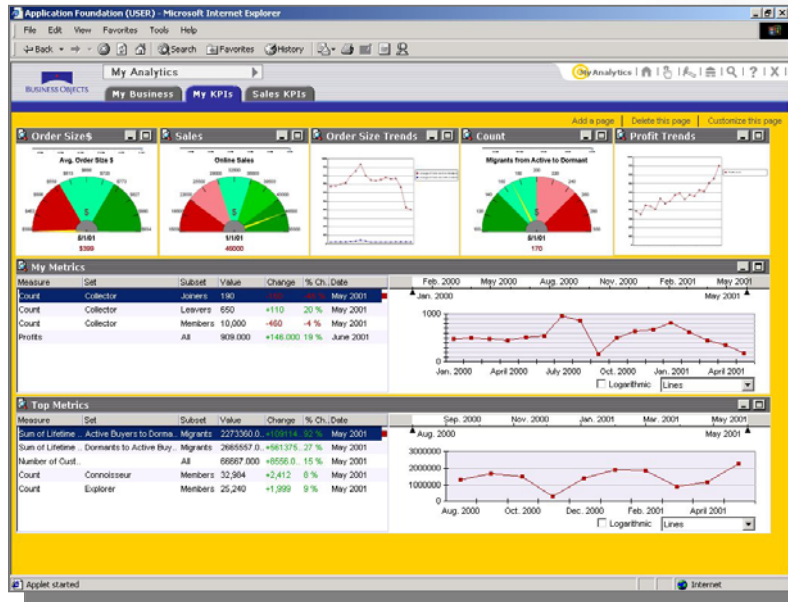
## World Business Council for Sustainable Development

- The World Business Council for Sustainable Development (WBCSD) is a coalition of 170 international companies united by a shared commitment to sustainable development via the three pillars of economic growth, ecological balance and social progress.
- [www.wbcsd.ch](http://www.wbcsd.ch)

# Dashboard Examples

## Goals with dashboards

- One screen shows key metrics relevant to that stakeholder
- Real time combining different data sources
- Graphic representations
  - Speedometers
  - Direction arrows to show improvement or decline



# Productivity Metrics

*A constant challenge - How to evaluate productivity improvements that are costly?*

## *Examples of productivity indicators*

- Productivity for activities that can be replicated – call centers
- Perceived productivity – extent to which worker believes environment supports their productivity
- Customer satisfaction
- Time in activity – looking for colleagues or available team space, setting up workspace
- Indirect indicators - absenteeism, retention
- Workplace characteristics that improve productivity
  - To what extent are these workplace characteristics present?
  - Experimental tests of productivity improvements from these characteristics

# Facility Management Metrics Approaches

## *Facility Condition Assessment*

$$\begin{array}{l}
 \text{Facility} \\
 \text{Condition} \\
 \text{Index (FCI)}
 \end{array}
 = \frac{\text{total cost of existing deficiencies}}{\text{current replacement value}}$$

### **Cost of Existing Deficiencies**

- Required Capital Improvements
- Deferred Maintenance
- Life-Safety Codes
- Internal Standards
- ADA
- Other codes

# Facility Management Metrics Approaches

## *Functionality, Serviceability, and Condition*

- Serviceability Tools and Methods (ST&M) - International Centre for Facilities
- Facility Performance Index - FM Tools
- American Society for Testing and Materials (ASTM) Standards

### Typical information technology A.5

Office computers and related equipment	A.5.1
Power at workplace	A.5.2
Building power	A.5.3
Data and telephone systems	A.5.4
Cooling	A.5.6

		1	2	3	4	5	6	7	8	9
I	6						T			
E	6					T				
I	4									
E	5					T				
I	7									

### Image to Public and Occupants A.11

Exterior appearance	A.11.1
Public spaces within building	A.11.3
Finishes and materials in office spaces	A.11.5
Identity outside building	A.11.6

		1	2	3	4	5	6	7	8	9
E	7									
E	6					T				
I	5									
M	6									

# Metrics Calculations

## Data Element Examples

### Data Element Categories

- Space
- Use
- Cost (below) – preliminary, to be reviewed in with OPD data elements

Revenues and Expenses	Corporate Revenue																
	Corporate Expenses													Profit			
	Workplace Expenses													Other Corporate Expenses			
	Workplace Expenses - CRE											Workplace Expenses - IT, Telecom (voice, data)					
	Occupancy Costs																
	Gross Rent													Other occupancy cost components			
	Cost Categories	Contract Rent	Operating Expenses		Salary and benefits	CRE Overhead		Depreciation Amortization		Other Onsite Occupancy Costs		Payments for alternative office spaces		Personal equipment	Connectivity	Corporate infrastructure equipment	Other
				Other expenses													
	Cost Detail	Net Rent		Repairs and maintenance		Corporate staff - salary, wages, benefits		Purchase Price		Interest and Principal Payments		Home offices		Voice (phone, cell phone, pagers)	Voice (service and time charges, installation)	LAN, WAN equipment	Mail, delivery
		Percentage Rent	Maintenance and operations	Janitorial, cleaning		Outsourced services	Salaries, wages, benefits	Building Capital Expenditures		Imputed Cost of Capital		Club fees					Insurance, taxes
Operating Expense Stop			CAM - common area maintenance			Other outsource payments			Furniture	Gains and losses on sales		Other fees		Data (laptop, fax, printers, software, modems)	Data (service and time charges, installation)	Signal carriers, wiring, cabling, PBX, satellite	
Tenant Improvement Amortization		Utilities	Basic utilities		Professional fees, incl. legal, architectural				Construction	Penalties							
			Intensive-use utilities		Travel and training		Tenant Expenses		Reconfiguration	Option payments							
			Taxes		Supplies				Wiring	License and usage fees							
		Insurance		Other overhead - space, IT, telecom				Moves									
						Transaction Costs		Acquisition									
								Disposition									

# Metric Refinements

## Comprehensive Cost Measures

*Integrated infrastructure management will require more attention to IT and telecom expenses.*

Workplace Expenses									
Workplace Expenses - CRE						Workplace Expenses - IT, Telecom			
Occupancy Costs									
Gross Rent		Other occupancy cost components							
Contract Rent	Operating Expenses	CRE Overhead (corporate staff, outsourcing, professional fees, travel, training, supplies, other)	Depreciation Amortization (purchase price, building capital expenditures, tenant expenses, transaction costs)	Other Onsite Occupancy Costs (imputed costs of capital, gains and losses on sales, fees, option payments)	Payments for alternative office spaces	Personal equipment (voice, data)	Connectivity (voice, data)	Additional corporate infrastructure equipment	Other (delivery, insurance, taxes)

From "Practices and Techniques: The Accounting Classification of Workpoint Costs," Institute of Management Accountants, IDRC, KPMG, Comsul Ltd, Commonwealth Advisers

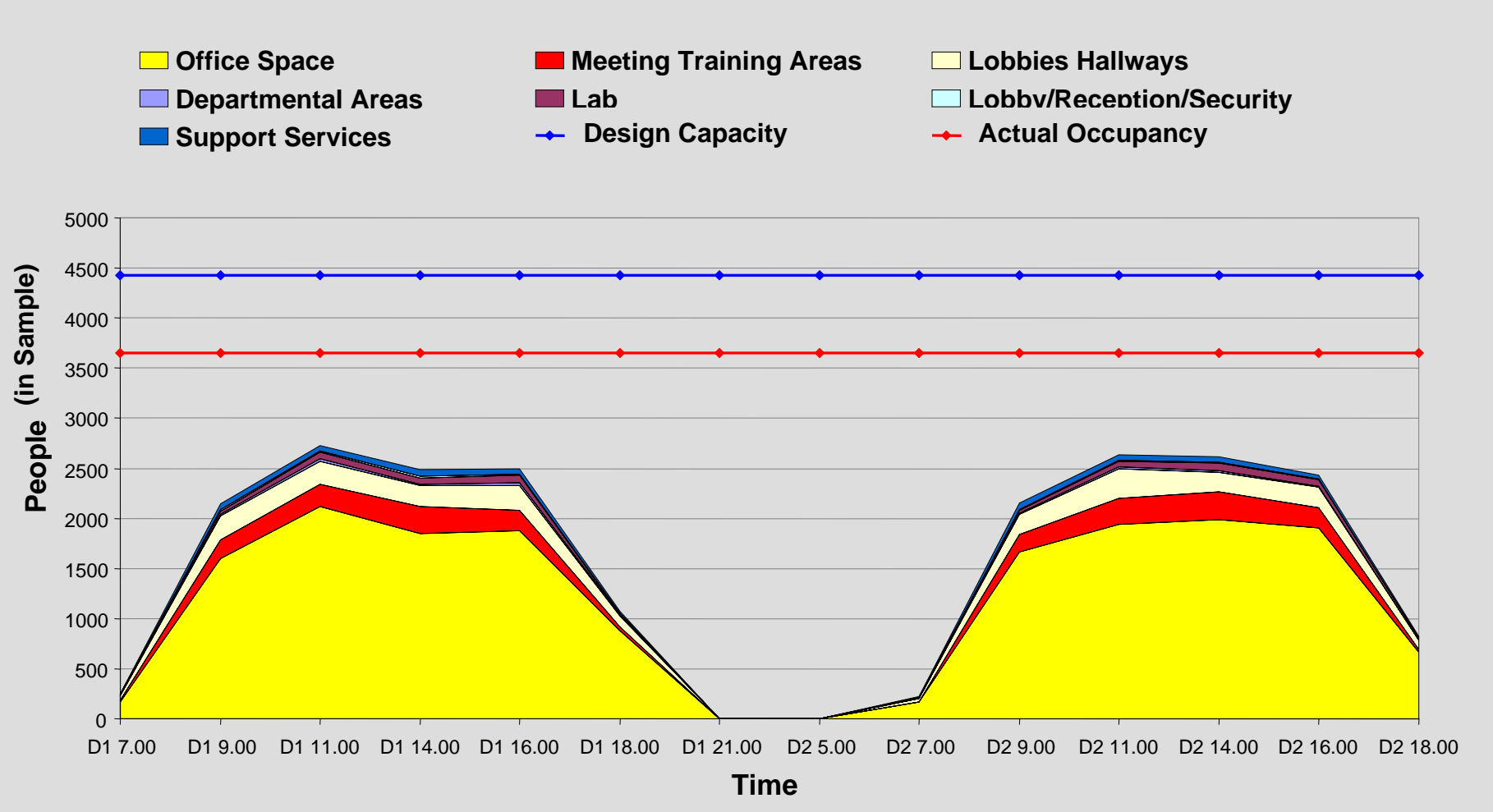




# What's My Utilization?

*Inquiring Corporations Want to Know*

## Two Days for a CRE 2010 Company



# Metrics Refinements

## New Workplace Strategies

### *Changing demand relationships for office space*

- More non-employees using space, organizations require fewer workspaces per employee
- More mobile workers, organizations require fewer workspaces per employee
  - ◆ Results from one study - Max. share of individual workspaces occupied at point in time – 45% - 60%
- More group workspaces required – conference rooms, informal meeting areas, increased USF / individual workspace

Employees		Contractors, Vendors, Outsourced Workers	
Persons Served			
Persons Housed		Other Persons Served	
Assigned Workers	Mobile Workers	Building Services Workers	Teleworkers

***Are similar changes happening for other space categories?***

# Performance Metrics

## Cost Per Persons Housed

*Jane Mather*

Performance Portfolio Management

# Cost per Person Metrics Analysis

*Top-down metric decomposition - works well for historical comparisons and understanding real estate cost drivers.*

$$\begin{array}{ccccccc}
 \frac{\text{Cost}}{\text{Persons Housed}} & = & \frac{\text{Cost}}{\text{Square Foot}} & * & \frac{\text{Square Feet}}{\text{Seat}} & * & \frac{\text{Seats}}{\text{Persons Housed}} \\
 \\
 \$ 9,176 & = & \$ 35 / \text{sf} & * & 226 \text{ sf} / \text{seat} & * & 1.16 \text{ seats} / \text{PH}
 \end{array}$$

*Reflects space and tenant improvement costs and quality*

*Reflects space efficiency, workspace size, and other amenities*

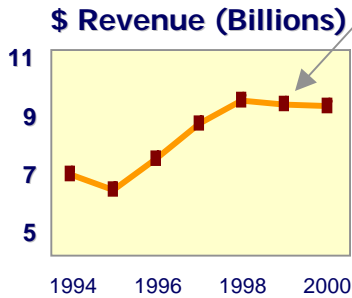
*Reflects utilization rates (86%) and sharing ratios (1.35 PH / seat for shared seats) for 15% of workers*

For sample sub-portfolio metrics  
 1.4 million square feet, 10 buildings  
 5,360 workers

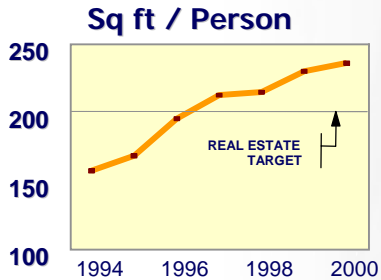
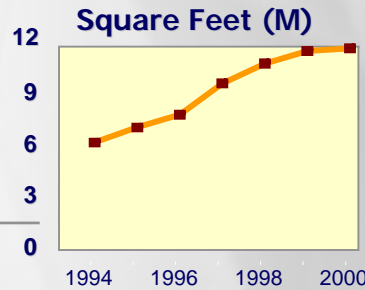
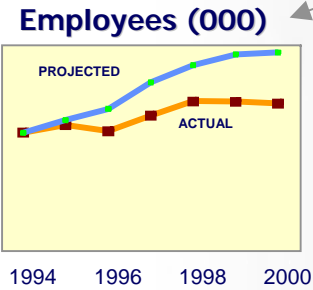
# Historical Metric Analysis

Accruent's PortfolioPlanner module tracks the historical relationships between revenue, headcount and occupancy costs.

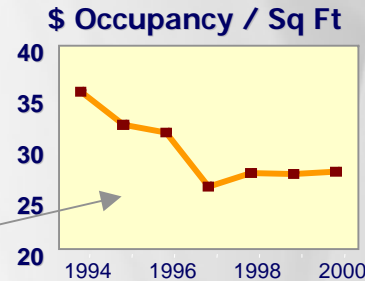
The business grew quickly; then it flattened out.



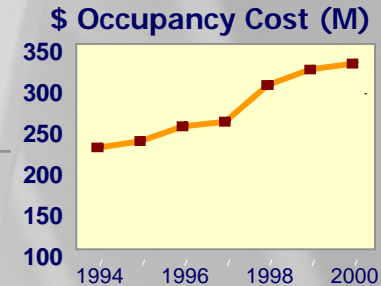
They added space faster than people.



X

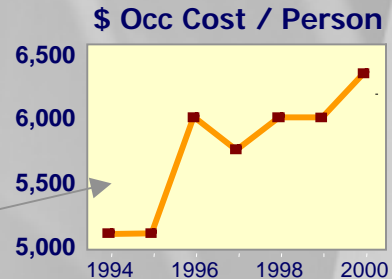


X



They picked lower cost locations and negotiated great deals.

Cost per Person jumped.



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# Cost Metric Consistency

*Are owned properties really less than half or two-thirds as expensive as leased properties?* No, have to include “cost of capital” or true opportunity cost.

	Cash Expenses / SF	Accounting Expenses / SF
<b>Owned – Avg.</b>	<b>15.43</b>	<b>21.64</b>
Plaza A	14.00	18.92
Tower	16.00	22.00
Engineering 1	16.00	21.73
Engineering 2	16.00	25.60
<b>Leased – Avg.</b>	<b>35.05</b>	<b>37.31</b>
Plaza B	32.00	35.20
Cluster A	34.00	34.00
Cluster B	31.00	36.40
Cluster C	36.00	36.00
Centre	35.00	39.00
Engineering 3	41.00	41.00

## Better cost metrics

- Cash + depreciation + imputed interest (EVA – Economic Value Added)
  - Depreciation does not include cost of capital if financing measured separately
    - Accounting cost = Cost / Useful Life
    - True cost = Amortization of Cost over Useful Life
  - Cost of capital should be based on current market value, often easier to use original cost or book value
- Market rent for owned properties
  - Market rent indicates the opportunity cost of the property – what could you receive if leased the property to someone else

# Cost Metric Consistency

*With better cost metrics for owned properties, owned and leased properties show similar costs per square foot.*

	Cash Expenses / SF	Accounting Expenses / SF	Cash + Depr + Imp Interest/ SF	Market Rent for Owned / SF
<b>Owned – Avg.</b>	<b>15.43</b>	<b>21.64</b>	<b>38.26</b>	<b>37.05</b>
Plaza A	14.00	18.92	36.63	33.00
Tower	16.00	22.00	37.18	36.00
Engineering 1	16.00	21.73	38.08	40.00
Engineering 2	16.00	25.60	42.95	40.00
<b>Leased – Avg.</b>	<b>35.05</b>	<b>37.31</b>	<b>40.76</b>	
Plaza B	32.00	35.20	40.11	
Cluster A	34.00	34.00	34.00	
Cluster B	31.00	36.40	44.68	
Cluster C	36.00	36.00	36.00	
Centre	35.00	39.00	45.14	
Engineering 3	41.00	41.00	41.00	



# Cost Allocation

*CRE executives should use the right costs to drive appropriate behavior.*

*Example:*

- *CRE for major financial services company with offices in New York City charging its corporate tenants in owned space cost = cash + depreciation (approximately \$30 - \$40 / sf).*
- *CRE realizes that many activities in NYC could be relocated to New Jersey with owned space leased to other tenants.*
- *Business units don't want to relocate.*
- *CRE changes cost for allocation to market rent, approximately \$70 / sf.*
- *What happens?*

# Metrics are *Not* for Forecasting

“The performance data featured represents past performance, which is no guarantee of future results.” *From mutual fund investor information.*

$$\frac{\text{Cost}}{\text{Persons Housed}} = \frac{\text{Cost}}{\text{Square Foot}} * \frac{\text{Square Feet}}{\text{Seat}} * \frac{\text{Seats}}{\text{Persons Housed}}$$

## Sample portfolio metrics

Current \$ 9,176 = \$ 35 / sf \* 226 sf / seat \* 1.16 seats / PH

## Target created with metrics formula

**\$ 6,170** = \$ 35 / sf \* 188 sf / seat \* 0.93 seats / PH

*New space standards*

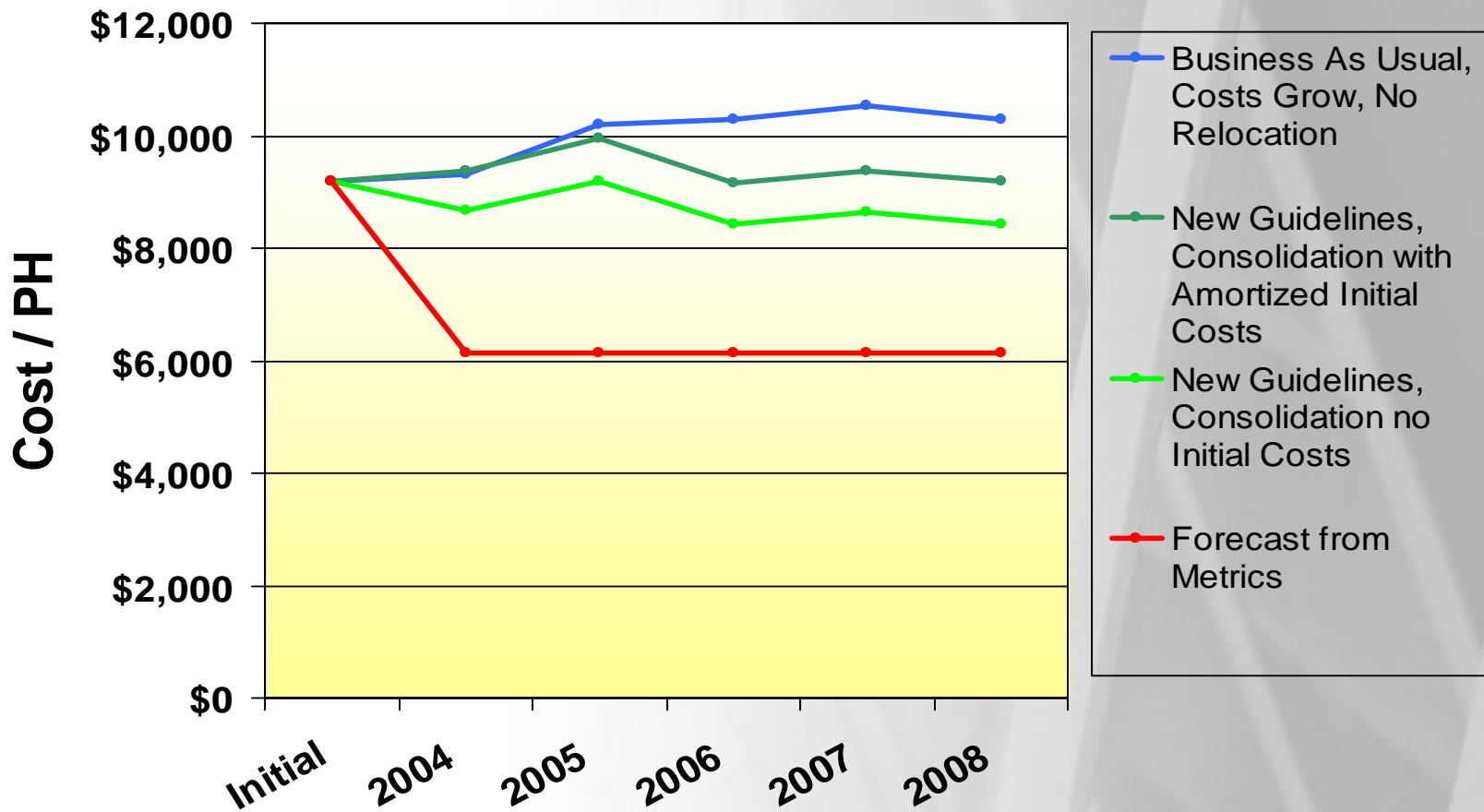
*New average sharing ratio –  
from 1.35 PH / seat to 1.6 PH / seat  
for more workers (15% to 18%)*

## **Problems with the metrics decomposition forecasting approach**

- Seats / persons housed – can’t dispose of excess space.
- Square feet / seat - costs of change, can’t dispose of excess space, special use space / person unchanged.

# Metrics and Bottoms-Up Forecasts

To forecast metrics, planners need a comprehensive bottoms-up model. With this model, new guidelines and consolidation reduce Cost per Persons Housed slightly compared to “Business As Usual,” but not by as much as predicted using the metrics decomposition as a forecasting tool.



# Can We Optimize With Metrics?

Would like to measure and optimize

- Productivity
- Costs
- Flexibility / responsiveness

## ***Metrics Challenges***

- **Can't measure productivity**
- **Difficult to measure flexibility**
- **Difficult to estimate impact of new strategies**

## ***Sub-Portfolio / Cluster Plan Approach***

- **Within sub-portfolio, identify trade-offs and choose best solution**
- **Strategies for flexibility and scenario analysis**
- **Comprehensive analysis across portfolio**