January 2007

Madison Water Utility Strategic Planning Initiative

Strategic Planning Project Overview

EMA

Overall Project

- Self-Assessment
  - Almost Complete
- Leadership Development Training
  - Scheduled
- Review & Comment on Strategic Initiatives
- Strategic Plan

Special Thanks to the O&M And Business Services Team Members

O&M Team

- Don Russell
- JJ Larson
- Chris Kreft
- Tim Sullivan
- Lori Kief
- Dan Rodefeld
- Jeff Thompson

Business Services

- Joe Stein
- Wendy Fitch
- Joel Guderyon
- Jim Green
- Janet Czerwonka
- Robin Piper
- Barb Maxwell
- Rick Marx
- Glenn Puntney
- Bob Runkel
- Doug De Master

O&M Assessment Findings

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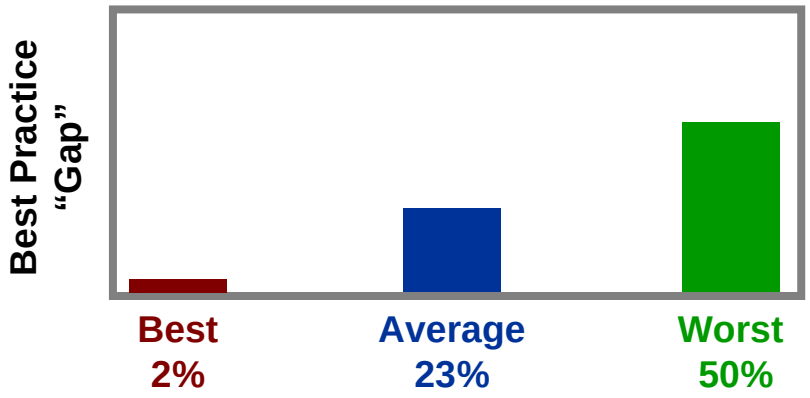
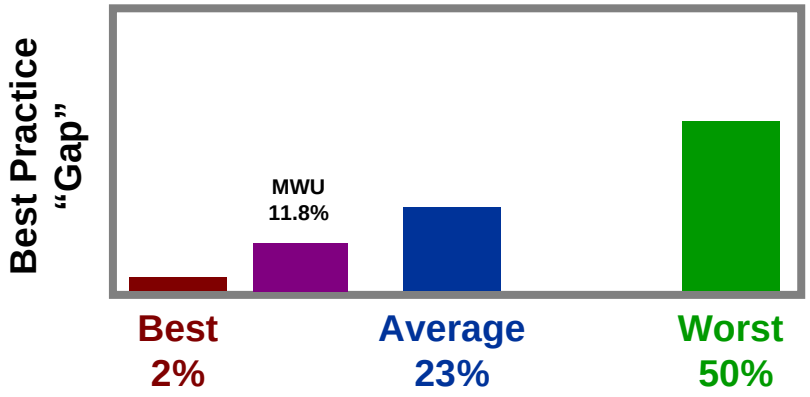
General Observations

Results From 400+ Competitive Assessments Show Overall Best Practice "Gap"



Madison Is Significantly Better than the Average of All Utilities Evaluated!!



Facts and Observations:

- 129 Budgeted FTEs (Full Time Equivalents)
  - 3 Administration
  - 1 Community Services/Administrative
  - 4 Water Quality
  - 28 Engineering (D&C, Mapping, SCADA Op's)
  - 4 Finance/Accounting
  - 24 Customer Service (Insp, CS, Mtr Rdg, Mtr Rep)
  - 68 Operations (Well Mnt, Shop, Line Mnt)
  - ? Funding for hourlys

85 FTEs in Core O&M, 47 FTEs in Business Support Services = 64% Core, 36% Support (within industry standards)

Facts and Observations:

- Supervisor/Worker Ratio = 21:111, 1:6.8
  - Industry Best Practice Standard is 1:10 to 1:20
- Organization is 6 sections wide by 6 layers deep (indicating a balanced organization structure that is not overly hierarchical but could be streamlined somewhat)

Facts and Observations:

- Total Controllable Operating Budget: $12,890,000 (does not include debt service and capital improvement)
- Labor Cost: $9,145,757
- Labor % of Controllable Budget: 70% (avg.)
- Average Burdened Salary: $69,286
- Overtime for Operating Divisions: $155,400 (1.5%, below avg. but offset by comp time usage)

Facts and Observations:

- Labor: $ 9,145,757
- Transfers: $ 642,512
- Contract Services: $ 3,391,039
- Mat's & Supplies: $ 971,908
- Debt: $ 4,426,703
- Capital Improvements: $ 766,948
- Overall Budget: $19,344,867

Observations by O&M Strategy

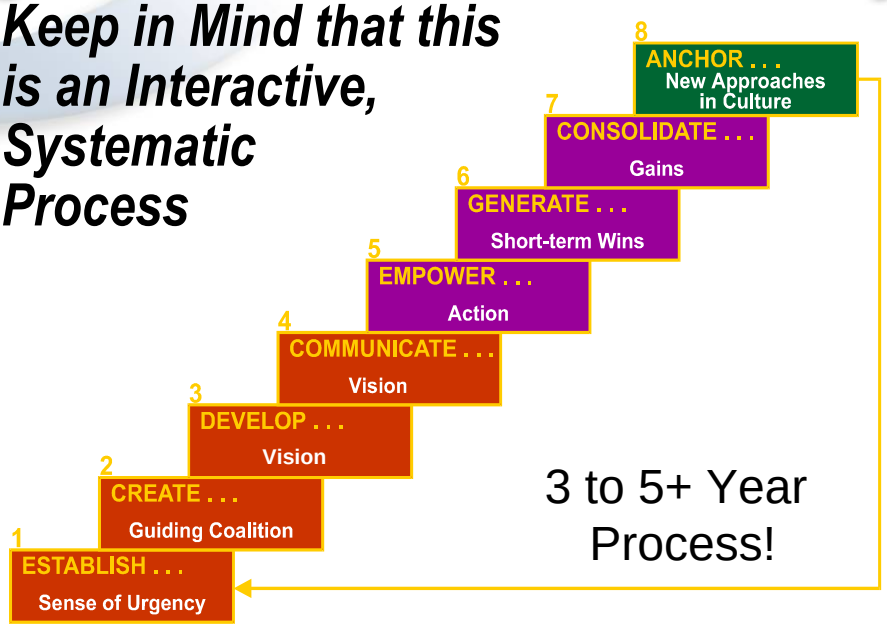
Industry Best Practice O&M Strategies Emphasize Efficiency and Effectiveness

- Efficiency and effectiveness is the fundamental issue
- O&M strategies to make you efficient and effective
  - Total Productive Operations (TPO)
  - Planned Maintenance (PM)
  - Off Shift Staffing
  - Work Force Flexibility (WFF) & Interdependence
  - Customer Service
  - Asset Management
- How to make these strategies permanent
  - Technology as a Strategy
  - Organization as a Strategy

How Best Industry O&M Practice Strategies Compare to Typical Utilities

TYPICAL	BEST PRACTICE
1. Eq. Op's & Labor	1. Total Productive Operations
2. Reactive	2. Planned Maintenance
3. Attended	3. Less or Unattended Facilities
4. Work Separated by Craft/ Skill Independent	4. Work Force Flexibility & Interdependent
5. Technology as Risky	5. Technology as Strategy
6. Organization as Structure	6. Organization as Strategy
7. Customer as a Nuisance	7. Customer as an Advocate
8. Assets as a Cost	8. Assets as an Investment

Keep in Mind that this is an Interactive, Systematic Process



3 to 5+ Year Process!

Typical Industry Average Equipment Operator: 70% Lost Productivity

70%

- Monitor, observe, inspect, travel.
- Check equipment during other activities (while laborers work) - wait while equipment is not in use.
- Special projects, "filler" activities to occupy time until equipment is needed again or until equipment use is limited and labor is needed to complete work.

30%

- Site preparation - load and unload equipment, set up safety zones, perform labor.
- Use equipment for it's intended task (excavate, TV, flush, vacuum, etc.) - conduct laborious work around limitations of equipment.
- Emergency response.
- Light maintenance and PMs on equipment - jobsite preparation/cleanup.

Equipment Operations vs Labor → Total Productive Operations
How Madison Compares:

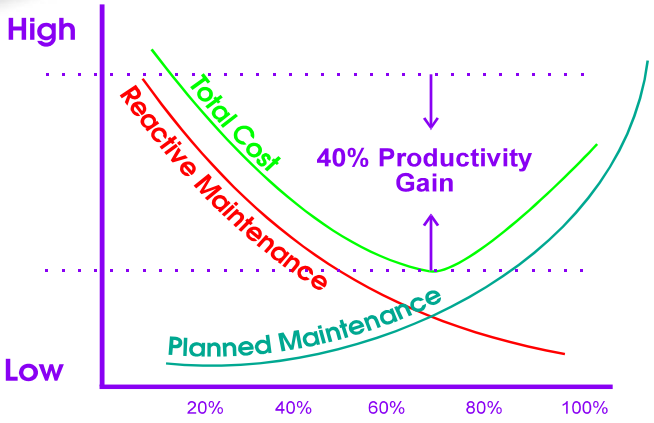
- Maintenance (well maintenance)
  - All but Supervisors do maintenance
- Distribution (maintenance)
  - All do labor
- Field Operations
  - Few Equipment Operators don't do labor
- CDL requirement is an issue for some

Equipment Operations vs Labor → Total Productive Operations
Calculations for Madison:

- 20 Equipment Operator FTEs
- Estimated 30% lost productivity
- = Productivity improvement potential of 6 FTEs*

* Would require changes over time to achieve

Typical Industry Maintenance Productivity is Enhanced 40% by Planning



If you plan 10% now, your lost productivity is 40%!
If you plan 60% now, your lost productivity is 7 !

Reactive Maintenance → Planned Maintenance
How Madison Compares:

- Maintenance
  - Little backlog exists
  - 75% (mostly) Reactive
- Field Operations
  - Anywhere from 0%-100% Planned
  - Estimates ranged from 5% - 25%
  - No backlog exists
- Distribution
  - No backlog exists
  - Estimates range from 5-25% Planned

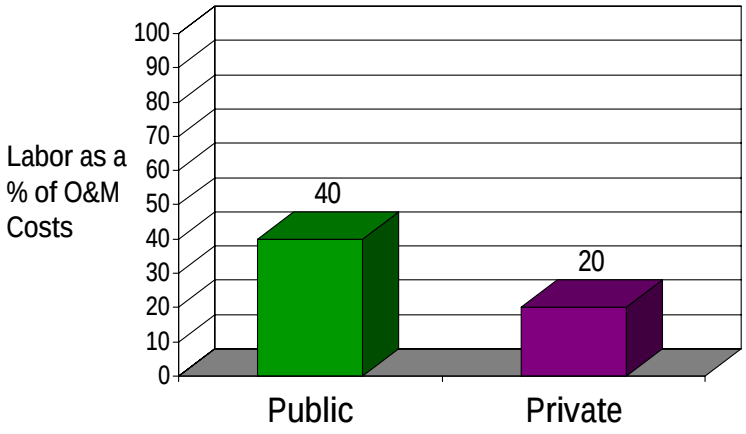
Reactive Maintenance → Planned Maintenance
How Madison Compares:

- Planned Activities:
  - Hydrant maintenance 2.5 FTEs
  - Lead replacement 8-10 FTEs
  - Flushing / valve turning 8 FTEs
  - Blacktop and concrete backlog contracted out

Reactive Maintenance → Planned Maintenance
Calculations for Madison:

- 25% Planned average = 25% lost productivity
- 49 maintenance staff x .25 = productivity improvement potential of 11 FTEs

Typical Privately Operated Utilities Make Great Use of Less Attended Facilities to Reduce Operating Labor



Attended → Less Attended
How Madison Compares:

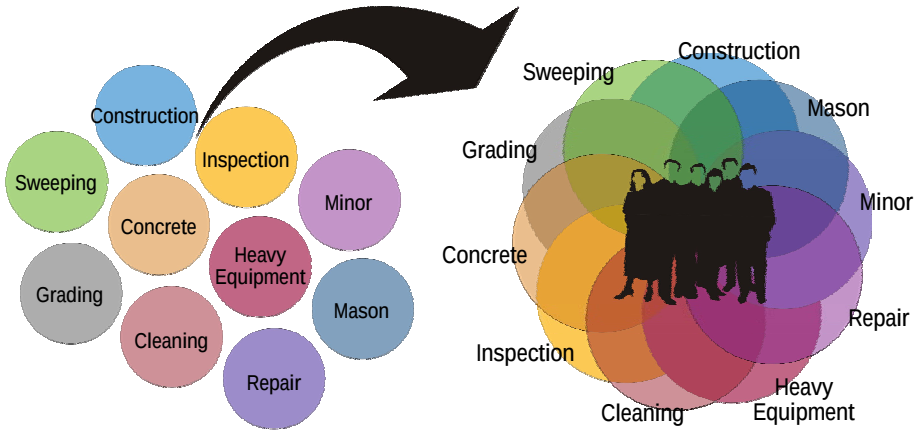
- One person is at Operations Center 24/7
- 4 on 2nd shift – building maintenance (3 buildings)
- Many off-shift emergencies have been recorded
- Winter main breaks often occur during off hours
- Off shift emergencies are handled by on-call staff
- 1 person is paid for standby (November-March)
- Others must respond 50% of the time when called
- Staff are not subject to performance evaluations
- No incentive/reward programs exist

Attended → Less Attended

Calculations for Madison:

- Madison uses one of the most efficient programs for handling off shift emergencies and is highly efficient using only one staff for off shift staffing of the Operations Center
- No improvement potential is apparent

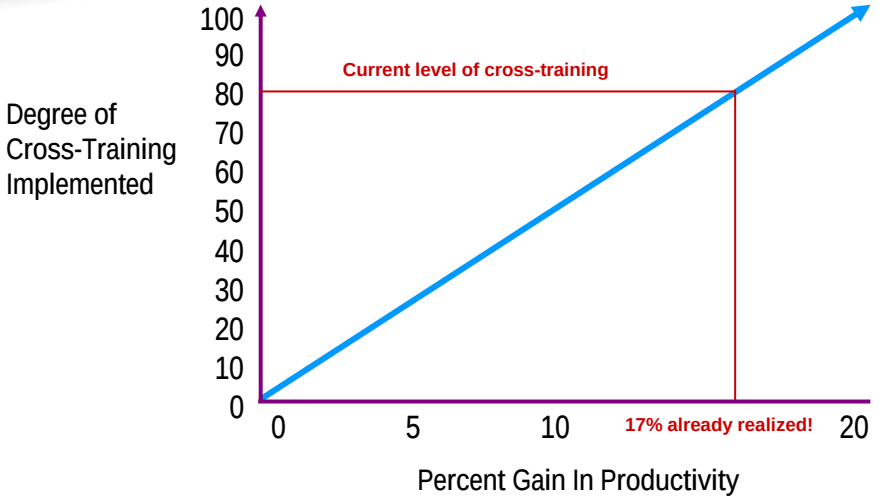
Work Force Flexibility Typically Increases Productivity Up To 20%



Workforce Flexibility How Madison Compares:

- No formal cross-training certification program exists
- Training is available but only on request
- Staff believe that this concept is not supported by management
- Little or no cross training exists in some areas
- No internal certification program exists
- Yet many-to-all staff are flexible in some way
- Typical crew size: 4-5 FTEs (slightly above standard)

Work Force Flexibility Improves Productivity – How Madison Compares



Workforce Flexibility
Calculations for Madison:

- 80% cross-trained today = 3% productivity improvement potential = 1 FTE (32 FTEs X .03 = 1)

Technology As Strategy is Industry Best Practice
Reinforce New Practices

Technology
How Madison Compares:

- 2 SCADA systems are currently in use that should be replaced by a single system
- Little or no e-mail access for many staff
- There is not an Enterprise-wide Data Base of critical information
- “Field View” Geographic Information system is in use
- There is a mix of e-mail access in some areas
- A Geographic Positioning System will be available starting around 12/2006
- There is little technology in place and much of it is hard to use
- Technology ideas from staff include: CMMS, GIS, Wireless

Organization As Strategy Is Industry Best Practice

Move From Top Down To Teams

Facilitate teams with team leaders

Organization
How Madison Compares:

- Communication with upper management is sometimes poor
- There is a mixture of levels of fear
- There is a general lack of trust between Mgt and Labor - some feel there is a good environment but some top-down decision-making occurs
- No TQM or teaming programs are in place
- Management seen as obstacle by some staff
- Employees reported numerous issues with MWU HR and Engineering leadership
- Communication (or lack thereof) is seen as an obstacle
- O&M supervisor:worker ratio is 1:10 = 0 FTE opportunity

Turn Our Customers Into Advocates is Industry Best Practice

Every customer contact is an opportunity to collect data on customer confidence. By collecting the data, we turn customers into advocates and customer satisfaction improves.

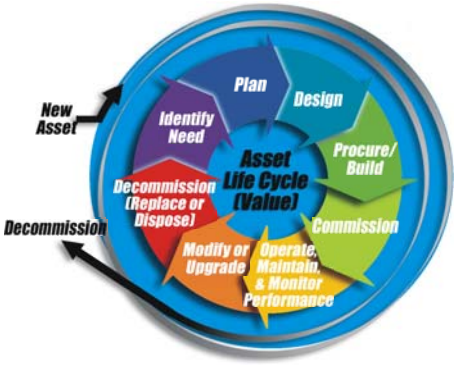
<u>Best Practice</u>

- Managing How Well We Do It
- Resource Management
- Empowering Staff
- Everybody Knows
- Customer Satisfaction
- Anticipation

Customer Approach
How Madison Compares:

- Customer data not collected
  - 400 customers surveyed
  - Tracking WS + WQ calls
- Many not trained in customer communication
- Most don't know customer satisfaction rating – but suspect it's low
- Most don't collect customer data
- There is a mix of ability to communicate with customers
- Internal communication is seen as an obstacle

From Assets as a Cost to Assets as Investments is Industry Best Practice



<u>Best Practice</u>

- Manage the Investment in Assets/ Infrastructure
- Collect work and cost history against assets
- Maximize asset performance, reliability and availability
- Minimize cost of asset over the life cycle
- Replace asset based on sound economic evaluations
- Involve all parties in creating new assets

Asset Management
How Madison Compares:

- No Asset Management *program* exists that O&M staff are aware of
- O&M staff do not feel that they are involved in Asset Management
- O&M costs are / are not collected depending on type of asset and type of work
- No Asset Management *system* exists that O&M staff are aware of
- O&M staff are not aware of any life cycle/replacement program
- An Asset Management Team needs to be created: 5 FTEs added (2 P/S, 2 Tech's, 1 Engineer)

Calculations and Opportunities

How a Typical Utility Compares to Best Industry O&M Practice Strategies

TYPICAL	BEST PRACTICE
1. Operations & Maintenance	1. Total Productive Operations
2. Reactive	2. Planned Maintenance
3. Attended	3. Less or Unattended Facilities
4. Work Separated by Craft/ Skill Independent	4. Work Force Flexibility & Interdependent
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MWU O&M Team Identified Opportunity/Gap Total of 13 FTEs

Best Practice	Identified Opportunity/Gap
1. Total Productive Operations	6.0 FTEs
2. Planned Maintenance	11.0 FTEs
3. Less Attended Facilities	0.0 FTEs
4. Work Force Flexibility	1.0 FTEs
5. Technology	None determined
6. Organization	0 FTEs
7. Customer	0 FTEs
8. Assets	-5 FTEs

Madison Staff Improvement Ideas

- Improve communication
- Create a Safety Coordinator position
- Implement a CMMS/Inventory system
- Improve care of equipment (vactors, vibration monitors): better care = longer life
- More communication / positive feedback
- Install wireless equipment in vehicles (including cell phones and radios)
- Fill current vacancies
- Optimize use city HR
- Improve site security

Business Services Assessment Findings

EMA

Observations by Support Strategy

Opportunity Model for Industry Best Practices for Business Services

1. Eliminate Inefficient Serial Work Processes
2. Use Cross-Functional Teams
3. Eliminate Duplication of Effort
4. Use Technology Strategically
5. Eliminate “Top-Down” Culture
6. Eliminate Specialty Silos
7. Adopt Formal Cross-Training
8. Use Flexible Technical Standards

Opportunity Model for Industry Business Services (cont'd)

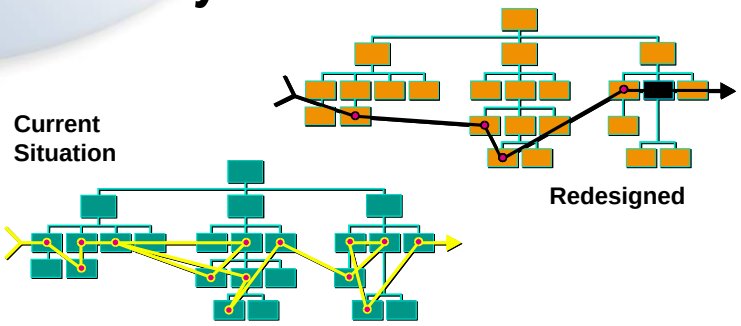
9. Eliminate Old, Outdated Policy and Procedures
10. Reduce Cultural Impediments
11. Improve Quality of Work Products
12. Manage Load Through Service Level Agreements
13. Outsource Strategically
14. Routinely Acquire Customer Feedback

Serial Work Processes Madison Observations:

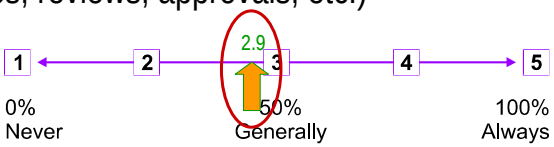
- CS: Meter install/change, acct adjustments
- Eng: Lots of paper, filing, systems not integrated
- Fin/Acct: Budget, payroll, cash, billing/financial system transfers
- Adm/Mgt: Time sheets, Accts payable, invoices, admin processes
- WQ: Sampling, private well inspection, cross-connection control
- Meters: Work orders, filing (minor)
- Fleet: Work orders

2.9

Productivity Model



1- Inefficient Serial Work Processes
(analyses, reviews, approvals, etc.)



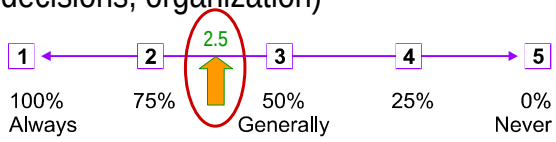
Use of Cross-Functional Teams
Madison Observations:

- CS: HR: Management, City & HR
  Software: Management (vs users)
- Eng: Same as CS
- Adm/Mgt: Same as CS and Fin/Acct
- WQ: Same as Adm/Mgt
- Meters: Same as Adm/Mgt
- Fleet: NA
- Safety communication, Emergency Operations

2.5

Productivity Model

2 - Use of Cross-Functional Teams & Process Focused Organization (problem solving, decisions, organization)

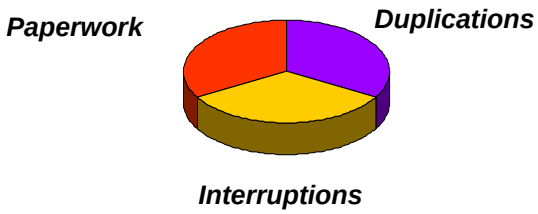


Duplication of Effort Madison Observations:

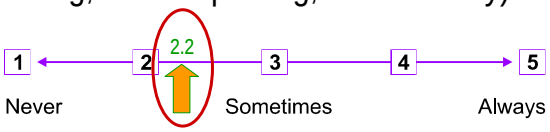
- CS: Approval not required, little – no duplication
- Eng: Mix of approval requirement, little – no duplication
- Fin/Acct: Approval not required, no duplication
- Adm/Mgt: Same as CS
- WQ: Same as CS
- Meters: Same as CS
- Fleet: Same as CS

2.2

Productivity Model



3 - Duplication of Effort
(over-checking, over-inspecting, data re-entry)



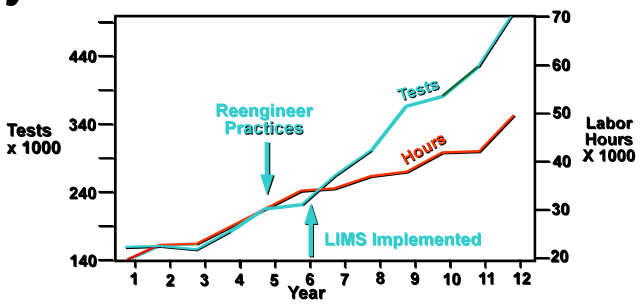
Access to Information, Use of Technology
Madison Observations:

- CS: Ease of use: varies, NA, GEO diff,
  - Data re-entry: None, New meter sets
- Eng: Easy with training, little integration, re-entry regularly
- Fin/Acct: Easy with training, city & department systems not integrated
- Adm/Mgt: Easy to use, no re-entry
- WQ: Varies (Field view, GEO), re-entry rare
- Meters: No computer access, easy
- Fleet: NA

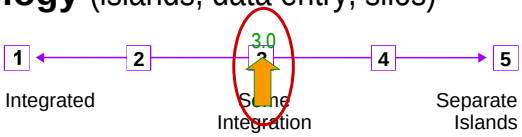
3.0

Productivity Model

Technology Not Systematically Applied For Business Results



4 - Access to Information & Use of Technology (islands, data entry, silos)

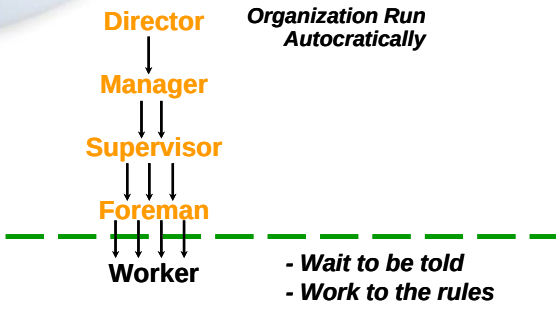


Autocratic Top-Down Culture
Madison Observations:

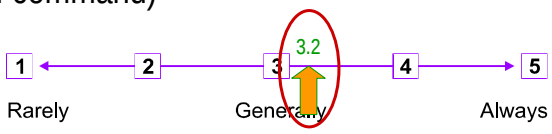
- CS: Input is sought, favoritism
- Eng: Input not requested, favoritism
- Fin/Acct: Input varies
- Adm/Mgt: Input not requested
- WQ: Input is requested
- Meters: Input not requested, favoritism
- Fleet: Input not requested

3.2

Productivity Model



5 - Autocratic Top-Down Culture
(chain of command)

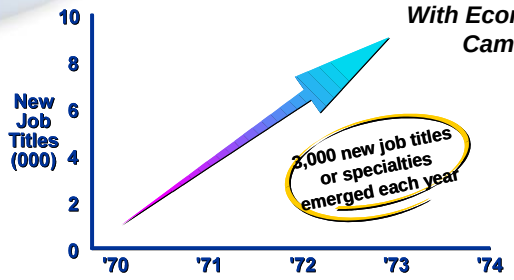


Specialty Skills or Work Silos
Madison Observations:

- CS: cooperation: Good to Great within limits: management, attitudes
- Eng: Little to good cooperation, poor communication and management limit
- Fin/Acct: Good to Great cooperation, personalities, management, HR limit
- Adm/Mgt: Good cooperation, management, attitudes, HR limit
- WQ: Good cooperation within group, conflicts between groups limit
- Meters: Little to good cooperation, supervisors limit
- Fleet: Good cooperation

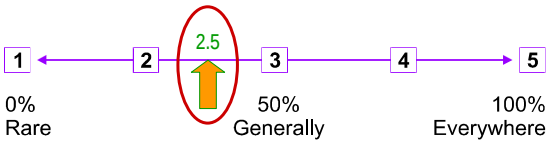
2.5

Productivity Model



With Economic Prosperity Came The 'Decade of Specialization'

6 - Specialty Skills or Silos



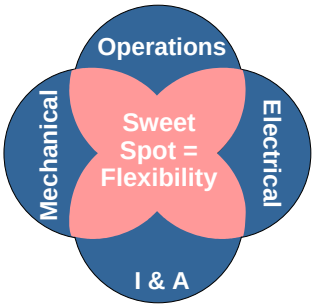
Formal Cross-Training Program Madison Observations:

- CS: Numerous cross-training opportunities, management doesn't push, must ask
- Eng: Little to no opportunities, OJT, favoritism
- Fin/Acct: Few opportunities, OJT, time problem
- Adm/Mgt: Little to no opportunities
- WQ: Lots of opportunities within group, not formalized
- Meters: Little to none, no time
- Fleet: No exposure to other functions of department

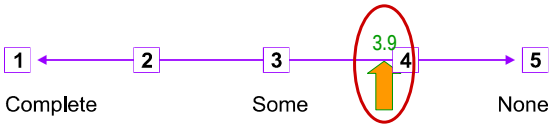
3.9

Productivity Model

Cross-Training Can Increase Productivity By 20%



7 - Formal Cross-Training Program
(WFF)

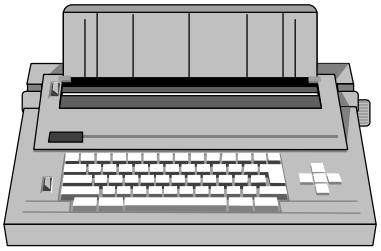


Inflexible Work Standards Imposed Madison Observations:

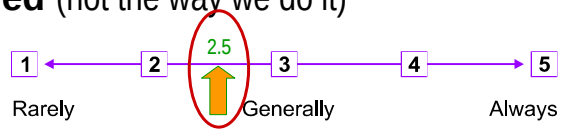
- CS: Hiring process, reuse meter parts, allowed to do work best way possible
- Eng: Favoritism but allowed flexibility
- Fin/Acct: PSC regulated
- Adm/Mgt: Rigid specifications drive costs up, allowed to use best judgement
- WQ: Some “that’s how we’ve always…”
- Meters: Poor routes, reuse meter parts, change meters before cycle
- Fleet: None

2.5

Productivity Model



8 - Inflexible Technical or Work Standards Imposed (not the way we do it)



Old, Outdated Policy & Procedures Madison Observations:

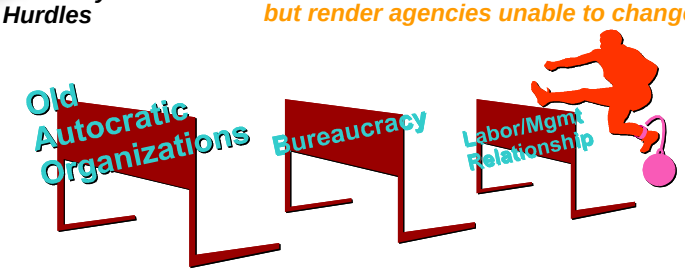
- CS: Can't recall last update, record keeping
- Eng: Not updated often, time tracking
- Fin/Acct: No recent updates, duplicate HR, flex time
- Adm/Mgt: No recent updates, vacation carry-over
- WQ: Schedules not consistent, no SOP after "Boil Water"
- Meters: No recent updates
- Fleet: None

3.5

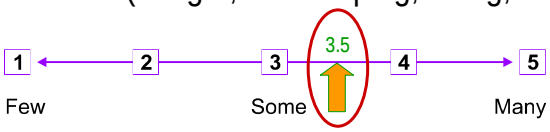
Productivity Model

Public Model Efficiency Gets Distracted By Hurdles

Designed to protect public, but render agencies unable to change



9 - Old, Outdated Policy & Procedure Impediments (budget, timekeeping, hiring, firing, etc.)



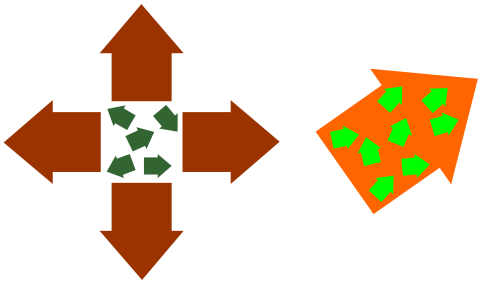
Culture Impediments
Madison Observations:

- CS: Co-workers are supportive, good atmosphere
- Eng: Some to much support, Not a good atmosphere
- Fin/Acct: Supportive but favoritism, HR issues
- Adm/Mgt: Supportive, good atmosphere
- WQ: Some support, “Learn to say thanks”
- Meters: Supportive, favoritism, management isn’t supportive
- Fleet: Mostly supportive

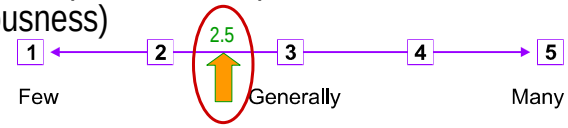
2.5

Productivity Model

Alignment Provides Consistent Movement Toward Goal



10 - Culture Impediments (fear, punishments, disrespect, split value camps, no customer consciousness)

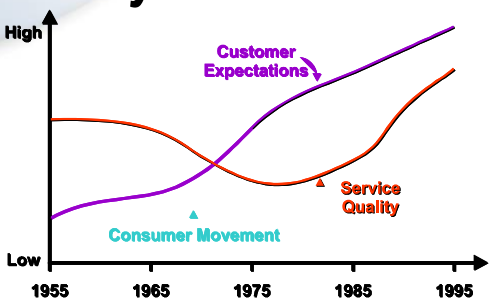


Quality of Work Products
Madison Observations:

- CS: HR does not treat like customer, staff are customer quality oriented
- Eng: Same as CS
- Fin/Acct: Same as CS
- Adm/Mgt: Same as CS
- WQ: Same as CS
- Meters: Same as CS
- Fleet: All staff of utility are customers of fleet, quality - focused

1.4

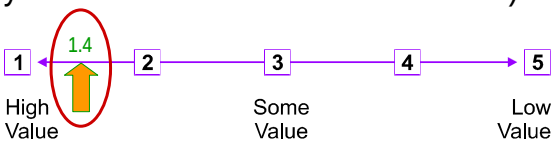
Productivity Model



Customer Satisfaction Is Determined By Gap Between Expectations & Service Quality

11 - Quality of Work Products

(generally external or internal customer-driven)



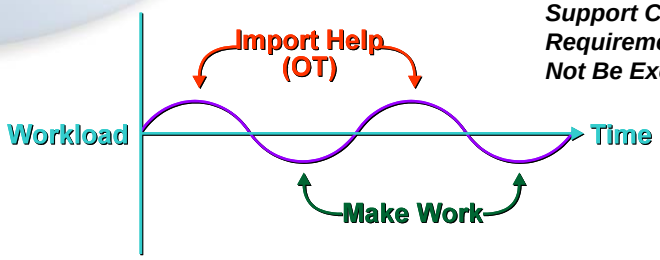
Management of Load, Service Level Agreements (SLAs)
Madison Observations:

- CS: No formal SLAs, work assigned: Geographic, availability
- Eng: No SLAs, assign by ability
- Fin/Acct: Some SLAs, assign by ability
- Adm/Mgt: Some SLAs, assign by ability/availability
- WQ: No SLAs, assign by ability
- Meters: No SLAs, assign by availability
- Fleet: Assign by availability

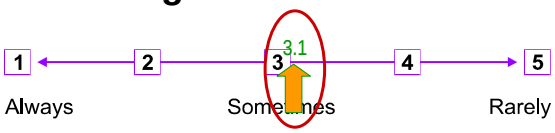
3.1

Productivity Model

Staffing Must Support Customer Requirements But Not Be Excessive



12 - Management of Load (staff for the base)
Service Level Agreements

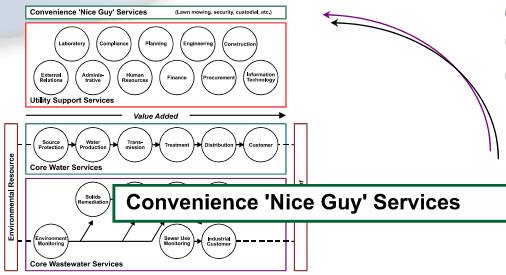


Outsourcing Strategy
Madison Observations:

- CS: Outsource bill printing, No SLAs for internal jobs
- Eng: Blacktop, rehab, consulting, no SLAs
- Fin/Acct: Bill mailing, lab tests, consulting, some SLAs
- Adm/Mgt: Patching, drilling, mapping no SLAs
- WQ: Lab analysis
- Meters: Don't outsource
- Fleet: Specialized, some major repairs

2.9

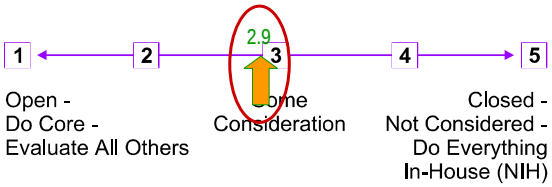
Productivity Model



Determining Priorities For Outsourcing:

Convenience 'Nice Guy' Service Options

13 - Outsource Strategy



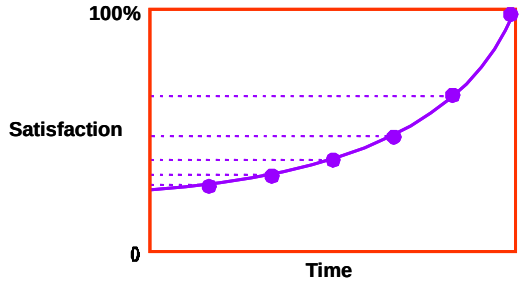
Routine Customer Feedback Acquired
Madison Observations:

- CS: Don't survey external customers, don't survey internal customers
- Eng: Same as CS
- Fin/Acct: Same as CS
- Adm/Mgt: Don't survey external customers, internal: suggestion box, monthly meetings, greive
- WQ: External customers: not regularly, internal customers: think so, informal
- Meters: Same as CS
- Fleets: Same as CS

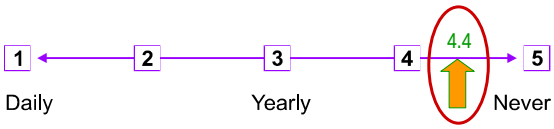
4.4

Productivity Model

Obtain Customer Feedback



14 - Routine Customer Feedback Acquired



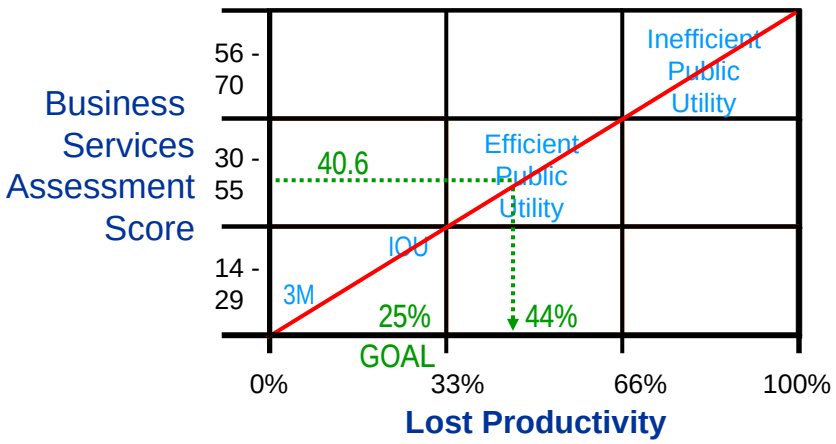
Scoring Results for Madison Business Services

	CS	Eng	Fin/Acct	Adm/Mgt	WQ	Meters	Fleet
1	3.0	4.25	3.896	2.25	3.0	1.5	2.5
2	2.0	4.0	2.5	4.25	2.0	2.0	1.0
3	1.5	3.0	1.5	4.0	2.0	1.5	2.0
4	3.0	3.5	3.0	3.0	3.0	2.5	3.0
5	3.0	4.0	2.0	4.5	1.5	3.0	4.5
6	2.0	3.0	2.0	2.0	3.5	3.0	2.0
7	3.5	4.0	3.5	4.0	3.0	4.0	5.0
8	2.5	2.0	2.0	2.0	3.0	3.5	2.5
9	4.0	2.5	2.0	4.0	4.5	3.0	4.5
10	3.0	4.5	2.0	2.0	2.0	2.0	2.0
11	1.0	1.0	1.0	3.0	1.0	1.5	1.0
12	3.0	4.0	3.0	3.0	3.0	3.0	3.0
13	3.0	3.0	3.0	3.0	3.0	4.0	1.5
14	4.0	4.5	4.5	4.0	4.5	4.9	4.5
Total	38.5	47.25	35.896	45	39	39.4	39

MWU Business Services Results:

1.	Serial Wk Practices:	2.9
2.	Cross-functional Teams:	2.5
3.	Duplication:	2.2
4.	Information Access:	3.0
5.	Top-Down Culture:	3.2
6.	Specialty Silos:	2.5
7.	Cross-training:	3.9
8.	Rigid Tech. Standards:	2.5
9.	Old Policies & Procedures:	3.5
10.	Cultural Impediments:	2.5
11.	Quality of Products/Services:	1.4
12.	Work Load Mgt:	3.1
13.	Outsourcing:	2.9
14.	Customer Feedback:	4.4
	Total:	40.6

Business Services (Non-O&M) Competitiveness Model



Madison – Business Services Calculations

- From the previous slide, a raw score in the assessment of 40.6 = a lost productivity factor of 44%. The goal in public sector support services is 25% lost productivity so the gap is 44% - 25% = 19%
- 19% of the 47 FTEs in Business Services = 9 FTE productivity improvement opportunity

Madison staff ideas for improving performance

- Meter routes take 4 hours average – not designed by meter readers
- Design, GIS, and Financial S/W don't communicate
- Top-down/poor communication, management issues
- Workers fear HR
- Supervisors/Managers not trained/poor communication
- Overtime is out of control (leading to entitlement)
- Consider professional cleaning / grounds keeping
- Better communication with management needed including positive and negative feedback appropriately

MWU O&M Team Identified Opportunity/Gap Total 13 FTEs

Best Practice	Identified Opportunity/Gap
1 – Total Productive Operations	6.0 FTEs
2 – Planned Maintenance	11.0 FTEs
3 – Less Attended Facilities	0.0 FTEs
4 – Work Force Flexibility	1.0 FTEs
5 - Technology	None identified
6 - Organization	0 FTEs
7 - Customer	0 FTEs
8 - Assets	-5 FTEs

MWU Assessment Teams Identified Opportunity/Gap of 11.8%

13 FTEs in O&M
+ 9 FTEs in Business Services
22 FTEs improvement potential
x $69,286
$1,524,292 productivity opportunity/gap

$1,524,292/$12,890,000 total controllable budget = 11.8% overall opportunity/gap based on final calculation above

MWU should reduce it's gap to 7% to be "World Class". That would require a productivity improvement equal to 13 FTEs

Those 13 FTEs should be redeployed to support new technologies and to address current O&M and Business Services challenges

Recommendations

Sustainable Utilities Focus on…

By Prioritizing into Quick Wins, Intermediate, and Long-Term Strategies

Organization Quick Win Ideas from Staff:

1. Improve communication/communication training
2. Institute management accountability
3. Get more input from staff
4. Show workers more respect
5. Use City HR instead of having an internal HR position
6. Improve positive and negative feedback

Organization Intermediate Ideas from Staff:

1. Fill vacancies/hire staff
2. Institute management accountability
3. Provide management with leadership training
4. Improve positive and negative feedback

Organization Long-Term Ideas from Staff:

- All Organization issues can be resolved in short-term or intermediate-term

Organization Suggestions from EMA:

- Short term (0-9 Mo)
  - Design Leadership Training to address specific organizational needs
  - Investigate potential for using City HR for more services – establish a Service Level Agreement for those services
  - Develop a Succession Plan around skills, knowledge, and talents
  - Structure around teams to better support "Best Practices" identified

Organization Suggestions from EMA:

- Intermediate (9-24 Mo)
  - Implement Leadership Training
  - Implement Recruitment and Retention Program to support the Succession Plan
  - Create a system to utilize staff so that the organization benefits fully from WFF
  - Develop the habit of Recalibrating organization and practices on a regular (6 month) basis

Organization Suggestions from EMA:

- Long Term (2yr – 5yr)
  - Revisit job descriptions and pay program to ensure that Madison is remaining competitive (to avoid becoming a “training ground” for others)
  - Implement cross-training and skill-based pay
  - Consider adding an Asset Management Team to the organization to lead the AM effort

Practice Quick Win Ideas from Staff:

1. Provide workers with handouts with phone numbers and other vital information for customers
2. Conduct customer call-back surveys
3. Rotate staff for variety
4. Do our own patching
5. Provide better access to leak report data

Practice Intermediate Ideas from Staff:

1. Develop and implement a PR program
2. Create/update SOPs
3. Improve the restocking process
4. Do more/better planning
5. Don't use consultants so much
6. Stop doing things "the way we've always done them"

Practice Long-Term Ideas from Staff:

1. Improve inventory control
2. Be more proactive about pipe replacement
3. Evaluate the equipment purchasing procedure for improvements

Practices Suggestions from EMA:

- Short Term (0-9 Mo)
  - Start a Leadership Development Program to improve, among other things, leadership communication
  - Develop a Performance Measurement Program that will support Continuous Improvement into the future
  - Design a team-based organization with support systems including Communication and Team Building as well as Accountability and Responsibility systems
  - Institute a Performance Evaluation Program

Practices Suggestions from EMA:

- Intermediate (9-24 Mo)
  - Design an Asset Management Program and determine resource requirements
  - Support the cultural changes resulting from communication and team-based organization structure changes to ensure alignment with leadership development (discussed later)
  - Implement new business practices based on earlier design effort
  - Conduct Business Process Redesign

Practices Suggestions from EMA:

- Long Term (2yr – 5yr)
  - Implement the Asset Management Program and integrate with technologies

Technology Quick Wins Ideas from Staff:

1. Get a Vactor and Bobcat
2. Improve the web site
3. Acquire additional cell phones and radios

Technology Intermediate Ideas from Staff:

1. Install a card reader system for security
2. Get more vibration monitoring equipment
3. Acquire a better phone system for customers calling in
4. Upgrade the SCADA system
5. Improve security at remote sites
6. Add wireless access for field staff

Technology Long-Term Ideas from Staff:

1. Acquire GPS, Reverse 911, maps access in field
2. Implement a CMMS
3. Get an inventory system with bar-coding
4. Replace Tandems with Tri-Axles

Technology Suggestions from EMA:

- Short Term (0-9 Mo)
  - Develop a strategy to design and implement a Work Management System (CMMS)
  - Standardize on one SCADA System with security included as a priority
  - Define functional needs and detailed specifications for other applications to support "Best Practices"
  - Develop an MWU Technology Plan and link to the Strategic Plan

Technology Suggestions from EMA:

- Intermediate (9-24 Mo)
  - Pilot CMMS and SCADA
  - Develop functional requirements and detailed specifications for other applications
  - Introduce laptops and other wireless technologies into the field incorporating “Best Practices”
  - Implement a Performance Operations Management System
  - Investigate optimum usage of GIS

Technology Suggestions from EMA:

- Long Term (2yr – 5yr)
  - Implement full CMMS
  - Implement single SCADA System solution

Conclusions

Conclusions:

- Madison is a good operation with an 11.8% gap that is much lower than the average that EMA has calculated for over 400 utilities. But EMA doesn't rate you as "World Class" just yet
- Staff (13) freed up from "best practices" should be used to improve various aspects of utility O&M and Business Services to address current deficiencies
- Some O&M Staff (5 FTE's) should be redeployed to improve Asset Management

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Questions?

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