### **RBA 101 for State Agencies**

Office of Fiscal Analysis and The Charter Oak Group, LLC January 3, 2013

# Objectives

- Understand the basic concepts and language of Results-Based Accountability<sup>™</sup> (RBA)
- Know the different types of performance measures and how to use them for accountability and program improvement
- Appreciate the value of an RBA framework for aligning your agency and programs with strategies at the population level
- Learn the basic principles of data display
- Understand how you can use RBA to engage a group in turning the curve on an indicator or performance measure that is important for the well-being of children, adults, families, and communities
- Learn how and where RBA is being used in Connecticut

### Results-Based Accountability<sup>™</sup>

### Mark Friedman

### **Fiscal Policy Studies Institute**

### Santa Fe, New Mexico



How to Produce Measurable Improvements for Customers and Communities

**Mark Friedman** 

<u>Websites</u> resultsaccountability.com raguide.org

Book - DVD Orders amazon.com resultsleadership.org



# Two Key Principles for Achieving Measurable Results for the State

- Start with ends and work backwards to means
- Use data-driven, transparent decision making

# Results Accountability Is Made Up Of Two Parts:

Population Accountability about the well-being of WHOLE POPULATIONS

For Communities – Cities – Counties – States - Nations

Performance Accountability about the well-being of CLIENT POPULATIONS

For Programs – Agencies – and Service Systems

# Results and Performance Accountability

# COMMON LANGUAGE COMMON SENSE COMMON GROUND

### The Language Trap

Too many terms. Too few definitions. Too little discipline.



8

# Definitions

Population

Performance

### **RESULT**

A condition of well-being for

children, adults, families or communities.

Children born healthy, Children succeeding in school, Safe communities, Clean Environment, Prosperous Economy

### **INDICATOR**

A measure which helps quantify the achievement of a result.

Rate of low-birthweight babies, Rate of high school graduation, crime rate, air quality index, unemployment rate

### **PERFORMANCE MEASURE**

A measure of how well a program, agency or service

system is working.

1. How much did we do?

Three types:

2. How well did we do it?

3. Is anyone better off? = Customer Outcomes

9

# From Ends to Means... From Talk to Action



### IS IT A RESULT, INDICATOR, OR PERFORMANCE MEASURE?

- **INDICATOR** 2. Crime Rate
- **PERF. MEASURE** 3. Average Police Dept response time
  - **RESULT** 4. A community without graffiti
  - **INDICATOR** 5. % of surveyed buildings without graffiti
    - **RESULT** 6. People have living wage jobs and income
  - **INDICATOR** 7. % of people with living wage jobs and income
- **PERF. MEASURE** 8. % of participants in job training program who get living wage jobs

# Connecticut Glossary of RBA Terms

- The Appropriations Committee standardized the terms we use in Connecticut
- Terms in Connecticut glossary are consistent with Friedman's RBA approach
- Everyone in Connecticut
   – executive branch, legislative branch, and now communities
   – is using a common language and speaking with a common understanding

# **POPULATION ACCOUNTABILITY**

For Whole Populations in a Geographic Area

### Results

**Population** ╋ **Geographic Area** ┿ **Condition of Well** Being Result

### Connecticut Early Childhood Result Statements

- Ready By Five, Fine By Nine
- Goal 1: All Children Healthy and Ready For School Success at Entry To Kindergarten
- Goal 2: All Children Healthy and Achieving School Success By Age 9
- All Infants and Very Young Children Achieve Optimal Health and Development In Safe, Nurturing Families and Environments

# Result Statements Developed by CT Non-Profits and Funders

- Connecticut children of all races and income levels are ready for school by age five and are successful learners by age nine
- Families and individuals live in stable, affordable housing
- All Connecticut residents have optimal mental health
- All children and youth in Connecticut become resilient, empowered, productive and engaged citizens
- All Capital Region adults are self-sufficient
- Connecticut children grow up safe, healthy, and ready to lead successful lives

### Results Developed by Governor's Non-Profit Health and Human Services Cabinet

- All Connecticut residents live in safe families and communities
- All Connecticut residents are economically secure
- All Connecticut residents are developmentally, physically, and mentally healthy across the life span
- All Connecticut residents who are elderly (65+) or have disabilities live engaged lives in supportive environments of their choosing
- All Connecticut residents succeed in education and are prepared for careers, citizenship, and life
- All children grow up in a stable environment, safe, healthy, & ready to succeed (from CT Children's Report Card)

# Community Outcomes for Christchurch, NZ

- A Safe City
- A City of Inclusive and Diverse Communities
- A City of People who Value and Protect the Natural Environment
- A Well-Governed City
- A Prosperous City
- A Healthy City
- A City for Recreation, Fun and Creativity
- A City of Lifelong Learning
- An Attractive and Well-Designed City

### Criteria for Choosing Indicators as Primary vs. Secondary Measures

### Communication Power

Does the indicator communicate to a broad range of audiences?

### Proxy Power

Does the indicator say something of central importance about the result? Does the indicator bring along the data **HERD**?

### Data Power

Quality data available on a timely basis.

# Choosing Indicators Worksheet

Outcome or Result Safe Community

Candidate Indicators	Со	mmunication Power	Proxy Power	Data Power
Measure 1		HML	HML	HML
Measure 2				
Measure 3		H	Н	H
Measure 4		Ц		
Measure 5			H	
Measure 6				Data
Measure 7				Development
Measure 8				Agenda

# Three Part Indicator List for Each Result

### Part 1: Primary Indicators

- 2 or 3 or 4 "Headline" Indicators
- What this result "means" to the community
- Meets the Public Square Test

### Part 2: Secondary Indicators

- Everything else that's any good (Nothing is wasted)
- Used later in the story behind the baseline

### Part 3: Data Development Agenda

### New data

• Data in need of repair (quality, timeliness etc.)

# Indicators for "All Connecticut residents have optimal mental health"

- Percent reporting 14 or more poor mental health days
- Percent reporting serious psychological distress
- % of adults reporting a major depressive disorder
- Youth rate of attempted suicide
- Youth rate of depression
- % of youth referred to juvenile court

### The Matter of Baselines



**Baselines have two parts: history and forecast** 

# Caution

- Data are not the same as reality. Think of a leaking roof. No water in the bucket under the leak does not prove that the roof does not leak. In fact, the ceiling may be about to come down.
- Data are a proxy for the condition of well-being we want. Our goal is not no water in the bucket; it is a fixed roof and a dry house.
- The better the proxy, the closer to reality we get. Having more than one indicator increases the chance that we have actually captured reality.
- The rating of headline indicators is not the last word. You must look at the identified indicators and see if, as a whole, they encompass the important dimensions of the result statement.





Georgia







### Santa Cruz, CA



Lehigh Valley, PA

# **REPORT CARDS**

### Country



New Zealand

### Neighborhood



Kruidenbuurt Tilburg, Netherlands

### Portsmouth, UK

City

TURNING THE CURVE TOOLKIT 'From Talk to Action – Making a Difference to Children, Young People and Families' Lives'

Portsmouth Children's Trust Development Team

August 2006

State Team Outcome # 2	#2: Pregnant Women and Young Children Thrive				
Ducanant Women and	Young Children Thrive	Recommendations	Accomplishments in 2000	Recommendations for 2001	Actions/Strategies 2001
Heartening Indicators:	Troublesome Indicators:	Community members have universal access to a comprehensive system of care	Continued outreach through Healthy Babies with more than 7,400 pregnant women invited to receive home visits.	Concentrate • particular focus on families who are difficult to engage	Work with Department of Health (DOH) related to National Association of State Health Programs grant, especially as related to devel- oping a seamless system for
Early Pronatal Care The International Care The Sections The Sections	Low Birthweight Infants		<ul> <li>Successfully obtained 3 year grant from the Common Wealth Fund and the Na- tional Association of State Health Policy which in part- nership with Medicaid will look at other ways to en- gage new families that have been difficult to engage.</li> </ul>		families. Work with DOH to develop one common Parent Informa- tion Project. Work through community tobacco grants to assure families have access to smok- ing cessation help. Develop a common parent information booklet to be used by all providers. Focus on ways all providers of care to pregnant women and their families access amoking cessation resources.
Percent Children (ages 0-5) with Elevated Lead Levels	Smoking During Pregnancy 25 Pertent of Mothers 20 Vermore 15 10 10 10 10 10 10 10 10 10 10	Vermont babies are breast fed	<ul> <li>Established Breast-Feed- ing Work Group to ad- dress ways to reach out to the public and especially employers on benefits to breast-feeding and ways to support breast-feeding women in our communi- ties.</li> </ul>	Support establishment of a Statewide Breast- feeding Work Group to increase awareness of benefits of breast feeding and assist employers in supporting families as the mother returns to work	Work with Department of Health Breast-Feeding Work Group to enhance public education and develop a helpline for breast-feeding women, their families and general public.
<figure><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></figure>	Asthma Hospitalization, Average Rates per 1000 33 Vermont Residents, 1989-98 25 25 25 25 25 25 25 25 25 25 25 25 25	Support proven intercentions that work to improve outcomes	<ul> <li>Healthy Babies State Team focused on three objectives and provided specific train- ing for home visits to take action to address infant mortality, immunization rates, and smoking cessa- tion.</li> </ul>	Consider other national models including Healthy Steps and Touchpoints	<ul> <li>Participate when possible with Touchpoint trainings to increase care providers awareness of the Brazleton approach in working with families.</li> </ul>
	An of the life state of the li	Children are not exposed to environmental toxins	<ul> <li>Creation of Children's Environmental Health Task Force.</li> <li>H.192, the Healthy Schools Air Quality Act, passed legislature.</li> </ul>	Continue to increase knowledge of parents and health care providers on environmental health risk for children, especially those factors they can prevent or eliminate in all children	<ul> <li>Identify resources to invite Dr. Michael Shannon, pediatric environmental expert, to speak to commu- nity partners.</li> <li>Work with DOH initiative to eliminate children's exposure to environmental tobacco smoke.</li> </ul>
	cessation continues to be the prime areas for focus of prevention if we are to bend the curve on infant mortality and low birth weight. Children at higher risk of developing asthma were more likely to be low birthweight babies, exposed to tobacco smoke in utero or in early life, sensitized to common allergens at an early age, or not breast-fed.	Parents and caregivers have the knowledge, skills and resources to promote positive child development	<ul> <li>Expansion of Parent and Community Leadership Trainings.</li> <li>Expanded Social and Rehabilitation Consumer Advisory Boards.</li> </ul>	parents, health care providers and child care providers to assure children have safe drinking water	<ul> <li>Increase awareness of issues related to nitrates in water.</li> <li>Increase testing of private well systems.</li> <li>Increase awareness of how to disinfect private water sources.</li> <li>Increase awareness of proper preparation of</li> </ul>

### **Performance Accountability** For Programs, Agencies and Service Systems

### Population Versus Performance Accountability

- At the population level, we ask first what quality of life we want and then what strategies (collections of activities or services) we want to buy to achieve our quality of life result
- At the performance level, once we have decided to buy a particular program or service, we want to know how well it is being implemented and whether anyone is better off



**Results Leadership Group** 

### Program Performance Measures

	Quantity	Quality
Input Effort	How much service did we deliver?	How well did we deliver it?
Output Effect	How much change/effect did we produce?	What quality of change/effect did we produce?

### **Program Performance Measures**



# Education

	Quantity	Quality	
	How much did we do?	How well did we do it?	
Effort	Number of students	Student-teacher ratio	
	Is anyone better off?		
Effect	Number of high school graduates	Percent of high school graduates	

# Health Practice

	Quantity	Quality	_
Effort	How much did we do? Number of patients treated	How well did we do it? Percent of patients treated in less than 1 hour	
Effect	Is anyone I Incidence of preventable disease (in the practice)	better off? Rate of preventable disease (in the practice)	

# Drug/Alcohol Treatment Program

How much did we do?	How well did we do it?		
Number of persons treated	Unit cost of treatment		
Is anyone better off?			
<u>Number</u> of clients off alcohol/drugs	Percent of clients off alcohol/drugs -at exit -12 months post-exit		

# What Quadrant?

- % participants who got jobs LR
- staff turnover rate UR
- # participants who got jobs
  LL
- % of children reading at grade level LR
- cost per unit of service
- # applications processed
- % patients who fully recover LR
# What Quadrant?

- % of customers satisfied with outcome of service (from survey) LR
- % of customers satisfied with service quality (from survey) UR
- % of applications processed within 2 working days UR
- # on waiting list UL, UR
- % of teachers with certification UR, LR

# All Data Have Two Incarnations



HS Graduation Rate % enrolled June 1 who graduate June 15 % enrolled Sept 30 who graduate June 15 % enrolled 9<sup>th</sup> grade who graduate in 12th grade

### **Separating The Wheat From The Chaff** Types Of Measures Found in Each Quadrant



### Selecting Headline Performance Measures

How much did we do? # Clients/customers served

# Activities(by type of activity)

### Selecting Headline Performance Measures

### How well did we do it?

### % Common measures

e.g. workload ratio, staff turnover rate, % staff fully trained, unit cost

### % Activity-specific measures

e.g. % timely intakes, % accreditation standards met

### Selecting Headline Performance Measures

How much did we do?		How well did we do	it?
	#/% Skills / Knowled (e.g. cognitive,	<b>better off?</b> dge social, physical)	
	<ul><li>#/% Behavior</li><li>(e.g. reading to</li><li>#/% Circumstances</li></ul>	nguage, parenting) child at home) e, transportation)	

# Choosing Headline Measures and the Data Development Agenda



51

# Not All Performance Measures Are Created Equal



# **The Matter of Control**





### 2012 Program Report Card: Residential Work Release – Department of Correction

Quality of Life Result: All Connecticut working age residents have jobs that provide financial self-sufficiency.

Contribution to the Result: Placing offenders in halfway houses allows us to supervise them in a controlled setting, while halfway house staff and other agencies provide job readiness, job-finding, and job retention services. Job readiness includes acquiring identification, securing clothing, and preparing for interviews. Job-finding entails matching the offender to existing job openings that fit his or her needs. Job-retention includes coaching the offender when they encounter challenges or when they are discouraged.

Program Expenditures	State Funding	Federal Funding	Other Funding	Total Funding
Actual FY 11	\$19,142,673.00	\$0	\$0	\$19,142,673.00
Estimated FY 12	\$19,142,673.00	\$0	\$0	\$19,142,673.00

Partners: Connection, CT Renaissance, Neon, Perception, Department of Mental Health and Addiction Services, Department of Social Services, Department of Labor, Board of Pardons and Paroles, University of Hartford, University of Connecticut, local city and town governments, local colleges and universities, business community, other non-profit agencies, and other state agencies. In addition, the work release halfway houses help offenders access services from DOC contracted non-residential services and many services that are not under contract. These include behavioral health, employment, and housing related services.

#### How Much Did We Do?

Number placed in work-release halfway houses.



#### Story behind the baseline:

There was a 4% reduction in the number of individuals placed in work-release (113). This small decline is explained by a small increase in the length of stay (FY10: 144 days and FY11: 146 days) and a 1% reduction in utilization (FY10 97% and FY11 96%). We think this reflects normal fluctuation and not a true trend.

Trend: <>

### How Well Did We Do It?

Percentage of successful completions



#### Story behind the baseline:

Successful completion rates in 2010 ranged from 56% to 94% within the halfway house programs with a variance of 38%. In 2011, the completion rates ranged from 68% to 93% within the halfway house programs with a variance of 25%. This reflects a more consistent and improved outcome. However, the FY11 variance suggests we have room for improvement. Although we have analyzed some data to determine possible factors, thus far we do not have a definitive answer. One possibility relates to differential rates of resources that halfway houses have.

Trend: 🛦

### How Well Did We Do It?

Average agency employment rate

FY	Served	Employed	Percentage
2011	2151	1205	56%

#### Story behind the baseline:

This is a new data element we have added for FY11. "Served" refers to the numbers who had completed orientation and who were not in a training or treatment program.

In 2011, there was a range from 18% to 100% within the halfway house programs with a variance of 82%. This large variance may reflect a data problem or a lack of consistency in practice. Other possible explanations for this variance may include different unemployment rates for different geographical areas, presence of an employment specialist on staff, and the number and variety of employers to which agencies can regularly refer clients.

Trend: N/A

### 2012 Program Report Card: Residential Work Release – Department of Correction

Quality of Life Result: All Connecticut working age residents have jobs that provide financial self-sufficiency.

#### Is Anyone Better Off?

Percentage with stable housing

	Successful		
FY	Completion	Housed	%
2011	1305	1281	98%

#### Story behind the baseline:

This data element was first available in FY11. In 2011, stable housing ranged from 83% to 100% within the halfway house programs with a variance of 17%. The denominator in this measure is those clients who successfully discharged from the program. Unsuccessful outcomes were those who were discharged to a shelter with no case management or discharged with no housing.

The high proportion of successful outcomes reflects the success that our non-profit partners, DOC Parole and Community Service staff, and other state agencies have in placing offenders in appropriate housing.

#### Is Anyone Better Off? Average bank account balance

FY	Eligible	Average	
2011	1188	\$928.35	

#### Story behind the baseline:

This data element was first available in FY11. There was a range in savings from \$200.00 to over \$1500.00 within the halfway house programs. Thirteen of the twenty-five halfway houses had an average savings of over \$1000.00.

It is clear that most of the halfway houses are doing a good job of helping offenders save money in preparation for release from the halfway house. We need to investigate the much lower savings in other halfway houses.

One possibility to explain the variation is that in some halfway houses, the hourly rate of pay to employed inmates is different. There is a direct relationship between rate of pay and savings. Rate of pay information will start to be collected on January 1, 2012.

### Proposed Actions to Turn the Curve:

Service variability should be informed by and improved by a process evaluation currently underway. Two years ago a Program Fidelity Model for halfway houses was created based on a research review, which included an audit tool. This model includes a number of low-cost or no-cost approaches that have been shown to improve outcomes. Examples include assisting offenders to engage in prosocial activities, utilizing motivational interviewing, and utilizing CBT principles. This process became de-railed due to facility population pressures, as well as financial constraints. Since then, the Department of Correction contracted with the University of Hartford and Connection, Inc., to undertake a process evaluation designed to identify implementation challenges that we have encountered and corrective actions that can be taken.

We are in the process of adding an audit team that will be in place by February 1, 2012. The audit team will be responsible for quality assuring the Program Fidelity Model. We fully expect improvements in completion rates, employment rates, and savings rates.

In mid December the DOC made "seed money" available for agencies to hire an Employment Specialist. We estimate that if successful, income generated by increased employment income will cover the future cost of the individual salary beyond the year the seed money will be available.

We need to collect data that better addresses "financial self-sufficiency." On January 1, 2012 we will begin to collect information on the number of hours worked and hourly wages. In addition, we will collect information on the proportion of individuals with "financial self-sufficiency plans." We expect to have the first quarterly report available May 1, 2012.

#### Data Development Agenda:

Regarding employment rates we recently resent information to providers regarding how employment figures should be calculated. We have reason to believe part of the variance is due to inconsistency in data calculation. Following the communication to providers, the Parole and Community Services will conduct an audit.

Trend: N/A

Trend: N/A

### Program Report Card: Recycling in Connecticut, CT DEP

Quality of Life Result: All Connecticut residents live in a "clean and wholesome" environment in which natural resources are conserved and protected.

Contribution to Result: Waste minimization and prevention programs (source reduction, materials reuse, recycling, composting) optimize the percentage of solid wastes diverted from disposal, thereby minimizing the volume of waste burned or disposed. This saves energy, prevents greenhouse gases, conserves natural resources, saves landfill space, reduces pollutants and toxicity, and lowers the potential for degradation of air and water. Less waste means less waste problems and a better environment.

Partners: Municipalities, CRRA, regional resources recovery and solid waste authorities, DECD, OPM, CT General Assembly, regional solid waste and recycling operating committees, academic institutions, environmental advocacy groups, property tax reform advocates.



Performance Measure 1: STATEWIDE RECYCLING RATE

#### Story behind the baseline:

Mandatory recycling was put into place in 1989 to decrease the amount of waste disposed. CGS 22a-220(f) set a 40% recycling goal for the year 2000. While total tons have risen, the percent of Municipal Solid Waste ("MSW") recycled has stalled at 25% due to an overall increase in waste generation and disposal. This trend could require public expenditures for additional disposal capacity. Locating, permitting, and building new RRFs and landfills is a costly and time-consuming process. If all municipalities reached 40% recycling, the cost savings would be about \$35 million dollars statewide in avoided disposal fees.

Proposed actions to turn the curve: Ensure partners' actions conform to state solid waste management plan: Focus on municipal compliance; support legislation to improve recycling of certain wastes; target enforcement in key sectors; improve collectors' registrations and ensure collectors act on their enforcement role.





Story behind the baseline: Data in chart includes residential and commercial waste. DEP estimates each CT person annually accounts for 900 lbs residential MSW. US EPA estimates that 500 pounds residential MSW per person annually is a sustainable disposal rate. The general lack of an economic signal at the individual level on the costs of disposal results in a failure to properly value recycling. Statewide education is limited due to the variety of collection services and recycling practices resulting from municipal, rather than regional, control of solid waste management.

#### Proposed actions to turn the curve:

DEP will improve data reporting and post data on website to aid municipalities in measuring their progress toward the goal. Recognize exemplary municipal recycling rates. Encourage collectors and municipalities to use unit-based pricing for solid waste disposal to change how residents value recycling. Encourage partners to act regionally.

#### Performance Measure 3: CLOSING THE GAPS IN INFRASTRUCTURE PERMITTED CAPACITY

#### **Recycling Infrastructure**

Waste type	Permitted facilities (#)	Capacity meeting current need (%)
Bottles, cans, paper	6+	100%
Food Waste	1	10%
Electronics	6	varying
Soil	0	marginal

Story behind the baseline: Current infrastructure has sufficient capacity to process current tonnages of commodity recyclables [paper, bottles, cans]. Infrastructure is lacking for processing certain significant sectors such as electronics, food waste, other organics, and soil] and for marketing and using processed recyclables. CT food waste is 13% of all waste disposed or 331,468 tons annually. There is one permitted food waste recycler in CT.

Proposed actions to turn the curve: Prioritize permit applications that close the capacity gap in specific sectors. Revise regulations to clarify reuse of soils and construction materials. Focus on permitting of collectors, processors, and waste streams with lagging recycling rates. Encourage partners to invest in making home composting units widely available. Ensure partners assist in development of industries, technologies, and commercial enterprises within the state that are based upon recycling, reuse, treatment, or processing of solid waste. Ensure partners encourage private investment in local recycled materials industries and marketing as part of green jobs promotion.

### The Connecticut Agricultural Experiment Station Program Report Card: Crop Quality and Food Safety

Quality of Life Result: All Connecticut residents have access to safe products and safe, locally-grown, high-quality food.

Contribution to Result: By conducting research on new crops for our farmers and testing for pesticides and other contaminants, we provide new locally grown crops for our farmers and farmers' markets, help preserve farmland, and reduce exposure to unwanted chemicals in our food. Results are disseminated to state residents and the scientific community through publications and talks.

Partners: CT Depts. of Agriculture, Consumer Protection, and Public Health; US FDA, USDA, US EPA; CT farmers and markets; food banks.

**Performance Measure 1**: Reduce exposure of CT residents to food and other products containing pesticides or other unwanted chemicals.



Story behind the baseline: With increased commerce from foreign countries and with our domestic, large-scale food processing, there is greater potential for product contamination. Sometimes foods and other products contained unwanted chemicals, such as pesticide residues. For example, pomegranate juice contained benomyl and was recalled. Other discoveries include detection of lead paint in toys (2 recalls), sanitizer fluids in CT milk (analyzed within 4 hours of receiving samples), melamine in dog food and wafer rolls (2 recalls), and ethylene glycol in toothpaste and fruit punch. Our tests resulted in 3 national recalls in 2008. These regulatory actions ensure consumer access to safe foods and other products.

Proposed actions to turn the curve: Pesticide extraction and analyses generally take about 4 days. New methods will be developed to detect lower amounts of pesticides more efficiently and to more quickly remove unsafe foods and other products from commerce. Further staff reductions or program cuts will greatly impede work output. **Performance Measure 2**: Develop new crops for CT farmers that offer fresh and nutritional food for CT residents.

Number of new crops and cultivars evaluated.

Year	# Crops Evaluated	# Cultivars Evaluated
2006	8	96
2007	9	93
2008	10	106

Story behind the baseline: There is increased public interest in growing new specialty crops with little or no pesticides. Cultivars (varieties) of fruits and vegetables and different cultural methods have been fieldtested. Recently, different crops, such as Chinese cabbage, were high yielding and could be grown in CT with little or no pesticides. Yields averaged about 17.5 tons/acre. At a retail price of about \$0.99 per pound, there is a potential crop value of about \$38,400 per acre. Farmers are including this crop in their farm operations: 24 CT farmers are growing 9 specialty crops with low-cost cultural methods. At fruit growers' requests, beach plums were evaluated at our farms for CT production. With an expected value of \$52,270 per acre, two of CT's largest commercial orchards now include beach plums, which are in consumer demand and can be made into a premium jelly.

Proposed actions to turn the curve: New information on crop programs will be transferred to farmers at grower meetings. A brochure was mailed to 500 farmers on the new crops program, but additional lectures will be given to describe new study results. Performance Measure 3: Improve soil quality and minimize the use of fertilizers on lawns and nursery stock.

Total soil tests performed.

Year	# Soil Tests		
2006	10,018		
2007	10,377		
2008	11,699		

Story behind the baseline: Fertilizers are used extensively by homeowners, landscapers, golf course managers, and farmers. In many cases, these chemicals are applied without knowledge of soil quality. This practice can lead to polluted surface and groundwater, thereby encouraging rapid growth of algae and invasive aquatic plants. People who own or rent lake-front properties are concerned about reduced water quality. A benefit of testing soil samples is less fertilizer leaching into surface and ground water and less detrimental effects to Long Island Sound. Around 4-5% of soils tested do not need additional fertilizer, thus saving those homeowners \$11,700 in fertilizer costs.

Proposed actions to turn the curve: Information will be included in soil-test reports to advise state residents on the proper use of fertilizers to prevent environmental contamination. Field studies have been designed to determine minimal amounts of fertilizers needed to reduce costs for proper Christmas tree growth in farms. Results will be transferred to growers at public meetings.

### Program Report Card: Interdistrict Magnet School Program (Connecticut State Department of Education)

Quality of Life Result: All Connecticut students have a successful transition to adulthood, assume a contributing role in a world-class workforce, and become productive members of their community and society at large.

Contribution to Result: Interdistrict Magnet Schools (IMSs) are one of the public school choice options that are raising the educational attainment level of participating students throughout the state through high-quality, racially/economically integrated education. These schools directly provide educational choices that contribute to a more highly educated work force and reduce racial, ethnic and economic isolation. IMSs maximize the opportunity for each student to achieve his or her highest potential by offering challenging, relevant and rigorous curriculum and instruction. In addition, these programs provide a creative and flexible environment that values each student's unique abilities, talents, interests and learning styles. Greater student learning and engagement in school lead directly to a more prosperous adulthood with greater contributions to the economy and society.

Partners: Institutions of higher education, business and industry, theme-specific associations/groups, educational researchers and parents.

Performance Measure 1: Number and percentage of IMSs meeting statutory racial isolation target of at least 20% white students.



Story behind the baseline: The percentage of IMSs meeting the standard (at least 20% white) is continually growing, currently at 87%, up from 65% two years earlier. However, approximately 40% of the schools meeting the standard are only *marginally* above it, thus risking falling below the standard with only a slight shift in white student enrollment from year to year. Enhanced marketing, better recruitment strategies and the influence of specific requirements resulting from the *Sheff* decision (requiring Hartfordarea IMSs to meet a specific student diversity standard) help explain the two-year improvement in this measure. The number of IMSs increased from 54 to 61 between 2007-08 and 2009-10.

Proposed actions to turn the curve: The Connecticut State Department of Education (CSDE) will build upon existing enrollment management plans (EMPs) in assisting IMSs that are below or marginally above the threshold with expanding and improving their recruitment strategies. An EMP is a school-level mechanism designed to ensure sufficient enrollment, equitable access, and that student systems to support success and retention are in place. Recruitment strategies may include greater interaction between IMS administrators and potential feeder school children and families, action videos, and other methods beyond program literature.

Performance Measure 2: Percentage of Hartford, New Haven and Waterbury resident students at or above proficiency in reading in both IMSs and the city public schools (non-magnets).



# of Students Tested in Reading (2009 CMT/ CAPT)

	Hartford	New Haven	Waterbury
Magnet	1955	2216	628
Non-magnet	7560	5443	7697

Note: These data reflect students in *tested* grades only. These three cities are chosen as they are the only urban areas with at least three IMSs serving significant numbers of city students from which to base valid comparisons.

Story behind the baseline: Resident students of urban centers who attend IMSs outperform students in the city public schools in reading. The distinction between magnet and non-magnet schools is nearly identical for mathematics. To control for differences in the baseline of students when they enter IMSs, an analysis of student academic *growth* between 2008 and 2009 yielded nearly identical results – IMS students, grew at a greater rate than non-IMS students, and New Haven's IMS student growth lagged behind that of Hartford and Waterbury.

Beyond the reading data shown, a recent UCONN study of Hartford-area IMSs found a *statistically significant* positive impact of the IMS program on mathematics and reading achievement of urban middle and high school students. It is unclear if the difference in IMS student performance across cities is related to the number or percentage of city resident students attending IMSs.

### How Population and Performance Accountability FIT TOGETHER

### **THE LINKAGE** Between POPULATION and PERFORMANCE



### **THE LINKAGE** Between POPULATION and PERFORMANCE

### **POPULATION ACCOUNTABILITY Healthy Births** POPULATION RESULTS Rate of low birth-weight babies **Children Ready for School** Percent fully ready per K-entry assessment **Self-sufficient Families** Percent of parents earning a living wage PERFORMANCE ACCOUNTABILITY Job Training Program Unit cost # persons per person receiving trained training % who get # who get living wage jobs living wage jobs **CUSTOMER** Outcomes

Contribution relationship

# Alignment of measures

Appropriate responsibility

### **Data Display Principles**

# **Data Display**

# Important Data Display Principles

- Show the data
- Induce the viewer to think about substance, rather that about the method, graphic design, or technology used to produce the graphic display
- Avoid distorting what the data have to say
- Make large data sets coherent
- Reveal data at several levels of detail, from a broad overview to a fine structure (drill-down approaches)
- Encourage the eyes to compare different pieces of data

- Adapted from Tufte, 1982

# Some Key Design Principles

- Organization of report should be driven by the audience and use of the report
- Level of detail should also vary based on audience and intended use of report. This includes:
  - How many and what kind of indicators or measures to include
  - What kinds of comparisons to make
  - How much detail is directly accessible in the report
- Don't bury people in data. The concept of headline indicators and performance measures is crucial

## Report the Trend, Not a Data Point

NO



Number of Clients Served







0

# Note Any Changes in Data Reporting



Note: Testing Format Revised for 2006

# Use 0-100 Scale Whenever Possible



NO



% Ready For K



# Use Chart/Table Combination

all kids



### Percent of Kids at or Above Goal on 3rd Grade Reading CMT

# Always Tell the Story with the Data





**Story behind the Baseline:** This measure shows program entry and one year follow-up scores on a parental rigidity assessment. Parental rigidity is predictive of a number of negative parenting behaviors , including abuse. The trend shows consistently lower (better) scores after participation in the program.

# **Display Important Disaggregations**

### If you know this....

### Don't just show this...

### % Achieving Goal on 3rd Grade Math CMT

100.0%				
90.0% -				
80.0% -				
70.0% -				
60.0% -				
50.0% -				
40.0% -				
30.0% -				
20.0% -				
10.0% -				
0.0% -				
	2007	2008	2009	2010
All Students	59.4%	60.2%	63.0%	62.6%
Free and Reduced Lunch Students	34.4%	34.6%	37.9%	38.9%

### % Achieving Goal on 3rd Grade Math CMT



# Other Critical Comparisons

- To a standard or expectation
- To a previous point in time
- To another place
- To a group of places
- To similar (but not exactly the same) programs

### The Power of RBA Thinking: Turning the Curve



Results Leadership Group

# How RBA Is Being Used in Connecticut

- Connecticut legislature
- State agencies
- Communities
- Non-profits
- Funders
- Connecticut RBA Practitioners Network

# Schedule for Appropriations Committee's RBA Initiative

- Agency trainings and technical assistance through mid-January
- Updated report cards for 2010-2012 programs due to Susan Keane by January 15
- Revised and finalized report cards due to Susan Keane by February 1 and transmitted to Committee members before budget hearings
- Budget hearings with the 8 questions for all programs in February
- Early Childhood Forum last week in February; Jobs Summit on March 20.
- Additional guidance, resources, and training for agencies in January



# "If you do what you always did...

# you will get what you always got."

Kenneth W. Jenkins President, Yonkers NY NAACP

### Never Be Afraid To Try Something New.

Remember...

A lone amateur built the Ark.

A large group of professionals built the Titanic.

## Thank You