



# **HR METRICS:**

## **Roadmap for Measuring HR's Impact**

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## **HR Metrics: Roadmap for Measuring HR's Impact**

The human resources (HR) profession is undergoing a transformation now that executives acknowledge employees as their most valuable business asset and competitive differentiator for organizational success. The size of budgets and latest technology or equipment has little meaning without people to carry out the business of the organization. This also applies to state government as an employer, perhaps more so because of the critical services provided by state employees that support a state's infrastructure, which is critical to the economy.

HR professionals are being asked by senior policy-makers to prove the value of HR programs to the bottom line. Part of the shift to a more strategic role involves metrics, the common business language of numbers. HR metrics focus on communicating whether critical long-term people management strategies drive productivity and deliver a workforce necessary to achieve business goals that improve financial and organizational effectiveness and performance.

The ultimate goal is to communicate to senior policy-makers on a high level the implications to the State, expressed in numbers, of taking or not taking strategic actions or making investments in the workforce. It goes beyond measuring activities to include effectiveness of results. They help illustrate the impact of HR strategies to the business, in essence answering the "so what" question.

HR metrics are in their infancy and will take years to refine into truly effective measures that go beyond efficiency measures of activity to analytics predicting the impact or outcome of people strategies on business goals. While the task can be overwhelming at first glance, it is critical to get started and focus on a few key analytics. To that end, the Division of Human Resources partnered with the Saratoga Institute to launch the HR measurement program. The State faces several challenges given the lack of data in an HRIS and lack of integrated sources of data (e.g., 12 payroll systems). No doubt the State's metrics and analytics will evolve, both as strategies change and as staff gains experience with data and formulas.

The process involves two stages: metrics and analytics. It begins by management identifying two or three people management strategies. Next is the selection of the people drivers defining the key outcomes of strategies and the key performance indicators (metrics) that will be communicated up to senior leadership in high-level dashboards. The second step is identifying the analytics that link HR strategies to the business. The result is a complete map with a line of sight from high-level strategy all the way to defined data elements.

While the Division of Human Resources (DHR) is focused on the statewide or systemic level, key performance indicators and reporting metrics can be applied by departments and institutions to measure the status and impact of their HR practices in meeting their unique needs.

This report begins with the metrics map followed by the business impacts; the "so what?" Several appendices are included that provide detailed information in the complete map. A final word of caution, while metrics are indispensable to strategic HR, they are not an end themselves, but a tool in decision-making that includes other considerations as well.

## Building the Metrics

The Division has generated data reports for a number of years, including annual workforce demographics, annual compensation survey, and annual HR activities. In 2003, a strategic HR direction was adopted and the first real strategic plan was developed. Management knew that the support of metrics would be needed in order to be truly strategic. One can use metrics without being strategic but one cannot be strategic without metrics. Thus, DHR embarked on establishing a metrics program with the following objectives.

- Proactive and results oriented to prove the value of HR strategies to senior leadership.
- Focus our limited resources.
- Link people and business strategies.
- Leverage what we were already doing with reporting data.

The first task involved understanding the end goal first before determining the key areas to measure. It started with a review and revision of the existing strategic plan that creates a line of sight for major projects and initiatives. Included is our definition of strategic HR as “a long-term approach to people management strategies that drive achievement of the organization’s service goals.” In essence, it is the human capital management strategies that drive organizational success through the link to performance and effectiveness.

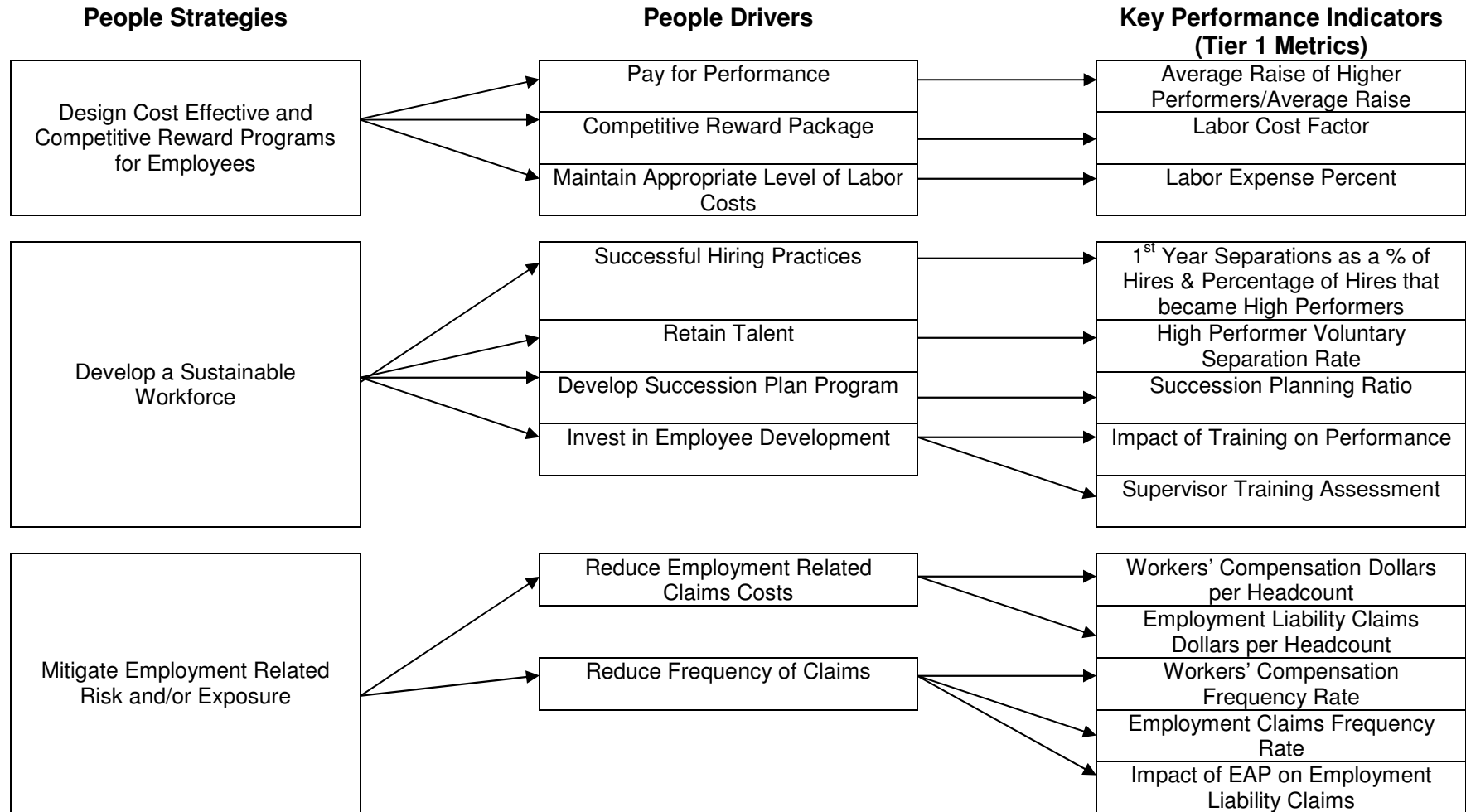
The result was three *people strategies* that represent the overall plan for HR to achieve business objectives. These three strategies are the most critical to senior policy-makers and are review annually. Next was the identification of the *people drivers* that represent the outcome of a strategy. They are high-level and management-oriented that will communicate strategic impact, not specific activities or interventions.

Attention then turns to selecting and defining metrics. The goal is to select a *few* that show outcomes of interest to *senior leadership* and align with the people drivers and strategies. Not all metrics are equally important. There are many to choose from and not all are easy to measure. Some considerations include: the primary audience, avoid overload, ability to benchmark externally and trend internally, frequency of reporting dashboards (point in time) and scorecards (over time), and integration with other business reporting cycles.

*Key Performance Indicators* (aka Tier 1 or T1) metrics were selected as the core outcome measures for each people drivers (one for each driver). Standard definitions and formulas must be developed in order to ensure consistency in application. Part of the process identifies issues with data quality and gaps, as well as applicability to the public sector. It is a challenge but not insurmountable. The special challenge for the public sector is that it is not profit-driven, mandated services are provided regardless of their effectiveness, and there is limited control over political decisions. However, public sector has revenue, input and output, costs savings or avoidance, and influence so it is possible to look at the effectiveness of processes, e.g., productivity, quality, cycle times, fraud reduction. The result is the basic metrics map to communicate upward (see map on next page).

The map continues with the addition of back-up detail that provides reporting metrics (aka Tier 2 or T2), data elements, and the sources and owners of data (see Appendices 2 through 5). While too detailed for communications upward, it is part of the gap analysis to manage quality and ensures consistency as metrics evolve. With completion of the metrics stage, the second stage can begin.

## Colorado HR Metrics Map



## Business Linkages – The Real Story

This second stage is often where HR stops but it is critical because it connects HR to business. *Analytics* (clusters of linked metrics) show the big picture – the impact of people strategies on organizational effectiveness and performance. They communicate the “so what” to senior leadership. This high-impact, high-level communication tells HR’s real story. If done correctly, analytics create the ability to be predictive and that’s when HR becomes truly strategic.

An organization cannot go straight to analytics without first laying out the key metrics. However, both can be developed at the same time and will result in a complete roadmap. This is the most challenging and time-consuming step. In addition to data gaps in the public sector, a large part of the effort at this point is becoming comfortable with ambiguities and some of the “softer” measures in analytics, e.g., multipliers and indices, and confidence levels. Absolute precision or perfection is not necessary. Gaps can be filled by research on external standards and internal estimates that can be refined over time. The key is to pick a standard or estimate and apply it consistently.

There are four steps to identifying and defining business impacts.

- Step 1 - identify potential effects. These are the multiple consequences as a result of a strategy or driver.
- Step 2 - define revenue/cost implications. These describe the impact a potential effect has on budget or productivity.
- Step 3 – define formulas and assumptions. These quantify the revenue/cost implications and define how they will be calculated. The total represents the cost of a strategy.
- Step 4 – identify next steps and owners. This step keeps track of the pieces of formulas that need additional work or follow-up research, and who is responsible for the work and actual analysis.

The following lays out the impacts of the State’s people drivers or strategies. The full map with revenue/cost implications and the formulas and assumptions is in Appendix 1.

### **Business Impact of Pay for Performance**

Impact on Productivity – effect on overall value of work and productivity from high performers.  
Impact on Turnover – effect on retention of high performers.  
Impact on Administration Costs – effect on PBP investment.  
Impact on Disputes – effect on employment disputes.

### **Business Impact of Competitive Reward Package**

Return on Investment in Human Capital – effects on total return of reward package, overall productivity, turnover, and candidate pool.

### **Business Impact of Successful Hiring Practices**

Impact on Productivity – effects on time-to-start, manager’s time in hiring process, short-term team productivity, and new hire time to productivity.  
Impact on Turnover – effect on new hire turnover.  
Impact on HR Administration – effects on “out of pocket” costs and integration of staffing into other HR processes.

### **Business Impact of Losing Talent – Opportunity Costs**

Effects on productivity related to the hiring process and from the vacancy, learning curve, and short-term

team productivity.

#### **Business Impact of Losing Talent – Out of Pocket Costs**

Effects on recruiting costs, training costs, physical costs of onboarding, value of training investment.

#### **Business Impact of Succession Plan Program**

Impact on Key Role – effects during placement (time to start) and after placement (productivity).

Impact on Organization – effects before placement (productivity), during placement (turnover), and after placement (workflow disruption).

Impact on Succession Planning Candidates – effect on retention of successors to key roles.

Impact on HR Function – effects during placement (hiring costs) and after placement (training requirements).

#### **Business Impact of Mitigating Employment Risk – Workers' Compensation**

Impact on Judgments/Payments - effect on safety & health risks that result in worker's comp claims.

Impact on Productivity – effect on productivity due to worker's comp.

Impact on Administration – effect on internal & external administration costs

#### **Business Impact of Mitigating Employment Risk – Employment Disputes**

Impact on Judgments/Payments – effect on employment disputes.

Impact on Productivity – effect on productivity due to disputes.

Impact on Administration – effects on internal administration and defense costs.

## **Summary**

Again, HR cannot be strategic without metrics. Colorado has built its roadmap but is just beginning the metrics function. It will evolve as DHR refines data and gains experience with analytics. The following key points need to be remembered.

- High level. It's driven by *management* – the primary audience. The focus is on upward communication of strategic outcomes.
- High impact. Pick a few key metrics and analytics that are of interest to senior policy-makers. It's not about measuring everything. It is not about reporting metrics.
- Perfection is the enemy and can lead to the “analysis paralysis” trap. Data gaps, quality, and lack of integrated sources are hard but not insurmountable. Embrace the ambiguities.
- It is critical to norm or compare externally and to establish trends over time. Only this point provides context to measurements.
- It is a challenge. Fight the temptation to retreat to easier reporting metrics.
- Start small and keep going – just start.
- Keep refocusing. Continually and honestly ask “so what”. It is the difference between what is easy to measure and what management really needs to know.

Prepared by Karen Fassler with special acknowledgement to Sue Huang and Laurie Benallo.

## Appendix 1 – Business Linkages

The following tables layout the analytics that show the impacts of people drivers on the business. They represent the link between HR strategies and business.

### Business Impact of Pay for Performance

Step 1 <i>Potential Effects</i>	Step 2 <i>Revenue/Cost Implications</i>	Step 3 <i>Formula/Assumptions</i>
<b>Impact on Productivity</b>		
Increase overall value of work	X% increase to VOW multiplier	PBP dollars x VOW multiplier x % increase in overall productivity x Confidence Level
Increase productivity from high performers	X% increase to VOW multiplier	Salary dollars x # of high performers x (% reduction of turnover rate for high performers) x VOW multiplier x % increase in overall productivity for high performers x Confidence Level
<b>Impact on Turnover</b>		
Retaining higher % of higher performers	Decrease in cost to retain higher performers	Cost difference of retaining talent in retention rate difference between high and standard performer
<b>Impact on Administration Costs</b>		
PBP investment	Dollars invested in PBP	% of request that is PBP
<b>Impact on Disputes</b>		
Decrease in employment disputes	Fewer disputes	X% decrease in # of disputes x cost per dispute

Value of Work (VOW) is a multiplier of 1.72 based on the ratio of state workforce total payroll and state revenue. Saratoga recommended 3.5 but agreed to the modification based on Colorado information.

Confidence Level: in order to measure the impact of a people drive, a survey or questionnaire technique may be used to collect employee or supervisor input for certain measurements (e.g., customer satisfaction). In addition to asking participants their input, the questionnaire would also ask them how confident they feel about the input provided. For example, if a supervisor estimates that his or her employees have improved their customer satisfaction by 80%, and if the supervisor indicates he or she is about 70% confident with this estimate, then the multiplication of these two values (80% x 70% = 56%) would represent the adjusted customer satisfaction improvement from this supervisor. This confidence level measurement is a technique to capture a conservative impact measurement; a well-established approach used in the Return-On-Investment (ROI) techniques by Dr. Jack Phillips.

### Business Impact of Competitive Reward Package

Step 1 <i>Potential Effects</i>	Step 2 <i>Revenue/Cost Implications</i>	Step 3 <i>Formula/Assumptions</i>
<b>Return on Investment in Human Capital</b>		
Increase in total return of competitive reward package	VOW returned from the investment	Adjusted Total General Fund ÷ overall Total Labor Cost
Increase overall	Total Labor Cost x (VOW	Total Labor Cost x VOW x (%)



productivity	increased thru competitive reward package)	of estimated productivity increase x % of Confidence Level from survey)
Decrease turnover	Decrease turnover cost from Retain Talent	% of reduction in turnover estimated x total turnover cost from Retain Talent x Confidence Level
Increase candidate pool	Decrease hiring costs from minimizing the need for re-announcing jobs	Hiring cost saving from % reduction in re-announcements using the Retain Talent Calculator

Productivity is measured as the "Gross General Fund (GGF) Nonexempt Revenue from the Fiscal Year Appropriation Report. It is the total general fund revenues as reflected in the Legislative Council's revenue estimate. The major components of the State's General fund revenues are sales and use, individual and corporate income, insurance, and cigarette taxes. This dollar amount will be adjusted based on the classified/total workforce (including both classified and general government non-classified) positions due to the fact that the overall human capital investment is estimated based on the classified workforce only. Productivity for Classified Workforce =  $\text{GGF} \times \# \text{ classified positions} \div \text{total workforce positions (general government + higher education classified and non-classified positions)}$ .

### Business Impact of Successful Hiring Practices

Step 1 <i>Potential Effects</i>	Step 2 <i>Revenue/Cost Implications</i>	Step 3 <i>Formula/Assumptions</i>
<b>Impact on Productivity</b>		
Reduced time to start	Additional days worked	Reduction in time to start x average salary x VOW x # of new hires
Managers' time dedicated to hiring process	Reduction in days that managers spend to hire employees	Reduction in hours x manager salary x VOW x # of new hires
Improved short-term team productivity	Reduction in days that managers spend to train employees	Reduced calendar days in learning curve x 15% x manager salary x VOW x # of new hires
Quicker time to productivity	Less productivity lost during learning curve	Reduced calendar days in learning curve x average salary x VOW x learning curve productivity factor x # of new hires
<b>Impact on Turnover</b>		
New hire turnover decreases	Turnover costs for reduced rehires	Turnover costs x net reduction in turnover rate x # of new hires
<b>Impact on HR Administration</b>		
Change in "out of pocket" costs	Increase in "out of pocket" hiring costs	Additional administrative cost for better job announcement and tests
Better integration of staffing into other HR processes	Reduced data entry and errors	To be included in boarder Technology effort

### Business Impact of Losing Talent – Opportunity Costs

Step 1	Step 2	Step 3
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<i>Potential Effects</i>	<i>Revenue/Cost Implications</i>	<i>Formula/Assumptions</i>
Productivity loss to the State related to the hiring process	Labor cost for all involved in the hiring process	Average daily salary of those involved in hiring process x total hours spend on the hiring process (in days)
Productivity loss while position is vacant	Lost value of work during vacancy	Calendar days from separation to start date x average daily salary x VOW
Learning curve	Value of work lost during learning curve	Calendar days from start date to fully productive x average daily salary of hires x VOW
Short-term team productivity (e.g., training, mentoring, workload) <i>Long-term impact to be footnoted</i>	Cost of lost team productivity	15% average supervisory salary x calendar days from start to fully productive x VOW

### Business Impact of Losing Talent – Out of Pocket Costs

Step 1 <i>Potential Effects</i>	Step 2 <i>Revenue/Cost Implications</i>	Step 3 <i>Formula/Assumptions</i>
Recruiting costs	Costs related to brining in talent (e.g., supply cots)	Sum of (recruiting agency + advertising + referral bonuses + career fairs + drug testing + background checks + skills testing) ÷ total hires
New hiring training costs	Costs for providing hires “formal” training	Total formal training costs within 1 <sup>st</sup> year
Physical costs related to onboarding	Operating costs (e.g., badge, space, computer)	Operating costs for onboarding
Lost value of training investment	Average cost of training for talent that left (during their entire tenure)	Average annual training costs x average tenure x total departed trained

Quality of hire decrease	These two will be noted as having an impact on the cost of turnover, but a dollar value will not be calculated for them.
Increase of public support for new program	

### Business Impact of Succession Plan Program

Step 1 <i>Potential Effects</i>	Step 2 <i>Revenue/Cost Implications</i>	Step 3 <i>Formula/Assumptions</i>
<b>Impact on Key Role</b>		
<b>During Placement</b>		
Reduced time to start	Additional calendar days worked due to less days needed to fill key roles	Reduction in time to start x average salary x VOW
<b>After Placement</b>		
Less time to full productivity	Less productivity lost during learning curve for successor in the new role	Reduced calendar days in learning curve x average salary x VOW x learning curve productivity factor

## Impact on Organization

### Before Placement

Employees are more productivity (uncertainty is minimized)

X% increase to VOW multiplier

Salary dollars x VOW x % increase in overall productivity for employees x Confidence Level

### During Placement

Reduced turnover (all employees affected)

Turnover costs are minimized

Turnover costs from model x net reduction in turnover rate

### After Placement

Less disruption to workflow

Cost savings from maintaining workforce productivity

Salary dollars x VOW x % decrease in overall productivity for employees x Confidence Level

## Impact on Succession Planning Candidates

### During Development

Retain successors to key roles in organization

Turnover costs for successors minimized

Turnover + training costs x net reduction in turnover rate within succession pipeline

## Impact on HR Function

### During Placement

Hiring costs are minimized

Out-of-pocket costs savings associated with filling key role internally

Recruiting and onboarding costs for external hire – recruiting and onboarding costs for internal hire

### After Placement

Reduced training requirements

Cost savings associated with training provided to internal hire vs. external hire

Training dollars invested in new external hire in key role – training dollars invested in internal hire in key role

## Business Impact of Mitigating Employment Risk – Workers' Compensation

Step 1  
*Potential Effects*

Step 2  
*Revenue/Cost Implications*

Step 3  
*Formula/Assumptions*

### Impact on Judgments/Payments

Reduced safety & health risks that result in worker's comp claims

Direct costs of workers' comp claims costs

For cases opened in the FY, actual costs and reserves (based on year-end snapshot)

### Impact on Productivity

Employee productivity lost due to workers' comp

Labor value of work for both employee and employee "team" (lost time claim)

Days lost x (worker salary + 15% supervisor salary) x VOW x # of claims

### Impact on Administration

Internal cost to administer workers' comp claims	Direct and indirect labor costs	Average salary x (agency HR + DHR FTE dedicated to workers' comp claims)
External cost to administer workers' comp claims	Costs of external contractors involved in administering claims and disputes	Workers' comp TPA fees

### Business Impact of Mitigating Employment Risk – Employment Disputes

Step 1  
*Potential Effects*

Step 2  
*Revenue/Cost Implications*

Step 3  
*Formula/Assumptions*

### Impact on Judgments/Payments

Reduce employment disputes (e.g., harassment, due process)	Amount paid to claimants and attorneys related to employment disputes	3 year rolling average of average loss per claim x # of new filings
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### Impact on Productivity

Productivity lost due to employee disputes	Labor value of work for both employee and employee "team"	Days lost x (worker salary + 15% supervisor salary) x VOW x # of claims
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### Impact on Administration

Internal cost to administer disputes	Direct and indirect labor costs	Average salary x (agency HR + DHR + DPA ombuds FTE dedicated to disputes)
Defense costs for employment disputes	Labor costs and external costs for defense of claims and disputes	Labor cost for AG + external attorney fees

## Appendix 2 Definition of Key Performance Indicators (Tier 1 Metrics)

These are the critical metrics shared with senior leadership in high-level dashboards that show the progress or how well programs are achieving outcomes for the organization as a whole (i.e., reported on the state personnel system by DHR). They are used to analyze cause and effect and predict outcomes.

METRIC	FORMULA	DESCRIPTION
<b>People Strategy: Design Cost Effective and Competitive Reward Programs for Employees</b>		
<b>People Driver: Competitive Reward Package</b>		
Labor Cost Factor*	$(\text{Regular Compensation Cost} + \text{Benefit Costs EPTNW}) \div \text{Regular Headcount}$	Average compensation and benefits per FTE. Excludes PTNW (paid time not worked) to avoid double counting of paid leave that is already in salaries. This metric provides insight in to the competitiveness of an organization's compensation and benefit package when compared against other organizations.
<b>People Driver: Maintain appropriate level of labor costs</b>		
Labor Cost Expense Percent*	$(\text{Regular Compensation Cost} + \text{Benefit Costs EPTNW}) \div \text{Total Budget}$	Percent of total budget devoted to employee compensation and benefit costs. Excludes PTNW (paid time not worked) to avoid double counting of paid leave that is already in salaries. This metric illustrates the degree to which workforce costs impact the organization's overall budget (generally labor costs account for the single largest expense to an organization). Tracked over time, this metric provides insight into the sustainability of an organization's compensation and benefits package.
<b>People Driver: Pay for Performance</b>		
High Performer Average Raise Percent	$\text{Average Annual \% Increase of High Performers} \div \text{Average Annual \% Increase of Regular Performers}$	The average annual percent increase for high performers compared to the average percent increase (base and non-base) for other employees to determine if performance influences pay and the degree to which pay is differentiated by performance. This metric provides insight into whether the organization rewards its high performing population by assessing the incremental salary increase high performers receive in comparison to the average increase in the organization.
<b>People Strategy: Develop a Sustainable Workforce</b>		
<b>People Driver: Successful Hiring Practices</b>		
First Year Separation Rate Based on Hires	$\text{Total Separations from the State Personnel System within 1 Year of Service} \div \text{Total Hires in the Year}$	Percent of hires who exit the state personnel system (voluntary and involuntary) within the first year of service. This measure provides insight into the effectiveness of the staffing process ("how well did we do in hiring the right person for the job") by assessing how many hires separated within the first year of service to the organization.
Percentage of New Hires that Become High Performers	$\text{Total New Hire High Performers within 1 - 2 years} \div \text{Total Hires within 1 - 2 years}$	Percent of new hires to the state personnel system that were ranked as high performers compared to all new hires within 1 – 2 years. The most recent evaluation will be used. This measure illustrates how well the organization has done in terms of hiring quality talent by assessing the percent of hires that were ranked as high performers within 12 to 24 months. In addition, this measure may provide insight into the effectiveness of the initial training and orientation efforts that may lead new employees to become high performers.
<b>People Driver: Retain Talent</b>		

METRIC	FORMULA	DESCRIPTION
High Performer Voluntary Separation Rate*	$\frac{\text{Total High Performer Voluntary Separations}}{\text{High Performer Headcount}}$	Percent of high performer headcount that voluntarily left the organization during the fiscal year. This measure illustrates how successful the organization is at retaining key, high performing talent.
<b>People Driver: Develop Succession Plan Program</b>		
Succession Planning Ratio	$\frac{\# \text{ Succession Planning Candidates}}{\# \text{ Key Roles}}$	Percent of key roles that have succession planning candidates associated with them. This measure provides insight into the status of the organization's workforce planning initiatives for key roles for the future.
<b>People Driver: Invest in Employee Development</b>		
Impact of Training on Performance	$\text{Average Annual Performance Rating of Trainees} - \text{Average Performance Rating of Employees Not Trained}$	The difference in average annual performance ratings as a result of participating in formal classroom training provided centrally. The results can be linked to other measures for an indication of the effectiveness of training and use of training as a performance award.
Supervisor Training Assessment	Survey results	Survey the effectiveness of formal classroom, centrally provided training applied on the job after a specified period of time following training. This metric provides an assessment of the effectiveness of formal classroom training provided by the State as indicated by the application of training on the job over a long-term period.
<b>People Strategy: Mitigate Employment-Related Risk and/or Exposure</b>		
<b>People Driver: Reduce Employment-Related Claims Costs</b>		
Workers' Compensation Factor	$\frac{\text{Workers' Compensation Cost (benefit \$ paid + TPA fees + program costs [personal services + operating])}}{\text{Regular Headcount}}$	The amount spent on workers' compensation costs per employee. This metric illustrates how well the organization is able to reduce or minimize workers' compensation costs per employee in the organization. It may also provide insight into the training effectiveness of courses aimed at reducing workers' compensation costs.
Employment Liability Claims Dollars per Headcount	$\frac{\text{Employment Liability Claims Cost (total \$ paid in judgments, settlements, appeals + legal fees + staff counts [hours x hourly rate])}}{\text{Regular Headcount}}$	The amount spent on liability claims costs per employee. Claims include formal disputes to the Board and Director, including appeals, director reviews, and grievances (assigned a case number). This metric illustrates how well the organization is able to reduce or minimize employment liability claims in the organization. It may also provide insight into the training effectiveness of courses aimed at reducing employment liability costs.
<b>People Driver: Reduce Frequency of Claims</b>		
Workers' Compensation Frequency Rate	$\frac{\# \text{ Workers' Compensation Claims in a Year}}{\text{Average \# Employees}}$	The average number of workers' compensation claims per employee. This metric illustrates how well the organization is able to reduce or minimize workers' compensation claims per employee in the organization. It may also provide insight into the training effectiveness of courses aimed at reducing workers' compensation claims.
Employment Liability Claims Frequency Rate	$\frac{\# \text{ Employment Liability Claims in a Year}}{\text{Average \# Employees}}$	The average number of employment liability claims per employee. Claims include formal disputes to the Board and Director, including appeals, director reviews, and grievances (assigned a case number). This metric illustrates how well the organization is able to reduce or minimize employment liability claims per employee in the organization. It may also provide insight into the training effectiveness of courses aimed at reducing employment liability claims.
EAP Frequency Factor	$\# \text{ Services in a Year (individual)}$	This allows the correlation of EAP services to the impact on employment liability

METRIC	FORMULA	DESCRIPTION
	sessions + group meetings) ÷ # Employment Liability Claims	claims. Claims include formal disputes to the Board and Director, including appeals, director reviews, and grievances (assigned a case number). This metric provides an indication of the effectiveness of the organization's investment in an EAP in reducing employment liability claims. It may also provide insight into the effectiveness of training courses in reducing disputes.

\* Indicates a metric selected by the National Association of Personnel Executives (NASPE) that aligns with a Saratoga metric.

### Appendix 3 Definition of Reporting Metrics (Tier 2 Metrics)

These are program level measures used by staff to track regular activities and impact of interventions. These tend to be traditional measures of efficiency.

METRIC	FORMULA	DESCRIPTION
<b>People Strategy: Design Cost Effective and Competitive Reward Programs for Employees</b>		
<i>People Driver: Competitive Reward Package</i>		
Compa Ratio	Average Compa Ratio	Evaluation of how closely organizational pay rates compare to the organization's defined midpoint of a pay range. This metric measures the alignment of organizational compensation strategies and actual pay practices. Too low or too high of a result may illustrate the need for restructuring or changes to the organization's compensation strategy.
Benefit Factor	Total Benefits Costs (employer contribution to all group benefits + retirement contribution + benefits and EAP program operations) ÷ Regular Headcount	Average cost of benefits per employee. Includes the EAP program. This metric provides insight into the competitiveness of an organization's benefit package when compared against other organizations. In addition, this measure is helpful to trend internally to ensure proper control of benefit costs over time.
Healthcare Factor	Healthcare Benefits Costs ÷ Employees Participating in Health Program	Average cost of healthcare to the State for each covered employee. Measured by PEPM (per employee per month) employer contributions. This metric illustrates the average investment in healthcare costs per employee in the organization and when trended can provide insight into the need to reform or restructure the current healthcare benefit options offered to the employee population.
Employee Cost Factor	Regular Compensation Cost ÷ Regular Headcount	Average compensation per permanent employee. This metric provides insight into the competitiveness of an organization's compensation package when compared against other organizations.
Compensation Impact of Hires	Annual Average New Hire Compensation Cost ÷ Annual Average Separated Employees Compensation Cost	The percentage difference between annual average gross salaries of newly hired employees and employees who separated during the survey period. This metric provides insight into the costs associated with replacing employees by assessing whether there are any incremental costs incurred to replace departed employees.
<i>People Driver: Maintain appropriate level of labor costs</i>		
Benefit Expense Percent	Total Benefit Costs ÷ Operating Expense	Percent of operating expense <sup>4</sup> devoted to benefit costs. This metric measures the impact benefit costs have on operating expenses. Continuous monitoring of this metric helps prevent overpayment of an organization's financial resources.
State Employees Percent	State Employees ÷ State Population	Percent of state population that is comprised of state employees. This metric illustrates the ratio of state employees to state population (citizens). Trended, this measure may provide insight into the State's staffing needs.
<i>People Driver: Pay for Performance</i>		
Performance Pay Percent	Performance Pay ÷ Regular	Performance pay percent looks at the percent of compensation costs that were



METRIC	FORMULA	DESCRIPTION
	Compensation Cost	devoted to performance (base and non-base). This metric can illustrate whether the organization links pay to performance. This measure illustrates how well the organization links pay to performance by assessing the percent of compensation dollars that were based on performance.
<b>People Strategy: Develop a Sustainable Workforce</b>		
<b><i>People Driver: Successful Hiring Practices</i></b>		
Time to Recruit	Calendar Days from Receipt of Requisition in the HR Office to Referral ÷ Total Hires	Average number of days to complete the recruitment process for a position. This metric is a potential indicator of the effectiveness and efficiency of the recruitment function. It is influenced by the labor market, industry and location. When the recruitment process is effective, and the organization is attractive, critical positions will be filled in a timely manner, resulting in a minimum loss of productive effort.
Offer Acceptance Rate*	Total Offers Accepted ÷ Total Offers Extended	Percent of offers extended to candidates that were accepted. This metric is an indicator of an organization's ability to attract new resources. It provides insight into the attractiveness of an organization in the market place, and the competitiveness of employment packages offered to recruits.
<b><i>People Driver: Retain Talent</i></b>		
Separation Rate by Performance Rating	Separations by Performance Rating ÷ Headcount by Performance Rating	Percent of headcount in a specific performance ranking category that separated (voluntarily or involuntarily) from the organization. This metric provides an assessment of separations from the organization by level of performance.
1st Year of Service Voluntary Separation Rate	Total Voluntary Separations with 0 to 1 Year of Service ÷ Regular Headcount with 0 to 1 Year of Service	Percent of headcount with less than a year of service that voluntarily left the organization during the survey period. This metric provides an assessment of turnover vulnerability for employees during their first year of service. Results may provide insight into the effectiveness of the recruiting process and total rewards package.
1 to 3 Years of Service Voluntary Separation Rate	Total Voluntary Separations with 1+ to 3 Years of Service ÷ Regular Headcount with 1 to 3 Years of Service	Percent of headcount with 1 to 3 years of service that voluntarily left the organization during the survey period. This metric provides an assessment of turnover vulnerability for employees 1 to 3 years of service. Results may provide insight into the effectiveness of the total rewards package.
3 to 5 Years of Service Voluntary Separation Rate	Total Voluntary Separations with 3+ to 5 Years of Service ÷ Regular Headcount with 3 to 5 Years of Service	Percent of headcount with 3 to 5 years of service that voluntarily left the organization during the survey period. This metric provides an assessment of turnover vulnerability for employees 3 to 5 years of service. Results may provide insight into the effectiveness of the total rewards package.
5 to 10 Years of Service Voluntary Separation Rate	Total Voluntary Separations with 5+ to 10 Years of Service ÷ Regular Headcount with 5 to 10 Years of Service	Percent of headcount with 5 to 10 years of service that voluntarily left the organization during the survey period. This metric provides an assessment of turnover vulnerability for employees who are in their 5 <sup>th</sup> through 10 <sup>th</sup> year of service. Results may provide insight into the effectiveness of the total rewards package.
More than 10 Years of Service Voluntary Separation Rate	Total Voluntary Separations with 10+ Years of Service ÷ Regular Headcount with 10+ Years of Service	Percent of headcount with 10+ years of service that voluntarily left the organization during the survey period. This metric provides an assessment of turnover vulnerability for relatively seasoned employees who have 10 or more years of service. Results may provide insight into the effectiveness of the total

METRIC	FORMULA	DESCRIPTION
		rewards package.
Voluntary Separations of High Performers in Key Positions	Total Voluntary Separations of High Performers in Key Positions ÷ Regular Headcount in Key Positions	Turnover of high performers in mission critical jobs or occupations in order to focus limited resources on most immediate staffing needs at a given time. This metric provides an assessment of turnover vulnerability within key positions that are held by high performers. Results may illustrate a need to focus on retention efforts for this population.
<b>People Driver: Develop Succession Plan Program</b>		
Department Succession Plan Percent	Departments with a Succession Plan ÷ Total Departments	Number of departments with department-wide succession plans as an indication of the level of involvement in succession planning, and progress over time. This metric illustrates the percent of the State's departments that have a succession plan in place. Results can illustrate the degree to which the State is focused on future workforce needs.
Percent of Employees Eligible for Retirement	In 3 years, 5 years, 10 years ÷ Headcount	Percent of employees who are eligible for retirement within the next 3, 5, and 10 years of service. This metric illustrates the degree to which the organization is prepared to deal with demographic shifts in the organization.
Management Completing Leadership Development Course	Management Completing Leadership Development Course ÷ Management Headcount	Percent of management that completed leadership development courses during the survey period. This metric quantifies formal developmental opportunities for organizational leaders.
<b>People Driver: Invest in Employee Development</b>		
Training Cost Factor	Training Program Costs (course fees + central program costs [personal services + operational] + participant costs [average hourly cost]) ÷ Total Payroll	Average percentage of payroll invested in formal classroom training provided centrally by the State. The results of this metric can be linked to other measures such as a competitive reward package and employee productivity.
Training Cost per Employee	Training Program Costs (course fees + central program costs [personal services + operational] + participant costs [average hourly cost]) ÷ Regular Headcount	Average cost in formal classroom training provided centrally by the State per employee. The results of this metric can be linked to other measures such as turnover and employee productivity.
Training Hours per Employee	Total Training Hours ÷ Regular Headcount	Average number of formal classroom training hours per employee that are provided centrally by the State. This measure illustrates the investment in employee training. The results of this measure can be lined to other measures such as turnover and employee productivity.
<b>People Strategy: Mitigate Employment-Related Risk and/or Exposure</b>		
<b>People Driver: Reduce Employment-Related Claims Costs</b>		
Workers' Compensation Benefits Paid	Total Workers' Compensation Benefits (medical + indemnity) Paid ÷ Number of Claims	Average cost of workers' compensation benefits paid per claim during the reporting period. This metric illustrates how well the organization is able to reduce or minimize the cost of workers' compensation claims. It may also link into the effectiveness of training aimed at reducing workers' compensation costs.
<b>People Driver: Invest in EAP Program</b>		
CSEAP Cost Factor	CSEAP Cost for Year ÷ Labor Costs	CSEAP costs as a percent of total labor costs for the organization. This metric illustrates the investment in the organization's EAP. The results of this measure

METRIC	FORMULA	DESCRIPTION
		can be linked to the effectiveness of the investment in the program.
CSEAP Cost Ratio	CSEAP Cost for Year ÷ Regular Headcount	Average CSEAP cost per employee. This metric illustrates the investment in the organization's EAP. The results of this measure can be lined to the effectiveness of the investment in the program.

\* Indicates a metric selected by the National Association of Personnel Executives (NASPE) that aligns with a Saratoga metric.

## Appendix 4 Data Elements

The detailed instructions define the formulas to be used; thus ensuring consistent calculations not only at the system-wide level but within departments and higher education institutions that feed data up to DHR.

Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
	Average Compa Ratio	Add up each employee's Compa Ratio and divide by headcount (be sure to use the headcount number reported in the Organization and Operations survey).	
X	Benefits Costs – Excluding Payments for Time Not Worked	<ol style="list-style-type: none"> <li>1. Add the total employer-paid costs incurred during the reporting period for legally required payments, retirement and savings plan employer contributions, life insurance premiums, healthcare benefit premiums, miscellaneous benefit payments.</li> <li>2. Include administrative costs</li> <li>3. Exclude payments for time not worked</li> <li>4. Exclude retirees.</li> <li>5. Exclude EAP program costs and workers' compensation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Legally Required Payments – Medicare, FICA taxes, and unemployment compensation.</li> <li>2. Retirement and Savings Plan Payments – employer-paid contributions incurred during the reporting period for pension plans, 401(k) type plans, including administrative costs and employer contributions, if applicable, and other related costs.</li> <li>3. Life and Death Insurance Benefit Premiums – employer-paid premiums incurred during the survey period for life insurance plans and accidental death and dismemberment plans including other related costs for active employees.</li> <li>4. Healthcare Premiums – employer-paid costs incurred during the reporting period for medical plans, dental plans, flexible spending plans, vision plans, short and long-term disability plans, and accident plans in addition to any administrative costs and other related costs.</li> <li>5. Miscellaneous Benefit Payments – total employer-paid costs incurred during the reporting period for discounts of goods and services purchased from the company by employees (e.g., clothing at company store), meals provided by the company.</li> </ol>
	Employees Participating in Healthcare Plans	<ol style="list-style-type: none"> <li>1. Add the total number of employees, excluding dependents, participating in employer-sponsored health care plans at the end of the survey period.</li> <li>2. Exclude dependents and employees receiving COBRA.</li> </ol>	

Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
	Healthcare Benefit Costs	<ol style="list-style-type: none"> <li>1. Add the total employer-paid premiums incurred during the reporting period for medical, dental, flexible spending, vision, short and long-term disability, and accident plans in addition to any administrative costs and other related costs.</li> <li>2. Exclude workers' compensation and EAP.</li> <li>3. Exclude retirees.</li> </ol>	
X	High Performer Headcount	<ol style="list-style-type: none"> <li>1. Add the total number of high performer employees at the end of the survey period as defined by the highest rating level in the State's performance system.</li> <li>2. Use the ranking that is available for the majority of the survey period.</li> </ol>	
	Management Completing Leadership Development Course	<ol style="list-style-type: none"> <li>1. Add the total number of Managers that completed one or more leadership development courses during the survey period.</li> <li>2. Count each Manager only once.</li> <li>3. Only include Management employees who participate in organization-sponsored leadership development courses.</li> <li>4. Exclude project managers.</li> <li>5. Exclude Management assessments and coaching sessions.</li> </ol>	Management: employees classified as Manager or above, which is defined as setting broad policies, exercising overall responsibility for execution of these policies, and directing individual departments or special phases of a firm's operations. Exclude project managers.
	Management Headcount	<ol style="list-style-type: none"> <li>1. Add the total number of permanent Management employees in the state personnel system at the end of each month during the reporting period.</li> <li>2. Divide by 12 for an annual average headcount.</li> <li>3. Include employees on Leave of absence.</li> <li>4. Exclude project managers.</li> </ol>	Management: employees classified as Manager or above, which is defined as setting broad policies, exercising overall responsibility for execution of these policies, and directing individual departments or special phases of a firm's operations. Exclude project managers.
	New Hire Total Compensation Cost	<ol style="list-style-type: none"> <li>1. Add the projected annual compensation costs of all employees who are hired by the organization during the survey period. For example, an employee is hired on December 15 and has a base salary of \$50,000. The new hire compensation costs for this employee would be \$50,000.</li> <li>2. Include overtime pay, pay premiums, sign-on and referral bonuses, and temporary pay differentials.</li> <li>3. Exclude compensation costs for contingent (temporary and contract) workers.</li> </ol>	

Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
		4. Include benefit costs.	
X	Number of Key Roles	1. Add the total number of key roles within the organization at the end of the survey period. 2. Key roles are identified by the department in accordance with DHR criteria.	
X	Number of Succession Planning Candidates	Add the total number of candidates in the organization's succession planning program.	
	Number of Workers' Compensation Claims Opened	Add the total number of workers' compensation claims opened during the reporting period.	
	Workers' Compensation Benefits Paid	1. Add the total medical and indemnity paid during the reporting period. 2. Exclude TPA fees.	
X	Total Budget	Include higher education.	Need to work with the Budget Office to get data from the Long Bill and possibly the Controller from COFRS.
	Performance Pay	Add the total amount the organization paid out for base and non-base performance pay and commissions to regular employees during the survey period.	
X	Regular Compensation Cost	Add the total compensation costs incurred during the reporting period for regular full-time and part-time permanent employees, including base and non-base performance pay, sign-on and referral bonuses, payments for time not worked, temporary pay differentials, and severance pay (voluntary separation incentive).	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
X	Regular Headcount	1. Add the total number of permanent employees on the payroll at the end of each month during the reporting period. 2. Divide by 12 for an annual average headcount.	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
	Regular Headcount with 0 to 1 Year of Service	Add the total number of permanent employees with less than a year of service at the end of the survey period.	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
	Regular Headcount with 1+ to 2 Years of Service	Add the total number of permanent employees with 1+ to 2 years of service at the end of the survey period.	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
	Regular Headcount with 2+ to 3 Years of Service	Add the total number of permanent employees with 2+ to 3 years of service at the end of the survey period.	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.

Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
	Service	2+ to 3 years of service at the end of the survey period.	workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
	Regular Headcount with 3+ to 5 Years of Service	Add the total number of permanent employees with +3 to 5 years of service at the end of the survey period.	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
	Regular Headcount with 5+ to 10 Years of Service	Add the total number of permanent employees with 5+ to 10 years of service at the end of the survey period.	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
	Regular Headcount with 10+ Years of Service	Add the total number of permanent employees with more than 10 years of service at the end of the survey period.	Regular Employees: full-time or part-time workers employed by the organization that are not classified as contingent workers (temporary and contract). These employees can be designated as exempt or nonexempt.
	Separated Employees Compensation Cost	<ol style="list-style-type: none"> <li>1. Add the projected annual base compensation cost of all employees who separated from the organization during the survey period. For example, an employee leaves on January 15 and has a base salary of \$50,000. The projected compensation cost for this employee would be \$50,000.</li> <li>2. Include overtime pay, pay premiums, commissions, performance pay, sign-on and referral bonuses, temporary pay differentials, leave payout, and severance pay (voluntary separation incentive).</li> <li>3. Exclude compensation costs for contingent (temporary and contract) workers.</li> <li>4. Exclude benefit costs.</li> </ol>	
	Total Benefit Costs	<ol style="list-style-type: none"> <li>1. Add the total employer-paid costs incurred during the reporting period for legally required payments, retirement and savings plan employer contributions, life insurance premiums, healthcare benefit premiums, payments for time not worked, and miscellaneous benefits.</li> <li>2. Include administrative costs.</li> </ol>	<ol style="list-style-type: none"> <li>1. Legally Required Payments – Medicare, FICA taxes, and unemployment compensation.</li> <li>2. Retirement and Savings Plan Payments – employer-paid contributions incurred during the reporting period for pension plans, 401(k) type plans, including administrative costs and employer contributions, if</li> </ol>

Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
		3. Exclude retirees. 4. Include CSEAP. 5. Exclude workers' compensation	applicable, and other related costs. 3. Life and Death Insurance Benefit Premiums – employer-paid premiums incurred during the survey period for life insurance plans and accidental death and dismemberment plans including other related costs for active employees. 4. Healthcare Premiums – employer-paid costs incurred during the reporting period for medical plans, dental plans, flexible spending plans, vision plans, short and long-term disability plans, and accident plans in addition to any administrative costs and other related costs. 5. Miscellaneous Benefit Payments – total employer-paid costs incurred during the reporting period for discounts of goods and services purchased from the company by employees (e.g., clothing at company store), meals provided by the company.
X	Total Higher Performer Voluntary Separations	1. Add the number of higher performer employees who voluntarily separated from the organization during the survey period. 2. High performer is defined as rated at the highest level in the performance system. 3. Use the ranking that is available for the majority of the survey period.	
X	Total Hires	Add the total number of permanent full and part-time employees who were hired from outside the organization to fill vacant positions during the survey period.	
	Total Offers Accepted	1. Add the total number of offers accepted by external and internal candidates that filled a requisition for full and part-time vacant permanent positions during the survey period. 2. Exclude contingent workers (temporary and contract).	Need to adjust the codes on the referral list.
	Total Offers Extended	1. Add the total number of offers extended to external and internal candidates that filled a requisition for full and part-time vacant permanent positions during the survey period. 2. Exclude contingent workers (temporary and	Need to adjust the codes on the referral list.



Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
		contract).	
X	Total Voluntary Separations with 0 to 1 Year of Service	<ol style="list-style-type: none"> <li>1. Add the total number of permanent employees with less than 1 year of service who voluntarily terminated employment in the state personnel system during the survey period.</li> <li>2. Exclude retirements.</li> </ol>	
	Total Voluntary Separations with 1+ to 3 Years of Service	<ol style="list-style-type: none"> <li>1. Add the total number of permanent employees with 1 to 3 years of service who voluntarily terminated employment in the state personnel system during the survey period.</li> <li>2. Exclude retirements.</li> </ol>	
	Total Voluntary Separations with 3+ to 5 Years of Service	<ol style="list-style-type: none"> <li>1. Add the total number of permanent employees with 3 to 5 years of service who voluntarily terminated employment in the state personnel system during the survey period.</li> <li>2. Exclude retirements.</li> </ol>	
	Total Voluntary Separations with 5+ to 10 Years of Service	<ol style="list-style-type: none"> <li>1. Add the total number of permanent employees with 5 to 10 years of service who voluntarily terminated employment in the state personnel system during the survey period.</li> <li>2. Exclude retirements.</li> </ol>	
	Total Voluntary Separations with 10+ Years of Service	<ol style="list-style-type: none"> <li>1. Add the total number of permanent employees with more than 10 years of service who voluntarily terminated employment in the state personnel system during the survey period.</li> <li>2. Exclude retirements.</li> </ol>	
X	Workers' Compensation Cost	<ol style="list-style-type: none"> <li>1. Add the employer's share only for workers' compensation costs including administrative costs, insurance premiums, and any claims paid. These numbers can be found from the benefits or insurance records for the survey period.</li> <li>2. Include all claims paid out by the organization during the survey period regardless of the year the claim was filed.</li> <li>3. Include benefits paid, TPA fees, and programs costs (e.g., personal services and operating).</li> </ol>	
X	Average Raise of High Performers	<ol style="list-style-type: none"> <li>1. Add up all the % increases of all high performers (highest performance rating).</li> <li>2. Divide by high performer headcount.</li> </ol>	
X	Average Raise of Employees	<ol style="list-style-type: none"> <li>1. Add up all of the % increases of all permanent employees.</li> </ol>	

Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
		2. Divide by permanent headcount.	
X	New Hire High Performers	Add the number of employees rated in the top rating level of the performance system during the reporting period.	
X	Employment Liability Claims Costs	Add the total dollars paid in settlements and cases over the reporting period.	Includes formal appeals to the Board and Director (assigned case numbers), e.g., appeals, director's reviews, grievances.
	State Employees	Add up the number of state employees for each month of the reporting period and divide by 12 for the yearly average.	
	State Population	Census updates.	
	Calendar Days from Requisition Approval to Referral List	Add the calendar days beginning with the date the requisition is received in the HR Office until the date the referral list is sent to the appointing authority.	
	Headcount with Performance Rating 1	1. Add the total number of permanent employees with a performance rating of 1 at the end of the survey period. 2. Use the rating that is available for the majority of the survey period.	
	Headcount with Performance Rating 2	1. Add the total number of permanent employees with a performance rating of 2 at the end of the survey period. 2. Use the rating that is available for the majority of the survey period.	
	Headcount with Performance Rating 3	1. Add the total number of permanent employees with a performance rating of 3 at the end of the survey period. 2. Use the rating that is available for the majority of the survey period.	
	Headcount with Performance Rating 4	3. Add the total number of permanent employees with a performance rating of 4 at the end of the survey period. 4. Use the rating that is available for the majority of the survey period.	No longer applicable with the 4/1/07 cycle.
	Number of Departments with Succession Plan Program	1. Add up the number of departments within state government that have a department-wide succession planning program in place. 2. A department has the same meaning as defined in Personnel Rule.	
	Number of State Departments	The same meaning as defined in Personnel Rule (principal department of general government and	

Feeds Tier 1	Saratoga Data Entry Element	Instructions	Other Details
		institutions of higher education), e.g., 53.	
	Percent of Headcount Eligible for Retirement in 3 Years.	Add up the total number of employees in the state personnel system eligible for retirement within 3 years from the end of the survey period.	
	Percent of Headcount Eligible for Retirement in 5 Years.	Add up the total number of employees in the state personnel system eligible for retirement within 5 years from the end of the survey period.	
	Percent of Headcount Eligible for Retirement in 10 Years.	Add up the total number of employees in the state personnel system eligible for retirement within 10 years from the end of the survey period.	
X	CSEAP Cost for Year	Add the total dollars to run the CSEAP program (e.g., personal services and operating costs).	
X	Total Training Hours	1. Add up all of the external and internal training hours taken by employees during the survey period. 2. Include only formal classroom training provided centrally by the State.	
	Total Training Costs	1. Add the total program costs for the Training program (e.g., personal services and operating costs). 2. Include participant costs (average salary x total classroom hours). 3. Add the course fees.	Only for formal classroom training provided centrally.
X	CSEAP Services	Add the total number of individual counseling sessions and group intervention meetings.	

## Appendix 5 Data Sources

Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
Average Compa Ratio	CPPS, CU, CSU, Comp Plan		High	Data entry errors, insignificant	High	High	High
Benefits Costs – Excluding Payments for Time Not Worked	Enrollment database, BAS, CPPS	Kaiser, SLV	High	1-2% only data inaccuracy – very little; CPPS is sometimes not updated, people are deleted. BAS is official system of record for enrollment.	High	High	High
Employees Participating in Healthcare Plans	BAS, CPPS, CU	Kaiser, SLV for COBRA	High	Data entry errors or timing in updates. BAS is official system of record for enrollment.	High	High	High
Healthcare Benefit Payments	CPPS, BAS, CU		High	Data entry errors or timing in updates. BAS is official system of record for enrollment.	High	High	High
High Performer Headcount	HRDW, CU, CSU	Agency self reports	Medium	1. Not entered into system about 25% of the time. 2. Entry errors into the system.	Definitional issues across department although there is a general rule in practice and thus a large number of employees are identified as high performers. Performance management side is an issue.	Medium	High if we choose to exercise that influence (e.g., giving them the form they are to use, but the reality is that we function as a decentralized entity so that makes it difficult). Thus, DHR has some limited ability to influence depending on

Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
							how important this is considered to be to the State.
Management Completing Leadership Development Course	DHR/WRD's Training Unit	Agency self reports	Medium	Data limited to DHR training only	Medium	Medium	Medium if we choose to request data from agencies; 100% response rate unlikely.
Management Headcount	CPPS, CU, CSU		High		Need to define management	High	High
New Hire Total Compensation Cost	CPPS, CU, CSU	Agency records	Medium	May not be able to collect all data included in the definition.	Definition needed.	Medium	Medium
Number of Key Roles	Each individual department must provide. It will not be an automated report.		Low	Because it will be their 1 <sup>st</sup> run, definitional issues may come up at first or some subjectivity in terms of what an important role is.	Process isn't defined thus it can't be consistent.	Low	DHR will have some, but hard to tell until it's launched. Since it is not mandatory exercise, DHR influence is somewhat limited.
Number of Succession Planning Candidates	Each individual department must provide. It will not be an automated report.		Low	Because it will be their 1 <sup>st</sup> run, definitional issues may come up at first or some subjectivity in terms of what an important role is.	Process isn't defined thus it can't be consistent.	Low	DHR will have some, but hard to tell until it's launched. Since it is not mandatory exercise, DHR influence is somewhat limited.
Number of Workers' Compensation Claims Opened	Pinnacle	Stars	Pinnacle - High	Data discrepancy between Pinnacle and Stars. Pinnacle is what DHR relies on.	Consistent process for tracking.	High	High

Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
Workers' Compensation Benefits Paid	Pinnacle	Stars	Pinnacle - High	Data discrepancy between Pinnacle and Stars. Pinnacle is what DHR relies on.	Consistent process for tracking.	High	High
Total Budget	Long Bill	COFRS	Medium	Program lines do not break out one-time expenses.	Process needs to be established and definitional issues resolved.	Medium	Medium
Performance Pay	HRDW, CPPS, CU, CSU	Payroll monthly report - COFRS	High	Percentage inaccuracy is very small. Mistakes are caught quickly.	Process is well set.	High	High
Regular Compensation Cost	HRDW, CPPS, CU, CSU	Payroll monthly report - COFRS	High	Percentage inaccuracy is very small. Mistakes are caught quickly.	Process is well set.	High	High
Regular Headcount	HRDW, CPPS, CU, CSU		High	Budget group uses FTE definition and DHR uses headcount definition.	Process is well set.	High	High
Regular Headcount with 0 to 1 Year of Service	HRDW, CPPS, CU, CSU		High	Budget group uses FTE definition and DHR uses headcount definition.	Process is well set.	High	High
Regular Headcount with 1 to 2 Years of Service	HRDW, CPPS, CU, CSU		High	Budget group uses FTE definition and DHR uses headcount definition.	Process is well set.	High	High
Regular Headcount with 2 to 3 Years of Service	HRDW, CPPS, CU, CSU		High	Budget group uses FTE definition and	Process is well set.	High	High

Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
Service				DHR uses headcount definition.			
Regular Headcount with 3 to 5 Years of Service	HRDW, CPPS, CU, CSU		High	Budget group uses FTE definition and DHR uses headcount definition.	Process is well set.	High	High
Regular Headcount with 5 to 10 Years of Service	HRDW, CPPS, CU, CSU		High	Budget group uses FTE definition and DHR uses headcount definition.	Process is well set.	High	High
Regular Headcount with 10+ Years of Service	HRDW, CPPS, CU, CSU		High	Budget group uses FTE definition and DHR uses headcount definition.	Process is well set.	High	High
Separated Employees Compensation Cost	HRDW, CPPS, CU, CSU		Medium	Sometimes data is not entered, how separation is coded.	Not timely entered.	Medium	Moderate influence – address with training.
Total Benefit Costs	HRDW, CPPS, CU, CSU	Payroll monthly report - COFRS	High	Percentage inaccuracy is very small. Mistakes are caught quickly.	Process is well set.	High	High
Total High Performer Voluntary Separations	HRDW, CPPS, CU, CSU		Medium	Sometimes data is not entered, how separation is coded.	Not timely entered.	Medium	Moderate influence – address with training.
Total Hires	HRDW, CPPS, CU, CSU		High	Lag in entering data into system, coding of the new hire.	Inaccuracy issues.	Medium	Moderate influence – address with training.
Total Offers Accepted	ADS	Agency self reports	Medium	Not all agencies use ADS; 100%	Medium	Medium	Moderate influence – non-

Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
				response rate from agencies unlikely.			participating agencies may not want to respond to requests; therefore, 100% response rate unlikely.
Total Offers Extended	ADS	Agency self reports	Medium	Not all agencies use ADS; 100% response rate from agencies unlikely.	Medium	Medium	Moderate influence – non-participating agencies may not want to respond to requests; therefore, 100% response rate unlikely.
Total Voluntary Separations with 0 to 1 Year of Service	HRDW, CU, CSU, CPPS		Medium	Sometimes data is not entered, how separation is coded.	Not entered. timely	Medium	Moderate influence – address with training.
Total Voluntary Separations with 1+ to 3 Years of Service	HRDW, CU, CSU, CPPS		Medium	Sometimes data is not entered, how separation is coded.	Not entered. timely	Medium	Moderate influence – address with training.
Total Voluntary Separations with 3+ to 5 Years of Service	HRDW, CU, CSU, CPPS		Medium	Sometimes data is not entered, how separation is coded.	Not entered. timely	Medium	Moderate influence – address with training.
Total Voluntary Separations with 5+ to 10 Years of Service	HRDW, CU, CSU, CPPS		Medium	Sometimes data is not entered, how separation is coded.	Not entered. timely	Medium	Moderate influence – address with training.
Total Voluntary Separations with 10+ Years of Service	HRDW, CU, CSU, CPPS		Medium	Sometimes data is not entered, how separation is coded.	Not entered. timely	Medium	Moderate influence – address with training.
Workers' Compensation Cost	Pinnacle	Stars	Pinnacle - High	Data discrepancy between Pinnacle and Stars. Pinnacle is what	Consistent process for tracking.	High	High



Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
				DHR relies on.			
Average Raise of High Performers	CPPS, CU, CSU		High	Potential entry errors from agencies.	Consistent process for tracking.	High	High
Average Raise of Employees	CPPS, CU, CSU		High	Potential entry errors from agencies.	Consistent process for tracking.	High	High
New Hire High Performers	CPPS, CU, CSU		Medium	Some entries either use old coding or annual updates have not been entered into the system.	Medium; performance ratings are entered once a year (June); therefore, only those employees present in the previous year will have a rating, resulting in the newest hires not in the mix.	Medium	Medium
Employment Liability Claims Costs	Pinnacle, Board, DHR	Stars	Pinnacle - High	Data discrepancy between Pinnacle and Stars. Pinnacle is what DHR relies on.	Consistent process for tracking, establish formula for Board & Director appeals.	High	High
State Employees	CPPS, CU, CSU		High	Potential entry errors from agencies.	Consistent process for tracking.	High	High
State Population	U.S. Census Bureau	Colo. Dept. of Labor & Employment	High	2000 is actual census data; subsequent years are population estimates.	High	High	None
Calendar Days from Requisition Approval to Referral List	ADS	HR Annual Survey; agency self reports	Medium	Not all agencies use ADS; 100% response rate from agencies unlikely.	Low	Low	High
Headcount with	CPPS, CU, CSU	Agencies self	Medium	Some entries	High	Medium	High

Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
Performance Rating 1		reports		either use old coding or annual updates have not been entered into the system.			
Headcount with Performance Rating 2	CPPS, CU, CSU	Agencies self reports	Medium	Some entries either use old coding or annual updates have not been entered into the system.	High	Medium	High
Headcount with Performance Rating 3	CPPS, CU, CSU	Agencies self reports	Medium	Some entries either use old coding or annual updates have not been entered into the system.	High	Medium	High
Headcount with Performance Rating 4 (not applicable with 4/07 cycle)	CPPS, CU, CSU	Agencies self reports	Medium	Some entries either use old coding or annual updates have not been entered into the system.	High	Medium	High
Number of Departments with Succession Plan Program	DHR/YPD's Staffing Systems Unit	Agencies self reports	Medium	This will require surveying all agencies; 100% response rate unlikely.	Medium	Medium	Medium; agencies may be either too busy to hesitant to report to DHR.
Number of State Departments	CPPS, CU, CSU		High		Consistent process for tracking.	High	High
Percent of Headcount Eligible for Retirement in 3 Years	CPPS, CU, CSU		Medium	Lack of information on purchased years of service	Consistent process for tracking	Medium	Medium
Percent of Headcount Eligible for Retirement in 5	CPPS, CU, CSU		Medium	Lack of information on purchased years of service	Consistent process for tracking	Medium	Medium

Data Element	Data/Systems				Business Process		
	Primary Data Source	Other Potential Sources	Quality of Data Assessment	Types of Data Inaccuracies	Consistency of Process Across Organization	Quality of Process	Ability to Influence Process
Years							
Percent of Headcount Eligible for Retirement in 10 Years	CPPS, CU, CSU		Medium	Lack of information on purchased years of service	Consistent process for tracking	Medium	Medium
CSEAP Cost for Year	Operating budget		High			High	High
Total Training Hours	DHR/WRD's Training Unit		Medium	This will require surveying all agencies; 100% response rate is unlikely.	Low	Low	Medium
Total TPA Fees	Enrollment database, BAS, CPPS	Kaiser, SLV	High	1-2% only data inaccuracy – very little; CPPS is sometimes not updated, people are deleted. BAS is official system of record for enrollment.	High	High	High
Workers' Compensation Program Costs (personal services & operating)	Pinnacle	Stars	Pinnacle - High	Data discrepancy between Pinnacle and Stars. Pinnacle is what DHR relies on.	Consistent process for tracking.	High	High
Workers' Compensation Cost (claims \$ paid)	Pinnacle	Stars	Pinnacle - High	Data discrepancy between Pinnacle and Stars. Pinnacle is what DHR relies on.	Consistent process for tracking.	High	High
Total Training Costs	DHR/WRD's Training Unit		Medium	Data entry errors or data may not be entered	Establish process to ensure consistency with DHR and CSU data	Medium	High
CSEAP Services	CSEAP		High	Data entry errors	High	High	High