

# Assessment System Decision Items

Jo O'Brien, Asst. Commissioner of Assessment, Research and Evaluation

Joyce Zurkowski, Director of Student Assessment

September 14, 2011



# Overview of Costs and Options

- Introduction
- Overview of ASG methodology
- Assessment Components
  - Brief description
  - Leveraging resources & deferring time
  - Cost choices
  - Decision Points and Recommendations
- Next conversation



### Our Charge and Timeframe...

- December 2010 SBE/CCHE adopted the assessment system to measure the new college and career standards.
- This system was based on a public one year analysis and dialogue with business, citizen and educator leaders. More than 2,000 Coloradans were involved in its scope.



# Colorado's dependence on an accurate and information-rich Assessment

 SB 212, SB191, SB163 are all predicated on a valid and reliable annual measure of students' grade level progress toward career and college readiness



# Colorado's Expectations from a New Assessment System

- Provide feedback along the way to inform instructional improvement
- Preserve the focus on growth
- Provide more timely results



# CDE's Task

- Move forward with designing the next level of detail of the new Colorado assessment system in a manner that:
  - Is consistent with the attributes adopted by the Board
  - Is responsive to Colorado needs and wants
  - Takes advantage of resources without compromising Colorado expectations
  - Is technically and legally defensible
  - Most importantly, has high likelihood of contributing to the meaningful achievement of Colorado children
  - Is fiscally practicable



# Considerations

- Colorado is arguably at least one year ahead of many national education reforms.
- The competing interests include maintaining the momentum of Colorado reform, participating in national comparability and innovation work and reducing costs.



# Assessment Solutions Group (ASG) Overview

- The primary use of this report is to provide the CDE with a realistic estimate of the cost of the key components of its new 2014 assessment system that can be used for budgeting purposes.
- ASG model outputs also allow CDE to gain a deeper understanding of the costs of the various components of the assessment system so CDE can make trade-offs in assessment program design prior to competitive bidding in order to develop the highest quality and cost-effective assessment for the budgeted dollars.



# ASG Overview (cont.)

- The ASG Cost Model was used to develop the cost of the new Colorado assessment system components.
- The ASG Cost Model is a variable input, metric-based calculation output model.
  - Specific assessment program variables are input to the model and applied against cost factors to derive assessment cost
  - Several hundred variables are contained in the model.
- The cost for the entire assessment is built from the <u>ground</u> <u>up</u>, element by element, function by function.
- Costs are provided for total assessment, by year, by content area, by grade, and by functional activity.



#### Components of Colorado's New Comprehensive Assessment System

Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



## SBE's task and timeline...

- August 4 Initial presentation of assessment cost issues
- Aug-Sept SBE/CDE one on one conversations
- Sept 14-15 SBE decides which components will be included in an RFP



#### Components of Colorado's New Comprehensive Assessment System

Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



#### Summative Assessment

Beginning in spring of 2014, the summative assessment will measure student mastery of the Colorado Academic Standards and progress toward being postsecondary and workforce ready:

- ➤ Grades 3-11 in Mathematics, Reading and Writing.
- Science and Social Studies measured once in elementary, middle and high school

An alternate assessment for each of the above must also be developed.



#### Summative Assessment:

What will the new summative assessment look like?

### Item types:

- Multiple choice
- Constructed response
- Technology-enhanced
- Performance tasks

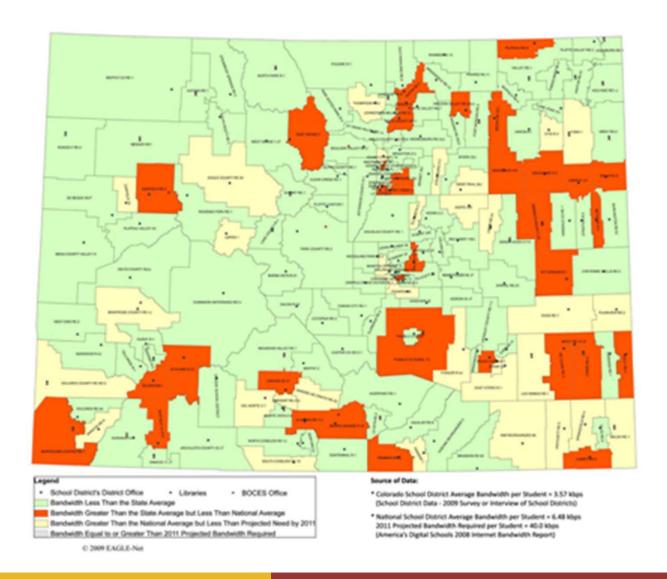


#### Summative Assessment:

What will the new summative assessment look like?

### Test length:

Although the request has been made for reduced testing time, that is in conflict with the request to measure new skills in more authentic ways. Goal: Stay within current testing time.





#### Summative Assessment:

What will the new summative assessment look like?

On-line Phase In Plan: paper and pencil administrations will be used in preceding years

Assessment Administration	Content Area
Spring 2014	Science
Spring 2015*	Writing
Spring 2016*	Reading and Social Studies
Spring 2017*	Mathematics

<sup>\*</sup>Dependent upon successful administration the previous year



#### What are our choices?

Build the reading, writing, math, science and social studies assessments for a 2014 launch with online phased in stages.

#### --- OR ---

Wait for assessment consortia to build a 23-state assessment in reading, writing and math. Estimated launch is 2015. Estimated one time savings \$6.3 million in development costs for literacy and math tests. The 15% augmented material such as personal financial literacy would have added costs. Colorado would go ahead with science and social studies in 2014.



#### What are our choices?

From a policy perspective, consortia have policy risks:

- The <u>momentum</u> of full implementation of the new standards would be not four but five years out.
- The accuracy of the launch with 25-35 states in the first year may expose technical risks on the <u>legitimacy</u> of assessment results and hence the legitimacy of Colorado accountability ratings.
- Beginning in 2014, Colorado's educator effectiveness system will depend on reliable and valid scores and on a <u>fair and defensible growth</u> model.



#### What are our choices?

From other perspectives, consortia have advantages:

- The ability to compare performance with other states
- The possible initial cost savings in three tests of seven.
- The innovations which can be discussed with other states
- ➤ The possibility of future federal funds being tied to participation in one of the consortia



# How well do the national consortia meet CO expectations?

There is not a complete match between the content areas

	Colorado	PARCC	SBAC
Reading/Writing	X	X*	X*
Mathematics	Χ	X*	X*
Science	X		
Social Studies	X		
Speaking/listening		X	X

<sup>\*</sup>The consortia will not cover all CAS content in these areas, including such concepts as Personal Financial Literacy.



# How well do the national consortia meet CO expectations?

Grade levels for accountability summative assessments for Reading, Writing and Mathematics

	Colorado	PARCC	SBAC
3-8	X	X	X
9	X	Χ*	
10	X	Χ*	
11	X	X	X

<sup>\*</sup>PARCC's approach for mathematics is not consistent with CO conversations.



# How well do the national consortia meet CO expectations?

Approach to on-line assessment

	Colorado	PARCC	SBAC
Introduction	An intentional gradual and systematic approach	No transition. Completely on- line in 2015.	Will allow for some transition. Specifics are unknown.
Within year comparability	Yes	Yes	Computer-based and paper-based form comparability will be challenging to establish due to adaptive feature and innovative, on-line item types.



## Possible Cost-Saving Decision Points

 Staff recommendation: Consider staggering the introduction of writing and social studies to coincide with the plan for their on-line implementation (i.e., writing in 2015 and social studies in 2016)

	2013	2014	2015	2016	2017
Reading	Field test: Paper	Op: Paper	Op: Paper	Op: on-line	Op: on-line
Writing		FT: on-line	Op: on-line	Op: on-line	Op: on-line
Mathematics	Field test: Paper	Op: Paper	Op: Paper	Op: Paper	Op: on-line
Social studies			FT: on-line	Op: on-line	Op: on-line
Science	Field test: on-line	Op: on-line	Op: on-line	Op: on-line	Op: on-line

In September, we will ask the Board if we should move forward with writing and social studies at the same time as the other assessments.



#### Staff Recommendation

- Move forward with design of CO system for launch 2014 to preserve momentum, alignment with CO standards and assessment system attributes, and credibility of Colorado's reform effort.
- Stay involved with and monitor developments with the consortia.
- Develop cross-walk/comparability with our assessment and the consortia assessments as needed.



#### Also, summative....

Summative assessments have a test for students with significant cognitive disabilities (formerly CSAP-A)



# Alternate Assessment Costs

	Development	Administration
Total	\$2,130,563	\$1,238,076
Avg Cost per		\$247.62
Student		



### For September's decision...

Does Colorado release an RFP for just Science and Social Studies **or** release an RFP for all five content areas for an ALTERNATE ASSESSMENT?

CDE recommends we go ahead and build the alternate for all subjects and all grades for administration in 2014.



#### Components of Colorado's New Comprehensive Assessment System

Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



# National Admission's Test



# Nationally Recognized College Admissions Costs

	Development	2012 Administration
CO ACT	\$0	\$1,875,939

- Current contract allows one year renewals through 2015.
- No decision required at this time.



#### Components of Colorado's New Comprehensive Assessment System

Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



# Interim Assessments

- Non-summatively state assessed content areas and grades
- Summatively state assessed content areas and grades



# Interim: Leveraging Resources

- Non-summatively state assessed grades and subjects:
  - Integration Grant (overlap)
  - Gates Study (overlap)
- Summatively state assessed grades and subjects:
  - SBAC: Their timeframe is further out than that of the Colorado system
  - > PARCC: optional "through course" is in flux



# Interim Assessment

- Summatively state assessed grades and subjects requirements
  - Adopted as an optional tool
  - On-line
  - Multiple item types (i.e., not just multiple choice)
  - Electronic reporting (requires teacher to upload constructed response scores)



#### Interim Assessment Decision Point

#### Staff recommendation:

- For now, rely on the Integration Grant and other grant activities for the non-summatively state assessed grades and content areas
- 2. Include interim assessments for the summatively state assessed grades and content areas in the RFP
- 3. Provide a vetting process and rubrics to assist districts in purchasing or designing rigorous and standards-focused interim assessments for all grades and all content areas.
  - Facilitate cross district purchasing
- In September, we will ask the Board to determine if CDE should pursue development of interim assessments. If yes, which content areas and grades?



Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



# Spanish Reading and Writing in 3<sup>rd</sup> and 4<sup>th</sup> Grade

Development	Single Year Implementation
\$989,526	\$854,666



#### Spanish Reading & Writing Decision Points

- Recommendation: Given the adoption of English Reading, Writing and Communicating standards and the prohibitive cost, CDE staff recommend working to eliminate this requirement. In addition, CDE staff recommend facilitating cross district purchase of K-12 Spanish literacy assessments.
  - In September, we will ask the Board how we should proceed in relation to the Spanish 3<sup>rd</sup> and 4<sup>th</sup> grade reading and writing assessment requirement.



Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



# English Language Proficiency Assessment Assumptions

- English Language Proficiency assessments measure not content but a student's ability to speak, listen, read and write in English.
- It must include a screener and proficiency test aligned to the Colorado English Language Proficiency standards.
- The proficiency assessment must be technically sound and administration practices will be consistent with the expectations of other high stakes state assessments (e.g., tests will be secure and students will not be exposed to the same form multiple times).
- The choice is to build our own assessment or to purchase one already aligned.



### English Language Proficiency Assessment: Leveraging Consortia Resources

- Colorado students would benefit from assessment and instructional approaches that are generated by a sharing of cross state resources.
- Colorado would benefit from some data that reflects a larger number of students, especially at the higher grades and with first languages other than Spanish.
- WiDA does have an existing assessment that is tightly aligned to all of the Colorado English Language Proficiency Standards.



#### English Language Proficiency Assessment Costs

- WiDA's off the shelf test currently costs \$23/student
- With a projected 112,392 students taking the assessment in Year 1, the ELP assessment would cost \$2,585,016.



# English Language Proficiency Assessment Decision Points

- Staff recommendation: Pursue an intergovernmental agreement with WiDA.
  - In September, we will ask the Board if the ELP assessment should be included in an RFP or if CDE should first pursue an intergovernmental agreement with WiDA.
- Staff recommendation: If possible, administer the new assessment in Spring of 2013.
  - In September, we will ask the Board if CDE should proceed with the goal of implementing in Spring of 2013, rather than 2014.



Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



#### K-2 Assessments

- 1. School readiness
- 2. Interim for K-2 in literacy and mathematics
- 3. End of year in 1-2 in literacy and mathematics



#### K-2 Assessment Costs

	Development and 3 years of implementation	Per student cost
School Readiness	\$2,196,605	\$10.73
K-2 mathematics interim	\$2,416,539	\$3.93
1-2 mathematics end of year	\$1,645,051	\$4.01
Total K-2 assessments	\$6,258,195	



# School Readiness Assessments Recommendations for 2011-2012

- Do not include K-2 assessments in this RFP:
- Conduct the school readiness pilot
- Continue to research and work with other states on early mathematics assessments
- Work with Governor's office to submit an application in response to the RTTT early childhood competition.



Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



#### Formative Assessment

- Provide on-going professional development activities in the use of formative assessment practices and interpretation of these results.
- Support the creation of content, district and/or regional consortia to promote professional dialogue on assessment throughout the state.



#### Formative: Leveraging Resources

- Content Collaboratives
  - ➤ Integration Grant Activities (\$342,500)
- Assessment Consortia
  - PARCC: Sharing work products of RTTT states
  - SBAC: Creating a digital library of formative resources
- Research Centers
  - Stanford, CRESST, and Harvard



#### Formative Assessment

CDE recommendation:

- Do not include formative assessment in the RFP
- Leverage current resources
- Discover findings of pilot and national work



Assessment	Replacement/New	Required/ Recommended by SBE and CCHE
Summative (includes alternate)	Replaces CSAP/TCAP	State/federal required
College Admissions Assessment	Continuation of ACT	State required
Interim	New	Recommended
Spanish Reading & Writing 3 <sup>rd</sup> & 4 <sup>th</sup> Grade	Continuation (if maintained)	State required
English Language Proficiency	Replaces CELA	State/federal required
School Readiness	New	State required
Formative	New	Recommended



#### **Additional Items**

- ICAP no additional funding being requested
- Dashboard
  - ➤ 5 million dollars for integration and customization and 1 million licensing/year
- Future items
  - Quality Assurance Vendor
    - \$100,000/year 1 and \$200,000/year 2-5



### Next Steps

- For now, look at decision point sheet with your notes
- Keep the spreadsheet
- Consider a one on one conversation with CDE and others



### Next Steps

- August 4 Initial presentation of assessment cost issues
- Aug-Sept SBE/CDE one on one conversations
- Sept 14-15 SBE decides which components will be included in an RFP