

COLORADO CHILD CARE LICENSING MODELS
COST EFFECTIVENESS STUDY
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Conducted By
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to
2004 CHILD CARE LICENSING MODELS - EVALUATION REPORT

by
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Acknowledgement

The Child Care Licensing Models Pilot meant a great deal to those who invested their time and energy toward it for a number of years. As a result, this study evoked many strong feelings and a number of different interpretations of the findings.

Several people provided clarifying information to the evaluator of this study and, in one instance, a different and equally valid method of analysis was suggested. All input was gratefully received and incorporated whenever possible.

The final document represents the best effort of the evaluator to synthesize the thinking of others with her own. In the final analysis, however, this document represents the position of the evaluator. Any departures from that position, presented by other interested parties in other documents, should be considered along side this document.

COLORADO CHILD CARE LICENSING MODEL PILOT COST EFFECTIVENESS STUDY

Introduction

The Child Care Licensing Model Pilot was created by Colorado Senate Bill 00-019 in 2000. The goal of the legislation and the subsequent Pilot Models was to *create a user-friendly licensing system that supports, monitors, and enhances early care and education for children in Colorado, birth to twelve years old*. In early 2001, four of the seventeen communities from another early childhood initiative, the Consolidated Child Care Pilot, were selected to develop innovative Licensing Models to achieve the legislated goal stated above. The selected communities were given additional funding to implement their Licensing Models. The communities participating in the Licensing Model Pilot were: Denver/ Triad (including Denver, Jefferson, Clear Creek and Gilpin Counties), El Paso County, and Larimer County. Two sites, Denver and Triad, chose to work together to develop one Model.

Each of the three Licensing Models designed a unique approach based on both national research and local input. All three of the Models hired supplemental licensing resource staff, who carried a caseload of providers significantly lower than that of State licensing staff. A detailed description of the Models is provided in the larger evaluation report, but a brief summary of each of the three community Models is provided below.¹

Overview of Cost Effectiveness Study

This cost effectiveness study is a complement to the much larger evaluation of the Child Care Licensing Model Pilot involving key informant interviews and a provider survey. The larger evaluation presents an overall assessment of the Models including their accomplishments and challenges. A cost effectiveness study is much narrower in scope than a full evaluation. It considers program budgets and relates them to quantitative outcome measures that determine effectiveness.

This cost effectiveness study looks at the State Licensing Division and three community Models (Denver/ Triad, El Paso, and Larimer). While the State Division of Child Care was not part of the Pilot, it was involved as a comparison group in both the full evaluation and in the cost effectiveness study, and the State is referred to as one of the “Models” for purposes of this study.

The study determined a unit cost for each of the Models and related that to the degree of change that occurred in the number of licensing violations. Violations were chosen as a

¹ A copy of the full 2004 Licensing Model Report is available from Sharon Triolo-Moloney at the Colorado Department of Education. (triolomoloney_s@cde.state.co.us)

quantitative measure intuitively linked to changes in licensing process, although reduction in violations was not the stated goal of the Pilot.

This cost effectiveness study, in conjunction with the larger evaluation, will enable decision-makers to compare the Models. It will also enable planners to determine the potential costs involved should the Pilot expand to a statewide program.

Description of the Three Community Pilot Models

Denver/ Triad Model – The Denver/ Triad Model focused on making the existing licensing system easier to use and understand. To achieve this goal, the group revised and reformatted the current licensing regulations and added an extensive resource section to the licensing manual. Denver/ Triad redesigned the qualifications and expectations of Licensing Inspectors and hired staff to fill that role for the Model. The Triad component of the Model included a mentoring program for providers.

El Paso County Model – The El Paso group wanted to create a licensing system that was collaborative and that also integrated quality rating scales with licensing regulations. Additional Model staff was hired to provide monthly support sessions to providers in the Model. Mentoring was offered and small cash stipends were available for providers to make changes to their facilities that would improve quality. In El Paso there was a strong focus on providers supporting one another.

Larimer County Model – The Larimer Model focused on creating a licensing system that encouraged quality and was responsive to the needs of all providers. The group did not rewrite the regulations but did create a self-assessment tool to guide providers in understanding and achieving licensing standards. Larimer also created a dual staffing Model. The State licensing staff completed the health and safety aspects of the inspection, while the Model staff provided all of the hands-on support and education.

Methodology of the Study

The study involves two different data sets. The first data set includes budget figures, number of facilities served, weighted units of service, and unit cost. This data set is based on numbers provided by each Model and reflects all the facilities served by the Model.

The second data set is concerned with the number and type of violations determined during inspection visits. This data set includes the number of violations, rating of violations, weighting of violations, and any change in violations. It is based on a sample of facilities from each Model, in which there were inspections at two different points in time.

The sample of facilities in each Model community was chosen randomly by one of the evaluators. An additional random sample (with similar types of facilities in communities other than Model sites) was selected to serve as a comparison group and to represent the State.

From the State database, containing copies of all prior inspections, the first and last inspections within the Pilot time period (July 2001 – June 2004) were selected for sample facilities. Facilities without two different inspections were not included in the analysis. Because the State sample had only one set of inspections during the Pilot time period, the number of violations and ratings of those violations for time-two were made to be the same as time-one.² This approach was deemed to be appropriate, in that the State facilities had no additional intervention and violations were likely to remain unchanged. There were 51 pairs of facilities included in the violations analysis.

Study Limitations

This study is predicated on the assumption that change in the number of violations is a natural result of changing the licensing process. Two issues complicate this assumption. First, the Models did not set out to reduce violations. Their stated objective was to make the licensing process more “user friendly.” The larger evaluation demonstrated that they did accomplish that objective. But because “user friendliness” is impossible to quantify, violations were selected as a proxy quantitative measure of effectiveness. A change in the number and type of violations is an intuitively logical outcome of any modification of licensing procedures.

The second issue challenging the study’s central assumption is that many factors can influence the number of violations and how they change between two points in time. The data in this study reflects this issue; although the violations decreased in two communities it is not possible to “prove” without a control group, that the decrease was due to the licensing pilot alone. The State sample was designed to serve as the comparison group for this study but lacked a second point in time.

An additional issue is the small sample size. Not all facilities in a Model community had inspections at two points of time and are, therefore, not represented in the study. Also, the facilities in the three communities represent only a very small percentage of all State facilities.

A final limitation concerns the “retrospective” nature of the cost effectiveness study. Many of the variables that are part of the analysis were not specified at the beginning of the Pilot. While budgets and staff FTE are known, hours spent directly and indirectly with the Model had to be estimated after the fact. Also, many facilities had to complete inspections and identify violations on a time frame suited to the evaluation rather than the Pilot itself.

Findings

Budget Comparisons

The State Licensing Division and the three Models provided information about their total program budgets from July 1, 2003 to June 30, 2004. The table below summarizes their

² See the section below on *Violations as a Measure of Effectiveness* for a discussion of the rating system utilized in this study.

total budgets and the relative percentages for personnel, operating, and other costs. The “Personnel” category includes benefits and the “Other” category includes materials, equipment purchases, and miscellaneous expenses.

Some of the community programs received in-kind support and the budget figures reported here include those as if they were actual dollars. The percent of the budget that was in-kind is reported on the table. While nothing is listed in this table for in-kind costs at the State level, many communities (i.e.: City and County of Denver) contribute funds to support the licensing function.

Table 1: Total Budgets and Percentages of Personnel, Operating, Other and In-Kind

	State	Denver/ Triad	El Paso	Larimer
Total Budget (In-Kind Included)	\$4,061,874	\$163,329	\$161,532	\$59,638
Percent In-Kind	- 0 -	12%	11%	8%
Personnel & Benefits	\$3,643,134	\$145,619	\$95,675	\$46,129
Personnel % of Total	90%	89%	59%	77%
Operating	\$418,740	\$15,988	\$8,732	\$7,980
Operating % of Total	10%	10%	5%	13%
Other	-0-	\$1,750	\$57,125	\$5,529
Other % of Total	-0-	1%	35%	9%

Table 1 demonstrates that all Models expended a large portion of their total budgets on Personnel, while only 5% to 13% was spent on operating costs. The State Personnel line includes \$1,712,503 in contract workers who do not receive benefits.

One notable item is the large percentage spent by El Paso on “Other” expenses. In El Paso, these included incentives and materials for participating facilities. El Paso focused on improving quality in its facilities and that additional task accounted for a portion of its total costs.

Unit Costs

Because of the difference between the sizes of the State budget and the community Models, it is essential to determine a unit cost in order to do any comparisons. The first step is to determine the total number of units for each of the Models. Units are not the same as facilities; the State has established a different number of units for each facility type: Family Care homes are considered one unit, School Age facilities are two units, and Child Care Centers are considered to be 2.5 units.

Table 2 shows the actual number of facilities by type and then the total number of weighted units. The State, of course, has vastly more units because it is responsible for licensing all facilities. El Paso served the fewest units, about half of those served by Denver/ Triad and Larimer.

Table 2: Weighted Units and Unit Cost for Four Models

	State	Denver/ Triad	El Paso	Larimer
Total Budget (In-Kind Included)	\$4,061,874	\$163,329	\$161,532	\$59,638
Number of Facilities	FC – 4,561	FC – 15	FC – 5	FC – 7
	CCC –1,376	CCC – 34	CCC –15	CCC –24
	SA - 623	SA – 0	SA – 6	SA -13
Total Facilities	6,560	49	26	44
Total Weighted Units*	9247	100	54.5	93
Cost per Weighted Unit	\$439	\$1,633	\$2,964	\$641

* FC – Family Care = 1 CCC- Child Care Center = 2.5 SA – School Age Program = 2

Dividing the total budget by the total number of units served yields the unit cost (Cost per Weighted Unit). Table 2 delineates a broad range of unit costs. The State unit costs are the lowest, while Larimer unit costs are 1.5 times higher than the State. Denver/ Triad and El Paso unit costs are 3.7 and 6.8 times larger than the State unit costs respectively.³

State Licensing Staff Time In Support of Community Models

Table 3 illustrates the differences between the Models in the amount of State licensing staff time spent in support of the Pilot project. State hours include those spent directly visiting Model facilities and indirectly on issues related to the Model by line workers and supervisors. These State staff hours represent dollars not accounted for in the Model budgets, but actual costs none-the-less.

Table 3: Hours Spent by State Licensing Staff in Support of Models in an Average Month

Model	State Hours in Support of Model in Average Month	Number of Licensing Staff Responding
Denver/ Triad	42	5
El Paso	38	2
Larimer	26	2

The Denver/ Triad total of 42 hours spent by State licensing staff in support of the Model, masks the fact that less than 3 hours average per month were spent directly with Denver facilities, as was expected in their Model. The bulk of the reported State licensing staff hours in support of the Denver/ Triad Model occurred in the Triad portion, where the State licensing worker accompanied the Model staff on some visits.

Violations as a Measure of Model Effectiveness

Violations were chosen as a measure of effectiveness because there was quantitative data from inspections occurring at two points in time during the Pilot period that could potentially demonstrate change. Report forms are generated after the inspection is

³ The El Paso model included a component that focused on increased quality. El Paso was able to demonstrate an increase in Educare Star ratings between times one and two. This additional emphasis accounted for their higher unit cost, but also resulted in an additional positive outcome not measured in this cost effectiveness study.

completed. The report form lists the type of violation but the State has no system currently in place to rate violations as to seriousness.

As a part of the Denver/ Triad model, a violation rating system was developed to assign a level of severity to each rule in the State regulations; this process was completed for each facility-type.⁴ The levels of severity correlate somewhat to the current State complaint rating system.

In the new violations rating system, each category was defined by the direct effect of that regulated item on the health, safety and well-being of a child in care.⁵ The Denver/ Triad violations categories are: Critical, Very Serious, Serious, Moderate, Mild, and Very Mild. (The Denver/ Triad “Deficiency Assessment Chart” defining the six categories can be found in the Appendix.)

All of the Models agreed to accept the Denver/ Triad violations rating system for purposes of the cost effectiveness study. To further facilitate the cost effectiveness analysis, the evaluator combined and weighted the Denver/ Triad six levels of violation severity. Critical Violations were excluded from the combinations, as these are reported directly to Social Services (because children are at immediate risk) and are not reported on the inspection forms. Serious and Very Serious Violations were combined into one category, as were Mild and Very Mild Violations. Moderate Violations remained as a separate category.

⁴ David Powell, Supervisor of Child Care and Health Facilities Programs at Denver Department of Environmental Health, was instrumental in the development of this rating system. He was assisted in developing and rating by Kay Mikus and Trisha Pollard of the Denver/ Triad Team. For a paper explaining the rating system in more depth, contact Powell directly. (david.powell@ci.denver.co.us)

⁵ For example, anything observed that would require police involvement or a report to the child abuse hotline was considered a Critical violation; consideration for calling the abuse hotline was a Very Serious violation. Issues around documents/ paperwork were considered Mild or Very Mild violations. Any violation observed more than 25% of the time during an inspection or recurring from the previous inspection raises the violation on level of severity for continual/ consistent non-compliance with the regulations.

Table 4: Average Number of Violations in Four Models

	State N = 16	Denver/ Triad N = 14	El Paso N = 9	Larimer N= 12
Average Number of Serious Violations- Time-one	2.94	2.64	3.89	2.50
Average Number of Serious Violations- Time-two	2.94	2.14	3.33	3.00
Average Number of Moderate Violations- Time-one	3.88	2.93	3.11	1.42
Average Number of Moderate Violations- Time-two	3.88	2.50	2.44	3.33
Average Number of Mild Violations- Time-one	4.31	3.78	4.88	1.42
Average Number of Mild Violations- Time-two	4.31	3.14	4.88	3.03

Table 4 reflects the average number of violations using the combined rating categories for each of the four Models in the study. For the State, Denver/ Triad, and El Paso, there are more Mild violations on average than there are Serious or Moderate Violations at both times one and two. Larimer’s violations do not follow that pattern. In addition, Larimer’s time-one inspections are considerably lower than the other Models, calling the reliability of their time-one numbers into question.⁶

Two Approaches to Determine Model Effectiveness at Achieving Change in Violations

Two approaches to determining the effectiveness of the Models at reducing violations are presented here. The first approach answers the question “Can changes in the number of violations be detected in facilities measured at two points in time?” The second approach answers the question “Do facilities that receive the intervention look different, at the end of it, from those facilities that received no intervention?”

In the first approach, pre and post total weighted violations are compared to determine change. This approach measures how violations in facilities change between two points in time, a result of the intervention. This approach is dependent upon confidence in the reliability of the violation measurements at both points in time.

In the second approach, the Models are compared to the State at one point in time, post intervention. The State’s average weighted violations are assumed to be the constant (as no intervention was received) and the Model’s average weighted violations demonstrate the result of the intervention in relation to that constant.

⁶ There is a difference of opinion about the reasons behind these violation figures. Larimer’s position is that the very low violations at time-one reflect inconsistent supervision prior to the Pilot, and that the increase in the number of violations at time-two shows a positive impact of the Pilot on State licensing practice. In contrast, the State’s position is that the increase in violations between the two points in time may reflect the limited involvement of State licensing staff with the Larimer pilot, and the emphasis of the Larimer Resource Specialists on support and resources rather than enforcement of rules.

Both approaches employ a composite measure of total violations. To account for the different levels of severity among violations, the violations groups described above were weighted before being combined. Severe Violations were given a weight of three, Moderate Violations were weighted two, and Mild Violations were weighted one.

Pre and Post Approach

Weighted violations are added together to get total weighted violations at times one and two. The time-one total is then subtracted from time-two to determine change. A minus figure indicates that violations decreased between times one and two; a positive number indicates an increase.

The resulting change figure is then divided by the time-one total to determine percent of change. Again, a minus figure in the percent change indicates a decrease in violations between times one and two (the desired outcome).

Table 5 demonstrates that Denver/ Triad and El Paso achieved reductions in total weighted violations of 17% and 13% respectively. Larimer violations did not decrease; the uncertainty about the accuracy of the time-one violation assessment makes interpretation of this finding difficult.

Table 5: Percent Change in Violations for Four Models

	State N = 16	Denver/ Triad N = 14	El Paso N = 9	Larimer N= 12
Number of Total Violations (Weighted*) Time-one	334	246	205	141
Number of Total Violations (Weighted*) Time Two	334	204	178	225
Change between Time-two and Time-one in Weighted Violations	-----	-42	-27	+84
Percent Change in Total Weighted Violations	-----	-17%	-13%	+ 60%

* Serious Violations = 3 Moderate Violations = 2 Mild Violations = 1

Single Point in Time Approach⁷

The second approach to compare the State and the Models, with respect to violations, uses one point in time and assumes that the State represents the norm and that the community Model numbers reflect the result of the intervention. Using this approach, it is necessary to use an average (mean) of total weighted violations to account for differences in sample size. Time-two numbers are employed here to represent a “post intervention” situation.

⁷ Thanks to Larry Neal, Larimer Model provider, for assistance with this analysis approach.

In this analysis, the mean of the total weighted violations is derived by dividing the total weighted violations (time-two), by the number of cases in the sample. The resulting number has been rounded for simplicity of presentation.

The difference is derived by subtracting the State mean from the Model means. The percent difference results when the difference figure is divided by the constant (the State mean).

Table 6: Percent Difference in Mean Weighted Violations - Community Models and the State

	State N = 16	Denver/ Triad N = 14	El Paso N = 9	Larimer N = 12
Mean Number of Weighted Violations	21	15	20	19
Difference between State and Model		-6	-1	-2
Percent of Difference		-29%	-5%	-10%

Note: Minus numbers reflect a reduction in violations, the desired effect.

In this approach, all Models are able to achieve some degree of difference between the State average number of weighted violations per facility and the average number after the Model intervention.

Cost Effectiveness

A cost effectiveness study compares the extent to which an intervention is successful at achieving the desired outcome in relation to the cost involved. In this study, one must relate the unit cost (Cost per Weighted Unit) to the degree of change achieved (Percent Change in Total Weighted Violations) or the departure from the pre-intervention constant (Percent of Differences). These calculations are made for only the community Models, as the State was held as a constant.

Table 7: Cost Effectiveness of Four Models of State Child Care Licensing

	State	Denver/ Triad	El Paso	Larimer
Cost per Weighted Unit	\$439	\$1,633	\$2,964	\$641
Percent Change in Total Weighted Violations (Pre/ Post Approach)	-----	-17%	-13%	+ 60%
Unit Cost per Percent of Change	-----	\$96	\$228	\$11
Percent of Difference (Single Point in Time)		-29%	-5%	-10%
Unit Cost per Percent of Difference		\$56	\$593	\$64

Table 7 reflects that, using the Pre/Post results, it cost Denver/ Triad \$96 per service unit for each percent of reduction in violations between times one and two. In contrast, although El Paso also achieved a reduction in violations, it cost them more than twice as much as Denver/ Triad for each percent reduction in violations.

Using the results from the Single Point in Time approach, however, Table 7 demonstrates that all three Models are successful in reducing violations below the State average. Denver/ Triad and Larimer, however, are able to do it at much less cost than El Paso.⁸

Cost to Expand the Model Approach to the Whole State using Caseload Size

One purpose of a Pilot is to determine if a particular intervention brings about a desired outcome. If the desired outcome is achieved, the next decision involves determining if it is feasible and financially possible to extend the piloted intervention statewide.⁹

Estimating the cost to go statewide with one of the Models is a complex calculation. There is no way, within the parameters of the current study, to determine which aspect of a Model accounts for its effectiveness at reducing violations. Each Model had unique characteristics (i.e.: reformatted or changed licensing regulations, changed licensing language, used mentors, expanded resources, designed self-evaluation, provided training, used a quality rating system) but a common element in all was the reduction in caseload size; that is the one aspect of expansion that can be “monetized.”¹⁰

The figures in Table 8 are simply rough estimates. Two factors are apparent from the table. First, in the State Model, the caseload for each FTE is much higher than in the community Models. The figure here is lower than actual line worker caseload size, because it includes all personnel (administrators and support staff, as well as line workers) in the calculation.

The second apparent factor is that cost per FTE is somewhat higher at the State level. Going statewide would require more line staff but also administrators and support staff as well. So, while the State cost per FTE may be high, it incorporates personnel at these different levels.

⁸ It is important to note again that El Paso achieved another positive outcome (improvement in Educare quality ratings) which was not measured by this cost effectiveness analysis.

⁹ A 2003 evaluation of the Child Care Licensing Models, conducted by Susan Eliot of Custom Measure, included what was referred to as a “Cost Benefit Analysis.” That analysis differed from the present study in several ways. The Eliot analysis asked staff of the Models to estimate how many units they anticipated they could serve if their Model was implemented statewide. These estimated numbers are identified in that report as “not yet demonstrated.” The Eliot analysis also contained no “benefit” discussion. The present study focuses only on “demonstrated” caseload units and does use a “benefit” or effectiveness measure.

¹⁰ It must be noted that caseload size (number of units per FTE) is an approximate measure and not without problems. It is used in this analysis to facilitate an estimate of cost to go statewide with a Model, and is sufficiently accurate to stimulate discussion. At the State level, the calculation includes administrators, support staff as well as line staff and consultants, so the resulting caseload calculation is lower than what the line staff actually carry. For the Models, the caseload size calculated is also probably lower than what would be possible once the conceptualization and development phase of the Model was complete. The Denver/ Triad position is that despite the calculations here, their model could be delivered statewide at no additional cost or increase in FTE. Because they were able to reduce violations, total costs might even be reduced.

Table 8: Personnel Cost and Caseload Size for Four Models

	State	Denver/ Triad	El Paso	Larimer
Total Budget (In-Kind Included)	\$4,061,874	\$163,329	\$161,532	\$59,638
Personnel and Benefits	\$3,643,134	\$145,619	\$95,675	\$46,129
FTE	65	3.2	2.4	1.2
Approx Cost/ FTE	\$56,048	\$45,792	\$39,865	\$40,112
Total Weighted Units	9247	100	54.5	93
Caseload Size - # Units/ FTE	142	31	22.5	77.5
Cost per Weighted Unit	\$439	\$1,633	\$2,964	\$641

This calculation of the cost of a “role-out” assumes that in order to achieve the level of effectiveness of the Models at achieving reductions in violations, a lower per FTE caseload would be required. Although Denver/ Triad maintain that their model could be delivered with excising caseloads, each of the Models has demonstrated success while staff carried lower caseloads.

In recognition of the fact that Model staff spent much of their time in development, this “roll out” calculation employs an estimated caseload of 100 units.¹¹ This figure is higher than each of the Models reported, but lower than that at the State.

Using State numbers, to achieve caseloads of 100 units would require approximately 92 FTE. Since the State already has 65 FTE (including 31 contract workers without benefits), it would need an additional 27. At a rate of \$56,048 average cost per FTE, it would require an additional \$1,513,296 to reduce caseload size and institute some aspects of the Models statewide. This figure is for personnel and benefits alone; operating costs are not included in this calculation although surely more personnel would necessitate a higher operating cost.

Cost to Expand the Model Approach to the Whole State using Reductions in Violations

Another approach to estimate the cost of a statewide “roll-out” would use the per percentage costs of a reduction in violations presented in Table 7 above, and determine the degree of reduction in violations that was desired.

Table 7 demonstrates that it cost the Models between \$56 and \$593 to achieve a one percent reduction in violations from the State norm for each unit of service. Assuming that the State wished to achieve a 10% reduction in violations in each of its facilities (9247 units) and that it chose the most efficient Model to do it (\$56 per one percent difference), it would cost \$560 for each service unit or a total of \$5,178,320 to achieve an overall reduction in violations statewide.

¹¹ This is in line with Recommendation 1 in the larger evaluation of the Colorado Pilot, “2004 Child Care Licensing Models – Evaluation Report”.

Summary

This Cost Effectiveness study demonstrates that the three Child Care Licensing Models in the Pilot were able to achieve a reduction in violations when compared to the State averages, and that two Models were able to achieve a reduction in violation between times one and two in their own community facilities. All Models achieved these results with much smaller caseloads than the State average.¹²

The exact cost to apply one of the Models to the State system is unclear. This study calculated that the cost to reduce caseload size to an average of 100 and apply some aspect of the Models would cost about \$1.5 million. The cost to reduce violations overall by 10% would be at least \$5.1 million.

Two issues should be considered when reviewing these cost figures. First, this cost analysis looked only at cost effectiveness - what it cost to achieve a degree of change. It was not a “cost/ benefit analysis” which would necessitate “monetizing” the outcome measure (in this instance, reduced violations), as well as the costs.

Violations can be costly both in terms of inspector and provider time as well as the impact on children’s learning and well-being of problems in their child care environment. It is possible that a reduction in violations would, in large part, create a cost-savings that could off set the cost to achieve it.

Second, the estimated cost of a Model “roll out” employing reduced caseloads of 100 units per FTE, used a caseload number higher than was actually demonstrated to achieve results in this study. It is possible that with this larger caseload size, the results might be more modest and might not occur at all.

The potential cost savings from reduced violations and the impact on violations of caseload sizes both require more study. The process by which childcare facilities are licensed can be a powerful mechanism to improve the well-being of children in Colorado, and as such, deserves continued attention and evaluation.

¹² Denver/ Triad maintain that their Model could be implemented with the existing State FTE at no additional cost. This was not demonstrated during the time frame of the Pilot, however.

Appendix

**DENVER/ TRIAD VIOLATION RATING SYSTEM
DEFICIENCY ASSESSMENT CHART**

Level Of Severity		Definition
0	Critical	An incident reported to protective services or police regarding child abuse or neglect allegations. Allegations include abuse, children totally unsupervised, hospitalization, or death of a child.
1	Very Serious	Actual harm to a child may occur if immediate action is not taken.
2	Serious	Actual or potential harm to a child may occur if action is not taken within 48 hours or less.
3	Moderate	Actual or potential harm to a child may occur if action is not taken within 30 days or less.
4	Mild	Care of children may be affected if action is not taken within 60 days or less.
5	Very Mild	Care of children may be affected if action is not taken by the next supervisory inspection.