

**Second Regular Session
Seventieth General Assembly
STATE OF COLORADO**

PREAMENDED

*This Unofficial Version Includes Committee
Amendments Not Yet Adopted on Second Reading*

LLS NO. 16-1071.02 Jane Ritter x4342

HOUSE BILL 16-1383

HOUSE SPONSORSHIP

Singer and Fields,

SENATE SPONSORSHIP

(None),

House Committees

Public Health Care & Human Services
Appropriations

Senate Committees

A BILL FOR AN ACT

101 **CONCERNING A PREDICTIVE DATA ANALYTIC TECHNOLOGY FOR CHILD**
102 **WELFARE PILOT PROGRAM.**

Bill Summary

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://www.leg.state.co.us/billsummaries>.)

The bill requires the department of human services (department) to develop, on or before September 1, 2016, a state-of-the-art data analytic system for child welfare pilot program (pilot program) to access, integrate, and analyze data sources for the purpose of calculating a child's risk for abuse or neglect. The pilot program must be able to integrate data from various state and county sources, use various types of technology to

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.
*Capital letters indicate new material to be added to existing statute.
Dashes through the words indicate deletions from existing statute.*

1 INTEGRATE, AND ANALYZE DATA ABOUT A CHILD AND HIS OR HER
2 ENVIRONMENT IN NEAR REAL TIME TO PROVIDE A MORE TIMELY,
3 ACCURATE, AND PRECISE MEASURE OF A CHILD'S RISK OF TRAGIC
4 OUTCOMES AS A RESULT OF ABUSE OR NEGLECT;

5 (f) BY USING TECHNOLOGY TO MONITOR A CHILD'S ENVIRONMENT
6 AND CONTINUOUSLY UPDATE THE CHILD'S RISK PROFILE, CASEWORKERS
7 ARE ABLE TO FOCUS BETTER ON THE HIGHEST RISK CASES AND THOSE THAT
8 HAVE THE MOST IMMEDIATE NEED FOR INTERVENTIONS, THUS BETTER
9 EQUIPPING CASEWORKERS TO PREVENT TRAGIC OUTCOMES; AND

10 (g) PROVIDING APPROPRIATE, USER-FRIENDLY TOOLS AND
11 TECHNOLOGY TO CASEWORKERS CAN DRAMATICALLY IMPROVE
12 OUTCOMES, INCREASE PRODUCTIVITY, AND REDUCE EMPLOYEE TURNOVER
13 RESULTING FROM BURNOUT, STRESS, AND FRUSTRATION.

14 (2) THEREFORE, THE GENERAL ASSEMBLY DECLARES THAT IT IS IN
15 THE BEST INTERESTS OF THE CHILDREN OF COLORADO TO ESTABLISH AN
16 IMPLEMENTATION PLAN FOR A STATE-OF-THE-ART PREDICTIVE DATA
17 ANALYTIC SYSTEM FOR CHILD WELFARE THAT IS COMPATIBLE WITH THE
18 COLORADO CHILD WELFARE MANAGEMENT SYSTEM AND THE STATE'S
19 INFORMATION TECHNOLOGY ENVIRONMENT.

20 **26-5.1-102. Predictive data analytic technology for child**
21 **welfare pilot program - steering committee - requirements -**
22 **independent vendor - reporting. (1) (a) ON OR BEFORE DECEMBER 15,**
23 **2016, USING THE RECOMMENDATIONS OF THE STEERING COMMITTEE**
24 **FORMED IN PARAGRAPH (b) OF THIS SUBSECTION (1), THE STATE**
25 **DEPARTMENT SHALL RELEASE A REQUEST FOR PROPOSALS FOR A**
26 **TECHNOLOGY VENDOR FOR A PREDICTIVE DATA ANALYTIC TECHNOLOGY**
27 **FOR CHILD WELFARE PILOT PROGRAM, REFERRED TO IN THIS ARTICLE AS**

1 THE "PILOT PROGRAM". THE PURPOSE OF THE PILOT PROGRAM IS TO
2 IMPLEMENT A STATE-OF-THE ART DATA ANALYTICS TECHNOLOGY SYSTEM
3 TO ACCESS, INTEGRATE, AND ANALYZE DATA SOURCES TO CALCULATE A
4 CHILD'S RISK SCORES FOR ABUSE OR NEGLECT.

5 (b) THE STATE DEPARTMENT SHALL CONVENE A STEERING
6 COMMITTEE THAT INCLUDES APPROPRIATE STAKEHOLDER
7 REPRESENTATION FROM CHILD WELFARE SERVICES AT THE STATE AND
8 COUNTY LEVELS. THE PURPOSE OF THE STEERING COMMITTEE IS TO:

9 (I) CONSIDER AND RECOMMEND, AT A MINIMUM, THE APPROPRIATE
10 NUMBER AND TYPES OF COUNTIES TO PARTICIPATE IN THE PILOT PROGRAM
11 TO ENSURE ADEQUATE DATA AVAILABILITY AND REPRESENTATION OF
12 DIVERSE POPULATIONS THAT WILL RESULT IN A MEANINGFUL PILOT
13 PROGRAM;

14 (II) ASSIST THE STATE DEPARTMENT IN THE DEVELOPMENT OF THE
15 REQUEST FOR PROPOSALS FOR A TECHNOLOGY VENDOR, AS DESCRIBED IN
16 SUBSECTION (3) OF THIS SECTION, UTILIZING THE REQUIREMENTS OF
17 SUBSECTION (2) OF THIS SECTION; AND

18 (III) RECOMMEND AN INDEPENDENT THIRD-PARTY EVALUATOR TO
19 PERFORM THE OBLIGATIONS SPECIFIED IN SECTION 26-5.1-103 (2).

20 (2) THE DATA ANALYTIC SYSTEM MUST PROVIDE THE FOLLOWING
21 CAPABILITIES:

22 (a) THE ABILITY TO INTEGRATE DATA FROM VARIOUS STATE AND
23 COUNTY DATA SOURCES;

24 (b) ADVANCED MATCHING AND ENTITY RESOLUTION TO
25 ACCURATELY MERGE DATA FROM DIFFERENT DATABASES;

26 (c) ADVANCED SOCIAL NETWORK OR LINK ANALYSIS TO
27 DETERMINE BOTH KNOWN AND HIDDEN RELATIONSHIPS THAT THE CHILD

1 MAY HAVE WITH OTHER PEOPLE;

2 (d) USE OF THE LATEST ADVANCED ANALYTICAL TECHNIQUES,
3 INCLUDING PREDICTIVE MODELING; COMPLEX PATTERN ANALYSIS; SOCIAL
4 NETWORK ANALYSIS; TEXT MINING; AND GEOSPATIAL ANALYSIS, TO MORE
5 ACCURATELY AND PRECISELY CALCULATE CHILD RISK SCORES;

6 (e) THE ABILITY TO REGULARLY MONITOR DATA SOURCES TO
7 AUTOMATICALLY IDENTIFY CHANGES TO A CHILD'S ENVIRONMENT AND
8 RECALCULATE THE CHILD'S RISK ACCORDINGLY;

9 (f) AN ALERTING MECHANISM THAT NOTIFIES CASEWORKERS WHEN
10 CHILD RISK FACTORS EXCEED PRESET TOLERANCE LEVELS;

11 (g) AN INTUITIVE USER INTERFACE FOR CASEWORKERS TO EASILY
12 PRIORITIZE AND VISUALIZE CASES AND RELATED INFORMATION ABOUT THE
13 CHILD AND HIS OR HER ENVIRONMENT; AND

14 (h) THE ABILITY FOR FEEDBACK AND SELF-LEARNING THAT
15 CAPTURES OUTCOMES AND UTILIZES THE INFORMATION TO IMPROVE
16 ANALYTIC ACCURACY OVER TIME.

17 (3) AT THE CONCLUSION OF THE REQUEST FOR PROPOSALS PROCESS
18 DEVELOPED PURSUANT TO SUBSECTION (1) OF THIS SECTION, THE STATE
19 DEPARTMENT SHALL SELECT AND ENTER INTO A VENDOR CONTRACT FOR
20 THE PILOT PROGRAM IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED
21 THOUSAND DOLLARS WITH A TECHNOLOGY VENDOR WITH EXPERIENCE IN
22 IMPLEMENTING DATA ANALYTICS TECHNOLOGY TO ACCESS, INTEGRATE,
23 AND ANALYZE ENTERPRISE HUMAN SERVICES DATA TO CALCULATE RISK
24 SCORES. THE TECHNOLOGY VENDOR SELECTED SHALL ENSURE AND
25 CERTIFY ITS COMPLIANCE WITH ALL RELEVANT STATE AND FEDERAL
26 PRIVACY LAWS AND POLICIES.

27 (4) UNLESS OTHERWISE PRECLUDED BY STATE OR FEDERAL

1 STATUTE OR RULES OR REGULATIONS, STATE AGENCIES SHALL MAKE THEIR
2 DATA AVAILABLE TO THE STATE DEPARTMENT FOR THE SPECIFIC PURPOSE
3 OF THE PILOT PROGRAM. DATA SHARING AGREEMENTS OR MEMORANDA OF
4 UNDERSTANDING MUST BE EXECUTED BETWEEN AGENCIES TO PROTECT
5 THE PRIVACY AND CONFIDENTIALITY OF THE DATA.

6 **26-5.1-103. Reporting and recommendations.** (1) ON OR
7 BEFORE MARCH 31, 2017, AND EVERY QUARTER THEREAFTER UNLESS
8 OTHERWISE DIRECTED BY THE COMMITTEE CHAIRS, THE STATE
9 DEPARTMENT SHALL SUBMIT A WRITTEN REPORT TO THE HEALTH AND
10 HUMAN SERVICES COMMITTEE OF THE SENATE AND THE PUBLIC HEALTH
11 CARE AND HUMAN SERVICES COMMITTEE OF THE HOUSE OF
12 REPRESENTATIVES, OR ANY SUCCESSOR COMMITTEES, ON THE PROGRESS
13 AND STATUS OF THE PILOT PROGRAM. THE REPORT MUST INCLUDE, AT A
14 MINIMUM:

15 (a) THE OVERALL PILOT PROGRAM STATUS, MILESTONES, AND
16 BUDGETARY REPORTS;

17 (b) THE DATA SOURCES THAT HAVE BEEN INCORPORATED, AS WELL
18 AS ADDITIONAL DATA SOURCES THAT WOULD ADD VALUE TO THE OVERALL
19 GOALS OF THE PILOT PROGRAM;

20 (c) ANALYTICAL RESULTS AND ACCURACY;

21 (d) EXAMPLES OF CASE INTERVENTIONS;

22 (e) PRODUCTIVITY IMPROVEMENTS; AND

23 (f) AGENCY PROCEDURAL CHANGES OR BEST PRACTICES
24 IDENTIFIED BY THE PILOT PROGRAM.

25 (2) AT THE CONCLUSION OF THE PILOT PROGRAM, THE STATE
26 DEPARTMENT SHALL, IN ADDITION TO THE QUARTERLY REPORTING
27 REQUIRED PURSUANT TO SUBSECTION (1) OF THIS SECTION, AND AFTER

1 REVIEW BY AN INDEPENDENT THIRD-PARTY EVALUATOR, PROVIDE A
2 RECOMMENDATION, PLAN, AND COST ESTIMATE FOR A STATEWIDE
3 IMPLEMENTATION OF THE PILOT PROGRAM.

4 **26-5.1-104. Repeal.** THIS ARTICLE IS REPEALED, EFFECTIVE
5 JANUARY 1, 2018.

6 **SECTION 2. Safety clause.** The general assembly hereby finds,
7 determines, and declares that this act is necessary for the immediate
8 preservation of the public peace, health, and safety.