The Colorado Family Resource Simulator:

A Demonstration

NCCP
National Center for Children in Poverty
Columbia University • Mailman School of Public Health
Department of Health Policy & Management

Colorado Center on Law and Policy

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Seth Hartig and Curtis Skinner

Summary of this Demonstration

- We will demonstrate how the Family Resource Simulator (FRS) (at http://nccp.org/tools/frs/) can be used to model real-life scenarios for Colorado families and the financial choices they make.
- This PowerPoint presentation will mirror the scenarios that will be presented using the online FRS tool.

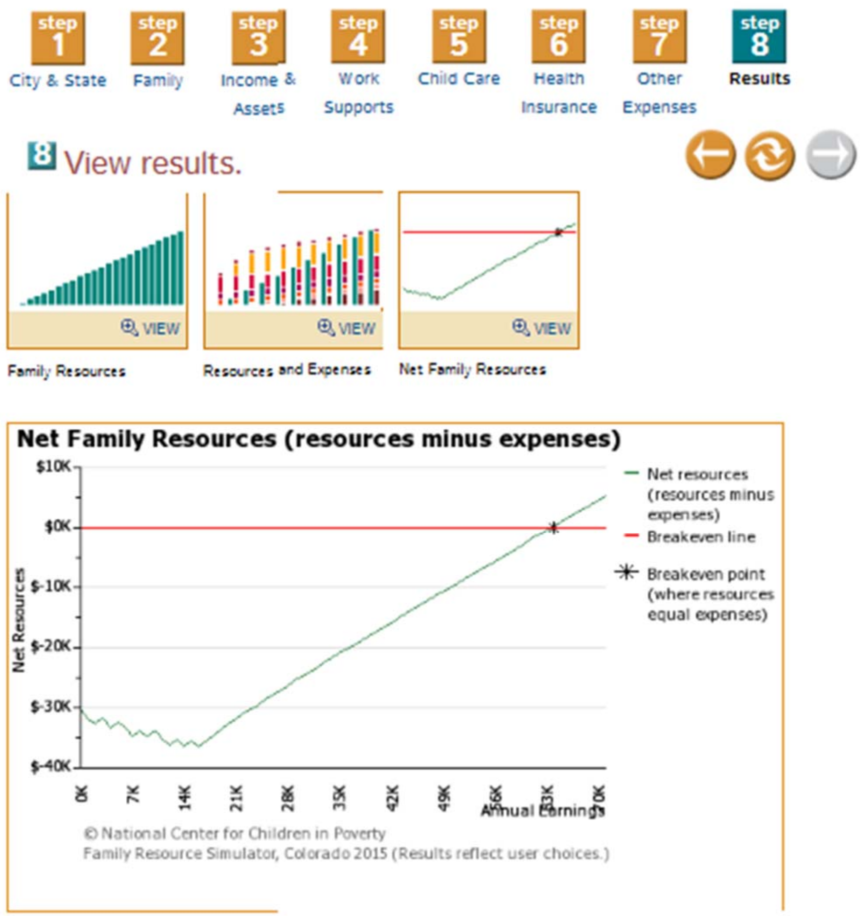
Scenario 1: No benefits, full costs

Assumptions

- Let's see how the FRS models cost for a representative family in Denver, assuming the following:
  - Single parent
  - Starting wage at minimum wage, $8.23/hour
  - Higher earnings levels reflect either more work hours (at starting wage) or higher wages once the parent starts working 40 hours per week
  - Two children: one 3-year-old and one 6-year-old
  - Child care is center-based, the more expensive of two options.
  - Family forgoes all public benefits

FRS Output Screen (Scenario 1)

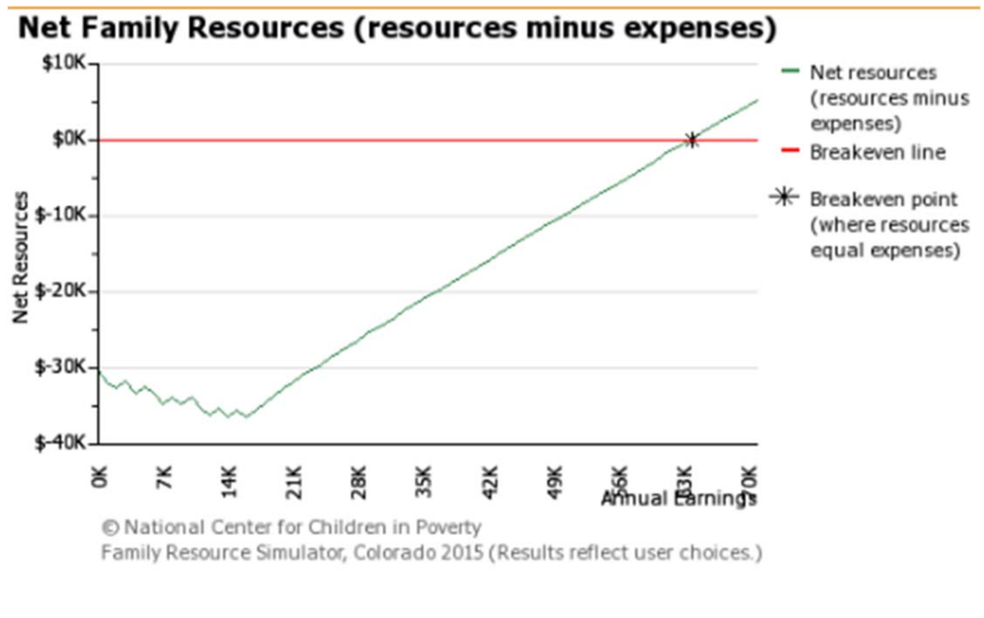
Family Resource Simulator: Denver, CO (2015)



This graph displays net family resources as the family's earnings increase from $0 to the state median income. The green line represents the net resources available to the family after subtracting basic expenses. The red horizontal line represents the "break even" line, where the family's total resources are equal to basic expenses; asterisks indicate where the family reaches this point. For more information about how resources and expenses are calculated, see Calculating Family Resources and Calculating Family Expenses.

Scenario 1: Analysis

- One of the more helpful graphs generated in the output screen is the “Net Family Resources” graph.

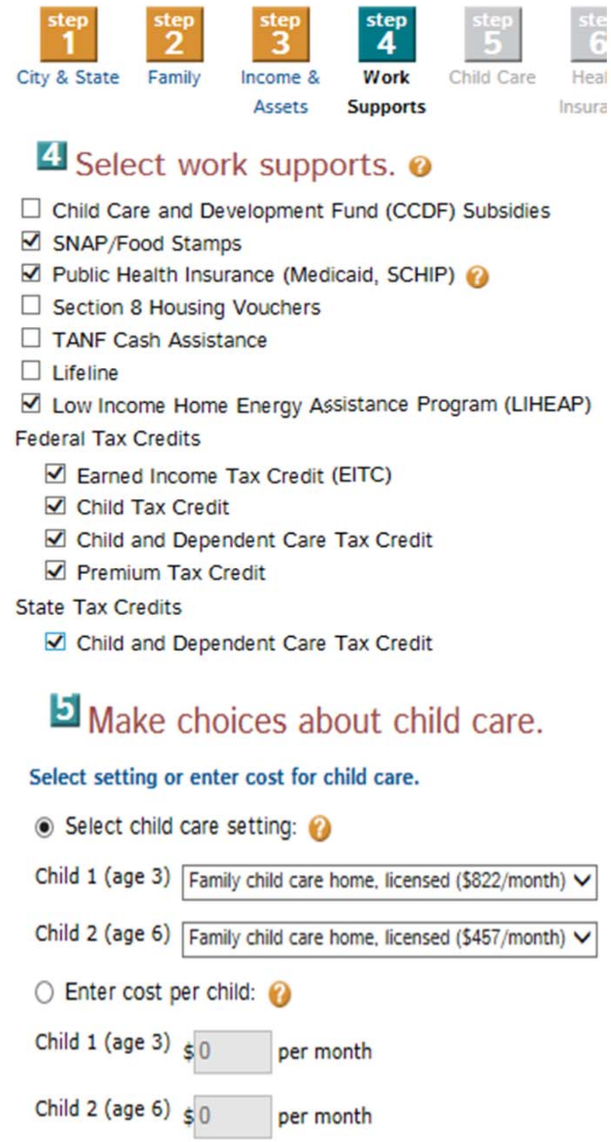


- There is no way a family making less than middle-class earnings could afford the standard necessities modeled in this simulation without going deep into debt.
- Families at the lower end of the earnings spectrum would likely adjust their spending or make greater use of public benefits.

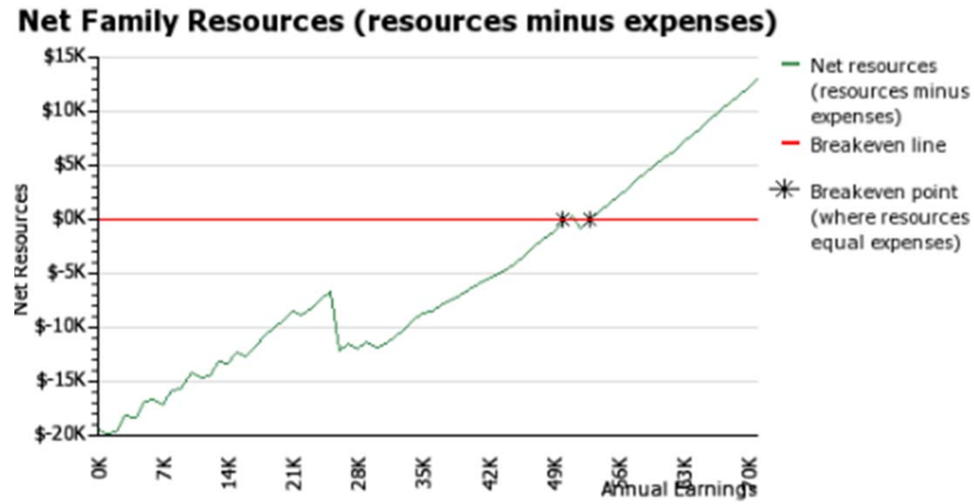
Scenario 2: Some Public Benefits

Assumptions:

- Same assumptions as in Scenario 1, but add in widely used or widely available benefits & tax credits:
  - Federal and state tax credits (including earned income credits, child tax credits, and child and dependent care tax credits)
  - SNAP
  - Medicaid
  - LIHEAP
- A less expensive but still standard type of child care (family child care homes)



Scenario 2: Analysis

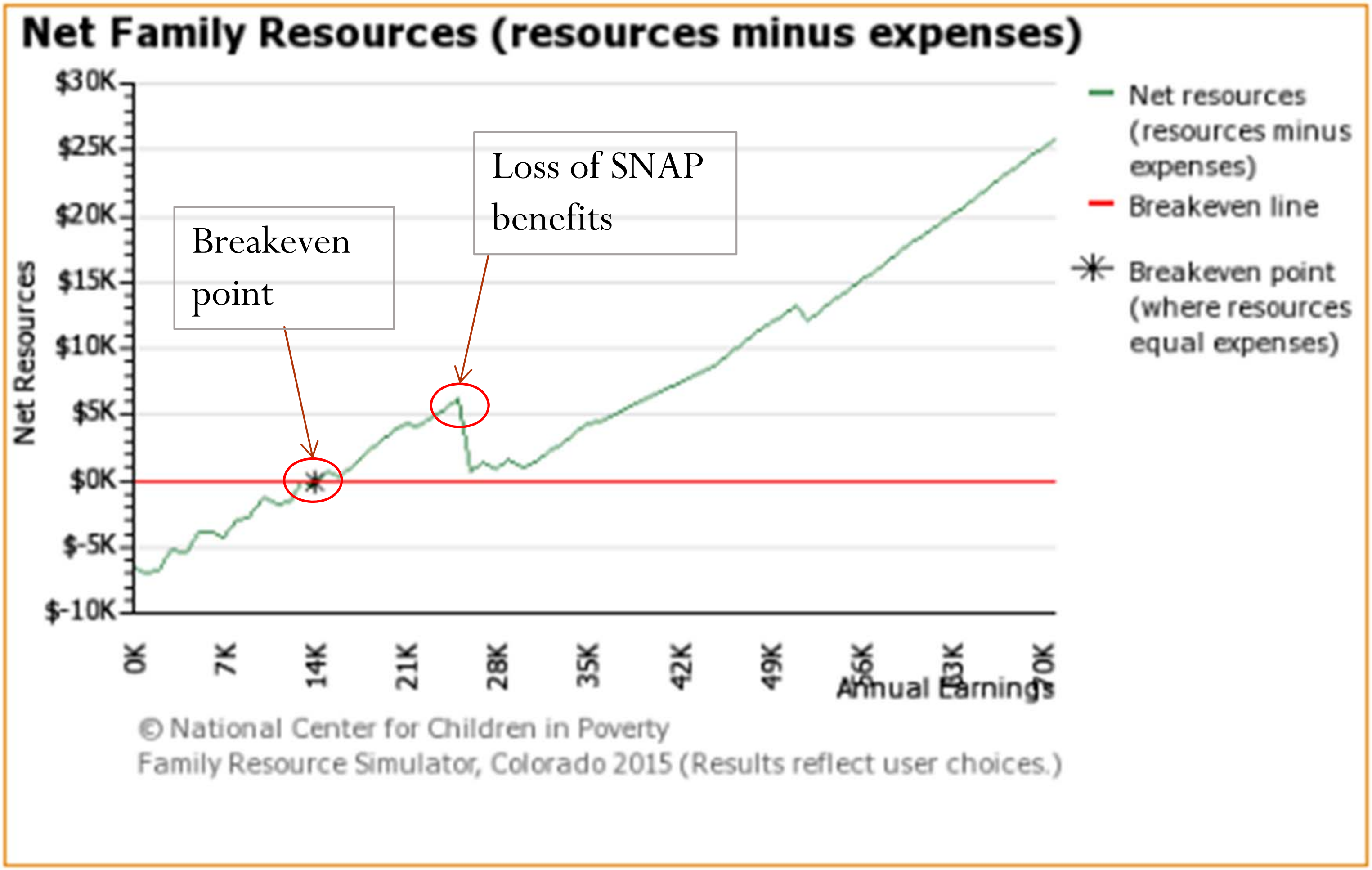


- The family gets closer to the breakeven line ($0 in net resources), but is still well below it.
- Entitlements and widely used public benefits alone cannot bring a family of this structure above the breakeven line, as long as we use standard costs of housing, child care, and other necessities.
- How can a family avoid going deep into debt at lower earnings levels?

Scenario 3: “doubling up”

- In this scenario, let’s say a family moves in with friends or relatives, who charge them $300 per month to help cover rent.
- Examples of this are widespread among the working poor, as recent quantitative and qualitative studies show.

Scenario 3: Net Family Resources



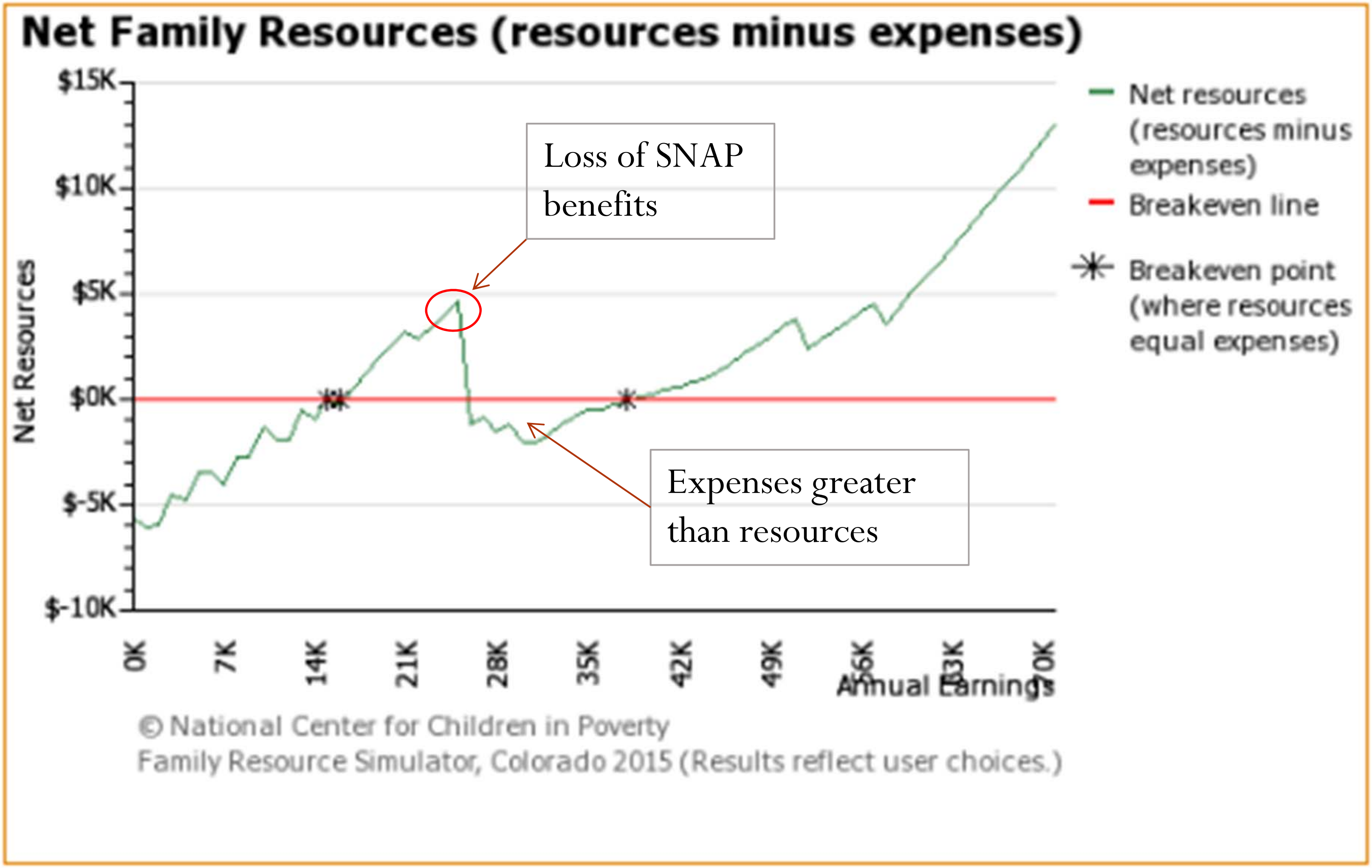
Scenario 3: Analysis

- In this scenario, the family achieves some level of stability at a very low income level (about $14,000/year). The family achieves a surplus in net family resources even after the loss of SNAP benefits, occurring when the family income exceeds SNAP's gross income eligibility limit ($25,728).
- However, the reliance on relatives can lead to overcrowded, unsafe housing conditions and a reliance on the individuals outside the initial family unit, which can lead to unsafe environments for children and their parents.

Scenario 4: Section 8

- Another way to accomplish stability is through attaining a Section 8 housing voucher.
- Although varying by locality, this benefit is usually difficult to attain.

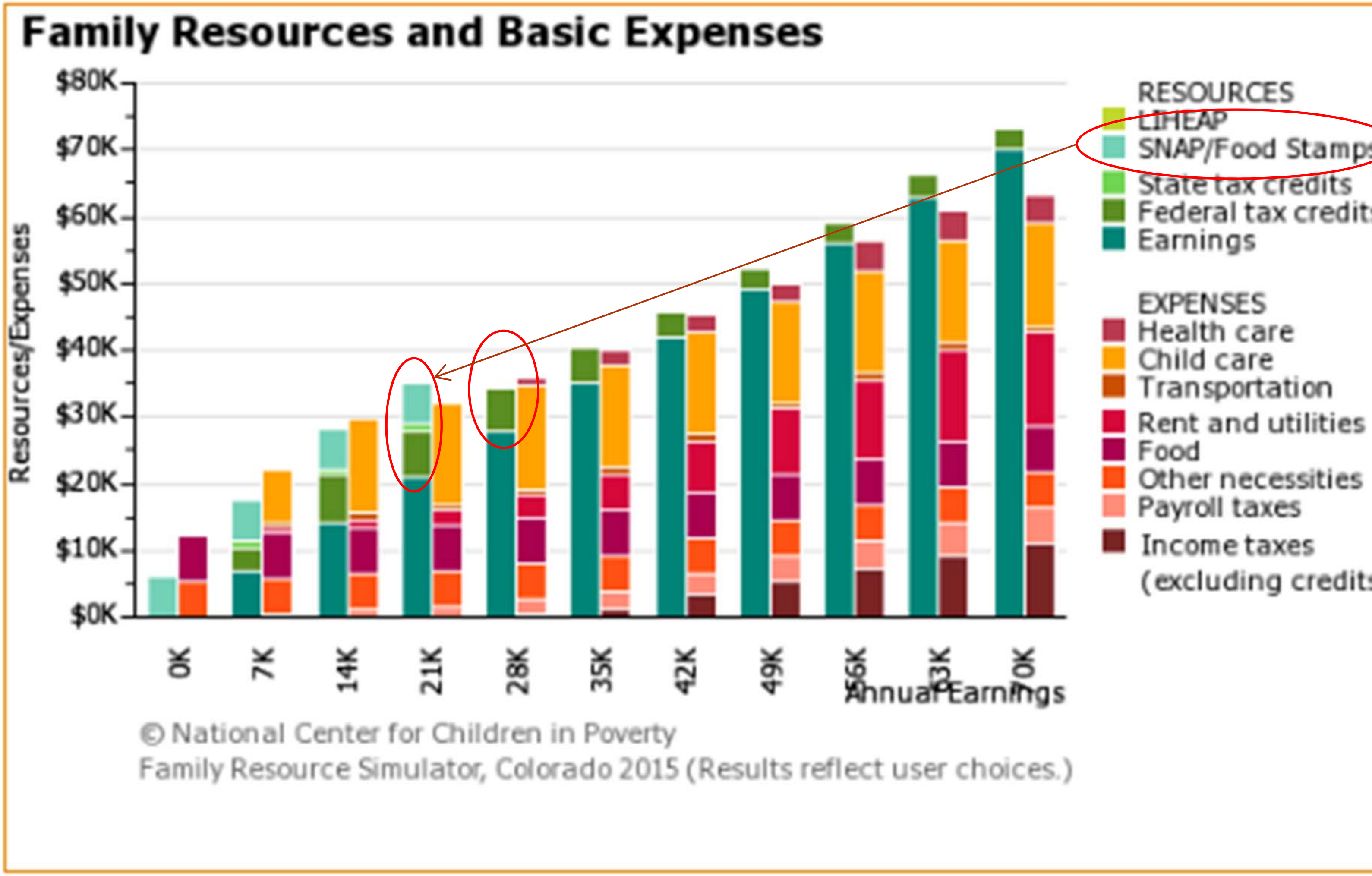
Scenario 4: Net Family Resources



Scenario 4: Analysis

- Net resources improve at lower earnings similar to "doubling up" scenario, but expenses increase at higher incomes due to increases in Section 8 rent.
- The increased rent leads to greater expenses than resources when SNAP benefits are lost.
- The SNAP benefit cliff can be seen graphically by clicking on another of the FRS graphs, "Resources and Expenses," as the next slide illustrates. The bar representing SNAP benefits, disappears between $21,000 and $28,000.

Scenario 4

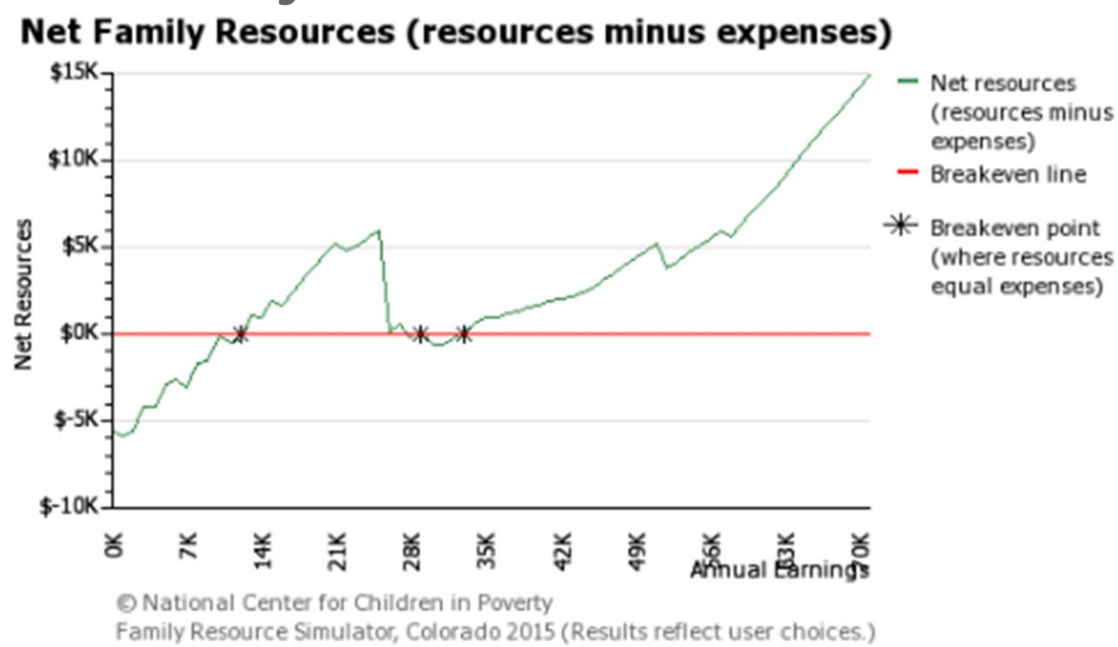


Family Resources and Basic Expenses
$80K
$70K
$60K
$50K
$40K
$30K
$20K
$10K
$0K
Resources/Expenses
0K
7K
14K
21K
28K
35K
42K
49K
56K
63K
70K
Annual Earnings
RESOURCES
LIHEAP
SNAP/Food Stamps
State tax credits
Federal tax credits
Earnings
EXPENSES
Health care
Child care
Transportation
Rent and utilities
Food
Other necessities
Payroll taxes
Income taxes
(excluding credits
© National Center for Children in Poverty
Family Resource Simulator, Colorado 2015 (Results reflect user choices.)

Scenario 5: Section 8, substandard child care

- We have been assuming that families are using formal means of child care at the 75th-percentile rate of costs.
- It seems plausible that a family making $26,000-$40,000/yr might enroll their children in lower-cost child care.
- We can model this by manually changing child care costs to reflect lower rates.
- In Denver, the mode (most commonly cited) cost of child care for a 3-year-old was $799, and for a 6-year-old was $315 per month (lower since they will be in school). (Adjusted for inflation.)

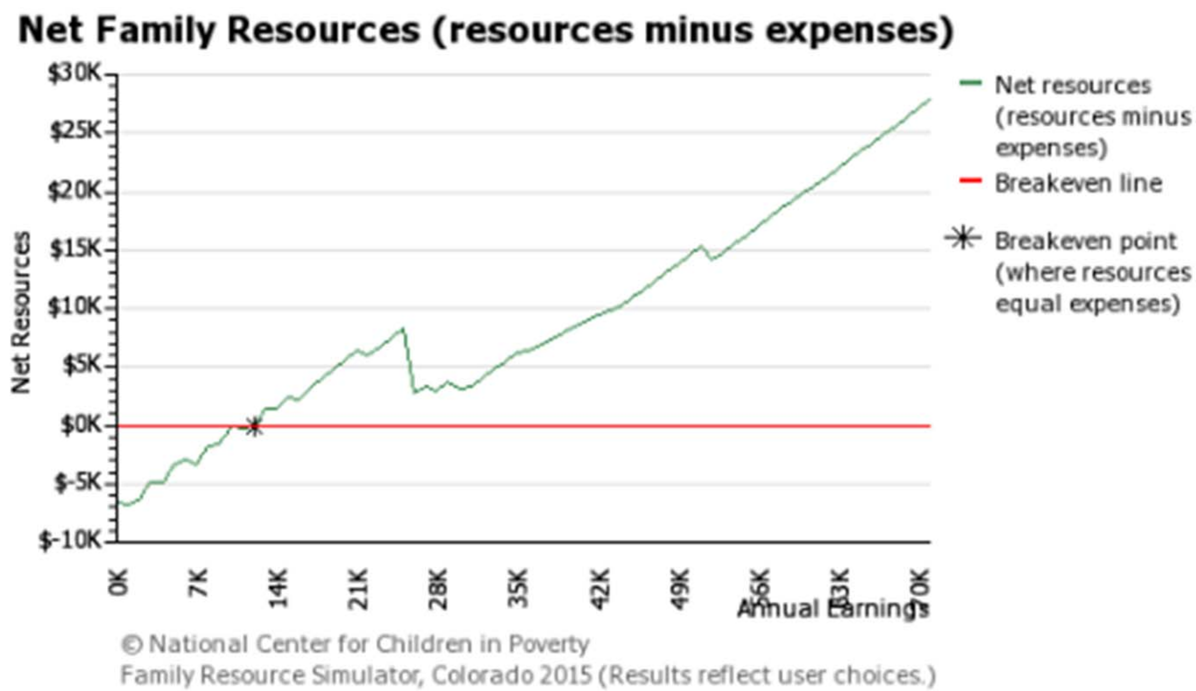
Scenario 5: Analysis



- In this scenario, the family is basically breaking even over the $26,000-$30,000 range. Outside of that window, the family has surplus resources once earnings rise above $12,000/year.
- However, by spending less on child care, the children in this family will be less prepared for school, as substandard child care has been shown to curb the intellectual and emotional development of children.

Scenario 6: “doubling up,” substandard care

- If we remove the assumption of Section 8 receipt and but add back the assumption of substandard rent ($300, presumably living with family or friends), the family has positive net resources at all earnings levels above $12,000.



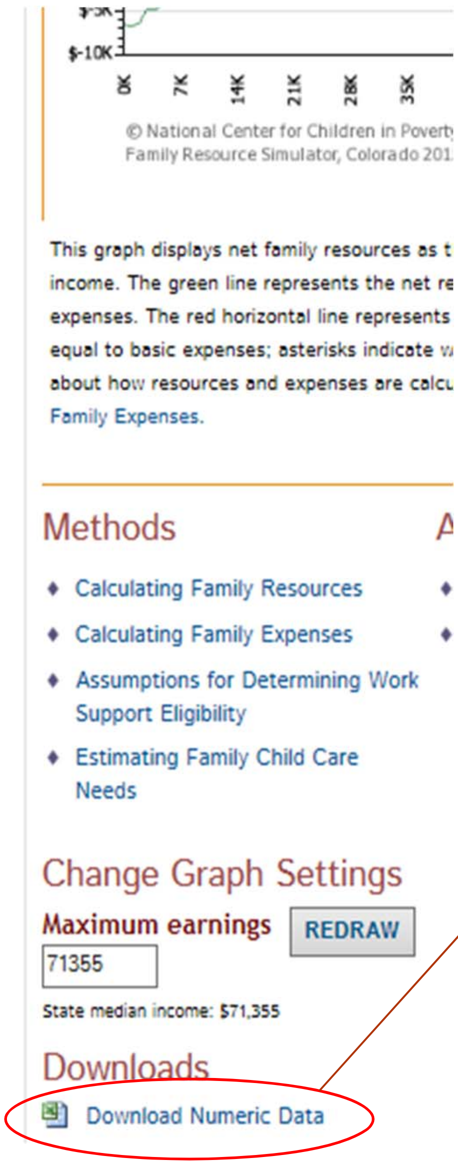
Conclusion

- We can see from the FRS that a family of this structure cannot survive by their own income alone at a broad range of income levels without incurring massive debt.
- Poor and low-income families must rely on extended family, their friends, or substandard conditions to remain financially afloat.
- Are these the choices we want families to make as they try to achieve self-sufficiency, or do we want to pursue policy or budgetary reforms that allow family budgets to be more secure at lower levels of earnings?

Coda: Getting the data

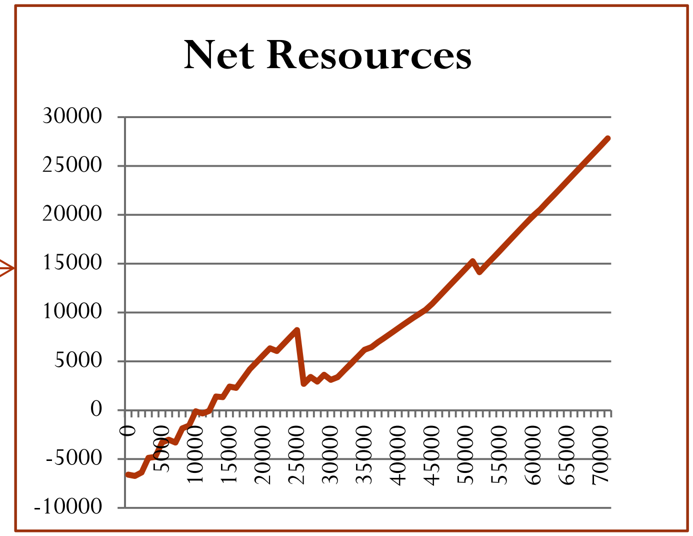
- The FRS includes ready-made graphs, but users can also use the "Download Numeric Data" function to access the data that informs those graphs.
- The data can be downloaded as .csv files.
- The column "Net Resources" is the column used to create the line graphs we have been using to analyze the above scenarios.
- Any of the columns can be used to create custom-made graphs in MS Excel.

Custom-made graphs



NCCP's Family Resource Simulator: CO 2015 (nccp.org/tools/frs).
Output Generated Wed Oct 28 16:06:27 2015. Results reflect user choices.

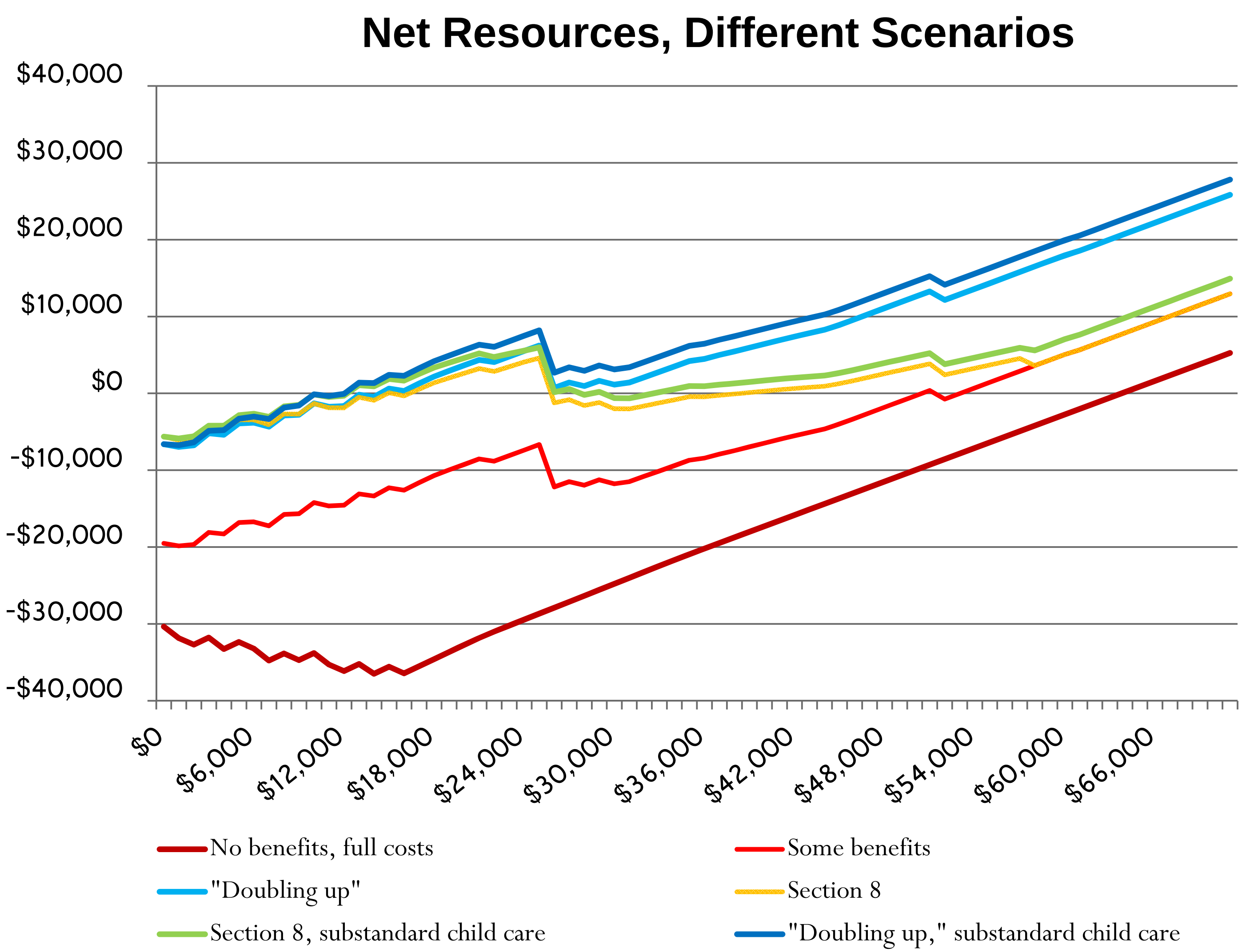
Earnings	Net Resources	Child Support	TANF	
0	-6607.83	0	0	
1000	-6738.81	0	0	
2000	-6368.43	0	0	
3000	-4876.53	0	0	
4000	-4775.91	0	0	
5000	-3302.41	0	0	
6000	-3032.03	0	0	
7000	-3332.01	0	0	
8000	-1858.51	0	0	
9000	-1588.13	0	0	



Comparing different scenarios

- The FRS is only currently able to generate graphs of one family scenario at a time.
- Through Excel or other software, users can compare different scenarios by downloading the .csv files of different scenarios.

Comparing Different Scenarios



End of Demonstration