Washington State Institute for Public Policy

The Evergreen State College • Seminar 3162 • Olympia, WA 98505 • (360) 866-6000, ext. 6380 • FAX (360) 866-6825

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The Family Resource Wage Progression Model:
Estimating Resources Available to Low-Income Families in Washington State

As families on state assistance move into higher-paying jobs or work more hours, their tax liability changes, along with their food stamp benefits, state income assistance grant, and child care costs. Monitoring the eligibility rules for public assistance programs and federal tax rules can be extremely complicated. The number of children in a family and a family's place of residence also significantly influence household budgets. This paper describes a computer micro-simulation program developed by the Washington State Institute for Public Policy which models the economic impact of child care copayments on WorkFirst families.

Background

The Washington State Institute for Public Policy was directed by the 1997 Legislature to conduct a study of reasonable, affordable child care copayments that are realistic for low-income families. The **Family Resource Wage Progression (FRWP) model** was developed to show how low-income families in Washington fare under the new *Working Connections* child care copayment schedule and other possible schedules. This child care program was adopted as part of *WorkFirst*, Washington's new welfare-to-work program, implemented in November 1997. Prior to the implementation of WorkFirst, the Aid to Families with Dependent Children (AFDC) program provided free child care to working families receiving public assistance grants. Families earning too much to qualify for AFDC were eligible for partially subsidized child care through the Transitional and Employment child care programs.

Modeling Family Resources

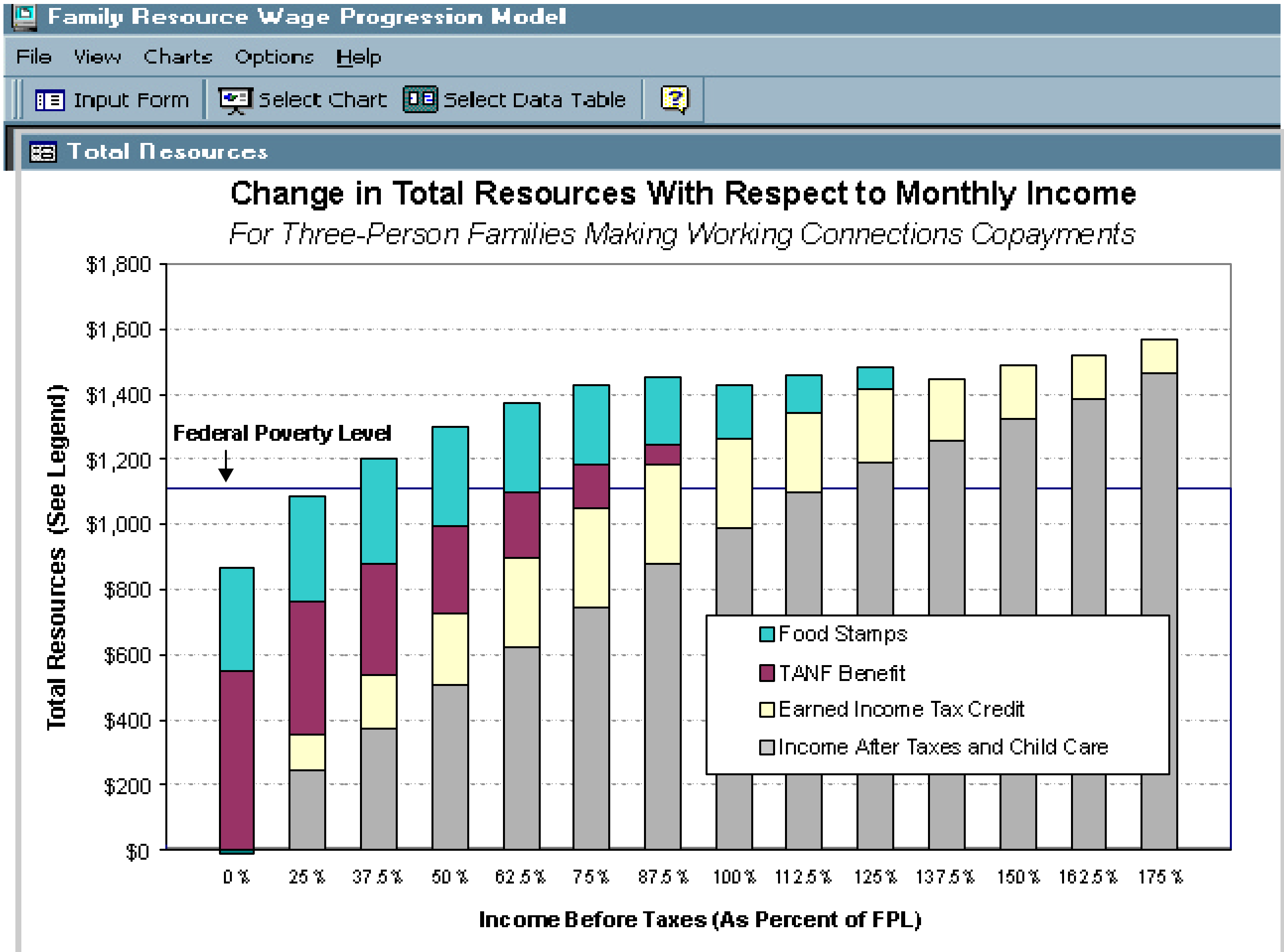
When state policymakers design copayment schedules for subsidized services, it is important to consider the constraints on a family's budget. Ideally, any copayment schedule should take into account the array of eligibility rules, tax credits, and different circumstances that apply to working families. For the purpose of assessing Washington's child care copayment schedule, the Institute has developed a computer micro-simulation model that calculates family resources at various wage levels. The model incorporates:

- after-tax income (including the dependent care and child tax credits);
- earned income tax credit;
- Temporary Assistance to Needy Families (TANF) grant; and
- food stamp benefits.

The **Family Resource Wage Progression model** allows the user to view how family size, child care costs, and regional variations within the state affect a family’s total resources. Twelve different child care copayment schedules are programmed into the model, including Washington's current child care program, Working Connections, and the child care copayment schedules of six different states. Copies of the FRWP model are available by request or may be downloaded from the Institute's web site: http://www.wa.gov/wsipp.

Figure 1 shows a screen from the **Family Resource Wage Progression model**. This chart illustrates the total resources available to three-person families[1] after paying taxes and child care copayments. The horizontal axis graphs the monthly salary of the family, expressed as a percentage of the Federal Poverty Level (FPL). The vertical axis displays the family's total resources[2] *after* paying for child care and taxes.

Figure 1: Total Resources Screen From the FRWP Model



The **Family Resource Wage Progression model** allows users to examine the complex interaction of child care costs, federal tax rules, and income assistance benefits. Using this model, one can review alternative child care copayments and their influence on overall family resources.

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[1] "Three-person families" refers to a single-parent household with two children in child care. The model estimates resources for single-parent households with one to five children.
[2] Total resources equals the sum of food stamps, TANF grant, earned income tax credit, and after-tax earnings.

Increases in Child Care Costs May Be Offset by Other Benefits

Using the **Family Resource Wage Progression model**, one can learn how an increase (or decrease) in child care costs affects a family's total resources. For example, the state of Oregon requires a higher child care copayment than comparable families would pay in Washington's program. However, it is difficult to assess the affordability of either copayment schedule by only comparing child care copayments.

A family of three with monthly wages of $1,250 will pay $20 per month for subsidized child care in Washington State. Under Oregon's child care copayment schedule, the same family is responsible for a $168 monthly copayment. This family pays $148 more in child care each month, but *is not* $148 worse off at the end of the month (see Table 1).[3]

Table 1: Total Resources for a Three-Person Family Under Two Child Care Programs

	Working Connections Program	Oregon's Child Care Schedule	Change in Resources
Gross Monthly Income	***$1,250***	***$1,250***	***$0***
TANF Grant	$0	$0	$0
Food Stamps	$113	$179	$66
Earned Income Tax Credit	$251.25	$251.25	$0
After-Tax Income	$1,114.15	$1,154.09	$39.94
Child Care Costs	$20	$168	-$148
Total Resources *After* Paying for Child Care	**$1,458.40**	**$1,416.34**	**-$42.06**

As a family's income and child care costs change, so will its taxes and benefits. For this family, a $148 increase in copayments reduces total after-tax resources by only $42.06 because the family receives more food stamps and a higher dependent care tax credit. (This example assumes the family takes full advantage of food stamp benefits and the dependent care tax credit.)

For this hypothetical family, 7*2 percent* of the increase in child care costs is offset by increases in food stamps and tax credits. However, the impact that child care costs have on total resources also depends on the family's wage level. Table 2 (next page) illustrates the impact of increased child care costs for families with slightly higher monthly wages.

[3] The FRWP model calculates total resources for *Washington families* based on several child care copayment schedules.

Once a family is no longer eligible for food stamps, increased child care costs have a more direct effect on their resources. Table 2 compares total resources for families with earnings at 150 percent FPL ($1,666.50/month) after making child care copayments in Washington and Oregon.

Table 2: Total Resources for a Three-Person Family Under Two Child Care Programs

	Working Connections Program	Oregon's Child Care Schedule	Change in Resources
Gross Monthly Income	***$1,666.50***	***$1,666.50***	***$0***
TANF Grant	$0	$0	$0
Food Stamps	$0	$0	$0
Earned Income Tax Credit	$163.50	$163.50	$0
After-Tax Income	$1,466.85	$1,522.20	$55.35
Child Care Costs	$143.60	$365	-$221.40
Total Resources *After* Paying for Child Care	**$1,486.75**	**$1,320.70**	**-$166.05**

At this income level, Working Connections requires a copayment of $143.60; under Oregon's child care program, the copayment is $365 ($221.40 higher). In this example, only *25 percent* of the increase in child care costs is offset through tax credits. The family still witnesses a $166.05 decrease in total resources as a result of increased child care costs.

Additional Features of the FRWP Model

The **Family Resource Wage Progression model** includes several other features that provide information about costs encountered by working families. These features include:

- *Basic Health Plan* copayment for eligible families.
- Typical *rental costs* according to place of residence (from Housing and Urban Development's 1996 Fair Market Rent Calculations).
- *Cost of child care* for families not eligible for subsidies. The child care costs are calculated by children's ages, a family's place of residence, duration of child care (part-time, full-time), and type of child care purchased (family home care, child care center). The costs reported are taken from the Department of Social and Health Service's 1996 survey of child care providers.

For more information about the economic impact of child care copayments, contact Jim Mayfield or Mason Burley at (360) 866-6000, extension 6380.

Washington State Institute for Public Policy

The Washington Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the legislature, the governor, and public universities—governs the Institute and guides the development of all activities. The Institute's mission is to carry out practical research, at legislative direction, on issues of importance to Washington State.