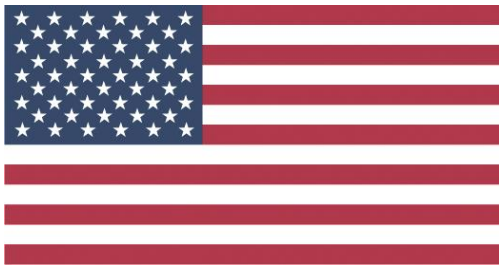
THE OECD TAX-BENEFIT MODEL FOR THE UNITED STATES

Description of policy rules for 2019



OECD

BETTER POLICIES FOR BETTER LIVES

THE OECD TAX-BENEFIT MODEL FOR THE UNITED STATES
Description of policy rules for 2019

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BETTER POLICIES FOR BETTER LIVES

Social Policy Division and Jobs and Income Division

www.oecd.org/social

Directorate for Employment, Labour and Social Affairs

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Preface

The OECD Tax-Benefit model (**TaxBEN**) incorporates detailed policy rules for tax liabilities and benefit entitlements as they apply to individual families across OECD member countries. Its main use is to calculate the amount of taxes that people are liable to pay, and the government transfers they are likely to receive, in different family and labour-market situations. The model includes legal policy rules that are relevant for people of **working age** (from 18 years old until the statutory retirement age) and their dependent children. Income tax liabilities and benefit entitlements are calculated for a broad set of *stylised* families ("vignettes", e.g. a married couple of 40 years old adults with two children aged 4 and 6 respectively). Model users are free to change many of these characteristics, including the age and number of children, activity status of adult members, hours of work, current and past earnings levels, unemployment duration, social contribution records, and housing-related costs. The model has been updated annually since the early 2000s for most OECD countries.

TaxBEN's policy scope includes the main taxes on employment income (earnings), social contributions paid by individuals and by employers, as well as the main cash and near-cash benefit programmes, including unemployment benefits, family benefits, guaranteed minimum-income benefits, cash housing benefits, and employment-conditional benefits. Disability benefits and support for non-parental childcare are included for a sub-set of countries and years. The most important policy areas that are outside the scope of the model include taxes on wealth (e.g. taxes on immovable and unmovable properties, including local taxes), indirect taxes (e.g. VAT), early-retirement benefits, sickness benefits and in-kind transfers (e.g. free school meals, subsidised transport and free health care).

This report describes the taxes and benefits that are included in the model and focuses on the rules that are relevant for family, individual and labour-market circumstances that are within its scope. The **Annex** provides information on other cash benefits and taxes on employment incomes that can be relevant for some members of the working-age population, but which are not included in the TaxBEN model.

Reading notes and further details on the scope and content of this report

- The **reference date** for policy rules described in this report is **January 1, 2019**.
- **Guidelines for completing and updating this report** are provided here.
- Further information on the model, model results, and references to reports and analytical uses is available on the project website. A methodology document provides a full description of the assumptions underlying the model as well as the model choices that users can make. The symbol ⓘ in the text provides a link to a glossary of technical terms.
- Section titles provide the names of taxes and benefits as they are known in the country: first, direct translation into English, then (in brackets) the name in the national language.
- In order to facilitate transparency between the policy descriptions and the associated code in the model, the variable names are indicated in the text in square brackets using the following format: **[variable name]**, for instance: **[AW]** for the average wage.

The OECD tax-benefit model for the United States: Policy rules in 2019

1. Reference wages and other reference amounts

Average wage **[AW]**: The OECD tax-benefit model (TaxBEN) uses Secretariat estimates of the average full-time wage (available here).[1] If Secretariat estimates are not available yet, the model uses wage projections obtained by applying forecasted wage growth[2] to the latest available wage estimate.

The federal minimum wage **[MIN]** in 2019 is USD 7.25 per hour. The annual minimum wage in the OECD tax-benefit model is computed by multiplying the minimum hourly wage (as of January 1, 2019) by 40*52, i.e. USD 7.25*40*52 = USD 15,080.[3]

2. Unemployment benefits

2.1. Unemployment insurance

Variable names:[4] **[UB; UI_p; UI_s]**

This benefit is contributory, not means-tested and taxable.

2.1.1. Eligibility conditions

Each State administers its own programme. Eligibility conditions differ from State to State, as do maximum benefit levels. This section describes the system in Michigan, which is modelled in TaxBEN.

Earnings requirement: The earnings requirement details how much an individual must have earned and the period of time during which the individual must have had earnings to qualify for benefits. To qualify for the minimum weekly benefit amount (WBA), High Quarter Wages (HQW) must equal USD 3,589 and Base Period Wages (BPW) must equal USD 5,384 with BPW being 1½ times the HQW, with wages in 2 quarters. Alternatively,

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[1] Average Wages are estimated by the Centre for Tax Policy and Administration at the OECD. For more information on methodology see the latest Taxing Wages publication.

[2] Wage growth projections are based on OECD Economic Outlook and EU economic forecasts (for non-OECD countries).

[3] Note that statutory minimum wage levels differ across States and are above the federal level in most States, see here: https://www.dol.gov/whd/minwage/america.htm. TaxBEN assumes the federal minimum wage level.

[4] Each (sub-)section in this chapter lists the variable names for the different benefits and taxes as they are used in TaxBEN. The first variable usually denotes the aggregate component while variable names ending with "_p" refer to the first adult (so-called "*p*rincipal" adult) whereas those ending with "_s" are related to the spouse (alternative specifications to denote adults are possible, e.g. "_1" and "_2"). For instance, in this section, **UB** denote unemployment benefits, which are the sum of individual-specific unemployment insurance benefits of the principal adult, **UI_p**, and the spouse, **UI_s** (as relevant).

BPW must equal 20 times the state average weekly wage (SAWW) with wages in 2 quarters (USD 20,458.40 in BPW).[5]

Minimum employment record: The "Minimum Employment Record" (or "Coverage Threshold") in a state is the threshold amount of wages that determines whether an employer is subject to the payment of unemployment taxes (and consequently their employees are then covered by the unemployment program in the state). Whether an employing unit is an employer depends on the number of days or weeks a worker is employed or the amount of the employing unit's quarterly or yearly payroll. Except for agricultural labor and domestic service, if an employing unit or employer paid wages of $1,500 or more in any calendar quarter in the current or immediately preceding calendar year, or if the employing unit had one or more workers on at least one day in each of 20 weeks during the current or immediately preceding calendar year. In the in TaxBEN model it is assumed that employers meet these thresholds (see Section 7.2 for further details on unemployment insurance taxes). However, the employer does not have to pay a minimum amount of taxes with respect to an individual for this individual to qualify for benefits.[6]

Behavioural requirements:[7]

Generally, all States require that UI recipients be able to work and available for full-time work. All states also require that UI recipients be actively seeking work. TaxBEN assumes "involuntary" job loss and that the behavioural requirements are satisfied.

2.1.2. Benefit amount

The weekly benefit amount (WBA) in Michigan is calculated as the 4.1 percent of HQW during the Base Period plus USD 6 for each dependent up to 5 dependents, maximum WBA is the same with or without dependents. The benefit is bound by a minimum WBA of USD 147 (USD 147*14 weeks (see Section 2.1.3) = USD 2,058 per benefit year), and a maximum of USD 362 per week (USD 362*20 weeks (see Section 2.1.3) = USD 7,240 per benefit year).

2.1.3. Benefit duration

Workers get regular state UI benefits for 14 to 20 weeks, based upon amount of wages earned. No waiting period is required. If they are still unemployed after those benefits are exhausted, they will draw Extended Benefits if the State has triggered on Extended Benefits and is in an Extended Benefits period.[8]

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[5] The base period comprises 4 quarters (according to the "standard" or "alternate" base period). The HQW is the quarter with the highest wages out of these 4 quarters. *Note:* As the TaxBEN model does not take into account quarterly wages, only the BPW requirement is implemented.

[6] Consequently, the "minimum employment record" for individual workers as implemented in TaxBEN is only related to the requirement of having earnings in at least 2 quarters, as defined in the 'earnings requirement' above.

[7] Details on behavioural requirements and sanction provisions for unemployment benefits are reported in regularly updated companion reports, see Immervoll and Knotz (2018), Langenbucher (2015) and Venn (2011).

[8] States that qualify for the Extended Benefit (EB) are those with a 13-week IUR (insured unemployment rate) of 5 percent or higher, and 120 percent above the IUR rate for the corresponding

In Michigan, the duration of benefits is variable dependent on earnings. In general, individuals with more earnings throughout a specified 12-month period would be eligible for more weeks of benefits than individuals with fewer earnings during a specified 12-month period. For simplicity, the TaxBEN model applies the maximum duration of benefits in Michigan on January 1, 2019, which was 20 weeks.

2.1.4. Means test

See Section 2.1.7.

2.1.5. Tax treatment

Unemployment insurance benefit income is subject to both Federal and State government income tax, but is exempted from social security taxes.

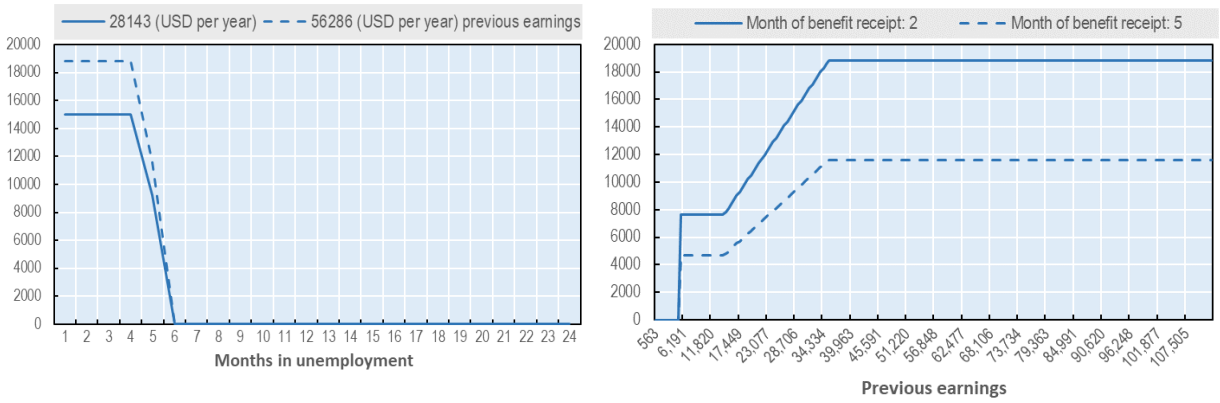
2.1.6. Interaction with other components of the tax-benefit system

None.

2.1.7. Combining benefit receipt and employment/starting a new job

The benefit is compatible with work but earnings reduce the amount of unemployment benefits. The weekly benefit amount (WBA) is reduced by 50 cents for every dollar earned during that week. Individuals earning more than 1.5 times their WBA are ineligible to receive benefits for that week.

Figure 2.1. Unemployment insurance by time of receipt and previous earnings



Note: Results for single aged 40 without children and with a 'long' and continuous previous employment.

Source: Results based on the OECD tax-benefit model.

2.2. Unemployment assistance

None.

13-week period in the two previous years. Michigan qualified for EB between January 25, 2009 and February 18, 2012. On January 1, 2019, EB was not payable. The maximum number of weeks of EB is 13 or 50 percent of the total amount of regular state UI benefits, whichever is less. The amount is the same as under the regular State UI benefit.

3. Social assistance and housing benefits

3.1. Supplemental Nutrition Assistance Program (SNAP)

Variable names: **[SA]**

This is a non-contributory benefit, means-tested and not taxable.

SNAP is in place since 1977 and was known as the *Food Stamp Program* before 2008. It is designed primarily to increase the food purchasing power of eligible low-income households to a point where they can buy a nutritionally adequate low-cost diet. This benefit scheme is classified as 'social assistance' in TaxBEN. The Temporary Assistance for Needy Families (TANF) is covered in Section 4. Other social assistance programmes such as State General Assistance (GA) and Supplemental Security Income (SSI) are beyond the scope of TaxBEN but are briefly described in the Annex.

Between 2002 and 2012 the participation ("take-up") rate for Food Stamps/SNAP rose sharply, from 54 percent to 83 percent. Between 2013 and 2016, participation rates have remained fairly steady, fluctuating between 83 and 85 percent.[9]

3.1.1. Eligibility conditions

Households who meet the income and asset tests described below and who meet other requirements (such as work registration and immigration rules, for example) are eligible for SNAP benefits. To be entitled to the benefit, households need to pass two income tests and an asset test except for households where all members receive TANF, GA or SSI, who qualify automatically[10]:

- Basic (gross) monthly income must not exceed 130 percent of the poverty guidelines;
- Counted (net) monthly income must not exceed 100 percent of the poverty guideline;
- Countable assets cannot exceed USD 3500 for households with an elderly or disabled member, USD 2250 for other households (not considered in TaxBEN).

The net income guideline for a family of four in 2019 was USD 2050 per month (see table below for further family types).

Household with elderly (aged 60 and over) members do not need to meet the basic (gross) income guideline and are waived from other programme requirements.

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[9] See https://www.fns.usda.gov/snap/SNAP-participation-rates-FY-2010-2016, Table H.1, page 85.

[10] This automatic qualification is referred to as "*categorical eligibility*". Households in which all members are receiving benefits through TANF, SSI, or GA are categorically eligible for SNAP. In addition, States are required to confer categorical eligibility on households receiving benefits or services that are at least 50 percent funded by TANF and have the option to confer categorical eligibility on households receiving benefits or services that are less than 50 percent funded by TANF. Many States have chosen to provide a TANF-funded noncash benefit to confer categorical eligibility on a broad number of households; this is known as broad-based categorical eligibility. As of August In 2018, 42 States, including Michigan, had adopted broad-based categorical eligibility policies. Michigan applied broad-based categorical eligibility to any household with gross income less than or equal to 200 percent of poverty and with total assets less than or equal to 200 percent of poverty and with total assets less than or equal to USD 5,000 after excluding the value of one vehicle and the combined value of any remaining vehicles up to USD 15,000.

3.1.2. Benefit amount

Basic (gross) monthly income is the cash household income. Earned income before federal, state and local taxes, and social security contributions is counted, as is TANF, Social Security income, Supplemental Security Income benefits, child support payments, retirement pensions, and virtually all other unearned income. The Earned Income Tax Credit (EITC) (see Section 6) is not included in basic monthly income. Also excepted is unanticipated, irregular or infrequent income up to USD 30/quarter and income from tax refunds.

In Fiscal Year (FY) 2019, net monthly income was calculated by deducting the following from gross monthly income:

- a standard deduction for all SNAP households: USD 164 for households of 3 persons or less; USD 174 for 4-person households; USD 204 for 5-person households and USD 234 for 6 or more persons[11];
- 20 per cent of gross earnings in recognition of taxes and work related expenses;
- Court ordered child support payments made to non-household members (not modelled in TaxBEN);
- Out-of-pocket medical expenses for elderly or disabled household members in excess of USD 35 as well as out-of-pocket dependent-care expenses necessary for work, school, or while seeking employment (not modelled in TaxBEN);
- Excess shelter expense (rent or mortgage and utility expenses) if shelter expenses exceed 50 per cent of gross income less the above deductions, with a maximum of USD 552 per month for households with no elderly or disabled members. Households with elderly or disabled members do not face a shelter expense cap.

As low-income families are expected to spend 30 per cent of their net income on food, the maximum benefit amounts are decreased by 30 per cent of counted (net) income.

A minimum monthly payment of USD 15 per month is applicable to one or two person households entitled to SNAP. Maximum Monthly SNAP allotments are linked to family size (see table).

Maximum monthly SNAP allotments for FY 2018-2019 (in USD per month)

Household size (persons)	Maximum allotments	Gross income eligibility limit	Net income eligibility limit (Poverty Guideline)
1	192	1316	1012
2	353	1784	1372
3	505	2252	1732
4	642	2720	2092
5	762	3188	2452
6	914	3656	2812
7	1011	4124	3172
8	1155	4592	3532
Each additional person	+144	+468	+360

[11] Since FY 2003, the standard deduction has been equal to 8.31 percent of the poverty guideline which varies by household size (see in the table below).

3.1.3. Benefit duration

No time limit, as long as eligibility conditions are met for most participants. SNAP benefits are issued monthly. Households are required to periodically submit information in order to be recertified for SNAP. Healthy, childless adults aged 18-49 are subject to strict work requirements and may receive benefits for only three months in any 36-month period unless they work, meet work requirements, are exempted under other provisions of law, or live in an area waived from work requirements due to insufficient jobs. In 2018, Michigan had a waiver in 69 counties due to employment conditions, but starting October 1, 2018, Michigan began applying the time limit for these individuals at recertification.

3.1.4. Means test

See Sections 3.1.1, 3.1.2 and 3.1.7.

3.1.5. Tax treatment

SNAP benefits are not taxable.

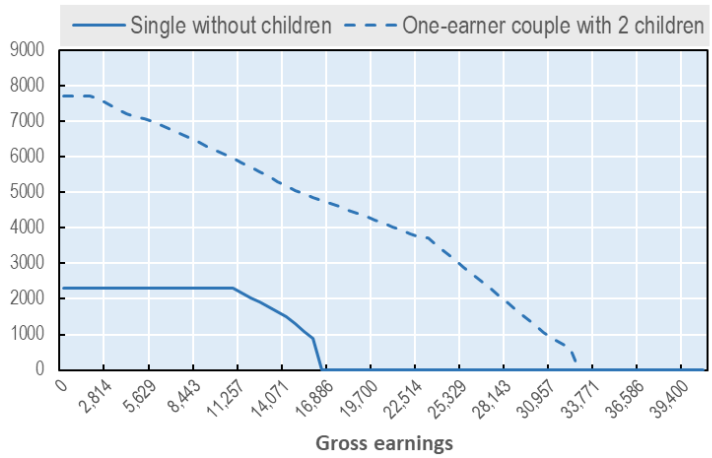
3.1.6. Interaction with other components of the tax-benefit system

SNAP benefits are not included in the means test of any other benefit.

3.1.7. Combining benefit receipt and employment/starting a new job

20 per cent of gross earnings are disregarded in SNAP income test in recognition of taxes and work related expense.

Figure 3.1. SNAP by family type



Note: Results for a single without children aged 40 and for a one-earner couple with two children aged 4 and 6 (adults aged 40) where the spouse is without work but available to the labour market (i.e. assumed to meet any behavioural eligibility requirements as applicable). Note that gross earnings are supplemented with TANF benefits with performing the SNAP means test.

Source: Calculations based on the OECD tax-benefit model.

3.2. Housing benefits

The three major federal rental assistance programs are: 1) public housing; 2) project-based Section 8; 3) tenant-based Section 8 vouchers. Individual states are permitted to use funds

from a limited number of other federal programmes to provide rental housing assistance. For example, some states choose to allocate a portion of funding from the Temporary Assistance to Needy Families (TANF) programme to operate rental subsidy programs, though these programs generally offer assistance that is short in duration and for limited numbers of specific target populations. Given long waiting periods for some of these benefits and the level of discretion in their admission, they are not covered in TaxBEN. Some further details can be found in the Annex.

4. Family benefits

4.1. Temporary Assistance for Needy Families (TANF)

Variable names: **[FB]**

TANF provides families with children with financial assistance and related support services. In Michigan this benefit is called Family Independence Program (FIP).

This is a non-contributory benefit, means-tested and not taxable.

Note however that actual participation ("take-up") rates for TANF have been declining continuously since the program's creation. A historically low 26.3 percent of poor eligible children and families actually received TANF benefits in 2015 (most recent data available).[12]

4.1.1. Eligibility conditions

Although States may impose various conditions on the receipt of assistance, a family must, based on Federal law, include at least one minor child (in Michigan, 18 years or younger, 19 years if student) or the mother must be pregnant. Also, the applicant must be a US national, citizen, or permanent resident.

4.1.2. Benefit amount

There are no Federal TANF rules or requirements regarding the State's calculation of benefits. Each State may establish its own benefit levels and determine its own benefit calculation. The benefit is calculated based on the number of family members using the following monthly amounts in January 2019 (Michigan; TANF benefit levels have not changed since 2009 in Michigan):

- 1 person: USD 306 (e.g. pregnant lone mother expecting first child)
- 2 people: USD 403
- 3 people: USD 492
- 4 people: USD 597
- 5 people: USD 694
- 6 people: USD 828
- 7 people: USD 905

[12] See https://aspe.hhs.gov/system/files/pdf/259196/WELFAREINDICATORS17THREPORT.pdf, p. 21.

4.1.3. Benefit duration

Eligibility and benefits are determined monthly. Federal funding for a family with an adult receiving federally funded TANF assistance is limited to 60 months. The 60 months do not have to be consecutive, but it is a lifetime limit. States may use their own funds to provide benefits after the expiration of the 60 months or exclude families from the accumulation of months toward the federal 60-month limit. States may also create their own time limits (in addition to the federal time limit). Many States have either shortened the time limit (for example, several States have a 24 month time limit) or limited the number of months that a family may receive benefits within a certain period of time. For example, the family may receive benefits for 24 months within a 60 month period, but there is a lifetime limit of 60 months of federally-funded assistance with up to 20 percent of the caseload exempted from the Federal time limit due to hardship.

Michigan did not enforce a time limit from 1996 to 2007 but has enacted a 48-month time limit as of October 2007, regardless of the funding source (federal or state funds). The time limit includes exemptions for age (65 or older), a verified disability or long-term incapacity, and when a spouse or parent provides care for a disabled family member living in the home.

4.1.4. Means test

TANF benefits are means-tested against income. Except where another Federal statute specifies that certain income or other benefits should be disregarded, each State may decide which income to consider in calculating the benefit amount. See Section 4.1.7 for the treatment of earned income.

4.1.5. Tax treatment

Family benefits are not taxable.

4.1.6. Interaction with other components of the tax-benefit system

TANF benefits are included in the means-test for SNAP, see Section 3.1.

4.1.7. Combining benefit receipt and employment/starting a new job

Although this benefit is compatible with earnings there is considerable variation among the States in their treatment of earned income. In calculating the monthly benefit, Michigan disregards the first USD 200 of income earned plus 20 per cent of any additional earnings to determine initial eligibility; once eligibility has been established, it disregards the first USD 200 of income earned plus 50 per cent of any additional earnings.

Across all States, the fixed income disregard ranges from zero to USD 250 and the variable disregard from zero to 100 per cent up to a limit, which can be based on income and/or time since starting work. In general, States with high fixed disregards tend to have smaller variable disregards and vice versa. Some States (not Michigan) impose a "family cap" on benefits. The initial benefit is based on the size of the family at the time of application, and benefits do not increase for additional children conceived after eligibility is determined.

Figure 4.1. TANF by family type

Note: Results for a single with one child and two children (2-person and 3-person family) and a one-earner couple with two and four children (4-person and 6-person family). Adults are aged 40, children are below age 18. The spouse in the one-earner couple is without work but available to the labour market (i.e. assumed to meet any behavioural eligibility requirements as applicable). Note that while the figure shows how TANF benefit varies with gross income, the benefit is calculated using net income. Some variations the TANF benefit are the result of changes in net income at

Source: Calculations based on the OECD tax-benefit model.

5. Net costs of Early Childhood Education and Care

The **reference date** for the policy rules described in this section is **January 1, 2019.**

The compulsory school age is age 5. Of children served in centers, according to a 2012 survey (most recent), 83 percent of children attend private centers, and 16 percent attend public centers.[13]

Gross child care fees are not regulated by any laws. However, for families receiving CCDF child care subsidies, copayment amounts are determined by states.

5.1. Gross childcare fees

Variable names: `[UScc_cost]`

Child care services are primarily provided through a market-based system at rates determined by market forces in the priced child care market. Hence, gross fees charged to parents are set autonomously by the providers and vary substantially based on region, state, age of child, and type of child care setting. Therefore, average gross fees are implemented in `TaxBEN`.[14] In 2017 (most recent data available), the average annual cost of full-time,

[13] https://www.acf.hhs.gov/sites/default/files/opre/characteristics_of_cb_ece_programs_111014.pdf

[14] Note, however, that these gross fees are applied subject to a ceiling for the calculation of childcare subsidies (cp. Section 5.3). If providers want to charge more than the ceiling, parents may pay that difference directly to the provider, outside of the subsidy program.

centre-based child care in Michigan was USD 10,603 for infants and USD 8,678 for a 4-year old (in TaxBEN, these rates are uprated to 2019 using CPI).[15]

No estimates are available for the cost of meals, as this is not a standardized service. Accordingly, meal costs are not considered in TaxBEN.

5.1.1. Discounts for part-time usage

Michigan pays its child care subsidies based on an hourly rate, which would be the same for full-day and part-time care. See Section 5.3.2.

5.2. Fee discounts and free provision I (Head Start Program)

The federal Head Start Program[16] provides free centre-based care to children aged 3 and 4 from low-income families (a very limited number of slots are also available to infants aged 0 through 2 via the Early Head Start Program). Family incomes (before taxes) must be below the federal Poverty Guidelines, which in FY 2019 for a family of 3 was USD 21,330.[17] Children in foster care, homeless children, and children from families receiving public assistance (TANF or SSI) are eligible regardless of income. Additionally, programs are allowed to enroll a limited number of children (up to 35 percent of total enrollment) with incomes between the federal poverty line and 135 percent of the federal poverty line. Families do not pay a fee. Some programs are full-day and some are part-day. TaxBEN models the full-day Head Start Program for children aged 3 and 4 for families with income below the federal poverty line.

Many states also have preschool programs that serve 3 and 4-year olds, though these programs vary dramatically across states in terms of numbers served, eligibility requirements, and parent co-payment and are therefore not considered in TaxBEN. Across states in 2017 (most recent data available), an (unweighted) average of 33 percent of 4-year olds are served by state preschool, and an (unweighted) average of 5 percent of 3-year olds are served by state preschool. Average state spending per child is USD 5,008.[18] In Michigan in 2017, 33 percent of 4-year-olds were served and no 3-year-olds were served. The income eligibility threshold was 250 percent of the federal poverty line (USD 51,950 for a family of three). The cost per child, paid by the government, was USD 6,356.[19]

5.3. Fee discounts and free provision II (Child Care and Development Fund, CCDF)

Variable names: **[cc_subsidy]**

The Child Care and Development Fund (CCDF) is a multibillion-dollar Federal and State partnership programme. As a block grant, CCDF provides funding to States, territories, and

[15] http://usa.childcareaware.org/wp-content/uploads/2018/10/appendices18.pdf?hsCtaTracking=189a8ba7-22d8-476b-aa2e-120483a43702%7Ce7f035de-f88f-4732-8204-a30353610929

[16] https://www.benefits.gov/benefits/benefit-details/1919

[17] https://aspe.hhs.gov/poverty-guidelines

[18] http://nieer.org/wp-content/uploads/2018/04/YB2017_Executive-Summary.pdf

[19] http://nieer.org/wp-content/uploads/2018/04/Michigan_YB2017.pdf

tribes to provide child care subsidies through vouchers or certificates to low-income families, and grants and contracts with providers in some States. CCDF provides access to child care services for low-income families so parents can work, attend school, or enrol in training. Additionally, CCDF promotes the healthy development of children by improving the quality of early learning and afterschool experiences. In FY 2019, Congress appropriated USD 8.2 billion in discretionary and mandatory matching funds to 56 States and Territories and 260 Tribal grantees; encompassing over 500 federally recognized tribes. In FY 2017 (latest preliminary data available), CCDF served approximately 1.316 million children under the age of 13 from 796,000 low-income working families each month.[20] Each State has discretion in determining how its CCDF child care programmes will operate. CCDF subsidies may be used to pay for care offered in non-center, family settings. TaxBEN uses CCDF as implemented in Michigan.

5.3.1. Eligibility

Parents must be working, or seeking employment, or attending job training or education. Typically a child must be under age 13, however, children with special needs may be eligible up to 19 years of age.[21] According to the most recent income-thresholds data the eligibility thresholds based on income for a family of three ranged from USD 1,423 per month in Puerto Rico to USD 5,156 per month in Alaska. As of 2017, Michigan's eligibility threshold for a family of three is USD 2,213 per month (the basic level, for a family of one, is USD 1,307 per month).[22]

The Federal law requires States to provide a minimum of 12 months of eligibility to children of families receiving CCDF assistance, regardless of increases in parents' earnings

[20] Further characteristics of families served by the Child Care and Development Fund (CCDF) based on preliminary FY 2017 data can be found here: https://www.acf.hhs.gov/occ/resource/preliminary-fy2017. Note however that this is only a small fraction of children eligible for child care subsidies. More details on eligibility versus actual participation ("take-up") rates can be found here (for FY 2015): https://aspe.hhs.gov/pdf-report/factsheet-estimates-child-care-eligibility-and-receipt-fiscal-year-2015

[21] As TaxBEN focusses on pre-school children, the age limit applied in the model is below 6 years.

[22] https://dhhs.michigan.gov/OLMWEB/EX/RF/Public/RFT/270.pdf; https://www.acf.hhs.gov/opre/resource/the-ccdf-policies-database-book-of-tables-key-cross-state-variations-in-ccdf-policies-as-of-october-1-2017, Table C-3, p. 296.

These thresholds reflect the income level needed to initially qualify for child care subsidies; some States have a second, higher threshold for families who already receive subsidies to allow for some income growth over time without impacting continued eligibility.

as long as their income remains at or below the eligibility threshold of 85 percent of state medium income (SMI).[23] [24]

5.3.2. Benefit amount

CCDF childcare benefits amounts are set by the State and typically vary by type of provider and other factors. Families receiving CCDF subsidies are required to contribute to the price of care on a sliding scale (based at a minimum on family size and income), although states may waive co-payments for families at or below poverty, for children in protective services, or families meeting other criteria established by the State.

Michigan's child care subsidies are based on a sliding scale related to gross monthly income and family size. The "entry" income ceiling for the initial subsidy eligibility per month ranges from USD 1,759 for a family of 2 to USD 2,665 for a family of 4. Co-payments range from USD 0 to USD 90 per child—bi-weekly pay period depending on income and subject to a maximum amount.[25] Provider payment rate ceilings vary by age of child, type of care, and by locality. For centre-based care, the base rate ceiling is USD 4.00 per hour for infants/toddlers (under age 2 ½) and USD 2.75 per hour for preschool/school age (over age 2 ½).[26] Providers at higher quality ratings receive higher payments. Michigan waives co-payment fees for some families at or below the poverty level, specifically for families receiving TANF cash assistance and for families with children receiving protective services (not considered in TaxBEN). Michigan pays its child care subsidies based on an hourly rate.

5.3.3. Tax treatment

No States are known to treat CCDF or TANF assistance as taxable income source.

5.3.4. Interaction with other components of the tax-benefit system

When determining eligibility for CCDF, Supplemental Security Income (SSI) is fully counted in a little over half the States. TANF income is fully counted in a little under half of the States; it is either not counted or only counted under certain circumstances in the

[23] In addition, the Federal law requires States to prioritize services for specific populations including children of very low income families, children with special needs, and children experiencing homelessness. States have flexibility as to how they offer priority to these populations, including by prioritizing enrolment, waiving co-payments, paying higher rates for access to higher-quality care, or using grants or contracts to reserve slots for priority populations. Many states offer priority for a child care subsidy eligibility to families receiving TANF cash assistance and to families transitioning off of TANF.

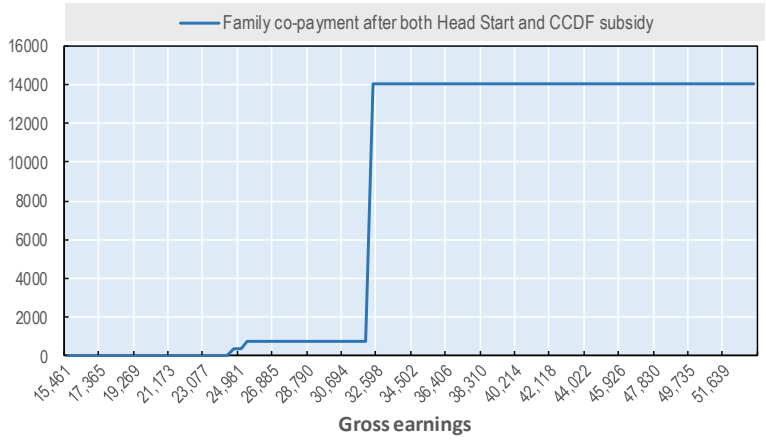
[24] https://www.acf.hhs.gov/ocs/resource/state-median-income-estimates-for-optional-use-in-fy-2018-and-mandatory-use-in-fy-2019

[25] https://dhhs.michigan.gov/OLMWEB/EX/RF/Public/RFT/270.pdf, p.2. Families must have incomes below the "entry" ceiling to begin receiving subsidies. Then, their income can keep increasing past the "entry" amount, and they won't get kicked off until they hit the "exit" threshold. As TaxBEN assumes constant monthly earnings throughout a year and in order not to overestimate eligibility, only "entry" ceilings are considered in the model. Therefore, co-payments range from USD 0 to USD 15 only per child—bi-weekly pay period with a maximum amount per family of USD 45.

[26] https://dhhs.michigan.gov/OLMWEB/EX/RF/Public/RFT/270.pdf, p.3

remainder. Most States do not count the value of energy assistance, housing assistance, the SNAP, or State EITC refunds.[27] Michigan does not take into account any of these benefits[28] to determine eligibility but only gross income (and unemployment benefits) which is the case modelled in TaxBEN.

Figure 5.1. Childcare fees after subsidies



Note: Results for a two-earner couple with two children aged 2 and 3, adults are aged 40. Gross childcare fees are shown after taking into account any free provision of childcare through the Head Start Program (as applicable), as well as the reduction through the CCDF subsidy (as applicable).

Source: Calculations based on the OECD tax-benefit model.

5.4. Childcare benefit for formal centre-based care

Variable names: **[cc_benefit]**

None.

5.5. Childcare allowance for children not using childcare centres

None.

5.6. Tax concessions for childcare expenditures (Child and Dependent Care Credit, CDCC)

Variable names: **[ActualCDCC_1; ActualCDCC_2]**

The Child and Dependent Care Credit (CDCC) provides tax assistance to families who pay for child care in order to work in paid employment or look for work. The amount of credit is based on income, the number of dependents, and the amount of child care expenses. For example, families with adjusted gross income of less than or equal to USD 15 000 are eligible to receive a child care credit of 35 percent of qualifying child care expenses; however, note that because the credit is non-refundable, families that owe no (federal) tax

[27] CCDF Policies Database Book of Tables: Key Cross-State Variations in CCDF Policies as of October 1, 2017, The Urban Institute: https://www.acf.hhs.gov/opre/resource/the-ccdf-policies-database-book-of-tables-key-cross-state-variations-in-ccdf-policies-as-of-october-1-2017

[28] With the exception of SSI (not modelled in TaxBEN): Although the SSI benefits received by the child under consideration for CCDF benefits is not considered, SSI received by another household member (e.g., a sibling), is counted.

will not receive the credit for which they are technically eligible. Families with higher income receive a lower credit, with the rate falling to 20 percent for individuals and couples with adjusted gross incomes above USD 43 000. In 2019, qualifying child care expenses were capped at USD 3 000 for one child and USD 6 000 for two or more children. Thus the maximum value of the credit was USD 1 050 for an individual or couple with one child and adjusted gross income below USD 15 000 and USD 2100 for a low-income family with two or more children. The credit is not refundable and so families that do not pay taxes (e.g., all families with married partners and incomes below USD 15 000) do not benefit from the credit at all.[29]

Michigan at this time does not have a state CDCC.

6. In-work benefits

6.1. Earned Income Tax Credit (EITC)

Variable names: **[IW; EIC_1; EIC_2; local_EIC_1; local_EIC_2]**

The EITC is a refundable tax credit. Eligible for EITC are working families with children under 19 (or under 24 if full-time student, or any age if permanently or totally disabled) and childless working persons aged between 25 and 65 that meet certain income thresholds.

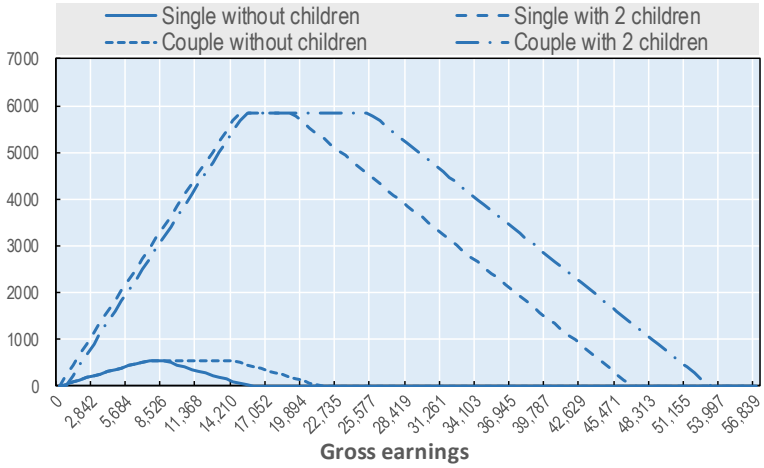
Workers with children: Low income workers with dependents are allowed a refundable (non-wastable) earned income credit. For taxpayers with one child, the credit is 34% of up to USD 10,378 of earned income in 2019. The credit phases down when income exceeds USD 19,023 (24,823 for married taxpayers) at a rate of 15.98% (21.06%) for taxpayers with one child and phases out when it reaches USD 41,094 (46,884 for married taxpayers). The earned income threshold and the phase-out threshold are indexed for inflation. For taxpayers with two children, the credit is 40% of up to USD 14,568 of earned income in 2019. The credit phases down when income exceeds USD 19,023 (24,823 for married taxpayers) and phases out when it reaches USD 46,703 (52,493 for married taxpayers). For taxpayers with three or more children the credit is 45% of up to USD 14,568 of earned income. The credit phases down when income exceeds USD 19,023 (24,823 for married taxpayers) and phases out when it reaches USD 50,162 (55,952 for married taxpayers).

Workers without children: low income workers without children are also eligible for the EITC. In 2019 low income workers without children are permitted a non-wastable earned income credit of 7.65% of up to USD 6,912 of earned income. The credit phases down when income exceeds USD 8,655 (14,445 for married taxpayers) at a rate of 7.65% and phases out when income reaches USD 15,570 (21,370 for married taxpayers). This credit is available for taxpayers without children at least 25 years old and under 65 years old.

Michigan additionally applies a local EITC, see Section 8.2.

[29] See the "Individual Income Tax Returns 2017" Publication or the "Child and Dependent Care Expenses Form 2241" for more information.

Figure 6.1. Federal EITC by family type



Note: Results for a single (one-earner couple) without children/with 2 children aged 4 and 6; adults are aged 40. The spouse in the one-earner couple is without work but available to the labour market (i.e. assumed to meet any behavioural eligibility requirements as applicable).

Source: Calculations based on the OECD tax-benefit model.

7. Social security contributions and payroll taxes

7.1. Employee's social security contributions

Variable names: **[SC; SOCSEC_p; SOCSEC_s]**

In 2019, the rate for employee contributions is 7.65% (6.2% for old age, survivors, and disability insurance, and 1.45% for Medicare (hospital insurance)). The 6.2% rate applies to earnings up to USD 132,900. Beginning in 1994, there is no limit on the amount of earnings subject to the 1.45% rate.

There is an additional 0.9% tax on employee wages and salaries that exceed USD 200 000 (USD 250 000 for joint returns) as the additional hospital insurance tax on high-income taxpayers. The additional tax on wages and salaries is subject to withholding (but without regard to the earnings of the spouse) when wages from a particular job exceed USD 200 000 per year. These thresholds are not indexed for inflation.

7.2. Employer's social security contributions

Variable names: **[SSCR; SSCR_p; SSCR_s]**

Pensions: The rate for employers' contributions is 6.2% on earnings up to USD 132,900 and 1.45% of all earnings (without limit).

Unemployment: Employers are required by the federal government to pay unemployment tax of 6% on earnings up to USD 7 000. Taxes are also paid to various state-sponsored unemployment plans which may generally be credited against the required federal percentage. In 2019 the estimated average unemployment insurance tax rate in Michigan was 3.20% of the first USD 9 000 of wages. The model considers that the Federal government allows employers to take a credit for state unemployment taxes of up to 5.4%, resulting in a net Federal tax of 0.6% (6% minus 5.4%) on earnings up to USD 7 000.

7.3. Payroll taxes

See Section 7.1.

8. Taxes

8.1. Personal income tax

Variable names: **[IT; INCTAX_1; INCTAX_2]**

Taxation period is the calendar year.

Families in the United States are generally taxed in one of three ways:

- As married couples filing jointly on the combined income of both spouses;
- As married individuals filing separately and reporting actual income of each spouse;
- As heads of households (only unmarried or separated individuals with dependents).

All others, including dependent children with sufficient income, file as single individuals.

Married couples generally benefit from a more favourable schedule of tax rates for joint returns of spouses (see Section 8.1.2). Therefore, TaxBEN assumes that couples always file jointly.

8.1.1. Tax allowances and reliefs

Variable names: **[ALLOW_1; ALLOW_2; basic_1; basic_2; CH_CRED_TOT_1; CH_CRED_TOT_2]**

Basic allowances: In 2019 a married couple filing a joint tax return is entitled to a standard deduction of USD 24 400. The standard deduction is USD 18 350 for single heads of households (e.g. lone parents) and USD 12 200 for single individuals. This relief is indexed for inflation.[30] [31]

The additional **personal exemption** was abolished in 2018.

Earned Income Tax Credit (EITC): see Section 6.

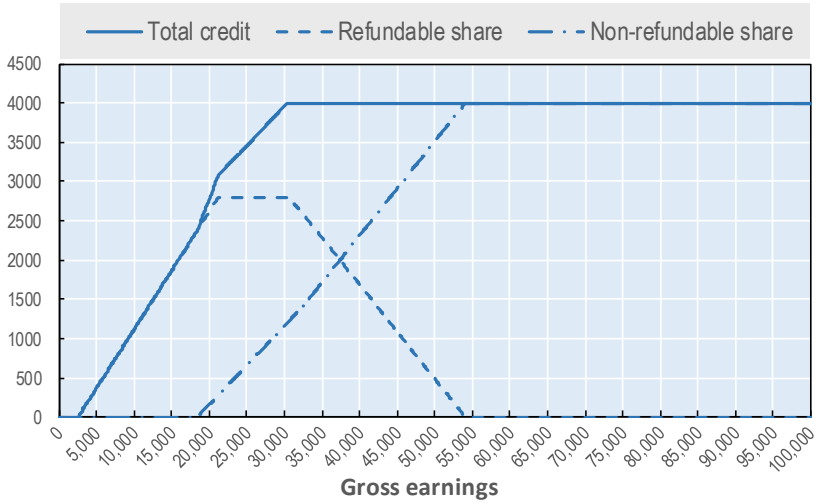
Child tax credit: Taxpayers are permitted a tax credit for each qualifying child under the age of 17 (or 17- and 18-year-old children living at home; or 19- to 24-year-old children attending school full time). In 2019 the maximum credit is USD 2 000 per child. The refundable (non-wastable) child credit is 15% of earned income in excess of USD 2 500, up to a maximum of USD 1 400 per child. The refundable portion of the credit (USD 1 400 in 2019) is indexed for inflation. For qualifying dependents other than qualifying children for whom a child tax credit was claimed, there is a USD 500 non-refundable credit (**other dependent tax credit**; not modelled in TaxBEN). Phase out of child tax credit and other dependent tax credit: The maximum credit is reduced for taxpayers with income in excess

[30] More liberal standard deductions are available for taxpayers who are age 65 or older and taxpayers who are blind. Special rules apply to children who have sufficient income to pay tax and are also claimed as dependents by their parents.

[31] Alternatively to the standard basic allowance, it is possible to claim a basic non-standard relief which is the deduction of certain expenses to the extent that, when itemised, they exceed in aggregate the standard deduction. TaxBEN assumes that workers claim the standard allowance, so further details on the non-standard allowance are not provided.

of certain thresholds. The total of the child tax credit and other dependent tax credit is reduced by USD 50 for each USD 1 000 by which modified aggregate gross income exceeds USD 400 000 for married taxpayers filing jointly (USD 200 000 for single and head of household – e.g. lone parent – taxpayers). These threshold amounts are indexed for inflation.

Figure 8.1. Child tax credit



Note: Results for a two-earner couple with 2 children aged 4 and 6; adults are aged 40. The couple is assumed to file jointly. The total credit is the sum of the refundable and the non-refundable share.

Source: Calculations based on the OECD tax-benefit model.

8.1.2. Definition of the tax base

Gross income minus the above tax exemptions.

8.1.3. Income tax schedule

Taxable Income Bracket (USD)*			Marginal Tax Rate (%)
Single Individual, income over:	Joint Return of Married Couple, income over:	Head of Household, income over:	
0	0	0	10
$9,700	$19,400	$13,850	12
$39,475	$78,950	$52,850	22
$84,200	$168,400	$84,200	24
$160,725	$321,450	$160,700	32
$204,100	$408,200	$204,100	35
$510,300	$612,350	$510,300	37

* The taxable income brackets are indexed for inflation.

8.2. Local income taxes

Variable names: **[ST_LOC_TAX_1; ST_LOC_TAX_2]**

The District of Columbia and 41 of the 50 States impose some form of individual income tax. In addition, some local governments impose an individual income tax, although this is

not generally the case. TaxBEN simulates the following local tax instruments as applied in Michigan:

- The state of Michigan permits a personal exemption of USD 4400 for the taxpayer and taxes income at the rate of 4.25 per cent.
- Michigan allows taxpayers who are eligible to claim the federal earned income tax credit (EITC; cp. Section 6) to claim a Michigan EITC. The Michigan EITC is a refundable (non-wastable) credit equal to 6 percent of the federal EITC.
- The city of Detroit permits a personal exemption of USD 600 and taxes income at the rate of 2.4 per cent.

9. Selected output from the OECD tax-benefit model (TaxBEN)

This section shows selected output of the TaxBEN model for the United States in 2019 (see figure below). TaxBEN by default produces the following output: 1) net household incomes (**black line**) and 2) related income components (**coloured stacked areas**) for selected family and individual circumstances (users are free to select many of these circumstances). The model and the related web calculator is accessible from the project website. The figure below shows output for a two-adult family with two children (adults are both 40 years old whereas children are 4 and 6 years old respectively) and four different scenarios:

- By percentage of the average wage (**Panel A**);
- By unemployment duration (in months) for a jobseeker claiming unemployment benefits (**Panel B**);
- By previous gross earnings levels for a jobseeker claiming unemployment benefits (**Panel C**);
- By previous employment record (in months), for a jobseeker claiming unemployment benefits (**Panel D**).

The stacked areas show the following household income components: **GROSS** = gross earnings; **UB** = unemployment benefits; **SA** = social assistance / guaranteed minimum income benefits; **HB** = housing benefits; **FB** = family benefits; **IW** = in-work benefits; **SSC** = social security contributions; **IT**= income tax. Note that these components may be the result of the aggregation of more than one benefit/tax into a composite category. Please refer to the sections above for the benefits/taxes included in each category.

Social assistance and housing benefit supplements are assumed to be available in all the four scenarios provided that the necessary income and eligibility requirements are met. Where receipt of social assistance or other benefits is subject to activity tests (such as active job-search or being available for work), these requirements are assumed to be met.

Panel A assumes that one adult family member (the so-called 'second adult' using the TaxBEN terminology) is out of work and not eligible for unemployment benefits (e.g. because they have expired) whereas the other adult member (the so-called 'first adult') is employed full-time throughout the entire year at different earnings levels ranging between 0 and 200% of the average wage (AW). When earnings of the first adult are precisely 0% of the AW this person is assumed to be out of work without receiving unemployment benefits (again, e.g. because they have expired) but claiming social assistance or guaranteed minimum income benefits, as applicable.

Panels B to D assume that the second adult is out of work and not eligible to unemployment benefits whereas the first adult is also out of work and claiming unemployment benefits. In Panel B and C the first adult is assumed to have a 'long' employment record of 264 consecutive months before the job loss. The x-axis in Panel B measures the time of benefit receipt, starting from the first month. The x-axis in Panel C shows the amount of previous gross earnings (before any social contribution payments). Results in Panels C and D refer to the 2nd month of unemployment benefit receipt. In Panel B and D, previous earnings are assumed to be equal to the average wage.

Figure 9.1. Selected output from the OECD tax-benefit model

Couple with two children; USD per year

Source: Calculations based on the OECD tax-benefit model.

Annex: Other benefits and direct taxes

This section provides a brief description of other cash benefits and taxes on employment incomes in the United States that are relevant for some members of the population below the statutory retirement age, but which are not included in the OECD tax-benefit model.

Supplemental Security Income (SSI)

SSI is a means-tested, federally administered income assistance programme which provides monthly cash payments in accordance with uniform, nation-wide eligibility requirements to needy aged, blind and disabled persons.

General Assistance programme (GA)

GA is a subsidy provided by local governments to needy individuals or families who do not qualify for the other major assistance programmes and to those whose benefits from other assistance programmes are insufficient to meet basic needs. Help may either be in cash or in kind, including such assistance as groceries and rent. Eligibility requirements and benefit amounts vary from State to State, and often within a State. Payments are usually at lower levels and of shorter duration than those provided by federally financed programmes. GA is administered and financed by State and local governments under their own guidelines.

Housing benefits

In the US, there are three primary rental assistance programs provide support for tenants subject to eligibility based on income: 1) public housing; 2) project-based Section 8 programs; 3) tenant-based Section 8 vouchers. Eligible income limits are based on a percentage of the local Area Median Income (AMI): no greater than 80 percent of AMI for both public housing and project-based Section 8 programs, and no greater than 50 percent of AMI for Section 8 vouchers, with adjustments for family size.

In practice, the three rental assistance programs serve tenants with much lower incomes - primarily below 30 percent of AMI. Local housing providers determine eligibility and admit tenants. Public housing authorities (PHAs) administer the public housing and tenant-based Section 8 programs, and private owners of assisted multifamily developments administer the project-based Section 8 program. Admission priorities are usually based on time on the local waiting list, but localities are allowed to establish local preferences (for example, for families transitioning to work from welfare, individuals with disabilities, and senior households).

The Department of Housing and Urban Development (HUD) calculates median incomes for the purpose of determining eligibility for federal rental assistance programs. For fiscal year 2019, HUD estimated the national median income for a family of 4 at $71,900[32] with

[32] Note that at the time of writing, the U.S. Department of Housing and Urban Development had not yet issued new income limits for FY 2019. The FY 2018 income limits remained in effect for its program operations. See "Methodology for Calculating FY 2018 Medians" (Attachment 2), available at: https://www.huduser.gov/portal/datasets/il/il18/Medians-Methodology-FY18r.pdf

80 percent of the median being $57,520 and 30 percent being $21,570. Using the example of the State of Michigan, the median income for a family of four was $67,300 per year, with 80 percent being $53,840 and 30 percent being $20,190.

Tenants are required to pay 30 percent of their income for rent. Tenants in the Section 8 voucher programme are also allowed to pay more than that amount to access higher priced housing. There are often a series of deductions for rental payments for elderly and disabled persons, youth and families with specific expenses (e.g. child care).[33] In the public housing and tenant-based Section 8 programs, local PHAs are authorized to charge a "minimum rent" up to $50 for families with very small incomes with hardship exceptions for some households.

In the public housing and project-based Section 8 programs, the benefit is the value of the housing provided. In the Section 8 voucher program, the subsidy makes up the difference between the tenant's rent contribution and a locally determined Fair Market Rent. Again, using this Chapter's example of the State of Michigan, the Fair Market Rent for the Detroit-Warren-Livonia metro area for a 2 bedroom apartment in 2019 was $967 per month.[34]

There is no statutory limit on duration of assistance. Families may lose assistance due to failure to comply with lease obligations, or through fraud or other criminal activity. Housing assistance is not taxable.

[33] Several types of income deductions reduce the required tenant rent contributions for families with a head of household who is elderly or disabled, medical expenses that exceed 3 percent of income per year, "reasonable" child care expenses, minors, and adults who are full-time students (or attending vocational training, disabled family members). In addition, child support, spousal support and income earned by minors are not counted toward income (with some limits) for purposes of calculating rent.

[34] More information on calculation of Fair Market Rents can be found at https://www.huduser.gov/portal/datasets/fmr.html.