
SFY 2017 Evaluation: Energy and Weatherization Assistance Programs

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TABLE OF CONTENTS

Table of Acronyms	1
Background	2
EAP Program Compliance with Legislative Requirements (NRS 702)	2
EAP Assessment of Program Effectiveness	13
EAP Summary and Conclusions.....	18
EAP Findings.....	19
WAP Overview	20
WAP Program Compliance with Legislative Requirements (NRS 702)	35
WAP Assessment of Program Effectiveness.....	44
WAP Summary	47
DWSS and NHD Compliance with Joint Requirements.....	48
Summary of Findings and Recommendations.....	55
Evaluation Summary	56

TABLES

Table 1. Eligibility Certification for SFY 2017	2
Table 2. FEAC Interest received and distributed for DWSS and NHD in SFY 2017.....	3
Table 3. FEAC Principle Funds received and distributed for DWSS and NHD in SFY 2017	3
Table 4. EAP Funds Spent, SFY 2017	5
Table 5. DWSS EAP Eligibility Tables for SFY 2017.....	6
Table 6. Benefit Cap for Households Using All Energy Sources (except Propane and Oil), July 2016-June 30, 2017	6
Table 7. Benefit Cap for Households Using Propane and Oil, July 2016 – June 30, 2017	7
Table 8. Example 1: Assistance with and without use of a cap	8
Table 9. Example 2: Assistance with and without use of a cap	9
Table 10. Percentage of Income EAP Participants are expected to spend on Energy, after Assistance, SFY 2017.....	14
Table 11. General Benefit Caps - 2017	15
Table 12. Benefit Caps if Energy includes Propane and/or Oil	15
Table 13. Expected Energy Burden after Assistance by Poverty Level and Household Composition, SFY 2017	16
Table 14. Percentage of Persons in Poverty in Selected Years	24
Table 15. Lean Living Wage, In Dollars (2017).....	28
Table 16. Lean Living Wage as a Percentage of the Federal Poverty Level (2017)	28
Table 17. 2017 Poverty Guidelines (Federal Poverty Level)	29
Table 18. Work Completed by each WAP Subgrantee (SFY 2017)	44
Table 19. Work Completed vs. Performance Goal by Subgrantee (SFY 2017).....	44
Table 20. Services to Special Needs Households (SFY 2017).....	44
Table 21. Homes by County (SFY 2017).....	45
Table 22. Housing Type and Primary Heat Source, SFY 2017	45
Table 23. Own/Rent Status by Housing Type	46

Table 24. Direct (FEAC) Weatherization Costs 46

FIGURES

Figure 1. UEC Funds Disbursed for the DWSS Energy Assistance Program in SFY 2017 4
Figure 2. Number of Payments by Type of Energy Supply 17
Figure 3. Numbers of EAP households with targeted and non-targeted household composition 17
Figure 4. Number of EAP recipients with Social Security Income, SFY 2011-2017 18
Figure 5. Percentage of Persons in Poverty, 1959-2015 24
Figure 6. General Economic Improvement 25
Figure 7. Nevada Unemployment Rate (Percent) 32
Figure 8. Logic Diagram for Universal Energy Change Weatherization Assistance Program 34
Figure 9. Commission Finding 54

TABLE OF ACRONYMS

ARRA American Recovery and Reinvestment Act

BPI Building Performance Institute

BWR Building Weatherization Report

CSA Community Services Agency

CSBG Community Service Block Grant

DSM Demand Side Management

DWSS Division of Welfare and Supportive Services

EAP Energy Assistance Program

EFSP Emergency Food and Shelter Program

ESG Emergency Shelter Grant

FAC Fixed Annual Credit

FEAC Fund for Energy Assistance and Conservation

FPL Federal Poverty Level

HEROS Governor's Home Energy Retrofits for Seniors

IT Information Technology

kWh Kilowatt hour

LIHEAP (LIHEA Program) Federal Low-Income Home Energy Assistance Program

NAC Nevada Administrative Code

NHD Nevada Housing Division

NRHA Nevada Rural Housing Authority

NRS Nevada Revised Statute

PUCN Public Utility Commission of Nevada

RFI Request for Information

RNDC Rural Nevada Development Corporation

RTCA Rebuilding Together with Christmas in April

SAFE Special Assistance Fund for Energy

SSI Supplemental Security Income

SFY State Fiscal Year

UEC Universal Energy Charge

USDHHS US Department of Health and Human Services

USDOE US Department of Energy

WAP Weatherization Assistance Program

BACKGROUND

Nevada’s Home Energy Assistance Program (EAP) and Weatherization Assistance Program (WAP) are funded jointly by the state’s Universal Energy Charge (UEC), which was established by the 2001 State Legislature and became effective during State Fiscal Year (SFY) 2002.¹ The first full program year was SFY 2003. The legislation establishing these programs requires an annual evaluation of program efficacy and compliance with legislative requirements. Nevada’s Division of Welfare and Supportive Service and the Nevada Housing Division jointly hired H. Gil Peach & Associates and Smith & Lehmann Consulting to conduct this evaluation for the 2017 fiscal year.²

EAP PROGRAM COMPLIANCE WITH LEGISLATIVE REQUIREMENTS (NRS 702)

Evaluation of EAP compliance and efficacy were determined using a variety of sources. The following EAP-provided data sets were used for analyses:

- ◆ **Eligibility Certification**—including information on 65,535 notice actions resulting in 41,835³ applicant records determined to be eligible or ineligible for SFY 2017. The final determination is shown in Table 1.⁴

Table 1. Eligibility Certification for SFY 2017.

Eligibility Certification		
Eligibility	Number of Households	Percent
Eligible	26,479	63%
Ineligible	15,356	37%
Total	41,835	100%

- ◆ **Family Members Details**—including 97,402 records on the family members of applicants requesting EAP assistance, including dates of application.
- ◆ **Income Type Detail** – including 63,683 household income entries.

The **Eligibility Certification** and **Family Members Details** and **Income Type Detail** data sets were merged in different steps of the analyses in order to obtain comprehensive program and client information.

- ◆ The **Eligibility Certification** data set (EAP Evaluation Eligibility Status-All-Final) was used to characterize clients as eligible or ineligible in all cases. As shown in Table 1, there are N=26,479 unique eligible cases and N=15,356 unique non-eligible cases. This information was also used in the analysis of demographic and other characteristics of the EAP recipient population.
- ◆ **Energy Burden** analyses were conducted on eligible households, merging the 26,479 eligible households, including household composition such as children, disabled, and aged. These certified households were merged with the 60,683 records for eligible household income contributions by source in the **Household Income Data** file.

¹ Universal Energy Charge (UEC) is granted by the [State of Nevada Assembly Bill 661 \(2001\), Section 26](#), et al, effective 07/17/2001, as codified in the Nevada Revised Statutes 702.010 through 702.170 and regulations adopted by the Public Utilities Commission of Nevada, as codified in the Nevada Administrative Code 702.010 through 702.450.

² Work Order Number 302.

³ This number is reported by the program. The evaluation uses slightly different numbers, in some cases, due to data exclusion rules used to create a uniform dataset for the evaluation.

⁴ Analysis using Excel 2016 & SPSS V24.

- ◆ **Household Income Data** merged with **Eligibility Certification** data were used to determine the relationship between social security income and program eligibility.

1.1. Did DWSS ensure UEC funds were administered in a coordinated manner with all other sources of money available for energy assistance?

[Reference: NRS 702.250.3, Deliverable 3.4.1]

The Department of Welfare and Supportive Services (DWSS) receives money for energy assistance from two sources. The Universal Energy Charge (UEC) is a charge on customer bills and is collected by the participating utilities and sent to the Public Utilities Commission of Nevada (PUCN). PUCN deducts its collection and oversight cost and transfers the funds to the Fund for Energy Assistance and Conservation which is maintained by the Division of Welfare and Supportive Services. In addition, the program receives funding from the Federal Low-Income Home Energy Assistance Program (LIHEAP or LIHEA Program). The Fund for Energy Assistance and Conservation is maintained by DWSS; funds are distributed per NRS 702 through the Energy Assistance Program. Other funding sources have been from LIHEAP only.

1.2. Was interest and income earned appropriately credited to FEAC?

[Reference: NRS 702.250.4, Deliverable 3.4.1.1]

Yes. Table 2 shows the distribution of FEAC interest between DWSS and NHD. Interest was distributed to each Division per their unspent balance of Principal.

Table 2. FEAC Interest received and distributed for DWSS and NHD in SFY 2017.

FEAC Interest Received and Distributed, SFY 2017	
	Amount
Amount Remaining for Distribution Following Refunds	\$14,232
Amount Distributed to NHD	\$1,682
Amount Distributed to DWSS	\$12,560

Interest earned was credited appropriately in this fiscal year.

1.3. Were FEAC funds distributed as mandated in NRS 702.260?

[Reference: NRS 702.260.1 Deliverable 3.4.1.2]

Yes. The distribution of FEAC funds between DWSS and NHD is shown in Table 3.

Table 3. FEAC Principal Funds received and distributed for DWSS and NHD for SFY 2017.

FEAC Principal Received and Distributed, SFY 2017		
	Amount	Percentage of Funds Disbursed
FEAC Amount Received by DWSS from PUCN	\$13,007,151	
Refunds (Directed by PUCN)	(\$31,868)	
Amount Remaining for Distribution Following Refunds	\$12,975,283	
Amount Distributed to NHD	\$3,243,821	25%
Amount Distributed to DWSS	\$9,731,462	75%

FEAC funds were distributed as mandated in NRS 702.260.

1.4. Were 75% of the FEAC funds distributed to DWSS?

[Reference: NRS 702.260.1 Deliverable 3.4.2]

Yes. As shown in Table 3, \$9,731,462, or 75% of FEAC funds, were distributed to DWSS.

75% of FEAC funds were distributed to DWSS.

1.5. Did DWSS use no more than 5% of FEAC funds for administrative expenses?

[Reference: 702.260.1 Deliverable 3.4.2.1]

Yes. As shown by combining interest distributed to DWSS (Table 2) with principal allocated to DWSS (Table 3), \$9,744,022 was received by EAP from FEAC funds and earned interest. Reserve funds of \$2,438,780 were available from the prior fiscal year. Adding these amounts together, the total of available FEAC funds for DWSS in SFY 2017 was \$12,182,802. DWSS used \$534,690 (4.39%) of the total FEAC funds distributed to it for program administration, and so is in conformance with NRS 702.260.1. The total of DWSS FEAC funds disbursed in SFY 2016 was \$8,175,831. DWSS used 6.54% of funds disbursed in SFY 2017 for program administration.

DWSS did not use more than 5% of FEAC funds distributed to it for administrative expenses.

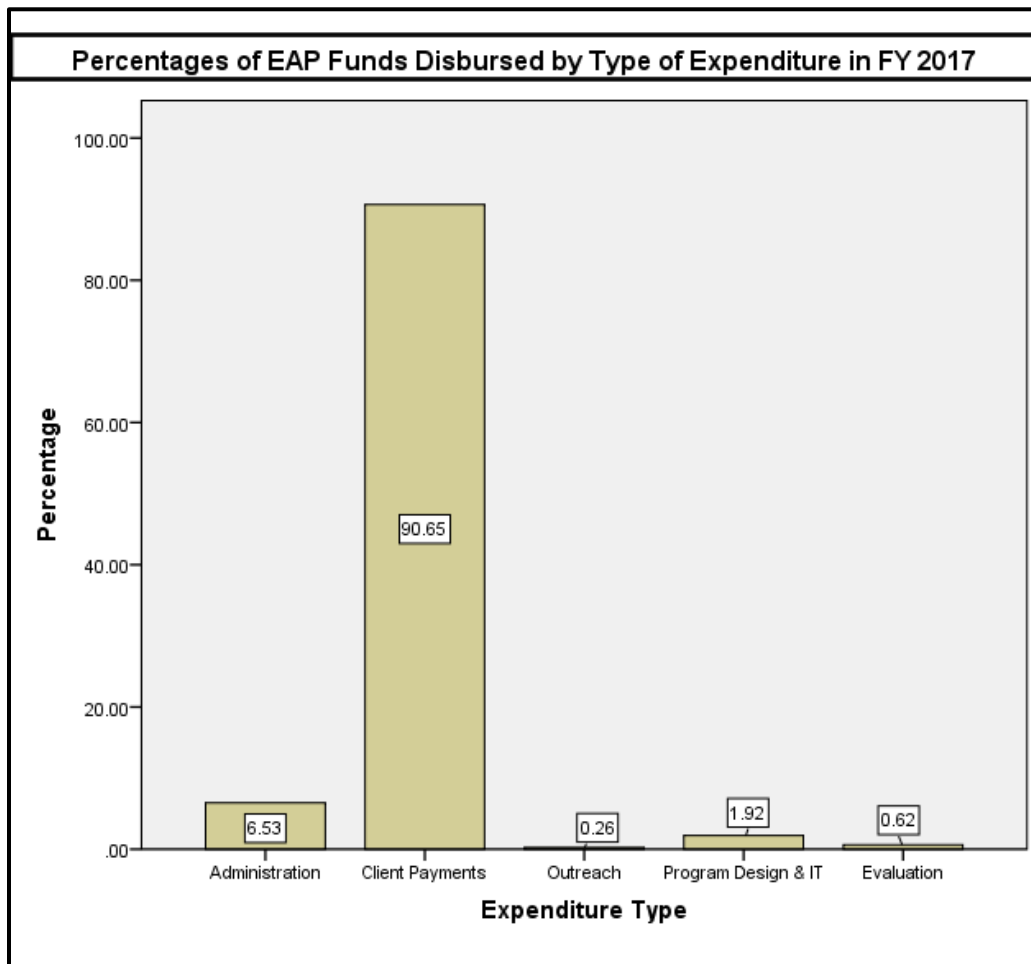


Figure 1. UEC Funds Disbursed for the DWSS Energy Assistance Program in SFY 2017.

Table 4. EAP Funds Spent, SFY 2017.

EAP Funds Disbursed, SFY 2017		
	Amount (\$)	Percentage of Funds Disbursed
Administration	534,690	6.53%
Client Payments	7,411,435	90.65%
Outreach	21,925	0.26%
Program Design (including IT re-programming)	156,876	1.92%
Evaluation	50,905	0.62%
Total Spent	8,175,831	
Reserve (to Next Year)	4,006,971	
Total Available (including carryover)	12,182,802	

1.6. Did DWSS use FEAC funds (after the no more than 5% deduction from funds distributed to FEAC for administrative expenses) to assist eligible households in paying for natural gas and electricity?

[Reference: 702.260.2(a) Deliverable 3.4.2.2]

Yes, as shown in Figure 1 and Table 3, \$7,411,435 was used to assist eligible households in paying for natural gas and electricity.

DWSS used 90.65% of FEAC funds to assist eligible households in paying for natural gas and electricity.

1.7. Did DWSS use FEAC funds (after the no more than 5% deduction from funds distributed to FEAC for administrative expenses) to carry out activities related to consumer outreach?

[Reference: 702.260.2(b) Deliverable 3.4.2.3]

Yes, Figure 1 and Table 3 show that 0.26% of funds were used for consumer outreach. Intake sites are paid \$10 per fully completed application. Having this information provided from intake sites makes for faster processing. However, the intake sites do not have access to the checking systems that DWSS has, so they can gather necessary information, but review and eligibility determination is carried out by DWSS.⁵

DWSS used about one quarter of one percent of FEAC funds for consumer outreach.

⁵“EAP applications may be obtained from/submitted to Division of Welfare and Supportive Services contracted intake sites such as county social services, senior citizen centers, or community based organizations. Completed applications submitted to a contracted intake site are sent to one of the two program offices statewide for processing after securing the documentation necessary to process the application. In FY17, the Division of Welfare and Supportive Services continue to augment the number of intake sites as needed. Contracted intake sites are encouraged to assist the Division of Welfare and Supportive Services in EAP program outreach.” Nevada Fund for Energy Assistance and Conservation State Plan for SFY 2017, P. 12.

1.8. Did DWSS use FEAC funds (after the no more than 5% deduction from funds distributed to FEAC for administrative expenses) to pay for program design?

[Reference: 702.260.2(c) Deliverable 3.4.2.4]

Yes, \$156,856 was used in program design (including IT work), as seen in Figure 1 and Table 3.

DWSS used FEAC funds for program design.

1.9. Did DWSS adjust the amount of assistance a household receives based upon the following factors: Household income; Household size; Energy type used, and other factors determined to make household vulnerable to increases in natural gas or electricity costs?

[Reference: 702.260.6(b) Deliverable 3.4.5.1]

Yes, DWSS developed eligibility tables based on household income and household size. DWSS also carefully developed benefit caps, which varied based on income, household size and the type of energy used. In addition, \$50 per month was added to the benefit cap for “vulnerable/targeted households” which includes the elderly, households with children younger than 6 years of age, and disabled persons. See tables 5, 6, 7 and 8.

Table 5. DWSS EAP Eligibility Tables for SFY 2017.

Household Size	Maximum Annual Gross Income				Maximum Monthly Income (150% FPL)
	Multiple of Federal Poverty Level				
	75%	100%	125%	150%	
1	\$8,910	\$11,880	\$14,850	\$17,820	\$1,485
2	\$12,015	\$16,020	\$20,025	\$24,030	\$2,003
3	\$15,120	\$20,160	\$25,200	\$30,240	\$2,520
4	\$18,225	\$24,300	\$30,375	\$36,450	\$3,031
5	\$21,330	\$28,440	\$35,550	\$42,660	\$3,555
6	\$24,435	\$32,580	\$40,725	\$48,870	\$4,073
7	\$27,458	\$36,730	\$45,913	\$55,095	\$4,591
8	\$30,668	\$40,890	\$51,113	\$61,335	\$5,111
Add for each additional person:	\$3,120	\$4,160	\$5,200	\$6,240	\$520

Note: The Annual Income Limit for 2017 Eligibility is 150% of the Federal Poverty Level

Table 6. Benefit Cap for Households Using All Energy Sources (except Propane and Oil), July 2016 - June 30, 2017.

Household Size	<75%	75-100%	100-125%	125-150%
1	\$697	\$418	\$390	\$352
2	\$766	\$460	\$429	\$387
3	\$842	\$505	\$471	\$425
4	\$925	\$555	\$518	\$467
5	\$1,008	\$605	\$565	\$509
6	\$1,099	\$659	\$615	\$555
7	\$1,198	\$719	\$671	\$605
8+	\$1,306	\$783	\$731	\$659
(Add \$50 for Targeted Households)				

Table 7. Benefit Cap for Households Using Propane and Oil, July 2016 - June 30, 2017.

Household Size	<75%	75-100%	100-125%	125-150%
1	\$837	\$558	\$530	\$492
2	\$906	\$600	\$569	\$527
3	\$982	\$645	\$611	\$565
4	\$1,065	\$695	\$658	\$607
5	\$1,148	\$745	\$705	\$649
6	\$1,239	\$799	\$755	\$695
7	\$1,338	\$859	\$811	\$745
8+	\$1,446	\$923	\$871	\$799
(Add \$50 for Targeted Households)				

For 2017, the median energy burden for Nevada households was 2.09% of household income.⁶

An example illustrating the median energy burden goal and the operation of the cap for a household of one person that is not a targeted household (and so, does not receive an added \$50) is shown in Table 8. A parallel example for a four-person household is shown in Table 9. These tables show the importance of the Energy Assistance Program in reducing the size of the bill that must be paid by the customer (the program is not intended to pay the full energy bill – the target customer responsibility portion of the bill is set in accordance with the median (middle value) household energy burden (proportion of household gross income paid for electricity and heat). Income at different multiples of the Federal Poverty Level is shown in Row 1, and the Median Energy Burden target is shown in Row 2. For this example, the Annual Energy Bill is set at \$1,000 (Row 3). The balance remaining to pay after the target customer responsibility amount is shown in Row 4. The cap amount to be applied is shown in Row 5.

Rows 6, 7 and 8 show the total customer responsibility amount for three cases: the case of the “no program” alternative, the program as envisioned under NRS 702 with no cap, and the program with the cap applied in SFY 2017. Rows 9 and 10 show the Bill Assistance amount provided by the program; first without application of a cap and then with the application of the cap applied in SFY 2017.

A design using a cap approach was envisioned by the legislature and is within the scope of determination of DWSS as specified in NRS 702 for years in which total funding is not sufficient to fully meet the median energy burden target for all eligible applicants during that year. In this case, it is evident that the lowest poverty group is more protected by the cap than upper poverty groups by income level. Essentially, this design preserves funding so that more households can be served while protecting the lowest poverty group by income level.

⁶ Nevada Fund for Energy Assistance and Conservation State Plan FY” 2017, Effective July 1, 2016, P. 17.

Table 8. Example 1: Assistance with and without use of a cap.

Assistance With and Without Use of a Cap for a One-Person Household					
Row No.	Category	Example Income (Multiple of Federal Poverty Level)			
		<=75%	75-100%	100-125%	125-150%
Household Size = 1					
1	Annual Household Income (Gross)	\$5,000	\$10,000	\$14,850	\$17,820
2	2017 Nevada Median Energy Burden (2.09%). This is the NRS702 target bill for customer responsibility.	\$105	\$209	\$310	\$372
3	Example Annual Household Energy Cost (based on energy usage amount)	\$1,000	\$1,000	\$1,000	\$1,000
4	Balance Remaining to Pay for energy usage after initial Customer Responsibility	\$896	\$791	\$690	\$628
5	Cap	\$697	\$418	\$390	\$352
6	Total Bill to Customer (No Program)	\$1,000	\$1,000	\$1,000	\$1,000
7	Customer Responsibility: EAP (with no Cap)	\$105	\$209	\$310	\$372
8	Customer Responsibility: EAP (with Cap)	\$303	\$582	\$610	\$648
9	Bill Assistance Amount (without Cap)	\$896	\$791	\$690	\$628
10	Bill Assistance Amount (with Cap)	\$697	\$418	\$390	\$352

Table 9. Example 2: Assistance with and without use of a cap.

Assistance With and Without Use of a Cap for a Four-Person Household					
Row No.	Category	Example Income (Multiple of Federal Poverty Level)			
		<=75%	75-100%	100-125%	125-150%
Household Size = 4					
1	Annual Household Income (Gross)	\$5,000	\$10,000	\$14,850	\$17,820
2	2017 Nevada Median Energy Burden (2.09%). This is the NRS702 target bill for customer responsibility.	\$105	\$209	\$310	\$372
3	Example Annual Household Energy Cost (based on energy usage amount)	\$1,000	\$1,000	\$1,000	\$1,000
4	Balance Remaining to Pay for energy usage after initial Customer Responsibility	\$896	\$791	\$690	\$628
5	Cap	\$925	\$555	\$518	\$467
6	Total Bill to Customer (with No Program)	\$1,000	\$1,000	\$1,000	\$1,000
7	Customer Responsibility: EAP (with no Cap)	\$105	\$209	\$310	\$372
8	Customer Responsibility: EAP (with Cap)	\$105	\$445	\$482	\$533
9	Bill Assistance Amount (without Cap)	\$896	\$791	\$690	\$628
10	Bill Assistance Amount (with Cap)	\$896	\$555	\$518	\$467

In May of 2016, the previous caps which had been in place from 2013 through 2016 were modified in consultation with the Low-Income Advisory Group. The new caps (Tables 6 and 7) went into effect for the FY 2017 program year. The caps need to be changed from time to time to re-optimize the program to work within the changing funding constraints for both UEC/FEAC and federal funding.

1.10. Did DWSS solicit advice from Nevada Housing Division (NHD) and other knowledgeable sources in developing the program to assist households in paying for natural gas or electricity?

[Reference: 702.260.8(a) Deliverable 3.4.7]

Yes. Throughout the year, DWSS managers consulted with the Low Income Advisory Committee and NHD, consistent with the directives for consultation and coordination in the enabling legislation for the program.

1.11. Did DWSS identify and implement appropriate delivery systems to distribute money from FEAC?

[Reference: 702.260.8(b) Deliverable 3.4.7.1]

Yes, DWSS provided supportive funding to eligible households in SFY 2017. DWSS continues to make changes to case processing systems to increase efficiency. During SFY 2016 the program reached the authorized civil service staffing levels and reached a more efficient level of case services processing. This staffing authorization continued for SFY 2017. DWSS has requested several improvements in the IT support system. There are multiple demands on IT so there is a backlog in working through these optimization requests.

Also, DWSS has been tracking and working to reduce processing time. Cases processed in less than 60 days constitute 86-98% of cases from March through July, but 19% to 62% of cases from August through February. Cases processed in less than 30 days constitute 56-96% of cases from March through July, but 2-8% of cases from August through February.

1.12. Did DWSS coordinate with other federal, state and local agencies that provide energy assistance to low-income persons?

[Reference: 702.260.8(c) Deliverable 3.4.7.2]

The current coordination between EAP and the Weatherization Assistance Program involves EAP sending WAP a monthly list of newly eligible EAP participants. WAP then divides this list according to Subgrantee service areas, and forwards to the Subgrantees a list of potential WAP participants within their service territories. Depending on backlog, Subgrantees then send postcards to potentially eligible households to alert them to this program.

1.13. Did DWSS establish a process for evaluating EAP?

[Reference: 702.260.8(d) Deliverable 3.4.7.3]

The Division of Welfare and Supportive Services and Nevada Housing Division jointly conducted an annual evaluation of the EAP and WAP for the State Fiscal Year 2016 And are currently conducting the SFY 2017 evaluation covering the programs from July 2016 through June 30, 2017.

1.14. Did DWSS establish a process for making changes to EAP?

[Reference: 702.260.8(e) Deliverable 3.4.7.4]

All changes are communicated in policy transmittal and manual transmittal letters. Few changes were made to EAP during the fiscal year and were documented through this process.

1.15. Did DWSS engage in annual planning and evaluation processes with NHD?

[Reference: 702.260.8(f) Deliverable 3.4.7.5]

DWSS and NHD engaged in public hearings and conducted joint planning activities throughout the year. A joint meeting was held in both 2016 and 2017 to review and discuss the Nevada Fund for Energy Assistance and Conservation and Weatherization State Plan. A public hearing was held in June 2016 to adopt the State Plan for 2017; a public hearing was held in June 2017 to adopt the State Plan for SFY 2018.

1.16. Did DWSS distribute 25% of FEAC funds to Nevada Housing Division?

[Reference: 702.270.1 Deliverable 3.4.8]

Yes, 25% of FEAC funds were distributed to NHD.

25% of FEAC funds were distributed to NHD.

1.17. Did DWSS submit a report to the Director of the Legislative Counsel Bureau on or before January 5 of each year, which specifies the amount of all money in FEAC allocated to DWSS during the preceding year which remains unspent and encumbered?

[Reference: 702.275.1 Deliverable 3.4.9]

Yes. The fiscal report for the previous fiscal year was submitted on or before January 5.

1.18. Did DWSS distribute not more than 30% of all FEAC funds that remained unspent and unencumbered at the end of a fiscal year to NHD?

[Reference: 702.255.2 Deliverable 3.4.9.1]

When the final accounting records were produced in September 2017, there was a carryover of \$4,006,971 to SFY 2018. However, the possible transfer to NHD was not applicable since there were no unspent funds that were not encumbered.

1.19. Did DWSS adopt regulations to carry out provisions of NRS 702.250 and 260?

[Reference: 702.260.7) Deliverable 3.4.6]

This report outlines each provision of NRS 702.250 and 260 and DWSS compliance with those provisions. In summary, by taking the following actions, DWSS implemented the program in compliance with NRS 702.250 and 260.

- ◆ DWSS administered the FEAC, which included all sources of public and private money available for energy assistance.
- ◆ DWSS coordinated the distribution of these funds with all available energy assistance funds.
- ◆ 75% of money in the FEAC was distributed to DWSS.
- ◆ The EAP provided subsidies to households to assist with paying for natural gas and electricity, pay for program design and evaluation expenses.
- ◆ Only households below 150% of the FPL were eligible to receive subsidies.
- ◆ DWSS provided emergency assistance to households for whom health and/or safety was threatened by bearing the full cost of heating and cooling.

- ◆ DWSS made a good faith effort to reduce the proportion of household income spent on energy by eligible applicant households to the statewide median. Due to the availability of funds, this goal was not met in 2017; however, DWSS worked to optimize assistance using a system of caps in accordance with provisions for flexibility authorized in NRS702.
- ◆ The amount of assistance was adjusted based on household income, household size, type of energy used, and the presence of a vulnerable household member.
- ◆ DWSS sought advice from the NHD and coordinated implementation of the EAP with the weatherization program.
- ◆ DWSS established and carries out a process for
 - Coordinating with other available programs including applications and eligibility;
 - An evaluation process;
 - A program design process that enabled changes during the fiscal year; and
 - Engaged in a planning and evaluation process with NHD.

Recommendation 1: For 2018, continue to track processing time and identify and develop a list of factors that slow processing from August through February.

Recommendation 2: DWSS has optimized the Energy Assistance Program by accomplishing key staffing goals and training. DWSS has also been working on shortening processing time. In the absence of any unusual events, for SFY 2018 DWSS should operate normally within this optimized structure while monitoring the operation of the caps. No new changes to processes, management or organization are recommended for DWSS based on the SFY 2017 evaluation. For SFY 2018, the goal should be to operate well with the current processes, management and organization.

EAP ASSESSMENT OF PROGRAM EFFECTIVENESS

1.20. Did DWSS determine eligibility of EAP households at a maximum income level of no more than 150% of the FPL?

[Reference: 702.260.3 Deliverable 3.4.3]

Yes. For 2017, DWSS determined eligibility of EAP households at a maximum level of no more than 150% of the Federal Poverty Level. The 2017 benefit caps enabled DWSS to serve qualifying applicant households at a maximum income level of no more than 150% FPL.

1.21. Did DWSS render emergency assistance to health/safety-threatened households experiencing an emergency related to the cost or availability of natural gas or electricity to otherwise EAP-eligible households?

[Reference: 702.260.4 Deliverable 3.4.4]

Yes. A Crisis Intervention Program helped households above the 150% poverty level whose medical expenses brought their income below 150% of poverty. In the 2017 fiscal year, 9 households were served through this program.⁷

1.22. Did DWSS determine the amount of EAP assistance a household is eligible to receive by determining the amount of assistance that is sufficient to reduce the percentage of the household's income that is spent on natural gas and electricity to the median percentage of household income spent on natural gas and electricity statewide?

[Reference: 702.260.8(c) Deliverable 3.4.5]

NRS 702 specifies that the EAP will use the average statewide energy burden to set benefit levels. For SFY 2017 the statewide energy burden calculated for all Nevada households was 2.09%⁸

Benefit caps were in place during SFY 2017 to ensure that EAP could provide a benefit to all qualifying households who applied. The cap is to enable the EAP program to serve all eligible applications with a meaningful benefit. A meaningful benefit is a grant that moves eligible households as close as possible to the statewide median energy burden and reduces the likelihood of service termination. The median energy burden target of 2.09% cannot be met due to the overall funding constraint.

When EAP was launched as a program in 2002-2003, EAP provided the envisioned median energy burden support level. Eligible applicant households were moved to the statewide Nevada median energy burden for those years. After the program began, it took some years for qualifying households to become fully aware of the program so the number of qualifying applicants was much smaller than it is today.

NRS 702 provides flexibility to DWSS for years in which available budget does not permit reducing client household energy burden to the Nevada median. The flexibility includes caps, changes to program income qualification levels and other program changes. These control tools became especially necessary

⁷ Determined as the number of "CI" records, trimmed to the number of unique UPI numbers.

⁸ The projection of Nevada median household energy burden is based on information on energy usage and energy cost provided by the utilities and yearly demographic estimates from the Nevada State Demographer. The percentage for 2017 is 2.09% (*Nevada Fund for Energy Assistance and Conservation State Plan FY 2017*, Effective July 1, 2016, P. 17).

during the years of the “Great Recession”, when UEC revenues declined⁹ while the number of eligible applicant households increased. During this time, the arrearage forgiveness program component was suspended, eligibility level was reduced and caps were computed and applied.

DWSS has applied benefits caps since 2009. On Aug 14, 2012, EAP announced a temporary increase in the benefit cap, retroactively effective July 1, 2012 through Sept 30, 2012. On Sept 26, 2012, when the final LIHEA funding was allocated, EAP made increased benefits effective going forward. On Nov 16, 2012, program eligibility was restored to households earning up to 150% FPL. The arrearage program was reinstated, effective December 1, 2012. On April 16, 2013, new benefit cap tables were established to provide better equity for households earning <75% FPL. This raised the targeted average monthly benefit from \$555 in 2012 to \$776 for SFY 2013. The benefit cap tables remained the same for SFY 2015 and SFY 2016 with a targeted average monthly benefit of \$776 for 2015 and \$718 for 2016.¹⁰ New benefit cap tables were effective beginning in 2017 (see Table 6).

The calculation of median household energy burden in SFY 2017 produced a result of 2.09%, the percentage of household income spent on household energy needs. The average benefit was \$533 per household in SFY 2017. With the arrearage benefit figured into the total for all households, the average benefit was \$569.¹¹

Given that there is a structural constraint of insufficient funding (combining state UEC and federal LIHEA funds), DWSS developed eligibility tables based on household income and household size. DWSS also carefully developed benefit caps, which varied based on income, household size and the type of energy used. In addition, \$50 was added to the benefit cap for “vulnerable/targeted households” which includes the elderly, households with children younger than 6 years of age, and disabled persons.¹²

Table 10. Percentage of Income EAP Participants are expected to spend on Energy, after Assistance, SFY 2017.

Percentage of Income EAP Participants Are Expected to Spend on Energy After Assistance, by Household Composition, SFY 2013 - 2017					
Household	Average % FAC Income Expected to be Spent on Energy				
	SFY 2013	SFY 2014	SFY 2015	SFY 2016	SFY 2017
With Children	6.35%	4.02%	4.26%	4.19%	5.55%
With Disabled	4.54%	3.79%	3.87%	4.32%	4.66%
With Elderly	4.06%	3.61%	3.54%	4.13%	4.27%
Non-Targeted	7.80%	5.45%	4.89%	5.55%	7.59%
Statewide Median for 2017					2.09%

Table 10 (shown above) reflects that the energy burden for each targeted group was held to approximately the same levels from 2014 through 2017. Benefit caps are shown in Tables 11 and 12 immediately below.

⁹ Since the UEC is a function of energy use, when energy use shows a decline, the generation of year to year UEC/FEAC funding also declines.

¹⁰ Projection of average annual benefit is carried out with information available at the time of the calculation. There is uncertainty included in the projection. Projections are approximate and for planning purposes.

¹¹ Based on the Management Monitoring Summary at end of year.

¹² See tables 8 & 9. Source: Appendix A, P. 2 of 2017 Energy Assistance Program Manual (DWSS).

Table 11. General Benefit Caps - 2017

FY 2017 Benefit Cap Table - All Energy Sources (except Propane and Oil)				
Household Size	<75%	75-100%	100-125%	125-150%
1	\$697	\$418	\$390	\$352
2	\$766	\$460	\$429	\$387
3	\$842	\$505	\$471	\$425
4	\$925	\$555	\$518	\$467
5	\$1,008	\$605	\$565	\$509
6	\$1,099	\$659	\$615	\$555
7	\$1,198	\$719	\$671	\$605
8+	\$1,306	\$783	\$731	\$659
(Add \$50 for Targeted Households)				

Table 12. Benefit Caps if Energy includes Propane and/or Oil.

FY 2017 Benefit Cap Table if Energy Source includes Propane and/or Oil				
Household Size	<75%	75-100%	100-125%	125-150%
1	\$837	\$558	\$530	\$492
2	\$906	\$600	\$569	\$527
3	\$982	\$645	\$611	\$565
4	\$1,065	\$695	\$658	\$607
5	\$1,148	\$745	\$705	\$649
6	\$1,239	\$799	\$755	\$695
7	\$1,338	\$859	\$811	\$745
8+	\$1,446	\$923	\$871	\$799
(Add \$50 for Targeted Households)				

Examination of the data by poverty level (table below) shows a consistent benefit to the targeted groups over the non-targeted group.

However, even within the narrow range of poverty incomes, energy burden declines as income increases. The pattern mirrors the known tendency throughout the whole of population above the poverty level – the more income received by a household (see Table 13), generally the lower the percentage of income that is required to be spent on household energy.

Table 13. Expected Energy Burden after Assistance by Poverty Level and Household Composition, SFY 2017.

Percentage of Income EAP Participants Are Expected to Spend on Energy After Assistance, by Poverty Level and Household Composition, SFY 2017					
Household	Average % FAC Income Expected to be Spent on Energy				SFY 2017
	Non-Targeted	With Children	With Disabled	With Senior(s)	
0-75%	10.79%	7.30%	5.41%	5.24%	
76%-100%	5.19%	4.18%	4.67%	4.35%	
101%-125%	4.21%	3.62%	4.20%	4.04%	
125%-150%	3.86%	3.31%	3.79%	3.70%	
Statewide Median for 2017 (Program Target)					2.09%

1.23. Numbers Served by Targeted Status and Energy Type Used

[Reference: 702.260.2(a) Deliverable 3.4.2.2]

Households with a variety of energy sources were served by EAP, as shown in Figure 2 below. In Figure 2, the category, “Other” includes pellet stoves and wood. The number of households receiving payments shown in Figure 4 (38,067) does not sum to the number of households receiving EAP benefits, since some households directed payments to more than one energy source.

DWSS served more households with elderly, disabled, or children under 6 than households without targeted members (Figure 5).

Some years ago, during SFY 2012, there was a substantial and statistically significant decline in the proportion of applicants receiving Social Security Income who were eligible for EAP benefits. This was due to a coincidence of reduced eligibility criteria (to serve all eligible applicant households with assistance in the form of a smaller but still meaningful benefit) at the same time there was a small increase in federal Social Security benefits. This combination pushed many applicants just above the income limits for 2012.

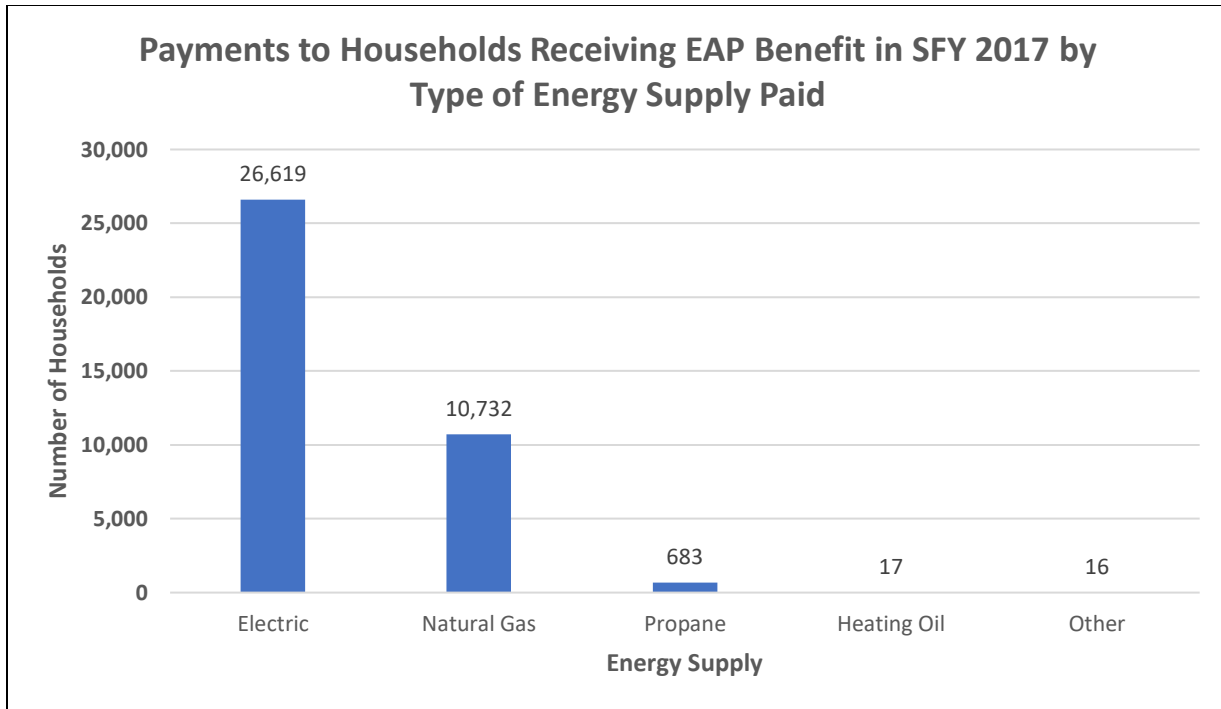


Figure 2. Number of Payments by Type of Energy Supply.

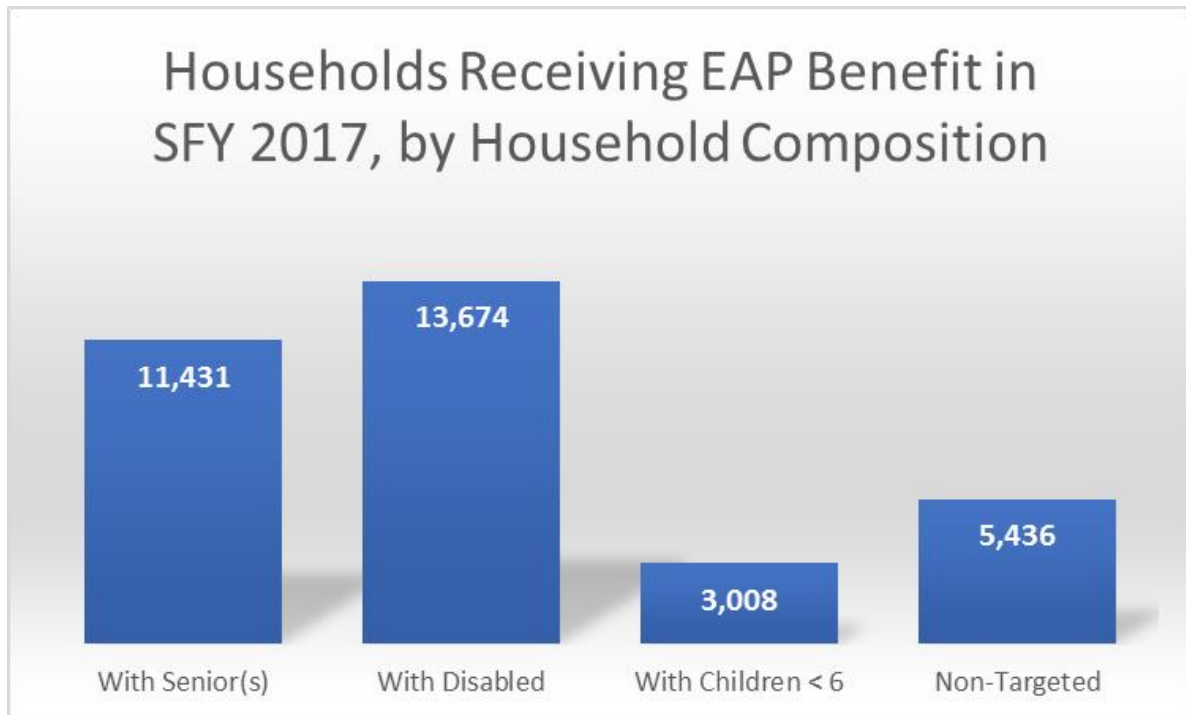


Figure 3. Numbers of EAP households with targeted and non-targeted household composition. The numbers do not add to the total number of households, since the categories for targeted households are not mutually exclusive.

As can be seen in Figure 4, the number of EAP recipients with Social Security income declined by nearly half from 2011 to 2012 due to this coincidence of factors. Then, in 2013, there was a partial recovery of the Social Security applicants who became EAP participants, and since then there has been additional

improvement. The number of EAP participants with Social Security income has now returned to the SFY 2011 level in 2017, reflecting the emphasis of DWSS in bringing back households. DWSS has continued outreach to seniors who may not realize that they are again eligible for energy assistance.

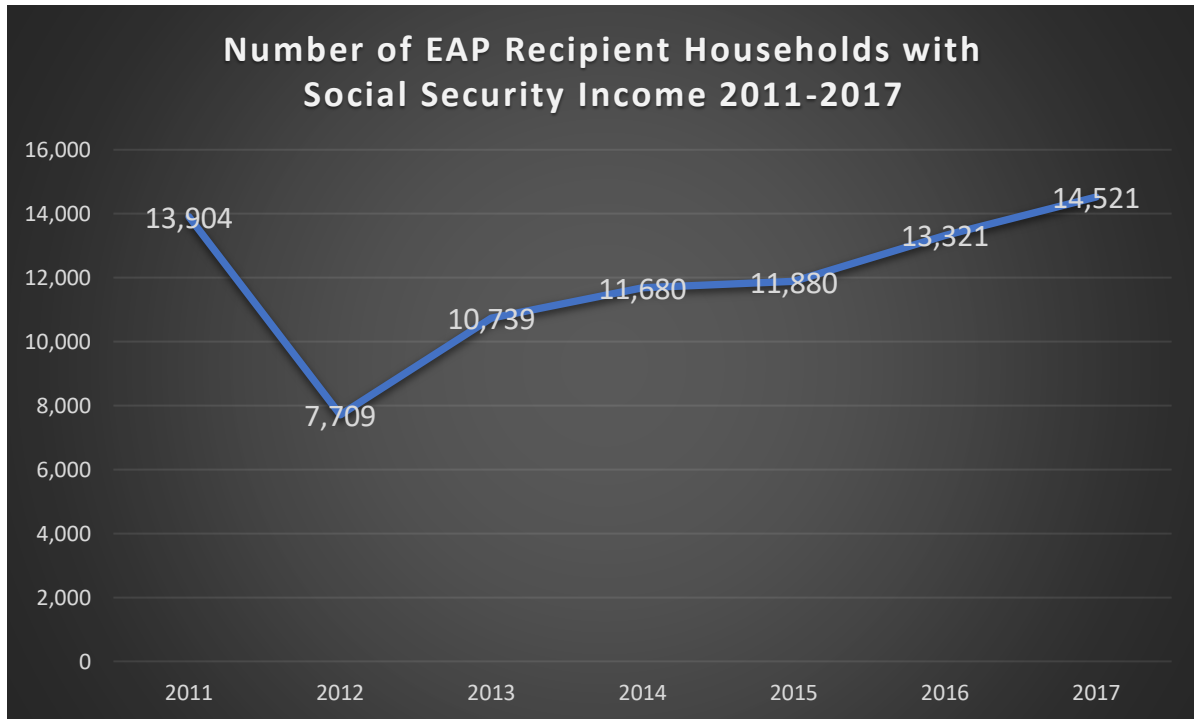


Figure 4. Number of EAP recipients with Social Security income, SFY 2011-2017.

As part of this effort, several new intake sites were added in SFY 2015 and SFY 2016. Intake sites, which are often senior centers or food banks, can be an excellent mechanism to raise awareness and increase enrollment of senior citizens in the EAP program. Some seniors may not have access to or understanding of computer technologies for computer-based applications. Intake sites are an important resource to eliminate technological barriers to services for elderly residents.

SUMMARY AND CONCLUSIONS

DWSS distributed the FEAC funds in a regular and thoughtful manner consistent with the requirements of the defining legislation. Through the EAP, DWSS provided qualifying applicant households assistance with their heating and cooling costs during FY 2017. The average benefit per household during this year was \$533 if the arrearage average is not included, and \$569¹³ if included in calculation of the overall average.

DWSS work in SFY 2017 has been consistent with the requirements of NRS 702. The level of funding available in the FEAC from the Federal LIHEA Program and UEC funds was insufficient to reduce the energy burden of eligible households to the state median. However, DWSS used the flexibility established in NRS 702 to optimize the EAP program within the funding limitation.

¹³ Source: EAP Management Monitoring Summary July 2016.

FINDINGS

Finding 1: The evaluation team finds DWSS has succeeded in recovering to the level of households with seniors, completing recovery from the drop which occurred during 2012.

Finding 2: The evaluation team finds DWSS fully compliant with the requirements of NRS 702.

WAP OVERVIEW

Overview of SFY 2017

This evaluation covers the Universal Energy Charge/Fund for Energy Assistance and Conservation (FEAC) Weatherization Assistance Program administered by the Nevada Housing Division (NHD) for State Fiscal Year (SFY) 2017. Nevada SFY 2017 began July 1, 2016 and ended June 30, 2017. Financial reporting was completed in September. Performance requirements for this program are codified in Nevada Revised Statutes (NRS) 702.

For SFY 2017, the primary program activities and major contextual factors affecting the UEC Weatherization Assistance Program include:

- ◆ **Planning** – As is required each year, during SFY 2016 and in order to prepare for SFY 2017, the NHD Weatherization Assistance Program and the Division of Welfare and Supportive Services (DWSS) Energy Assistance Program (EAP) collaborated on the development of two State Plans:
 - One is the 2017 Nevada Fund for Energy Assistance and Conservation State Plan required by NRS 702.280.
 - The second is the 2017 State of Nevada Low Income Home Energy Assistance Program (LIHEA Program) State Plan. The LIHEA Program plan is required by the US Department of Health and Human Services.¹⁴
- ◆ **Planning Targets and Accomplishments** - For SFY 2017, NHD received UEC/FEAC funds for the UEC Weatherization Assistance Program in the amount of \$3,245,503.¹⁵ In addition, there was a remaining balance for transfer to the reserve fund of \$613,213 from the previous program year.¹⁶

In SFY 2017, the budget for the year was \$3,157,190 for the Subgrantee agencies and \$363,562 by NHD, for a total budget of \$3,520,752. Of this budget, \$3,108,096 was expended by the Subgrantee agencies and \$273,472 for administration and related purposes, program design, IT, outreach and evaluation). The total expenditure for 2017 was \$3,381,539. This leaves a balance of \$90,090 for administration and related purposes and a balance of \$49,094 for Subgrantees (a total of \$139,183) at the end of 2017 to be transferred to the reserve fund.¹⁷

¹⁴ Additionally, in the final months of SFY 2017 NHD and DWSS developed these plans as required for 2018. The Nevada Fund for Energy Assistance and Conservation follows the state fiscal year which ends each June 30th; the plan for the LIHEA Program is structured by the federal fiscal year which ends each September 30th.

¹⁵ The Division of Welfare and Supportive Services (DWSS) receives funds collected by the Public Utilities Commission of Nevada and distributes twenty-five percent of net funding to the Nevada Housing Division (NHD) for the UEC Weatherization Assistance Program. DWSS reports transfer of \$3,245,503 to NHD. This includes \$3,243,821 in principal and \$1,682 in interest. Source: Financials spreadsheet provided by DWSS. The \$3,245,503 matches to the sum of four Decentralized Journal Voucher (JVD) entries at NHD. The last transfer from DWSS occurred after the end of the 2017 fiscal year, but that is not unusual because the funds must be collected by the Public Utility Commission of Nevada, then transferred to DWSS and accounted and then transferred to NHD. Since the fully accounting period for collections ends at the end of a fiscal year, the final transfer for a fiscal year may occur following the close of the fiscal year.

¹⁶ Source: NHD spreadsheet for SFY 2016, showing balance remaining by category, for transfer to the reserve fund 2017 (lines 205 to 207). The remaining balance at the close of 2016 was \$343,611 for the Subgrantee agencies and an administration carryover of \$269,602 for administration for a total remaining balance of \$613,213.

¹⁷ Source: NHD spreadsheet SFY 2017. For the evaluation, all spreadsheet numbers are rounded to the nearest dollar. Note that initial numbers in the NHD financial spreadsheet are estimates and that actual receipts are only known after a fiscal year is completed (the final transfer of UEC/FEAC funds to NHD occurs after the end of the fiscal year). The operating budget reported here is backed out from end of year expenditures and reserve plus the total of UEC/FEAC funds for the fiscal year.

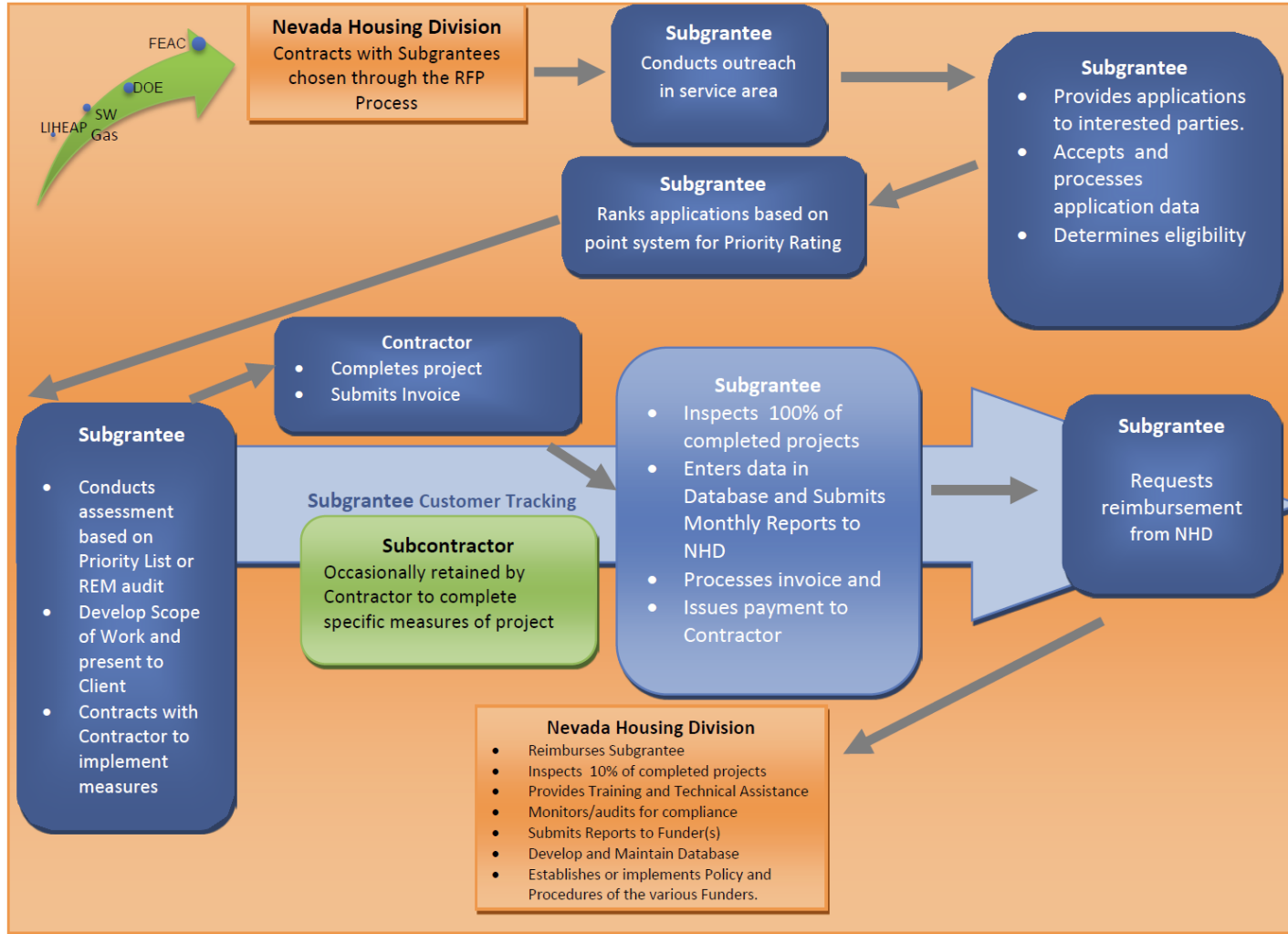
The planning target for SFY 2017 was 353 homes to be weatherized. A total of 495 Universal Energy Charge/Fund for Energy Assistance and Conservation households were completed (exceeding the target by 36%) on time and within budget.¹⁸

- ◆ **Program Implementation** – The revised Business Process developed in the later part of SFY 2012 continued in place through SFY 2017. The Business Process is summarized in drawing represented in Figure 5. The Nevada Universal Energy Charge/Fund for Energy Assistance and Conservation, the US Department of Energy, and the US Department of Health and Human Services Low-Income Home Energy Assistance Program provided primary funding Weatherization Assistance Program effort for SFY 2017.
- ◆ **Changes in the Percentage of Persons living in Poverty** – Following a substantial increase in persons living in poverty since 2001, the percentage of persons living in poverty in Nevada was about 15.2% in 2015 and about 13.8% as of part way through 2016. For the United States, the percentage of persons living in poverty was 14.8% in 2015 and 12.7% in 2016. A time series comparison of percentage of persons in poverty is shown in Figure 5.¹⁹ Some selected representative percentages are shown in Table 14.

¹⁸ Source: BWR database for SFY 2017.

¹⁹ For 1959 and 1969, the information used in the figure is from *Poverty in the United States: 2000*, Appendix Table A-1 and from US Census Bureau Table CPH-L-162, Persons by Poverty Status by State. The data from that point through 2011 is from the US Bureau of the Census, Current Population Survey, Annual Social and Economic Supplement, Table 5, Percent of People by Ratio of Income to Poverty Level: 1970 to 2011 and Table 21: Number of Poor and Poverty Rate by State: 1980 to 2011. The data source for 2012 and 2013 is Poverty 2012 and 2013, American Community Survey Briefs by Alemayehu Bishaw and Kayla Fontenot, US Department of Commerce, Economics and Statistics Administration, US Census Bureau, September 2014. Data for 2014 is from QuickFacts Beta, Persons in Poverty, Percent (<http://www.census.gov/quickfacts/table/PST045214/00>) and is also based on the American Community Survey. Data for 2015 is from QuickFacts, Persons in Poverty, Percent (<http://www.census.gov/quickfacts/table/INC110214/00,32>). For 2016, the Nevada data is from the US Bureau of the Census, QuickFacts (<https://www.census.gov/quickfacts/NV>); the US data is from the US Census Bureau, *Income and Poverty in the United States: 2016*, Current Population Reports, September 2016. The Bureau, instead of providing precise estimates every ten years, now produces rough estimates every year. The Bureau now warns against making year by year comparisons for the same geographic unit because precision is poor. The comparison shown is approximately true and based on the best available data.

WEATHERIZATION ASSISTANCE PROGRAM Nevada Housing Division BUSINESS PROCESS



The Business Process is summarized in the above schematic.

As can be seen in this schematic, since at least 1959 Nevada in most years has had a much lower poverty rate than the US. However, this pattern changed and poverty in Nevada increased sharply beginning in economic recession of the early 2000's (sometimes referred to as the "dotcom bubble"), then began to moderate. Next, Nevada poverty increased through the Great Recession of 2007 (sometimes called the "derivatives bubble" or the "housing bubble")

- For percent of persons living in poverty, Nevada reached a peak that exceeded the US percentage in 2010.
- Nevada's percent of persons living in poverty was equal to the rate of official poverty in United States for 2013 (15.8%) and 2014 (14.8%).
- For 2015, the percentage of persons living in poverty in Nevada again slightly exceeded the rate for the US as a whole (15.2% vs. 14.8%). These percentages are essentially equal.
- Though for 2016 the percentage of persons living in poverty in Nevada slightly exceeded the rate for the US (13.8% for Nevada vs. 12.7% for the US). These numbers are essentially equal.
- The uncertainty in yearly percentages released by the US Bureau of the Census means that the poverty in Nevada and poverty in the US is equal to essentially equal from 2013 through 2016.

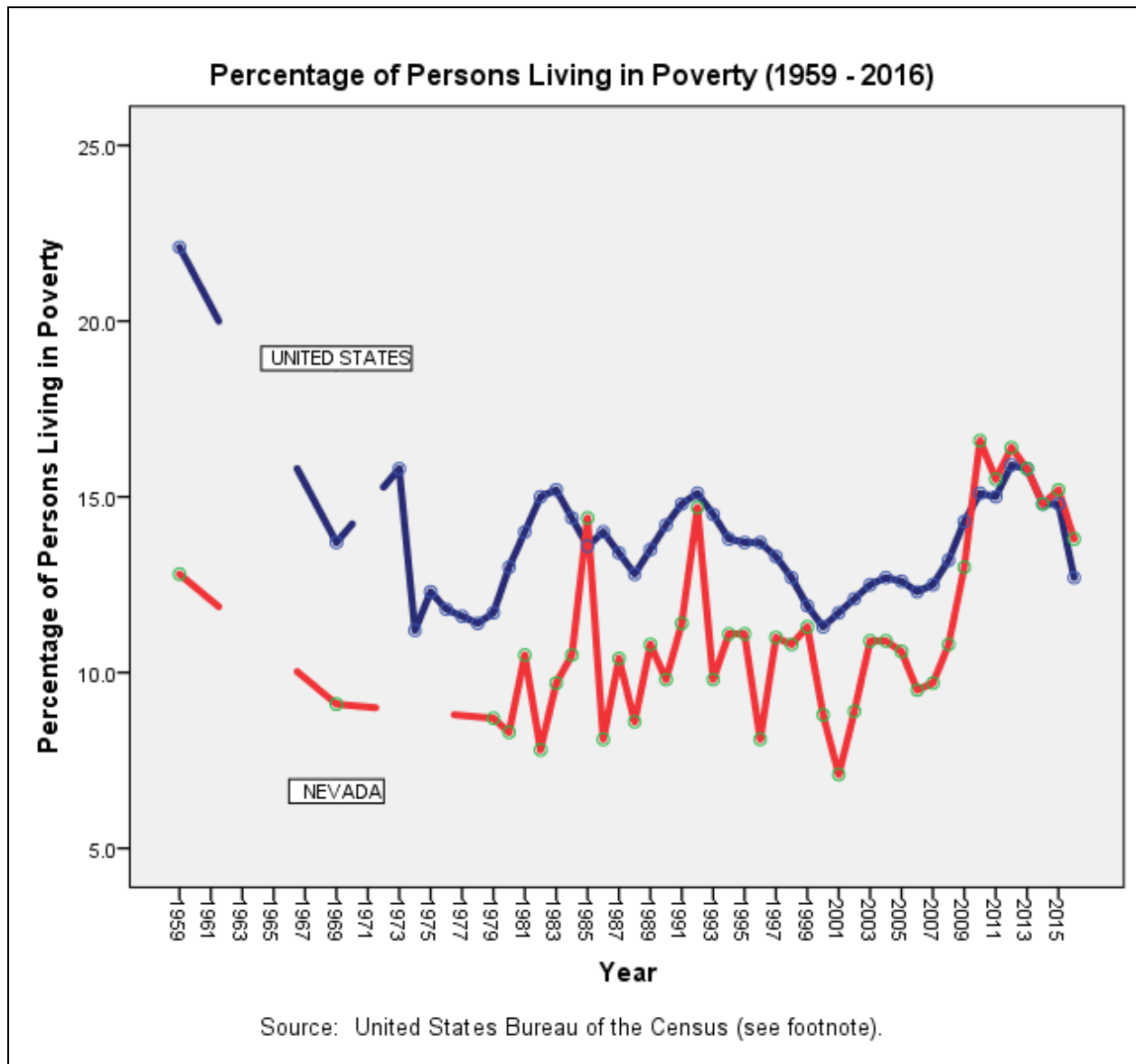


Figure 5. Percentage of Persons in Poverty, 1959-2016.

Table 94. Percentage of Persons in Poverty in Selected Years.

Persons in Poverty (Percentage) - Selected Years							
	1959	1969	1979	1989	1999	2009	2016
US	22.1	13.7	11.7	13.5	11.9	14.3	13.8
Nevada	12.8	9.1	8.7	10.8	11.3	13	12.7

Finding 3: The percent of persons living in poverty increased, leveled out and has started to decline. However, there is a higher level of need for services than compared with the years prior to 2006.

At the same time, regional trends as monitored by the Governor’s Office of Economic Development show notable improvement (<http://www.diversifynevada.com/images/uploads/Nevada.pdf>) in Nevada’s economy (Figure 6).

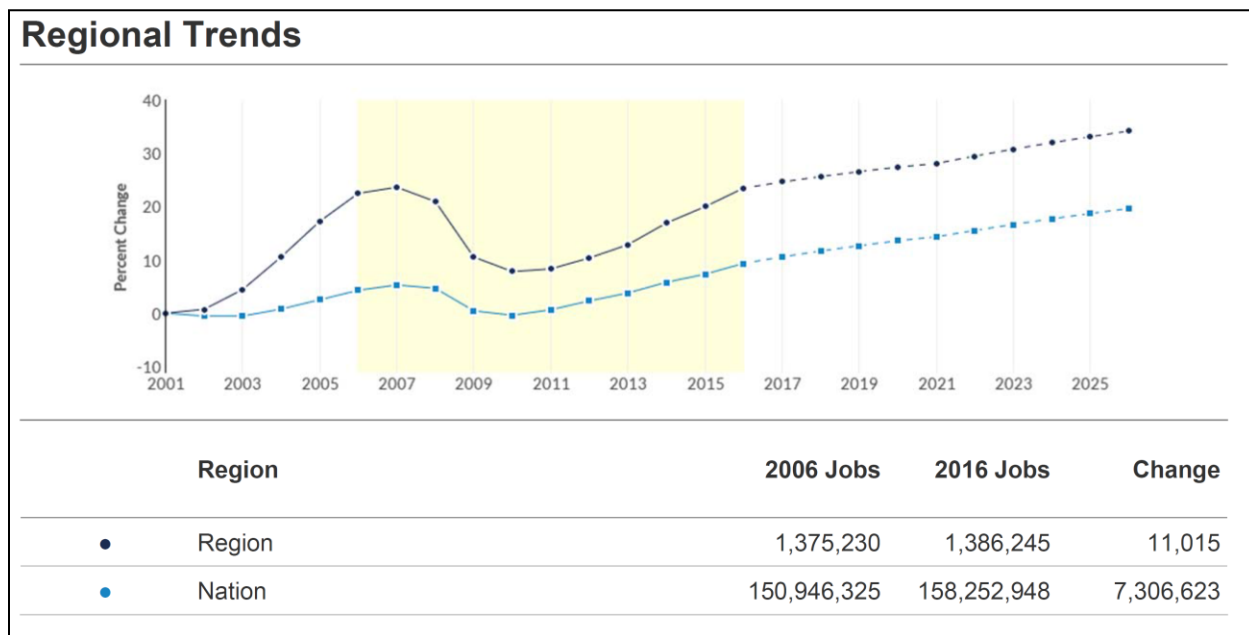


Figure 6. General Economic Improvement (Source: Governor’s Office of Economic Development).

Although we are familiar with the saying, “a rising tide lifts all ships,” economic improvement in the United States tends to benefit people of different economic groups differently. So, it takes time for economic improvement to affect persons living in poverty. However, DWSS has noted a decline in applications of about 10%, which probably reflects the effect of the general economic improvement.

Although the economy is generally improving, the overall pattern of change recorded in Figure 6 indicates that the need for services has substantially increased in Nevada for persons living in poverty prior to 2006. Need is further analyzed in the next section.

Recommendation 3: To meet the increase in need under the current eligibility criteria, funding for the Universal Energy Charge should be increased.

Needs Analysis

There are two primary methods for assessing income insufficiency or need. The official analysis makes use of multiples of the federal poverty level (FPL); and unofficial (but more careful) assessment is based on analysis of household budgets.

Multiples of the Federal Poverty Level Approach to Assessing Income Insufficiency - The NRS 702 definition of need is based on 150% of the Federal Poverty Level (FPL). An alternative metric of need is defined as income insufficiency. Using this alternative definition, need is meaningfully higher than

indicated by the original FPL.²⁰ Because the FPL is not a good indicator of actual need, federal and state programs seldom use the FPL directly as a program eligibility criterion. In Nevada, NRS 702 uses 150% of the FPL. Similarly, the federal Weatherization Assistance Program in Nevada uses 200% of the FPL. Use of this multiple of the FPL is useful because FPL data is maintained by the federal government; federal guidance is framed in terms of the FPL. The FPL offers the advantage of comparative ease in administration of programs. Use of a multiple of the FPL is a way to adjust for the inadequacy of the official FPL as a measure of need. It is done in all the states and in many federal programs.

Some examples of the use of multiples of the FPL include:

- ◆ The US Department of Health and Human Services Low Income Home Energy Assistance Program (the LIHEA Program) uses 150% of the FPL for eligibility.
- ◆ The Nevada Universal Energy Charge/Fund for Energy Assistance and Conservation Payment Assistance Program is harmonized to this 150% level for household eligibility (as required by NRS 702.260.3).
- ◆ The US Department of Energy permits a range of eligibility levels for the federal Weatherization Assistance Program. Most states use either 60% of state median household income or 200% of poverty. Nevada uses 200% of the FPL for this program.
- ◆ In Nevada, the Nevada Universal Energy Charge/Fund for Energy Assistance and Conservation Weatherization Assistance Program eligibility criterion is set at 150% of the FPL (as required by NRS 702.270.3).

An Alternative Measure: The Family Budget Method – A more exact method for estimating income insufficiency in order to indicate need for service is to use the *family budget method* and, at the same time, to allow eligibility to vary by county or place. The family budget method has been used by social workers and community workers since at least the early 1900's.

The “self-sufficiency standard” (a particular form of the family budget method; sometimes also identified as a “living wage” standard) better reflects reality as experienced by households. The self-

²⁰ Federal indicators of need, such as the poverty metric, unemployment and the consumer price index each have the virtue of being systematic time series measurements with a record of explicit changes in definition over the years for which they have been reported. However, they have become distorted (gradually, over time) and now significantly understate the conditions that they were originally developed to measure. All of the official indicators and all of the changes to the indicators are academically defensible in an abstract sense. All can be useful as general indicators. Yet each falls meaningfully short as a true indicator. The federal indicators correspond poorly to what people mean by poverty, unemployment and the increasing cost of a standard basket of goods. They do not make sense in terms of what people experience. Each indicator quantitatively underestimates economic hardship as experienced. The size of the gaps between the indicators and reality as experienced increases over time. Now, the Federal Poverty Level (FPL) is a discredited measure of income insufficiency. Now, unemployment has been progressively redefined so that it is a misleading measure of actual unemployment. The degree of inadequacy of the consumer price index (CPI-U) is, on the other hand, somewhat controversial. A good way to appreciate its inadequacy is to look at a jurisdiction in which family budget studies have been done at two points in time and compare the simple CPI-U adjustment of the earlier study with the results of the later family budget study. This kind of comparison demonstrates that the CPI-U captures a part of inflation as actually experienced by households and can be useful for very short-term comparisons. However, it also demonstrates that over time the drift of the CPI-U from reality becomes a serious gap. One set of replacement indicators for unemployment and CPI is at <http://www.shadowstats.com/>. A critical review of this website can be found on Wikipedia: <http://en.wikipedia.org/wiki/Shadowstats.com>. Our own assessment is that the proposed Shadowstat alternate indicators are much better than the official indicators but that the alternate CPI may be somewhat overstated.

sufficiency standard is designed to consider most *immediate* needs of a family at a minimal level of living, for households without special problems (for example, a severe medical problem).

Strengths of the Family Budget method and self-sufficiency standard over the FPL multiple method are that it captures:

- ◆ Cost of transportation to work
- ◆ Cost of child care when needed to permit a parent to work.

Weaknesses of the self-sufficiency standard are that it does not include several expenses faced by families over the long term (the FPL multiple method also does not include these expenses):

- ◆ Provision for retirement
- ◆ Provision for college for children
- ◆ Provision of resources children need to participate in many normal school activities in grade school and high school (many of these costs have been isolated by schools and are now transferred as direct “add-on” costs to families, whereas in previous decades the costs were covered by the schools for all students)
- ◆ Provision for special medical problems
- ◆ Provision for some meals outside the home
- ◆ Provision for recreation

While not fully inclusive,²¹ the self-sufficiency standard is a more careful assessment of income insufficiency than is a fixed multiple of the FPL. This is shown first in Tables 15 and 16. Table 15 provides estimates of what an individual must earn to support their household, on a (lean) living wage if they are the sole provider and working full-time (2,080 hours per year). Table 16 shows the same information in the form of percentages of the Federal Poverty Level. The percentages are computed for different family structures and sizes based on tables developed by Dr. Amy K. Glasmeier at Pennsylvania State University, which we updated to 2016 and have converted from an hourly pay rate to an annual income level.²²

²¹ The lack of inclusion of these other normal expenses means that even the best analytic work based on the family budget method does not consider the growing chasm of economic inequality that squeezes households out of normal participation in society. When the upper one-percent is allocated larger and larger amounts of income, the households within incomes below 95% on the curve of households by income lose income. When this happens, the middle class cannot fully support through taxes and donations the level of public services they supported in the 1950s or 1960s. The incomes of ordinary citizens are no longer large enough to support public institutions to the degree that they were supported during the more egalitarian era that ran from the end of WWII through approximately 1970. Reallocations have occurred from the lower, middle and lower upper-middle parts of the income distribution and from the public sector to the very rich. This results in a lower level of living with much hidden rationing apportioned throughout our economic system (in the form of extra fees assessed to households and declining quality of goods and services). Rationing is not acknowledged in most conventional economic analyses.

²² Glasmeier’s 2012 results are been converted to 2016 dollars using the Bureau of Labor Statistics (BLS) Consumer Price Index (CPI) calculator (http://www.bls.gov/data/inflation_calculator.htm). This can be called a “lean” living wage. It covers an adequate family budget for everyday expenses; It does not cover the costs of living lives that include full participation in society (listed above in the text as weaknesses of the method).

In these tables, we multiply the tabled values of Glasmeier’s hourly living wage by work hours per year (2080) and then by 1.05 since according to the US Bureau of Labor Statistics (BLS) it takes \$1.05 in 2016 to purchase what a dollar would have bought in 2012. We then divide by the 2016 Federal Poverty Level as adjusted for household size. As is shown in the tables, family budgets for the same lean level of living vary by county or place. In contrast, the FPL, although adjusted for household size, is applied uniformly in the forty-eight contiguous states and the District of Columbia. It does not take variation by county or place into account.

Table 15. Lean Living Wage, in Dollars (2017).

Lean Living Wage - Yearly (by County or Place - Adjusted to July 2017)					
Place	1 Adult	1 Adult, 1 Child	2 Adults	2 Adults, 1 Child	2 Adults, 2 Children
Dollars					
Washoe	\$20,275	\$45,380	\$31,759	\$39,838	\$42,776
Clark County	\$21,433	\$46,003	\$32,961	\$40,461	\$43,399
Carson City	\$19,251	\$43,600	\$30,624	\$38,036	\$40,996
Elko	\$18,962	\$42,798	\$29,155	\$37,234	\$40,194
Nye	\$16,826	\$40,773	\$29,089	\$35,187	\$38,169
FPL Reference	\$12,060	\$16,240	\$16,240	\$20,420	\$24,600

Note: Table adjusted using official Bureau of Labor Statistics CPI Calculator for July 2017.

The next table converts these dollar values to percentages of the Federal Poverty Level (FPL). The lean living wage for different family structures and sizes is *almost always above 150% of the FPL*. It is not a statewide measure; results differ to reflect the cost of living in different counties or places.

Table 16. Lean Living Wage as a Percentage of the Federal Poverty Level (2017).

Lean Living Wage as Percentage of FPL (by County or Place - Adjusted to July 2016)					
Place	1 Adult	1 Adult, 1 Child	2 Adults	2 Adults, 1 Child	2 Adults, 2 Children
Washoe	168%	279%	196%	195%	174%
Clark County	178%	283%	203%	198%	176%
Carson City	160%	268%	189%	186%	167%
Elko	157%	264%	180%	182%	163%
Nye	140%	251%	179%	172%	155%
FPL Reference	100%	100%	100%	100%	100%

Note: Table adjusted using official Bureau of Labor Statistics CPI Calculator for July 2017.

For comparison, the 2017 Federal Poverty Level by household size used in the calculation of Tables 15 and 16 is shown in Table 17.

Table 17. 2017 Poverty Guidelines (Federal Poverty Level).

2017 Poverty Guidelines for the 48 Contiguous States and the District of Columbia	
Persons in Family/ Household	Poverty Level (\$)
1	\$12,060
2	\$16,240
3	\$20,420
4	\$24,600
5	\$28,780
6	\$32,960
7	\$37,140
8	\$41,320

For families/households with more than 8 persons, add \$4,180 for each additional person. Source: <https://aspe.hhs.gov/poverty-guidelines>.

Estimates of need based on Glasmeier’s work on income insufficiency indicate that program eligibility should be in the range of 140% -279% of poverty, depending on household structure and on county or place. For many areas, the estimates are within the 200% guideline used in Nevada for the federal Weatherization Assistance Program, but only one area is within the 150% guideline used in NRS 702 (and that, only for one family type).

The analysis of the family budget method leads to a recommendation: The basis for determination of eligibility should be the family budget method. However, if necessary for ease of administration, administration of eligibility could be moved to a higher multiple of the FPL. As shown in Table 15, a reasonable approximate level would be 250% of the FPL.

Recommendation 4: Costs have changed, while the eligibility level for the UEC/FEAC programs is at 150% of poverty. This percentage was appropriate for an earlier year; however, the eligibility level for program participation should be increased.

An Insurance Concept: Temporary emergencies for other households – Though need has decreased as the national economic crisis becomes a memory, there will also always be some households at middle income levels and even at upper income levels that need assistance due to a temporary or a situational problem such as sudden illness or death of a provider. While middle and upper income households typically have the resources to recover from these situations, some do not. While some can recover using their own resources and resource networks, some may require short term help. A list of such encounters with the chances of life include:

- ◆ Injury or illness
- ◆ Sudden illness
- ◆ Divorce in a middle-income, two-earner household
- ◆ High medical bills
- ◆ Medically related usage

- ◆ Death of an income provider
- ◆ Sudden loss of employment and household income
- ◆ Disabled persons
- ◆ Aging out; a household that has become infirm elderly

These emergency events for non-low-income households are not fully recognized within the current scope of NRS 702, due to the income eligibility cap. Flexibility for emergency situations for households

Recommendation 5: Seek an amendment to NRS 702 to broaden the emergency provisions for inclusion of all households in temporary economic difficulties.

within the income cap has been included in NRS 702. NRS 702 also includes a special provision for medical emergencies that suddenly reduce a normally non-poverty household to an income level of 150% of poverty or below). This program concept could be extended to a temporary and situational insurance concept for all households that pay into the Universal Energy Charge.²³ Since everyone pays into the UEC, it seems reasonable to seek an amendment to NRS 702 to define a new component of the Universal Energy Charge/FEAC as a form of *short term* help for all households. This would broaden the emergency provision for inclusion of all households in temporary economic difficulties by removing the income limit (or raising it) for a set of emergency situations. This would provide additional discretion to the program administrator.²⁴ This would also explicitly introduce a quasi-insurance component to the program.

Other Factors - Other factors in the general socioeconomic context that influence need for services include:

- ◆ Nominal electric and natural gas rates generally increase over time, though there are some temporary exceptions. Fracking has substantially reduced the commodity cost of natural gas, equivalent to a sizable low-income subsidy but affecting all consumers of natural gas.
- ◆ “[B]etween 2000 and 2012 wages were flat or declined for the entire bottom 60 percent of the wage distribution”²⁵
- ◆ Another sign of economic recovery is shown in the improving unemployment rate. Nationally, there were about 1.5 unemployed people for every job opening in July 2015, per the Bureau of Labor Statistics, down from about 2.1 the year before.²⁶ This is a recovery essentially (but not quite) to the level just prior to the 2001 recession and represents a major recovery from the Great Recession (2008-2009).

²³ As noted, there is an emergency provision in NRS 702 for households technically above the eligibility level that experience severe un-reimbursable medical problems that suddenly bring them to the 150% FPL eligibility level and there are certain other provisions that can provide emergency exceptions.

²⁴ Through inclusion of a quasi-insurance component, the UEC would become a general residential program. Redevelopment of the basic program concept as social insurance would lead to a different type of benefit-cost analysis, like that used in Sweden for universal benefit program that are not needs-tested.

²⁵ Mishel, Lawrence and Heidi Shierholz, “A Decade of Flat Wages, The Key Barrier to Shared Prosperity and a Rising Middle Class.” Washington, DC: Economic Policy Institute Briefing Paper, August 21, 2013, Briefing Paper No. 365.

²⁶ US Bureau of Labor Statistics, Unemployed Job Seekers per Opening (JOLTS historical chart). See

<http://www.labor.ny.gov/stats/job-seekers-per-opening.shtm>.

- ◆ Nevada’s unemployment rate has markedly improved (see graph).²⁷ Recovery is proceeding.
- ◆ In the US as a whole, the adjusted wage share of the functional income distribution declined from about 64% in 1968 to about 56 % in 2015.²⁸ In other words, economic return to workers is declining (except for the highest paid workers).
- ◆ Income inequality “...has increased markedly over the past few decades in the U.S. and at a much faster rate than in other countries.”²⁹

²⁷ Graphed rates are averaged from monthly rates provided by the Bureau of Labor Statistics (see data file at http://data.bls.gov/timeseries/LASST320000000000003?data_tool=XGtable). The rate for July 2016 is from <http://www.unemployment-extension.org/unemployment-rate-nevada.php>. Note that Figure 2 shows the official unemployment rate for Nevada. As a rule of thumb taught in grad school economics, to convert the usual federal report of unemployment (CPI-U) into an everyday commonsense value, multiply it by two. More recently, this has changed to “multiply by two and then add from one to three percent.” So, actual unemployment is running at about 13-15% in Nevada, down from a peak of about 30% in 2010. By “everyday commonsense” we mean, for example, that if Uncle Jack does not have a job, he is unemployed even if the federal statistics reclassify him as a “discouraged worker” in order to drop him from their official calculation by changing the earlier federal definition of unemployment. There are other similar “technical adjustments” that make official statistics biased indicators of the things they indicate. No one is fooled by this kind of statistical trick when it involves a family member, but we do tend to be fooled by the statistical talk at an abstract level when it is repeated constantly. Also, in common talk, we make a distinction between a “job” (underemployment or piecing together part-time work from two or three underpaid and under resourced jobs) and a “real job” (full time, decent pay, medical benefit, secure career prospect and defined benefit pension). Federal statistics in the areas of employment and unemployment do not take these realities into account. However, they are still useful as general indicators of direction of change, which is currently in the direction of increased employment.

²⁸ Apel, Holgar, “Income Inequality in the US from 1950 to 2010 –The Neglect of the Political,” Pp. 2-15 in *Real World Economics Review*, Issue 71, September 30, 2015 (<http://www.paecon.net/PAEReview/>).

²⁹ Deaton, Angus, “Will Civil Society Endure; the Threat of Inequality,” *Scientific American*, Special Issue on The Future, September 2016, Pp. 48-53.

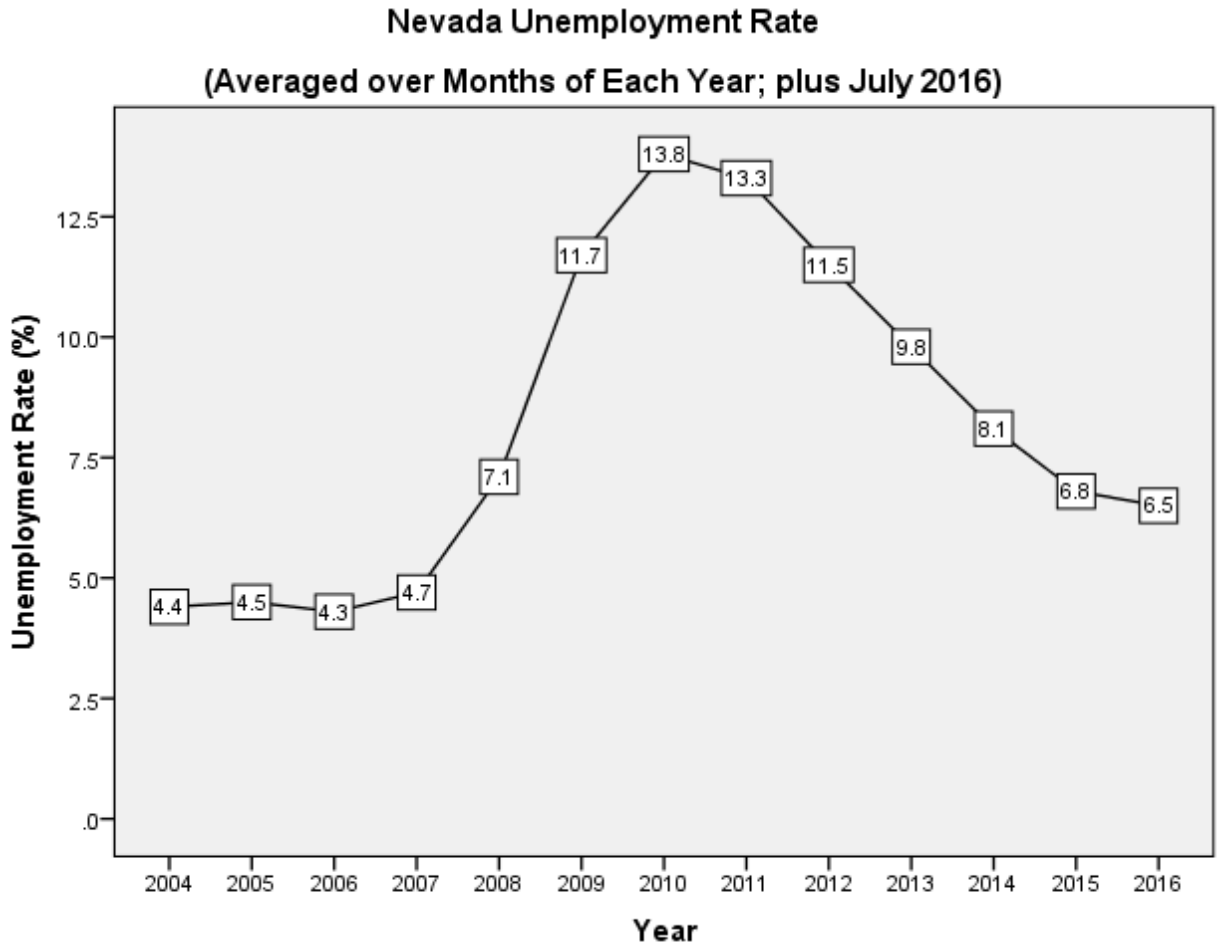


Figure 7. Nevada Unemployment Rate (Percent).

Household eligibility for both Energy Assistance and Weatherization Assistance is set at 150% of poverty by NRS 702. There were approximately 227,857 eligible households in Nevada (households at or below 150% of the FPL) in 2012.³⁰ We retain this percentage estimate though 2017 and, using the total households for 2016 (1,016,709) estimate 233,843 eligible households for 2017.³¹ These results further document that at the current yearly funding levels need exceeds ability to serve.³²

³⁰ This estimate was developed in 2012 using three different calculation methods. The methods provided estimated results of 226,239; 227,857 and 229,219. The middle number (the number adopted for this study) is based on the Governor Certified Population and its development was assisted by the State Demographer (electronic communication of 7/23/2012 from Jeff Hardcastle to Gil Peach and NHD). The middle number (227,857) represents about 23% of Nevada households (1,005,958) using 2010-2014 household data from the Bureau of the Census QuickFacts: Nevada (<http://quickfacts.census.gov/qfd/states/32000.html>).

³¹ Estimate is based on data from 2011-2015, due to lags in data availability (US Census Bureau, QuickFacts: Nevada, <https://www.census.gov/quickfacts/fact/table/NV/IPE120216>).

³² Viewed as a process, the current level of funding enables a certain number of homes to be weatherized each year. Since the stock of eligible homes is not fixed but is a flow with new additions each year and the total of eligible homes is beyond the capability provided by the annual funding level for the program, the program effort is always a process that never reaches an end.

PROGRAM LOGIC OF THE WEATHERIZATION ASSISTANCE PROGRAM

The program logic of the Universal Energy Charge/Fund for Energy Assistance and Conservation Weatherization Assistance Program is shown in terms of resource inputs and program goals in Figure 8.

The resources are all of the resources that are drawn upon by the program. In addition to UEC/FEAC funding, for SFY 2016 the program leveraged federal DOE funding. Support is also provided from the Nevada Housing Trust Fund, the Governors Home Energy Retrofits Opportunities for Seniors (HEROS) fund and LIHEA.

As shown in the logic diagram, the direct resources used to carry out the principal activities for SFY 2017 were the NHD; the Subgrantees, the Contractors, building science technologies and equipment, the BWR database and IT support coupled with the specialized knowledge required to administer and manage the overall WAP.

The immediate outcomes of the weatherization work are reduced energy use and lower energy bills for low-income homes, improvement in health and safety condition of homes, reduced illnesses, and in some cases, saved lives. The program also provides community education and contractor training.

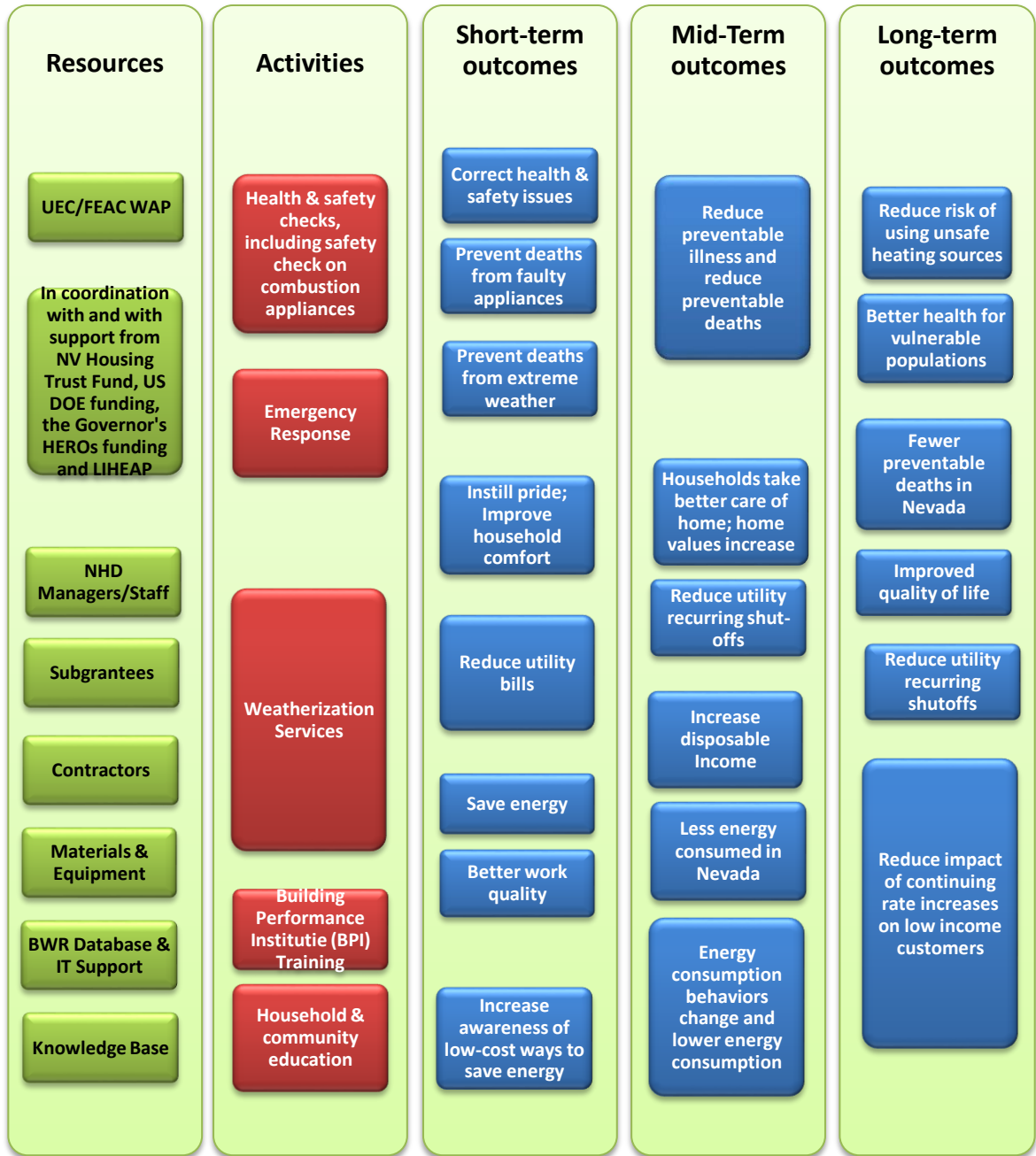


Figure 8. Logic Diagram for Universal Energy Charge Weatherization Assistance Program.

WAP PROGRAM COMPLIANCE WITH LEGISLATIVE REQUIREMENTS (NRS 702)

This section of the study is focused on direct answers to specific legislative questions.

2.1. Did NHD use no more than 6% of FEAC funds for its administrative expenses?

[Reference: NRS 702.270.1; Deliverable 3.5.1]

Yes, NHD's total cost for program administration was \$137,944, or about 3.92% of the total FEAC funds distributed to the Program (\$3,520,752).

2.2. Did NHD provide eligible households with services of basic home energy conservation and efficiencies or assist households in acquiring services of load management?

[Reference: NRS 702.270.2(a); Deliverable 3.5.2]

Yes, NHD provided eligible households with services of basic home energy conservation and efficiencies which assisted households in reducing energy consumption over time. Performance was confirmed during NHD Monitoring Reviews of sample projects and reviews of the Buildings Weatherization Reports database (BWR database). Load management was not a focus of the program in 2017; the focus was on reducing energy use. Production numbers are provided in the effectiveness section of this evaluation.

2.3. Did NHD pay for appropriate improvements associated with energy conservation, weatherization and energy efficiency?

[Reference: NRS 702.270.2(b); Deliverable 3.5.2.1]

Yes. Monitoring Reviews by NHD Weatherization Assistance Program staff of a sample of projects verifies that NHD paid for appropriate improvements associated with energy conservation, weatherization and energy efficiency measures.

2.4. Did NHD carry out activities related to consumer outreach?

[Reference: NRS 702.270.2(c); Deliverable 3.5.2.2]

The Energy Assistance Program carried out outreach for both EAP and NHD. Throughout the year, consumer outreach was also conducted by NHD Subgrantee agencies. NHD and its Subgrantees responded to phone calls referred by NV Energy and NHD and Subgrantees' websites. NHD or its Subgrantees also participated in NV Energy's Senior Energy Assistance Expositions (one in southern Nevada and one in northern Nevada). Subgrantees also provided outreach at local social service offices, senior centers, through radio and television interviews, newspaper ads, community meetings, energy savings events, poster with tear tabs, and distributed of brochures, flyers and door hangers (documented by Subgrantees). The Subgrantees provided intake sites and online service to process applications. NHD, Subgrantees and Contractors distributed brochures and the "Your Home Energy Savers Book" and Energy Calendars to the public at energy fairs. Outreach through the Subgrantees was verified through Monitoring Review by NHD Weatherization Assistance Program staff.

2.5. Did NHD pay for program design?

[Reference: NRS 702.270.2; Deliverable 3.5.2.3]

No. Primary program design for UEC/FEAC WAP was accomplished by NHD in 2002-2003 and updates were carried out in other years. During SFY 2016 there were no major program design activities.

However, there was substantial progress on development of a new database. This is a major focus, working with the University of North Dakota EERC and is expected to be in production in SFY 2018.

2.6. Did NHD pay for annual program evaluation?

[Reference: NRS 702.270.2(e); Deliverable 3.5.2.4]

Yes. In SFY 2017, NHD paid its prorated share of the cost for the SFY 2016 annual program evaluation.

2.7. Did NHD determine eligibility of households at a maximum income level of no more than 150% of the federally designated level signifying poverty (FPL)?

[Reference: NRS 702.270.3; Deliverable 3.5.3]

Yes. Eligibility criteria were communicated to Subgrantees through verbal and written communications. Income eligibility was verified by the Subgrantee and during NHD staff Monitoring Reviews of samples of Client applications from completed projects. Note that other funding, including the Governor's Home Energy Retrofits Opportunities for Seniors program permit treatment of houses up to and including 200% of poverty.

2.8. Did NHD render emergency assistance to health/safety-threatened households experiencing an emergency because of the structural, mechanical or other failure of their occupied dwelling?

[Reference: NRS 702.270.4(a); Deliverable 3.5.4]

No, this year, emergency assistance was not provided for buildings with structural, mechanical or similar failure. The problem with dwellings in which there is major structural, mechanical or other failure of the whole dwelling (for example, very old homes with knob and tube wiring throughout) is that the cost of repairs would be so substantial that the building cannot be treated, although the authority exists to do so. During SFY 2017, although authorized in NRS 702, no emergency assistance was provided to repair/replace the structural, mechanical or other failure of an occupied dwelling.

2.9. Did NHD render emergency assistance to health/safety-threatened households experiencing an emergency because of a failure of a component or system of their occupied dwelling?

[Reference: NRS 702.270.4(a) and(b); Deliverable 3.5.4.1]

Yes. Emergency assistance to health/safety threatened households was provided to fifty-eight (58) households that experienced an emergency because of a failure of a component or system of their occupied dwelling. Community Services Agency and Rural Nevada Development Agency did not provide emergency services during 2017. The three Subgrantee agencies that provided emergency services are HELP, Nevada Rural Housing Authority and the Urban League of Las Vegas.

List of FEAC Emergency Services

Number and nature of FEAC funded emergency services rendered during the period? [NRS 702.270.4(a) and (b).]

HELP of Southern Nevada

Project Number (Household)	Emergency Service (Kind of service provided)	Specific Equipment Failure (Type: Structural, Mechanical or its components, Component System, brief description of repair or replacement)	Resolution (Describe the results: Heat, AC, improved ventilation, etc.)
F26813	No AC. 73° in home. Air conditioning inoperable.	Repaired leak on 3.5-ton gas package.	Client now has an operating cooling system.
F26933	No AC. 87° in home. Condenser inoperable on 4-ton gas split system.	New dual run capacitor and coil cleaning.	Client now has an operating cooling system.
F26589	No AC. 79° in home. AC is leaking on inoperable	New 3-ton unit installed.	Client now has an operating heating and cooling system.
F26182	No heat. 52° in home. Inoperable furnace.	New Coleman furnace installed.	Client now has an operating heating system.
F26658	No AC. 90° in home. 3.5-ton heat pump package supplying inadequate cooling to the home.	New 3.5-ton heat pump unit installed.	Client now has an operating heating and cooling system.
F26630	No AC. 88° in home. Inoperable gas package unit.	New outdoor fan motor and new run capacitor installed along with coil cleaning.	Client now has an operating cooling system.
HF26844	No AC. 99° in home. Unit not functioning properly.	Repaired control board and installed contact switch.	Client now has an operating cooling system.
F26800	No AC. 69° in home. Blower door malfunction and clogged drain lines.	New blower motor, unclogged drain lines, installed capacitor and new air filters.	Client now has an operating cooling system.
HFL26639	No AC. 88° in home. Undersized 2-ton unit on home with a refrigerant leak.	New 2.5-ton gas package installed.	Client now has an operating cooling and heating system.
F26632	Unit not functioning.	New 3.5-ton gas split system.	Client now has an operating cooling system.

F26607	No unit on home.	New 4.0-ton gas split system installed.	Client now has an operating cooling and heating system.
F26657	No AC. 95° in home. Inoperable unit.	New 3.5-ton heat pump package unit installed.	Client now has an operating heating and cooling system.
LF26371	No AC. 77° in home. Not functioning properly; leak in system.	Repairs made on 3.5-ton gas split system.	Client now has an operating cooling system.
HFL26588	No AC. 80° in home. Bad blower motor and compressor on heat pump package.	New fan motor and compressor installed.	Client now has an operating cooling system.
HF26860	No AC. 95° in home. Motors are shot and compressor was grounded. Repairs would exceed replacement.	New 3.5 straight cool condenser installed.	Client now has an operating cooling system.
HF26858	No AC. 79° in home. Leak in evap. Coil, shorted compressor, high amping condenser fan motor. Cost to repair would exceed replacement.	New 3 ton straight cool condenser installed on Goodman AC and blower motor installed on Coleman furnace.	Client now has an operating cooling system.
F26964	No AC. 88° in home. Inoperable heat pump split system due to seized compressor.	New compressor installed along with 8lbs of Freon.	Client now has an operating cooling system.
F26765	Unit not functioning properly to operate the heating or cooling. Low voltage and disconnected wire at t-stat and low freon.	New condensate drain and t-stat installed along with R-22 Freon charge and coil cleaning.	Client now has an operating heating and cooling system.
HF26819	No AC. 78° in home. Unit fails; high-amping compressor, bad capacitors and leaks.	New 3 ton straight cool condenser installed	Client now has an operating cooling system.
F26867	No AC. 98° in home. Inoperable heat 3.5-ton pump package unit.	New defrost control board and contact switch installed along with coil cleaning.	Client now has an operating cooling system.
F27166	No heat.	Bad inducer fan motor on Coleman furnace.	New inducer motor installed. Client now has an operating heating system.
F27165	No heat.	Bad inducer fan motor on 2.5-ton gas package.	New inducer motor installed and cleaned coils. Client now has an operating heating system.

F26866	No AC. 78° in home.	2-ton gas split system. Compressor drawing high amps and leaking and cracked heat exchanger on furnace.	Replaced unit. Client now has an operating cooling system.
F27120	No heat.	Evcon furnace. Tripping safety switch and flame burning erotically, faulty gas valve and cracked heat exchanger.	Installed new 75,000 BTU up-flow 95% gas furnace. Client now has an operating heating system.
F27253	No heat.	Bad fan motor, compressor & valve on 3.5-ton gas package unit along with rusted gas exchanger.	Replaced unit. Client now has an operating heating system.
F26897	No heat.	Inoperable 3.5-ton gas package found torn apart.	Replaced unit. Client now has an operating cooling system.
F27248	No heat. 54° in home.	Inoperable 4-ton gas package with cracked heat exchanger and extreme roll out.	Replaced unit. Client now has an operating cooling system.
LF26584	No AC 79° in home.	3.5-ton gas package inoperable unit due to bad dual run capacitor.	Replaced run capacitor. Client now has an operating cooling system.
F27250	No heat. 62° in home.	Dead compressor in heat pump package.	New compressor installed. Client now has an operating heating system.
F26885	No AC. 89° in home.	3.5-ton heat pump split system. Bad compressor in condenser and dirty coils.	New compressor installed, 7lbs. of Freon added and cleaned coils. Client now has an operating cooling system.
HF26822	No heat.	Inoperable 3.5-ton gas package due to bad 50/50 dual run capacitor.	New run capacitor installed and coils cleaned. Client now has an operating heating system.
F26144	No AC. 95° in home.	4-ton heat pump package inoperable due to bad blower motor.	New indoor blower motor with run capacitor installed.
F25117	No heat. 66° in home.	Gas package inoperable. Bad condenser.	Replaced unit. Client now has an operating cooling system.
F26964	No heat.	Heat pump split system inoperable due to seized compressor.	New compressor installed, added 8lbs. of Freon. Client now has an operating heating system.

F26596	<i>No AC 86° in home.</i>	<i>Dead Compressor and frozen motor on heat pump split system.</i>	<i>Replaced unit. Client now has an operating cooling system.</i>
HF26886	<i>No AC. 91° in home.</i>	<i>Heat pump split system. Freon empty and seized compressor.</i>	<i>Replaced unit. Client now has an operating cooling system.</i>
F26559	<i>No AC. 93° in home.</i>	<i>Heat pump package unit. Insulation from coil access panel blocking air flow and causing coil to freeze up.</i>	<i>Replaced unit. Client now has an operating cooling system.</i>
F27164	<i>No heat.</i>	<i>Inoperable Coleman furnace due to bad compressor and seized condensing motor.</i>	<i>Replaced unit. Client now has an operating heating system.</i>
F27132	<i>No heat.</i>	<i>30-year-old inoperable Coleman furnace due to seized compressor.</i>	<i>Replaced unit. Client now has an operating heating system.</i>

Nevada Rural Housing Authority

Project Number (Household)	Emergency Service (Kind of service provided)	Specific Equipment Failure (Type: Structural, Mechanical or its components, Component System, brief description of repair or replacement)	Resolution (Describe the results: Heat, AC, improved ventilation, etc.)
NRHA17010	<i>No heat</i>	<i>Replace FAU</i>	<i>Resolved</i>
NRHA17046	<i>No heat</i>	<i>Replace FAU, C&T DHW, Broken window</i>	<i>Resolved</i>
NRHA17009	<i>No heat</i>	<i>Replace FAU</i>	<i>Resolved</i>
NRHA17013	<i>No heat, Previous Weatherization</i>	<i>Replace FAU</i>	<i>Deferred all other issues due to conditions</i>
NRHA17020	<i>No heat</i>	<i>Replace FAU</i>	<i>Resolved</i>
NRHA17025	<i>No heat</i>	<i>Replace FAU, DHW due to H&S discovery</i>	<i>Resolved heat issue and health & safety issues</i>
NRHA17042	<i>No heat</i>	<i>Replace FAU</i>	<i>Resolved</i>
NRHA17039	<i>No heat</i>	<i>Replace FAU plus Full Weatherization</i>	<i>Resolved plus Full Weatherization</i>
NRHA17026	<i>No heat</i>	<i>Replace FAU</i>	<i>Resolved</i>
NRHA17016	<i>No heat</i>	<i>Repair FAU</i>	<i>Resolved</i>

NRHA17035	<i>No heat</i>	<i>Replace FAU plus H&S</i>	<i>Resolved</i>
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Las Vegas Urban League

Project Number (Household)	Emergency Service (Kind of service provided)	Specific Equipment Failure (Type: Structural, Mechanical or its components, Component System, brief description of repair or replacement)	Resolution (Describe the results: Heat, AC, improved ventilation, etc.)
F16088	<i>Bad run capacitor</i>	<i>Repair furnace</i>	<i>Replace run capacitor</i>
F17092	<i>Inoperable gas package unit</i>	<i>Replacement gas package unit</i>	<i>Replacement gas package unit</i>
F17001	<i>Unit blowing hot air</i>	<i>Mechanical system</i>	<i>Replace sideboard</i>
F170210	<i>Water heater burst</i>	<i>Could not repair</i>	<i>Replace water heater</i>
F16034	<i>Water heater burst</i>	<i>Could not repair</i>	<i>Replace water heater</i>
L37006	<i>Heater not working</i>	<i>Furnace has bad limit switch</i>	<i>Install new side draft and new fan limit switch</i>
F17004	<i>Inoperable gas package unit</i>	<i>Duct work crushed unit undersized and leaks</i>	<i>Replaced duct work and properly sized unit</i>
17027A	<i>Inoperable gas package unit</i>	<i>Repair furnace</i>	<i>Replacement gas package unit</i>

2.10. Did NHD adopt regulations to carry out and enforce the provisions of NRS 702.270?

[Reference: NRS 702.270.5; Deliverable 3.5.5]

No. The necessary regulations were established primarily in 2002-2003. No new regulations were adopted in SFY2016 by NHD.

2.11. Did NHD solicit advice from DWSS and from other knowledgeable sources?

[Reference: NRS 702.270.6(a); Deliverable 3.5.6]

Yes. Please see the answer to question 2.17.

2.12. Did NHD identify and implement appropriate delivery systems to distribute money from FEAC?

[Reference: NRS 702.270.6(b); Deliverable 3.5.6.1]

Yes. Please see the NHD WAP Business Process diagram.

2.13. Did NHD coordinate with other federal, state and local agencies that provide conservation services to low-income persons?

[Reference: NRS 702.270.6(c); Deliverable 3.5.6.2]

Yes. NHD coordinated with appropriate federal, state and local agencies.

Federal coordination: During SFY 2017, NHD coordinated with federal officials through the National Association for State and Community Services Programs, whose members are state administrators of the US Department of Health and Human Services, Community Service Block Grant (CSBG) and the US Department of Energy/Weatherization Assistance Program for DOE programs. Coordination at the federal, state and local agency levels also occurred through the Energy OutWest conference with training in state-of-the-art best practice building sciences techniques.

State coordination: NHD coordinated with state officials through continuing contact with the Division of Welfare and Supportive Services and through the Low-Income Energy Assistance Program Advisory Group (FEAC Advisory Group). Participants in this group include representatives of the Division of Welfare and Supportive Services and the Public Utility Commission of Nevada. Also in this group are representatives of NV Energy, Southwest Gas, service and community based organizations and advocates.

This year, the Housing Trust Fund and the Governor’s Home Energy Assistance Retrofits Opportunities for Seniors (HEROS) made possible treatment of homes that required additional work.

In regard to coordination specifically with DWSS, both NHD and DWSS exchange client referrals. NHD uses a one-page application form which includes the question, “Are you currently receiving Energy Assistance (LIHEA or Energy Assistance)?” The applicant’s response is NHD’s opportunity through its Subgrantees to refer clients to DWSS/EAP. NHD also accepts referrals from DWSS and forwards the list of eligible clients provided by DWSS to its Subgrantee agencies and, when possible, to projects funded by others.³³ While NHD and DWSS are unable to use the same application form due to different eligibility criteria—both agencies are committed, to the fullest extent practicable, to efficiency in the application process.

Local coordination: NHD coordinated with many local agencies through its Subgrantee agencies, serving different areas of the state. This local work by the Subgrantees provides education in energy conservation and program outreach.

2.14. Did NHD encourage other persons to provide resources and services to the extent practicable, to schools and programs providing training in the building trades and apprenticeship programs?

[Reference: NRS 702.270.6(d); Deliverable 3.5.6.3]

No UEC/FEAC funds were used or leveraged during SFY 2016 to encourage other persons to provide resources and services to schools and programs providing training in the building trades and

³³ Qualifying referrals are not automatically accepted in the Weatherization Assistance Program because referrals are also generated from other sources and only occasionally is there capacity to accept a few qualifying households (the UEC/FEAC Weatherization Assistance is underfunded in relation to need). Also, NHD is required to prioritize service according to specific criteria. This means that some households will never be accepted since there are always households above them in order of priority selection.

apprenticeship programs. During the economic stimulus (American Recovery and Reinvestment Act or ARRA), NHD implemented training. When the stimulus funding ended but the economy had only begun to improve, there was not a need for any major support of training and there will not be a need for another major focus on training until there is a sufficient need for new trainees. However, Building Performance Institute (BPI) training was provided to Subgrantees.

2.15. Did NHD establish a process for evaluating the Weatherization Assistance Program (WAP)?

[Reference: NRS 702.270.6(e); Deliverable 3.5.6.4]

For the SFY 2017 WAP, as in each year since the requirements of NRS 702 were legislated, the NHD has established a process for evaluating the Weatherization Assistance Program (WAP). For the WAP evaluations for SFY 2012 through SFY 2019, the evaluation criteria have been set to conform exactly to the explicit provisions of NRS 702.

2.16. Did NHD establish a process for making changes to WAP?

[Reference: NRS 702.270.6(f); Deliverable 3.5.6.5]

Yes. The state UEC/FEAC WAP has a process for making changes to WAP to conform to changes in federal requirements to ensure the programs are undiluted and cost effective.

2.17. Did NHD engage in annual planning and evaluation processes with DWSS?

[Reference: NRS 702.270.6(g); Deliverable 3.5.6.6]

Yes. During SFY 2017, NHD engaged in annual planning and evaluation processes with the Division of Welfare and Supportive Services. Meetings with the Low-Income Advisory Group were part of the planning process; that is, since input and ideas are solicited from the Advisory Group at each meeting. Also, NHD made presentations at each meeting regarding funding levels, expenditures and production performance, as well as solicited member responses. Further, an annual evaluation for SFY 2017 program was chartered and sponsored jointly by NHD and the Division of Welfare and Supportive Services. The formal planning process proceeded per state and federal requirements, with public participation and formal hearings conducted, resulting in the approved Nevada Fund for Energy Assistance and Conservation State Plan for 2018 and the companion State of Nevada LIHEAP State Plan for 2018. While the UEC program year runs from the first day of July through the end of the following June, the LIHEAP program year is the same as the federal program year, beginning on October 1 each year and ending on the 30th of the following September.

WAP ASSESSMENT OF PROGRAM EFFECTIVENESS

In SFY 2017, Nevada Housing Division Subgrantees weatherized 495 homes (Table 18), exceeding the goal of 353 homes by 40.2% (Table 19). The energy savings target for SFY 2017 was an average of 20% per home weatherized.³⁴

Table 18. Work Completed by each WAP Subgrantee (SFY 2017).

Work Completed by each Subgrantee Agency (SFY 2017)		
Agency	Number of Homes	Percent
HELP	284	57.4
Urban League	86	17.4
NRHA	45	9.1
CSA	72	14.5
RNDC	8	1.6
Total	49	100.0

Table 19. Work Completed vs. Performance Goal by Subgrantee (SFY 2017).

Performance against Goals: Work Completed by each Subgrantee Agency (SFY 2017)			
Agency	Planned	Actual	Percent of Agency Goal Achieved
HELP	173	284	164%
Urban League	78	86	110%
NRHA	35	45	129%
CSA	54	72	133%
RNDC	13	8	62%
Total	353	495	140%

Of the homes completed during SFY 2017, services to special needs households are as shown in Table 20.³⁵

Table 20. Services to Special Needs Households (SFY 2017).

Services to Special Needs Households (SFY 2017)		
Category	Number of Homes	Percent
Elderly over 60	278	56.2%
Persons with Disabilities	180	36.4%
Children under 6	48	9.7%
Native American	11	2.2%
High Energy Users	117	23.6%
Note: This table contains category overlaps.		

³⁴ Goal provided by Nevada Housing Division.

³⁵ A household may have more than one special needs classification.

Homes completed by county are shown in Table 21. These completions approximately follow the population sizes of Nevada counties.

Table 21. Homes by County (SFY 2017).

Homes Completed by County (SFY 2017)		
County	Number of Homes	Percent
CLARK	370	74.7
WASHOE	72	14.5
CARSON CITY	24	4.8
LYON	17	3.4
MINERAL	4	0.8
DOUGLAS	2	0.4
HUMBOLDT	2	0.4
CHURCHILL	2	0.4
NYE	2	0.4
Total	495	100.0
Note: The home count is correct. The percentages contain rounding error.		

Some Nevada counties do not have utilities that arrange for payment into the Universal Energy Charge., Housing weatherized by NHD in those counties are funded from federal and other funds (and are not reported here).

Table 22 shows completed homes by housing type and heating fuel. This table reflects the relative frequency in the population of natural gas as a heating source as compared with electricity and propane.

Table 22. Housing Type and Primary Heat Source, SFY 2017.

Type of House and Primary Heating Fuel (SFY 2017)					
House Type	Fuel Type			Total	Percent
	Electric	Natural Gas	Propane		
2-4 Family	14	26	0	40	8.0%
5+ Family	1	64	0	65	13.1%
Mobile Home	10	170	10	190	38.4%
Single Family	46	148	6	200	40.4%
Total	71	408	16	495	100.0%
Percent	17%	80%	3%	100%	
Note: Counts are correct. Percentages contain some rounding error.					

Table 23. Own/Rent Status by Housing Type.

Ownership Status by Type of House (SFY 2017)				
House Type	Rent/Own		Total	Percent
	Rental	Owned		
2-4 Family	6	34	40	8.0%
5+ Family	64	1	65	13.1%
Mobile Home	10	180	190	38.4%
Single Family	23	175	200	40.4%
Total	105	390	495	100.0%
Percent	24.0%	76.0%	100.0%	

Note: Counts are correct. Percentages contain some rounding error.

Much of the weatherization work involves the strong emphasis on health and safety goals inherent in the federal and state guidelines for weatherization assistance. Certain measures are not primarily for energy savings but to enable a family to remain in its home. In FY 2017 these installations included 296 combustion safety inspections, 117 refrigerators replaced, 139 air conditioner replacements, 55 air conditioner repairs, 8 evaporative cooler replacements, 1 evaporative cooler repair, 31 heat pump replacements, 28 heat pump repairs, 28 gas appliance repairs, 81 furnace replacements and 26 furnace repairs.

A summary of direct weatherization costs per home is shown in Table 24. Direct weatherization cost includes all FEAC contractor costs (including materials and labor).³⁶

Table 24. Direct (FEAC) Weatherization Costs.

Project (FEAC) Direct Weatherization Cost by Type of House (SFY 2017)			
House Type	Number	Median	Mean
2-4 Family	40	\$3,478	\$3,585
5+ Family	65	\$949	\$1,858
Mobile Home	190	\$4,827	\$4,690
Single Family	200	\$4,000	\$4,163
Total	495	\$3,527	\$4,016

Note: Values rounded to nearest dollar.

Energy savings improvements to homes have a life of at least five to twenty years, and the major improvements, such as insulation, will last thirty-five years or more. Savings are expected to gradually decrease as different types of improvements reach the end of their effective measure lives.

³⁶ Direct weatherization cost excludes that Subgrantee agency costs and NHD costs. Also, for some homes additional funding sources were leveraged to provide more complete installation of measures. For these cases the additional funding is not included in the table.

SUMMARY

With regard to all of the specific provisions of NRS 702.270 for NHD, NHD was fully compliant for SFY 2017.

Finding 4: The Evaluation Team finds the Nevada Housing Division's Weatherization Assistance Program fully compliant with the provision of NRS 702.

DWSS and NHD COMPLIANCE WITH JOINT REQUIREMENTS

3.1 Did DWSS and NHD jointly establish an annual plan to coordinate their activities and programs?

[Reference: NRS 702.280.1; Deliverable 3.6.1]

Yes. Each year, the Department of Welfare and Supportive Services (DWSS) and the Nevada Housing Division (NHD) jointly develop an annual plan, the *Nevada Fund for Energy Assistance and Conservation State Plan*, to coordinate their activities and programs in accordance with NRS 702.280. The plan for SFY 2017 became effective July 1, 2016 and the plan for SFY 2018 became effective July 1, 2017³⁷. Each of these plans includes a description of resources and services used by each program and a description of efforts undertaken to improve services and resources [NRS 702.280.1(a)]. The programs are funded by the Universal Energy Charge (UEC) /Fund for Energy Assistance and Conservation (FEAC). These funds support the FEAC Energy Assistance Program (EAP) which is administered by DWSS and the FEAC Weatherization Assistance Program (WAP), administered by NHD.

- ◆ EAP assists eligible Nevadans in paying their utility costs on an annual basis and provides emergency assistance for eligible households in crisis. The program also has a one-time arrearage component.
- ◆ WAP assists low-income households in reducing their utility costs and energy consumption by providing for energy conservation and health and safety measures.

3.2. Did the plan include resources and services used by each program and efforts to increase or improve resources and services?

[Reference: NRS 702.280.1(a); Deliverable 3.6.1.2]

Yes. The joint annual plan includes resources and services used by each program and there have been efforts to increase and improve both resources and services. Both the Division of Welfare and Supportive Services and the Nevada Housing Division continually work to improve resources and services. The type of problem engaged by both DWSS and NHD is that of optimization subject to constraints. The largest constraint is that for each program the need for the program is much higher than the combined resources available to meet the need. Available resource is the major constraint when need is defined using the official definition of eligibility (provided in NRS 702 and as further defined by each program) or other approaches (for example, the family budget approach). Resources applied include the combination of UEC and other state funding, available federal and city funding, private-sector funding, and funding from institutional, religious and community organizations.

The resource constraint is a characteristic for these kinds of program efforts throughout the United States. Within each state there is a high level of need (either as defined officially and/or using other methods) and a much lower level of resource.

³⁷ Nevada State Division of Welfare & Supportive Services, Public Hearing to Adopt Low-Income Home Energy Assistance (LIHEAP) and Nevada Fund for Energy Assistance and Conservation SFY State Plans, June 15, 2017.

3.3. Did the plan include efforts to improve administrative efficiencies?

[Reference: NRS 702.280.1(b); Deliverable 3.6.1.3]

Yes. Both DWSS and NHD engage in continual improvement.

- ◆ For 2017, the Division of Welfare and Supportive Services Energy Assistance Program was ready to apply for federal leveraging credit but did not apply since there were no leveraging dollars available.³⁸
- ◆ DWSS continually analyzes business practices and tries to be as efficient and effective as practicable, making program revisions within the scope of NRS 702 in consultation with the low-income advisory committee. In 2016, DWSS improved efficiency by replacing temporary positions with civil service staff and this staffing structure continues in 2017. Past evaluations have documented that temporary staff (including the turnover problem) is less efficient than civil service staff in this work.
- ◆ DWSS in 2017 employed civil service caseworker positions in Las Vegas. This change completed the transition from temporary positions and solved the turnover problem which had been a characteristic of the Las Vegas office for several years.
- ◆ For the Nevada Housing Division, the addition of the Governor’s Home Energy Retrofits for Seniors (HEROS) funding provided substantial benefit in that it made it possible to coordinate funding to make the program more effective by treating some homes that required more work and otherwise would not have been treated.
- ◆ The Nevada Housing Division has been engaged in development of a better database and reporting system. The new system is expected to move beyond the test phase in 2018. All forms will be electronic, including field reporting. This will eliminate manual entry of paper records.
- ◆ Utility Demand-Side Management Programs (Gas & Electric)
 - Natural Gas: The Nevada Housing Division could not continue its arrangement for program coordination with Southwest Gas through for 2017 due to a determination by the Public Utility Commission of Nevada (PUCN) related to special rules for utility program cost effectiveness.³⁹ Across the US, coordination of utility low-income DSM effort implemented with WAP programs is generally considered to improve program efficiency and effectiveness,⁴⁰ but in the utility area there are unusual cost effectiveness criteria which were established using the model of utility resource acquisition relevant to the energy supply models of the 1980’s (rather than a cost-effectiveness criterion relevant to a low-income or social service model). Depending on interpretation by the

³⁸ The federal LIHEAP leveraging system was created to reward states with a small allocation of additional federal program dollars in relation to non-federal funding developed within the state to support the programs. However, in many years the Congress does not fund the leveraging provision. For specifics, see “Leveraging Nonfederal Resources for LIHEAP,” compiled by the LIHEAP Clearinghouse, November 2013, <https://liheapch.acf.hhs.gov/pubs/820.htm>.

³⁹ However, Southwest Gas does provide some direct support to the Subgrantee agencies which can be used to further the work of the NHD Weatherization Assistance Program.

⁴⁰ Brown, M.A, and L.J. Hill, Low-Income DSM programs: The cost-effectiveness of coordinated partnerships. Oak Ridge, Tennessee: Oak Ridge National Laboratory, May 1994 (ORNL/CON 375); Brown, Marilyn A., Mark A. Beyer, Joel Eisenberg, Edward J. Laps and Meg Power, Utility Investments in Low-Income Energy Efficiency Programs. Oak Ridge, Tennessee: Oak Ridge National Laboratory, September 1994 (ORNL/CON 379), http://weatherization.ornl.gov/pdfs/ORNL_CON-379.pdf.

utility commission, the resource acquisition cost-effectiveness criteria can sometimes support and sometimes prevent coordination of programs between state and utilities. It is a policy question, the answer to which may change from time to time and which is answered independently by each state commission.

California provides a relevant example of a state which coordinates low-income government and utility funding for residential weatherization. The California Public Utility Commission has adopted specific policy rules for low-income programs⁴¹.

Resolution in moving towards the practical benefits of coordinated programs in Nevada would need to take place within PUCN regulatory proceedings; for example, by initiating a new proceeding to review cost-effectiveness testing, as outlined in the new National Standard Practice Manual.⁴²

- Electricity: NV Energy has had difficulty in developing a low-income DSM effort that is cost-effective using the resource acquisition model required for electric utilities by the PUCN. A program scope for working with NHD and the Subgrantee agencies was approved by PUCN and was technically operative in the first half of FY 2014, but the envisioned implementation did not occur in 2014 - 2016 due to anticipated benefit-cost expectations on the part of the utility. In the regulatory process, utilities are normally not granted cost-effectiveness for a program (and thus full cost recovery) until the program is evaluated. This uncertainty can cause reluctance to implement a program that might be borderline for cost-effectiveness using a resource planning test such as the Total Resource or the Utility Cost Test. Such problems can usually only be resolved by regulatory commission policy decisions, so that the utility can have high confidence in full cost recovery. Resolution in moving towards the practical benefits of coordinated programs in Nevada would need to take place within PUCN regulatory proceedings; for example, through a new proceeding to review cost-effectiveness testing, as outlined in the new National Standard Practice Manual.⁴³

Finding 5: DWSS in 2017 employed civil service caseworker positions in Las Vegas which completed the transition from temporary positions and solved the turnover problem that had been a characteristic of this office for several years.

Finding 6: For NHD, the addition of the Governor's Home Energy Retrofits for Seniors (HEROS) made it possible to coordinate funding to make the program more effective by treating some homes that required more work and otherwise would not have been treated.

⁴¹ The California programs are listed at: <http://www.cpuc.ca.gov/igap.aspx>.

⁴² The National Standard Practice Manual can be downloaded from: <https://nationalefficiencyscreening.org/national-standard-practice-manual/>.

⁴³ Ibid.

3.4. Did the plan include efforts undertaken to coordinate with other federal, state and local agencies, nonprofit organizations and any private business or trade organizations providing energy assistance or conservation services to low-income persons?

[Reference: NRS 702.280.1(c); Deliverable 3.6.1.4]

Yes. The plan for SFY 2017 includes efforts to coordinate with federal, state and local agencies, nonprofit organizations and utilities to provide energy assistance and conservation services to low-income persons [NRS 702 280.1(c)]. Trade organizations were not included in the 2017 annual plan. For 2017, coordination is specifically discussed with the following entities:

- ◆ **Special Assistance Fund for Energy (SAFE)** – Sierra Pacific Power/NV Energy’s fund. This fund provides some utility bill payment assistance to low-income, elderly and disabled customers, as well as families facing short-term financial crisis. This program is administered through several local social service agencies. Sierra Pacific Power provides all administrative costs for the program and provides annual financial support.
- ◆ **Emergency Shelter Grant (ESG)** – This program is administered though NHD and funded by the US Department of Housing and Urban Development (HUD). It covers some households experiencing sudden reduction of income with an inability to pay bills. It is aimed at preventing homelessness when there is a reasonable prospect that the household will resume their regular payments in a reasonable amount of time.
- ◆ **Emergency Food and Shelter Program (EFSP)** – United Way’s program to help people with economic emergencies not related to disasters. Funding can be used to help some households supplement food, shelter, rent/mortgage and utility assistance.
- ◆ **Energy Share** – Southwest Gas’s direct assistance program for qualified people with unexpected financial difficulties, such as job loss and medical emergency. This program is administered by the Salvation Army.
- ◆ **Seniors Helping Seniors Weatherization Program** – Seniors Helping Seniors provides some qualified Southwest Gas customers with weather-stripping, caulking, door sweeps, low-flow showerheads, pipe insulation, switch and outlet gaskets, water heater blankets and energy education. This program is limited to Southern Nevada, to homeowners at least 55 years of age or disabled and with annual income not exceeding \$25,000.
- ◆ **Rebuilding Together with Christmas in April (RTCA)** – RTCA operates in Southern Nevada to provide free housing repairs to low-income seniors and the disabled. It includes an annual corporate volunteers event day in which over 3,000 corporate volunteers make home improvements at no charge to qualifying households. RTCA also maintains rapid repair services for home heating, cooling, plumbing and electrical programs to qualifying homeowners.
- ◆ **Low-Income Housing Trust Fund Welfare Set-Aside Program** – NHD allocates 15% of the funds received for the Account for Low-Income Housing (Trust Fund) to city and county social service agencies for families who are or are in danger of becoming homeless and need assistance with utilities, security deposits and rental or mortgage payment assistance. Eligibility is restricted to

individuals and families with income at or below 60% of area median income as designated by the Department of Housing and Urban Development.

- ◆ **Governor’s Home Energy Retrofits Opportunities for Seniors (HEROS)** – In addition, this new initiative provides funding that can permit substantial improvement in seniors’ homes. It can provide for upgrades that permit some homes to be served that would otherwise be “walkaways” – homes that require more work than is sustainable under the regular weatherization rules.

For SFY 2017, WAP’s funding sources are: 1) the Nevada Fund for Energy Assistance and Conservation which is funded by the universal energy charge (UEC), 2) the U.S. Department of Energy (DOE), 3) US Department of Health and Human Services Low-Income Home Energy Assistance Program (LIHEAP), 4) The Low-Income Housing Trust Fund, and 5) the Governor’s Home Energy Retrofits Opportunities for Seniors (HEROS). EAP has two funding sources: 1) the federal Low-Income Home Energy Assistance Program (LIHEAP) grant from the U.S. Department of Health and Human Services, and 2) the Nevada Fund for Energy Assistance and Conservation which is funded by a universal energy charge (UEC) assessed to every public utility retail customer in the state, with some exceptions.

3.5. Did the plan include measures concerning program design that will be undertaken to improve program effectiveness?

[Reference: NRS 702.280.1(d); Deliverable 3.6.1.5]

Yes. The Energy Assistance Program (EAP) was designed to assist qualifying households with utility cost that exceeds the median state household energy burden, but provides flexibility in altering the design when funding runs short of need.⁴⁴ By basing the UEC energy assistance on the Nevada’s median state household energy burden (Nevada’s median energy burden was computed to be 2.09% of household income for SFY 2017) the Energy Assistance Program (EAP) establishes a realistic and fair level of assistance. The level is inherently rooted in a principle of fairness: energy assistance is provided at the level of the median percentage of household income required for household energy use for the state. Each household in the program is responsible for paying this portion of their utility bills for the year. The portion above that amount may be covered by the Energy Assistance Program.

The EAP has been repeatedly adjusted to meet changing conditions. During the relatively recent national economic crisis (sometimes referred to as the “Great Recession”), it became necessary to further cap assistance to stretch existing funds to serve more households. In SFY 2011 and in prior years, energy assistance was provided to households up to and including 150% of the Federal Poverty Level (FPL) as

⁴⁴ The “median” is the middle value of a statistical distribution. In this case, half of Nevada households for a given year have energy burdens larger than the median value and half have energy burdens less than the median value for that year. The calculation of median energy burden in Nevada begins with the most recent value of median household income. This is used as the denominator of a fraction. The numerator of the fraction is the cost of household energy use (natural gas and electricity used by the household) for the year. Household energy use data is calculated for each of the two major utilities, Southwest Gas and NV Energy, and the energy use (gas and electricity) is applied to the current residential rate structure of the utilities to derive the cost of energy per household. This cost is then divided by the Nevada median household income to provide the median household energy burden for the year. The actual calculation has some more details and is carried out separately for Northern Nevada and Southern Nevada. Both the median household income and the median household energy burden are updated annually for each new state plan program year.

specified in NRS 702. For SFY 2012 assistance eligibility was capped at 110% of the FPL⁴⁵ due to shortage of funding in relation to increased need. For SFY 2013 eligibility was initially capped at 125% but was raised back to 150% of the FPL when additional federal funds became available late in fiscal year. For 2014, the program again operated at its design level of 150% of FPL.⁴⁶ However, to stretch funding to more households, benefit caps were used during 2014, with the caps based on poverty level and a designation for vulnerability. Benefit caps were also applied during 2015 and 2016. The need for the program exceeds available funding, so the use of caps is designed to support continuing operation throughout the year. These changes are implemented as conditions change, using flexibility provided in the enabling legislation to provide smaller grants and serve more households.

In 2015, The Nevada Housing Division Universal Energy Charge/Fund for Energy Assistance and Conservation Weatherization Assistance Program, following USDOE guidance, standardized job descriptions and certification requirements for positions in weatherization work. It has also introduced Building Performance Institute (BPI) certification both for the NHD WAP Compliance/Audit Investigator and for some field staff at each Subgrantee agency. In addition, NHD separated the building audit role from the contractor services role so that auditing is independent. These changes, implemented in 2015 increased program effectiveness for 2016, 2017 and across future years.

Also, NHD continues to move towards replacement of its current audit software by a new system that will be more comprehensive and that will better align energy savings estimates at audit with post-installation energy savings as recorded in utility customer information systems. This work is ongoing and the system is likely to move out of its testing phase during SFY 2018. This improvement in the database and reporting system is the primary change for NHD weatherization for 2016-2017.

3.6. Did the jointly-developed DWSS/NHD annual plan include the efforts that will be undertaken to improve program effectiveness?

[Reference: NRS 702.280.1(e); Deliverable 3.6.1.6]

Yes. The most recent evaluation (of SFY 2016 programs, dated December 8, 2015) contained four recommendations. Of the four, one was implemented and three were not. The evaluation recommendations from SFY 2016 and actions during SFY 2017 are as follows:

- ◆ **Recommendation 1:** For SFY 2017, DWSS has already optimized the Energy Assistance Program by accomplishing key staffing goals and training. For this year (2017), and in the absence of any unusual events, DWSS should operate normally within this optimized structure while monitoring the operation of the new caps applied for SFY 2017.
 - *DWSS operated within an optimized structure in Fiscal Year 2017.*
- ◆ **Recommendation 2:** To meet the increase in need under the current eligibility criteria, funding for the Universal Energy Charge should be increased.
 - *This recommendation was not implemented; however, this is a policy recommendation that would have to be addressed at the legislative level. Also, over the past few years, on the NHD side of the UEC, the Governor's Home Energy Retrofits Opportunities for Seniors*

⁴⁵ This was raised to 125% FPL when additional federal funds became available in April of 2012.

⁴⁶ There are no asset or resource criteria for eligibility. There are some more detailed rules for special situations.

(HEROS) funding provided substantial benefit (in that it made it possible to coordinate funding to make the Weatherization Assistance Program more effective by treating some homes that required more work and otherwise would not have been treated).

- ◆ **Recommendation 3:** Consider seeking an Amendment to NRS 702 to use the Family Budget Method by County, or, if better for ease of administration, raise the Federal Poverty Level (FPL) multiple for eligibility from 150% to 250% of the FPL.
 - *This recommendation was not implemented. However, this is a policy recommendation that would have to be addressed at the legislative level.*
- ◆ **Recommendation 4:** Seek an amendment to NRS 702 to broaden the emergency provisions to include all households in temporary economic difficulties.
 - *This recommendation was not implemented. However, this is a policy recommendation that would have to be addressed at the legislative level.*

Continuing Evaluation: Did the DWSS/NHD jointly conduct an annual evaluation of the EAP and WAP programs?

[Reference: NRS 702.280.2(a); Deliverable 3.6.2]

The Division of Welfare and Supportive Services and Nevada Housing Division jointly conducted an annual evaluation of the EAP and WAP for the State Fiscal Year 2016 programs during SFY 2017 and are currently conducting the SFY 2017 evaluation covering the programs from July 1, 2016 through June 30, 2017.

3.7. Did DWSS/NHD jointly solicit advice from the Nevada Public Utilities Commission as part of the annual evaluation?

[Reference: NRS 702.280.2(b); Deliverable 3.6.2.1]

There was extensive work with the Nevada Public Utilities Commission in 2013-2014. This work ended with a recommendation in the SFY 2014 evaluation consistent with the PUCN conclusion that the utilities should disperse annual DWSS funding to customers on a pro-rated monthly basis (see Figure 9). This is a recommendation that would need to be implemented by the utilities, rather than DWSS or NHD. It has not been implemented.

As part of the upcoming SFY Evaluation, the Commission should advise that DWSS continue to evaluate utility customers for EAP eligibility on an annual basis and EAP payments continue to be disbursed to the utilities in annual lump sum payments for EAP customers. However, utilities should now credit 1/12th of each payment to the corresponding EAP customer on a monthly basis over a 12-month period.

Figure 9: Commission Finding.

We checked with commission staff in 2017 and the PUCN advice will remain constant until there is another proceeding regarding the Universal Energy Charge/Fund for Energy Assistance and Conservation. The use of the word, “should”, means that this is not an order to the utilities but is an expression of PUCN deliberation and input for the yearly evaluation. It is an expression of the commission’s deliberative desire which the utilities may or may not decide to implement.

3.8. Report to Governor, Legislative Commission and Interim Finance Committee

[Reference: NRS 702.280.2(c) & NRS 702.280.3(a-3); Deliverables 3.6.2.2, 3.6.3 & 3.6.3.1 through 3.6.3.4]

Yes. DWSS/NHD jointly prepared a report concerning the annual evaluation for SFY 2016 and submitted the report to the Governor, Legislative Commission and Interim Finance Committee in accordance with NRS 702 280.2(c).

The report consisted of the SFY 2016 evaluation and the SFY 2016 executive summary with a well-constructed brief letter of transmittal. The evaluation includes a full description of the objectives of each program [NRS 702 280.3(a)], an analysis of the effectiveness and efficiency of each program in meeting the objectives of the program [NRS 702 280.3(b)], the amount of money distributed from FEAC for each program and a detailed description of the use of that money for each program [NRS 702 280.3(c)], and analysis of the coordination between the Divisions concerning each program [NRS 702 280.3(d)], and any changes planned for each program [NRS 702 280.3(e)].

SUMMARY OF FINDINGS

1. The evaluation team finds DWSS has succeeded in recovering to the level of households with seniors, completing recovery from the drop which occurred during 2012.
2. The evaluation team finds DWSS fully compliant with the requirements of NRS 702.
3. The percent of persons living in poverty increased, leveled out and has started to decline. However, there is a higher level of need for services than compared with the years prior to 2006.
4. The Evaluation Team finds the Nevada Housing Division’s Weatherization Assistance Program fully compliant with the provision of NRS 702.
5. DWSS in 2017 employed civil service caseworker positions in Las Vegas which completed the transition from temporary positions and solved the turnover problem that had been a characteristic of this office for several years.
6. For NHD, the addition of the Governor’s Home Energy Retrofits for Seniors (HEROS) made it possible to coordinate funding to make the program more effective by treating some homes that required more work and otherwise would not have been treated.

SUMMARY OF RECOMMENDATIONS

1. For 2018, continue to track processing time and identify and develop a list of factors that slow processing from August through February.
2. DWSS has optimized the Energy Assistance Program by accomplishing key staffing goals and training. DWSS has also been working on shortening processing time. In the absence of any unusual events, for SFY 2018 DWSS should operate normally within this optimized structure

while monitoring the operation of the caps. No new changes to processes, management or organization are recommended for DWSS based on the SFY 2017 evaluation. For SFY 2018, the goal should be to operate well with the current processes, management and organization.

3. To meet the increase in need under the current eligibility criteria, funding for the Universal Energy Charge should be increased.
4. Costs have changed, while the eligibility level for the UEC/FEAC programs is at 150% of poverty. This percentage was appropriate for an earlier year; however, the eligibility level for program participation should be increased.
5. Seek an amendment to NRS 702 to broaden the emergency provisions for inclusion of all households in temporary economic difficulties.

OVERALL EVALUATION SUMMARY

NHD WAP and DWSS EAP were fully compliant with all provisions of NRS 702.280 for SFY 2017.

The Evaluation Team finds the Department of Welfare and Supportive Services' EAP and the Nevada Housing Division's WAP fully compliant with the joint provisions of NRS 702.